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No. 8087

EL 1257

MOUNT WEDGE

PROGRESS AND FINAL REPORTS TO LICENCE SURRENDER FOR THE PERIOD 12/10/88 TO 27/5/92

Submitted by
Stockdale Prospecting Ltd
1992

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**PRIMARY INDUSTRIES
AND RESOURCES SA**

ENVELOPE 8087

TENEMENT: EL 1527, Mount Wedge

TENEMENT HOLDER: Stockdale Prospecting Ltd

CONTENTS OF VOLUME ONE

| | | | | | |
|-----------------|--|--------------|-------------------------|--|----|
| REPORT: | Wilson, P.D., 1989. EL 1527: Mt Wedge. First quarterly report for the period ending 11 January 1989. | | | SADME NO . 8087 R 1 Pgs 3-15 | |
| PLANS | | Scale | Company Plan no. | | |
| Fig. 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 14 | A3 |
| Fig. 2 | Physiographic divisions. | 1:250 000 | SEL 3540 | Pg. 15 | A3 |
| REPORTS: | Honner, K.K., 1989. EL 1527: Mt Wedge. Second quarterly report for the period ending 11 April 1989. | | | 8087 R 2 Pgs 16-17 | |
| | Weeks, A.M., 1989. EL 1527: Mt Wedge. Third quarterly report for the period ending 11 July 1989. | | | 8087 R 3 Pgs 18-25 | |
| PLANS | | Scale | Company Plan no. | | |
| | Locality map. | 1:250 000 | SEL 3539 | Pg. 24 | A3 |
| | North Lock loam grid sampling. | 1:50 000 | SEL 3652 | Pg. 25 | A3 |
| REPORT: | French, A.C., 1990. EL 1527: Mt Wedge. Fourth quarterly report for the period ending 11 October 1989. | | | 8087 R 4 Pgs 26-34 | |
| PLANS | | Scale | Company Plan no. | | |
| Map 2 | Landsat TM interpretation. | 1:250 000 | SEL 3769b | Pg. 33 | A3 |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 34 | A3 |
| REPORT: | Potter, S.D., 1990. EL 1527: Mt Wedge. Fifth quarterly report for the period ending 11 January 1990. | | | 8087 R 5 Pgs 35-42 | |
| PLANS | | Scale | Company Plan no. | | |
| | Locality map. | 1:250 000 | SEL 3539 | Pg. 41 | A3 |
| | North Lock loam grid sampling. | 1:50 000 | SEL 3652 | Pg. 42 | A3 |
| REPORT: | Potter, S.D., 1990. EL 1527: Mt Wedge. Sixth quarterly report for the period ending 11 April 1990. | | | 8087 R 6 Pgs 43-49 | |

| PLAN | | Scale | Company Plan no. | SADME NO. | |
|--------------------|--|--------------|-----------------------------|--------------------|----|
| | Locality map. | 1:250 000 | SEL 3539 | Pg. 49 | A3 |
| REPORT: | Potter, S.D., 1990. EL 1527: Mt Wedge. Seventh quarterly report for the period ending 11 July 1990. | | | 8087 R 7 | |
| APPENDIX 1: | Magnetic intensity plots for completed anomalies. Airborne data. | | | Pgs 50-60 | |
| APPENDIX 2: | Magnetic intensity plots for completed anomalies. Ground data (includes 8 coloured figures). | | | Pgs 61-70 | |
| | | | | Pgs 71-80 | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 81 | A3 |
| Map 2 | Total field magnetics. | 1:100 000 | SEL G1569 | 8087-1 | A1 |
| Map 3 | Airborne geophysical interpretation. | 1:250 000 | SEL 3804 | Pg. 82 | A3 |
| REPORT: | Potter, S.D., 1990. EL 1527: Mt Wedge. Eighth quarterly report for the period ending 11 October 1990. | | | 8087 R 8 | |
| APPENDIX 1: | Magnetic intensity plots for completed anomalies. Airborne data. | | | Pgs 83-90 | |
| APPENDIX 2: | Magnetic intensity plots for completed anomalies. Ground data (includes 3 coloured figures). | | | Pgs 91-94 | |
| APPENDIX 3: | Drill logs for MW 18 and MW 19. | | | Pgs 95-98 | |
| PLANS | | Scale | Company Plan no. | Pgs 99-107 | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 105 | A3 |
| Map 2 | Airborne geophysical interpretation. | 1:250 000 | SEL 3804 | Pg. 106 | A3 |
| Map 3 | Current sampling. | 1:100 000 | SEL 3971 | 8087-2 | A1 |
| REPORT: | Potter, S.D., 1991. EL 1527: Mt Wedge. Ninth quarterly report for the period ending 11 January 1991. | | | 8087 R 9 | |
| PLANS | | Scale | Company Plan no. | Pgs 108-115 | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 115 | A3 |
| Map 2 | Current sampling. | 1:100 000 | SEL 3971 | 8087-2 | A1 |

CONTENTS OF VOLUME TWO

| | | | | | |
|--------------------|---|--------------|-----------------------------|--------------------|----|
| REPORT: | Mitchell, M.S., 1991. EL 1527: Mt Wedge. Tenth quarterly report for the period ending 11 April 1991. | | | 8087 R 10 | |
| APPENDIX 1: | 1990 geochemical results. | | | Pgs 116-122 | |
| APPENDIX 2: | 1991 drilling logs. | | | Pgs 123-125 | |
| PLANS | | Scale | Company Plan no. | Pgs 126-164 | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 165 | A3 |
| Map 2 | Airborne geophysical interpretation. | 1:250 000 | SEL 3804 | Pg. 166 | A3 |
| Map 3 | Current sampling. | 1:100 000 | SEL 3971 | 8087-2 | A1 |

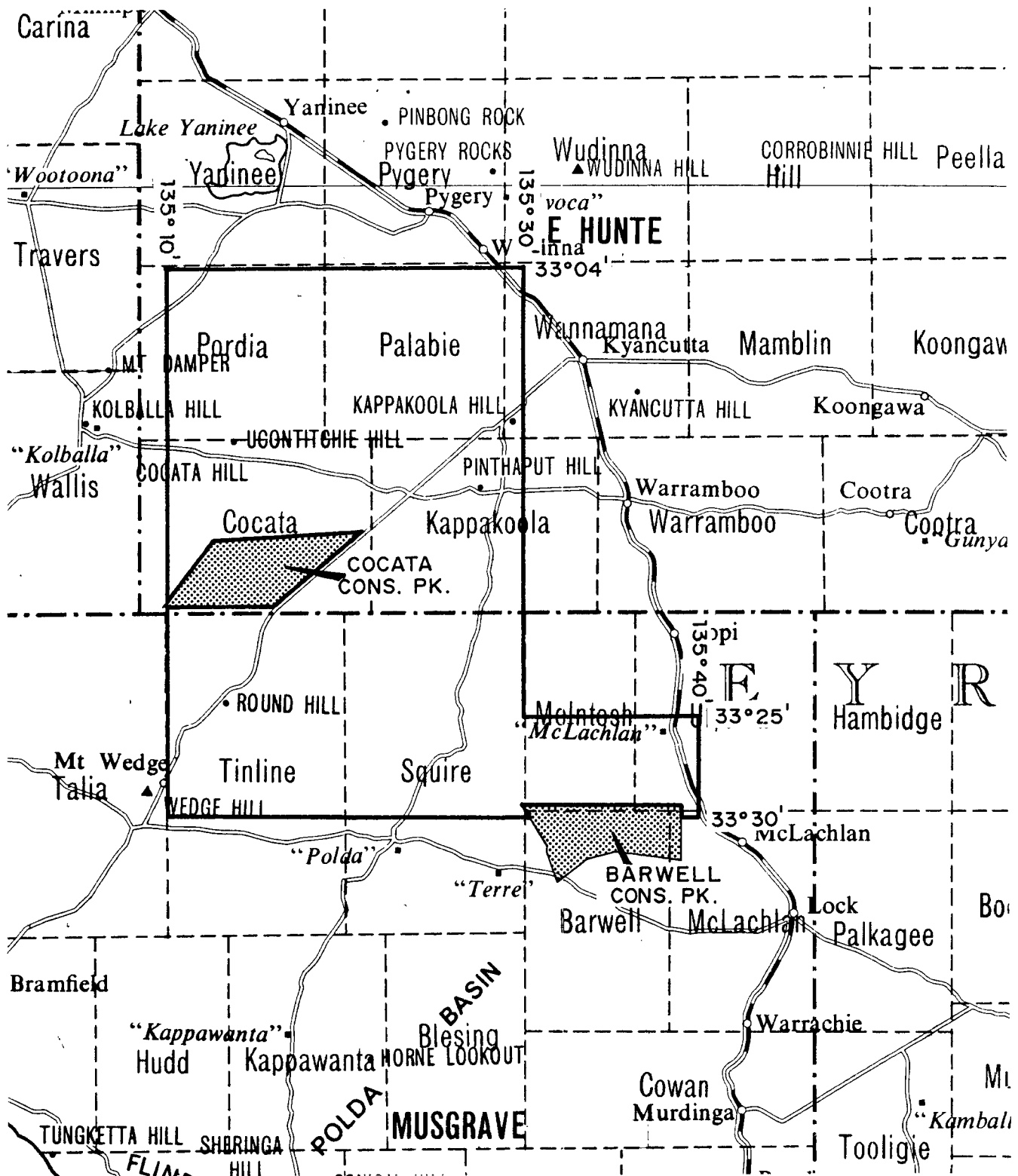
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|--------------------|--|--------------|-----------------------------|---|----|
| REPORT: | Mitchell, M.S., 1991. EL 1527: Mt Wedge. Eleventh quarterly report for the period ending 11 July 1991. | | | SADME NO. 8087 R 11 Pgs 167-173 Pgs 174-177 Pgs 178-181 | |
| APPENDIX 1: | 1991 Geochemical results. | | | | |
| APPENDIX 2: | 1991 Drill core petrographic description. | | | | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 182 | A3 |
| Map 2 | Sample locations. | 1:100 000 | | 8087-3 | A1 |
| Map 3 | Airborne geophysical interpretation. | 1:100 000 | SEL 3804 | 8087-4 | A1 |
| REPORT: | Mitchell, M.S., 1991. EL 1527: Mt Wedge. Twelfth quarterly report for the period ending 11 October 1991. | | | 8087 R 12 Pgs 183-191 Pgs 192-202 | |
| APPENDIX 1: | 1991 geochemical results. | | | | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 203 | A3 |
| Map 2 | Airborne geophysical interpretation. | 1:100 000 | SEL 3804 | 8087-4 | A1 |
| REPORT: | Mitchell, M.S., 1991. EL 1527: Mt Wedge. Thirteenth quarterly report for the period ending 11 January 1992. | | | 8087 R 13 Pgs 204-209 Pgs 210-217 | |
| APPENDIX 1: | Anomaly MW 13 geochemical results. (Analabs). | | | | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 218 | A3 |
| Map 2 | Airborne geophysical interpretation. | 1:250 000 | SEL 3804 | Pg. 219 | A3 |
| REPORT: | Finlay, S.C., 1992. EL 1527: Mt Wedge. Fourteenth quarterly report for the period ending 11 April 1992 (includes 4 coloured figures). | | | 8087 R 14 Pgs 220-233 | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 232 | A3 |
| Map 2 | Airborne geophysical interpretation. | 1:250 000 | SEL 3804 | Pg. 233 | A3 |
| REPORT: | Robison, H.R., 1992. EL 1527: Mt Wedge. Final report. | | | 8087 R 15 Pgs 234-242 Pgs 243-252 | |
| APPENDIX 1: | Magnetic contours, airborne data. MW02, 06, 07, 08, 09, 11, 14, 17 (includes 9 coloured figures). | | | | |
| APPENDIX 2: | Magnetic contours, ground data. MW11, 17 (includes 2 coloured figures). | | | Pgs 253-255 | |
| PLANS | | Scale | Company Plan no. | | |
| Map 1 | Locality map. | 1:250 000 | SEL 3539 | Pg. 256 | A3 |
| Map 2 | Current sampling. | 1:100 000 | | 8087-5 | A1 |
| Map 3 | Airborne geophysical interpretation. | 1:100 000 | SEL 3804 | 8087-4 | A1 |
| LETTER: | Robison, H.R., 1992. EL's 1518, 1527, 1672, 1694. | | | Pgs 257-259 | |

END OF CONTENTS**SEPARATELY HELD DATA****DATA TAPES** (held by Information Services Branch):

Survey no. 88SA05. Airborne magnetic and radiometric survey.

DRILL SAMPLES (held by SADME Core Library):

For up to date information on available drillhole samples, contact the Supervisor, SADME Core Library and quote the Exploration Licence and drillhole number/s you wish to query.



SCALE 1:500,000

KILOMETRES 10 0 10 20 30 40 50 KILOMETRES

APPLICANT: STOCKDALE PROSPECTING LIMITED

DM: 151/88

1:250000 PLANS: KIMBA

LOCALITY: EYRE PENINSULA - 20 KM WEST of KYANCUTTA

DATE GRANTED: 12.10.88

DATE EXPIRED: 11.10.89

EL No: 1527

SURRENDERED



000003

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
FIRST QUARTERLY REPORT FOR THE
PERIOD ENDING 11 JANUARY 1989

Edited: A C FRENCH

Author/s: P D WILSON

Approved: H R ROBISON

Date: JANUARY 1989

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

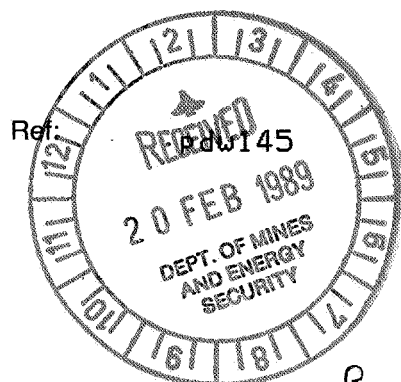
Text Pages No.: 6 Plan Nos.: 2 Table Nos.: 2 Appendices: - Plates:-

Keywords: AIRBORNE MAGNETICS

Abstract: Exploration Licence 1527 covering the Mt Wedge area on north western Eyre peninsula was granted to Stockdale Prospecting on 12 October 1988 for a term of one year. An airborne geophysical survey over the area has been flown but no results are as yet available.

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STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
FIRST QUARTERLY REPORT FOR THE
PERIOD ENDING 11 JANUARY 1989

CONTENTS

- 1 INTRODUCTION
- 2 LEGAL
- 3 PHYSIOGRAPHY
 - 3.1 Physiographic Divisions
 - 3.2 Rainfall
 - 3.3 Vegetation
 - 3.4 Access
- 4 GEOLOGY
 - 4.1 General
 - 4.2 Archaean
 - 4.3 Proterozoic
 - 4.4 Permian - Jurassic
 - 4.5 Tertiary
 - 4.6 Quaternary
- 5 AIRBORNE GEOPHYSICAL SURVEY
- 6 FORWARD PROGRAMME
- 7 STAFF
- 8 EXPENDITURE
- 9 REFERENCES

FIGURES

- Figure 1 : 1:250 000 Locality Map EL 1527
- Figure 2 : 1:250 000 Physiographic Regions EL 1527

TABLES

- Table 1 : Precambrian Stratigraphy of Eyre Peninsula
(from Parker et al 1985).
- Table 2 : Expenditure Summary, EL 1527

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MT WEDGE

FIRST QUARTERLY REPORT TO 11 JANUARY 1989

1 INTRODUCTION

Exploration Licence No 1527 is located on the north western Eyre Peninsula in South Australia about 115 kilometres north west of Cleve (Figure 1). The licence covers 1558 square kilometres on the Kimba 1:250 000 sheet (SH53-7).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 January 1989. During this time an airborne geophysical survey over the area was completed. No results have been received by Stockdale to this date.

2 LEGAL

Exploration Licence No 1527 was granted to Stockdale Prospecting Limited on 12 October 1988 for a term of one year.

3 PHYSIOGRAPHY

3.1 Physiographic Divisions
(from Twidale and Campbell 1985)

The major physiographic units identified in the area of EL 1527 are shown on Figure 2. These are :

- i Tuckey Plain - covers the northern half of the Licence area. It is a siliceous sand ridge plain identified by its longitudinal dune forms.
- ii Tooligie and McLachlan Dune Fields - occupies an east-west strip in the central part of the licence area south of the Tuckey Plain. They are similar to the Tuckey Plain but are characterised by parabolic or U-shaped dunes rather than longitudinal.
- iii Calcareous sand dunes - old coastal foredunes of the Talia Hills and Chandada Plains extend into the area of the exploration licence from the southwest.
- iv Granitic Plains - a small area of residual granitic soils developed around Uncontichie Hill on the north western edge of the exploration licence.

3.2 Rainfall

Rainfall over the licence area averages 300 to 350 mm per year. About 14% of this total falls in the summer months, while about 50% falls in the winter (Schwerdtfeger, 1985).

3.3 Vegetation

The major part of the original native vegetation of the area has been cleared for grazing and cereal crops but stands of natural mallee woodland have been preserved in the Cocata and Barwell Conservation Parks (Figure 1).

3.4 Access

The licence area is serviced by a network of sealed and gravel roads. Farm tracks allow easy access within most properties.

4 GEOLOGY (Parker et.al 1985)

4.1 General

The Mt Hope area lies within the Gawler Block, a stable craton with crystalline basement rocks which range in age from 2700 million years to 900 million years. Stabilisation of the craton took place after the Kimban Orogeny at about 1450 million years.

The Precambrian stratigraphy of the Eyre Peninsula is shown in Table 1 (from Parker et al 1985).

4.2 Archaean

Although not represented in outcrop drill hole data indicates that the southern area of the exploration licence is underlain by ancient Archaean to very Early Proterozoic rocks of the Sleaford Complex.

On the southern coastline of the Eyre Peninsula where the Sleaford Complex is well exposed it is composed of two distinct elements :

- i Carnot Gneisses - a highly metamorphosed supra-crustal sequence of dominantly thinly layered, garnetiferous, quartz and feldspathic gneisses often intimately intercalated with thin layers of leucogneiss, biotite-garnet gneiss, hypersthene bearing felsic gneiss and basic granulite.
- ii Dutton Suite - a slightly younger, higher crustal, level suite of granitoids.

Table 1. PRECAMBRIAN STRATIGRAPHY OF EYRE PENINSULA. (from Parker et.al. 1985)

| AGE | | WEST COAST | SOUTHERN EYRE PENINSULA | CENTRAL EYRE PENINSULA | NORTHERN EYRE PENINSULA | |
|--------------------|------------------|---|--|--|---|--|
| | | | | | MIDDLEBACK RANGE | KIMBA/WUDINNA REGION |
| ADELAIDEAN | UMBERATANA GROUP | | | | Tent Hill Formation Whyalla Sandstone Willochra Subgroup Tapley Hill Formation | |
| | CALLANNA GROUP | | | | Beda Volcanics Backy Point Beds | dolerite dykes |
| MIDDLE PROTEROZOIC | | | | | Unconformity Pandurra Formation Unconformity | |
| | | Hiltaba Suite | | | dolerite dykes | rhyolite dykes |
| | | | | | Charleston Granite | Hiltaba Suite |
| | | | CORUNNA CONGLOMERATE | Blue Range Beds | breccia (Cowleds Mbr) quartzite (Nikenee Mbr) conglomerate | Yardea Dacite |
| | | acid volcanics granite | | Unconformity | Moonable Formation McGregor Volcanics Wandearan Metasilstone Unconformity | "Older" Gawler Range Volcanics |
| EARLY PROTEROZOIC | LINCOLN COMPLEX | | Bungalow Granodiorite | | | |
| | | granite gneissic granite migmatite gneiss | Moody Suite Spilsby Suite Donington Granitoid Suite | Carpa Granite Middle Camp Granite Minbrie Gneiss | Wertiga Granite Broadview Schist Myola Volcanics Unconformity | granite gneissic granite Volcaniclastics |
| | | | | Yadnarie Schist | | |
| | | | | Upper Middleback Jaspilite (Mt. Shannan Iron Fm) | Upper Middleback Jaspilite | |
| | | | | Cook Gap Schist (Mangala Schist and local amphibolite) | Cook Gap Schist | Middleback Subgroup Equivalents |
| ARCHAEOAN | | | | Lower Middleback Jaspilite | Lower Middleback Jaspilite | |
| | | | | Katunga Dolomite | Katunga Dolomite | |
| | | | | Warrow Quartzite (Local calcisilicate at base) | local quartzite and leucagneiss | Warrow Quartzite |
| | | | | Miltalie Gneiss | | |
| | | | | | | |
| | SLEAFORD COMPLEX | | DUTTON SUITE Whidbey Granite Kiana Granite Coultia Granodiorite | | | |
| | | | Wangary Gneisses Carnot Gneisses | | | garnet gneiss |

4.3 Proterozoic

To the southwest of the exploration licence a series of unmetamorphosed pebbly sandstones, about 150m thick are exposed in a gently ($<5^{\circ}$) west dipping sequence. They form Mt Wedge from which the exploration licence takes its name. These are the Blue Range Beds, a Late Proterozoic unit of unmetamorphosed rudites and arenites that unconformably overlie the Archaean Sleaford Complex.

Mt Wedge is one of a number of remnants of an older separate east west trending basin called the Illedoo Basin which was a precursor to the Polda Basin (Flint et al 1981).

Both outcrop and drillhole information indicate that the northern half of the exploration licence is underlain by granitoids of the Hiltaba Suite. These are a group of Middle Proterozoic, post-tectonic granitoids which are extensively developed throughout northern Eyre Peninsula and form some of the very prominent landforms within the region eg Uncontichie Hill. The granites represent high-level intrusives derived essentially from "S"-type magma sources in the lower crust. Parker et al (1985) suggest that the Hiltaba Suite post dates the deposition of the Blue Range Beds and the extrusion of the Gawler Range Volcanics.

4.4 Permian-Jurassic

The Polda Basin lies immediately to the south of EL 1527. It is a narrow, east-west graben less than 25 km wide but extending for 350 km from Rudall in the east to about 220 km offshore from Elliston. It is an intracratonic graben flanked by Archaean - Middle Proterozoic rocks and is completely covered by Tertiary and Quaternary sediments.

Both Permian and Jurassic sedimentary rocks are preserved within the Graben. The Permian Coolardie Formation consists of diamictite (brown, grey or green) and mudstone. The formation was deposited in a glacial environment. Overlying the Coolardie Formation is the Jurassic Polda Formation. This was deposited in fluvial-swampy conditions and consists of dark-grey, fine to coarse-grained clayey sand, dark grey claystone and lignite.

4.5 Tertiary

Overlying the Polda Formation within the Polda Trough are Middle-Late Eocene fluvial sediments of the Poelpena Formation. This formation appears to be restricted to the Polda Basin itself and marginal areas.

Within the area of EL 1527 Binks and Hooper (1984) define the Lower Tertiary Yaninee Palaeochannel. The Palaeochannel is incised into the underlying Hiltaba Granite and appears to have flowed from the north into the area of EL 1527 and thence toward the Poldas Basin. The channel is filled with Eocene to Pliocene fluvial sands and clay. However, glauconite coated sand grains and sponge spicules are common in the Eocene sands and these reflect marine or estuarine conditions of deposition. The channel achieves a maximum depth of 90 metres below surface in the north west corner of the exploration licence.

4.6 Quaternary

Thin veneers of Quaternary sediments mask the underlying Archaean Early Proterozoic and Tertiary rocks over much of the area of the exploration licence.

The Bridgewater Formation is a Pleistocene unit of calcrete and carbonate-cemented aeolianite which occurs in the southwest corner of the licence. The aeolianite contains large dune-size cross-beds and consists of comminuted shell fragments in a micrite cement. Calcretes vary in form from intraclast breccia to nodular, massive and laminated calcrete.

Overlying the Bridgewater Formation in the remainder of the exploration licence are Pleistocene-Holocene inland longitudinal and parabolic dunes and sand spreads (Wiabuna Formation and Moornaba Sand).

5 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over the Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

The survey specifications were as follows :

| | |
|-------------------------|---|
| Mean Terrain clearance | 100m |
| Flight Line Spacing | 500m |
| Flight Line Direction | E-W |
| Tie Line Spacing | 12 km N-S |
| Airspeed | 70m/second (125 knots) |
| Magnetometer Cycle Rate | 0.2 seconds |
| Data Collected | Total field magnetic and 4 channel radio-metrics. |
| Navigation | Syledis Radio Navigation System. |

At the date of this report no data has been received by Stockdale Prospecting Limited.

6 FORWARD PROGRAMME

Follow-up of the results of the airborne geophysical survey will be carried out in two stages :

- Stage 1 - geophysical anomalies of interest will be identified, located and evaluated with sampling, ground magnetics and Sirotem.
- Stage 2 - those anomalies that survive the evaluation stage and are therefore potential kimberlite targets will be drilled.

7 STAFF

Staff employed in research, administration and monitoring of the progress of the geophysical survey over EL 1527 were :

Geologists 1

The project has been supported by the facilities of the Regional Office in Whyalla and the Head Office in Melbourne.

8 EXPENDITURE

Expenditure of \$33 319 has been allocated as shown in Table 2.

9 REFERENCES

- Binks P J, and Hooper G J, 1984 : "Uranium in Tertiary Palaeochannels 'West Coast Area' South Australia. Proceedings of the Australian Institute of Mining and Metallurgy, No 289, November/December, pp 271-275.
- Flint R B, and Parker A J, 1982 "The Blue Range Beds, Central Eyre Peninsula". Quarterly Geological Notes, The Geological Society of South Australia, No 80, October 1981.
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Schwerdtfeger P, 1985, : Climate in "Natural History of Eyre Peninsula". Edited by C R Twidale et al. Royal Society of South Australia.

Twidale C R, and Campbell E M, 1985 : The Form of the Land Surface in "Natural History of Eyre Peninsula". Edited by C R Twidale et al. Royal Society of South Australia.



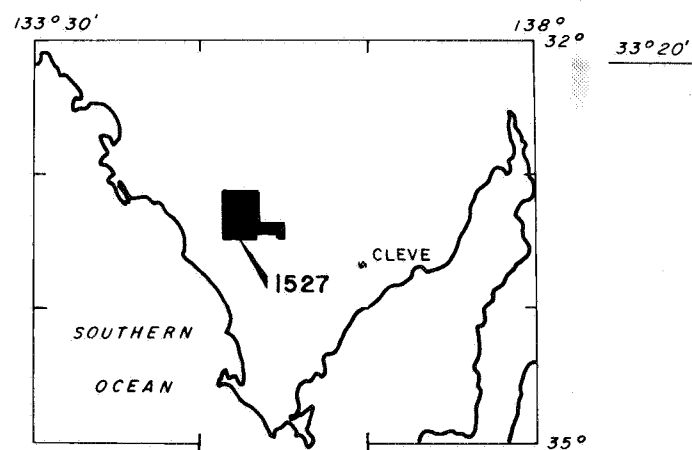
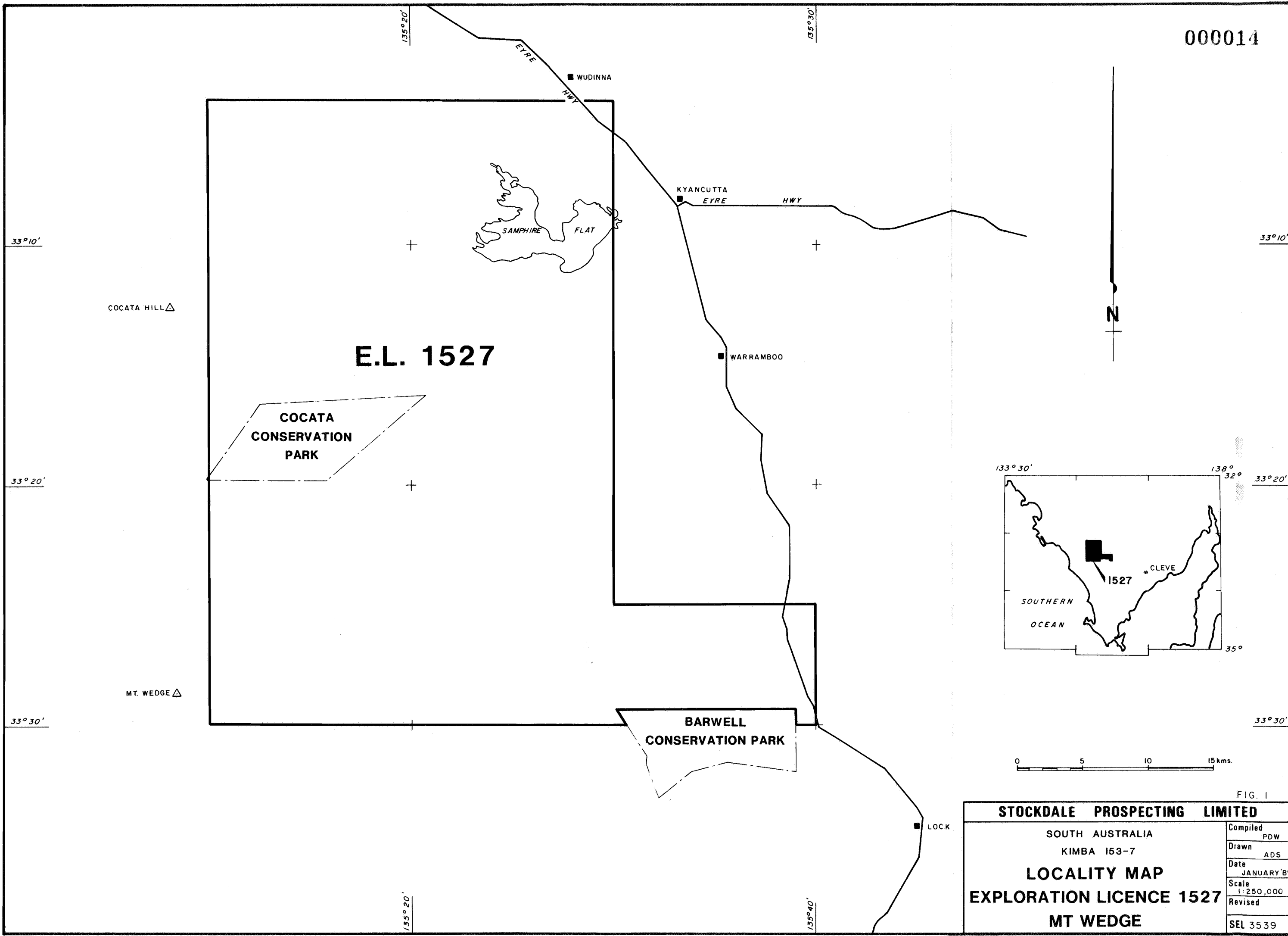
P D Wilson
Project Geologist
Whyalla



H R Robison
Chief Geologist - East

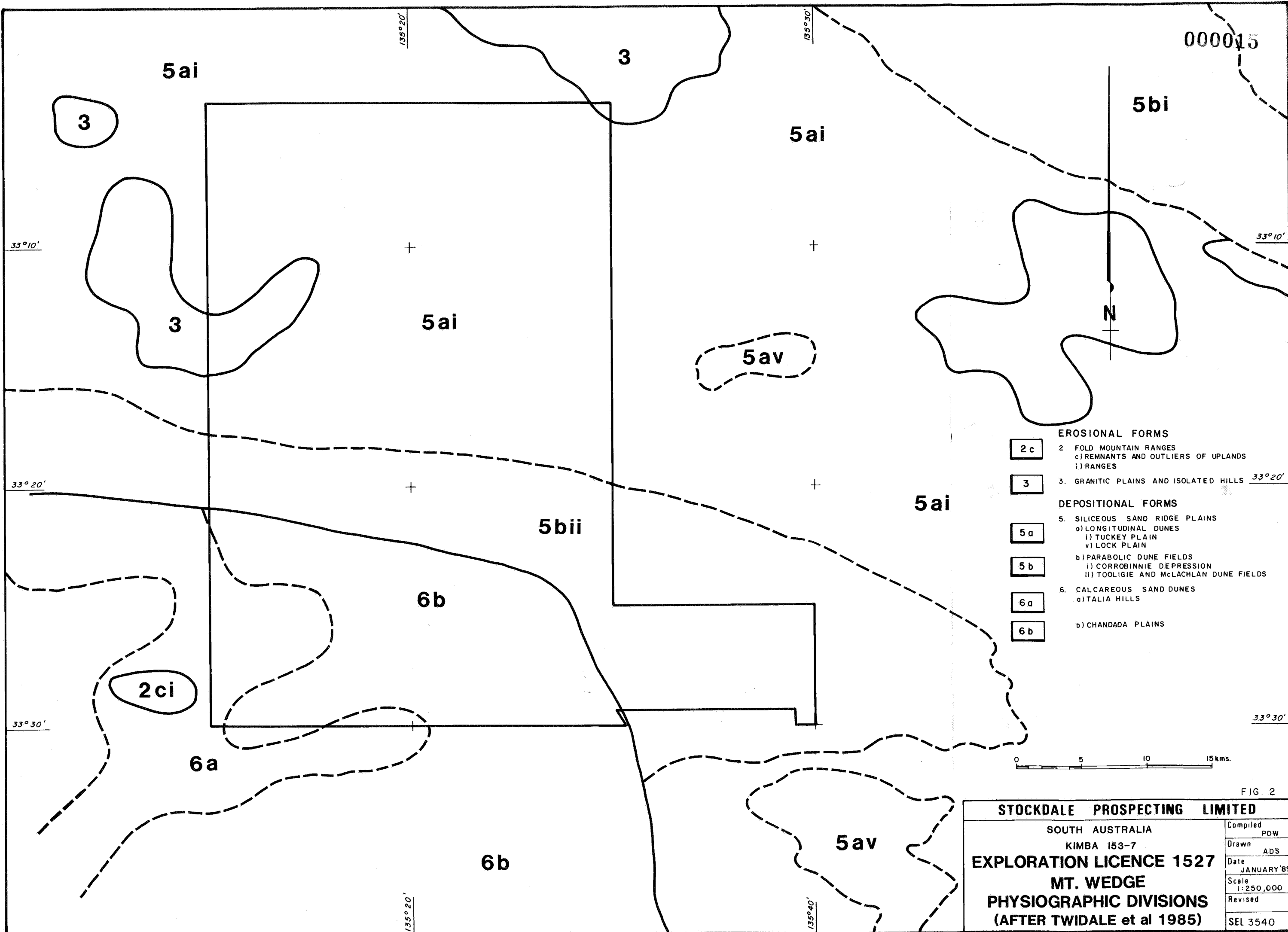
TABLE 2 : EXPENDITURE REPORT FOR EL 1527 : MT WEDGE
PERIOD ENDING 31/12/88

| | EL 1527 |
|------------------------|----------|
| TENEMENT COSTS | 3 703 |
| CONTRACTS (GEOPHYSICS) | 18 909 |
| SPECIALIST SERVICES : | |
| GEOPHYSICS | 1 636 |
| ADMINISTRATION : | |
| REGIONAL OFFICE | 3 048 |
| HEAD OFFICE | 4 893 |
| CAPITAL UTILISATION | 1 130 |
| | ----- |
| TOTAL EXPENDITURE | \$33 319 |
| | ===== |



| STOCKDALE PROSPECTING LIMITED | |
|---|------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

FIG. 1



| STOCKDALE PROSPECTING LIMITED | |
|-------------------------------|-------------|
| SOUTH AUSTRALIA | |
| KIMBA 153-7 | |
| EXPLORATION LICENCE 1527 | |
| MT. WEDGE | |
| PHYSIOGRAPHIC DIVISIONS | |
| (AFTER TWIDALE et al 1985) | |
| Compiled | PDW |
| Drawn | ADS |
| Date | JANUARY '89 |
| Scale | 1:250,000 |
| Revised | |
| SEL 3540 | |

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MT WEDGE

SECOND QUARTERLY REPORT TO 11 APRIL 1989

1 INTRODUCTION

Exploration Licence No 1527 is located on the north western Eyre Peninsula in South Australia about 115 kilometres north west of Cleve. The licence covers 1558 square kilometres on the Kimba 1:250 000 sheet (SH53-7).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 April 1989. An airborne geophysical survey over the area was completed and reported last quarter.

2 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over ~~the~~ Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

At the date of this report no data has been received from the South Australian Department of Mines and Energy (SADME). This data is required prior to any geophysical and geological follow-up work being carried out.

3 STAFF

Staff employed in research, administration and monitoring of the progress of the geophysical survey over EL 1527 were :

Geologists 1

The project has been supported by the facilities of the Regional Office in Whyalla and the Head Office in Melbourne.

4 EXPENDITURE

The expenditure table in the previous report contains an error. A corrected expenditure report for the first Quarterly Report is attached.

No expenditure for this quarter has been allocated.

A C Fernald.
for. K K Honner
Project Geologist

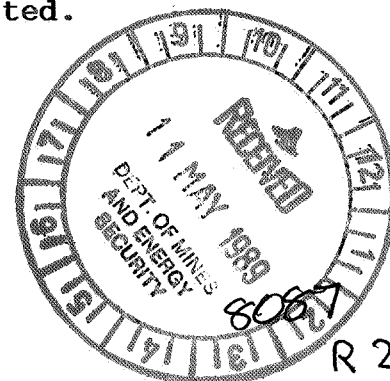
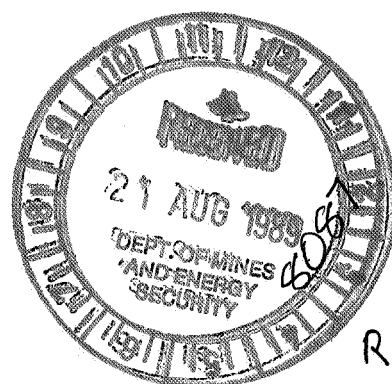


TABLE 1 : EXPENDITURE REPORT FOR EL 1527 : MT WEDGE
PERIOD ENDING 31/12/88 (corrected)

| | EL 1527 |
|----------------------------------|----------|
| TENEMENT COSTS | 3 703 |
| CONTRACTS (GEOPHYSICS) | 18 909 |
| SPECIALIST SERVICES : GEOPHYSICS | 1 636 |
| ADMINISTRATION : | |
| REGIONAL OFFICE | 3 049 |
| HEAD OFFICE | 4 956 |
| CAPITAL UTILISATION | 1 130 |
| | ----- |
| TOTAL EXPENDITURE | \$33 384 |
| | ===== |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
THIRD QUARTERLY REPORT FOR THE
PERIOD ENDING 11 JULY 1989



STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
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Fax (03) 240 0974

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
THIRD QUARTERLY REPORT FOR THE
PERIOD ENDING 11 JULY 1989

Edited: A C FRENCH

Author/s: A M WEEKS

Approved: H R ROBISON

Date: JULY 1989

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.:

KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 2 Table Nos.: 1 Appendices: - Plates: -

Keywords: AIRBORNE MAGNETICS, LOAM SAMPLING

Abstract: Exploration Licence 1527 covering the Mt Wedge area on the north western Eyre Peninsula was granted to Stockdale Prospecting Limited on 12 October 1988 for a term of one year. An airborne geophysical survey over the area has been flown, however data (is) not yet available. A loam sampling programme has commenced in the area.

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SADME, WHYALLA, MELBOURNE

Ref:

amw1

Circulate to:

CONTENTS

- 1 INTRODUCTION
- 2 AIRBORNE GEOPHYSICAL SURVEY
- 3 SOIL SAMPLING
- 4 STAFF
- 5 EXPENDITURE

MAPS

- | | |
|---------------------------------------|-----------|
| Map 1 : Locality Map EL 1527 | 1:250 000 |
| Map 2 : North Lock Loam Grid Sampling | 1:50 000 |

TABLES

- | |
|---------------------------------------|
| Table 1 : Expenditure Summary EL 1527 |
|---------------------------------------|

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MOUNT WEDGE

THIRD QUARTERLY REPORT TO 11 JULY 1989

1 INTRODUCTION

Exploration Licence No 1527 is located on the north western Eyre Peninsula in South Australia about 115 kilometres north west of Cleve. The licence covers 1558 square kilometres on the Kimba 1:250 000 sheet (SH53-7, Map 1).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 July 1989.

2 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over ~~the~~ Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

Data ~~has~~ not yet been received and therefore the processing and interpretation of data has not been possible. This seriously affects the field programme as most of the area is under crops and cannot be accessed from June to December. This means field work cannot now commence until 1990.

3 SOIL SAMPLING

A soil sampling programme on Exploration Licence No 1527 was part of a loam sampling grid surveyed as follow-up to kimberlitic indicators recovered from reconnaissance sampling in an adjacent licence. The sampling was located in the south eastern corner of the licenced area approximately 12 kilometres northwest of Lock. A total of 14 samples were taken. All samples were loam material collected on surface and unscreened. The approximate size of each sample was 260 kilograms. Sample locations are shown on Map 2.

Samples are awaiting treatment.

4 STAFF

Staff employed in research, administration and monitoring of the progress of the geophysical survey over EL 1527 were :

Geophysicist 1


Staff employed in research, administration and field work for the soil sampling on EL 1527 were :

| | |
|------------------|---|
| Geologists | 2 |
| Field Assistants | 3 |

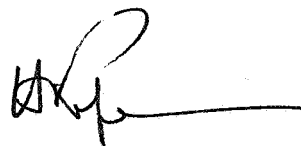
The project has been supported by the facilities of the Regional Office in Whyalla and the Head Office in Melbourne.

5 EXPENDITURE

Expenditure of \$2 959 has been allocated as shown in Table 1.



A M Weeks
Geologist
Whyalla

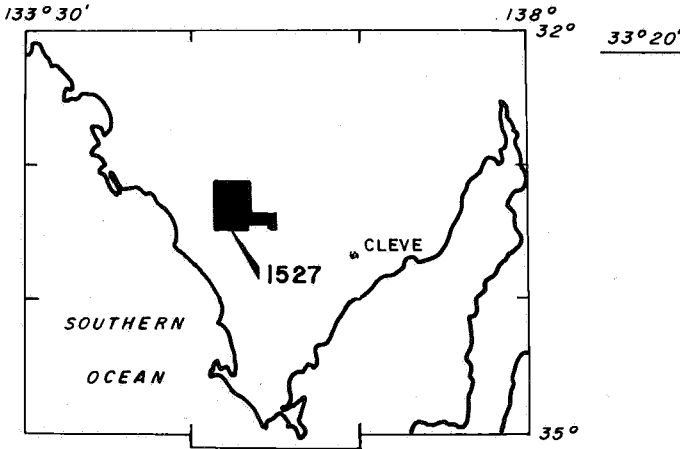
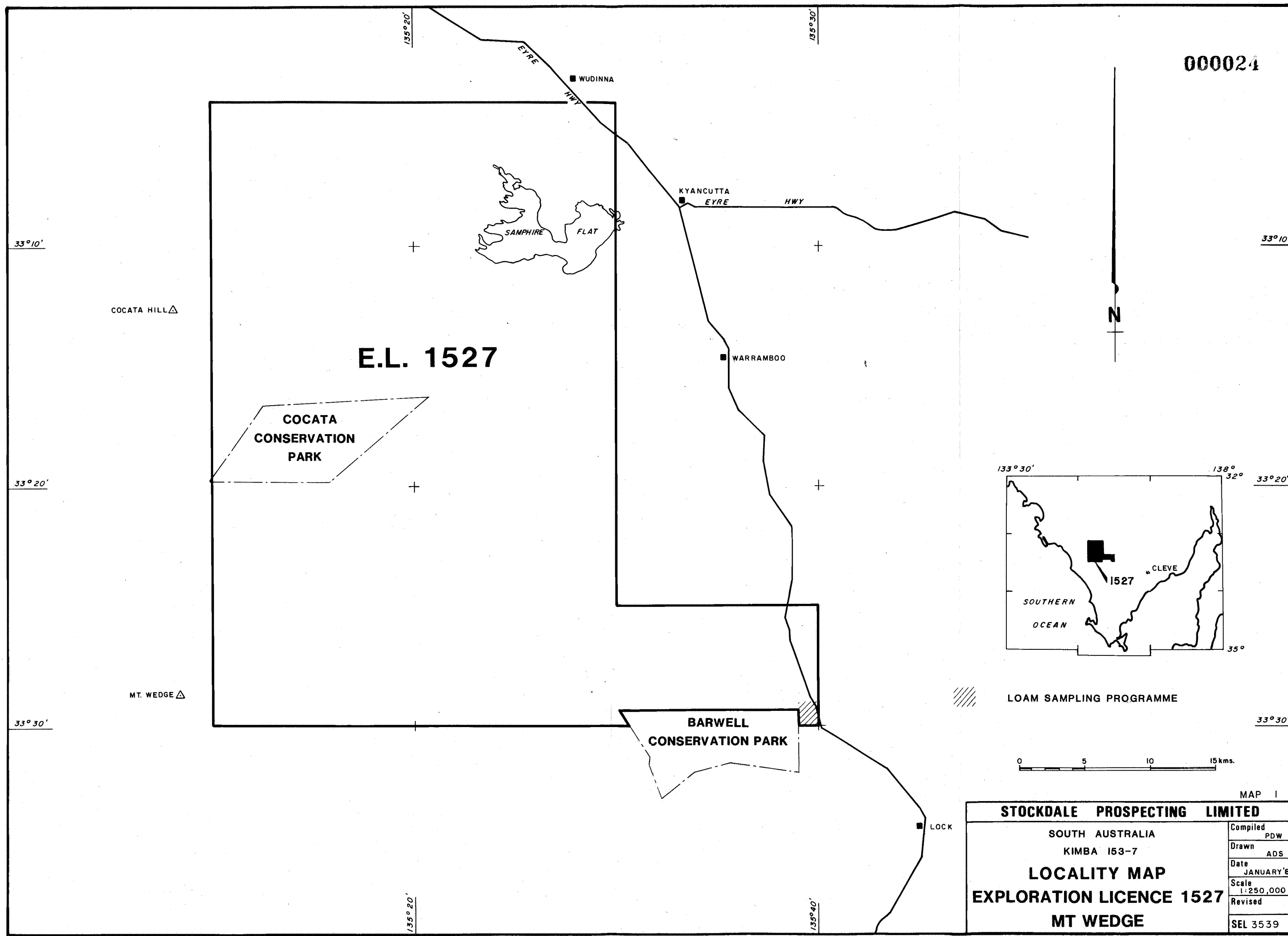


H R Robison
Chief Geologist-South

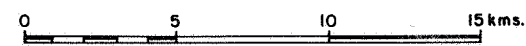
TABLE 1 : EXPENDITURE REPORT FOR EL 1527 : MT WEDGE
PERIOD ENDING 30 JUNE 1989

| | EL 1527 \$ |
|----------------------------------|---------------|
| OPERATIONAL STAFF COSTS | 207 |
| GENERAL OPERATIONAL EXPENSES | 768 |
| SPECIALIST SERVICES : GEOPHYSICS | 930 |
| : DRAFTING | 498 |
| ADMINISTRATION : REGIONAL OFFICE | 146 |
| : HEAD OFFICE | 304 |
| CAPITAL UTILISATION | 106 |
| TOTAL THIS PERIOD | 2 959 |
| TOTAL PREVIOUSLY REPORTED | 33 384 |
| TOTAL EXPENDITURE TO DATE | \$ 36 343 |
| | ===== |

000024



LOAM SAMPLING PROGRAMME



| | |
|--|------------------|
| MAP 1 | |
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

000025

E.L. 1527

Ox4962 Ox4961 Ox4960 Ox4946
Ox4964 Ox4963 Ox4958 Ox4959
Ox4957 Ox4956 Ox4955

Ox4974 Ox4973 Ox4972

TM

E.L. 1516

BARWELL CONSERVATION
PARK

Glendinga

700

HIGHWAY

Boyston Park

Glengaraff

Four Winds

Palkagee Glen

1000m 0 1 2km

MAP 2

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
153-7 KIMBA / KOPI 6031-3
EL 1527 MT WEDGE

NORTH LOCK
LOAM GRID SAMPLING

| | |
|----------|----------|
| Compiled | A.W. |
| Drawn | BAN |
| Date | AUG. '89 |
| Scale | 1:50000 |
| Revised | |
| SEL | 3652 |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
FOURTH QUARTERLY REPORT FOR THE
PERIOD ENDING 11 OCTOBER 1989



000027

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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
FOURTH QUARTERLY REPORT FOR THE
PERIOD ENDING 11 OCTOBER 1989

Edited: A C FRENCH

Author/s: A C FRENCH

Approved: H R ROBISON

Date: JANUARY 1990

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 3 Plan Nos.: 2 Table Nos.: 1 Appendices: - Plates: -

Keywords: AIRBORNE MAGNETICS, LOAM SAMPLING

Abstract: Exploration Licence 1527 covering the Mt Wedge area on the north western Eyre Peninsula was granted to Stockdale Prospecting Limited on 12 October 1988 for a term of one year. An airborne geophysical survey over the area has been flown, and data (is) presently being processed and interpreted. Results from a loam sampling programme are still awaited. A remote sensing study was also carried out.

Copy to: SADME, WHYALLA, MELBOURNE

Ref: ACF501

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CONTENTS

- 1 INTRODUCTION
- 2 AIRBORNE GEOPHYSICAL SURVEY
- 3 SOIL SAMPLING
- 4 REMOTE SENSING
 - 4.1 Interpretation
- 5 STAFF
- 6 EXPENDITURE

MAPS

- Map 1 : Locality Map EL 1527 1:250 000
- Map 2 : Landsat TM interpretation

TABLES

- Table 1 : Expenditure Summary EL 1527

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 MT WEDGE

FOURTH QUARTERLY REPORT TO 11 OCTOBER 1989

1 INTRODUCTION

Exploration Licence No 1527 is located on ~~the~~ north western Eyre Peninsula in South Australia about 115 kilometres north west of Cleve. The licence covers 1558 square kilometres on the Kimba 1:250 000 sheet (SH53-7, Map 1).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 October 1989.

2 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over ~~the~~ Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

Data has been received and the processing and interpretation of the data is now in progress.

3 SOIL SAMPLING

Samples reported last quarter are still awaiting treatment in Whyalla.

4 REMOTE SENSING

A regional study of the Eyre Peninsula including EL 1527 was carried out. Principally a study of the Landsat TM Imagery was completed, however intense cultivation and extensive seif dunefields made interpretation of the processed imagery difficult.

To assist with the interpretation a field visit was made to the area, to gain information on landform, lithology and calcrete distribution. Road traverses were made across the area and the outcrops of calcrete and laterite profiles were visited.

This field work confirmed the dearth of outcrop in the area. It also indicated that the thickness of the calcrete is quite variable from metres to tens of metres and that it is underlain in some areas by lateritically weathered basement and others by fresh basement. In the areas of sand underlain by calcrete it was observed that it weathers into a buff soil and the development of soil is not uniform with extensive areas of near calcrete pavement in some regions. It was also noted that dense bush appears to be more developed on the calcrete areas where it is overlain by a thin veneer of sand (<.5m) but it is possible this is a cultural effect, stripping of the bush may result in the removal of the sand by erosion. Generally the calcrete areas are not cultivated but are used for pasture. Where thicker soils are developed on calcrete the soil is distinctly red and therefore iron rich.

4.1 Interpretation

The TM imagery has permitted the dividing of the area into a number of 'regolith' units and very little lithological discrimination or identification is possible from the TM imagery alone.

- Plains - In west and north of Peninsula. Undulating but poorly drained and intensely cultivated.
- Seif Dune - Extensive areas of dunes which cross the
Fields Peninsula, trending NW-SE. Generally low dunes which are intensely cultivated throughout.
- Calcrete - Main exposure is in the west of the Peninsula though it may extend further east than the imagery indicates below the seif dune field. There are two distinct expressions of the calcrete in the imagery.

- * - iron-rich
- * - 'clay rich'

Field examination shows that calcrete does contain some iron oxides and soil derived from it is generally red to buff indicating moderate iron oxide content. It appears that where the bush has not been stripped from the calcrete is where the 'clay' response is detected. Field examination showed in these areas a veneer of sand is present on the calcrete (see above). Hence the difference in response may be cultural rather than lithological. This may be confirmed by the fact that nature reserves in the dunefields also have a similar response to calcrete in the regolith image.

Palaeo -
 drainage - Along the western side of the peninsula are distinct palaeodrainage systems all of which drain from the NE-SW and are of a similar length. Linking their headwaters may define an approximate palaeodivide.

From the regolith imagery it is possible to map general boundaries between more 'clay' rich soils and iron-rich soils. This may define boundaries between windblown and residual soils being derived from lateritic material.

Apart from the calcrete areas it is almost impossible to map structure due to the cultural and dune effects on the imagery.

This is a difficult area to gain useful geological information from TM imagery due to the combined effect of dune development and agriculture.

5 STAFF

Staff employed in research, administration and regional studies on EL 1527 were :

Geologist 1

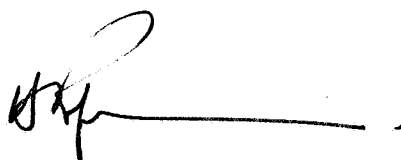
The project has been supported by the facilities of the Regional Office in Whyalla and the Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$2 624 has been allocated as shown in Table 1.



A C French
 District Geologist
 Whyalla



H R Robison
 Chief Geologist-South

Table 1 : Expenditure Report For EL 1527 : Mt Wedge
Period Ending 30 September 1989

000032

| | |
|----------------------------------|-----------|
| | EL 1527 |
| | \$ |
| OPERATIONAL STAFF COSTS | 849 |
| GENERAL OPERATIONAL EXPENSES | 300 |
| SPECIALIST SERVICES : GEOPHYSICS | 673 |
| : DRAFTING | 214 |
| ADMINISTRATION : REGIONAL OFFICE | 175 |
| : HEAD OFFICE | 261 |
| CAPITAL UTILISATION | 127 |
| | ----- |
| TOTAL THIS PERIOD | \$ 2 624 |
| TOTAL PREVIOUSLY REPORTED | \$ 36 343 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 38 967 |
| | ===== |

000033



EL 1527

SEIF DUNE FIELD

NATURAL BUSH VEGETATION
ON CALCRETEIRON RICH SOIL
OVER CALCRETE

CALCRETE

NATURAL BUSH VEGETATION
ON CALCRETE

HAMBIDGE

CONSERVATION
PARK

LEGEND

ROAD

LAKE

PALEO DRAINAGE

CLAY IRON
IRON/CLAY SOIL BOUNDARY

FAULT/FRACTURE

REGOLITH/TOPOGRAPHICAL
CONTACTS

ANOMALOUS CIRCULAR FEATURE

0 10km

MAP 2

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7
EL 1527 - MT. WEDGELANDSAT TM
INTERPRETATION

Compiled ACF

Drawn HMR

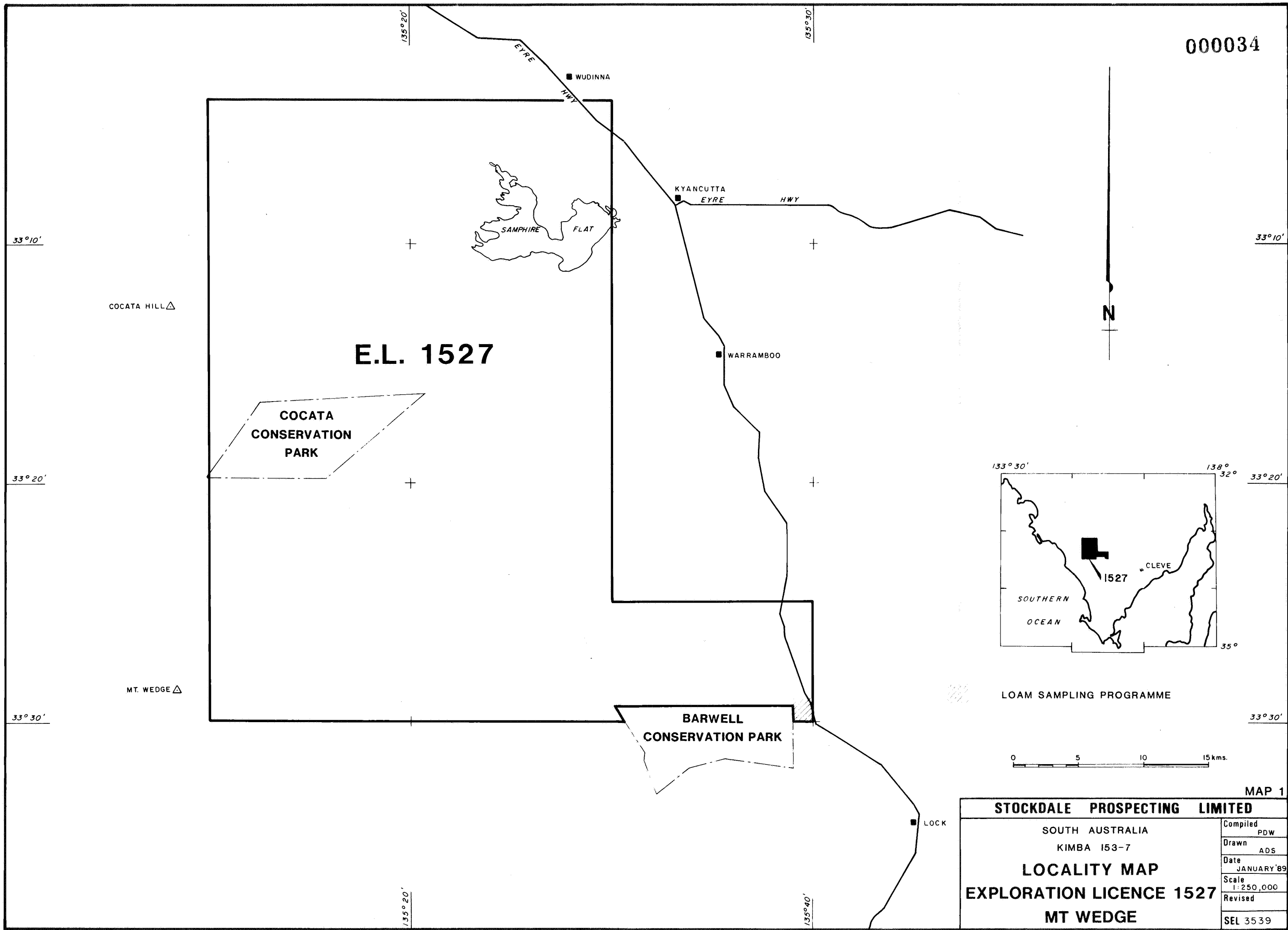
Date 2/90

Scale 1:250000

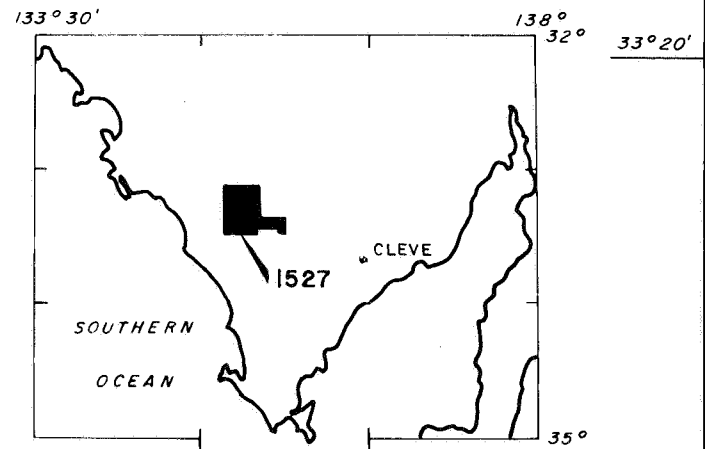
Revised

SEL 3769b

000034



N



LOAM SAMPLING PROGRAMME



MAP 1

| STOCKDALE PROSPECTING LIMITED | |
|---|------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
FIFTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JANUARY 1990



000036

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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
FIFTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JANUARY 1990

Edited: A C FRENCH

Author/s: S D POTTER

Approved: H R ROBISON

Date: MARCH 1990

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: - Table Nos.: 1 Appendices: - Plates: -

Keywords: AIRBORNE MAGNETICS, LOAM SAMPLING

Abstract: Exploration Licence 1527 covering the Mt Wedge area on the north western Eyre Peninsula was granted to Stockdale Prospecting Limited on 12 October 1988 for a term of one year. An airborne geophysical survey over the area has been flown, and data is presently being processed and interpreted. Results from the loam sampling programme referred to in the Third Quarterly Report have been received.

Copy to: SADME, WHYALLA, IC

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Circulate to:

CONTENTS

- 1 INTRODUCTION
- 2 RESULTS
- 3 AIRBORNE GEOPHYSICAL SURVEY
- 4 FORWARD WORK PROGRAMME
- 5 STAFF
- 6 EXPENDITURE

MAPS

| | | |
|---------|----------------------|-----------|
| MAP 1 : | Locality Map EL 1527 | 1:250 000 |
| MAP 2 : | Sample Results | |

TABLES

| | |
|-----------|-----------------------------|
| TABLE 1 : | Expenditure Summary EL 1527 |
|-----------|-----------------------------|

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****FIFTH QUARTERLY REPORT TO 11 JANUARY 1990****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula in South Australia about 115 kilometres on the Kimba 1:250 000 sheet (SH-7, Map 1).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 January 1990.

2 RESULTS

Results for the samples referred to in the Third Quarterly Report have been received (Map 2).

Sample X4964 contained 1 kimberlitic garnet, the rest proved negative with respect to kimberlitic indicators.

3 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over the Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

Data has been received and the processing and interpretation of the data is now in progress.

4 FORWARD WORK PROGRAMME

It is envisaged that the interpretation of the aeromagnetic data will be complete by the next quarter. Consequently, preparations for follow up of this data will begin.

5 STAFF

No field staff were employed for this project during the quarter.

The project has been supported by the facilities of the Regional Office in Whyalla and the research/technical department, sorting laboratory and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$ 6 287 has been allocated as shown in Table 1.

S. Potter

S D Potter
Geologist
Whyalla

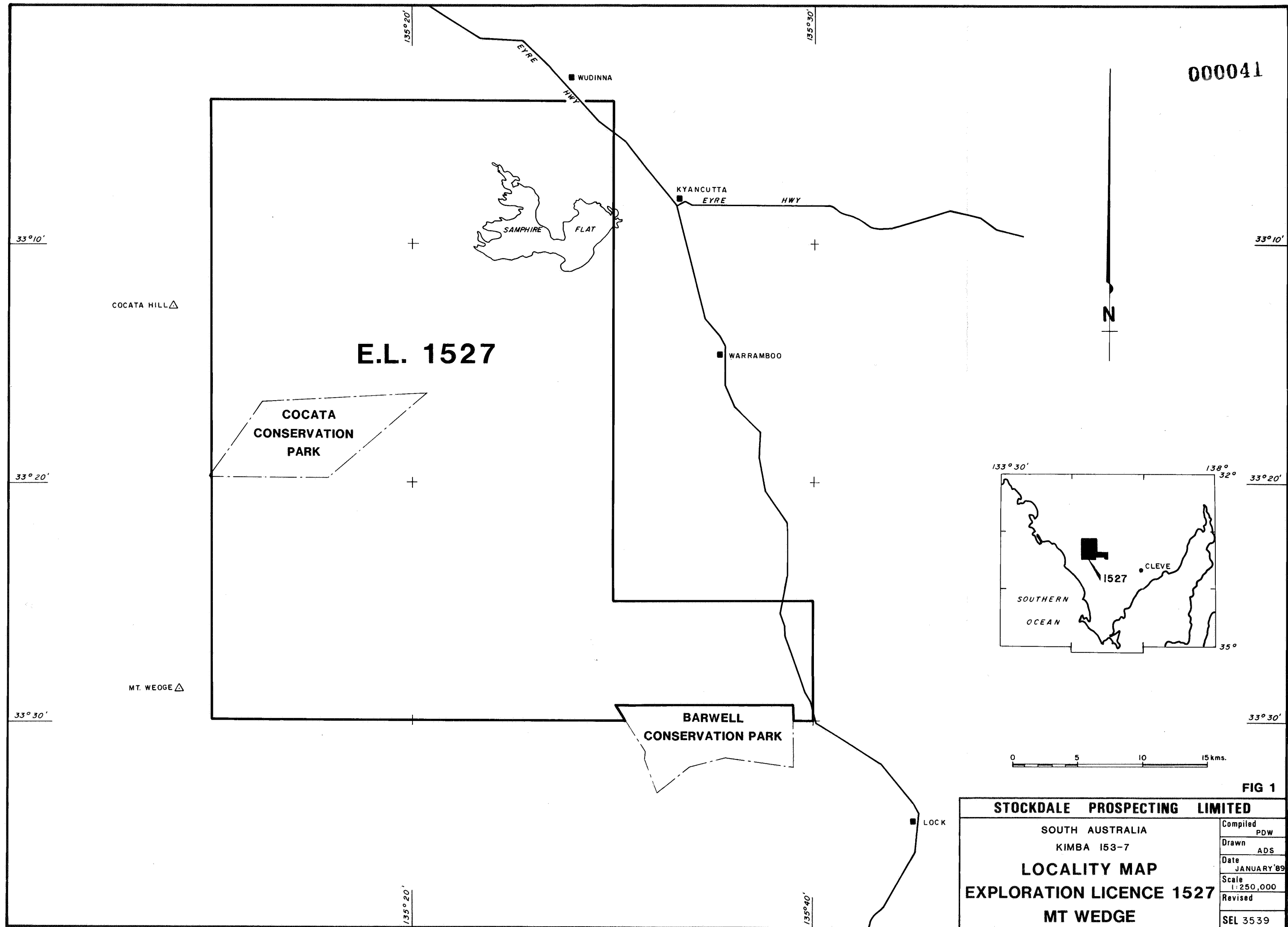


H R Robison
Chief Geologist-South

Table 1 Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 January 1990

| | |
|---------------------------|-----------|
| | \$ |
| CENTRAL TREATMENT PLANT | 2 354 |
| LABORATORY: | |
| TREATMENT | 200 |
| EXAMINATION | 351 |
| SPECIALIST SERVICES: | |
| GEOPHYSICS | 2 178 |
| DRAFTING | 145 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 308 |
| HEAD OFFICE | 496 |
| CAPITAL UTILISATION | 255 |
| TOTAL THIS PERIOD | \$ 6 287 |
| TOTAL PREVIOUSLY REPORTED | 38 967 |
| TOTAL EXPENDITURE TO DATE | \$ 45 254 |
| | ===== |

000041



| STOCKDALE PROSPECTING LIMITED | |
|---|------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

000042

E.L. 1527

TN

BARWELL CONSERVATION
PARK

E.L. 1516

LEGEND

● KIMBERLITIC GARNET

1000m 0 1 2km

MAP 2

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
153-7 KIMBA / KOPI 6031-8
EL 1527 MT WEDGE

**NORTH LOCK
LOAM GRID SAMPLING
SAMPLE RESULTS**

| | |
|----------|----------|
| Compiled | A.W. |
| Drawn | BAN |
| Date | AUG. '89 |
| Scale | 1:50000 |
| Revised | |
| SEL | 3652 |

○ X4962
○ X4961
○ X4960
○ X4946
○ X4964
○ X4963
○ X4958
○ X4959
○ X4957
○ X4956
○ X4955
○ X4974
○ X4973
○ X4972

Glendinga

Royston Park

Glengaraff

Four Winds

Palkagee Glen

135°40'

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
SIXTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 APRIL 1990



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000044

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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
SIXTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 APRIL 1990

Edited: A C FRENCH

Author/s: S D POTTER

Approved: H R ROBISON

Date: APRIL 1990

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 1 Table Nos.: 1 Appendices: _ Plates: _

Keywords: AIRBORNE MAGNETICS

Abstract: Exploration Licence 1527 covering the Mt Wedge area on the north western Eyre Peninsula was granted to Stockdale Prospecting Limited 12 October 1988 for a term of one year. An airborne geophysical survey over the area has been flown, and data has been processed and interpreted. Results from this exercise are awaited and once they have been received a programme of field work will begin.

