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FOURTH

ANNUAL REPORT

EL 8434 'NICKER'

YUENDUMU JOINT VENTURE

For Year Ending 17 April 2004

Author
L T P English
J E Anderson
Claudia Rohde

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1.0 SUMMARY

EL 8434 is located approximately 400 kilometres WNW of Alice Springs in the Arunta Region (**Figure 1**). Exploration Licence 8434 'Nicker' is the subject of a Deed for Exploration between the Central Land Council (CLC) and the Yuendumu Mining Company NL (YMC), signed on 3 August 1996. On 29 September 1999 Tanami Exploration NL (TENL), a wholly owned subsidiary of Tanami Gold NL, entered into a Joint Venture agreement with YMC covering EL 8434 together with the Saxby tenements EL 8306, EL 8962 and EL 8966.

This report summarises exploration carried out by TENL on EL 8434 during 2003 and is mainly based on English and Anderson, 2004. Between August and September 2003, two phases of RAB and Aircore drilling were completed for 187 holes and 8127m. In October and November the exploration focus turned to surface geochemistry. A total of 468 lag (including 45 repeat splits), 146 rock chip and 49 'soil' samples ware collected and assayed for a multi-element suite. An anomalous corridor of 2.5 kilometres length was outlined; the Dodger Prospect. Best assay results include 8.7g/t Au from a rock chip sample and 686ppb Au from a lag sample (**Table 1**). Seven additional +0.5g/t Au rock chips over 200m strike length .

Table 1. Summary of TENL Exploration.

Type	Samples	Fraction	Samples/holes	Metres	Max Au
Soil	NKS001-049	<80#	49		2.65ppb
Lag	NKL001-399 NKL401-469	4.7-11mm <4.7mm 0.425-4.7mm <0.425mm	368 (excl. 'B' samples)		686ppb
Rock chip	NKK041-185	-	145		**8.7g/t**
RAB / Aircore	NKB001-188	-	188	8118	1m at 34ppb

2.0 INTRODUCTION

Exploration Licence 8434, referred to as The Nicker Project, is the subject of a Deed for Exploration between the Central Land Council (CLC) and the Yuendumu Mining Company NL (YMC), signed on 3 August 1996. Exploration has been previously carried out by TENL over the first three years of tenure. This report describes exploration in the fourth year of tenure.

EL 8434 is located on the Lake Mackay 1:250,000 Sheet (SF52-11) and Highland Rocks 1:250,000 Sheet (SF52-7) 400 kilometres WNW of Alice Springs. Access is via the Tanami Track past Yuendumu, then by station roads through Vaughan Springs, then via little used station tracks west into the tenement (**Figure 1**).

Access can also be gained from the Tanami Track via the Chilla Well Track for 90 kilometres to the Mt Farewell and Vam Hill localities in the northern part of the tenement. Access via the El Escondido and Klondike Track into the western portion is also possible.

3.0 TENURE

EL 8434 was granted to YMC on 18 April 2000 over an area of 499 blocks. At the end of the second year of term, 54 blocks were relinquished and a partial waiver was granted on 24 April 2002. At the end of the third year a full waiver from partial relinquishment was approved. At the end of the fourth year of term a further 143 blocks were relinquished.

The tenement lies entirely on Aboriginal Land within the Lake Mackay Land Trust area. Work Area Clearance over the central section of EL 8434 was received on 12 March 2002 from the CLC (**Figure 2**). An exclusion zone was identified over the southern part of the tenement centred on Mt Nicker. This part of the tenement was subsequently relinquished.

The status of the tenement for the year ending 17 April 2004 is shown in **Table 2.**

Table 2: Tenement Details – EL 8434

Tenement Name	Tenement No	Date Granted	Expiry Date	Blocks	Km^2	Covenant
Nicker	EL 8434	18 Apr-00	17-Apr-06	445	1,413	$57,000

4.0 GEOLOGY

Basement outcrop within the tenement area is estimated to be <10%, and forms isolated hills and ridges. In addition, lateritised and weathered basement rocks form breakaways and low hills and minor areas of pisolithic, lithic and quartz lag occur. However, the majority of the region is covered by aeolian and sheetwash sand and silt.

