



Oxiana Golden Grove Pty Ltd

GOLDEN GROVE PROJECT
Western Australia

COMBINED ANNUAL EXPLORATION REPORT
FOR THE PERIOD ENDED 31st DECEMBER, 2005
GSWA Ref No C294/1993, M1249/1

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1:250,000 Sheet: SH50-2 Yalgoo, SH50-3 Kirkalocka

1:100,000 Sheet: 2240 Badja, 2340 Thundelarra

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SUMMARY

This report outlines the base metal exploration activities undertaken by Newmont Golden Grove Operations Pty Ltd and Oxiana Golden Grove Pty Ltd on the Golden Grove Project during the 2005 calendar year. Oxiana Limited purchased the Golden Grove operation from Newmont Australia Limited in July 2005.

Newmont did not provide an exploration budget for calendar year 2005. Instead, some funds were made available to test the gold potential at three locations along the western limit of the tenement holding. This resulted in the completion of six shallow diamond drill holes into massive and stringer pyrite-pyrrhotite and graphitic shales; no gold anomalies were recorded. No base metal exploration was undertaken.

CONTENTS

SUMMARY

1 INTRODUCTION

- 1.1 Location and Access
- 1.2 Tenements

2 REGIONAL GEOLOGY

3 GEOCHEMISTRY

- 1.3 Diamond Drill Core Sampling
- 4.1 Rotary Air-blast (RAB) Chip Sampling
- 4.2 Analytical Techniques

4 DRILLING

- 5.1 Diamond Drilling

5 ENVIRONMENT AND REHABILITATION

6 REPORT BY TENEMENT

- 7.1 M59/03 (Scuddles)
- 7.2 M59/195 (Gossan Hill)
- 7.3 M59/361 (Badja)
- 7.4 M59/362 (Badja)

7 REFERENCES

8 BIBLIOGRAPHIC DATA SHEET

LIST OF TABLES

1. Golden Grove Project Tenement Holdings 2005
2. Diamond Drilling Summary 2005

LIST OF FIGURES

1. Tenement Locations¹
2. Regional Geology¹
3. Stratigraphic Column – Golden Grove
4. Diamond Drilling 2005
5. Scuddles Area, Diamond Drilling 2004 - 2005
6. Western Tenement Area, Diamond Drilling 2005

Notes:

¹ AGD 1984 Zone 50

All other figures Local Mine Grid with AGD 1984 Zone 50 grid overlay; refer to Drill Hole data files on CD for conversion data

LIST OF APPENDICES

1. Drilling Data, 2004 - 2005 (on CD)

1 INTRODUCTION

This report documents the calendar year 2005 exploration programmes undertaken by Newmont Golden Grove Operations Pty Ltd and Oxiana Golden Grove Pty Ltd on the Golden Grove Project. Mining Lease M59/543 (Walgardy) is included in the Golden Grove Project.

Shallow diamond drilling was undertaken to test the potential for gold deposits within the so-called "Banded Iron" sequence to the west of Gossan Hill and Scuddles. No funding was made available for base metal exploration in calendar 2005.

1.1 Location and Access

The Golden Grove Project is located in the southern Murchison region of Western Australia approximately 55 kilometres south south-east of the township of Yalgoo and approximately 225 kilometres east of the Port of Geraldton. The tenements are located alongside, and largely to the west of the Yalgoo to Paynes Find road. Access within the property is provided by gravel tracks, fence lines and cleared grid lines. An all weather airstrip services the Project.

