Grosvenor Gold Pty Ltd

Final Report

For

Government Co-funded Exploration Drilling

Fortnum Gravity Target

DAG2012/00052965

Mining Lease M52/132

Peak Hill Mineral Field, Western Australia

Robinson Range SG50-07, 1:250,000 Mapsheet

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August 2012

BIBLIOGRAPHIC DATA SHEET

Project Name:	Fortnum
Tenement Number:	M52/132
Tenement Operator:	Grosvenor Gold Pty Ltd
Tenement Holder:	Grosvenor Gold Pty Ltd
Report Type:	Government Co-funded Exploration Drilling Final Report
Report Title:	Final Report for Government Co-funded Exploration Drilling, Fortnum Project, M52/132
Report Period:	Final Report
Author:	K A Williams
Date of Report:	10 July 2012
1:250,000 Map Sheet:	Robinson Range (SG50/07)
1:100,000 Map Sheet:	Milgun (50J)
Mineral Field:	Peak Hill
Target Commodity:	Gold, Copper, Lead, Zinc
Keywords:	Diamond Drilling
Datum:	GDA94 (MGA Zone 50)

Abstract

Location:

The drill site is located approximately 180 kilometres north of Meekatharra at Fortnum Mine Site which is currently being refurbished . The project area is located within the Peak Hill Mineral Field on the Robinson Range 1:250,000 map sheet. Access is good along the Great Northern Highway and then graded roads maintained by the shire of Meekatharra.

Regional Geology:

The project lies predominantly within Palaeoproterozoic Bryah and Padbury Basins (part of the formerly termed 'Glengarry Basin'), which form part of the Capricorn Orogen, a collision zone between the Archaean Yilgarn and Pilbara Cratons.

Work done:

A zone of diminished magnetic response and the source of a distinct gravity anomaly was tested with a Government co-funded diamond drill hole, DDH1-F1, to 814.2m.

Results:

DDH1-F1 did not return any encouraging gold assays.

Copper assays to 905ppm are however worthy of further investigation.

Conclusions:

Increased understanding of the local geology.

Further testing of copper anomalism should be considered.

Exploration work type	*File name*	*Format*
Office studies		
Literature search		
Database compilation		
Computer modeling		
Reprocessing of data		
General research		
Report preparation		
Lithology Codes		
Airborne exploration surveys		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital Terrane modeling		
Other (specify)		
Remote sensing		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Digital Elevation Modeling		
Ground exploration surveys		
Geological Mapping		
Regional		
Reconnaissance		
Prospect		
Underground		
Exploration Pitting		
Ground geophysics		
Radiometrics		
Magnetics		
Gravity	GG_WASL3_Grav2012	pdf
Digital Terrain modeling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Geochemical surveys		
Drill sample		

Stream sediment		
Soil		
Rock chip		
Laterite		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis		
Other (specify)		
Drilling		
Diamond		
RC Drilling		
Rotary air blast		
Air-core		
Auger		
Groundwater drilling		
All Drilling	GG_WADG3_ASS2012.txt GG_WADG3_GEO2012.txt GG_WASL3_COLL2012.txt GG_drill_core-submission GG_WADG3_XRF2012.txt	WADG3 WADG3 WASL3 JPEG WADG3

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Introduction

This report describes the exploration carried out by Grosvenor Gold Pty Ltd on Mining Lease M52/132 in the Peak Hill Region of Western Australia within the Fortnum Project. Three gravity surveys were completed in late 2010 and early 2011 and the data was modelled by Southern Geoscience Consultants. A single circular gravity target was identified as worthy of further testing. An application submitted to the Government Co-funded Exploration Drilling Programme for drilling a single hole into the gravity target was successful (application number DAG2012/00052965).

Drilling commenced in April 2012.

Location and Access

Mining Lease M52/132 is located near the Fortnum Mine approximately 180 kilometres north of Meekatharra in the Peak Hill Mineral Field on the Robinson Range 1:250,000 Mapsheet.

Access from Meekatharra is via the Great Northern Highway and then along graded roads maintained by the Shire of Meekatharra (Figures 1 and 2).

