



TANAMI
EXPLORATION NL

ABN 45 063 213 598

FIRST
ANNUAL REPORT

KINTORE JOINT VENTURE
EL 23414 'WORMAN ROCKS'
EL 5782 'ININTI'

Year Ending 26 June 2004

Author
L. English
T. Smith

Distribution:

- Department of Business, Industry, & Resource Development (1)
- Central Land Council (1)
- Tanami Gold NL, Perth (1)
- Tanami Gold NL, Alice Springs (1)
- Lutz Frankenfeld (1)
- Troy Resources NL (1)

File: cr35dbirdAR2004_Kintore JV

CONTENTS

1.0	SUMMARY	1
2.0	INTRODUCTION.....	1
3.0	TENURE	2
4.0	REGIONAL GEOLOGY.....	2
5.0	PREVIOUS EXPLORATION	3
6.0	TENL EXPLORATION.....	3
6.1	Summary of Work Completed	3
6.2	EL 23414 'Worman Rocks'	3
6.2.1	Summary.....	3
6.2.2	Exploration Rationale	4
6.2.3	Geomorphology & Regolith	4
6.2.4	Geology.....	4
6.2.5	Work Completed - Phase 1	5
6.2.6	Work Completed - Phase 2	6
6.2.7	Conclusions and Recommendations	8
6.3	EL 5782 'Ininti'	8
6.3.1	Summary.....	8
6.3.2	Exploration Rationale	8
6.3.3	Geomorphology & Regolith	8
6.3.4	Geology.....	8
6.3.5	Work completed	9
6.3.6	Conclusion & Recommendations	9
7.0	EXPLORATION EXPENDITURE YEAR ENDING 26 JUNE 2004.....	10
8.0	PROPOSED EXPLORATION PROGRAM YEAR 2	10
9.0	REFERENCES.....	11

TABLES

Table 1:	Tenement Details Kintore Project.....	2
Table 2:	Summary of geochemical samples collected from Kintore Joint Venture 2003	3
Table 3:	Summary of geochemical samples collected from Worman Rocks, Phase 1	5
Table 4:	Summary of results for samples collected from Worman Rocks, Phase 1.....	6
Table 5:	Summary of samples collected from Worman Rocks, Phase 2	7
Table 6:	Summary of results for samples collected from Worman Rocks, Phase 2.....	7
Table 7:	Summary of results for samples collected from Ininti	9
Table 8:	Exploration Expenditure Summary Year Ending 26/06/04.....	10
Table 9:	Proposed Exploration Program Year 2.....	10

FIGURES

Figure 1:	Project Locality	1:2 000 000
Figure 2:	Tenement Locality	1:1 000 000
Figure 3:	Exclusion Zones	1:500 000

PLATES

Plate 1:	Worman Rocks Surface Geology	1:100,000
Plate 2:	Sample Locations Worman Rocks	1:100 000
Plate 3:	Sample Locations Ininti	1:100 000

DIGITAL APPENDICES (supplied on CD)

FILE DESC

KINTORE_SG2_LAG2003A	Lag samples
KINTORE_SG2_ROCK2003A	Rockchip samples
KINTORE_GEOLOGY_CODES	Description of geology codes

1.0 SUMMARY

Exploration Licences 5782 'Ininti' and 23414 'Worman Rocks' form part of the Kintore Joint Venture Project. The Joint Venture tenements are being explored pursuant to an agreement between the registered holder, Lutz Frankenfeld, Troy Resources NL and Tanami Gold NL (TGNL). This combined report describes exploration in the first year of tenure carried out by Tanami Exploration NL (TENL), a wholly owned subsidiary of TGNL, a publicly listed company.

The tenements are situated 500 and 450 kilometres respectively west of Alice Springs close to the West Australian border (**Figure 1**). The target is epigenetic gold mineralisation hosted by Proterozoic basement inliers of the Southern Arunta Province exposed along the northern margin of the Neoproterozoic-Palaeozoic Amadeus Basin.

Exploration in the first year included first pass reconnaissance and follow up geochemical sampling. A total of 226 lag and 143 rockchip samples were collected; 185 lag samples and 136 rock chips from EL 23414 and 41 lag and 7 rock chip samples from EL 5782.