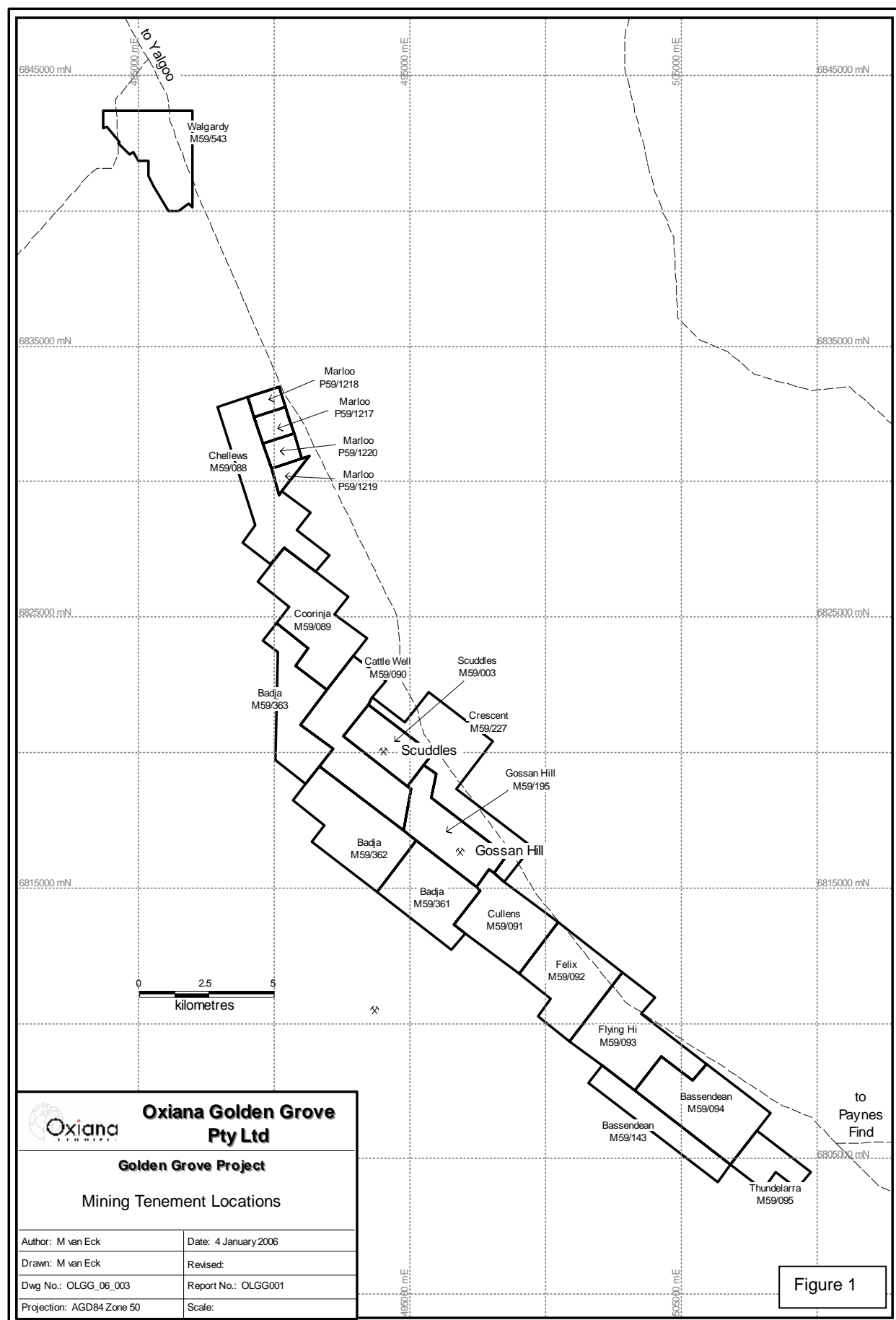
1.2 Tenements

Mining and prospecting leases, which comprise the Project area and are the subject of this report, are shown in Table 1 and Figure 1. Surveys of lease boundaries were completed in April 2005 resulting in some changes to tenement areas.

An application was made to the Department of Minerals and Energy in September 1997 to convert prospecting leases P59/1217, 1218, 1219 and 1220 to a mining lease (MLA59/480). M59/03 (Scuddles) was renewed for a further 21 years.

Table 1: Golden Grove Project Tenement Holdings 2005

Prospect Name	Tenement Number	Area (ha)	Grant Date
Scuddles	M59/03	449.55	09/12/83
Chellews	M59/88	933.15	19/05/88
Coorinja	M59/89	960.45	19/05/88
Cattle Well	M59/90	977.05	19/05/88
Cullens	M59/91	737.65	19/05/88
Felix	M59/92	839.85	19/05/88
Flying Hi	M59/93	959.85	19/05/88
Bassendean	M59/94	960.05	19/05/88
Thundelarra	M59/95	319.05	19/05/88
Bassendean	M59/143	480.00	10/05/89
Gossan Hill	M59/195	687.45	18/05/90
Crescent	M59/227	999.85	08/05/91
Badja	M59/361	759.70	02/03/95
Badja	M59/362	958.30	02/03/95
Badja	M59/363	722.65	02/03/95
Walgardy	M59/543	766.00	04/02/2002
Marloo	P59/1217	120.00	28/09/93
Marloo	P59/1218	90.00	28/09/93
Marloo	P59/1219	75.00	28/09/93
Marloo	P59/1220	120.00	28/09/93
Total Area		12,915.6	