Published BMR 1:250 000 scale geological mapping differentiates between granite, gneiss, schist, quartzite and minor dolerite in outcrop (Lake MacKay - Nicholas *et al*. 1971, Highland Rocks - Blake D.H., Hodgson I.M. & Green D. 1977). More recent interpretations by the NTGS assign the 'quartzites' in the north of the tenement to the Lower Proterozoic (~1860Ma) metasedimentary Lander Rock beds Formation. The 'quartzites' in the south of the tenement are assigned to the younger (~1770Ma) metasedimentary Nicker beds Formation. A major granitic intrusive in the south of the tenement is assigned to the ~1550Ma Southwark Granitic Suite and it is suggested that batholithic granite intrusives and associated pegmatites found elsewhere on the tenement may be coeval. The gneiss and schist remain unassigned.

Field descriptions of the outcropping and drilling geology made during the 2003 field season by TENL geologists recognise the following lithological units.

Metasediments (Lander Rock beds and Nicker beds) include:

- Thinly bedded metasedimentary units composed of quartz and sericite in variable proportions. The lithologies vary between fine-grained quartz-sericite schist, phyllitic to massive pelite and fine-grained quartzite. Where interbedded with the schist or the phyllitic pelite, the quartzite typically has a pinch-and-swell to lensoid structure. Foliation parallel quartz vein lenses are common, and most abundant in the quartzite-rich horizons.

- Very thickly bedded (10's metres) metasedimentary units apparently dominated by quartzite. These quartzite units comprise many of the ridges that crop-out in the northern part of the tenement.

- Dark green tremolite schist with distinctive coarse-grained radiating acicular tremolite and local malachite staining. This lithology has only been recognised in one location where it forms a *c*.2m thick unit within a sequence of thinly bedded metasediments (NKK073 in northwest of the tenement).

Gneissic rocks include:

- Medium to coarse-grained biotite-feldspar-quartz granite/gneiss with an alignment of the biotite grains. This has variously been described as a gneissic granite or felsic gneiss.
- Strongly foliated biotite-rich quartz-feldspar-biotite gneiss with a well developed gneissose banding and locally with migmatitic textures.

Dolerite:

- Dark green, fine to medium-grained, equigranular, massive, dolerite as outcropping bodies 10's of metres in size.

Granite and associated **pegmatite** includes:

- Massive, medium to coarse-grained muscovite-bearing granite coinciding with magnetic highs on the aeromagnetic data.
- Pegmatites of quartz-plagioclase-muscovite +/- beryl, quartz veins with minor muscovite and quartz veins probably associated with emplacement of the muscovite-bearing granite. The pegmatites intrude both the gneissic units and the dolerite, suggesting that the end of granite emplacement post-dates both these lithologies.

Veins and hydrothermally altered rocks include:

- Laminated and stockwork quartz veining and silicified host rock forming 1-6m thick horizons apparently occurring along major regional structures identifiable in aeromagnetic data. The silicified host rocks include metasediments (pelites, schists and quartzites), granite and probably also felsic gneiss.
- A thin (m-scale) iron-muscovite altered shear zone hosted by quartz-feldspar-biotite schist and gneiss, interpreted as a Greenschist facies retrograde shear zone, possibly associated with the Palaeozoic Alice Springs Orogeny. The shear zone as well as the quartz veins and muscovite-bearing quartz veins/veinlets within the shear zone may be enriched in gold-silver-copper-lead-bismuth. Pegmatites within and/or cross-cutting the shear zone often contain xenoliths of, or are intercalated with the muscovite schist, but do not show a sheared fabric within the pegmatite, suggesting that they were intruded after the main phase of ductile deformation. However, the pegmatite veins are iron altered suggesting

that at least one phase of mineralisation along the shear zone occurred during or after pegmatite emplacement.

5.0 SUMMARY OF PREVIOUS EXPLORATION

Exploration was carried out by TENL on EL 8434 in the first three years of tenure. The exploration strategy in the first year was to assess the controls on existing anomalism and mineral occurrences on the neighbouring Mt Doreen Project, and to commence reconnaissance and systematic geochemical exploration over areas of residual regolith terrain and shallow transported cover on EL 8434.

No fieldwork was carried out on EL 8434 during the period from 18 April 2000 to 17 April 2001 (**Year One**) owing to the delay in finalising clearance of the proposed exploration programs by the CLC.

