

REGENCY RESOURCES LTD

EL10/2005 Arthur River
Iron Project

Project Review and Recommendations

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ABSTRACT

This report describes the work programme undertaken during 2006/2007 for the Arthur River (EL10/2005) tenement in northwest Tasmania. A project review was compiled focusing on magnetite mineralization using relevant geological information combined with historical exploration reports. Based upon this research, recommendations are presented to initiate airborne magnetic and gravity modelling of the areas previously identified as economically prospective. This will be followed up by drilling programmes which will also consider other commodity potential.

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All co-ordinates listed in this report are referenced to the AGD66 Datum – Zone 55

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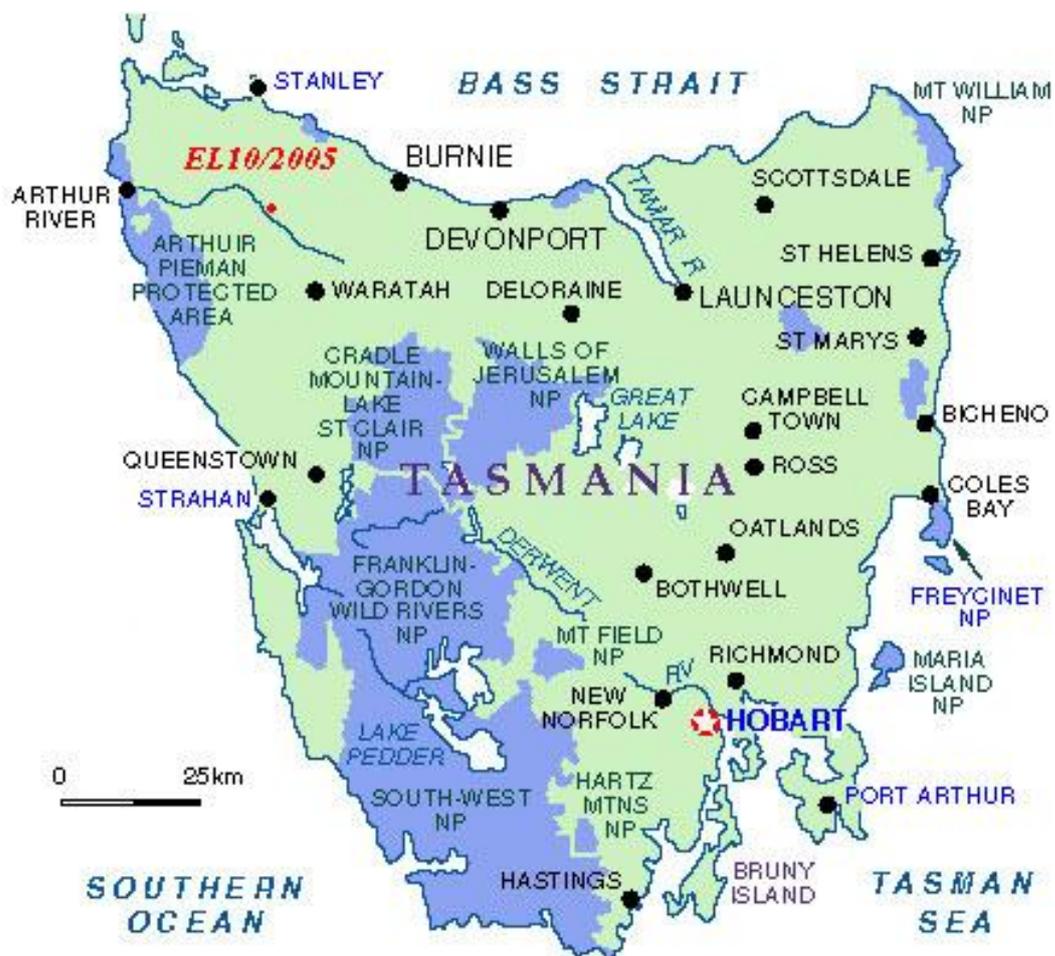
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1.0 INTRODUCTION

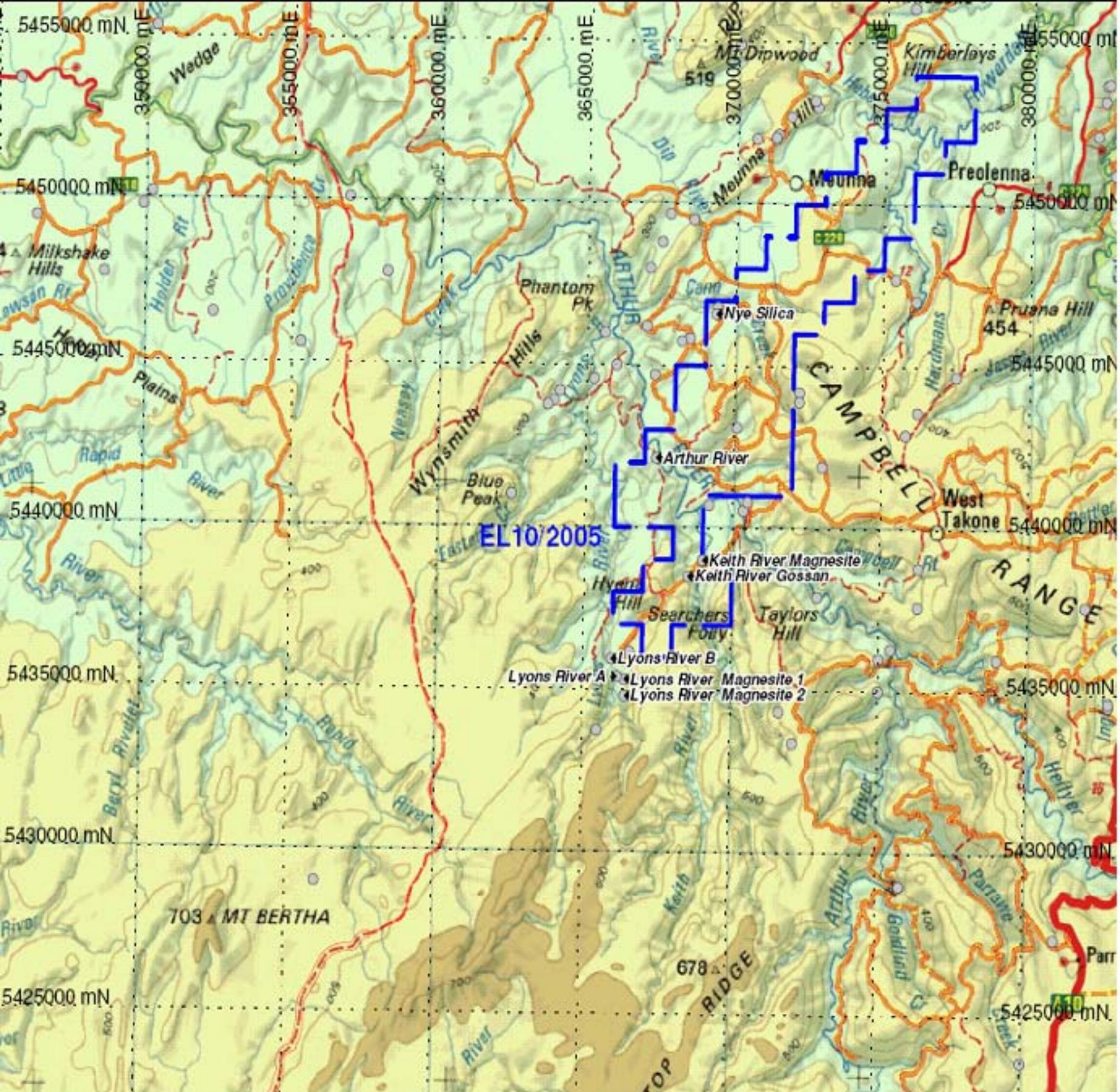
This report presents a project review with recommendations for follow up work on the Arthur River tenement in northwest Tasmania. The work, commissioned for Regency Resources Ltd, focused on the economic potential of magnetite deposits within the area previously outlined during relevant geological and historical exploration work.

Important outcomes of that past work relevant to the exploration for iron in magnetite deposits is summarised and recommendations are made to target specific areas that have shown evidence for significant magnetite content. Reference is made to other commodities where they are relevant to current areas of interest. Recommendations are to initially target prospective iron-bearing areas that have the most comprehensive data. Activities and exploration budgets are also presented.

2.0 TENEMENT LOCATION and ACCESS

Redrock are exploring under exploration license E10/2005 Arthur River granted for five years from 12 May 2006. The licence, comprises 61 km² and is located on the edges of remote forests some 30km west and southwest of Burnie township and port (Figure 1). The area is rugged, largely clad in native forest and subject to high seasonal rainfall. The bulk of the Arthur River tenement land is designated State Forest which includes a number of informal reserves. Approximately 5% is private land.

Vehicle access to the Arthur River tenement is good via a network of forestry roads. Slopes can be steep and vegetation very dense.



LEGEND

- Metallic and Construction mineral occurrences



Redrock Resources plc Locality Map	
Date: 14/08/01	Author: Arthur River EL 10/2005
Ordnance Survey	Figure 1
Scale: 1:20000	Projection: AMG2 Zone 55 AGD 84

3.0 RELEVANT PUBLISHED DATA

Perhaps as a reflection on the rugged terrain and thick forest, the Savage River to Arthur River area is one of the few remaining highly prospective parts of Tasmania not yet completely covered by published 1:25,000 geological map sheets. The bulk of the Arthur River tenement is covered at 1:25,000, mainly on the Folly sheet (3644), and part of Milabena (3645). Best published geology south of the Arthur River is on the Trowutta 1:50,000 sheet (7915N - Everard et. al, 1996). Topography is published as the Arthur River 1:100,000 sheet; Milabena (3645), Folly (3644) and Keith (3643) 1:25,000 sheets.