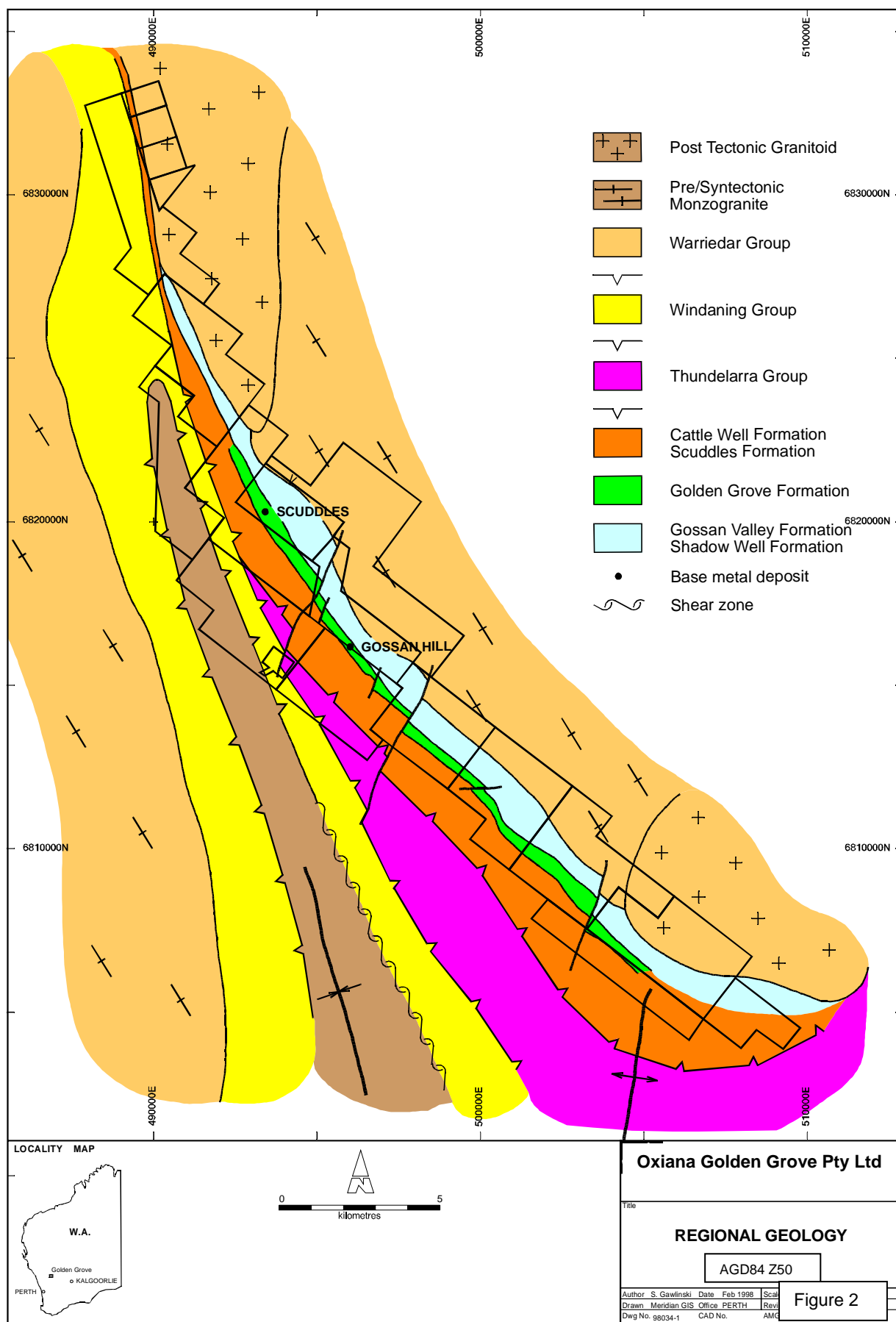
2 REGIONAL GEOLOGY

The Golden Grove Project lies on the eastern side of a central synclinal axis within the Warriedar Fold Belt (WFB). The WFB is dominated by mafic volcanic successions and lies in the Yalgoo-Mt Singleton Greenstone Belt of the Murchison Province within the Yilgarn Craton, Western Australia. The host sequence to the Scuddles and Gossan Hill base metals deposits is the Golden Grove formation of the Gossan Hill Group (Clifford, 1992) which, in general, youngs and dips westerly between 75° and 80° (Figure 2). It comprises a foot wall sequence of rhyolitic flows and tuffs, a host sequence of volcanoclastic litharenites and crystal tuffs and a hanging wall sequence of felsic