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Gary Ferris - NED  
Jarek Kopias - Co Sec

## CAPITAL STRUCTURE

Ordinary Shares  
Issued 96.1M

Options  
Issued 3.0M

## CONTACT

Address:  
Level 3, 63 Pirie Street  
ADELAIDE SA 5000

Email:  
info@itechminerals.com.au

Website:  
www.itechminerals.com.au

Telephone:  
+61 2 5850 0000



**Location – Ethiopia Prospect, Eyre Peninsula, South Australia**

# iTECH IDENTIFIES RARE EARTH POTENTIAL AT THE EYRE PENINSULA KAOLIN PROJECT



*REE bearing high purity kaolin samples from the Ethiopia Prospect – Eyre Peninsula Project, South Australia*

- Test work of historical drilling from the Ethiopia Prospect confirms the potential for thick intervals of high purity kaolin at surface
- Rare earth element indicator Cerium (Ce) is elevated in clay rich intervals, suggesting additional REE potential
- Widespread REE and kaolin enriched host rocks point to broader potential
- Resampling of 41 historical drill holes for REE and kaolin potential is underway, and results are due in late November 2021

In preparation for the upcoming ASX listing and drilling programs at the Eyre Peninsula Kaolin Project, iTech Minerals Ltd (ASX: **ITM**, **iTech** or **Company**) has undertaken a detailed review of historical data held by both Archer Materials Limited (Archer) and the South Australian Department for Mining and Energy. The review confirmed iTech's view of the kaolin potential of the Ethiopia Prospect with kaolin test work on historical drill samples confirming thick intervals of high purity kaolin from surface with good recoveries.

While the team remains focussed on the kaolin potential, the review of data collected by previous explorer (Adelaide Resources, 2007) seeking uranium in the region, revealed that the geochemistry of those same samples showed highly elevated Cerium (Ce) values, indicating the potential for coincident REE Ion Adsorption Clay mineralisation (IAC). An extensive review of other historical data uncovered a high grade REE rock chip (>5% TREO) and the presence of a 5.7km x 2.5km outcropping allanite bearing monzonite nearby, all of which point to a REE enriched basement source in the area. iTech has sent selected samples for more detailed laboratory analysis and is expecting results in November.

*"The most exciting part of this development is the previously overlooked REE potential at the Ethiopia Prospect is complimentary to the Company's existing Kaolin exploration program and gives us a lot more opportunities for exploration success in our upcoming drilling programs."*