At Worman Rocks (EL 23414) a number of surface geochemical anomalies have been identified to a maximum of 5ppb Au. The anomalies are hosted within Neoproterozoic Amadeus Basin sediments. No Proterozoic basement rocks or major quartz reefs were located within the tenement. Follow-up sampling of the weak surface geochemical anomalies failed to improve on initial results returning disappointing results to a maximum of 3ppb Au.

At Ininti (EL 5782) scattered low level gold anomalies to 5ppb Au were returned. The geology comprises mainly granite and gneiss and is considered unprospective to host significant gold mineralisation. A large exclusion zone overlies the northern section of the tenement which is interpreted to host possible metasediments of the Lander Rock Beds Group and is therefore regarded as having higher prospectivity.

2.0 INTRODUCTION

This report summarises exploration carried out on the Kintore Joint Venture between Tanami Gold NL (TGNL), Troy Resources NL and Lutz Frankenfeld during the 2003 field season.

The Kintore Joint Venture comprises two tenements; EL 23414 'Worman Rocks', located in the southwest of the Northern Territory, approximately 450km west of Alice Springs; and EL 5782 'Ininti' 50km further northwest and adjacent to the West Australian border, straddling the Gunbarrel / Desert Bore Road (**Figure 1**).

The primary target of the Kintore Project is epigenetic gold mineralisation. At Worman Rocks exploration targeted gold hosted by Proterozoic basement inliers of the Southern Arunta Province exposed along the northern margin of the Neoproterozoic-Palaeozoic Amadeus Basin. At Ininti gold mineralisation associated with splays off the major east-west trending Desert Bore Shear are targeted.

The principal aim of the initial exploration program conducted during 2003 was to

1. identify areas of outcropping Proterozoic basement and/or residual regolith terrain developed over weathered Proterozoic bedrock, and to
2. conduct first-pass sampling to test for low order geochemical anomalism, with the ultimate aim of developing targets for drill testing in the 2004 field season.

3.0 TENURE

The Kintore Joint Venture comprises two granted tenements, EL 23414 'Worman Rocks' and EL 5782 'Ininti', which were granted on 27 June 2003 (**Figure 2**). The tenements were granted to Lutz Frankenfeld, further tenement details are summarised in **Table 1**.

Table 1: Tenement Details Kintore Project

Tenement	Tenement No.	Blocks	Km ²	Grant Date	Expiry	DBIRD Covenant
Ininti	EL 5782	81	257	27/06/03	26/06/09	\$10,000
Worman Rocks	EL 23414	411	1290	27/06/03	26/06/09	\$90,000

The tenements are explored under the Kintore Farm-In Agreement, dated 30 October 2001, between Lutz Frankenfeld, Troy Resources NL (Troy) and TGNL. Pursuant to the terms of the agreement, Troy and TGNL can acquire an interest in Exploration Licences 5782 and 23414 by conducting exploration on the tenements.

A Deed for Exploration was lodged with the Department of Business, Industry and Resource Development (DBIRD) on 20 May 2003. Work area clearance of the tenements was completed by the Central Land Council (CLC) in late June 2003. Worman Rocks is affected by only minor exclusion zones with no significant impact on exploration programs. However a significant proportion of Ininti, including the entire northern portion of the tenement, has been excluded from exploration (**Figure 3**).

4.0 REGIONAL GEOLOGY

The region is covered by first edition BMR geological mapping of the Mt Rennie and Bloods Range 1:250,000 map sheets. In the region, Proterozoic basement comprising granitic gneiss and mafic lithologies is exposed in the Kintore Hills and is unconformably overlain by flat lying outliers of Heavitree Quartzite in the Davenport Hills (**Plate 1**).

The Worman Rocks tenement (EL 23414) contains scattered outcrops of Amadeus Basin sediments. The NTGS have mapped the sediments as generally younging to the west with Cambrian Pertaoorta Group sediments dominating in the east and Ordovician Larapinta Group sediments further west. These are considered to be unconformably overlain by Permian Mereenie Sandstone and Devonian sediments in the northwestern parts of the tenement. Although the solid geology is interpreted by the NTGS as a gently folded sequence of Amadeus Basin sediments, the thickness of the basin sequence in this region has not been established and it has been suggested that windows through the basin sediments to inliers of Proterozoic basement may exist within the cores of antiformal or domal structures. Lineaments observed in Landsat and aeromagnetics trending WNW-ESE (Trans-Tanami orientation) tends to support this interpretation however on-ground exploration has found no evidence of basement Palaeoproterozoic rocks.