lavas. Figure 3 provides a schematic stratigraphic column representing the Golden Grove formation and its enclosing units. The Gossan Hill Group is overlain by the predominately mafic successions of the Thundelarra Group (Watkins and Hickman, 1990).

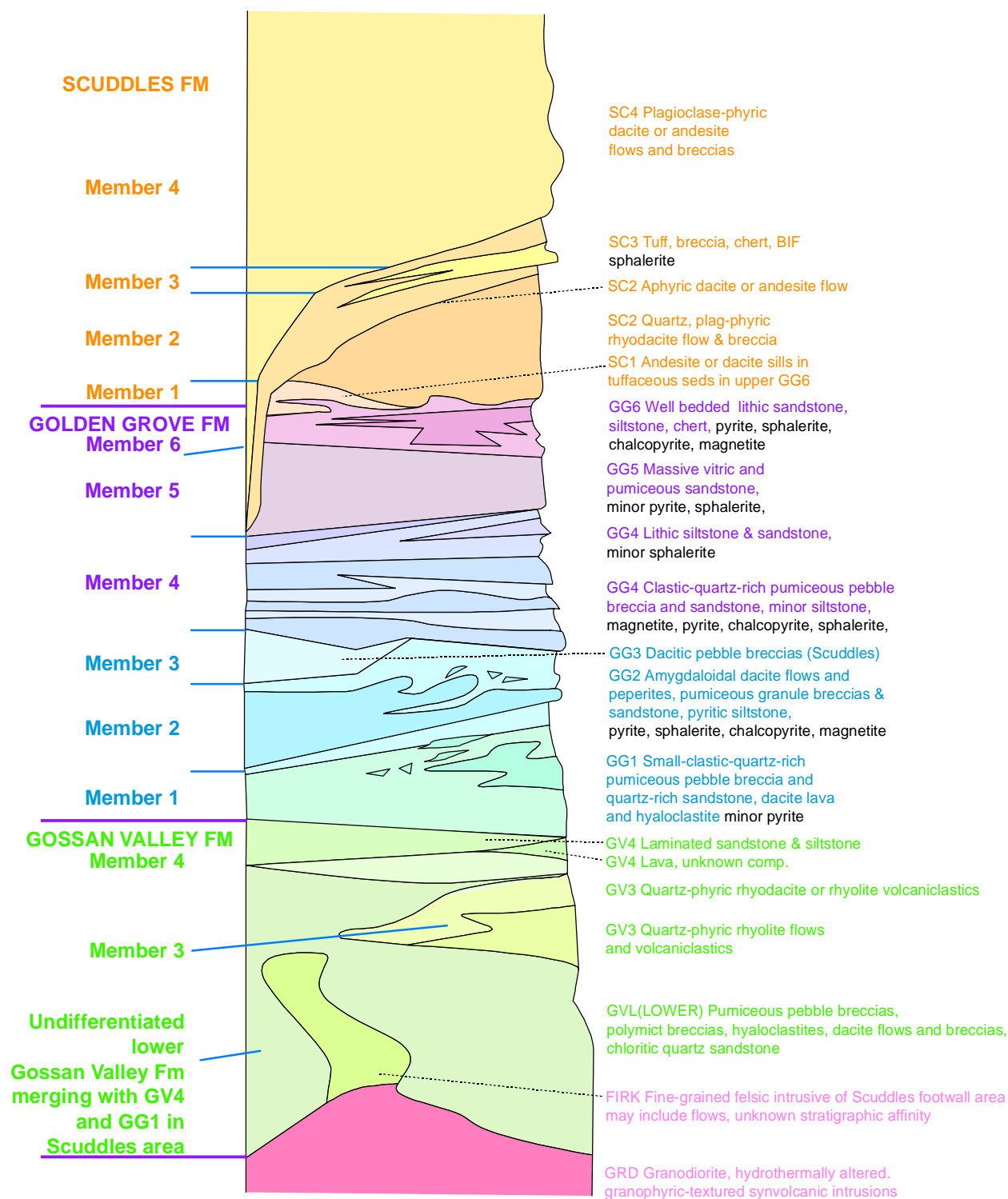
The Gossan Hill and Thundelarra Groups are overlain, either unconformably or structurally, by BIF and chert of the Windaning Group (Baxter, 1982b,c; Frater, 1978, 1983a, as cited in Clifford, 1992). The BIF and chert form the prominent hills of the Minjar Range. On the western flank of the range, sandstone and conglomerate of the Warriedar Formation crop out. Siltstones and shales of the Mougooderra Formation overlie the Warriedar Formation.

