



ARAFURA RESOURCES LTD

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ANNUAL AND FINAL REPORT FOR YEAR ENDING 9/07/07, EL 9701 FREW RIVER, NORTHERN TERRITORY, AUSTRALIA

by

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INTRODUCTION

BACKGROUND

(After Hussey 2006, Goulevitch 2005, Partially from Drummond, 2001-2003)

EL 9701 ("Frew River") is situated in the Davenport Province, to the immediate east of the Kurinelli goldfield, about 140 kilometres SE of Tennant Creek in the Northern Territory (Figure 1). Gold mineralisation was discovered in the area over 100 years ago in 1898 by prospector/explorer Davidson (Davidson, 1905) but the region has been subjected to only limited, spasmodic attention since that time. Current activity by local prospectors in the Kurinelli area is directed towards recovery of gold nuggets from shallow alluvial and colluvial deposits using metal detectors. Several hundred to several thousand ounces of gold are estimated to have been recovered in this way over the past 10-15 years.

Historical activity centred on gold mineralisation within quartz veins that characteristically occur within interbedded sandstone/siltstone (Rooneys Formation) and conformable gabbro/dolerite. The two main mines were the Kurinelli Mine (former MCC59) and the Dempsey's Choice Mine (MCC191). Historical production was about 400 ounces of gold.

The central part of the Kurinelli field covers an area of 8 x 20 kilometres. More scattered mineralisation is recorded in similar host rocks over an area in excess of 20x30 kilometres. The Rooneys Formation, which hosts the mineralisation, also occurs elsewhere in the Davenport Region including within EL 9701 and it was for this reason that that title to the area was sought in 1996. The Company's strategy at the time was to initially explore around the known gold mineralisation at Kurinelli and progressively extend exploration to more distant areas after successful exploration techniques were developed at Kurinelli.

Despite the presence of outcropping gold mineralisation, prior to 2004 the Kurinelli field had never been subjected to systematic exploration using modern geophysical and geochemical exploration methods developed in the past 10-15 years. Of particular importance is the fact that the area received little attention in the BLEG 'gold rush' of the 1980's though it may have been covered in Australia-wide open range exploration of this type by one multi-national group and not reported in the public domain.

Current interest in the Kurinelli area stems from the discovery in mid-late 1996 of highly elevated levels of nickel, platinum, palladium and gold in magnetic ironstone boulders which had been recovered by local gold miners. The boulders, which were up to 200 millimetres in diameter, were located by the use of metal detectors being employed by the local miners to find nugget gold in surficial deposits. After an initial burst of excitement when a multitude of mineral claims were pegged around Kurinelli by the local operators and smaller exploration companies, the ironstones were identified as fragments of meteorites and not gossans.

Despite this set back, the Kurinelli ironstones drew attention to the under-explored gold potential in the area and it was this which became the main focus of attention of Arafura Resources as early as 1997. It was another 7 years before Native Title and other tenure issues were resolved and Authority C74 granted in mid-2004. Arafura immediately embarked on a program of regional geochemical soil sampling. This work successfully identified widespread low-level gold anomalism in the central Kurinelli area and as a result the same approach was adopted on EL 9701 in 2005. The work on EL9701 identified an area of potential interest and additional follow-up higher density sampling was undertaken in Phase 2A in March-April, 2006.

LOCATION AND ACCESS

(After Hussey 2006, Goulevitch, 2005)

EL 9701 is located in the Davenport Province and is centred about 10 kilometres southeast of Epenarra and about 140-160 kilometres southeast of Tennant Creek in the Northern Territory (Figures 1 and 2).

Access to the area is via the unsealed Davenport Loop Road (DLR) which leaves the Stuart Highway 87 kilometres south of Tennant Creek and 27 kilometres north of the Wauchope Roadhouse. The Davenport Loop Road returns to the Stuart Highway 36 kilometres south of the Wauchope Roadhouse.

The northern access passes through Kurundi and Epenarra Stations situated 52 and 121 kilometres respectively from the Stuart Highway. Epenarra Station is located 8 kilometres north of the licence area. The title is traversed by the road to Canteen Creek and the DLR is just west of the licence area. Some bush tracks and graded fence lines provide access across EL 9701. Cross-country 4WD vehicle passage is possible in many areas.

