13 August 2019

Metalsearch to Acquire High Purity Alumina Project

Metalsearch Limited ("MSE" or the "Company") is pleased to announce that it has entered into a binding agreement for the acquisition of 100% of the share capital in Abercorn Kaolin Pty Ltd, which owns the Abercorn High Purity Alumina ("HPA") Project located in Queensland, Australia ("Acquisition").

Highlights

- Binding agreement to acquire the Abercorn HPA Project consisting of EPM's 26837, 26903 and 19081 (128 km^2 tenement area).
- 24 RC holes drilled over an area of approximately 5.5km by 3.5km (19.25km^2), defining large scale resource potential, from surface.
- **All 24 holes intersected kaolinite**, the source of high quality HPA feedstock - the kaolin mineralisation remains open in all directions.
- **99.99% Al_2O_3 (4N HPA) already produced** from Cynthia kaolin prospect feedstock.
- High grade HPA feedstock **assay results include 33.71% Al_2O_3** (-10µm micron fraction)
- Commercial grade Aluminium Sulphate ("ALUM"), used in water purification, also produced from Cynthia kaolinite.
- Main sealed highway adjacent to project, mains power onsite and located close to two deep water ports.
- Highly experienced technical director John Goody to join MSE board. MSE will leverage his deep understanding of the project and product(s) to help deliver on the potential Abercorn presents.
- The project concept is for a moderate size open pit mine and process onsite to produce HPA and Alum and / or potential **direct shipping ore (DSO)** opportunities.

Background

MSE proposes to purchase 100% of the shares of Abercorn Kaolin Pty Ltd ("Abercorn"), to acquire a large-scale kaolinite prospect which has the potential to be developed into a world leading High Purity Alumina ("HPA") project in Queensland (Figure One). The kaolin mineralisation previously drilled at the Cynthia prospect offers the capacity to produce HPA and marketable volumes of higher-grade feedstock.

Assays completed to date indicate the -10µm fraction has consistently graded at >33% Al_2O_3, representing circa 20% of raw ore mass. The ability to cost effectively and

upgrade bulk raw ore to a higher yield of Al_2O_3, via simple grain size sorting, at considerable scale, leads to the investigation into potential DSO opportunities or joint venture production, from global end users seeking to source high grade Al_2O_3.

HPA is used across a range of high-tech markets such as lithium-ion batteries, sapphire glass, smartphones, tablets, televisions, watches, optical lens, bio-medical devices, light-emitting diodes ("LED") lights and electronic circuitry markets. HPA demand is set to escalate and outstrip production due to forecast global electric vehicle ("EV") adoption.

ALUM is widely used as a coagulating agent in the purification of drinking water and waste water treatment plants. In water purification, it causes suspended impurities to coagulate into larger particles and then settle to the bottom of the container (or be filtered out) more easily. Global demand for cost effective water purification solutions remains high.

About Abercorn Kaolin Pty Ltd

Abercorn is the 100% owner of the Cynthia Kaolinite deposit, which comprises 3 contiguous Exploration Permits Mineral ("EPM") for a total of 38 sub-blocks, an **area of 128km^2**, these are EPM 26837 comprising 33 sub-blocks, EPM 26903 comprising 4 sub-blocks and EPM 19081 comprising one sub-block (Figure 1).

The Project is situated approximately 135km south of the deep-water port of Gladstone and 125km west of the deep-water port of Bundaberg in Central Queensland. Both of these major ports are connected to the project by sealed roads. The Burnett highway bisects the property (Figure 2).

Figure 1 – Project Location

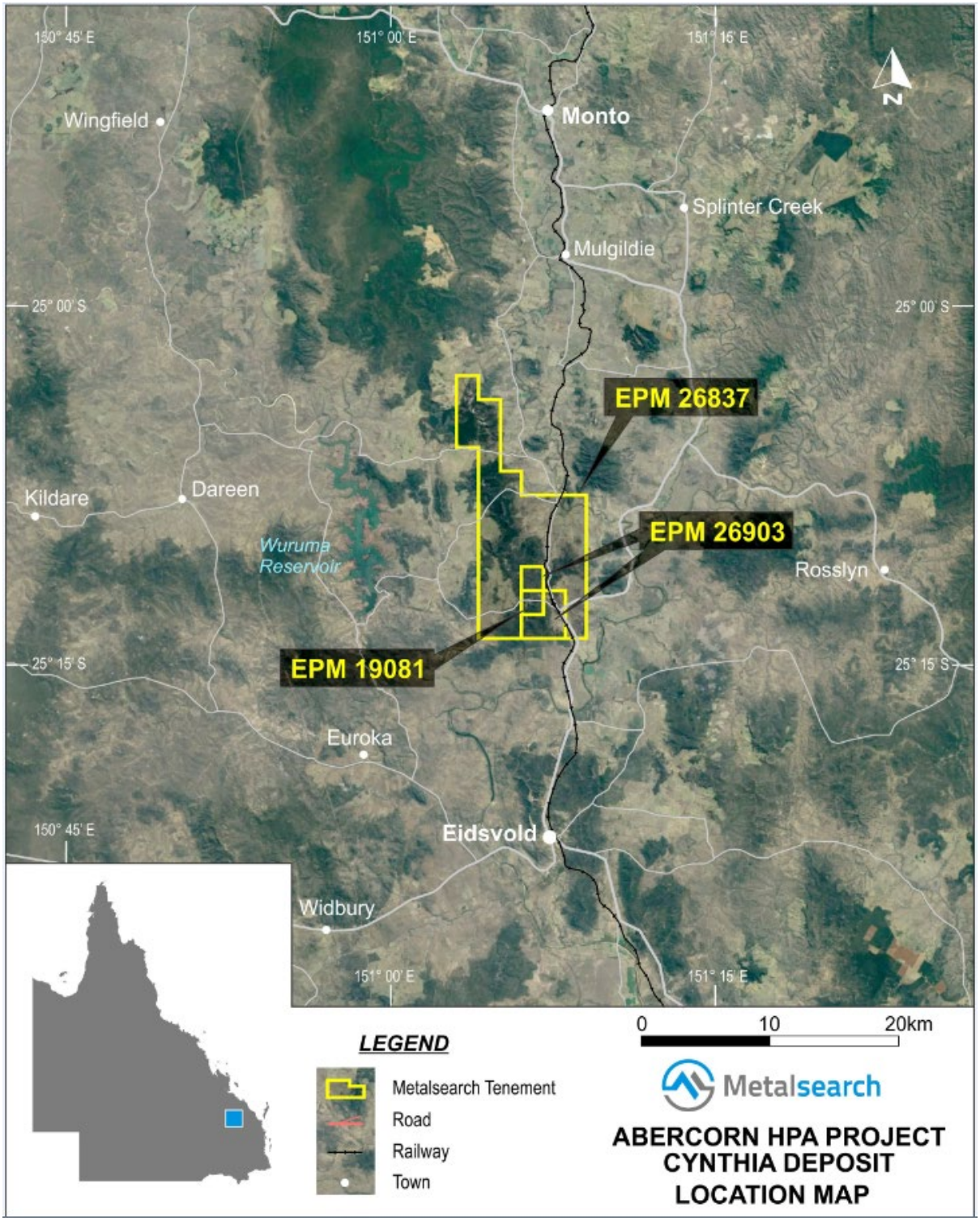
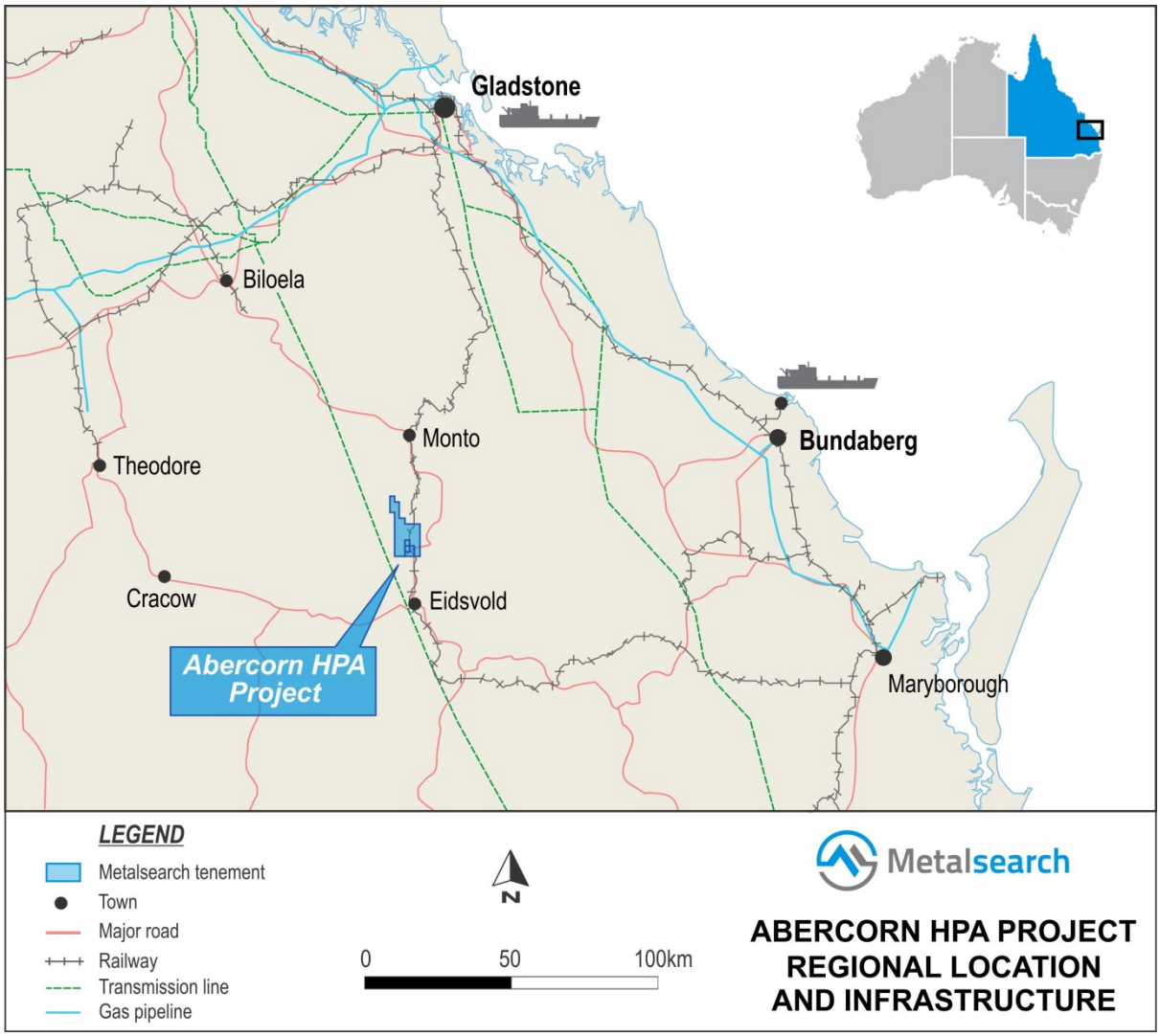


