

DEFIANCE MINING NL
A.C.N. 009161522

ANNUAL REPORT FOR THE PERIOD

30 MAY 1999 TO 29 MAY 2000

MICROFILMED
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EL17/91/PT2
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FOR EL 17/91 - MATHINNA

00_4437

Annual Report for the period 30 May 1999 to 29 May
2000 - EL17/91 - Mathinna
Connemara Gold Mines Proprietary Limited; Defiance
Jackson, D.G. EL17/91

Report No : Def 088D
Date due : 29 April 2000
Author : DG Jackson
Accepted By: AG Keogh
Signature : 
Copies : Defiance Mining (1)
: Connemara Gold Mines (1)
: Mineral Resources Tasmania (1)

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1. Summary

Defiance Mining NL are exploring EL 17/91 at Mathinna in Joint Venture with Connemarra Gold Mines Pty Ltd, a wholly owned subsidiary of the Mining Contractor, Barmenco Pty Ltd.

The targets are high-grade gold bearing reefs containing more than 50,000 ozs and similar in style to the Main and Loanes Reefs at the New Golden Gate Mine in adjacent tenement 43M/89.

Since the Joint Venture was signed in September 1998, Defiance has concentrated its field program within the 27ha mining lease 43M/89, which is surrounded by EL 17/91.

No work was completed in EL 17/91 during the current reporting period, however, 57 RC and diamond holes were completed in 43M/89 for totals of 4778m of RC and 886.4m of core drilling.

2. Introduction

EL 17/91 "Mathinna", of approximately 20sq km, is centred on the town of Mathinna approximately 65 km east of Launceston. The licence, which is now nearing its ninth anniversary, is due for renewal on 29 May 1999.

Connemarra Gold Mines Pty Ltd now holds the tenement, which has been previously held by Alex White and Resolute Samantha Ltd. Defiance Mining NL has signed a joint venture with Connemarra, whereby they can earn a 50% equity in this and other associated tenements, by spending \$1 million on exploration for high-grade gold reefs.

The licence is a mixture of private land on alluvial flats along the South Esk River and State Forest in adjacent hilly country. Access is generally excellent with a sealed road to Launceston and strategically placed gravel roads throughout the tenement.

3. Conclusions and Recommendations

- First pass evaluation drilling should be completed on the Volunteer Consolidated, Chinamen's Hill, Enterprise and Golden Staircase targets as soon as evaluation drilling in the New Golden Gate area is completed.
- Reconnaissance drilling around should be undertaken in EL 17/91 to test for additional reefs along strike from the New Golden Gate mine.

4. Geology

EL 17/91 lies near the southern end of the 90-km long, north-north-west trending, line of gold deposits that extend from Mangana in the south to Lyndhurst on the north coast.

The gold deposits occur as auriferous quartz reefs, hosted in the Mathinna Beds, a folded sequence of Silurian-Ordovician age sediments. The Mathinna beds are intruded by younger, Devonian-Carboniferous age granites and are in part overlain by Permo-Triassic glacial marine sediments, Jurassic dolerites and Tertiary basalts.

The gold bearing veins are structurally controlled and occur in a range of orientations and forms within zones of shearing and tectonic deformation. Typical vein features are:

Width	0.1-1.0m	up to 10m
Length	10-100m	up to 350m
Depth	<100m	up to 580m
Grade	15-30g/t	cut off 10g/t
Strike	variable	NW to NE dominant
Dip	typically steep	70-80°
Mineralogy	quartz, arsenopyrite, pyrite	minor galena, chalcopyrite, sphalerite

This overall geological setting is very similar to the high grade, quartz vein style mineralisation in the slate belts of central and eastern Victoria which have historical production of approximately 80Mozs.

5. Summary of Previous Exploration

The first gold discovery in Tasmania was made at Mangana in 1852. As exploration extended to the north, further discoveries were made in the Lyndhurst-Mangana belt (including a number in Mathinna EL 17/91) and at Lisle, Lefroy and Beaconsfield.