- Managing Director Mike Schwarz -

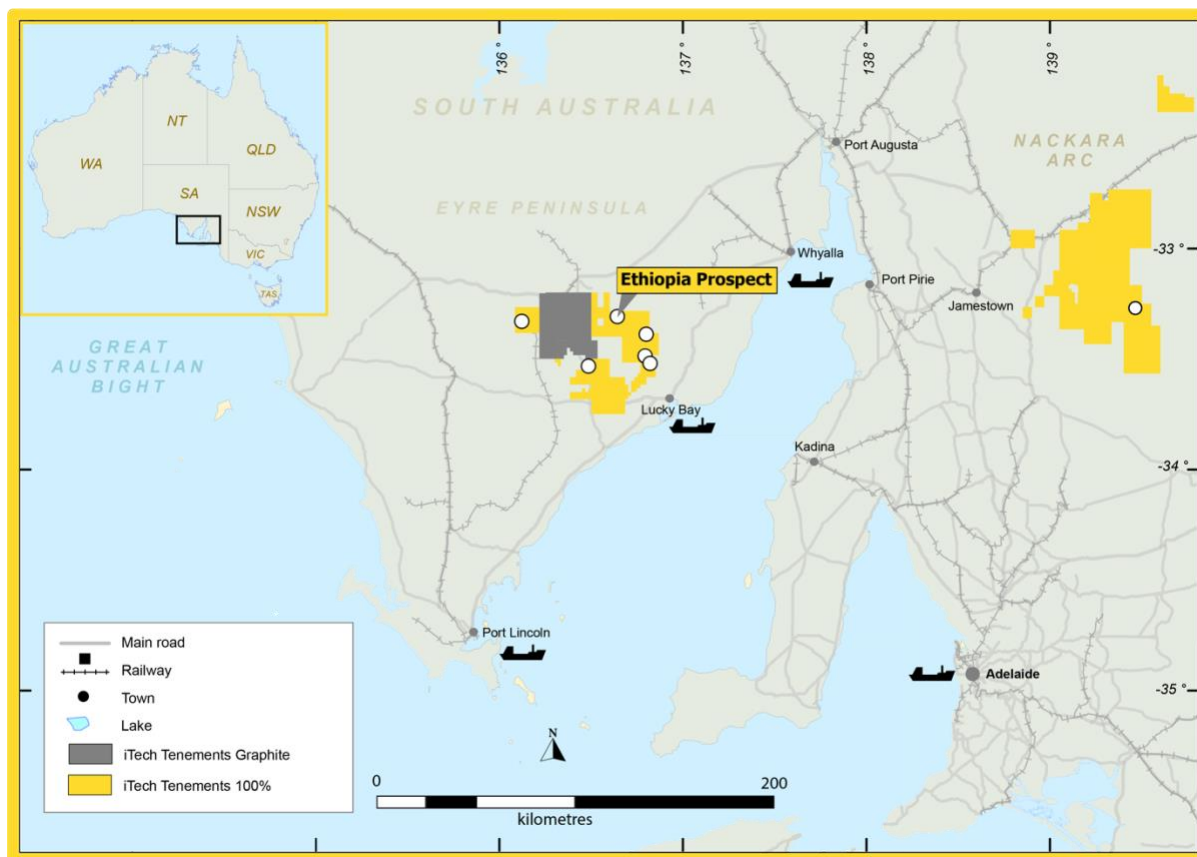


Figure 1. Location of the Ethiopia Prospect – Eyre Peninsula, South Australia

### Kaolin Potential

iTech Minerals identified the Ethiopia Prospect as having potential for high purity kaolin clay. A detailed review of historical data, from aircore drilling undertaken by Adelaide Exploration Pty Ltd in 2007, identified thick intervals, up to 24m, of high purity kaolin clay, over an area of approximately 1 km x 1km (Fig. 2). Of the 41 aircore holes drilled, a preliminary 10 holes were sub-sampled to assess the potential for high purity kaolin. Significant results from the preliminary sampling are presented in Table 1 (7 of the 10 samples had <1% Fe<sub>2</sub>O<sub>3</sub>). A full list of results can be found in Appendix 1. The results show significant potential for thick intervals of high purity kaolin at or near surface and confirm the Company's view that the prospect has potential for applications such as feedstock for high purity alumina and ceramics. Samples have been resubmitted for Reflectance (ISO (B)) and XRD kaolinite and halloysite analysis.

Hole ID	From (m)	To (m)	Interval (m)	-45µm (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	TiO <sub>2</sub> (%)
ETH-01	0	6	6	39%	0.55	31.2	0.94
ETH-013	0	10	10	36%	0.62	30	0.85
ETH-016	2	26	24	33%	0.88	31.9	0.59
ETH-033	2	20	18	47%	0.83	31.9	0.69
ETH-036	2	18	16	36%	0.6	31.7	0.23
ETH-037	2	8	6	34%	0.75	28.7	0.99
ETH-038	2	6	4	32%	0.9	27.5	0.87

Table 1. Preliminary kaolin test work of the Ethiopia Prospect – Eyre Peninsula, South Australia



Figure 2. Location of kaolin analysis samples, Ethiopia Prospect – Eyre Peninsula, South Australia

### Rare Earth Element (REE) Potential

The Ethiopia Prospect was originally explored for uranium by Adelaide Exploration Pty Ltd in 2007. 41 aircore holes were drilled over an area of approximately 1 km x 1 km to test a regional radiometric anomaly and handheld XRF uranium and thorium soil anomaly. The drill samples were analysed for uranium, thorium and cerium with results showing only low levels of uranium (<4-42ppm) and thorium (10-120ppm), however, cerium was significantly elevated (20-500ppm).

Cerium is one of 17 REE and indicates the potential for Ion Adsorption Clay (IAC) REE mineralisation within the weathering profile at Ethiopia. As a result, iTech Minerals has resubmitted the kaolin samples for complete REE analysis. The kaolin sample test work concentrates the kaolin clays by removing quartz grains from the sample. **As the REEs are bound to the clays they are expected to be significantly concentrated by this process, thereby increasing the total REE grades.**

REE mineralisation is within the, ~30m thick, lateritic weathering profile which overlies basement rocks of the Gawler Craton, composed of the Palaeoproterozoic Miltalie Gneiss and the Hutchison Group Metasediments. The association of elevated REE's with clays suggest the mineralisation is likely to be of the ion adsorption clay type.

### Characteristics of REE IAC's

REE's are found in soils deposited after weathering of granitic and/or REE enriched source rocks

- Occur primarily in China, but now being recognised globally.
- Sometimes called laterite deposits
- REE's are adsorbed to kaolinite, halloysite and other clay minerals
- Ore is relatively low-grade, generally only 0.05% to 0.5% REO (rare earth element oxides)
- High heavy REE enriched, which are more valuable
- Easily extractable REE can be highly profitable due to low extraction costs
- REE's leachable from clays with simple ammonium sulphate at room temperature



