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DEFIANCE MINING NL
A.C.N. 009161522

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ANNUAL REPORT FOR THE PERIOD

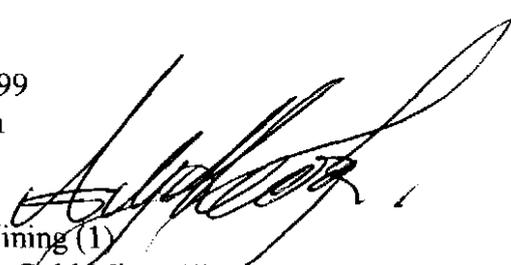
30 MAY 1998 TO 29 MAY 1999

FOR EL 17/91 - MATHINNA

MINERAL RESOURCES	
EL 17/91	
29 MAY 1999	
See folio 33	

99-4322

ANNUAL REPORT - EL 17/91
MATHINNA - DEFIANCE MINING
D JACKSON

Report No : Def 077D
 Date due : 29 April 1999
 Author : DG Jackson
 Accepted By: AG Keogh
 Signature : 
 Copies : Defiance Mining (1)
 : Connemarra Gold Mines (1)
 : Mineral Resources Tasmania (1)

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LIST OF APPENDICES

- 1. Historical Soil Geochemical Data**

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 mainly concentrated its field program within 43M/89, which is surrounded by EL 17/91.

Work completed in EL 17/91 during the reporting period has included:

- Entering historical geochemical data from Resolute Samantha Limited into a digital data base and processing the data in a GIS package, at a variety of scales, as both images and dot plans.
- Obtaining regional airborne geophysical data from Mineral Resources Tasmania and having it processed into images by Southern Geoscience Consultants.
- Evaluation of all the available historical data within the tenement and selection of a number of targets for further work.
- Purchasing geological and topographical data in digital form to enhance map production.

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 eighth birthday, 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

6.1 Soil Geochemical Data

Resolute Samantha Ltd collected a large number (2019) of soil and auger samples over Mathinna EL 17/91 while they held tenure. These samples, which were collected at 100m by 50m spacing with 50m by 25m infill in anomalous zones, cover an area of approximately eight square kilometres. They were analysed at Minlabs in Perth WA for Au by fire assay (AAS finish) with a 50g charge and a detection limit of 1ppb and for As by perchloric acid digest and AAS with a 10ppm detection limit.

After ascertaining that Resolute did not have the data in digital form Defiance arranged to have it entered into a digital data base (Appendix 1 - Excel 97 spreadsheet). In the Defiance data base samples below detection limits are entered as half of the detection limit to facilitate statistical processing.

Plots of sample locations and both elements at a variety of scales and in a number of formats were then possible using the Map Info GIS package. Attached Plan Nos TAS039-040 present the Au and As data as images at 1:25000 scale and Plan Nos TAS036-038 illustrate the elements as dot plans at 1:10000 scale.

6.2 Airborne Data Processing

Defiance purchased the available airborne magnetic and radiometric data, comprising the Fingal (1993), Mathinna (1990) and Alberton-Mangana (1989) surveys from Mineral Resources Tasmania.

These data were processed by Southern Geoscience consultants to produce a number of images. The Total Magnetic Intensity image is presented here at 1:25000 scale (plan No TAS035).

The structural features that control the Au mineralisation are not readily apparent on the magnetic image. The south western part of the tenement has a relatively low magnetic intensity compared to the north eastern quadrant. This may simply reflect depth to magnetic basement (granite?). Minor cultural noise anomalies caused by the town of Mathinna are apparent in the data centred at AMG coordinates 574500E and 5408000N.

6.3 Prospect Evaluation

Prior to Defiance Mining NL and Connemarra Gold Pty Ltd forming the Mathinna Joint Venture, Connemarra arranged the production of a report on all the potential gold prospects in the area (Colville 1998). A number of these prospects, on which further work was recommended, are within the Mathinna EL 17/91 and are summarised below.

6.3.1 Chinamen's Hill Soil Anomaly

This area was soil sampled by Resolute Samantha as it lies to the north along strike from the main trends of old workings at Mathinna. A well defined zone of anomalous gold is defined over 600m within EL 17/91. This zone is truncated by a perched east west trending paleochannel before reappearing in E3/97 in the area of the Golden Horseshoe workings.

Resolute float sampling of silicified and/or stockworked siltstone in the area where the anomaly crosses the top of the hill assayed to ~1g/t Au. A Resolute costean across

part of this anomalous trend was systematically channel sampled with best results of 9m of 1.35g/t Au including 3m of 2.8g/t Au. One small sample of siltstone assayed ~20g/t Au.

While the one hole drilled into this target by Resolute was disappointing, it is considered that further drilling is warranted to test the anomaly at different depths and along strike.

6.3.2 Volunteer Consolidated Old Workings

This mine was one of the better producers in the Mathinna field with about 2000 ozs being produced. Resolute collected mullock samples from dumps that returned assays up to 64.3g/t Au.

There is reasonable evidence for a moderate south-south-west plunging shoot defined by the Nos 2 & 3 shoots on the surface and at Nos 2 & 3 Levels. This postulated shoot would be tested by a combination of RC and diamond drilling.

6.3.3 Enterprise Drill Intersection

The best intersection from Resolute's RC program was near the old Enterprise workings on their Township-Church Hill soil anomaly where drill hole MT2 intersected 1m from 4m at 13.6g/t Au. One additional hole was drilled under this intersection without success but the along strike potential has still not been tested.

6.3.4 Golden Staircase

Resolute drilled holes approximately 50m to the north and south of the workings and intersected low grade reef structure mineralisation with best one metre intersections of 1.35g/t Au and 3830ppm As. Further holes are proposed in the immediate vicinity of the old workings as the Mathinna reefs rarely exceeded 50m in strike and usually are sub vertical and steeply plunging.