The Ininti tenement (EL 5782) is situated over a flexure in the regional Desert Bore Shear Zone that separates the Arunta Region to the north from the younger (but still Palaeoproterozoic) Warumpi Province to the south. The area north of the Desert Bore Shear Zone, which is excluded from exploration under native title, is underlain by low-grade pelites and psammites, possibly Lander Rock Beds equivalents. South of the Desert Bore Shear Zone the bedrock is mapped as granulite facies charnockitic gneissic granite of the newly named Yaya Domain, overlain in the Winnecke Hills by a flat-lying outlier of Heavitree Quartzite.

Recent research conducted by the NTGS places the Proterozoic basement in the Warumpi Province at 1690-1610Ma, which is equivalent to mineralised successions elsewhere in Australia in the highly prospective P7 (1700 – 1600Ma) interval including Mt Isa, the McArthur Basin and Broken Hill successions. The Warumpi Province is interpreted as an allochthonous terrane, having been accreted onto the North Australian Craton at 1640-1630Ma as evidenced by the major tectonic, thermal and magmatic Liebig Event. Magmatism associated with the event led to emplacement of the prospective Andrew Young Hills (Ni, Cu, PGE) and Mt Webb Granite (Cu-Au).

5.0 PREVIOUS EXPLORATION

No previous exploration in the area has been reported.

6.0 TENL EXPLORATION

6.1 SUMMARY OF WORK COMPLETED

A total of 226 lag and 143 rockchips were collected during 2003 on the Kintore Joint Venture tenements (Table 2). The sampling programs are discussed in detail in Section 6.2 (Worman Rocks) and Section 6.3 (Ininti).

Table 2: Summary of geochemical samples collected from Kintore Joint Venture 2003

Prefix	Number	# Samples	Type	Size Fraction
KNK	001 – 093 101 – 126	143	Rockchip	
KNL	001 – 226	226	Lag	-6mm +1.5mm

All samples were prepared by Australian Laboratory Services (ALS) in Alice Springs and analysed by ALS in Perth 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 using an aqua regia digest and ICP analysis. Results for all analyses are listed in the digital Appendix.

6.2 EL 23414 'WORMAN ROCKS'

6.2.1 Summary

A total of **185 lag** and **136 rockchip** samples were collected from two phases of exploration:

Phase 1 reconnaissance exploration by helicopter identified an area of consistent weakly elevated gold anomalism (typically 2-5ppb Au) in pisolithic lag gravel and rockchips of pisolithic ferricrete. Initial results also included two anomalous rock chip results to a maximum of 13ppb Au in calcrete and 9ppb Au in weathered sandstone. However check assaying of these two samples by ALS using a second split, returned values of only 3ppb Au and 5ppb Au respectively.

Phase 2 ground based follow-up geochemical sampling, comprising rockchip and lag sampling carried out over selected anomalies identified from Phase 1 reconnaissance. Resampling of the anomalous calcrete returned a maximum of 3ppb Au; consistent with the subsequent check assaying carried out by the lab. Resampling of the anomalous sandstone downgraded the anomaly to a maximum of 5ppb Au.

Infill lag sampling at approximately 250x250m spacing around the low level anomalism in pisolithic lag generally failed to improve or repeat the original consistent low level anomalism in pisolithic lag (**Table 4**).

6.2.2 Exploration Rationale

The Kintore region of the Southern Arunta is under-explored. First edition geological mapping of the region is generally regarded to be of low-moderate confidence having relied heavily on air photo interpretation. A reinterpretation of available data suggested that inliers of early to mid-Proterozoic Arunta Block basement rocks may occur within the cores of antiformal or domal structures. Such crystalline basement rocks of the Arunta block are the principal target lithology for epigenetic gold, copper-gold and magmatic nickel-copper mineralisation in the region. West-northwesterly trending linear features visible in Landsat and magnetics were interpreted as possibly Trans-Tanami –style structures which are common throughout the Tanami-Arunta Province.

The Amadeus Basin sediments are a secondary target lithology for gold mineralisation related to the Palaeozoic Alice Springs Orogeny. In the Arltunga Goldfields near Alice Springs Neoproterozoic Heavitree Quartzite hosts gold mineralisation at the White Range gold mine. Some explorers have also targeted the Amadeus Basin sequence as a potential host by analogy to the Witwatersrand 'hydrothermal' model (Gutnick Resources 'Rand Project').

