

# CRITICAL MINERALS FORUM TOWNSVILLE 25th August 2022.

# INNOVATIVE EXPLORATION AT MOUNT CANNINDAH

Dr Simon.D.Beams Director/Principal Geologist Terra Search Pty Ltd Non Executive Director Cannindah Resources Ltd

Terra Search Pty Ltd





# ACKNOWLEDGEMENTS OF CANNINDAH RESOURCES/TERRA SEARCH EXPLORATION TEAM AT MOUNT CANNINDAH (1)

Exploration is a team effort requiring Leadership, Knowledge, Experience, Guidance and a dedicated group of field & support professionals capable of careful data collection, compilation, analysis & interpretation.

> Tom Pickett : Executive Chairman Cannindah Resources Dr Simon Beams Principal Geologist Terra Search, Director CAE

Geologists : Mike Barr, Robyn Allen, Scott Trompetter, James Bishop, Michael Alderson, Geophysicist/Geostatistician/Ore Body Modeller : Tim Beams Field Crew : Don Dunwoodie, Michael MacDougall, Jayannah Petersen Senior Site Executive/Senior Geologist : Peter Gregory







## ACKNOWLEDGEMENTS OF CANNINDAH RESOURCES/TERRA SEARCH EXPLORATION TEAM AT MOUNT CANNINDAH (2)

Field Manager : Travers Davies Office Admin: Leanne Casey, Leanne Standley, GIS : Jennifer Vetali, Valeria Murgalov, Patricia Abaijah Geologist Trainees : Sophie Law, Maddison Chalker-Holz Drilling Contractor : AED Peter Johns, Craig Burgess Laboratory : Intertek Labs, Townsville, Anto Wilson Landholder/Earthmoving : Justin & Kay Brian

Mt Cannindah's Metal Combination of Copper - Silver- Gold has been in demand throughout human history –Enduring Critical Metals CAE has drilled a truly impressive number of thick intercepts of all three metals through 2021 & 2022 at Mt Cannindah . An exploration performance from the team worthy of Bronze, Silver & Gold Medal status.







# **Disclaimer**



Cannindah Resources

This presentation includes certain *forward looking statements*, estimates and projections with respect to the future performance of Cannindah Resources Limited. Such statements, estimates and projections reflect various assumptions concerning anticipated results, which assumptions may prove not to be correct. The projections are merely estimates by Cannindah Resources Limited of the anticipated future performance of the company based on interpretations of existing circumstances, factual information and certain assumptions of future economic conditions and results, which may prove to be incorrect. Such projections and estimates are not necessarily indicative of future performance, which may be significantly less favourable than reflected herein. Accordingly, no representations are made as to the accuracy or completeness of such statements, estimates or projections and such statements, estimates and projections should not be relied upon as a guarantee of value or future results. This presentation does not constitute an offer to subscribe for securities in Cannindah Resources Limited.

#### **Competent Persons Statement**

The information in this report that relates to exploration results is based on information compiled by Dr. Simon D. Beams, a full-time employee of Terra Search Pty Ltd, geological consultants employed by Cannindah Resources Limited to carry out geological evaluation of the mineralisation potential of their Mt Cannindah Project, Queensland, Australia. Dr. Beams has BSc Honours and PhD degrees in geology; he is a Member of the Australasian Institute of Mining and Metallurgy (Member #107121) and a Member of the Australian Institute of Geoscientists (Member # 2689). Dr. Beams has sufficient relevant experience in respect to the style of mineralization, the type of deposit under consideration and the activity being undertaken to qualify as a Competent Person within the definition of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code).Dr. Beams consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

#### Disclosure:

Dr Beams and his employer Terra Search Pty Ltd hold ordinary shares in Cannindah Resources Limited.



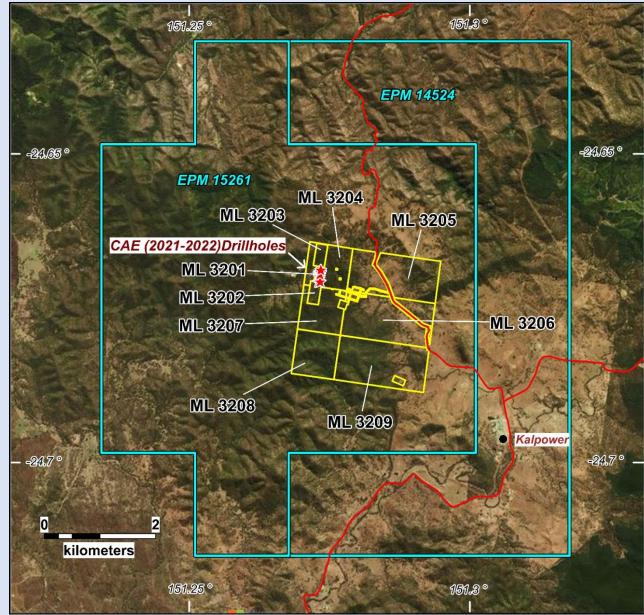












# Tenure

EPM 14524EPM 152619 Sub Blocks14 Sub BlocksMining Leases3201 to 3206 (Contiguous)Total of71.5 sq.km of Exploration Permits &5.7 sq.km of Mining Leases.

#### **Ownership:**

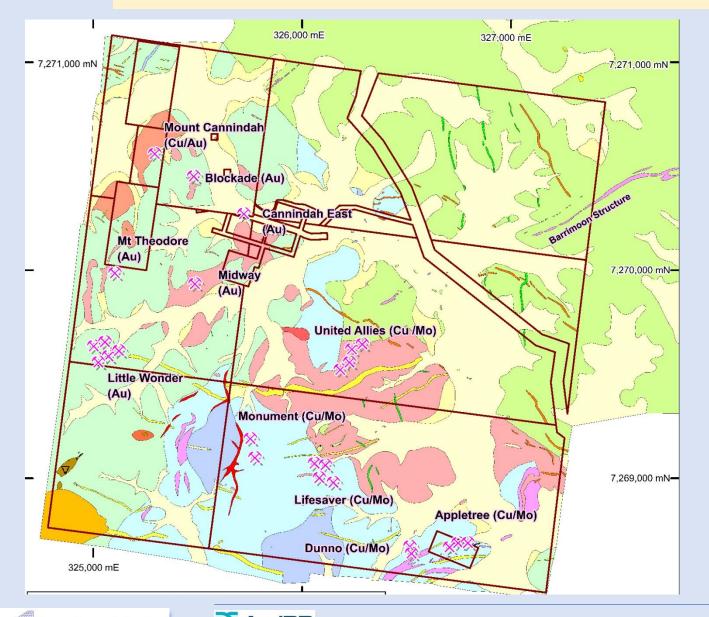
The Mount Cannindah Project is 100% owned by Cannindah Resources Ltd. Newcrest (60%) & Glencore/MIM (40%) have1.5% net smelter return (NSR) royalty on production