7. Proposed Future Program

In the period June-July 1999 Defiance plans to drill approximately 3090m in 41 holes in the vicinity of the New Golden Gate mine. The majority of this drilling will be within 43M/89, which is totally enclosed by EL 17/91, however, some of the reconnaissance drill lines proposed are likely encroach in to EL 17/91 (~ 4 holes for 320m).

If encouraging results were forthcoming from the above program Defiance would expect to complete a second program in the Mathinna area in late 1999. This program additional drilling in the vicinity of New Golden Gate but would also involve drilling of a number of regional targets. These targets would be likely to include the

Volunteer Consolidated and Chinamen's Hill prospects outlined above (4 holes for about 360m 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.

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

9. Expenditure Statement - EL 17/91

For the period 1 July 1998 to 31 March 1999

Item	\$
MRT/ Legal/NNTT Costs	1674.98
Literature Research	328.61
Freight	55.00
Geophysics - Aeromags	75.00
Computing & CAD Services	892.83
Consultant - Geophysics	765.50
Salaries & Wages	8328.63
Vehicles	319.63
Travel & Accommodation	4170.95
Consumables - Drilling	441.95
*Planning Future Drilling	6000.00
*Site Inspection	6000.00
Overheads at 10%	2905.31
Total	31958.39

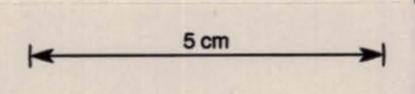
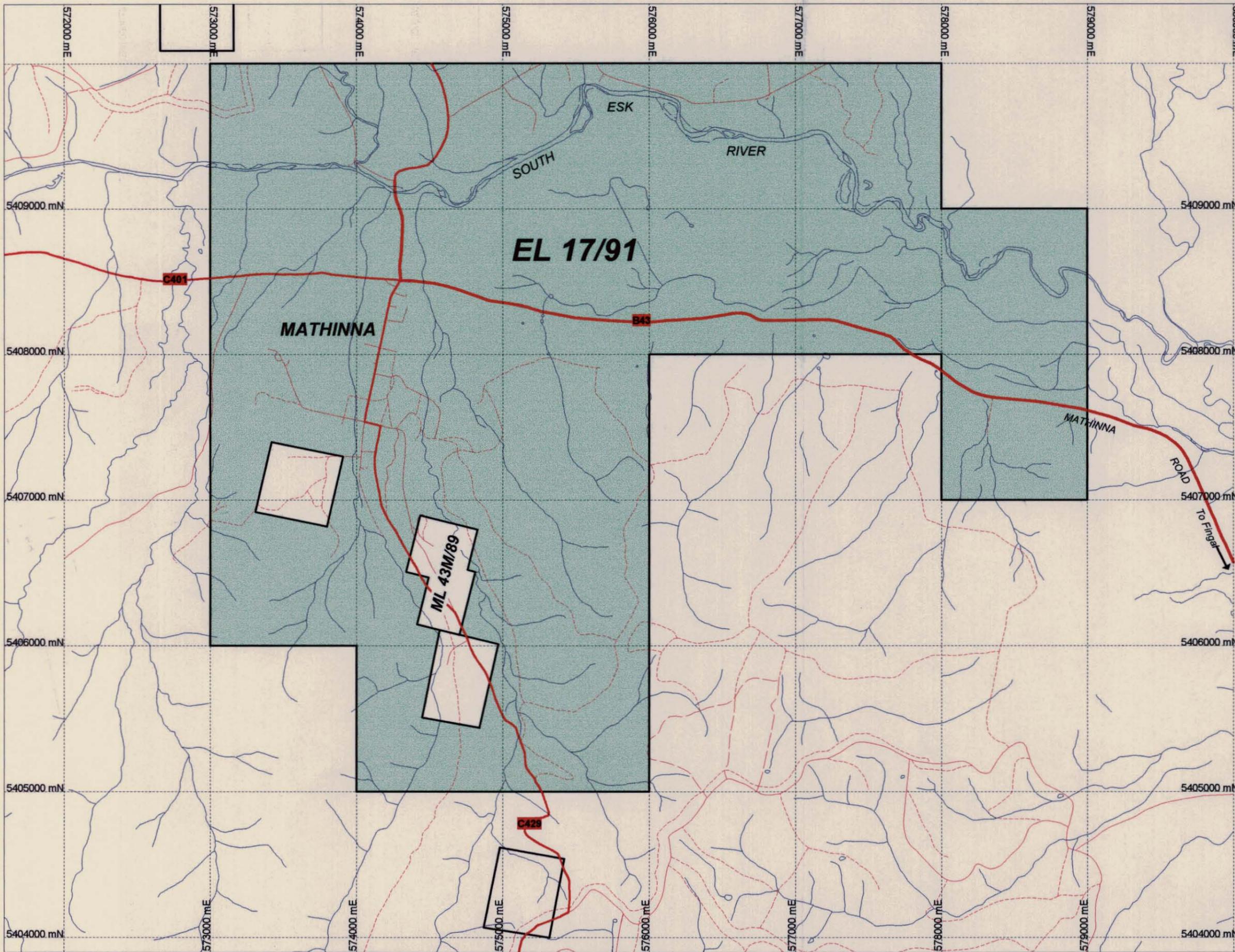
Notes:

1. Items Marked with (*) are sourced from Connemarra Gold quarterly report for quarter ending 30.9.98. All other expenditure is attributed to Defiance Mining NL in the period 1.10.98 to 31.3.99.

