

First Annual Report
on
EL 37/2010 – WESTBURY

Reporting Period: 7 November 2011 – 6 November 2012
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Date: 31 October 2012

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1 ABSTRACT

Objective:

Exploration Licence (EL) 37/2010 “Westbury” 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 penepained surfaces preserved as plateaus. The goal of the program is to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light 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 12 tonne 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).
5. Systematic drill testing at close spacings to obtain data for resource estimation in the best target areas defined by programme under 4.

Results:

ABx4 Pty Ltd (**ABx4**) applied for the Westbury tenement EL 37/2010 in late 2010 as an extension to the original Deloraine tenement EL 9/2010 which did not cover many areas where bauxite occurrences were recorded (Owen 1954). The tenement was granted on 7 November 2011 and reconnaissance work commenced in January 2012 to explore key areas where bauxite potential is greatest. Approval for a work program for drilling on the Rosevale Target has been granted and additional approval is required for a work program at Bracknell which should be approved during November 2012. The bauxite mineralization in the Deloraine/Westbury region is generally confined to hills, ridges and plateaus of weathering/bauxitization of basaltic volcanoclastic deposits.

ABx4 is partially relinquishing 44sq km with the focus on removing towns, settlements, rivers, mountains and exclusion areas from the tenement. These areas are unlikely to have bauxite and would constrain any potential future developments.

ABSTRACT Cont**Recommendations for future work:**

Recommendation for future work include further:

- Detailed geological mapping, including geomorphological mapping and study of satellite images to define the areas with the best potential for bauxite.
- Systematic sampling of natural outcrops and exposures in road cuts of lateritic weathering profile.
- Chemical analyses of samples, including specialist analyses to determine total and available alumina, total and reactive quartz, loss on ignition and sieving (+0.26mm) at 260 microns as required in the bauxite search.
- Drill testing of zones with best potential with an RC drill rig mounted on a light six wheel 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).
- Systematic drilling at close spacings to obtain data for preliminary resource estimation in the best target areas defined by program.
- Sieve testing to find optimal sieve size for Tasmanian bauxites.
- Detailed analysis of assay results to determine assaying strategy for future drilling.

2 INTRODUCTION

Exploration Rationale

EL 37/2010 “Westbury” 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 is to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light 12 tonne truck.

Geological Setting

In the Westbury area, the occurrences of bauxite are located in areas with Tertiary basaltic volcanics.

Study of geomorphology based on a digital terrain model led the company’s geologist to the conclusion that Tertiary basaltic volcanics are preserved on remnants of old surface which form larger plateaus or smaller ‘mesas’.

Bauxite was formed during the Tertiary period a when tropical climate prevailed (high rainfall and relatively high temperatures). Bauxite is present in the upper part of the ancient lateritic / saprolitic weathering profile. Except for the lateritic crust, ancient lateritic / saprolitic weathering profile is easily eroded because weathered rocks are soft.

However, under protective cover of Tertiary basaltic volcanics, large tonnages of bauxite may have been preserved. This concept is being tested by drilling.

Tenement Information

EL 37/2010 “Westbury” was granted on and from 7 November 2011 for a period of 5 years to ABx4.

This is the First Annual Report for the reporting period 7 November 2011 - 6 November 2012 incorporating the results of work completed during the first year of tenure.

Total area of the original licence is 218sq km and its Mineral Category is 1 – Metallic Minerals and Atomic Substances. ABx4 however is relinquishing 44sq km of the tenement bringing the total area to 174sq km.

Tenure, including joint venture details and title transfers

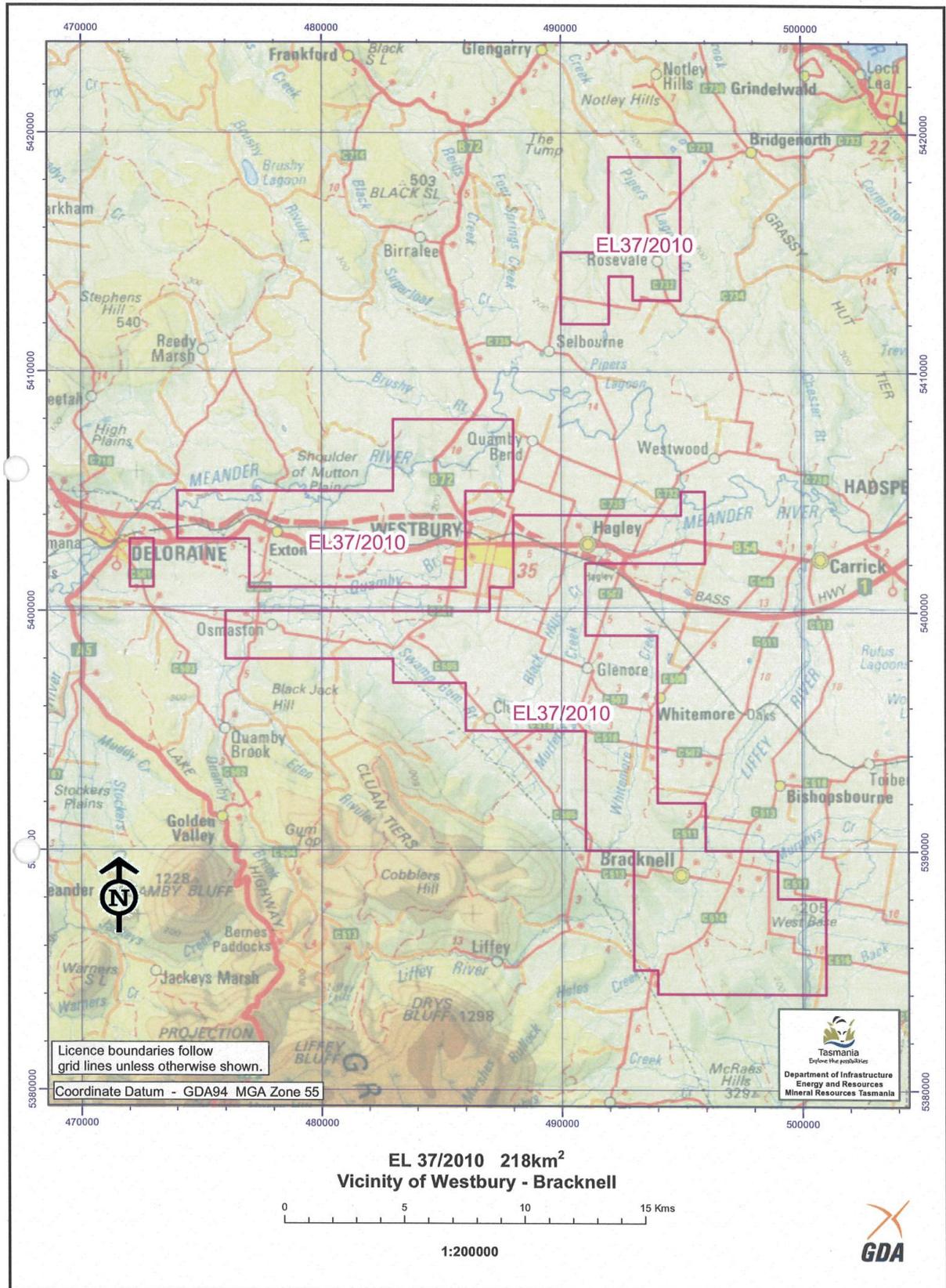
EL 37/2010 “Westbury” is 100% owned by ABx4 which is a fully owned subsidiary of Australian Bauxite Limited.