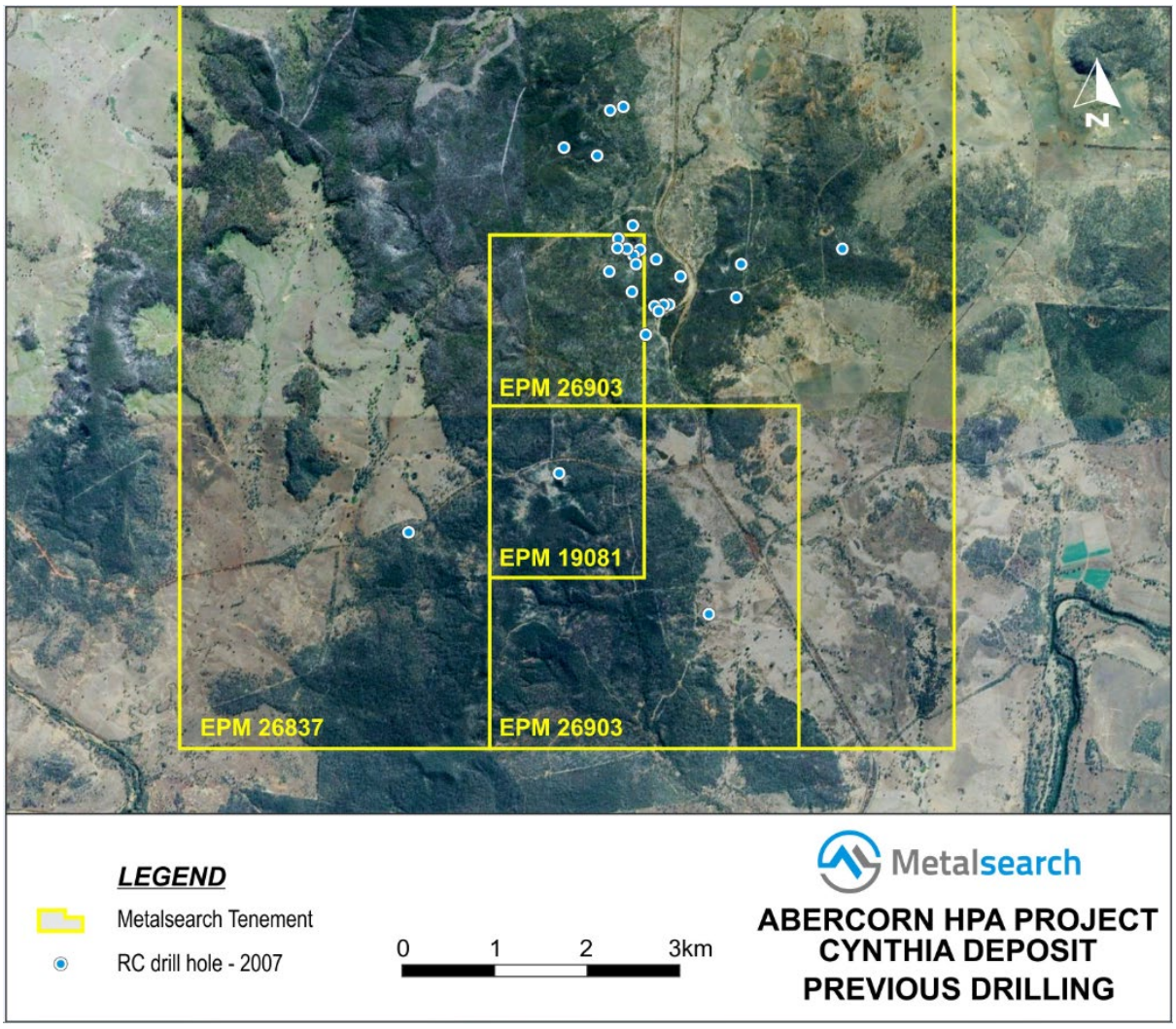
Figure 2 – Project Location and Infrastructure



The Cynthia Kaolinite Deposit

The scale of the Cynthia deposit is not quantified at this point in time and no JORC resource has been quantified in accordance with the JORC Code. However, twenty-four Reverse Circulation ("RC") drill holes have been drilled within the tenure, over an area of approximately 5.5km N-S and 3.5km E-W (19.25km²) (Figure 3).

Figure 3 – 2007 RC Drilling



All twenty-four holes intersected kaolinite and the kaolin mineralisation remains open in all directions. Indicating the potential ore body is of a very large, high grade nature. The deposit is thought to have a North - South extent in excess of 20km and a variable East – West extent of between 1km and 10km. The vertical extent of the kaolin as shown by drilling is between 3m and 35m thick, with little to no overburden, averaging only 1.5m thick (Figures 4, 5).

Figure 4 – Drilling at Cynthia

Figure 5 – Fine White Kaolin Samples

Advantages of the Cynthia Kaolinite Prospect

- Low cost operation - straight forward open cut mining
- Little to no overburden
- Low impurities
- No drill and blast required / low environmental impact
- Pit depth can be kept to a maximum of 10 metres
- Main sealed highway adjacent to the deposit
- Mains power on site / major power transmission line within 5km of site
- Large water supply nearby and within EPM
- Within close proximity of two towns offering a readily accessible and flexible workforce
- Close to two deep water ports

Table 1 shows a breakdown of the size fractions of the raw ore.

Table 1 - Size Fractions of the Kaolin Feedstock

Product	Size (µM)	Mass (%)	Cum. % Passing
+90	90	43.91	56.09
-90 +75	75	2.96	53.13
-75 +53	53	4.99	48.14
-53 +45	45	1.63	46.51
-45 +38	38	2.05	44.46
-38 +25	25	2.20	42.26
-25 +20	20	1.19	41.07
-20 +10	10	19.57	21.50
-10	-10	21.50	
TOTAL		100%	

- The -10µm micron fraction which represents 21% of the raw ore contains 53% of all the Al_2O_3 in the raw ore. This fraction assayed **33.71%** Al_2O_3.
- The -20µm fraction which represents 41% of the raw ore contains 88.3% of all the Al_2O_3 in the raw ore. This fraction assayed **29.5%** Al_2O_3.

These feed stock grades put the Cynthia prospect in a class of its own, when aligned to the potential large scale of the ore body delivering material for processing into HPA.

High Purity Alumina (HPA) Market

The HPA market is experiencing significant growth. Demand is primarily being driven by sapphire glass and lithium-ion batteries. HPA is a very pure form of aluminium oxide (Al_2O_3) and a pre-cursor material required for the manufacturing of sapphire glass and ceramic coated lithium-ion battery separators (Figure 6).

Figure 6 – HPA's Core Applications – Delivering Critical Components to New Tech

Synthetic Sapphire

HPA is a critical input in the production of synthetic sapphire - one which has no substitute.

Applications:

- Substrates for LED lights, lenses and semiconductors
- Scratch-resistant sapphire glass used for optical lenses, watch faces, televisions, tablet and smartphone components
- Bio-medical devices and phosphors

The LED market is forecast to grow **from US$26Bn (2016) to US$54Bn by 2022** and progressively take the major share of the global lighting market of US$110Bn (Source: Zion market research).