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Ref: SDP36

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CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
- 3 AIRBORNE GEOPHYSICAL SURVEY
- 4 FORWARD WORK PROGRAMME
- 5 STAFF
- 6 EXPENDITURE

MAPS

MAP 1 : Locality Map EL 1527 1:250 000

TABLES

TABLE 1 : Expenditure Summary EL 1527

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MT WEDGE

SIXTH QUARTERLY REPORT TO 11 APRIL 1990

1 INTRODUCTION

Exploration Licence No 1527 is located on the north western Eyre Peninsula in South Australia about 115 kilometres north west of Cleve on the Kimba 1:250 000 sheet (Map 1).

This report covers diamond exploration carried out by Stockdale Prospecting Limited during the quarter ending 11 April 1990.

2 FIELD WORK

No field work has been performed in the project area for this quarter.

3 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over the Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey was carried out in late June 1988 by Geoterrex Pty Ltd.

The processing and interpretation of the data has been completed.

4 FORWARD WORK PROGRAMME

Upon reception of the aeromagnetic interpretation a programme of field work will commence to follow up anomalies with kimberlitic affinities.

5 STAFF


No field staff were employed on this project during the quarter.

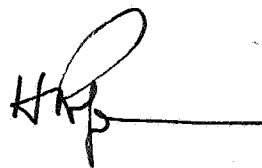
The project has been supported by the facilities of the Regional Office in Whyalla and the research/technical department, sorting laboratory and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$ 4 212 has been allocated as shown in Table 1.



 S D Potter
Geologist
Whyalla



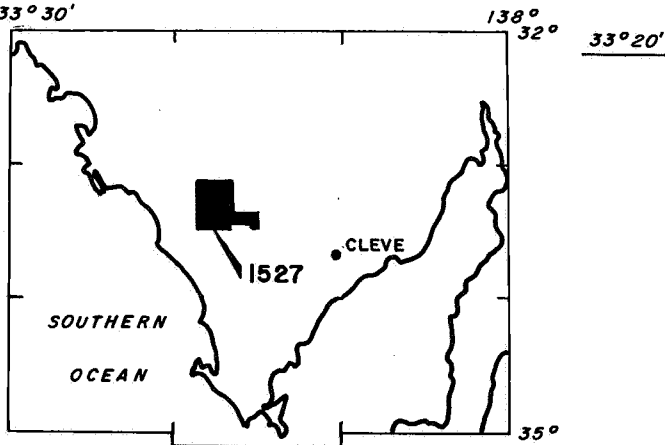
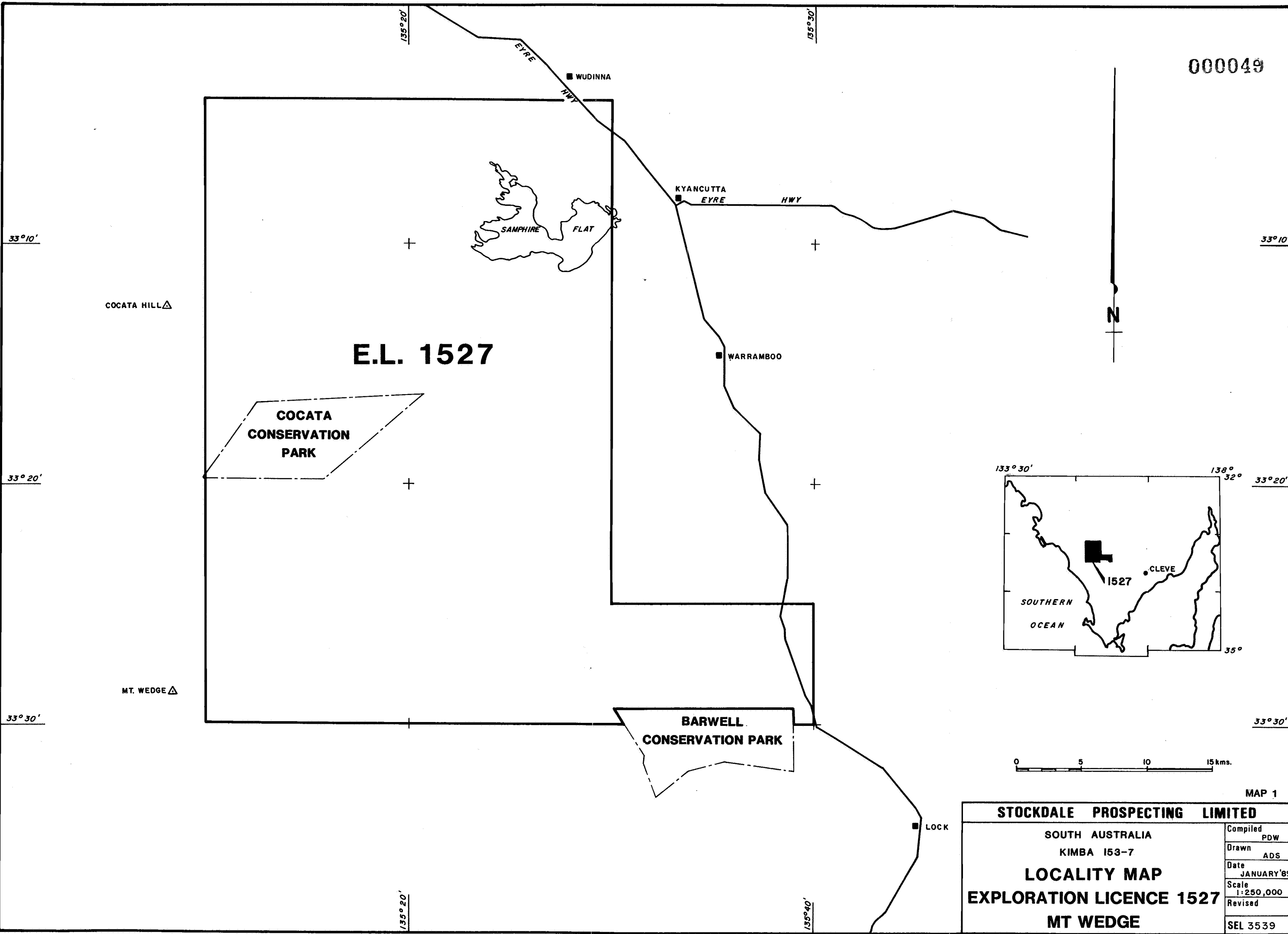
H R Robison
Chief Geologist-South

000048

Table 1 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 March 1990

| | |
|----------------------------|-----------|
| | \$ |
| GENERAL OPERATING EXPENSES | 655 |
| SPECIALIST SERVICES: | |
| GEOPHYSICS | 2 777 |
| DRAFTING | 42 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 138 |
| HEAD OFFICE | 559 |
| CAPITAL UTILISATION | 41 |
| | ----- |
| TOTAL THIS PERIOD | \$ 4 212 |
| TOTAL PREVIOUSLY REPORTED | 45 254 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 49 466 |
| | ===== |

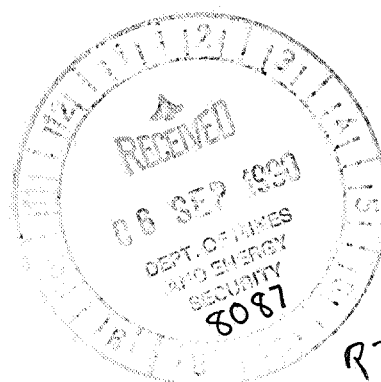
000049



| STOCKDALE PROSPECTING LIMITED | |
|---|------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

MAP 1

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO. 1527 : MT WEDGE
SEVENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JULY 1990



R7

000051



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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
SEVENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JULY 1990

Edited: A C FRENCH

Author/s: S D POTTER

Approved: H R ROBISON

Date: APRIL 1990

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 12 Table Nos.: 5 Appendices: 2 1 Plates: -

Keywords: AIRBORNE MAGNETICS, GROUND MAGNETIC SURVEYS, DRILLING

Abstract: During this quarter 20 possibly kimberlitic anomalies were selected from the SADME/BMR airborne geophysical survey. To date 9 anomalies have been ground surveyed and 2 of these have been investigated by drilling.

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Ref: SDP47

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CONTENTS

| | |
|---|-----------------------------|
| 1 | INTRODUCTION |
| 2 | AIRBORNE GEOPHYSICAL SURVEY |
| 3 | FIELD WORK |
| | 3.1 Ground Magnetic Surveys |
| | 3.2 Heavy Mineral Sampling |
| | 3.3 Drilling Programme |
| 4 | STAFF |
| 5 | FORWARD WORK PROGRAMME |
| 6 | EXPENDITURE |

MAPS

| | | |
|---------|-------------------------------------|-----------|
| MAP 1 : | Locality Map EL 1527 | 1:250 000 |
| MAP 2 : | Total Field Magnetics | 1:50 000 |
| MAP 3 : | Airborne Geophysical Interpretation | 1:250 000 |
| MAP 4 : | MW1 Ground Magnetics | 1:50 000 |
| MAP 5 : | MW4 Ground Magnetics | 1:7 500 |
| MAP 6 : | MW5 Ground Magnetics | 1:7 500 |
| MAP 7 : | MW10 Ground Magnetics | 1:7 500 |
| MAP 8 : | MW12 Ground Magnetics | 1:12 500 |
| MAP 9 : | MW16 Ground Magnetics | 1:10 000 |
| MAP 10: | MW18 Ground Magnetics | 1:10 000 |
| MAP 11: | MW19 Ground Magnetics | 1:10 000 |
| MAP 12: | MW20 Ground Magnetics | 1:7 500 |

TABLES

| | |
|-----------|---|
| TABLE 1 : | Airborne Geophysical Survey Specifications |
| TABLE 2 : | Mt Wedge Airmagnetic Targets |
| TABLE 3 : | AMG Co-ordinates of 5000E/5000N Peg for Completed Anomalies |
| TABLE 4 : | Drilling Programme Summary |
| TABLE 5 : | Expenditure Report |

APPENDICES

| | |
|--------------|--|
| APPENDIX 1 : | Magnetic Intensity Plots for Completed Anomalies - Airborne Data |
| APPENDIX 2 : | Magnetic Intensity Plots for Completed Anomalies - Ground Data |

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****SEVENTH QUARTERLY REPORT TO 11 JULY 1990****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250 000 sheet (Map 1).

During this quarter 20 possibly kimberlitic anomalies were selected from the SADME/BMR geophysical survey. Of these, 9 anomalies were ground surveyed and 2 were investigated by drilling.

2 AIRBORNE GEOPHYSICAL SURVEY

As part of the joint SADME/BMR airborne geophysical survey over the Eyre Peninsula in which Stockdale Prospecting Limited participated, the area of Exploration Licence 1527 was flown. The survey specifications are shown on Table 1.

The airborne magnetic data was processed and interpreted by the research and technical department in Melbourne (Map 2). The data is very active over most of the survey region due to Proterozoic and Archaean granites, which has hindered selection of targets. Cultural anomalies are not obvious due to the strong magnetic background and wide flight line spacing.

Shown on the Geophysical Interpretation Map are a total of 20 anomalies selected as potential kimberlitic targets (Map 3). The anomalies are designated MW1 to MW20 and are summarised in Table 2.

3 FIELD WORK**3.1 Ground Magnetic Surveys**

Follow-up of the aeromagnetic anomalies has involved the creation of grids and subsequent collection of ground magnetic data to accurately locate and define targets.

During this quarter 9 of the 20 aeromagnetic anomalies have been ground surveyed. These are : MW01, MW04, MW05, MW10, MW12, MW16, MW18, MW19 and MW20. Large scale magnetic intensity plots of these anomalies are contained in Appendices 1 and 2.

For each anomaly an appropriate grid size was determined from the airborne data. Grid lines were oriented north-south at 50 metre intervals and readings of the total magnetic field were taken at 25 metre spacings. The AMG co-ordinates of the 5000E/5000N peg for completed anomalies are shown in Table 3.

The data from each survey was corrected and contoured in the field using a portable P.C. The resulting contour plots are shown as Maps 4 - 12. The ground magnetic contour plot may differ significantly from the magnetic intensity plot. This is due to the wide flight line spacing of the airborne data inhibiting accurate anomaly definition.

3.2 Heavy Mineral Sampling

At anomalies MW12, MW18 and MW19 20 litres of -1.0 + 0.3 mm loam material was collected within a 100 metre radius of the magnetic anomaly centre. The sample numbers used were Z7909 (MW12), X5386 (MW18) and X5379 (MW19).

These samples are in Whyalla waiting treatment and examination for diamonds and kimberlitic indicators.

3.3 Drilling Programme

As part of a larger drilling programme, a rotary air/mud drilling rig provided by Thompson Drilling was available to investigate anomalies MW18 and MW19. The drilling is summarised in Table 4.

Detailed logging and sampling of the holes is not yet complete.

4 STAFF

Staff employed in the field programme were :

| | |
|------------------|---|
| Geologists | 2 |
| Field Assistants | 4 |

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the research/technical department and Head Office in Melbourne.

5 FORWARD WORK PROGRAMME

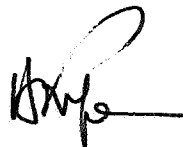
The continuation of ground magnetic surveying will proceed during the next quarter. If weather permits a sampling programme will commence.

6 EXPENDITURE

Expenditure of \$ 45 933 has been allocated as shown in Table 5.



S D Potter
Geologist
Whyalla



H R Robison
Chief Geologist-South

Table 1 : Airborne Geophysical Survey Specifications

| | |
|------------------------|--|
| Area | 1592 km |
| Line Kms | 3516 km |
| Flight Direction | East - West |
| Mag Sensor Height | 100 metres |
| Flight Line Separation | 500 metres |
| Tie Line Separation | 5 km |
| Magnetometer | Cesium Vapour |
| Sample Interval | 0.2 seconds |
| Navigation | Radio Beacons (Syledus) |
| Contractor | Geoterrex |
| Data | Total Intensity Magnetics Four Channel Gamma Radiometrics Two Component VLF |

TABLE 2: Mt WEDGE (E53-7) AIRMAGNETIC TARGETS

| ANOMALY # | EASTING | NORTHING | PRIORITY | Peak nT | COMMENTS |
|-----------|---------|----------|----------|---------|--|
| MW01 | 543087 | 6336045 | 2 | 260 | Could be part of Archean granite? |
| MW02 | 539337 | 6332482 | 2 | 600 | Granitic basement anomaly? On basement fault. |
| MW03 | 535474 | 6325920 | 2 | 400 | High priority apart from high amplitude magnetics. |
| MW04 | 539374 | 6322470 | 2 | 300 | Possibly Proterozoic basement outcrop? |
| MW05 | 543687 | 6316957 | 3 | 350 | Possibly Proterozoic basement ? |
| MW06 | 525687 | 6329820 | 3 | 450 | Possibly Proterozoic basement outcrop? |
| MW07 | 520849 | 6326520 | 2 | 250 | Coincides with Proterozoic outcrop. Check carefully . |
| MW08 | 521899 | 6321420 | 3 | 250 | Possibly Proterozoic basement? |
| MW09 | 531012 | 6308895 | 2 | 300 | |
| MW10 | 536787 | 6306945 | 3 | 300 | Basement anomaly? |
| MW11 | 535062 | 6303157 | 2 | 400 | Broad basement anomaly? On basement fault. |
| MW12 | 544062 | 6308070 | 1 | 350 | |
| MW13 | 540724 | 6300495 | 2 | 180 | Within Elliston (Itiledoo) Trough? |
| MW14 | 538437 | 6297420 | 3 | 170 | Elongate anomaly (dyke?), Within Elliston (Itiledoo) Trough? |
| MW15 | 533712 | 6294682 | 2 | 120 | Broad anomaly? Within Elliston (Itiledoo) Trough? |
| MW16 | 546349 | 6301057 | 2 | 120 | Elongate anomaly. May be too deep. |
| MW17 | 548299 | 6296482 | 1 | 250 | Within Poldo Trough? |
| MW18 | 560074 | 6298920 | 1 | 100 | Within Poldo Trough? |
| MW19 | 561012 | 6296745 | 1 | 70 | Within Poldo Trough? |
| MW20 | 546199 | 6314520 | 2 | 700 | On basement fault. |

000057

Table 3 : AMG Co-ordinates of 5000E/5000N Pegs for Completed Anomalies

| ANOMALY | CO-ORDINATE | |
|---------|-------------|----------|
| MW01 | 543087E | 6336045N |
| MW04 | 539374E | 6322470N |
| MW05 | 543687E | 6316957N |
| MW10 | 536787E | 6306945N |
| MW12 | 544062E | 6308070N |
| MW16 | 546349E | 6301057N |
| MW18 | 560074E | 6298920N |
| MW19 | 561012E | 6296745N |
| MW20 | 546199E | 6314520N |

Table 4 : Drilling Programme Summary

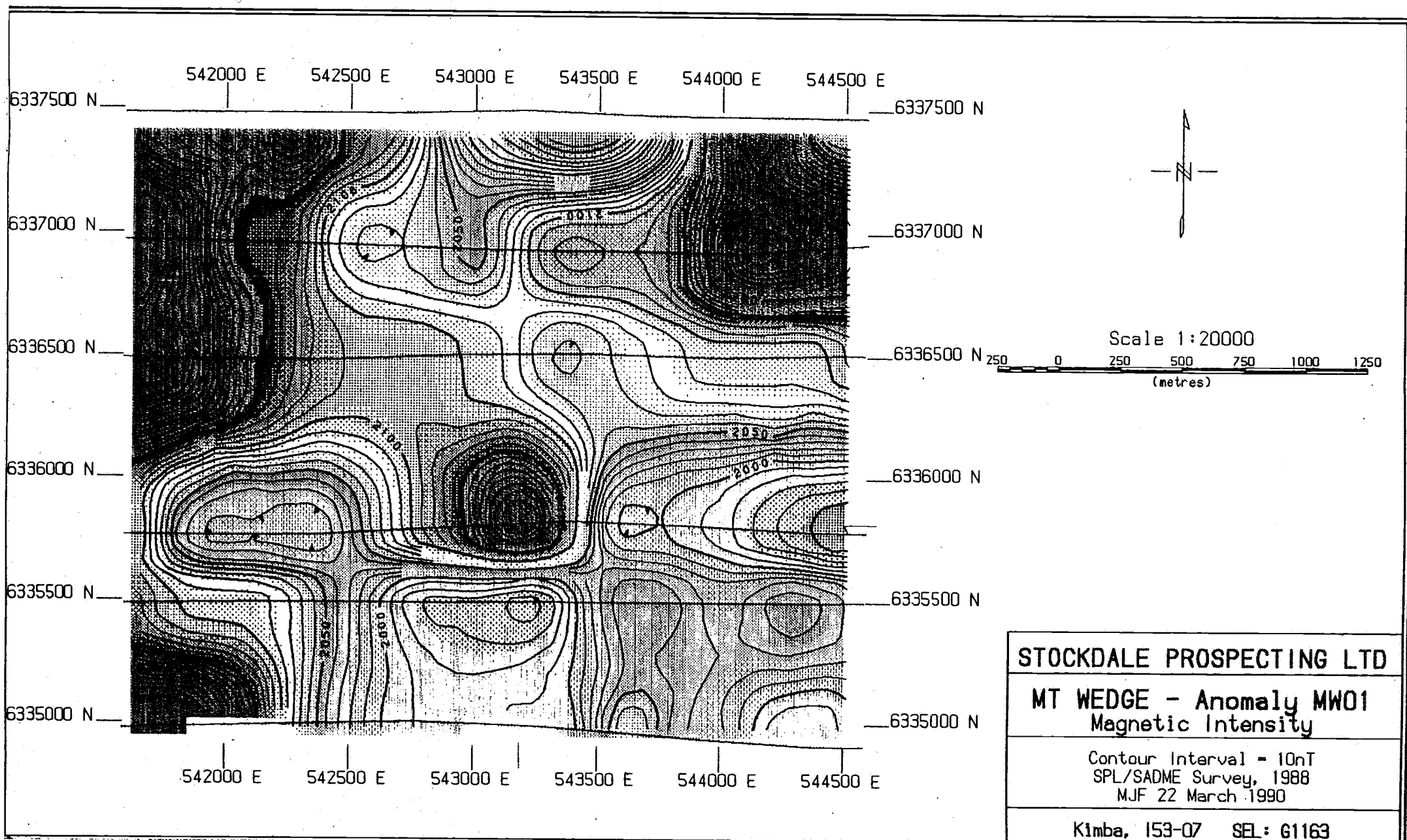
| Anomaly | Grid Co-ords | Depth | Summary Log | | |
|---------|-----------------|-------|----------------|-----|-----------------------|
| MW18 | 4900E 4575N | 58m | 0-15m | Qpb | Bridgewater Formation |
| | | | 15-50m | Tep | Poelpena Formation |
| | | | 50-56m | | Weathered Basement |
| | | | 56-58m | | Granite/BIF |
| | | | EOH | | |
| MW19 | 5000E 4975N | 48m | 0-14m | Qpb | Bridgewater Formation |
| | | | 14-32m | Tep | Poelpena Formation |
| | | | 42-46m | | Weathered basement |
| | | | 46-48m | | Granite |
| | | | EOH | | |

Table 5 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 June 1990

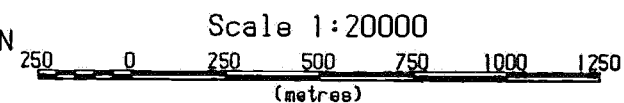
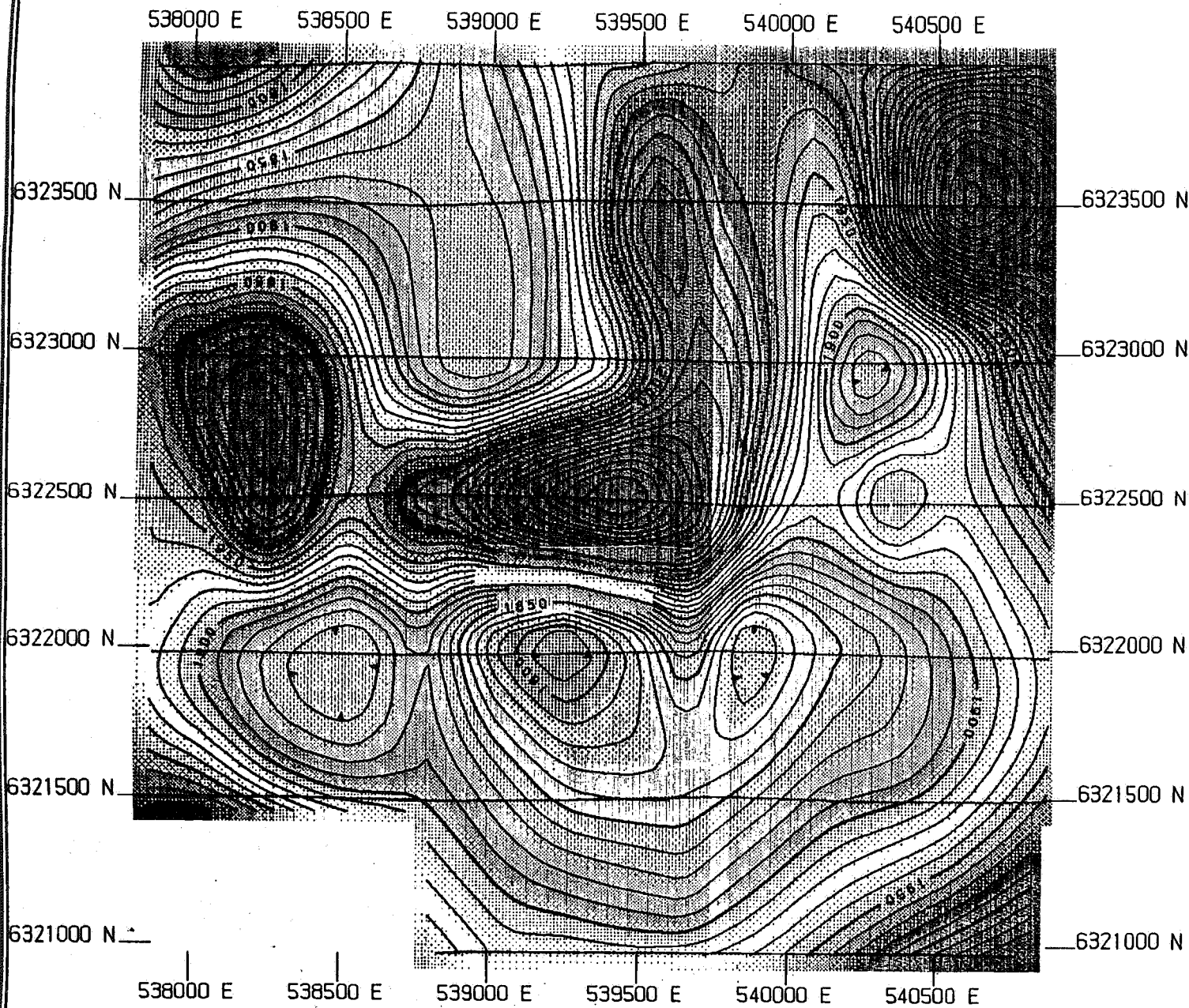
| | \$ |
|----------------------------|-----------|
| OPERATIONAL STAFF COSTS | 22 447 |
| GENERAL OPERATING EXPENSES | 2 604 |
| TRANSPORT AND TRAVEL | 994 |
| DRILLING CONTRACTORS | 2 098 |
| CENTRAL TREATMENT PLANT | 1 532 |
| SPECIALIST SERVICES: | |
| GEOPHYSICS | 4 183 |
| DRAFTING | 581 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 5 970 |
| HEAD OFFICE | 3 744 |
| CAPITAL UTILISATION | 1 780 |
| | ----- |
| TOTAL THIS PERIOD | \$ 45 933 |
| TOTAL PREVIOUSLY REPORTED | 49 466 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 95 399 |
| | ===== |

APPENDIX 1
Magnetic Intensity Plots
For Completed Anomalies

Airborne Data



000062



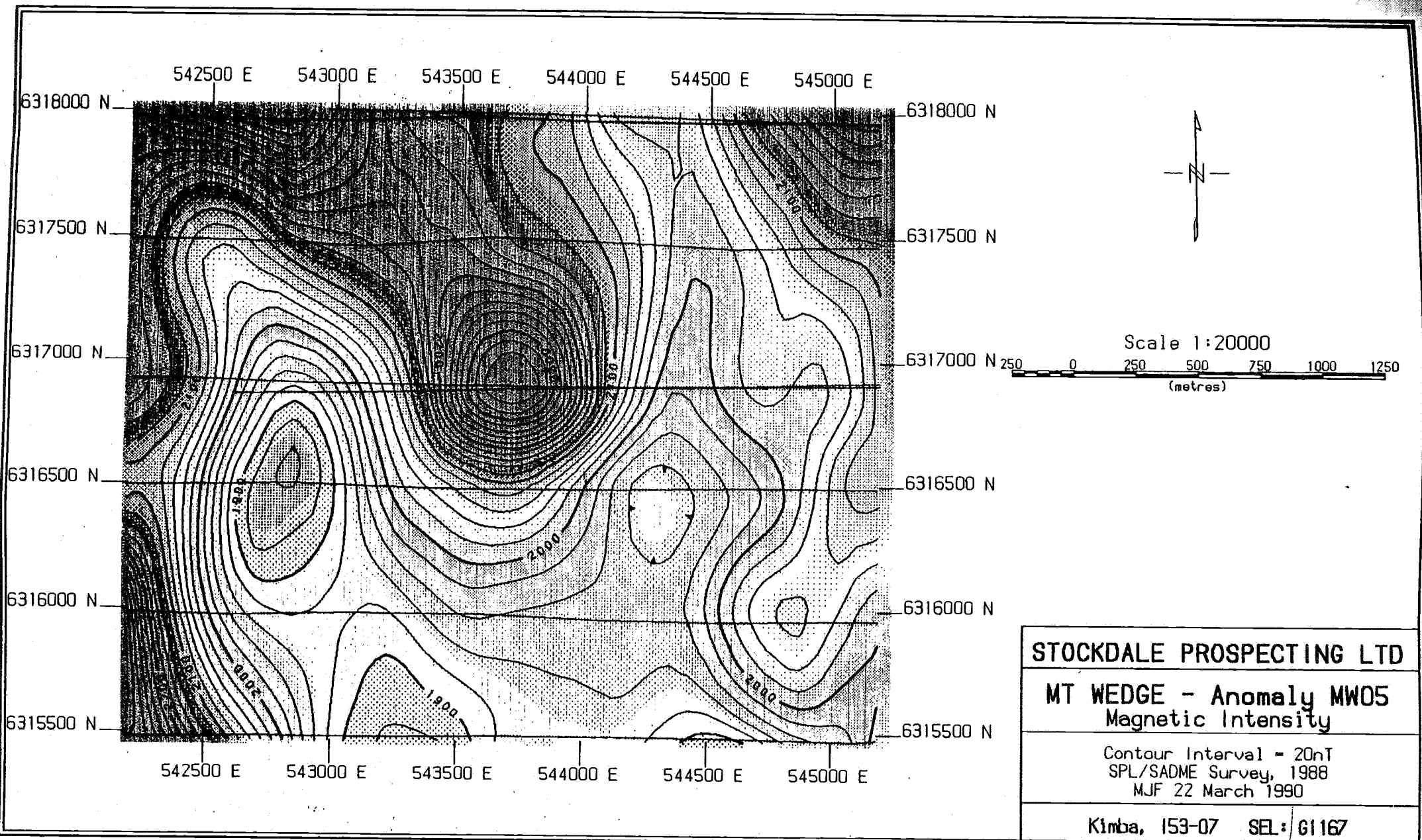
STOCKDALE PROSPECTING LTD

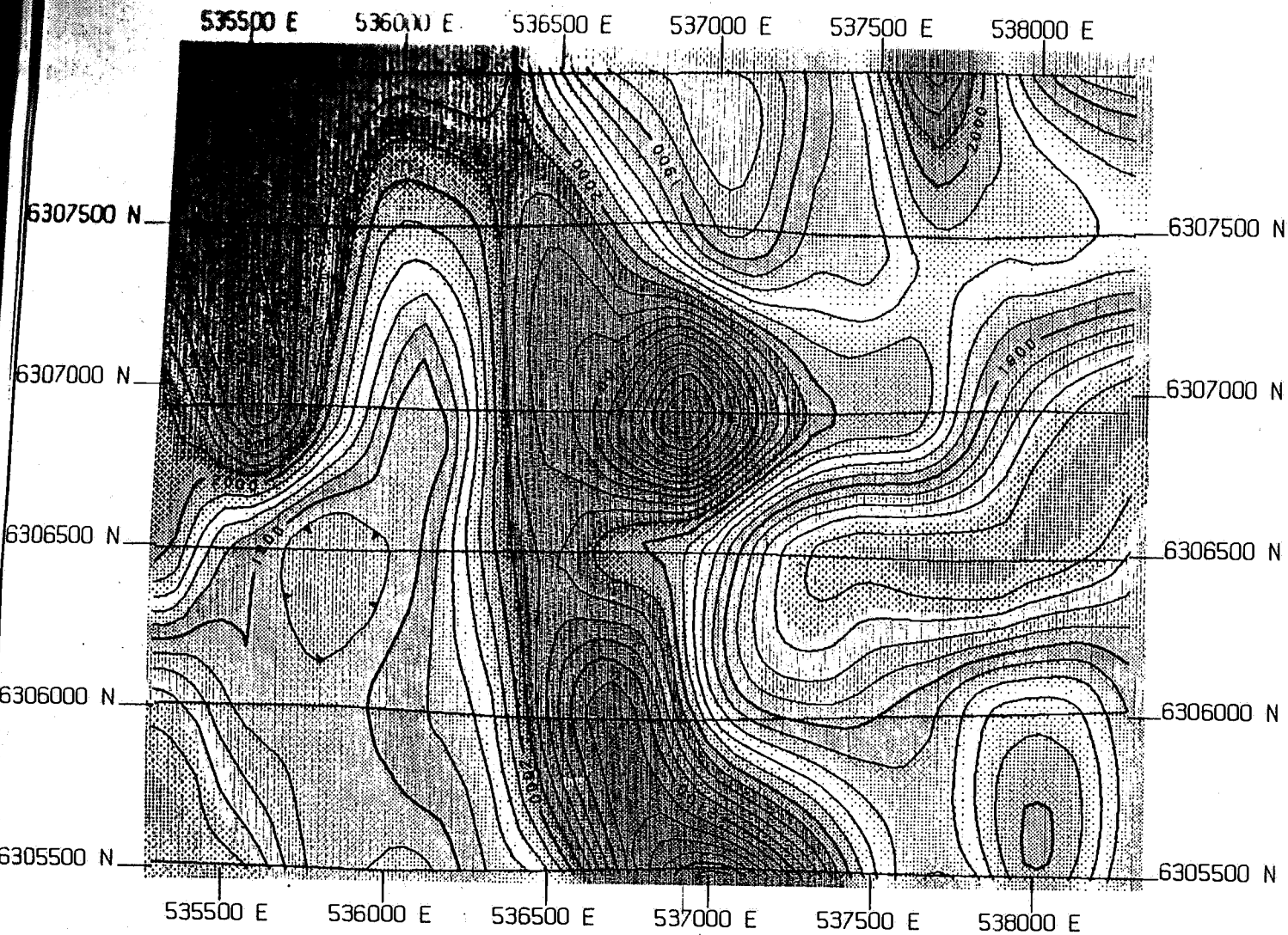
MT WEDGE - Anomaly MW04
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: 61166

000063





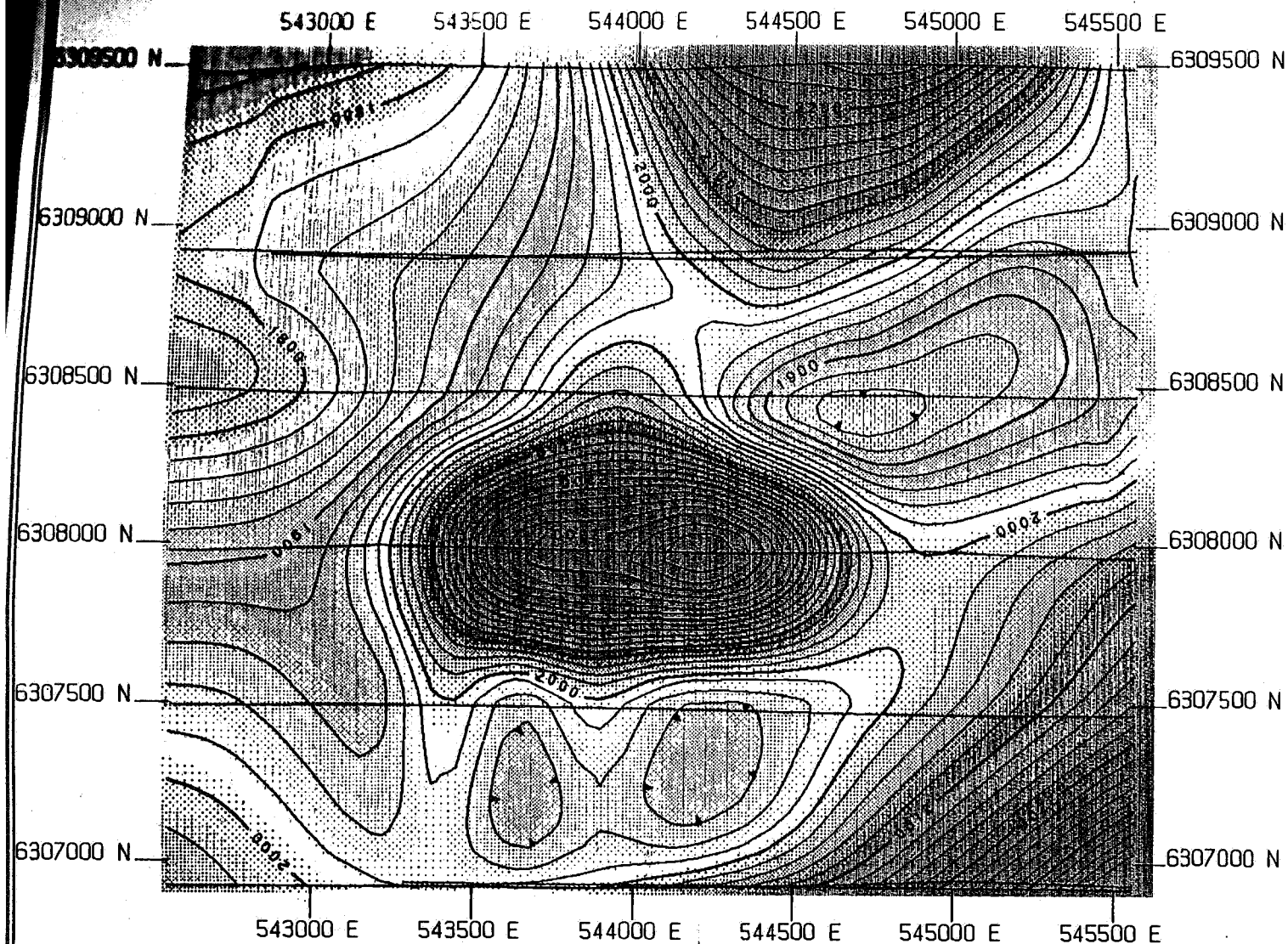
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW10
Magnetic Intensity

Contour Interval = 20nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1172

000063



Scale 1:20000



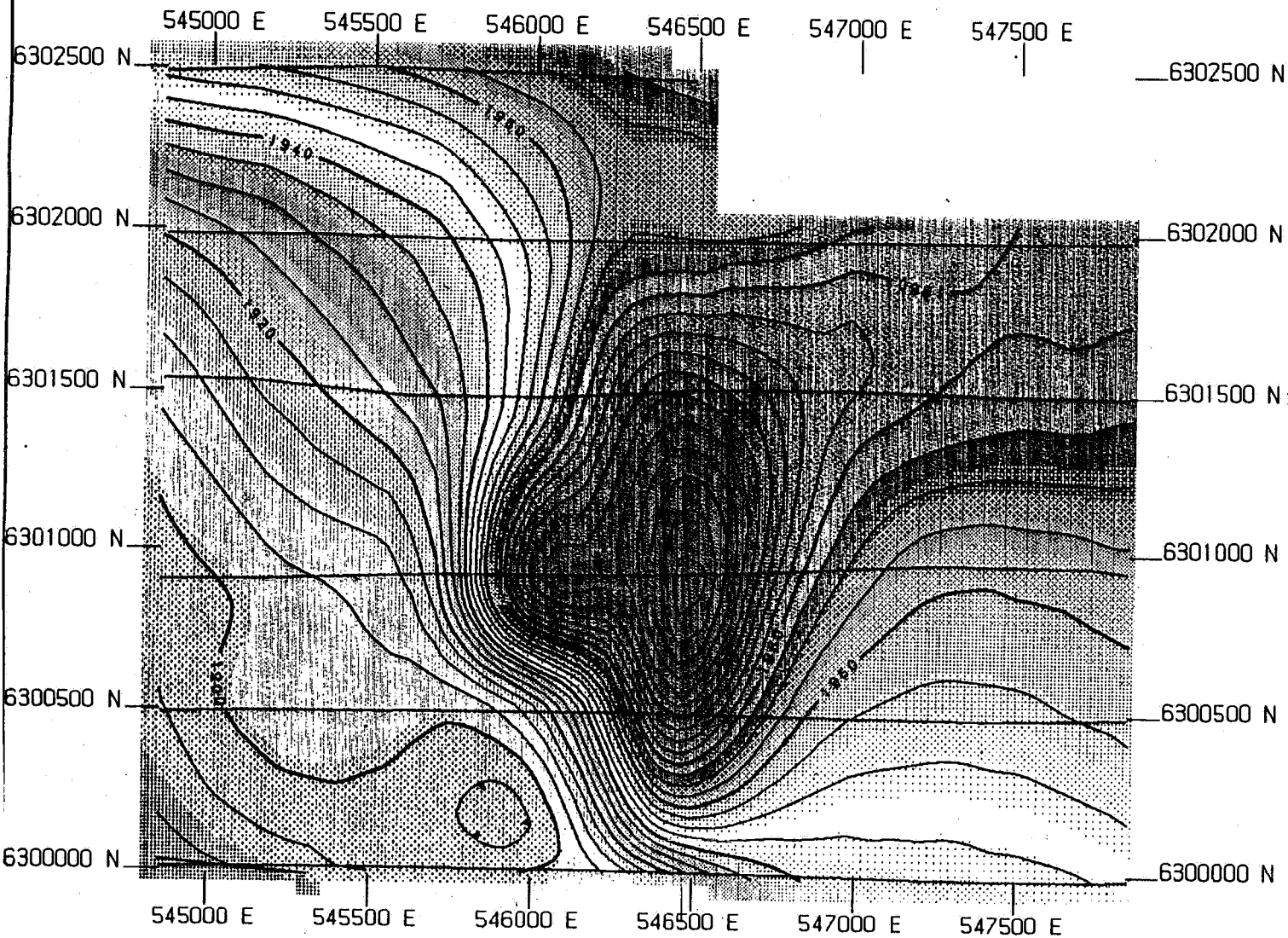
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW12
Magnetic Intensity

Contour Interval = 20nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: 61174

000060



Scale 1:20000



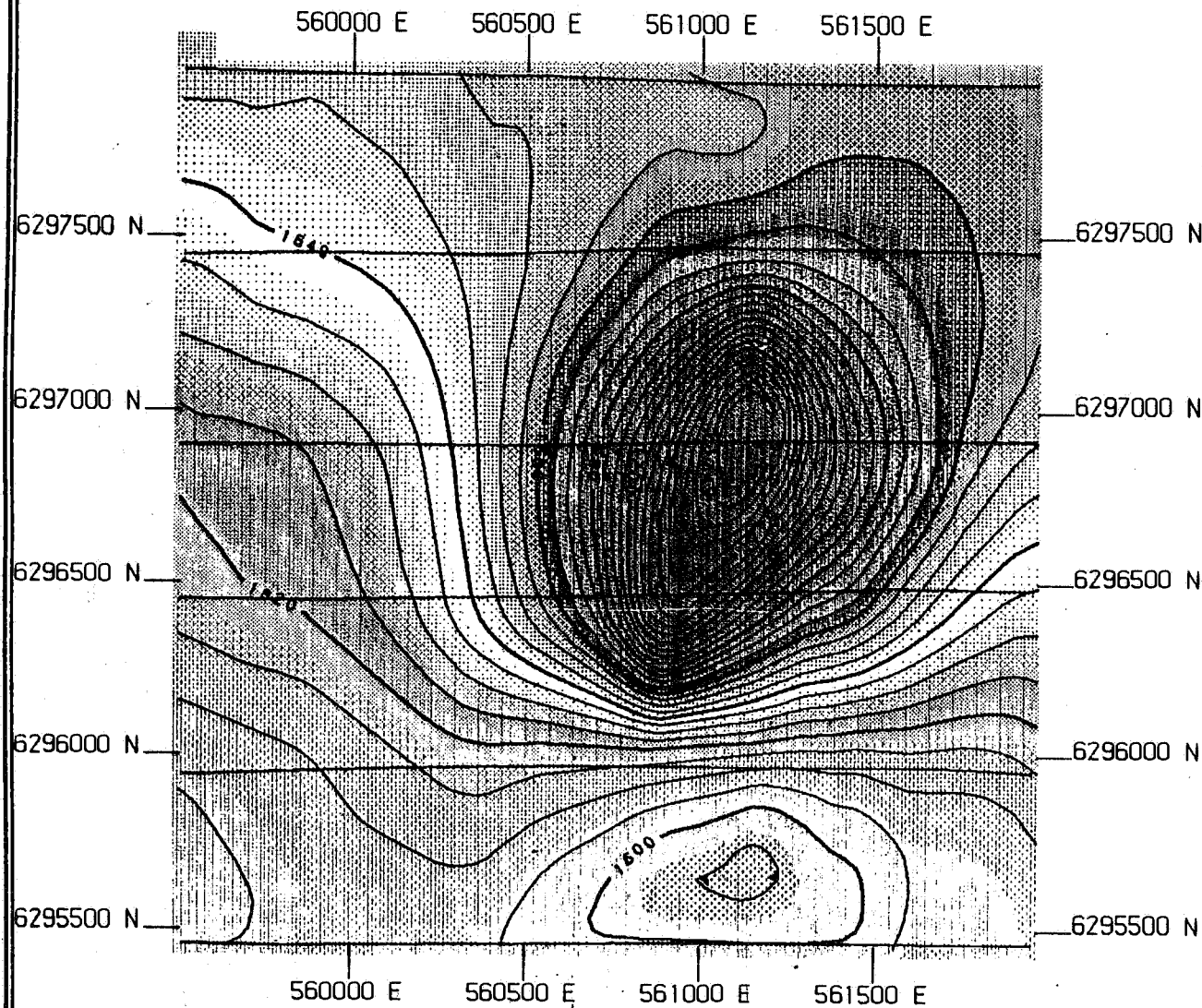
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW16
Magnetic Intensity

Contour Interval - 5nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: 61178

000067



Scale 1:20000



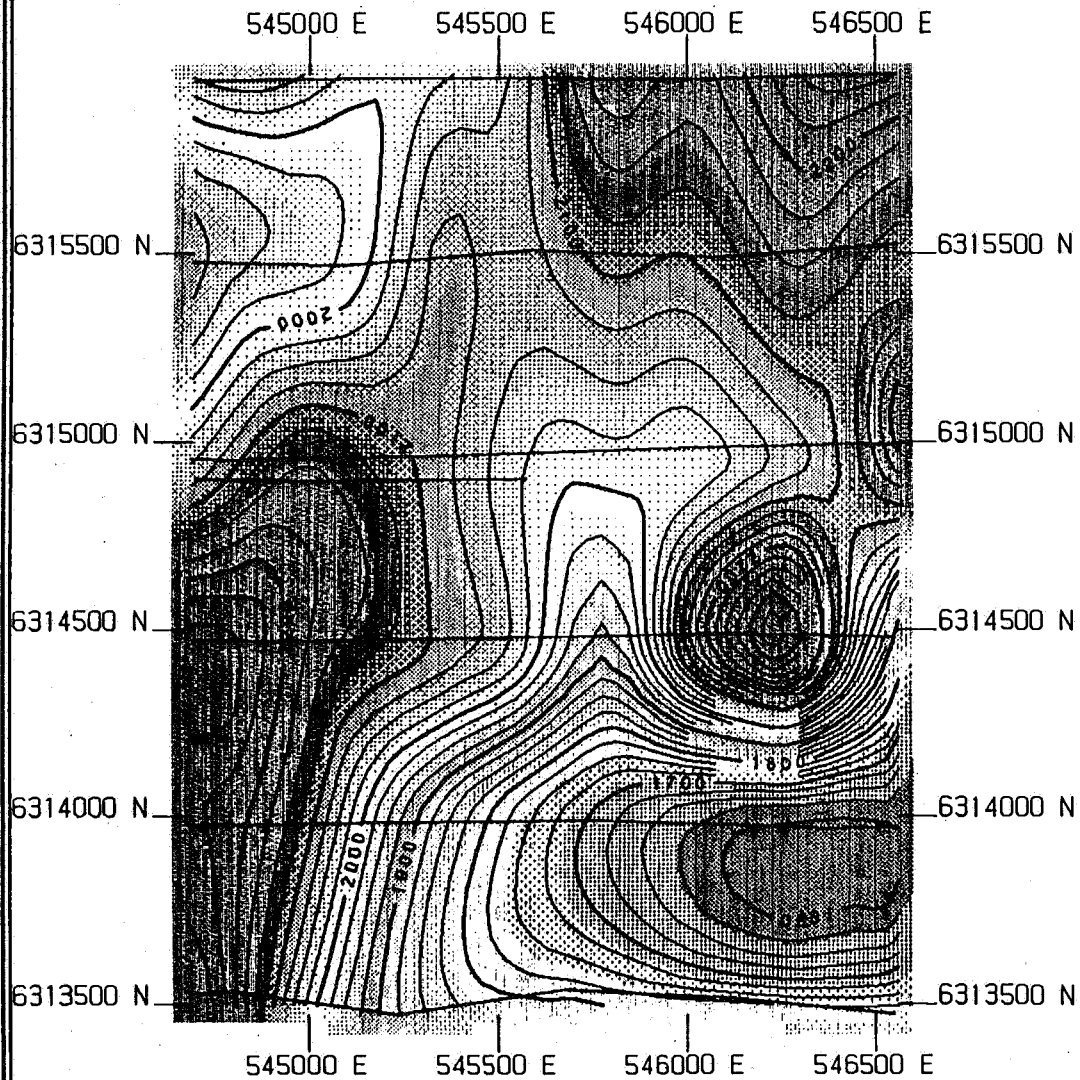
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW19
Magnetic Intensity

Contour Interval = 5nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1181

000063



STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW20
Magnetic Intensity

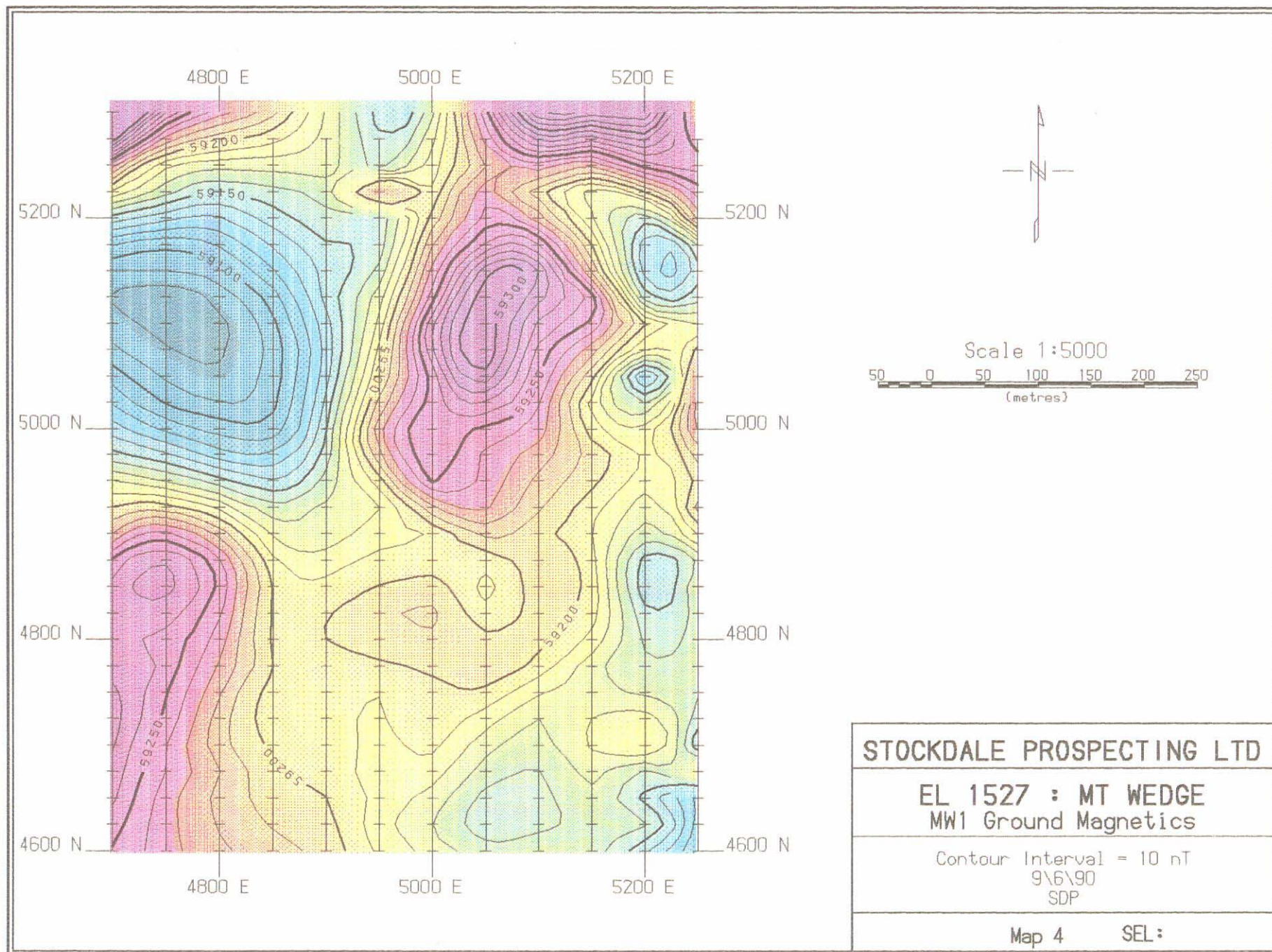
Contour Interval - 25nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: G1182

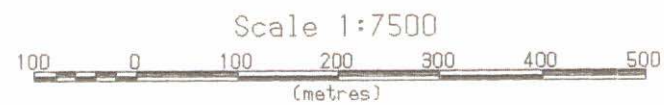
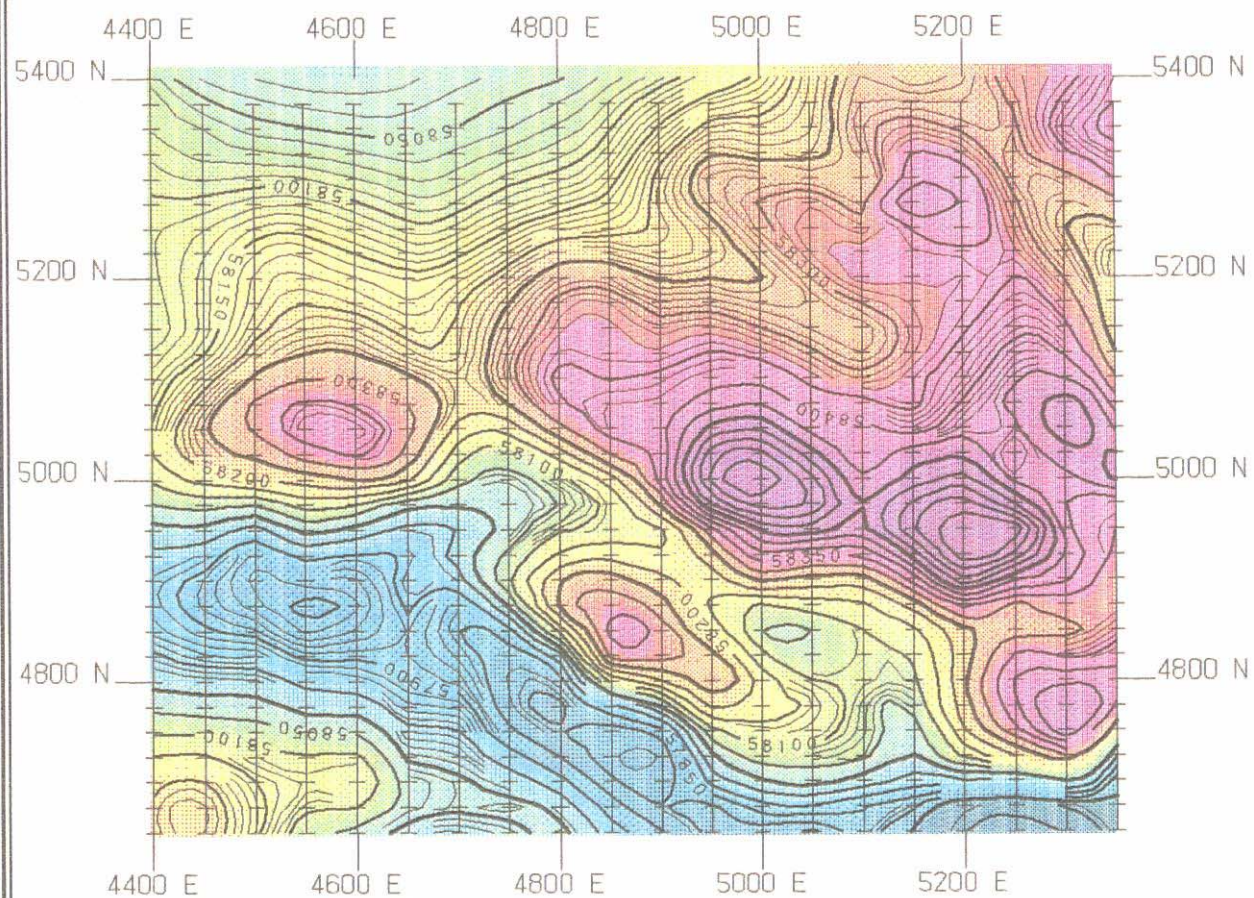
000070

APPENDIX 2

Magnetic Intensity Plots
for completed anomalies
- Ground Data -

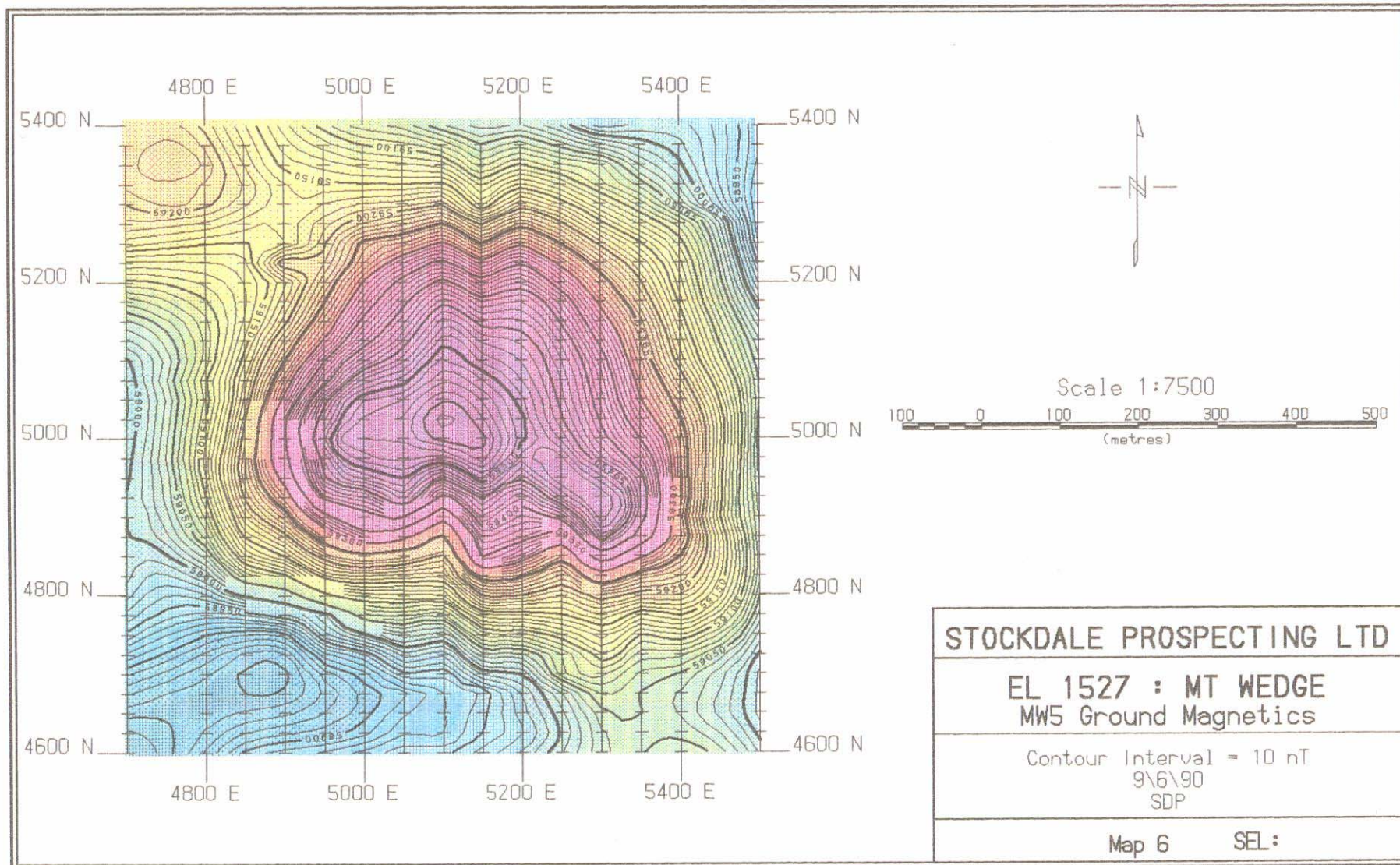


0000072

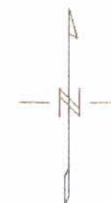
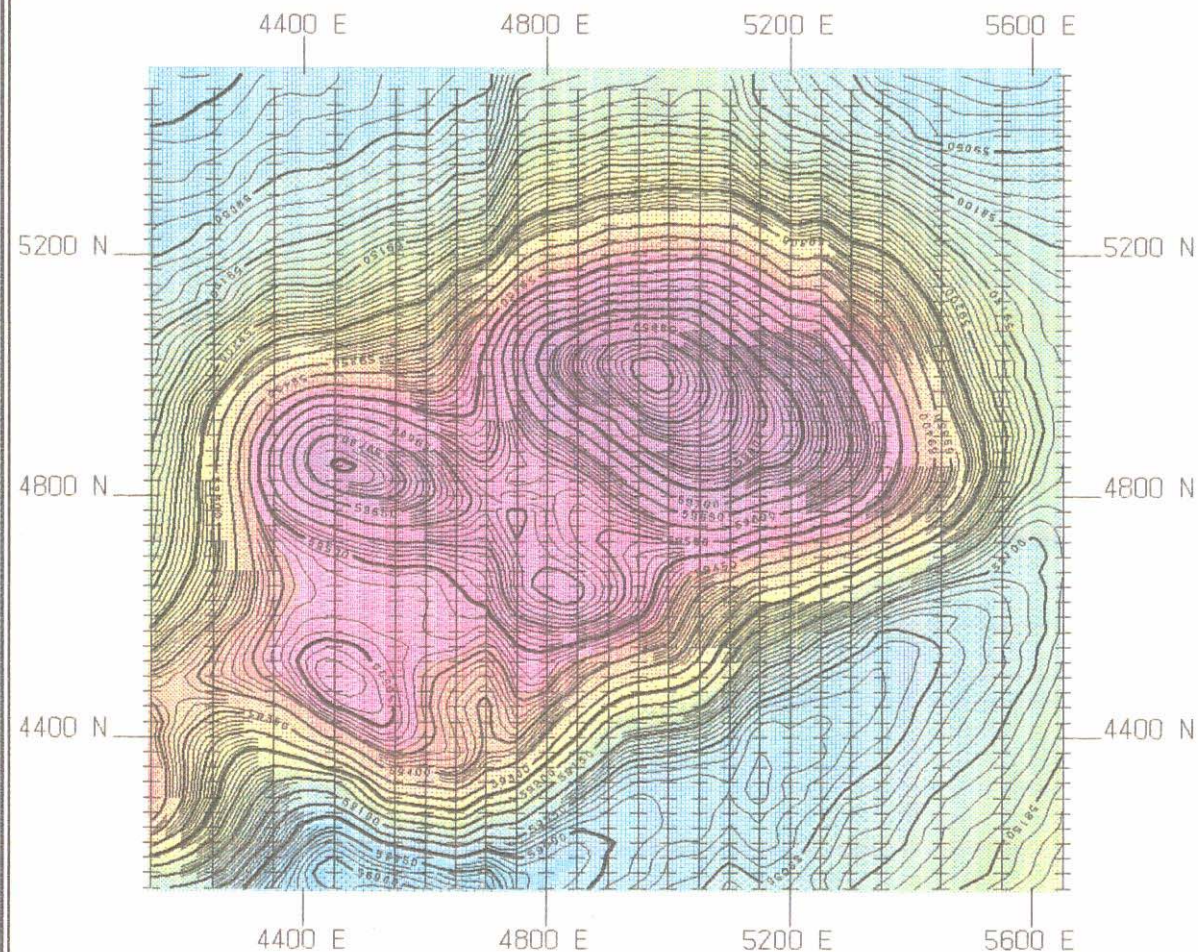


| | |
|---------------------------|------|
| STOCKDALE PROSPECTING LTD | |
| EL 1527 : MT WEDGE | |
| MW4 Ground Magnetics | |
| Contour Interval = 10 nT | |
| 31\5\90 | |
| SDP | |
| Map 5 | SEL: |