Location

The Westbury tenement is centred on the town of Westbury and is approximately 68km from Bell Bay and 114km from Burnie which are both large operation ports. There is also a railway siding just south of Hagley next to the highway and away from residential areas. The Westbury tenement is ideally located for both rail and road transport to the port.

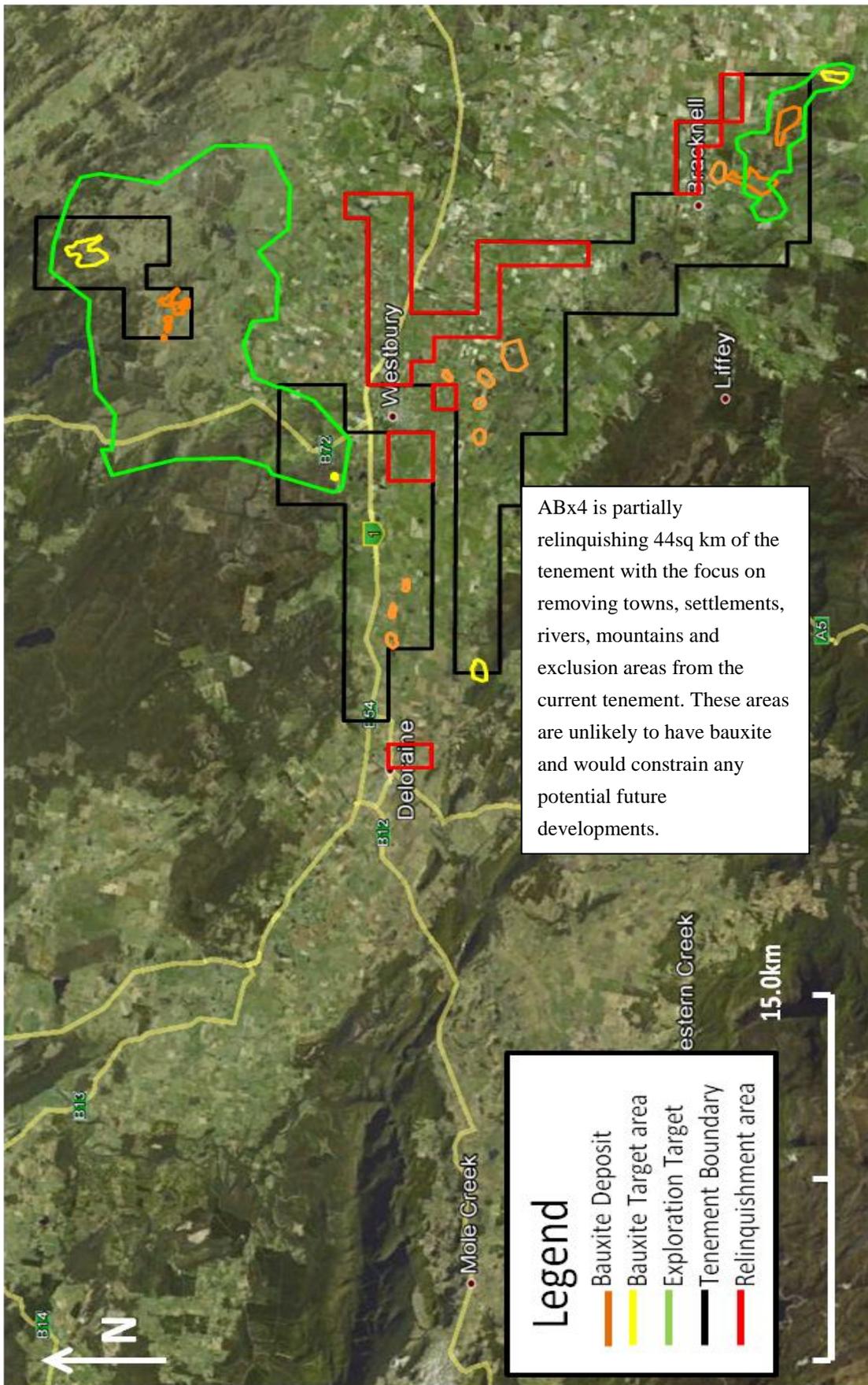
The majority of the land usage in the Westbury tenement is Plantation, natural forest and agricultural land with land categories 3-6. Gaining access to farming properties was very successful; all landowners contacted by ABx have allowed exploration.

INTRODUCTION Cont



Map 1 – Location Map of EL 37/2010 “Westbury”

INTRODUCTION Cont



Map 2 – EL37/2010 relinquishment areas marked by red outline

3 REVIEW OF PREVIOUS WORK

Prior to Current Tenement

Historical references for bauxite in the Westbury Tenement are reported by H.B. Owen in his book "Bauxite in Australia", 1954, which was the basis for Initial exploration of the area.