The area is generally inaccessible for short periods each year as seasonal rainfall, scattered though it may be, regularly makes different sections of the DLR and local access tracks impassable.

TOPOGRAPHY AND DRAINAGE

(After Hussey 2006, Goulevitch, 2005)

The Kurinelli-Frew River project area is at the boundary between the Barkley Tableland and the Davenport Range in central Australia. Topographic relief within EL 9701 is largely subdued with most of the area at an elevation of 335-400 metres AHD. The southern part of the EL 9701 encroaches on the northern foothills of the Davenport Range.

The licence area is drained by the Frew River along the western boundary and Teatree Creek along the eastern boundary. Both of these watercourses drain to the NNE (Figure 2). Numerous permanent and semi-permanent waterholes occur in the Frew River and Teatree Creek but the watercourses generally only flow for short periods after heavy summer rain.

CLIMATE AND VEGETATION

(After Hussey 2006, Goulevitch, 2005)

The Frew River area is relatively arid with an average annual rainfall of about 300 millimetres. Most of this falls in the period between December and March when the remnants of monsoonal tropical lows and cyclones can pass across the area and deposit several hundred millimetres of rain in a few days. Otherwise the area relies on intermittent summer storm rain. Peak average monthly rainfall is in February.

Maximum temperatures peak at over 40°C in summer and minima below 10°C are common in winter. Occasional frosts can occur.

“Spinifex with low trees and shrubs is the most abundant vegetation. Small patches of turpentine bush on rocky ridges and mulga and gidgee in depressions are common locally. Eucalypts line some of the larger watercourses, especially near waterholes. A variety of grasses grow on plains and valley floors”. (Blake *et al.*, 1986)

SUMMARY

Prior to Arafura's tenancy, the Kurinelli gold field and the immediate surrounding areas had never undergone systematic exploration using modern geochemical and geophysical methods. Arafura Resources completed a number of low-level gold-in-soil geochemical sampling programs in the Kurinelli-Frew River area in 2004-2006, which in conjunction with regional mapping have increased the geological understanding of the area.

Two phases of geochemical exploration were completed across EL 9701. In May – June 2005, a regional soil sampling program (Phase 1) identified a coherent zone of possible low-level gold anomalism over an approximate area of six square kilometres. A second follow-up, more closely spaced sampling program (Phase 2A) was completed in 2006, in order to test the accuracy of the Phase 1 program and to enhance the coherency of the possible low-level Au anomaly.

The results of Arafura's two soil sampling programs indicate a broad zone of possibly anomalous low-level gold is present over an area of 1000m x 500m within EL 9701. It was decided that Arafura would relinquish the title for EL9701 and concentrate exploration efforts on more attractive gold anomalies in the neighbouring AC 74 'Kurinelli' tenement.

TENURE

MINING/MINERAL RIGHTS

Exploration Licence 9701, originally 316 blocks (944 square kilometres) was granted to McCleary Investments Pty Ltd on 10 July, 2002, for a period of six years. The licence was transferred to Arafura Resources NL on 15 July, 2002.

The licence was reduced to 158 blocks at the start of the third year of its term, further reduced to 79 blocks on 10 July 2005 at the start of the fourth year and reduced to 40 blocks on 10 July 2006 for the fifth year. Exploration Licence 9701 was surrendered at the end of the fifth year.

LAND TENURE

Background land tenure under EL 9701 is part of:

- Kurundi Station, Perpetual Pastoral Lease 1109 - NT portion 716, owned by Brenda Marie SAINT of Kurundi Station, PO Box 508, TENNANT CREEK 0861 (Ph/Fax – 89641516/89641964)

The boundary between Kurundi Station and Epenarra Station (PPL 1206; Fax 89641552) is located 1-2 kilometres to the north of the northern boundaries of EL 9701.