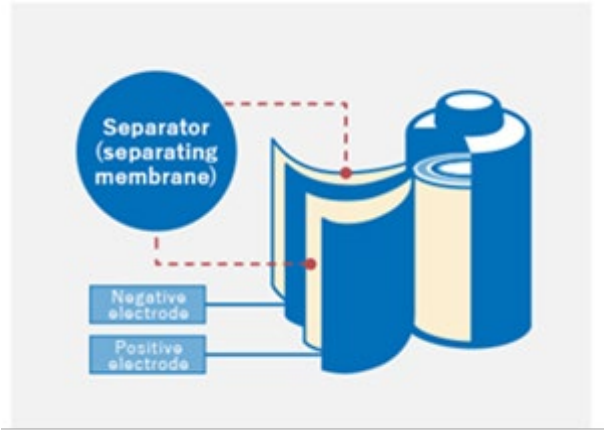
The higher brightness, energy efficiency, and longer life span of LED lights are some of the major factors that offer tremendous opportunities for LED lighting market in years to come.

Lithium-ion Batteries

HPA's fastest growing market is in lithium-ion batteries. HPA is now being used as a coating on the separators in lithium-ion batteries in the EV industry.

The separator is vital to the safety, integrity and performance of the lithium-ion batteries used in electric vehicles in particular (Figure 7).

Figure 7 – HPA Separators in Lithium-Ion Batteries

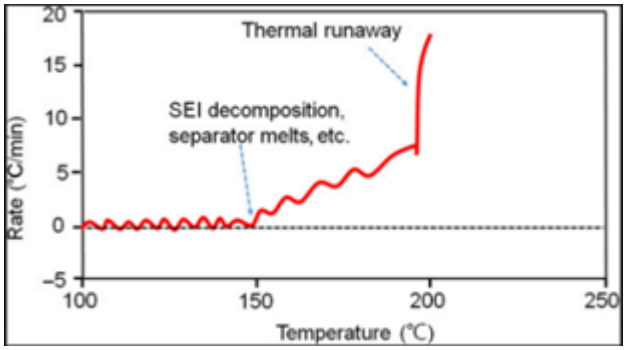


HPA is coated onto the separator between the anode and the cathode in the lithium-ion battery.

Previously, most lithium-ion battery separators were based on polyethylene or polypropylene which were adequate for cathodes such as lithium iron phosphate, lithium manganese oxide and lithium cobalt oxides. However, the demand for higher energy density in a smaller more compact battery has meant higher operating temperatures in the batteries and the need for better quality separators such as HPA.

HPA coated separators are extremely important in reducing flammability as the separators can tolerate much higher temperatures than traditional separators (>200ºC), resulting in thermal stability (Figure 8).

Figure 8 – Thermal Stability of Lithium-Ion Batteries



The SEI layer is a component of lithium-ion batteries, formed from the decomposition materials associated with the electrolyte of the battery. HPA coated separators can tolerate temperatures >200ºC.

HPA coated separators have also been shown to significantly lengthen battery life due to lower self-discharge and increased battery discharge rate.

Premier resource forecasting agency, CRU, forecast demand for 4N HPA in lithium-ion batteries is set to increase at an extraordinary Compound Annual Growth Rate (**CAGR) of 57.5% between 2017 and 2025.** This, combined with a healthy growth outlook for LED demand, leads CRU to forecast that **overall HPA demand is set to treble over the next 7 years** (Source: CRU Group).

Geology

The Bundamba group, of upper Triassic – Lower Jurassic Age crops out throughout the Abercorn Project area, striking approximately NNW and with a gentle dip to the East. The Bundama Group, within the project area, consists of three recognised formations:

The Box Vale Sandstone – A light-coloured clayey sandstone at the top of the group

The Evergreen Shale – A light-coloured clay shale which includes the ironstone

The Precipice Sandstone – Which forms the Basel sediments of the Bundamba Group in this area.

Sedimentation is lenticular and individual shale and sandstone horizons are not laterally persistent.

To the east in the valley of the Burnett River, the Bundamba Group is overlain by the Jurassic Mulgildie Coal Measures.

Exploration Work Completed (Appendices 1, 2, 3)

In January 2007, a reconnaissance air core drilling programme was carried out to investigate the potential for kaolin resources suitable for paper coating and other applications between Abercorn and Cynthia, which lies approximately 30km south of Monto.

Twenty-four drill holes (814m) were drilled to test the extent and characteristics of the clay deposits in the area.

All twenty-four holes intersected kaolinite, with the average intersection of kaolinite being approximately 30m. Hole 20 intersected Kaolinite from surface to a depth of 54m, ending in mineralisation.

White claystone and clay sandstone are exposed in a railway cutting approximately 2.5km north of Cynthia. Topographically higher locations in the area are capped with silcrete. The sequence of silcrete and clay deposits is interpreted as a partially eroded lateritic weathering profile.

The overburden was between 0m and 10m thick and averaged approximately 1.5m. The SG of clay is approximately 1.86 tonne per cubic metre.

Within the above 19.25km^2 there is a more intensely drilled area containing 14 drill holes within an area of 1.05km^2 (Cynthia 1). This area, which measured 1500m by 700m, had an average overburden of approximately 0.8m (Figure 3).

Exploration Potential

The sheer size of the kaolin at the Cynthia prospect is not quantified at this point in time. The current size of the Cynthia kaolin mineralisation puts Abercorn in the enviable position of being able to produce several size fractions that contain very high grades of AL_2O_3.

Of the twenty-four RC drill holes completed, every hole intersected kaolinite and the mineralisation remains open in all directions. Indicating it is of a very large, potentially high grade nature.

The deposit is thought to have a North - South extent in excess of 20km and a variable East – West extent of between 1km and 10km. The vertical extent of the kaolinite as shown by drilling is between 3m and 35m thick, with little to no overburden.

The kaolinite is whitish in colour and very fine in particle size (Figure 9).

Figure 9 – Cynthia Kaolin Mineralisation

MSE plans to conduct an extensional drilling campaign, as soon as possible, to further define the size and scale of the ore body and to produce a JORC (2012) compliant Mineral Resource.

Abercorn Transaction

MSE has signed a binding term sheet with the owners of Abercorn ("the Vendors") to purchase 100% of the shares in Abercorn ("Sale Shares").

Key Commercial Terms of Acquisition

The Acquisition is a combination of cash and MSE shares including deferred payments to the Vendors once key performance related milestones are achieved.

The Vendors comprise:

(i) Goody Investments Pty Ltd ACN 066 933 597.

(ii) Anthony Paul Sheridan.

(iii) Gold Coast Tweed Pet Motels Pty Ltd ACN 613 383 592.

(iv) Peter Zardo <Zardo Family A/c).

(v) Pointciano Pty Ltd ACN 614 258 78 <Ivanhoe Investments A/c>

(vi) Monica Holdings Pty Ltd ACN 634 230 890 <Mnoica Family A/c>.

No Vendor is a related party of MSE.

The consideration for the Acquisition is summarised as follows:

- the payment by MSE of $50,000 as a non-refundable deposit;
- at completion, the payment by MSE of $300,000 as reimbursement for past expenditures;
- at completion, the issue by MSE to the Vendors of 235,000,000 ordinary fully paid shares in MSE ("MSE Shares") at a deemed issue price of $0.006 having a total value equivalent to $1,410,000;
- issue of the deferred consideration set out below on satisfaction of each milestone;
    - upon certification by an independent Competent Person on or before the first anniversary of the date of the term sheet of an inferred JORC compliant resource of 10,000,000 tonnes of raw ore containing 29% Al_2O_3 at -20micron sizing, the issue by MSE to the Vendors of 75,000,000 MSE Shares: and
    - upon completion by the Company of a Scoping Study (as defined in the JORC Code) before the 3rd anniversary of the date of the term sheet, the issue by MSE to the Vendors of 75,000,000 MSE Shares.

No person will acquire a relevant interest of greater than 20% in the Company and as a result of the MSE Shares issued at completion of the Acquisition and any subsequent issue of MSE Shares under the consideration for the Acquisition will be deferred to the extent that, as a result of any such issue, the resulting voting power of any shareholder will increase to more than 20% in contravention of section 606(1) of the Corporations Act 2001 (Cth).

Completion of the Acquisition is subject to and conditional upon the satisfaction of various conditions precedent including (but not limited to):

(a) MSE obtaining all shareholder approvals required under Listing Rule 11.1.2 or any other approvals required by the ASX in relation to the transaction;

(b) MSE completing a capital raising of $2,000,000;

(c) MSE completing due diligence to its satisfaction of all legal, financial and technical aspects of Abercorn and the tenements; and

(d) MSE distributing to their shareholders a Notice of Meeting calling a general meeting of shareholders, to be held, to approve the Acquisition.

Capital Raising

In conjunction with, and as a condition to completion of, the Acquisition and subject to Shareholder approval of the Acquisition, MSE proposes to conduct a capital raising by way of a placement to sophisticated investors to raise $2 million at an issue price of $0.006 per share ("Capital Raising").

Funds raised pursuant to the Capital Raising will be used for the following:

- Infill drilling to define JORC compliant resource
- Extensional RC drilling to further determine the scale of the resource
- Further regional exploration work
- Commencement of work on a Scoping Study
- Working capital

Cautionary Statement

MSE is optimistic about concluding this Acquisition, however as at the date of this announcement there cannot be any assurance that the conditions precedent with respect to the transaction will be completed to the satisfaction of each party. Accordingly, investors are cautioned against making investment decisions based on this announcement.