- H.B. Owen, 1954, Bauxite in Australia, Bulletin 24
- H. B. Owen 1946. *Rosevale, Country Devon, Tasmanian*. Bureau of Mineral Resources
- M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25000 Series, Sheet 4841 Bridgenorth. Mineral resources Tasmania.
- M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25000 Series, Sheet 4838 Liffey. Mineral resources Tasmania.

During current Tenement

This has been the first year of tenure.

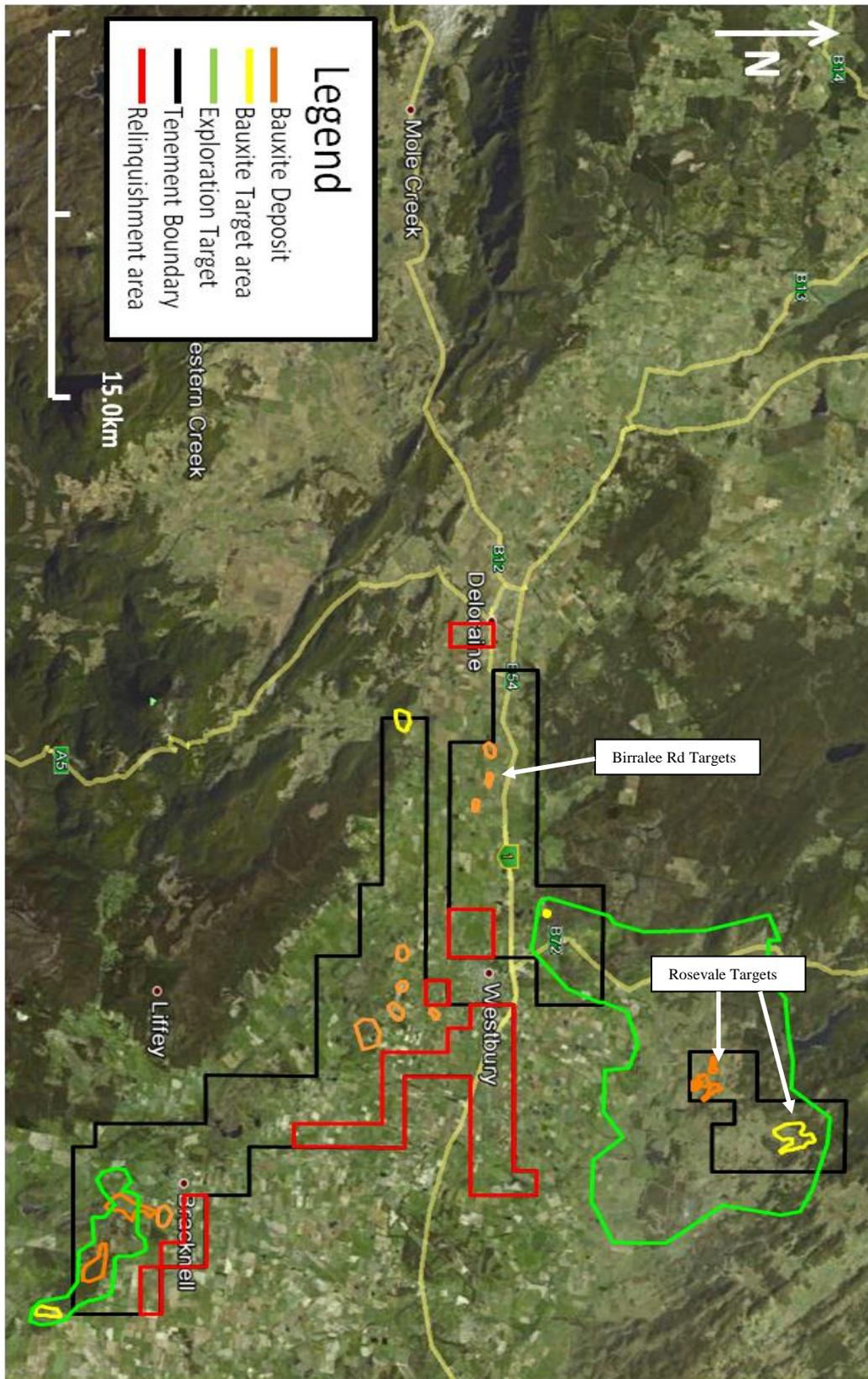
4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Literature Review

- H.B. Owen, 1954, Bauxite in Australia, Bulletin 24
- H. B. Owen 1946. *Rosevale, Country Devon, Tasmanian*. Bureau of Mineral Resources
- M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25000 Series, Sheet 4841 Bridgenorth. Mineral resources Tasmania.
- M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25000 Series, Sheet 4838 Liffey. Mineral resources Tasmania.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

