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EL 4302, EL 4407 AND EL 4473

CENTRAL GAWLER GOLD PROVINCE

PACE 2020 DISCOVERY DRILLING 2012

**YEAR 7 DRILLING PARTNERSHIP NO. 12 –
NUCKULLA HILL PROJECT - DRILLING OF BIMBA
PROSPECT MAGNETIC AND GEOCHEMICAL
ANOMALIES**

PROJECT FINAL REPORT

Submitted by
Doray Minerals Ltd
2013

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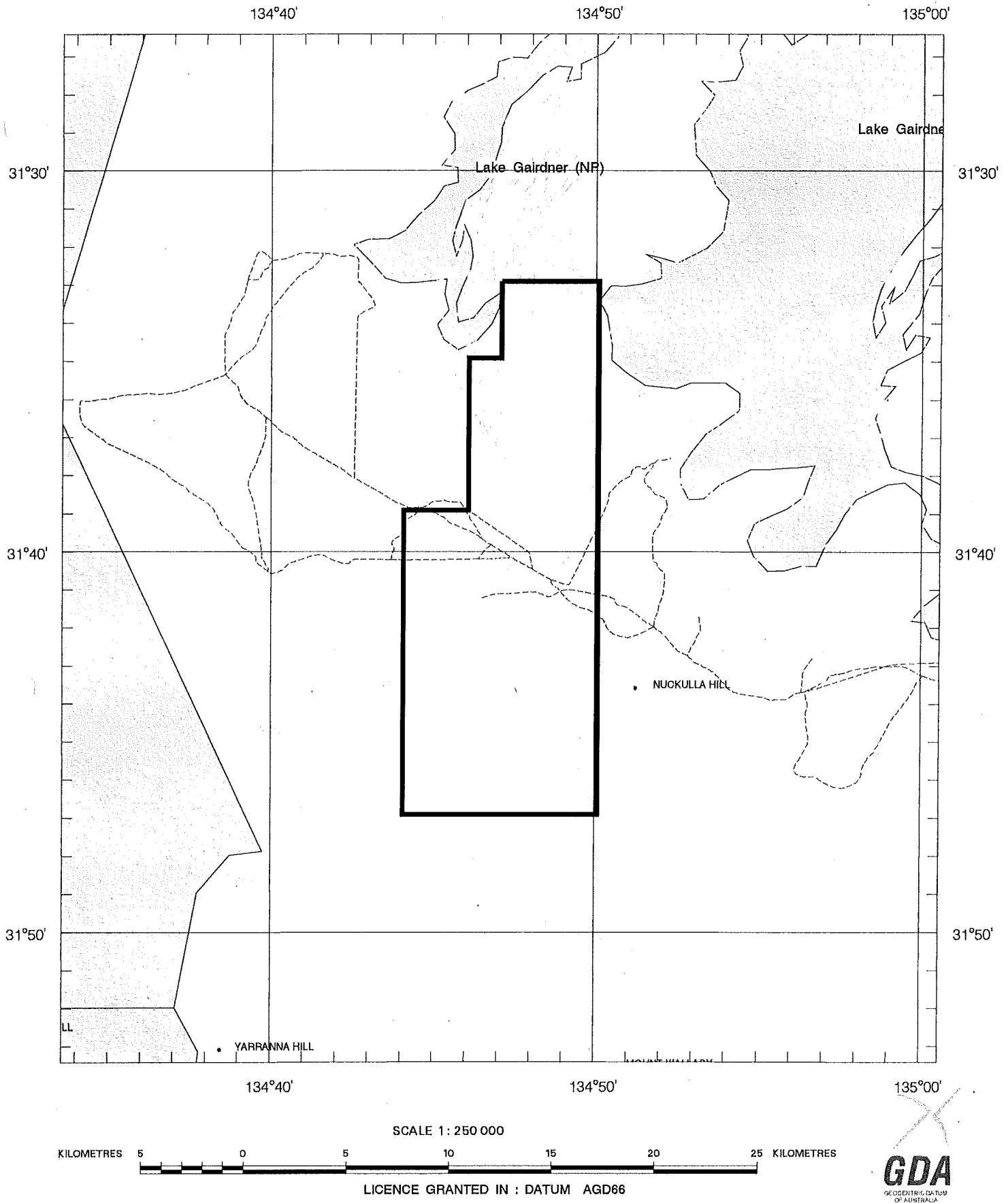
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Facsimile: (08) 8204 1880



Government of South Australia
Department of State Development

SCHEDULE A



APPLICANT : **DORAY MINERALS LTD**

FILE REF : **60/09**

TYPE : **MINERAL ONLY**

AREA : **204 km²** (approx.)

1:250000 MAPSHEETS : **CHILDARA**

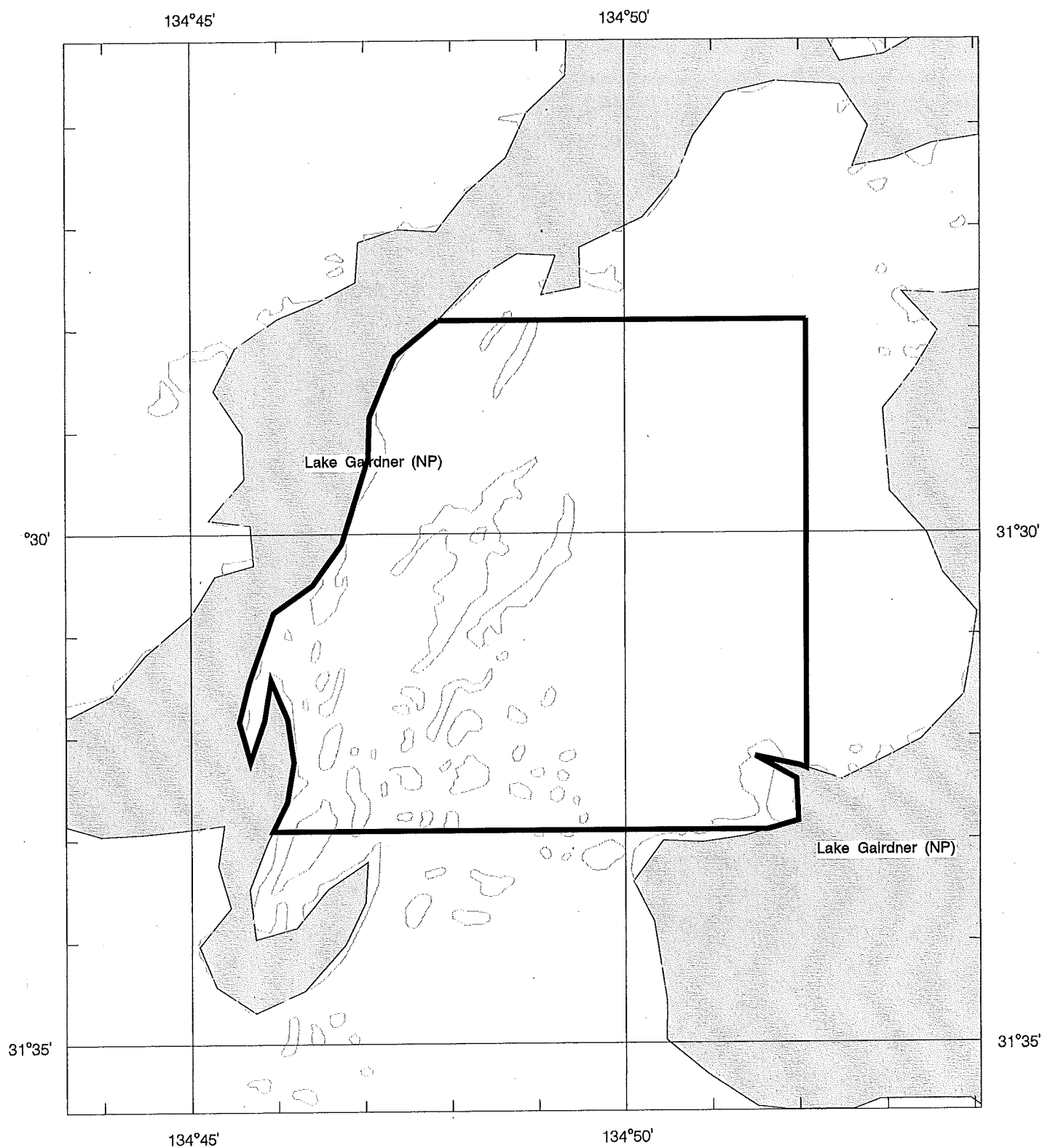
LOCALITY : **NUCKULLA HILL AREA - Approximately 100 km SSE of Tarcoola**