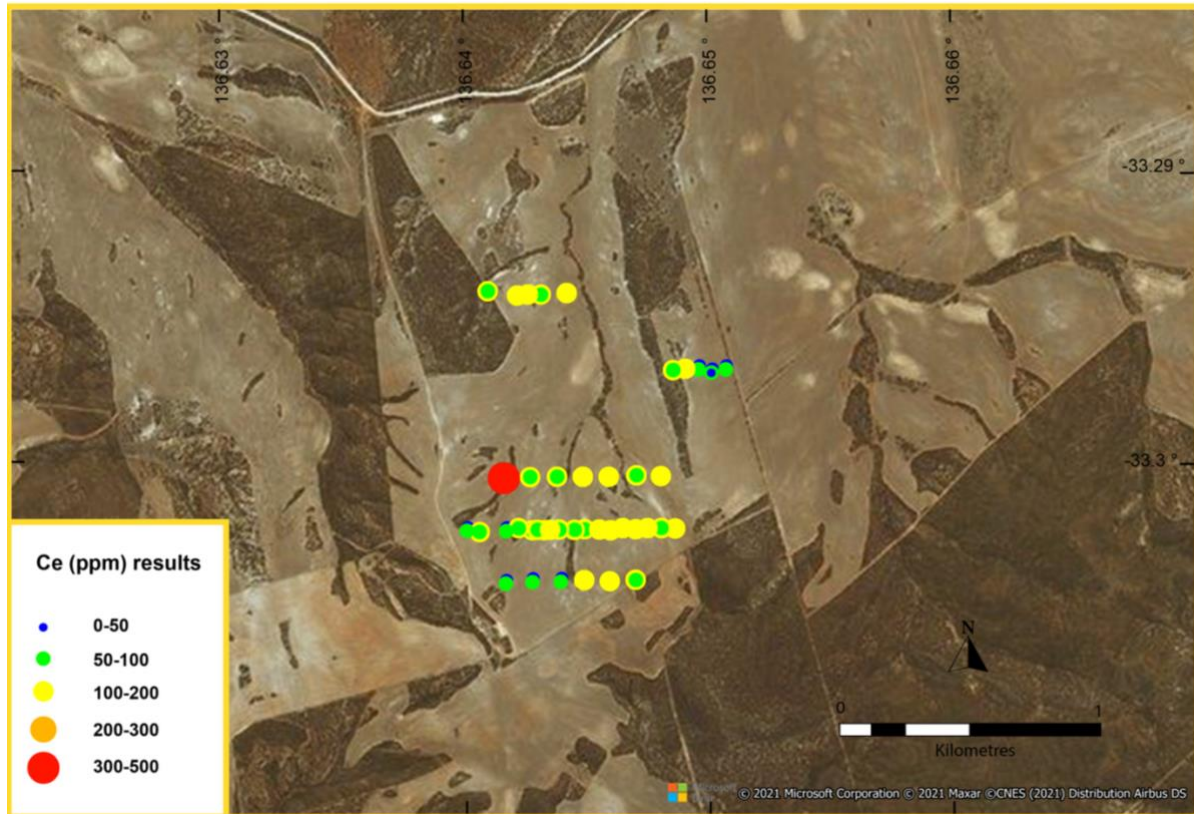


Figure 3. Individual down hole Cerium analysis results, Ethiopia Prospect – Eyre Peninsula, South Australia

### REE enriched source rocks

Historical exploration on the area covered by iTech Mineral's tenement, EL6478, has identified several REE rich source rocks in the near vicinity of the Ethiopia Prospect. Rock chip sampling by Adelaide Exploration Pty Ltd in 2006 identified three samples approximately 6.5 km to the east of Ethiopia with highly elevated REE's (Fig. 4). Samples EU016, EU017, and EU018 contained 8900 ppm, 5400 ppm and 51,500 ppm (5.15%) Total Rare Earth Element Oxides (TREO). Petrology on sample EU018 identified it as a kaolin rich rock with up to 10% monazite (a REE bearing phosphate mineral).

Sample ID	Easting (m) MGA94 Z53	Northing (m) MGA94 Z53	TREO (%)	TREO-CeO2 (%)	CREO (%)	LREO (%)	HREO (%)	% NdPr	HREO/TREO	LREO/TREO
EU016	658666	6311090	0.89	0.52	0.25	0.72	0.17	21%	19%	81%
EU017	658666	6311090	0.54	0.33	0.16	0.41	0.13	18%	24%	76%
EU018	658666	6311090	5.15	3.05	1.43	4.35	0.83	25%	16%	84%

Table 2. REE analysis of rock chips taken by Adelaide Exploration Pty Ltd on EL6478

Geological mapping and sampling by The Shell Company of Australia Pty Ltd in 1985-1986 identified an allanite rich quartz monzonite approximately 14.5 km to the southeast of the Ethiopia Prospect (Fig. 4). Outcrop was mapped over and area of approximately 5.7 km x 2.5 km. Petrology on a sample of the material (sample 33994) identified the rock as a "metamorphosed, allanite-rich, quartz-monzonite" with coarse grains of calc-silicate material. Thin section analysis describes the calc-silicate material as "These coarse grains are seen in thin section to be allanite and make up about 2% of the rock. There are also abundant accessory grains of sphene, apatite and zircon, suggesting that the rock is rare-earth-element-rich granitoid. The allanite grains are up to 2mm in diameter with dark and pale yellow-brown zones."

iTech considers the occurrence of enriched REE basement rocks over a large area, within EL6478, which have been submitted to widespread weathering and kaolinsation as highly encouraging for the discovery of both IAC style REE deposits as well as more traditional “hard rock” style mineralisation. The company is particularly interested in coincident kaolin and IAD style mineralisation due to the potential for low-cost mining, processing, and extraction of both kaolin and REE from the same source material.