6.2.3 Geomorphology & Regolith

Approximately 90% of the tenement is covered by aeolian sand comprising linear or sinuous dunes 10-15m in height and up to several kilometres in length. Some areas are passable by light vehicle where the dunes are shorter in length, although not without some difficulty.

Inter-dune swales mostly comprise more aeolian sand and sandy wash, but rare areas of outcrop, lateritic material, calcrete and silcrete also occur (**Plate 1**). The lateritic material comprises either black pisolithic gravels or, less often, nodular/pisolithic ferricrete. The nodular/pisolithic ferricrete is interpreted as an iron-cemented transported lateritic gravel: the absence of cutans on the nodule surfaces suggesting transport prior to cementation. The lateritic material often occurs in association with outcrops of ferruginous, mottled or pallid arenaceous saprock, and as thin sheets in wash areas or claypans.

The remainder of the tenement comprises low areas of wash, claypans and calcrete 'channel' country. This channel country provides vehicle access into the interior of the tenement.

6.2.4 Geology

All outcrop consists of weathered metasediments, ranging from relatively fresh rock to mottled or ferruginous saprock and weakly lateritised breakaways. Lithologies mainly comprise sandstones, with lesser conglomerate and quartzite, which together with the flat-lying or gently dipping attitude suggests that they are part of the Neoproterozoic to Palaeozoic Amadeus Basin sequence (**Plate 1**).

No Palaeo- or Mesoproterozoic basement (schist, gneiss, granulite, amphibolite or granite) has been identified on the tenement.

A linear WNW-ESE (possible Trans-Tanami) feature in the centre of the tenement was traversed along its entire 6km length by foot, and was observed to comprise a long linear strike ridge of resistant quartz arenite. Rockchip samples were taken at regular intervals along it and lateritic gravels nearby were sampled. .

6.2.5 Work Completed - Phase 1

Helicopter supported reconnaissance was conducted over the 'Worman Rocks' tenement in late July 2004, comprising systematic 10km spaced north-south sampling traverses targeting favourable geochem material including outcrop, laterite, calcrete, and any quartz veining that might be observed (**Plate 2**). The 10km sweeps were then infilled to approximately 5km in regions where outcrop or pisolithic lag had been identified. Samples are summarised in **Table 3**.

Table 3: Summary of geochemical samples collected from Worman Rocks, Phase 1

Prefix	Number	# Samples	Type	Size Fraction
KNK	001 – 049 101 – 126	75	Rockchip	
KNL	001 – 048 101 – 120	68	Lag	-6mm +1.5mm

Samples were submitted to ALS for analysis of 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 using an aqua regia digest and ICP analysis. Results for all analyses are listed in the digital Appendix.

Results from geochemical sampling initially appeared encouraging for Phase 1 reconnaissance, including 13ppb Au in calcrete, 9ppb Au in weathered sandstone and consistent weak gold anomalism (typically 2-5ppb Au) in pisolithic lag gravel and rock chips of pisolithic ferricrete (**Table 4**). Cu and Pb were weakly elevated throughout but not significantly so, whereas Zn was generally low but recorded some anomalous spikes up to 306ppm Zn. Silver was consistently elevated (commonly >0.5g/t Ag) in the pisolithic lag gravels.

Some concerns with the first batch of samples were noted. The first sample in the batch returned the highest gold value at 13ppb (in calcrete) and the fourth sample returned the second highest value at 9ppb. The results immediately raised suspicions of laboratory contamination. Validation of the results was necessary by re-sampling, which was conducted as part of Phase 2, and re-assaying of a second split of the sample.

Greater confidence was held in the area of transported pisolithic lag gravels in the northeast of the tenement, the elevated values being geographically consistent. Silver was noted to be elevated throughout the batch in lags and rock chips including four >1ppm Ag samples to a maximum of 2.7ppm Ag.