000073



000071



Scale 1:12500



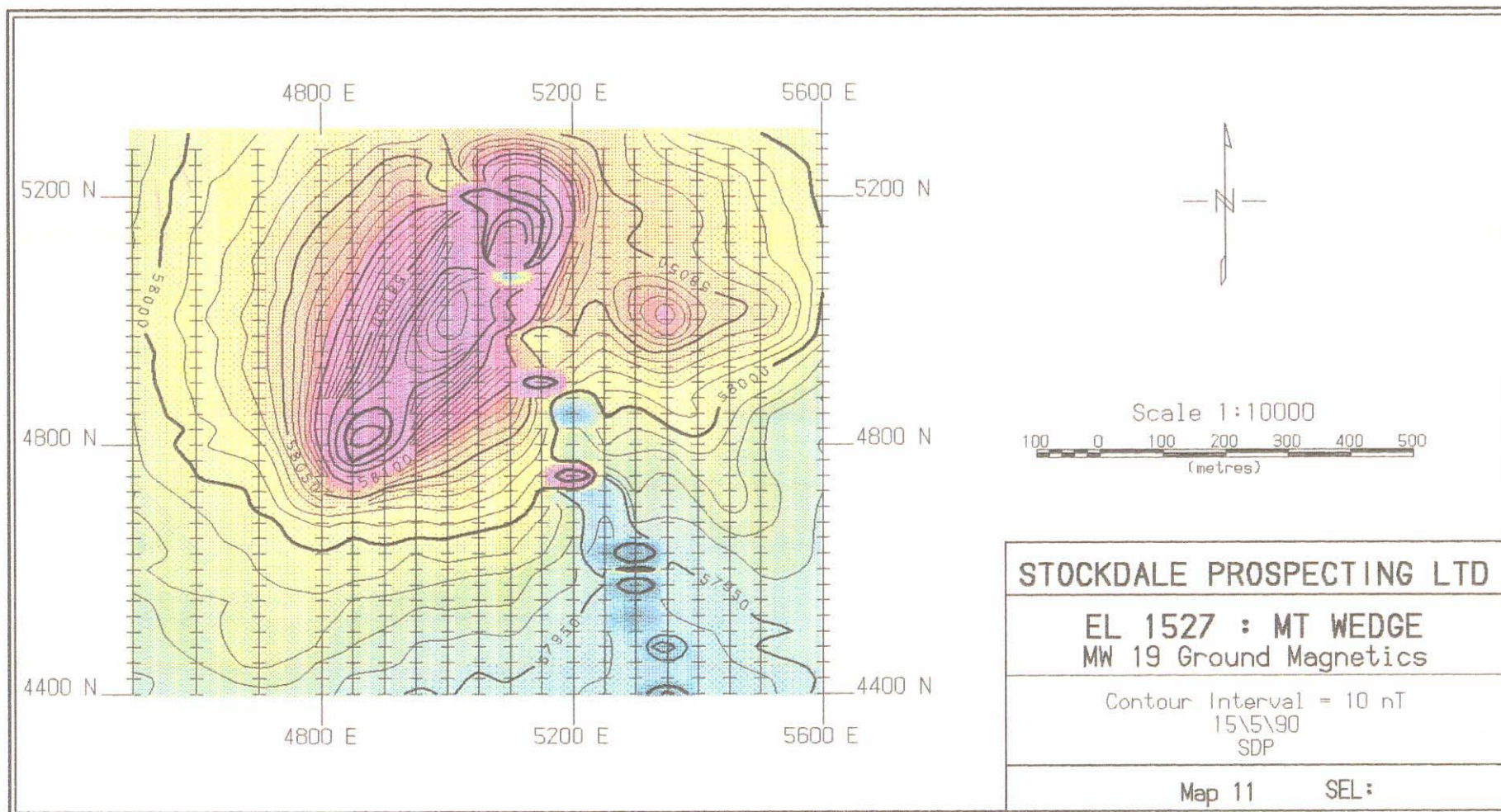
STOCKDALE PROSPECTING LTD

EL 1527 : MT WEDGE
MW12 Ground Magnetics

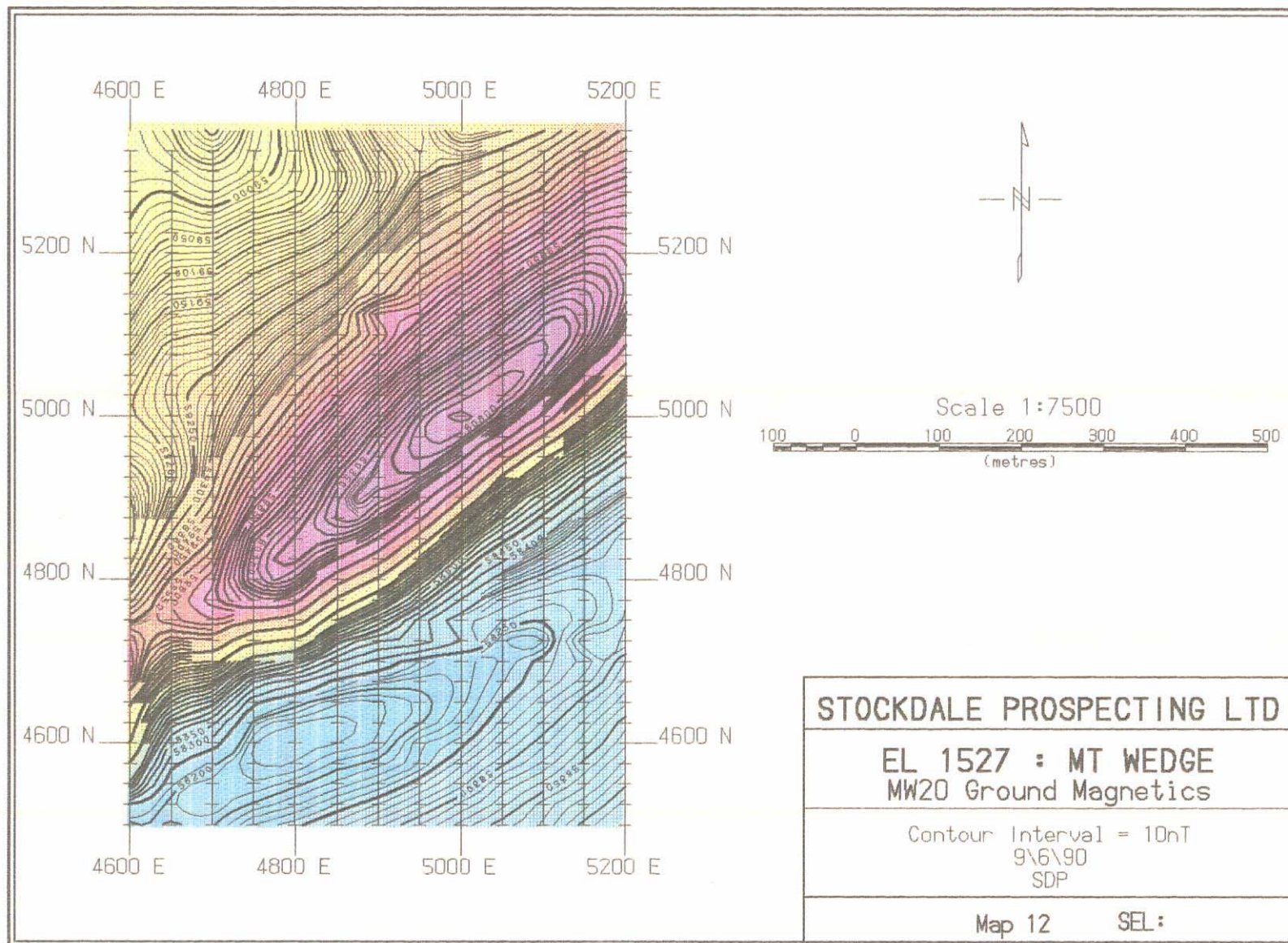
Contour Interval = 10 nT
12\5\90
SDP

Map 8 SEL:

020000

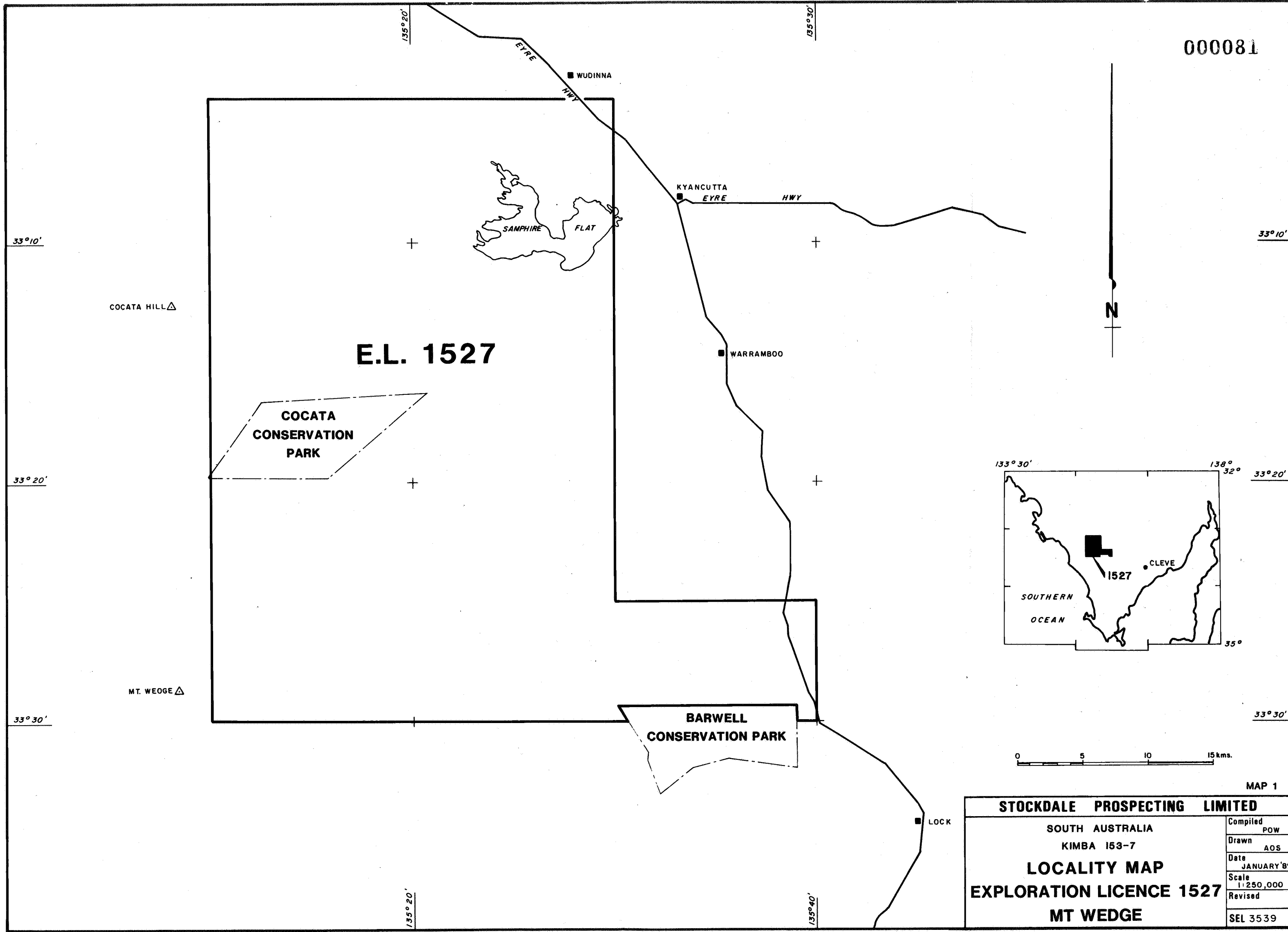


000073

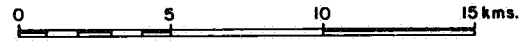
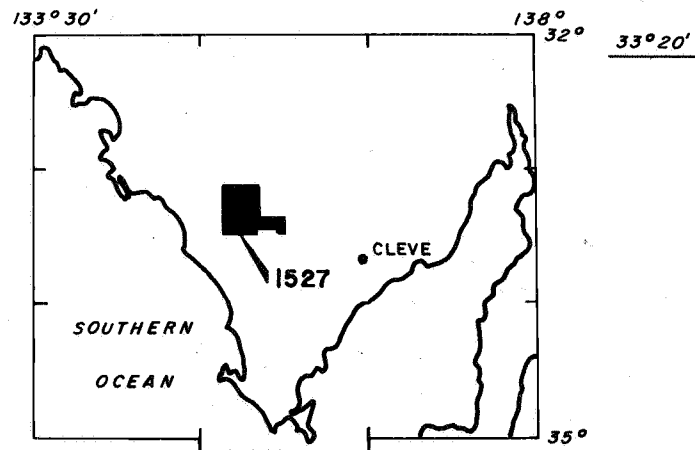


080000

000081



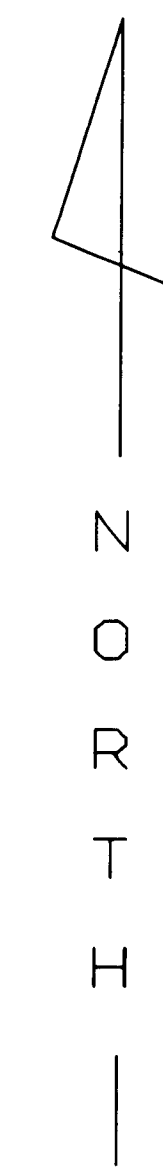
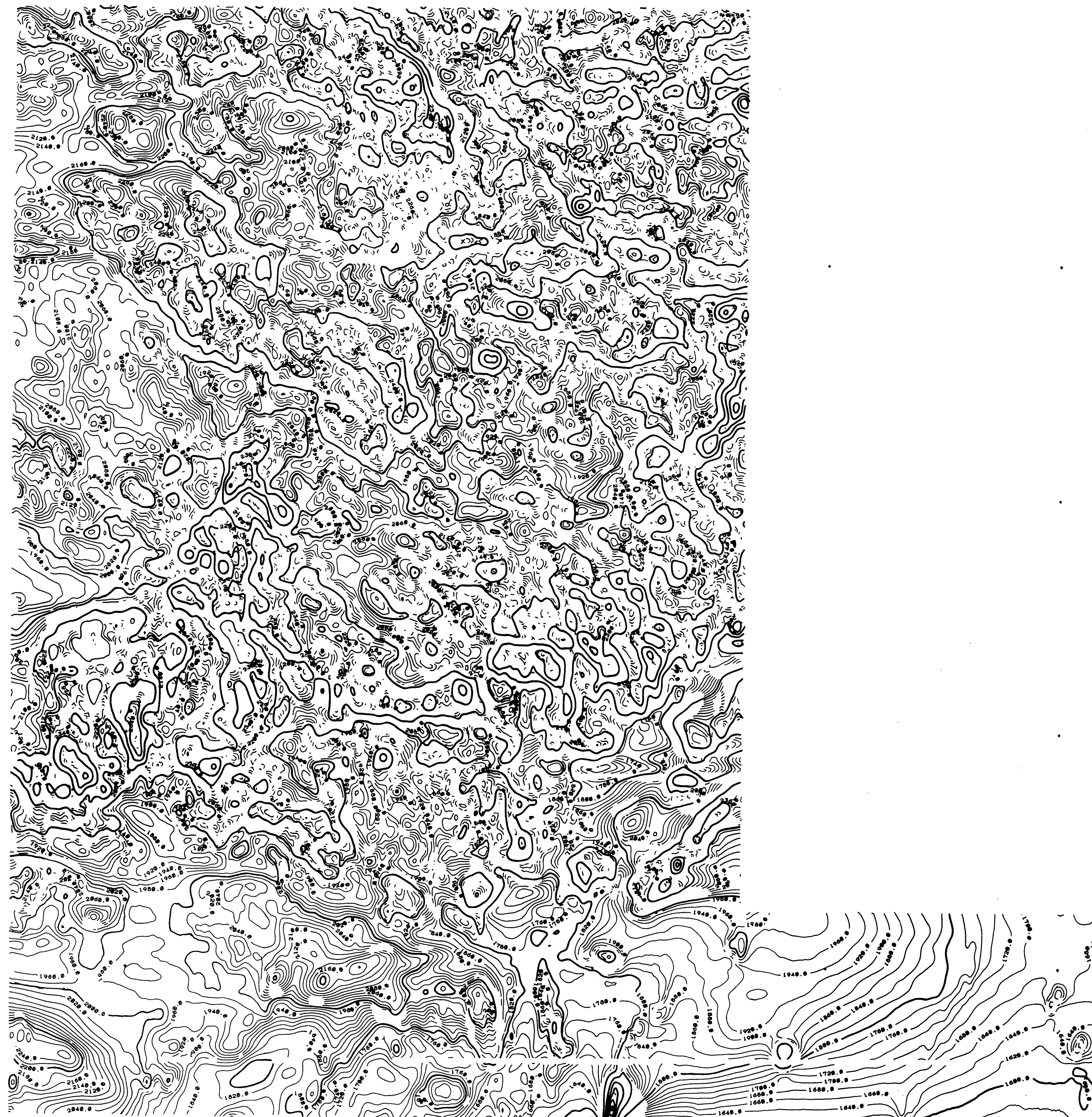
N



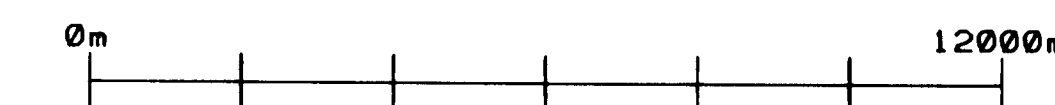
MAP 1

| STOCKDALE PROSPECTING LIMITED | |
|---|---------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled POW |
| | Drawn AOS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

8087-1



CONTOUR INTERVAL = 20 DATUM = 0



Scale 1:100000

FLIGHT SPECIFICATIONS

Date flown: Nov 1988 Jan 1989
 Type of aircraft: Shrike Commander
 Flown for: SPL
 Data collected: magnetics radiometrics
 Magnetometer type: Scintrex cesium vapour
 Spectrometer type: Nuclear Data 256 ch
 (4 windows recorded)
 Average height: 100 m
 Average speed: 125 knots (70m/s)
 Flight direction: East West
 Line spacing: 500 m

DATA SPECIFICATIONS

Sample interval: 14 m
 Noise estimate: 0.2 nT
 Mag sensitivity: 0.04 nT
 Mag cycle rate: 0.2 s
 Position control: Syledis navigation
 Regional removed: IGRF/AGRF
 Noise Filter: none

STOCKDALE PROSPECTING LTD

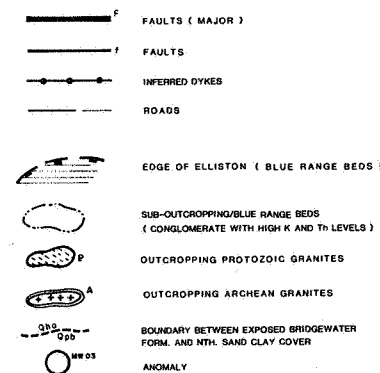
TOTAL FIELD MAGNETICS

KIMBA I53-07

MOUNT WEDGE

8087-1

1



LOCATION MAP



STOCKDALE PROSPECTING LIMITED

| | |
|----------|-----------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3/90 |
| Scale | 1:250 000 |
| Revised | |
| SEL | 3804 |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
EIGHTH QUARTERLY REPPORT FOR THE PERIOD
ENDING 11 OCTOBER 1990



000084

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
South Yarra Victoria 3141
Australia
Telephone (03) 241 7522
Telex Stodal AA39546
Fax (03) 240 0974

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
EIGHTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 OCTOBER 1990

Edited: F M GAUNT

Author/s: S D POTTER

Approved: H R ROBISON

Date: OCTOBER 1990

Place: WHYALLA

1 : 250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 3 Plan Nos.: 4 Table Nos.: 2 Appendices: 3 Plates: -

Keywords: AIRBORNE MAGNETICS, GROUND MAGNETIC SURVEYS, DRILLING,
HEAVY MINERAL SAMPLESAbstract: During this quarter 3 airborne anomalies were ground
surveyed and a reconnaissance sampling programme was
performed.

Copy to: SADME, WHYALLA, IC

Ref: SDP54

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CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
 - 2.1 Ground Magnetic Surveys
 - 2.2 Heavy Mineral Sampling of Magnetic Anomalies
 - 2.3 Reconnaissance Sampling
- 3 DRILLING PROGRAMME
 - 3.1 Legal
 - 3.2 Drilling Programme
 - 3.3 Heavy Mineral Sampling
- 4 STAFF
- 5 EXPENDITURE

MAPS

| | | |
|---------|-------------------------------------|-----------|
| MAP 1 : | Locality Map EL1527 | 1:250,000 |
| MAP 2 : | Airborne Geophysical Interpretation | 1:250,000 |
| MAP 3 : | Current Sampling Damper | 1:100,000 |
| MAP 4 : | Current Sampling Kopi | 1:100,000 |

TABLES

- TABLE 1 : AMG Co-ordinates of 5000E/5000N Peg for Completed Anomalies
- TABLE 2 : Expenditure Report

APPENDICES

- APPENDIX 1 : Magnetic Intensity Plots for Completed Anomalies - Airborne Data
- APPENDIX 2 : Magnetic Intensity Plots for Completed Anomalies - Ground Data
- APPENDIX 3 : Drill Logs for MW18 and MW19

EXPLORATION LICENCE NO 1527 : MT WEDGE

EIGHTH QUARTERLY REPORT TO 11 OCTOBER 1990

1 INTRODUCTION

Exploration Licence No. 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

During this quarter, 3 magnetic anomalies were ground surveyed and a reconnaissance sampling programme was performed.

2 FIELD WORK

2.1 Ground Magnetic Surveys

Follow up of aeromagnetic anomalies (previous quarterly report) has involved the creation of grids and subsequent collection of ground magnetic data to accurately locate and define targets.

During the quarter 3 anomalies have been ground surveyed. These are : MW03, MW13 and MW15 (Map 2). Large scale magnetic intensity plots of the data are contained in Appendices 1 and 2.

For each anomaly an appropriate grid size was determined from the airborne data (Appendix 1). Grid lines were oriented north-south at 50 metre intervals and readings of the total magnetic field were taken at 25 metre spacings. The AMG co-ordinates of the 5000E/5000N peg for completed anomalies are shown in Table 1.

The data from each survey was corrected and contoured in the field using a portable P.C. The resulting contour plots are shown in Appendix 2. The ground magnetic contour plot may differ significantly from the airborne magnetic intensity plot. This is due to the wide flight line spacing of the airborne data inhibiting accurate anomaly definition.

2.2 Heavy Mineral Sampling of Magnetic Anomalies

At anomalies MW03 and MW15 20 litres of $-1.0 + 0.3$ mm loam material was collected within a 100 metre radius of the magnetic anomaly centre. The sample numbers used were X4993 (MW03) and X4994 (MW15).

These samples are in Whyalla waiting treatment and examination for diamonds and kimberlitic indicators.

2.3 Reconnaissance Sampling

A reconnaissance loam sampling programme was performed to locate kimberlitic indicators and possibly provide areas of interest for further exploration.

A method of continuous loam sampling was employed whereby individual loam sites were selected at 1 kilometre intervals along the verges of roads and several adjacent sites were grouped together under one sample number. At each site 10 litres of $-1.0 + 0.3$ mm material was collected.

A total of 51 samples were collected (Maps 3 and 4) using the following numbers : X3285 - X3300, X4997 - X5000, X5098, X5381 - X5400, X5692 - X5694, X5697 - X5700, X5877 - X5879.

3 DRILLING PROGRAMME

As mentioned in the previous quarterly report anomalies MW18 and MW19 were investigated as part of a larger drilling programme.

3.1 Legal

Permission to conduct drilling was obtained from SADME. The programme was approved upon the condition that holes which penetrated both the Tertiary sand and Bridgewater aeolianite aquifers were abandoned with an approved grout.

Permission for access was obtained from the relevant landholders.

A contract for the drilling programme was awarded to Thompson Drilling to provide a rotary air/mud drilling rig for the job.

3.2 Drilling Programme

Drill hole 21 was drilled at grid coordinates 5000E/4975N to intersect MW19 (Map 4). At 48 m the hole was completed in granite. No anomalous magnetic susceptibilities were encountered.

Drill hole 22 was drilled at grid coordinates 4900E/4575N to intersect MW18 (Map 4). At 58 m the hole was completed in Banded Iron Formation. Associated susceptibilities of around 1600×10 SI units show the BIF to be the source of MW19.

Drill logs are contained in Appendix 3.

3.3 Heavy Mineral Sampling

Samples of drill cuttings were collected at 2 metre intervals. Sample numbers Z8592 - Z8644 were used as shown on the drill logs.

All samples were treated and examined for kimberlitic indicators. Only 2 samples proved to be positive :

Z8642 contained : 1 kimberlitic spinel

Z8644 contained : 1 kimberlitic spinel
: 1 kimberlitic ilmenite

4 STAFF

Staff employed in the field programme were :

| | |
|------------------|---|
| Geologists | 3 |
| Field Assistants | 5 |

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the research/technical department and Head Office in Melbourne.

5 EXPENDITURE

Expenditure of \$ 45,226 has been allocated as shown in Table 2.

S. Potter

S D Potter
Staff Geologist
Whyalla

H R Robison

H R Robison
Chief Geologist South

Table 1 : AML Co-ordinates of 5000E/5000N Pegs for Completed
Anomalies

| ANOMALY | CO-ORDINATE | |
|---------|-------------|----------|
| MW03 | 535474E | 6325920N |
| MW13 | 540724E | 6300495N |
| MW15 | 533712E | 6294682N |

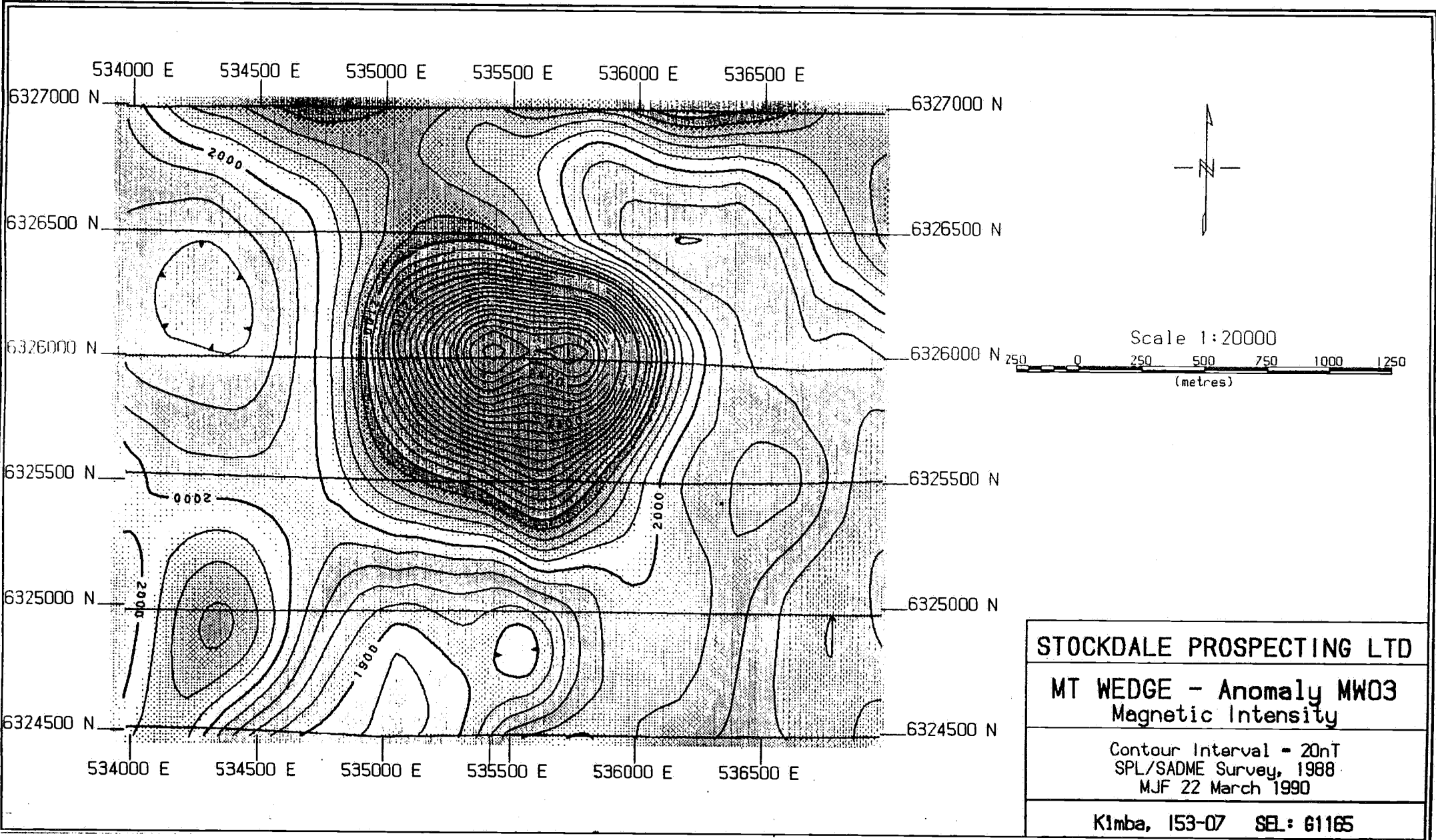
Table 2 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 September 1990

000030

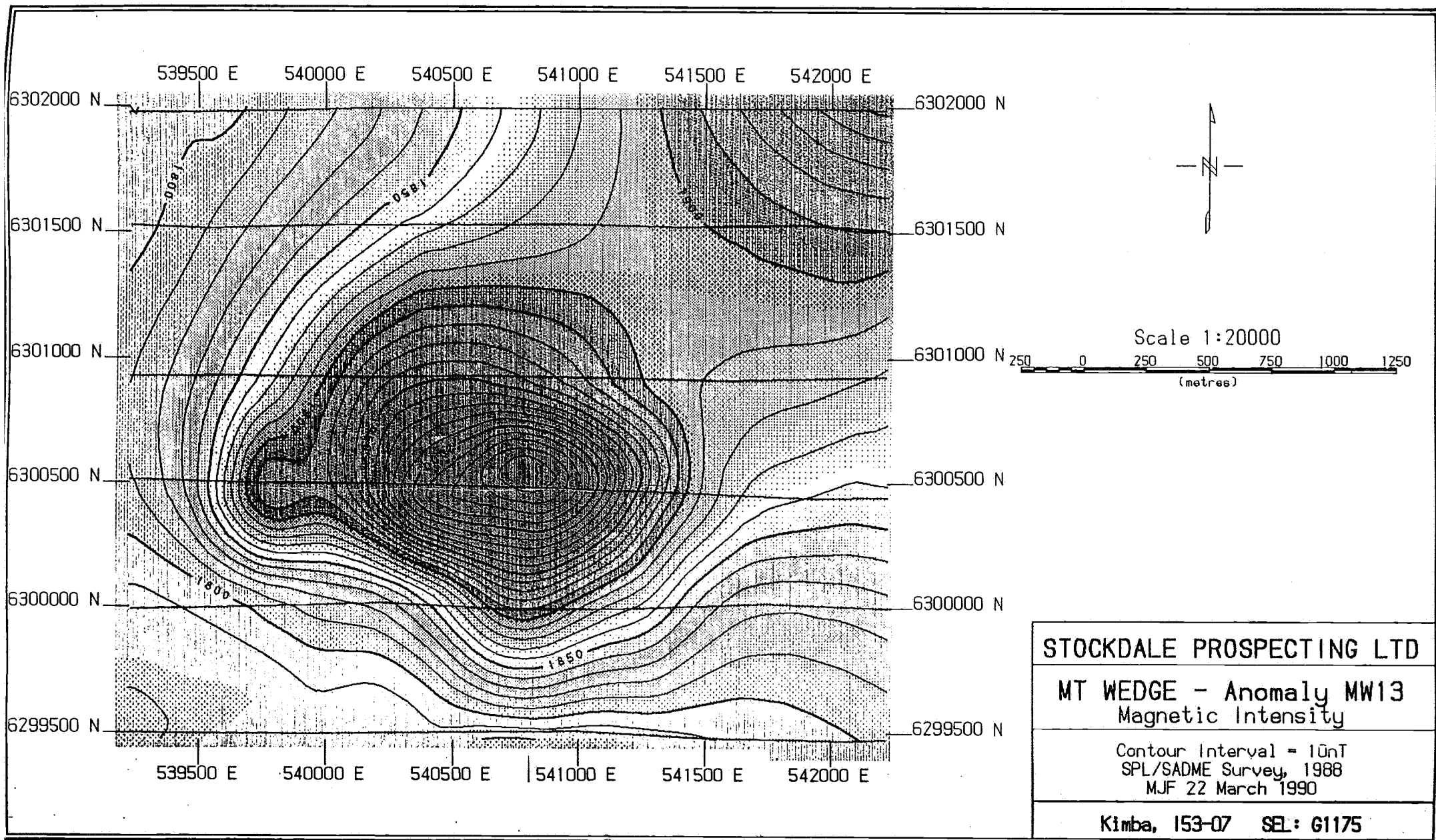
| | | |
|----------------------------|------------|--|
| | \$ | |
| OPERATIONAL STAFF COSTS | 17 975 | |
| GENERAL OPERATING EXPENSES | 342 | |
| TRANSPORT AND TRAVEL | 1 944 | |
| CENTRAL TREATMENT PLANT | 2 255 | |
| LABORATORY : | | |
| TREATMENT | 280 | |
| EXAMINATION | 590 | |
| SPECIALIST SERVICES: | | |
| MINERALOGY | 750 | |
| COMPUTING | 295 | |
| GEOPHYSICS | 9 312 | |
| DRAFTING | 763 | |
| OTHER | 560 | |
| ADMINISTRATION: | | |
| REGIONAL OFFICE | 4 762 | |
| HEAD OFFICE | 3 978 | |
| CAPITAL UTILISATION | 1 420 | |
| TOTAL THIS PERIOD | \$ 45 226 | |
| TOTAL PREVIOUSLY REPORTED | 95 399 | |
| TOTAL EXPENDITURE TO DATE | \$ 140 625 | |

APPENDIX 1

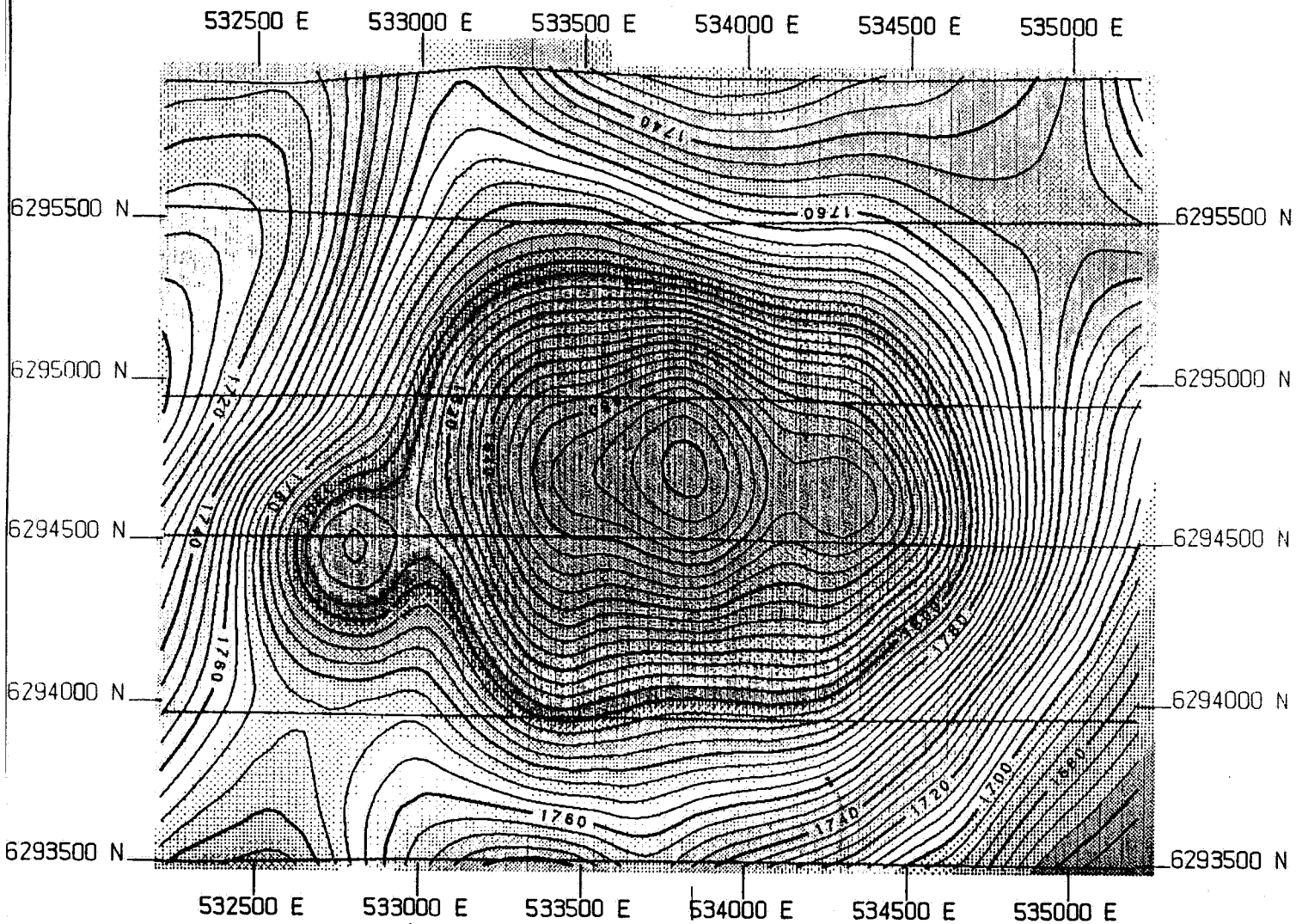
**Magnetic Intensity Plot for Completed
Anomalies - Airborne Data**



000092



000093



STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW15
Magnetic Intensity

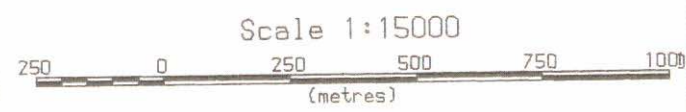
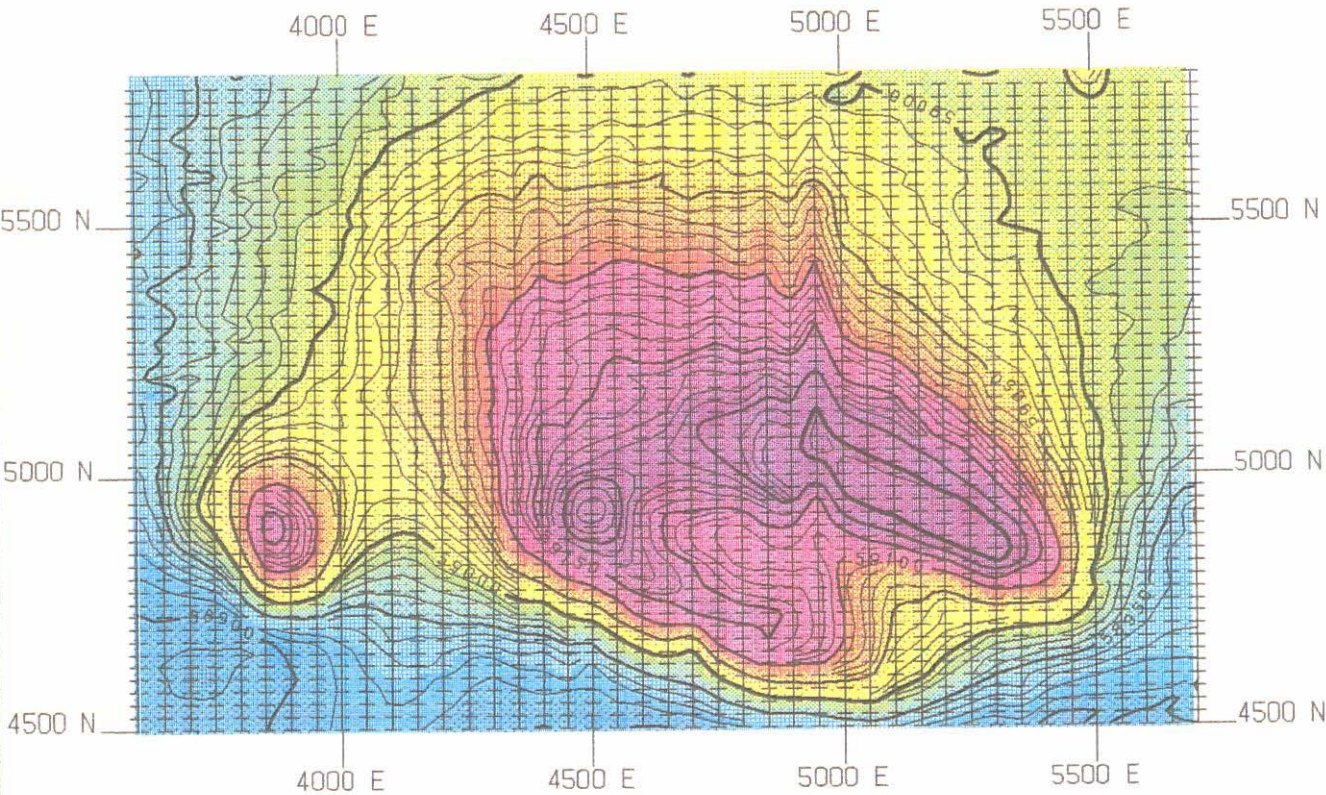
Contour Interval = 5nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1177

00009.1

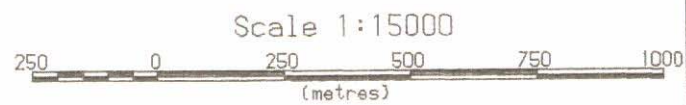
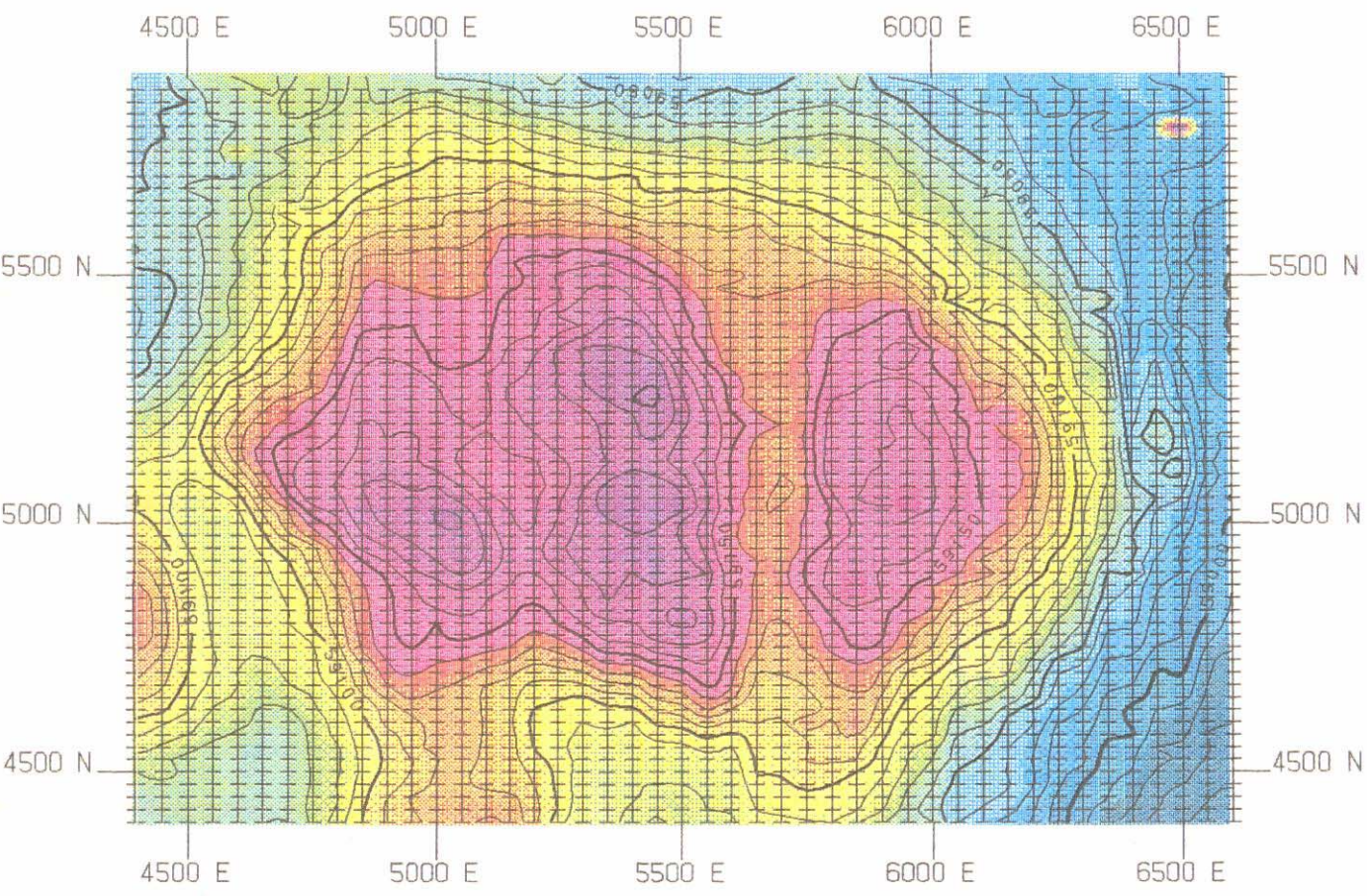
APPENDIX 2

Magnetic Intensity Plot for Completed
Anomalies - Ground Data



| | |
|---|------|
| STOCKDALE PROSPECTING LTD | |
| EL 1527 : MT WEDGE MW13 Ground Magnetics | |
| Contour Interval = 10 nT | |
| Map 3 | SEL: |

000097



| | |
|---------------------------|------|
| STOCKDALE PROSPECTING LTD | |
| EL 1527 : MT WEDGE | |
| MW15 Ground Magnetics | |
| Contour Interval = 10 nT | |
| .c2. | |
| .c3. | |
| Map 4 | SEL: |

860000

APPENDIX 3

Drill Logs for MW18 and MW19

STOCKDALE PROSPECTING LTD.
DRILLHOLE LOG SUMMARY SHEET

Page
of 1/2

PROJECT MOUNT WEDGE

AREA MW/19

Drillhole type
MUD

CO-ORDS 5000E 4975N DECLN

AZIMUTH VERT

RL

DH No. 21

DATE
COMMENCED

2/6/90

DATE
COMPLETED

2/6/90

DRILLED
BY

THOMPSON'S

DRILL
RIG

R4

Max Coring to: 48m

HQ Core to:

HQ Core to:

BQ Core to:

EOM 48m

| FROM | TO | ROCK TYPE | FIELD DESCRIPTION | SAMPLE No. | RESULTS |
|------|----|-------------------------|---|------------|--------------------|
| 0 | 2 | CALLARENITE Qpb | CALLARENITE CHIPS CALCAREOUS SAND | Z 8592 | (X10-3 SE) 9-19 |
| 2 | 4 | CALLARENITE CLAY Qpb | 50% CALLARENITE CHIPS 50% RED/BROWN CLAY | Z 8593 | 12-17 |
| 4 | 6 | CALCAREOUS CLAYS Qpb | 25% CALLARENITE CHIPS 75% FAWN CLAYS | Z 8594 | 17-21 |
| 6 | 8 | " | 20% CALLARENITE CHIPS 20% RED-FAWN + BROWN SILT 60% FAWN-BROWN CLAYS | Z 8595 | 8-11 |
| 8 | 10 | CALCAREOUS SANDS Qpb | 50% CALLARENITE CHIPS 40% MEDIUM FINE QTS SANDS 10% FAWN SILTS + CLAYS | Z 8596 | 3-7 |
| 10 | 12 | " | 10% CREAM CLAY 15% CALLARENITE CHIPS 75% MEDIUM-FINE QTS SANDS | Z 8597 | 2-5 |
| 12 | 14 | " | 15% CALLARENITE CHIPS 85% FINE QTS SANDS | Z 8598 | 1-5 |
| 14 | 16 | SANDY CLAY Top | 40% FINE QTS SANDS 60% WHITE CLAY - KAOLIN? | Z 8599 | 1-3 |
| 16 | 18 | " | 60% WHITE CLAY - KAOLIN? 10% MUDSTONE/SANDSTONE CHIPS 30% FINE-MEDIUM QTS SANDS | Z 8600 | 5-6 |
| 18 | 20 | " | 80% WHITE CLAY - KAOLIN 20% MEDIUM-FINE TO COARSE QTS SANDS | Z 8601 | 3-5 |
| 20 | 22 | " | 70% WHITE CLAY - KAOLIN 30% FINE TO MEDIUM QTS SANDS | Z 8602 | 6-7 |
| 22 | 24 | " | 70% WHITE CLAY - KAOLIN 30% RED + WHITE + CLEAR FINE QTS SANDS | Z 8603 | 4 |
| 24 | 26 | " | 30% WHITE CLAY - KAOLIN 30% FINE QTS SANDS 60% CREAM SILT. | Z 8604 | 3-5 |
| 26 | 28 | " | 40% WHITE CLAY - KAOLIN 20% CREAM SILTS 40% FINE QTS SANDS | Z 8605 | 3-4 |

SCALE:

GEOLOGIST:

DATE:

STOCKDALE PROSPECTING LTD.
DRILLHOLE LOG SUMMARY SHEET

Page
of 2/2

PROJECT MOUNT WEDGE AREA MW19 Drillhole type MWD

CO-ORDS 5000E 49 - DECLN AZIMUTH VERT RL DH No. 21

DATE COMMENCED 2/6/90 DATE COMPLETED 2/6/90 DRILLED BY THOMPSONS DRILL RIG R4

Nea Coring to: 48m HQ Core to: HQ Core to: HQ Core to: HQ Core to: EOH 48m

| FROM | TO | ROCK TYPE | FIELD DESCRIPTION | SAMPLE No. | RESULTS |
|------|----|------------------------------------|--|------------|---------|
| 28 | 30 | UNCONSOLIDATED QTS SANDS Top | 60% RED BROWN FINE SANDS 30% WHITE - CREAM CLAY - K 10% CREAM SILTS | 28606 | 3-5 |
| 30 | 32 | " | 70% MEDIUM FINE RED QTS SANDS 20% CREAM CLAY - KAOLIN 10% CREAM SILTS | 28607 | 6 |
| 32 | 34 | WEATHERED BASEMENT GRANITE | 50% GRANITIC CHIPS - QTS / FELDSPAR / BIOTITE 40% FINE QTS SANDS 10% CREAM KAOLIN CLAYS | 28608 | 13-28 |
| 34 | 36 | " | 60% GRANITIC CHIPS 30% FINE QTS SANDS 10% CREAM CLAYS | 28609 | 44-48 |
| 36 | 38 | " | 10% QTS SANDS 40% CREAM CLAYS + SILTS 50% GRANITIC CHIPS, ANGULAR QTS / FELDSPAR | 28610 | 8-21 |
| 38 | 40 | " | 80% GRANITIC CHIPS, QTS, FELDSPAR, BIOTITE 20% FINE QTS SANDS | 28611 | 43-45 |
| 40 | 42 | " | 85% GRANITIC FRAGMENTS QTS / FELDSPAR BIOTITE 15% QTS SANDS | 28612 | 12-28 |
| 42 | 44 | " | 80% GRANITIC CHIPS 5% GREEN CHLORITIZED CLAYS 15% QTS ANGULAR SANDS | 28613 | 39-42 |
| 44 | 46 | " | 10% CREAM GREEN CLAYS 90% GRANITIC CHIPS QTS / FELDSPAR BIOTITE | 28614 | 31-56 |
| 46 | 48 | GRANITE | 5% SILTS 95% FRESH GRANITIC CHIPS, QTS, FELDSPAR, BIOTITE F.D.H. GRANITE | 28615 | 45-51 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SCALE:

GEOLOGIST:

DATE:

STOCKDALE PROSPECTING LTD.
DRILLHOLE LOG SUMMARY SHEET

Page
of 1/3

PROJECT MOUNT WEDGE

AREA MW18

Drillhole type
MUD

CO-ORDS 4900E/4575N DECLN

AZIMUTH VERT RL

DH No. 22

DATE COMMENCED 2/6/90

DATE COMPLETED 2/6/90

DRILLED BY THOMPSONS

DRILL RIG R4

Max Casing to: 58m

HQ Core to:

HQ Core to:

HQ Core to:

EQH 58m

| FROM | TO | ROCK TYPE | FIELD DESCRIPTION | SAMPLE No. | RESULTS |
|------|----|------------------------------------|---|------------|---------------------------------|
| 0 | 2 | CALLARENITE Qpb | CALLARENITE CHIPS FAWN / GREEN SILTS | 28616 | (X10 ⁻³ SI) 36-60 |
| 2 | 4 | CALCAREOUS SILTS Qpb | 25% CALLARENITE CHIPS 75% CALCAREOUS SILTS | 28617 | 27-29 |
| 4 | 6 | " | 15% CALLARENITE CHIPS 85% CALCAREOUS SILTS + SANDS | 28618 | 16-18 |
| 6 | 8 | " | 20% CALLARENITE CHIPS 80% CALCAREOUS SILTS + SANDS | 28619 | 11-13 |
| 8 | 10 | CALLARENITE Qpb | 70% CALLARENITE CHIPS 30% FAWN SILTS | 28620 | 9-14 |
| 10 | 12 | CALCAREOUS SILTS Qpb | 10% CALLARENITE CHIPS 90% FAWN SILTS | 28621 | 11-19 |
| 12 | 14 | " | 25% CALLARENITE CHIPS 75% FAWN SILTS | 28622 | 9-11 |
| 14 | 16 | UNCONSOLIDATED QTS SANDS Exp | 20% CALLARENITE CHIPS 70% RED QTS SANDS 10% RED - FAWN SILTS | 28623 | 7-10 |
| 16 | 18 | " | 10% CALLARENITE CHIPS 80% RED MEDIUM FINE QTS SANDS | 28624 | 7-8 |
| 18 | 20 | " | 10% SANDSTONE CHIPS 90% MEDIUM FINE RED QTS SANDS | 28625 | 7 |
| 20 | 22 | " | 50% FINE RED SANDS 50% MEDIUM COARSE CLEAR QTS SANDS | 28626 | 6-8 |
| 22 | 24 | " | 20% SANDSTONE CHIPS WHITE 80% MEDIUM COARSE QTS SANDS | 28627 | 5-6 |
| 24 | 26 | " | 10% SANDSTONE CHIPS WHITE 90% MEDIUM COARSE QTS SANDS | 28628 | 2-4 |
| 26 | 28 | " | 10% WHITE SANDSTONE CHIPS 10% RED FINE SILT 80% MEDIUM COARSE QTS SANDS | 28629 | 5-11 |

SCALE:

GEOLOGIST:

DATE:

STOCKDALE PROSPECTING LTD.
DRILLHOLE LOG SUMMARY SHEET

Page
of 2/3

PROJECT MOUNT WEDGE

AREA M. W 18

Drillhole type
MJD

CO-ORDS 4900E/4575NDEGLN

AZIMUTH VERT RL

DH No. 22

DATE COMMENCED 2/6/90

DATE COMPLETED 2/6/90

DRILLED BY THOMPSONS

DRILL RIG R4

New Coring to: 58m

HQ Core to:

HQ Core to:

HQ Core to:

EON 58m

| FROM | TO | ROCK TYPE | FIELD DESCRIPTION | SAMPLE No. | RESULTS |
|------|----|--|--|------------|------------------|
| 28 | 30 | UNCONSOLIDATED QTS SANDS CARBONACEOUS top | 20% WHITE CLAY 10% BLACK CARBONACEOUS MUD 70% MEDIUM COARSE QTS SANDS | 28630 | (X10-55C) 4-5 |
| 30 | 32 | " | 20% CARBONACEOUS MUD 15% YELLOW TO CREAM CLAYS 65% MEDIUM COARSE QTS SANDS | 28631 | 3-5 |
| 32 | 34 | CARBONACEOUS CLAYS + SANDS top | 80% BLACK CARBONACEOUS CLAYS + MUD 10% FINE QTS SANDS 10% LIGNITE - BROWN | 28632 | 3-6 |
| 34 | 36 | " | 80% BLACK CARBONACEOUS CLAYS 20% FINE QTS SANDS | 28633 | 7-21 |
| 36 | 38 | " | 20% FINE QTS SANDS 80% BLACK CARBONACEOUS CLAYS | 28634 | 4-5 |
| 38 | 40 | " | 35% MEDIUM-FINE QTS SANDS 65% BLACK CARBONACEOUS CLAY | 28635 | 7-9 |
| 40 | 42 | " | 70% MEDIUM COARSE QTS SANDS 20% BLACK CARBONACEOUS CLAY 10% CREAM TO GREY CLAY | 28636 | 6-9 |
| 42 | 44 | " | 30% BLACK CARBONACEOUS CLAY 70% MEDIUM COARSE QTS SANDS | 28637 | 2-10 |
| 44 | 46 | " | 90% COARSE QTS SANDS 10% BROWN CARBONACEOUS SILTS | 28638 | 1-2 |
| 46 | 48 | " | 25% WHITE CLAY 10% BROWN CARBONACEOUS SILT 65% COARSE QTS SANDS | 28639 | 4 |
| 48 | 50 | " | 10% CARBONACEOUS CLAY 20% WHITE CLAY 70% COARSE QTS SANDS | 28640 | 2 |
| 50 | 52 | " | 10% CARBONACEOUS MUD 10% WHITE CLAY 80% ANGULAR QTS SANDS / CHIPS | 28641 | 8-13 |
| 52 | 54 | WEATHERED BASEMENT | 10% GREEN CLAY 10% DARK MAFICS? 10% CARBONACEOUS MATERIAL 70% ANGULAR QTS - COARSE | 28642 | 7-18 |
| 54 | 56 | " | 5% SILVER MICAS - MUSCOVITE 20% BLACK/GREEN CLAY 70% ANGULAR QTS + FELDSPAR 5% BIOTITE? (GRANITIC?) | 28643 | 216-253 |

SCALE:

GEOLOGIST:

DATE:

STOCKDALE PROSPECTING LTD.
DRILLHOLE LOG SUMMARY SHEET

Page of 3/3

PROJECT MOUNT WEDGE

AREA MW18

Drillhole type
M30

CO-ORDS 4900E/4575N DEC LN

AZIMUTH VERT

RL

DH No. 27

DATE COMMENCED 2/6/90

DATE COMPLETED 2/6/90

DRILLED
BY THOMPSONS

DRILL RIG R4

Non Caring to: 58m

HQ Care to:

NG Com No :

BO. Cam to:

EOH 58u

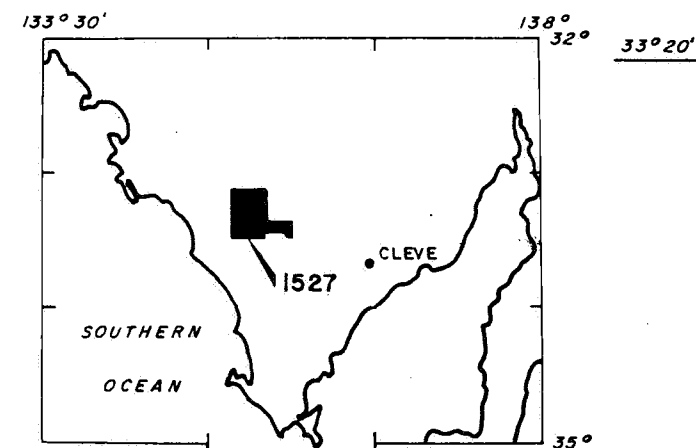
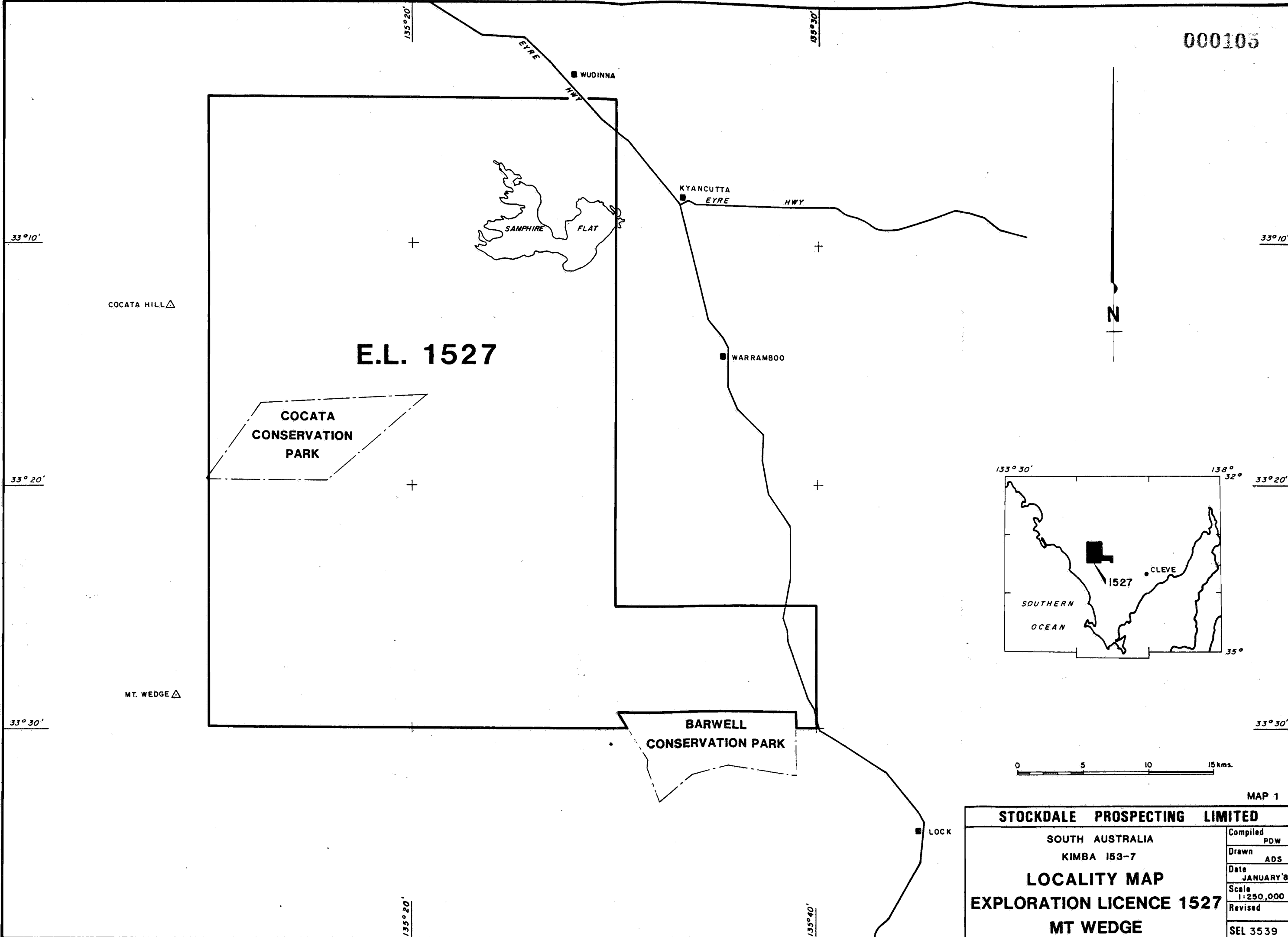
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SCALE:

GEOLOGIST:

DATE:

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MAP 1

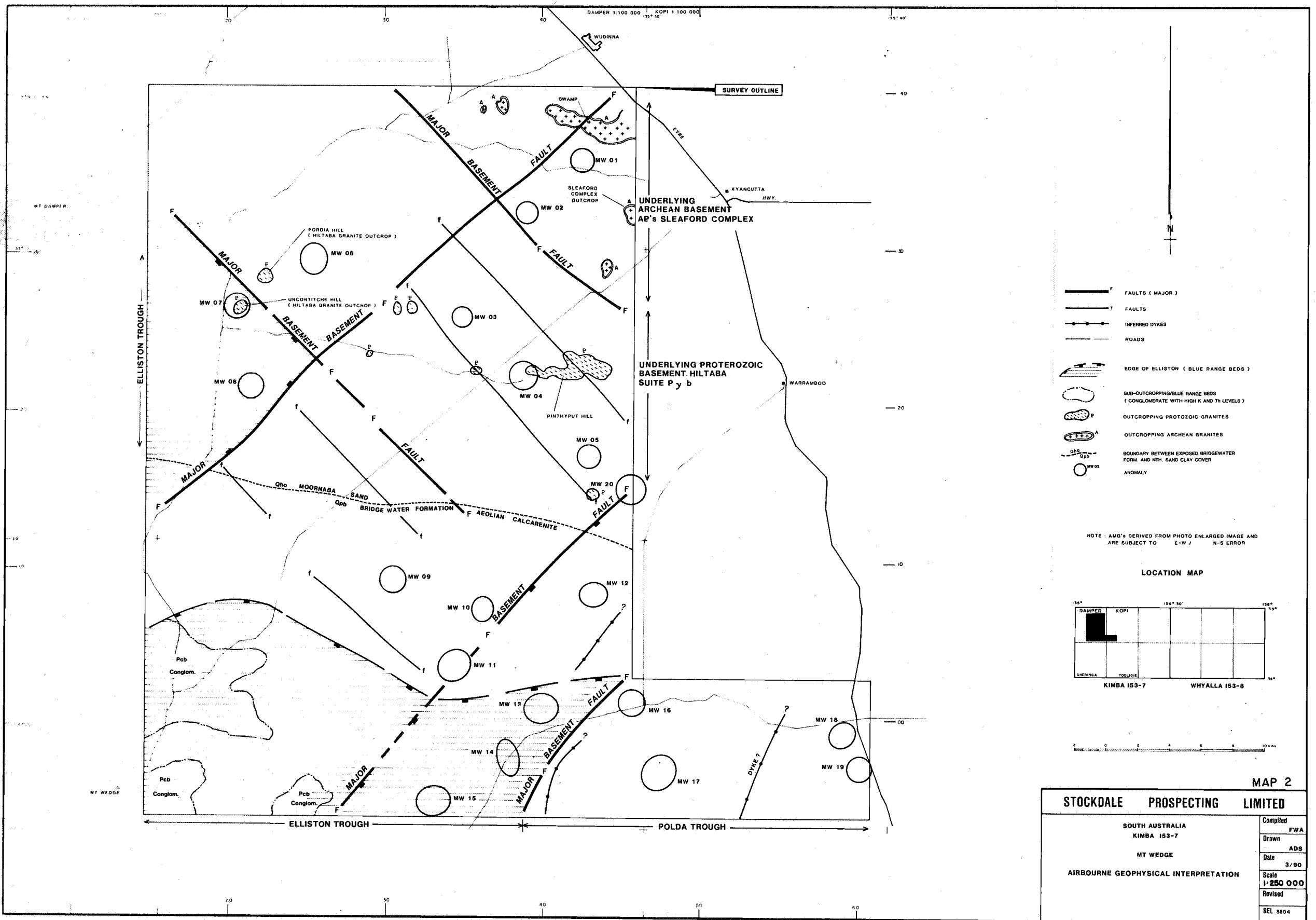
STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA

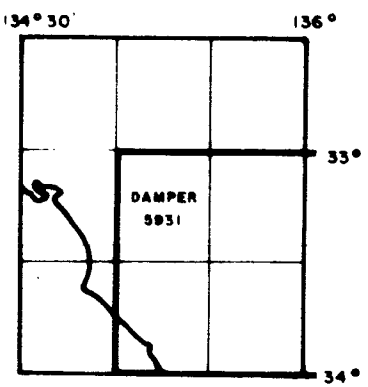
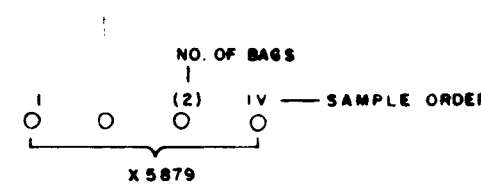
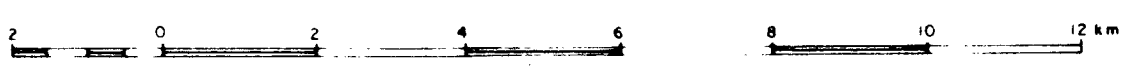
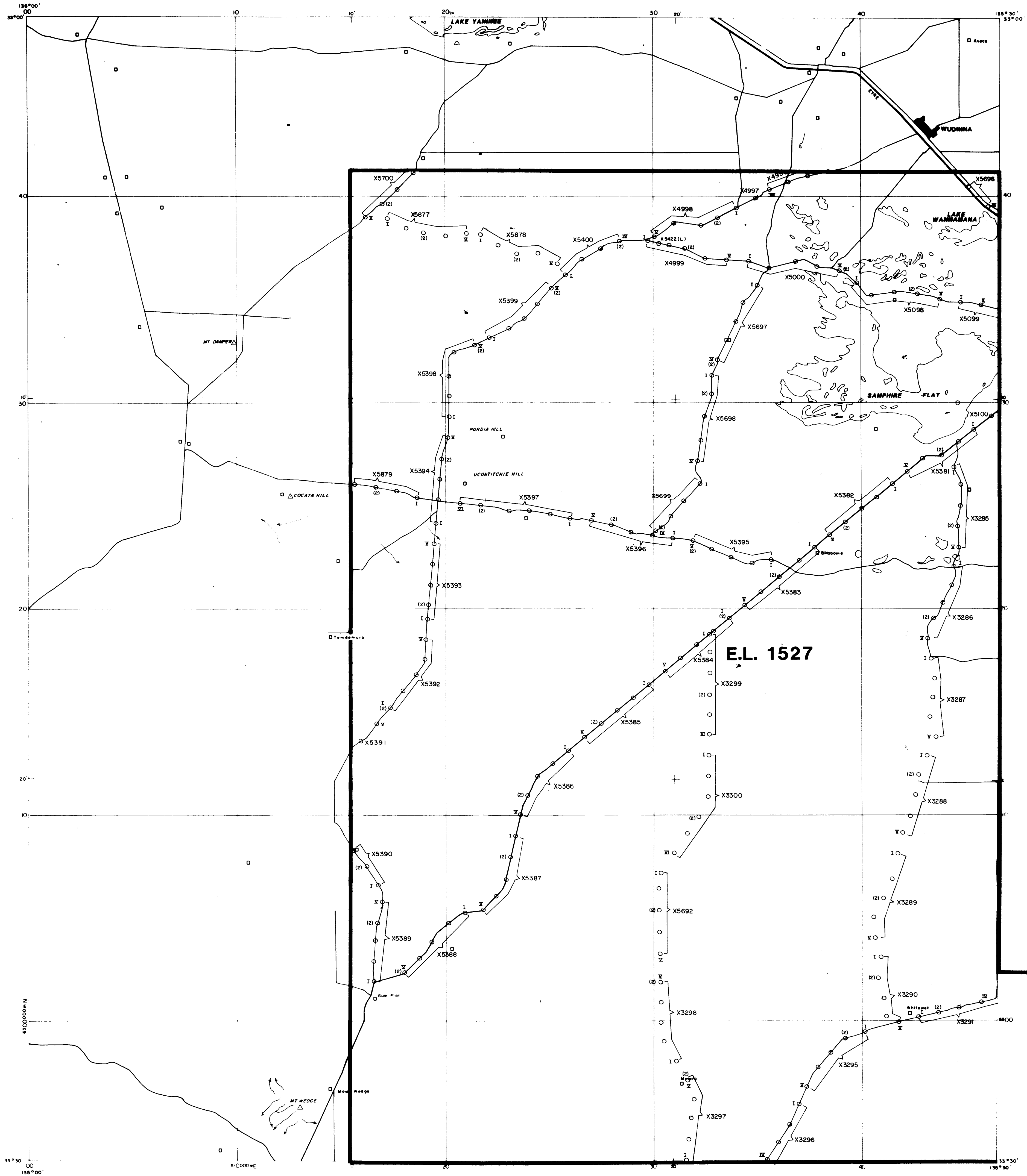
KIMBA 153-7

LOCALITY MAP
EXPLORATION LICENCE 1527
MT WEDGE

| | |
|----------|-------------|
| Compiled | PDW |
| Drawn | ADS |
| Date | JANUARY '85 |
| Scale | 1:250,000 |
| Revised | |
| SEL | 3539 |

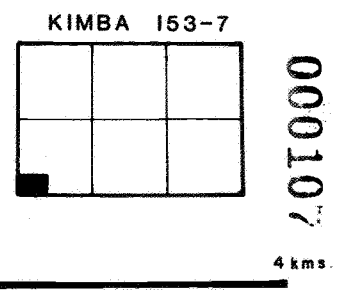
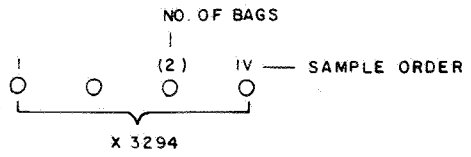
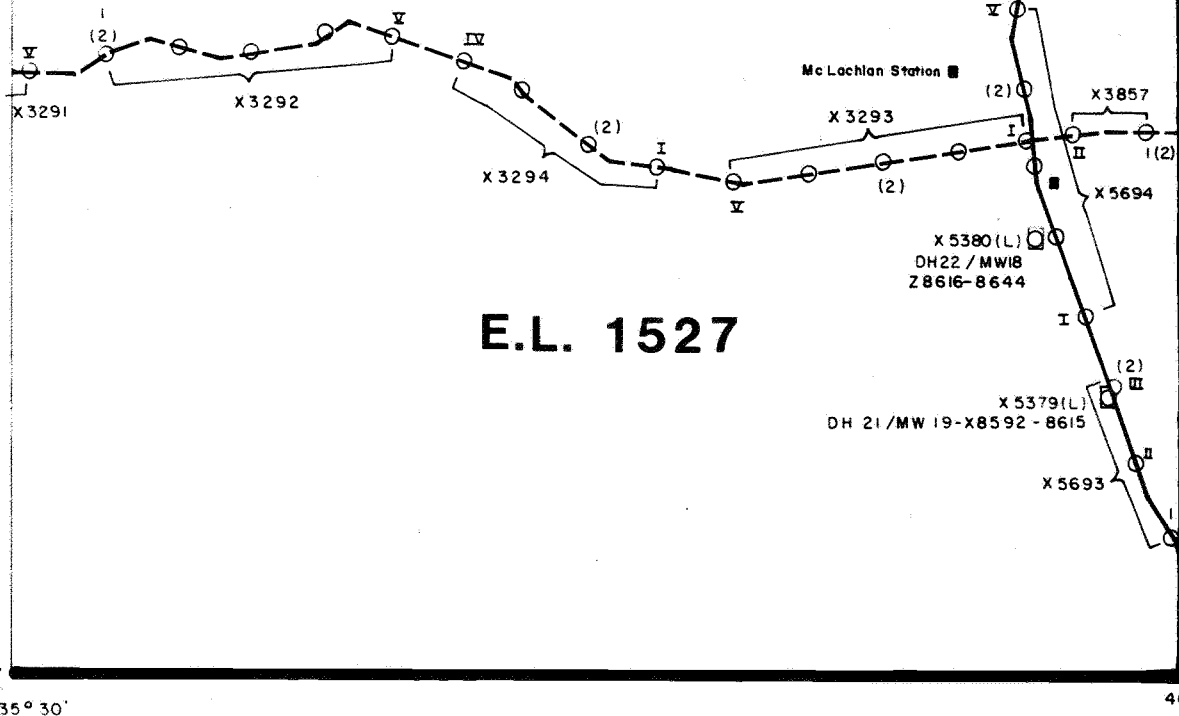


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|-------------------------------|-----------|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA | |
| 183-7 KIMBA | |
| DAMPER 1:100 000 | |
| CURRENT SAMPLING | |
| Compiled | 11/00 000 |
| Drawn | 11/00 000 |
| Date | 11/00 000 |
| Scale | 11/00 000 |
| Revised | 11/00 000 |
| CEL 3971 | |



| | |
|-------------------------------|-----------|
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| KIMBA 153-7 | |
| KOP1 1:100 000 | |
| CURRENT SAMPLING | |
| Compiled | HRR |
| Drawn | ADS |
| Date | NOV '90 |
| Scale | 1:100 000 |
| Revised | |
| SEL 3972 | |

MAP 4

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
NINTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JANUARY 1991

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
South Yarra Victoria 3141
Australia
Telephone (03) 241 7522
Telex Stodal AA39546
Fax (03) 240 0974

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
NINTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JANUARY 1991

Edited: F M GAUNT

Author/s: S D POTTER

Approved: H R ROBISON

Date: JANUARY 1991

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 2 Table Nos.: 2 Appendices: - Plates: -

Keywords: HEAVY MINERAL SAMPLES

Abstract: During this quarter the reconnaissance loam sampling
programme was completed and the results from this work
were received.