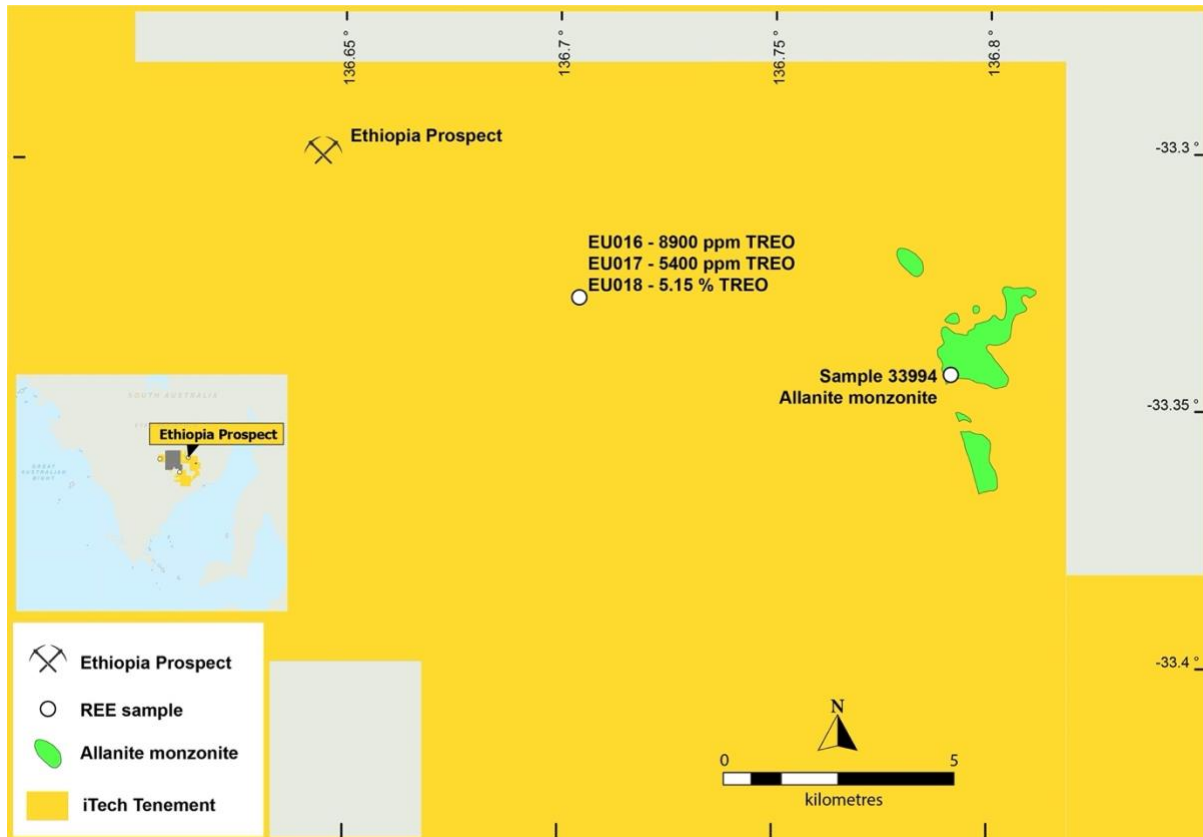


Figure 4. Location of historical REE enriched source rocks and samples relative to the Ethiopia Prospect – Eyre Peninsula, South Australia

### Next Steps

iTech is in the process of resampling the remaining 31 aircore drill holes from the 2007 drilling program to further assess the kaolin and REE potential of the Ethiopia Prospect. Results are expected in late November 2021. Mapping and sampling of the kaolin and REE enriched rocks to the southeast of Ethiopia is due to commence in early November. Updates on progress to commence drilling on the Eyre Peninsula tenements will be provided in due course. Landowner negotiations/notifications are currently underway.

### Other work underway

iTech is currently undertaking detailed reviews at its Franklyn Kaolin-Halloysite Project in the Nackara Arc and of the Campoona Graphite Project on the Eyre Peninsula. The company plans to update the market on progress as new information and results become available in the near future.

