ABx
AUSTRALIAN BAUXITE LIMITED   ASX Code: ABZ

3.5 Million Tonnes Maiden Resource on Granted Mining Lease Near Bundaberg Port, Central QLD

Company resources grow to 116 million tonnes[1]

- 3.5 million tonnes of gibbsite-rich bauxite resources on granted Mining Lease, located 155 km SW of Bundaberg Export Port

- Bauxite production is being assessed as a precursor to our large Binjour Bauxite Project

- Scoping studies for early production have commenced

Bauxite development company, Australian Bauxite Limited (**ABx, ASX Code ABZ**) has completed investigative drilling as part of its due diligence with respect to Mining Lease ML80126, located 25 km south of Mundubbera and 155 km southwest of Bundaberg Port in central Queensland (see Figure 1). ABx confirms that the Inferred Resource of bauxite identified is 3.5 Million tonnes.

Establishing the resource size provides the resource size consideration for concluding final agreements to purchase the mining lease and commence early mine production to supply the buoyant bauxite market, which is currently seriously short of this type of gibbsite bauxite.

This granted, long-term mining lease ML80126 may be a fast-track route to the commencement of ABx's large Binjour Bauxite Project located 115 km southwest of Bundaberg Export Port, Queensland – see Figure 1.
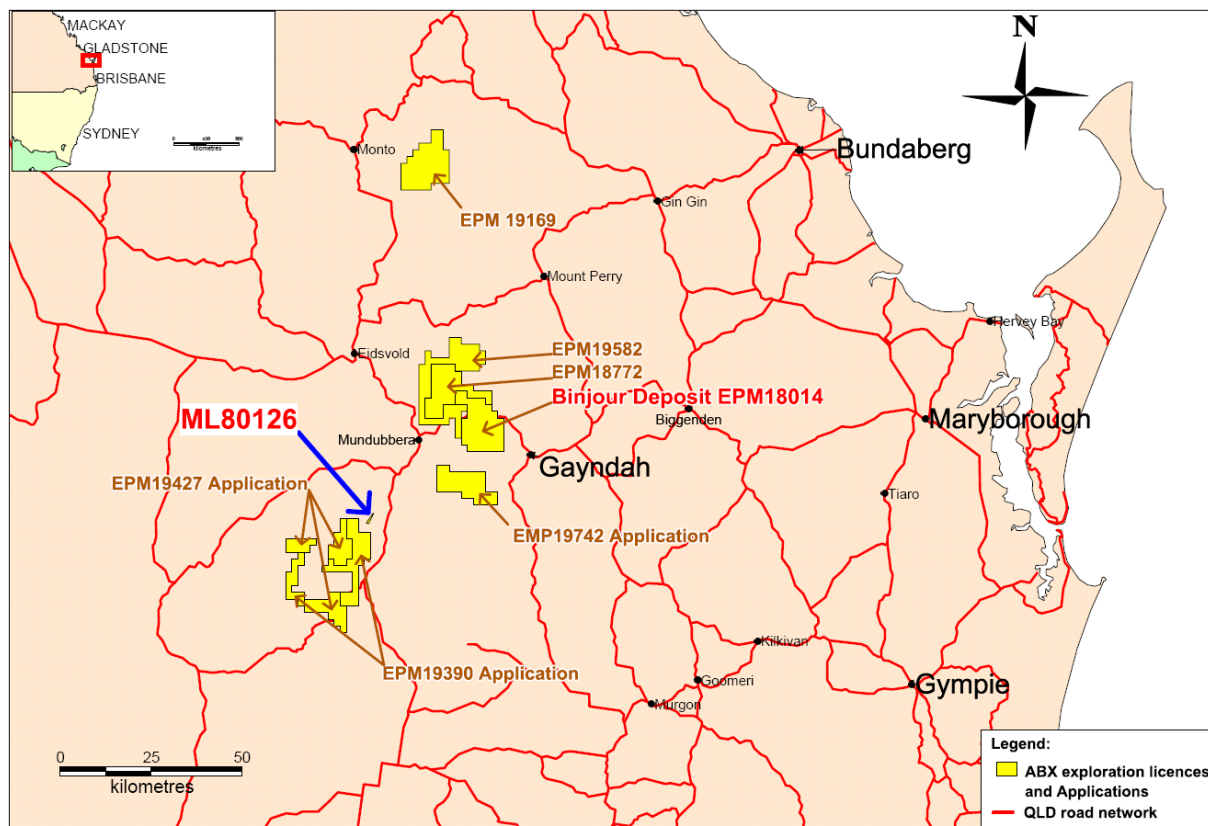