**<u>Note:</u>** Mt Cannindah Mining Pty Ltd is wholly Subsidiary of Cannindah Resources Ltd

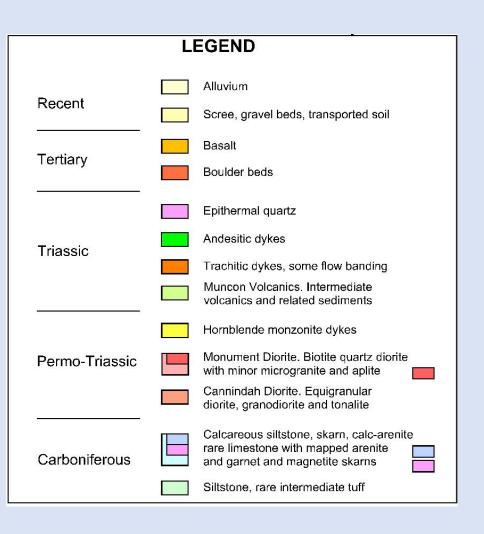




# **Mt Cannindah Mining Leases & Prospects on Geology**

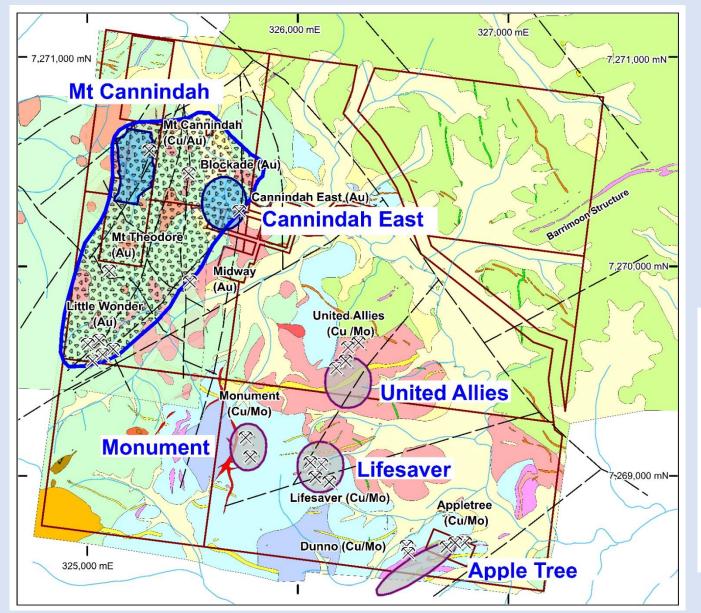


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### Mt Cannindah Projects Mineral Resources

Mt Cannindah Mining Pty Ltd wholly owned subsidiary of



Cannindah Resources Limited

#### Mt Cannindah

5.5Mt @ 0.92 % Cu, 0.34 g/t Au & 14.9 g/t Ag (JORC, 2004)

**Cannindah East** 

245,000 t @ 2.8 g/t Au (Non-JORC)

United Allies 2Mt @ 0.5% Cu, 179ppm Mo (Non-JORC)

#### **Monument/Lifesaver**

8Mt @ 0.4% Cu Inferred (Non-JORC)

#### Apple Tree

30,000 t @ 2.1% Cu , 1.7 g/t Au & 20 g/t Ag (Non-JORC)



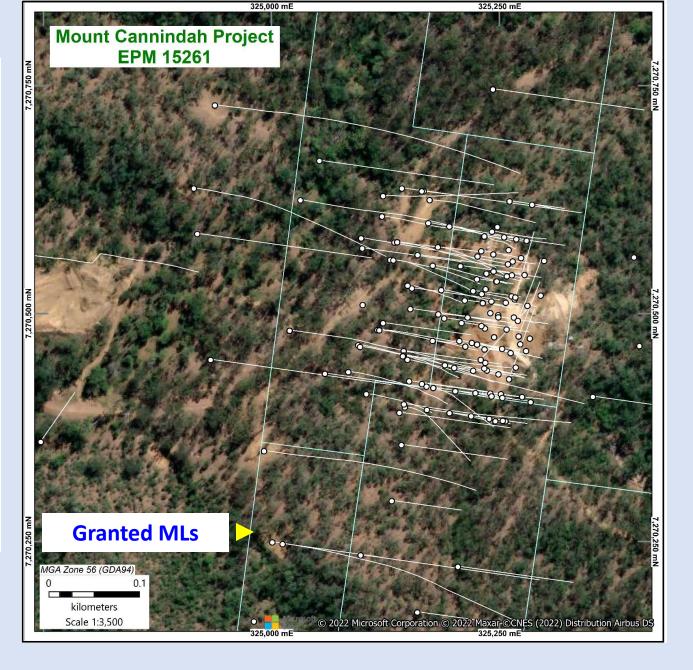


Mount Cannindah Project

Previous Drilling 1958-2011

(MIM, Newcrest, Astrik, QLD Ores, Drummond Gold)