Tenure

Mining Lease M52/132 is currently held by Grosvenor Gold Pty Ltd. It was previously held by Gleneagle Gold Ltd, Homestake Australia Ltd and Perilya Ltd.

The surveyed area of the lease is 698.2 HA and was granted on 11 May 1989 and expires on 10 May 2031 (Figure 3).

Regional Geology

The project lies predominantly within Palaeoproterozoic Bryah and Padbury Basins (part of the formerly termed 'Glengarry Basin'), which form part of the Capricorn Orogen, a collision zone between the Archaean Yilgarn and Pilbara Cratons. The Bryah and Padbury Groups comprise rocks that are bound to the north by the Bangemall Basin, to the west by the Archaean rocks of the Yilgarn Craton, and Proterozoic rocks lie to the south. Rocks of the Bryah Group are interpreted as a rift succession of mafic-ultramafic volcanic rocks with intercalated clastics throughout the sequence. The Padbury Group largely comprises clastic sedimentary rocks and unconformably overlies the Bryah Group.

Mineralisation within the Bryah Basin mainly comprises orogenic lode-gold and volcanogenic massive sulphide Cu-Au deposits. To date, the majority of exploited gold mineralisation is structurally controlled, mesothermal, epigenetic lode systems. These deposits are spatially associated with high-strain zones in metasedimentary and/or metavolcanic rocks, and are characterised by zones of hydrothermal alteration. The region is also highly prospective for VMS-style copper-gold deposits (Horseshoe Lights), Iron Ore, and Uranium.

The Fortnum deposits are located within a "wedge" of volcanic rocks in the western part of the Bryah Basin within a regional N-S-trending fold/thrust belt tectonically juxtaposed against the Archaean Narryer Terrain, to the west. Specifically, lode-gold mineralisation within the Fortnum

area is associated with quartz veining within brittle fracture zones in haematitic jasperoids (e.g. Toms and Yarlarweelor deposits), and also quartz vein associated silica–albite-pyrite alterations zones within the volcaniclastic sequence (e.g. Trev's-Starlight deposit). Other significant deposits within the Fortnum district, such as Nathans and Labouchere are hosted within sediments and volcanics of the Labouchere Formation. The Horseshoe deposits, located 25km south east of the treatment plant are hosted within a sequence of ultramafic and high MgO volcanics that lie stratigraphically in the upper parts of the Ravelstone Formation.

Previous Exploration

A gravity survey conducted over the Fortnum Mine in late 2010 and early 2011 has shown a circular high in the vicinity of known mineralisation. Forward modelling was carried out by Southern Geoscience Consultants to match the gravity response with single vertical cylinders of varying depths. Details of the modelling are attached.

Removal of a regional trend from the detailed gravity data revealed an equi-dimentional residual response underlying and peripheral to the Fortnum Pits. Detailed magnetics in the mine area show a closed structural feature semi-coincident with the circular gravity feature.

The gravity feature was considered to reflect an intrusive body at depth which may provide a heat source for the alteration and mineralisation in the Fortnum area (Figure 4).

Details of the Royalties for Regions Exploration Incentive Scheme general application are attached to this report.

Current Exploration

A single diamond drill hole, DDH1-F1, co-sponsored by the Government Co-funded Exploration Drilling Programme, was completed at Fortnum. The hole was planned to test a regional gravity anomaly as well as improving the understanding of the local geology.

Drilling company, DDH1 Drilling, was contracted to drill a single 800m diamond hole using a Sandvik UDR 1200 multipurpose drill rig. Details are presented in Table 1 below.

Hole Number	DDH1-F1
Project	Fortnum
GDA 94 E	637000E
GDA 94 N	7197400N
Zone	50
Azimuth	0
Dip	90
Depth	814.2m
Completion Date	April 2012
Drill Company	DDH1 Drilling
Drill Rig	Sandvik UDR 1200

Table 1

All intersections of interest were sampled with the focuss on the occurrence of euhedral pyrite, quartz veining and silicification alteration as well as shear zones. Drill logs are attached to this report.