Figure 1: ABx Bauxite Tenements in Central Queensland, including ML80126 & the large Binjour Project

Strategically significant

ABx CEO, Ian Levy said; "The discovery of a good bauxite deposit on this granted long-term Mining Lease is one of the final jigsaw pieces in establishing the first modern bauxite business in Australia since the 1960s. Production from this mining lease may commence early and kick-start the large Binjour Project several years earlier than we previously thought."

Summary of Resource

A gibbsite-rich bauxite layer, 1 to 7 metres thick, totalling 5 million tonnes has been discovered beneath a shallow layer of soil and overburden red clay at the Toondoon Mining Lease ML80126. A total of 14 drillholes totalling 186 metres were drilled and revealed a consistent, continuous deposit (see Figure 2) and enabled the estimation of an Inferred Resource.

Two estimates based on two cut-off grades were competed and are reported in Table 1 following.

Table 1: Summary of Maiden Bauxite Resources, Mining Lease ML80126

Cut-off 25% Al_2O_3 Avl			Sieved at 0.26mm										
Resource category	Tonnes millions	Bauxite Thick-ness	Al_2O_3 Avl % 143°	Rx SiO_2 %	Avl/Rx Ratio	Al_2O_3 %	SiO_2 %	A/S Ratio	Fe_2O_3 %	TiO_2 %	LOI %	Yield %	Over-burden m	Internal Waste m
Inferred	3.5 Mt	4.9 m	32.8	5.2	6.3	40.2	7.2	5.6	25.3	4.9	21.7	67%	1.5 m	0 m
TOTAL	3.5 Mt	4.9 m	32.8	5.2	6.3	40.2	7.2	5.6	25.3	4.9	21.7	67%	1.5 m	0 m

Cut-off grades applied: Minimum 25% available Al_2O_3 Avl, 2m thickness, 200m search ellipse. Leach conditions to measure available alumina "Al_2O_3 Avl" & reactive silica "Rx SiO_2" is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Rx" ratio is (Al_2O_3 Avl)/(Rx SiO_2) and "A/S" ratio is Al_2O_3/SiO_2. Avl/Rx values above 6 are good. Tonnage is for bauxite in-situ. Yield is for screening all samples at 0.26mm. The significant tonnages requiring no upgrade will have 100% yield.

Cut-off 30% Al_2O_3 Avl			Sieved at 0.26mm										
Resource category	Tonnes millions	Bauxite Thick-ness	Al_2O_3 Avl % 143°	Rx SiO_2 %	Avl/Rx Ratio	Al_2O_3 %	SiO_2 %	A/S Ratio	Fe_2O_3 %	TiO_2 %	LOI %	Yield %	Over-burden m	Internal Waste m
Inferred	2.2 Mt	3.1 m	35.6	4.0	8.8	41.6	5.9	7.1	23.9	5.1	22.7	67%	2.4 m	0 m
TOTAL	2.2 Mt	3.1 m	35.6	4.0	8.8	41.6	5.9	7.1	23.9	5.1	22.7	67%	2.4 m	0 m