NATIVE TITLE

A registered native title claim is in place over Kurundi Station:

- D6017/01 - DC01/017 Kurundi, C/- Central Land Council

Arafura Resources has negotiated and executed an Exploration Agreement with the Central Land Council (on behalf of registered various Native Title Claimant Groups). EL 9701, adjacent AC 74 and MCCs 950-953 within AC 74 are subject to this agreement. As a result, there are no Native Title impediments to continued exploration on these titles other than holding appropriate consultations, avoiding sacred sites and, in due course, paying agreed amounts of financial compensation.

Should mining eventuate within the area subject to this agreement, a mining compensation agreement will have to be negotiated both with the holder of the pastoral lease in accordance with the Mining Act, and also with the registered Native Title Claimants in accordance with the Right To Negotiate provisions of the Native Title Act. A mining tenement can only be granted where an appropriate Native Title agreement is emplaced. The terms of the Exploration Agreement provide for continuation of exploration on the area of the proposed mining tenement while the mining agreement is being negotiated with the registered Native Title Claimants.

ABORIGINAL SACRED SITE CLEARANCES

(After Hussey 2006)

Prior to the commencement of soil sampling activities in the Kurinelli Region in 2004, an Aboriginal Sacred Sites survey was conducted over the area of intended activity by members of the relevant Native Title Group. The survey was coordinated by Anthropologist, Mr Phil Lancono, and Mining Officer, Ms Julie-Ann Stoll, of the Central Land Council. The CLC subsequently advised Arafura of the location of exclusion zones around identified sacred sites and these areas were avoided during the sampling program other than where they overlapped with existing roads and tracks.

The sacred sites clearance issued by the CLC is effective for “Phases 1-2” of exploration at Kurinelli as defined in correspondence from Arafura to the CLC dated 17 March, 2005. Phase 1 (soil sampling) was completed in 2005. Phase 2 is detailed infill soil sampling, gridding, rock sampling and mapping in one or more campaigns down to 50 x 25 metres sample spacing. Phase 3 is RAB or RC drilling of identified targets. Prior to the commencement of Phases 2 and 3 detailed location plans and work programmes have to be submitted to the CLC in accordance with the provisions of the Exploration Agreement.

GEOLOGICAL SETTING

REGIONAL GEOLOGY

(After Hussey 2006, Goulevitch, 2005)

Prospective basement rocks in the Kurinelli Project Area (which includes EL 9701) belong to the Palaeoproterozoic Ooradidgee Group within the Davenport Province of the Tennant Creek Region in central Northern Territory. The geology was first revised and described in detail by Blake *et al.* (1987) as part of the second edition regional geological mapping program in the Davenport Province but their description and maps have been modified since that time, most recently by Donnellan (2004) and Donnellan and Johnstone (2002, 2004) after close-spaced low level airborne geophysical surveys were completed over the region. The following summary is written mainly with reference with the 1:500 000 scale Tennant Creek Region maps of Donnellan (2002) and Donnellan and Johnstone, (2004) and to a lesser extent with the 1:250 000 scale Davenport Province map of Blake *et al.* (1988).

“The Tennant Creek Region is a composite term used for the pre Barramundi basement (Warramunga Province) and the unconformably overlying Palaeo- to Mesoproterozoic North Australian Platform Cover successions of the Davenport and Ashburton provinces to the south and north respectively. To the east and west the Palaeozoic Georgina and Wiso basins overlie the Tennant Creek Region.” (NTGS website, February, 2005)

In the central Tennant Creek Region, volcanoclastic/volcanic rocks and flysch sediments of the Warramunga Province were intruded by granites and deformed by the Tennant Orogeny at ~1850 Ma. These units and intrusives are unconformably overlain by relatively undeformed and predominantly sedimentary successions of the Ashburton Province to the north and mildly deformed and metamorphosed sedimentary and volcanic successions of the Davenport Province to the south. (after NTGS website, February, 2005)