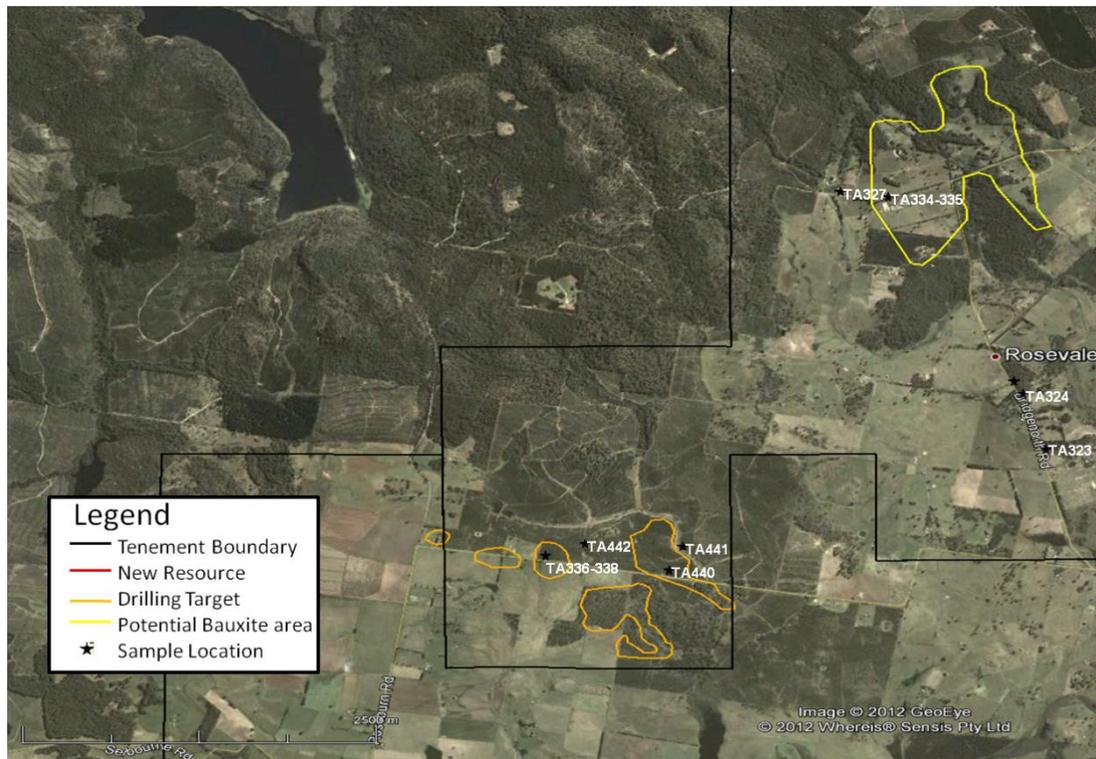
Regional Exploration Activities



Map 3 – Google Earth Map showing location of EL 37/2010 and bauxite exploration areas

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

Rosevale Targets



Map 4 – EL 37/2010 Rosevale Target areas

Rosevale Targets identified in H.B Owen's book *Bauxite Australia* were described as small thin deposits sometime with only residual boulders exposed at surface. The largest of the Rosevale Targets described by Owen is highlighted in orange and occurs in plantation, natural forest and agricultural land. The largest Rosevale Target appears to be hosted in channels made from dolerite and has a pisolitic cap (pdm) with red very iron rich bauxite at surface and then grades into a brecciated red/yellow massive bauxite which is sometimes vuggy and often has tubular vughs filled with a low iron gibbsite/clay mix. High grade material and the mottled zone often contain strong relic volcanic textures. The bauxite has sharp contacts with the dolerite at unusual angles. This sometime means that the mottled zone occurs higher up the slope than the bauxite. In volcanic hosted bauxite; the bauxite is almost always at the highest point of terrain and has a very consistent layer. To the south the bauxite is in direct contact with pisolitic laterites probably derived from sediment and has a sharp contact. The eastern contact is located in the lowest point in terrain in the centre of a creek bed and the bauxite appears to outcrop right to the edge of the water.

The bauxite could be capped with basalts in the west because bauxite protrudes though the basalt capping. This suggests that the bauxite could be more extensive than the current exposur at surface which could significantly increase the potential tonnage for the area.

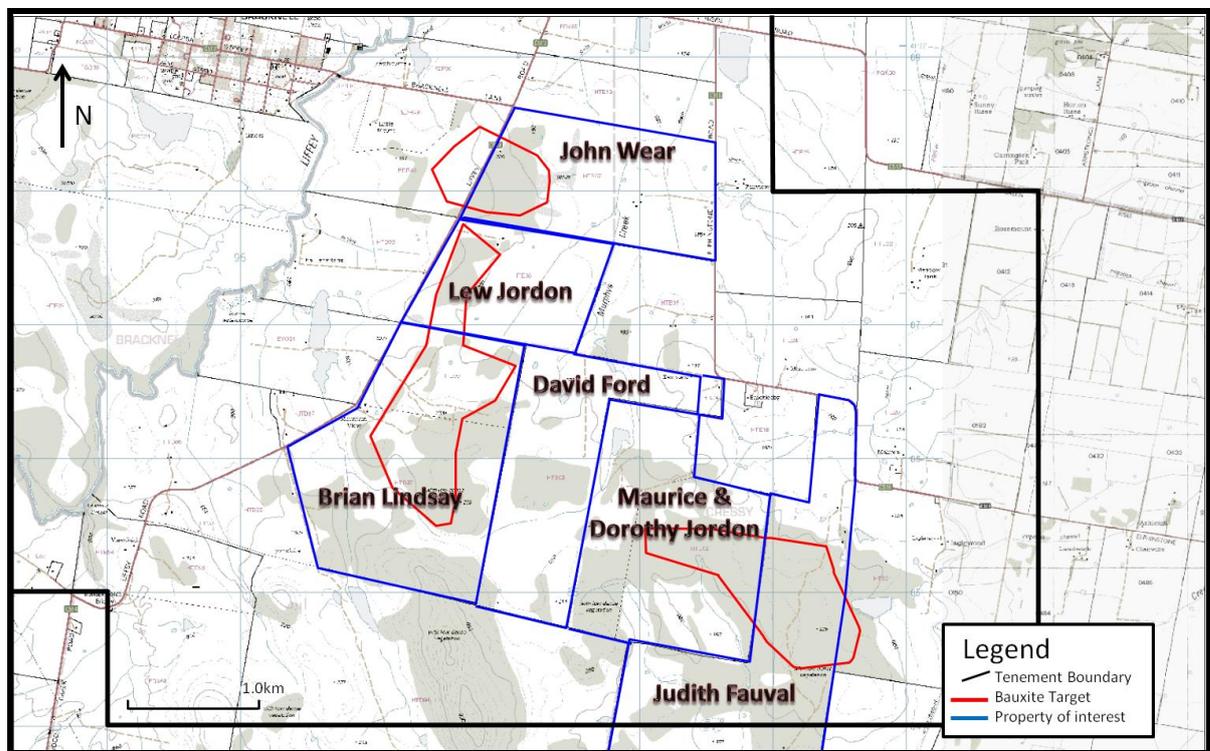
A work program for drilling the targets highlighted in orange has been approved. There is an eagles nest on the target area which will restrict operations until the end of January.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

Table 1 - Assay Results for Surface Samples at the Rosevale Targets

Sample No	Al ₂ O ₃ Avl%	Rx SiO ₂ %	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	LOI	Avl/Rx Ratio	A/S Ratio
TA336	38.6	2.3	44.7	3.14	23.4	25.71	16.8	14.2
TA337	36.4	2.7	42.3	3.89	25.7	25.95	13.5	10.9
TA338	38.4	1.5	45	2.24	25.7	24.15	25.6	20.1
TA440	15	6.2	24.1	6.68	46.3	18.49	2.4	3.6
TA441	34	3.1	39.8	3.67	28.5	23.56	11.0	10.8
TA442	18.2	6	26.8	8.27	45	18.47	3.0	3.2

The complete set up of assay results can be found in Appendix A.