Cut-off grades applied: Minimum 30% available Al_2O_3 Avl, 1m thickness, 200m search ellipse. Leach conditions to measure available alumina "Al_2O_3 Avl" & reactive silica "Rx SiO_2" is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Rx" ratio is (Al_2O_3 Avl)/(Rx SiO_2) and "A/S" ratio is Al_2O_3/SiO_2. Avl/Rx values above 6 are good. Tonnage is for bauxite in-situ. Yield is for screening all samples at 0.26mm. The significant tonnages requiring no upgrade will have 100% yield.
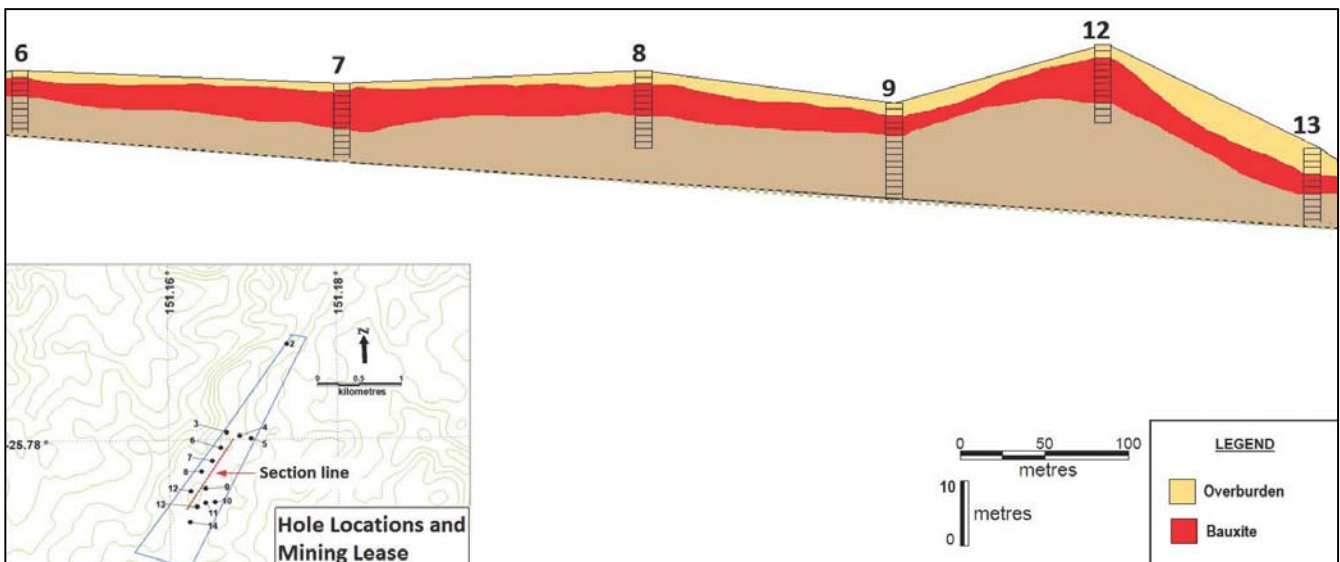

Figure 2: Drillhole section showing continuity of bauxite layer. Extraction appears straightforward

Raw In-Situ DSO Bauxite

It is common to commence operations based on those bauxite zones that contain bauxite in the ground ("in-situ") that is "DSO Bauxite" which can be exported directly (see definitions) and to stockpile the bauxite that requires screening for processing in later years. Approximately 50% of the bauxite meets DSO grades and requires no upgrade.

The estimate of DSO Bauxite is approximately 50% of the bauxite deposit as reported in Table 2:

Table 2: Summary of DSO Bauxite Resources, Mining Lease ML80126

Selected raw DSO bauxite			Raw, unsieved in situ bauxite										
Resource category	Tonnes millions	Bauxite Thickness	Al_2O_3 Avl % 143°	Rx SiO_2 %	Avl/Rx Ratio	Al_2O_3 %	SiO_2 %	A/S Ratio	Fe_2O_3 %	TiO_2 %	LOI %	Yield %	Over-burden m	Internal Waste m
Inferred	1.7 Mt	2.4 m	35.5	5.9	6.0	42.2	7.4	5.7	21.9	5.2	22.5	100%	0.2 m	0 m
TOTAL	1.7 Mt	2.4 m	35.5	5.9	6.0	42.2	7.4	5.7	21.9	5.2	22.5	100%	0.2 m	0 m

Cut-off grades applied: Minimum 27% available Al_2O_3 Avl, less than 11% Rx SiO_2, 1m thickness, 200m search ellipse. Leach conditions to measure available alumina "Al_2O_3 Avl" & reactive silica "Rx SiO_2" is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Rx" ratio is (Al_2O_3 Avl)/(Rx SiO_2) and "A/S" ratio is Al_2O_3/SiO_2. Avl/Rx values above 6 are good. Tonnage is for bauxite in-situ without any screening. Yield is therefore 100% for these tonnages that require no upgrade.