In this first phase of mining, production peaked sometime prior to 1884. In the Lyndhurst-Mangana zone, activity was concentrated on the southern section between Mangana and Alberton within a 70km by 5km belt of deformed sediments.

In about 1887, after the first phase of mining had largely been completed, a Mr A Loane discovered a reef (Loane's Reef) in the abandoned adit of the Golden Gate mine. Sinking of a shaft to evaluate this reef discovered an additional reef (Main Reef). These two reefs were subsequently mined down to about 280m depth and probably each produced somewhere between 50,000 and 100,000 ozs.

Further exploration at depth below, and adjacent to, these reefs discovered a further two reefs (East and West Reefs) which were mined from 250-470m depth. The New Golden Gate Shaft was subsequently extended to 549m.

The bulk of the 265,000 ozs of gold from the New Golden Gate mine was produced in the years 1888 to 1904. Intermittent production occurred through to 1929 when the workings were finally abandoned. New Golden Gate production represents approximately 16% of Tasmania's historical production.

Early mills were generally simple stamp and gravity mills, which recovered most of the coarse free gold, but gold associated with sulphides was lost. The New Golden Gate mill experimented with cyanide extraction of their sulphides with limited success.

An important feature of the area is that many of the quartz veins never outcropped and were only discovered during underground development aimed at other veins.

Modern day exploration activity has seen a number of companies hold tenure over the New Golden Gate mine and other mines in the Mathinna area, however, very few have carried out drilling programs in the area of the old mines.

Of the two more comprehensive programs, prior to the recent Defiance program, Epoch Minerals had a best intersection of 8m at 10.7g/t gold in the Central Reef at the New Golden Gate mine and Resolute Samantha Limited had best intersections of 7m at 2.4g/t gold in Mathinna township and 6m at 1.9g/t gold at the old Jubilee workings. For both companies the target was shallow, large tonnage, open pit gold resources and because these did not look achievable, the programs were not continued.

A large number of old workings remain untested by drilling.

A more detailed summary of historical exploration is available in MacDonald (1996)

6. Summary of Work Completed

Exploration drilling in the current reporting year concentrated on the newly discovered Dylan's and Sophie's reefs in the immediate vicinity of the New Golden Gate mine workings. While 52 drill holes were completed on these targets for totals of 4778m of RC and 886.4m of core drilling, all of the holes were positioned on the completely enclosed ML 43M/89. This work will be reported separately.

7. Proposed Future Program

While the priorities for the next round of drilling in the Mathinna JV have yet to be decided, they are likely to include the Volunteer Consolidated and Chinamen's Hill prospects outlined in the 1999 annual report. Drilling on these targets is likely to comprise 4 holes for about 360m of RC and 30m of core.