A number of brief summary reports focusing on the economic geology of the region have been published. These include Turner et. al (1992), and references therein, for a brief geological overview, and McClenaghan & Seymour (1996) for a presentation and interpretation of geophysical images. More academic discussions on the Arthur Mobile Belt / lineament can be located from Holm et. al (2003).

There are also numerous unpublished but publicly available (open file) Company reports documenting exploration over the areas of interest. These are discussed in sections below. Throughout this report sources are referenced in two ways. Author and year (eg. Smith, 1999) with citations listed in the References section, mostly from published sources. References citing year_report no. (eg. 99_1000) are open file reports. Refer in these cases to tables in Appendix I for further information.

4.0 REGIONAL GEOLOGY AND MAJOR DEPOSITS

The Arthur Lineament is a broad 10 km wide, NE-SW trending zone of increasing schistosity and metamorphism of Cambrian age that forms the eastern margin of the Mesoproterozoic and Neoproterozoic Rocky Cape Block. Termed the Arthur Metamorphic Complex it comprises both the allocthonous Bowery Formation and Reece Amphibolite, and the autochthonous Ahrberg and Rocky Cape Groups

(Holm et al, 2003). The zone hosts magnetite-rich iron ore (mined at Savage River), as well as silica flour, dolomite, magnesite, ochre, umber, gold and copper. A few alluvial diamonds have been recovered during gold and osmiridium prospecting.

Areas north of the Arthur River, are largely occupied by Basal Permian tillites and mudstones capped by Tertiary basalts. Thicker Tertiary basalts show on magnetic TMI images as intense lows, apparently remnantly magnetised. These rocks effectively bury the Precambrian rocks of the Arthur Lineament. The most prospective unit for magnetite is the Bowery Formation, comprising mafic schist, amphibolite, meta-gabbro, massive and laminated magnetite, and minor deformed granitoid.

4.2 Lyon River and Keith River Magnesite

Adjacent to, but excluded from, the Arthur River tenement are two areas of significant magnesite resources (Keith River and Lyons River, 95_3756) The Keith River magnesite was discovered by drilling under alluvium. A block of down faulted Permian mudstones occurs to the west of the magnesite deposits. The magnesite horizon is thought to be a conformable stratigraphic unit with a thick sequence of quartz schist and quartz-mica schists forming the hanging wall to the east. The western footwall sequence is dominated by amphibolite and pyritic siltstones. The Keith River Gossan zone, which occurs between the two magnesite bodies, is situated within this sequence. Dips range from vertical to 70 degrees to the south-east.

The Keith River magnesite deposit occurs over a strike length of 3,500 metres and ranges in thickness from 150-400 metres. It has been tested by seven diamond drill holes (1,642.8 metres, DD83 AR1-7) and the defined potential was approximately 3 million tonnes per vertical metre. It extends to at least 300 metres depth. High grade zones of +40% magnesite within the deposit have average Fe_2O_3 1.57% , CaO 2.17% and SiO_2 at 6.35%.

5.0 PAST EXPLORATION

Approximately 37 MRT open file reports have identified and tabulated (Appendix I) as being relevant to E10/2005 Arthur River. The most relevant reports have been inspected to extract relevant pieces of information. A number of key reports are recommended as best summarising past activities.

Alluvial gold mining preceded opening of the Victory Mine in the early 1890s. Although worked for copper via an adit, no significant production is recorded and this area is excluded from the tenement. Chalcopyrite and malachite occur with hematite at the contact of dolomite and schist. Minor gold is also present (McNeil, 1961; 70_632).

Magnesite was first discovered by P B Nye in 1925 in the Lyons River- Keith River areas. A joint venture between Mineral Holdings Australia (MHA) and CRA in 1982 established drill defined resources of moderate to high grade magnesite at Lyons River and Keith River (refer to section “Regional Geology and Major Deposits”, above).

In 1965 an extensive regional programme of stream sediment sampling was completed by Picklands Mather and Co International. Some re-sampling of anomalies followed, then no further work was undertaken. Original data are no longer held in open file by MRT.

In 1970 MHA commenced exploration by ground checking aerial-magnetic anomalies, especially near the old Victory Mine. MHA later formed joint ventures with CRA. A large gossan at Keith River was investigated in some detail. The extensive gossanous rock contains up to 22% iron in the form of limonite and hematite, but is reported to be low in elements such as copper and gold.

Weathering and gossan development here is deep compared to normal Tasmanian weathering profiles; there is evidence that the gossan is Permian in age. The “sulphide horizon” as mapped is a tightly folded sequence interpreted to

be faulted off adjacent to alluvium cover to the north (83_2039, Appendix I). An aeromagnetic anomaly 2.4 kilometres downstream from the Old Victory Mine was found to be associated with an amphibolite unit carrying quartz - carbonate - pyrite - chalcopyrite veins, associated with a small irregular magnetite body (72_868). To the south the Keith River Gossan appears to be faulted against Permian. Similar amphibolitic sequences are again seen south in the Lyons River, outside the current tenement.

In 1971 CRA drilled two diamond holes, targeting this gossan for Besshi style VMS mineralization. They then withdrew from the prospect (71_839). Hole KR1 had poor recoveries to 100m and a total depth of 241.2m (797 feet). A "sulphide horizon" was interpreted at 91-157m. The only significant magnetite was 1m at 302-305 feet and 30cm at 310-311 feet. Iron assaying about 20% over 9m was also sampled at 368-398 feet, but this occurs largely as pyrite.

Hole KR2 was completed to 165m. A "sulphide horizon" was interpreted at 61.9-79.5m. Magnetite bands were intersected at 205'9"-208' and 209-210', 217-219', with up to 50% magnetite-pyrite over 12m from 67.7m (222-262'). The last 20m of the hole is logged (in 1983) as Permian, in conflict with all surface mapping. Holes were drilled to the south and northwest, respectively.

Only hole KR1 was assayed for Fe and S at this time. Drilling showed that the primary source material was lenticular stratiform pyrite with minor magnetite and trace chalcopyrite hosted in dolomite, siltstone, shale, quartzite and amphibolite, although aero-magnetics suggests a magnetic component over 1.5km in extent. Copper and zinc content was less than 1500ppm, and gold content from composite 30m samples was less than 1.2g/t Au. There appears to have been no further drilling of this horizon once the absence of copper, lead and zinc was established. The holes were relogged and area re-mapped in 1983, but no significant new information was provided.

In 1973 Esso Exploration and Production Australia Incorporated (Esso) flew an extensive Input EM survey, followed by regional and local geological reconnaissance, failing to delineate areas warranting further exploration.

From 1979 to 1986 Geopeko, initially solely and later in joint venture with CRA, conducted exploration. Targets included stratiform tungsten mineralization and shale hosted lead-zinc mineralisation. Work included reprocessing the Esso Input EM survey, conducting a magnetic and radiometric survey, locating no unexplained anomalies. Follow-up work included geological mapping, ground geophysics and stream sediment and bedrock geochemistry. Anomalous gold was found near the Arthur River at 5 442 000mN 367 300mE (300ppb in -80 mesh samples and 29ppb in cyanide leached samples) but despite shallow auger drilling the source was not located.

Most of CRA's efforts were focused on magnesite. They found that the magnesite horizons carried traces of gold and platinumoids. Gold values ranged up to 0.4g/t, platinum to 0.015g/t and palladium to 0.020 g/t. The gold was assumed to be very fine grained because it was not observed in thin section. Reports 83_2036 (Appendix III), 84_2214, 85_2334 detail work undertaken by CRA and MHA on E43/70 Arthur River. The focus of this work was the magnesite potential of the Keith River - Arthur River area. In this work it was suggested that the Keith River gossan was a correlative of the Savage River pyrite - magnetite deposits.

In 1990 Geopeko again was active in a search for gold and base metals including stratiform Cu-Zn-Ag (Mt Isa - McArthur River type) and stratiform copper-zinc deposits of the Besshi Type. Work included a geophysical review (aeromagnetics and gravity) and water geochemistry. Reports 91_3247, 92_3370, 93_3529 conclude that water sampling gave spurious results. Geopeko collected 25 rock chips along Cann Creek. Highest assay was 0.06 g/t Au, not considered significant.

In 1987 Betoota Pty Ltd (and others), held the area but conducted only a desk review of previous exploration and a geological interpretation based on aeromagnetics. Similarly in 1994 Allstate Exploration NL (Allstate) did interpretative work on a 1993 government conducted magnetic survey, but no ground exploration follow-up was done.

Commodity	Iron ore
Description	Numerous limonitic outcrops.
Locality	Near the junction of Farquars Road and the Keith River.
Location	368 500mE 5 438 500mN
Deposit Size	Not determined
Host Rock Ages	Proterozoic
Form	Stratiform
Rock Type	siltstone
Gangue	Hematite, Limonite, Magnetite, Pyrite
Exploration	Drilling, Geochemical surveys, Geological mapping, geophysical surveys

(Source: MRT Mine database)

Principal Reports

70_0632	Progress Reports on Exploration on SPL 56, Arthur River District, North- Western Tasmania, During 1970
72_0868	Progress Reports on Exploration of S.P.L. 56, Arthur River District, North- Western Tasmania During 1971.
72_0904	Progress Reports on Operations in E.L. 43/70, Arthur River, Tasmania During 1970-1971
78_1243	report image page 11 shows sketch map of Keith River Gossan
84_2214	E.L. 43/70 Arthur River Area, Report on Exploration for 12 Months to 15th October, 1984

Extract from McPherson, Duncan & Assoc (2002-UR2002_12) Keith River gossans

The following extract summarises field checking of anomalous geophysical domains, as commissioned by MRT:

“These gossans occur between the two magnesite deposits at the Arthur River and Lyons River and occupy the site of an intense aeromagnetic high. The high is asymmetric towards the southwest, with the weaker northeast section having been explored by CRA using two diamond-drill holes. The holes encountered well-bedded siltstone with magnetite and pyrite bands up to 300 mm thick. Field measurements showed that the southwest part of the anomaly had ironstone gossans with some fresh pyrite-magnetite? mineralisation which had a high magnetic susceptibility. As the gossanous cap shows a more subdued

In 1996 Goldstream / Titan carried out only a few stream sediment samples before withdrawing from the area. In 2001 MRT covered E10/2004 with heli-borne geophysics at 75m height as part of a much larger study, defining the area of current interest (Figure 2).