PROJECT DESCRIPTION

Location and Infrastructure

The North Burnett region of Central Queensland has rural infrastructure, with regional highways passing through the bauxite areas, connecting to an export port at Bundaberg, which has ample spare port capacity (Figure 3). Shipping into and out of Bundaberg Port is via deep, sand-bottomed shipping channels connected to the eastern Australian deepwater shipping lanes and does not pass over any part of the Great Barrier Reef or ecologically sensitive seafloors.

There is a well-developed state electric power grid and ample water supplies.

Natural gas pipelines connect from the Surat Basin to Gladstone through this district.

Coal mining occurs to the north and south of this region and there are several mineral deposits being assessed in the region.

Figure 3 Bundaberg Port

There are well-established regional population centres at Mundubbera and Gayndah and ABx's large Binjour bauxite project is located between these two regional centres (see locations in Figure 1).

Gladstone (see Figure 4 below) is a major bauxite processing centre with two alumina refineries and an aluminium smelter. Gladstone is a major mineral port (coal, bauxite, coal seam gas, chemicals) that services the Queensland Alumina Limited (QAL) and Yarwun alumina refineries and Australia's largest aluminium smelter at Boyne Island. Both alumina refineries and the Boyne Island aluminium smelter at Gladstone are operated by Rio Tinto Alcan.

This part of Queensland has major steel fabrication and heavy machinery workshops as well as highly experienced contractors in earth moving, mining, transport and construction.

In summary, the ABx bauxite project areas in central Queensland are supplied with power, water, communications and transport infrastructure, near well-serviced industrial centres and near to two efficient export ports that operate all year round without seasonal interruptions.

Figure 4 Location

Environmental Setting

ML80126 is a fully-granted, long-term Mining Lease located in an area that is unaffected by Queensland's strategic cropping land maps.

The Mining Lease is unlikely to be affected by socio-environmental impediments.

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JORC Compliant Resource Statements

The following are Joint Ore Reserve Code ("JORC")-compliant Public Reports released to the ASX declaring the JORC resources referred to. These can be viewed on the ASX website and the Company will provide these reports, free of charge on request.

- [1] 08/05/2012 ASX Inverell JORC Resource Update, 38.0 Million Tonnes
- [2] 30/05/2012 ASX Taralga Bauxite Resource Increased 50% to 37.9 Million Tonnes
- [3] 15/08/2011 ASX Maiden Guyra Resource, 6.0 Million Tonnes
- [4] 29/07/2012 ASX Binjour Maiden Resource, 24.5 Million Tonnes
- [5] 08/11/2012 ASX Maiden Tasmania JORC Resource, 5.7 Million Tonnes
- [6] 03/12/2012 ASX Maiden QLD Mining Lease JORC Resource, 3.5 Million Tonnes

Direct Shipping Bauxite or "Direct Shipping "Ore"

All references in this report to direct shipping bauxite or direct shipping ore (DSO) refers to the company's exploration objective of defining or identifying DSO grade mineralisation.

True Width

The true-width of the deposit is not known and will be determined by further resource definition drilling.

Definitions

DSO bauxite	Bauxite that can be exported directly with minimal processing
Averaging method	Aggregated average grades in the table are length-yield-weighted averages of each metre's yields & grades.

About Australian Bauxite Limited: ASX Code ABZ

Australian Bauxite Limited (**ABx**) holds the core of the newly discovered Eastern Australian Bauxite Province. Its 41 bauxite tenements in Queensland, NSW and Tasmania covering 7,537 km^2 were rigorously selected on 3 principles:

1. good quality bauxite;
2. proximity to infrastructure connected to export ports; and,
3. free of socio-environmental or native title land constraints.

All tenements are 100% owned and free of obligations for processing and third-party royalties. ABx has already discovered many bauxite deposits and new discoveries are still being made as knowledge and expertise grows. ABx conducts vigorous reviews of the commercial viability of its projects and tenements, resulting in new acquisitions, but also reductions in area as exploration is conducted.