The basal unit in the Davenport Province, the Ooradidgee Group, crops out predominantly in a discrete inlier (here termed the “Kurinelli Block”) some 85 x 50 kilometres in extent centered on the Kurinelli area and extending east into EL 9701. The Kurinelli Block, which is evident as a discrete magnetic/gravity domain in geophysical images (Donnellan, 2004; Donnellan and Johnstone, 2004), is bounded to the south by the overlying sequences of the Hatches Creek Group and to the north and east by Cambrian, Cainozoic and Recent sediments. An intrusive unit of “Devil’s Suite” granite (c1710 Ma, Donnellan and Johnstone, 2002; here termed the “Hanlon Creek Granite”), some 10-15 x 25 kilometres in extent (obscured for the most part by a veneer of the younger sediment listed above), largely defines the eastern outcropping limit of the lower Oorididgee Group units in the Kurinelli Block. Oorididgee Group rocks occur to the east of the granite. The presence of the Hanlon Creek Granite is clearly demonstrated on aeromagnetic images of the region by a domain of uniformly even magnetic character with coincident low Bouguer gravity response (Donnellan, 2004; Donnellan and Johnstone, 2004). This granite occupies the area separating the eastern and western blocks remaining as part of EL 9701 (Figure 3).

Lesser exposures of the Ooradidgee Group occur in major anticlinal domes near Kurundi and Wauchope in the Murchison and Davenport Ranges, 50-80 kilometres west of Kurinelli; at Hatches Creek, Skinner Pound and Murray Downs in the Davenport Range, 30-50 kilometres south of Kurinelli; and at Newlands Creek, 100 kilometres to the southeast of Kurinelli. However, it is only in the Kurinelli Block and at Newlands Creek that oldest sediments of the Ooradidgee Group, the Rooneys Formation, are exposed and, in the Kurinelli area, it is this unit, and dolerites which intrude this unit, that hosts the known gold mineralisation.

In the Kurinelli Block, the lowest exposed units of Ooradidgee Group are the Epenarra Volcanics and the Rooneys Formation. According to Blake *et al.* (1987), the Rooneys Formation is conformable on and interfingers with the Epenarra Volcanics but the relationship between these units is not clear on published

maps of the area where they are shown to be separated by, and overlain by the Kurinelli Sandstone. Elsewhere in the Kurinelli Block the Epenarra Volcanics are separated from the Kurinelli Sandstone by the Edmirringee Volcanics, and the Kurinelli Sandstone is overlain by the Taragan Sandstone and the Treasure Volcanics. Map codes, thicknesses (Blake *et al.*, 1987) and descriptions of rock components of these units are listed in Table 1.

The units of the Oorididgee Group are intruded by dolerite (Pd/Pdl) and dioritic to rhyolitic granophyre (Pgy). According to Blake *et al.* (1987) the mafic intrusions consist of fine grained dolerite ranging to coarse gabbro, they are generally altered, and they are not present any higher in the sequence than the lower part of the Wauchope Sub-Group (lower Hatches Creek Group) which unconformably overlies the Oorididgee Group. Outcrop and magnetic patterns suggest that some of the dolerites consist of folded stratiform sheets (Donnellan and Johnstone, 2002) and this is especially the case where the dolerite (?sills) intrude the Rooneys Formation in the middle of the Kurinelli Block. It would seem from this that intrusion of dolerite sills in the Kurinelli Block preceded regional deformation and metamorphism of the Oorididgee Group and some may have been associated with "Treasure Suite" volcanism in late Oorididgee times (1820 Ma, Donnellan and Johnstone, 2002).

TABLE 1: Description of Oorididgee Group units in the Kurinelli Block.

OORIDIDGEE GROUP UNITS	THICKNESS (m) Blake <i>et al.</i>, 1987	CODE Walley, 1987	CODE Donnellan, 2004	DESCRIPTION Donnellan, 2004
Treasure Volcanics	0->1800	Pht	Pot	rhyolitic to dacitic lava and pyroclastics including ignimbrite, felsic intrusives, feldspathic/lithic arenite, quartz arenite, minor basaltic lava
Taragan Sandstone	0->1000	Pha	Poa	feldspathic/sublithic arenite, quartz arenite and conglomerate, minor siltstone, mudstone and altered felsic lava
Edmirringee Volcanics	0-2500	Phg	Pog	basaltic lava, minor volcanoclastic arenite and felsic lava
Kurinelli Sandstone	0-2600	Phk	Pok	subarkosic/lithic arenite, quartz arenite, siltstone and minor felsic and mafic lava and tuff
Epenarra Volcanics	0->3000	Phr	Por	felsic lava and pyroclastic rocks including ignimbrite and lapilli tuff, volcanoclastic arenite and conglomerate, minor mafic lava
Rooneys Formation	0->1200	Phn	Pon	greywacke, siltstone, subarkosic/sublithic/lithic arenite, minor felsic porphyry; locally schistose