SADME, WHYALLA, IC

SDP61

Copy to:

Ref:

Circulate to:

CONTENTS

| | |
|---|-----------------------------|
| 1 | INTRODUCTION |
| 2 | FIELD WORK |
| | 2.1 Reconnaissance Sampling |
| 3 | RESULTS |
| 4 | FORWARD WORK PROGRAMME |
| 5 | STAFF |
| 6 | EXPENDITURE |

MAPS

| | | |
|---------|-------------------------|-----------|
| MAP 1 : | Locality Map EL1527 | 1:250,000 |
| MAP 2 : | Current Sampling Damper | 1:100,000 |

TABLES

| | |
|-----------|---------------------------------|
| TABLE 1 : | Reconnaissance Sampling Results |
| TABLE 2 : | Expenditure Report |

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MT WEDGE

NINTH QUARTERLY REPORT TO 11 JANUARY 1991

1 INTRODUCTION

Exploration Licence No. 1527 is located on the north western Eyre Peninsula about 2 kilometers south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

During this quarter 1 reconnaissance loam sample was collected and results from the sampling programme were received

2 FIELD WORK

2.1 Reconnaissance Sampling

The reconnaissance loam sampling initiated in the previous quarter was completed with the collection of one sample (X4995, Map 2). The sample consisted of 50 litres of $-1.0 + 0.3$ mm material.

3 RESULTS

Results for the reconnaissance sampling programme have been received and are displayed on Table 1.

4 FORWARD WORK PROGRAMME

A study of sample results and airborne magnetics will be performed in order to determine the next phase of exploration.

5 STAFF

Staff employed in the field programme were :

| | |
|------------------|---|
| Geologists | 1 |
| Field Assistants | 4 |

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the research/technical department and Head Office in Melbourne.

6 EXPENDITURE

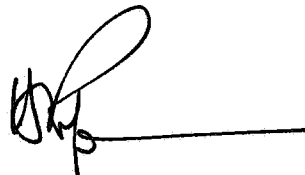
~~\$67,857~~ **\$63 877**

Expenditure of ~~\$ 67,857~~ has been allocated as shown in Table 2.



S. D. Potter

S D Potter
Staff Geologist
Whyalla



H R Robison
Chief Geologist South

Table 1 : Reconnaissance Sampling Results

| SAMPLE | RESULT |
|---------------|-------------------------|
| X3285 - X3287 | negative |
| X3288 | 1 kimberlitic garnet |
| X3289 | 2 kimberlitic garnets |
| X3290 - X3295 | negative |
| X3296 | 1 kimberlitic garnet |
| X3297 - X3298 | negative |
| X3299 | 1 kimberlitic garnet |
| X3300 | 1 kimberlitic garnet |
| X4995 - X4998 | negative |
| X4899 | 1 kimberlitic spinel |
| X5000 | negative |
| X5098 | negative |
| X5381 - X5385 | negative |
| X5386 | 3 kimberlitic garnets |
| X5387 - X5391 | negative |
| X5392 | 3 kimberlitic garnets |
| X5393 - X5400 | negative |
| X5692 | 2 kimberlitic ilmenites |
| X5693 - X5694 | negative |
| X5697 | 1 kimberlitic ilmenite |
| X5698 | 1 kimberlitic spinel |
| X5699 - X5700 | negative |
| X5877 - X5879 | negative |

Table 2 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 30 December 1990

| | |
|----------------------------|------------|
| | \$ |
| OPERATIONAL STAFF COSTS | 23 527 |
| GENERAL OPERATING EXPENSES | 1 258 |
| TRANSPORT AND TRAVEL | 2 725 |
| CONTRACTORS | 375 |
| CENTRAL TREATMENT PLANT | 11 409 |
| LABORATORY : | |
| TREATMENT | 920 |
| EXAMINATION | 1 783 |
| SPECIALIST SERVICES: | |
| COMPUTING | 66 |
| GEOPHYSICS | 2 858 |
| DRAFTING | 1 500 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 9 074 |
| HEAD OFFICE | 5 677 |
| CAPITAL UTILISATION | 2 705 |
| TOTAL THIS PERIOD | \$ 63 877 |
| TOTAL PREVIOUSLY REPORTED | 140 625 |
| TOTAL EXPENDITURE TO DATE | \$ 204 502 |
| | ===== |

33°10'

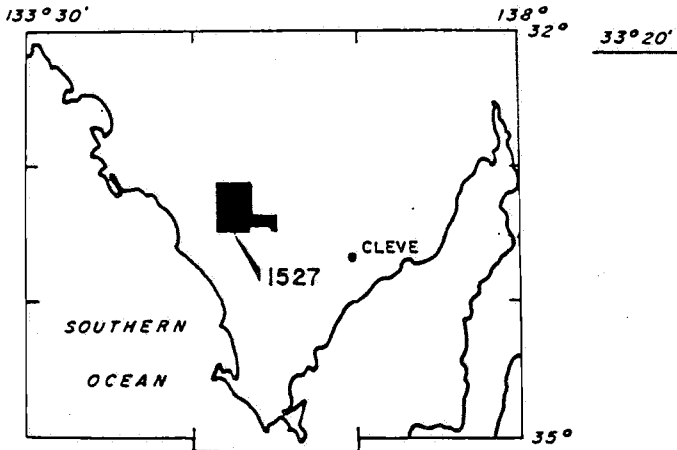
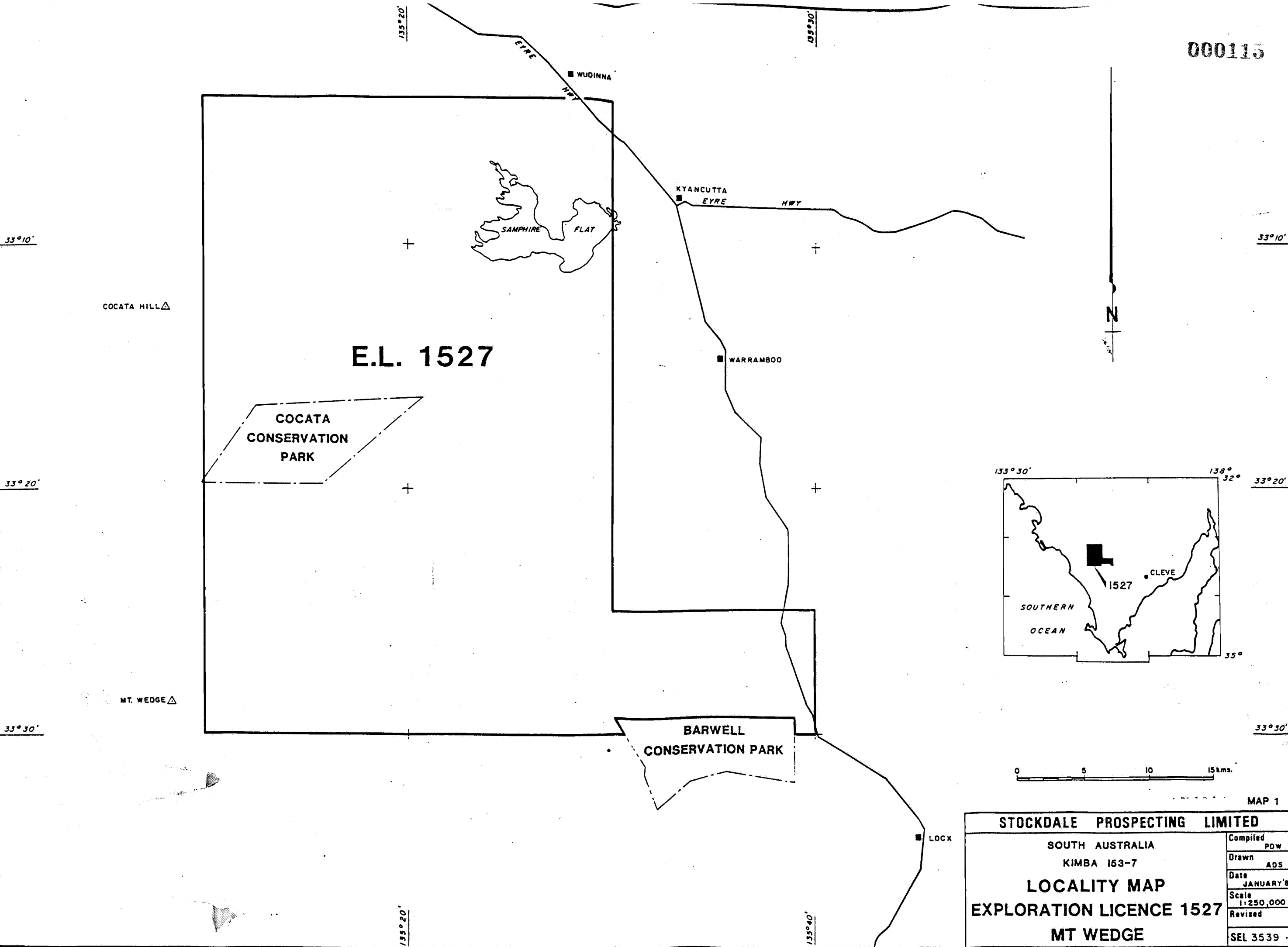
33°10'

33°20'

33°20'

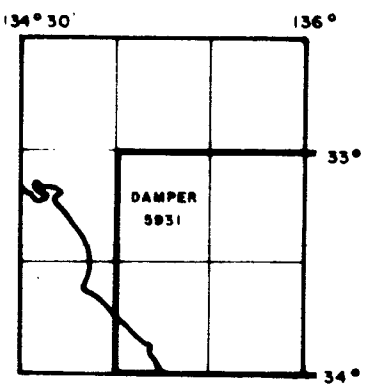
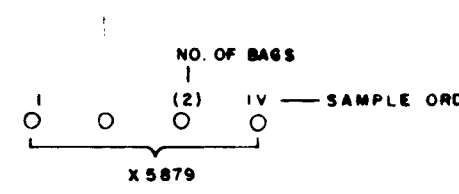
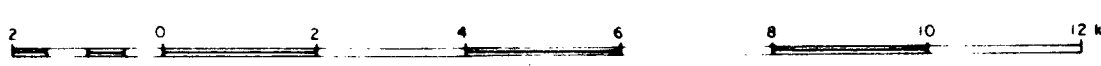
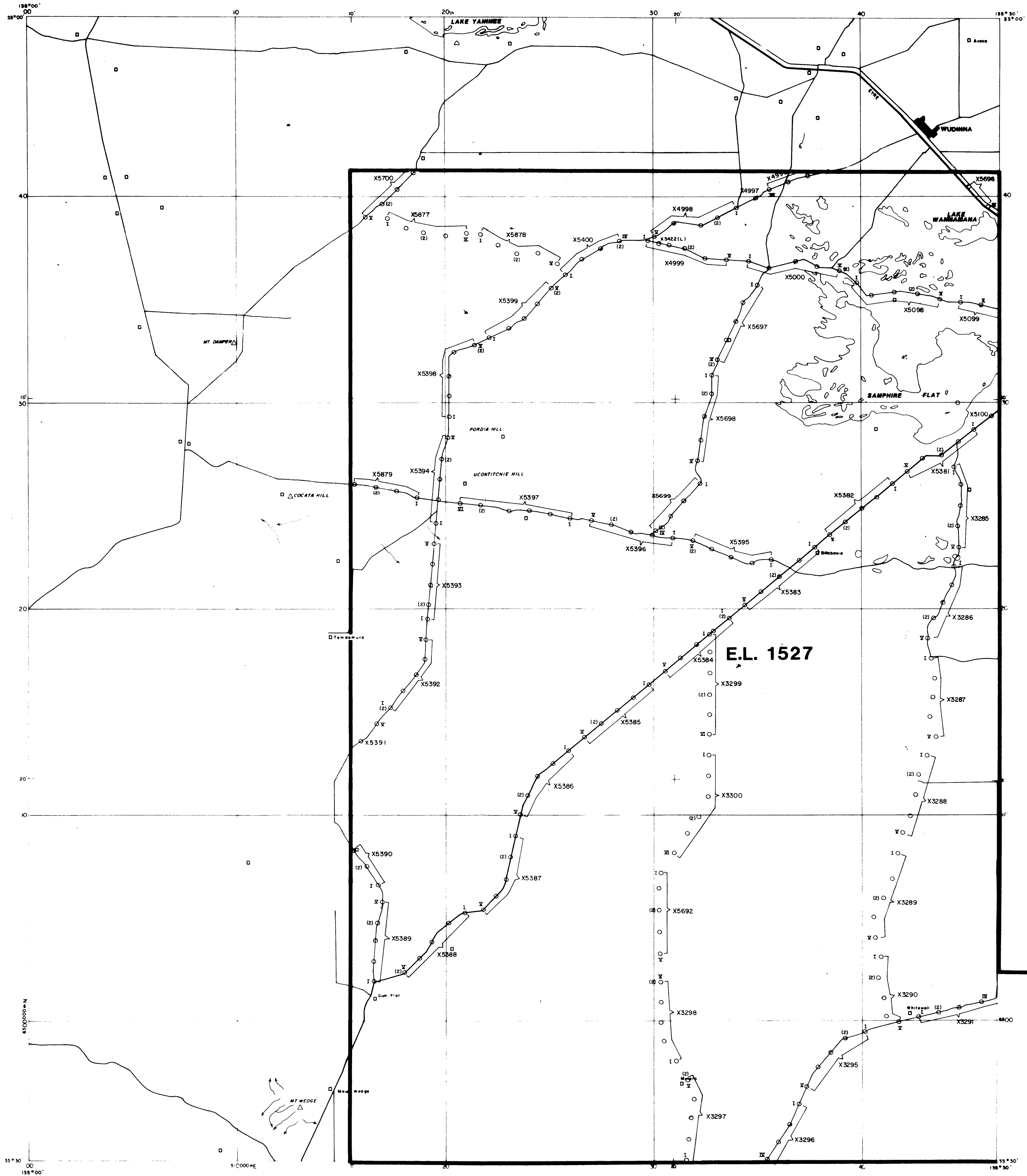
33°30'

33°30'



| STOCKDALE PROSPECTING LIMITED | |
|---|------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

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8087-2

| | |
|-------------------------------|-----------|
| STOCKDALE PROSPECTING LIMITED | |
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| 183-7 KIMBA | |
| DAMPER 1:100 000 | |
| CURRENT SAMPLING | |
| Compiled | 11/00 000 |
| Drawn | 11/00 000 |
| Date | 11/00 000 |
| Scale | 11/00 000 |
| Revised | 11/00 000 |
| CEL 3971 | |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
TENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 APRIL 1991



000117

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
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Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
TENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 APRIL 1991

.Edited: F M GAUNT

Author/s: M S MITCHELL

Approved: H R ROBISON

Date: APRIL 1991

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 3 Table Nos.: 2 Appendices: 2 Plates: -

Keywords: DRILLING, GEOCHEMISTRY.

Abstract: During this quarter eight ground magnetic targets were drilled. No recognisable kimberlitic type rocks were intersected. Geochemical results from the 1990 drilling programme were received, no kimberlitic signatures were observed.

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Ref: MSM34

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CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
 - 2.1 Drilling Programme
- 3 RESULTS
- 4 FORWARD WORK PROGRAMME
- 5 STAFF
- 6 EXPENDITURE

MAPS

- MAP 1 : Locality Map EL1527 1:250,000
- MAP 2 : Airborne Geophysical Interpretation 1:250,000
- MAP 3 : Current Sampling Drilling Location Map 1:100,000

TABLES

- TABLE 1 : Drilling Results
- TABLE 2 : Expenditure Report

APPENDICES

- APPENDIX 1 : 1990 Geochemical Results
- APPENDIX 2 : 1991 Drilling Logs

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NO 1527 : MT WEDGE

TENTH QUARTERLY REPORT TO 11 APRIL 1991

1 INTRODUCTION

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

During this quarter eight ground magnetic targets were drilled. A total of 15 holes were drilled to basement, except one which had to be abandoned; all holes failed to intersect any recognisable kimberlitic type rocks.

Geochemical results from the 1990 drilling programme were received during this quarter.

2 FIELD WORK

2.1 Drilling Programme

A total of 15 holes (838 metres) were drilled into 8 ground magnetic anomalies. The tenth hole (MW10) had to be abandoned due to unconsolidated Tertiary sands caving in the hole and jamming the drill rods. Only two of the magnetic anomalies were explained MW04 and MW20, the magnetic sources for the remainder of the anomalies were not explained and probably lie within the basement.

Drill chip samples were collected every 2 metres and will be treated and examined for kimberlitic indicators. Geochemical samples were taken from the bottom of the hole and will be analysed for a kimberlitic suite of elements.

Drilling details are listed on Table 1.

3 RESULTS

Results from the bottom of the hole geochemical samples from the 1990 drilling programme became available and are listed in Appendix 1. No kimberlitic signatures were observed.

All results from the 1991 drilling are outstanding for this quarter.

4 FORWARD WORK PROGRAMME

The remaining 10 airborne magnetic anomalies MW02, 06, 08, 09, 11, 14, 17, 21, MH116 and MH118 are to be ground magnetically surveyed and evaluated for drilling. (Locations on Map 2).

5 STAFF

Staff employed in the field programme were :

| | |
|------------------|---|
| Geologists | 1 |
| Field Assistants | 4 |

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the Research/Technical department and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$41,775 has been allocated as shown in Table 2.



M S Mitchell
Senior Geologist
Whyalla



H R Robison
Chief Geologist-South

Table 1 : Drilling Results

| DRILL HOLE | DRILL PRIORITY | ANOMALY | EST. DEPTH | BASEMENT DEPTH | BASEMENT | SUSCEPT. ($\times 10^{-5} \text{SI}$) |
|---------------|-------------------|---------|---------------|-------------------|--------------|--|
| 1 | 3 | MW01 | 50m | 36m | Granite | 21 |
| 2 | 3 | MW01 | 50m | 32m | Granite | 17 |
| 3 | - | MW04 | 100m | 36+1m* | Granodiorite | 400 |
| 4 | 2 | MW03 | 100m | 58m | Granite | 5 |
| 5 | 2 | MW03 | 100m | 44m | Granite | 9 |
| 6 | - | MW20 | 120m | 66m | Metasediment | 2050 |
| 7 | - | MW20 | 120m | 80m | Granite | 37 (78@74m) |
| 8 | - | MW20 | 120m | 66m | Granite | 38 |
| 9 | 3 | MW05 | 100m | 42m | Gneiss | 12 |
| 10 | 3 | MW10 | 90m | 42m | Abandoned | 2 |
| 11 | 2 | MW13 | 70m | 80m | Gneiss | 17 |
| 12 | 2 | MW13 | 70m | 101m | Gneiss | 13 |
| 13 | 2 | MW13 | 70m | 57m | Gneiss | 6 |
| 14 | 3 | MW16 | 50m | 50+1m* | Gneiss | 60 |
| 15 | 3 | MW16 | 50m | 46m | Gneiss | 28 |

* Basement cored

Table 2 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 March 1991

| | \$ |
|----------------------------|------------|
| OPERATIONAL STAFF COSTS | 12 672 |
| GENERAL OPERATING EXPENSES | 1 796 |
| TRANSPORT AND TRAVEL | 1 044 |
| CONTRACTORS : DRILLING | 17 193 |
| LABORATORY : TREATMENT | 40 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 3 957 |
| HEAD OFFICE | 3 438 |
| CAPITAL UTILISATION | 1 635 |
| | ----- |
| TOTAL THIS PERIOD | \$ 41 775 |
| TOTAL PREVIOUSLY REPORTED | 204 502 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 246 277 |
| | ===== |

APPENDIX 1
1990 Geochemical Results

MW19

MW18

| ANALYSIS NO. | 5/1 | 6/2 | 7/3 | 8/4 | 9/5 | 10/6 | 11/7 | 12/8 | 13/9 | 14/10 | 15/11 | 16/12 | 17/13 | 18/14 | 19/15 | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| B.O.N.O. | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | 510791 | |
| SAMPLE- NUMBER | CS | GS | PR | Z | Z | Z | Z | Z | Z | 7 | 7 | 7 | 7 | Z | 7 | |
| | 390 | 769 | 453 | 8509 | 8610 | 8611 | 8612 | 8613 | 8614 | 8615 | 8619 | 8640 | 8641 | 8642 | 8643 | |
| Ni | g/l | 120 | 20E | 24 | 19 | 10 | 18 | 19 | 22 | 9 | 17 | 0 | 0 | 7 | 28 | 14 |
| Cu | g/l | 106 | 344C | 71 | 10 | 10 | 0 | 8 | 4 | 12 | 39 | 6 | 1 | 0 | 10 | 36 |
| Zn | g/l | 53 | 2441C | 80 | 86 | 58 | 49 | 119 | 72 | 33 | 127 | 18A | 104 | 82 | 28H | 26A |
| Pb | g/l | 13 | 160 | 8 | 3 | 12 | 10 | 7 | 8 | 11 | 4 | 9 | 22 | 30 | 32 | 6 |
| Cd | g/l | 42 | 14E | 8 | 3 | 2 | 2 | 6 | 1 | 7 | 1 | 2 | 2 | 4 | 5 | 25B |
| Mo | g/l | 14 | 4 | 5 | 7 | 6 | 8 | 7 | 8 | 9 | 8 | 5 | 5 | 7 | 5 | 9 |
| S | Z | 0.0T | 0.0 | 0.0 | 0.1T | 0.1 | 0.1T | 0.1 | 0.1 | 0.1T | 0.1 | 0.3T | 0.3 | 0.1 | 0.2 | 0.2 |
| As | g/l | 61 | 80 | 12 | 8 | 17 | 11 | 11 | 11 | 6 | 12 | 10 | 12 | 7 | 7 | 12 |
| Se | g/l | 8 | 3 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 |
| Sb | g/l | 6 | 21 | 16 | 1 | 10 | 5 | 1 | 1 | 6 | 3 | 10 | 8 | 1 | 9 | 24 |
| Bi | g/l | 17 | 8 | 5 | 1 | 6 | 0 | 3 | 2 | 2 | 4 | 7 | 5 | 5 | 4 | 7 |
| Fe | Z | 9.0T | 4.8 | 1.4 | 10.4T | 1.9 | 10.0T | 5.0 | 8.4 | 12.2T | 2.6 | 1.1T | 1.2 | 1.1 | 3.0 | 25.9 |
| Mn | Z | 1.5T | 1.1 | 0.8 | 1.8T | 0.8 | 1.9T | 1.4 | 1.9 | 1.9T | 1.7 | 0.4T | 0.5 | 0.6 | 2.0 | 5.1 |
| Cr | Z | 0.2T | 0.2 | 0.2 | 0.2T | 0.2 | 0.2T | 0.2 | 0.2 | 0.2T | 0.2 | 0.1T | 0.1 | 0.2 | 0.2 | 0.7 |
| TiO2 | Z | 1.2T | 0.3 | 0.9 | 0.6T | 0.5 | 0.6T | 0.6 | 0.6 | 0.6T | 0.5 | 0.5T | 0.3 | 0.3 | 0.6 | 0.6 |
| V2O5 | Z | 0.3T | 0.3 | 0.3 | 0.3T | 0.3 | 0.3T | 0.4 | 0.3 | 0.3T | 0.3 | 0.3T | 0.3 | 0.3 | 0.3 | 0.4 |
| Sr | g/l | 46 | 28 | 25R | 93 | 254 | 95 | 13R | 99 | 81 | 98 | 18 | 40 | 63 | 52 | 22 |
| Ba | g/l | 206 | 458 | 1238C | 1196C | 1247C | 1361C | 1267C | 1224C | 1107C | 1144C | 158 | 305 | 541 | 330 | 528 |
| U3O8 | g/l | 1 | 8 | 12 | 14 | 16 | 10 | 11 | 13 | 15 | 12 | 11 | 10 | 12 | 20 | 14 |
| ThO2 | g/l | 28 | 19 | 1 | 5 | 4 | 9 | 2 | 4 | 7 | 2 | 8 | 7 | 2 | 3 | 28 |
| U/Th | | 0.4 | 11.3 | - | 3.6 | - | - | - | - | - | - | - | - | 4.8 | - | - |
| Sn | g/l | 29 | 3 | 28 | 19 | 24 | 18 | 21 | 14 | 19 | 25 | 32 | 27 | 30 | 23 | 31 |
| WOL | g/l | 3 | 60E | 4 | 7 | 8 | 5 | 0 | 4 | 4 | 5 | 13 | 9 | 7 | 10 | 13 |
| Ta2O5 | g/l | 17 | 67F | 7 | 32 | 0 | 26 | 13 | 25 | 32 | 23 | 1 | 5 | 3 | 11 | 68 |
| Mo2O5 | g/l | 0 | 20 | 20 | 8 | 6 | 9 | 9 | 11 | 4 | 5 | 11 | 2 | 2 | 10 | 2 |
| Zr | g/l | 53 | 188 | 246 | 27 | 104 | 97 | 112 | 28 | 21 | 98 | 118 | 42 | 49 | 98 | 36 |
| Rb | g/l | 29 | 76 | 114 | 170 | 136 | 181 | 181 | 188 | 152 | 165 | 83 | 157 | 199 | 155 | 39 |
| Y | g/l | 35 | 86 | 37 | 23 | 23 | 21 | 23 | 23 | 49 | 24 | 11 | 9 | 14 | 21 | 13 |
| P2O5 | Z | 0.4T | 0.2 | 0.5 | 0.3T | 0.5 | 0.2T | 0.5 | 0.3 | 0.2T | 0.6 | 1.0T | 0.6 | 0.6 | 0.1 | 0.2 |
| K | Z | 0.7T | 2.5 | 2.4 | 3.0T | 1.7 | 3.2T | 1.7 | 1.4 | 3.0T | 1.4 | 2.6T | 5.3 | 5.7 | 3.7 | 0.8 |
| Ca | Z | 2.0T | 1.9 | 2.5 | 0.4T | 0.4 | 0.5T | 0.6 | 0.5 | 0.4T | 0.5 | 0.3T | 0.2 | 0.3 | 1.0 | 2.1 |
| Te | g/l | 55 | 20 | 35 | 19 | 41 | 23 | 28 | 23 | 27 | 38 | 56 | 43 | 40 | 38 | 52 |
| F | Z | 0.0T | 0.0 | 0.0 | 0.0T | 0.0 | 0.0T | 0.0 | 0.0 | 0.0T | 0.0 | 0.0T | 0.0 | 0.0 | 0.0 | 0.0 |
| SiO2 | Z | 52.2T | 74.7 | 67.3 | 49.9T | 74.8 | 50.4T | 63.7 | 38.6 | 50.5T | 59.4 | 94.8T | 87.8 | 77.0 | 75.2 | 30.8 |
| Al2O3 | Z | 12.6T | 12.0 | 12.1 | 10.7T | 12.4 | 11.1T | 11.9 | 11.8 | 10.6T | 11.5 | 11.2T | 11.8 | 12.0 | 12.6 | 8.1 |
| Hg | Z | 1.1T | 0.1 | 0.5 | 0.4T | 0.0 | 0.3T | 0.2 | 0.3 | 0.4T | 0.2 | 0.0T | 0.0 | 0.0 | 0.1 | 0.8 |
| Na | Z | 0.0T | 0.0 | 0.0 | 0.0T | 0.0 | 0.0T | 0.0 | 0.0 | 0.0T | 0.0 | 0.0T | 0.0 | 0.0 | 0.0 | 0.0 |

NOTE 1:

CAUTION - Results are reported to a one standard deviation detection limit.
 N.D. = Not Determined. Elements marked "Z" MAY be inaccurate if an undetermined element is present.
 C = Result exceeds calibration limit & MAY have enhanced elements marked F. Only serious if warning is printed above.
 T = Bad major elements total (<90% >110% - - - - -). Refers to column marked Z. Only relevant if all values determined.
 L = May be inaccurate due to low sample mass.

000124

MW18

| | | |
|-------------------|-----------|-----------|
| ANALYSIS NO. | 20/1 | 21/15 |
| S.O. NO. | 530751 | 530751 |
| SAMPLE- NUMBER | CS 390 | Z 8443 |
| Ni g/l | 119 | 17 |
| Cu g/l | 197 | -37 |
| Zn g/l | 56 | 259 |
| Pb g/l | -17 | 4 |
| Cr g/l | 42 | -256 |
| Mo g/l | -13 | -9 |
| S % | 0.01 | 0.2 |
| As g/l | 64 | -12 |
| Se g/l | -7 | -4 |
| Sb g/l | -19 | 27 |
| Bi g/l | -18 | -8 |
| Fe % | 8.91 | 25.7 |
| Mn % | 1.51 | 5.3 |
| Cr % | 0.21 | 0.7 |
| TiO2 % | 1.21 | 0.6 |
| V2O5 % | 0.31 | 0.4 |
| Sr g/l | 46 | 21 |
| Ba g/l | 200 | 534 |
| U3O8 g/l | -4 | 21 |
| ThO2 g/l | -26 | -30 |
| U/Th | - | - |
| Sn g/l | -33 | -38 |
| WO3 g/l | 3 | -6 |
| Te2O5 g/l | -17 | -70 |
| Mo2O5 g/l | 1 | 0 |
| Zr g/l | 54 | 35 |
| Rb g/l | 28 | 40 |
| Y g/l | 35 | 13 |
| P2O5 % | -0.41 | 0.1 |
| K % | 0.71 | 0.8 |
| Ca % | 2.01 | 2.2 |
| Te g/l | -38 | -54 |
| F % | 0.01 | 0.0 |
| SiO2 % | 51.41 | 32.8 |
| Al2O3 % | 12.31 | 8.7 |
| Hg % | 1.21 | 0.8 |
| Na % | 0.01 | 0.0 |

NOTE 1

CAUTION - Results are reported to a one standard deviation detection limit.

N.D. = Not Determined; Elements marked "Z" MAY be inaccurate if an undetermined element is present.

C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.

T = Red major elements total (<20% >110% as guides). Refers to columns marked Z. Only relevant if all majors determined.

L = May be inaccurate due to low sample mass.

000123

APPENDIX 2

1991 Drilling Logs

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PAGE 1/2

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: PALABIE ANOM: MW 1 DH NO. 1
 DC: LE HUNTE SECTION: 9 HUNDREDTH: PALABIE OWNER: D SIMPSON
 CO-ORDS: 5050E 5120N DECLIN: AZIMUTH: V RL: DH TYPE: MUD
 DATE ST: 8/2/91 DATE FN: 8.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 36M CORING TO: CORING TO: EOH: 36m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
|----------|-------|--|---------|---------------------------|------------------------|
| 0 - 2 | Q ph. | Q ₂ SAND CALCARENITE | Z7918 | 0.30 3.37 | SURFACE 0.46 - 0.56 |
| 4 | | " " | 19 | 0.33 0.67 | |
| 6 | | " " | 20 | 0.38 0.50 | |
| 8 | | RED OCHRE CLAYS + CALCARENITE + Q ₂ SAND | 21 | 0.28 0.40 | |
| 8 - 10 | | GREY CLAY " " | 22 | 0.14 0.15 | |
| 12 | | " " | 23 | 0.11 0.17 | |
| 14 | CLAYS | CREAM GREY CLAY + Q ₂ SAND | 24 | 0.13 0.14 | |
| 16 | | " " | 25 | 0.10 0.12 | |
| 18 | Top | GREEN GREY CLAY MINOR Q ₂ | 26 | 0.07 0.08 | |
| 18 - 20 | | " " | 27 | 0.05 0.06 | |
| 22 | | d. OLIVE CLAYS + MICA | 28 | 0.05 0.08 | |
| 24 | | BROWN - CREAM - GREEN CLAY | 29 | 0.04 0.05 | |
| 26 | | m. - c. ANG. Q ₂ d. green CLAYS | Z7930 | 0.06 0.05 | |
| 28 | | ↓ | 31 | 0.04 0.05 | |

SCALE:

GEOLOGIST: MSM

DATE: 8/2/91

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

[illegible]

STOCKDALE PROSPECTING LIMITED

PAGE 1/2

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: PACABIE ANOM: MW 1 DH NO. 2
 DC: LE HUNTE SECTION: 9 HUNDREDTH: PACABIE OWNER: SIMPSON
 CO-ORDS: 5050 E / 4950 N DECLIN: AZIMUTH: RL: DH TYPE: MUD
 DATE ST: 8.2.91 DATE FN: 8.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 32m CORING TO: CORING TO: EOH: 32m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻⁷ | COMMENTS/ RECOVERY |
|----------|-----------------|--|---------|---------------------------|------------------------|
| 0 - 2 | Q _{pb} | CALCARENITE + Q ₂ SAND | Z7936 | 0.21 0.26 | 0.55 - 0.68 SURFACE |
| 4 | | " " | 37 | 0.10 0.13 | |
| 6 | | " " | 38 | 0.13 0.16 | |
| 8 | | " " | 39 | 0.11 0.14 | |
| 8 - 10 | | CREAM GREY CLAYS " " | Z7940 | 0.06 0.07 | |
| 12 | | RED FAWN CLAYS + " " | 41 | 0.06 | TOGETHER |
| 14 | | ↓ | 42 | 0.08 0.14 | |
| 16 | T _p | REDSANDY CLAY + GREEN CREAM CLAY | 43 | 0.08 0.09 | |
| 18 | | CREAM GREY CLAY + MINOR Q ₂ | 43 | 0.04 0.08 | |
| 18 - 20 | | " | 44 | 0.07 0.09 | |
| 22 | | BROWN GREY CLAY + Q ₂ | 45 | 0.08 0.09 | |
| 24 | | d. OLIVE CLAY | 46 | 0.04 | |
| 26 | | " | 47 | 0.02 0.04 | |
| 28 | | CLEAN m-c gr. SANDS WELL - SUBROUNDED | 48 | 0.00 0.03 | |

SCALE:

GEOLOGIST: MSM

DATE: 8/2/91

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

[illegible]

STOCKDALE PROSPECTING LIMITED

PAGE 1 / 2

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: PALABIE ANOM: MW4 DH NO. 3

DC: LE HUNTE SECTION: 25 HUNDREDTH: KAPPAK~~000~~ OWNER: A. WINTER

CO-ORDS: 5000E 4980N DECLn: AZIMUTH: V RL: DH TYPE: MUD

DATE ST: 8.2.91 DATE FN: 8.2.91 DRILLED BY: THOMPSON RIG: 6

NON CORING TO: 36m CORING TO: CORING TO: 37m EOH: 37m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ³ | COMMENTS/ RECOVERY |
|----------|-----------------|---------------------------------------|---------|--------------------------|-----------------------|
| 0 - 2 | Q _{pb} | BROWN CALC. SANDS + CHIPS. | Z7951 | 0.32 0.41 | 0.57-0.62 SURFACE |
| 4 | | " + CLAY | 52 | 0.19 0.26 | |
| 6 | | CALCRETE + OCHRE CLAY + GZ SANDS | 53 | 0.05 0.06 | |
| 8 | | | 54 | 0.04 0.05 | |
| 8 - 10 | | | 55 | 0.06 | |
| 12 | | | 56 | 0.06 0.07 | |
| 14 | | | 57 | 0.03 0.07 | |
| 16 | T _p | f. grey SANDS + CALC. | 58 | 0.01 0.03 | |
| 18 | | | 59 | 0.02 0.04 | |
| 18 - 20 | | " + OCHRE CLAY | Z7960 | 0.03 0.05 | |
| 22 | | GREY SANDS + R. CLAY + CARB. SILT. | 61 | 0.04 0.05 | |
| 24 | | | 62 | 0.02 0.04 | |
| 26 | | | 63 | 0.03 0.04 | |
| 28 | | | 64 | 0.01 | |

SCALE:

GEOLOGIST: MSM

DATE: 8/2/91

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| | | | | | |
|-------------------|----------|-------------|------------|---------------------|--|
| 1:100,000 SHEET : | | AREA: | | ANOM: MW/4 DH NO. 3 | |
| DC: | SECTION: | HUNDREDTH: | OWNER: | | |
| CO-ORDS: | DECLIN: | AZIMUTH: | RL: | DH TYPE: | |
| DATE ST: | DATE FN: | DRILLED BY: | RIG: | | |
| NON CORING TO: | | CORING TO: | CORING TO: | EOH: 37m | |

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC <small>X10⁻³</small> | COMMENTS/ RECOVERY |
|----------|--------|--|---------|---|-----------------------|
| 28-30 | | f. Q ₂ SANDS + p. tawn clay s | Z7865 | 0.05 0.06 | |
| 32 | | " " + GREY/ BLUE CLAY | 66 | 0.02 0.04 | |
| 34 | | c. gr. Q ₂ + CARB. MATTER + CLAY | 67 | 0.04 0.05 | |
| 36 | | BLUE GREEN CLAY - f. gr. Q ₂ + BIOTITE. | 68 | 0.07 0.14 | |
| 37 | Aps.m? | GRANODIORITE ? | BMO161 | 56 | BIT CORED |
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| SCALE: | GEOLOGIST: | DATE: |
|--------|------------|-------|

STOCKDALE PROSPECTING LIMITED

PAGE 1/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: PALABIE ANOM: MW3 DH NO. 4
 DC: LE HUNTE SECTION: 32 HUNDREDTH: KAPPAKOO OWNER: P. VANDERHUCMT
 CO-ORDS: 5350E 5090N DECLIN: AZIMUTH: ✓ RL: DH TYPE: MUD
 DATE ST: 9/2/91 DATE FN: 9.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 55m CORING TO: CORING TO: EOH: 58

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ⁻³ | COMMENTS/ RECOVERY |
|----------|-------------------|---|---------|---------------------------|------------------------|
| 0 - 2 | Qpb | m-f Q2 SAND + CALCARENITE | Z7969 | 0.15 0.20 | 0.27 - 0.30 SURFACE |
| 4 | | ↓ | 70 | 0.10 0.14 | |
| 6 | | ↓ + FAWN CLAYS | 71 | 0.11 0.17 | |
| 8 | | " " | 72 | 0.06 0.07 | |
| 8 - 10 | | " + GREEN CLAY | 73 | 0.13 | |
| 12 | | " " | 74 | 0.07 0.12 | |
| 14 | T ₁ pb | + Q2 SAND | 75 | 0.04 0.08 | |
| 16 | | | 76 | 0.07 0.09 | |
| 18 | | GREEN CLAYS + f. Q2 SANDS | 77 | 0.05 0.06 | |
| 18 - 20 | | CARBON. MUD. + GREEN CLAYS + f Q2 SAND. | 78 | 0.03 | |
| 22 | | ↓ | 79 | 0.03 0.04 | |
| 24 | | | 80 | 0.05 | |
| 26 | | YELLOW SILTSTONE + C. MUDS. | 81 | 0.04 0.10 | |
| 28 | | ↓ | 82 | 0.05 0.09 | |

SCALE:

GEOLOGIST: JMSM

DATE: 9/2/91

STOCKDALE PROSPECTING LIMITED

PAGE 2/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | ANOM: MW3 | DH NO. 4 | |
|-------------------|----------|--|------------|--------------|-------------------|
| DC: | SECTION: | HUNDREDTH: | OWNER: | | |
| CO-ORDS: | DECLIN: | AZIMUTH: | RL: | DH TYPE: | |
| DATE ST: | DATE FN: | DRILLED BY: | RIG: | | |
| NON CORING TO: | | CORING TO: | CORING TO: | EOH: 58 m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC | COMMENTS/RECOVERY |
| 28 - 30 | | ↓ | Z7983 | 0.06 0.07 | |
| 32 | | | 84 | 0.05 0.11 | |
| 34 | | f. Q ₂ SAND | 85 | 0.02 0.04 | |
| 36 | | ↓ | 86 | 0.03 0.04 | |
| 38 | | | 87 | 0.07 | |
| 38 - 40 | | CREAM GREEN CLAY + CAR. SANDS. | 88 | 0.03 0.04 | |
| 42 | | " | 89 | 0.04 0.05 | |
| 44 | | d. OLIVE CLAY + SMALL MAFIC CHIPS. | 90 | 0.04 0.06 | |
| 46 | Tep | BLACK CARB CLAY + MINOR GREEN CLAY + Q ₂ SANDS. | 91 | 0.04 0.05 | |
| 48 | | KAOLINITIC CLAY + CAR. MUD | 92 | 0.06 0.10 | |
| 48 - 50 | | M. Q ₂ SAND + → " | 93 | 0.04 0.05 | |
| 52 | | BLACK CAR. CLAY + Q ₂ MINOR KAOLIN | 94 | 0.05 0.06 | |
| 54 | | ↓ | 95 | 0.05 0.04 | |
| 56 | | KAOLIN CLAYS + M. G. Q ₂ SANDS | 96 | 0.04 0.06 | |
| SCALE: | | GEOLOGIST: | DATE: | | |

STOCKDALE PROSPECTING LIMITED

PROJECT :

DRILLHOLE LOG SUMMARY SHEET

[illegible]

STOCKDALE PROSPECTING LIMITED

PAGE 1/2

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: PACABIE ANOM: MW3 DH NO. 5

DC: Le Hunte SECTION: 31/32 HUNDREDTH: KAPPAKLOON OWNER: P. VANDERHUCHT

CO-ORDS: 5000E 5010N DECLIN: AZIMUTH: ✓ RL: DH TYPE: MUD

DATE ST: 9.2.91 DATE FN: 9.2.91 DRILLED BY: THOMPSON RIG: 6

NON CORING TO: 44m CORING TO: CORING TO: EOH: 44m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ⁻³ | COMMENTS/ RECOVERY |
|----------|-------|---|---------|---------------------------|------------------------|
| 0 - 2 | QPD | CALCARENITE + Q ₂ SANDS | Z7998 | 0.17 0.19 | 0.71 - 0.81 SURFACE |
| 4 | | " + FAWN CLAYS | 99 | 0.03 0.10 | |
| 6 | | | Z8000 | 0.07 0.15 | |
| 8 | | | 01 | 0.06 0.09 | |
| 8 - 10 | | " + RED BROWN CLAYS | 02 | 0.08 0.10 | |
| 12 | | " " + GREY CLAYS | 03 | 0.10 0.24 | |
| 14 | | | 04 | 0.09 0.12 | |
| 16 | | | 05 | 0.10 0.11 | |
| 18 | | | 06 | 0.08 | |
| 18 - 20 | Tep | CAR. MUD + CALCARETE + GREY OCHRE CLAYS. | 07 | 0.07 0.09 | |
| 22 | | | 08 | 0.04 0.05 | |
| 24 | | | 09 | 0.05 0.06 | |
| 26 | | | 10 | 0.01 0.04 | |
| 28 | | f. Q ₂ SAND + CREAM CLAY + CAR. MUD. | 11 | 0.02 0.03 | |

SCALE:

GEOLOGIST: M/SY

DATE: 7/2/91

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

| | | | | | |
|-------------------|------------|-------------|------------|----------|----------|
| 1:100,000 SHEET : | | AREA: | ANOM: MW 3 | | DH NO. 5 |
| DC: | SECTION: | HUNDREDTH: | OWNER: | | |
| CO-ORDS: | DECLIN: | AZIMUTH: | RL: | DH TYPE: | |
| DATE ST: | DATE FN: | DRILLED BY: | RIG: | | |
| NON CORING TO: | CORING TO: | CORING TO: | EOH: 44m | | |

[illegible]

STOCKDALE PROSPECTING LIMITED

PAGE 1/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW20 DH NO. 6
 DC: LE HUNTE SECTION: 4 HUNDREDTH: KAPPA OWNER: D. SAMPSON
 CO-ORDS: 5000E 4940N DECLIN: AZIMUTH: ✓ RL: - DH TYPE: MUD
 DATE ST: 9.2.91 DATE FN: 9.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 66m CORING TO: CORING TO: EOH: 66m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
|----------|-----------------|--|---------|---------------------------|-----------------------|
| 0 - 2 | Qph. | CALCARENITE + f. RED SANDS | Z7720 | 0.12 0.15 | 0.06-0.11 SURFACE |
| 4 | | FAWN SILTS + CLAYS + CALC. | 21 | 0.14 0.50 | |
| 6 | | REDBROWN CLAY + Q ₂ + " | 22 | 0.20 0.41 | |
| 8 | | " + " | 23 | 0.31 0.39 | |
| 8 - 10 | | " Q ₂ " | 24 | 0.22 0.23 | |
| 12 | T _p | WHITE SS + FAWN SILTS | 25 | 0.16 0.17 | |
| 14 | T _p | WHITE + RED SS + f. Q ₂ SAND. | 26 | 0.03 0.04 | |
| 16 | | SS " " | 27 | 0.06 | |
| 18 | | " " | 28 | 0.05 | |
| 18 - 20 | | " " | 29 | 0.03 0.06 | |
| 22 | T _{ep} | CARB. MUD + " | 30 | 0.03 | |
| 24 | | " | 31 | 0.03 0.02 | |
| 26 | | " | 32 | 0.01 | |
| 28 | | LIGNITE + " | 33 | 0.00 0.01 | |

SCALE:

GEOLOGIST: M.S.M

DATE: 9/2/91

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW20 DH NO. 6 | |
|-------------------|-------|--|---------|---------------------|-----------------------|
| DC: | | SECTION: | | HUNDREDTH: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | |
| | | | | EOH: 66m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC 40-3 | COMMENTS/ RECOVERY |
| 28 - 30 | | LIGNITE + V.f. Q ₂ SANDS | Z7734 | 0.00 0.01 | |
| 32 | | " | 35 | 0.02 0.03 | |
| 34 | | " | 36 | 0.01 0.02 | |
| 36 | | " | 37 | 0.02 0.08 | |
| 38 | | " | 38 | 0.01 | |
| 38 - 40 | | " | 39 | 0.02 0.03 | |
| 42 | | " + SILVER GREY CLAY | 40 | 0.06 0.08 | |
| 44 | | " | 41 | 0.03 0.07 | |
| 46 | | BLUE GREY MICA CLAY CARB MUD + V.f. Q ₂ SAND | 42 | 0.05 | |
| 48 | | " | 43 | 0.07 0.08 | |
| 48 - 50 | | " | 44 | 0.05 0.07 | |
| 52 | | " | 45 | 0.08 0.12 | |
| 54 | | f. Q ₂ SAND + SILVER BLUE CLAY | 46 | 0.17 0.26 | |
| 56 | | " | 47 | - | |
| SCALE: | | GEOLOGIST: | | DATE: | |

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

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STOCKDALE PROSPECTING LIMITED

PAGE 1/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

| 1:100,000 SHEET : DAMPER | | AREA: COCATA | ANOM: MW20 | DH NO. 7 | |
|--------------------------|-----------------|--|------------------|---------------------------|------------------------|
| DC: LE HUNTE | | SECTION: 4 | HUNDREDTH: KAPPA | OWNER: D SAMPSON | |
| CO-ORDS: 5000E 5000N | | DECLIN: | AZIMUTH: ✓ | RL: | DH TYPE: MUD |
| DATE ST: 9/2/91 | | DATE FN: 9/2/91 | | DRILLED BY: THOMPSON | |
| NON CORING TO: 50m | | CORING TO: | CORING TO: | EOH: 80m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
| 0 - 2 | Q _{pb} | CALCARENITE | ZT153 | 0.32 | 0.48 - 0.56 SURFACE |
| 4 | | FAUN CLAYS + " | 54 | 0.14 0.19 | |
| 6 | | " " | 55 | 0.42 0.47 | |
| 8 | | RED SS CHIPS CALCRETE + MINOR CLAYS | 56 | 0.11 0.16 | |
| 8 - 10 | | ↓ | 57 | 0.08 0.14 | |
| 12 | | CALC. SANDS + MINOR CLAYS | 58 | 0.12 0.17 | |
| 14 | T _p | RED + WHITE SS CHIPS + Q ₂ + " | 59 | 0.07 0.08 | |
| 16 | | Fe. SS + CLEAN WHITE SS + f. Q ₂ SAND | 60 | 0.05 0.12 | |
| 18 | | ↓ | 61 | 0.05 0.07 | |
| 18 - 20 | | ↓ | 62 | 0.08 0.09 | |
| 22 | | ↓ | 63 | 0.03 0.04 | |
| 24 | T _{ep} | CARB SANDS + CLEAN Q ₂ SANDS | 64 | 0.03 0.08 | |
| 26 | | LIGNITE + f Q ₂ SANDS | 65 | 0.01 0.03 | |
| 28 | | ↓ | 66 | 0.02 0.06 | |
| SCALE: | | GEOLOGIST: JMM | DATE: 09/2/91 | | |

STOCKDALE PROSPECTING LIMITED

PAGE 2/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MWZO DH NO. 7 | | |
|-------------------|-------|------------------------------------|---|---------------------|-----------------------|--|
| DC: | | SECTION: | | HUNDREDTH: | | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | | |
| DATE ST: | | DATE FN: | | DRILLED BY: | | |
| NON CORING TO: | | CORING TO: | | CORING TO: | | |
| | | | | EOH: 80m | | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC %C3 | COMMENTS/ RECOVERY | |
| 28 - 30 | | " | Z7767 | 0.02 0.03 | | |
| 32 | | V.F. Q ₂ SAND + LIGNITE | 68 | 0.01 0.03 | | |
| 34 | | ↓ | 69 | 0.01 0.03 | | |
| 36 | | | 70 | 0.03 0.04 | | |
| 38 | | | 71 | 0.01 0.02 | | |
| 38 - 40 | | | 72 | 0.03 0.04 | | |
| 42 | | | 73 | 0.02 0.04 | | |
| 44 | | | 74 | 0.02 0.03 | | |
| 46 | | | 75 | 0.02 0.06 | | |
| 48 | | | CARB. MUDDS + 1. Q ₂ SANDS | 76 | 0.05 0.14 | |
| 48 - 50 | | | d. GREEN CLAYS + " | 77 | 0.06 0.10 | |
| 52 | | | + MAFIC SPECKS | 78 | 0.10 | |
| 54 | | ↓ | 79 | 0.07 0.09 | | |
| 56 | | | SIWER GRAY d. GREEN - BROWN CLAYS + MICA CLAY MUSC + TC (?) | 80 | 0.20 0.24 | |
| SCALE: | | GEOLOGIST: | | DATE: | | |

STOCKDALE PROSPECTING LIMITED

PAGE 3/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

1:100,000 SHEET :

AREA:

ANOM: MW20 DH NO. 7

DC:

SECTION:

HUNDREDTH:

OWNER:

CO-ORDS:

DECLIN:

AZIMUTH:

RL:

DH TYPE:

DATE ST:

DATE FN:

DRILLED BY:

RIG:

NON CORING TO:

CORING TO:

CORING TO:

EOH: 80m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
|----------|----------------|---|---------|---------------------------|-----------------------|
| 56-58 | | d. GREEN - BLACK CLAY + f. MICAS. | Z7781 | 0.17 0.20 | |
| 60 | | " " + Q ₂ | 82 | 0.27 0.29 | |
| 62 | | ↓ | 83 | 0.39 0.42 | |
| 64 | | | 84 | 0.31 0.50 | |
| 66 | | | 85 | 0.39 0.56 | |
| 68 | | ↓ | 86 | 0.42 0.46 | |
| 68-70 | | Y. GREEN / GREY GREEN CLAY | 87 | 0.42 0.50 | |
| 72 | | m. - c. gr Ang. Q ₂ . SANDS | 88 | 0.73 0.74 | |
| 74 | | Q ₂ + minor FSPH + GREY CLAYS | 89 | 0.61 0.78 | |
| 76 | | " + BLUE-GREEN CLAY | 90 | 0.58 0.63 | |
| 78 | | BIOTITE + Ang. Q ₂ + " | 91 | 0.39 0.47 | |
| 78-80 | A _p | MICACEOUS GRANITE $\begin{matrix} \swarrow Q_2 \\ \swarrow FSPH \\ \swarrow Biotite \end{matrix}$ | 92 | 0.37 0.30 | EOH |
| | | | | | |
| | | | | | |

SCALE:

GEOLOGIST:

DATE:

STOCKDALE PROSPECTING LIMITED

PAGE /

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATTA ANOM: MW20 DH NO. 8
 DC: LE HUNTE SECTION: 4 HUNDREDTH: KAPPA¹⁰⁰⁰ OWNER: D. SAMBSON
 CO-ORDS: 5000E 4960N DECLIN: AZIMUTH: ✓ RL: DH TYPE: MWD
 DATE ST: 10.2.91 DATE FN: 10.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 66m CORING TO: CORING TO: EOH: 66m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
|----------|-------|--|---------|---------------------------|-----------------------|
| 0 - 2 | Gph | CALCHARENITE + Q ₂ SAND | Z7793 | 0.33 0.72 | 0.36-0.40 SURFACE |
| 4 | | " + RED CREAM CLAYS | 94 | 0.25 0.34 | |
| 6 | | " + RED BROWN " | 95 | 0.32 0.66 | |
| 8 | | " " | 96 | 0.17 0.22 | |
| 8 - 10 | | " + WHITE SS. | 97 | 0.14 0.32 | |
| 10 - 12 | | CALCRETE + SS + RED CLAY | 98 | 0.15 0.16 | |
| (14) | | " " | 99 | 0.16 0.18 | |
| 16 | | Q ₂ SAND + " + " | Z7800 | 0.07 0.16 | |
| 18 | | ↓ | 01 | 0.12 0.19 | |
| 18 - 20 | Tep | + SS + Q ₂ SAND + LIGNITE + CALCRETE | 02 | 0.02 0.01 | |
| 22 | | ↓ | 03 | 0.05 0.10 | |
| 24 | | ↓ | 04 | 0.06 0.08 | |
| 26 | | LIGNITE + Q ₂ SANDS. | 05 | 0.04 | |
| 28 | | ↓ | 06 | 0.06 0.09 | |

SCALE:

GEOLOGIST:

PBM

DATE: 10.2.91

STOCKDALE PROSPECTING LIMITED

000145

PAGE 2/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | ANOM: MW20 DH NO. 8 | | |
|-------------------|----------|--|---|--------------------------|-----------------------|
| DC: | SECTION: | HUNDREDTH: | OWNER: | | |
| CO-ORDS: | DECLIN: | AZIMUTH: | RL: | DH TYPE: | |
| DATE ST: | DATE FN: | DRILLED BY: | RIG: | | |
| NON CORING TO: | | CORING TO: | CORING TO: | EOH: 66m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ³ | COMMENTS/ RECOVERY |
| 28-30 | | LIGNITE + f. Q ₂ SAND | Z7807 | 0.03 0.05 | |
| 32 | | ↓ | 08 | 0.06 0.07 | |
| 34 | | | 09 | 0.06 | |
| 36 | | | 10 | 0.05 0.06 | |
| 38 | | | 11 | 0.02 0.03 | |
| 38-40 | | | 12 | 0.03 | |
| 42 | | ↓ | 13 | 0.00 0.01 | |
| 44 | | BLACK CLAY + ANG. Q ₂ + CAR. MUD | 14 | 0.02 0.06 | |
| 46 | | ↓ | 15 | 0.03 | |
| 48 | | | 16 | 0.03 | |
| 48-50 | | | WHITE + BLACK CLAYS + Q ₂ SAND | 17 | 0.04 |
| 52 | | SILVER GREY CLAY FINE MICAS + d. GREEN CLAY | 18 | 0.05 0.07 | |
| 54 | | | 19 | 0.06 0.09 | |
| 56 | | CREAM GREY CLAYS + ANG. Q ₂ | 20 | 0.25 0.33 | |
| SCALE: | | GEOLOGIST: | DATE: | | |

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

[illegible]

000147

STOCKDALE PROSPECTING LIMITED

PAGE 1/2

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW5 DH NO. 9
 DC: LE HUNTE SECTION: 4 HUNDREDTH: KAPPA OWNER: D. SAMPSON
 CO-ORDS: 5100E 5000E DECLIN: AZIMUTH: ✓ RL: DH TYPE: MWD
 DATE ST: 10/2/91 DATE FN: 10/2/91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 42m CORING TO: CORING TO: EOH: 42m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ³ | COMMENTS/ RECOVERY |
|----------|-----------------|--|---------|--------------------------|------------------------|
| 0 - 2 | Q _{pb} | CALCARENITE + Q ₂ SAND | 27826 | 0.10 0.16 | 0.40 - 0.56 SURFACE |
| 4 | | " + RED BR. CLAY | 27 | 0.06 0.08 | |
| 6 | | " " | 28 | 0.06 | |
| 8 | | | 29 | 0.07 0.08 | } TOGETHER |
| 8 - 10 | | | 29 | 0.08 0.10 | |
| 12 | | | 30 | 0.08 | |
| 14 | T _p | WHITE SS + Q ₂ SAND + CALC. | 31 | 0.08 0.12 | |
| 16 | | | 32 | 0.00 0.02 | |
| 18 | | | 33 | 0.02 0.04 | |
| 18 - 20 | | | 34 | 0.03 | |
| 22 | | | 35 | 0.01 | |
| 24 | T _{ep} | CARB. MAT. + SS CHIPS + V.f. SAND. | 36 | 0.03 | |
| 26 | | | 37 | 0.01 0.02 | |
| 28 | | | 38 | 0.02 0.04 | |

SCALE:

GEOLOGIST: R. J. M.