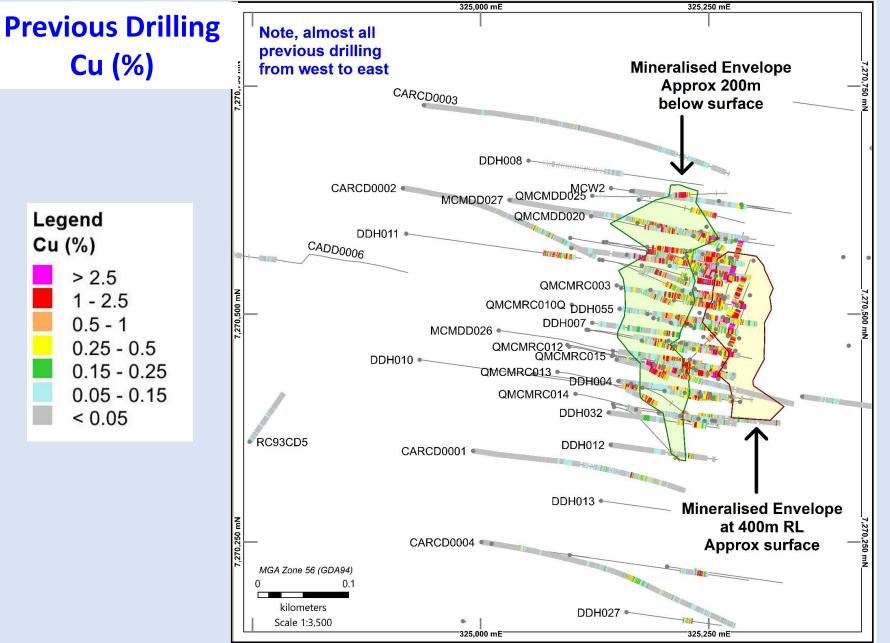
> Bing Aerial Satellite











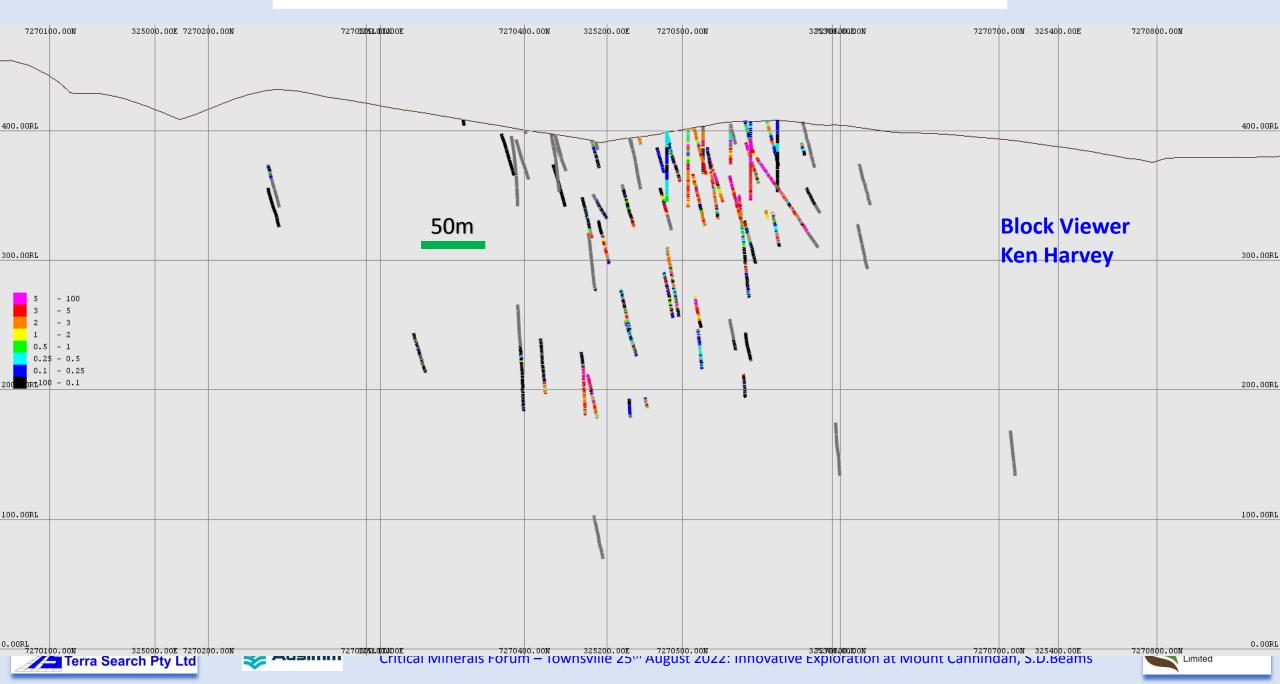
Drillhole traces projected from depth onto horizonal level plan.

50 years of drilling. Almost all drilled West to East Direction Last drilling in 2011 deepest holes, disappointing results. **CAE looked at fresh** approach, look for continuity of mineralization. **Contrarian and innovative to** Drill 180 degrees to all previous drilling. Hole 1 abandoned after hitting old workings. CAE began by drilling ore block gaps in long section, obliquely to south.

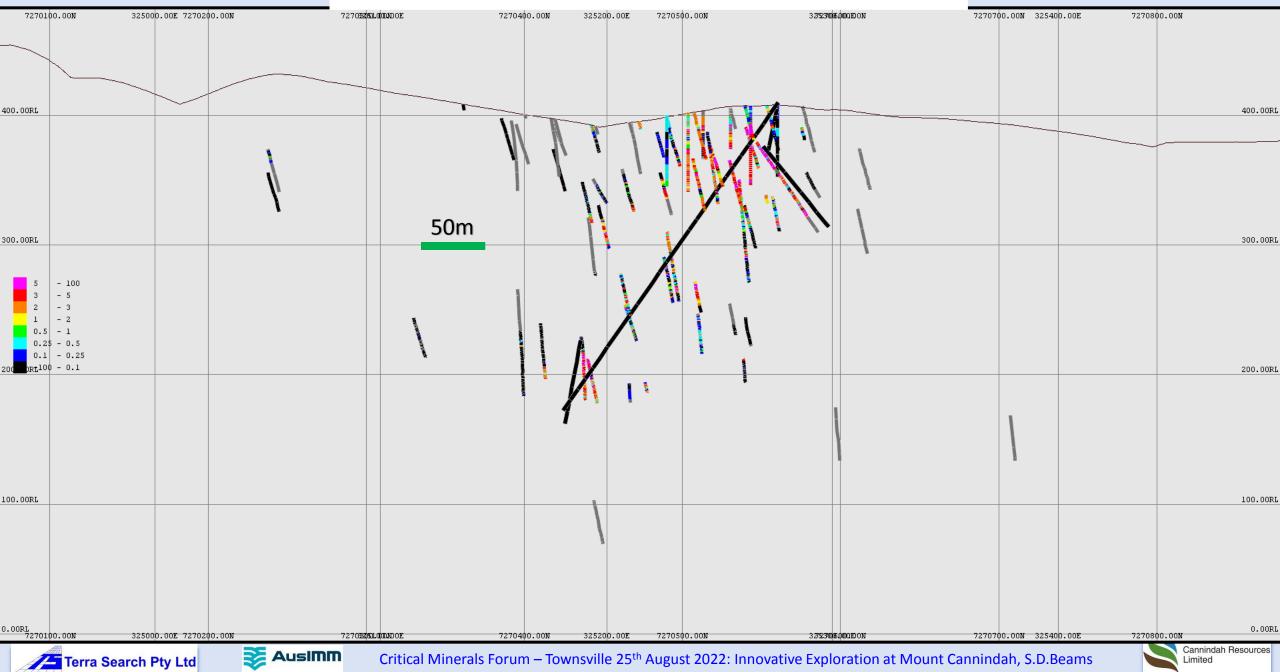




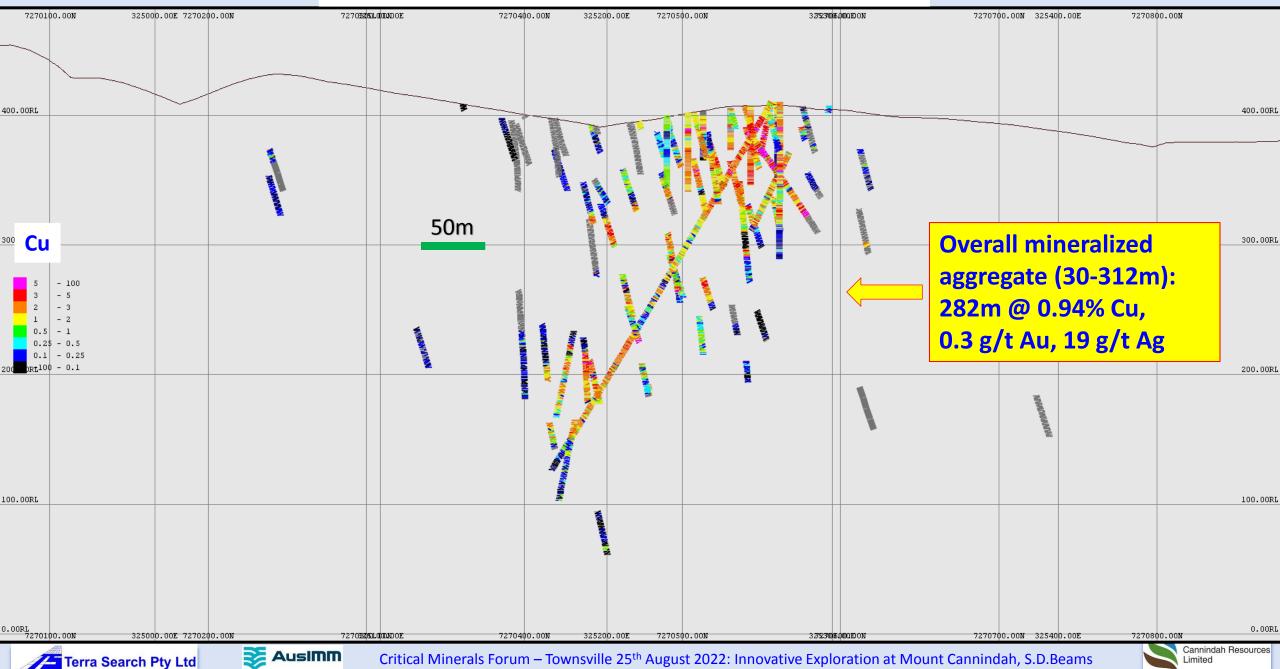
#### **Original long section historical drillholes pre drilling CAE DDH 02**