The company's bauxite is high quality and can be processed into alumina at low temperature – the type that is in short-supply globally. **Global resources declared to date total 115.6 million tonnes.** At the company's first drilling prospect in Inverell, northern NSW, a resource of 38.0 million tonnes[1] has been reported from drilling 35% to 40% of the area prospective for bauxite and a resource of 37.9 million tonnes[2] of bauxite has been reported at the Taralga project in southern NSW. A 6.0 million tonnes[3] maiden resource was declared at Guyra. A 24.5 million tonnes[4] resource has been declared at the Binjour Plateau in central QLD, confirming that ABx has discovered a significant bauxite deposit including some bauxite of outstandingly high quality. A 5.7 million tonnes[5] maiden resource has been declared for Tasmania. Australian Bauxite Limited aspires to identify large bauxite resources in the Eastern Australian Bauxite Province, which is emerging as one of the world's best bauxite provinces.

ABx has the potential to create significant bauxite developments in three states - Queensland, New South Wales and Tasmania. Its bauxite deposits are favourably located for direct shipping of bauxite to both local and export customers.

ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.

Figure 5: ABx Project Locations

APPENDIX

RESOURCE ESTIMATE METHOD

Qualifying statement

The information in this announcement that relate to Exploration Information are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and are directors of Australian Bauxite Limited.

Mr Rebek and Mr Levy have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Resources. Mr Rebek and Mr Levy have consented to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

The information in this announcement that relate to bauxite resource classifications is based on results and interpretations compiled by Ian Levy who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Levy is a qualified geologist and employed as CEO of Australian Bauxite Limited.

Geostatistical block modelling and polygon resource estimation was carried out by Mr Levy and project geologist, Thomas Grieve using MapInfo GIS software. The two independent methods yielded the same estimations, within a tight tolerance.

Mr Levy has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Resources. Mr Levy has consented in writing to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

More detailed explanations regarding resource methodologies are included in the Appendix.

Drilling: A total of 14 aircore holes were drilled in ML80126 totalling 186 metres. The regularity and continuity of the bauxite layer became immediately apparent from the relatively consistent results from hole to hole drilled in the identified bauxite zone. Boundaries of the bauxite proved sharp and mappable.

Six of the 14 holes intersected bauxite with grades and thicknesses above cut-off grade. Washing yields ranges from 60% to 84% when wet-sieved at 0.26 mm, averaging above 65% yield.

Bauxite Density: DSO bauxite density was assumed to be 1.95 dry tonnes per cubic metre based on gravimetric testing of similar bauxite types in drillcore the Binjour area, 40kms to the northeast.

Sampling and Laboratory Analysis: Drill samples were collected at 1 metre intervals from the aircore drillholes and analysed at ALS Laboratories in Brisbane including trihydrate (THA) available alumina ("Al_2O_3 Avl % 143") and reactive silica ("Rx SiO_2") measurements. Leach conditions to measure available alumina "Al_2O_3 Avl" and reactive silica "Rx SiO_2" were 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 minutes. The normal sample preparation method used was to wash the dried bauxite using a 0.26mm screen and analyse the material recovered on that screen.

Block Modelling Estimation Method: Estimation was done by both polygonal and geostatistical block modelling methods based on bauxite intercepts in drillholes, constrained within the geological and lease boundaries. The correspondence between polygonal estimates and block modelling was good.

The block size is 100m x 100m and drill spacing within the bauxite zones was typically at 150 to 200 metres spacings. Data interpolation using a search ellipse of up to 350 metres was done, based on statistical assessments of continuity. . All blocks within the geological and lease boundaries were classified as Inferred Resources due to the wide spaced drillholes, despite the good continuity characteristics in the data (as demonstrated in Figure 2).

Cut-Off Grade: Minimum resource criteria were 25% minimum available alumina (Al_2O_3 Avl % 143°) over 2 metres of bauxite thickness and 30% Al_2O_3 Avl % 143° over 1 metres.

Averaging and aggregating methods: Aggregated average intercept grades are length & yield weighted averages of each metre's grades & yields. Block grades are aggregated by length & yield weighted averaging of each block's length of bauxite, yield and grades.