DATE: 10/2/91

000143

STOCKDALE PROSPECTING LIMITED

PAGE 1/2

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW10 DH NO. 10
 DC: ELLISTON SECTION: 34 HUNDREDTH: SQUIRE OWNER: T. VAN LOON
 CO-ORDS: 5000E 4995N/DECLIN: AZIMUTH: ✓ RL: DH TYPE: AIR
 DATE ST: 10/2/91 DATE FN: 10/2/91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 42m CORING TO: CORING TO: EOH: 42m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ³ | COMMENTS/ RECOVERY |
|----------|-------|---|---------|--------------------------|-----------------------|
| 0-2 | Gpb. | CALCARENITE | 27846 | 0.44 0.48 | 1.37-1.75 SURFACE |
| 4 | | | 47 | 0.40 0.44 | |
| 6 | | | 48 | 0.33 0.35 | |
| 8 | | | 49 | | No |
| 8-10 | | | 50 | | SAMPLE CAVITY |
| 12 | | BRIGHT ORANGE - YELLOW CLAY + f Q ₂ . | 51 | 0.05 0.12 | |
| 14 | | PINK to BLUE GREY CLAY + m. Q ₂ SANDS + BIOTITE (?) | 52 | 0.03 0.04 | |
| 16 | | ORANGE + RED GREY CLAY + " | 53 | 0.03 0.07 | |
| 18 | Lep | LIGNITE + d. BROWN CLAY + m. Q ₂ | 54 | 0.03 0.05 | |
| 18-20 | | | 55 | 0.02 0.03 | |
| 22 | | LESS CLAY CONTENT | 56 | 0.02 | |
| 24 | | | 57 | 0.03 0.04 | |
| 26 | | CARBONACEOUS MUD / ROUNDED - SUB. ROUNDED C. GR. Q ₂ . | 58 | 0.02 0.04 | |
| 28 | | | 59 | 0.04 0.06 | |

SCALE:

GEOLOGIST: JPM

DATE: 10/2/91

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

1:100,000 SHEET :

AREA:

ANOM: MWIO DH NO. 10

DC :

SECTION:

HUNDREDTH:

OWNER:

CO-ORDS:

DECLn:

AZIMUTH:

RL:

DH TYPE:

DATE ST:

DATE FN:

DRILLED BY:

RIG:

NON CORING TO:

CORING TO:

CORING TO:

EOH: 42m

[illegible]

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PAGE 8/3

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW/13 DH NO. 11
 DC: ELLISTON SECTION: 8 HUNDREDTH: SQUIRE OWNER: J. LETTON
 CO-ORDS: 5100E 4950N DECLIN: AZIMUTH: ✓ RL: DH TYPE: AIR/MULT
 DATE ST: 10/2/91 DATE FN: 11/2/91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 80m CORING TO: CORING TO: EOH: 80m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ³ | COMMENTS/ RECOVERY |
|----------|--------|--|---------|--------------------------|---|
| 0 - 2 | Qpb. | CALCARENITE | 27871 | 0.29 0.32 | 2.46-2.59 SURFACE |
| 4 | | | 72 | 0.18 0.22 | |
| 6 | | | 73 | 0.20 0.24 | |
| 8 | | | 74 | 0.13 0.14 | |
| 8 - 10 | | | 75 | 0.10 0.11 | HIT CLAY AT 10m CHANGE TO FOAM |
| 12 | | CREAM GREY CLAY " + RED " | 76 | 0.05 0.07 | |
| 14 | | RED + YELLOW CLAY + Q ₂ + CALC. | 77 | 0.07 0.08 | |
| 16 | | | 78 | 0.06 | |
| 18 | | BROWN SILT + CLAY + CALC. | 79 | 0.09 0.11 | |
| 18 - 20 | | + " | 80 | 0.06 0.07 | CUT OF WATER REMENT HOLE CHANGE TO M. |
| 22 | | f. Q ₂ SAND + SS + " | 81 | 0.16 0.20 | 11/2/91 |
| 24 | Tep(?) | MUDSTONE + f. Q ₂ SAND | 82 | 0.03 0.05 | |
| 26 | | CAR. MUD + " | 83 | 0.04 0.05 | |
| 28 | | | 84 | 0.02 0.03 | |

SCALE:

GEOLOGIST: MAM

DATE: 11/2/91

STOCKDALE PROSPECTING LIMITED

PAGE 2/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW13 DH NO. 11 | | |
|-------------------|-------|--|------------------------------------|---------------------------|-----------------------|--|
| DC: | | SECTION: | | HUNDREDTH: | | |
| CO-ORDS: | | DECLIN: | | RL: | | |
| DATE ST: | | DATE FN: | | DRILLED BY: | | |
| NON CORING TO: | | CORING TO: | | CORING TO: | | |
| | | | | EOH: 80m | | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ⁻³ | COMMENTS/ RECOVERY | |
| 28-30 | | V.f. Q ₂ SAND + CARB. MUD. | Z7885 | 0.04 0.05 | | |
| 32 | | ↓ | 86 | 0.03 0.07 | | |
| 34 | | | 87 | 0.04 0.06 | | |
| 36 | | | f-c.gr Q ₂ + CARB. CLAY | 88 | 0.03 0.05 | |
| 38 | | | | 89 | 0.06 0.07 | |
| 38-40 | | ↓ | 90 | 0.03 0.06 | | |
| 42 | | | 91 | 0.02 0.03 | | |
| 44 | | | 92 | 0.03 0.04 | | |
| 46 | | | 93 | 0.04 0.05 | | |
| 48 | | | 94 | 0.07 0.09 | | |
| 48-50 | | | 95 | 0.08 0.11 | | |
| 52 | | GREY CLAY + Q ₂ ANGULAR + BIOTITE | 96 | 0.07 0.11 | | |
| 54 | | GREEN GREY CLAY + ANG Q ₂ + u | 97 | 0.08 0.11 | | |
| 56 | | ↓ | 98 | 0.18 0.14 | | |
| SCALE: | | GEOLOGIST: | | DATE: | | |

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW13 DH NO. 11 | |
|-------------------------|-----------------|--|---------|---------------------------|-----------------------|
| DC: | | SECTION: | | HUNDREDTH: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | |
| | | | | EOH: 80m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ⁻³ | COMMENTS/ RECOVERY |
| 58 | | GREY GREEN CLAY + ANG Q ₂ + BIOTITE (?) | Z7899 | 0.12 0.14 | |
| 58-60 | | ↓ + FSPAR | Z7900 | 0.19 0.25 | |
| 62 | | WEATHERED AMPHIBOLITE | Z79234 | 0.21 0.23 | |
| 64 | | ↓ | 35 | 0.31 0.38 | |
| 66 | | ↓ MINOR AMPHIBOLES | 36 | 0.64 0.94 | |
| 68 | | GREEN Q ₂ CLAY + AMPHIBOLITE + FSPAR + Q ₂ | 37 | 0.29 0.40 | |
| 68-70 | | GREEN CHIPS + CLAY (SCHIST LIKE) Q ₂ - FSPAR - BIOTITE | 38 | 0.14 0.18 | |
| 72 | | ↓ | 39 | 0.11 0.13 | |
| 74 | | ↓ | Z9240 | 0.14 | |
| 76 | | ↓ | 41 | 0.22 0.37 | |
| 78 | | ↓ | 42 | 0.13 0.16 | |
| 78-80 | Ap _s | FOLIATED FSPAR - Q ₂ - BIOTITE CHIPS | 43 | 0.16 0.17 | EOH |
| | | GNEISSIC BAS. | | | |
| SCALE: GEOLOGIST: DATE: | | | | | |

STOCKDALE PROSPECTING LIMITED

000154

PAGE

14

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW13 DH NO. 12
 DC: ELLISTON SECTION: 8 HUNDREDTH: SQUIRE OWNER: J. LETTON
 CO-ORDS: 5100E 4800N DECLIN: AZIMUTH: V RL: DH TYPE: MWD
 DATE ST: 11.2.91 DATE FN: 11.2.91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 101m CORING TO: CORING TO: EOH: 101

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC %10-3 | COMMENTS/ RECOVERY |
|----------|-------|--|---------|---------------|-----------------------|
| 0 - 2 | Cpb | CALCARENITE + LGREY CLAY | Z 9244 | 0.17 0.15 | 2-11-3.88 SURFACE |
| 4 | | | 45 | 0.14 0.16 | |
| 6 | | | 46 | 0.12 0.16 | |
| 8 | | | 47 | 0.11 0.13 | |
| 9 - 10 | | " + BEIGE CLAY. | 48 | 0.10 0.12 | |
| 12 | | " + CALCCRETE | 49 | 0.05 | |
| 14 | | te - IRONSTONE | 50 | 0.07 | |
| 16 | | GREEN GREY + WHITE CLAY + fgr. MUSCOVITE | 51 | 0.07 | |
| 18 | | GREEN GREY + YELLOW CLAY + f. Qz. grains. | 52 | 0.09 | |
| 18 - 20 | | GREENISH WHITE CLAY + FSTONE + SS | 53 | 0.06 0.08 | |
| 22 | Top | GREEN MUDSTONE WHITE-GREEN CLAY CAR. MUD | 54 | 0.05 | |
| 24 | | | 55 | 0.03 | |
| 26 | | | 56 | 0.03 0.04 | |
| 28 | | WHITISH GREEN CLAY, LIGNITE + Qz. SAND. | 57 | 0.02 0.03 | |

SCALE:

GEOLOGIST:

MGS

DATE:

11.2.91

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000155

PAGE 2/4

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW13 DH NO. 12 | |
|-------------------|-------|--|---------|--------------------------|-----------------------|
| DC: | | SECTION: | | HUNDREDTH: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | |
| | | | | EOH: 101m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC $\times 10^{-3}$ | COMMENTS/ RECOVERY |
| 28 - 30 | | LIGNITE m-c gr Qz YEL. SS. CHIPS | Z9258 | 0.03 | |
| 32 | | " " | 59 | 0.03 0.04 | |
| 34 | | d. GREEN GREY CLAY c-m Qz + LIGNITE | 60 | 0.03 0.04 | |
| 36 | | | 61 | 0.04 0.08 | |
| 38 | | | 62 | 0.03 0.08 | |
| 38 - 40 | | | 63 | 0.05 0.10 | |
| 42 | | GREY CLAY | 64 | 0.09 0.11 | |
| 44 | | + MUSCOVITE | 65 | 0.12 0.10 | |
| 46 | | + ANG Qz | 66 | 0.16 0.19 | |
| 48 | | + BIOTITE (?). | 67 | 0.14 0.20 | |
| 48 - 50 | | | 68 | 0.13 0.16 | |
| 52 | | Qz RICH ANG. | 69 | 0.14 0.15 | |
| 54 | | | 70 | 0.10 0.11 | |
| 56 | | | 71 | 0.10 0.12 | |
| SCALE: | | GEOLOGIST: | | DATE: | |

STOCKDALE PROSPECTING LIMITED

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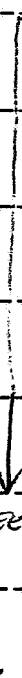

DRILLHOLE LOG SUMMARY SHEET

PAGE 3/4

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW13 DH NO. 12 | |
|-------------------|-------|---|---------|---------------------------|-----------------------|
| DC: | | SECTION: | | HUNDREDTH: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | |
| | | | | EOH: 10/m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ⁻³ | COMMENTS/ RECOVERY |
| 58 | | ANG. Q ₂ + GREY GREEN CLAY + BICTITE | Z9272 | 0.10 0.11 | |
| 58 - 60 | | WHITE GREEN CLAY + ANG. Q ₂ + " | 73 | 0.07 0.11 | |
| 62 | | ↓ | 74 | 0.08 | |
| 64 | | SILVER GREY MICACEOUS BROWN CLAY + GARNET | 75 | 0.09 0.13 | |
| 66 | | GREEN GREY CLAY SOME SULPHIDES | 76 | 0.05 0.12 | |
| 68 | | " + BROWN CLAY | 77 | 0.14 0.11 | |
| 68 - 70 | | ↓ | 78 | 0.10 0.11 | |
| 72 | | ↓ | 79 | 0.10 0.11 | |
| 74 | | FSPAR + GREY BROWN CLAY + Q ₂ | 80 | 0.11 | |
| 76 | | ↓ | 81 | 0.10 0.14 | |
| 78 | | ↓ | 82 | 0.13 0.15 | |
| 78 - 80 | | + GREY GREEN CLAY | 83 | 0.11 | |
| 82 | | ↓ | 84 | 0.14 0.17 | |
| 84 | | ↓ | 85 | 0.15 0.17 | |
| SCALE: | | GEOLOGIST: | | DATE: | |

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW13 DH NO. 12 | |
|-------------------|-------|---|---------|----------------------|-----------------------|
| DC: | | SECTION: | | HUNDREDTH: | |
| | | | | OWNER: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: | |
| | | | | RL: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | |
| | | | | RIG: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | |
| | | | | EOH: 10/m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC Y163 | COMMENTS/ RECOVERY |
| 86 | | GREY BROWN CLAY + BIOTITE + Q _z | Z 79286 | 0.19 0.20 | |
| 88 | |  | 87 | 0.18 0.21 | |
| 88 - 90 | | | 88 | 0.21 0.22 | |
| 92 | | | 89 | 0.20 | |
| 94 | | | 90 | 0.20 0.23 | |
| 96 | | | 91 | 0.20 0.22 | |
| 98 | | GREY BROWN + GREEN + BLUE CLAY + Q _z | 92 | 0.20 0.22 | |
| 98 - 100 | |  | 93 | 0.08 0.09 | |
| 101 | Aps | Q _z - BIOTITE - FSPAR (?) GNEISS | 94 | 0.07 0.13 | ECH |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| SCALE: | | GEOLOGIST: | | DATE: | |

STOCKDALE PROSPECTING LIMITED

000153

PAGE 1/3

DRILLHOLE LOG SUMMARY SHEET

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW 13 DH NO. 13
 DC: ELWISTON SECTION: 8 HUNDREDTH: SQUIRE OWNER: J. LETTON
 CO-ORDS: 45C0E 4925N DECLIN: AZIMUTH: ✓ RL: DH TYPE: MWD
 DATE ST: 11/2/91 DATE FN: 11/2/91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 57m CORING TO: CORING TO: EOH: 57m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ³ | COMMENTS/ RECOVERY |
|----------|-------|---|---------|--------------------------|------------------------|
| 0 - 2 | Qpb | CALCARENITE | Z9285 | 0.77 0.79 | 1.48 - 1.84 SURFACE |
| 4 | | | 96 | 0.86 0.97 | |
| 6 | | | 97 | 0.49 0.59 | |
| 8 | | | 98 | 0.37 0.47 | |
| 8 - 10 | | WHITE CLAY + CALCARENITE | 99 | 0.32 0.38 | |
| 12 | | | Z9300 | 0.46 0.53 | |
| 14 | | | 01 | 0.29 0.26 | |
| 16 | | + RED CLAY | 02 | 0.20 0.24 | |
| 18 | | GREEN - WHITE - GREY - YELLOW CLAYS | 03 | 0.19 0.21 | |
| 18 - 20 | | GREY BROWN CLAYS | 04 | 0.07 0.11 | |
| 22 | | | 05 | 0.12 0.16 | |
| 24 | | LIGNITE - CREAM CLAYS - V.F. Q ₂ SANDS | 06 | 0.09 0.11 | |
| 26 | | | 07 | 0.04 0.07 | |
| 28 | | | 08 | 0.06 0.14 | |

SCALE:

GEOLOGIST:

MSM

DATE: 11/2/91

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | ANOM: Mw13 DH NO. 13 | | |
|-------------------|----------|---|----------------------|---------------------------|-----------------------|
| DC: | SECTION: | HUNDREDTH: | OWNER: | | |
| CO-ORDS: | DECLIN: | AZIMUTH: | RL: | DH TYPE: | |
| DATE ST: | DATE FN: | DRILLED BY: | RIG: | | |
| NON CORING TO: | | CORING TO: | CORING TO: | EOH: 57m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC X10 ⁻³ | COMMENTS/ RECOVERY |
| 28 - 30 | | f - cgr Q ₂ + CARB. MUD | Z9309 | 0.08 | |
| 32 | | CREAM - OCHRE CLAYS + " + f. Q ₂ | 10 | 0.06 0.08 | |
| 34 | | f - cgr Q ₂ + CARB. MUD | 11 | 0.07 0.14 | |
| 36 | | f gr Q ₂ SAND | 12 | 0.05 0.08 | } TOGETHER |
| 38 | | | 12 | 0.06 0.07 | |
| 38 - 40 | | | 13 | 0.05 0.06 | |
| 42 | | | 14 | 0.06 | |
| 44 | | + CREAM CLAY | 15 | 0.04 0.06 | |
| 46 | | | 16 | 0.07 0.08 | |
| 48 | | | 17 | 0.07 | |
| 48 - 50 | | | 18 | 0.07 0.14 | |
| 52 | | | 19 | 0.07 | |
| 54 | | | 20 | 0.05 | |
| 56 | | | 21 | 0.02 0.00 | |

SCALE:

GEOLOGIST:

DATE:

DRILLHOLE LOG SUMMARY SHEET

PAGE 3/3

PROJECT :

[illegible]

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PAGE 1/2

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW16 DH NO. 14
 DC: ELLISTON SECTION: 36 HUNDREDTH: SQUIRE OWNER: T. VAN LOON
 CO-ORDS: 4950E / 4840N DECLIN: AZIMUTH: ✓ RL: DH TYPE: MUD
 DATE ST: 11/2/91 DATE FN: 12/2/91 DRILLED BY: THOMPSON RIG: 6
 NON CORING TO: 50m CORING TO: CORING TO: 51m EOH: 51m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC | COMMENTS/ RECOVERY |
|----------|-------|--|---------|--------------|------------------------|
| 0 - 2 | Qph | CALCARENITE | 29323 | 0.53 0.52 | 0.35 - 0.91 SURFACE |
| 4 | | ↓ | 24 | 0.23 0.29 | |
| 6 | | + FAUN CLAYS | 25 | 0.28 0.37 | |
| 8 | | ↓ + RED ORANGE SS + FAUN CLAY | 26 | 0.19 0.23 | |
| 8 - 10 | | GREENISH GREY CLAY + FAUN CLAY | 27 | 0.19 0.23 | |
| 12 | | RED BROWN SS GREY GREEN CLAY + FQZ SAND | 28 | 0.12 0.13 | |
| 14 | | " + F2 SS + PINK-RED CLAY | 29 | 0.08 0.10 | |
| 16 | | L. GREEN CLAYS - RED - PINK BROWN | 30 | 0.09 | |
| 18 | | " | 31 | 0.08 0.09 | |
| 18 - 20 | Tep | CREAM CLAY + Q2 SAND + CARB. MUD | 32 | 0.02 0.06 | |
| 22 | | GREEN + " + " + " | 33 | 0.09 | |
| 24 | | ↓ + ORANGE - LBROWN SS. | 34 | 0.08 0.10 | |
| 26 | | GREEN GREY CLAY, SS m - c gr Q2 + LIGNITE | 35 | 0.06 0.07 | |
| 28 | | ↓ | 36 | 0.06 0.07 | |

SCALE:

GEOLOGIST: MSM/SCF

DATE: 12/2/91

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

| 1:100,000 SHEET : | | AREA: | | ANOM: MW16 DH NO. 14 | |
|-------------------------|-------|---|-----------|--------------------------|-------------------------------|
| DC: | | SECTION: | | HUNDREDTH: OWNER: | |
| CO-ORDS: | | DECLIN: | | AZIMUTH: RL: DH TYPE: | |
| DATE ST: | | DATE FN: | | DRILLED BY: RIG: | |
| NON CORING TO: | | CORING TO: | | CORING TO: EOH: 51m | |
| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC $\times 10^{-3}$ | COMMENTS/ RECOVERY |
| 28 - 30 | | M - 1 gr Qz + CARB MUD + SS | 29337 | 0.05 0.06 | |
| 32 | | LIGNITE + \rightarrow (AUSC) + SS | 38 | 0.03 0.04 | |
| 34 | | L. GREY CLAY + " + d. GREEN CLAYS | 39 | 0.07 0.10 | |
| 36 | | CREAM GREEN CLAY + Qz + BIOTITE | 40 | 0.08 0.10 | |
| 38 | | MICA GREY CLAY + 1 gr Qz | 41 | 0.08 0.11 | |
| 38 - 40 | | \downarrow + MAFIC CHIPS | 42 | 0.03 | |
| 42 | | MICA CLAY, Qz, Px(?), BIOTITE | 43 | 0.10 0.13 | |
| 44 | | C. ANG Qz + BIOTITE + BLUE GREY CLAY + SPAR | 44 | 0.14 0.17 | |
| 46 | | \downarrow | 45 | 0.13 0.14 | |
| 48 | | \downarrow | 46 | 0.14 0.16 | |
| 48 - 50 | | GREEN SCHIST (?) | 47 | 0.17 0.23 | |
| 51 | Aps | FOURIATED GNEISSIC ROCK | CORE 0.60 | | EOH 2 ~ 50% RECOVERY |
| SCALE: GEOLOGIST: DATE: | | | | | |

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PAGE 1/2

PROJECT : MT. WEDGE

1:100,000 SHEET : DAMPER AREA: COCATA ANOM: MW16 DH NO. 15

DC: ELUSTEN SECTION: 30 HUNDREDTHSQUIRE OWNER: TIM VAN LOON

CO-ORDS: 4950E 5000N ECLN: AZIMUTH: V RL: DH TYPE: MUD

DATE ST: 12/2/91 DATE FN: 12 2 91 DRILLED BY: THOMPSON RIG: 6

NON CORING TO: 46m CORING TO: CORING TO: EOH: 46m

| INTERVAL | STRAT | LOG SUMMARY | SAMP NO | SUSC x10 ³ | COMMENTS/ RECOVERY |
|----------|-----------------|--------------------------------------|---------|--------------------------|-----------------------|
| 0 - 2 | Qpb. | CALCARENITE | 29348 | 0.18 0.31 | 167-2.80 SURFACE |
| 4 | | | 49 | 0.21 0.22 | |
| 6 | | | 50 | 0.19 0.22 | |
| 8 | | L. BROWN CLAY | 51 | 0.14 0.18 | |
| 8 - 10 | | WHITE / RED BROWN CLAY | 52 | 0.15 0.16 | |
| 12 | | | 53 | 0.14 0.15 | |
| 14 | | | 54 | 0.12 0.16 | |
| 16 | | | 55 | 0.13 0.14 | |
| 18 | | | 56 | 0.02 0.14 | |
| 18 - 20 | T _p | RED BROWN CLAYS - SANDS | 57 | 0.06 0.06 | |
| 22 | | D. BROWN - RED CLAY | 58 | 0.10 | |
| 24 | | | 59 | 0.03 | |
| 26 | | | 60 | 0.03 0.06 | |
| 28 | T _{ep} | CARB MUDS - sub- rounded Qzgr SANDS. | 61 | 0.02 0.01 | |

SCALE:

GEOLOGIST: MSM / SCF

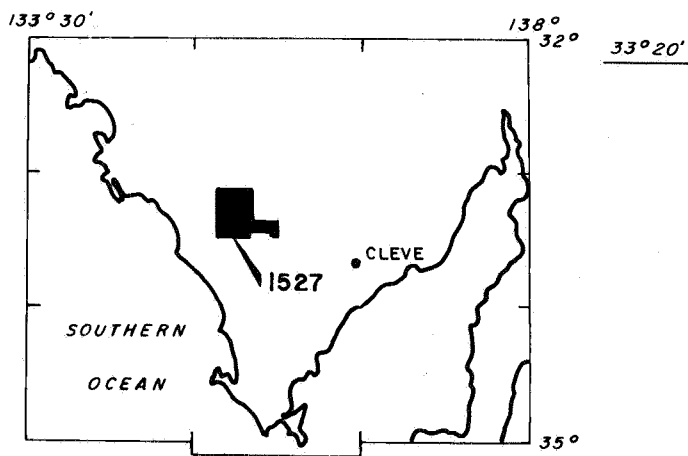
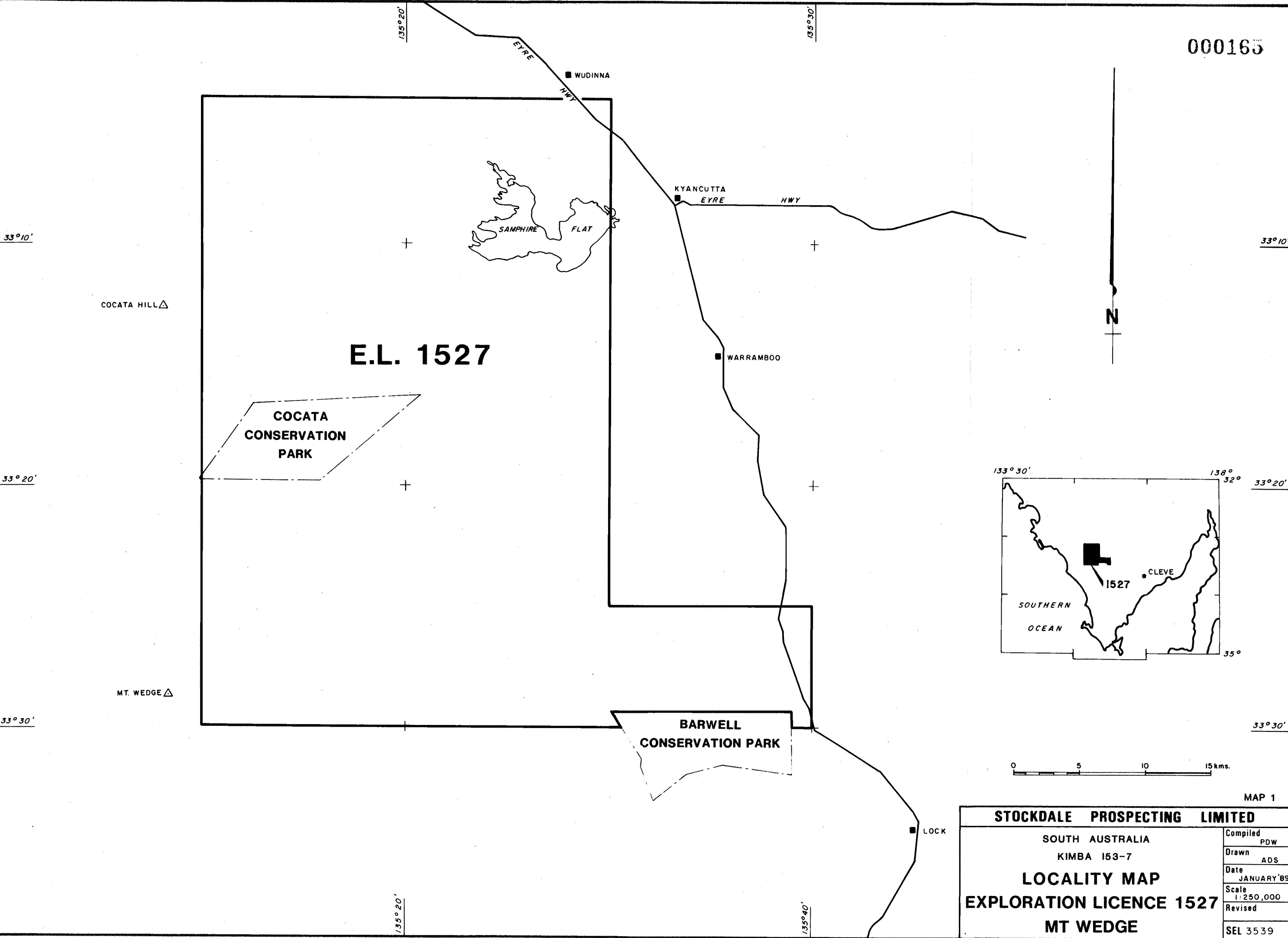
DATE: 12.2.91

STOCKDALE PROSPECTING LIMITED

DRILLHOLE LOG SUMMARY SHEET

PROJECT :

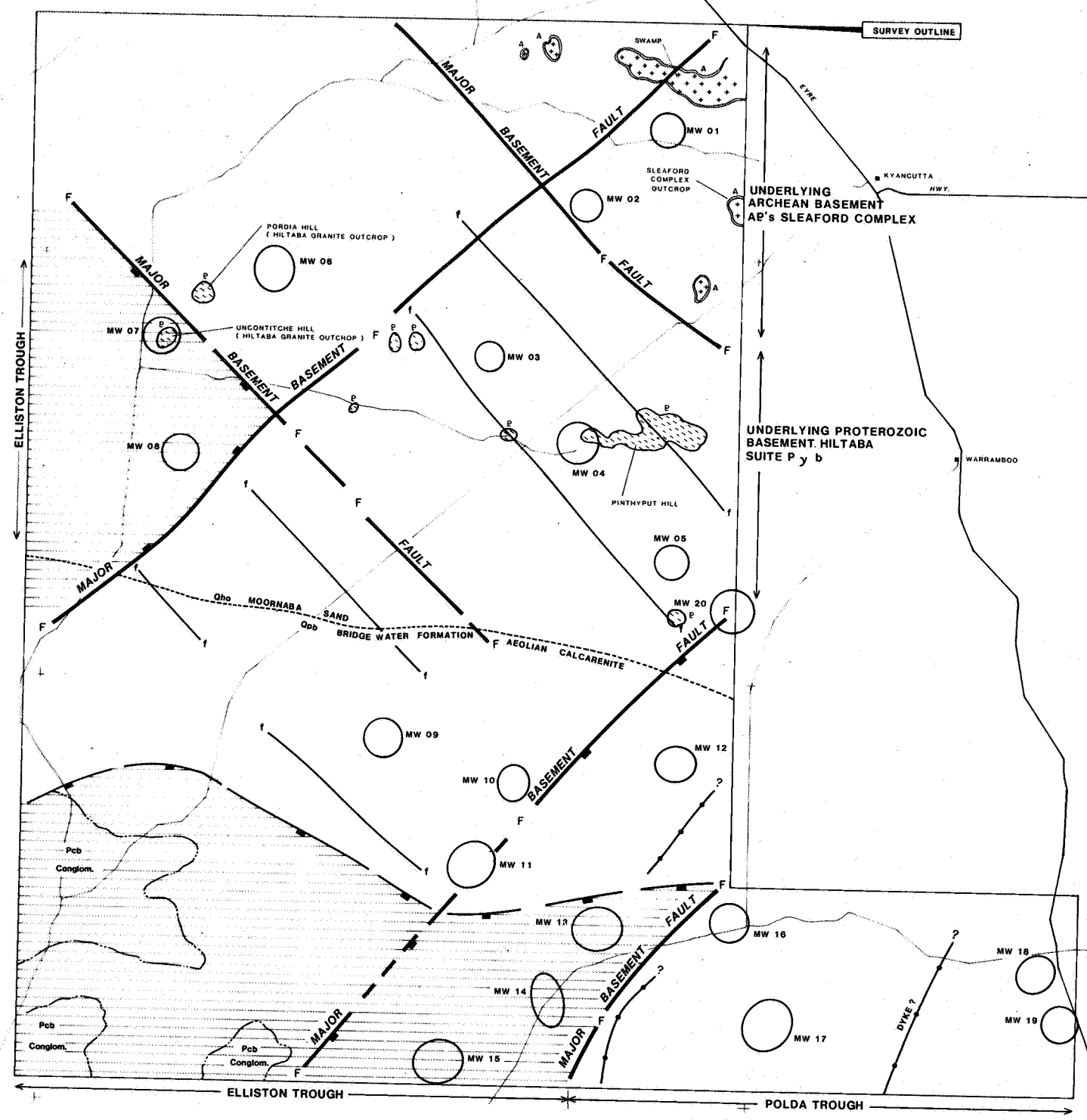
| 1:100,000 SHEET : | | AREA: | | ANOM: MW/16 | | DH NO. 15 | |
|-------------------|-------|---------------------------------|--|--------------|--------------|-------------------|-----|
| DC: | | SECTION: | | HUNDREDTH: | | OWNER: | |
| CO-ORDS: | | DECLn: | | AZIMUTH: | | RL: DH TYPE: | |
| DATE ST: | | DATE FN: | | DRILLED BY: | | RIG: | |
| NON CORING TO: | | CORING TO: | | CORING TO: | | EOH: 46m | |
| INTERVAL | STRAT | LOG SUMMARY | | SAMP NO | SUSC | COMMENTS/RECOVERY | |
| 28 - 30 | | CARB. MUD + ROUNDED Qzgr. SANDS | | Z9362 | 0.00 0.01 | | |
| 32 | | ↓ | | 63 | 0.02 | | |
| 34 | | | | 64 | 0.03 | | |
| 36 | | L. GREY-GREEN CLAY | | 65 | 0.07 0.08 | | |
| 38 | | ↓ | | 66 | 0.08 0.16 | | |
| 38 - 40 | | | | 67 | 0.10 0.11 | | |
| 42 | | GREY GREEN CLAY - c.gr. ang. Qz | | 68 | 0.12 0.14 | | |
| 44 | | ↓ | | 69 | 0.25 0.29 | | |
| 46 | Aps | | | BIOTITE - Qz | 70 | 0.27 0.28 | EOH |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| SCALE: | | GEOLOGIST: | | DATE: | | | |



MAP 1

| STOCKDALE PROSPECTING LIMITED | |
|---|---------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

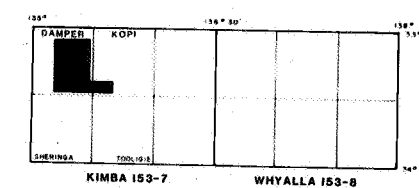
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- F — FAULTS (MAJOR)
- f — FAULTS
- d — INFERRED DYKES
- R — ROADS
- E — EDGE OF ELLISTON (BLUE RANGE BEDS)
- S — SUB-OUTCROPPING/BLUE RANGE BEDS (CONGLOMERATE WITH HIGH K AND TH-LEVELS)
- P — OUTCROPPING PROTEROZOIC GRANITES
- A — OUTCROPPING ARCHEAN GRANITES
- B — BOUNDARY BETWEEN EXPOSED BRIDGEWATER FORM AND NTH. SAND CLAY COVER
- O — ANOMALY

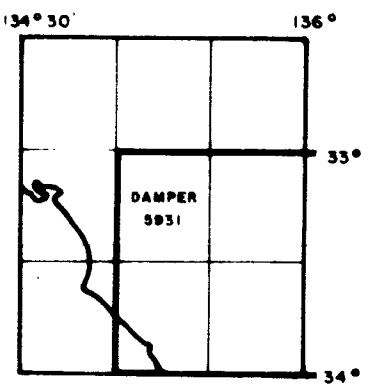
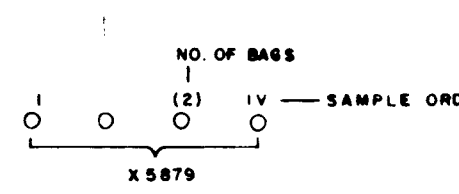
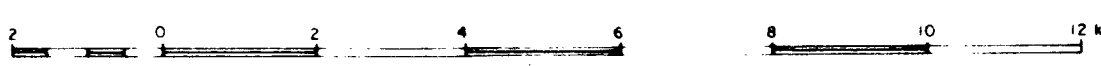
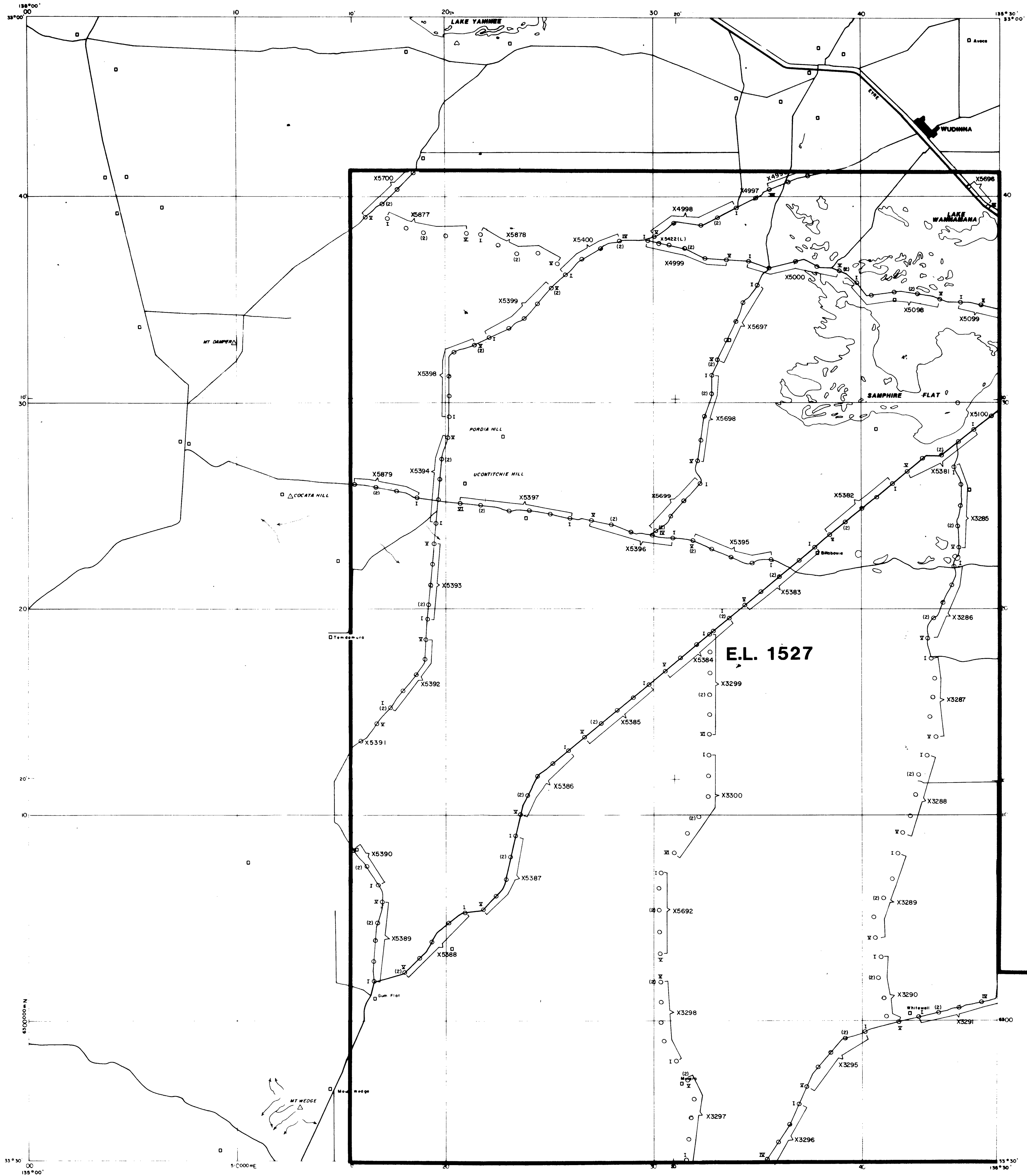
NOTE: AMG's DERIVED FROM PHOTO ENLARGED IMAGE AND ARE SUBJECT TO E-W / N-S ERROR

LOCATION MAP



| MAP 2 | |
|--|--|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA KIMBA 153-7 MT WEDGE AIRBOURNE GEOPHYSICAL INTERPRETATION | |
| Compiled FWA | |
| Drawn ADS | |
| Date 3/90 | |
| Scale 1:250 000 | |
| Revised | |
| SEL 3804 | |

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| | |
|-------------------------------|-----------|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA | |
| 183-7 KIMBA | |
| DAMPER 1:100 000 | |
| CURRENT SAMPLING | |
| Compiled | 11/00 000 |
| Drawn | 11/00 000 |
| Date | 11/00 000 |
| Scale | 11/00 000 |
| Revised | 11/00 000 |
| CEL 3971 | |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
ELEVENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JULY 1991



000163

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

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South Yarra Victoria 3141
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Telephone (03) 241 7522
Telex Stodal AA39546
Fax (03) 240 0974

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
ELEVENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JULY 1991

Edited: F M GAUNT

Author/s: M S MITCHELL

Approved: H R ROBISON

Date: JULY 1991

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 2 Table Nos.: 2 Appendices: 2 Plates: -

Keywords: DRILLING, GEOCHEMISTRY.

Abstract: During this quarter several deflation loam and geochemical samples were taken over "suspected" kimberlite locations identified by local landowners. Ground magnetic profiles were also conducted over each site. Results from the samples and surveys failed to indicate any presence of kimberlitic rocks.

Petrographic descriptions from 1991 drill core became available and no kimberlitic rock types were identified.

Copy to: SADME, WHYALLA, IC

Ref: MSM50

Circulate to:

CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
- 3 RESULTS
- 4 FORWARD WORK PROGRAMME
- 5 STAFF
- 6 EXPENDITURE

MAPS

| | | |
|---------|---|-----------|
| MAP 1 : | Locality Map EL1527 (SEL 3539) | 1:250,000 |
| MAP 2 : | Sample Locations EL 1527 | 1:100,000 |
| MAP 3 : | Airborne Geophysical Interpretation (SEL 3804) | 1:250,000 |

TABLES

- TABLE 1 : Sampling Locations
- TABLE 2 : Expenditure Report

APPENDICES

- APPENDIX 1 : 1991 Geochemical Results
- APPENDIX 2 : 1991 Drill Core Petrographic Description

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****ELEVENTH QUARTERLY REPORT TO 11 JULY 1991****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

During this quarter several supposed kimberlitic anomalies were investigated. A local group of pastoralists with "hidden knowledge" formed a group and put forward what is called the Oolanta proposal.

Petrographic descriptions of core from magnetic anomaly MW04 and MW16 became available. All other results are outstanding.

2 FIELD WORK

The Oolanta proposal was investigated on the ground with crosshair magnetic profiles, loam and geochemical samples taken over several of the "suspected" kimberlites. Magnetic spikes were associated with all these areas or proximal to the designated area. However these peaks probably reflect the active background known over the region, also the peaks were non-dipolar in nature and therefore not considered reflective of an intrusive rock type.

A total of 4 loam and 4 geochemical samples were taken over two of these areas (Table 1). At each site 30kg of -1.0 + 0.3mm deflation sediment was collected (Map 2).

3 RESULTS

All loam sample results were negative with respect to kimberlitic indicators, also no kimberlitic geochemical signatures were observed (Appendix 1).

Petrographic descriptions from the 1991 drill core became available and the rock types intersected are as follows.

MW04 - hornblende - quartz gabbro.

MW16 (1st hole) - Quartzo-feldspathic (sillimanite) schist biotite.

MW16 (2nd hole) - Brecciated quartzo-feldspathic biotite schist.

Full petrographic descriptions are located in Appendix 2.

The remaining drill chip samples are currently being treated and all results will be reported on when available.

4 FORWARD WORK PROGRAMME

A total of seven airborne magnetic anomalies require ground magnetic surveying, MW02,08,09,11,17,21 and MH118. The ground magnetic signatures of these anomalies will be evaluated and may be drilled if considered worthy of further work (locations shown on Map 3).

5 STAFF

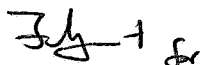
Staff employed in the field programme were :

| | |
|------------------|---|
| Geologists | 1 |
| Field Assistants | 2 |

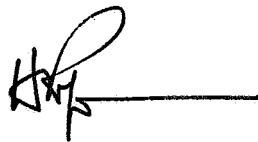
The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the Research/Technical department and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$ 24,572 has been allocated as shown in Table 2.



M S Mitchell
Senior Geologist
Whyalla



H R Robison
Chief Geologist-South

Table 1 : Sampling Locations EL1527

| Sample Number | Type | Coordinates | |
|---------------|----------------|-------------|----------|
| | | Easting | Northing |
| X5963 | Loam & Geochem | 530423m | 6334930m |
| X5964 | Loam & Geochem | 530423m | 6334930m |
| X5971 | Loam & Geochem | 536250m | 6339100m |
| X5972 | Loam & Geochem | 536250m | 6338370m |

Table 2 : Expenditure Report for EL 1527 : Mt Wedge
Period Ending 31 June 1991

| | \$ |
|-------------------------------|------------|
| OPERATIONAL STAFF COSTS | 5 394 |
| GENERAL OPERATING EXPENSES | 951 |
| TRANSPORT AND TRAVEL | 917 |
| CONTRACTORS : SAMPLE ANALYSIS | 177 |
| CENTRAL TREATMENT PLANT | 8 008 |
| LABORATORY : TREATMENT | 1 160 |
| : EXAMINATION | 3 240 |
| ADMINISTRATION: | |
| REGIONAL OFFICE | 1 869 |
| HEAD OFFICE | 2 084 |
| CAPITAL UTILISATION | 772 |
| TOTAL THIS PERIOD | \$ 24 572 |
| TOTAL PREVIOUSLY REPORTED | 246 277 |
| TOTAL EXPENDITURE TO DATE | \$ 270 849 |

APPENDIX 1
1991 Geochemical Results

ANALABS

EL 1527

Analytical Data

| Sample Prefix | | Report Number | | Report Date | | Client Order No. | | Page | |
|---------------|------------|-----------------|-------|-------------|-------|------------------|-------|--------|-------|
| | | 113500.10.82688 | | 17/05/91 | | M 8645 | | 1 OF 3 | |
| Tube | Sample No. | Mg | K | Ca | Ti | V | Cr | Co | Ni |
| 1 | X5963 -80# | 0.170 | 0.560 | 0.210 | 2990 | 58 | 26 | 8 | 20 |
| 2 | X5964 -80# | 0.140 | 0.390 | 0.350 | 1860 | 33 | 38 | 5 | 12 |
| 9 | X5971 -80# | 0.090 | 0.300 | 0.120 | 1490 | 23 | <10 | <5 | <10 |
| 10 | X5972 -80# | 0.500 | 0.670 | 4.630 | 1910 | 39 | 38 | 7 | 13 |
| 23 | DETECTION | 0.002 | 0.050 | 0.005 | 10 | 2 | 10 | 5 | 10 |
| 24 | UNITS | % | % | % | ppm | ppm | ppm | ppm | ppm |
| 25 | METHOD | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 |

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

ANALABS

EL 1527

Analytical Data

| Sample Prefix | | Report Number | | Report Date | | Client Order No. | | Page | |
|---------------|------------|-----------------|-------|-------------|-------|------------------|-------|--------|-------|
| | | 113500.10.82688 | | 17/05/91 | | M 8645 | | 2 OF 3 | |
| Tube | Sample No. | Cu | Zn | Sr | Y | Zr | Nb | Ag | Ba |
| 1 | X5963 -80# | 12.30 | 18.80 | 33 | 16 | 86 | 10 | 0.49 | 126 |
| 2 | X5964 -80# | 4.62 | 13.60 | 32 | 9 | 51 | <10 | 0.17 | 106 |
| 9 | X5971 -80# | 7.56 | 9.03 | 17 | 5 | 41 | <10 | 0.25 | 78 |
| 10 | X5972 -80# | 14.80 | 14.20 | 159 | 9 | 48 | <10 | 0.28 | 138 |
| 23 | DETECTION | 2.00 | 2.00 | 1 | 1 | 5 | 10 | 0.10 | 5 |
| 24 | UNITS | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 25 | METHOD | GI222 | GI222 | GI201 | GI201 | GI201 | GI201 | GI222 | GI201 |

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

ANALABS

EL 1527

Analytical Data

| Sample Prefix | | Report Number | | Report Date | | Client Order No. | | Page |
|---------------|------------|-----------------|-------|-------------|-------|------------------|-------|--------|
| | | 113500.10.82688 | | 17/05/91 | | M 8645 | | 3 OF 3 |
| Tube | Sample No. | La | Ce | Ta | Pb | Th | U | |
| 1 | X5963 -80# | 21 | 39 | <10 | 14.20 | 10 | <100 | |
| 2 | X5964 -80# | 12 | 22 | <10 | 8.77 | <10 | <100 | |
| 9 | X5971 -80# | 7 | <15 | <10 | 6.51 | <10 | <100 | |
| 10 | X5972 -80# | 22 | 22 | <10 | 9.70 | <10 | <100 | |
| 23 | DETECTION | 5 | 15 | 10 | 1.00 | 10 | 100 | |
| 24 | UNITS | ppm | ppm | ppm | ppm | ppm | ppm | |
| 25 | METHOD | GI201 | GI201 | GI201 | GI222 | GI201 | GI201 | |

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

APPENDIX 2

1991 Drill Core Petrographic Description

SAMPLE: BM0161 (MW04)

Thin Section: C55124

Rock Name:

Hornblende-quartz gabbro

Hand Specimen:

The drill core rock sample is medium-grained, massive, and dark greenish grey in colour with small disseminated white interstitial patches.

Brief Petrography:

In thin section, this sample displays a massive gabbroic igneous texture.

Hornblende is moderately abundant. It occurs as pleochroic greenish brown to green grains that in places form euhedral prismatic crystals, but elsewhere form anhedral poikilitic grains up to ~5 mm in size that enclose plagioclase and rare cores of clinopyroxene (augite).

Plagioclase occurs in similar abundance to hornblende. It forms prismatic crystals ~1 mm in average length, most which have suffered partial replacement in cores or in zones by small sericite flecks and, less commonly, granules of epidote. Primary twinning and normal zoning is well-preserved.

Biotite occurs in minor amount as pleochroic dark brown to pale yellow plates that have suffered partial replacement by yellow epidote and green chlorite.

Quartz occurs in minor amount as clear, unstrained interstitial anhedral grains.

Apatite is present in accessory amount as subhedral squat prismatic crystals disseminated throughout the rock.

Opakes occur in two forms: as uncommon small (<0.2 mm) euhedra of primary origin (possibly ilmenite), and as moderately abundant aggregates and stringers that fill fractures and grain boundaries.

The sample represents a basic intrusive igneous rock that formed by slow cooling of silica-oversaturated basic magma. A quartz-tholeiitic magmatic affinity of the parent magma is inferred from the mineralogy.

SAMPLE: BM0166(a) (MW16)

Thin Section: C55129

Rock Name:

Quartzo-feldspathic (sillimanite-)biotite schist

Hand Specimen:

The rock sample is a grey, uniform rock with strong foliation defined by dark micaceous laminations.

Brief Petrography:

In thin section, this sample displays a granoblastic, strongly foliated metamorphic texture.

Plagioclase is abundant, occurring as anhedral grains ~0.2-0.6 mm in grain size, with rare larger grains ~1-1.5 mm long. Elongated grains are aligned within the foliation plane. Most of the plagioclase is fresh, but incipient clouding by very fine sericite flecks is evident.

Quartz is subequal in abundance to plagioclase, with which it is granoblastically intergrown. Strain extinction is common in the quartz.

Biotite forms flakes ~0.2-0.6 mm long, with pleochroism from reddish brown to very pale straw yellow. The flakes are strongly aligned, and bending or kinking is common.

Muscovite is present in minor amount as small flakes intergrown with biotite.

Other accessory phases include sillimanite, which forms very fine-grained fibrous aggregates intergrown with biotite, and apatite which builds anhedral grains up to ~0.5 mm in size.

The sample represents a peraluminous sediment (e.g. clay-rich quartzo-feldspathic silty sediment) that has suffered dynamic regional metamorphism of moderate grade, generating the strongly foliated assemblage plagioclase + quartz + biotite + minor sillimanite + apatite.

SAMPLE: BM0166(b) (MW016)

Thin Section: C55130

Rock Name:

Brecciated quartzo-feldspathic biotite schist

Hand Specimen:

The rock sample has a fine-grained, grey colour, with fragmental structure.

Brief Petrography:

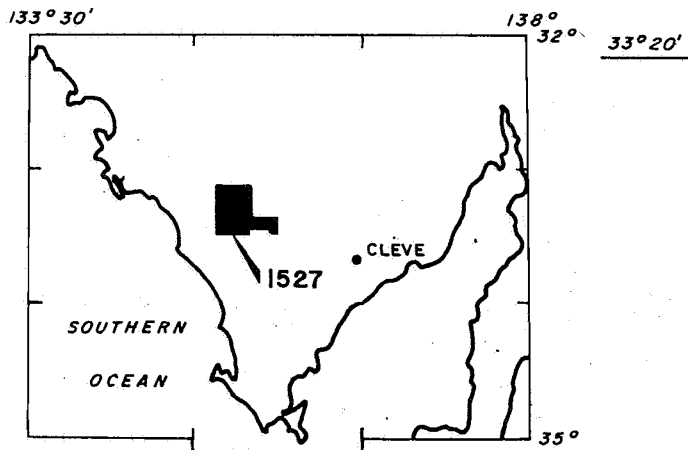
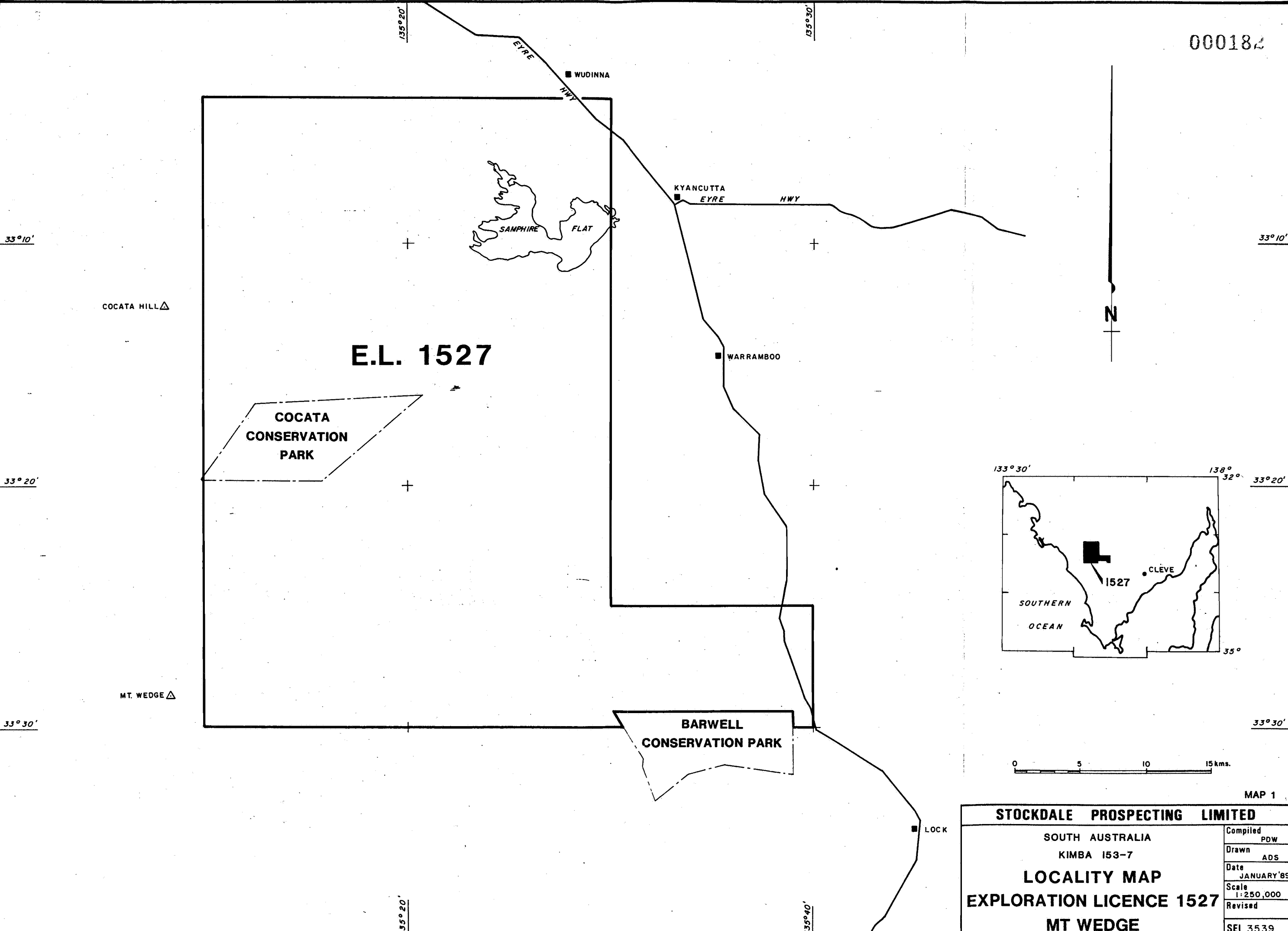
In thin section, this sample displays a strongly foliated granoblastic metamorphic texture that has been disrupted by brecciation.

The host rock is composed of abundant granoblastic plagioclase and strained quartz, of average grain size ~0.4 mm. Strongly foliated biotite, pleochroic in dark brown to pale yellow, is distributed throughout. Very fine-grained sericite flecks the plagioclase, and the biotite has suffered incipient alteration to green chlorite and associated minute granules of Ti-phase (leucoxene).

Fragments of the host rock several mm to centimetres in size lie in a breccia matrix containing angular fragments of wall rock, together with fragments of mineral components of the wall rock. These angular particles lie in a very fine-grained matrix dominated by white mica (sericite), with small patches of fine-grained anhedral feldspar (possibly K-feldspar).

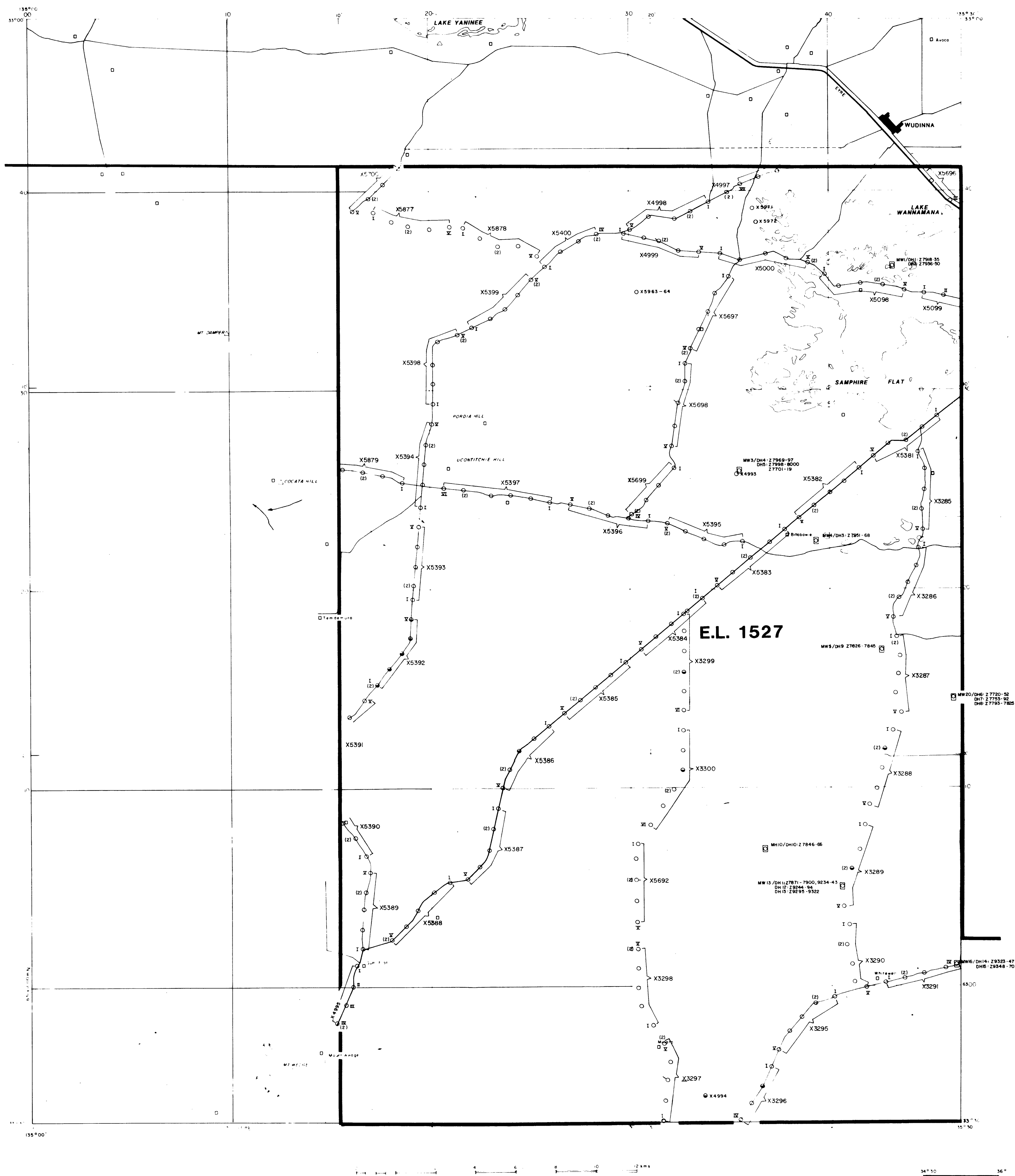
The sample represents a quartzo-feldspathic biotite schist that has suffered brecciation. Breccia zones were sealed by precipitation of white mica + feldspar.

000182



| MAP 1 | |
|---|---------------------|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled POW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

8087-3

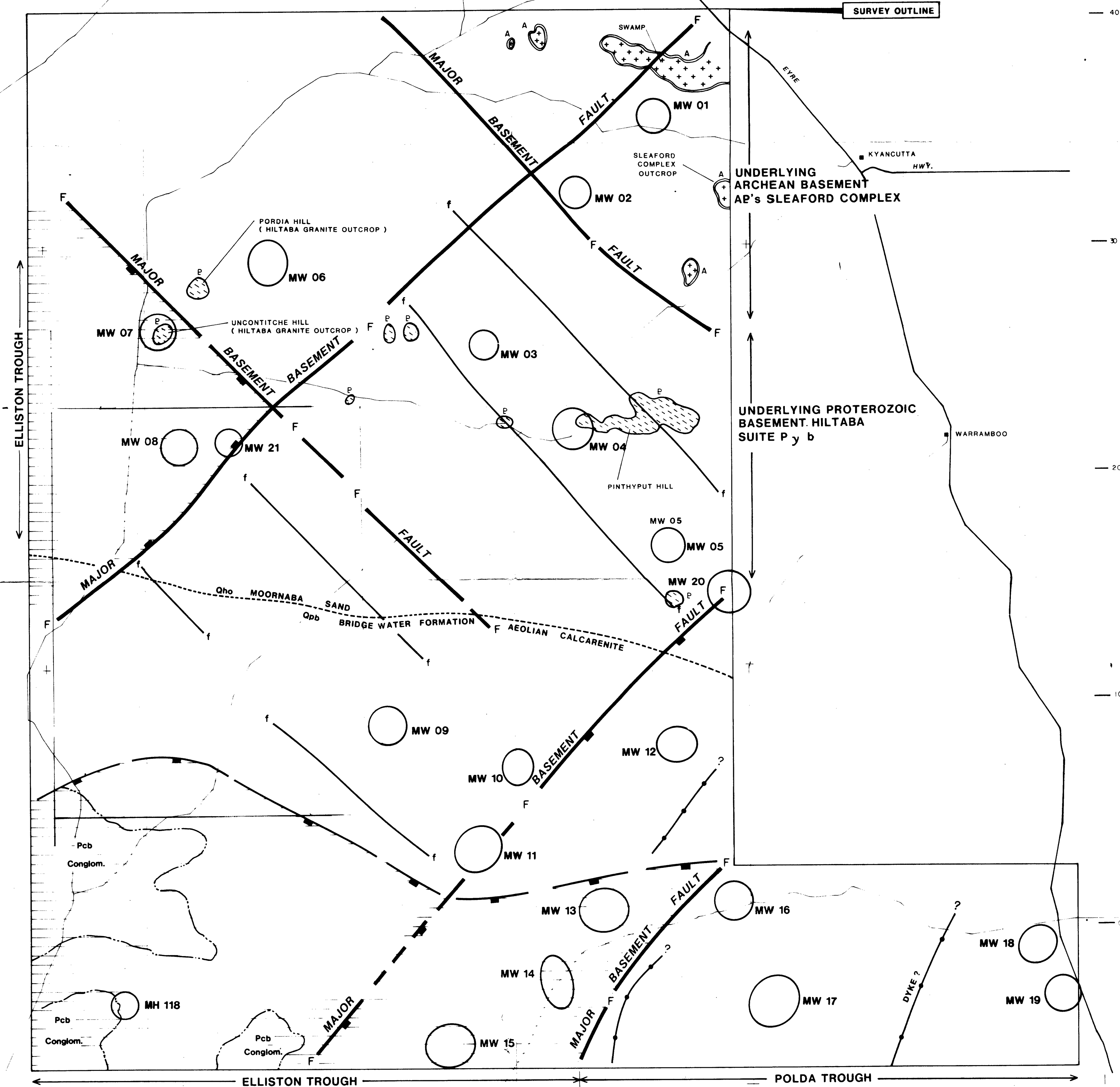


8087-3

| STOCKDALE | PROSPECTING | LIMITED |
|---|-------------|---------|
| <p style="text-align: center;">SOUTH AUSTRALIA</p> <p style="text-align: center;">163-7 KIMBA</p> <p style="text-align: center;">DAMPER 1:100 000</p> <p style="text-align: center;">E.L. 1527 MT WEDGE PROJECT</p> <p style="text-align: center;">SAMPLE LOCATIONS</p> | | |
| <p>Compiled</p> <p>Drawn</p> <p>Date</p> <p>Scale</p> <p>Revised</p> <p>SCL</p> | | |

| | |
|---------|------|
| Drawn | MAK |
| Date | |
| Scale | |
| 1:100 | 000 |
| Revised | 8/91 |
| SEL. | |

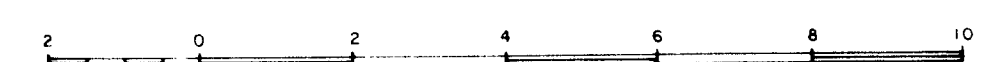
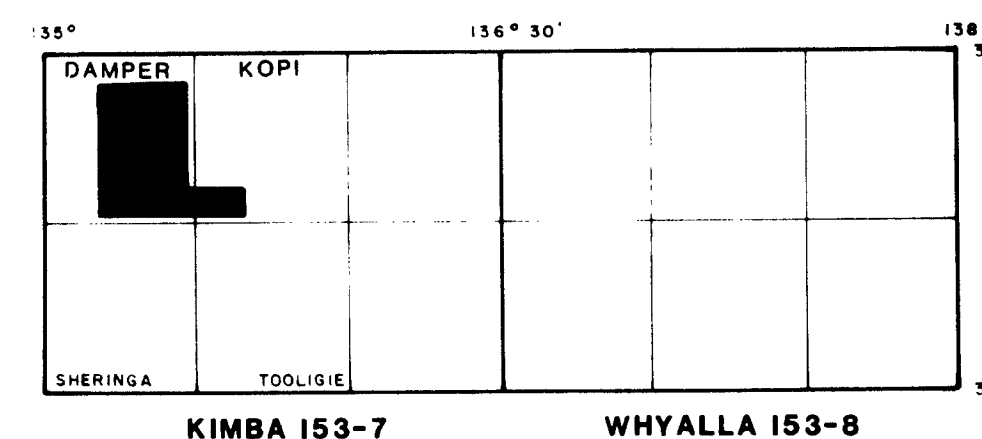
8087-4



- Legend:
- FAULTS (MAJOR)
 - FAULTS
 - INFERRED DYKES
 - ROADS
 - EDGE OF ELLISTON (BLUE RANGE BEDS)
 - SUB-OUTCROPPING/BLUE RANGE BEDS (CONGLOMERATE WITH HIGH K AND Th LEVELS)
 - OUTCROPPING PROTEROZOIC GRANITES
 - OUTCROPPING ARCHEAN GRANITES
 - BOUNDARY BETWEEN EXPOSED BRIDGEWATER FORM. AND NTH. SAND CLAY COVER
 - ANOMALY

NOTE : AMG's DERIVED FROM PHOTO ENLARGED IMAGE AND ARE SUBJECT TO 50m. E-W / 100m. N-S ERROR

LOCATION MAP



8087-4

MAP 3

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL INTERPRETATION

| | |
|----------|-----------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3/90 |
| Scale | 1:100 000 |
| Revised | |
| SEL | 3804 |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
TWELFTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 OCTOBER 1991



STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

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South Yarra Victoria 3141
Australia
Telephone (03) 241 7522
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000184

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
TWELFTH QUARTERLY REPORT FOR THE
PERIOD ENDING 11 OCTOBER 1991

Edited: F M GAUNT

Author/s: M S MITCHELL

Approved: H R ROBISON

Date: OCTOBER 1991

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 3 Plan Nos.: 2 Table Nos.: 2 Appendices: 1 Plates: -

Keywords: DRILLING, GEOCHEMISTRY

Abstract:

During this quarter an attempt was made to locate an airborne magnetic anomaly in the southern portion of the tenement. The attempt failed due to the anomaly being artificially generated from widely line spaced data and a contouring problem associated with the Geosoft software programme.