LOCAL GEOLOGY

(After Hussey 2006)

A scanned portion of the FREW RIVER 1:250 000 geological map (Walley, 1987) that covers EL 9701 is illustrated in Figure 3. This map shows that the prospective Palaeoproterozoic basement rocks of Kurinelli – Frew River area, dominantly arenites and siltstones of the Rooneys Formation and interlayered sills of dolerite and gabbro, are exposed in the northern and western parts of EL 9701. However, these rocks are largely obscured by surficial deposits of Cambrian, Cainozoic and Recent ages. As stated above, an intrusive unit of “Devil’s Suite” granite, some 10-15 x 25 kilometres in extent (obscured for the most part by a veneer of the young sediment), largely defines the eastern limit of the outcropping Rooneys Formation and separates the eastern and western blocks held in the last years of EL 9701 (Figure 3).

Most economic interest in EL 9701 derives from the area underlain by the Rooneys Formation and associated intrusive dolerite sills. In discontinuous outcrops, the Rooneys Formation and dolerites underlie an area that is some 20 kilometres long in a NE-SW direction by 10 kilometres wide. No gold mineralisation has been recorded in EL 9701.

A major ENE trending fault structure along which discontinuous lenticular quartz ridges are developed, cuts the Rooneys Formation in EL 9701. This structure has been mapped over a strike length of about 50 kilometres and, in aeromagnetic imagery; it coincides with a lineament which can be traced over a distance of at least 75 kilometres and as much as 150 kilometres. Field observations at Kurinelli suggest that the structure dips shallowly to the SE (Goulevitch 2005).

PREVIOUS INVESTIGATIONS – KURINELLI PROJECT AREA

PRIOR TO 1996

The following summary of exploration activity in the area prior to Arafura's involvement was prepared by Drummond (2001-2003).

Kurinelli is an historical Au mining region, with the first activity undertaken in the 1890's. In subsequent times a number of small shafts were sunk and a small stamp mill was operational in the 1950's. The field has received scant attention by scientific exploration - possibly because its importance has only recently been emphasised by the significant Au production, from a large area, by prospectors using metal detectors. Discussion with them leads to the conclusion that about 150 kg have been recovered in the last few years.

Review of Historic Exploration

(a) Gold & Mineral Exploration N L (1972 - 74) EL633. CR75-123

This tenement was in the Kurinelli area. Work done was essentially of a prospecting nature, with bulldozer costeaning. In that time of low Au price and no effective geochemical or geophysical techniques available, their effort was unsuccessful. Evaluation of a small Cu show (locality uncertain) did not provide encouragement.

(d) Mineral Horizons N L (1985 - 1989) EL4815. CR89-148, 90-075

The original tenement covered some 1300 sq km, being the central part of the Davenport Ranges, including much of Arafura's ELs 9710 and 9711. The first year's work consisted predominantly of prospecting and visiting known Au occurrences. Analogies to Telfer were drawn. In the second year reconnaissance surface sampling of various prospects and an introductory stream sampling programme was carried out - neither of which advanced matters much. By the third year, effort was being concentrated around Arafura's Kurinelli Project area in consequence of the returns from prospectors' metal detecting. Mapping programmes, rock chip sampling and costeaning were initiated which emphasised that Au seemed to be preferentially associated with sediment and dolerite/gabbro contacts especially where brecciation is evident. There was additional work to the south of the field and out of the Kurinelli Zone around the Aztec and Great Davenport prospects.

Poorly ground-located rock chip sampling over basal Treasure Volcanics in the south west of EL9711 is viewed as most encouraging by Drummond. Twenty-metre composite rock chips returned values of 1.04 g/t and 0.41 g/t Au: an indication for potential for higher bulk Au deposits, rather than confinement to narrow quartz veins.