In November 2001 the CLC completed a Work Area Clearance over part of EL 8434 and adjacent EL 10064. TENL received clearance to access part of EL 8434 in March 2002. A limited reconnaissance sampling program was undertaken in the last week of **Year Two** of tenure.

During the 2002 field season (**Year Three)** TENL conducted rockchip and lag surface geochemistry, and vacuum and RAB drilling in addition to compilation of previous district exploration data and a regional scale bedrock interpretation. Elevated gold and arsenic values were identified from reconnaissance geochemical exploration providing encouragement to continue systematic geochemistry over the tenement. Substantial areas of prospective host lithology remain untested by first-pass geochemical exploration.

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Geological compilation of the Arunta Proterozoic basement in the Mt Doreen region has highlighted the existence of prospective hosting lithologies and deformation history. Thick successions of complexly deformed metasedimentary Lander Rock beds comprise similar lithologies and are believed to be stratigraphic equivalents of the Tanami Group which hosts mineralisation in the Tanami region. Phases of deformation are also believed to correlate with major orogenic deformation events in the Tanami and Central Australia. Metallogenic data compiled from previous exploration and known base metal occurrences within the Mt Doreen district provides additional encouragement.

6.0 YEAR FOUR EXPLORATION PROGRAM

6.1 RAB Drilling

6.1.1 Phase 1 – RAB Drilling

During August 2003, 85 RAB holes for 3152m were drilled in the tenement over areas at which 2002 reconnaissance suggested a predominance of sand covered terrain not amenable to surface sampling methods (**Plate 1**). Drilling was designed to focus over anomalous rock chip results (from 2002) and structural targets identified from aeromagnetics. Samples were assayed by ALS in Alice Springs for gold to 1ppb and Ag, As, Bi, Ca, Cd, Co, Cu, Fe, Mg, Mn, Mo, Ni, P, Pb, S, Sb, and Zn at ppm level

Four regional lines of RAB traversed the northern structural corridor. The majority of the holes were at 250 metre spacing, although the distances were stepped out away from the structural targets towards the ends of the lines. Although some granite/pegmatite was encountered, the majority of the holes were biotite schist. The biotite schist is generally very deeply weathered. Deep lacustrine clays were intersected at the southern end of the first line (NKB001 and 2), but the regolith is generally a metre or so of fine-grained aeolian silty-sand over hardpanised bedrock clays with a saprolitic zone normally around 35 metres thick

The central region (adjacent to the Nirrippi Road) was traversed by two lines of 250 metre spaced RAB. A more complex regolith was apparent, with at least a couple of metres (up to 10) of gravely soil over silty material (also up to 10 m thick) that is probably transported in nature (alluvial?). This material is often underlain by ferricrete, a thin laterite or mottled zone, overlying a leached saprolite zone of variable thickness. Again, biotite schist was the predominant rock type with subordinate granite / pegmatite.

A single north-south traverse was performed in the south-western corner of the tenement along a cleared track. The holes were initially shallow (bottoming in fresh rock within 5 metres or so) and traversed a prominent lateritic hill, before deepening markedly as the line progressed across a broad valley. The line terminated against a prominent quartz ridge (actually a shear zone). Most of the holes intersected biotite schists or variants thereof, generally very deeply weathered. Good basal gravels, many with a notable pisolithic component were encountered.

Assays results were encouraging, with low level anomalism associated with the targeted structures identified at each of the three areas drilled (Appendix I). The most significant results are tabulated below in **Table 3**.

Table 3. RAB - summary of significant results from Phase 1 RAB drilling.

Hole	From	To	Sample Type	Au ppb
NKB013	34	38	4m comp.	11
NKB013	46	51	4m comp.	13
NKB034	2	3	lag	8
NKB083	14	18	4m comp.	21

Re-sampling of >4ppb Au RAB 4m composite samples at 1m intervals was undertaken to better define grade and the geological controls on mineralisation. Thirteen holes were re-sampled and sent to Genalysis to assay for Au (aqua regia digest and enhanced fire assay to 1ppb Au detection limit). In most cases the anomalous composite samples included some quartz veining.

Assays were received for initial 1m re-sampling of anomalous 4m composites from Phase 1 drilling, returning a maximum value of 2m at 26ppb Au from 36m in NKB013. Re-sampling of NKB083 failed to repeat the 21ppb composite with a maximum 1m sample value of 5ppb suggesting a lab error with the original batch. Further 1m re-sampling of the hole again failed to return elevated gold values.