5.1 Individual Prospect Summaries

Arthur River Alluvial Gold (outside tenement)

Deposit Id	406
Name	Arthur River
Type	Area of alluvial workings
Operational Status	Mineralised area
Commodity Type	Metals/elements
Commodity	Gold
Location	367 380mE 5 442 140mN
Deposit Size	Not determined
Host Rock Ages	Cenozoic
Form	Placer
Commodities	Gold
Exploration	Drilling, Geochemical surveys, Prospecting

(Source: MRT Mine database)

Principal Reports

TR5_46_60 Geological Reconnaissance of part of the Arthur River Area

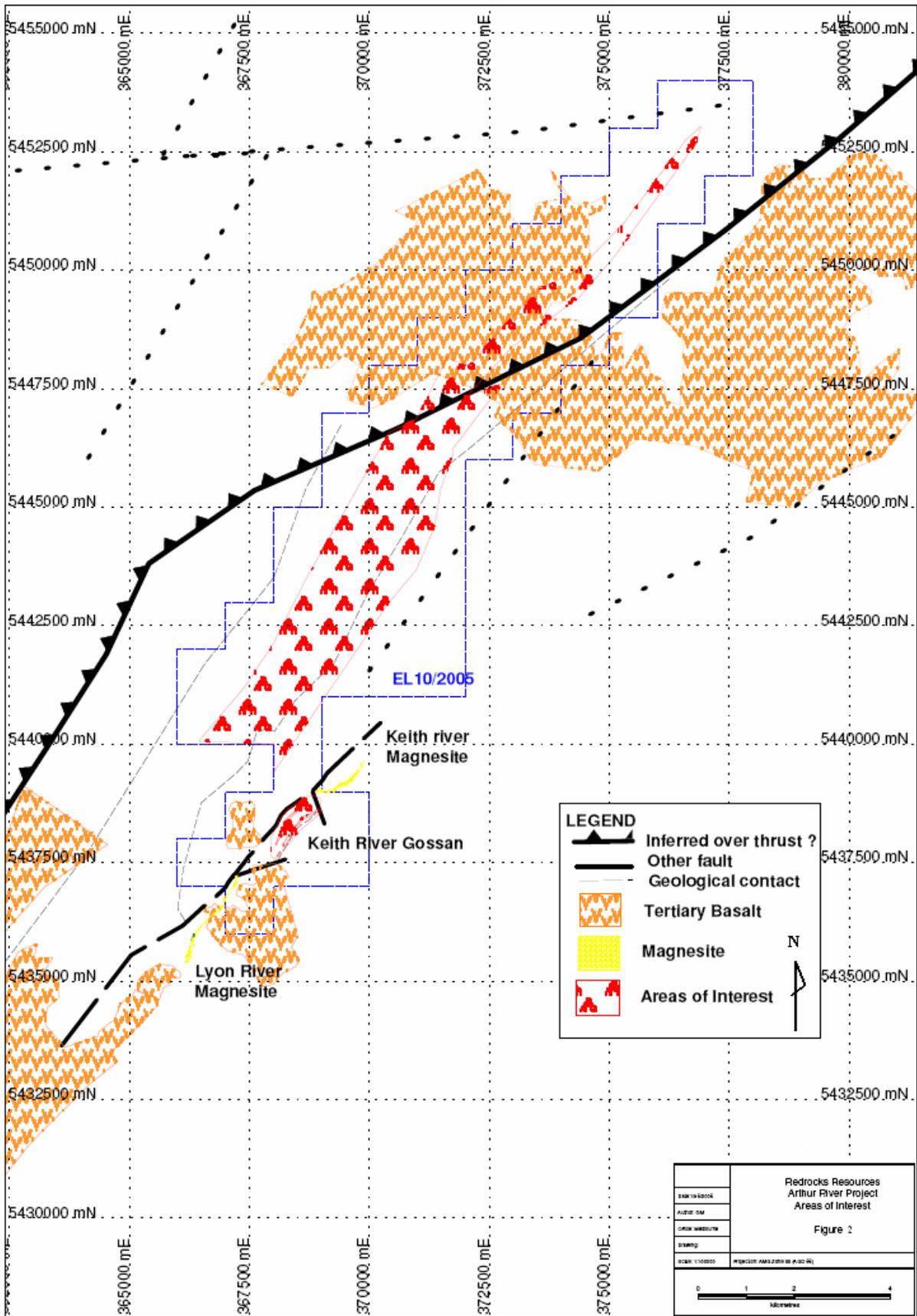
85_2341: Rapid River E1/79 North West Tasmania, Progress Report on Exploration, February 1984-February 1985. The enclosed Plan shows location of relevant anomalous Geopeko and CRA stream sediment samples, suspected but not confirmed as being alluvial in source.

90-3146 Placer Exploration, considered that a high Sn in stream sediment samples indicates Arthur River flood contamination from the upstream Mt, Bischoff source.

86_2533 Rapid River E1/79 North West Tasmania, Progress Report on Exploration, February 1985-February 1986.

Keith River Gossan

Deposit Id	429
Name	Keith River Gossan
Aliases	Keith Iron, Keith River Ironstone
Deposit Type	Mine or Prospect
Operational Status	Prospect



magnetism than the mineralisation, it is concluded that the magnetic high infers a substantial volume of primary magnetite–sulphide mineralisation of the Savage River ore type which has never been tested.

Keith River Gossan zone — centre of anomaly at; 5 438 000mN 368 000mE. Drill holes KR1 and 2 — dolomite, siltstone, shale and quartzite of Pam, part of AMC. Siltstones contain magnetite and pyrite bands in well bedded pale green siltstone and occasional amphibole dyke. Mag bands up to 300 mm thick in KR2.”

5.2 Key Reports

A key report is defined as a report that concisely or best summarises and references preceding work or covers significant new work relevant to the current tenement. Of the approximately 37 open file MRT reports selected for this section the following provide the best starting point for a reader. The reference is to the MRT Report No. (year_report).

72_0904	CRA geological mapping of Keith River Gossan and drilling of holes KR1 and 2.
83_2036	CRA relogging of Keith River Gossan holes and regional outcrop mapping
96_3676	Allstate Exploration. Brief review of past work. Outlines the limited work completed, including aeromagnetic interpretation.
98_4218	Goldstream Mining, Titan Resources. Stream sediment sampling programme. No significant results within the current area of interest.

5.3 Field Work Completed

From the 8-10 June 2006 a reconnaissance field visit was completed by Gordon McLean, and focused on the Keith River Gossan.

Access to the Arthur River Project was found to be generally good to the Keith River Bridge, being 50km from Burnie airport (Wynyard) via Takone, the last

20km being unsealed. The partially collapsed (unusable) Keith River Bridge is 2.2 km beyond Farquhars Bridge that crosses the Arthur River (beyond locked gate), rated to maximum 6 tonnes gross, being 5.4km southwest of the turnoff from Pruana Road. A fine weather deep ford at the Keith River Bridge is available for appropriate large vehicles. Fording the Arthur River may be difficult at any time.

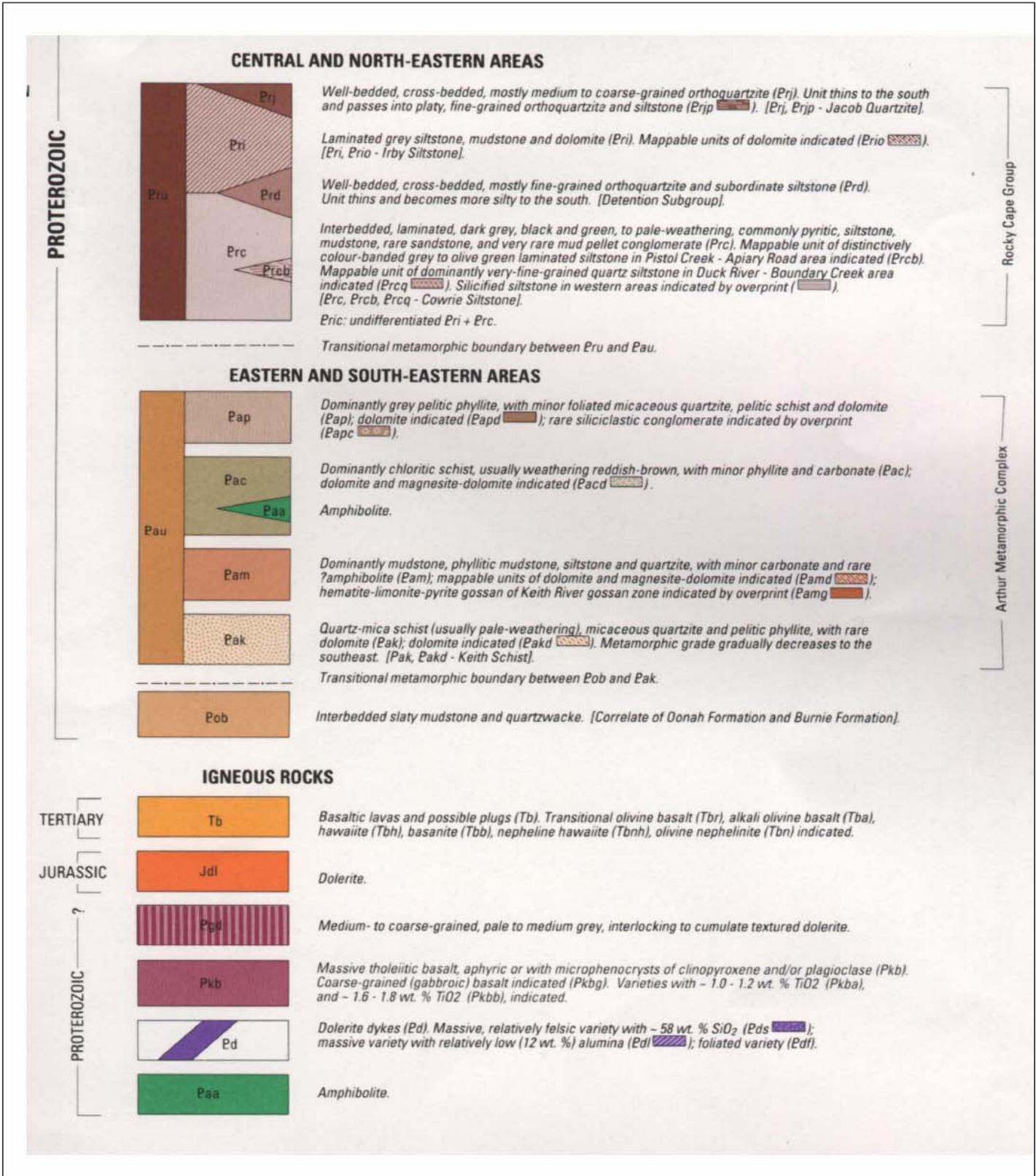
Forestry roads around the tenement are good though hampered by a washed out bridge at 5 441 830mN 369 560mE on Relapse Link Road, and at the Keith River, along with overgrown roads on both NE trending sections of Champion Road.

