

Final Report
on
EL 14/2010 – MYALLA

Reporting Period: 14 September 2010 – 13 September 2012
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CONTENTS

1	ABSTRACT.....	2
2	INTRODUCTION	3
3	REVIEW OF PREVIOUS WORK	7
4	EXPLORATION COMPLETED DURING THE REPORTING PERIOD	8
5	DISCUSSION AND CONCLUSIONS.....	12
6	ENVIRONMENT	13
7	EXPENDITURE	14
8	REFERENCES	15

TABLES

Table 1 - Assay results from location 381171E, 5464536N GDA84, Bass Highway Road cutting (Figure 2)	10
Table 2 – Drill-hole MY005 on Bramich's and Dowling's Deposit.....	10
Table 3 – Drill-hole MY029 that was not initially assayed from 'Devil's Elbow'.....	11
Table 4 – Exploration Activity and Expenditure Table for reporting period 14 September 2010 – 13 September 2012	14

MAPS

Map 1 – Location Map of EL 14/2010 “Myalla”.....	5
Map 2 –EL 14/2010 Myalla, showing drill holes and bauxite targets.....	8
Map 3 – Geological Map of Myalla EL 14/2010 with mapped bauxite areas.....	9

NOTE: All Garmin maps use WGS – 84

APPENDICES

Appendix A: Surface Locations

Appendix B: Down-hole Survey

Appendix C: Down-hole Geochemistry

Appendix D: Surface Samples – Bass Highway

Appendix E: Botanical Survey

1 ABSTRACT

Objective:

Exploration Licence (EL) 14/2010 “Myalla” was applied for in order to facilitate an exploration program to discover economically viable deposits of bauxite associated with Tertiary Volcanics, in an area with old peneplained surfaces preserved as plateaus. The goal of the program was to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light Mitsubishi 12 tonne truck.

Methodology:

1. Detailed geological mapping, including geomorphological mapping, to define the areas with best potential for bauxite.
2. Systematic sampling of natural outcrops and exposures in road cuts of lateritic weathering profile.
3. Chemical analyses of samples, including specialist analyses to determine total and available alumina, total and reactive quartz, loss on ignition and other analyses as required in bauxite search.
4. Drill testing of zones with best potential defined by work under 1, 2. and 3, by an RC drill rig mounted on a light Mitsubishi truck to get samples representing the whole lateritic weathering profile (from upper-most iron rich zone through alumina rich zone down into mottled and pallid saprolite zone).

Summary of Results:

The Myalla tenement was applied for in early 2010 on the basis of bauxite occurrences recorded in the area in the 1940's. The 2010 drilling program commenced in November and aimed to drill new areas identified during field reconnaissance. 37 holes were drilled into the Myalla targets but only 5 out of 37 holes intersected high quality bauxite with an average thickness of 2.6m with a maximum of 3m of bauxite mineralisation. The approximated tonnage for the targets drilled would be around 0.5Mt. The bauxite mineralization at Myalla is generally confined to hills, ridges and plateaus of bauxitised volcanoclastic deposits. No extensive reconnaissance program was completed and there is still opportunity for more deposits to be discovered. This tenement is being fully relinquished because the deposits were small and primarily located on high value agricultural land which would put heavy constraints on any potential developments.

2 INTRODUCTION

Exploration Rationale

EL 14/2010 Myalla was applied for in order to facilitate an exploration program to discover economically viable deposits of bauxite associated with Tertiary Volcanics, in an area with old peneplained surfaces preserved as plateaus. The goal of the program was to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light Mitsubishi 12 tonne truck.

Geological Setting

The bauxite has formed in a large area of tertiary volcanics where only small amounts of erosion have occurred. Bauxite mineralization is generally confined to hills, ridges, plateaus, and channels of bauxitised volcanoclastic. The bauxite was formed during the Lower Tertiary period when volcanism commenced and extreme tropical climatic conditions prevailed – at the boundary between the Cretaceous Era and the onset of the Tertiary Era which is often referred to as the K-T boundary commonly associated with the extinction of the dinosaurs, approximately 60 million years ago. The bauxite occurs on the old lateritic surface, where the processes of laterisation in the Tertiary period have removed silica from the rock, leaving mainly Aluminium and Iron rich minerals behind.