Table 4: Best assay results for samples collected from Worman Rocks, Phase 1

Sample Number	Easting MGA	Northing MGA	Regolith	Lithology	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
KNK001	544905	7345536	LAC	CAL/SIL	3 (13)*	0	2	11	0	0
KNK003	550088	7337260	PAL	ARN	4	0	0	4	3	2
KNK004	555711	7332343	PAL	ARN	5 (9)*	0	0	8	3	2
KNK038	534052	7370641	ALV	SIL	4	0.5	6	19	46	4
KNK048	541562	7370327	ALV	SIL/PISO	4	0	40	72	8	67
KNK050	539048	7368802	ALV	SIL/CLY	4	0	4	15	31	2
KNK054	535832	7369591	ALV	CAL	5	0	3	13	6	0
KNK063	569197	7356459	ALV	CAL	3	0	1	4	2	51
KNK064	566437	7359858	ALV	CAL	3	0	0	6	0	0
KNK102	558471	7350133	LAT	FE	3	0.9	186	21	22	0
KNK138	539859	7369047	HDP	feCLY	5	0.7	8	37	2	306
KNL002	545192	7363856	COL	GRV/PISO	3	0.6	47	9	21	4
KNL003	545778	7359972	ALV	PISO	3	0.7	60	8	25	0
KNL011	560497	7362400	ALV	PISO	5	0.6	48	20	30	3
KNL014	558232	7366437	ALV	PISO	3	0.5	43	18	24	5
KNL015	557503	7367329	ALV	PISO	4	0.4	37	20	24	6
KNL019	546479	7352309	ALV	PISO	4	0.7	39	6	22	2
KNL028	538356	7369641	ALV	PISO	6	0.6	61	19	50	6
KNL101	558701	7350094	COL	GRV/PISO	3	0.8	128	28	51	4
KNL102	558484	7350140	COL	GRV/PISO	5	0.6	102	17	16	0
KNL110	538048	7359091	ALV	PISO	6	0.6	47	9	22	0
KNL111	538209	7359043	COL	GRV/PISO	5	0.5	27	9	20	4

* bracketed numbers are initial assay results subsequently found to be elevated by laboratory contamination. Unbracketed value is accepted check re-assay result. LAC=lacustrine; PAL=pallid zone; ALV=alluvium; LAT=laterite; HDP=hardpan; COL=colluvium; CAL=calcrete; ARN=arenite; SIL=silcrete; PISO=pisoliths; CLY=clay zone; FE=ferruginous; GRV=gravel.

6.2.6 Work Completed - Phase 2

The Phase 2 program comprised 4WD vehicle-based follow-up of selected anomalies identified from Phase 1 reconnaissance. Anomalies targeted for follow-up work included those suspected of laboratory contamination as resampling of such anomalies was considered an important test of validity. A further 22 rockchips and 60 lag samples were collected (Table 5). Three areas were targeted for follow-up:

1. 13ppb in calcrete in the southwest of the tenement (subsequently found to be a contaminated sample: re-assayed at 3ppb Au).
2. 9ppb in weathered arenite (Amadeus Basin) in the southwest of the tenement (subsequently suspected to be a contaminated sample: re-assayed at 5ppb Au).
3. Consistent 2-5ppb Au anomalism in transported pisolithic gravel in the northeast of the tenement.

Table 5: Summary of samples collected from Worman Rocks, Phase 2

Prefix	Number	# Samples	Type	Size Fraction
PHASE 2				
KNK	072 - 093	22	Rockchip	
KNL	167 - 226	60	Lag	-6mm +1.5mm

Results for Phase 2 surface geochemical sampling and re-assaying of anomalous pulps were disappointing. Re-assaying of pulps downgraded grade in both cases, either to a weaker anomalism (KNK009) or to background level (KNK001) (**Table 4**). Repeat sampling of anomalous outcrops and close-spaced follow-up sampling of lag targets failed to repeat the high values obtained in the Phase 1 sampling.

1. Re-assaying pulps of the 13ppb Au calcrete sample downgraded the sample to 3ppb Au (Table 4). The initial contamination was confirmed by two repeat samples of the calcrete outcrop which returned 1ppb and 3ppb Au (KNK072-73; Appendix I).
2. The arenite outcrop which assayed at 9ppb was similarly downgraded with the re-assay of the pulp returning 5ppb Au and the two repeat samples returning <1ppb Au (KNK075-76; Appendix I).

The initial elevated assay results (Phase 1) relative to the re-assaying of pulps has been attributed by ALS to carry-over contamination from a previous batch due to incomplete cleaning of a suction device used when aliquoting solutions prior to extraction.