Magnetite bearing amphibolite is likely to be widespread across the magnetic portion of the Arthur Metamorphic Complex as witnessed from alluvium and the few outcrops visited. Observed and interpreted occurrences correspond well with magnetic highs (Figure 2).

The intention was to collect a number of pan concentrate samples from around the Keith River Gossan to establish a qualitative distribution of magnetite and to log the provenance of alluvium. The shortage of creek water and the inability to carry adequate sample restricted this programme to six samples from the southern portion of the tenement. All samples contained octahedral magnetite typical of amphibolite, those at Keith River Gossan somewhat less than to the north, perhaps reflecting a differing style of magnetite (Figure 3a). Three gossan samples were collected. The southern most sample (FTS0605203), located only as sparse float, contains significant massive magnetite (Appendix IV).

Roads, tracks and some outcrops of the 1.5km long Keith River Gossan were located by GPS and compared to the most recent geological mapping of the prospect (CRA, 83_2036 - Appendix II). General agreement with this mapping was concluded, although only one road is maintained. Outcrops are largely restricted to road cuttings. Earlier mapping is more detailed (72_0904) but very interpretive, suggesting the main gossan bands are a single folded horizon. Much of the mapped "gossan" is ferruginous mafic rock lacking true gossanous texture. The package of rocks containing the gossan has a markedly weaker textural

GEOLOGICAL LEGEND



Keith River Gossan



Area of interest

FTS0605201

Rock chip sample

A

Stream sediment sample

Figure 3b
Arthur River
Geological Legend
(Trowutta 1:50,000
geology sheet)

metamorphic fabric than surrounding contemporaneous rocks, it is probably entirely fault bounded. Close to the gossan, outcrops and float of weathered biotite-quartz-albite, crudely foliated rocks occur (Appendix III) that may have been granitoid(?). Selected photos from Arthur River are presented in Appendix IV.

6.0 DISCUSSION

Apart from the intensive studies of the Keith River Gossan, magnesite and silica deposits, exploration over the remainder of the tenement (outside of Cann Creek), appears in the recent past to rely heavily stream sediment sampling and to a lesser degree on remote sensing. Little targeted exploration is reported for the northern section of this tenement. Magnetics correspond well with magnetite bearing amphibolite occurrences. There is a possibility that the northern section of the Arthur River tenement north of about 5 450 000mN, may have a fundamentally different surficial geology (Leaman, 91_3213). This should be further researched before exploring north of this region (the Rocky Cape Overthrust and Group?). Note that lithologies on the leading edge of Rocky Cape Group contain gold (eg Folly Prospect).

The Keith River Gossan, located in the south of the tenement, has a marked magnetic response. It occurs within a discrete 1.5km long magnetic zone. Bands of "amphibolite" have been logged in these holes, both in 1972 and 1983. However, the 1972 logs include some "amphibolite" containing up to 10% fine quartz, and some described with a conglomeratic appearance. Probable dolerite dykes, containing significant magnetite have been logged west of nearby magnesite deposits. Narrow massive magnetite bands have been logged within siltstone that is often very pyritic. Although there are indications holes KR1 & 2 have been re-assayed for ppm level gold, no systematic documentation has been located.

Inspection of outcrop along road-cuts at the Keith River Gossan Prospect during preparation of this report suggest that between the two main outcropping gossans there is little probability for significant widths of massive magnetite.

Fresh massive magnetite float, in gossan, was located at the south end of the gossan, but was not seen in quantity. Mapping and airborne magnetics suggest the gossans themselves seem to be most prospective for iron but the iron content is not universally high (as shown by drill holes). Large amounts of accompanied pyrite may incur high disposal/encapsulation costs.

6.1 RECOMMENDATIONS

Keith River Gossan magnetics (and gravity) should be modeled, applying all information from past mapping and drilling, to quantify potential magnetite content. On a positive outcome to the modeling, more detailed magnetics should be acquired. Detailed heli-magnetics may be more cost effective than ground magnetics, due to line cutting requirements and magnetic noise from regolith lag. Limited RC drilling located from mapping and ground magnetic profiles may be justified at an early stage following a positive outcome to the modeling, but without a significant access upgrade only track-mounted RC rigs have the capability of reliably reaching the prospect by road, if the Arthur River can be crossed. A budget is presented in Table 1. Early discussions with MRT on acceptable work programs are encouraged for all areas.

Table 1 – Arthur River Exploration Budget

Phase	Activity	Duration	Cost
Date Modelling	Acquire and model magnetic and gravity data.	Two Weeks	\$15,000
Heli-Mag	Acquire detailed heli-mag over target area (Keith River Gossan)	Four Weeks	\$75,000
First Pass Drilling	Initial RC drill testing of helimag targets	Six Weeks	\$80,000
		Total	\$170,000

7.0 CONCLUSION

Regency Resources are exploring for economic iron deposits in NW Tasmania within E10/2005 Arthur River tenement. This area contains some of the least detailed published geological mapping in Tasmania. The Tenement is located within the Arthur Metamorphic Complex, as a 10 km wide, NE-SW trending zone defined by a Cambrian schistosity and metamorphism of Proterozoic age rocks. This belt hosts significant magnetite and magnesite deposits (Lyon River, Keith River). All areas are covered by 200m spaced, low level airborne magnetics, with some smaller areas at closer spacing.

The region is rugged, with land designated dominantly as State Forest. There has been sustained exploration since the 1960's for a variety of commodities, but at lesser detail than similar, more accessible, areas elsewhere.

Within the Arthur River tenement the Keith River Gossan is identified as most likely to contain significant massive magnetite. The Keith River Gossan, located in the south of the tenement, occurs within a 1.5km long magnetic zone. Two holes in the prospect are noted to contain amphibolite, and narrow massive magnetite bands have been logged within siltstone. This drilling does not report good widths of magnetite but the quality of core recovery is uncertain, and magnetite was not the drill target.

It is recommended that geologically controlled airborne magnetic and gravity modeling of the identified prospective areas be undertaken. This will establish whether economic widths and grades of magnetite can be hosted by the chosen areas. Once established, mapping, geochemical sampling and detailed heli-magnetics should be completed. Although iron ore is the stated objective exploration should also target gold, copper, lead and zinc within these areas to maximize exploration opportunities. Select targets should be drill tested. Exploration budgets of \$170,000 for Arthur River and \$120,000 for Savage River North have been presented.