Bracknell Targets

Map 5 – Bracknell Target – landowners' properties and potential bauxite areas

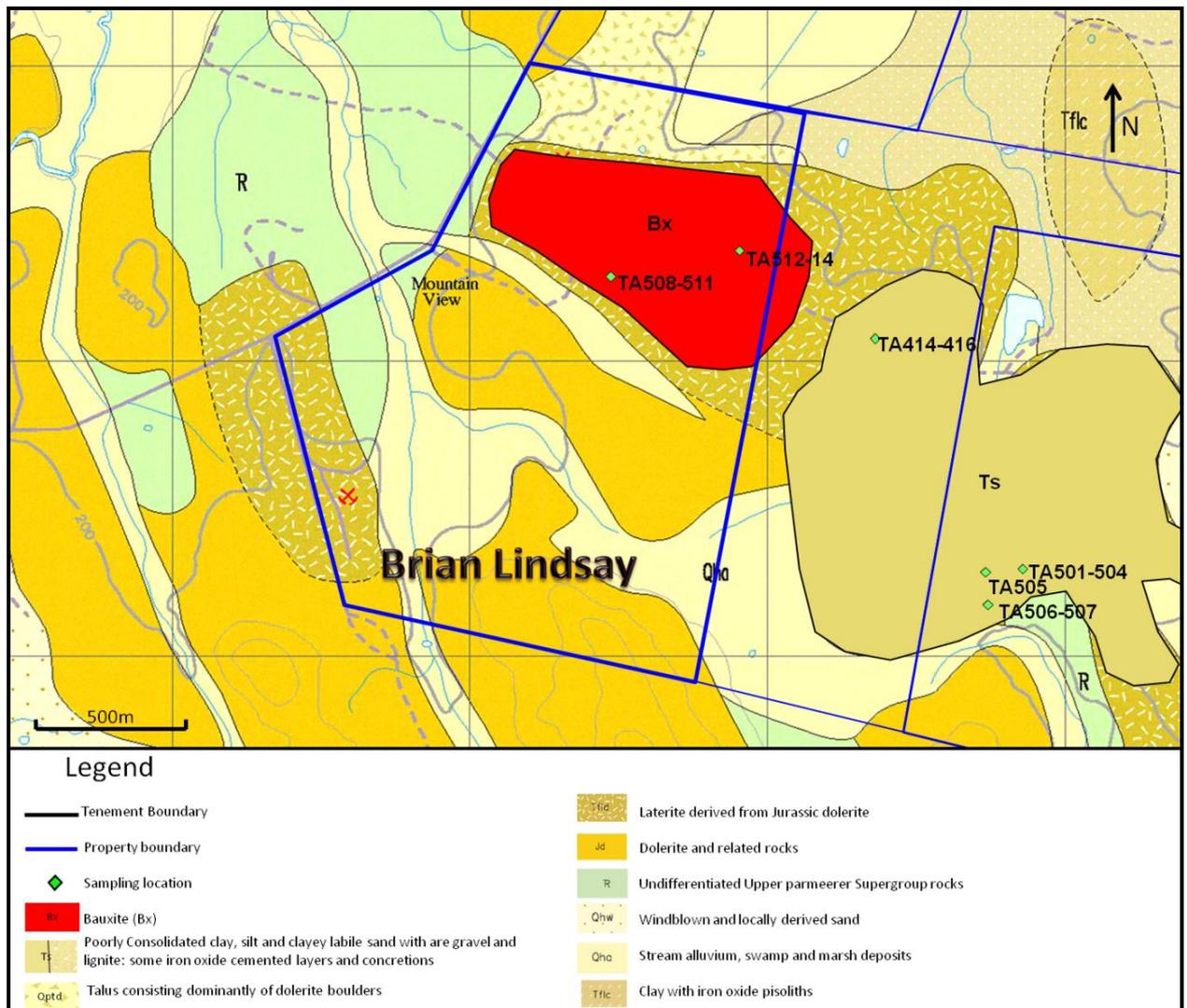
The Bracknell Targets are located within EL 37/2010 about 2km south east of Bracknell. The target area covers low lying ridges and hills that represent the old tertiary surface. Bauxite and Laterite occur interchangeably at this level. Dolerite ridges and hills make up the high ground and also protrude through the laterite/bauxite in places. Two areas of potential bauxite have been identified in the Bracknell area. One located on Brian Lindsay's property contains both low iron pisolitic bauxite to DSO bauxite. The bauxite also particularly contains elevated levels of free quartz. The second target is on John Wear's property and contains high grade DSO bauxite but is very small. The material to the east consists of a quartz iron laterite which looks very similar to the bauxite.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

Brian Lindsay's Property

Brian Lindsay's property is a large block which was mined for road base when the Poatina Road was built. Up to 50 trucks a day of material was moved from the area for a number of years. The bauxite in the area occurs at a moderate elevation in the old surface where there has been little erosion. The bauxite is hard and iron rich at surface with wormhole vughs just below the cemented cap (this material gives the best assay results) and tends to be more friable at depth. The wormhole vughs are filled with low iron bauxite. Because the area has been previously mined for bauxite it looks very thin, no more than 3m thick in the exposures and quickly grade to the clay rich mottled zone. The bauxite has a significant quartz content which is unusual for Tasmania. The quartz appears to be consistent and pervasive and is probably derived from a thin tuff deposit which has picked up sand/quartz from which is the host for the bauxite deposit. The bauxite forms a large subtle ridge approximately 1km long and 500m wide.