DATE GRANTED : **25-Aug-2009**

DATE EXPIRED : **24-Aug-2010**

EL NO : **4302**

SCHEDULE A



SCALE 1:100 000
METRES 2000 0 2 4 6 8 10 KILOMETRES
LICENCE GRANTED IN : DATUM AGD66



APPLICANT : DORAY MINERALS LTD

FILE REF : 133/09

TYPE : MINERAL ONLY

AREA : 81 km² (approx.)

1:250000 MAPSHEETS : CHILDARA

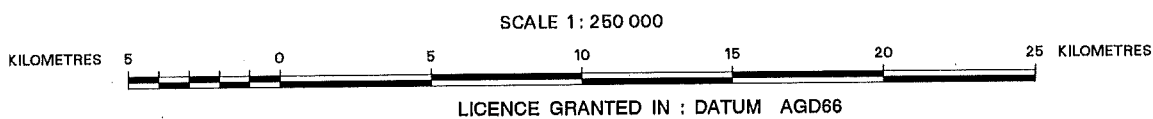
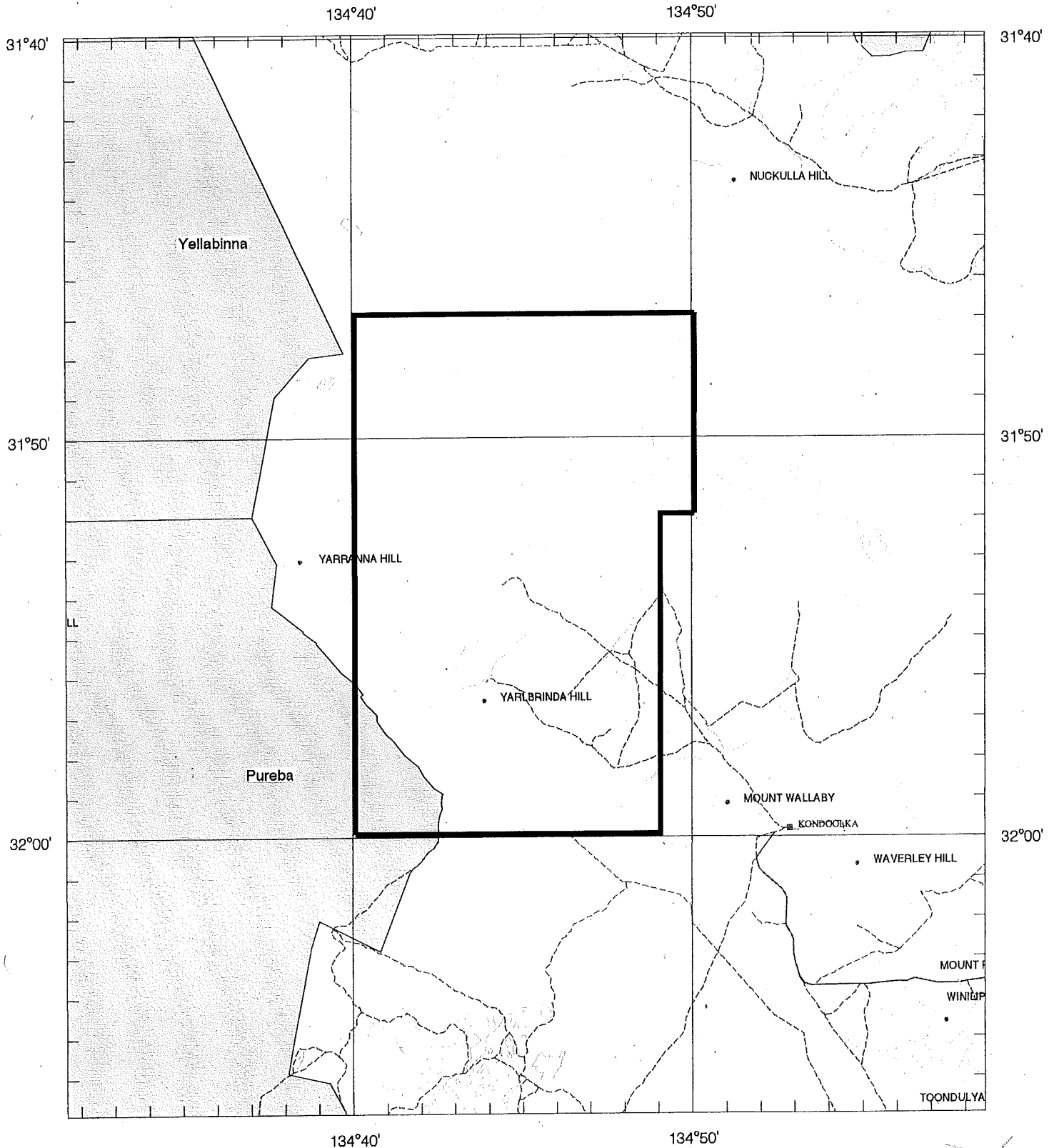
LOCALITY : LAKE GAIRDNER AREA - Approximately 90 km SSE of Tarcoola

DATE GRANTED : 24-Dec-2009

DATE EXPIRED : 23-Dec-2010

EL NO : 4407

SCHEDULE A



APPLICANT : **DORAY MINERALS LTD**

FILE REF : **254/09**

TYPE : **MINERAL ONLY**

AREA : **355 km² (approx.)**

1:250000 MAPSHEETS : **CHILDARA**

LOCALITY : **KONDOOLKA AREA - Approximately 90 km ENE of Ceduna**

DATE GRANTED : **27-Apr-2010**

DATE EXPIRED : **26-Apr-2011**

EL NO : **4473**

BIMBA PROSPECT PACE FUNDED DRILLING

Nuckulla Project, SA, Exploration Licence 4302

FINAL DRILLING PROJECT REPORT

Joe Gendall

November, 2013

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Summary

- 1106m RC drilling across 5 holes and 2 failed collars.
- 1877m AC drilling across 42 holes.
- Bimba structure continuity along strike confirmed, however grades were below economic interest.
- Bimba structure continuity down dip unclear. The only down dip RC hole returned no significant assays.
- Site rehabilitation planned for January 2014.

1. Introduction

The Nuckulla Hill Au-Ag project, NE of Ceduna, covers approximately 60km of strike of the mineralised Yarlbrinda Shear Zone (YSZ). It is situated approximately 35km south of the Mungana Gold Mines (72%) and Helix Resources (28%) owned Tunkillia deposit which contains 0.88Moz Au and 2.5Moz Ag (Mungana Gold Mines Ltd. Annual Report 2013). The project consists of three exploration licences covering 640km².

Between 26/06/2013 and 9/08/2013 Doray Minerals Ltd (DRM) completed 7 RC holes (including 2 failed collars) for 1106m of Reverse Circulation (RC) drilling and 42 Air Core (AC) holes for 1877m.