8. References

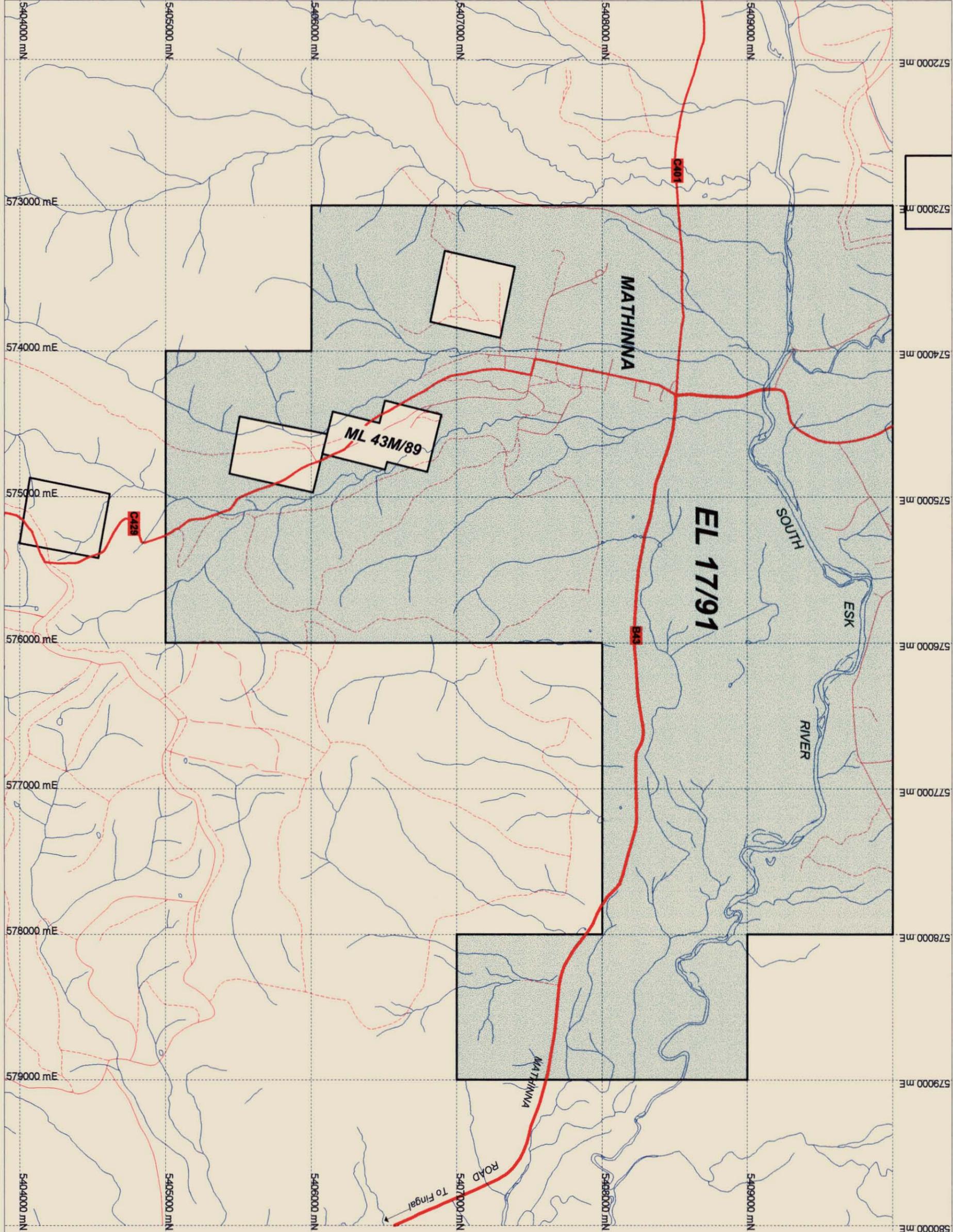
Colville, R. 1998. Connemarra Gold Mines Pty Ltd, Mathinna Gold Project, Annual Report on Exploration Licence 3/97 for the Twelve months ending 19 September 1998.

Jackson, D G, 1999. Defiance Mining NL, Annual Report 1999 EL 17/91 "Mathinna".

MacDonald, G. 1996. Resolute Samantha Limited, Annual Report 1995 EL 17/91 "Mathinna".

9. Expenditure Statement - EL 17/91**For the period 1 April 1999 to 31 March 2000**

Item	\$
MRT/ Legal/NNTT Costs	740.00
Vehicles	5561.07
Overheads at 10%	700.12
Total	7001.19



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 Connemara Gold Mines Proprietary Limited; Defiance Jackson, D.G. EL17/91