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Appendix I

Summary Tables of Previous Exploration Reports

**ARTHUR RIVER PAST EXPLORATION
1966-1984**

Report_no	Title	Tenements	Companies	Authors	Reportdate	Nfvims	Structure	Gprphlc	Map_name	Deposits	Minerals	Types	Keywords	Xplrmthds	Annotation
66_0438	Report on Planet Mining Co Tasmanian Phosphate Leases	EL20/1965, EL21/1965, EL26/1965	Cundill Meyers and Associates Proprietary Limited, Planet Mining Company Proprietary Limited	Watts, T.R.	01/01/1966	1	23PP, 2 APPX, 5 TABLES, 54 PLATES, 3 PLANS,	Burnie, Devonport, Flinders Island, Furneaux Group, King Island, Marrawah, Smithton	Currie, Forth, Hellyer, Welcome		Phosphate	Geochemistry, Geology, Indust, Minerals, Misc and Fuels, Surface mapping	Cainozoic Sediments, Smithton Trough(S)	Rock Geochemistry;	The marine Tertiary rocks of all leases show a dominant limestone lithology but with no above background phosphate values. Relinquishment is recommended for the King and Flinders Island leases and more work is recommended in the Palaeozoic rocks near Sm
70_0632	Progress Reports on Exploration on SPL 56, Arthur River District, North- Western Tasmania, During 1970	SPL56	Mineral Holdings Australia Proprietary Limited, Tomic Exploration Proprietary Limited	Hughes, T.D., Nye, P.B.	01/03/1970	1	7 REPORTS, AVERAGE 5PP, 14 PLANS,	Arthur River, Keith River, Lyons River, Wedge Creek	Meunna	New Victory	Base Metals, Dolomite, Hematite, Iron, Limonite, Magnesite, Magnetite, Ochre, Pyrite	Air magnetic, Bed-rock, Geochemistry, Geology, Geophysics, Misc and Fuels, Petrology, Rock-chip, Surface mapping	Rocky Cape Region(S)	Aeromagnetics; Geological Mapping; Rock Geochemistry;	This literature review of work on SPL 56, including recommendations for further investigations, indicates the presence of oxidised iron formation with pyrite. Preliminary aeromagnetic results require ground surveillance, although little hope of economic
71_0839	Final Report on the Keith River Prospect E.L. 43/70 Northwest Tasmania	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited, Tomic Exploration Proprietary Limited	Porter, T.M.	01/12/1971	1	17PP, 10 TABLES, 9 PLANS,	Arthur River, Keith River, Lyons River, Takone	Meunna		Base Metals, Silver	Analysis, Bed-rock, Diamond, Drilling, Geochemistry, Geology, Logs, Soil (A,B,C horiz), Surface mapping	Arthur Lineament, Tertiary Basalt	Soil geochemistry; Geological Mapping; Drilling;	Diamond drilling indicates that the gossan represents a stratiform pyritic occurrence. No economic base metal mineralisation was encountered in drill core. No further exploration on the EL is planned.
72_0868	Progress Reports on Exploration of S.P.L. 56, Arthur River District, North- Western Tasmania During 1971.	SPL56	Mineral Holdings Australia Proprietary Limited	Nye, P.B.	01/03/1971	1	3PP,	Arthur River, Keith River, Lyons River	Meunna	Arthur R, New Victory	Base Metals, Chalcopyrite, Copper, Dolomite, Hematite, Iron, Limonite, Magnesite, Magnetite, Ochre	Air magnetic, Geochemistry, Geophysics, Rock-chip	Amphibolite, Arthur Lineament, Mafic Intrusives, Magmatic Mineralisation, Replacement, Mineralisation, Rocky Cape Region(S), Vein Mineralisation	Aeromagnetics; Rock Geochemistry;	Three progress reports summarising investigations into various prospects.
72_0904	Progress Reports on Operations in E.L. 43/70, Arthur River, Tasmania During 1970-1971	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited, Tomic Exploration Proprietary Limited	Nye, P.B., Porter, T.M.	01/01/1971	1	8PP,	Arthur River, Atlas Creek, Keith River, Preolenna	Meunna	Atlas, Keith Iron	Base Metals, Chalcopyrite, Coal, Copper, Dolomite, Galena, Iron, Lead, Magnesite, Magnetite, Pyrite	Air magnetic, Analysis, Diamond, Drilling, Fuels:Coal, Geochemistry, Geology, Geophysics, Logs, Misc and Fuels, Rock-chip, Surface mapping	Arthur Lineament, Carbonate Hosted Mineralisation, Parmeener Supergroup(S)	Aeromagnetics; Geological Mapping; Rock Geochemistry; Drilling;	Investigation of magnesite-dolomite, coal and iron deposits. Keith Iron formation consists of bedded pyrite in siltstone with minor magnetite bands and rare chalcopyrite.
72_0916	Lyons River Copper Occurrence, E.L. 43/70, Northwest Tasmania	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited, Tomic Exploration Proprietary Limited	Porter, T.M.	01/05/1972	1	3PP, 1 TABLE, 1 PLAN,	B A Creek, Lyons River	Meunna	Lyons R	Base Metals, Chalcopyrite, Copper, Dolomite, Magnesite, Pyrite	Geochemistry, Stream sediment	Arthur Lineament, Carbonate Hosted Mineralisation, Gossan	Stream Sediment Geochemistry;	Trace chalcopyrite occurs in a brecciated and silicified dolomitic slate on the Lyons River and is similar to the Keith River sulphide horizon.
78_1243	Progress Reports on Exploration on E.L. 43/70, Arthur River, Tasmania During 1974-1977 Part 1. April-Aug 1974	EL43/1970	Mineral Holdings Australia Proprietary Limited	Nye, P.B.	01/01/1977	1	7PP, 3 FIGS, 3 TABLES,	Arthur River, Lyons River, Savage River	Cleveland, Meunna	Cann Ck, Lyons R, Meunna Trig, Preolenna, Victory	Coal, Lignite, Magnesite, Silica	Analysis, Auger/Test pits, Bed-rock, Drilling, Fuels:Coal, Geochemistry, Geology, Indust, Minerals, Misc and Fuels, Non-metallics, Petrology, Surface mapping	Arthur Lineament, Parmeener Supergroup(S), Permian Coal Measures, Rocky Cape Region(S), Tertiary Basalt	Geological Mapping; Drilling;	Operations and investigations on several prospects are outlined. Sampling and assay results are not finalised but several companies are showing interest in the deposits.
80_1429	Tasmanian Oil-Shale Prospects, Quarterly Interim Report	EL17/1979, EL18/1979, EL19/1979, EL21/1979	Petro Quest Proprietary Limited	Anon	01/05/1980	1	11PP, 2 APPX, (APPX 2 = 6 FIG),	Beaconsfield, Bracknell, Golden Valley, Latrobe, O'Connors Peak, Ralton, Yolla	Arthur River, Forth, Hellyer, Meander, Mersey, South Esk, Tamar		Tasmanites	Fuels:Oil shale, Geology, Misc and Fuels	Exploration Potential, Parmeener Supergroup(S)	Remote Sensing; Geological Mapping;	A summary of performed and planned operations. No results are presented in the report.
80_1477	Exploration Licence 43/70, Sisters Creek, Tasmania, Drilling Programme December, 1976	EL43/1970	Broken Hill Proprietary Company Limited, Mineral Holdings Australia Proprietary Limited	Anon	01/09/1977	1	4PP, 2 APPX, 1 PLAN,	Lapoinya, Milabena, Sisters Creek	Meunna, Yolla		Silica	Analysis, Drilling, Geology, Indust, Minerals, Logs, Misc and Fuels, Non-metallics, Percussion, Surface mapping	Rocky Cape Group(S)	Geological Mapping; Drilling;	Following favourable surface sampling, the Jacob Quartzite in the Sisters Creek area was tested by shallow reconnaissance percussion drilling to a maximum depth of 21 m. Weathering to chemically acceptable, but often soft, quartzite is extensive, extend
82_1816	Preliminary Report on An Airborne Geophysical Survey, Rapid River, E.L. 1/79, North-West Tasmania	EL1/1979	CRA Exploration Proprietary Limited	Flis, M.F.	01/08/1982	1	12PP, 1 APPX, 3 PLANS, 7 FIG,	Arthur River, Lyons River, Mt Bertha, Rapid River	Cleveland, Horton, Meunna, Trowutta	Savage R, Victory	Base Metals, Chalcopyrite, Copper, Gold, Hematite, Iron, Magnesite, Magnetite, Malachite, Pyrite, Silver	Air magnetic, Air radiometric, Geology, Geophysics, Surface mapping	Amphibolite, Arthur Lineament, Gossan, Rocky Cape Region(S)	Airborne Radiometrics; Aeromagnetics; Geological Mapping;	Airborne magnetic and radiometric survey data was used to create an interpreted geology map for the area. Magnetic anomalies were delineated for future follow-up work. Priority grading of anomalies by inversion modelling is recommended.
83_2030	First Progress Report on the Follow-up of Aeromagnetic Anomalies, Rapid River E.L. 1/79 North West Tasmania, August 1982 to August 1983.	EL1/1979	CRA Exploration Proprietary Limited	Clementson, I.M., Flis, M.F.	01/08/1983	1	13PP, 2 APPX, 1 TABLE, 5 PLANS,	Clearwater Creek, Donaldson River, Little Donaldson River, Lyons River, Mt Bertha, Pinner Creek, Rapid River, Roy Creek	Cleveland, Meunna		Base Metals, Tin, Tungsten	Geochemistry, Geology, Geophysics, Gnd magnetic, Soil (A,B,C horiz), Stream sediment	Arthur Lineament, Dolerite, Photogeology	Ground Magnetics; Soil geochemistry; Stream Sediment Geochemistry;	Initial ground follow-up of nine aeromagnetic anomalies resulted in the dismissal of six as being of no further interest. The remaining three are recommended for gridding.