Three RC holes were designed to test the down dip and along strike continuity of the Bimba prospect, identified by Equinox Resources in the mid 1990's. One of the best of historic intercepts at the Bimba Prospect is 24m @ 1.0g/t Au (incl. 8m @ 1.8g/t Au) from 122m – 146m. One RC hole tested the down dip potential of this intercept.

Two RC holes were planned to test a parallel structure to the west of Bimba, defined by the 2010 aeromagnetic survey conducted by DRM. This structure coincided with Pb anomalism (up to 1950ppm) identified in historic AC holes.

Two AC style lines were completed by the same RC rig to test an interpreted dilational jog north of the Bimba prospect that has the potential to host significant Au mineralisation beneath transported cover.

2. Location

The Nuckulla Hill Au-Ag project is located within the Central Gawler Gold Province, 115km NE of Ceduna in South Australia. The project area covers approximately 60km of the YSZ, approximately 36km south of the Tunkillia gold-silver deposit (0.88M oz Au and 2.5M oz Ag).

The project consists of three Exploration Licences as follows:

Licence	Area (km ²)	Grant Date	Expiry Date
EL 4302	204	25/08/2009	24/08/2014
EL 4407	81	24/12/2009	23/12/2013
EL 4473	355	27/04/2010	26/04/2015
TOTAL	640		

Table 1: Tenement Summary

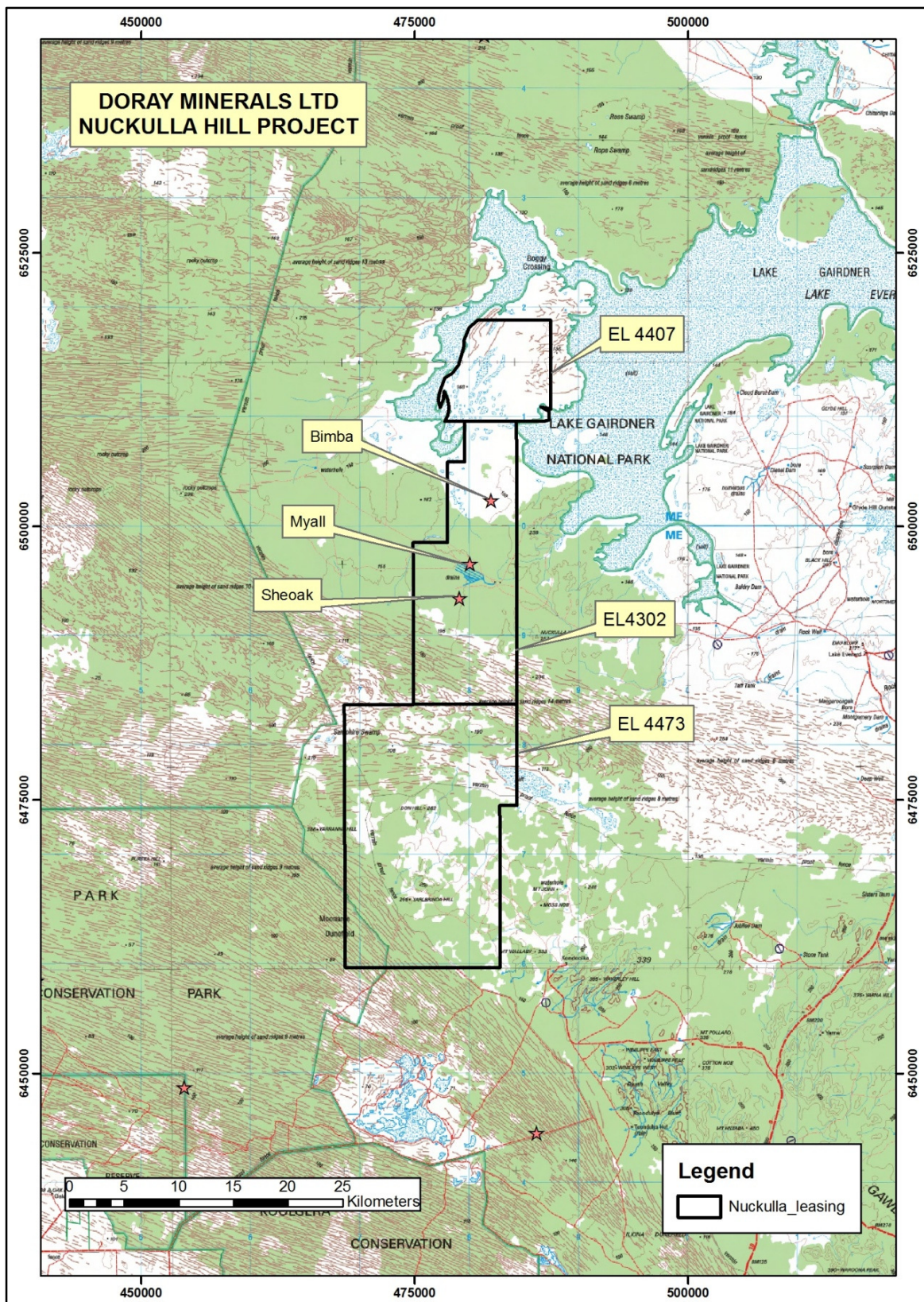
Access to the area is via station tracks and varies from excellent to poor; some areas are dominated by NW-SE trending sand dunes, which can be up to 10m high.

The Bimba Prospect is located in the northern half of EL4302 within the YSZ (Figure 1, Figure 2).

3. Regional Geology

The project is located on the west side of the Mesoproterozoic Gawler Range Volcanics within the YSZ. The local geology is dominated by Proterozoic “Tunkillia Suite” granitoids deformed by the N-S trending Mesoproterozoic YSZ, which is thought to be contemporaneous with the Hiltaba granite/Gawler Range Volcanic event. At the southern end, the shear zone is intruded by the Hiltaba-age Koondoolka Batholith.

Outcrop is virtually non-existent within the Bimba prospect area which is covered by up to 6m of transported colluvium with up to 4 metres of silcrete and fercrete beneath that.