A total of 235 half core samples were dispatched to Genalysis/Interdek Laboratory in Perth for assay. All samples were assayed for Au (FA50/AA) and a suite of elements including Ag, As, Be, Bi, C, Cd, Co, Cu, Ge, In, Li, Mo, Ni, Pb, Re, S, Sb, Se, Te, Tl, Zn (4A/MS, 4A/OE, /CSA). Results for gold were disappointing. Copper intercepts were however more encouraging with assays up to 905ppm. Intercepts for copper greater than 200ppm are summarised in Table 2. Refer to attachments for all sample assays and core photographs

Project	Sample ID	Hole ID	mFrom	mTo	Interval	Sample Type	Cu ppm (4A/OE)
Fortnum	A0083	DDH1-F1	104.00	105.00	1.00	1/2 Core	209
Fortnum	A0094	DDH1-F1	146.00	147.00	1.00	1/2 Core	253.4
Fortnum	A0172	DDH1-F1	242.00	243.00	1.00	1/2 Core	283.9
Fortnum	A0183	DDH1-F1	280.00	281.00	1.00	1/2 Core	303.5
Fortnum	A0189	DDH1-F1	286.00	287.00	1.00	1/2 Core	502.6
Fortnum	A0190	DDH1-F1	287.00	288.00	1.00	1/2 Core	430
Fortnum	A0194	DDH1-F1	303.00	304.00	1.00	1/2 Core	532.5
Fortnum	A0280	DDH1-F1	489.00	490.00	1.00	1/2 Core	218.8
Fortnum	A0288	DDH1-F1	506.00	507.00	1.00	1/2 Core	374
Fortnum	A0289	DDH1-F1	507.00	508.00	1.00	1/2 Core	283.7
Fortnum	A0290	DDH1-F1	508.00	509.00	1.00	1/2 Core	430.8
Fortnum	A0316	DDH1-F1	694.00	695.00	1.00	1/2 Core	905.2

Table 2

Core selected for assaying was targeted at jasperoid/quartz veining and shear zones along with the abundance of visible pyrite, with gold being the primary target.

XRF data collected using an Olympus Innov-X Delta handheld analyser suggests further assaying for copper should be considered. XRF copper values are generally not coincident with "assay" values and these readings must be regarded as a guide only.

Summary Log – DDH1-F1

DDH1-F1 (Total depth – 814.2m)

Objective:

Test circular gravity anomaly adjacent to Fortnum mine site mineralisation. Modelling was suggestive of possible fluid conduits at and possible associated ore body at depth.

Stratigraphy:

The hole commenced in probable mafics with alternating tuffs and sediments. This was followed by a thick package of mafics followed by ultramafics to the end of the hole. Quartz carbonate veining is ubiquitous throughout the hole with associated pyrite and rare epidote.

0 – 12m	Siltstone
12 – 60m	light brown, green highly weathered mafic
60 – 108m	green metabasalt with increasing quartz veining with depth, minor silicification
108 – 451m	green metabasalt, silicification from 172 to 184m, pyrite and quartz veining throughout
451 – 626m	green metabasalt, magnetite alteration from 451 to 473m
626 – 814.2 m	dark green ultramafic, 5 to 10% quartz veining throughout, occasional pyrite to 5%

Veining:

The entire sequence is veined with predominantly quartz – carbonate veining. Pyrite (often euhedral) is associated with the veining but not exclusively so. Percentages of pyrite range from 5% to 30%.

Alteration:

Only one occurrence of minor epidote was noted.

Small intervals of silicification occur, the most prominent from 172 to 184m.

Pyrite occurs irregularly throughout the succession in both mafics and ultramafics, mostly associated with quartz carbonate veining.

Refer to attachments to this report for detailed logs.

Conclusions

1. The results enhanced geochemical understanding of background, anomalous and highly anomalous thresholds for base and precious metals in a transect of mafic and ultramafic lithologies, typical of the Bryah Basin.