**ARTHUR RIVER PAST EXPLORATION
1966-1984**

Report_no	Title	Tenements	Companies	Authors	Reportdate	Nfvims	Structure	Gprphlc	Map_name	Deposits	Minerals	Types	Keywords	Xplrmtths	Annotation
83_2036	E.L. 43/70 Arthur River, Tasmania. Report on Exploration for the Year Ending 15 October, 1983.	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Williams, V.A.	01/08/1983	1	15PP, 9 APPX, 17 PLANS	Arthur River, B A Creek, Keith River, Lyons River, Pinner Creek	Meunna	Lyons R	Chlorite, Iron, Magnesite, Magnetite, Pyrite, Talc, Tourmaline	Analysis, Diamond, Drilling, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Mineral Process., Misc and Fuels, Petrology, Surface mapping	Arthur Lineament, Dolomite	Ground Magnetics; Geological Mapping; Drilling;	Two potentially large deposits of moderate to low grade magnetite have been identified by geological mapping and diamond drilling. One zone is 200 m to 400 m wide, over 1000 m long and at least 270 m deep. The other deposit occurs beneath Quaternary all
84_2103	Rapid River EL 1/79 North West Tasmania. Progress Report on Exploration August 1983 - February 1984.	EL1/1979	CRA Exploration Proprietary Limited	Clementson, I.M.	01/03/1984	1	17PP, 3 APPX, 18 PLANS	Cleanwater Creek, Donaldson River, Keith River, Little Donaldson River, Lyons River, Rapid River, Savage River	Cleveland, Meunna, Trowutta		Base Metals, Chlorite, Gold, Graphite, Iron, Magnesite, Magnetite, Pyrite, Sericite	Air electromag, Air magnetic, Air radiometric, Geochemistry, Geophysics, Misc and Fuels, Petrology, Rock-chip, Soil (A,B,C horiz), Stream sediment	Arthur Lineament, Exploration Potential, INPUT-EM, Mafic Volcanics, Rocky Cape Region(S)	Airborne Radiometrics; Aeromagnetics; Airborne EM; Soil geochemistry; Stream Sediment Geochemistry; Rock Geochemistry;	Follow-up of aeromagnetic and INPUT-EM anomalies have produced inconclusive results. Further work is recommended. Further evaluation of a magnetite- rich horizon and an anomalous gold value from a creek in the south of the EL is recommended. The potenti
84_2214	E.L. 43/70 Arthur River Area. Report on Exploration for 12 Months to 15th October, 1984	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Mackenzie, P.C.J.	01/09/1984	2	29PP, 16 APPX, 31 PLANS	Arthur River, Cann Creek, Keith River, Lyons River	Meunna	Arthur R, Cann Ck, Keith R, Lyons R	Dolomite, Magnesite, Pyrite	Analysis, Biogeochemistry, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gravity, Indust. Minerals, Logs, Misc and Fuels, Non-metallics, Surface mapping, Whole-rock:Major	Arthur Lineament	Geological Mapping; Drilling;	A major magnetite body has been outlined at the Lyons River deposit. The zone is over 2000 m long by up to 400 m wide and at least 270 m deep. It contains an estimated 30 Mt of plus 40% MgO with 1.10% Fe2O3, 2.55% CaO and 5.53% SiO2 down to the level of
84_2214	E.L. 43/70 Arthur River Area. Report on Exploration for 12 Months to 15th October, 1984	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Mackenzie, P.C.J.	01/09/1984	2	29PP, 16 APPX, 31 PLANS	Arthur River, Cann Creek, Keith River, Lyons River	Meunna	Arthur R, Cann Ck, Keith R, Lyons R	Dolomite, Magnesite, Pyrite	Analysis, Biogeochemistry, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gravity, Indust. Minerals, Logs, Misc and Fuels, Non-metallics, Surface mapping, Whole-rock:Major	Arthur Lineament	Gravity;	A major magnetite body has been outlined at the Lyons River deposit. The zone is over 2000 m long by up to 400 m wide and at least 270 m deep. It contains an estimated 30 Mt of plus 40% MgO with 1.10% Fe2O3, 2.55% CaO and 5.53% SiO2 down to the level of
84_2214	E.L. 43/70 Arthur River Area. Report on Exploration for 12 Months to 15th October, 1984	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Mackenzie, P.C.J.	01/09/1984	2	29PP, 16 APPX, 31 PLANS	Arthur River, Cann Creek, Keith River, Lyons River	Meunna	Arthur R, Cann Ck, Keith R, Lyons R	Dolomite, Magnesite, Pyrite	Analysis, Biogeochemistry, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gravity, Indust. Minerals, Logs, Misc and Fuels, Non-metallics, Surface mapping, Whole-rock:Major	Arthur Lineament	Geological Mapping; Rock Geochemistry; Drilling;	A major magnetite body has been outlined at the Lyons River deposit. The zone is over 2000 m long by up to 400 m wide and at least 270 m deep. It contains an estimated 30 Mt of plus 40% MgO with 1.10% Fe2O3, 2.55% CaO and 5.53% SiO2 down to the level of

**ARTHUR RIVER PAST EXPLORATION
1985-1999**

Report no	Title	Tenements	Companies	Authors	Reportdate	Nv/m	Structure	Gpphlc	Map_name	Deposits	Minerals	Types	Keywords	Xplrmthds	Annotation
85_2340	Rapid River E.L. 1/79 Report on the Reduction of Licence Area.	EL1/1979	CRA Exploration Proprietary Limited	Clementson, I.M.	01/02/1985	1	24PP, 3 APPX, 1 TABLE, 18 PLANS	Clearwater Creek, Donaldson River, Keith River, Mt Bertha, Rapid River, Savage River	Cleveland, Meunna		Base Metals	Air electromag, Air magnetic, Air radiometric, Geochemistry, Geology, Geophysics, Gnd magnetic, Misc and Fuels, Petrology, Remote sensing, Rock-chip, Soil (A,B,C horiz), Stream sediment, Surface	Arthur Lineament, Burnie Formation(S), INPUT-EM, Magnetic Modelling, Photogeology, Rocky Cape Group(S), Shale Hosted Mineralisation, Tertiary Basalt	Airborne Radiometrics; Remote Sensing; Aeromagnetics; Ground Magnetics; Airborne EM; Soil geochemistry; Geological Mapping; Stream Sediment Geochemistry; Rock Geochemistry;	Ground follow-up of aeromagnetic and INPUT-EM anomalies failed to locate any evidence of mineralisation over large portions of the EL.
85_2341	Rapid River E.L. 1/79, North West Tasmania Progress Report on Exploration February 1984 - February 1985	EL1/1979	CRA Exploration Proprietary Limited	Clementson, I.M.	01/02/1985	1	18PP, 3 APPX, 25 PLANS	Arthur River, Cann Creek, Folly Hill, Lyons River, Rapid River	Cleveland, Meunna	Arthur R, Cann Ck, Folly Hill, Lyons R	Gold, Iron, Magnesite, Magnetite, Pyrite	Air magnetic, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Gnd radiometric, Indust. Minerals, Misc and Fuels, Petrology, Rock-chip, Soil (A,B,C	Arthur Lineament, Burnie Formation(S), Duricrust, Ferricrete, INPUT-EM, Oonah Formation(S), Rocky Cape Group(S)	Ground Radiometrics; Aeromagnetics; Ground Magnetics; Soil geochemistry; Geological Mapping; Stream Sediment Geochemistry; Rock Geochemistry;	Follow-up of aeromagnetic and INPUT-EM anomalies has failed to delineate mineralisation. The majority of anomalies are caused by Tertiary basalts and Precambrian black shales with no economic potential. No further work is recommended for these areas. On
86_2533	Rapid River E.L. 1/79, North West Tasmania. Progress Report on Exploration February 1985 - February 1986	EL1/1979	CRA Exploration Proprietary Limited	Clementson, I.M.	01/02/1986	2	18PP, 3 APPX, 25 PLANS	Arthur River, Cann Creek, Folly Hill, Lyons River, Rapid River	Cleveland, Meunna	Arthur R, Cann Ck, Folly Hill, Lyons R	Gold, Iron, Magnesite, Magnetite, Pyrite				No significant work, Jackro auger failed to reach through alluvium
85_2498	E.L. 43/70 Arthur River Area, Tasmania. Report on Exploration for 12 Months to 15th October, 1985	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Dickson, T.W.	01/10/1985	1	5PP, 3 APPX, 2 FIG, 1 PLAN	Arthur River, Cann Creek, Lyons River	Meunna	Cann Ck	Magnesite	Analysis, Diamond, Drilling, Geology, Indust. Minerals, Logs, Mineral Process, Misc and Fuels, Surface	Arthur Lineament	Geological Mapping; Drilling;	Diamond drilling below a series of small magnesite outcrops on Cann Ck only intersected two small sections of magnesite (4.4 m and 6.5 m thick). No further work is recommended due to the restricted tonnage potential of the deposit. Metallurgical testing
87_2716	Ei 43/70 Arthur River Area. Report on Exploration for 12 Months to 15 October 1987	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings NL	Funnell, F.R.	01/09/1987	1	6PP, 4 APPX, 3 PLANS,	Arthur River, B A Creek, Lyons River	Cleveland, Meunna	Arthur R, Cann Ck, Lyons R	Dolomite, Magnesite	Bed-rock, Geochemistry, Geology, Indust. Minerals, Mineral Process., Mineral/Gossan, Misc and Fuels, Surface mapping	Arthur Lineament	Rock Geochemistry;	Bulk sampling of magnesite prospects for metallurgical and marketing studies. Large reserves of magnesite have been identified. Maximum reserves at Cann Creek are estimated at 200,000 t.
87_2716	Ei 43/70 Arthur River Area. Report on Exploration for 12 Months to 15 October 1987	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings NL	Funnell, F.R.	01/09/1987	1	6PP, 4 APPX, 3 PLANS,	Arthur River, B A Creek, Lyons River	Cleveland, Meunna	Arthur R, Cann Ck, Lyons R	Dolomite, Magnesite	Bed-rock, Geochemistry, Geology, Indust. Minerals, Mineral Process., Mineral/Gossan, Misc and Fuels, Surface mapping	Arthur Lineament	Geological Mapping;	Bulk sampling of magnesite prospects for metallurgical and marketing studies. Large reserves of magnesite have been identified. Maximum reserves at Cann Creek are estimated at 200,000 t.
87_2716	Ei 43/70 Arthur River Area. Report on Exploration for 12 Months to 15 October 1987	EL43/1970	CRA Exploration Proprietary Limited, Mineral Holdings NL	Funnell, F.R.	01/09/1987	1	6PP, 4 APPX, 3 PLANS,	Arthur River, B A Creek, Lyons River	Cleveland, Meunna	Arthur R, Cann Ck, Lyons R	Dolomite, Magnesite	Bed-rock, Geochemistry, Geology, Indust. Minerals, Mineral Process., Mineral/Gossan, Misc and Fuels, Surface mapping	Arthur Lineament	Geological Mapping;Rock Geochemistry;	Bulk sampling of magnesite prospects for metallurgical and marketing studies. Large reserves of magnesite have been identified. Maximum reserves at Cann Creek are estimated at 200,000 t.
88_2857	Exploration Licence 15/85 - Meunna, Final Report	EL15/1985	Amatek Limited, Monier Limited, Wolston Developments Proprietary Limited	Harrison, B.R.	01/09/1988	1	4PP, 1 APPX, 1 FIG,	Dip Range, Lapoinya, Maynes Creek, Meunna, Meunna Hills, Sisters Hills	Meunna, Wynyard, Yolla	Lapoinya	Gold, Gravel, Sand, Silica	Analysis, Auger/Test pits, Construction materials, Drilling, Geochemistry, Geology, Indust. Minerals, Logs, Misc and Fuels, Non-metallics, Percussion, Stream sediment	Rocky Cape Group(S)	Stream Sediment Geochemistry;	Exploration for economic silica sand deposits and gold mineralisation was unsuccessful in the relinquished area.
88_2862	Percussion Drilling and Geological Results, Arthur River E.L. 43/70, Cann Creek Magnesite and Foya Talc	EL43/1970	Australian Mineral Development Laboratory, CRA Exploration Proprietary Limited, Hilmac Proprietary Limited, Mineral Holdings Australia Proprietary Limited	Mackenzie, P.C.J.	01/05/1988	1	17PP, 6 APPX, 2 PLANS,	Arthur River, Cann Creek, Keith River	Meunna	Cann Ck, Foya	Dolomite, Magnesite, Talc	Analysis, Drilling, Geology, Indust. Minerals, Logs, Mine/Deposit, Misc and Fuels, Non-metallics, Percussion	Arthur Lineament	Drilling;	Percussion drilling delineated high grade magnesite (greater than 41% MgO) within 10% of an interbedded talc carbonate sequence. A complicated structure exhibits dislocated magnesite outcrops and subcrops. Further drilling is recommended. Prospective ta
88_2865	Exploration Licence 23/87 - Wynsmith Hills, Annual Report : Year 1 (November 1987 - November 1988)	EL23/1987	Betoota Proprietary Limited, Echelon Proprietary Limited, Pasadena Projects Proprietary Limited, Petrecon Australia Proprietary Limited	Cromer, W.C.	01/10/1988	1	12PP, 1 FIG, 2 PLANS,	Arthur River, Little Rapid River, Neasey Creek, Wynsmith Hills	Meunna, Stanley		Base Metals, Gold	Air magnetic, Geology, Geophysics, Remote sensing, Surface mapping	Arthur Lineament, Parmeener Supergroup(S), Rocky Cape Group(S)	Geological Mapping; Aeromagnetics, remote sensing	A summary of previous mining and exploration including an interpretative geological compilation showing aero magnetic anomalies.