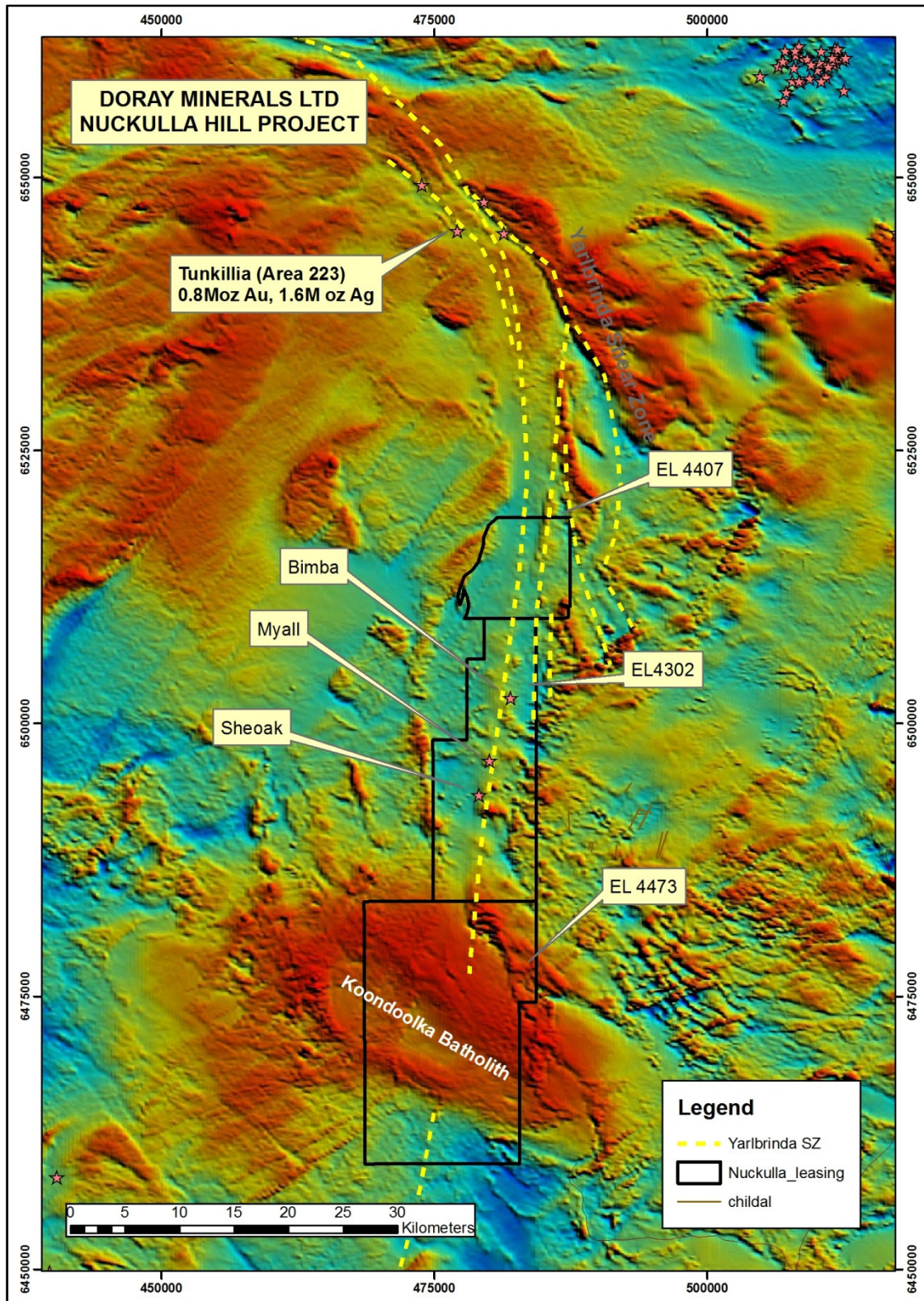


Figure 2: Regional Aeromagnetic Image of Nuckulla Hill Project Area showing the Yarlbirinda Shear Zone, the Location of the Tunkillia Au-Ag Deposit and the Koondoolka Batholith.

4. Drilling

Between 26/06/2013 and 9/08/2013 DRM completed 7 RC holes (including 2 failed collars) for 1106m of RC drilling, as well as 42 AC holes for 1877m.

Three RC holes were designed to test the down dip and along strike continuity of the Bimba prospect, identified by Equinox Resources in the mid 1990's.

Two RC holes were planned to test a parallel structure to the west of Bimba defined by the 2010 aeromagnetic survey.

Two AC style lines were completed by the same RC rig to test an interpreted dilational jog north of the Bimba prospect.

All RC and AC holes were drilled grid east and at -60° dip. Weather caused significant delays with 71mm of rain recorded between 12/07 and 14/07, and another 17mm recorded from 18/07 to 19/07. Maintenance issues and ground conditions (swelling clays) also plagued the program which, due to time constraints and other commitments, had to be cut short resulting in 22 AC holes left not drilled.

Figure 3 (below) shows all DRM drill hole locations. Following this is table 2 showing hole type, location, drilling direction and maximum depth of DRM drill holes.