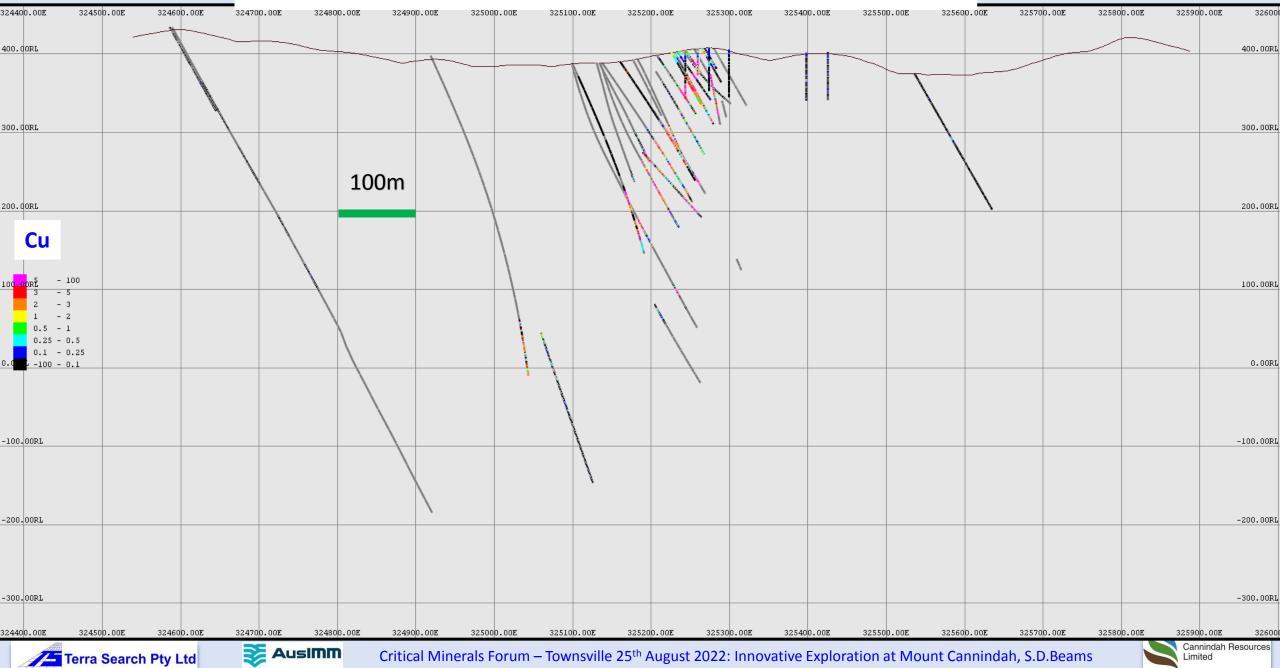
#### Long section proposed drillhole pre drilling CAE DDH 02



#### Long section – Cu Results of CAE DDH 02, September 2021



#### **Original cross section historical drillholes pre drilling CAE DDH 03**



**Cross section proposed drillhole pre drilling CAE DDH 03** 

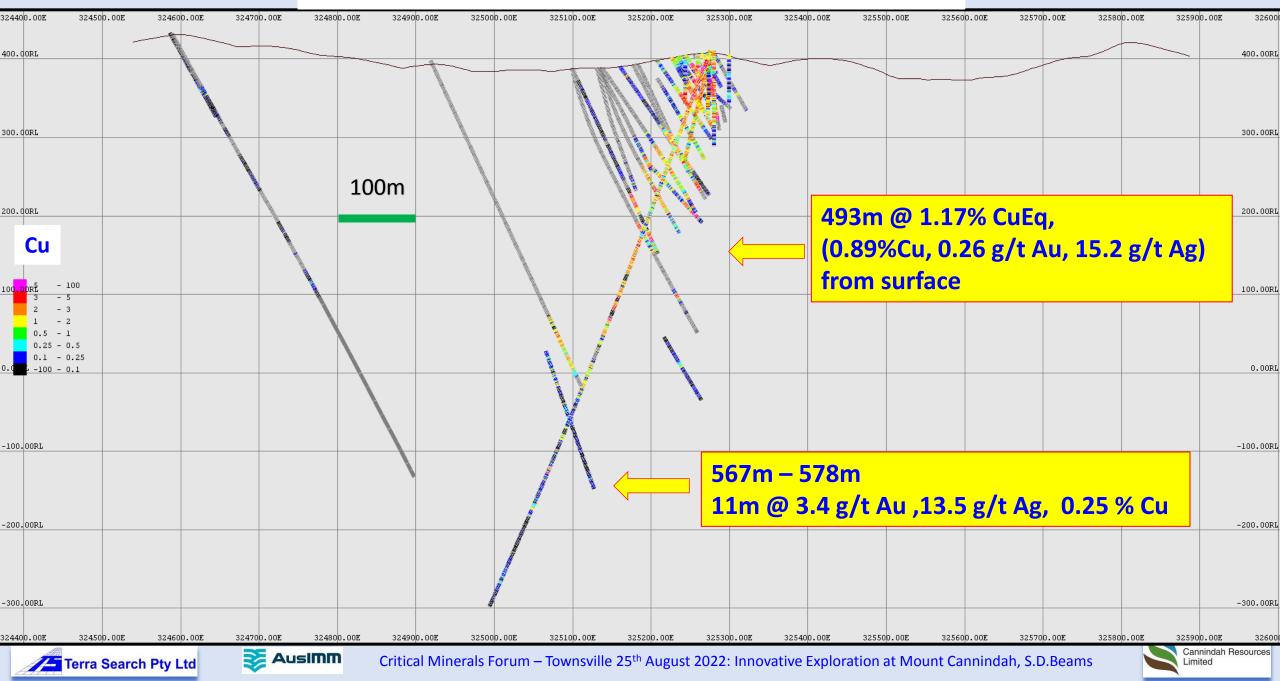






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Cross section – Cu Results of CAE DDH 03, November 2021