Two major regional structures, the Mougooderra and Chulaar Shears, pass through and west of the leases. These structures have been interpreted as strike slip faults and more recently as thrust faults.

The WFB is bounded to the east, west and south-east by the pre-syntectonic Murchison Monzogranite. Post-tectonic granitoids intrude the margin of the greenstone belt post-dating regional folding events. Mafic intrusives are common throughout the belt and are thought to be generally contemporaneous with overlying mafic successions.



Golden Grove Stratigraphic Column



Drawn by John Martyn of Martyn and John Associates based on the scheme of Clifford (1992).

Figure 3

3 GEOCHEMISTRY

An outline of the analytical techniques and elemental suites for the various drilling programmes is presented below. Available assay data are presented in Appendix 1.

3.1 Diamond Drill Core Sampling

In areas of sulphide mineralisation or strong alteration, samples of half core were taken over nominal one metre intervals defined by lithological or alteration boundaries.

3.2 Rotary Air Blast (RAB) Chip Sampling

While no RAB drilling was undertaken in calendar 2005, assays for several holes completed in 2004 and not previously reported are provided in Appendix 1. One metre samples were collected from a cyclone and placed in rows on the ground. Using a PVC "spear" composite samples were collected over five metre intervals and submitted for assay.

3.4 Analytical Techniques

All routine exploration diamond core samples were sent to ALS-Chemex in Perth. Each sample was pulverised totally and assayed for the listed elements by the following techniques (detection limits in brackets):

Au (0.01ppm) by Fire Assay, method AA26

Cu (0.01%), Pb (0.01%), Zn (0.01%), Ag (1ppm), Fe (0.01%), S (0.01%) by method AA62.

Selected diamond core holes were sampled to provide information on the effects of hydrothermal alteration. These samples were sent to UltraTrace in Perth. Each sample was pulverised totally and assayed for the listed elements by the following techniques (detection limits in brackets):

Al₂O₃ (0.01%), BaO (20ppm), CaO (0.01%), Cr₂O₃ (1ppm), Fe₂O₃ (0.01%), K₂O (0.01%), MgO (0.01%), MnO (0.01%), Na₂O (0.01%), Nb (10ppm), Ni (5ppm), P₂O₅ (0.001%), SiO₂ (0.01%), Sn (0.001%), SO₃ (0.001%), TiO₂ (0.001%), V₂O₅ (10ppm), ZrO₂ (5ppm) by XRF fusion

CO₂ (0.1%) from Carbon determined by Total Combustion Analysis

All RAB samples were sent to ALS-Chemex in Perth. Each sample was pulverised totally and assayed for the listed elements by the following techniques (detection limits in brackets):

Au (0.001ppm) by Aqua Regia and Graphite Furnace, method Au GF42

Ag (0.01ppm), As (0.1), Ba (0.2), Ca (0.01%), Cd (0.01ppm), Cu (0.2), Fe (0.01), Hg (0.01), In (0.005), Mn (5), Mo (0.05), Pb (0.2), S (0.01%), Sb (0.05ppm), Se (0.2), Sn (0.2), Te (0.01), W (0.05), Zn (2) by Aqua Regia and ICPOES - ICPMS, method ME-MS41.

4 DRILLING

4.1 Diamond Drilling

Diamond drilling programmes from surface and underground resulted in the completion of 2,297.5m in 10 holes. The diamond drilling is summarised in Table 2. Diamond drill hole locations are shown on Figure 6. Summaries of the diamond drilling on a tenement by tenement basis are provided in Section 7. Diamond drilling data, including those not available for the 2004 Annual Report, are presented in Appendix 1.