(e) Mineral Horizons N L (1986 - 1990) EL4877. CR88-034, 87-116, 89-015, 90-232

This small tenement (4 blocks) was centered around an Au show which is situated about 4 km south of the old Kurinelli battery. Sampling around it produced disappointing results, with only one of 10 samples returning better than 1.0 g/t. Trenching and bulk sampling were undertaken, but the latter was not processed. Interestingly, this is the first report which mentions carbonate cementation in the weathered zone and the observation of calcrete. Soil sampling was undertaken over a small prospect 7 km south of the battery with no real encouragement, but the sampling was over a small area, and utilised a technique possibly not sufficiently sensitive, in Drummond's opinion.

(f) Wellington Resources Pty Ltd (1987 - 1988) EL5354. CR89-33

This small tenement (12 blocks) occurred in the southern part of the Kurinelli zone. Most of the tenement has an alluvial cover and Wellington undertook no exploration designed to test the cover, or through it. It examined outcropping reef mineralisation elsewhere in the field and decided that the quartz reefs were narrow and lacked the structural setting and alteration associated with significant mineralisation.

**(i) Mr A J Shields (1993 - 1995) ELs 7158, 7925 and 7978.
CR92-381, 93-260, 93-344, 94-224, 95-199, 95-208.**

The tenements occupied the northern 60% of Arafura's AC74. The target was to discover new quartz veins in the poorly outcropping district by using ground magnetics and refraction seismic and mapping. Broadly spaced soil BLEG was undertaken and it indicated significant anomalism. Shields' BLEG predominantly covered areas in the south-west corner of AC74, and to the north-east of it centred around 20°33'S, 135°08'E: these areas did not return anomalous (i.e. >1.0 ppb Au BLEG) assays. However traverses which generally lie in the east of RE1345 were consistently anomalous. The more southerly traverse returned six consecutive anomalous values - averaging 5.5 ppb - over a traverse of almost 4 km. The traverse to the north-east returned six anomalous readings from eight sites over almost 6 km : the eight samples averaged 3.8 ppb. An outlying sample at 20°34'S, 135°05'E returned 107 ppb. Drummond considers that this highlights the extent of mineralisation in the Kurinelli Zone beyond areas of known surface gold accumulation. It also demonstrates the usefulness of the soil BLEG survey technique in the area. The areas which did not return anomalous Au in Shields' programme may simply require sample collection below transported alluvium. Shields also noted that it may only be sub-sections of a quartz reef system that might be mineralised, citing examples such as Woods Point and Walhalla in Victoria.

(k) Hall and Hallett (1991 - 1992) EL7471. CR92-629

This small EL was centred around an old Au show mapped 6 km south-east of the Great Davenport mine. Of 35 stream sediment samples panned or tested in a Au wheel some 16 returned either a trace or a colour. This indicates the general Au anomalism at the southern wedge-out of the Kurinelli zone.

**(l) Orion Resources N L and Cynate Pty Ltd (1993 - 1995) ELs 8285, 8379 & 8447.
CR95-191, 95-496**

The project was initiated as the result of Cynate's concept that some of the granites intruding the Hatches Creek Group showed characteristics of those which intrude the older Warramunga Group rocks which host the Au, Cu, Bi deposits around Tennant Creek. The BMR mapping and geophysical data were used to define targets around the granite batholith in the north-east of the Taragan Block, and some 30 kms east of the Kurinelli Zone in EL9701.

Eight anomalies were investigated on the ground by magnetics and soil geochemical surveys and were geologically mapped. Three were drilled (five reverse circulation holes for a total of 281 metres). Although magnetic data and modelling defined the drill targets, none of the holes satisfactorily explained the magnetic anomalies, and no geochemical interest was aroused. Best assays were in the first hole, with 350 ppm Zn between 28 - 32 metres and 380 ppm Pb between 12 - 16 metres.

(n) BHP Gold Ltd/Newcrest Operations Ltd 1991. Various EL Applications

In 1991, during a corporate and operational transitional change between Newcrest and BHP Gold, the former applied for Exploration Licences which covered almost all of the Davenport Ranges, and extended south-easterly sufficiently to cover Arafura's Supplejack Project. Before the tenements were granted BHP Gold undertook an extensive stream sediment sampling programme and samples

were assayed by BLEG techniques for precious metals, and by conventional techniques for base metals. Although BHP Gold defined anomalous areas for follow-up, the project was terminated before any of the Exploration Licences was granted and there were no reporting requirements to NTDM.