Effect on Capital Structure

If the Acquisition and the Capital Raising are completed in full as described above, the issued share capital structure of MSE will be as follows:

Shares	
Current MSE on issue	480,910,159
Capital Raising @ $0.006 per MSE Share to raise $2,000,000	333,333,333
Proposed issue of MSE Shares to Vendors at Completion	235,000,000
Proposed issue of MSE Shares to corporate adviser	35,000,000
Proposed maximum total MSE Shares on issue at Completion	**1,084,243,492**
Proposed issue of MSE Shares to Vendors upon satisfaction of First Milestone	75,000,000
Proposed issue of MSE Shares to Vendors upon satisfaction of Second Milestone	75,000,000
Proposed maximum total MSE Shares on issue if Milestones are met	**1,234,243,492**

Board Appointment

On completion the Vendors will have the right to appoint one nominee to the board of MSE.

The Vendors have nominated John Goody to join the MSE board as a non-executive director. MSE will leverage his deep understanding of the project and product(s) to help deliver on the potential Abercorn presents.

John Goody is Member of the Australian Geological Society with over 45 years' experience in minerals exploration in Australia and overseas. He was a founding director of Aeon Metals Ltd (ASX: AML) which now has circa $150m market cap and currently a director of minerals exploration company Cobalt Queensland Pty Ltd.

Next Steps

- MSE will provide the necessary resources to assist in achieving key milestones
- Immediately undertake extensional RC drilling to further define the size and scale of the resource.
- Concurrently complete an infill drilling program to produce a JORC compliant resource.
- Commence discussions with potential end users around product quality and off-take agreements.

Shareholder Approvals

The Company will despatch a notice of meeting to shareholders seeking the relevant approvals to proceed with the proposed Acquisition and Capital Raising.

Competent Person Statement

Statements contained in this announcement relating to historical exploration results, and current exploration results are based on, and fairly represents, information and supporting documentation prepared by Mr. Jeremy Read, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 224610. Mr Read is a Non-Executive Director and part-time consultant to the Company and has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the *Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012*. Mr Read consents to the use of this information in this announcement in the form and context in which it appears.

Appendix 1

Drill Information – 24 holes Completed in 2007

Hole_ID	Easting (MGA94 - 56J)	Northing (MGA94 - 56J)	Elevation (MGA94 - 56J)	Depth (m)	Inc (Degrees)
CK001	311084	7209515	213	42	-90
CK002	307821	7210351	283	24	-90
CK003	309439	7211012	310	30	-90
CK004	310359	7212520	265	30	-90
CK005	310730	7213154	255	18	-90
CK006	310460	7213326	258	36	-90
CK007	310207	7212976	267	36	-90
CK008	310148	7213440	259	51	-90
CK009	309808	7214439	273	24	-90
CK010	309939	7214931	265	27	-90
CK011	309445	7214518	288	30	-90
CK012	310207	7213689	252	39	-90
CK013	309953	7213195	266	39	-90
CK014	310538	7212844	235	39	-90
CK015	311390	7213293	281	24	-90
CK016	311336	7212932	282	21	-90
CK017	312480	7213472	263	42	-90
CK018	310287	7213435	245	48	-90
CK019	310215	7213366	252	54	-90
CK020	310241	7213272	255	48	-90
CK021	310044	7213444	241	41	-90
CK022	310610	7212844	254	23	-90
CK023	310495	7212768	253	18	-90
CK024	310454	7212823	260	30	-90

Appendix 2

Geochemical Information – 24 holes Completed in 2007

DRILL HOLE	FROM (m)	TO (m)	FIELD SAMPLE NO	FRACTION	SAMPLE	Al_2O_3 (%)	CaO (%)	Fe_2O_3 (%)	K_2O (%)	MgO (%)	MnO (%)	Na_2O (%)	P_2O_5 (%)	SiO_2 (%)	TiO2 (%)	LOI (%)
CK003	6	7	CK003-7	-45um	063/01	29.2	0.04	0.57	0.65	0.15	<0.01	0.03	0.15	58	0.975	10.1
CK003	7	8	CK003- 8	-45um	063/02	30.6	0.04	0.56	0.67	0.15	<0.01	0.03	0.14	57	1.05	10.5
CK003	10	11	CK003-11	-45um	063/03	30.2	0.03	0.58	0.61	0.14	<0.01	0.03	0.05	56.8	0.96	10.7
CK003	14	15	CK003-15	-45um	063/04	27.5	0.04	0.7	0.54	0.13	<0.01	0.03	0.11	60.5	0.8	9.57
CK008	6	7	CK008-7	-45um	063/05	26.5	0.06	0.92	0.79	0.23	<0.01	0.05	0.1	60.2	1.48	9.59
CK009	7	8	CK008-8	-45um	063/06	26.2	0.07	0.98	0.94	0.26	<0.01	0.05	0.1	60.7	1.29	9.36
CK010	10	11	CK008-11	-45um	063/07	27.4	0.05	0.81	0.88	0.21	<0.01	0.05	0.09	60.3	0.995	9.78
CK011	14	15	CK008-15	-45um	063/08	27.7	0.05	0.72	1.1	0.26	<0.01	0.04	0.1	59.5	1.17	9.65
CK012	8	9	CK012-9	-45um	063/09	28	0.05	1.06	1.51	0.23	<0.01	0.49	0.16	53.4	1.01	14.1
CK013	9	10	CK012-10	-45um	063/10	27.7	0.05	1.1	1.36	0.22	<0.01	0.36	0.17	54.7	1.04	13.1
CK014	10	11	CK012-11	-45um	063/11	28.4	0.04	0.94	1.4	0.22	<0.01	0.4	0.11	53.9	1.03	13.4
CK015	18	19	CK012-19	-45um	063/12	25.2	0.05	0.82	1.72	0.29	<0.01	0.13	0.1	59.8	1.13	10.7
CK016	19	20	CK012-20	-45um	063/13	25.4	0.05	0.96	1.54	0.3	<0.01	0.09	0.1	60.6	1.12	9.97
CK017	20	21	CK012-21	-45um	063/14	27.3	0.05	0.79	1.09	0.21	<0.01	0.04	0.11	59.5	0.825	10.1
CK014	4	5	CK014-5	-45um	063/15	28.3	0.05	0.81	1.03	0.24	<0.01	0.05	0.09	58.6	1.22	10.1
CK014	5	6	CK014-6	-45um	063/16	28.2	0.05	0.82	1.03	0.23	<0.01	0.04	0.1	58	1.38	9.94
CK014	6	7	CK014-7	-45um	063/17	27.9	0.05	0.86	0.9	0.21	<0.01	0.04	0.08	59.1	1.15	10
CK014	7	8	CK014-8	-45um	063/18	28.6	0.04	0.81	0.89	0.21	<0.01	0.04	0.08	58.1	1.25	10.3

DRILL HOLE	FROM (m)	TO (m)	FIELD SAMPLE NO	FRACTION	SAMPLE	Al_2O_3 (%)	CaO (%)	Fe_2O_3 (%)	K_2O (%)	MgO (%)	MnO (%)	Na_2O (%)	P_2O_5 (%)	SiO_2 (%)	TiO2 (%)	LOI (%)
CK014	8	9	CK014-9	-45um	063/19	29.7	0.05	0.78	0.91	0.21	<0.01	0.04	0.06	56.4	1.08	10.6
CK014	9	10	CK014-10	-45um	063/20	28.1	0.04	0.7	0.95	0.22	<0.01	0.03	0.07	58.7	1.18	9.91
CK014	12	13	CK014-13	-45um	063/21	27.8	0.04	0.69	0.95	0.22	<0.01	0.03	0.08	60.1	0.935	9.47
CK014	16	17	CK014-17	-45um	063/22	28.2	0.05	0.69	0.93	0.21	<0.01	0.03	0.11	59.7	0.935	9.66
CK015	6	7	CK015-7	-45um	063/23	28.5	0.05	0.91	0.98	0.17	<0.01	0.09	0.18	55.9	1.15	11.8
CK016	6	7	CK016-7	-45um	063/24	21.7	0.06	1.08	0.84	0.16	<0.01	0.12	0.11	64.7	1.21	9.7
CK017	4	5	CK017-5	-45um	063/25	28.6	0.06	0.62	0.6	0.14	<0.01	0.03	0.09	58.2	1.2	10.1
CK019	10	11	CK019-11	-45um	063/26	27	0.08	1.03	1.31	0.28	<0.01	0.12	0.15	57.1	1.24	11
CK019	11	12	CK019-12	-45um	063/27	28.4	0.07	0.98	1.82	0.26	<0.01	0.16	0.19	53.4	1.08	13.3
CK019	12	13	CK019-13	-45um	063/28	27.9	0.06	1	1.83	0.25	<0.01	0.15	0.22	53.8	0.985	13.1
CK021	5	6	CK021-6	-45um	063/29	25.7	0.05	1.01	0.89	0.24	<0.01	0.04	0.09	61.8	1.21	9.14
CK021	10	11	CK021-11	-45um	063/30	29.4	0.06	0.86	0.91	0.21	<0.01	0.04	0.09	57.5	0.96	10.4
CJ022	7	8	CK022-8	-45um	063/31	28.3	0.05	0.83	1.03	0.24	<0.01	0.04	0.12	58.3	0.955	9.96
CK024	3	4	CK024-4	-45um	063/32	28.6	0.04	0.64	0.8	0.17	<0.01	0.04	0.09	58.2	0.83	11.5