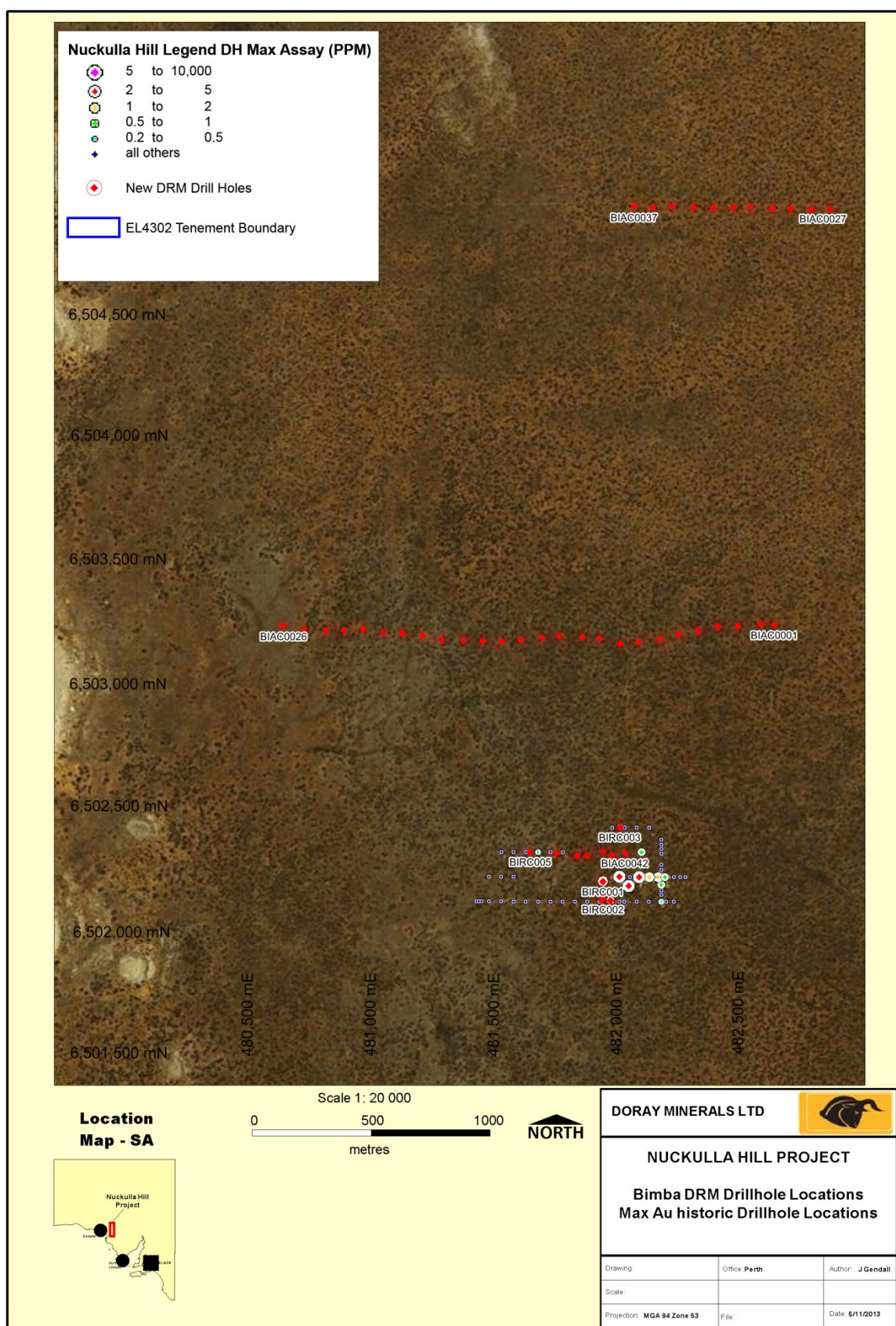


Figure 3: Bimba DRM Drill Hole Locations

Hole_ID	Hole_Type	NAT_East	NAT_North	NAT_Azi	Dip	Max_Depth
BIAC0001	AC	482586	6503294	90	-60	28
BIAC0002	AC	482530	6503296	90	-60	34
BIAC0003	AC	483438	6503287	90	-60	44
BIAC0004	AC	482355	6503286	90	-60	42
BIAC0005	AC	482276	6503269	90	-60	47
BIAC0006	AC	482198	6503255	90	-60	43
BIAC0007	AC	482122	6503235	90	-60	35
BIAC0008	AC	482034	6503224	90	-60	41
BIAC0009	AC	481960	6503217	90	-60	44
BIAC0010	AC	481876	6503236	90	-60	60
BIAC0011	AC	481807	6503243	90	-60	39
BIAC0012	AC	481714	6503247	90	-60	44
BIAC0013	AC	481643	6503240	90	-60	47
BIAC0014	AC	481557	6503231	90	-60	41
BIAC0015	AC	481479	6503224	90	-60	35
BIAC0016	AC	481403	6503226	90	-60	37
BIAC0017	AC	481324	6503231	90	-60	30
BIAC0018	AC	481234	6503233	90	-60	36
BIAC0019	AC	481158	6503248	90	-60	34
BIAC0020	AC	481076	6503257	90	-60	37
BIAC0021	AC	481000	6503259	90	-60	31
BIAC0022	AC	480917	6503275	90	-60	42
BIAC0023	AC	480840	6503269	90	-60	45
BIAC0024	AC	480765	6503268	90	-60	48
BIAC0025	AC	480678	6503274	90	-60	48
BIAC0026	AC	480593	6503287	90	-60	40
BIAC0027	AC	482810	6504975	90	-60	36
BIAC0028	AC	482733	6504973	90	-60	41
BIAC0029	AC	482649	6504977	90	-60	36
BIAC0030	AC	482573	6504978	90	-60	46
BIAC0031	AC	482487	6504981	90	-60	66
BIAC0032	AC	482416	6504981	90	-60	58
BIAC0033	AC	482334	6504979	90	-60	63
BIAC0034	AC	482256	6504980	90	-60	60
BIAC0035	AC	482167	6504983	90	-60	66
BIAC0036	AC	482088	6504981	90	-60	63
BIAC0037	AC	482014	6504985	90	-60	42
BIAC0038	AC	481787	6502359	90	-60	46
BIAC0039	AC	481828	6502360	90	-60	54
BIAC0040	AC	481892	6502375	90	-60	50
BIAC0041	AC	481927	6502362	90	-60	45
BIAC0042	AC	481981	6502370	90	-60	53

BIRC001	RC	481892	6502255	90	-60	254
BIRC002	RC	481892	6502183	90	-60	48
BIRC002A	RC	481888	6502180	90	-60	12
BIRC003	RC	481961	6502474	90	-60	264
BIRC004	RC	481702	6502369	90	-60	150
BIRC005	RC	481598	6502374	90	-60	183
BIRC006	RC	481923	6502178	90	-60	195

Table 2: 2013 DRM Hole Type, Location, Depth and Drilling Direction

Down Hole Geology

Down hole, the typical lithological/regolith profile of the Bimba prospect consisted of:

- 0-3m transported gravels and clays with calcrete bands
- 3-6m transported clays- no calcrete bands
- 6-10m silcrete and fericrete
- 10-30m highly weathered granitoid
- 30-40m moderately weathered granitoid
- 50-55m+ fresh granitoid.

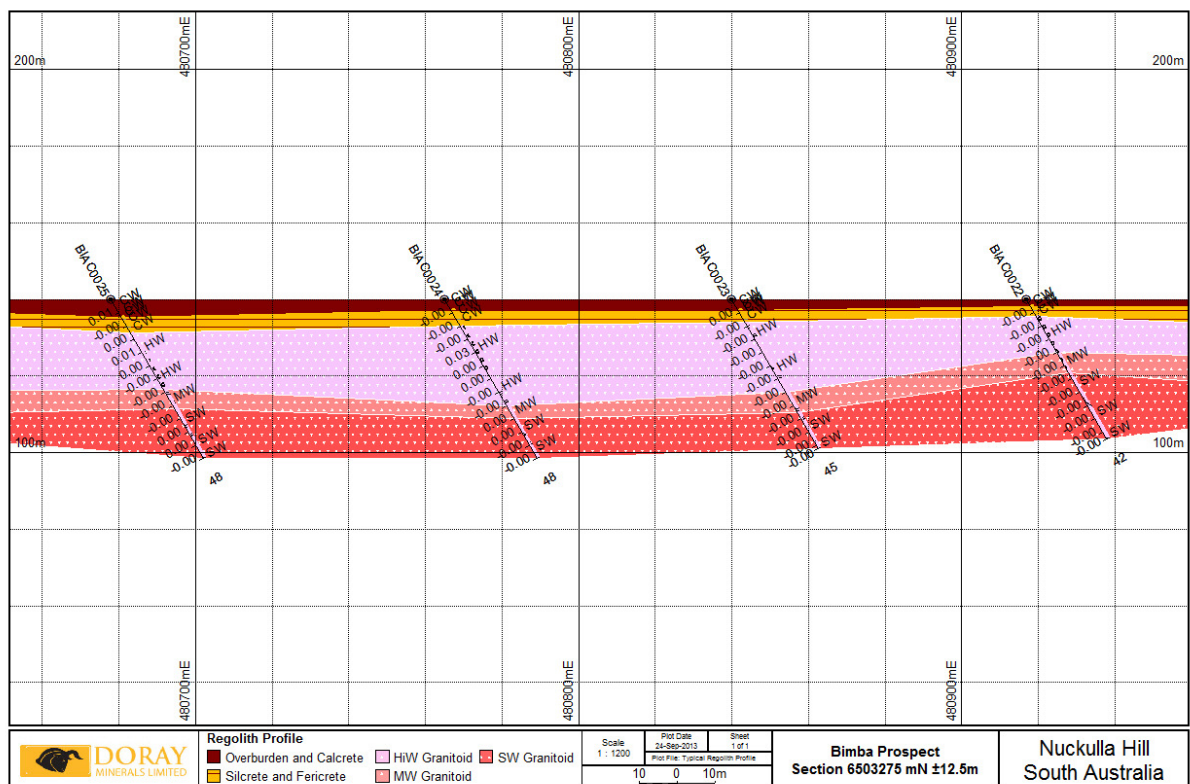


Figure 4: Typical Regolith Profile north of Bimba Prospect (Holes BIAC0022-BIAC0025)

The main granitoid unit, found in most drill holes, was originally of granodiorite to monzogranite composition with variable albite, hematite, magnetite, chlorite, sericite and quartz alteration. Mineralised intercepts are believed to be associated with intense red albite/hematite alteration and sulphide occurrence. Only trace sulphides were detected in any of the holes drilled.

Results

RC drilling of the Bimba prospect confirmed the continuity of a mineralised structure; however Au grades were sub economic with a best intercept in BIRC006 of 28m @ 0.58g/t Au from 144m (including 16m @ 0.72g/t from 156m).

BIRC001 was drilled to 254m and intercepted 1m @ 0.58g/t Au from 39m and 1m @ 1.05g/t Au from 55m (see Figure 6). Both these intercepts represent supergene gold remobilised to weathering horizons. The anticipated Bimba intercept was predicted to be somewhere from 170-230m. Several sheared/mylonitic zones were logged, some with trace Py, but no significant Au mineralisation was intercepted.

BIRC006 extended the strike of the Nuckulla structure a further 50m south with an intercept of 28m @ 0.58g/t Au from 144m (including 16m @ 0.72g/t from 156m). Mineralisation was hosted in an albite-chlorite altered granitoid with occasional sulphide occurrence (See Figure 7).

BIRC003 was drilled 200m north of the northernmost Bimba intercept. This hole was drilled to 264m and intercepted 1m @ 0.14g/t Au from 236m and 2m @ 0.25g/t Au from 238m (see Figure 8). Mineralisation was hosted in albite-chlorite altered granitoid with moderate shearing. It is possible this mineralisation represents a continued Bimba structure.