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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

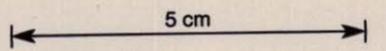
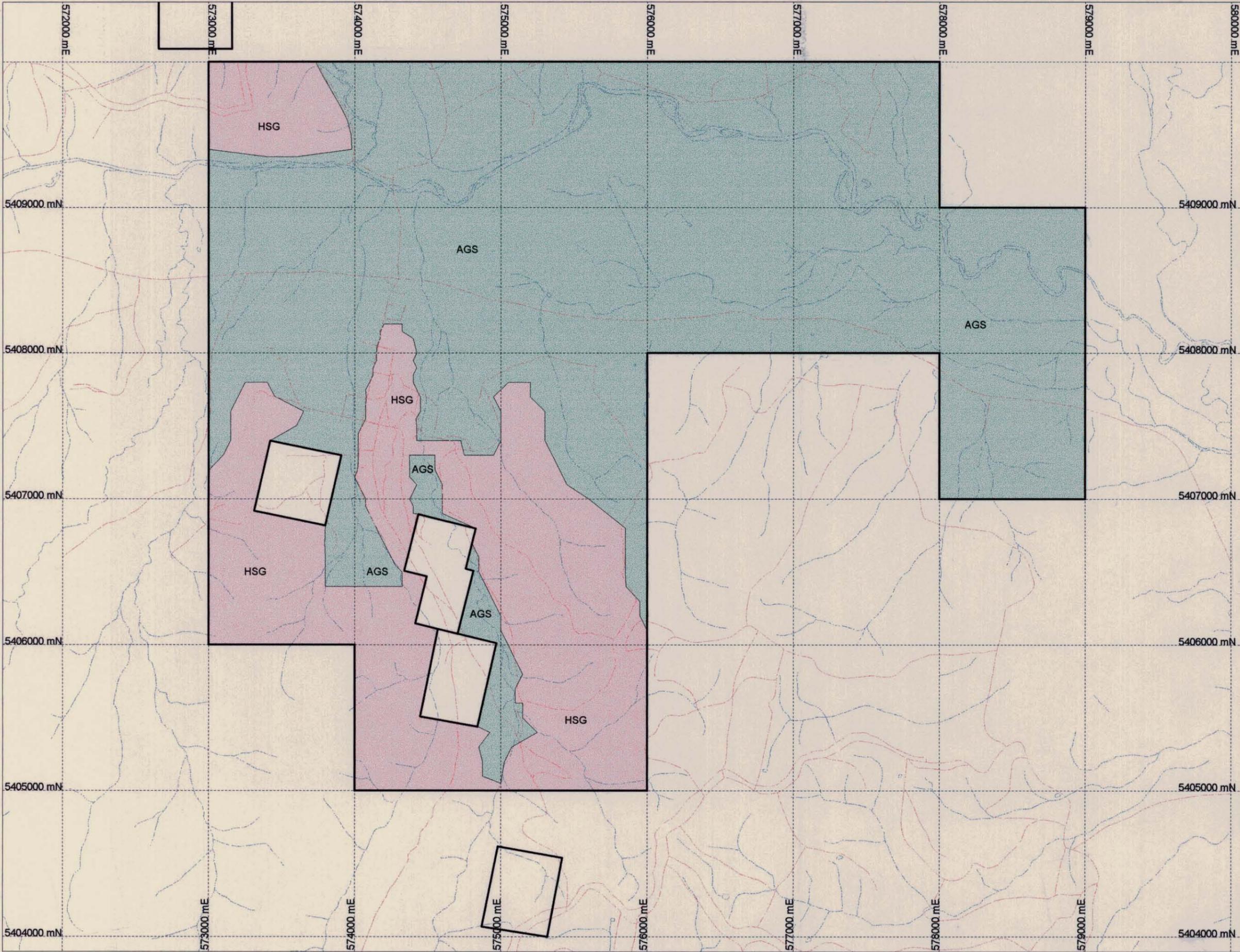
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	Author: TC Downs	Plan No: TAS032
	Projection: AMG Zone 55 (AGD 84)	

Scale: 1:25000
0 500 1000 metres

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MATHINNA - DEFIANCE MINING
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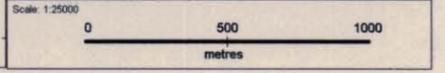


- Airborne Geophysical Survey
- Airborne Geophysical Survey and Historical Soil Geochemistry Survey
- Roads
- River

DEFIANCE MINING NL

Mathinna Joint Venture
Exploration Activity Map
EL 17/91

	Date: 6/4/1999	Geologist: DG Jackson
	Author: TC Downs	Plan No: TASO33
	Projection: AMG Zone 55 (AGD 84)	





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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.
- Qc Colluvium - derived from Mathinna Group.
- Qpl Talus consisting of dolerites and subordinate Upper Permian rocks.
- Qdb Dolerite block fields probably underlain by clay from weathered dolerite, with interstitial siltstone.
- Qpl Topped dolerite masses (>100m), coherent or partly disaggregated, produced by cliff fall.

TERTIARY

- Tec 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.
- rt Quartz rich lithic sandstone and minor quartz sandstone (Rt), with mudstone and carbonaceous mudstone (Rtm).
- Plp Cross bedded quartz sandstone.
- Pj Fine grained, slightly feldspathic quartz sandstone, micaceous shale and minor carbonaceous mudstone.
- Pm Poorly sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for bed of pebbly sandstone indicated (Pmp).
- Pt Thick-bedded usually poorly sorted, pebbly sandstone passing upward to interbedded siltstone and mudstone. Marine fossils abundant in places.

PERMIAN

- Ppl Dominantly bioclastic limestone.
- Pp Marine fossiliferous mudstone siltstone and minor sandstone and bioclastic limestone.
- pr Fine grained pebbly sandstone with phosphatic nodules. Marine fossils present in places.
- Pp Mudstone siltstone and poorly sorted sandstone. Uncommon marine fossils.
- Pp Dominantly well sorted quartz sandstone, usually cross-bedded and commonly with inter-laminated carbonaceous shale lesser conglomerate and rare coal.
- Pp Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pp); dominantly thick-bedded to massive, medium to coarse-grained quartz sandstone and minor conglomerate (Pps).