Correlations between sieved and In-Situ Raw Grades: 52% of the samples from bauxite holes were also analysed both in the raw, unsieved state and after sieving to allow a conversion factor to be determined for sieved results converted to raw results as per the following correlations:
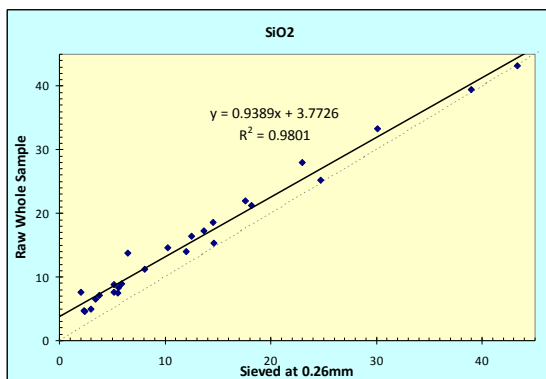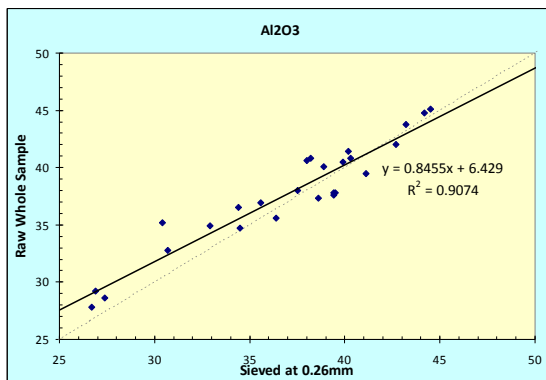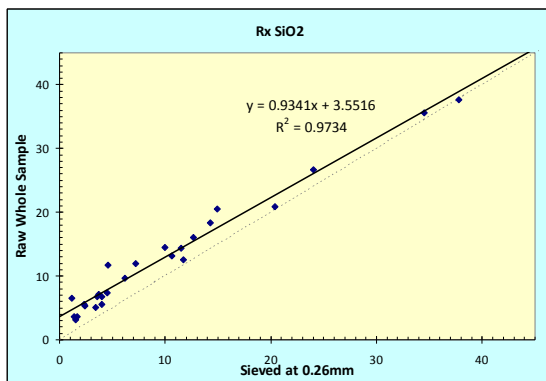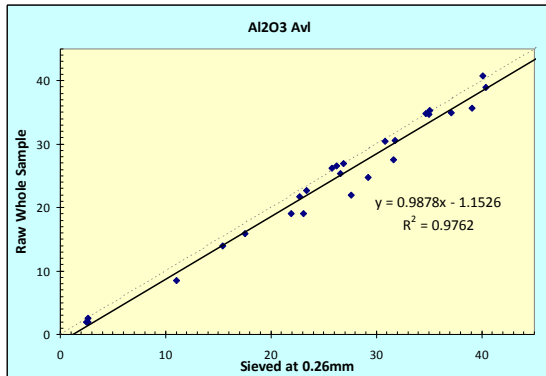
Raw grade = a x Sieved Grade + b

	Al2O3avl	Rx SiO2	Al2O3	SiO2	Fe2O3	TiO2	LOI
a	0.9878	0.9341	0.846	0.939	0.758	1.118	0.87
b	-1.153	3.5516	6.429	3.773	2.529	-0.36	2.281

All correlation coefficients are ~ 0.95

Al2O3 Avl

$y = 0.9878x - 1.1526$
$R^2 = 0.9762$

Rx SiO2

$y = 0.9341x + 3.5516$
$R^2 = 0.9734$

Al2O3

$y = 0.8455x + 6.429$
$R^2 = 0.9074$

SiO2

$y = 0.9389x + 3.7726$
$R^2 = 0.9801$

Fe2O3

$y = 0.7583x + 2.5293$
$R^2 = 0.9459$

TiO2

$y = 1.1183x - 0.3626$
$R^2 = 0.9349$

LOI

$y = 0.8699x + 2.2811$
$R^2 = 0.945$