6.1.2 Phase 2 – RAB Drilling

Follow-up exploration of 13ppb and 21ppb anomalism identified from Phase 1 drilling was completed over the northern structural corridor during September 2003. Phase 2 drilling comprised 103 RAB holes for 4966m. Drill spacing was at a nominal 2000 x 400m to gain maximum coverage over projected strike of important structures (**Plate 1**). Best assay results are tabulated below in **Table 4**.

Table 4. RAB - summary of significant results from Phase 2 RAB drilling.

Hole	From	To	Sample Type	Au ppb
NKB177	27	31	4m comp.	8
NKB180	30	34	4m comp.	6
NKB183	26	30	4m comp.	13
NKB186	46	50	4m comp.	15

Re-sampling of several >4ppb Au RAB 4m composite samples at 1m intervals returned maximum assays of 1m at 34ppb Au from 48m in NKB186 and 1m at 28ppb Au from 26m in NKB188. In both cases the elevated gold appears to represent enrichment along a weathering front within quartz-feldspar-biotite gneiss. This region lies along an ENE-WSW trending structural corridor exhibiting splays and flexures prospective for gold mineralisation.

The anomalous results from the first round of drilling are located approximately 17 km apart on the northern margin of an ENE-WSW trending structural corridor. Although currently poorly defined, it appeared that coherent anomalism exists over an extended distance and additional north-south drill traverses (with hole spacings at 400 and 800 metres) were drilled in an attempt to define additional anomalism and verify the anomalous corridor.

The predominant rock types encountered in the Phase 2 drilling are gneisses (with many different variations) and muscovite granite. The high metamorphic grade of the gneisses is not considered especially prospective, but areas of muscovite-bearing schistose lithologies suggest that zones of retrogression or low-grade alteration are present. The gneisses are very variable in appearance, ranging from granitic gneisses through to felsic biotite schist and coarse biotite schists. Some of the granites also appear to be locally hydrothermally altered, with chloritised primary biotite and traces of epidote and haematite.

6.2 Phase 1 - Regional Surface geochemistry

A total of 339 lag samples, supplemented where appropriate by 96 rock chip samples were collected on a broad-spaced surface sampling program designed to cover the whole of the tenement (**Plate 2**). Lag samples were collected by taking shallow surface scrapes and sieving out the appropriate grain size fraction, see below. Two grain size fractions were collected and analysed by way of an orientation study on a subset of fifteen of these samples. Lag and rock chip samples were submitted to Genalysis for assaying at 0.1ppb Au as well as As, Ag, Bi, Cu, Mo and Pb to ppm detection.

6.2.1 Regional Lag Sampling - Phase 1

Where suitable material for lag sampling was common, samples were collected along approximately 2km spaced north-south traverses with a minimum spacing of c.250m (**Plate 2**). Where laggable material was scarce the north-south traverses where abandoned and samples were taken from all suitable sites determined in the field with the aid of Landsat images. Sample sites were accessed by 4WD vehicle or, rarely, by foot, and locations determined using handheld GPS. The majority of samples consisted of ferruginous pisoliths, lateritic gravel or colluvium of rock and vein quartz fragments. Colluvium samples were typically taken on the lower slopes of outcrops and where the outcrop had a preferred strike direction colluvial lag samples where taken from the slopes on either side of the strike ridge to ensure that the whole of the outcrop had been tested. The 5 -11mm fraction was collected for all samples. The grain size fraction was chosen to be consistent with the sampling conducted by Newmont on the neighbouring tenements. A subset of fifteen samples was also sampled at the +20# and -5mm fraction by way of an orientation study, see below.

Encouraging assay results with a maximum of **686ppb Au** lag were returned. Analysis of data indicates that greater than 1-2ppb Au should be regarded as anomalous (**Fig. 3**). The best results are summarised in **Table 5**.

Figure 3. Frequency distribution plot of gold values for Nicker lag (NKL) samples. Background gold is at 1-2ppb Au. A top cut has been applied to the dataset.