**ARTHUR RIVER PAST EXPLORATION
1985-1999**

Report no	Title	Tenements	Companies	Authors	Reportdate	Nv/m	Structure	Gprphic	Map_name	Deposits	Minerals	Types	Keywords	Xplrmthds	Annotation
90_3146	Relinquishment Report for 12 Months to June 1990, EL 18/89, Frog Hill, Tasmania.	EL18/1989	Placer Exploration Limited	Ellis, P.D.	01/05/1990	1	14PP, 3 APPX, 2 FIG, 6 PLANS,	Blue Peak, Folly Hill, Frog Hill	Meunna	Folly Hill	Gold	Geochemistry, Geology, Rock-chip, Soil (A,B,C horiz), Stream sediment, Surface mapping	Arthur Metamorphic Complex(S), Neasy Formation(S), Rocky Cape Group(S)	Geological Mapping;	Results from bulk cyanide leach and conventional stream sediment sampling together with limited rock chip sampling and deep auger soil sampling (at Folly Hill) did not encourage further work.
91_3219	EL 40/89 Keith River Report on Exploration Activity January 1990 to November 1990.	EL40/1989	Geopeko Limited, Peko Exploration Limited	Mathison, I.J., Virgoe, K.J.	01/12/1990	1	6PP, 5 FIG, 2 TABLES, 4 APPX,	Baretop Ridge, Keith River	Cleveland, Meunna, Waratah, Yolla	Arthur R, Keith R, Lyons R	Base Metals	Air magnetic, Geophysics, Gravity	Arthur Metamorphic Complex(S), Oonah Formation(S)	Aeromagnetics; gravity	The report provides a review of previous exploration and a geophysical review of regional gravity and magnetic data.
91_3220	EL 44/89 Wedge Plains Report on Exploration Activity January 1990 to November 1990	EL44/1989	Geopeko Limited, Peko Exploration Limited	Mathison, I.J., Virgoe, K.J.	01/12/1990	2	8PP, 5 FIG, 2 TABLES, 4 APPX, 6 PLATES,	Arthur River, Wedge Plains	Meunna, Smithton, Stanley, Trowutta		Base Metals, Gold	Air magnetic, Geochemistry, Geology, Geophysics, Gravity, Surface mapping, Water	Rocky Cape Group(S)	Aeromagnetics; gravity	Report provides regional reviews of geology, mineralisation, geophysics (aeromagnetic/gravity interpretation), previous exploration including stream sediment sampling, 109 water samples, three Au anomalous areas but analytical problems to be resolved. A
91_3247	EL 1/90 Meunna Report on Exploration Activity March 1190 to February 1991	EL1/1990	Geopeko Limited, Peko Exploration Limited	Mathison, I.J., Virgoe, K.J.	01/02/1991	1	7 PP, 4 APPX, 5 FIG, 2 TABLES, 5 PLATES,	Cann Creek, Meunna	Meunna	Keith R	Base Metals, Gold	Air magnetic, Geochemistry, Geology, Geophysics, Gravity, Rock-chip, Surface mapping, Water	Arthur Lineament	Geological Mapping; Aeromagnetics; gravity; rock geochemistry	The exploration target is stratiform Cu-Zn-Ag (Mt Isa - McArthur River type) and stratiform Cu-Zn-Au (Besshi type). Collected 9 water samples and 30 rock chip samples (from Cann Ck). Three rock chip samples had anomalous Au (up to 5.83 g/t). Give a rev
92_3328	EL 40/89 Keith River Report on Exploration Activity December 1990 to November 1991	EL40/1989	Geopeko Limited, Peko Exploration Limited	Mathison, I.J.	01/12/1991	1	6PP, 1 APPX, 1 FIG, 2 PLATES,	Keith River	Cleveland, Meunna	Atlas		Geochemistry, Rock-chip, Stream sediment	Huminex	Stream Sediment Geochemistry;	No anomalies in the 19 stream sediments taken. Anomalous Pb and Zn values were obtained in the Atlas area (Pb-46ppm, Zn-1800 ppm).
92_3331	EL 43/89 Holder Rivulet Report on Exploration Activity December 1990 to November 1991.	EL43/1989	Geopeko Limited, Peko Exploration Limited	Mathison, I.J.	01/12/1991	1	6 PP, 1 APPX, 1 FIG, 1 PLATE	Cann Creek, Holder Rivulet, Neasey Creek	Meunna			Geochemistry, Geology, Rock-chip, Surface mapping	Arthur Lineament	Rock Geochemistry; Geological Mapping	Anomalous gold results from water sampling was followed up in Neasey Creek. Detailed rock-chip sampling failed to find the source of the anomalous gold. It was surmised that problems with analytical techniques led to spurious results. Anomalous lead res
92_3370	Relinquishment Report Including Report on Exploration Activity April 1991 to April 1992	EL30/1990	Geopeko Limited	Mathison, I.J.	01/07/1992	1	7 PP, 2 FIG, 2 TABLES, 4 APPX	Arthur River	Meunna	Folly Hill	Gold	Geochemistry, Geology, Rock-chip, Surface mapping, Water	Huminex	Geological Mapping; Rock Geochemistry	Anomalous gold by the Huminex method was not repeated and and is regarded as spurious. Rock chip samples from the Folly Hill workings, Wynsmith Hills and along Cann Ck revealed no significant mineralization. It was recommended that the area be dropped
93_3529	EL 40/89 Keith River Relinquishment Report and Annual Report - December 1992 to December 1993	EL40/1989	Peko Exploration Limited	Gardner, D.	01/12/1993	1	9 PP, 3 FIGS, 4 PLATES, 3 APPX,	Arthur River, Keith River, Lyons River	Cleveland	Atlas, Keith R, Victory	Copper, Gold, Lead, Zinc	Geochemistry, Geology, Misc and Fuels, Petrology, Rock-chip, Surface mapping, Water	Arthur Lineament	Geological Mapping; Rock Geochemistry	Water sampling and reconnaissance mapping highlighted a gold anomalous area with adjacent highly altered rocks in the Rohan1 Creek area
95_3711	Assorted Stream Sediment Geochemistry- Tasmania Wide		CSR Limited	Ellis, P.D.	01/04/1995	2	300PP					Geochemistry, Geology, Stream sediment, Surface mapping		Stream Sediment Geochemistry;	Tasmania-wide stream sediment survey; no report, analysis only
95_3756	Data to Accompany Application for Retention Licences Arthur River Area for EL 43/70, RL8717, RL8718	EL43/1970, RL17/1987, RL18/1987	CRA Exploration Proprietary Limited	Anon	01/01/1987	1	110PP	Arthur River, Cann Creek, Keith River, Lyons River	Meunna	Arthur R, Cann Ck, Keith R, Lyons R, Pinner	Dolomite, Magnesite	Analysis, Diamond, Drilling, Environment, Feasibility Study, Geochemistry, Geology, Logs, Mineral Process., Mineral analysis, Misc and Fuels, Non-metallics, Ore Reserves, Rock-chip, Surface mapping	Arthur Lineament, Arthur Metamorphic Complex(S), Flotation, Mineral Separation, Mining : Open Pit, Plant Design And Optimisation	Drilling;	Report to justify an application for a retention licence. Summarises results from 19 drill holes. The Keith R-Arthur R deposit(3500m by 150m-400m by 300m deep) has approximately 3 million tonnes/vertical metre of magnesite with high grade zones of +40%
98_4218	Combined Annual Report - EL's 37/96 Rapid River, 38/96 Savage River, (to 29/10/98) and EL 46/96-Flowerdale River(to 17/12/98), West. Tasmania	EL37/1996, EL38/1996, EL46/1996	Goldstream Mining NL, Titan Resources NL, Turner Geological Services	Turner, N.J.	01/07/1998	1	5PP, 3FIG, 2APPX	Arthur River, Campbell Range, Cann Creek, Donaldson River, Flowerdale River, Inglis River, Keith River, Lapoinya, Lyons River, Meunna, Mt Bertha, Preolenna, Rapid River, Savage River	Corinna, Meunna	Blue Peak, Brookside, Folly Hill, Lucy Spur, Specimen Ck, Specimen Reef	Antimony, Arsenic, Bismuth, Copper, Gold, Lead, Magnesite, Silver, Zinc	Geochemistry, Stream sediment	Arthur Lineament, Arthur Metamorphic Complex(S), Oonah Formation(S), Parmeener Supergroup(S), Precambrian Sediments, Rocky Cape Group(S), Sediment Hosted Mineralisation, Tertiary Basalt, Vein Mineralisation	Stream Sediment Geochemistry;	Two broad structural classes of gold mineralisation have been identified in the Arthur Metamorphic Complex and adjacent rocks. One class is widespread anomalous gold which is either pre-tectonic(?primary) or syn-tectonic, the other class is post-tectoni
98_4242	Annual Report - EL 26/97, Neasey Creek, N.W. Tasmania	EL26/1997	Pacific-Nevada Mining Proprietary Limited, Turner Geological Services	Westbrook, S.	01/11/1998	1	8pp, 3 fig, 2 appx, 4 plans	Arthur River, Neasey Creek	Yolla		Gold	Geochemistry, Geology, Rock-chip, Stream sediment, Surface mapping	Cowrie Siltstone(S), Detention Sub-Group(S), Irby Siltstone(S), Jacob Quartzite(S), Rocky Cape Group(S)	Stream Sediment Geochemistry; Rock Geochemistry;	Work done included stream sediment sampling and some rock chip sampling and geological mapping. One gold anomaly was recorded.