Newcrest kindly provided access to its report which does not include the raw assay data. Rather it mainly consists of plots, on a per element basis, of the assay results which BHP Gold considered to be anomalous. Accordingly Drummond has accepted, and considers it reasonable to do so, BHP Gold's definitions of anomalism without being able to undertake any independent checking of the data or the statistical analysis.

General conclusions which can be drawn from a study of BHP Gold's results are as follows,

I. Gold

The Kurinelli Sandstone, to the south-east of the Great Davenport mine, and beyond the Kurinelli Zone, is anomalous over about 20 sq km. Despite its evident Au mineralisation, the Kurinelli Zone generally did not provide much anomalism. But this is presumably due to the fact that its north-eastern part, i.e. beyond 1 km north-east from the old battery site, was not sampled. Additionally the south-western part is known to be covered by thicker alluvium.

WORK COMPLETED BY ARAFURA RESOURCES

Initial activities undertaken by Arafura Resources and its associates in 1996 and 1997 have been described by Goulevitch (1997) and comprised:

- acid-etching of ironstones;
- conventional and ICP-MS/OES analyses of several ironstones;
- petrographic studies of polished sections from four ironstone boulders by reputable consultants;
- laser-ablation ICP-MS analyses on the polished sections;
- petrological review and description of doleritic and gabbroic rocks from the Kurinelli area;
- reconnaissance soil and lag sampling in the vicinity of the discovery;
- review of the regional geology and of aeromagnetic data from the region; and
- a search for relevant data in the open file company reports from previous exploration in the area.

In 2004-05, Arafura Resources conducted initial systematic reconnaissance soil sampling across much of the Kurinelli goldfield in AC 74 and EL 9701 (Goulevitch, 2005a, b & c). Follow-up infill soil sampling programs to 25 by 50 metres sample spacing also occurred at various locations throughout AC 74 highlighting significant zones of anomalous Au (McGilvray, 2006).

Systematic Phase 1 soil sampling across most of the northern parts of EL 9701 indicated possibly anomalous low-level Au over an area of about 6 square kilometres (Goulevitch, 2005c, figure 3). This sampling area was chosen because it contained outcropping host rock units that were the same as those at Kurinelli. Further investigation in 2006 by means of a more closely spaced soil sampling program (Phase 2A) highlighted a 1000 x 500m possible low-level gold anomaly within the area (Hussey 2006, figure 3 and 4). Phase 2A yielded four (4) sites with more than 10 ppb Au and a maximum of 13 ppb Au (figure 4). These results are considered definitely anomalous, as defined by Goulevitch (2005a, b & c) and McGilvray (2006). The highest Au-in-soil geochemical results obtained by Arafura in EL 9701 are up to three (3) orders of magnitude less than those obtained in the nearby Kurinelli area.

There has been no further exploration of EL9701 since the completion of the phase 2A soil sampling program in 2006.

ASSESSMENT AND PROPOSALS FOR FURTHER INVESTIGATION

Phase 1 and follow up Phase 2A geochemical soil sampling programs were not successful in defining high-levels of gold anomalism in EL 9701, like those in the nearby by AC74 at Kurinelli.

A 1000 by 500 metre zone of possible low-level gold anomalism was detected (see figure 4). Infill soil sampling and follow up drilling would normally have been carried out, however the presence of much more promising gold anomalies in the nearby 'Kurinelli' tenement (AC 74) has lead to the decision to relinquish EL 9701.

The possible low-level gold anomalous zone identified in EL 9701 has values that are up to 3 orders of magnitude lower than those in the nearby Kurinelli goldfield. Hence until coherent economic intersections are encountered in an area of known gold mineralisation at Kurinelli, follow up work in this greenfield area is discouraged. This is because Arafura's exploration model is based around the Kurinelli goldfield and our current exploration strategy has not identified a coherent zone of economic gold mineralisation at depth in this area.

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