EARLY DEVONIAN (?) - SILURIAN - ORDOVICIAN (?)

- SDu Quartzwacke turbidite sequence of interbedded sandstone siltstone and mudstone (SDu); sequences with significant mudstone indicated (SDu); dominantly sandstone and siltstone (SDu), some quartzite units indicated (SDuq).
- SDp Dominantly mudstone and siltstone (SDp).
- SDp Metapsammite (SDsm, SDspm), metaquartzite (SDspq).

IGNEOUS ROCKS

TERTIARY

- Tib Basinite.

JURASSIC

- Jf Dolerite - grain size <0.2mm (v). Areas with later very fine-grained dykes shown (fd).

DEVONIAN

- Dsa Aplite.

MAJOR GRANITIC INTRUSIONS

SCOTTSDALE BATHOLITH

- Dsac Generally equigranular medium to coarse grained, leucocratic biotite alkali feldspar granite/adamellite with pale pink feldspar.
- Dspg Sparsely to moderately porphyritic (quartz and K feldspar), fine to coarse grained biotite granite.
- Dspg Equigranular coarse to very coarse grained biotite +/- hornblende adamellite / granodiorite with pink to white feldspar.

BLUE TIER BATHOLOITH

- Dspg Medium grained, equigranular to rarely porphyritic (KF), biotite-hornblende granodiorite. Locally with a strong grain foliation. Variable but usually strongly magnetic (Dspg). Weakly magnetic (Dspgw).

BEN LOMOND GRANITE

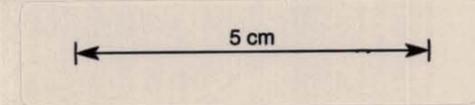
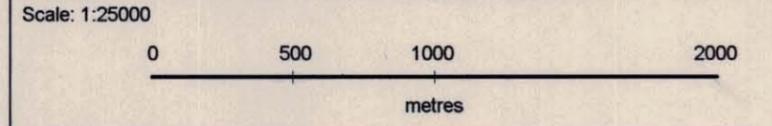
- Dspg Fine to coarse grained equigranular to porphyritic (KF) alkali feldspar granite.

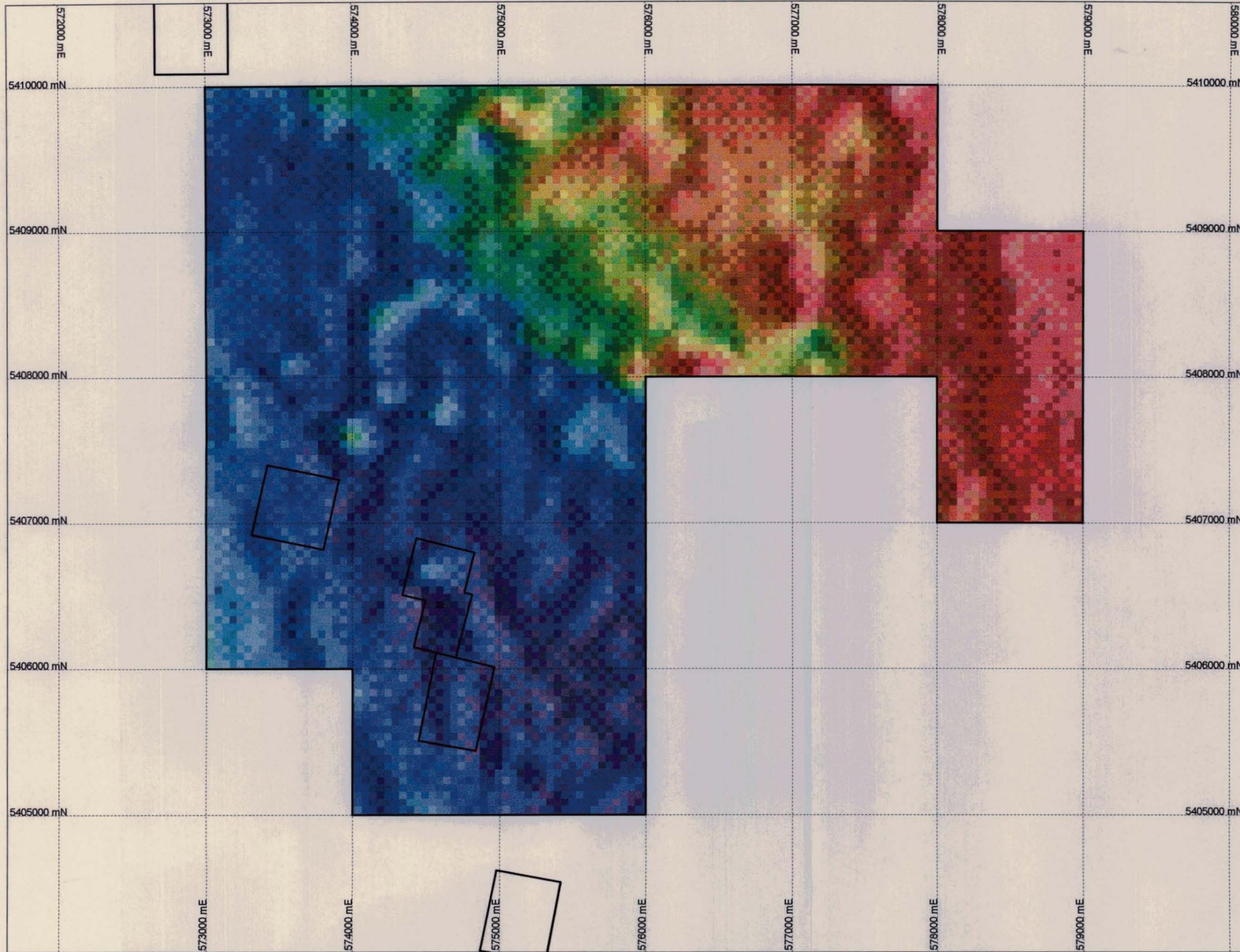
DEFIANCE MINING NL

Mathinna Joint Venture
Regional Geology
EL 17/91



Date: 6/4/1999	Geologist: DG Jackson
Author: TC Downs	Plan No: TAS034
Projection: AMG Zone 55 (AGD 84)	