Appendix 3

Geochemical Information – 2018 Re-Sampling of 2007 RC Drill Holes

					ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-XRF13n	ME-GRA05
Drill Hole	From	To	Size Fraction	SAMPLE	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	SrO	TiO2	V2O5	Zn	ZrO2	Total	LOI
	(m)	(m)		DESCRIPTION	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
CKD06	2	8	-88 -20um	CKD06 02-08 -20um	27.32	0.05	0.07	0.01	0.95	1.54	0.15	<0.01	0.29	0.09	4.08	53.6	0.04	1.18	0.01	<0.01	0.05	103.65	14.2
CKD06	2	8	+20-25um	CKD06 02-08 +20-25	6.03	0.04	0.03	0.01	0.36	0.41	0.06	<0.01	0.05	0.03	0.5	88.4	<0.01	1.17	<0.01	<0.01	0.19	100	2.74
CKD06	2	8	+25 -38um	CKD06 02-08 +25 -38	5.61	0.04	0.03	<0.01	0.33	0.4	0.05	<0.01	0.04	0.03	0.45	89.4	<0.01	0.97	<0.01	<0.01	0.24	99.95	2.36
CKD06	2	8	+38 -45um	CKD06 02-08 +38 -45	5.56	0.04	0.03	0.01	0.32	0.36	0.05	<0.01	0.05	0.03	0.45	89.3	<0.01	0.94	<0.01	<0.01	0.33	99.94	2.47
CKD06	2	8	+45 -53um	CKD06 02-08 +45 -53	4.99	0.04	0.03	0.01	0.3	0.3	0.05	<0.01	0.05	0.02	0.35	90.2	<0.01	0.98	<0.01	<0.01	0.37	99.95	2.26
CKD06	2	8	+53 -75um	CKD06 02-08 +53 -75	4.45	0.04	0.05	<0.01	0.25	0.24	0.03	<0.01	0.03	0.02	0.29	91.9	<0.01	0.68	<0.01	<0.01	0.15	99.96	1.83
CKD06	2	8	+75 -90um	CKD06 02-08 +75 -90	3.5	0.04	0.02	<0.01	0.19	0.19	0.03	<0.01	0.01	0.01	0.24	93.8	<0.01	0.4	<0.01	<0.01	0.06	100	1.5
CKD06	9	11	-11 -20um	CKD06 09-11 -20um	28.02	0.04	0.06	0.01	1.4	1.8	0.23	<0.01	0.13	0.07	2.37	52.3	0.02	0.91	0.01	<0.01	0.03	99.99	12.59
CKD06	9	11	+20-25um	CKD06 09-11 +20-25	7.53	0.04	0.03	0.01	0.63	0.74	0.12	<0.01	0.05	0.04	0.39	85.7	<0.01	1.49	0.01	<0.01	0.25	99.95	2.92
CKD06	9	11	+25 -38um	CKD06 09-11 +25 -38	6.91	0.04	0.03	0.01	0.58	0.7	0.11	<0.01	0.05	0.04	0.38	86.3	<0.01	1.36	0.01	<0.01	0.4	99.96	3.04
CKD06	9	11	+38 -45um	CKD06 09-11 +38 -45	5.72	0.04	0.03	0.01	0.51	0.6	0.1	<0.01	0.05	0.04	0.36	88.2	<0.01	1.36	0.01	<0.01	0.55	99.95	2.37
CKD06	9	11	+45 -53um	CKD06 09-11 +45 -53	4.83	0.04	0.03	0.01	0.43	0.49	0.09	<0.01	0.03	0.03	0.27	90	<0.01	1.26	0.01	<0.01	0.48	99.97	1.97
CKD06	9	11	+53 -75um	CKD06 09-11 +53 -75	3.67	0.03	0.02	0.01	0.32	0.39	0.06	<0.01	0.03	0.02	0.19	92.5	<0.01	0.89	<0.01	<0.01	0.17	99.96	1.66
CKD06	9	11	+75 -90um	CKD06 09-11 +75 -90	2.9	0.03	0.02	<0.01	0.23	0.31	0.05	<0.01	0.01	0.01	0.18	94.6	<0.01	0.5	<0.01	<0.01	0.03	99.99	1.11
CKD06	23	28	-20um	CKD06 23-28 -20um	29.51	0.02	0.06	0.01	1.06	1.48	0.31	<0.01	0.04	0.04	0.15	56.3	<0.01	1	0.01	<0.01	0.03	99.99	9.97
CKD06	23	28	+20-25um	CKD06 23-28 +20-25	9.33	0.05	0.03	0.01	0.56	1.63	0.13	<0.01	0.07	0.04	0.05	83.8	<0.01	1.29	0.01	<0.01	0.13	99.97	2.84
CKD06	23	28	+25 -38um	CKD06 23-28 +25 -38	8.31	0.05	0.03	<0.01	0.48	1.78	0.12	<0.01	0.07	0.03	0.05	85.5	<0.01	1.08	0.01	<0.01	0.16	100.05	2.37
CKD06	23	28	+38 -45um	CKD06 23-28 +38 -45	6.94	0.05	0.03	0.01	0.41	1.64	0.1	<0.01	0.07	0.04	0.06	87.4	<0.01	1.02	0.01	<0.01	0.24	100.05	2.01
CKD06	23	28	+45 -53um	CKD06 23-28 +45 -53	5.85	0.05	0.03	0.01	0.36	1.48	0.09	<0.01	0.06	0.04	0.05	89.1	<0.01	0.98	0.01	<0.01	0.33	100.05	1.61
CKD06	23	28	+53 -75um	CKD06 23-28 +53 -75	4.8	0.04	0.02	0.01	0.32	1.14	0.08	<0.01	0.05	0.03	0.05	90.5	<0.01	0.94	0.01	<0.01	0.44	100	1.57
CKD06	23	28	+75 -90um	CKD06 23-28 +75 -90	3.22	0.03	0.02	<0.01	0.25	0.72	0.06	<0.01	0.02	0.02	0.04	93.4	<0.01	0.81	0.01	<0.01	0.22	99.98	1.14
CKD07	14	17	-88 -20um	CKD07 14-17 -20um	30.97	0.03	0.04	<0.01	0.54	0.82	0.15	<0.01	0.04	0.03	0.3	54.9	<0.01	1.03	0.02	<0.01	0.03	99.95	11.05
CKD07	14	17	+20-25um	CKD07 14-17 +20-25	6.32	0.04	0.02	<0.01	0.29	0.45	0.06	<0.01	0.02	0.02	0.07	89	<0.01	1.25	0.01	<0.01	0.14	100	2.31
CKD07	14	17	+25 -38um	CKD07 14-17 +25 -38	5.57	0.04	0.02	<0.01	0.27	0.42	0.06	<0.01	0.03	0.02	0.05	90.2	<0.01	1.08	0.01	<0.01	0.19	99.94	1.98
CKD07	14	17	+38 -45um	CKD07 14-17 +38 -45	4.54	0.04	0.02	<0.01	0.23	0.35	0.05	<0.01	0.02	0.02	0.06	91.7	<0.01	0.98	0.01	<0.01	0.25	100.05	1.78
CKD07	14	17	+45 -53um	CKD07 14-17 +45 -53	3.78	0.04	0.02	<0.01	0.21	0.29	0.04	<0.01	0.02	0.02	0.05	92.8	<0.01	0.91	0.01	<0.01	0.34	99.96	1.43
CKD07	14	17	+53 -75um	CKD07 14-17 +53 -75	2.76	0.03	0.02	<0.01	0.18	0.21	0.03	<0.01	0.01	0.02	0.05	94.3	<0.01	0.94	0.01	<0.01	0.42	100	1.04
CKD07	14	17	+75 -90um	CKD07 14-17 +75 -90	1.88	0.03	0.02	<0.01	0.14	0.16	0.03	<0.01	0.01	0.01	0.04	95.8	<0.01	0.76	<0.01	<0.01	0.21	99.98	0.86
CKD07	18	21	-88 -20um	CKD07 18-21 -20um	30.3	0.03	0.04	0.01	0.67	1	0.19	<0.01	0.07	0.05	0.44	55	0.01	1.06	0.02	<0.01	0.03	100.05	11.12
CKD07	18	21	+20-25um	CKD07 18-21 +20-25	7.23	0.04	0.03	<0.01	0.38	0.5	0.07	<0.01	0.03	0.02	0.06	87.5	<0.01	1.38	<0.01	<0.01	0.19	100	2.57
CKD07	18	21	+25 -38um	CKD07 18-21 +25 -38	6.74	0.04	0.03	0.01	0.37	0.51	0.08	<0.01	0.03	0.03	0.06	88.2	<0.01	1.22	<0.01	<0.01	0.31	99.99	2.36
CKD07	18	21	+38 -45um	CKD07 18-21 +38 -45	5.15	0.04	0.02	<0.01	0.31	0.39	0.06	<0.01	0.02	0.03	0.06	90.3	<0.01	1.19	<0.01	<0.01	0.51	99.95	1.87
CKD07	18	21	+45 -53um	CKD07 18-21 +45 -53	4	0.04	0.02	<0.01	0.26	0.32	0.06	<0.01	0.02	0.03	0.05	91.9	<0.01	1.14	<0.01	<0.01	0.6	99.99	1.55
CKD07	18	21	+53 -75um	CKD07 18-21 +53 -75	2.99	0.03	0.02	0.01	0.21	0.22	0.04	<0.01	0.02	0.02	0.06	93.9	<0.01	0.97	<0.01	<0.01	0.36	100	1.15
CKD07	18	21	+75 -90um	CKD07 18-21 +75 -90	2.06	0.03	0.02	<0.01	0.16	0.18	0.03	<0.01	0.01	0.01	0.04	96	<0.01	0.63	<0.01	<0.01	0.09	100.05	0.76
Composite			+90um	CK+90um composit	2.12	0.03	0.01	<0.01	0.14	0.14	0.01	<0.01	<0.01	0.01	0.14	96.3	<0.01	0.22	<0.01	<0.01	0.02	100	0.85
CKD24	5	8	-20um	CKD24 05-08 -20um	31.35	0.02	0.04	<0.01	0.64	0.78	0.16	<0.01	0.03	0.04	0.07	54.9	<0.01	1	0.02	<0.01	0.03	100	10.93
CKD15	3	8	-20um	CKD15 03-08 -20um	27.71	0.04	0.05	0.01	0.89	0.86	0.15	<0.01	0.05	0.09	0.53	58.7	0.04	1.23	0.01	<0.01	0.05	99.96	9.55
CKD15	10	14	-20um	CKD15 10-14 -20um	29.35	0.03	0.06	0.01	1.18	1.26	0.19	<0.01	0.21	0.06	2	53.5	0.02	0.97	0.01	<0.01	0.04	100	11.11
CKD07	10	13	-20um	CKD07 10-13 -20um	30.57	0.03	0.05	0.01	0.76	0.81	0.17	<0.01	0.05	0.06	0.32	55	0.02	1.38	0.02	<0.01	0.04	100	10.73
CKD07	22	25	-20um	CKD07 22-25 -20um	31.03	0.04	0.04	<0.01	0.64	1.16	0.19	<0.01	0.08	0.06	0.98	53.8	0.02	0.91	0.01	<0.01	0.03	99.97	10.98
CKD07	26	29	-20um	CKD07 26-29 -20um	27.23	0.03	0.05	<0.01	0.79	1.1	0.22	<0.01	0.03	0.04	0.23	59.9	<0.01	1	0.01	<0.01	0.04	100	9.33
CKD14	2	4	-20um	CKD14 02-04 -20um	30.99	0.03	0.06	0.01	0.96	0.94	0.21	<0.01	0.04	0.05	0.09	54.7	<0.01	1.12	0.02	<0.01	0.04	99.98	10.72
CKD15	3	6	-20um	CKD15 03-06 -20um	29.18	0.04	0.05	0.01	0.89	0.72	0.14	<0.01	0.04	0.09	0.35	56.6	0.03	1.41	0.01	<0.01	0.05	100.05	10.41
CK Composite			+20-25um	CK +20 -25 composit	6.89	0.04	0.03	0.01	0.41	0.46	0.08	<0.01	0.05	0.03	0.06	87.8	<0.01	1.51	0.01	<0.01	0.23	100	2.4
CK Composite			+25 -38um	CK +25 -38 composit	6.36	0.04	0.03	0.01	0.38	0.46	0.08	0.01	0.04	0.03	0.09	88.6	<0.01	1.29	0.01	<0.01	0.35	99.98	2.2
CK Composite			+38 -45um	CK +38 -45 composit	4.97	0.03	0.03	0.01	0.31	0.37	0.06	<0.01	0.03	0.03	0.07	90.8	<0.01	1.09	<0.01	<0.01	0.44	100	1.77
CK Composite			+45 -53um	CK +45 -53 composit	4.04	0.03	0.02	0.01	0.27	0.31	0.06	<0.01	0.03	0.03	0.06	92.2	<0.01	1	<0.01	<0.01	0.42	99.99	1.5
CK Composite			+53 -75um	CK +53 -75 composit	3.25	0.03	0.02	0.01	0.22	0.25	0.05	<0.01	0.03	0.02	0.08	93.8	<0.01	0.77	<0.01	<0.01	0.23	99.97	1.19
CK Composite			+75 -90um	CK +75 -90 composit	2.18	0.03	0.02	0.01	0.15	0.17	0.03	<0.01	0.01	0.01	0.06	95.9	<0.01	0.51	<0.01	<0.01	0.1	100.05	0.84