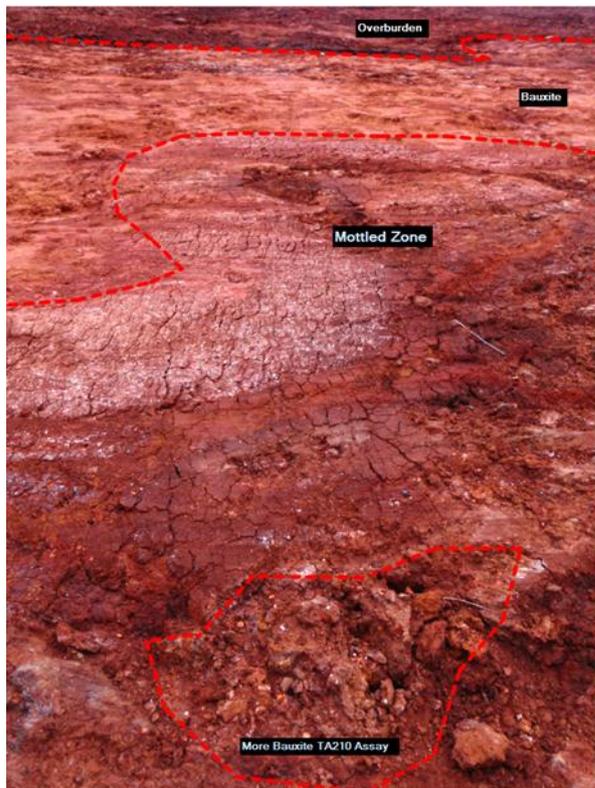


Figure 1 - Example of bauxite inclusion in the Mottled Zone

INTRODUCTION Cont

Figure 2 - Full bauxite profile of Wells Deposit in a fresh road cutting at Myalla

Tenement Information

EL 14/2010 “Myalla” was granted on and from 14 September 2010 for a period of 5 years to ABx4.

This is the Final Report for the reporting period 14 September 2010 - 13 September 2012 incorporating the results of work completed during the first two years of tenure.

Total area of the Licence is 80sq km and its Mineral Category is 1 – Metallic Minerals and Atomic Substances. The entire tenement area will be relinquished.

INTRODUCTION Cont

Location



Map 1 – Location Map of EL 14/2010 “Myalla”

The Myalla tenement is located on the North West coast of Tasmania 10km west of Wynyard. The tenement is located over an old railway and is 30km away from Burnie which has a large operating port. The Myalla tenement is also only 20km away from Port Latta which exports Iron ore from Savage River and has been downsizing operations creating excess capacity. The port is privately owned.

INTRODUCTION Cont

The majority of the land usage in the tenement is agricultural land between Categories 1-6. The bauxite is generally located in the flatter ground which is favourable for cropping. At one target remnant forest and weeds were left to grow which indicates the soil was poorer quality and hence probably rich in bauxite. Gaining access to farming properties was 100% successful, all landowners contacted by ABx4 allowed the drill rig operate on their property with only the usual concerns. There have been no access issues for the whole time the lease was granted.

Tenure, including joint venture details and title transfers

EL 14/2010 “Myalla” is 100% owned by ABx4 which is a fully owned subsidiary of Australian Bauxite Limited.

3 REVIEW OF PREVIOUS WORK

Prior to Current Tenement

The Myalla tenement was applied for on the basis of bauxite occurrences recorded in the area in the 1940's.

The following were references used to attain historical information:

- D.R. Dickenson (1945). Bauxite at Myalla. Department of mines
- Duncan, D.McP (1997). Final Report - EL 18/96 Myalla and EL 35/96 Sister Creek. Companies Mineral Holdings Australia Pty. Ltd.

King's Deposit has a historical bauxite occurrence discussed in the book:

- H.B. Owen, 1954, Bauxite in Australia, Bureau of Mineral Resources Bulletin no. 24

The following report makes reference to Owen's book above citing a bauxite occurrence tested in Myalla.

