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ITECH EXPANDS GRAPHITE DRILLING PROGRAM TO NEW TARGETS

SUMMARY

- Resource drilling at Lacroma Central has highlighted the potential for a low-cost mining operation in clay hosted graphite mineralisation near surface.
- iTech Minerals plans to explore for more of this material by expanding the current drill program to nearby drill targets, which have similar characteristics.
- Targets have been generated from regional electromagnetic data, historical drill data and geological mapping.
- The Lacroma North target is twice the size of Lacroma Central and extends for over 5 km.
- The Balumbah target is approximately 3km long and has an electromagnetic signature over 3 times as strong as Lacroma Central.
- Balumbah North appears to be an extension of Balumbah and brings the combined target length to over 5 km.
- Lacroma North and Balumbah have confirmed graphite mineralisation in historical drilling. Balumbah North has not been drilled.
- Overall, these targets add another 10km of prospective strike to iTech's upcoming drilling targets.

"iTech's drilling program has had a strong focus on adding resources over the past 4 months and will continue to do so into next year. The addition of these new drill targets will add over 10km of highly prospective strike length and ensure significant upside to the Company's resource inventory.

Managing Director - Mike Schwarz



WATCH Managing Director Mike Schwarz take a deep dive into the graphite drill targeting at the Campoona Graphite Project with the latest Exploration Update.

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Graphite Review

Following the ongoing success of iTech Minerals' Ltd (iTech or Company) (ASX: ITM) graphite drill program at the Lacroma Central Graphite Prospect, the Company has undertaken a review of the graphite potential across its extensive graphite tenure on the Eyre Peninsula with a view to the next best locations to continue to grow the Company's resource inventory. iTech holds 100% interest in graphite rights to over 2,085 km² of exploration licences and a current mining licence (ML 6470) over the Campoona Central Graphite Deposit. iTech's graphite project surrounds the proposed centrally located Sugarloaf Graphite Processing Facility on the multipurpose licence (MPL150) and water infrastructure licence (MPL 151).

As part of the review, iTech compiled and merged over 1,470 km² of regional airborne electromagnetic surveys covering a significant portion of its graphite prospective licences. Airborne electromagnetics is a useful tool in identifying graphite potential as it measures the conductivity of rocks beneath the surface over a large area. Graphite is a very conductive mineral, and when it occurs in significant concentrations in the earth's crust, has the potential to be mapped as conductivity anomalies by airborne electromagnetics. Using this method, iTech has identified over 200km of conductive geological horizons, within its licences, likely to be formed by graphite mineralisation.

Sometimes geological features such as salty groundwater and sulphide accumulations can also cause conductivity anomalies. To ensure iTech is mapping anomalies caused by graphite, iTech only mapped anomalies confirmed as being caused by graphite either in drilling or in outcrop.



Figure 1. Location of iTech's Graphite Deposits and Prospects on AEM image (conductive horizons appear as red areas) – Eyre Peninsula, South Australia



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Graphite Prospects

As part of the process to confirm which airborne electromagnetic anomalies were caused by graphite, iTech compiled the follow list of significant graphite deposits, prospects and occurrences.