Geology and Sampling Locations for Brian Lindsay's Property



Map 6 – Base map – M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25,000 Series, Sheet 4838 Liffey. Mineral Resources Tasmania.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

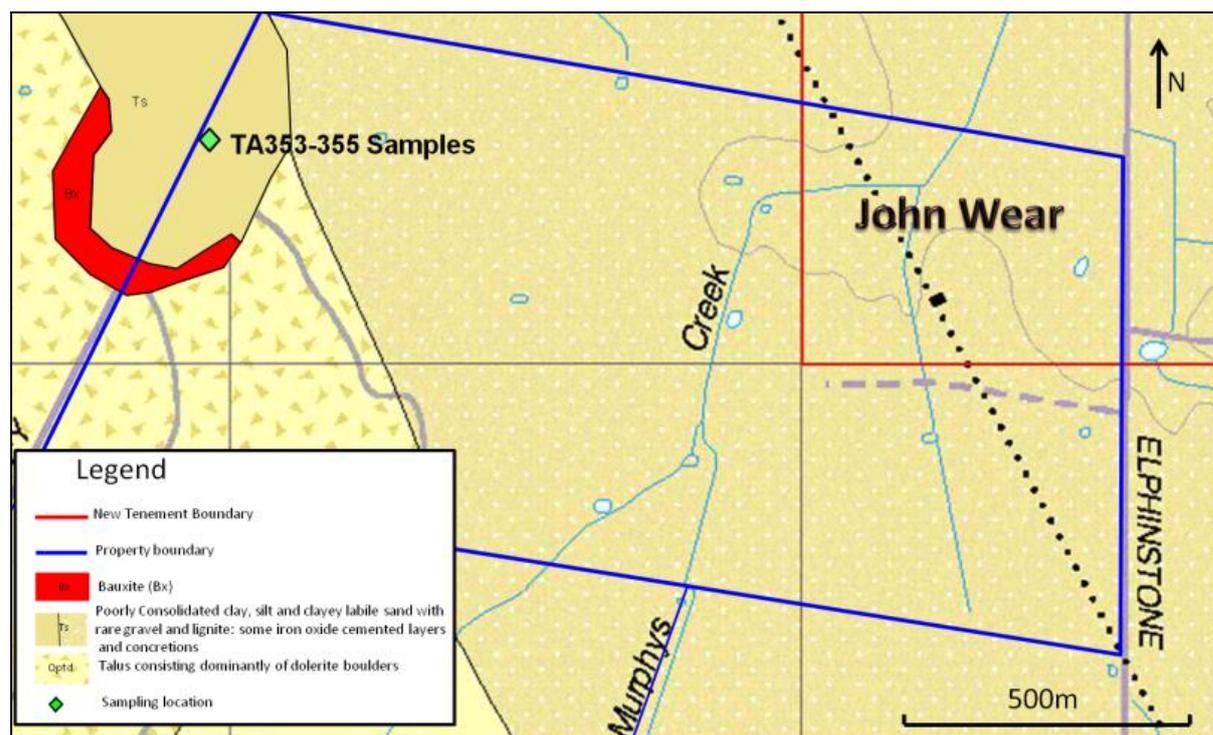
Table 2 - Samples results for Brian Lindsay's Property

Sample ID	Al ₂ O ₃ avl %	Rx SiO ₂ %	Al ₂ O ₃ %	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %	LOI %	Sample Description
TA508	31.1	3.4	38.2	12.9	25.4	1.66	21.3	Red pisolitic bauxite with gibbsite filled wormholes
TA509	15.1	7.1	26.7	9.21	47.2	1.05	15.2	Red pisolitic Iron rich bauxite
TA510	30.5	5.5	39	11.95	25.1	1.7	21.8	Red & Biege bauxite with 1cm pervasive wormholes
TA511	30.3	4.1	36.5	13.85	27.2	1.6	20.4	Red massive bauxite with minor wormhole and pisolites
TA512	19.3	6.8	28.8	18	35.3	1.17	16.1	Red massive iron rich bauxite with pisolites and wormholes. Some quartz grit layers
TA513	24	5.3	32.7	16.15	30.5	1.23	18.7	Red massive iron rich bauxite with pisolites and wormholes. Some quartz grit layers
TA514	11.4	9.7	22.6	28.7	33.9	1.38	12.8	Matte Red & white material from bauxite mottled zone contact

The complete set of assay results can be found in Appendix A.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont**John Wear's Property**

John Wear's property is a moderate sized farming block with a heavily forested section at the back of the property along the Liffy Road. The bauxite occurs around the edge of a small hill in the heavily forested area. The bauxite is high grade, light weight grey bauxite with gibbsite filled vuggs and a breccia texture. The bauxite exposure is very thin and small but a larger deposit could be concealed by a thin layer of quartz laterite. Dolerite is exposed below the bauxite layer with no mottled zone identified.

Geology and Sampling Points on John Wear's Property

Map 7 – Base map - M. Vicary (Compiler) 2004. Digital Geological Atlas 1:25000 Series, Sheet 4838 Liffey. Mineral resources Tasmania.

Table 3 - Samples results for John Wear's Property

Sample ID	Al ₂ O ₃ avl %	Rx SiO ₂ %	Al ₂ O ₃ %	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %	LOI %	Sample Description
TA353	28.2	7.9	38.6	11.3	29.5	1.52	18.5	
TA354	0.4	12.2	5.9	48.1	38.3	0.69	6.4	
TA355	35.6	5.4	42	7.27	22.8	2.41	25.0	