3. Most disappointingly, systematic follow-up of the consistently elevated pisolithic material in the northeast of the tenement generally failed to repeat anomalism. The maximum was 3ppb Au (in three samples – KNL168, KNL183 and KNL186; **Table 6**) and many samples taken adjacent to 3-5ppb Au results from Phase 1 returned assays below detection. Notably, silver assays were uniformly less than detection. The inconsistency in the silver results has been attributed to variations in the correction factor used to accommodate inter-element interference in the ICPAES analysis. High iron contents, particularly in the pisolithic lag samples, causes a lot of interference, necessitating a large correction factor and reducing precision of the results. A similar explanation may account for the downgraded gold assays.

Table 6: Best assay results for samples collected from Worman Rocks, Phase 2

Sample Number	Easting	Northing	Regolith	Lithology	Au ppb	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
KNK073	544919	7345539	ALV	CAL	3	8	0	0	0	1
KNK074	544025	7344782	SAP/PAL	ARN	3	8	3	9	0	0
KNK083	562749	7360231	HDP	PISO	3	60	17	12	0	73
KNK091	560377	7361553	MOT	ARN	4	11	3	4	0	4
KNK093	557608	7364673	MOT	ARN	4	7	8	2	0	2
KNL168	562602	7360165	ALV	PISO	3	15	25	6	0	54
KNL183	561250	7361500	ALV	PISO	3	21	23	11	0	50
KNL186	560504	7361545	ALV	PISO	3	34	25	13	0	40

6.2.7 Conclusions

The bedrock geology of EL 23414 comprises unprospective Neoproterozoic Amadeus Basin sediments. No Palaeo-Mesoproterozoic basement was identified. The sediments of the Amadeus Basin cannot be completely discounted as a host rock given that the White Range gold deposit in Central Australia is hosted within equivalent stratigraphy. However at White Range mineralisation is believed to have been introduced into overlying quartzites along basement faults and shears. The basal contact between crystalline basement and the Heavitree Quartzite, the brittle host to gold mineralisation at White Range, does not occur within EL 23414 .

Geochemical sampling has failed to identify robust anomalism. Check assaying and follow-up of initially encouraging assays, both in tenor and consistency, has failed to improve or repeat the Phase 1 results.

6.3 EL 5782 'ININTI'

6.3.1 Summary

A first pass program of lag and rock chip sampling of the Ininti tenement was carried out over the areas cleared by the CLC (**Figure 3**) with a total of **41 lag** (KNL065-100; 162-166) and **7 rockchip** samples (KNK065-071) collected during a reconnaissance field visit. Scattered weakly anomalous gold assays to 5ppb Au were returned however the geology is considered unprospective to host significant gold mineralisation.

6.3.2 Exploration Rationale

The tenement is principally targeted for structurally hosted epigenetic gold mineralisation. The tenement is mapped as containing Proterozoic basement comprising gneissic granite and quartz-sericite schist which could represent meta-sedimentary rocks. Also, the major Desert Bore Shear Zone transects the tenement.

6.3.3 Geomorphology & Regolith

The topography of the Ininti tenement is essentially flat with heterogeneously distributed isolated outcrops typically less than 1m high. In this area the terrain between outcrops is covered with a residual lag of weathered bedrock over a thin sandy soil. Calcrete development is common within the soil. Further south the outcrops and associated lags become increasingly scarce and transported sands become thicker with termite mounds more abundant. Isolated sand dunes are present in the south of the tenement but form no impediment to 4WD access.

6.3.4 Geology

The non-excluded southern part of the tenement consists of east-west striking granite and feldspar-biotite gneiss. In outcrop the granite is a massive, coarse-grained rock composed of quartz, plagioclase and biotite and may be described as a biotite tonalite. The feldspar-biotite gneiss varies between medium and coarsely crystalline, and moderately to strongly foliated. Unpublished mapping by the NTGS indicates that orthopyroxene-clinopyroxene charnockites are also present. These units have been assigned by the NTGS to the Yaya Domain. Integration of the outcrop data with

aeromagnetics suggests that the magnetic highs depict the granite and the magnetic lows define the distribution of the feldspar-biotite gneiss packages. Outcrop indicates that tectonic strain was predominantly taken up by ductile shear fabrics in the feldspar-biotite gneiss, whilst the granitic-rock remains essentially massive and undeformed. The contact between these lithological packages is considered the most prospective zones for epigenetic gold mineralisation.