- Miss S.E. Close, June 1971, Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania, CRA Exploration Pty Limited

During current Tenement

In the first year of tenure, a total of 37 holes were drilled totalling 198m. Only 5 out of 37 holes intersected high quality bauxite with an average thickness of 2.6m and with a maximum of 3m of bauxite mineralisation. Because of the unique friable nature of this bauxite, many intercepts were not identified as bauxite and thus not assayed initially. Many more intercepts may have been missed. Holes drilled in the area were very short and no deep exploratory holes were drilled. In addition, no holes were drilled through the younger basalts. A total of 60 samples were sent to ALS Laboratory for sieved analysis and an extra 9 samples were assayed whole.

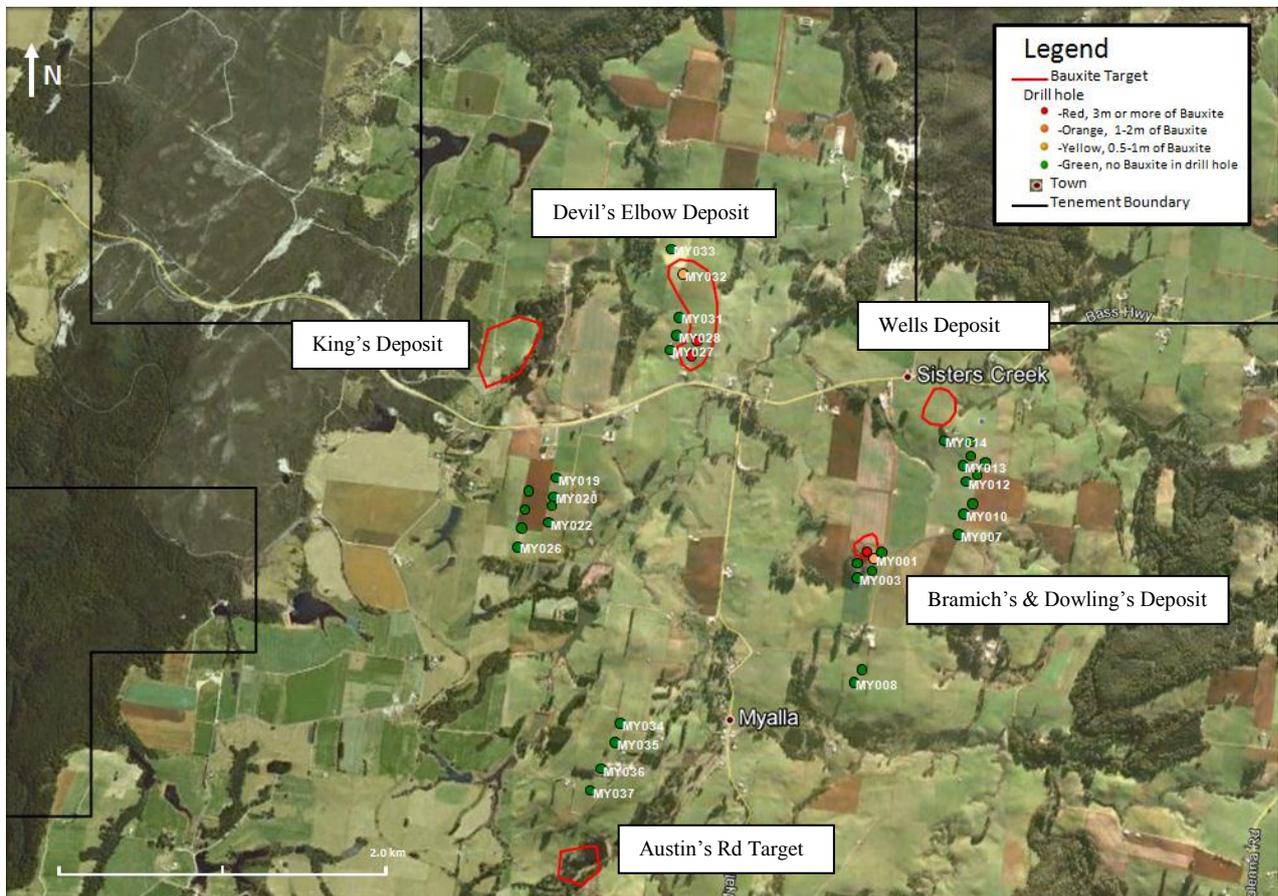
4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Literature Review

The following were references used to attain historical information:

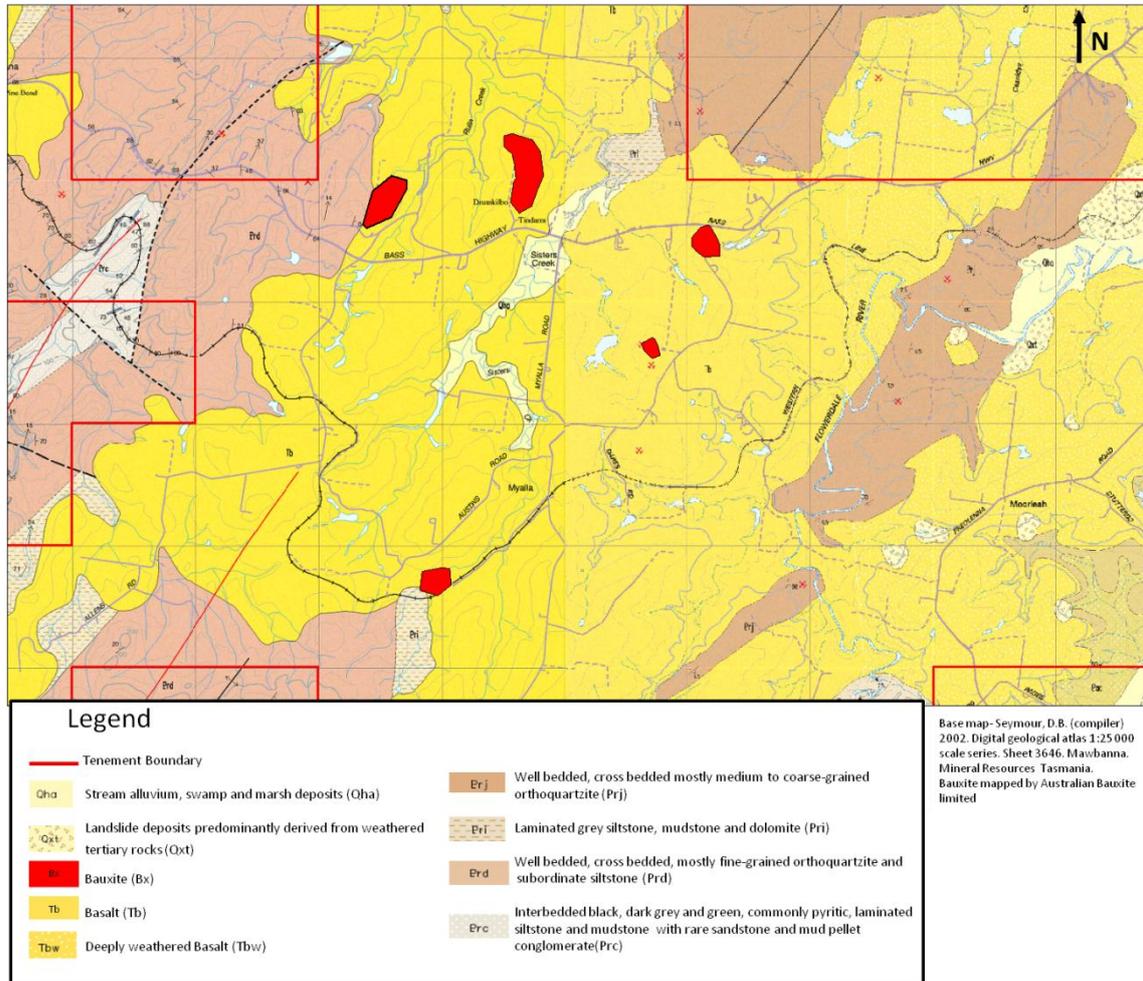
- D.R. Dickenson (1945). Bauxite at Myalla. Department of mines
- Duncan, D.McP (1997). Final Report - EL 18/96 Myalla and EL 35/96 Sister Creek. Companies Mineral Holdings Australia Pty. Ltd.
- H. B. Owen (1954). Bauxite in Australia, Bureau of Mineral Resources Bulletin no. 24
- Miss S.E. Close, June 1971, Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania, CRA Exploration Pty Limited