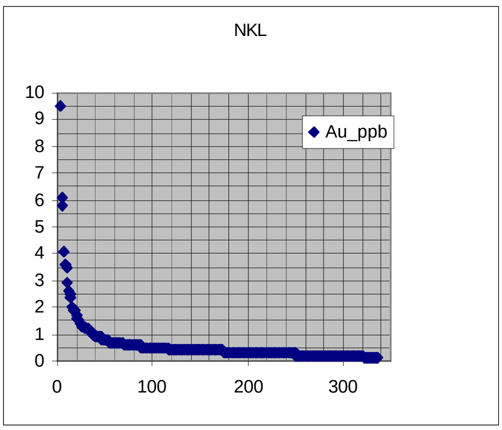

Table 5. Lag samples containing >4ppb Au from the Nicker tenement. Samples are 5-11mm fraction except 'B' sample which is <5mm fraction.

Sample	MGA East	MGA North	Comments	Au ppb	Ag ppm	As ppm	Bi ppb	Cu ppb	Mo ppm	Pb ppm
NKL415	643363	7560538	colluvial quartz gravel with some felsic schist (thin bedded quartzite)	**685.8**	3.6	4	X	106	9	1779
NKL341B	643236	7560201	sand-grade lag of mica-bearing vein quartz (pegmatite) and minor rock fragments	**271.1**	0.3	2	X	21	7	138
NKL341	643236	7560201	gravel lag of mica-bearing vein quartz (pegmatite) and minor rock fragments	17.4	X	2	X	15	7	65
NKL418	644991	7561305	colluvial schist and subordinate quartz gravel near schist outcrop	9.5	X	3	7	17	3	9
NKL420	645508	7561280	colluvial quartz and minor ?granite gravel on edge of hill near granite outcrop, mainly quartz with granite and gniess fragments	6.1	X	X	5	15	7	7
NKL417	645234	7561513	colluvial gravel of quartz and ferruginous rock fragments - schist?	5.8	X	X	1	20	4	20
NKL227	620896	7561750	colluvial quartz gravel with minor quartzite fragments	4.1	X	X	4	9	5	2

Orientation study: Comparison of the 5-11mm lag fraction with the <5mm fraction suggests that gold anomalies may be better detected using the finer, <5mm fraction. Fifteen lag samples were tested at both size fractions: of these, three returned slightly lower gold assays in the finer fraction, one sample returned identical assay results and eleven samples returned higher assay values in the finer grained fraction, including one very significant result of 271ppb Au for the <5mm fraction compared to 17.1ppb Au for the 5-11mm fraction (NKL341). Based on these findings the Phase 2 follow-up lag sampling used the <5mm fraction.

6.2.2 Regional Rock Chip Sampling - Phase 1

Rock chips were taken where suitable material was present with an emphasis on quartz veins. In many cases the rock chip sample was taken in the vicinity of a lag sample. The majority of the samples consisted of quartz veins, stockwork and laminate quartz veined and silicified rocks of various protoliths, and ferruginous metasediments. A total of ninety-six rock chip samples were taken during Phase 1 exploration.

Rock chip sampling returned some encouraging assay results with a maximum of 131ppb Au adjacent to the 687ppb Au lag sample (Section 3.2). Analysis of data indicates that more than 1-2ppb Au should be regarded as anomalous **(Figure 4**). The best results are summarised in **Table 6**.

Figure 4. Frequency distribution plot of gold values for Nicker rock chip (NKK) samples. Background gold in both cases is at 1-2ppb Au. A top cut has been applied to the dataset.