Prospect/ Deposit	Description	Discovery Year	Status	Host Geology	Easting (m)	Northing (m)
SUGARLOAF	Historic copper mine drilled by Archer Exploration in 2008 identified significant downhole intercepts of graphite. Petrology confirmed fine, medium and coarse flake sized graphite. An Exploration Target size of 158- 264Mt @ 7-12% TGC. Investors should be aware that the potential quantity and grade of the Exploration Targets reported are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.	1905	PROSPECT	Middleback Subgroup	623440	6293950
STANLEYS	Anomalous Zn-bearing pyritic gossanous zones to 1980ppm detected in Hutchison Group ironstone and calc-silicate horizons. Monax Mining in 2011 identified potential for flake graphite.	1917	OCCURRENCE	Hydrothermal alteration	632116	6299248
ARGENT	12m shaft was excavated on a silver prospect. HYL Brown reported 33 ozs/ton Ag in a sample from 'mineralised country'. Monax Mining in 2011 identified potential for flake graphite.	1908	OCCURRENCE	Warrow Quartzite	632142	6295964
SUGARLOAF HILL	Linear magnetic trend drilled to identify bands of iron oxide and graphitic schist. Weak anomalous base metals and uranium. Thin band massive magnetite, 3m of graphitic schist described as of greater crystal size than other areas.	1978	OCCURRENCE	Middleback Subgroup	622471	6296172
FRANCIS	Electromagnetic anomaly drill tested in March-April 2013, which drilling identified the source of the anomaly was graphitic schist of the Hutchison Group. Best value was 15m at 20.7% TGC from 14-29m in hole WG118.	2013	OCCURRENCE	Hutchison Group	629876	6312602
WILCO SOUTH	Surface outcrop of graphitic schist over 10m width, with coincident AEM data showing coincident conductive zone ~2.4km long. Anomaly drill tested to maximum depth 100m in 2012 for best intersection of 15m @ 16.3%C. Inferred resource of 6.38 Mt @8.8% TGC defined by Monax Mining in 2012.	2012	DEPOSIT	Hutchison Group	634446	6314871
BALUMBAH	Outcrop of graphitic schist with samples returning values of 10% TGC. Graphite intersected in historical drilling over 1.2km apart. Associated airborne electromagnetic anomaly extends for over 3 km.	2012	PROSPECT	Hutchison Group	626130	6322600
BALUMBAH NORTH	Airborne electromagnetic anomaly extension from Balumbah. Never been drill tested.	2008	PROPSECT	Hutchison Group	625000	6324350
CAMPOONA SHAFT	Pit on bed of graphitic schist. 6% flake graphite reported at 38% TGC. Ferruginous and graphitic schist ~970m SW identified. Drill tested in 4 holes. Resource figure Oct 2021 of 1.5 Mt @ 9.2% TGC.	1905	DEPOSIT	Mangalo Schist	637341	6289211
WILCLO	Airborne electromagnetic anomaly at N end of linear conductivity anomaly. Field work identified surface occurrence of graphitic schist as probable source of conductivity anomaly. Historic hole CR 519 penetrated graphitic metasediment from 10-18m.	2011	OCCURRENCE	Hutchison Group	631951	6322472
CUT SNAKE	Airborne electromagnetic survey identified an intense conductivity anomaly, which on field checking, was found to be sourced by graphitic schist of the Hutchison Group.	2011	OCCURRENCE	Hutchison Group	631801	6306412
CAMPOONA CENTRAL	~2km SSW of Campoona Shaft deposit, shear-hosted graphitic schist of the Mangalo Schist with resource drilling in 2012 identifying highly crystalline graphite resource of 520,000 tonnes at 11.1% TGC.	2012	DEPOSIT	Mangalo Schist	636051	6286902
LACROMA	Hole drilled by WMC Exploration in 1982 identified 70m of graphite gneiss from 88-158m. Follow up drilling in 2012 by Monax Mining Ltd of 4 holes identified 60m @ 6.8% TGC, best value 1m @ 16.3% TGC. Significant body of mineralisation subject to resource drill out by iTech Minerals.	1982	RESOURCE DRILLING	Hutchison Group	620601	6316601
LACROMA NORTH	Graphite logged in drilling by WMC Exploration in 1982. Two zones identified over 600m apart extending over 1.2km. Associated AEM anomaly extends for over 5km.	1982	PROSEPCT	Hutchison Group	619800	6323700

Table 1. Summary of relevant graphite deposits, prospects and occurrences modified from SARIG, 2022 andASX Announcement: "200km of Graphite Potential at Eyre Peninsula Projects" on 26 October 2022.



Drill Targets

Resource drilling at Lacroma Central is expected to continue into next year. When completed iTech plans to move the drill rig to the next best targets to determine the optimal location to add additional resource tonnes to its graphite inventory.

Lacroma North

The Company has identified Lacroma North as the next best target for the following reasons.