RC drilling (BIRC004 and BIRC005) of the Pb anomaly with coincident magnetic structure west of Bimba returned best results of 4m @ 0.16g/t Au from 44m and 4m @ 0.16g/t from 76m in hole BIRC004. BIRC004 and BIRC005 confirmed trace amounts of remobilised Au at weathering horizons, as well as anomalous Au in fresh rock. Unfortunately no results were of economic significance (Figure 9).

BIRC002 and BIRC002A were failed holes due to swelling clays. BIRC006 was drilled to cover the target not reached by BIRC002 or BIRC002A.

The AC drilling returned no significant assays and was cut short due to other commitments.

Below is a table of all Au results from the 2013 drill programme which returned results above 0.1g/t Au.

SampleID	Hole_ID	mFrom	mTo	Au_ppm
D010377	BIAC0039	40	44	0.12
D010378	BIAC0039	44	48	0.132
D010363	BIAC0040	36	40	0.12
D020006	BIRC001	37	38	0.15
D020008	BIRC001	39	40	0.58
D020020	BIRC001	55	56	1.05
D020054	BIRC003	236	237	0.14
D020056	BIRC003	238	239	0.18
D020057	BIRC003	239	240	0.32
D010203	BIRC004	44	48	0.157
D020080	BIRC004	54	55	0.13
D020081	BIRC004	55	56	0.12
D010211	BIRC004	76	80	0.16
D010213	BIRC004	84	88	0.142
D010218	BIRC004	104	108	0.132
D020108	BIRC004	117	118	0.1
D020110	BIRC004	119	120	0.13
D020137	BIRC005	70	71	0.16
D010251	BIRC005	80	84	0.123
D010262	BIRC005	124	128	0.104
D010271	BIRC005	160	164	0.118
D010314	BIRC006	144	148	0.582
D010315	BIRC006	148	152	0.302
D010316	BIRC006	152	156	0.281
D010317	BIRC006	156	160	0.714
D010318	BIRC006	160	164	0.587
D010319	BIRC006	164	168	0.91
D010320	BIRC006	168	172	0.668
D010322	BIRC006	176	180	0.202
D010323	BIRC006	180	184	0.255