2. Increased understanding of the local geology.

3. Further testing of copper anomalism should be considered.

References

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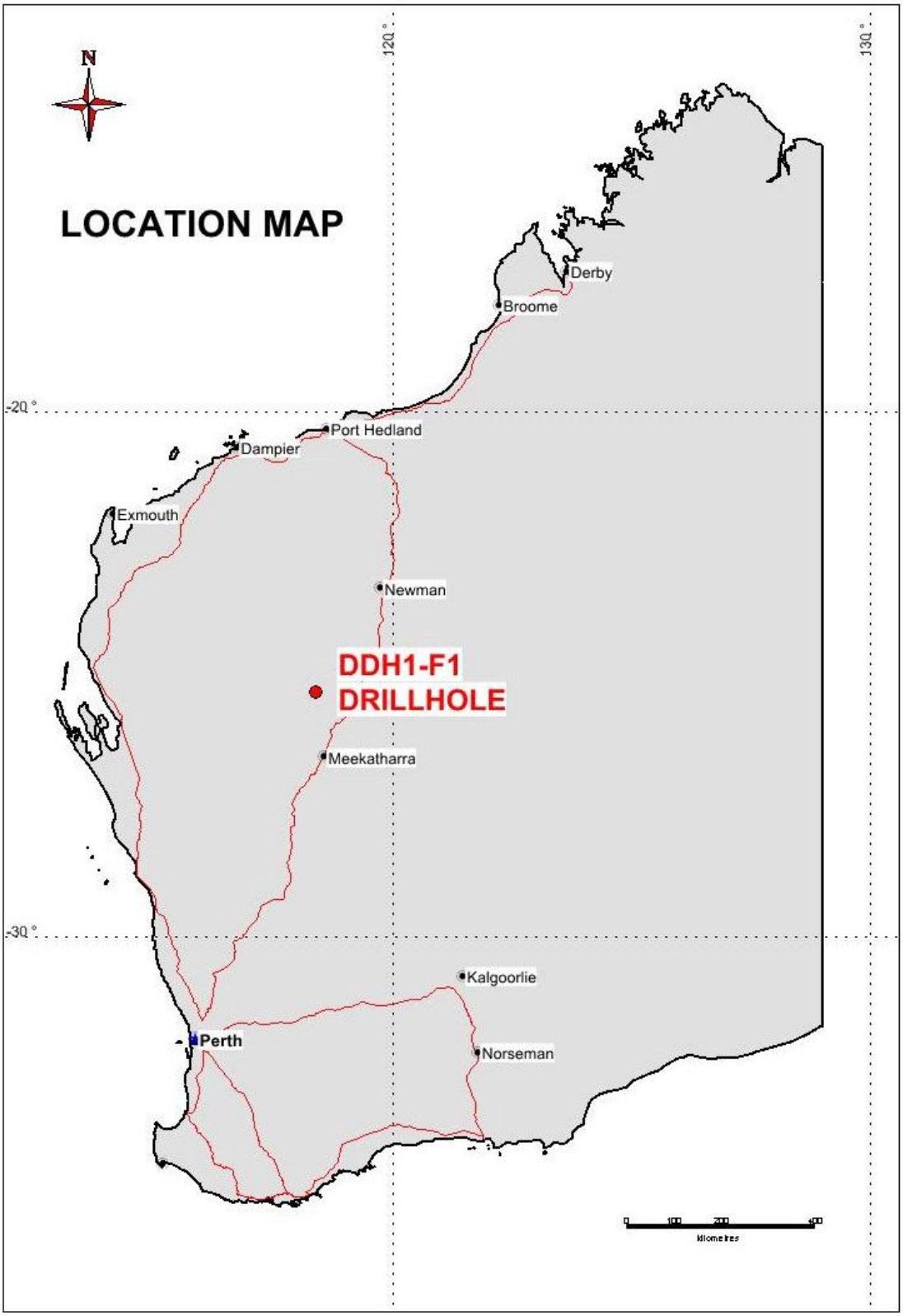
N
LOCATION MAP
120 °
130 °
-20 °
-30 °
Derby
Broome
Port Hedland
Dampier
Exmouth
Newman
DDH1-F1
DRILLHOLE
Meekatharra
Kalgoorlie
Perth
Norseman
0
100
200
400
Kilometres