SURVEY SPECIFICATIONS **MATHINNA**

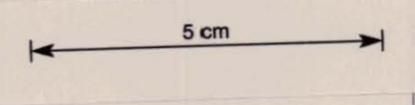
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Aircraft	: -
Instrumentation	: Proton G-813
Survey Date	: Feb 1990
Sample Interval	: 13 metres
Flight Line Spacing	: 150 metres
Flight Line Direction	: 000 - 180 deg.
Tie Line Spacing	: 400 metres
Mean Terrain Clearance	: 80 metres
Navigation	: Control Maps

Grid Cell Size : 50mE x 50mN

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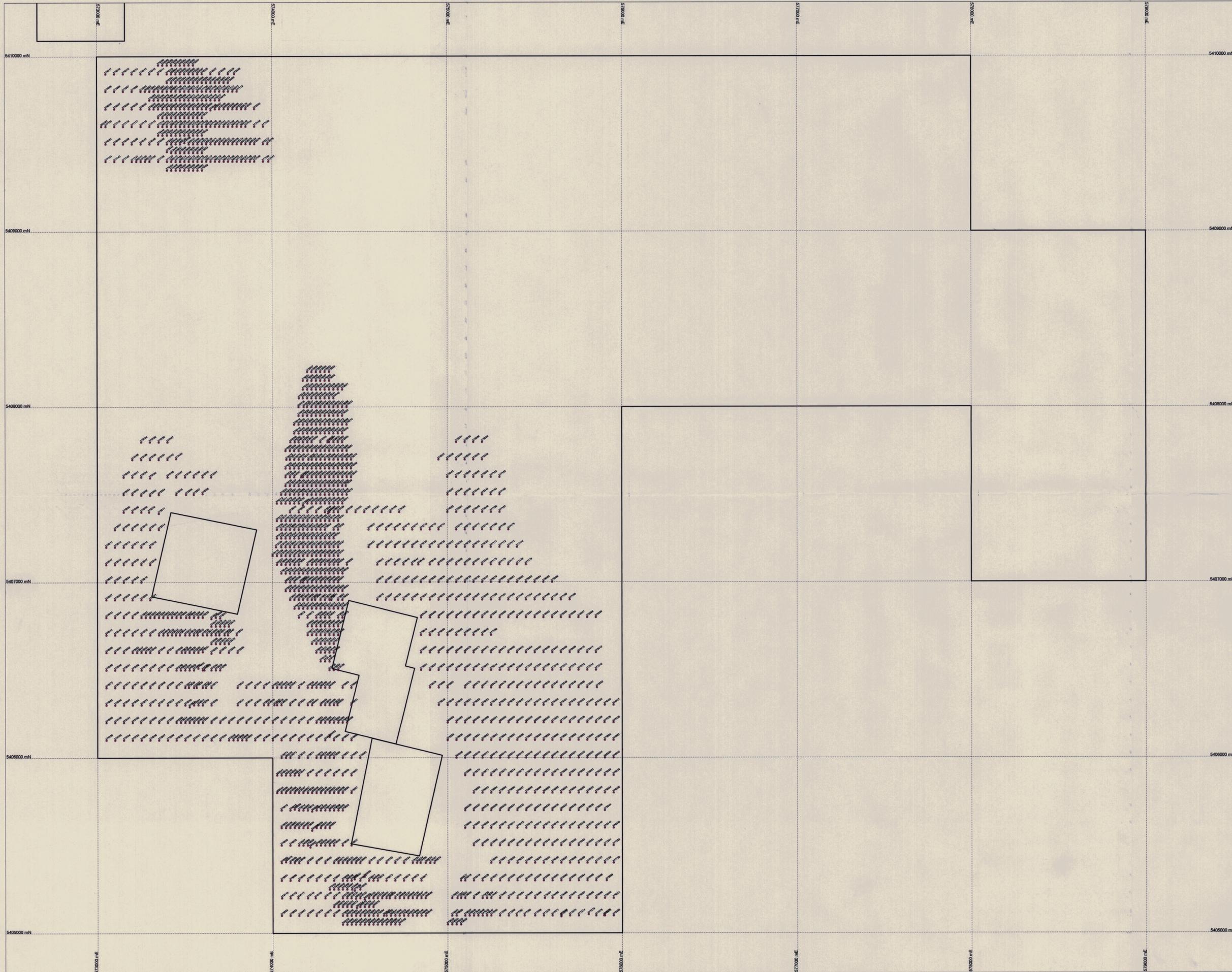


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Mathinna Joint Venture
Airborne Geophysical Survey
Total Magnetic Intensity Image (NL)
EL 17/91

Date: 6/4/1999	Geologist: DG Jackson
Author: TC Downs	Plan No: TAS035
Projection: AMG Zone 55 (AGD 84)	