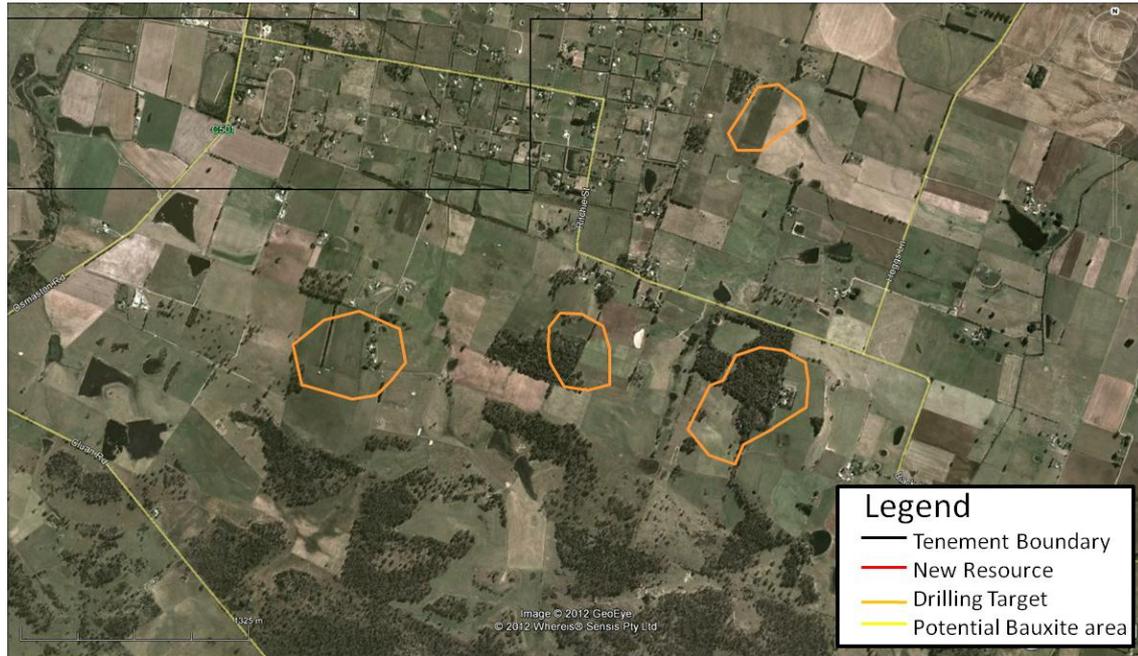
The complete set of assay results can be found in Appendix A.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont

Westbury Targets

The Westbury bauxite occurrences are identified in mineral occurrence maps of Tasmania but no reports on these occurrences have been identified. Because of the proximity to Westbury; these bauxite deposits will not be drilled and possibly never mined. The location of these deposits suggest that more deposits could exist south of these deposits between Westbury and Bracknell along the Bracknell Fault Line.

Map of Westbury Targets



Map 8 - Base map of Westbury Targets - Google Earth Imagery

Assay Results for Surface Samples from Westbury Targets

Sample No.	AvlAl ₂ O ₃	RxSiO ₂	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	LOI	Avl/Rx	A/S
TA356	1.1	8.9	9.55	23.2	56.2	9.87	0.1	0.4
TA357	22.5	1.2	26.3	2.55	49	16.74	18.8	10.3

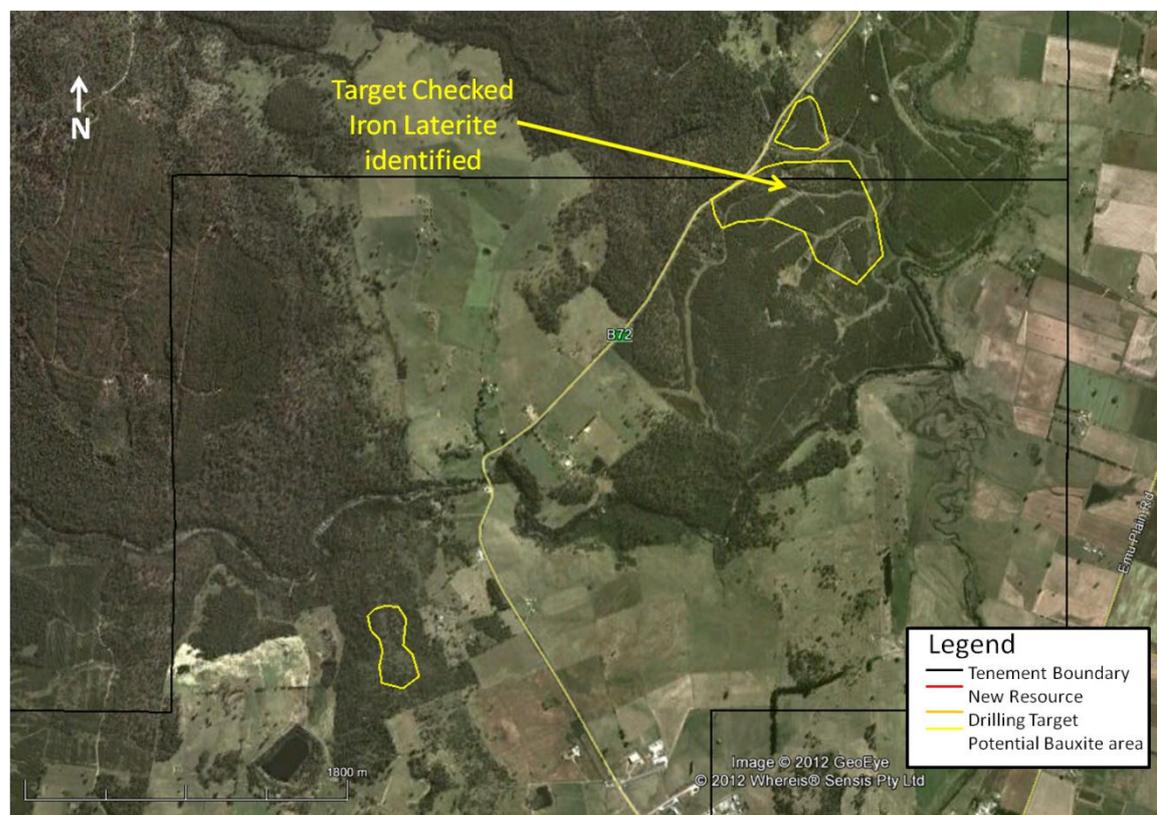
The complete set of assay results can be found in Appendix A.

EXPLORATION COMPLETED DURING THE REPORTING PERIOD Cont**Birralee Road Targets**

The southern Birralee road target is identified in literature in 'Bauxite Australia' by H.B. Owen but there is no sampling information provided. Both targets are located in low value land, the northern Targets occurring in a gunn's plantation. The Northern target has been explored and consisted of a low silica, iron rich laterite on top of dolerite. The host rock for this material is unknown and the material is not bauxite.