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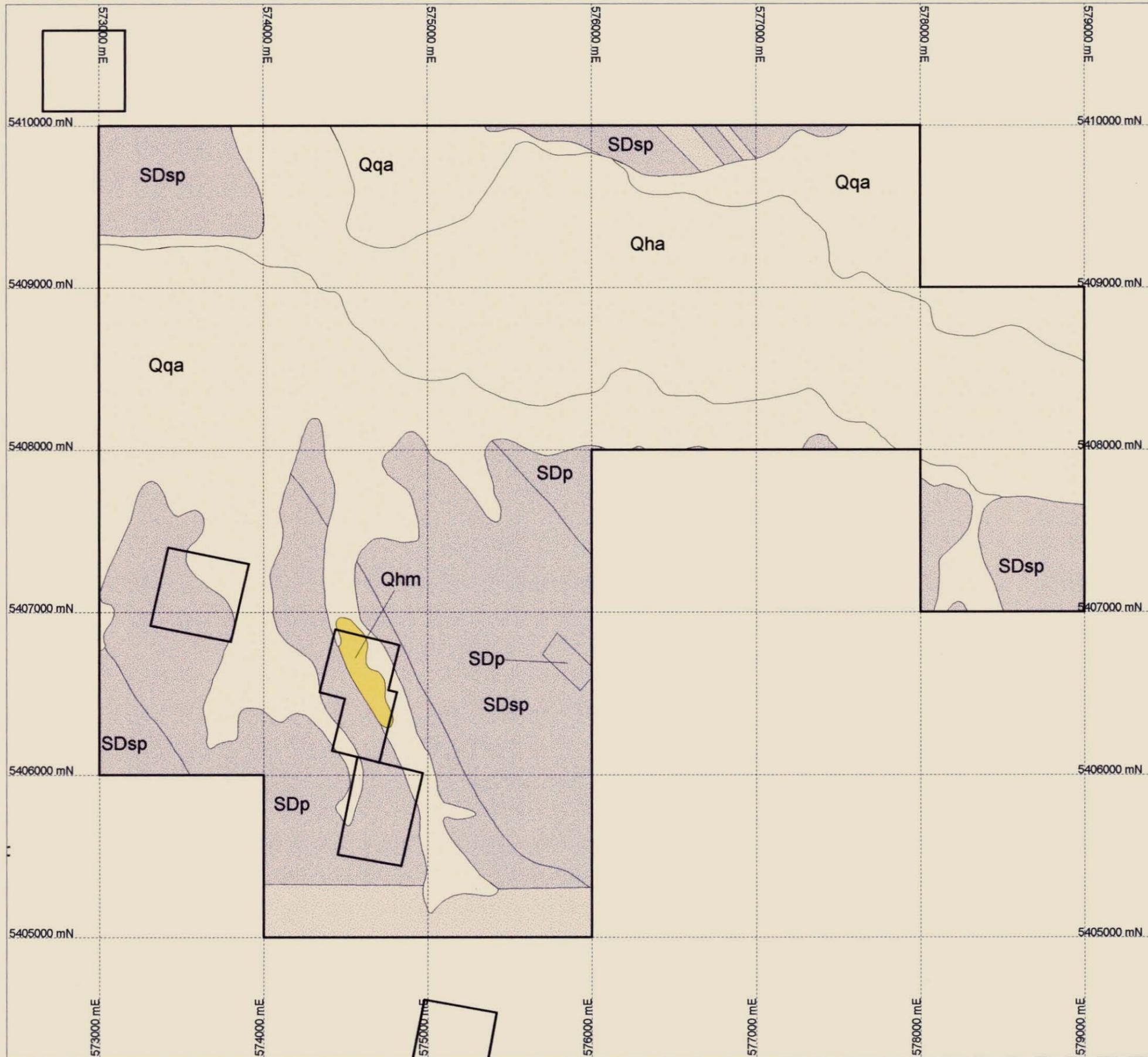
-  Tenement EL 17/91
-  Primary Surfaced Roads
-  Secondary Surfaced Roads
-  Unsurfaced Roads and Tracks
-  River

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Mathinna Joint Venture
 Tenement Location Plan
 EL 17/91