Regional Exploration Activities



Map 2 –EL 14/2010 Myalla, showing drill holes and bauxite targets

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont



Map 3 – Geological Map of Myalla EL 14/2010 with mapped bauxite areas

Wells Deposit

The Wells Deposit was not drilled because the majority of the bauxite is situated around the gas pipeline and Bass Highway. The Wells Deposit was recently excavated for road works along the Bass Highway Road (Figure 2) and samples from the target were excellent (Table 1). Drilling the ridge further up the hill to the south did not result in positive bauxite results even though it was only 100m from the sampling point. The Wells and Bramich's deposit was hoped to be a continuous body of bauxite. But drilling determined they are separate and possibly very small deposits. Drilling within 100m of Wells Deposit immediately hit fresh hard basalt rock in the drill hole. It is possible that the bauxite layer extends under the basalt layer which would significantly improve tonnage for the deposit.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

Table 1 - Assay results from location 381171E, 5464536N GDA84, Bass Highway Road cutting (Figure 2)

Sample ID	AvlAl ₂ O ₃	Rx SiO ₂	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	LOI	Sample Description
TA207	2.2	26.3	27.7	29.9	22.1	14.81	4-5m from surface grey/green material with concretions of gibbsite Fiji type, Mottled zone
TA208	47.5	2.5	52	2.87	13.15	29.42	Grey/red with white gibbsite concretions vuggy
TA209	49.9	1.4	53.8	1.9	11.25	30.45	Vuggy dark grey and red bauxite with white and yellow gibbsitic concretions
TA210	42	4.2	48	5.06	16.85	26.16	Vuggy grey bauxite with red spots and white concretions of gibbsite
TA211	48.1	2.6	53.7	3.38	11.8	29.61	Pale yellow gritty friable material

Please see Appendix D for the complete set of assay results.

Bramich's & Dowling's Deposit

Bramich's & Dowling's Deposit is a historical mining area for bauxite. The bauxite was used for filtering oils for Hydro Tasmania in the 1950's. The bauxite in this area was highly variable and appears to be contained to a small hill.

Only two holes at Bramich's Deposit intersected bauxite which averaged 2.5m thick. The average grade for bauxite with a cut-off grade of 2.5 A/S ratio is: 29.7% Available Alumina (avl Al₂O₃), 5.9% Reactive Silica (rx SiO₂), 39.2% Total Alumina, 7.7% Total Silica and 24.5 % Iron oxide.

Sieving of the bauxite produced all the desired effects with increasing total and available alumina and decreasing silica. The iron also decreased with sieving which suggest that it is not the same form of iron found in other bauxite deposits i.e. Hematite or Magnetite. Recovery was generally low averaging 59%.

Table 2 – Drill-hole MY005 on Bramich's and Dowling's Deposit

Sample ID	Sieved at 0.26mm								Recovery +0.26mm
	Al ₂ O ₃ avl	Rx SiO ₂	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	LOI	AV/RX	A/S	
MY00501	26.3	5.8	36	11.35	25.2	22.62	4.53	3.17	76.9
MY00502	33.3	2.4	40.1	3.25	27.1	24.55	13.88	12.34	69.1
MY00503	32.3	3.7	39.8	4.08	27.3	23.76	8.73	9.75	43.4

Please see Appendix C for the complete set of assay results.

King's Deposit

Historical Bauxite Occurrence recorded in 'Bauxite Australia' by H. B. Owen and by Duncan, D.McP (1997). This deposit was not explored in this drilling campaign and occurs in a forested area in an exclusion zone under the gas pipeline.

Devil's Elbow Deposit

The deposit located near the Devil's Elbow Road, is not identified in any previous literature and has not been well delineated by drilling. The deposit is on the next ridge east of the King's deposit in narrow green paddocks with a thick soil profile. The drilling intersected bauxite with an average thickness of 2.5m and maximum thickness of 3m. Due to the usually friable nature of this bauxite much of this bauxite was recorded as clay or weathered basalt and not assayed initially. The average grade for

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

bauxite with a cut-off grade of 2.5 A/S ratio is: 34.7% Available Alumina (avl Al₂O₃), 4.6% Reactive Silica (rx SiO₂), 41.8% Total Alumina, 6.3% Total Silica and 21.4% Iron oxide.