Table 4 - In house XRF analysis of Reconnaissance Samples (Note Al₂O₃ ±20% and SiO₂±5%, both are highly inaccurate readings)

Sample ID	Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂
TA475	1.49	2.439	82.948	0.045
TA476	2.413	3.422	82.566	0.035
TA477	7.405	18.689	36.091	0.454
TA478	5.815	7.401	61.272	0.51
TA479	15.613	26.203	47.675	0.625
TA480	1.387	4.014	74.445	0.066
TA481	4.419	6.668	76.913	0.09
TA482	5.671	12.168	34.508	0.219
TA483	4.519	40.227	49.726	1.31
TA484	5.074	10.567	68.703	0.532
TA485	7.789	20.395	46.019	0.539
TA486	7.495	17.158	44.978	0.519

Map of Birralee Road Targets

Map 9 - Base map – Birralee Road Targets - Google earth imagery

5 DISCUSSION OF RESULTS

The bauxite mineralization in the Westbury tenement is generally confined to hills, ridges and plateaus of bauxitised volcanoclastic or dolerites. There are multiple different forms of bauxite in Tasmania which results in different geochemical characteristics in individual deposits. Tasmanian bauxites are generally very friable, sometimes without the typical cementaceous nature of bauxite and can have a very similar consistency to clay. At Rosevale the bauxite overlying dolerite has a Pisolithic cap (PDM) with red very Iron rich bauxite at surface and then grades into a brecciated Red/Yellow massive bauxite which is sometimes vuggy and often has tubular vughs filled with a low iron gibbsite/clay mix. High grade material often contains strong relic volcanic textures. The bauxite appears to occur in channels in the Dolerite and grades into laterite in the south. The Eastern contact is located in the lowest point in the terrain in the centre of a creek bed and the bauxite appears to outcrop right to the edge of the water.

The Bracknell Target is hard and iron rich at surface with wormhole vughs just below the cemented cap (this material gives the best assay results) and tends to be more friable at depth. The wormhole vughs are filled with low iron bauxite and appear to be thin quickly grading into the clay rich mottled zone. The bauxite has a significant quartz content which is unusual for Tasmania. The bauxite forms a large subtle ridge approximately 1km long and 500m wide.

The underlying contact zone "Mottled Zone" is defined by red and white irregular mottled layer sometimes with cemented lumps of red iron rich clay just below the bauxite layer. In lower parts of the Mottled zone; relic textures of the original volcanic is evident. Often when the bauxite is in direct contact with dolerites, a true mottled zone is not present. The underlying rocks are still weathered either in an unconformity and/or the lateritic weathering has formed but it's not very pervasive. There is only modest evidence that bauxite can be derived from Dolerite.

6 CONCLUSIONS AND RECOMMENDATIONS

Exploration in the Westbury tenement has been successful with multiple bauxite targets identified and some ready to drill. The deposits are located in areas generally considered poor quality land and have been left forested or put to plantation. The proposed partial relinquishment of 44sq km focuses on removing towns, settlements, rivers, mountains and exclusion areas from the current tenement. These areas are unlikely to have bauxite and would constrain any potential developments.

Recommendations for future work include:

1. Detailed geological mapping, including geomorphological mapping and study of satellite images to define the areas with the 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 sieving (+0.26mm) at 260 microns as required in the search of bauxite.
4. Drill testing of zones with best potential with an RC drill rig mounted on a light six wheel truck to get samples representing the whole lateritic weathering profile (from upper-most iron rich zone through to the alumina rich zone and down into the mottled and pallid saprolite zone).
5. Sieve testing to find optimal sieve size for Tasmanian bauxites.
6. Detailed analysis of assay results to determine assaying strategy for future drilling.
7. Testing new sample processing techniques to improve silica reduction.

7 ENVIRONMENT

Surface Disturbing Operations:

No surface disturbing operations were undertaken in the first year of tenure. Only exploration on foot and traversing on existing tracks was undertaken.

ABx4's surface disturbing operations are in general minimal.

Drilling is conducted by an RC drill rig mounted on a light 12 tonne truck. All drill holes are filled immediately after completion.

Existing tracks are used wherever possible. In the event that any specific access is required for drill rigs and/or service vehicles, track construction will be minimised and in accordance with directions of any landowners who may be affected.

Surveys (archaeological, botanical):

Two botanical surveys were conducted by Philip Milner Consultant Pty Ltd covering the following areas within EL 37/2010.

1. Rosevale Target Area
2. Bracknell Target Area

Please refer to Appendix B for the complete Surveys.

Rehabilitation:

No surface disturbing activities were undertaken during the first year of tenure and therefore no rehabilitation was required.

ABx4 has a policy that all drill holes are filled immediately after completion. Drill holes are plugged using octo-plugs at a depth of 1.5m and re-filled using innocuous material from the drill hole.

8 EXPENDITURE

Table 5 – Exploration Activity and Expenditure Table for reporting period 7 November 2011 – 6 November 2012

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration			
Authority Management	Land Holders Compensation		
	Tenement management		\$137
	Rent		\$4,546
Office Activities	Data Processing & Interpretation		
Field Activities	Geological Mapping	Days or Ha	
	Sampling	Number of samples	
	Equipment Hire	Vehicle hire and petrol	\$1,825
	Accommodation/Field Camp	Days	
	Travel		
	Land Holder Liaison		\$7,868
	Field Supplies		\$12,693
	Other	Freight Charges	\$669
	Other	Mineralogical	
	Geophysics		
	Airborne		
	Type	Line kms	
	Ground		
	Type	Line kms	
	Drilling (program cost)		
	RAB/AC	Holes/total metres	
	RC	Holes/total metres	
	Diamond	Holes/total metres	
	Other	Holes/total metres	
Laboratory	ME-XRF 13B, Reactive Silica Available Alumina	92 Surface Samples	\$4,600
Salaries / Wages	Contractors - consultants		\$25,709
	Contractors - employees		\$15,463
	Contractors - field assistants		\$9,569
		Grand Total	\$83,079

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

9 REFERENCES

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

H. B. Owen 1946. *Rosevale, Country Devon, Tasmanian*. Bureau of Mineral Resources

M. Vicary (Compiler) 2004. *Digital Geological Atlas 1:25000 Series, Sheet 4841 Bridgenorth*. Mineral resources Tasmania.

M. Vicary (Compiler) 2004. *Digital Geological Atlas 1:25000 Series, Sheet 4838 Liffey*. Mineral resources Tasmania.