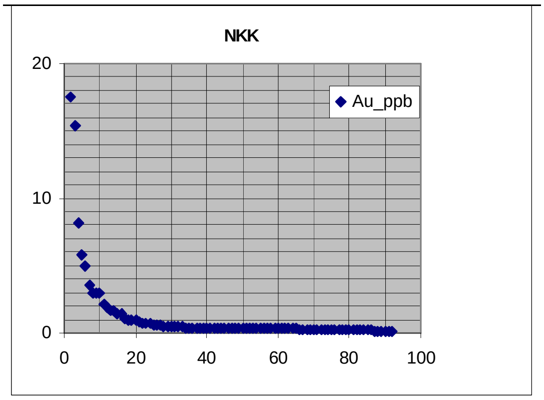

Table 6. Rock chips containing >5ppb Au

Sample	MGA East	MGA North	Comments	Au ppb	Ag ppm	As ppm	Bi ppb	Cu ppb	Mo ppm	Pb ppm
NKK120	643344	7560556	ferriginous quartz vein in outcropping felsic schist on low hill	**131.5**	3.9	2	13	435	7	3157
NKK073	618790	7566352	dark green malachite stained tremolite schist with mgr radiating fibres	17.5	7.8	X	176	5302	X	11
NKK121	639371	7576681	white quartz vein of unknown width and length. Slightly ferriginous and possibly hosted within quartzite	15.4	X	X	15	5	4	18
NKK134	650907	7527216	moderately foliated and tightly "z" folded ferruginous saprolite (after pelite) and smokey blueish-grey finely crystalline quartz vein	8.2	0.2	54	X	77	3	4
NKK089	619975	7561519	slightly ferriginous, weakly foliated quartz veins	5.8	X	X	115	6	5	2
NKK099	619728	7561803	ferruginous quartz vein	5	X	X	6	4	4	X

6.3 Phase 2 - Follow-up Surface Geochemistry

Twenty-nine lag and forty-nine rock chip samples were collected to follow-up over the best lag and rock chip gold anomalies discovered in the Phase 1 regional sampling program. The follow-up program focused on the area of the 686ppb and 271ppb Au lag and the 131ppb Au rock chip Phase 1 samples. As a result of the orientation study undertaken during Phase 1 sampling it was decided to collect a finer lag fraction. Samples were submitted to Genalysis for assaying, this time at 1ppb Au detection for rock chips and 0.1ppb Au detection limit for lag samples, along with As, Ag, Bi, Cu, Mo and Pb to ppm detection.

6.3.1 Follow-up lag sampling - Phase 2

During follow-up sampling a lag traverse of twenty-nine samples at approximately 20m spacing was completed across the main gold anomaly (**Figure 5**). The 0.425-5mm fraction (''A" sample) and the less than 0.425mm fraction ("B" sample) were both collected and analysed. Anomalies were generally higher grade in the coarser "A" fraction. Results were disappointing with a maximum of only 49ppb Au (**Table 7**). However, these results do suggest that a >10ppb lag footprint can be expected to be at least 40m wide, indicating that sample spacing should not be more than 20m.

Table 7. Lag samples containing greater than 10ppb Au. 'A' samples are 0.425-5mm fraction; 'B' sample which is <0.425mm fraction.

Sample	MGA East	MGA North	Comments	Au ppb	Ag ppm	As ppm	Bi ppb	Cu ppb	Mo ppm	Pb ppm
NKL391A	643299	7560514	Lag of muscovite schist with qtz veins	12	0.3	2	1	106	4	800
NKL391B				9	0	3	0	52	0	383
NKL392A	643316	7560500	Lag of muscovite schist with qtz veins	49	0.2	6	0	92	2	1220
NKL393B				24	0	4	0	41	0	401
NKL394A	643347	7560489	muscovite schist lag/colluvium	26	0.2	3	0	51	2	525
NKL394B				9	0	3	0	15	0	119

6.3.2 Follow-up rock chip sampling - Phase 2

Follow-up rock chip sampling around anomalous lag and rock chip gold assay results improved on the original anomaly (maximum 686ppb Au lag, 131ppb Au rock chip) with a maximum rock chip sample assaying at **8.7g/t Au** (**Figure 5**). These results confirm that gold mineralisation is within a **gold-copper-lead-silver** system. The best results are summarised in **Table 8**.

Table 8. Rock chips containing greater than 0.5g/t Au

Sample	MGA East	MGA North	Comments	Au ppm	Ag ppm	As ppm	Bi ppb	Cu ppb	Mo ppm	Pb ppm
NKK182	643232	7560440	Feox-stained musc schist with qtz veinlets 031/35S	**8.7**	2.7	3	3	335	8	3421
NKK172	643365	7560554	sheared grannular white qtz vein and musc schist country rock	2.2	4.5	0	0	76	9	1001
NKK146	643312	7560508	2m composite of silicified and feox altered musc schist	1.7	4.6	3	0	171	16	**13600**
NKK174	643368	7560552	white grannular qtz vein	1.4	2.4	3	4	278	9	1533
NKK145	643309	7560508	1m composite of sheared, ferruginous intercalated pegmatite and musc schist	0.9	3.6	0	0	278	9	4601
NKK149	643346	7560541	c.2m thick red-stained qtz vein with ferruginous inclusions (wthd sulphide?) 047 strike	0.5	1.2	0	0	38	4	290