Heavy mineral results from drill chips and basal clay geochemistry results became available from the February 1991 drill programme. No apparent kimberlitic rocks were intersected.

Copy to: SADME, IC, WHYALLA

Ref: MSM65

Circulate to:

CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
- 3 REMOTE SENSING
- 4 RESULTS
 - 4.1 Drill Chip Results
 - 4.2 Geochemical Results
- 5 FORWARD WORK PROGRAMME
- 6 STAFF
- 7 EXPENDITURE SUMMARY

TABLES

- TABLE 1 Drill Hole Kimberlitic Results Summary
- TABLE 2 Expenditure Report

MAPS

- MAP 1 Locality Map EL1527 1:250,000
(SEL 3539)
- MAP 2 Airborne Geophysical Interpretation 1:250,000
(SEL 3804)

APPENDICES

- APPENDIX 1 1991 Geochemical Results

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****TWELFTH QUARTERLY REPORT TO 11 OCTOBER 1991****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

Field work conducted this quarter included an attempt to locate a magnetic anomaly east of Mt Wedge. After an exhaustive search failed to locate the anomaly it was found that the anomaly had been falsely generated by the Geosoft software package partly due to the wide (500m East-West) airborne magnetic flight line spacings.

Heavy mineral and bottom of the hole geochemical results from the February 1991 drilling programme became available.

2 FIELD WORK

After an extensive search using a Magellan Global Positioning System and Geometrics 856 magnetometer failed to locate the airborne magnetic target MH118, a review of the flight line data revealed that the Geosoft software package had falsely generated the anomaly. The fault partially lies with the data, 500m East-West flight line spacing, which is too wide for the accurate interpolation or definition of some magnetic anomalies.

3 REMOTE SENSING

TM and radiometric imagery for the western Eyre Peninsula was purchased and enhanced. The imagery was presented on 1:100,000 scale colour photographs for viewing and interpretation. The TM imagery consists of colour composite and clay iron images and the radiometrics data set uses K/Th/Ur counts.

No formal interpretation has been conducted to date, however, in the initial viewing of the TM imagery, the extent of the calcrete and dune cover is visible. Photofeatures displaying structural control could not readily be identified.

The radiometric data image was useful in gaining an understanding of the depth to basement, especially where the basement was at or near surface.

4 DRILLING RESULTS

4.1 Drill Chip Results

Heavy mineral results became available from the February 1991 drilling programme (Map 2, Table 1). Three drill holes 12, 13 and 14 recovered kimberlitic indicators, the majority of these from the Tertiary Sands. Indicators in the basal clays of drill holes 12 and 13 may possibly be due to down the hole contamination since they were recovered proximal to fresh, harder basement and considering the drilling technique (rotary mud), contamination between lithologies is common.

Geochemical samples for the entire hole for drillholes 12 and 13 have been sent for analysis to check if the indicators have come from a primary source or secondary host.

4.2 Geochemical Results

Geochemical data from all eight drilled magnetic anomalies became available during this period. Appendix 1 lists the results of the 34 element x-ray fluorescence determinations along with analytical results for Au and Pd.

No geochemical kimberlitic signatures were observed in the basal clays of each hole.

5 FORWARD WORK PROGRAMME

A total of six airborne magnetic anomalies require ground magnetic surveying, MW02, 08, 09, 11, 17 and MW21. The ground magnetic signatures of these anomalies will be evaluated and may be drilled if considered worthy of further work (locations shown on Map 2).

6 STAFF

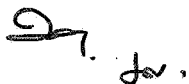
Staff employed in field work in EL1527 were :

Geologists 2

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the Research/Technical department and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$24,133 has been allocated as shown in Table 2.



M S Mitchell
Senior Geologist
Whyalla



H R Robison
Chief Geologist-South

TABLE 1 : DRILL HOLE KIMBERLITIC RESULTS SUMMARY

| DH NO | DATE DRILLED | ANOMALY NO (MH) | SHEET 1:50 000 | EASTING | NORTHING | GRID CO-ORDS E - W | | DEPTH TO BASE | | | | SAMPLE NUMBERS | BASEMENT INTERSECTION | QUATERNARY | TERTIARY | BASAL CLAYS |
|----------|-----------------|--------------------|-------------------|---------|----------|-----------------------|-------|----------------------------|-------|----------------|------------------|-----------------------|--------------------------|------------|----------|-------------|
| | | | | | | | | QUAT. CALC- ARENITES | CLAYS | TERT. SANDS | CLAYS (basal) | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| ===== | | | | | | | | | | | | | | | | |
| 1 | 8/2/91 | MW01 | PALABIE | 543185 | 6335820 | 5050E | 5120N | 6 | 14 | 18 | 36 | Z7918-35 | Z7935 | Negative | Negative | Negative |
| 2 | 8/2/91 | MW01 | PALABIE | 543185 | 6335820 | 5050E | 4950N | 8 | 14 | 28 | 32 | Z7936-50 | Z7950 | Negative | Negative | Negative |
| 3 | 8/2/91 | MW04 | PALABIE | 539374 | 6322470 | 5000E | 4980N | 6 | 14 | 32 | 36 | Z7951-68 | Z7968 BM0161 | Negative | Negative | Negative |
| 4 | 9/2/91 | MW03 | PALABIE | 535474 | 6325920 | 5350E | 5090N | 4 | 12 | 42 | 58 | Z7969-97 | Z7997 | Negative | Negative | Negative |
| 5 | 9/2/91 | MW03 | PALABIE | 535474 | 6325920 | 5000E | 5010N | 2 | 18 | 40 | 42 | Z7998-800 Z7701-19 | Z7719 | Negative | Negative | Negative |
| 6 | 9/2/91 | MW20 | COCATA | 546250 | 6314520 | 5000E | 4940N | 2 | 10 | 50 | 66 | Z7720-52 | Z7752 | Negative | Negative | Negative |
| 7 | 9/2/91 | MW20 | COCATA | 546250 | 6314520 | 5000E | 5000N | 2 | 12 | 72 | 80 | Z7753-92 | Z7792 | Negative | Negative | Negative |
| 8 | 10/2/91 | MW20 | COCATA | 546250 | 6314520 | 5000E | 4960N | 2 | 18 | 50 | 66 | Z7793-825 | Z7825 | Negative | Negative | Negative |

| DH NO | DATE DRILLED | ANOMALY NO (MH) | SHEET 1:50 000 | EASTING | NORTHING | GRID CO-ORDS E - W | DEPTH TO BASE | | | | SAMPLE NUMBERS | BASEMENT INTERSECTION | QUATERNARY | TERTIARY | BASAL CLAYS |
|----------|-----------------|--------------------|-------------------|---------|----------|-----------------------|----------------------------|-------|----------------|------------------|-------------------|--------------------------|-------------------------------------|---------------------------------------|---------------------------------------|
| | | | | | | | QUAT. CALC- ARENITES | CLAYS | TERT. SANDS | CLAYS (basal) | | | | | |
| | | | | | | | | | | | | | | | |
| 9 | 10/2/91 | MW05 | COCATA | 543687 | 6316957 | 5100E 5000N | 2 | 12 | 38 | 42 | Z7826-45 | Z7845 | Negative | Negative | Negative |
| 10 | 10/2/91 | MW10 | COCATA | 536940 | 6306945 | 5000E 4995N | 10 | 16 | 42+ | | Z7846-66 | Z7866 | Negative | Negative | --- |
| 11 | 10/2/91 | MW13 | COCATA | 540724 | 6300495 | 5100E 4950N | 10 | 14 | 52 | 80 | Z7871-900 | Z7900 | Negative | Negative | Negative |
| 12 | 11/2/91 | MW13 | COCATA | 540724 | 6300495 | 5100E 4800N | 2 | 14 | 94 | 101 | Z9244-94 | Z9294 | 1 kimberlitic spinel (0 - 2m) | 4 kimberlitic spinel (10 - 12m) | 1 kimberlitic spinel (96 - 98m) |
| 13 | 11/2/91 | MW13 | COCATA | 540724 | 6300495 | 4500E 4925N | 8 | 14 | 52 | 57 | Z9295-322 | Z9322 | Negative | 1 kimberlitic spinel (14 - 16m) | 1 kimberlitic garnet (54 - 56m) |
| 14 | 11/2/91 | MW16 | COCATA | 546440 | 6300920 | 4950E 4840N | 4 | 8 | 36 | 50 | Z9323-47 | Z9347 BM0166 | Negative | 1 kimberlitic garnet (8 - 10m) | Negative |
| 15 | 12/2/91 | MW16 | COCATA | 546440 | 6300920 | 4950E 5000N | 8 | 20 | 34 | 46 | Z9348-70 | Z9370 | Negative | Negative | Negative |

000190

Table 2 Expenditure Report EL1527 : Mt Wedge
For the Period Ending 30 September 1991

| | |
|---------------------------------|------------|
| | \$ |
| OPERATIONAL STAFF COSTS | 1 199 |
| GENERAL OPERATING EXPENSES | 270 |
| TRANSPORT AND TRAVEL | 194 |
| TECHNICAL SERVICES : GEOPHYSICS | 324 |
| : REMOTE SENSING | 1 121 |
| CENTRAL TREATMENT PLANT | 9 919 |
| LABORATORY : | |
| TREATMENT | 2 700 |
| EXAMINATION | 3 334 |
| ADMINISTRATION : | |
| REGIONAL OFFICE | 1 879 |
| HEAD OFFICE | 2 416 |
| CAPITAL UTILISATION | 777 |
| | ----- |
| TOTAL THIS PERIOD | \$ 24 133 |
| TOTAL PREVIOUSLY REPORTED | \$ 270 849 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 294 982 |
| | ===== |

APPENDIX 1

1991 Geochemical Results

ANGLO AMERICAN RESEARCH LABORATORIES
X-RAY FLUORESCENCE GROUP
MULTI-ELEMENT ANALYSIS BY X-RAY FLUORESCENCE SPECTROMETRY

GEOLOGICAL DEPARTMENT REFERENCE NO. : GD/91/0430

LABORATORY REFERENCE NO. : X/91/0538

FIELD REFERENCE NO. : MBSPL/91/01

REGIONAL OFFICE : MB

GEOLOGIST : DE BEERS

Attached are the results of the ARL 72000S X-ray fluorescence determination of 34 major, minor and trace elements in 83 PDCHIPS samples submitted by the Consulting Geologist. The major and minor elements (marked %) were determined using pressed powder briquettes and, in part, by Energy Dispersive Spectrometry. In consequence, the results for these elements are relatively less accurate and less precise than those for the trace elements.

See attached page for an explanation of the comment codes.

All results will be kept for a minimum period of six months after the date on this report. Requests for such data should give the laboratory and Head Office reference numbers.

REMARKS:

Fluorine is not included in the 36 element package as the monochromator was damaged beyond repair.

At present the Sodium channel is down on the ARL 72000S spectrometer multi element programme.

The spectrometer has therefore been calibrated to exclude the element which is faulty.

Where Al2O3 is very high the following elements may be slightly depressed:- Ni, Sb, Bi, U, Sn, Te and F.

There is a possibility that W and Ta may be slightly enhanced.

Ba at high levels will be considerably underestimated - possibly by as much as 50% relative.

000193

At levels of up to 1% Ba, the following effects will occur:-

Enhancement: Te, Bi, Nb, V, Ti, U, As, W, Pb and P.

Depression : Sb, Sn and F.

In the presence of high percentage levels of Ba, other analyte trace elements may be effected as follows:-

Enhancement: Te, Sb, Sn, Bi, Nb, V, Ti, U, As, W, Pb, Ta, Cu, F and P.

The following elements are unreliable in the presence of high Fe:- Te, Sb, S, W, Ta and Co.

Where Fe is very high all trace element analyses must be considered as estimates only.

The following effects are possible in the presence of high Cu:-

Enhancement: Ta and W may be considerably enhanced, Zn, Ni, Co, Ba

Pb, Bi, As, Mo and U will be enhanced to a lesser degree.


Unreliable : Where Cu is very high Te, Sb and Sn analyses will be Unreliable.

The following effects are possible in the presence of high Zn:-

Enhancement: W, Ta, Cu, Na, Ni, Co, Ba and Pb.

Depression : Bi will be depressed when Zn is very high.

Unreliable : Sb, Te, Sn and F.


for B.E. Jackson
HEAD: X-RAY FLUORESCENCE SECTION

INVESTIGATORS : SP/SK/BV

Date : 13-Aug-91

000191

ANALYSIS NO. 1
Q.D. NO.
SAMPLE-
NUMBER

| | | | |
|-------|-----|------|------|
| Ni | s/t | 0A | 0A |
| Cu | s/t | 1A | 1A |
| Zn | s/t | 0A | 0A |
| Pb | s/t | 0A | 0A |
| Co | s/t | 2A | 2A |
| Mn | s/t | 7A | 7A |
| S | Z | 0.0A | 0.0A |
| As | s/t | 9A | 9A |
| Se | s/t | 3A | 3A |
| Sb | s/t | 18A | 18A |
| Bi | s/t | 6A | 6A |
| Fe | Z | 0.0A | 0.0A |
| Mn | Z | 0.0A | 0.0A |
| Cr | Z | 0.0A | 0.0A |
| Y102 | Z | 0.0A | 0.0A |
| V205 | Z | 0.0A | 0A |
| Sr | s/t | 0A | 0A |
| Ba | s/t | 0A | 0A |
| U308 | s/t | 0A | 9A |
| Th02 | s/t | 9A | |
| U/Th | | | 28A |
| Sn | s/t | 28A | 5A |
| W03 | s/t | 5A | 23A |
| Ta205 | s/t | 23A | 0A |
| Nb205 | s/t | 0A | 0A |
| Zr | s/t | 0A | 0A |
| Rb | s/t | 0A | 0A |
| Y | s/t | 0A | 0.0A |
| P205 | Z | 0.0A | 0.0A |
| K | Z | 0.0A | 0.0A |
| Ca | Z | 0.0A | 44A |
| Te | s/t | 44A | 0.0A |
| F | Z | 0.0A | 0.0A |
| Si02 | Z | 0.0A | 0.0A |
| Al203 | Z | 0.0A | 0.0A |
| Hs | Z | 0.0A | 0.0A |
| Na | Z | 0.0A | |

NOTE : A = RECOMMENDED ADJUSTMENT. More accurate results MAY be obtained by adding these values to the reported results.

CAUTION - Results are reported to a one standard deviation detection limit.
N.D. = Not Determined. Elements marked "?" MAY be inaccurate if an undetermined element is present.
C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.
T = Bad major elements total (<90% >110%, as oxides). Refers to columns marked Z. Only relevant if all majors determined.
L = May be inaccurate due to low sample mass.

000193

SPRINT 11/01
M/1/0538

AMERICAN RESEARCH LABORATORY
X-RAY FLUORESCENCE GROUP

LAB-71
DATE: 10/29/8

PAGE 4.1

| DH01 / MW01 | | | | | | | | | | DH2 / MW01 | | DH4 / MW03 | | | | | DH6 / MW20 | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|--------|------------|--------|--------|--------|--------|------------|--------|--------|--------|--|
| ANALYSIS NO. | 5/1 | 6/2 | 7/3 | 8/4 | 9/5 | 10/6 | 11/7 | 12/8 | 13/9 | 14/10 | 15/11 | 16/12 | 17/13 | 18/14 | 19/15 | 20/16 | 21/17 | 22/18 | 23/19 | 24/20 | |
| G.D.NO. | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | |
| SAMPLE- | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | |
| NUMBER | 7927 | 7928 | 7929 | 7930 | 7931 | 7932 | 7933 | 7934 | 7935 | 7949 | 7950 | 7990 | 7991 | 7992 | 7993 | 7994 | 7995 | 7996 | 7997 | 7745 | |
| Ni | s/t | 3 | 1 | 3 | 14 | 5 | 10 | 5 | 9 | 12 | 12 | 10 | 2 | 3 | 4 | 6 | 4 | 5 | 4 | 5 | |
| Cu | s/t | 4 | 4 | 4 | 2 | 1 | 5 | 3 | 5 | 5 | 11 | 13 | 4 | 6 | 5 | 6 | 6 | 5 | 4 | 5 | |
| Zn | s/t | 18 | 23 | 15 | 22 | 18 | 50 | 37 | 78 | 51 | 46 | 20 | 57 | 20 | 14 | 12 | 11 | 27 | 26 | 27 | |
| Pb | s/t | 3 | 4 | 64 | 8 | 2 | 26 | 21 | 28 | 16 | 10 | 1 | 9 | 11 | 8 | 7 | 13 | 16 | 17 | 14 | |
| Co | s/t | 3 | 3 | 4 | 1 | 2 | 0 | 1 | 1 | 1 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | |
| Mo | s/t | 4 | 5 | 1 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 7 | 0 | 3 | 4 | 2 | 3 | 4 | 5 | 4 | |
| S | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.5 | 0.6 | 0.87 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.9 | |
| As | s/t | 9 | 11 | 17 | 8 | 1 | 9 | 2 | 2 | 4 | 1 | 0 | 9 | 9 | 18 | 13 | 14 | 9 | 11 | 36 | |
| Se | s/t | 1 | 1 | 0 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 3 | 2 | 4 | 3 | 3 | 2 | 2 | 1 | |
| Sb | s/t | 26 | 22 | 11 | 16 | 6 | 8 | 11 | 13 | 10 | 3 | 0 | 30 | 24 | 13 | 12 | 10 | 7 | 4 | 4 | |
| Bi | s/t | 7 | 8 | 8 | 6 | 5 | 6 | 0 | 1 | 4 | 2 | 2 | 9 | 7 | 11 | 10 | 7 | 5 | 6 | 0 | |
| Fe | Z | 1.2 | 1.1 | 1.2 | 1.6 | 1.0 | 1.3 | 1.0 | 1.1 | 1.4 | 1.6 | 1.77 | 2.4 | 1.4 | 1.1 | 0.9 | 1.2 | 1.0 | 0.8 | 4.1 | |
| Mn | Z | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.47 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.8 | |
| Cr | Z | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.17 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | |
| TiO2 | Z | 0.5 | 0.5 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.47 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | |
| V2O5 | Z | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.37 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| Sr | s/t | 161 | 117 | 80 | 94 | 49 | 96 | 138 | 156 | 224 | 283 | 154 | 31 | 23 | 19 | 25 | 32 | 54 | 49 | 102 | |
| Ba | s/t | 72 | 172 | 248 | 178 | 224 | 490 | 690 | 648 | 617 | 738 | 294 | 191 | 189 | 167 | 233 | 290 | 557 | 588 | 706 | |
| U3O8 | s/t | 7 | 6 | 6 | 6 | 4 | 7 | 9 | 9 | 10 | 12 | 8 | 3 | 2 | 0 | 2 | 4 | 5 | 7 | 7 | |
| ThO2 | s/t | 11 | 11 | 8 | 7 | 13 | 1 | 1 | 4 | 1 | 6 | 13 | 9 | 5 | 0 | 4 | 0 | 7 | 6 | 12 | |
| U/Th | | | | | | | 7.6 | 2.1 | | | | | | | | 0.6 | | 0.3 | 1.0 | 0.5 | |
| Sn | s/t | 38 | 33 | 26 | 27 | 29 | 17 | 20 | 26 | 27 | 25 | 22 | 39 | 36 | 30 | 31 | 31 | 24 | 23 | 23 | |
| W03 | s/t | 6 | 3 | 0 | 5 | 6 | 9 | 9 | 5 | 4 | 20 | 5 | 5 | 9 | 10 | 10 | 6 | 9 | 7 | 5 | |
| Ta2O5 | s/t | 14 | 9 | 3 | 4 | 0 | 4 | 3 | 1 | 7 | 1 | 3 | 2 | 4 | 10 | 8 | 4 | 3 | 4 | 6 | |
| Nb2O5 | s/t | 3 | 4 | 9 | 5 | 4 | 11 | 7 | 8 | 6 | 6 | 4 | 13 | 9 | 13 | 12 | 9 | 10 | 10 | 10 | |
| Zr | s/t | 108 | 115 | 282 | 140 | 93 | 179 | 109 | 150 | 115 | 178 | 182 | 430 | 359 | 172 | 183 | 184 | 155 | 108 | 95 | |
| Rb | s/t | 32 | 31 | 47 | 41 | 31 | 77 | 94 | 88 | 76 | 63 | 19 | 49 | 30 | 31 | 39 | 54 | 106 | 128 | 173 | |
| Y | s/t | 13 | 11 | 14 | 8 | 7 | 10 | 10 | 19 | 20 | 15 | 10 | 15 | 11 | 12 | 12 | 12 | 16 | 16 | 15 | |
| P2O5 | Z | 1.6 | 0.9 | 0.5 | 0.2 | 0.7 | 0.8 | 1.1 | 1.0 | 0.3 | 0.3 | 0.57 | 0.7 | 0.5 | 0.5 | 0.9 | 0.1 | 0.4 | 0.6 | 0.2 | |
| K | Z | 1.0 | 1.0 | 1.5 | 1.4 | 1.2 | 2.7 | 4.1 | 4.0 | 3.3 | 2.6 | 0.97 | 1.4 | 1.0 | 0.8 | 1.1 | 1.5 | 2.8 | 3.4 | 4.2 | |
| Ca | Z | 8.6 | 6.3 | 3.2 | 2.9 | 1.8 | 1.0 | 0.8 | 1.8 | 3.5 | 1.1 | 0.87 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | |
| Te | s/t | 50 | 45 | 50 | 35 | 35 | 34 | 29 | 26 | 31 | 31 | 34 | 62 | 43 | 50 | 50 | 43 | 32 | 25 | 4 | |
| F | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| SiO2 | Z | 70.9 | 78.4 | 82.3 | 90.0 | 97.6 | 78.1 | 77.3 | 76.8 | 77.1 | 83.6 | 98.07 | 74.9 | 79.3 | 81.8 | 76.2 | 88.8 | 85.1 | 84.3 | 85.0 | |
| Al2O3 | Z | 3.6 | 4.3 | 6.9 | 5.7 | 4.7 | 11.3 | 12.2 | 11.3 | 7.8 | 8.9 | 5.27 | 9.1 | 9.4 | 12.4 | 13.6 | 9.0 | 10.3 | 11.6 | 8.2 | |
| H2 | Z | 2.8 | 2.0 | 1.1 | 0.7 | 0.3 | 0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 0.27 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | |
| Na | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

NOTE:

CAUTION - Results are reported to a one standard deviation detection limit !
 N.D. = Not Determined. Elements marked 'Z' MAY be inaccurate if an undetermined element is present.
 C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warnings is printed above.
 T = Bad major elements total (<90% >110%, as oxides). Refers to columns marked Z. Only relevant if all majors determined.
 L = May be inaccurate due to low sample mass.

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DD: 11/04/80
10:00 01/01
00110535

AMERICAN RESEARCH LABORATORY
X-RAY FLUORESCENCE ANALYSIS

PAGE 3-1

DH06/MW20

DH7/MW20

DH8/MW20

| ANALYSIS NO. | 25/21 | 26/22 | 27/23 | 28/24 | 29/25 | 30/26 | 31/27 | 32/28 | 33/29 | 34/30 | 35/31 | 36/32 | 37/33 | 38/34 | 39/35 | 40/36 | 41/37 | 42/38 | 43/39 | 44/40 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| O.R.NO. | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI |
| SAMPLE- | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z |
| NUMBER | 7746 | 7747 | 7748 | 7749 | 7750 | 7751 | 7752 | 7789 | 7790 | 7791 | 7792 | 7818 | 7819 | 7820 | 7821 | 7822 | 7823 | 7824 | 7825 | 7826 |
| Ni | s/t | 19 | 15 | 15 | 30 | 22 | 22 | 21 | 39 | 40 | 32 | 25 | 32 | 26 | 25 | 27 | 34 | 31 | 24 | 28 |
| Cu | s/t | 3 | 4 | 1 | -6 | -6 | -3 | -3 | 1 | -1 | 6 | -4 | -19 | 13 | 17 | 10 | 6 | 13 | 8 | 6 |
| Zn | s/t | 47 | 79 | 58 | 62 | 60 | 69 | 51 | 60 | 124 | 40 | 49 | 50 | 37 | 45 | 37 | 465 | 87 | 72 | 72 |
| Pb | s/t | 7 | 10 | 8 | 12 | 7 | 13 | 13 | 1 | 6 | -2 | 20 | 24 | 17 | 28 | 17 | 7 | 11 | 15 | 14 |
| Co | s/t | 7 | 4 | 7 | 12 | 1 | 10 | 10 | 9 | 36 | 18 | 4 | 36 | 3 | 7 | 10 | 9 | 4 | 4 | 6 |
| Mo | s/t | -6 | -6 | -6 | -6 | -6 | -6 | -3 | -7 | -7 | -8 | -6 | -6 | -7 | -7 | -6 | -7 | -7 | -9 | -8 |
| S | Z | 0.7 | 0.5 | 0.4 | 0.4 | 0.37 | 0.27 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.7 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 |
| As | s/t | 31 | 3 | 6 | 6 | 2 | 13 | 22 | -4 | 14 | -7 | -4 | 48 | 15 | 9 | 6 | 3 | 1 | 4 | 11 |
| Se | s/t | 0 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | 4 | 0 | 0 | -3 | -3 | -1 | -2 | -2 | -3 | -1 | -2 |
| Sb | s/t | -11 | -8 | -5 | -15 | -8 | -9 | -4 | -28 | -40 | -8 | -2 | -14 | -8 | -13 | -15 | -8 | -16 | -18 | -20 |
| Bi | s/t | 0 | 0 | 0 | 3 | 0 | 3 | 2 | 0 | 3 | 1 | 3 | -7 | -6 | -1 | -4 | -2 | -4 | -4 | -2 |
| Fe | Z | 4.0 | 3.8 | 5.3 | 11.1 | 11.07 | 8.17 | 6.7 | 15.4 | 14.9 | 9.9 | 7.1 | 3.5 | 3.5 | 7.5 | 9.4 | 11.4 | 8.5 | 11.8 | 12.0 |
| Mn | Z | 0.8 | 0.8 | 1.2 | 2.1 | 2.17 | 2.27 | 2.2 | 2.3 | 2.1 | 1.8 | 1.6 | 0.7 | 0.7 | 2.0 | 2.5 | 2.8 | 2.2 | 2.7 | 0.6 |
| Cr | Z | 0.2 | 0.2 | 0.2 | 0.2 | 0.27 | 0.27 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 |
| TiO2 | Z | 0.5 | 0.5 | 0.5 | 0.6 | 0.77 | 0.77 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 |
| V2O5 | Z | 0.3 | 0.3 | 0.3 | 0.3 | 0.37 | 0.37 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Sr | s/t | 15 | 13 | 29 | 62 | 89 | 112 | 126 | 36 | 46 | 46 | 127 | 29 | 20 | 30 | 28 | 29 | 34 | 72 | 50 |
| Ba | s/t | 174 | 220 | 234 | 658 | 964 | 1264C | 1318C | 487 | 450 | 416 | 1360C | 213 | 194 | 362 | 358 | 358 | 326 | 430 | 465 |
| U3O8 | s/t | 6 | 6 | 8 | 15 | 13 | 15 | 14 | 14 | 12 | 13 | 5 | 4 | 12 | 9 | 13 | 8 | 11 | 11 | 12 |
| ThO2 | s/t | -5 | -5 | -4 | -4 | -1 | 3 | -9 | -1 | -11 | -8 | 8 | 0 | 1 | -1 | -5 | 1 | -3 | -1 | 3 |
| U/Th | | | | | | | 5.3 | | | | | 0.7 | | 11.3 | | | | | | 3.5 |
| Sn | s/t | -25 | -24 | -24 | -22 | -22 | -29 | -20 | -28 | -22 | -19 | -27 | -26 | -32 | -28 | -21 | -29 | -28 | -23 | -18 |
| WO3 | s/t | 3 | 5 | 2 | -5 | -12 | -2 | -1 | -20 | -20 | -11 | -5 | 11 | 8 | 8 | -5 | -7 | -3 | -7 | 3 |
| Ta2O5 | s/t | -11 | -9 | -15 | -30 | -28 | -18 | -16 | -44 | -44 | -30 | -22 | 3 | 0 | -11 | -24 | -32 | -20 | -29 | -5 |
| Hf2O5 | s/t | 6 | 6 | 7 | 9 | 10 | 11 | 11 | 7 | 3 | 6 | 5 | 21 | 18 | 16 | 12 | 10 | 14 | 13 | 12 |
| Zr | s/t | 153 | 120 | 149 | 115 | 122 | 118 | 111 | 108 | 73 | 104 | 69 | 234 | 274 | 208 | 175 | 149 | 188 | 120 | 136 |
| Rb | s/t | 29 | 33 | 37 | 72 | 115 | 164 | 161 | 40 | 26 | 44 | 158 | 73 | 49 | 51 | 34 | 31 | 46 | 40 | 34 |
| Y | s/t | 9 | 9 | 18 | 64 | 40 | 27 | 24 | 11 | 11 | 11 | 34 | 20 | 18 | 17 | 18 | 20 | 21 | 27 | 23 |
| P2O5 | Z | 0.8 | 0.7 | 0.4 | 1.5 | 1.67 | 1.97 | 1.7 | 1.6 | 1.5 | 0.9 | 1.5 | 1.4 | 1.2 | 1.6 | 1.3 | 1.7 | 1.7 | 1.8 | 1.4 |
| K | Z | 0.7 | 0.8 | 0.8 | 1.3 | 1.97 | 2.97 | 3.4 | 0.8 | 0.6 | 0.8 | 4.3 | 1.3 | 1.0 | 0.9 | 0.7 | 0.6 | 0.9 | 0.7 | 2.3 |
| Ca | Z | 0.4 | 0.4 | 0.5 | 0.5 | 0.77 | 0.77 | 0.7 | 0.6 | 0.9 | 0.7 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 2.5 |
| Te | s/t | -38 | -32 | -36 | -38 | -41 | -40 | -29 | -48 | -25 | -34 | -29 | -41 | -40 | -52 | -41 | -44 | -32 | -47 | -55 |
| F | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.07 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SiO2 | Z | 75.5 | 76.8 | 78.9 | 58.2 | 54.57 | 52.57 | 60.7 | 53.1 | 56.2 | 65.1 | 61.6 | 61.0 | 66.8 | 54.7 | 58.1 | 57.4 | 57.2 | 49.2 | 50.0 |
| Al2O3 | Z | 9.6 | 10.3 | 8.3 | 10.3 | 10.77 | 11.77 | 11.0 | 8.5 | 6.2 | 8.5 | 9.9 | 19.8 | 17.8 | 20.1 | 17.4 | 14.4 | 17.7 | 18.9 | 16.4 |
| Hg | Z | 0.2 | 0.2 | 0.2 | 0.3 | 0.67 | 0.67 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| Na | Z | 0.0 | 0.0 | 0.0 | 0.0 | 0.07 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

NOTE:

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 N.D. = Not Determined. Elements marked '?' MAY be inaccurate if an undetermined element is present.
 C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.
 T = Bad major elements total (<90% >110%, as oxides). Refers to columns marked Z. Only relevant if all majors determined.
 L = May be inaccurate due to low sample mass.

000197

10-11-74 10:30
 ANALYST: J. L. O. I.
 DATE: 11-1-74

ANALYST: AMERICAN RESEARCH LABORATORY
 X-RAY FLUORESCENCE ANALYSIS

ANALYST: J. L. O. I.
 DATE: 11-1-74

PAGE: 4-1

| | DH9/MW05 | | | | DH10/MW10 | | | | DH11/MW13 | | | | DH12/MW13 | | | | DH12/MW13 | | | |
|--------------|----------|--------|--------|--------|-----------|--------|--------|--------|-----------|--------|--------|--------|-----------|--------|--------|--------|-----------|--------|--------|--------|
| ANALYSIS NO. | 45/41 | 46/42 | 47/43 | 48/44 | 49/45 | 50/46 | 51/47 | 52/48 | 53/49 | 54/50 | 55/51 | 56/52 | 57/53 | 58/54 | 59/55 | 60/56 | 61/57 | 62/58 | 63/59 | 64/60 |
| S.D. NO. | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI |
| SAMPLE- | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z | Z |
| NUMBER | 7844 | 7845 | 7865 | 7866 | 7897 | 7898 | 7899 | 7900 | 9234 | 9235 | 9236 | 9237 | 9238 | 9239 | 9240 | 9241 | 9242 | 9243 | 199 | 9291 |
| Ni | s/t | 0 | 8 | 1 | 0 | 19 | 20 | 23 | 19 | 16 | 25 | 24 | 19 | 16 | 13 | 14 | 15 | 26 | 26 | 16 |
| Cu | s/t | 2 | 5 | 3 | 1 | 11 | 11 | 12 | 10 | 10 | 12 | 11 | 7 | 11 | 6 | 8 | 7 | 6 | 8 | 21 |
| Zn | s/t | 12 | 6 | 2 | 1 | 64 | 39 | 50 | 109 | 49 | 56 | 48 | 133 | 133 | 53 | 62 | 53 | 61 | 53 | 84 |
| Pb | s/t | 13 | 13 | 4 | 5 | 19 | 18 | 18 | 17 | 16 | 21 | 17 | 16 | 14 | 19 | 17 | 15 | 14 | 17 | 21 |
| Co | s/t | 4 | 4 | 5 | 4 | 3 | 3 | 5 | 4 | 7 | 2 | 7 | 7 | 4 | 6 | 4 | 6 | 4 | 4 | 4 |
| Mo | s/t | 4 | 5 | 2 | 2 | 3 | 3 | 6 | 5 | 6 | 6 | 6 | 4 | 5 | 6 | 5 | 3 | 6 | 5 | 7 |
| S | Z | 0.4 | 0.2 | 0.21 | 0.21 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.1 |
| As | s/t | -3 | -4 | -19 | -15 | -10 | -4 | 1 | -3 | -2 | -1 | -3 | 0 | -5 | -1 | -2 | -5 | -5 | -7 | -4 |
| Se | s/t | -1 | -1 | -2 | -1 | -2 | -2 | -1 | -1 | -1 | -1 | -2 | -1 | -1 | -1 | -1 | -1 | -2 | -2 | -2 |
| Sb | s/t | -13 | -4 | -20 | -25 | -11 | -3 | -10 | -5 | -6 | -5 | -6 | -4 | 1 | 1 | 2 | 1 | 6 | -3 | 17 |
| Bi | s/t | -4 | -2 | -5 | -4 | -5 | -4 | -1 | -3 | -2 | -1 | -4 | 0 | -3 | 0 | -2 | -1 | -1 | -2 | -4 |
| Fe | Z | 0.6 | 0.7 | 0.87 | 0.67 | 2.7 | 2.9 | 3.1 | 3.4 | 4.0 | 3.6 | 3.4 | 3.5 | 2.9 | 2.6 | 2.6 | 2.6 | 2.7 | 2.2 | 4.1 |
| Mn | Z | 0.2 | 0.2 | 0.37 | 0.27 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 |
| Cr | Z | 0.2 | 0.2 | 0.27 | 0.17 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |
| Ti02 | Z | 0.4 | 0.3 | 0.27 | 0.27 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 |
| V2O5 | Z | 0.3 | 0.3 | 0.37 | 0.37 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Sr | s/t | 196 | 300 | 7 | 4 | 100 | 88 | 62 | 86 | 65 | 65 | 77 | 84 | 66 | 68 | 70 | 75 | 72 | 80 | 207 |
| Ba | s/t | 1268C | 1331C | 191 | 168 | 501 | 633 | 650 | 592 | 609 | 624 | 679 | 593 | 590 | 501 | 553 | 824 | 768 | 639 | 1229C |
| U3O8 | s/t | 6 | 9 | 3 | 2 | 7 | 8 | 10 | 9 | 10 | 11 | 8 | 11 | 10 | 11 | 9 | 8 | 10 | 9 | 13 |
| ThO2 | s/t | -7 | -7 | -18 | -14 | 3 | 7 | 8 | 4 | 4 | 7 | 7 | 0 | 2 | 0 | 2 | -1 | -2 | -3 | 4 |
| U/Th | | | | | 2.0 | 1.2 | 1.4 | 2.1 | 2.1 | 1.6 | 1.2 | | | 4.0 | | 4.7 | | | 3.1 | 0.9 |
| Sn | s/t | -24 | -14 | -33 | -30 | -20 | -21 | -19 | -18 | -20 | -23 | -21 | -21 | -20 | -25 | -22 | -24 | -14 | -21 | -13 |
| W03 | s/t | 4 | 5 | 8 | 6 | 11 | 7 | 8 | 9 | 4 | 5 | 5 | 6 | 7 | 4 | 8 | 7 | 4 | 7 | 6 |
| Ta2O5 | s/t | 3 | 3 | 0 | 0 | 1 | -3 | -1 | -4 | -9 | -5 | -5 | -7 | -4 | -5 | -4 | -5 | -5 | -3 | -7 |
| Nb2O5 | s/t | 4 | 2 | 1 | 1 | 16 | 12 | 12 | 13 | 11 | 12 | 12 | 11 | 11 | 10 | 11 | 10 | 9 | 10 | 19 |
| Zr | s/t | 123 | 81 | 219 | 166 | 247 | 181 | 171 | 186 | 171 | 172 | 176 | 172 | 200 | 209 | 211 | 194 | 193 | 180 | 239 |
| Rb | s/t | 79 | 91 | 14 | 11 | 99 | 147 | 157 | 133 | 150 | 148 | 160 | 134 | 147 | 132 | 136 | 129 | 131 | 134 | 135 |
| Y | s/t | 6 | 6 | 5 | 4 | 32 | 42 | 30 | 25 | 21 | 20 | 22 | 21 | 21 | 21 | 21 | 20 | 21 | 18 | 38 |
| P2O5 | Z | 1.0 | 0.8 | -2.47 | -2.87 | 0.9 | 1.0 | 1.5 | 1.2 | 1.2 | 1.3 | 1.2 | 1.1 | 0.8 | 1.3 | 0.8 | 0.9 | 0.3 | 1.2 | 1.3 |
| K | Z | 4.4 | 4.8 | 0.87 | 0.67 | 2.2 | 3.3 | 3.5 | 2.9 | 3.2 | 3.1 | 3.3 | 2.9 | 3.2 | 3.2 | 3.0 | 3.1 | 3.0 | 3.2 | 2.6 |
| Ca | Z | 0.5 | 0.7 | 0.47 | 0.47 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 | 1.3 | 1.1 | 1.1 | 1.1 | 1.2 | 2.1 |
| Te | s/t | -19 | 0 | -42 | -39 | -35 | -38 | -37 | -33 | -30 | -24 | -26 | -27 | -31 | -25 | -29 | -28 | -20 | -24 | -19 |
| F | Z | 0.0 | 0.0 | 0.07 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Si02 | Z | 75.2 | 79.3 | 117.07 | 117.87 | 74.2 | 71.9 | 67.6 | 71.1 | 69.6 | 68.3 | 69.0 | 74.7 | 77.3 | 70.2 | 76.9 | 76.3 | 76.4 | 73.8 | 66.0 |
| Al2O3 | Z | 10.0 | 9.6 | 1.47 | 0.97 | 13.6 | 14.2 | 13.3 | 12.4 | 12.0 | 12.8 | 12.3 | 10.2 | 9.9 | 11.1 | 9.5 | 9.5 | 9.5 | 10.8 | 13.4 |
| Mg | Z | 0.0 | 0.0 | 0.17 | 0.17 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 |
| Na | Z | 0.0 | 0.0 | 0.07 | 0.07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

NOTE:

CAUTION - Results are reported to a one standard deviation detection limit!
 N.D. = Not Determined. Elements marked ? MAY be inaccurate if an undetermined element is present.
 C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.
 T = Bad major elements total (<90% >110%, as oxides). Refers to columns marked Z. Only relevant if all majors determined
 L = May be inaccurate due to low sample mass.

000193

ANALYSIS NO. 55/81
G.D.NO. 5307SI
SAMPLE-
NUMBER 9292

AMERICAN RESEARCH
X-RAY FLUORESCENCE

PAGE 4-4

| DH12 / MW13 | | | | | | | | | | DH14 / MW16 | | | | | | | | | | DH15 / MW16 | | | | | | | | | | MW03 | | | | DH13 / MW04 | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--|
| ANALYSIS NO. | 55/81 | 56/82 | 57/83 | 58/84 | 59/85 | 70/86 | 71/87 | 72/88 | 73/89 | 74/90 | 75/91 | 76/92 | 77/93 | 78/94 | 79/95 | 80/96 | 81/97 | 82/98 | 83/99 | 84/00 | 55/81 | 56/82 | 57/83 | 58/84 | 59/85 | 70/86 | 71/87 | 72/88 | 73/89 | 74/90 | 75/91 | 76/92 | 77/93 | 78/94 | 79/95 | 80/96 | 81/97 | 82/98 | 83/99 | 84/00 | |
| G.D.NO. | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | 5307SI | |
| SAMPLE- | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| NUMBER | 9292 | 9293 | 9294 | 9341 | 9342 | 9343 | 9344 | 9345 | 9346 | 9347 | 9365 | 9366 | 9367 | 9368 | 9369 | 9370 | 9371 | 9372 | 9373 | 9374 | 9375 | 9376 | 9377 | 9378 | 9379 | 9380 | 9381 | 9382 | 9383 | 9384 | 9385 | 9386 | 9387 | 9388 | 9389 | 9390 | 9391 | 9392 | 9393 | 9394 | |
| Mi | 12 | 8 | 8 | 57 | 52 | 102 | 95 | 73 | 48 | 46 | 47 | 73 | 72 | 57 | 57 | 70 | 30E | 10 | 3 | 15 | | | | | | | | | | | | | | | | | | | | | |
| Cu | 9 | 7 | 6 | 3 | 2 | -1 | 0 | -1 | -1 | -1 | 16 | 10 | 7 | 6 | 17 | 18 | 3407C | 7 | 5 | 26 | | | | | | | | | | | | | | | | | | | | | |
| Zn | 47 | 40 | 34 | 80 | 60 | 75 | 92 | 56 | 44 | 44 | 82 | 154 | 120 | 90 | 150 | 115 | 3177C | 14 | 1 | 180 | | | | | | | | | | | | | | | | | | | | | |
| Pb | 20 | 14 | 13 | 0 | -8 | 1 | 0 | 1 | 0 | 0 | 1 | 6 | 8 | 7 | 14 | 13 | 201 | 19 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | |
| Co | 3 | 2 | 2 | 12 | 12 | 18 | 19 | 18 | 12 | 10 | 3 | 4 | 5 | 4 | 4 | 4 | 26 | 20 | 2 | 6 | | | | | | | | | | | | | | | | | | | | | |
| Mn | -7 | -6 | -7 | -6 | -6 | -8 | -6 | -5 | -6 | -6 | -3 | -7 | -6 | -5 | -5 | -6 | -4 | -2 | 4 | -7 | | | | | | | | | | | | | | | | | | | | | |
| S | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.11 | 0.21 | 0.1 | 0.01 | 0.1 | 0.4 | 0.21 | 0.1 | 0.1 | 0.1 | 0.21 | 0.0 | 0.3 | 0.21 | 0.41 | | | | | | | | | | | | | | | | | | | | | |
| As | -4 | -1 | -4 | -8 | -12 | -10 | -7 | -8 | -12 | -8 | -12 | -12 | -11 | -12 | -8 | -5 | 99 | 2 | 2 | -7 | | | | | | | | | | | | | | | | | | | | | |
| Se | -2 | -2 | -2 | -3 | -3 | -3 | -2 | -2 | -3 | -2 | -2 | -3 | -2 | -3 | -2 | -2 | -1 | -2 | 0 | -2 | | | | | | | | | | | | | | | | | | | | | |
| Sb | -8 | 2 | 2 | -11 | -2 | -5 | -5 | -3 | 3 | 6 | 2 | -5 | 1 | 5 | 6 | 1 | 33 | 9 | 26 | -2 | | | | | | | | | | | | | | | | | | | | | |
| Bi | -4 | -3 | -2 | -7 | -9 | -7 | -3 | -4 | -7 | -6 | -4 | -9 | -5 | -6 | -5 | -5 | 9 | -9 | -1 | -7 | | | | | | | | | | | | | | | | | | | | | |
| Fe | 2.3 | 1.9 | 1.8 | 2.2 | 2.5 | 3.01 | 3.31 | 3.5 | 4.21 | 3.6 | 1.9 | 2.41 | 1.7 | 1.8 | 3.0 | 4.91 | 6.1 | 1.5 | 1.11 | 2.41 | | | | | | | | | | | | | | | | | | | | | |
| Mn | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.61 | 0.71 | 0.6 | 0.81 | 0.7 | 0.4 | 0.51 | 0.4 | 0.4 | 0.6 | 0.81 | 1.0 | 0.3 | 0.31 | 0.51 | | | | | | | | | | | | | | | | | | | | | |
| Cr | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.21 | 0.11 | 0.2 | 0.21 | 0.2 | 0.1 | 0.21 | 0.2 | 0.1 | 0.2 | 0.21 | 0.1 | 0.2 | 0.21 | 0.21 | | | | | | | | | | | | | | | | | | | | | |
| TiO2 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.61 | 0.61 | 0.6 | 0.71 | 0.7 | 0.4 | 0.61 | 0.4 | 0.5 | 0.5 | 0.81 | 0.4 | 0.9 | 0.21 | 0.61 | | | | | | | | | | | | | | | | | | | | | |
| V2O5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.31 | 0.31 | 0.3 | 0.31 | 0.3 | 0.3 | 0.31 | 0.3 | 0.3 | 0.31 | 0.3 | 0.3 | 0.3 | 0.31 | 0.31 | | | | | | | | | | | | | | | | | | | | | |
| Sr | 68 | 68 | 69 | 32 | 32 | 76 | 99 | 92 | 134 | 113 | 24 | 49 | 84 | 72 | 136 | 411 | 28 | 333 | 46 | 547 | | | | | | | | | | | | | | | | | | | | | |
| Ba | 797 | 678 | 587 | 374 | 404 | 433 | 478 | 508 | 606 | 673 | 233 | 336 | 500 | 496 | 549 | 1061C | 384 | 562 | 176 | 692 | | | | | | | | | | | | | | | | | | | | | |
| U3O8 | 5 | 8 | 8 | 6 | 6 | 8 | 9 | 11 | 17 | 13 | 5 | 6 | 6 | 7 | 7 | 16 | 10 | 10 | 3 | 13 | | | | | | | | | | | | | | | | | | | | | |
| ThO2 | 6 | 3 | -1 | -10 | -14 | -14 | -13 | -13 | -9 | -7 | -13 | -14 | -10 | -12 | -11 | -5 | 22 | 1 | -9 | -12 | | | | | | | | | | | | | | | | | | | | | |
| U/Th | 0.8 | 2.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.5 | - | - | - | | | | | | | | | | | | | | | | | | | | | |
| Sn | -25 | -15 | -15 | -27 | -25 | -22 | -21 | -22 | -20 | -20 | -22 | -24 | -24 | -24 | -18 | -20 | 25 | -30 | -25 | -27 | | | | | | | | | | | | | | | | | | | | | |
| W03 | 4 | 7 | 7 | 9 | 6 | 6 | 2 | 0 | 1 | 2 | 6 | 10 | 7 | 5 | 4 | 8 | 67E | 6 | 7 | 4 | | | | | | | | | | | | | | | | | | | | | |
| Ta2O5 | -1 | -1 | -2 | 2 | -1 | -1 | -3 | -5 | -7 | -5 | -2 | 1 | 2 | 1 | -7 | -9 | 67E | 4 | -3 | -2 | | | | | | | | | | | | | | | | | | | | | |
| Nb2O5 | 17 | 13 | 11 | 3 | 2 | 2 | 2 | 2 | 7 | 6 | 3 | 3 | 3 | 2 | 2 | 5 | 20 | 15 | -1 | -1 | | | | | | | | | | | | | | | | | | | | | |
| Zr | 232 | 230 | 193 | 111 | 106 | 96 | 103 | 94 | 132 | 133 | 116 | 129 | 166 | 109 | 109 | 143 | 186 | 271 | 51 | 45 | | | | | | | | | | | | | | | | | | | | | |
| Rh | 179 | 148 | 127 | 97 | 92 | 84 | 75 | 102 | 126 | 107 | 41 | 131 | 126 | 135 | 99 | 84 | 55 | 70 | 8 | 50 | | | | | | | | | | | | | | | | | | | | | |
| Y | 26 | 24 | 19 | 35 | 34 | 18 | 14 | 13 | 20 | 16 | 14 | 18 | 24 | 17 | 24 | 106 | 18 | 3 | 10 | | | | | | | | | | | | | | | | | | | | | | |
| P2O5 | 1.2 | 1.0 | 0.9 | 1.1 | 1.1 | 1.31 | 1.71 | 1.3 | 1.61 | 1.1 | -0.2 | 1.41 | 1.1 | 1.6 | 1.3 | 2.41 | 1.6 | 1.7 | -1.41 | 1.61 | | | | | | | | | | | | | | | | | | | | | |
| K | 4.0 | 3.7 | 3.4 | 3.1 | 3.0 | 2.61 | 2.51 | 3.2 | 3.11 | 2.9 | 1.4 | 3.31 | 5.3 | 5.4 | 3.5 | 2.41 | 2.1 | 1.8 | 0.51 | 1.61 | | | | | | | | | | | | | | | | | | | | | |
| Ca | 0.6 | 0.8 | 1.1 | 0.4 | 0.3 | 0.41 | 0.81 | 0.7 | 0.61 | 0.5 | 0.7 | 0.41 | 0.3 | 0.3 | 1.1 | 1.71 | 2.3 | 3.0 | 1.21 | 1.91 | | | | | | | | | | | | | | | | | | | | | |
| Te | -26 | -21 | -19 | -36 | -33 | -30 | -22 | -27 | -37 | -27 | -32 | -32 | -29 | -30 | -24 | -23 | -34 | -37 | -11 | -31 | | | | | | | | | | | | | | | | | | | | | |
| F | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.01 | 0.01 | 0.0 | 0.01 | 0.0 | 0.0 | 0.01 | 0.0 | 0.0 | 0.0 | 0.01 | 0.0 | 0.0 | 0.01 | 0.01 | | | | | | | | | | | | | | | | | | | | | |
| SiO2 | 71.9 | 74.3 | 79.8 | 69.7 | 68.1 | 65.21 | 64.21 | 65.5 | 61.11 | 64.8 | 91.0 | 83.81 | 71.1 | 68.2 | 71.9 | 57.61 | 65.1 | 63.7 | 110.51 | 64.41 | | | | | | | | | | | | | | | | | | | | | |
| Al2O3 | 10.4 | 10.0 | 9.3 | 13.7 | 14.1 | 12.51 | 12.31 | 11.9 | 14.61 | 12.5 | 8.3 | 15.91 | 12.9 | 14.6 | 11.2 | 10.41 | 12.9 | 15.5 | 2.11 | 13.31 | | | | | | | | | | | | | | | | | | | | | |
| Ms | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 1.01 | 1.11 | 0.5 | 0.51 | 0.7 | 0.3 | 0.11 | -0.2 | -0.3 | 0.2 | 2.01 | 0.3 | 0.3 | 0.21 | 0.51 | | | | | | | | | | | | | | | | | | | | | |
| Na | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.01 | 0.01 | 0.0 | 0.01 | 0.0 | 0.0 | 0.01 | 0.0 | 0.0 | 0.0 | 0.01 | 0.0 | 0.0 | 0.01 | 0.01 | | | | | | | | | | | | | | | | | | | | | |

NOTE :

CAUTION - Results are reported to a one standard deviation detection limit !
N.D. = Not Determined. Elements marked '?' MAY be inaccurate if an undetermined element is present.
C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.
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L = May be inaccurate due to low sample mass.

000193

007910430
MDCPL 01/01
17910538

ANGLO-AMERICAN RESEARCH
X-RAY FLUORESCENCE

PAGE 01

CH 13 / MW 13

ANALYSIS NO. 85/81 86/82 87/83
O.D. NO. 530781 530781 530781
SAMPLE- 1 1 1
NUMBER 9320 9321 9322

| | | | | |
|-------|-----|------|--------|-------|
| Ni | s/t | 6 | 5 | 6 |
| Cu | s/t | 3 | 4 | 9 |
| Zn | s/t | 14 | 23 | 25 |
| Pb | s/t | 8 | 7 | 13 |
| Co | s/t | 3 | 3 | -2 |
| Mo | s/t | -6 | -4 | -2 |
| S | Z | 0.3 | 0.21 | 0.21 |
| As | s/t | -15 | -15 | 4 |
| Se | s/t | -2 | -2 | 2 |
| Sb | s/t | -3 | -8 | -20 |
| Bi | s/t | -4 | -2 | 0 |
| Fe | Z | 1.1 | 0.91 | 1.11 |
| Mn | Z | 0.3 | 0.31 | 0.31 |
| Cr | Z | 0.1 | 0.21 | 0.21 |
| TiO2 | Z | 0.3 | 0.31 | 0.31 |
| U2O5 | Z | 0.3 | 0.31 | 0.31 |
| Sr | s/t | 53 | 44 | 39 |
| Ba | s/t | 446 | 494 | 471 |
| U3O8 | s/t | 6 | 6 | 5 |
| ThO2 | s/t | -8 | -8 | 1 |
| U/Th | | - | - | 3.3 |
| Sn | s/t | -20 | -27 | -28 |
| WO3 | s/t | 7 | 6 | 8 |
| Ta2O5 | s/t | -1 | 0 | -4 |
| Nb2O5 | s/t | 4 | 4 | 2 |
| Zr | s/t | 175 | 126 | 123 |
| Rb | s/t | 90 | 93 | 86 |
| Y | s/t | 12 | 10 | 10 |
| P2O5 | Z | -0.2 | -0.81 | -0.71 |
| K | Z | 2.5 | 2.51 | 2.41 |
| Ca | Z | 1.0 | 0.51 | 0.41 |
| Te | s/t | -32 | -28 | -28 |
| F | Z | 0.0 | 0.01 | 0.01 |
| SiO2 | Z | 96.0 | 101.21 | 99.61 |
| Al2O3 | Z | 5.2 | 5.11 | 4.31 |
| Hs | Z | 0.1 | 0.11 | 0.11 |
| Na | Z | 0.0 | 0.01 | 0.01 |

NOTE :

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L = May be inaccurate due to low sample mass.

000200

6004100450
REPLACEMENT
10/31/95

ANALYSIS AMERICAN
X-RAY FLUORESCENCE

10/31/95

| | PH101 MW101 | PH204 MW203 | PH7 MW20 | PH11 MW13 | PH12 MW13 | PH15 MW16 |
|--------------|----------------|----------------|-------------|--------------|--------------|--------------|
| ANALYSIS NO. | 88/1 | 39/15 | 90/31 | 91/46 | 92/51 | 93/76 |
| Q.D.NO. | 530751 | 530751 | 530751 | 530751 | 530751 | 530751 |
| SAMPLE- | 1 | 1 | 1 | 1 | 1 | 1 |
| NUMBER | 7927 | 7994 | 7792 | 7898 | 9292 | 9370 |

| | | | | | | | |
|-------|-----|------|------|-------|------|------|-------|
| Ni | g/t | 3 | 6 | 25 | 21 | 12 | 76 |
| Cu | g/t | 4 | 4 | -2 | 13 | 8 | 17 |
| Zn | g/t | 15 | 28 | 33 | 40 | 46 | 115 |
| Pb | g/t | 4 | 10 | 21 | 18 | 19 | 15 |
| Co | g/t | -4 | -5 | -4 | -7 | -2 | -26 |
| Mn | g/t | -3 | -3 | -7 | -5 | -7 | -6 |
| S | % | 0.2 | 0.3 | 0.21 | 0.2 | 0.1 | 0.21 |
| As | g/t | -6 | -12 | -3 | -4 | -7 | -5 |
| Se | g/t | -1 | -3 | 1 | -2 | -2 | -2 |
| Sb | g/t | -27 | -7 | -4 | -10 | -3 | -3 |
| Bi | g/t | -10 | -8 | 3 | -4 | -4 | -6 |
| Fe | % | 1.2 | 1.1 | 7.1T | 3.0 | 2.2 | 5.0T |
| Mn | % | 0.2 | 0.3 | 1.6T | 0.7 | 0.5 | 0.8T |
| Cr | % | 0.1 | 0.2 | 0.2T | 0.2 | 0.2 | 0.2T |
| TiO2 | % | 0.4 | 0.4 | 0.5T | 0.6 | 0.6 | 0.8T |
| U2O5 | % | 0.2 | 0.3 | 0.3T | 0.3 | 0.3 | 0.3T |
| Sr | g/t | 164 | 32 | 129 | 67 | 69 | 416 |
| Ba | g/t | 71 | 298 | 1341C | 616 | 740 | 1021 |
| U3O8 | g/t | 8 | 3 | 18 | 9 | 7 | 16 |
| ThO2 | g/t | -9 | -1 | -6 | 7 | 8 | -5 |
| U/Th | | - | - | - | 1.2 | 0.8 | - |
| Sn | g/t | -37 | -28 | -15 | -25 | -16 | -21 |
| WO3 | g/t | -6 | 9 | -2 | 8 | 6 | 3 |
| Ta2O5 | g/t | -15 | 5 | -20 | -2 | 0 | -10 |
| Nb2O5 | g/t | 2 | 10 | 6 | 12 | 16 | 5 |
| Zr | g/t | 99 | 186 | 70 | 186 | 236 | 138 |
| Rb | g/t | 32 | 50 | 164 | 145 | 178 | 84 |
| Y | g/t | 13 | 13 | 33 | 43 | 27 | 25 |
| P2O5 | % | 1.5 | 0.2 | 1.6T | 1.2 | 1.3 | 2.6T |
| K | % | 1.0 | 1.5 | 4.2T | 3.1 | 3.8 | 2.4T |
| Ca | % | 8.5 | 0.5 | 0.5T | 0.4 | 0.7 | 1.6T |
| Te | g/t | -45 | -38 | -26 | -38 | -24 | -31 |
| F | % | 0.0 | 0.0 | 0.0T | 0.0 | 0.0 | 0.0T |
| SiO2 | % | 73.1 | 89.0 | 59.4T | 70.8 | 72.1 | 59.1T |
| Al2O3 | % | 3.3 | 9.1 | 9.9T | 12.8 | 11.5 | 10.1T |
| Mg | % | 2.8 | 0.2 | 0.0T | 0.2 | 0.1 | 2.1T |
| Na | % | 0.0 | 0.0 | 0.0T | 0.0 | 0.0 | 0.0T |

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C = Result exceeds calibration limit & MAY have enhanced elements marked E. Only serious if warning is printed above.

T = Bad major elements total (<90% >110% as oxides). Refers to columns marked %. Only relevant if all majors determined.

L = May be inaccurate due to low sample mass.