#### Best holes over the past 2 years with Copper as the primary commodity

Date	Hole Number	Project	Country	Company	From (metres)	To (metres)	Interval (metres)	CuEq (%)	CuEq Grade x Interval! (%-m)	Source Document
2020-02-24	VHD037	Onto	Indonesia	PT Sumbawa Timur Mining	536.00	1,484.60	948.60	1.893	1,796.0	PT Sumbawa Timur PR
2021-05-13	F30H041	Filo del Sol	Argentina	Filo Mining Corp.	188.00	1,046.00	858.00	2.043	1,752.9	Filo Mining PR
2021-09-08	LHDHG03	Los Helados	Chile	NGEx Minerals	6.00	1,140.40	1,134.00	0.883	1,001.4	NGEx Minerals Ltd PR
2020-10-20	AD30W1	Oak Dam	Australia	BHP Group	1,190.00	1,502.00	312.00	3.117	972.6	BHP Grp PR
2021-03-22	SLS-14	Warintza	Ecuador	Solaris Resources Inc.	0.00	922.00	922.00	0.972	896.2	Solaris Rsrc Inc PR
2021-06-14	UHGZ-21-045	Tujuh Bukit	Indonesia	PT Merdeka Copper	14.00	530.00	516.00	1.714	884.5	PT Merdeka Copper Expl. Repor
2020-01-29	RC595	Red Chris	Canada	Newcrest	394.00	1,114.00	720.00	1.094	787.5	Imperial Metals PR
2021-10-27	K-21-217	Kwanika	Canada	NorthWest Copper	253.15	488.60	235.45	3.155	742.9	NW Copper Corp PR
2021-11-09	21CAEDD003	Mount Cannindah	Australia	Cannindah Resources Ltd.	0.00	493.00	493.00	1.299	640.4	Cannindah Rsrc Ltd Expl. Report
2021-06-24	ATD038	Proyecto de Rio Tinto	Spain	Atalaya	280.00	532.00	252.00	2.538	639.5	Atalaya Mining PR
2021-07-07	FC5522	MCSA Mining Complex	Brazil	Ero Copper	774,70	841.70	67.00	9.542	639.3	Ero Copper PR

#### Filo's FSDH041 ranks as one of the best copper intercepts globally over the past 2 years...

#### ...and the top hole held by a Junior Mining Company.

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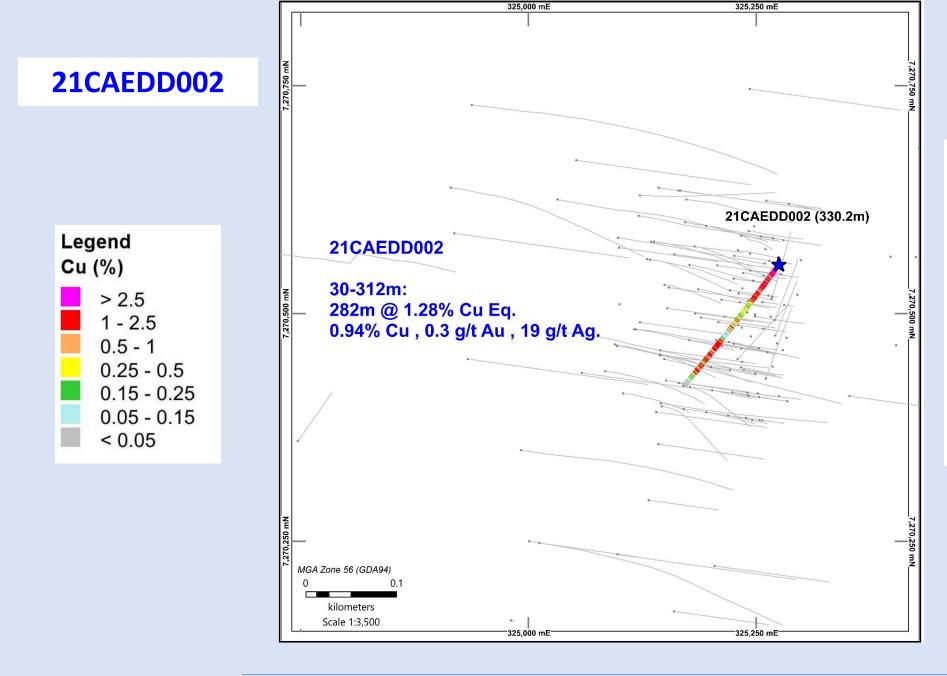
Source: S&P Global Market Intelligence, Drill Results - Copper, filtered by period for the last two years, as of December 15, 2021 (Note: only one "best hole" from each project is included) <sup>1</sup> Copper Equivalent (CuEq) Grades as reported by S&P Global Market Intelligence and may not match Company disclosure. CuEq Grade x Interval calculated by multiplying the CuEq% by the interval metres. Oak Dam Red Chris Kwanika Filo del Sol Los Helados Mt Cannindah 2,000 %-n 1.000 %-m %-m MCSA **Rio Tinto** Warintza Onto Tujuh Bukit Filo Mining | Corporate Presentation



Drillhole 21CAEDD003 Interval 493m @ 1.299 % CuEq

CuEq Grade x Interval 640.4 (%-m)