 Date: 29/9/2000 Author: T.C. Downs Projector: AMS Zone 55 (AGD 84)	Geologist: D.G. Jackson Plan No: 745802
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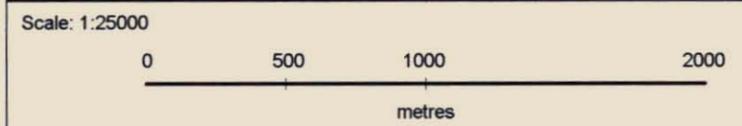
- CAINOZOIC**
- QUATERNARY**
- Qhm Mine tailings and man disturbed ground
 - Qha Stream alluvium, swamp and marsh deposits
 - Qqa Older alluvium of river terraces
 - Qdp Colluvium - derived from Mathinna Group
 - Qpr Talus consisting of dolerite and subordinate Upper Permian rocks
 - Qpb Dolerite block fields probably underlain by clay from weathered dolerite, with interstitial fines
 - Qpt Topped dolerite masses (>100m), coherent or partly disaggregated, produced by cliff failure
- TERTIARY**
- Tc Conglomerate with rounded clasts of Mathinna Group and very rare weathered dolerite, often partly cemented by iron oxides
- MESOZOIC**
- TRIASSIC**
- Tl Dominantly lithic sandstone with minor mudstone and coal
 - Tm Quartz rich lithic sandstone and minor quartz sandstone (RT), with mudstone and carbonaceous mudstone (Rbm)
 - Tc Cross bedded quartz sandstone
 - Tf Fine grained, slightly feldspathic quartz sandstone, micaceous shale and minor carbonaceous mudstone
 - Tp Poorly sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for rare forams
 - Tps bed of pebbly sandstone indicated (Pmp)
 - Tt Thick-bedded usually poorly sorted, pebbly sandstone passing upward to interbedded sandstone, siltstone and mudstone. Marine fossils abundant in places
 - Tl Dominantly bioclastic limestone
- PERMIAN**
- Pm Marine fossiliferous mudstone siltstone and minor sandstone and bioclastic limestone
 - Pp Fine grained pebbly sandstone with phosphatic nodules. Marine fossils present in some areas
 - Pf Mudstone siltstone and poorly sorted sandstone. Uncommon marine fossils
 - Pp Dominantly well sorted quartz sandstone, usually cross-bedded and commonly with interbedded and inter-laminated carbonaceous shale lesser conglomerate and rare coal
 - Pp Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pb), dominantly thick-bedded to massive, medium to coarse-grained quartz sandstone and minor conglomerate (Pbs)
- EARLY DEVONIAN (?) - SILURIAN - ORDOVICIAN (?)**
- SDp Quartzitic turbidite sequence of interbedded sandstone siltstone and mudstone (SDu), sequences with significant mudstone indicated (SDsp), dominantly sandstone and siltstone (SDs), some quartzite units indicated (SDsq)
 - SDp Dominantly mudstone and siltstone (SDs)
 - SDp Metapsammite (SDem, SDepm), metaquartzite (SDeqm)
- IGNEOUS ROCKS**
- TERTIARY**
- Tb Basinite
- JURASSIC**
- Jd Dolerite - grain size <0.2mm (vF) Areas with later very fine-grained dykes shown (FD)
- DEVONIAN**
- Dap Apatite
- MAJOR GRANITIC INTRUSIONS**
- SCOTTS DALE BATHOLITH**
- Sd Generally equigranular medium to coarse grained, leucocratic biotite alkali feldspar granitoid/monzonite with pale pink feldspar
 - Sdp Sparingly to moderately porphyritic (quartz and K feldspar), fine to coarse grained biotite granite
 - Sdc Equigranular coarse to very coarse grained biotite +/- hornblende and/or monzonite with pink to white feldspars
- BLUE TIER BATHOLOITH**
- Bt Medium grained, equigranular to rarely porphyritic (KF), biotite-hornblende granodiorite. Locally with a strong grain foliation. Variable but usually strongly magnetic (DBgt). Weakly magnetic (DBgw)
- BEN LOMOND GRANITE**
- Bg Fine to coarse grained equigranular to porphyritic (KF) alkali feldspar granite

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Mathinna Joint Venture
Regional Geology
EL 17/91