MossLake Drilling Services Pty Ltd continued the BJDD-series surface diamond drilling programme. The drilling was undertaken with a UDR 1000 rig providing PQ, HQ and NQ2 core. Pre-collars were drilled mainly with PQ triple tube core to maintain dip and azimuth. Down-hole survey control was provided by an Eastman-type single shot camera at nominal 30m intervals; selected holes were re-surveyed using a gyroscopic survey tool.

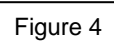
Boart Longyear undertook the S04-series underground exploration drilling at Scuddles using an LM75 rig. Down-hole survey control was provided by an Eastman-type single shot camera at nominal 30m intervals.

Final drill collar locations, dips and azimuths (with respect to the Mine Grid) for all holes were provided by the on-site surveyors.

Table 2: Diamond Drilling Summary 2005

Hole ID	Target Tenement	Mine Grid East	Mine Grid North	Azimuth Grid	Dip	Drilled (m)
BJDD004	M59/362	3961	21601	270	-60	237.2
BJDD005	M59/362	3993	21602	090	-60	243.8
BJDD006	M59/361	2647	19500	090	-60	249.7
BJDD007**	M59/361	2505	19502	090	-60	83.8
BJDD008	M59/361	2515	19502	090	-60	227.9
BJDD009	M59/361	2279	19193	086.5	-60	249.8
S04/100	M59/003	6719	22370	066	+37	216.9
S04/101	M59/003	6719	22370	066	-54	319.1
S04/102	M59/003	6595	21930	086	-5	250
S04/103	M59/003	6564	22140	123	-5	219.3
Total						2,297.5

** Abandoned due to bogged rods



5 ENVIRONMENT AND REHABILITATION

Work completed on the Golden Grove Project included site preparation for diamond drilling and site clean-up on completion of drilling.

Some historical and recent drill collars were checked during the year to ensure that collar caps remained sound and that erosion around the collars did not occur.

There were no reportable environmental incidents during 2005.

6 REPORT BY TENEMENT

Only specific exploration activities within the respective tenements are detailed below. With the exception of the drilling discussed below, exploration-related activities centred around the setting up of lithogeochemical assessments of available diamond drilling.

6.1 M59/03 (Scuddles)

6.1.1 Diamond Drilling

Underground hole S04/103 was completed at 219.3m after being at 86.5m at the end of calendar 2004. This hole was part of a short programme to test the base metal potential of the lower part of the volcanic sequence at Scuddles. No sulphides or major hydrothermal alteration were intersected. The locations and details of underground exploration holes S04/100 to S04/102 completed very late in December 2004 are also provided with this report.

Assay, survey, geological, geochemical and location data are provided in Appendix 1.

6.2 M59/361 (Badja)

6.2.1 Diamond Drilling

This tenement is located to the immediate west of the Gossan Hill mine. Diamond drill holes BJDD006, BJDD007, BJDD008 and BJDD009 were completed for a total of 944m (refer Figures 4 and 5). Hole BJDD007 was abandoned after the rods were irretrievably bogged. No anomalous gold values were recorded in any of the holes despite the presence of pyrite with minor pyrrhotite.

Assay, survey, geological, geochemical and location data are provided in Appendix 1.

6.3 M59/362 (Badja)

6.3.1 Diamond Drilling

This tenement is located to the west of the Scuddles mine. Diamond drill holes BJDD04 and BJDD005 were completed for a total of 481m (refer Figures 4 and 5). Vein-style pyrite accumulations were intersected but no anomalous gold values were recorded.

Assay, survey, geological, geochemical and location data are provided in Appendix 1.