For further information please contact the authorising officer Michael Schwarz:

Michael Schwarz, FAusIMM, AIG  
Managing Director  
E: [mschwarz@itechminerals.com.au](mailto:mschwarz@itechminerals.com.au)  
Ph: +61 2 5850 0000  
W: [www.itechminerals.com.au](http://www.itechminerals.com.au)

**ABOUT iTECH MINERALS LTD**

iTech Minerals Ltd is a newly listed mineral exploration company exploring for and developing battery materials and critical minerals within its 100% owned Australian projects. The company is exploring for kaolinite-halloysite, ion adsorption clay rare earth element mineralisation and developing the Campoona Graphite Deposit in South Australia. The company also has extensive exploration tenure prospective for Cu-Au porphyry mineralisation, IOCG mineralisation and gold mineralisation in South Australia and tin, Tungsten, and polymetallic Cobar style mineralisation in New South Wales.

**COMPETENT PERSON STATEMENT**

The information which relates to exploration results is based on and fairly represents information and supporting documentation compiled by Michael Schwarz. Mr Schwarz 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 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Schwarz is a full-time employee of iTech Minerals Ltd and is a member of the Australian Institute of Geoscientists and the Australian Institute of Mining and Metallurgy. Mr Schwarz consents to the inclusion of the information in this report in the form and context in which it appears



## APPENDIX 1 – DETAILED TECHNICAL INFORMATION AND JORC TABLE 1

Hole ID	From (m)	To (m)	Interval (m)	-45µm (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	TiO <sub>2</sub> (%)
ETH-01	0	6	6	39%	0.55	31.2	0.94
ETH-03	0	10	10	35%	1.9	27.9	0.81
ETH-013	0	10	10	36%	0.62	30	0.85
ETH-016	2	26	24	33%	0.88	31.9	0.59
ETH-032	2	8	6	32%	1.28	29	0.73
ETH-033	2	20	18	47%	0.83	31.9	0.69
ETH-034	2	26	24	44%	1.04	33.2	1.19
ETH-036	2	18	16	36%	0.6	31.7	0.23
ETH-037	2	8	6	34%	0.75	28.7	0.99
ETH-038	2	6	4	32%	0.9	27.5	0.87

Table 3. Ethiopia Prospect 2007 RAB drillhole kaolin composite sample assay results

Prospect	Hole ID	From (m)	To (m)	Interval (m)	U ppm	Th ppm	Ce ppm
Ethiopia	ETH-001	0	6	6	14	79	120
Ethiopia	ETH-002	12	18	6	20	58	110
Ethiopia	ETH-003	0	12	12	5	42	110
Ethiopia	ETH-004	0	25	25	9	70	148
Ethiopia	ETH-005	6	36	30	10	57	118
Ethiopia	ETH-006	0	12	12	9	71	120
Ethiopia	ETH-007	18	34	16	11	71	113
Ethiopia	ETH-008	0	36	36	8	58	110
Ethiopia	ETH-009	0	36	36	8	70	123
Ethiopia	ETH-010	0	29	29	10	72	128
Ethiopia	ETH-011	0	30	30	11	66	120
Ethiopia	ETH-012	0	30	30	12	73	120
Ethiopia	ETH-013	0	36	36	11	73	120
Ethiopia	ETH-014	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-015	12	18	6	4	22	100
Ethiopia	ETH-016	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-017	0	12	12	8	57	100
Ethiopia	ETH-018	12	16	4	8	52	100
Ethiopia	ETH-019	0	28	28	9	63	122
Ethiopia	ETH-020	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-021	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-022	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-023	18	28	10	11	56	115
Ethiopia	ETH-024	18	36	18	11	60	110
Ethiopia	ETH-025	0	40	40	10	60	112
Ethiopia	ETH-026	0	47	47	11	62	110
Ethiopia	ETH-027	6	24	18	11	70	130
Ethiopia	ETH-028	30	36	6	30	54	130
Ethiopia	ETH-029	0	30	30	15	36	356
Ethiopia	ETH-030	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-031	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-032	NSI	NSI	NSI	NSI	NSI	NSI
Ethiopia	ETH-033	6	40	34	20	101	148
Ethiopia	ETH-034	0	18	18	8	73	105
Ethiopia	ETH-035	0	32	32	10	69	138
Ethiopia	ETH-036	24	30	6	12	74	100
Ethiopia	ETH-037	0	31	31	11	73	132
Ethiopia	ETH-038	6	28	22	8	73	115
Ethiopia	ETH-039	18	24	6	12	60	110
Ethiopia	ETH-040	0	6	6	12	52	100
Ethiopia	ETH-041	0	18	18	12	79	127

Table 4. Ethiopia Prospect 2007 RAB drillhole U, Th, Ce composite sample assay results (NSI = No significant Interval)