Table 3: 2013 results >0.1g/t Au

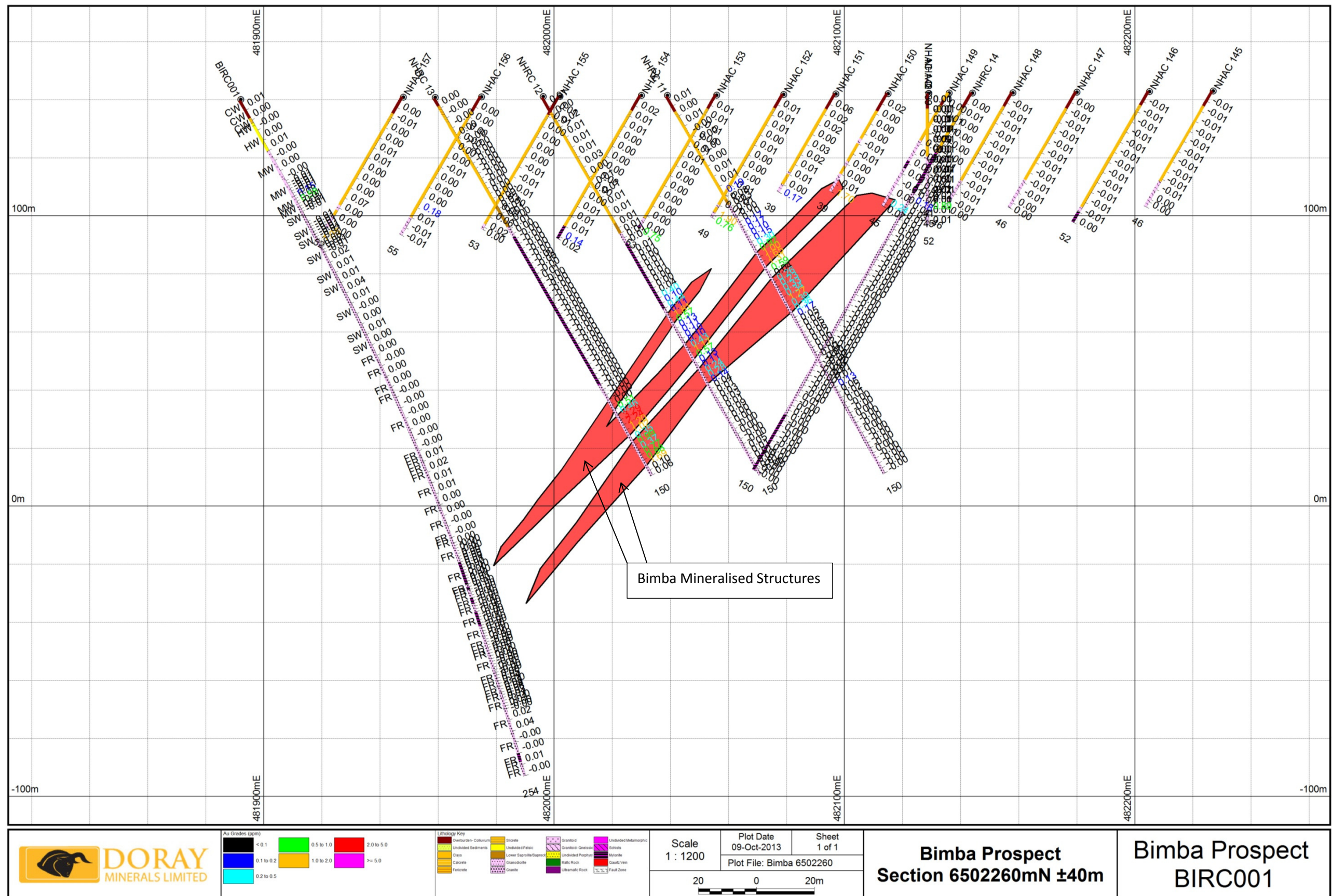


Figure 4: Bimba Section 6502260 showing BIRC001 Au Results

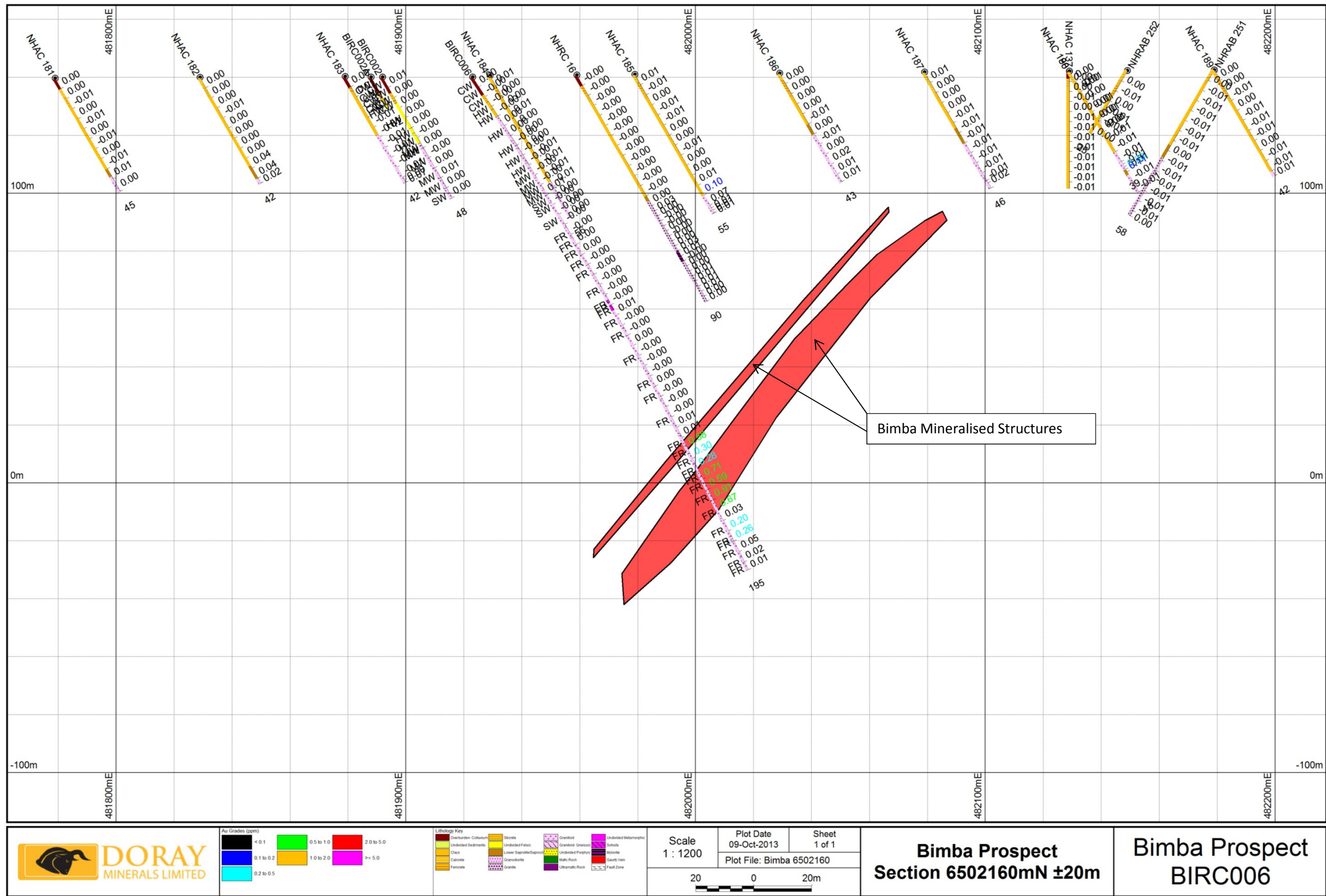


Figure 5: Bimba Section 6502160 showing BIRC006 Results

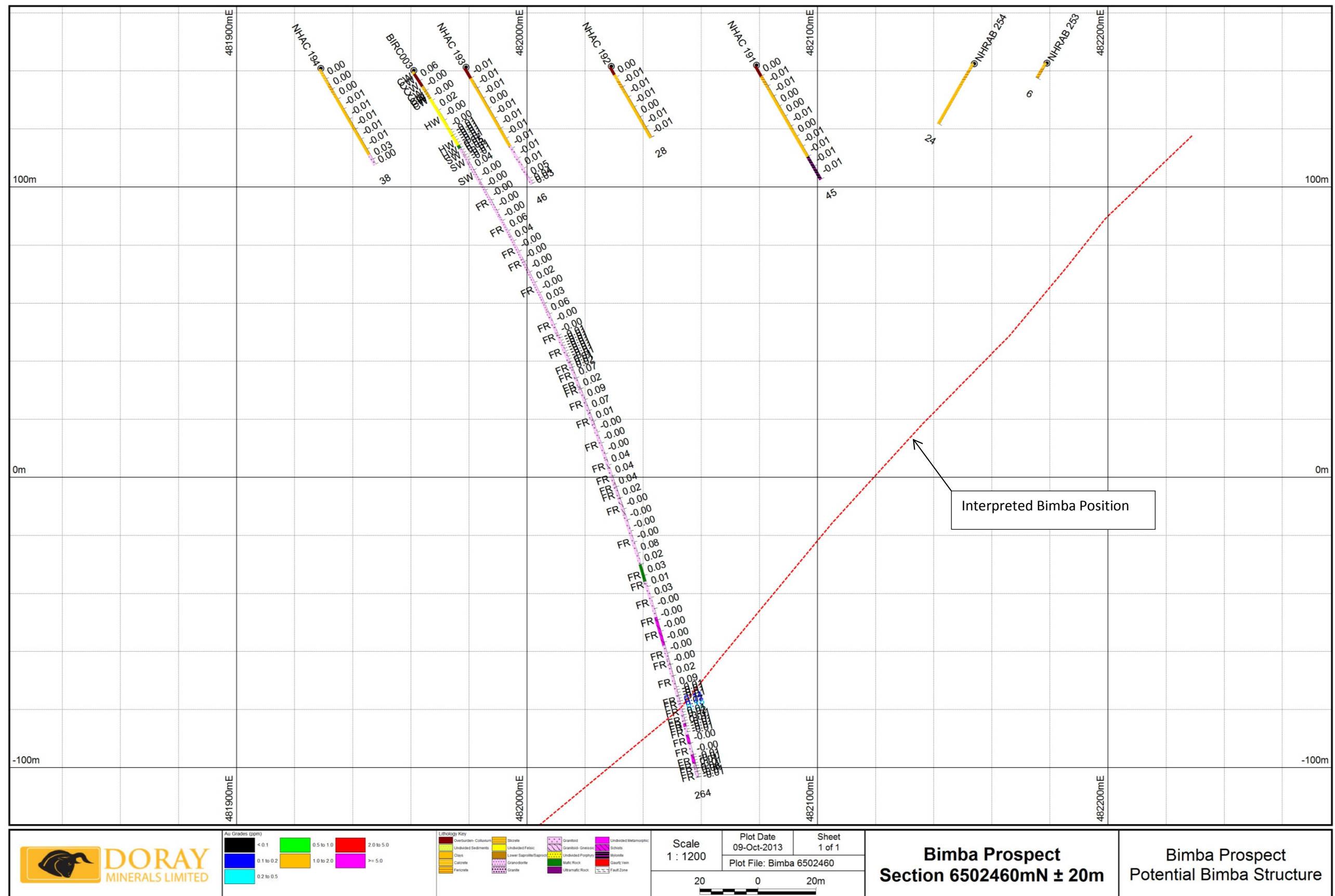


Figure 6: Bimba Section 6502460 showing BIRC003 Results

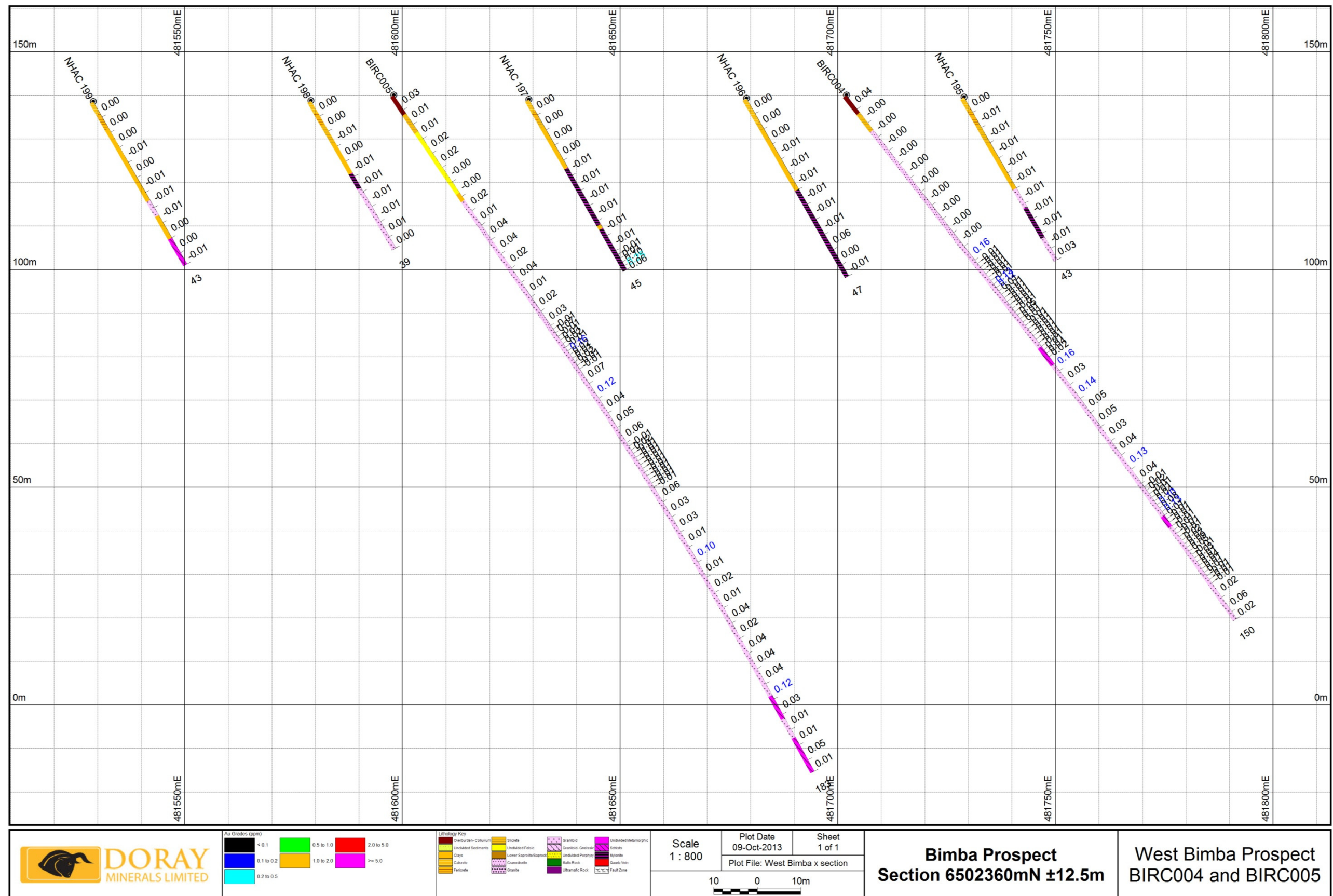


Figure 7: Section 6502360 West of Bimba showing BIRC004 and BIRC005 Results

5. Rehabilitation

All rehabilitation is planned to be completed in January 2014. This will include the removal of all plastic RC and calico bags, cutting collars, filling in sumps and ripping all drilling pads and tracks.

Appendix C contains photos of the current status of all drill holes as at 24/10/2013.

6. Summary and Recommendations

Despite the low grade results from the recent Bimba prospect drilling, The Nuckulla Hill Au-Ag project remains highly prospective, given its location within the YSZ, along strike from Tunkillia. The exploration history of the project has been sporadic and virtually no systematic gold exploration has been carried out since 1997 despite the increase in the gold (and silver) price since then. The Nuckulla Hill Au-Ag project remains significantly underexplored.

Gold mineralisation identified by previous explorers at Sheoak, Myall and Bimba was found by exploring only the most obvious calcrete anomalies. A number of structural targets, including some identified in the 2010 magnetic survey, have not been tested, either by surface sampling or drilling. Some of these structural targets are located beneath sand dune cover, where calcrete sampling is considered to be of questionable effectiveness. An orientation surface sampling program across anomalous, wide spaced calcrete samples will help determine if there is in fact a cost effective method to generate robust drill targets beneath dune cover.

In the upcoming year, Doray plans to complete the following:

- Completion of surface geochemical sampling programme where calcrete sampling proved ineffective (approximately 480 samples).
- Execute infill surface geochemical sampling on a 200 x 50m for new identified anomalies.
- A regolith mapping exercise will be undertaken to produce a high resolution map of the project area to assist in targeting areas suitable for surface geochemical sampling.
- An orientation geochemical survey over anomalous Au in calcrete sampling to the south of the project area within dune sands will be completed to reproduce anomalous results. It is anticipated further sampling will result from the orientation survey.