6.4 Soil Sampling

Two orientation studies were undertaken to test bulk cyanide leach analysis of -80# aeolian sand samples as a method of detecting covered gold anomalies. The samples were submitted to Genalysis for BLEG digestion using a 100g charge and analysis for Au (0.01ppb), Ag (0.1ppb), As (0.02ppb), Bi (0.1ppb), Cu (0.01ppb) and Mo (0.1ppb) by mass spectroscopy. Large areas of the tenement are covered by aeolian sand and remain untested by surface sampling or drilling. This method could prove a cost efficient method of conducting first pass exploration over these areas. Newmont Gold Exploration Pty Ltd have successfully used **bulk cyanide leach** (BCL) ''soil'' sampling on the -80# fraction of interdune sands on a 1x2km grid to identify a consistent <5ppb gold anomaly which appears to be coincident with a magnetic high along the margin of a major NE-SW orientated structure (Walter & Whittaker 2003).

6.4.1 Phase 1 – Soil Orientation Study Across Weak Drill Anomaly

The first orientation study consisted of 24 samples (NKS001-24) collected on a 400x2000m grid centred on a weakly anomalous RAB gold anomaly (NKB013). This sample set did not return anomalous gold results with all samples returning <0.4ppb Au (**Plate 2**).

6.4.2 Phase 2 – Soil Orientation Study Across 'High Grade' Lag / Rock Chip Anomaly

A further 25 samples (NKS025-049) were collected from two sample lines at 50m sample spacing, along strike and between the >100ppb lag and rock chip anomalies. These samples are designed to provide comparative data from an area of significant gold mineralisation as the phase 1 test was had tested an area of relatively weak gold mineralisation and was therefore considered ineffective (**Figure 5**). Three consecutive samples (*ie*. over a 150m interval) returned >1ppb Au results and were clearly anomalous (**Table 9**). These three samples were collected within the vicinity of a known 271ppb Au lag anomaly (NKL341B) suggesting that the aeolian cover is enriched in the mineralised zone. However the enrichment is suspected to be locally derived sediment shedding off the nearby mineralised outcrop rather than due to some upward movement of mineralisation buried beneath the sandy cover. The absence of detectable enrichment in the sandy cover immediately to the north, and along strike, of the outcropping gold anomaly would support this explanation. It must therefore be concluded that we have not been able to demonstrate that BLEG analysis on samples of aeolian sand can be relied upon to detect sand-covered gold mineralisation. Lag and rock chip sampling appear to be more reliable indicators of gold mineralisation.

Table 9. Best results from BLEG analysis of <80# transported silty sand cover material.

Sample	MGA East	MGA North	Au ppb	Ag ppb	Bi ppb	Cu ppb	Mo ppb
NKS026	643150	7560250	1.3	7.8	0.7	0.26	17.1
NKS027	643200	7560250	1.08	7.4	0.2	0.24	19.2
NKS028	643250	7560251	2.65	6.3	11.4	0.23	13.9

7.0 CONCLUSIONS

Three styles of gold mineralisation appear to be present:

1. The main >1g/t Au (max. **8.7g/t** – NKK182) anomaly occurs in **gold-silver-copper-lead-bismuth** enriched **silica-iron-muscovite altered shear zone** and associated quartz veins and muscovite-bearing quartz veins. The host lithology consists of quartz-feldspar-biotite schist and gneiss. The mineralised shear zone is oriented at 047° and is exposed in outcrop over 200m strike length. Mineralisation is open along strike in both directions where the inferred continuation of the shear zone is covered by aeolian sand. This locality has been assigned prospect status and informally named the **Dodger Prospect**. (**Figure 5**)

2. **Copper-silver-bismuth-gold** mineralisation hosted by **quartz veins** and **malachite-stained tremolite schist** within a thin metasedimentary package in the northwest of the tenement (e.g. NKK073, 089, 092, 099). Up to **0.5% Cu**, maximum 17.5ppb Au (NKK073).

3. Rare, **weak gold** mineralisation (<10ppb Au) hosted by **stockwork** and **laminated quartz veining** along regional ENE-WSW striking structures (*e.g.* NKK062 and possibly NKK121).