Appendix II

Selected Open File Maps
Relevant to Arthur River

Appendix III

Important Geological Observations - Arthur River

Arthur River Geological Observations

SampleID	Sample Group	Sample Type	AMG E	AMG N	Datum	Company	Date	Description
		outcrop	371576	5442945	AGD66	Redrock	08/06/2006	residual dolerite boulders over dolerite regolith
		outcrop	371174	5442334	AGD66	Redrock	08/06/2006	flat lying, fg. Quartzose, well sorted qtz-sst, minor cgl lenses
		outcrop	369984	5442650	AGD66	Redrock	08/06/2006	flat lying, indurated, hackley weathering fg. -mg sst
		outcrop	370100	5443360	AGD66	Redrock	08/06/2006	flat lying, indurated, hackley weathering fg. -mg sst
		outcrop	370090	5443450	AGD66	Redrock	08/06/2006	cg. Muscovite schist. Contact is obscured in creek bed
A	strmsed	PanCon	368030	5438080	AGD66	Redrock	09/06/2006	Pan. Con A- below road, influenced by road fill? - felsic grit
B	strmsed	PanCon	368190	5437870	AGD66	Redrock	09/06/2006	Pan. Con B - felsic grit
C	strmsed	PanCon	368930	5438776	AGD66	Redrock	09/06/2006	Pan Con C - above road, Fe nodules & magnetite
FTS0605201	rockchip	float	368860	5438580	AGD66	Redrock	09/06/2006	Leached, ferruginous ("gossanous"), schist with secondary qtz- minor riverbed cobbles.
FTS0605202	rockchip	outcrop	368262	5438370	AGD66	Redrock	09/06/2006	sub-gossanous mafic schist O/C grab
FTS0605203	rockchip	float	368110	5438000	AGD66	Redrock	09/06/2006	massive magnetite float - restricted extent
		float	368955	5438583	AGD66	Redrock	09/06/2006	Leached, ferruginous ("gossanous"), arenaceous schist with secondary qtz
		float	368815	5438686	AGD66	Redrock	09/06/2006	Leached, ferruginous ("gossanous"), schist with secondary qtz
		outcrop	368795	5438686	AGD66	Redrock	09/06/2006	sandy-grit colluvium of segregated qtz-schist on road
		outcrop	368700	5438680	AGD66	Redrock	09/06/2006	Fe sub-gossanous float, cream, non-segregated, crudely banded kspar-qtz (biotite?) schist O/C
		outcrop	368390	5438450	AGD66	Redrock	09/06/2006	cream, non-segregated, crudely banded albite-qtz (biotite?) schist O/C
		outcrop	368600	5438570	AGD66	Redrock	09/06/2006	heavily qtz veined quartzite road cut - sample
		outcrop	368100	5438170	AGD66	Redrock	09/06/2006	quartzite road cut - sample
		outcrop	368330	5438400	AGD66	Redrock	09/06/2006	weathered, non-segregated, crudely banded albite-qtz (biotite) schist w inter-layered sub-goss schist
		outcrop	368240	5438330	AGD66	Redrock	09/06/2006	sub-gossanous mafic schist O/C –continuous with FTS0605202, felsic to South
		outcrop	368020	5438074	AGD66	Redrock	09/06/2006	intermediate phyllitic schist (massive cream)
		outcrop	368300	5438290	AGD66	Redrock	09/06/2006	quartzite overgrown road cut
		outcrop	368340	5438300	AGD66	Redrock	09/06/2006	Running sands quartzite on overgrown road cut
		outcrop	368470	5438340	AGD66	Redrock	09/06/2006	grey, massive, consolidated siliceous siltstone
		outcrop	368460	5438480	AGD66	Redrock	09/06/2006	grey, massive, consolidated siliceous siltstone- change to Fe bearing
D	strmsed	PanCon	369275	5442160	AGD66	Redrock	10/06/2006	same as 5/5/1998 G267. 50% intermediate (chlorite) schist, 50% musc. Schist
E	strmsed	PanCon	368600	5442120	AGD66	Redrock	10/06/2006	same creek as D, 50% intermediate (chlorite) schist, 20% Permian quartzite, 10% magnetite bearing amphibolite
F	strmsed	PanCon	367950	5443120	AGD66	Redrock	10/06/2006	80% chlorite, nonsegregated arenaceous schist. Abundant fg magnetite in pan.
		outcrop	368360	5442350	AGD66	Redrock	10/06/2006	Quarry 100m downhill=well fol. Mg. non-segregated chloritic arenaceous schist. Road cut =amphibolite

Appendix IV

Photographs Arthur River – June 2006



Photo 1: Arthur River- Farquhar Bridge across Arthur River, 6t gross limit



Photo 2: Arthur River – Keith River Bridge (closed)



Photo 3: Arthur River – Vehicle ford across Keith River (bridge in background)



Photo 4: Arthur River – Access road and road cutting Keith River Gossan



Photo 5: Arthur River – Detail of albitic rock at Keith River Gossan (hammer handle for scale)

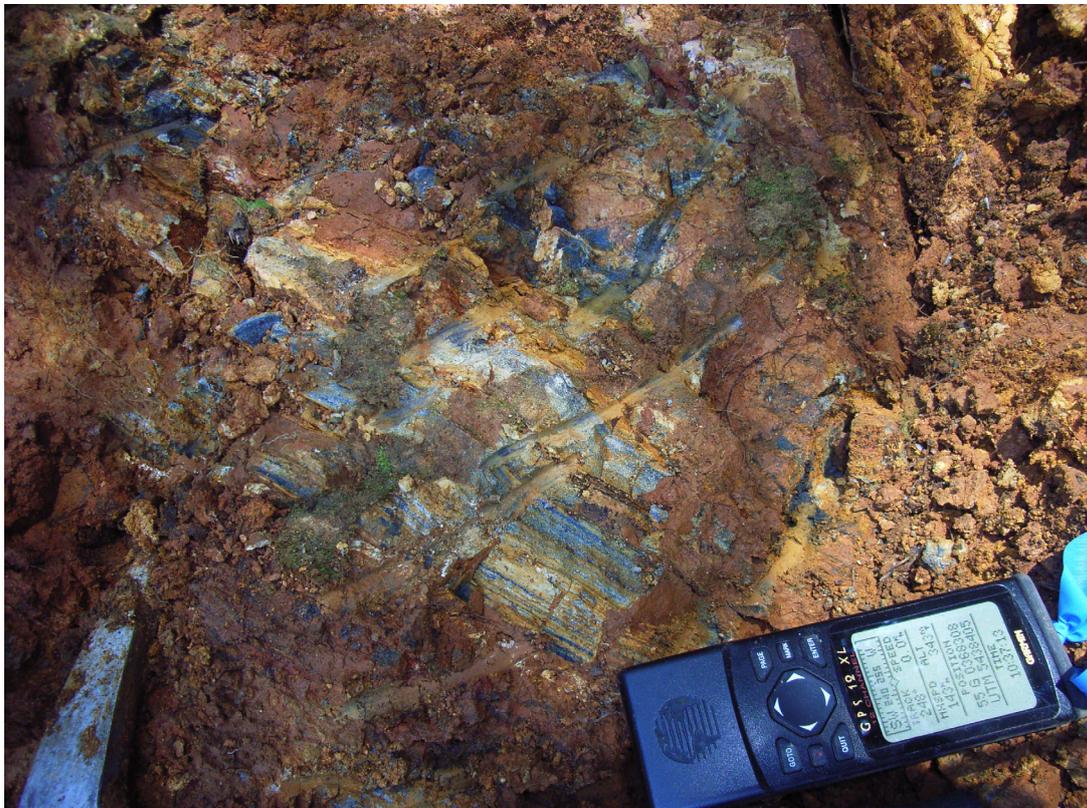


Photo 6: Arthur River – Phyllitic siltstone between the two main Keith River Gossan bands (368 308mE 5 438 405mN).



Photo 7: Arthur River – Western “gossan” at Keith River Gossan (368 260mE 5 438 365mN).



Photo 8: Arthur River – View south towards Keith River Gossan (in mist)