600201

JRESRPT

ANGLO AMERICAN CORPORATION OF SOUTH AFRICA LIMITED
 ANGLO AMERICAN RESEARCH LABORATORIES - GEOCHEMICAL INTERPRETATION SECTION
 EXPLORATION SAMPLE INFORMATION SYSTEM (EXSIS)

PAGE: 2
 DATE: 25 JUL 91
 TIME: 08H20

G NUMBER : GD910431

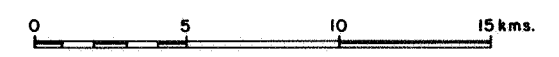
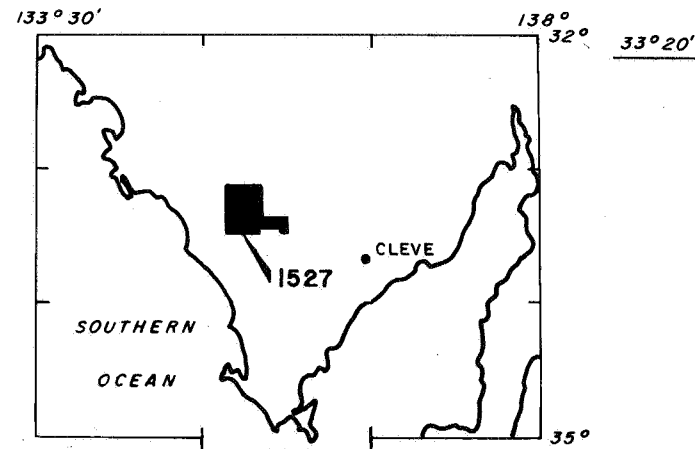
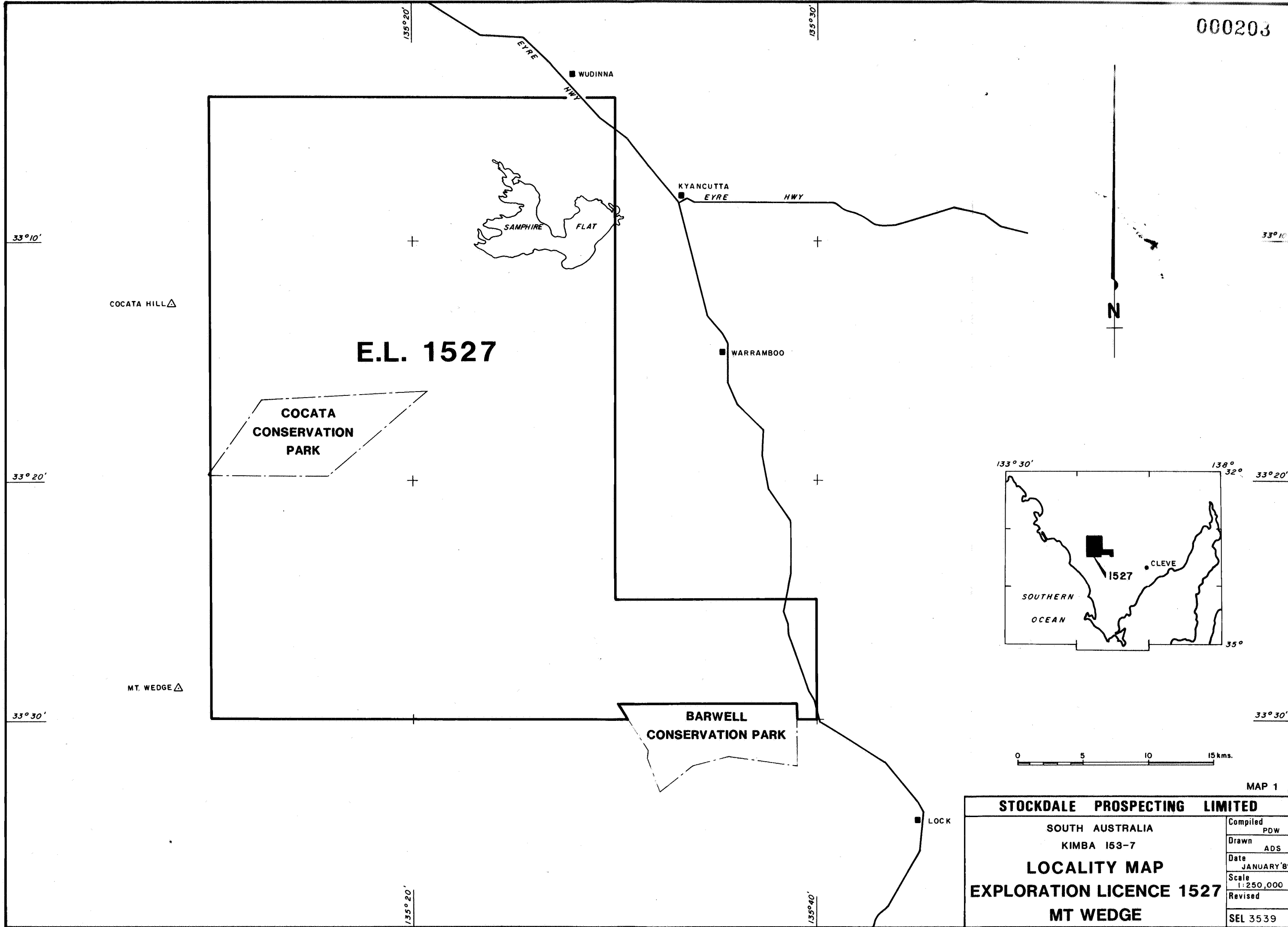
ANALYTICAL RESULTS FOR GD910431

G NUMBER : GD910431

| SAMPLE NO | AU PB | PD PB | |
|-----------|----------|----------|-------------|
| 7719 | M | M | PHOS / MW03 |
| 7727 | | | |
| 7728 | | | |
| 7730 | | | |
| 7731 | | | |
| 7732 | | | |
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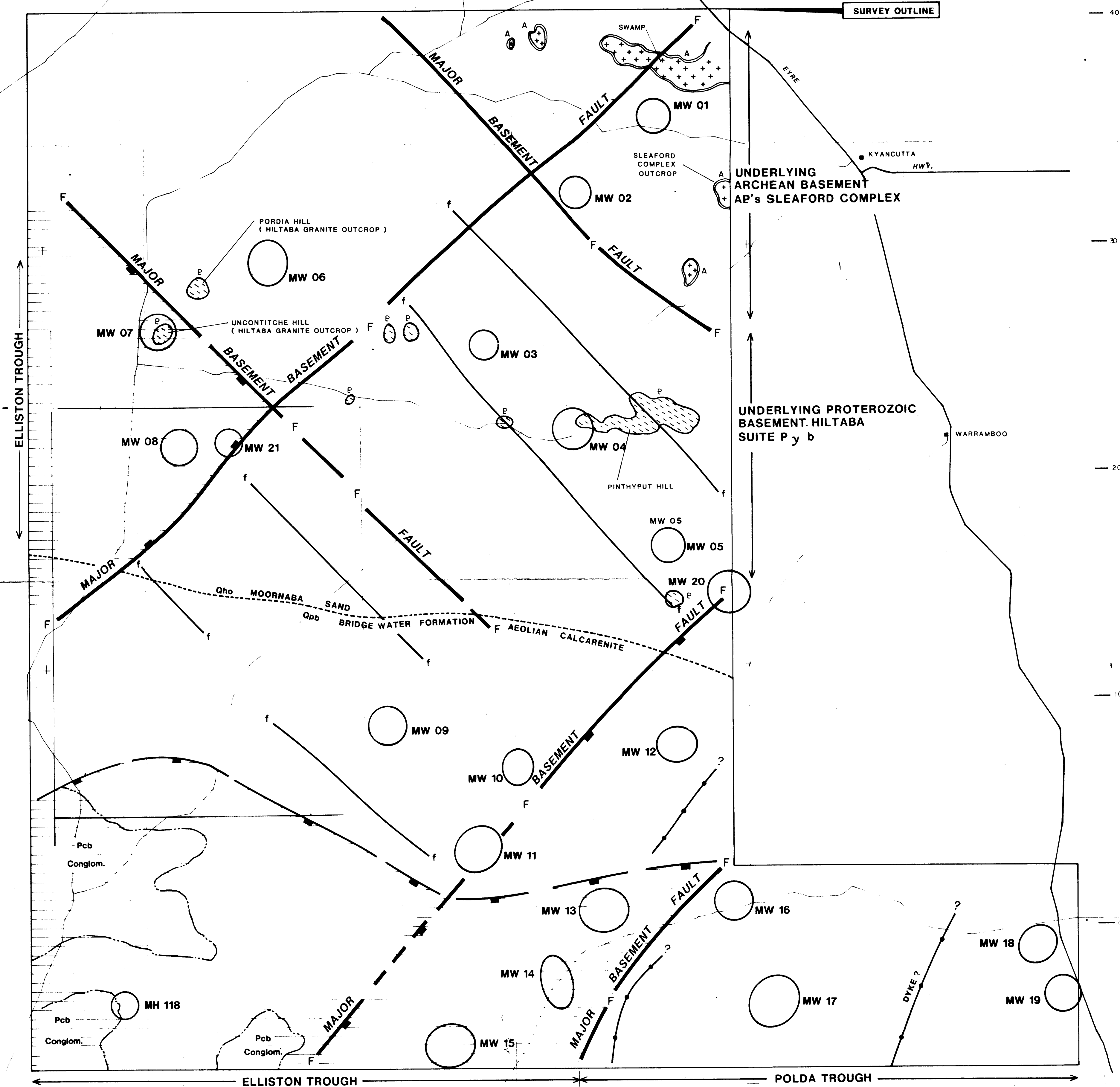
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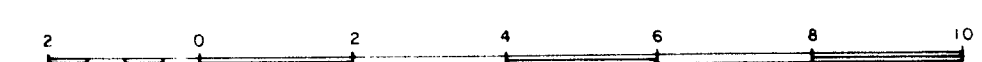
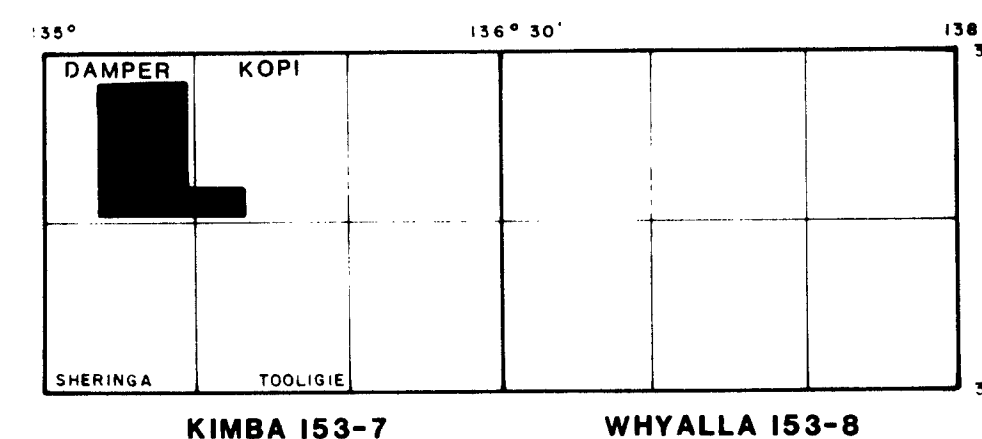
| | |
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| MAP 1 | |
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

8087-4



NOTE: AMG's DERIVED FROM PHOTO ENLARGED IMAGE AND ARE SUBJECT TO 50m. E-W / 100m. N-S ERROR

LOCATION MAP



8087-4

MAP 3

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL INTERPRETATION

| | |
|----------|-----------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3/90 |
| Scale | 1:100 000 |
| Revised | |
| SEL | 3804 |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
THIRTEENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 JANUARY 1992

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
South Yarra Victoria 3141
Australia
Telephone (03) 241 7522
Telex Stodal AA39546
Fax (03) 240 0974

Project Name: MT WEDGE

Title: EXPLORATION LICENCE NO 1527 : MT WEDGE
THIRTEENTH QUARTERLY REPORT FOR THE
PERIOD ENDING 11 JANUARY 1992

Edited: F M GAUNT

Author/s: M S MITCHELL

Approved: H R ROBISON

Date: DECEMBER 1991

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-7

Text Pages No.: 2 Plan Nos.: 2 Table Nos.: 1 Appendices: 1 Plates: -

Keywords: DRILLING, GEOCHEMISTRY

Abstract: No field work was conducted during this quarter.

Geochemical results from anomaly MW13 became available this quarter. Two drill holes into this anomaly recovered several kimberlitic type indicators. No kimberlitic type geochemical signatures were observed, the source of the indicators is now considered to be secondary.

Copy to: SADME, IC, WHYALLA

Ref: MSM77

Circulate to:

CONTENTS

- 1 INTRODUCTION
- 2 FIELD WORK
- 3 GEOCHEMICAL RESULTS
- 4 REMOTE SENSING
- 5 FORWARD WORK PROGRAMME
- 6 STAFF
- 7 EXPENDITURE SUMMARY

TABLES

- TABLE 1 Expenditure Report

MAPS

- | | | |
|-------|---|-----------|
| MAP 1 | Locality Map EL1527 (SEL 3539) | 1:250,000 |
| MAP 2 | Airborne Geophysical Interpretation (SEL 3804) | 1:250,000 |

APPENDICES

- APPENDIX 1 Anomaly MW13 Geochemical Results

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****THIRTEENTH QUARTERLY REPORT TO 11 JANUARY 1992****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

No field work was conducted during this quarter.

Geochemical results from the anomaly MW13 Drill holes 12 and 13 of the February 1991 drilling programme became available.

2 FIELD WORK

No fieldwork was conducted during this quarter.

3 GEOCHEMICAL RESULTS

Geochemical results from anomaly MW13, drill holes 12 and 13 of the February 1991 drilling programme became available. Heavy mineral results, reported in the last quarterly report, indicated kimberlitic type chrome spinels and a pyrope garnet from the drill chips. Geochemical samples from both holes were sent for analysis to determine whether or not kimberlite had been intersected. Results show no kimberlitic type signatures were observed (Appendix 1).

The kimberlitic indicators down the hole are presumed to have come from a secondary host in the Quaternary and Tertiary calcarenites and sands.

4 REMOTE SENSING

An interpretation on the Eyre Peninsula's (including EL1517) Landsat and Radiometric data has been carried out. This report is still being bound and will be detailed in the next quarterly report.

5 FORWARD WORK PROGRAMME

A total of six airborne magnetic anomalies require ground magnetic surveying, MW02, 08, 09, 11, 17 and MW21. The ground magnetic signatures of these anomalies will be evaluated and may be drilled if considered worthy of further work (locations shown on Map 2).

6 STAFF

No staff were employed in field work during this quarter.

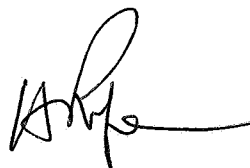
The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the Research/Technical department and Head Office in Melbourne.

7 EXPENDITURE

Expenditure of \$5,917 has been allocated as shown in Table 1.



M S Mitchell
Senior Geologist
Whyalla



H R Robison
Chief Geologist-South

Table 1 Expenditure Report EL1527 : Mt Wedge
For the Period Ending 31 December 1991

| | |
|-------------------------------|------------|
| | \$ |
| OPERATIONAL STAFF COSTS | 990 |
| GENERAL OPERATING EXPENSES | 8 |
| TRANSPORT AND TRAVEL | 49 |
| TECHNICAL SERVICES : DRAFTING | 100 |
| : REMOTE SENSING | 1 275 |
| CONTRACTORS : GEOCHEMISTRY | 2 488 |
| ADMINISTRATION : | |
| REGIONAL OFFICE | 428 |
| HEAD OFFICE | 516 |
| CAPITAL UTILISATION | 63 |
| | ----- |
| TOTAL THIS PERIOD | \$ 5 917 |
| TOTAL PREVIOUSLY REPORTED | \$ 294 982 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 300 899 |
| | ===== |

APPENDIX 1

Anomaly MW13 Geochemical Results

| ANALABS | | | | | | | | | |
|-----------------------------|-----------------|-------------|------------------|--------|----|-----|----|-----|-------|
| PRELIMINARY ANALYTICAL DATA | | | | | | | | | |
| CLIENT PREFIX | REPORT NUMBER | REPORT DATE | CLIENT ORDER No. | PAGE | | | | | |
| | 113500.10.87288 | 04/12/91 | M 10644 | 1 OF 6 | | | | | |
| SAMPLE | Mg | K | Ca | Ti | U | Cr | Co | Ni | DEPTH |
| 29295 -80# | 0.410 | 0.870 | 8.570 | 1240 | 15 | 16 | 6 | 10 | 0-2 |
| 29296 -80# | 0.540 | 0.980 | 9.560 | 1090 | 17 | 49 | 6 | 11 | 2-4 |
| 29297 -80# | 1.070 | 0.340 | >20.000 | 863 | 13 | <10 | 6 | 12 | 4-6 |
| 29298 -80# | 1.220 | 0.360 | >20.000 | 579 | 10 | <10 | 6 | 11 | 6-8 |
| 29299 -80# | 3.130 | 0.660 | 16.200 | 936 | 15 | 14 | 10 | 12 | 8-10 |
| 29300 -80# | 1.530 | 0.670 | 10.100 | 1630 | 42 | 62 | 7 | 13 | 10-12 |
| 29301 -80# | 1.050 | 0.600 | 5.300 | 2360 | 42 | 44 | 6 | 14 | 12-14 |
| 29302 -80# | 0.460 | 0.410 | 1.620 | 2630 | 49 | 100 | <5 | 10 | 14-16 |
| 29303 -80# | 0.400 | 0.320 | 1.530 | 2270 | 43 | 26 | <5 | <10 | 16-18 |
| 29304 -80# | 0.170 | 0.320 | 1.080 | 2390 | 15 | 21 | <5 | <10 | 18-20 |
| 29305 -80# | 0.190 | 0.430 | 0.930 | 2000 | 18 | 56 | <5 | <10 | 20-22 |
| 29306 -80# | 0.140 | 0.350 | 0.890 | 1540 | 12 | 12 | <5 | <10 | 22-24 |
| 29307 -80# | 0.080 | 0.280 | 0.470 | 1140 | 10 | 66 | <5 | <10 | 24-26 |
| 29308 -80# | 0.120 | 0.350 | 0.570 | 1220 | 10 | 11 | <5 | <10 | 26-28 |
| 29309 -80# | 0.090 | 0.330 | 0.480 | 1160 | 11 | 73 | <5 | <10 | 28-30 |
| 29310 -80# | 0.100 | 0.340 | 0.700 | 1090 | 10 | <10 | <5 | <10 | 30-32 |
| 29311 -80# | 0.110 | 0.350 | 0.520 | 1220 | 12 | 79 | <5 | <10 | 32-34 |
| 29312 -80# | 0.160 | 0.340 | 0.670 | 1100 | 12 | 20 | <5 | <10 | 34-36 |
| 29313 -80# | 0.070 | 0.270 | 0.570 | 965 | 7 | 60 | <5 | <10 | 36-38 |
| 29314 -80# | 0.160 | 0.330 | 0.620 | 1010 | 9 | 17 | <5 | <10 | 38-40 |
| 29315 -80# | 0.160 | 0.320 | 0.650 | 1160 | 9 | 12 | <5 | <10 | 40-42 |
| 29316 -80# | 0.200 | 0.370 | 0.680 | 1010 | 19 | 127 | <5 | 10 | 42-44 |
| 29317 -80# | 0.190 | 0.390 | 0.700 | 1780 | 16 | 19 | 5 | 10 | 44-46 |
| 29318 -80# | 0.210 | 0.630 | 0.710 | 2030 | 27 | 149 | 13 | 24 | 46-48 |
| 29319 -80# | 0.280 | 0.940 | 0.760 | 2570 | 34 | 29 | 17 | 33 | 48-50 |

MW13

D413

(29295-321)

ANALABS

PRELIMINARY ANALYTICAL DATA

| CLIENT PREFIX | REPORT NUMBER | REPORT DATE | CLIENT ORDER No. | PAGE |
|---------------|---------------|-------------|------------------|------|
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113500.10.87288

04/12/91

M 10644

3 OF 6

MW13

DH13

DEPTH

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48-50

| SAMPLE | Sr | Y | Zr | Nb | Ba | La | Ce | Ta |
|------------|------|----|-----|-----|-----|----|-----|-----|
| 29295 -80# | 347 | 10 | 47 | <10 | 276 | 14 | 27 | <10 |
| 29296 -80# | 413 | 9 | 28 | <10 | 290 | 11 | 20 | <10 |
| 29297 -80# | 1050 | 4 | 15 | <10 | 80 | <5 | <15 | <10 |
| 29298 -80# | 894 | 4 | 16 | <10 | 81 | <5 | <15 | <10 |
| 29299 -80# | 515 | 12 | 25 | <10 | 105 | <5 | 16 | <10 |
| 29300 -80# | 372 | 7 | 45 | <10 | 192 | 9 | 12 | <10 |
| 29301 -80# | 215 | 6 | 57 | <10 | 191 | 14 | 16 | <10 |
| 29302 -80# | 89 | 4 | 66 | <10 | 82 | 9 | <15 | <10 |
| 29303 -80# | 78 | 3 | 59 | <10 | 78 | 8 | <15 | <10 |
| 29304 -80# | 54 | 10 | 222 | <10 | 94 | 35 | 64 | <10 |
| 29305 -80# | 53 | 7 | 177 | <10 | 131 | 23 | 44 | <10 |
| 29306 -80# | 46 | 5 | 135 | <10 | 98 | 15 | 28 | <10 |
| 29307 -80# | 29 | 4 | 92 | <10 | 85 | 9 | 20 | <10 |
| 29308 -80# | 34 | 5 | 96 | <10 | 99 | 11 | 22 | <10 |
| 29309 -80# | 29 | 4 | 94 | <10 | 97 | 10 | 22 | <10 |
| 29310 -80# | 39 | 5 | 90 | <10 | 97 | 11 | 23 | <10 |
| 29311 -80# | 33 | 5 | 97 | <10 | 104 | 10 | 22 | <10 |
| 29312 -80# | 42 | 6 | 94 | <10 | 100 | 11 | 23 | <10 |
| 29313 -80# | 30 | 4 | 77 | <10 | 82 | 7 | 15 | <10 |
| 29314 -80# | 39 | 6 | 87 | <10 | 98 | 9 | 20 | <10 |
| 29315 -80# | 42 | 6 | 95 | <10 | 98 | 10 | 21 | <10 |
| 29316 -80# | 48 | 9 | 174 | <10 | 113 | 13 | 27 | <10 |
| 29317 -80# | 47 | 9 | 192 | <10 | 113 | 14 | 27 | <10 |
| 29318 -80# | 55 | 12 | 200 | <10 | 169 | 21 | 44 | <10 |
| 29319 -80# | 68 | 14 | 238 | 21 | 237 | 29 | 59 | <10 |

ANALABS

PRELIMINARY ANALYTICAL DATA

| CLIENT PREFIX | REPORT NUMBER | REPORT DATE | CLIENT ORDER No. | PAGE |
|---------------|-----------------|-------------|------------------|--------|
| | 113500.10.87288 | 04/12/91 | M 10644 | 4 OF 6 |

MW13
DH13DEPTH
50-52

| SAMPLE | Sr | Y | Zr | Nb | Ba | La | Ce | Ta |
|------------|----|----|-----|-----|-----|----|----|-----|
| 29320 -80# | 64 | 16 | 198 | <10 | 394 | 32 | 67 | <10 |

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| DETECTION | 1 | 1 | 5 | 10 | 5 | 5 | 15 | 10 |
| UNITS | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| METHOD | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 |

000215

ANALABS

PRELIMINARY ANALYTICAL DATA

| CLIENT PREFIX | REPORT NUMBER | REPORT DATE | CLIENT ORDER No. | PAGE |
|---------------|---------------|-------------|------------------|------|
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5 OF 6

SAMPLE

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| 29295 -80# | <10 | <100 |
| 29296 -80# | <10 | <100 |
| 29297 -80# | <10 | <100 |
| 29298 -80# | <10 | <100 |
| 29299 -80# | <10 | <100 |
| 29300 -80# | <10 | <100 |
| 29301 -80# | <10 | <100 |
| 29302 -80# | <10 | <100 |
| 29303 -80# | <10 | <100 |
| 29304 -80# | 16 | <100 |
| 29305 -80# | 11 | <100 |
| 29306 -80# | <10 | <100 |
| 29307 -80# | <10 | <100 |
| 29308 -80# | <10 | <100 |
| 29309 -80# | <10 | <100 |
| 29310 -80# | <10 | <100 |
| 29311 -80# | <10 | <100 |
| 29312 -80# | <10 | <100 |
| 29313 -80# | <10 | <100 |
| 29314 -80# | <10 | <100 |
| 29315 -80# | <10 | <100 |
| 29316 -80# | <10 | <100 |
| 29317 -80# | <10 | <100 |
| 29318 -80# | 11 | <100 |
| 29319 -80# | 17 | <100 |

MW13

DH13

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ANALABS

000216

PRELIMINARY ANALYTICAL DATA

| CLIENT PREFIX | REPORT NUMBER | REPORT DATE | CLIENT ORDER No. | PAGE |
|---------------|-----------------|-------------|------------------|--------|
| | 113500.10.87288 | 04/12/91 | M 10644 | 6 OF 6 |

MWIS
DH 13

DEPTH

50-52

| SAMPLE | Th | U |
|------------|----|------|
| 29320 -80% | 14 | <100 |

| | | |
|-----------|-------|-------|
| DETECTION | 10 | 100 |
| UNITS | ppm | ppm |
| METHOD | G1201 | G1201 |

000217

ANALABES

A Division of Incharge Inspection and Testing Services Australia Pty Ltd
ANALABES 104/21 654

ANALYTICAL DATA

Mt Wedge

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

| SAMPLE PREFIX | | REPORT NUMBER | | | | REPORT DATE | | CLIENT ORDER No | | PAGE | |
|---------------|------------|-----------------|-------|--------|-------|-------------|-------|-----------------|-------|--------|--|
| | | 113500.10.88225 | | | | 15/01/92 | | M 11704 | | 1 OF 2 | |
| TUBE No. | SAMPLE No. | Mg | K | Ca | Ti | V | Cr | Co | Ni | Sr | |
| 1 | Z 9244 | .6380 | .6080 | 253000 | 607 | 14 | <10 | 7 | 12 | 1030 | |
| 2 | Z 9245 | .8410 | .4550 | 305000 | 627 | 17 | <10 | 8 | 14 | 998 | |
| 3 | Z 9246 | .8310 | .4200 | 310000 | 620 | 17 | 11 | 8 | 14 | 938 | |
| 4 | Z 9247 | .7070 | .3350 | 336000 | 470 | 15 | 13 | 8 | 13 | 917 | |
| 5 | Z 9248 | 7100 | .3390 | 324000 | 554 | 14 | <10 | 8 | 13 | 819 | |
| 6 | Z 9249 | 36100 | 4050 | 168000 | 887 | 20 | 20 | 9 | 11 | 394 | |
| 7 | Z 9250 | .30200 | .5310 | 130000 | 1280 | 31 | 27 | 8 | 13 | 322 | |
| 8 | Z 9251 | .9240 | .7390 | 18200 | 3120 | 87 | 47 | 5 | 10 | 97 | |
| 9 | Z 9252 | 6650 | .5790 | 13700 | 2840 | 98 | 29 | <5 | <10 | 70 | |
| 10 | Z 9253 | 7520 | 4210 | 32100 | 1840 | 50 | 18 | <5 | <10 | 107 | |
| 11 | | | | | | | | | | | |
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| 21 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | DETECTION | 20 | 500 | 50 | 10 | 2 | 10 | 5 | 10 | 1 | |
| 24 | UNITS | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | |
| 25 | METHOD | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | GI201 | |

MW13

DH 12

DEPTH (m)

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2-4

4-6

6-8

8-10

10-12

12-14

14-16

16-18

18-20

Results in ppm unless otherwise specified

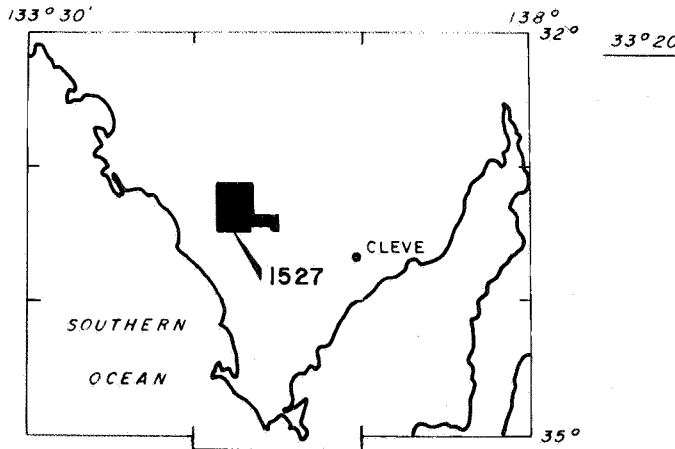
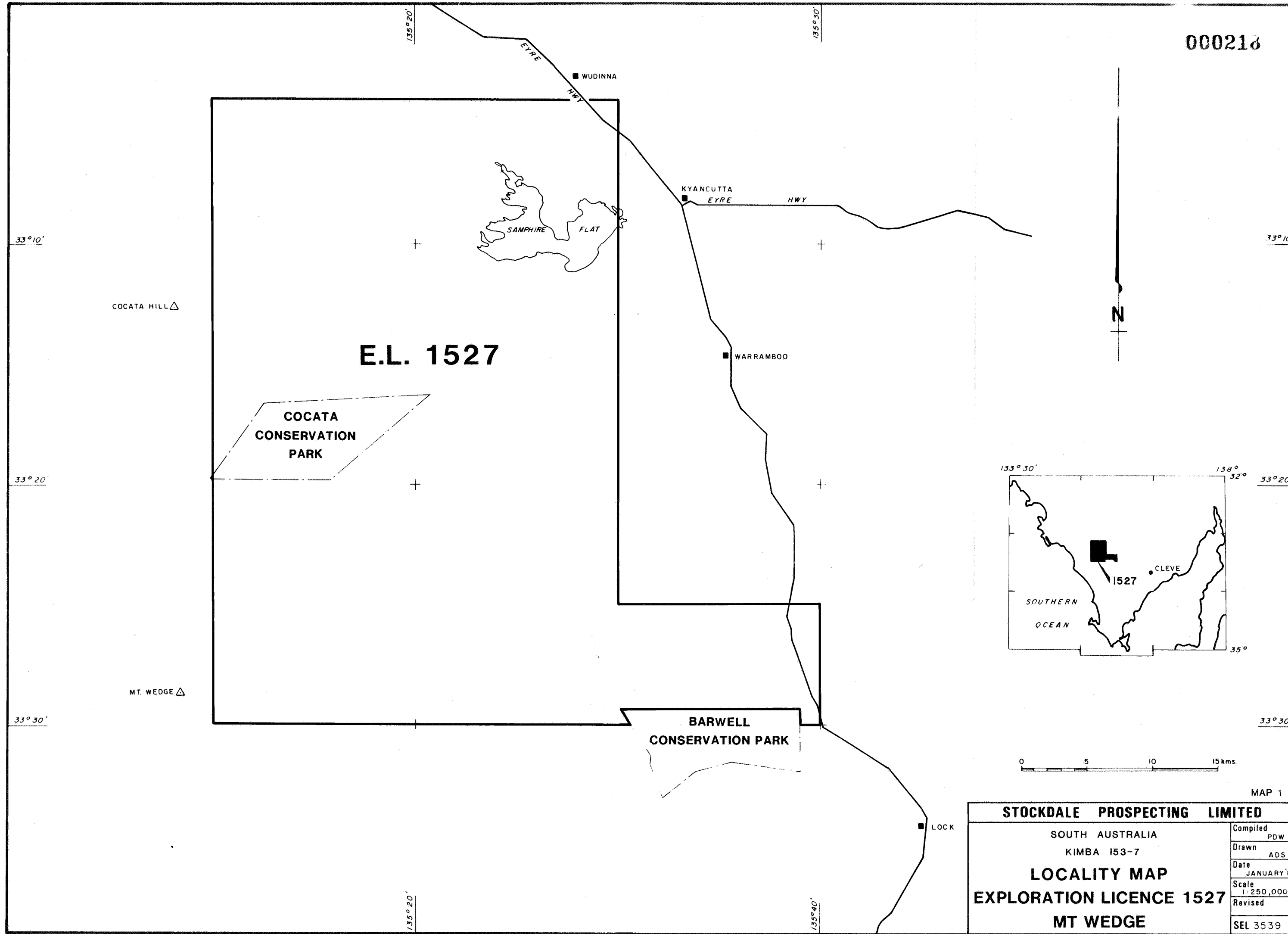
T = element present; but concentration too low to measure

X = element concentration is below detection limit

— = element not determined

AUTHORISED
OFFICER

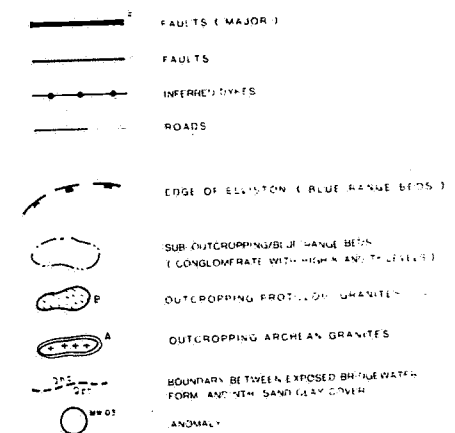
J. Cooper



MAP 1

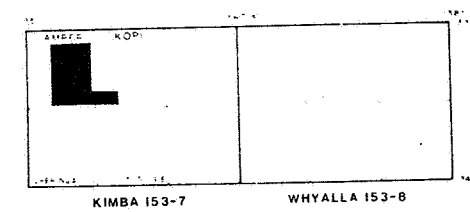
| STOCKDALE PROSPECTING LIMITED | |
|---|---------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised |
| SEL 3539 | |

2



NOTE: ANGLES DERIVED FROM PHOTO IN LARGER IMAGE AND
ARE SUBJECT TO ± 1° WITH ± 0.5° ERROR

LOCATION MAP



M.A.P 2

STOCKDALE PROSPECTING LIMITED

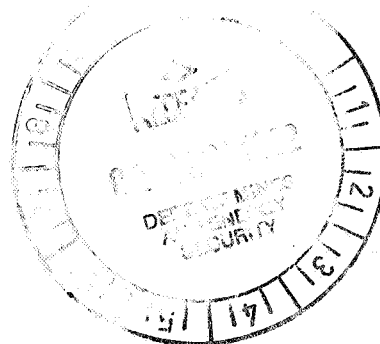
SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL
INTERPRETATION

| | |
|----------|------------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3 90 |
| Scale | 1' 250 000 |
| Revised | |
| SEL 3804 | |

STOCKDALE PROSPECTING LIMITED
EXPLORATION LICENCE NO 1527 : MT WEDGE
FOURTEENTH QUARTERLY REPORT FOR THE PERIOD
ENDING 11 APRIL 1992





000221

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
South Yarra Victoria 3141
Australia
Telephone (03) 241 7522
Telex Stodal AA39546
Fax (03) 240 0974

Project Name: MT WEDGE

Title:

EXPLORATION LICENCE NO 1527 : MT WEDGE
FOURTEENTH QUARTERLY REPORT FOR THE
PERIOD ENDING 11 APRIL 1992

Edited:

F M GAUNT

Author/s:

S C FINLAY

Approved:

H R ROBISON

Date:

APRIL 1992

Place:

WHYALLA

1:250,000 Sheet Name/s & No/s.:

KIMBA SI53-7

Text Pages No.: 2

Plan Nos.: 2

Table Nos.: 2

Appendices: _

Plates: _

Keywords:

Abstract:

Field work this quarter involved ground follow up of airborne magnetic targets and some related sampling. The results of the Landsat and radiometric data interpretation proved disappointing as little useful information could be gleaned from the interpretation.

Copy to: SADME, IC, WHYALLA

Ref: SCF12

Circulate to:

CONTENTS

| | |
|---|------------------------|
| 1 | INTRODUCTION |
| 2 | FIELD WORK |
| 3 | REMOTE SENSING |
| 4 | FORWARD WORK PROGRAMME |
| 5 | STAFF |
| 6 | EXPENDITURE SUMMARY |

TABLES

| | |
|---------|---------------------|
| TABLE 1 | Sample Listing |
| TABLE 2 | Expenditure Summary |

MAPS

| | | |
|-------|-------------------------------------|-----------|
| MAP 1 | Locality Map EL1527 Mt Wedge | 1:250,000 |
| MAP 2 | Airborne Geophysical Interpretation | 1:250,000 |

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****FOURTEENTH QUARTERLY REPORT TO 11 APRIL 1992****1 INTRODUCTION**

Exploration Licence No 1527 is located on the north western Eyre Peninsula about 2 kilometres south of Wudinna on the Kimba 1:250,000 sheet (Map 1).

Field work during the quarter consisted of ground magnetic follow-up of four aeromagnetic targets.

An interpretation of Landsat and radiometric data has also been received.

2 FIELD WORK

Four of the six remaining Mt Wedge anomalies were followed up this quarter. These included MW02, 08, 09 and 21 (Map 2). The resultant colour plots and culture maps (where applicable) are included in the Appendix. The results have yet to be examined by the SPL Geophysicist so that we are awaiting interpretation which will be summarised in the subsequent quarterly report.

Permission has been obtained to access MW17 via a rolled track (re : Dept. Mines and Energy letter 25/3/92) subject to the guidelines contained within the above correspondence.

Loam samples were taken over the centre of five of the magnetic anomalies (Table 1). We are currently awaiting these results.

Table 1 : Sample Listing

| Anomaly | Sample Number |
|---------|---------------|
| MW02 | X7496 |
| MW08 | X7498 |
| MW09 | X7499 |
| MW11 | X7500 |
| MW21 | X7497 |

NB : Material collected ~30kg deflation material screened on site to -1 + 0.3mm.

3 REMOTE SENSING

The interpretation of radiometric and Landsat imagery, unfortunately has not contributed greatly to our understanding of the area. The 'masking effect' of the Bridgewater Formation calcarenites prevented any work of this nature, in relation to structural features, from being discernible. The interpretation has also been unsuccessful in identifying any features associated with the airborne magnetic anomalies.

4 FORWARD WORK PROGRAMME

The two remaining airborne magnetic targets (MW11 and MW17) require ground follow-up. Evaluation of the results along with those included in this report will determine the likelihood of another drilling programme in the area. Results from the sampling are also pending assessment.

5 STAFF

Staff employed during this quarter are as follows :

| | |
|------------------|---|
| Geologists | 2 |
| Field Assistants | 7 |

The project has been supported by the facilities of the Regional Office in Whyalla, the personnel and facilities of the Research/Technical department and Head Office in Melbourne.

6 EXPENDITURE

Expenditure of \$14629 has been allocated as shown in Table 2.



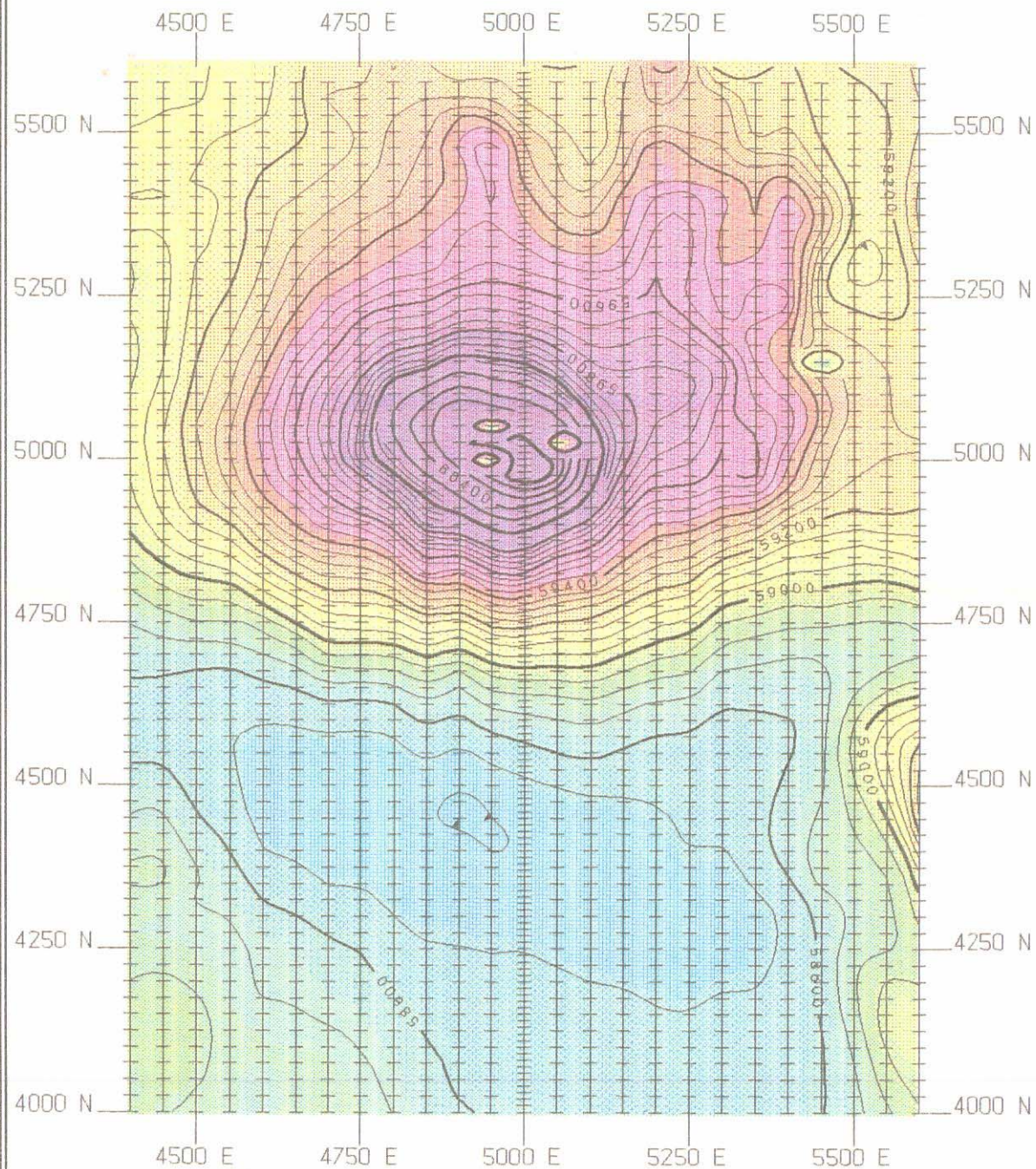
S C Finlay
Geologist
Whyalla



H R Robison
Chief Geologist-South

Table 2 Expenditure Report EL1527 : Mt Wedge
For the Period Ending 31 March 1992

| | |
|-------------------------------|------------|
| | \$ |
| OPERATIONAL STAFF COSTS | 10 759 |
| TRANSPORT AND TRAVEL | 306 |
| CONTRACTORS : SAMPLE ANALYSIS | 400 |
| ADMINISTRATION : | |
| REGIONAL OFFICE | 1 388 |
| HEAD OFFICE | 1 203 |
| CAPITAL UTILISATION | 573 |
| | ----- |
| TOTAL THIS PERIOD | \$ 14 629 |
| TOTAL PREVIOUSLY REPORTED | \$ 300 899 |
| | ----- |
| TOTAL EXPENDITURE TO DATE | \$ 315 528 |
| | ===== |



Scale 1:10000
100 0 100 200 300 400 500
(metres)

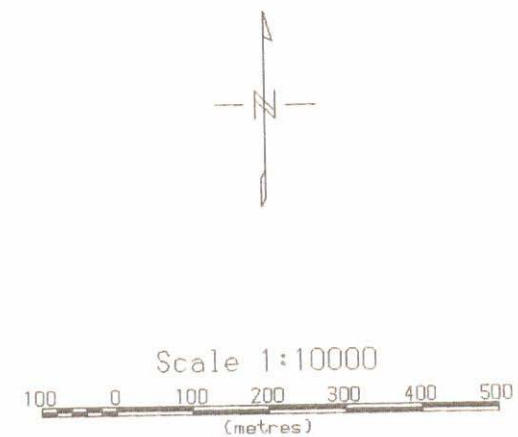
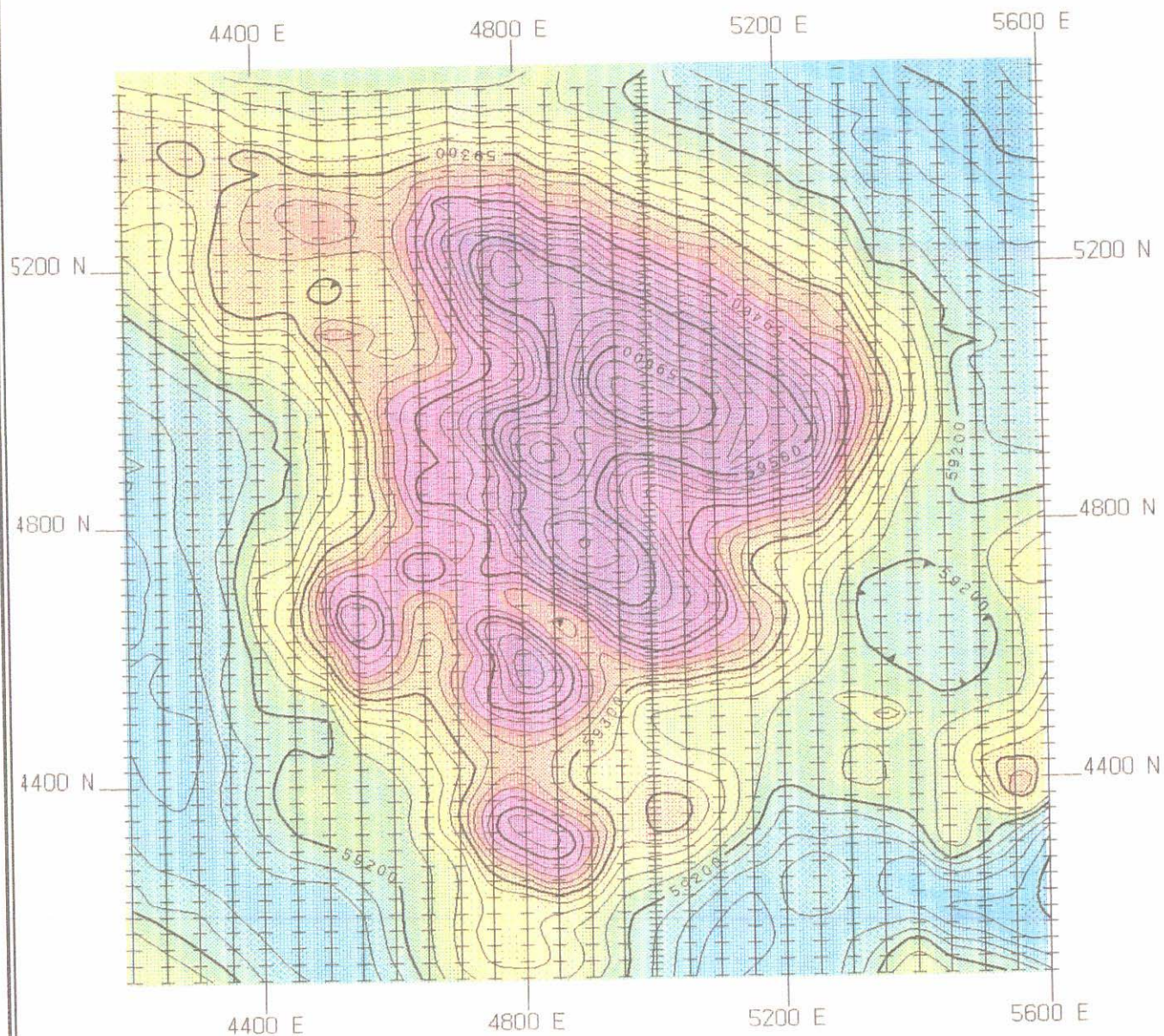
STOCKDALE PROSPECTING LTD

MOUNT WEDGE MW02
Ground Magnetic Intensity

Magnetic North
cont = 50nT
26.02.92

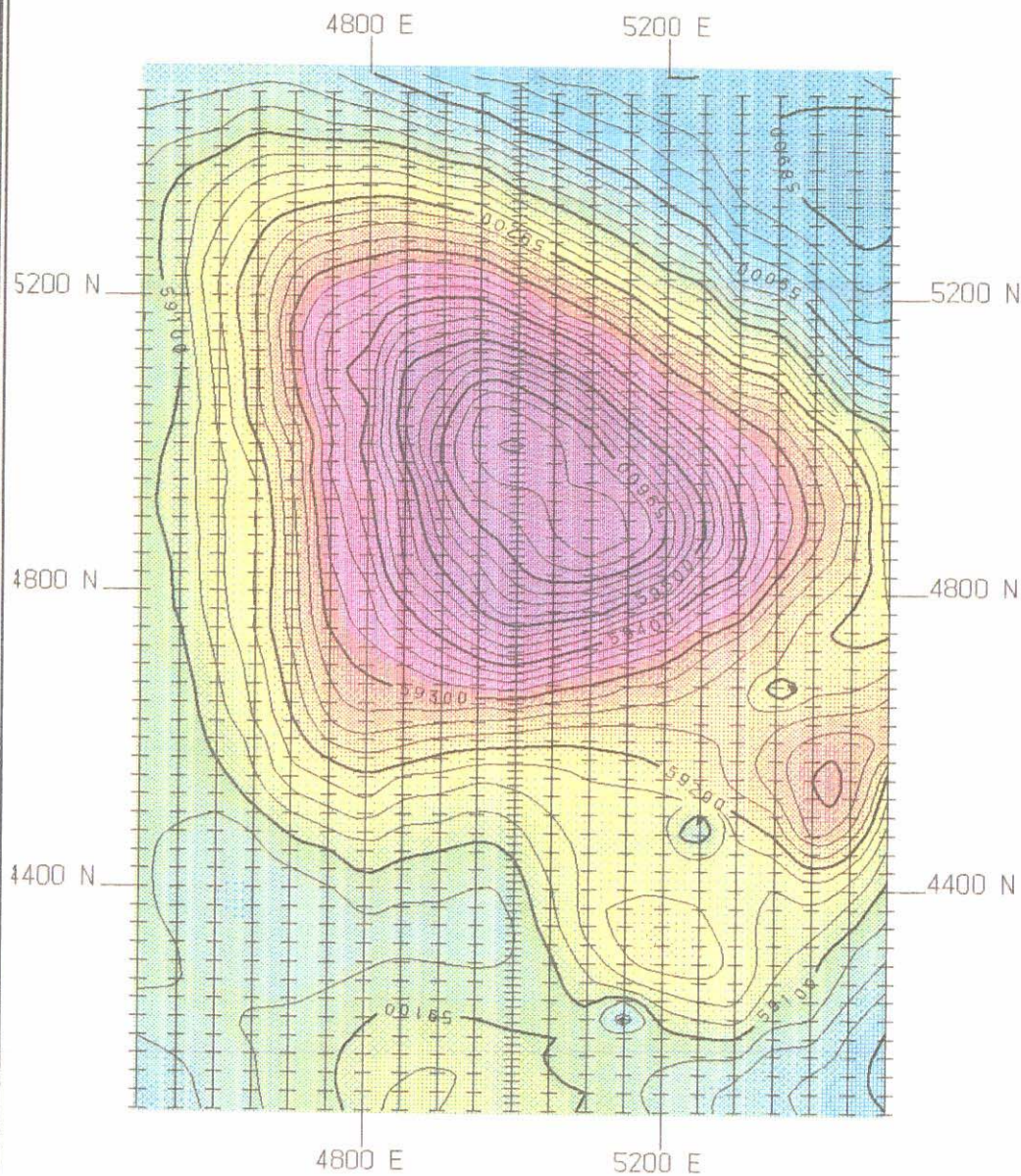
Kimba SI53 - 7 SEL:

000227



| |
|---|
| STOCKDALE PROSPECTING LTD |
| MOUNT WEDGE - MW08 Ground Magnetic Intensity |
| Magnetic North cont = 20nT 04 - 05.03.92 |
| KIMBA S153 - 7 SEL: |

000228



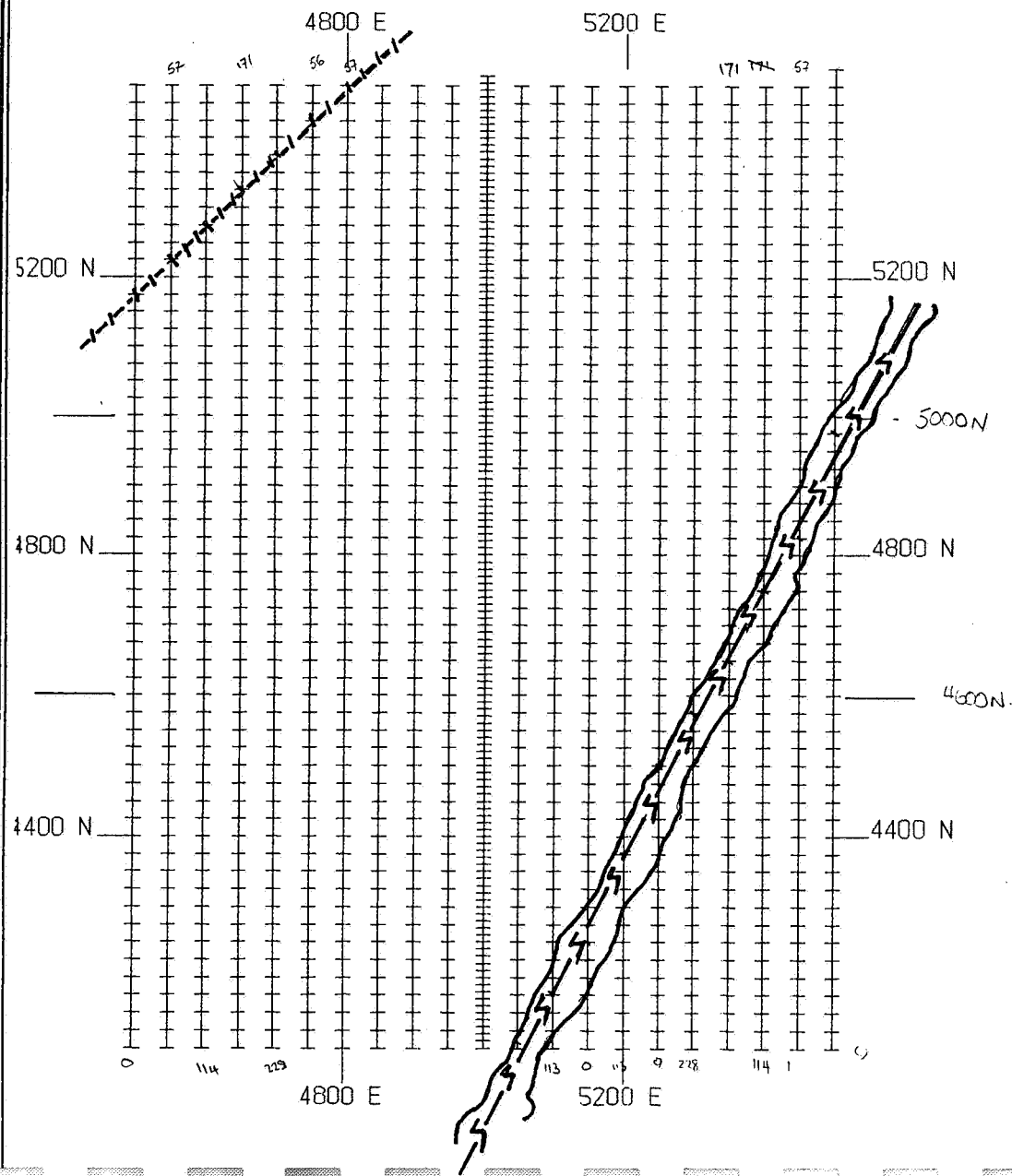
STOCKDALE PROSPECTING LTD

MOUNT WEDGE MW09
Ground Magnetic Intensity

Magnetic North
cont = 25nT
09 - 10.03.92

KIMBA S153 - 7

SFI :



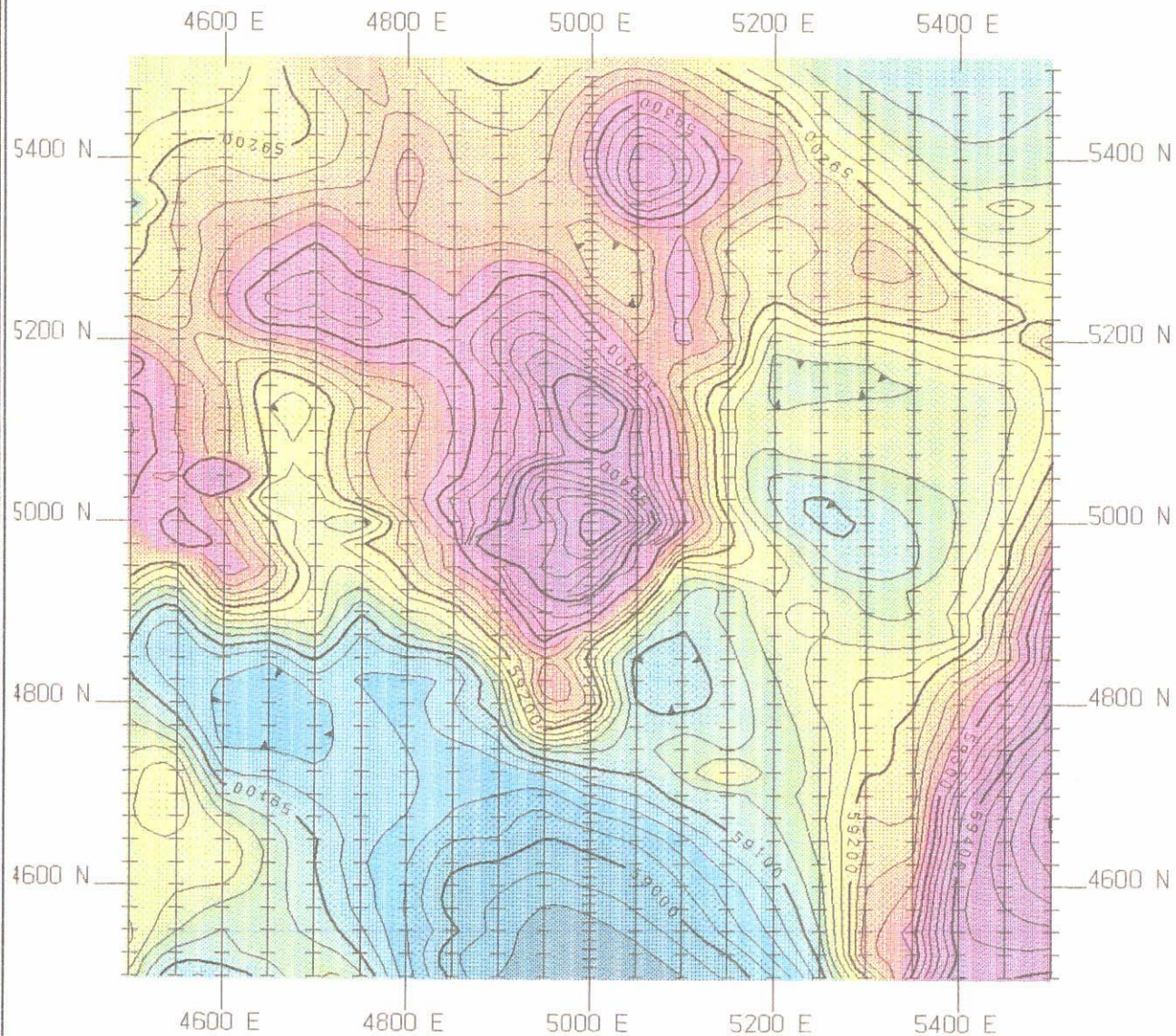
STOCKDALE PROSPECTING LTD

MOUNT WEDGE MW09
Ground Magnetic Intensity

Magnetic North
Cultural Map
09 - 10.03.92

KIMBA S153 - 7 SEI :

000230



Scale 1:7500



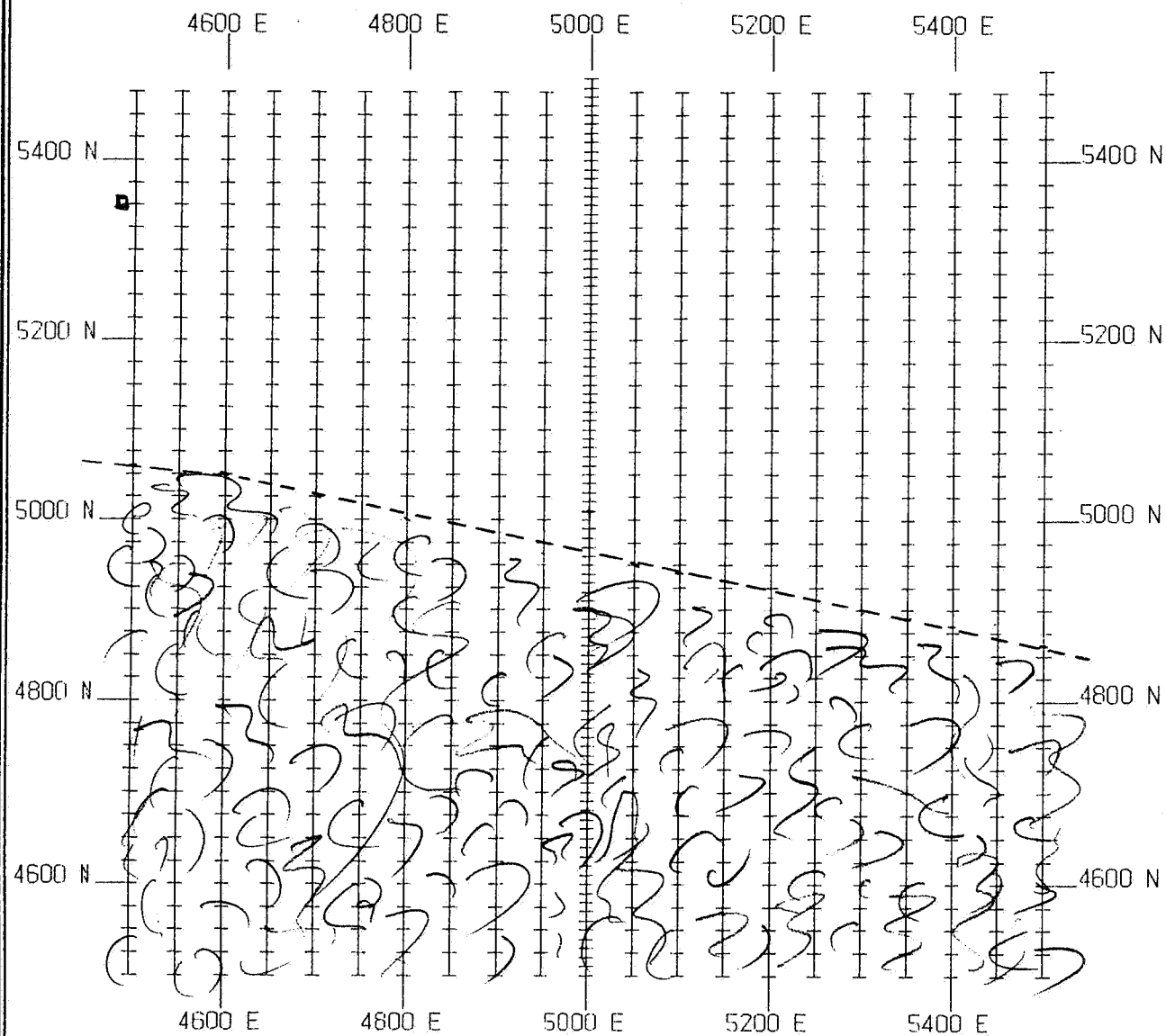
STOCKDALE PROSPECTING LTD

MOUNT WEDGE 21
Ground Magnetic Intensity

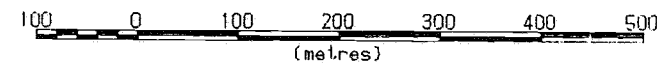
Magnetic North
cont = 20nT
06.03.92

KIMBA S153 - 7

SEL:



Scale 1:7500

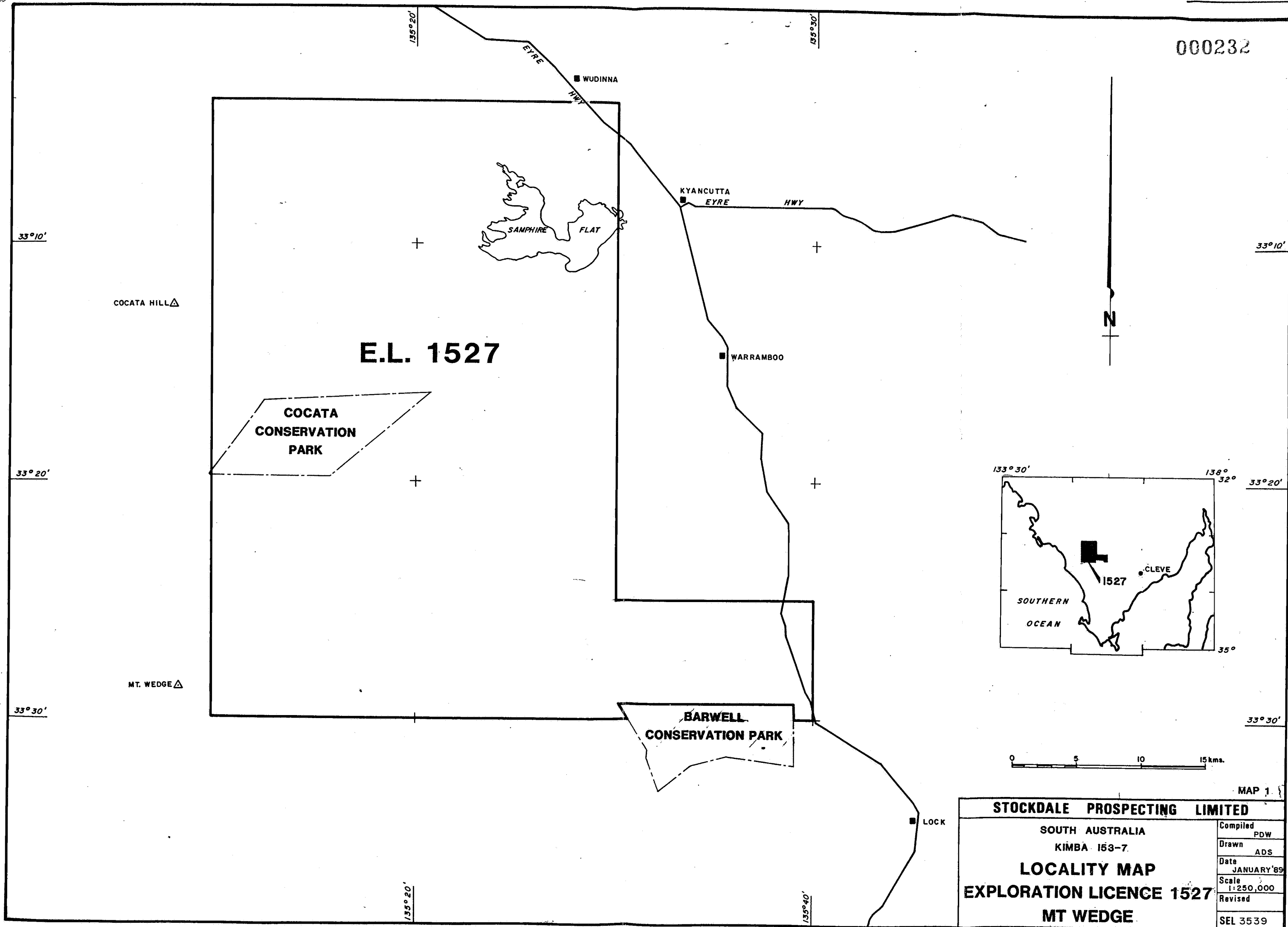


- FENCE LINE
- - TRACTOR
- - SCRUB

STOCKDALE PROSPECTING LTD

MOUNT WEDGE 21
Ground Magnetic Intensity

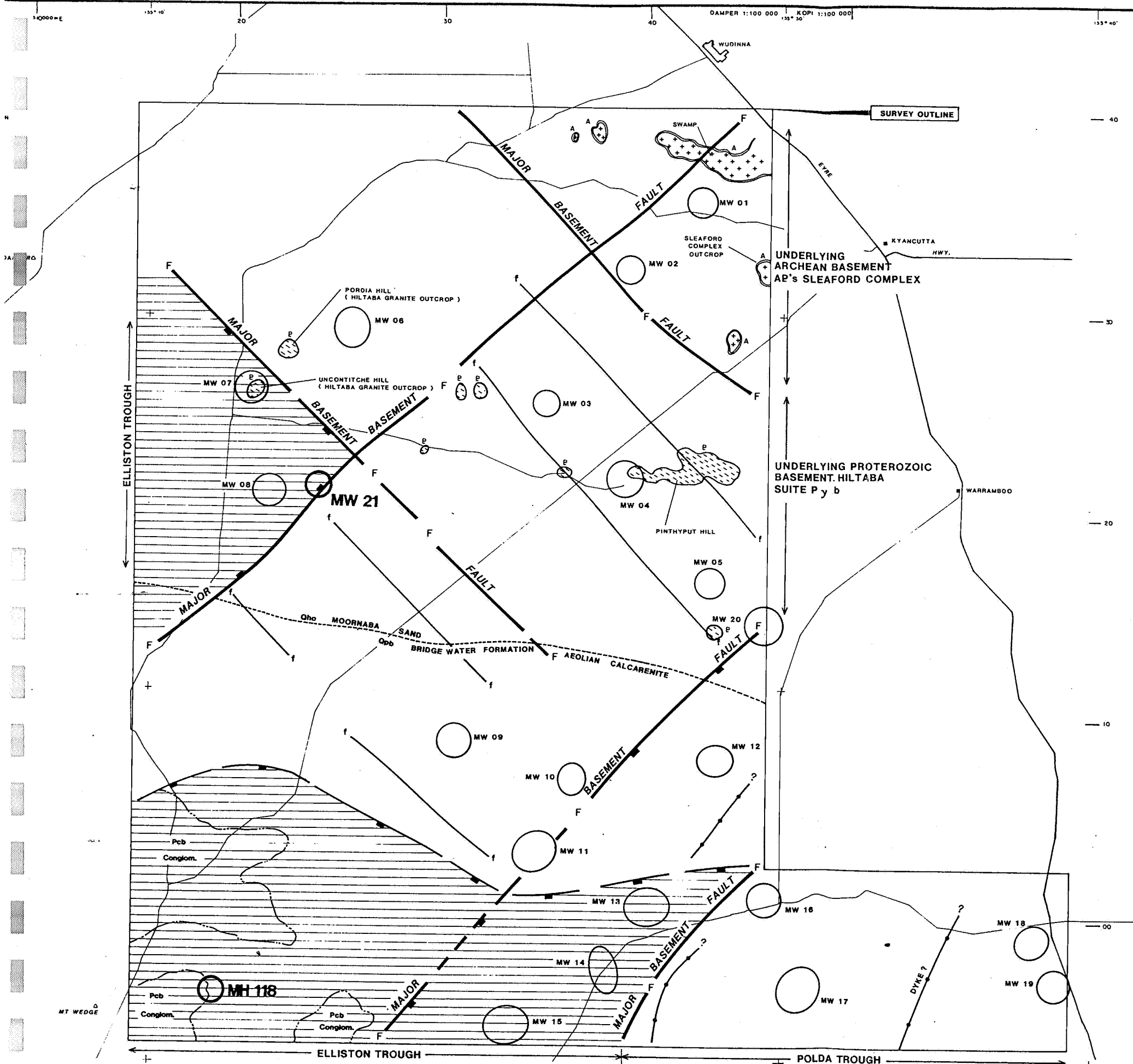
Magnetic North
Cultural Map
06.03.92



MAP 1

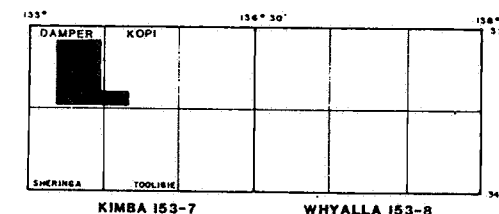
| | |
|--------------------------------------|-------------|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA | |
| KIMBA 153-7. | |
| LOCALITY MAP | |
| EXPLORATION LICENCE 1527 | |
| MT WEDGE | |
| Compiled | PDW |
| Drawn | ADS |
| Date | JANUARY '89 |
| Scale | 1:250,000 |
| Revised | |
| SEL | 3539 |

000233



NOTE : AMG's DERIVED FROM PHOTO ENLARGED IMAGE AND
ARE SUBJECT TO E-W / N-S ERROR

LOCATION MAP



MAP 2

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

**AIRBORNE GEOPHYSICAL
INTERPRETATION**

| | |
|----------|-----------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3/90 |
| Scale | 1:250 000 |
| Revised | |
| SEL | 3804 |

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE 1527

MT WEDGE .