Scale: 1:25000



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sample number

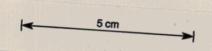
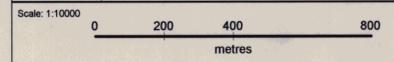
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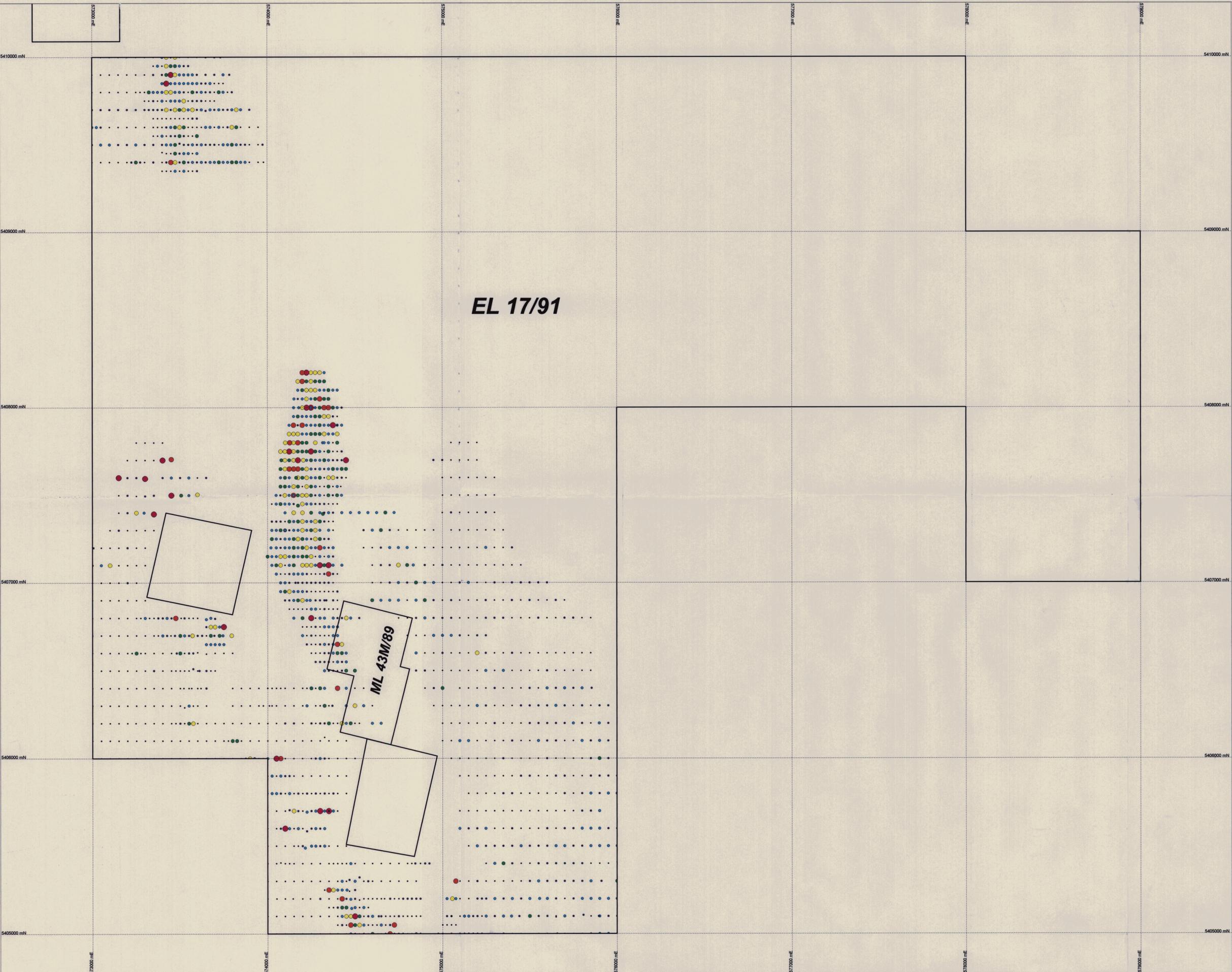
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Mathinna Joint Venture
 Historical Soil Geochemistry Survey
 Sample Location Plan
 Survey Conducted by Resolute Samantha Ltd.
 EL 17/91



Date: 6/4/1999	Geologist: DG Jackson
Author: TC Downs	Plan No: TASC36
Projection: AMG Zone 55 (AGD 84)	