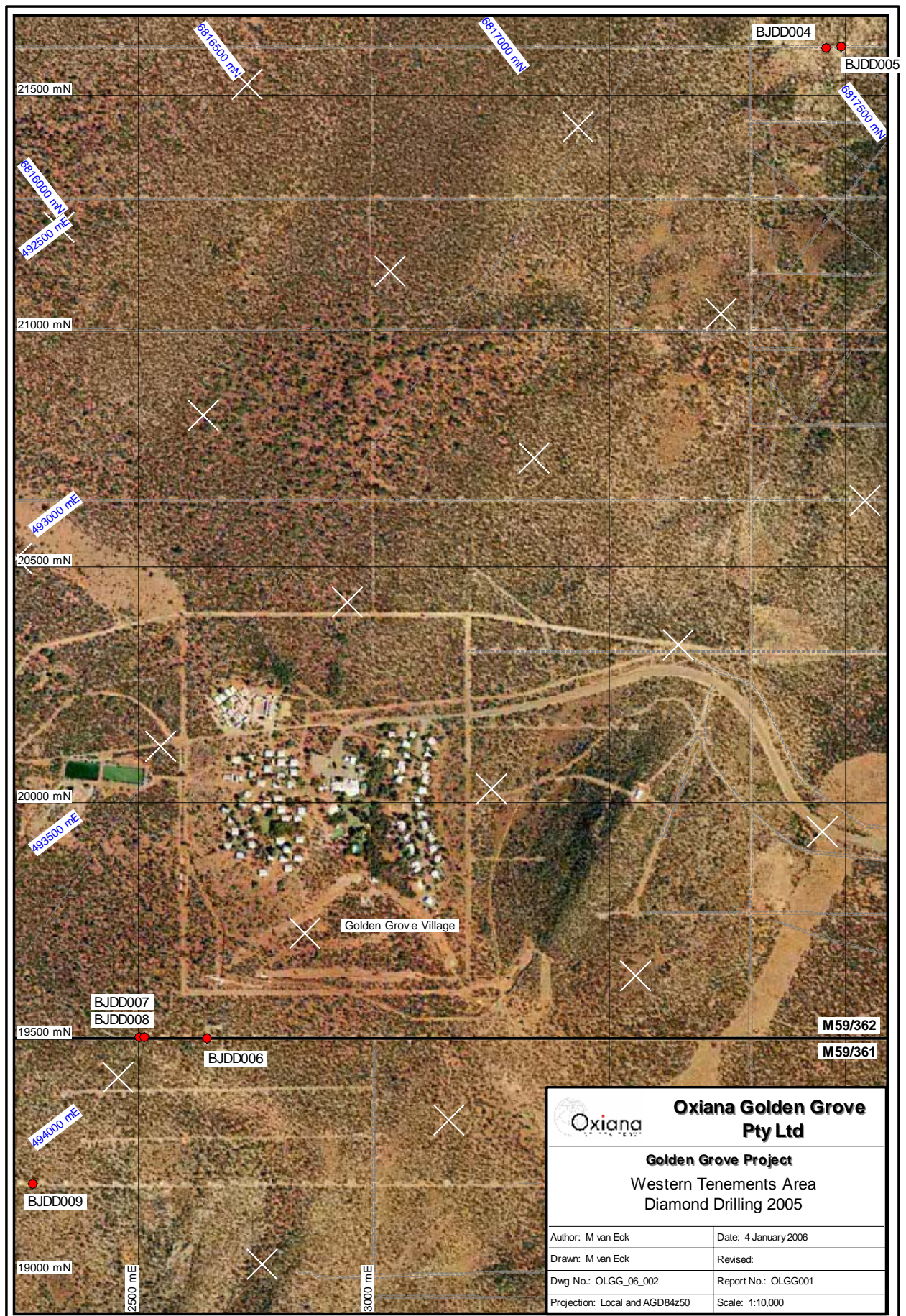


Figure 5

8 REFERENCES

- Clifford, B.A., 1992. Facies and palaeo-environment analysis of the Archaean volcanic-sedimentary succession hosting the Golden Grove Cu-Zn massive sulphide deposits, Western Australia. Unpublished Ph.D. Thesis, Monash University, Melbourne.
- Watkins, K.P. and Hickman, A.H., 1990. Geological evolution and mineralisation of the Murchison Province, Western Australia. Geological Survey of Western Australia, Bulletin 137.

9 BIBLIOGRAPHIC DATA SHEET

Report No: OLGG001

Title: Golden Grove Project. Combined Annual Exploration Report for the Period Ended 31st December 2005.

Ownership: Oxiana Golden Grove Pty Ltd

Commodity: Base metals, precious metals

Tectonic Units: Yalgoo-Singleton Greenstone Belt

1:250,000 Sheets: SH50-2 Yalgoo, SH50-3 Kirkalocka

1:100,000 Sheets: 2240 Badja, 2340 Thundelarra

Keywords: Archaeaean
Yilgarn
Volcanic Hosted Massive Sulphide deposits
Zinc, copper, gold
Diamond Drilling
Environmental Rehabilitation

APPENDIX 1
DRILLING DATA 2004 - 2005
(ON CD)