- Lacroma North is just 3.5 km north of Lacroma Central, occurs along the same geological horizon and is most likely an extension of the Lacroma Central mineralisation.
- It is likely to have similar positive metallurgical characteristics to Lacroma Central with easy beneficiation using industry standard flotation techniques.
- Is likely to have similar geological characteristics to Lacroma Central, that potentially could support a low-cost mining operation such as:
 - Graphite mineralisation outcrops at the prospect.
 - Deep weathering, clay hosted mineralisation with likely negligible grinding costs.
 - Deep (>60m) groundwater table which means low dewatering costs and easier mining characteristics.
 - Low sulphide content which means more efficient flotation/concentration.
 - Shallow mineralisation/low stripping ratio.
- The electromagnetic anomaly is the same intensity but more than twice the length of the Lacroma central anomaly which suggests more extensive mineralisation.
- Graphite has been logged in historical drilling in two separate horizons over a distance of >1.2km (Env 3583, SARIG, 2023).

Balumbah and Balumbah North

- Balumbah has a very high intensity electromagnetic signature, over 3 times that of Lacroma Central, suggesting potential for higher grades.
- It appears to be on a different geological horizon from Lacroma Central and its metallurgical characteristics are unknown.
- It has shallow graphite mineralisation intersected in several drill holes over a distance of 1.3km which are coincident with the AEM anomaly (Env 3583, SARIG, 2023).
- The prospect appears to be partially obscured by thin (<30m) palaeochannel sediments which could enhance the AEM signature due to overlying salty groundwater. The presence of graphite in drill holes confirms the main anomaly is caused by graphite mineralisation.
- Balumbah North appears to be an extension of Balumbah graphite mineralisation but has never been drill tested.
- Together they constitute a drill target over 5 km long.

Prospect	Lacroma Central	Lacroma North	Balumbah	Balumba North	
Length	2.3 km	5.0 km	3.0 km	1.5 km	
Width	0.5 km	1.0 km	1.0 km	0.8 km	
AEM Anomaly peak strength (50-100m)	130	130	390	180	
Graphite in historical drilling	Yes, main zone appears to be 1.5km long, up to 95m thick	Yes, two zones identified over 600m apart extending over 1.2km	Yes, graphite in drill holes over 1.3km	No drilling	
Best drill result	93m @ 6.9% TGC	Graphite logged in drill holes from 2-38m, ended in mineralisation	Graphite logged in drill holes from 34-60m, ended in mineralisation	n/a	
Cover/palaeochannel sediments	Outcrops at surface	Outcrops at surface	~30m of palaeochannel sediments over mineralisation	Unknown	

Table 2. Summary of proposed graphite drill targets.



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Figure 2. Plan of new graphite drill targets in the vicinity of the Lacroma Central Graphite Prospect. Contours are generated from a 50-100m depth conductivity depth image from a regional airborne electromagnetic survey



Figure 3. Location of iTech's Graphite Deposits and Prospects, Eyre Peninsula, South Australia

Next Steps

iTech Minerals will continue drilling out the graphite resource at Lacroma Central into early next year. During this time the company will contact relevant landowners at Lacroma North and Balumbah to request access for drilling and if favourable negotiate land access agreements. When resource drilling is completed, the drill rig will plan to move to Lacroma North and then Balumbah to assess the potential for further graphite resources.

For further information please contact the authorising officer Michael Schwarz:

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ABOUT ITECH MINERALS LTD

iTech Minerals Ltd (**ASX:ITM**, **iTech** or **Company**) is an ASX listed mineral exploration company exploring for and developing battery materials and critical minerals within its 100% owned Australian projects. The Company is exploring for graphite, kaolinite-halloysite, regolith hosted 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.

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GLOSSARY

AEM = Airborne Electromagnetic EM = Electromagnetic TGC = Total Graphitic Carbon

This announcement contains results that have previously released as "Replacement Prospectus" on 19 October 2021, "200km of Graphite Potential at Eyre Peninsula Projects" on 26 October 2022. iTech confirms that the Company is not aware of any new information or data that materially affects the information included in the announcement.

The Campoona Shaft Mineral Resource Estimate (MRE) is made up of a Measured MRE of 320,000 tonnes @ 12.7% TGC, Indicated MRE of 780,000 tonnes @ 8.2% TGC and Inferred MRE of 550,000 tonnes @ 8.5% TGC. The Central Campoona MRE is made up of Indicated MRE of 220,000 tonnes @ 12.3% TGC and Inferred MRE of 300,000 tonnes @ 10.3% TGC.