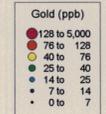


EL 17/91

ML 43M/89

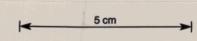
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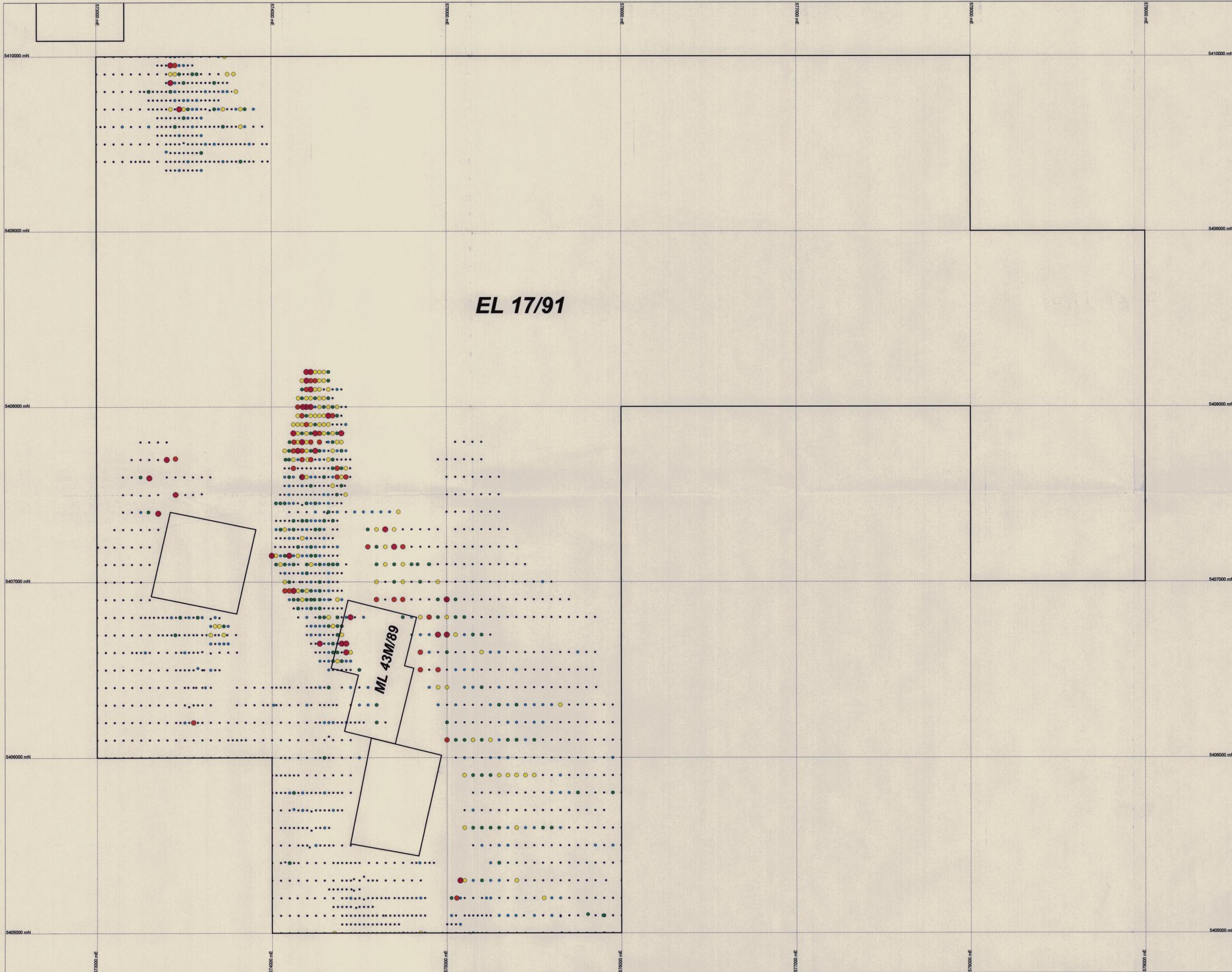
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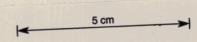
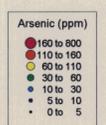
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Mathinna Joint Venture Historical Soil Geochemistry Gold Dot Plan EL 17/91	
Date: 6/4/1999	Geologist: DG Jackson
Author: TC Downs	Plan No: TAO37
Projection: AMG Zone 55 (AGD 84)	
Scale: 1:10000	





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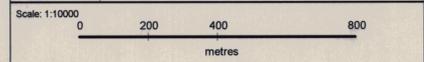
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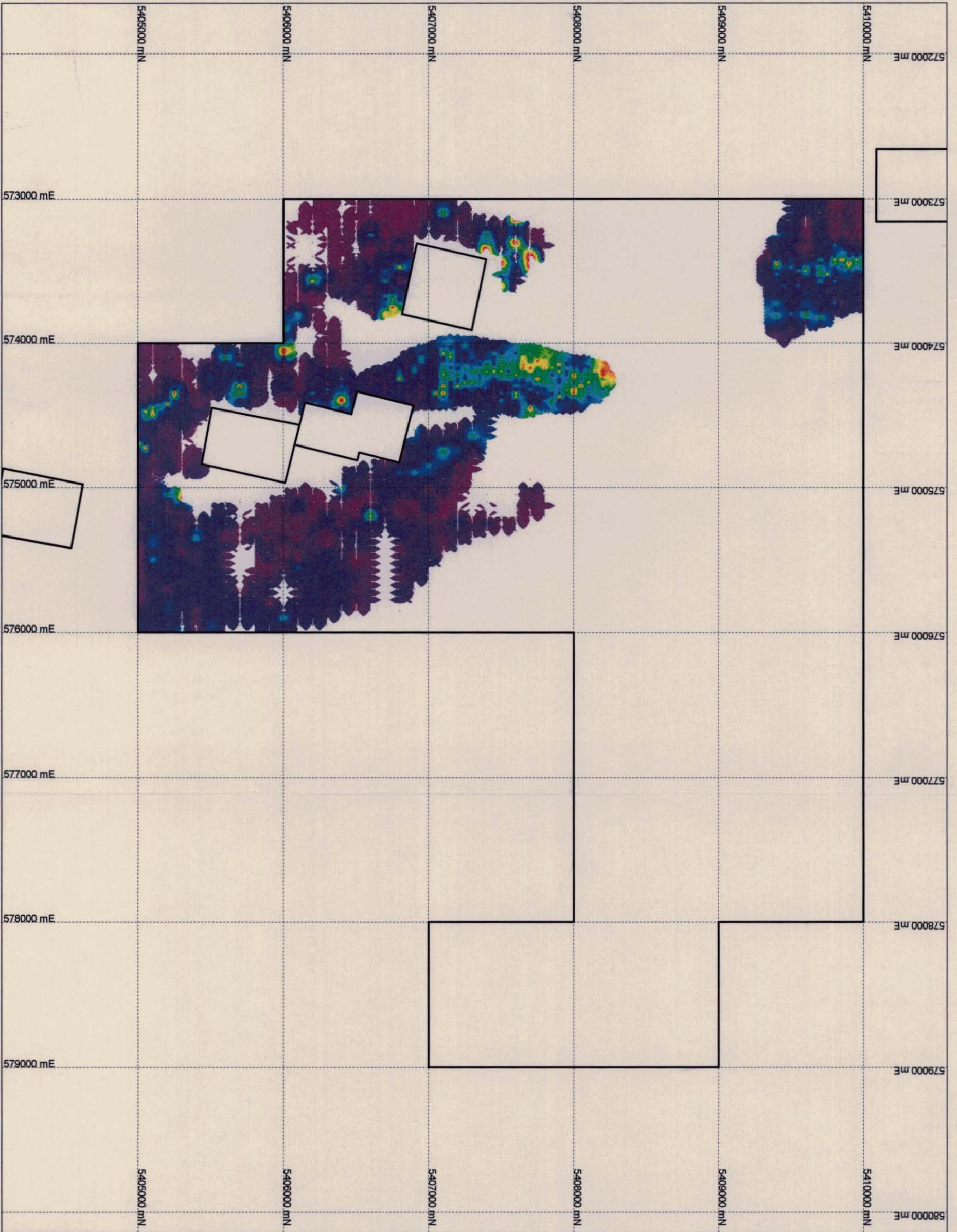
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Mathinna Joint Venture
 Historical Soil Geochemistry
 Arsenic Dot Plan
 EL 17/91