JORC TABLE

TABLE 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	**Historical Drill Samples** 24 reverse circulation drill holes for 814m were previously drilled within the Abercorn Project area (EPM's 26837, 26903, 19081) in 2007 by Abercorn Kaolin Pty Ltd. The drilling was conducted using a reverse circulation TD 375-2 drilling rig supplied by Drill Torque Queensland. The drill rig was mounted on a 4x4 MAN truck, utilising an onboard 900x300 compressor capable of drilling reverse circulation holes to 100m depth. The drill holes were approximately 125mm in diameter. A report on the drilling from 2007 stated the details of the drilling and sampling including drill hole collar location, azimuth, dip and historic assay results, etc. Samples from the 24 reverse circulation drill holes, drilled in 2007, were collected on a 1m basis. Each one metre sample passed through the reverse circulation drilling rig cyclone into a bulk sample bag. The entire bulk sample bag was passed over a riffle splitter to produce a 3kg representative sample. The remainder of the original bulk 1m sample was retained. In total 357m 1m samples were collected. Of these samples, 32 from 11 drill holes were tested for grain size distribution, clay brightness and whole rock analysis. This analysis was done primarily to determine the potential of the Abercorn Project to host a viable kaolin deposit for use in the paper and coating industries. In July and August 2018, re-examination of the original assay results from the drilling completed in 2007, suggested that the kaolin on the Abercorn Project had potential as feedstock for processing into High Purity Alumina. Therefore, a second round of sampling and assaying of samples was undertaken using material from the bulk 1m RC drill samples retained from the 2007 drilling program. Composite samples were produced from 5 drill holes (CK006, CK007, CK014, CK015, CK024), sized into different size fractions and assayed.

Criteria	JORC Code explanation	Commentary
		Three composite samples from drill hole CK006 were produced from the 1m samples over the down hole intervals 2-8m, 9-11m and 23-28m. Two composite samples from drill hole AC007 were produced from the 1m samples over the down hole intervals 14-17m and 18-21m. A single composite sample from drill hole CK014 was produced from the 1m samples over the down hole interval 2-4m. Two composite samples from drill hole CK015 were produced from the 1m samples over the down hole intervals 3-8m and 10-14m. A single composite sample from drill hole CK024 was produced from the 1m samples over the down hole interval 5-8m. A 56 kg overall composite sample was made by combining the composite samples from holes CK006, CK007, CK014, CK015, CK024, into one overall, large scale composite sample. The 56kg overall composite sample was sized using a cyclone classifier. Four different size fraction samples were then produced; the cyclone underflow at -20 microns, the cyclone overflow at -20 to +10 microns, plus +3.35 microns and +38 microns (4 different size fractions in total). All 4 size fractions of the 56kg overall composite sample were analysed using ALS method ME-XRF13n (details below). A 4.25kg sample from down hole depth 3-4m in drill hole CK024 was prepared for initial metallurgical test work preformed by NAGROM (“the Mineral Processors”) of 49 Owen Road, Kelmscott, Western Australia. The 4.25kg sample from drill hole CK024 was agitated at 50% (w/w) for 30 minutes at 1800rpm and then immediately screened to -45 microns. 34.58% of the mass reported to the -45 micron fraction, which had a head grade of 5.418% Al and 39.636% Si and contained 93.86% of the Al. The -45 micron fraction was calcined in alumina crucibles to 650^{o}C for four hours and then forwarded to leaching to extract the Al into a precipitate. The calcined -45 micron material was leached for 4 hours in a stirred breaker with 32% HCl, extracting 85.26% of the Al. The Al was precipitated from the leach liquor by sparging with HCl gas. Second, third and fourth stage leaching and precipitation were then conducted in a similar manner as the first stage leaching. A sub-sample of the washed precipitate after stage four leaching, was roasted in a quartz glass tube for 2 hours at 450^{o}C and then for four hours at 1170^{o}C.