The regional scale Desert Bore Shear Zone passes through the excluded northern part of the tenement and separates the southern Yaya Domain from probable Lander Package schists and amphibolites of the North Australian Craton. This major structure and the Lander Package lithologies are generally considered more prospective than the granulite facies gneisses that are present in the non-excluded ground.

6.3.5 Work completed

Three north-south traverses at approximately 5km spacing were completed and lag samples collected where possible with a minimum 200m sample-spacing (**Plate 3**). A total of **41 lag** (KNL065-100; 162-166) and **7 rockchip** samples (KNK065-071) were collected. The southern area of EL 5782 remains largely untested due to extensive aeolian sand cover.

Samples were submitted to ALS for analysis of 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. Results for all analyses are listed in the digital Appendix.

A number of widely scattered low level anomalies were returned from the sampling (**Table 7**). No readily determinable pattern in terms of underlying bedrock or magnetics has developed.

Table 7: Summary of results for samples collected from Ininti

Sample No	Easting	Northing	Regolith	Lithology	Au ppb	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
KNK065	501956	7431761	Ferruginous	Feldspar-biotite gneiss	4	25	26	18	0	6
KNK066	501952	7430133	Weathered	Quartzite	5	32	2	13	0	1
KNL067	502017	7430545	Colluvium	Gravel	3	10	14	9	0	1
KNL070	501986	7433347	Colluvium	Gravel	3	16	14	8	0	6
KNL085	512020	7433157	Colluvium	Gravel	3	10	4	4	0	3
KNL087	511247	7429156	Colluvium	Gravel	3	14	26	5	0	10
KNL166	505973	7431890	Colluvium	Gravel	4	9	3	8	0	0

6.3.6 Conclusion

Scattered weakly anomalous gold assays provide some encouragement for the possibility of gold mineralisation, however the host rocks observed to date in the southern part of the tenement are considered to have low prospectivity.

7 EXPLORATION EXPENDITURE YEAR ENDING 26 JUNE 2004

Exploration costs to date are summarised in **Table 8** below.

Table 8 – EL5782 & EL 23414 Expenditure

Cost Element	EL5782 \$	EL 23414 \$
Salaries and Wages	3,725	23,866
Contractors/Consultants	308	1,717
Assaying - Geochemical Survey	958	6,415
Helicopter Hire & Fuel	0	22,118
Geophysical Survey - Consultants	112	576
Camp/Field Costs	1,258	7,682
Drafting and Computing	920	5,200
Vehicles/Fuel	989	6,822
Travel/Accommodation	1,040	5,690
Administration/Overheads	944	12,038
Total	\$10,254	\$92,124
<i>Covenant</i>	<i>\$10,000</i>	<i>\$90,000</i>
Site Clearance	\$7,4691	\$40,531

8 PROPOSED EXPLORATION YEAR 2

No further on-ground exploration is planned at present following further detailed assessment of the results returned from exploration conducted during Year 1. Planned work in Year 2 comprises a desktop study to critically review the geochemical anomalism and geological observations made to date with respect to possible other alternative exploration models for the region. A specialist geological consultant may be utilised to conduct this work.

Table 9: Proposed Exploration Program Year 2

Cost Element	EL 5782 \$	EL 23414 \$
Salaries and Wages	1,000	2,000
Consultant/Contractor	1,500	3,000
Re-analysis of Samples	250	500
Drafting and Computing	250	500
Vehicles/Fuel	100	200
Travel/Accommodation	1,000	2,000
Administration/Overheads	500	1,250
Proposed Covenant	4,600	9,450

9 REFERENCES

Forman D.J. & Stewart A.J. 1967. Bloods Range Sheet SG52-3, First Edition 1:250 000 scale geological map. *Bureau of Mineral Resources, Geology and Geophysics, Canberra.*

Wells, A.T. Foreman D.J. & Ranford L.C. 1968. Mt Rennie Sheet SF52-15, First Edition 1:250 000 scale geological map. *Bureau of Mineral Resources, Geology and Geophysics, Canberra.*

English, L.T.P., Smith, T., 2004, 2003 Exploration Report on the Kintore Joint Venture Worman Wocks EL 23414 and Ininti EL 5782. TGNL Internal Report.