- All RC and AC holes will be rehabilitated in January 2014.

7. References

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APPENDIX A

Nuckulla Hill Project Drilling Data

Doray_Nuckulla_EL4302_WADG3_ASS2013A.txt

Doray_Nuckulla_EL4302_WADL3_GEO2013A.txt

Doray_Nuckulla_EL4302_WADS3_SURV2013A.txt

Doray_Nuckulla_EL4302_WASL3_COLL2013A.txt

Doray_Nuckulla_EL4302_WASL3_META2013A.txt

APPENDIX B

Aeromagnetic imaging used to assist in siting AC and RC collar positions

SA_tmi_1vdrtp_over_2vdagcrtp_rbw_m53

SA_tmi1vdagcrtp_g_m53

SA_tmi1vdrtp_esun_rbw_m53

SA_tmi1vdrtp_g_m53

SA_tmi1vdrtp_nesun_rbw_m53

SA_tmi1vdrtp_rbw_m53

SA_tmi2vdagcrtp_g_m53

SA_tmiAS_esun_rbw_m53

SA_tmiAS_nesun_rbw_m53

SA_tmirtip_esun_hsi_m53

SA_tmirtip_esun_rbw_m53

SA_tmirtip_nesun_hsi_m53

SA_tmirtip_nesun_rbw_m53

SA_tmiTDR_dx_esun_rbw_m53

SA_tmiTDR_dx_nesun_rbw_m53

SA_tmiTDR_esun_rbw_m53

SA_tmiTDR_nesun_rbw_m53

APPENDIX C

Drill site photos 25/10/2013



BIAC0001 Drill Site 25/10/2013



BIAC0002 Drill Site 25/10/2013



BIAC0003 Drill Site 25/10/2013



BIAC0004 Drill Site 25/10/2013



BIAC0005 Drill Site 25/10/2013



BIAC0006 Drill Site 25/10/2013



BIAC0007 Drill Site 25/10/2013



BIA0008 Drill Site 25/10/2013



BIA0009 Drill Site 25/10/2013



BIAC0010 Drill Site 25/10/2013



BIAC0011 Drill Site 25/10/2013



BIAC0012 Drill Site 25/10/2013



BIAC0013 Drill Site 25/10/2013



BIAC0014 Drill Site 25/10/2013



BIAC0015 Drill Site 25/10/2013



BIAC0016 Drill Site 25/10/2013



BIAC0017 Drill Site 25/10/2013



BIAC0018 Drill Site 25/10/2013



BIAC0019 Drill Site 25/10/2013



BIAC0020 Drill Site 25/10/2013



BIAC0021 Drill Site 25/10/2013



BIAC0022 Drill Site 25/10/2013



BIAC0023 Drill Site 25/10/2013



BIAC0024 Drill Site 25/10/2013



BIAC0025 Drill Site 25/10/2013



BIAC0026 Drill Site 25/10/2013



BIAC0027 Drill Site 25/10/2013



BIAC0028 Drill Site 25/10/2013



BIAC0029 Drill Site 25/10/2013



BIAC0030 Drill Site 25/10/2013



BIAC0031 Drill Site 25/10/2013



BIAC0032 Drill Site 25/10/2013



BIAC0033 Drill Site 25/10/2013



BIAC0034 Drill Site 25/10/2013



BIAC0035 Drill Site 25/10/2013



BIAC0036 Drill Site 25/10/2013



BIAC0037 Drill Site 25/10/2013



BIAC0038 Drill Site 25/10/2013



BIAC0039 Drill Site 25/10/2013



BIAC0040 Drill Site 25/10/2013



BIAC0041 Drill Site 25/10/2013



BIAC0042 Drill Site 25/10/2013



BIRC001 Drill Site 25/10/2013



BIRC002 and BIRC002A Drill Site 25/10/2013



BIRC003 Drill Site 25/10/2013



BIRC004 Drill Site 25/10/2013



BIRC005 Drill Site 25/10/2013



BIRC006 Drill Site 25/10/2013