Recovery with sieving at 0.26mm was 63% which is low but acceptable. No whole samples were taken at this deposit so upgrading cannot be measured.

Table 3 – Drill-hole MY029 that was not initially assayed from 'Devil's Elbow'

Sample ID	Sieved at 0.26mm								Recovery % +0.26mm
	Al ₂ O ₃ avl	Rx SiO ₂	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	LOI	AV/RX	A/S	
MY02901	36.4	3.8	43.7	4.42	21	26.48	9.58	9.89	54.2
MY02902	42.6	3.9	49.2	4.18	14.6	28.34	10.92	11.77	60.7
MY02903	35	4.5	42.7	5.05	21.3	25.77	7.78	8.46	38.7

Please see Appendix C for the complete set of assay results.

Austin's Road Target

Austin's Road Target initially located in the report by D.R. Dickenson 'Bauxite at Myalla' identified an area just west of Myalla town-ship on the edge of a Basalt ridge which had potential for bauxite underlying the basalt. Drill holes were only drilled to a maximum of 8m depth and did not intersect any bauxite but may have identified the weathered profile. More exploration of this area is required.

5 DISCUSSION AND CONCLUSIONS

The bauxite in the Myalla area is high quality gibbsitic bauxite, which occurs at or near surface mostly in agricultural land. The deposits are small and thin but there is still potential for more bauxite deposits to be discovered in the immediate area. The estimated tonnage for areas drilled and intersecting bauxite is about 0.5Mt. Most of the bauxite deposits are primarily located on high value agricultural land which would put heavy constraints on any potential developments. For this reason the ABx4 has decided to relinquish the tenement.

6 ENVIRONMENT

Surface Disturbing Operations:

37 holes were drilled by an RC drill rig mounted on a light 12 tonne truck over the tenement area. These holes caused minimal disturbance, being only 7cm in diameter and drilled to a maximum depth of approximately 13m. There was no track clearing as driving was done on existing tracks. All drill holes were plugged immediately after completion and inert material from the hole was used as backfill.

Surveys (archaeological, botanical):

A botanical survey was conducted by Philip Milner Consultant Pty Ltd covering the Myalla Target Area within EL 14/2010.

Please refer to Appendix E for the complete Botanical Survey.

Rehabilitation:

All drill holes were fully rehabilitated immediately after drilling. Drill holes were plugged using octo-plugs at a depth of 1.5m and re-filled using innocuous material from the drill hole.

There was no track clearing as driving was done on existing tracks.

7 EXPENDITURE

Table 4 – Exploration Activity and Expenditure Table for reporting period 14 September 2010 – 13 September 2012

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration			
Authority Management	Environment		\$562
	Tenement Management		\$151
Office Activities	Data Processing & Interpretation		
Field Activities	Geological Mapping		
	Sampling		
	Equipment Hire	Vehicle hire	\$1,618
	Accommodation/Field Camp	Days	
	Travel		\$7,204
	Land Holder Liaison		
	Field Supplies	Equipment	\$5,331
	Other		
	Geophysics		
	Airborne		
	Type	Line kms	
	Ground		
	Type	Line kms	
	Drilling (program cost)		
	RAB/AC	Holes/total metres	
	RC	37 holes for 198 metres	\$28,366
	Diamond	Holes/total metres	
	Other	Holes/total metres	
Laboratory	ME-XRF 13B, Reactive Silica & Available Alumina	60 Samples	\$4,241
Salaries / Wages	Contractors	Professional & Consulting	\$6,106
	Employees	Drilling supervision	\$2,014
		Grand Total	\$55,593

Note: Office Administration was met by parent company – Australian Bauxite Limited.

8 REFERENCES

Coyte, T; Rebek, J: EL 14/2010 Myalla First Annual Report, 12 August 2011, ABx4 Pty Ltd

D.R. Dickenson (1945), Bauxite at Myalla, Department of mines

Duncan, D.McP (1997), Final Report - EL 18/96 Myalla and EL 35/96 Sister Creek, Companies Mineral Holdings Australia Pty. Ltd.

H. B. Owen (1954). Bauxite in Australia, Bureau of Mineral Resources Bulletin no. 24

Miss S.E. Close, June 1971, Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania, CRA Exploration Pty Limited