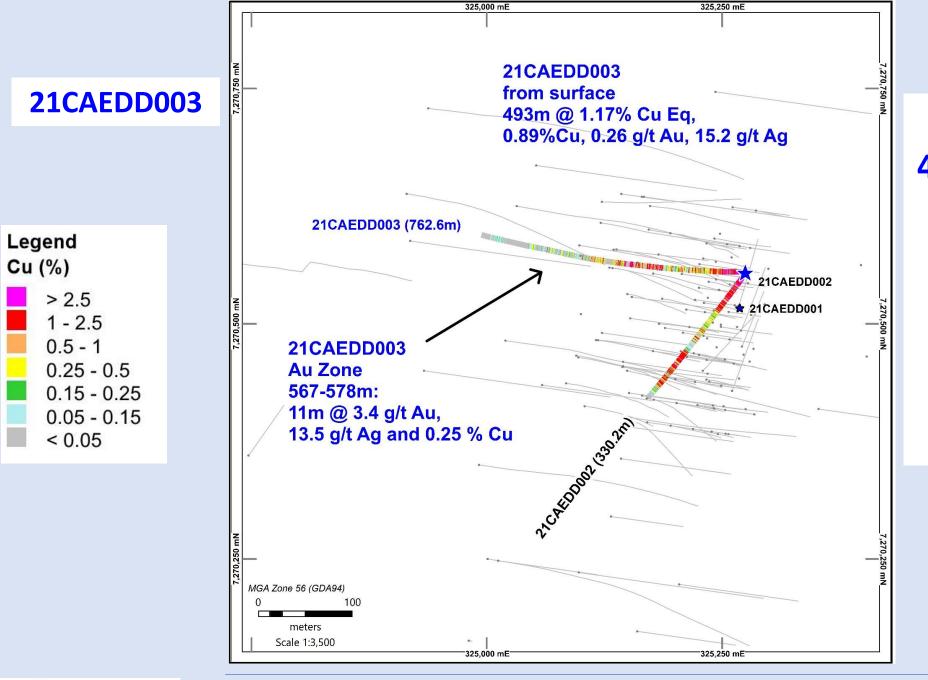




CAE 2 282m @ 1.28% Cu Eq, 0.94% Cu 0.3 g/t Au 19 g/t Au 30m - 312m





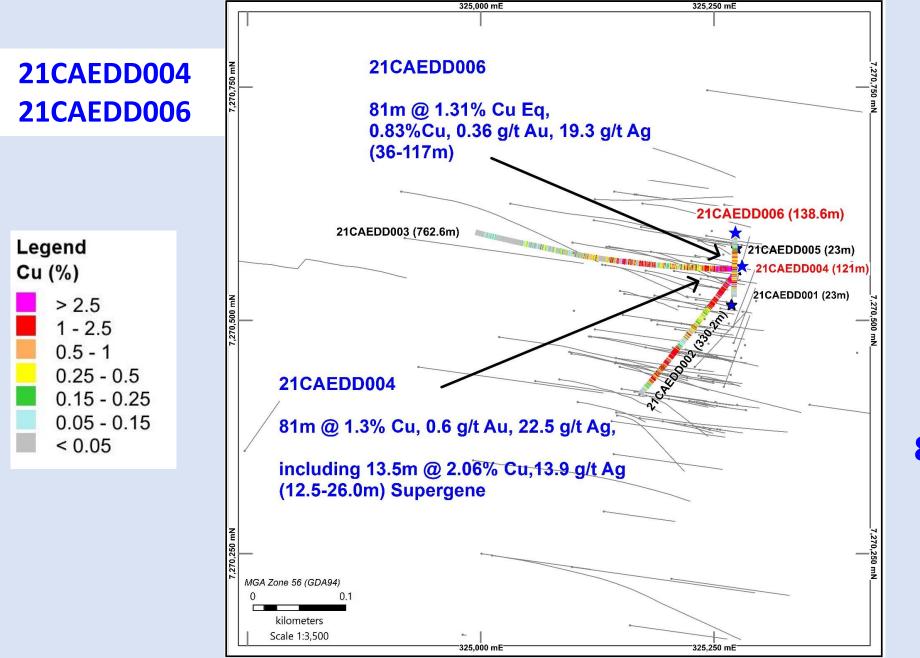


CAE 3 493m @ 1.17% CuEq, 0.89% Cu 0.26 g/t Au 15.2g/t Au 0m - 493m 11m @ 3.4 g/t Au 567m-578m









CAE 4 81m @ 1.3% Cu, 0.6 g/t Au 22.5 g/t Au 13m - 94m CAE 5 23m Scout Hole

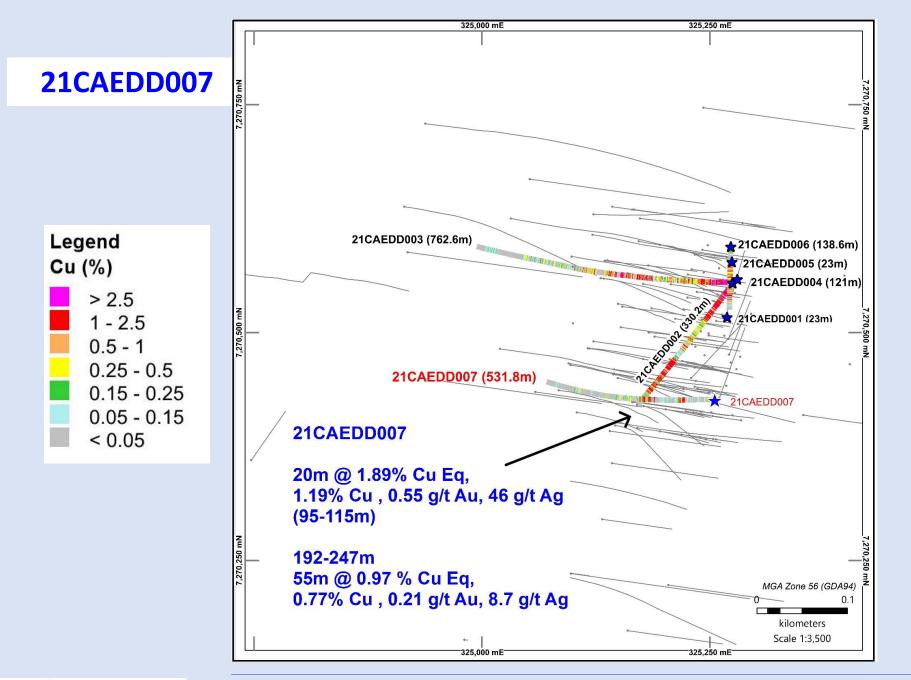
CAE 6 81m @ 1.31% Cu Eq, 0.36 g/t Au 18.3 g/t Au 36m - 117m

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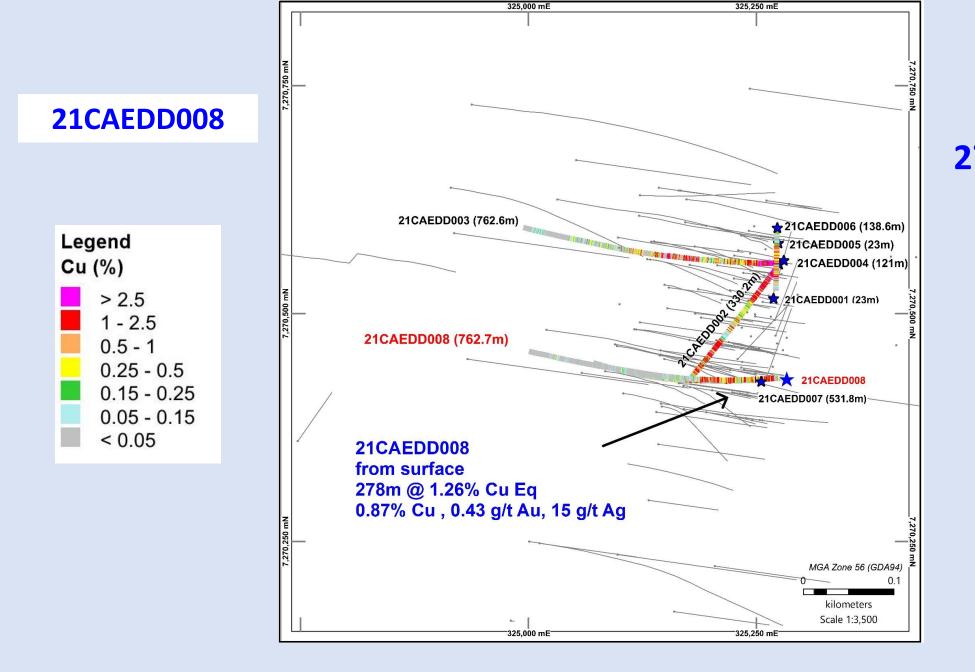