Date: 6/4/1999	Geologist: DG Jackson
Author: TC Downs	Plan No: TAS038
Projection: AMG Zone 55 (AGD 84)	





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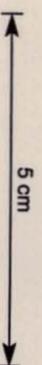
DEFIANCE MINING NL

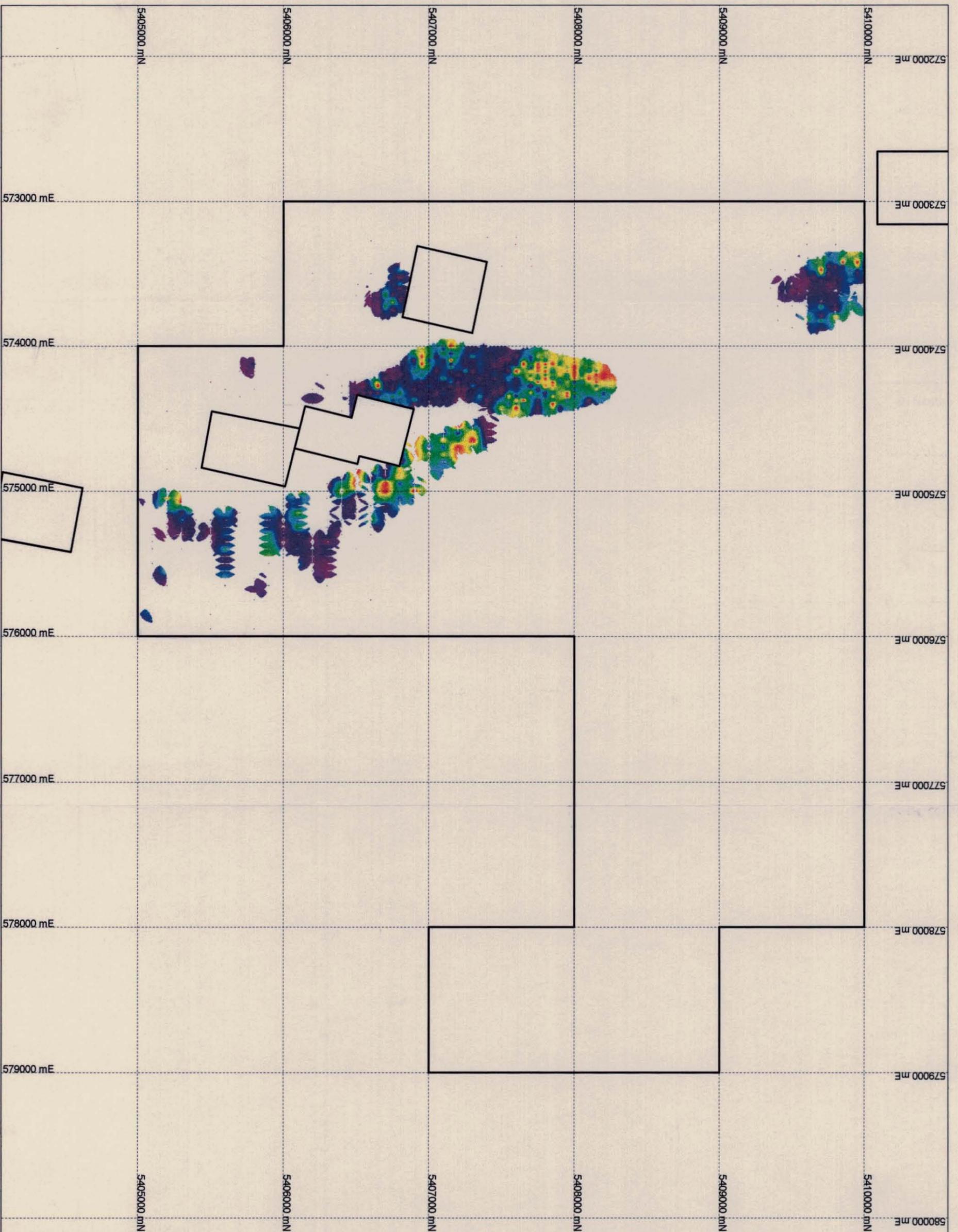
Mathinna Joint Venture
 Soil Geochemistry
 Gold Image
 EL 17/91



Date: 04/11/99
 Author: TC Dawes
 Projection: AMG Zone 55 (MAD 84)
 Scale: 1:25000
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 metres

Geologist: D.J. Jackson
 Plan No: **TAS 039**





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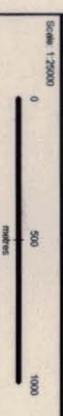


DEFIANCE MINING NL

Mathinna Joint Venture
 Soil Geochemistry
 Arsenic Image
 EL 17/91



Date: 04/1/99
 Author: TC Downs
 Inspector: AMS Zone 55 (AQD 34)
 Geologist: DG Jackson
 Firm: **TASCORO**



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Appendix 1
Historical Soil Geochemistry Data