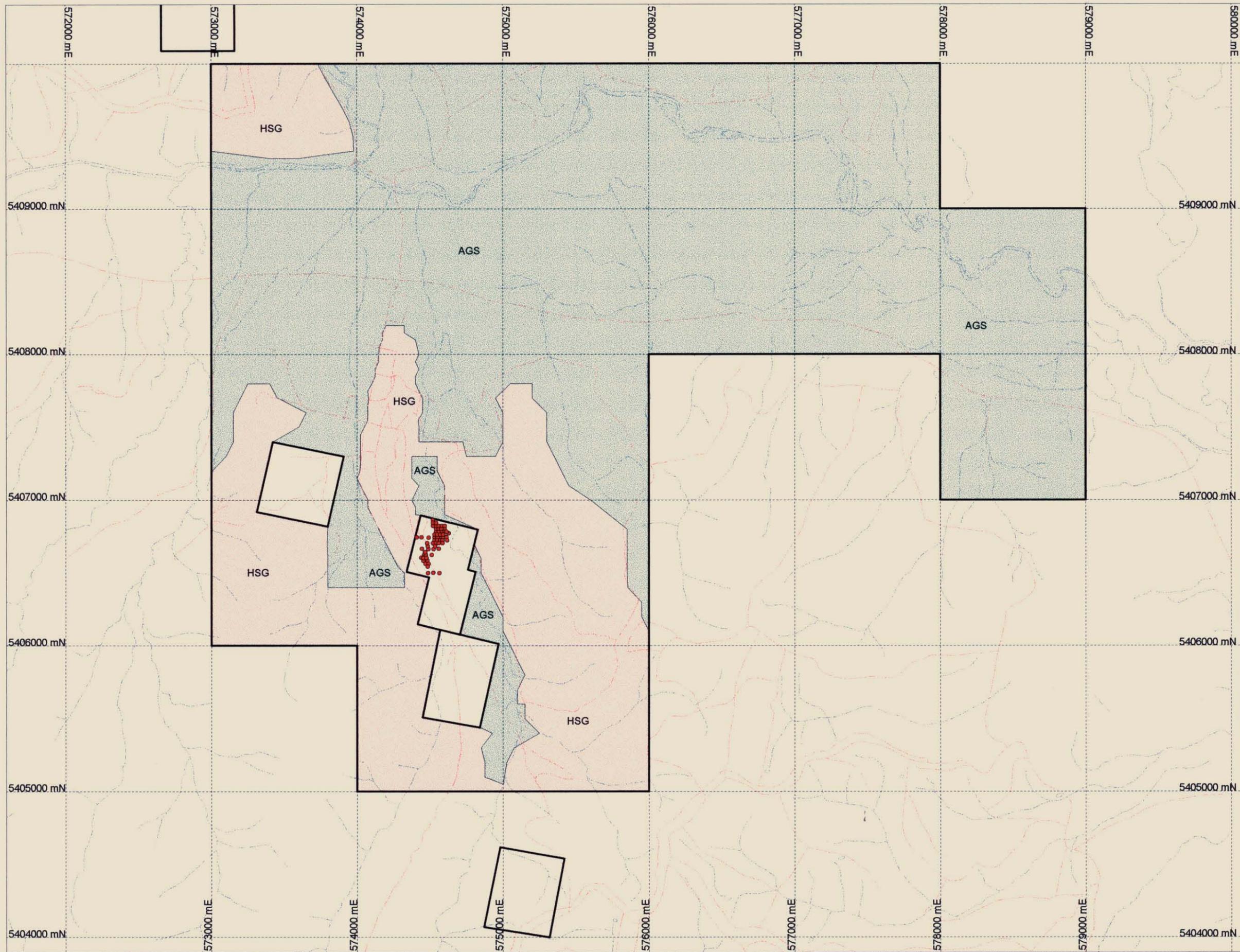


Date: 27/3/2000
 Geologist: DG Jackson
 Author: TC Downs
 Plan No: TAS034
 Projection: AMG Zone 55 (AGD 84)

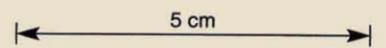


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- RC Drillhole Collar
- Airborne Geophysical Survey
- Airborne Geophysical Survey and Historical Soil Geochemistry Survey
- Roads
- River

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Mathinna Joint Venture
Exploration Activity Map
EL 17/91

	Date: 29/3/2000	Geologist: DG Jackson
	Author: TC Downs	Plan No: TAS065
	Projection: AMG Zone 55 (AGD 84)	