Figure 1

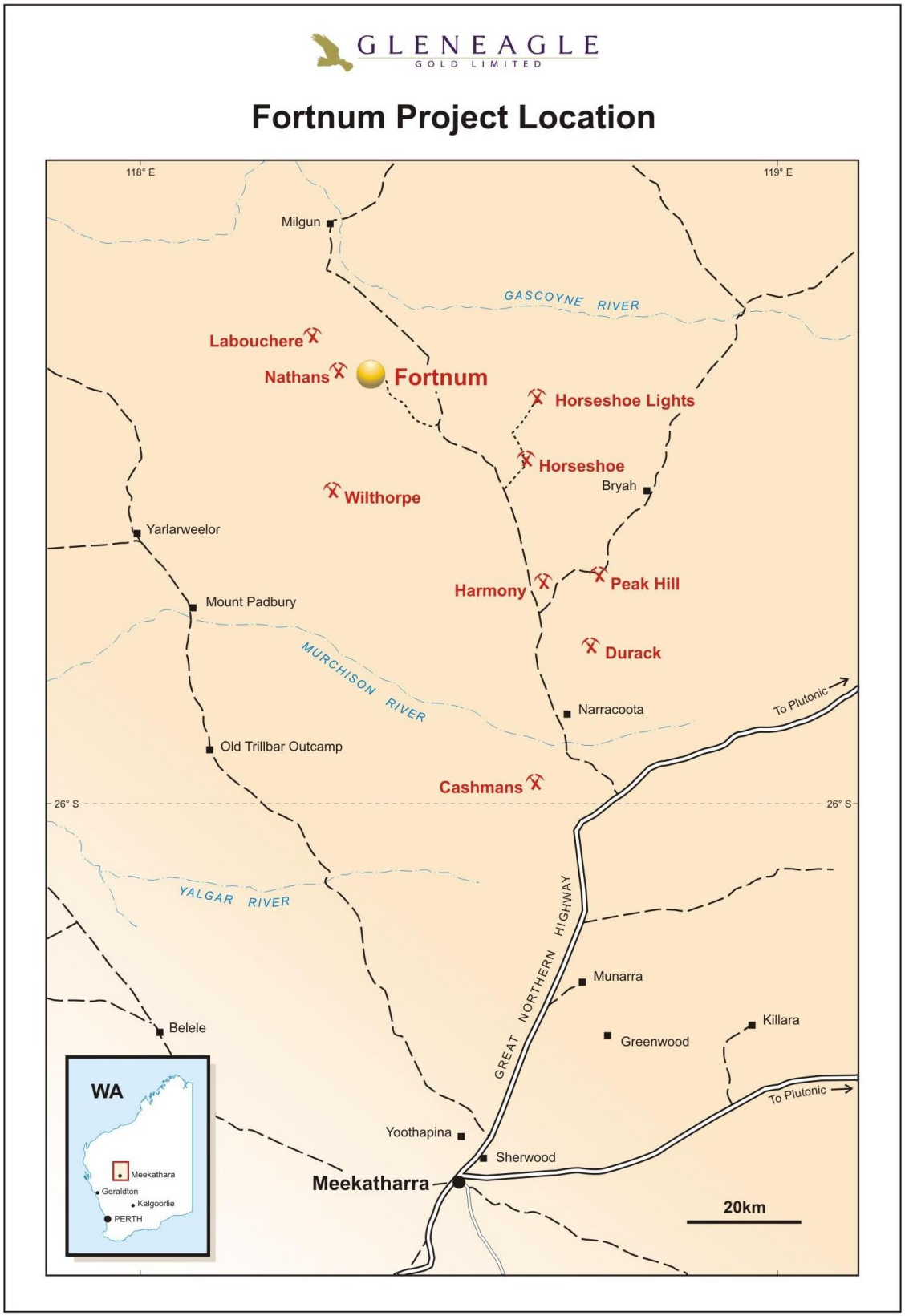
GLENEAGLE
GOLD LIMITED
Fortnum Project Location
118° E
119° E
Milgun
GASCOYNE RIVER
Labouchere
Nathans
Fortnum
Horseshoe Lights
Horseshoe
Bryah
Wilthorpe
Yarlarweelor
Harmony
Peak Hill
Mount Padbury
Durack
MURCHISON RIVER
Narracoota
To Plutonic
Old Trillbar Outcamp
Cashmans
26° S
26° S
YALGAR RIVER
GREAT NORTHERN HIGHWAY
Munarra
Killara
Greenwood
Belele
To Plutonic
WA
Meekathara
Geraldton
Kalgoorlie
PERTH
Yoothapina
Sherwood
Meekatharra
20km