FINAL REPORT

STOCKDALE
PROSPECTING
LIMITED

Incorporated in the State of Victoria

60 Wilson Street
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Australia
Telephone (03) 241 7522
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Project Name: MT WEDGE

Title: EXPLORATION LICENCE 1527 : MT WEDGE
FINAL REPORT

Edited: H R ROBISON

Author/s: H R ROBISON

Approved: H R ROBISON

Date: JULY 1992

Place: WHYALLA

1:250,000 Sheet Name/s & No/s.: KIMBA SI53-07

Text Pages No.: 5 Plan Nos.: 3 Table Nos.: 1 Appendices: 2 Plates: _

Keywords: AIRBORNE MAGNETICS, GROUND MAGNETICS, DRILLING, HEAVY
MINERAL SAMPLING, INDICATOR MINERALS, GEOCHEMISTRY,
PETROGRAPHY, REMOTE SENSING, LANDSAT TM

Abstract:

Heavy mineral sampling, an airborne geophysical survey, the ground follow up of magnetic anomalies and drilling failed to detect kimberlite. It was concluded that the area is unlikely to host kimberlitic inclusions of economic significance.

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Ref: HRR1

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CONTENTS

- 1 INTRODUCTION
- 2 GEOLOGY AND PHYSIOGRAPHY
- 3 HEAVY MINERAL SAMPLING
 - 3.1 Reconnaissance Sampling
 - 3.2 Grid Loam Sampling
 - 3.3 Sampling of Magnetic Anomalies
 - 3.4 Miscellaneous
- 4 AIRBORNE GEOPHYSICAL SURVEY
 - 4.1 Data Interpretation
 - 4.2 Ground Follow up of Magnetic Anomalies
 - 4.3 Drilling
- 5 REMOTE SENSING
- 6 CONCLUSIONS
- 7 EXPENDITURE

MAPS

| | | | |
|--------|-------------------------------------|-----------|----------|
| Map 1: | Locality Map | 1:250 000 | SEL 3539 |
| Map 2: | Current sampling | 1:100 000 | |
| Map 3: | Airborne Geophysical Interpretation | 1:100 000 | SEL 3804 |

Tables

Table 1: Expenditure summary

Appendices

- Appendix 1 Magnetic contours, airborne data
 MW02,06,07,08,09,11,14,17
- Appendix 2 Magnetic contours, ground data
 MW11,17

STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE NO 1527 : MT WEDGE****FINAL REPORT****1 INTRODUCTION**

Exploration Licence No 1527 is located in the north western Eyre Peninsula immediately south of the township of Wudinna, and occupies 1558 square kilometres on the Kimba mapsheet (Map 1). The licence was granted to Stockdale Prospecting on 12th October 1988, and diamond exploration during the tenure of the licence included heavy mineral sampling, an airborne geophysical survey, and the follow up of magnetic anomalies by ground geophysical surveys and drilling. It was concluded that the area was unlikely to host kimberlitic rocks of economic significance and the licence was surrendered on 27th May 1992.

2 GEOLOGY AND PHYSIOGRAPHY

The licence area lies within the Gawler Block, a stable craton with crystalline basement rocks ranging in age from 2700 million years to 900 million years. Younger cover rocks include the Late Proterozoic sediments of the Blue Range Beds, seen at Mt Wedge, and Permian, Jurassic and Tertiary sediments deposited in the Poldia Trough, a narrow east-west graben the northern flank of which is more or less coincident with the southern boundary of the Exploration Licence. Thin veneers of Quaternary sediments, notably sands and calcretes of the Bridgewater Formation mask the underlying rocks, which outcrop only in a few isolated hills. The geology and physiography of the licence area are described in more detail in the 1st Quarterly report.

3 HEAVY MINERAL SAMPLING (Map 2)**3.1 Reconnaissance Sampling**

Semi-continuous loam sampling was carried out along roads and tracks across the licence area. Fifty two samples were collected and produced a scatter of kimberlitic indicator minerals which are not considered to be of significance. Details of the programme are given in the 8th and 9th Quarterly reports.

3.2 Grid Loam Sampling

Fourteen loam samples were collected on a 1km grid in the extreme south-eastern portion of the licence area as part of follow up to a heavy mineral anomaly in the adjacent exploration licence (EL1516). One sample contained a single kimberlitic garnet. Details are given in the 3rd and 5th Quarterly reports.

3.3 Sampling of Magnetic Anomalies

Loam samples were collected from at or near the centre of most magnetic anomalies during ground follow up, as detailed in the 7th, 8th and 14th Quarterly reports.

In addition samples comprising 2 bags of -1 + 0.3mm material were collected from anomaly MW11 (X7500) and MW17 (X6540). Six bags of -2 + 0.3mm and 4 bags of +2mm drill spoil were also collected as sample X6539 from drillhole CRA 81/LRM51 which is located at local co-ordinates 5700E/4875N on the MW11 grid.

None of these samples produced results of significance.

3.4 Miscellaneous

A few samples collected to investigate prospects introduced by local pastoralists all gave negative results, as described in the 11th Quarterly report.

4 AIRBORNE GEOPHYSICAL SURVEY

The licence area was included in the joint SADME/BMR survey of the Eyre Peninsula flown by Geoterrex toward the end of 1988. Stockdale's collaboration in this survey included infill flying over the Mt Wedge licence to give a flight line spacing of 500m. The survey specifications were :

| | |
|--------------------------------|---|
| Mean Terrain Clearance | 100m |
| Flight Line Spacing | 500m |
| Flight Line Orientation | E-W |
| Tie Line Spacing (Orientation) | 12km (N-S) |
| Airspeed | 70m/second (175 knots) |
| Magnetometer Cycle Rate | 0.2 seconds |
| Data Collected | Total Field Magnetics 4 Channel Radiometrics |
| Navigation | Syledis Radio Navigation System |

4.1 Data Interpretation

Located and levelled digital data supplied by the contractor was gridded, processed and imaged by Stockdale's Research and Technical Services Division in Melbourne. A preliminary contour plot (plan SEL G1569, 7th Quarterly report) showed the magnetic data to be very active over the licence area, due to the extensive Archaean(?) and Proterozoic granites. This hindered target selection as any lower amplitude anomalies were probably masked by the active magnetic background. Considerable dependency was therefore placed on the interpretation of filtered images, from which twenty anomalies, designated MW01 to MW20, of possibly kimberlitic style were selected (7th Quarterly report). Subsequent re-examination of the aeromagnetic data led to the selection of 3 additional anomalies, MW21, MH118 and MH116. All but the latter, which is located in the Barwell Conservation Park about 6km SE of MW17 and is therefore inaccessible, are shown on Map 3.

4.2 Ground Follow up of Magnetic Anomalies

Ground follow up was conducted by pegging a grid of appropriate size over each anomaly using tape or chain and compass. Grid lines were oriented N-S (magnetic) and spaced 50m apart. Magnetic readings were collected at 25m intervals along each line using a Geometrics G856 proton precession memory magnetometer. A second such instrument was used to monitor diurnal drift. The data collected was drift corrected and contoured in the field using a laptop PC. The resulting plots were forwarded to Melbourne for interpretation.

Contour plots for the airborne and ground magnetic data have been presented for anomalies MW01, 04, 05, 10, 12, 16, 18, 19, 20 (7th Quarterly report), 03, 13 and 15 (8th Quarterly report). Contour plots for the ground magnetic data for anomalies MW02, 08, 09 and 21 were submitted with the 14th Quarterly report.

Anomaly MW07 is coincident with the Hiltaba Granite outcrop at Uncontitchie Hill, and was not investigated further. Anomalies MW06 and 14 were not thought to warrant ground follow up. Anomaly MH118 could not be located on the ground, and subsequent re-examination of the data showed it to be an artefact of processing. As previously noted MH116 is within a conservation park and therefore could not be followed up.

Contour plots of the airborne and ground magnetic data not previously supplied are to be found in Appendices 1 and 2 to this report.

4.3 Drilling

A number of the anomalies were recommended for drilling following the appraisal of ground magnetic data in Melbourne. Two phases of drilling took place.

Anomalies MW18 and 19 were drilled in June 1990 when 2 holes totalling 106m were completed. Two kimberlitic spinels and one ilmenite were recovered from drill cuttings. Details of the drilling, downhole sampling and drill logs were provided in the 8th Quarterly report; results for the geochemical analysis of basement samples are in Appendix 1, 10th Quarterly report.

In February 1991 fifteen holes with an aggregate depth of 838m were drilled to investigate anomalies MW01, 03, 04, 05, 10, 13, 16 and 20. A variety of crystalline basement rocks were intersected. The drilling programme was reported in the 10th Quarterly report, to which the drill logs were attached as Appendix 2. Petrographic descriptions of hornblende-quartz gabbro from MW04 and schists from MW16 are in Appendix 2 of the 11th Quarterly report. A few kimberlitic indicator minerals were recovered from the drill cuttings as detailed in Table 1 of the 12th Quarterly report, whilst analytical results from downhole geochemical samples were appended to both the 12th and 13th Quarterly reports.

None of the basement rocks intersected during either drilling programme were kimberlite or of kimberlitic affinities, and it is believed that the few indicator minerals recovered from drill samples are derived from a secondary host in the Quaternary and Tertiary calcarenites and sands.

5 REMOTE SENSING

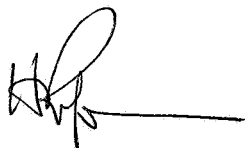
The area of EL1527 was included as part of more comprehensive study of Landsat TM imagery over the Eyre Peninsula. In essence this did not contribute significantly to exploration in the area, primarily because the veneer of Bridgewater Formation calcarenites and younger sand spreads masks structural and other features of the basement. Brief reference to the TM study was made in the 4th (see Map 2, plan SEL3769b), 12th, 13th and 14th Quarterly reports.

6 CONCLUSIONS

Reconnaissance heavy mineral sampling did not detect any concentration of kimberlitic indicator minerals sufficient to suggest a proximal primary source. The active nature of the magnetic background makes the interpretation and selection of anomalies which may be due to kimberlite difficult. Nevertheless none of the anomalies selected for drilling resulted from kimberlite. It was thought unlikely that economically significant diamond bearing rocks occurred within the licence area and exploration was therefore terminated.

7 EXPENDITURE

The work completed within the tenement from grant to surrender has incurred expenditure totalling \$356 202, as summarised in Table 1.



H R Robison
Senior Divisional Geologist

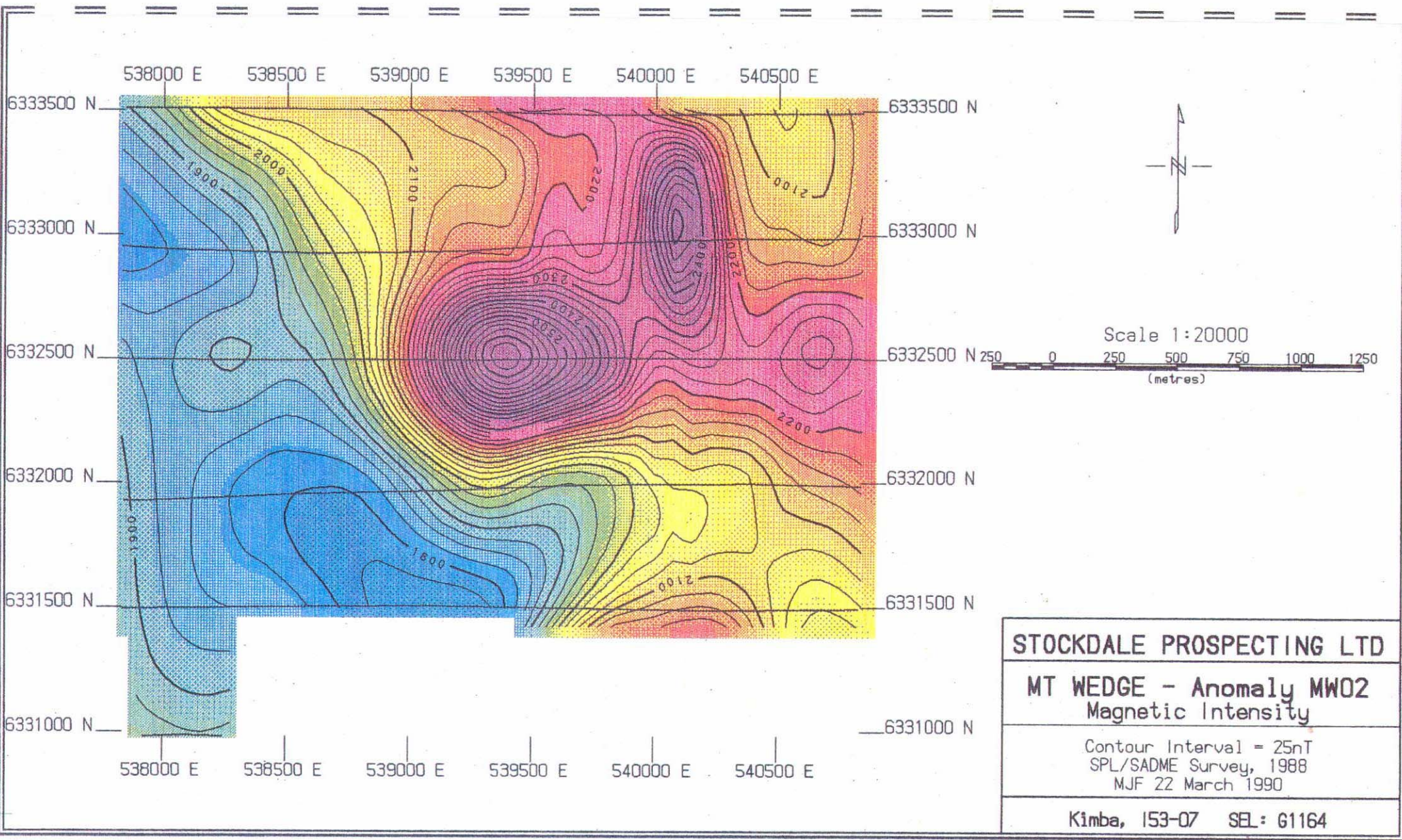
Table 1 : Expenditure Summary, EL1527
 Period 12 October 1988 to 30 June 1992

| | \$ |
|--|-----------------------------------|
| OPERATIONAL STAFF COSTS | 123 208 |
| GENERAL OPERATIONAL EXPENSES | 10 208 |
| TRANSPORT AND TRAVEL | 11 451 |
| CENTRAL TREATMENT PLANT | 37 230 |
| LABORATORY : TREATMENT | 5 300 |
| : EXAMINATION | 9 298 |
| CONTRACTORS : GEOPHYSICS | 18 909 |
| : DRILLING | 19 291 |
| : SAMPLE ANALYSIS | 3 440 |
| : EARTHMOVING | 825 |
| TECHNICAL SERVICES : GEOPHYSICS | 25 246 |
| : REMOTE SENSING | 2 396 |
| : DRAFTING | 3 843 |
| : MINERALOGY | 750 |
| : COMPUTING | 361 |
| : OTHER | 560 |
| ADMIN/LOGISTIC SUPPORT : REGIONAL OFFICE | 40 189 |
| : HEAD OFFICE | 32 872 |
| CAPITAL UTILISATION | 10 285 |
| TOTAL EXPENDITURE | <u>\$ 356 202</u> <u>=====</u> |

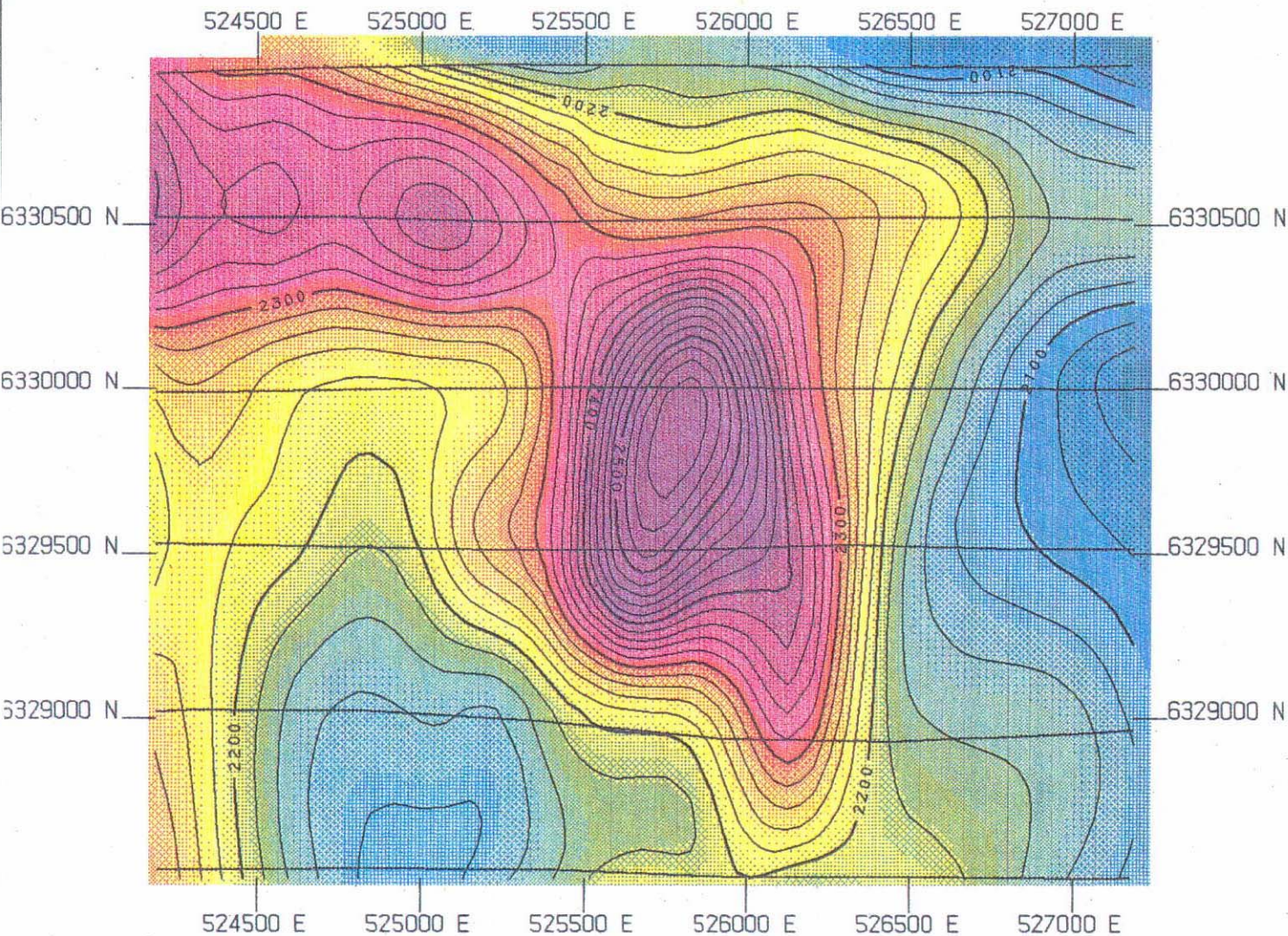
APPENDIX 1

Magnetic Contours, Airborne Data

MW02,06,07,08,09,11,14,17



000211



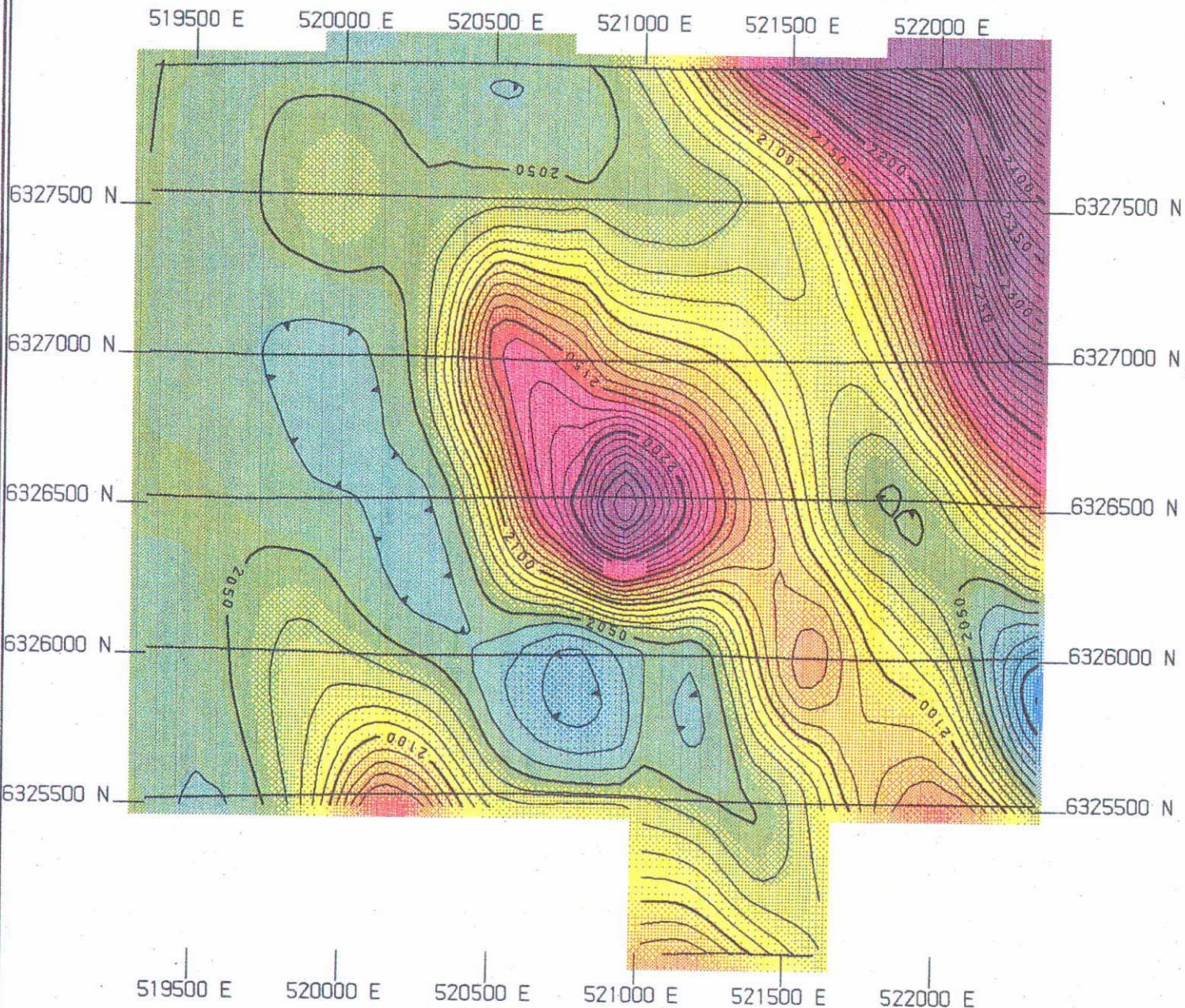
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW06
Magnetic Intensity

Contour Interval = 20nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1168

000243



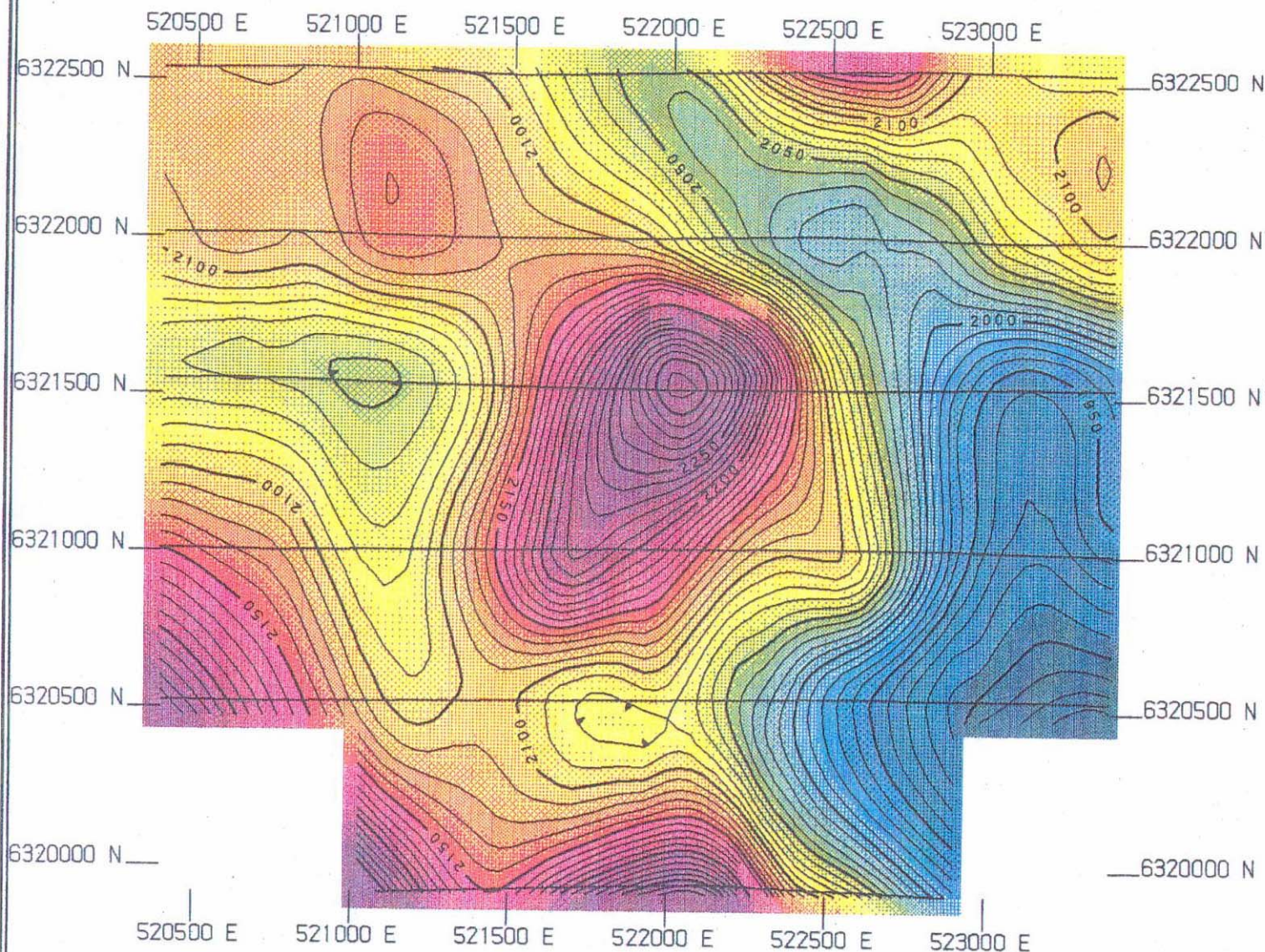
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW07
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: G1169

600240



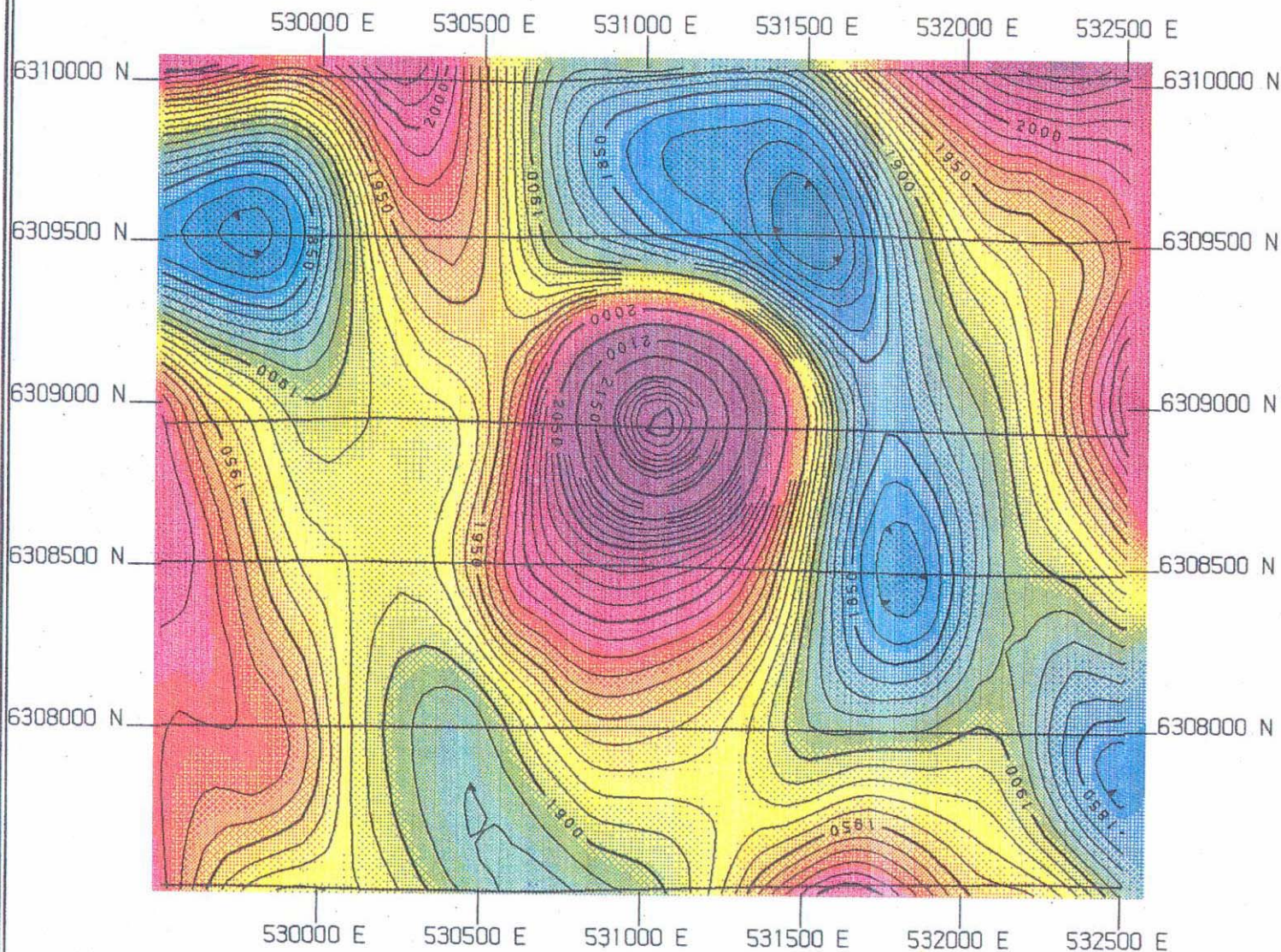
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW08
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1170

000227



Scale 1:20000



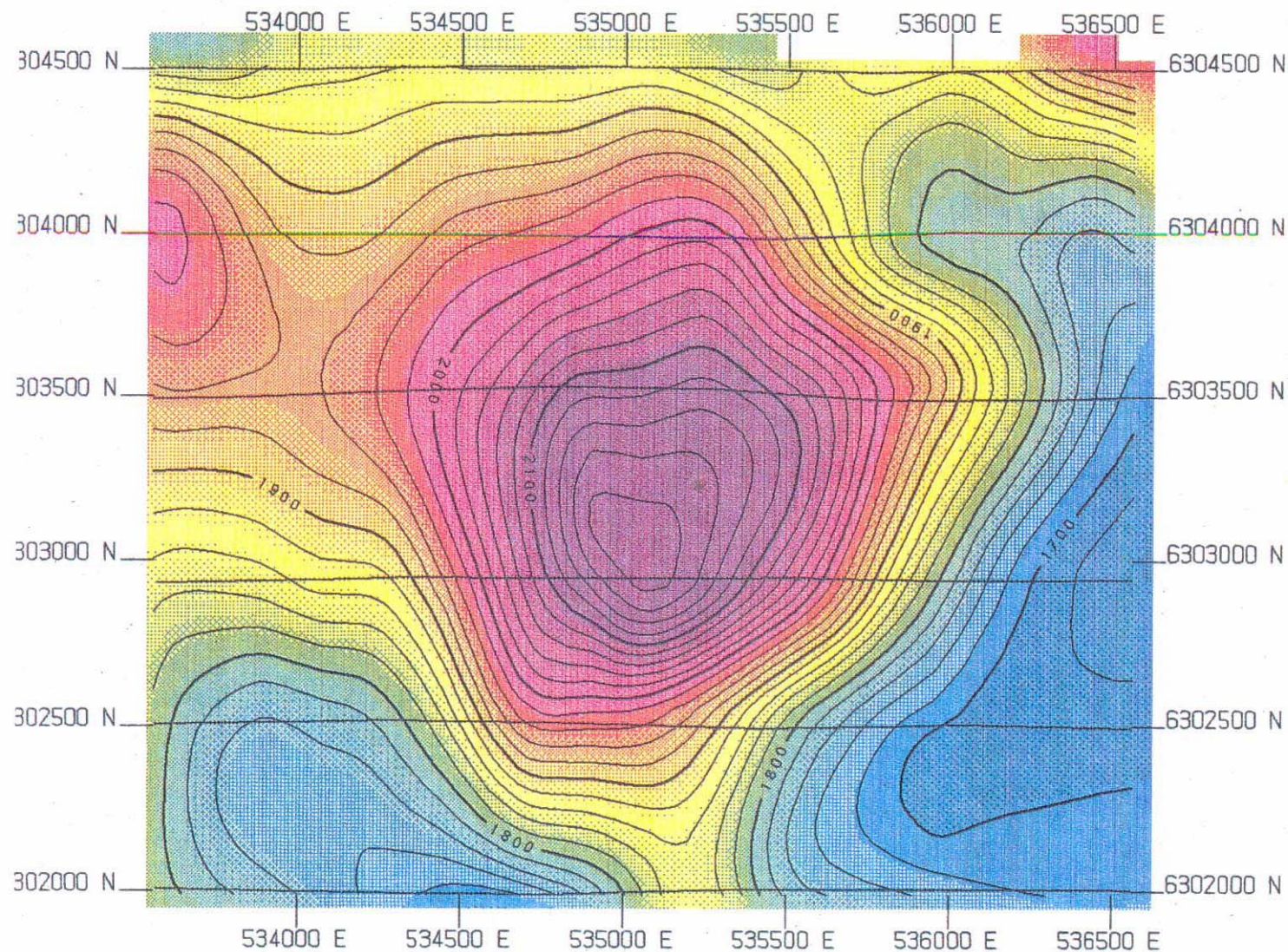
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW09
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: G1171

000246



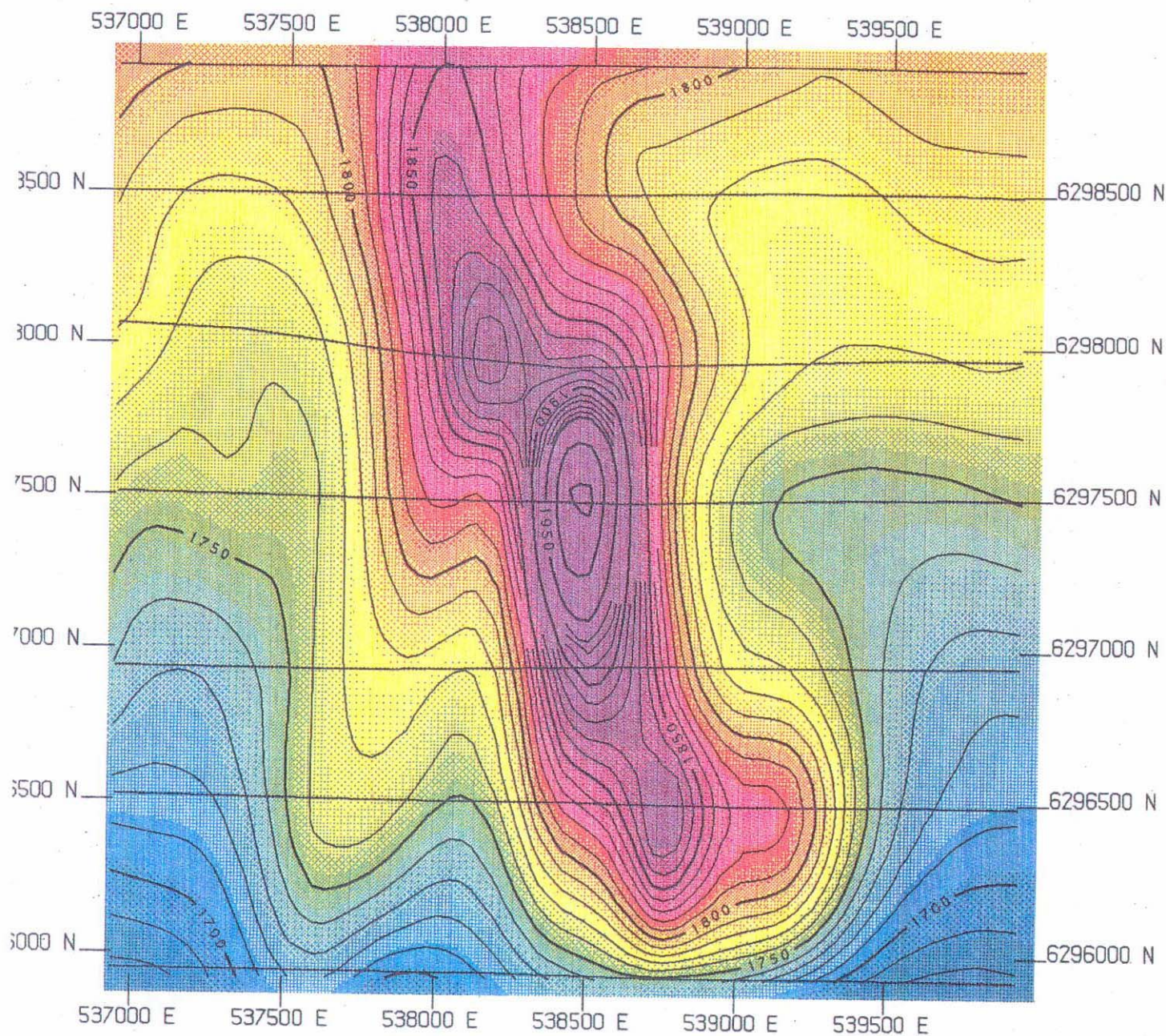
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW11
Magnetic Intensity

Contour Interval = 20nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, I53-07 SEL: G1173

000213



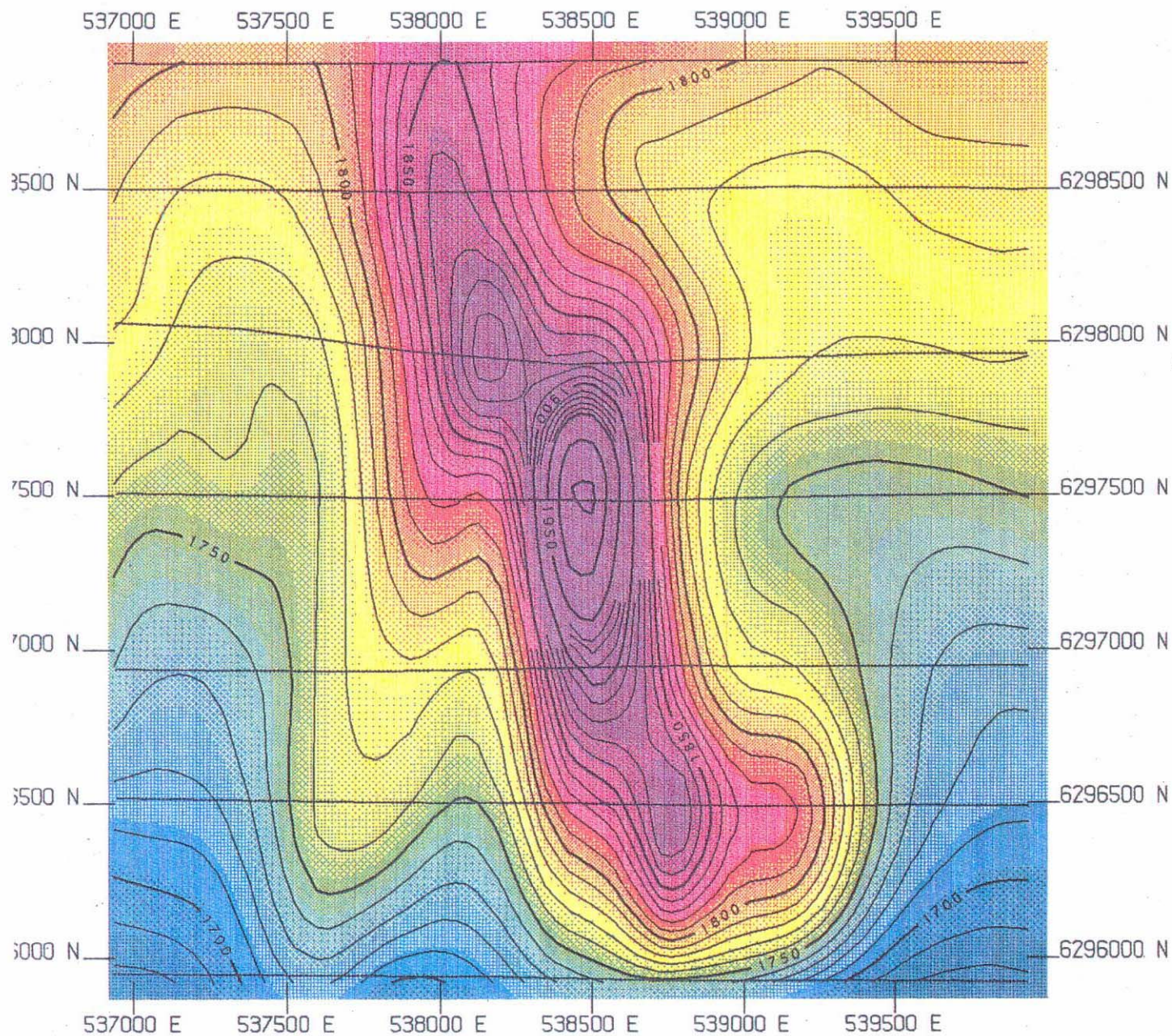
STOCKDALE PROSPECTING LTD

MT WEDGE - Anomaly MW14
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1176

000250



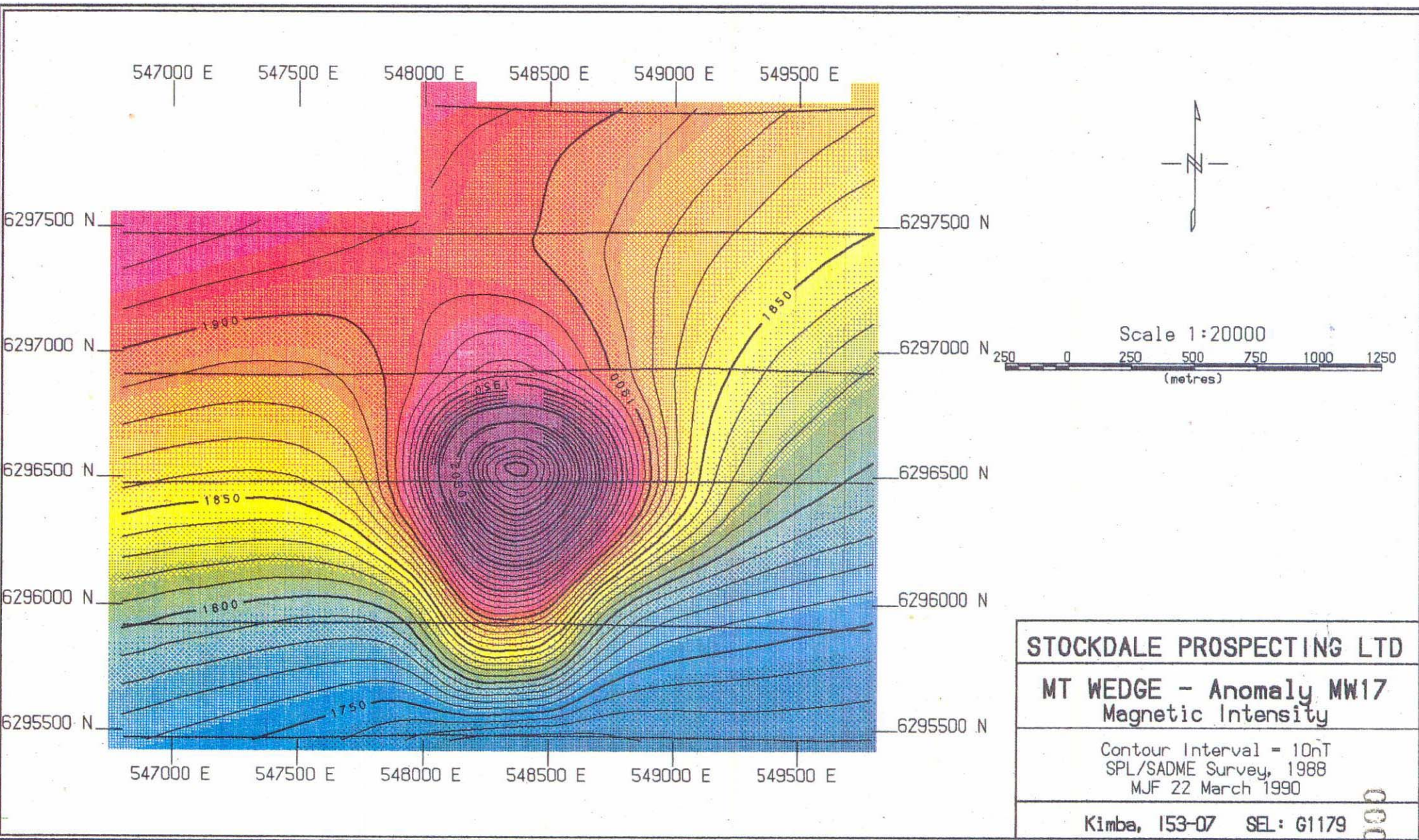
STOCKDALE PROSPECTING LTD

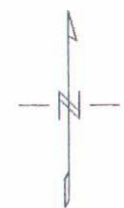
MT WEDGE - Anomaly MW14
Magnetic Intensity

Contour Interval = 10nT
SPL/SADME Survey, 1988
MJF 22 March 1990

Kimba, 153-07 SEL: G1176

000251

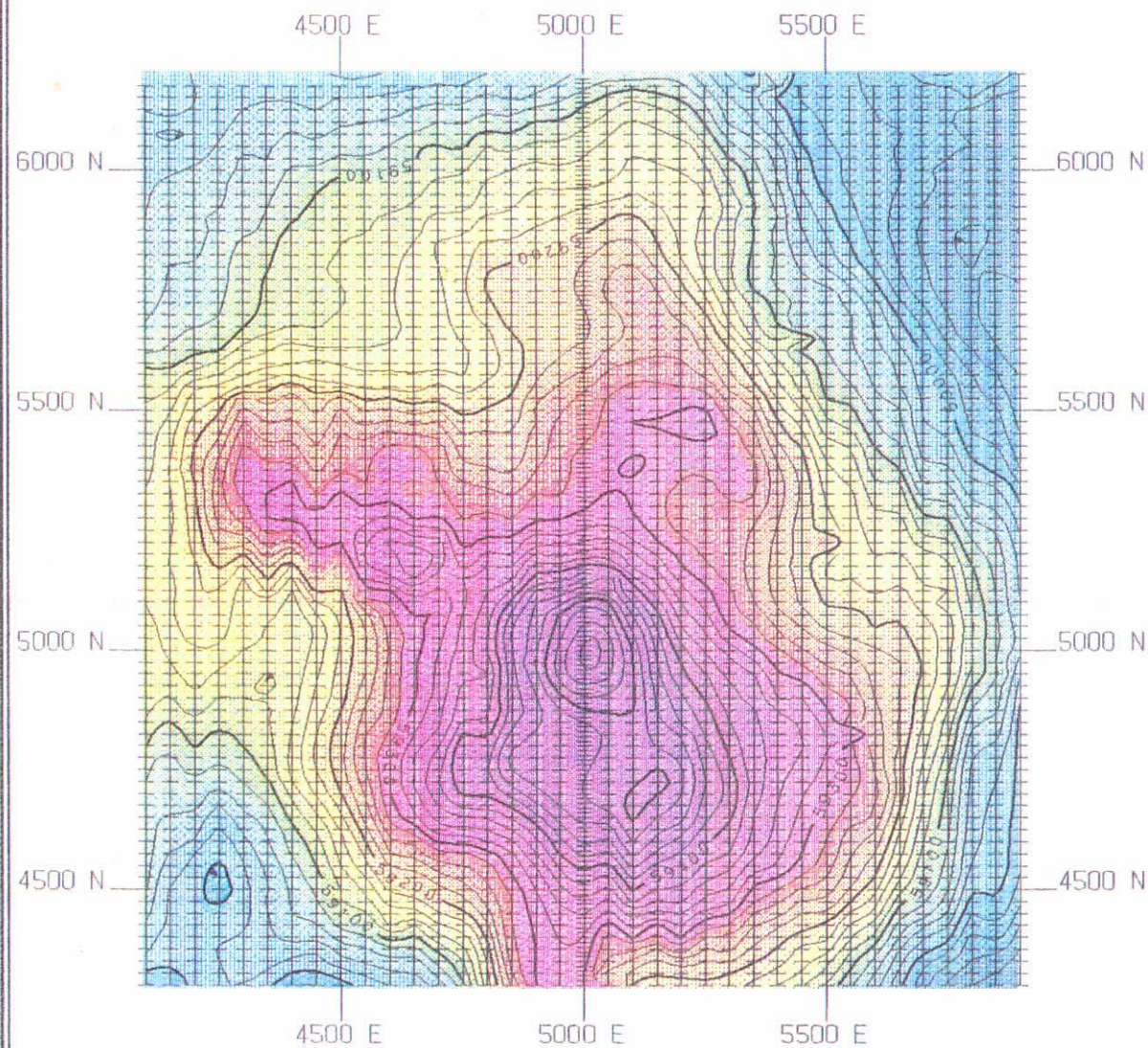




(metres)

KIMBA S153-7 SEL:

005000



Scale 1:15000
250 0 250 500 750 1000
(metres)

STOCKDALE PROSPECTING LTD

MT. WEDGE MW11
Groundmagnetic Survey

Magnetic North
Cont 20nT
7/4/92-10/4/92

KIMBA SI53-7 SEL:

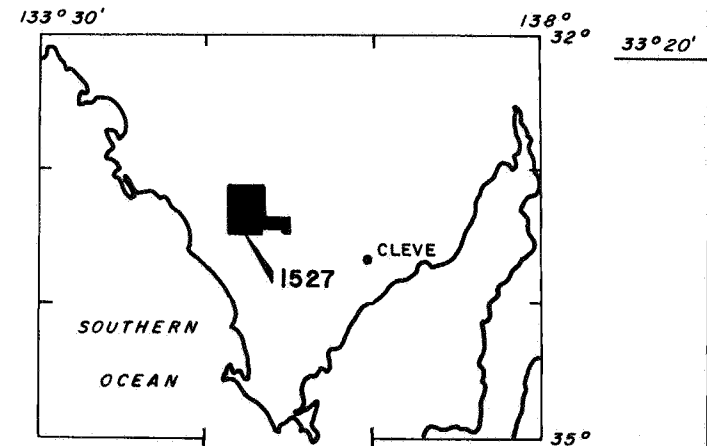
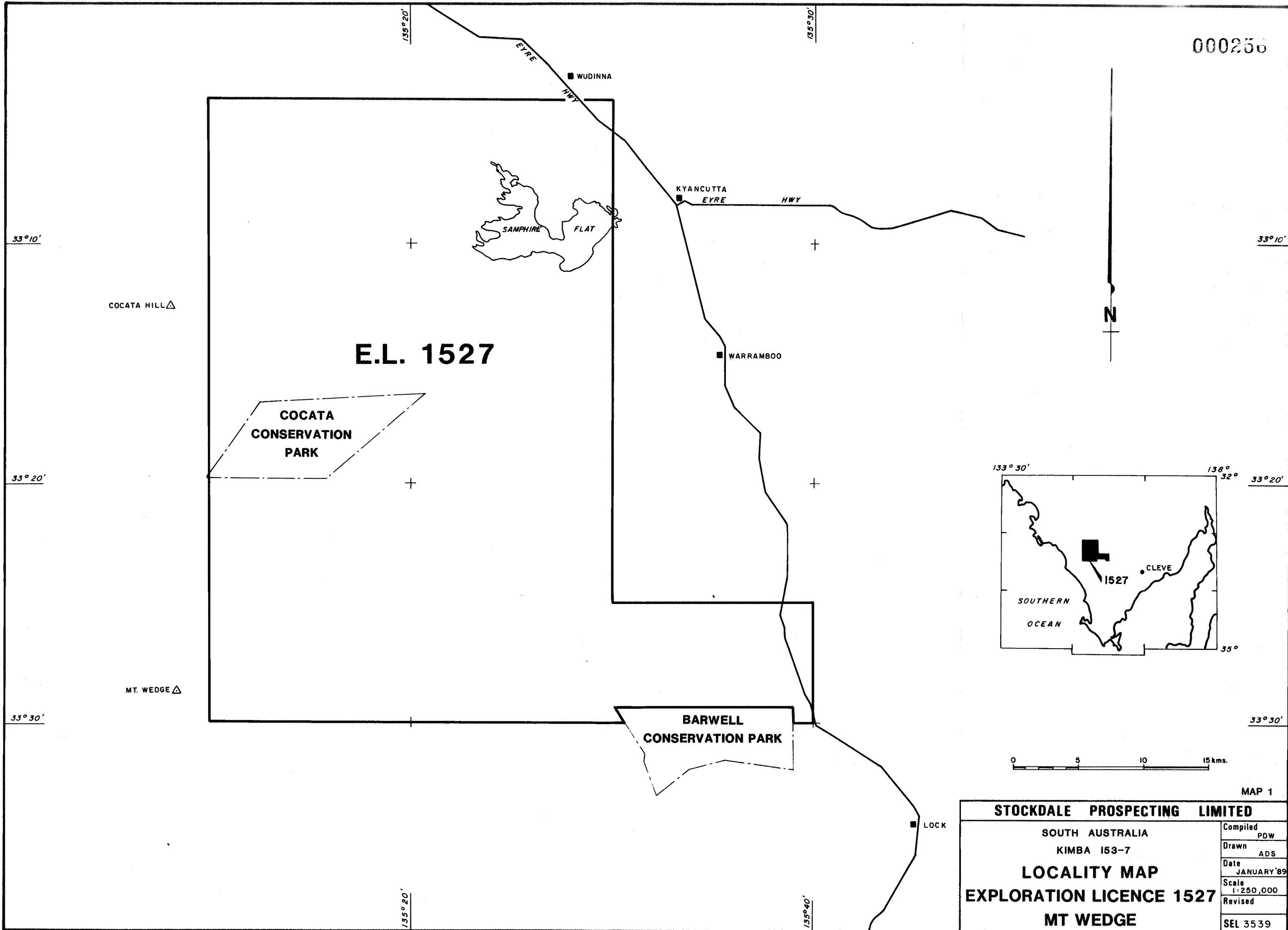
000254

APPENDIX 2

Magnetic Contours, Ground Data

MW11,17

000256

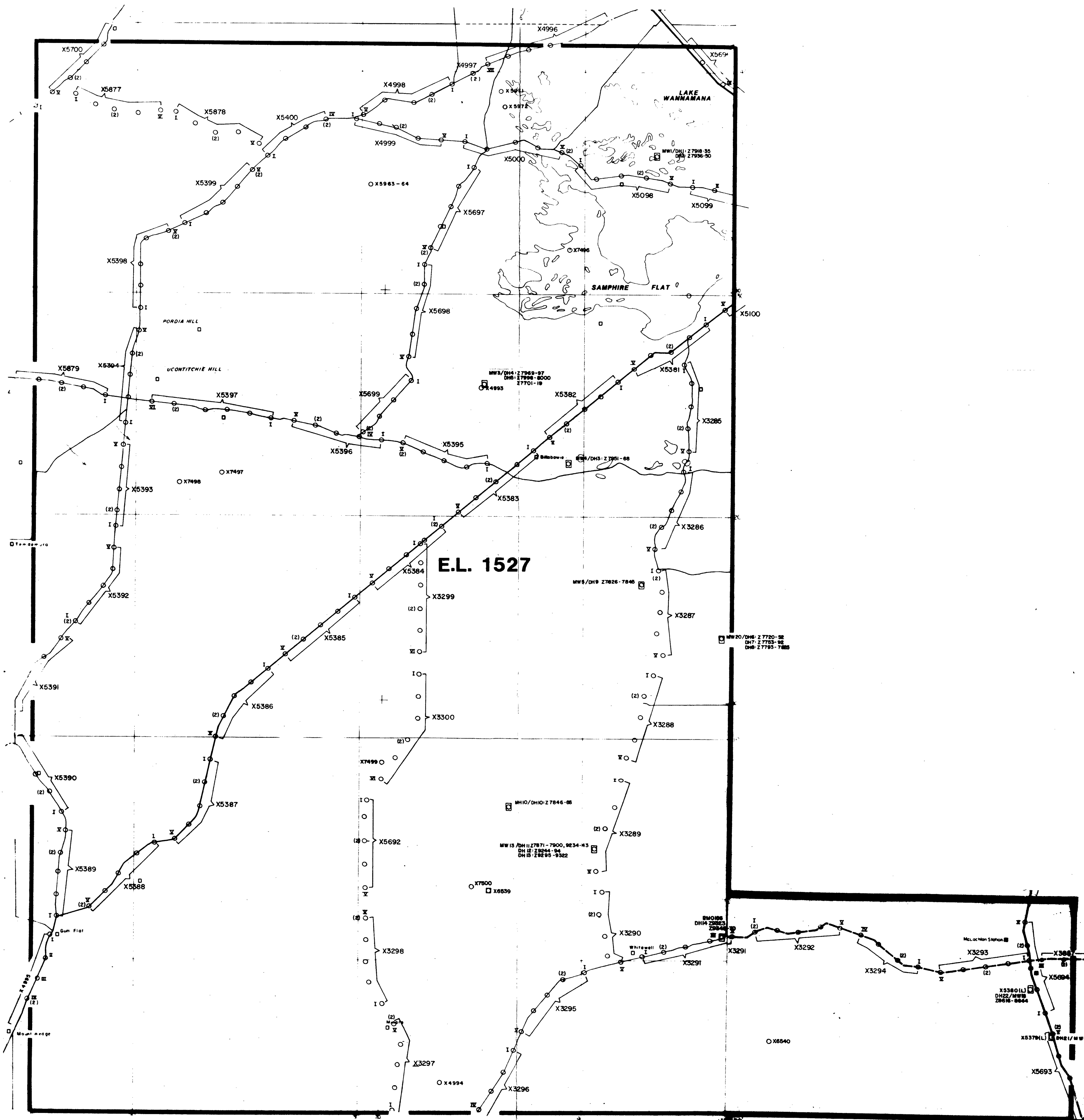


0 5 10 15 kms.

MAP 1

| STOCKDALE PROSPECTING LIMITED | |
|---|---------------------|
| SOUTH AUSTRALIA KIMBA 153-7 LOCALITY MAP EXPLORATION LICENCE 1527 MT WEDGE | Compiled PDW |
| | Drawn ADS |
| | Date JANUARY '89 |
| | Scale 1:250,000 |
| | Revised SEL 3539 |

8087-5



| | |
|-------------------------------|--|
| STOCKDALE PROSPECTING LIMITED | |
| SOUTH AUSTRALIA | |
| 8087-5 | |
| CURRENT SAMPLING | |
| E.L. 1527 | |
| Scale 1:100,000 | |
| Date 7/92 | |
| Drawn | |
| Checked | |
| Reviewed | |
| SEL | |

8087-4

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL INTERPRETATION

Legend:

- FAULTS (MAJOR)
- FAULTS
- INFERRED DYKES
- ROADS
- EDGE OF ELLISTON (BLUE RANGE BEDS)
- SUB-OUTCROPPING/BLUE RANGE BEDS (CONGLOMERATE WITH HIGH K AND Th LEVELS)
- OUTCROPPING PROTEROZOIC GRANITES
- OUTCROPPING ARCHEAN GRANITES
- BOUNDARY BETWEEN EXPOSED BRIDGEWATER FORM. AND NTH. SAND CLAY COVER
- ANOMALY

Location Map:

DAMPER KOPI 136° 30' 138° 30' 34° 36°

SHERINGA TOOLIGIE

KIMBA 153-7 WHYALLA 153-8

8087-4

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

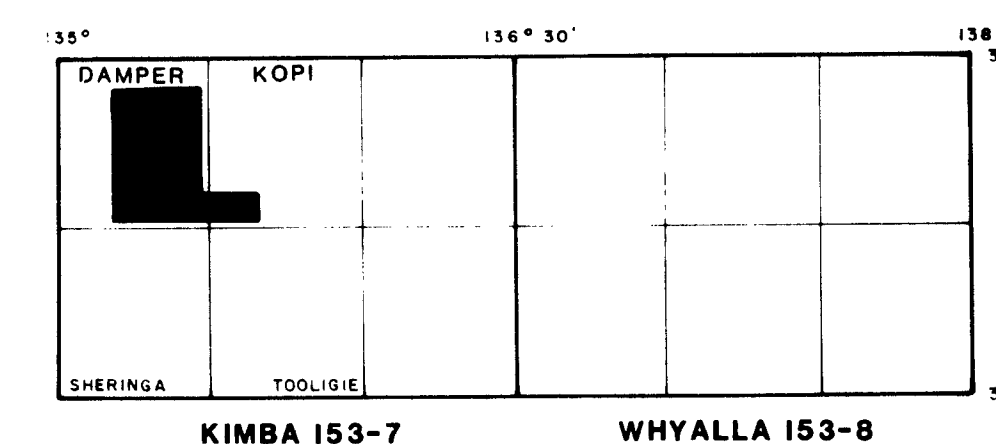
MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL INTERPRETATION

Compiled FWA
Drawn ADS
Date 3/90
Scale 1:100 000
Revised
SEL 3804

NOTE : AMG's DERIVED FROM PHOTO ENLARGED IMAGE AND
ARE SUBJECT TO 50m. E-W / 100m. N-S ERROR

LOCATION MAP



8087-4

STOCKDALE PROSPECTING LIMITED

SOUTH AUSTRALIA
KIMBA 153-7

MT WEDGE EL 1527

AIRBORNE GEOPHYSICAL INTERPRETATION

| | |
|----------|-----------|
| Compiled | FWA |
| Drawn | ADS |
| Date | 3/90 |
| Scale | 1:100 000 |
| Revised | |
| SEL | 3804 |



000257

STOCKDALE
PROSPECTING
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Telex Stodal AA39546
Fax (03) 826 0974

15 October 1992

The Director-General
Department of Mines and Energy
PO Box 151
EASTWOOD SA 5063

Attention: Mr. G. Kwitko

Dear Sir,

Exploration Licences 1518, 1527, 1672, 1694

Further to your letter of 1 October, 1992, I enclose supplementary information as follows:

EL1518

1. Petrographic Report KR 89/772 for kimberlite Mt. Hope-01 (Anomaly MH01)
2. Petrographic Report KR 90/114 for kimberlite Mt. Hope-02 (Anomaly MH14)
3. A report detailing the ion-microprobe U-Pb dating of perovskite from Kimberlite Mt. Hope-01.
4. Drill hole logs for drillholes DH 53-55, Anomaly MH109.
5. AMG co-ordinates for drillholes DH20-55, Anomalies MH11 to MH109, Feb. '91 drilling programme.
6. Results for loam sample X7493.

E1527

1. AMG co-ordinates for DH21 (Anomaly MW19) and DH22 (Anomaly MW18).
2. Results for loam samples X7496-7500.

EL1672

1. Results for loam samples X7701-20, X7844-48 and X8184-200.

EL1694

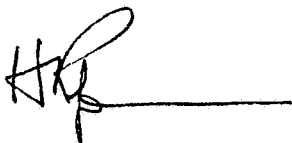
1. Petrographic report KR 91/624 for kimberlite Mt. Hope -06 (Anomaly SH13)
2. Petrographic report KR 91/606 for kimberlite Mt. Hope -07 (Anomaly SH09)
3. Petrographic report KR 91/625 for kimberlite Mt. Hope -08 (Anomaly SH08)

The raw/field data for SIROTEM surveys over anomalies MH01 and MH14 (EL1518) and over anomaly SH14 (EL 1672) are being compiled and will be forwarded to you in due course.

Samples (cores/cuttings) of all drilling undertaken on Eyre Peninsula are presently being prepared and documented in Whyalla. These, and representative samples of the kimberlites discovered will be lodged with the Department's Core Library in Whyalla and we will contact Mr. Logan when all samples are ready for submission.

Please advise if you have any further requirements.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'H R Robison', followed by a horizontal line.

H R ROBISON

Senior Divisional Geologist

RTF:HRR993

STOCKDALE PROSPECTING LIMITEDEL 1527

1. AMG Co-ordinates for Drillholes, Quarter ended 11/10/90.

| <u>DH NO.</u> | <u>ANOMALY NO.</u> | <u>EASTING</u> | <u>NORTHING</u> |
|---------------|--------------------|----------------|-----------------|
| 21 | MW19 | 560984 | 6296713 |
| 22 | MW18 | 560024 | 6298846 |

2. Results for loam samples over magnetic anomalies, Quarter ended 1/4/92.

Sample No. Anomaly No.

| | |
|-------|----------|
| X7496 | Negative |
| X7497 | Negative |
| X7498 | Negative |
| X7499 | Negative |
| X7500 | Negative |