Criteria	JORC Code explanation	Commentary
		The roasted product was washed twice with Suprapur ™ grade water before being assayed. The roasted product returned an assay with no detectable metals other than Al. A mass loss of 78% occurred during the roasting process. A second sub-sample of the precipitate was also roasted in a quartz glass tube for 2 hours at 450°C and then for four hours at 1170°C. The second roasted product was washed twice with Suprapur ™ grade water before being assayed. The second roasted product returned an assay with detectable metals, other than Al, at less than 0.01%. **Analysis** The 32 3kg 1m reverse circulation samples from 11 drill holes from the drilling completed in 2007, were sent to Amdel Laboratory in Adelaide (job number N2308GE07). Each sample was sized, via wet screening (the exact preparation method is not known) and the -45 micron size fraction was assayed for the major elements Al_2O_3, CaO, Fe_2O_3, K_2O, MgO, MnO, Na_2O, P_2O_5, SiO_2, TiO_2, using a non-metallic preparation (the exact preparation method is not known). The 32 samples were also tested for brightness, given that the aim of the investigation in 2007 was to determine the potential of the project to deliver an economic kaolin project. In 2018 the focus of the project changed to determine the potential of the kaolin at Abercorn to be feedstock for a High Purity Alumina Operation. The composite samples from 5 drill holes (CK006, CK007, CK014, CK015, CK024) were sent to the ALS laboratory for analysis. The composite samples (see details above) were wet sized into the following fractions -20 microns, -38 microns, -45 microns, -53 microns, -75 microns and -90 microns, in order to determine the optimum screen size for recovery and subsequent beneficiation of the Al_2O_3. 50 composite samples, of different size fractions where assayed using ALS method ME-XRF13n. The samples were analysed by XRF for elements Al_2O_3, BaO, CaO, Cr2O3, Fe2O3, K_2O, MgO, MnO, Na_2O, P_2O_5, SO_3, SiO_2, SrO,TiO_2, V_2O_5, Zn, ZrO_2. Sample preparation comprised drying, weighing, crushing, sub-sampling and grinding to less than 75 microns for each size fraction of the composite samples. The samples were then analysed with results reported by elemental analysis expressed as metal

Criteria	JORC Code explanation	Commentary
		oxides as determined by X-Ray Fluorescence Spectrometry (XRF). In addition, Loss on Ignition (LOI) was also determined by Thermogravimetric Analyzer (TGA), which determines the loss of mass due to volatiles that are driven off when the samples if heated from 105^{o}C to 1000^{o}C.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	24 reverse circulation drill holes for 814m were previously drilled within the Abercorn Project area (EPM's 26837, 26903, 19081) in 2007 by Abercorn Kaolin Pty Ltd. The drilling was conducted using a reverse circulation TD 375-2 drilling rig supplied by Drill Torque Queensland. The drill rig was mounted on a 4x4 MAN truck, utilising an onboard 900x300 compressor capable of drilling reverse circulation holes to 100m depth. The drill holes were approximately 125mm in diameter. As the samples were produced by RC drilling there were no orientated samples.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	The RC drilling samples were collected through a cyclone attached to the RC drilling rig. Samples were collected into large plastic bags on a one-meter basis. Each 1 metre sample of RC drilling chips weighed approximately 20-30kg. The 1 metre RC drill samples were then passed over a riffle splitter and a 3kg sample was split off each 1m RC drill sample. Passing the sample through the cyclone and then use of the riffle splitter to produce the 3kg sample, ensured each sample sent for analysis was representative of each 1m drilled. The remainder of the sample from each 1m drilled was retained in case additional analysis needed to be performed.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	Each of the 24 RC drill holes completed in 2007 were geologically logged. The drill chips for each 1m interval from each of the 24 drill holes were examined from surface until the end of each drill hole describing the colour and composition of each sample, the mix of siltstones, clay, sandstone, the grain size, the percentage of the sample which is sand and the iron content. 100% of each drill hole was geological logged. The geological logging was quantitative in nature. Additional drilling and geological logging will be required in order to support a Mineral Resource estimation and Metallurgical Studies.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled*	The samples were taken from RC drill holes. The RC drilling samples were collected through a cyclone attached to the RC drilling rig. Samples were collected into large plastic bags on a one-meter basis. Each 1 metre sample of RC drilling chips weighed approximately 20-30kg. The 1 metre RC drill samples were then passed over a riffle splitter and a 3kg sample was split off each 1m RC drill sample. Passing the sample through the cyclone and then use of the riffle splitter, to produce the 3kg sample, ensured each sample sent for analysis was representative of each 1m drilled. The remainder of the sample from each 1m drilled was retained in case additional analysis needed to be performed. Duplicate samples were not taken during the drilling and sampling competed in 2007. However, when additional drilling is undertaken, duplicate samples will be taken in order to further ensure samples are representative. The sample sizes are considered to be more than appropriate for the grain size.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	The rock chip and drill samples were set to ALS, a world leading analytical laboratory. The samples were screened, crushed, pulverised and analysed. The analysis method used was ME-XRF13n (bauxite analysis package using XRF for elements Al_2O_3, BaO, CaO, $Cr_2O_3Fe_2O_3$, K_2O, MgO, MnO, Na_2O, P_2O_5, SO_3, SiO_2, SrO,TiO_2, V_2O_5, Zn, ZrO_2.). For the initial sampling, from the 24 drill holes completed in 2007, the Competent Person could not determine if standards, blanks and duplicates were used. Therefore, the Competent Person is a making the assumption that they were not used. Laboratory Certificates are not available for the 2007 geochemical data. The geochemical data collected in 2018, assessing the potential of the Abercorn kaolin to be feedstock for an HPA processing plant, performed within the internal laboratory standards of ALS. However, duplicates and standards were not used in the 2018 geochemical analyses and will need to be used in the future.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	This has not been done.
	The use of twinned holes.	Twin holes have not been completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All drill logs and sampling lists were captured on paper and then transferred to Microsoft Excel, which is appropriate for an early stage of exploration project.
	Discuss any adjustment to assay data.	No adjustments were made to the assay data from 2007 or 2018.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The 24 drill holes from 2007 were located in the field with a hand held GPS. However, the type and accuracy of the GPS is not known to the Competent Person. No down hole surveys were completed as the RC drill holes were vertical and relatively short, given the maximum drill hole depth was 54m. Given the 2007 drilling was wide spaced reconnaissance drilling, these procedures are considered appropriate for the objectives at the time.
	Specification of the grid system used.	Datum: MGA94 Zone:56J

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	The altitude and location of the 24 drill holes completed in 2007 were determined by GPS. The Competent Person is not aware of the accuracy of the location information.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The 24 RC drill holes completed in 2007 were drilled at variable spacings. The closest holes were approximately 70m apart, with the largest distance between the holes being approximately 500m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The data spacing is currently not sufficient to allow for Mineral Resource estimation.
	Whether sample compositing has been applied.	The samples from the original RC drilling in 2007 were not composited. 32 one metre samples were analysed in 2007 by Amdel labs. In July and August 2018, re-examination of the original assay results from the drilling completed in 2007, suggested that the kaolin on the Abercorn Project had potential as feedstock for processing into High Purity Alumina. Therefore, a second round of sampling and assaying of samples was undertaken using material from the bulk samples retained from the 2007 drilling program. Composite samples were produced from 5 drill holes (CK006, CK007, CK014, CK015, CK024), sized into different size fractions and assayed. Three composite samples from drill hole CK006 were produced from the 1m samples over the down hole intervals 2-8m, 9-11m and 23-28m. Two composite samples from drill hole CK007 were produced from the 1m samples over the down hole intervals 14-17m and 18-21m. A single composite sample from drill hole CK014 was produced from the 1m samples over the down hole interval 2-4m. Two composite samples from drill hole CK015 were produced from the 1m samples over the down hole intervals 3-8m and 10-14m. A single composite sample from drill hole CK024 was produced from the 1m samples over the down hole interval 5-8m. A 56 kg overall composite sample was made by combining the

Criteria	JORC Code explanation	Commentary
		composite samples from holes CK006, CK007, CK014, CK015, CK024, into one overall, large scale composite sample. The 56kg overall composite sample was sized using a cyclone classifier. Four different size fraction samples were then produced; the cyclone underflow at -20 microns, the cyclone overflow at -20 to +10 microns, plus +3.35 microns and +38 microns (4 different size fractions in total).
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The geology is relatively flat lying to shallow dipping and the RC drill holes intersected the strata at a high angle. Therefore, the Competent Person considers that no sampling bias occurred.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	As the RC drilling was at a high angle to the geological layering and strata, The Competent Person considers the orientation of the 2007 RC drill holes did not introduce a sampling bias.
Sample security	*The measures taken to ensure sample security.*	The Competent Person is not aware of the measures taken in 2007 to ensure security of the original samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of sampling techniques and data were completed.

TABLE 1 – Section 2: Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The tenure for the Abercorn HPA Project consists of EPM's 26837, 26903 and 19081 (128 km^2 tenement area), issued by the Queensland Government. The tenements are currently 100% owned by Abercorn Kaolin Pty Ltd.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	EPM 19081 is valid until 29/11/2022 EPM26837 is valid until 12/7/2023 EPM26903 is valid until 13/8/2023 EPM19081 was granted subject to the General Conditions Version 5 of the Mineral Resources Act 1989 and Version 2 of the Native Title Protection Conditions. EPM's 26837 and 26903 were granted subject to the conditions outlined in the Mineral Resources Act 1989 and the Minerals Resources Regulation 2013. Excluded from the area granted under EPM26837 are any current Mining Claim, Mineral Development Licence or Mining Lease, pursuant to Section 132 of the Mineral Resources Act 1989 and land subject to Native Title (i.e. Lot 062/YL1009 & Lot 061/YL495 & Lot 063/YL495 & Lot 080/YL952 & Lot 060/YL495 & Lot 082/YL952 & Lot 81/YL974 & Lot 18/A7662 & 3/A7662 Lot 17/A7662 & Lot 8/A7662 & Lot 58/A777662 & Lot 60/AP22955 & Lot 3/4/6/8/9/10/11/12/13/14/A7666 and Three Moon Creek) Excluded from the area granted under EPM26903 is land subject to Native Title (i.e. Lot 79/YL896 & Lot 57/SP273751). Upon application for renewal EPM's 26837 and 26903 will be required to be reduced by 40%. A variation application can be submitted to the Queensland Department of Natural Resources, Mines and Energy

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>The drill holes drilled in 2007 were drilled by Abercorn Kaolin Pty Ltd.</td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting and style of mineralisation.</td><td>The kaolin mineralisation, being investigated as having potential to be feedstock for a High Purity Alumina operation, occurs within white claystone and clayey sandstone, exposed in a railway cutting 2.5km north of the town of Cynthia in central Queensland. 24 RC drill holes were completed in 2007 investigating the kaolin occurrence. The kaolin occurs within the Bundamba group, of upper Triassic – Lower Jurassic Age and crops out throughout the Abercorn Project area, striking approximately NNW and with a gentle dip to the East. The Bundama Group, within the project area, consists of three recognised formations:

The Box Vale Sandstone – A light-coloured clayey sandstone at the top of the group

The Evergreen Shale – A light-coloured clay shale which includes the ironstone

The Precipice Sandstone – Which forms the Basel sediments of the Bundamba Group in this area.