Figure 2

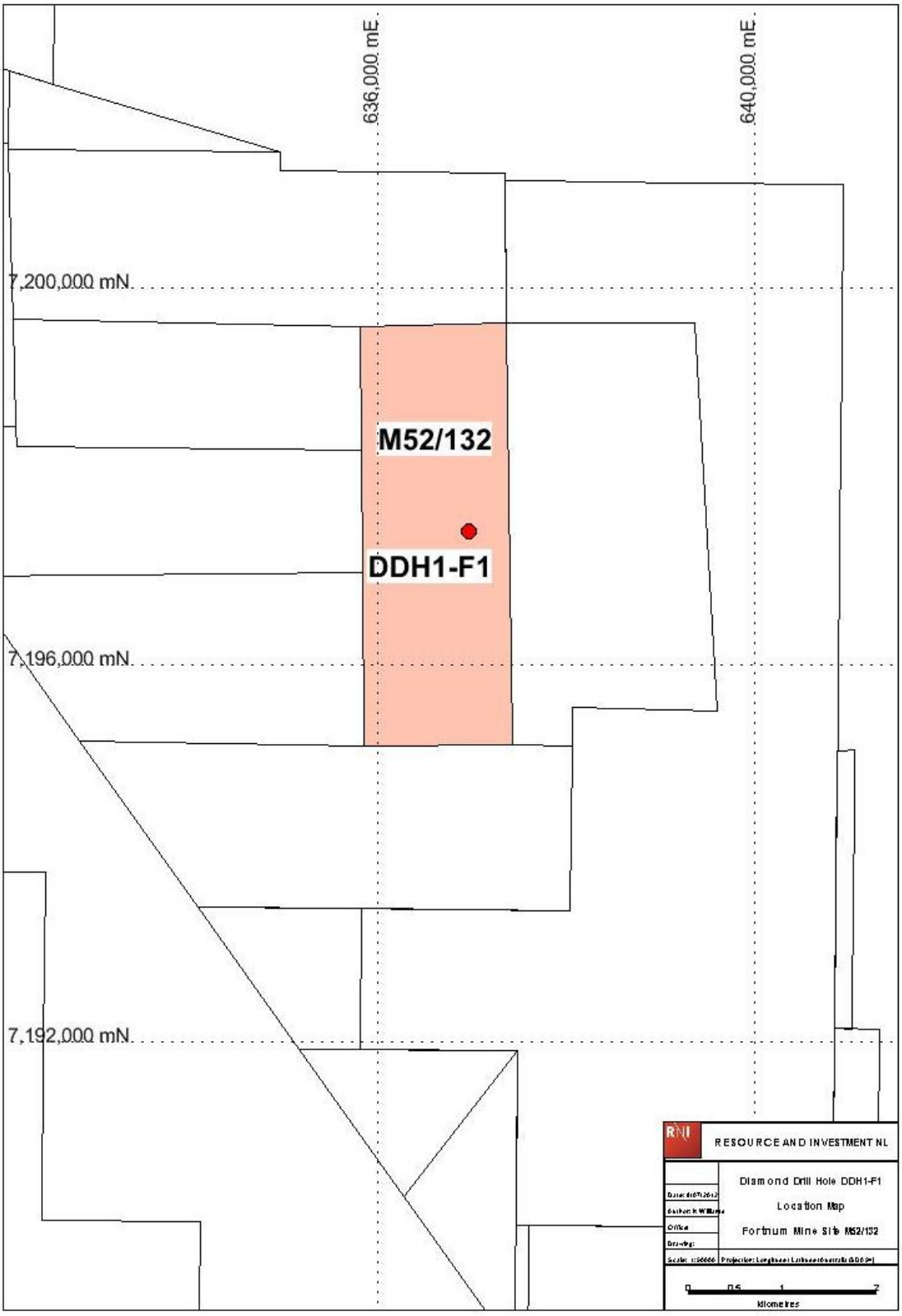
636,000 mE
640,000 mE
7,200,000 mN
M52/132
DDH1-F1
7,196,000 mN
7,192,000 mN
RNI
RESOURCE AND INVESTMENT NL
Diamond Drill Hole DDH1-F1
Location Map
Fortnum Mine Site M52/132
Kilometres