Hole ID	Datum	Easting (m)	Northing (m)	RL (m AHD)	Dip	Az (AMG)	Final Depth (m)
ETH-001	GDA94	652996	6313998	354	-90	360	46
ETH-002	GDA94	652951	6313999	356	-90	360	40
ETH-003	GDA94	652899	6314007	357	-90	360	40
ETH-004	GDA94	653498	6313997	366	-90	360	25
ETH-005	GDA94	653445	6313999	367	-90	360	40
ETH-006	GDA94	653392	6314000	365	-90	360	40
ETH-007	GDA94	653347	6313997	359	-90	360	34
ETH-008	GDA94	653297	6314001	364	-90	360	36
ETH-009	GDA94	653250	6313994	354	-90	360	34
ETH-010	GDA94	653207	6313997	369	-90	360	29
ETH-011	GDA94	653151	6313999	364	-90	360	31
ETH-012	GDA94	653113	6313998	368	-90	360	31
ETH-013	GDA94	653054	6313999	355	-90	360	39
ETH-014	GDA94	652851	6313997	363	-90	360	37
ETH-015	GDA94	652750	6313995	357	-90	360	34
ETH-016	GDA94	652702	6314000	368	-90	360	70
ETH-017	GDA94	653344	6313803	372	-90	360	16
ETH-018	GDA94	653245	6313800	372	-90	360	16
ETH-019	GDA94	653147	6313806	374	-90	360	28
ETH-020	GDA94	653057	6313801	363	-90	360	28
ETH-021	GDA94	652948	6313801	372	-90	360	31
ETH-022	GDA94	652846	6313797	373	-90	360	19
ETH-023	GDA94	653446	6314197	345	-90	360	28
ETH-024	GDA94	653353	6314202	354	-90	360	37
ETH-025	GDA94	653247	6314197	352	-90	360	40
ETH-026	GDA94	653148	6314199	354	-90	360	47
ETH-027	GDA94	653049	6314201	353	-90	360	40
ETH-028	GDA94	652946	6314201	358	-90	360	37
ETH-029	GDA94	652845	6314199	359	-90	360	34
ETH-030	GDA94	653700	6314600	337	-90	360	40
ETH-031	GDA94	653645	6314588	336	-90	360	37
ETH-032	GDA94	653596	6314601	342	-90	360	31
ETH-033	GDA94	653546	6314604	353	-90	360	40
ETH-034	GDA94	653499	6314600	345	-90	360	37
ETH-035	GDA94	653097	6314900	341	-90	360	32
ETH-036	GDA94	652998	6314896	338	-90	360	31
ETH-037	GDA94	652949	6314897	336	-90	360	31
ETH-038	GDA94	652907	6314894	340	-90	360	28
ETH-039	GDA94	652795	6314912	324	-90	360	36
ETH-040	GDA94	652972	6314000	363	-90	360	43
ETH-041	GDA94	653020	6313999	359	-90	360	37

Table 5. Ethiopia Prospect 2007 RAB drillhole collars

Sample ID	Easting (m)	Northing (m)	CeO2	La2O3	Th	Y2O3	Dy2O3	Er2O3	Eu2O3	Gd2O3
	MGA94 Z53	MGA94 Z53	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			IC3E	IC3E	IC3E	IC3E	IC3R	IC3R	IC3R	IC3R
DETECTION LIMIT			10	5	5	2	0.02	0.05	0.02	0.05
EU016	658666	6311090	3685	1701	1200	825	137.72	70.90	20.84	218.99
EU017	658666	6311090	2150	997	700	762	94.11	59.46	11.58	121.02
EU018	658666	6311090	21006	9676	6650	3238	746.01	308.75	133.16	1325.49

Sample ID	Easting (m)	Northing (m)	Ho2O3	Lu2O3	Nd2O3	Pr6O11	Sm2O3	Tb4O7	Tm2O3	Yb2O3	U
	MGA94 Z53	MGA94 Z53	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			IC3R	IC3R	IC3R	IC3R	IC3R	IC3R	IC3R	IC3R	XRF1
DETECTION LIMIT			0.02	0.02	0.02	0.05	0.02	0.02	0.05	0.05	4
EU016	658666	6311090	22.34	5.69	1458.00	398.71	324.69	28.82	6.85	48.96	320
EU017	658666	6311090	17.18	5.69	758.16	211.44	173.94	17.64	6.85	48.39	185
EU018	658666	6311090	109.97	19.90	10031.04	2778.86	2087.28	164.67	28.55	170.81	2300

Table 6. Adelaide Exploration 2006 rock chip sampling results





**PETROLOGY DESCRIPTION FROM REPORT ENV5545, PAGE 95 – SHELL  
COMPANY OF AUSTRALIA PTY LTD, 1985-1986**

0085

33994 : metamorphosed, allanite-rich, quartz-monzonite

This sample was sectioned because,

- (1) it appeared to be potassium felspar rich, and
- (2) it had scattered coarse grains of possible calc-silicate minerals.