CAE 7 20m @ 1.89% CuEq 1.19%Cu 0.55 g/t Au 46 g/t Au 95m - 115m

55m @ 0.97% CuEq 0.77% Cu,0.21 g/t Au , 9.7 g/t Ag 192m-247m





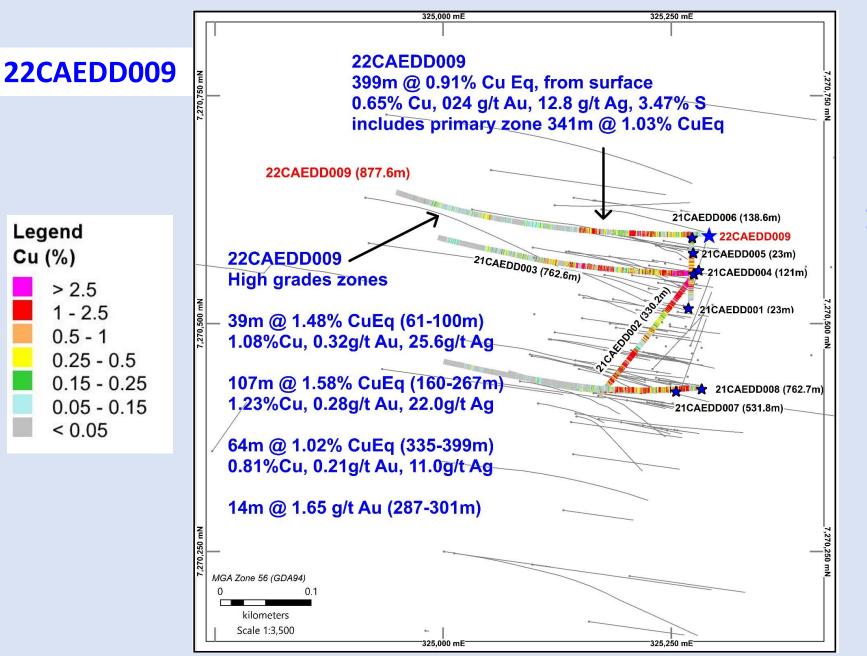


CAE 8 278m @ 1.28% CuEq 0.97%Cu 0.43 g/t Au 15 g/t Au 0m - 278m









## **CAE 9**

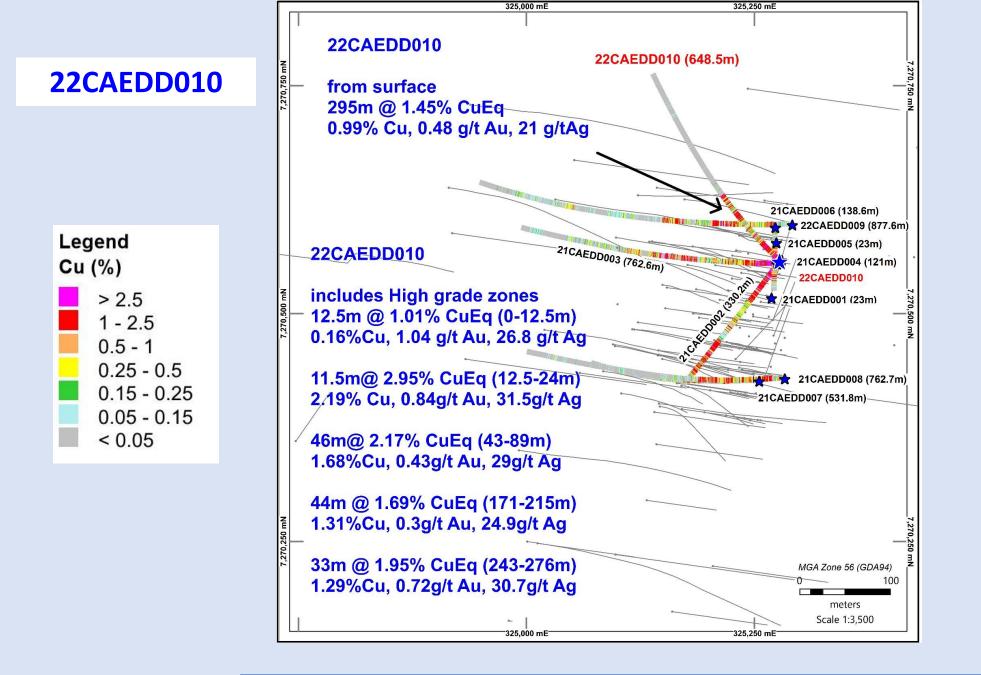
341m @ 1.08% CuEq 0.75%Cu,0.26 g/t Au 15 g/t Au,58m - 399m