Figure 3

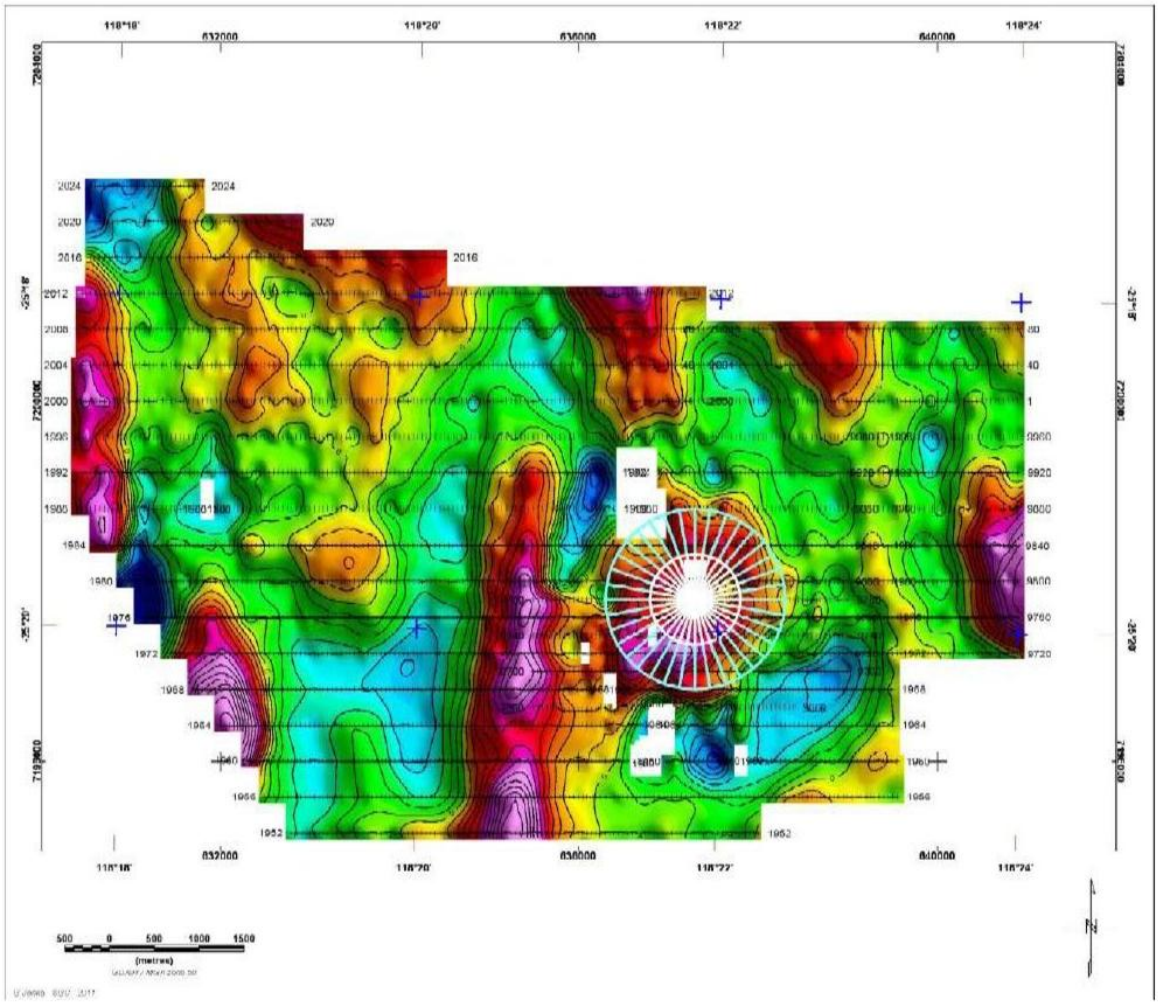
118°18'
632000
118°20'
636000
118°22'
640000
118°24'
2024
2020
2016
2012
2008
2004
2000
1996
1992
1988
1984
1980
1976
1972
1968
1964
1960
1956
1952
9960
9920
9880
9840
9800
9760
9720
500 0 500 1000 1500
(metres)

Figure 4