These coarse grains are seen in thin section to be allanite and make up about 2% of the rock. There are also abundant accessory grains of sphene, apatite and zircon, suggesting that the rock is rare-earth-element-rich granitoid. The allanite grains are up to 2mm in diameter with dark and pale yellow-brown zones.

The grainsize is about 0.7mm with about 35-40% each of sericitised plagioclase and fresh microcline. Opaque oxides chlorite and quartz make up the remainder with 15-20% quartz. The quartz is recrystallised but occurs in patches 0.5-1mm in size. Some of the felspar is recrystallised also and occurs as grains less than 0.05mm in size.



## JORC 2012 EDITION - TABLE 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p>Adelaide Exploration Pty Ltd</p> <ul style="list-style-type: none"> <li>Rock chip samples EU016-EU018 were taken from a council excavation beside a road.</li> <li>Rotary Air Blast (RAB) drill cuttings were collected at 1 metre intervals and contained in large plastic bags. Samples for geochemical analysis were collected as 6 metre composites taken over the entire length of each hole. The composites were collected by taking equal volumes from the contributing 1 metre bulk samples with the resulting composites weighing approximately 3-4 kilograms. A total of 258 original composite samples were collected. Additionally, eleven of the original samples were duplicated and submitted to the laboratory to determine laboratory accuracy and maintain quality control.</li> <li>The Competent Person has referenced publicly sourced information through the report and considers that sampling was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g., 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.).</li> </ul>	<ul style="list-style-type: none"> <li>Ethiopia RAB holes ETH-01-41 – drilled by Johannsen Drilling using drill rig Edison 2000. Historical report no other details provided.</li> <li>All holes were drilled using a small diameter percussion hammer run on RAB rods and in effect the drill method can be considered as open hole percussion.</li> <li>The Competent Person has referenced publicly sourced information through the report and considers that drilling techniques was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.</li> </ul>
<b>Drill Sample Recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>Ethiopia RAB holes ETH-01-41 - historical report no details reported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Drill collar information, geological logs, total count gamma scintillometer and spectrometer readings and magnetic susceptibility readings were recorded in excel spreadsheets and made available in appendices 1-5 of PACE Report DPY4-33</li> </ul>
<b>Sub-Sampling Techniques and Sample Preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all cores taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>Adelaide Exploration Pty Ltd</p> <ul style="list-style-type: none"> <li>Samples for geochemical analysis were collected as 6 metre composites taken over the entire length of each hole. The composites were collected by taking equal volumes from the contributing 1 metre bulk samples with the resulting composites weighing approximately 3-4 kilograms.</li> <li>Additionally, eleven of the original samples were duplicated and submitted to the laboratory to determine laboratory accuracy and maintain quality control.</li> </ul> <p>Archer Materials</p> <ul style="list-style-type: none"> <li>Kaolin rich intervals of the original Adelaide Resources 2007 RAB drilling were subsampled and submitted for kaolin analysis at Bureau Veritas based on visual estimates of whiteness and kaolin content</li> <li>The Competent Person has referenced publicly sourced information through the report and considers that sampling techniques was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.</li> </ul>
<b>Quality of Assay Data and</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the</li> </ul>	<p>Adelaide Exploration Pty Ltd</p> <ul style="list-style-type: none"> <li>Rock chip samples EU016-EU018 were submitted to Amdel Ltd for multielement geochemistry using</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Laboratory Tests</b>	<p>technique is considered partial or total.</p> <ul style="list-style-type: none"> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p>assay codes FA3, IC3E, IC3M, IC3R and XRF1. Detection limits are considered appropriate for the style of mineralisation.</p> <ul style="list-style-type: none"> <li>Ethiopia RAB holes ETH-01-41 - historical report, no geochemistry details reported. However, duplicate samples were deemed to be within an acceptable range</li> <li>Total count gamma scintillometer readings were made on each sample obtained from all the drill holes. Total counts were obtained using an Exploranium 110 instrument.</li> <li>Where anomalous high counts were recorded estimates of uranium (U ppm), thorium (Th ppm) and potassium (K %) were obtained using an Exploranium GR-135G spectrometer.</li> <li>Magnetic susceptibility readings were made on all composited (6m) drill samples using an Exploranium KT9 instrument</li> </ul> <p>Archer Materials</p> <ul style="list-style-type: none"> <li>Kaolin rich intervals of the original Adelaide Resources 2007 RAB drilling were subsampled and submitted for kaolin analysis at Bureau Veritas using the following method <ul style="list-style-type: none"> <li>Screen with 45 micron screen using cold water</li> <li>Retain both fractions</li> <li>Dry each fraction in low temp over</li> <li>Record masses.</li> <li>Rifle split a 10gm (+45 and -45 fraction) for whole rock assay (14 element oxides) and LOI.</li> </ul> </li> </ul>
<b>Verification of Sampling and Assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Ethiopia RAB holes ETH-01-41 - historical report no details reported</li> <li>Rare earth element analyses were originally reported in elemental form but have been converted to relevant oxide concentrations as in the industry standard <ul style="list-style-type: none"> <li>TREO = <math>\text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Y}_2\text{O}_3</math></li> <li>CREO = <math>\text{Nd}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Y}_2\text{O}_3</math></li> <li>LREO = <math>\text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3</math></li> <li>HREO = <math>\text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Y}_2\text{O}_3</math></li> </ul> </li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>○ <math>\text{NdPr} = \text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11}</math></li> <li>○ <math>\text{TREO-Ce} = \text{TREO} - \text{CeO}_2</math></li> <li>○ <math>\% \text{NdPr} = \text{NdPr} / \text{TREO}</math></li> </ul>
<b>Location of Data Points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<p>Shell Company of Australia Pty Ltd</p> <ul style="list-style-type: none"> <li>• Sample 33994 location was digitised from sample location map in ENV5545 Adelaide Exploration Pty Ltd</li> <li>• Rock chip sample locations EU016-EU018 were recorded in AMG84 Zone 53</li> <li>• No information reported on drill hole location method or accuracy</li> <li>• Ethiopia RAB holes ETH-01-41 – Datum used was GDA94 MGA Zone 53</li> <li>• No information reported on drill hole location method or accuracy</li> </ul>
<b>Data Spacing and Distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<p>Adelaide Exploration Pty Ltd</p> <ul style="list-style-type: none"> <li>• Samples for geochemical analysis were collected as 6 metre composites taken over the entire length of each hole. The composites were collected by taking equal volumes from the contributing 1 metre bulk samples with the resulting composites weighing approximately 3-4 kilograms.</li> </ul> <p>Archer Materials Ltd</p> <ul style="list-style-type: none"> <li>• Sample compositing was applied on the basis of the visual estimates of whiteness and kaolin content.</li> </ul>
<b>Orientation of Data in Relation to Geological Structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<p>Adelaide Exploration Pty Ltd</p> <ul style="list-style-type: none"> <li>• Ethiopia RAB holes ETH-01-41 – Holes were drilled vertically which is appropriate to sufficiently assess the horizontally lying weathering profile</li> </ul>
<b>Sample Security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Ethiopia RAB holes ETH-01-41 - historical report no details reported</li> </ul>
<b>Audits or Reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• None undertaken.</li> </ul>



## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<b>Mineral Tenement and Land Tenure Status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Tenement status confirmed on SARIG.</li> <li>The tenements are in good standing with no known impediments.</li> </ul>
<b>Exploration Done by Other Parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Relevant previous exploration has been undertaken by Shell Company of Australia Pty Ltd, Adelaide Exploration Pty Ltd and Archer Materials Ltd</li> <li>See body of report for details on previous exploration</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements are within the Gawler Craton, South Australia.</li> <li>iTech is exploring for porphyry Cu-Au, epithermal Au, kaolin and halloysite and REE deposits.</li> <li>This release refers to kaolin mineralisation and ion adsorption rare earth elements mineralisation related to lateritic weathering processes on basement rock of the Gawler Craton, in particular the Palaeoproterozoic Mitalie Gneiss and Warrow Quartzite.</li> <li>See body of the report for description of the geology in more detail.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Refer to Appendix 1, Table 5 of this report for details</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>– Dip and azimuth of the hole</li> <li>– Downhole length and interception depth</li> <li>– Hole length</li> <li>• 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.</li> </ul>	
<b>Data Aggregation Methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Archer Materials kaolin analysis intervals were aggregated using no lower or upper cut-offs.</li> <li>• Adelaide Exploration U, Th and Ce intervals were aggregated using a 100 ppm Ce lower cut-off and with no high cut</li> </ul>
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Ethiopia RAB holes ETH-01-41 – holes were drilled vertically which is appropriate to sufficiently assess the horizontally lying weathering profile</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• See main body of report.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>Adelaide Exploration Pty Ltd - 2006</p> <ul style="list-style-type: none"> <li>• Rock chip samples EU016-EU018 were submitted to Amdel Ltd for multielement geochemistry using assay codes FA3, IC3E, IC3M, IC3R and XRF1 and were the only samples assayed for REE and therefore the only samples reported in this</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>announcement. Detection limits are considered appropriate for the style of mineralisation.</p> <ul style="list-style-type: none"> <li>• All other relevant data has been reported</li> <li>• The reporting is considered to be balanced.</li> </ul>
<b>Other Substantive Exploration Data</b>	<ul style="list-style-type: none"> <li>• 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 characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• The Project area has been subject of significant exploration for base metals, graphite and gold.</li> <li>• See body of report for details</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Further exploration sampling geochemistry and drilling required at all prospects</li> </ul>