Sedimentation is lenticular and individual shale and sandstone horizons are not laterally persistent.

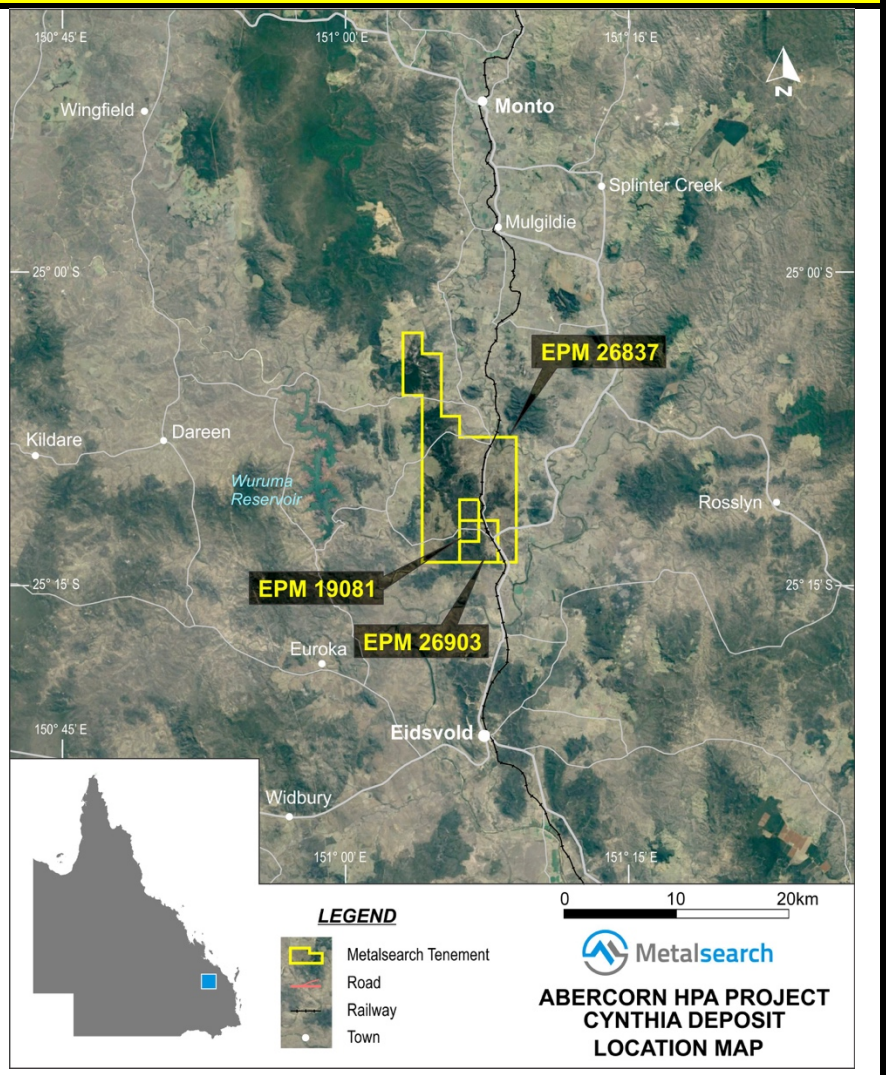
To the east in the valley of the Burnett River, the Bundamba Group is overlain by the Jurassic Mulgildie Coal Measures.</td></tr>
<tr><td>Drill hole Information</td><td>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
easting and northing of the drill hole collar
elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
dip and azimuth of the hole
down hole length and interception depth
hole length.</td><td>
<table>
<tr><th>Hole_ID</th><th>Easting (MGA94 -56J)</th><th>Northing (MGA94 - 56J)</th><th>Elevation (MGA94 - 56J)</th><th>Depth (m)</th><th>Inc (Degrees)</th></tr>
<tr><td>CK001</td><td>311084</td><td>7209515</td><td>213</td><td>42</td><td>90</td></tr>
<tr><td>CK002</td><td>307821</td><td>7210351</td><td>283</td><td>24</td><td>90</td></tr>
<tr><td>CK003</td><td>309439</td><td>7211012</td><td>310</td><td>30</td><td>90</td></tr>
</table>
</td></tr>
</table>

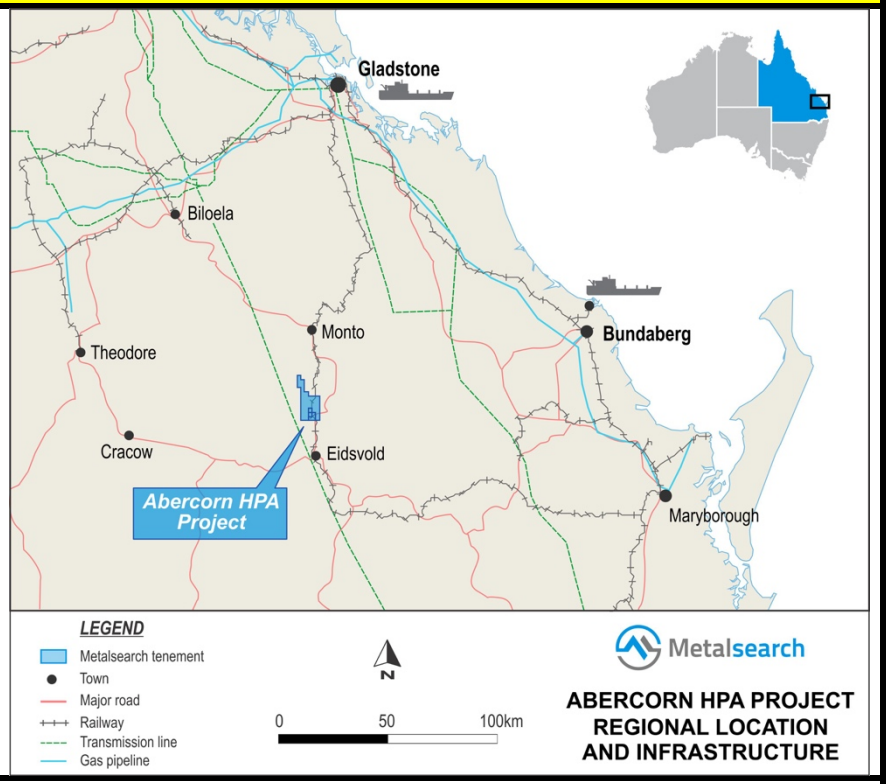
Criteria	**JORC Code explanation**	**Commentary**

CK004	310359	7212520	265	30	90
CK005	310730	7213154	255	18	90
CK006	310460	7213326	258	36	90
CK007	310207	7212976	267	36	90
CK008	310148	7213440	259	51	90
CK009	309808	7214439	273	24	90
CK010	309939	7214931	265	27	90
CK011	309445	7214518	288	30	90
CK012	310207	7213689	252	39	90
CK013	309953	7213195	266	39	90
CK014	310538	7212844	235	39	90
CK015	311390	7213293	281	24	90
CK016	311336	7212932	282	21	90
CK017	312480	7213472	263	42	90
CK018	310287	7213435	245	48	90
CK019	310215	7213366	252	54	90
CK020	310241	7213272	255	48	90
CK021	310044	7213444	241	41	90
CK022	310610	7212844	254	23	90
CK023	310495	7212768	253	18	90
CK024	310454	7212823	260	30	90

	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	This information has not been excluded.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Intersection intervals have not been reported and therefore no cut-offs have been reported.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	N/A
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	*If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.*	The geological strata is flat lying to shallow dipping and therefore the vertical RC drill holes from 2007 intersected the kaolin mineralisation at a high angle.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Down-hole widths were reported. However, the exact true width is interpreted to be close to true thicknesses as the magnetic layering was at a high angle to the core axis.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	

Criteria	JORC Code explanation	Commentary
		

Criteria	JORC Code explanation	Commentary
		
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All known exploration results have been reported to the knowledge of the Competent Person completing this JORC Table 1.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported) including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock*	No other meaningful exploration data exists to the knowledge of the competent person completing this JORC Table 1.

Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Exploration plans to advance this project are currently being finalised. The focus of follow up work will be to drill out sufficient kaolin mineralisation to support an economic HPA project. The goal of the next phase of drilling will be to define an Inferred Mineral Resource to JORC (2012).
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.