The **>1g/t Au** lag and rock chip samples were all derived from a low hill with extensive aeolian sand plains to the east, west and south, and a narrow (<100m) area of aeolian sand cover separating it from a taller hill to the north-west. Lag and rock chip sampling from this north-western hill did not return any positive assay results. Gold mineralisation occurs in an area of **muscovite schist** and muscovite-altered quartz-feldspar-biotite gneiss, sandwiched between a massive granite body, recognised in outcrop and as a magnetically quiet area, and extensive outcrops of quartz-feldspar-biotite schist, and occasionally migmatitic quartz-feldspar-biotite gneiss.

The muscovite schist is interpreted as Greenschist facies retrograde metamorphism of the quartz-feldspar-biotite gneiss and has a dominant foliation oriented at **047°**. A gradational variation between the shear zone and the country rock is recognised in outcrop. In the centre of the shear zone, where the muscovite alteration is at its strongest, a south-east oriented crenulation is locally developed and 1-5cm thick schistosity-parallel quartz veinlets are typically weakly folded. Silicification of the schist adjacent to the quartz veins is also recognised.

At least two thin (<1m) pegmatites are recognised within the shear zone. They often contain xenoliths, or are intercalated with the muscovite schist, but do not show a sheared fabric within the pegmatite, suggesting that they were intruded after the main phase of ductile deformation. The pegmatite veins contain iron oxide altered ''gossanous'' phases and appear to be more ferruginous than the host rock. It is suggested that the abundance of iron represents mineralisation by late-stage iron-rich hydrothermal fluids targeting the relatively permeable pegmatite. Cross-cutting quartz veins are more common away from the shear zone, where muscovite alteration is less pronounced. In this zone at least two vein directions are recognised in outcrop, suggesting either a conjugate set or two or more phase of brittle deformation.

A set of three **low grade gold anomalies** (5-10ppb Au) occur in lag samples collected from an outcrop hill approximately 2.5km from the main geochemical anomaly. A traverse of the hill failed to identify an obvious source of the anomalous gold. The geology consisted of quartz-feldspar-biotite gneiss with some distinctive 160° dolerite intrusives, cross-cut by an east-west orientated pegmatite swarms. A rock chip sampling traverse was taken across this area, sampling at approximately 50m intervals for 12 samples (NKK156-167), but failed to detect any anomalous gold values.

In summary a unique Au-Pb(-Cu) association has been identified from geochemical sampling at the **Dodger Prospect**. This association is unknown elsewhere in the Tanami-Arunta region. In the remainder of Nicker Project additional gold anomalism has been located at a number of other areas within the tenement.

8.0 EXPLORATION EXPENDITURE YEAR FOUR

Exploration expenditure for the period ended 31 March 2004 is given below in **Table 10**.

Table 10: Year Four Exploration Expenditure

Item	$
Salaries/Wages	44,203
Consultants/Contractors	13,784
Drilling	30000
Assays - Drilling	31,095
Assays – Geochemical survey	8,556
Vehicles/Fuel	15,934
Travel/Accommodation	7,920
Drafting/Computing	2,090
Field/Camp costs	13,040
Administration/Overheads	31,880
Total	**$242,081**

9.0 PROPOSED EXPLORATION PROGRAM YEAR FIVE

Following review of the Dodger Prospect over the wet season the following work was planned to be conducted on EL 8438 during the 2004 field season:

- Prospect scale Landsat fact mapping and regolith interpretation.
- Reprocessing of local aeromagnetics and bedrock geological interpretation.
- Further detailed surface geochemistry over residual terrain.
- Hammer drill testing beneath mineralised outcrop.
- Blade refusal drill testing under cover along strike.

- Regional scale Landsat fact mapping and regolith interpretation.
- Reprocessing of regional aeromagnetics and bedrock geological interpretation utilising bottom of hole drill data.
- Procure full dataset from Lake MacKay JV and interrogate for Au-Pb. Cross-sections etc to be prepared.
- Apply gold-lead model to regional database.

The proposed budget to conduct this work is outlined below in **Table 11**.

Table 11: Proposed Exploration Expenditure – Year Five

Item	$
Salaries/Wages	12,500
Drilling	20,000
Assays - Drilling	7,500
Assays – Geochemical survey	2,500
Vehicles/Fuel	2,500
Travel/Accommodation	3,000
Drafting/Computing	1,000
Field/Camp costs	2,500
Administration/Overheads	7,500
Total	**$59,000**

10.0 REFERENCES

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Drilling Details and Assay Results 2003

Surface Geochemistry Assay Results 2003