> Total Mineralised Aggregate 887.6m @ 0.48 % CuEq







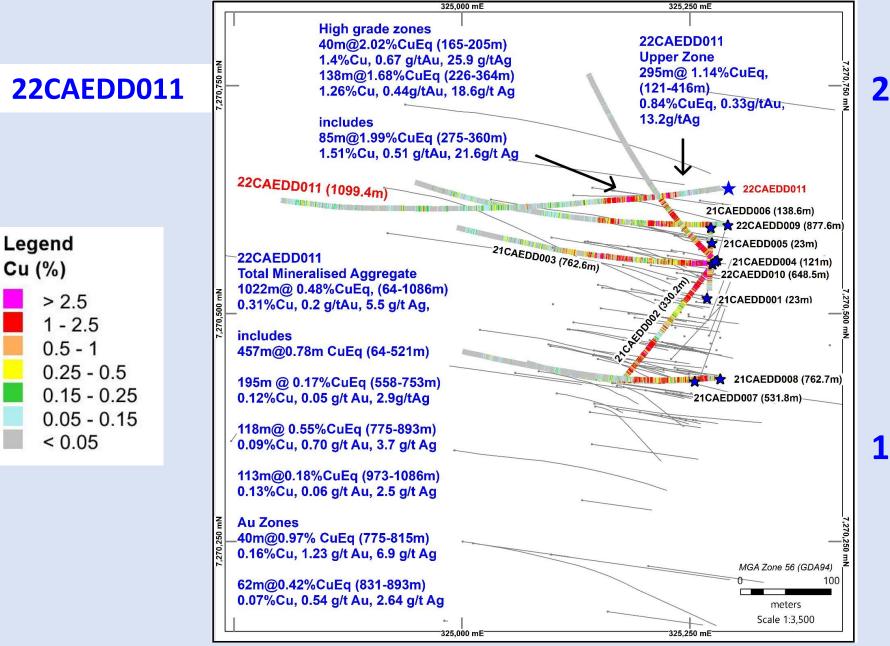


CAE 10 295m @ 1.45% CuEq 0.99%Cu,0.48 g/t Au 21 g/t Ag, 0m - 295m









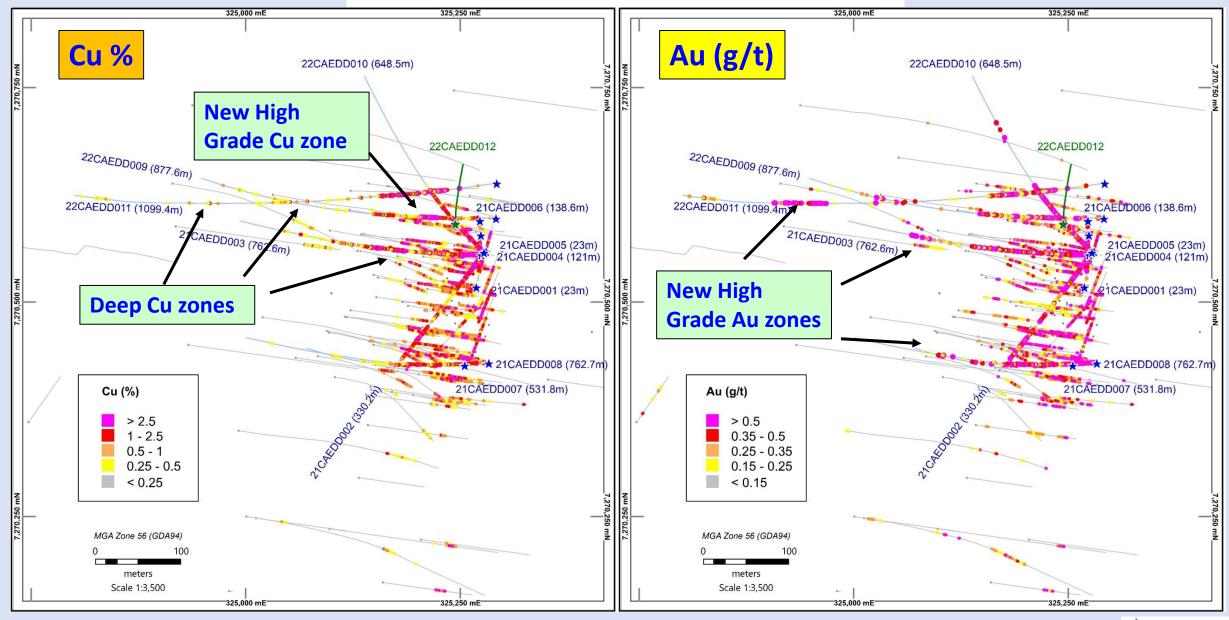
**CAE 11** 295m @1.14% Cu Eq (121m-416m)40m@1.23g/t Au (775m-815m) 62m@0.54g/t Au 831m-893m **Total Mineralised** Aggregate 1022m @ 0.48 Cu Eq (64-1086m)







## CAE Drilling & Previous Drilling Plan View



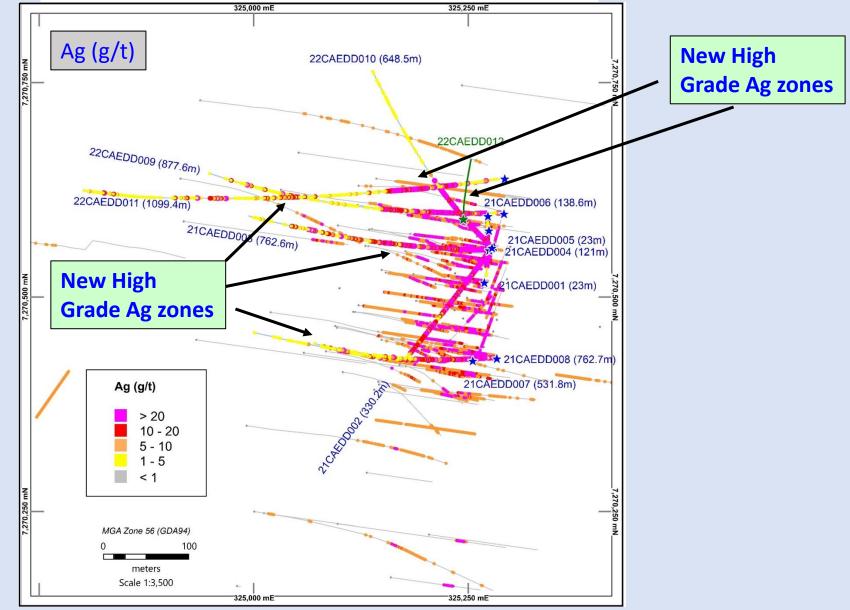
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### CAE Drilling & Previous Drilling Plan View















## Mineralised Breccia Development hosted at contact diorite and hornfels

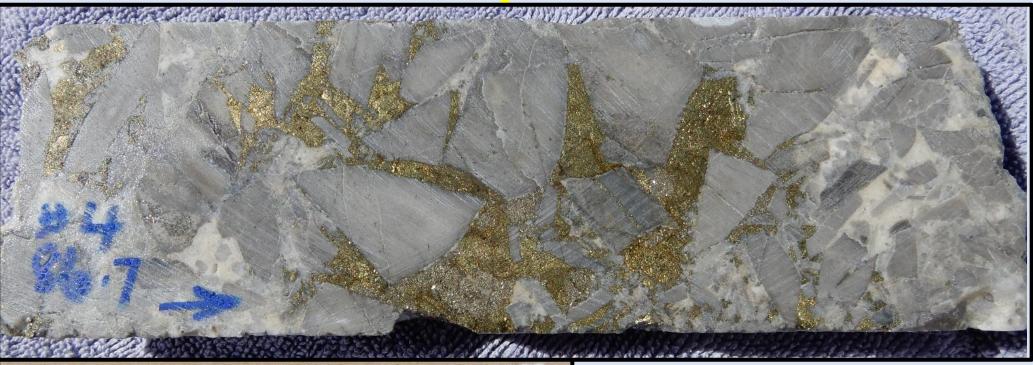


Left to Right (1)Vein Fracture network hornfels (2)Shatter Breccia hornfels (3)Crackle breccia monomict to Bimictic. Hydrothermal infill (4)Matrix supported breccia (5)Crush & fault zones.





## Copper Rich Infill Breccia : Hornfels Dominant Clasts





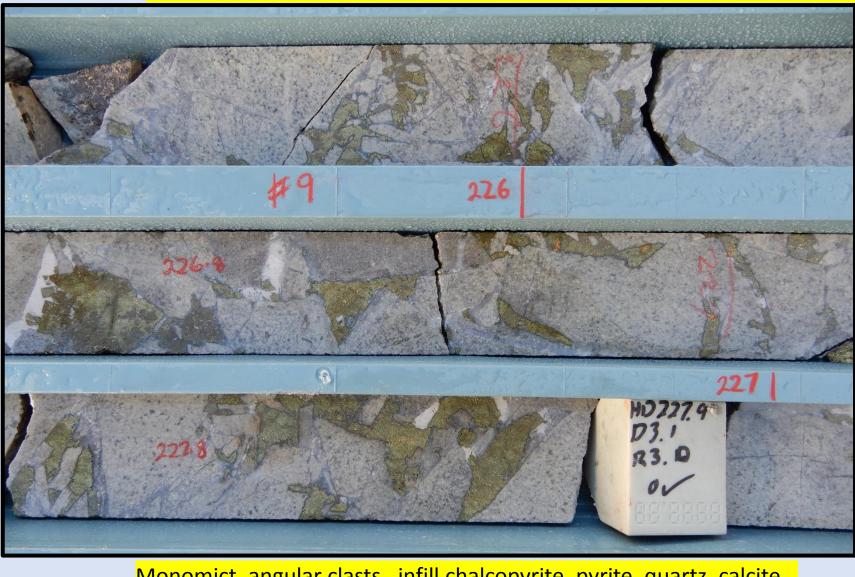
Monomict, angular clasts, infill of chalcopyrite, pyrite, quartz, calcite. Hole # 3 : 364m, Hole # 4 86.7m.







# Copper Rich Infill Breccia Diorite Dominant Clasts

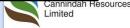


Monomict, angular clasts , infill chalcopyrite, pyrite, quartz, calcite, Hole# 9, 211m, 226-228m)





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# Copper Rich Infill Breccia, Range of Clasts



Polymict subangular –subrounded clasts hornfels, diorite, altered porphyries. Infill chalcopyrite, pyrite quartz calcite. Deeper levels of breccia. Hole# 3 , 333.6m.









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Key Factors in CAE's Exploration Success at Mt Cannindah Tried & True Procedures utilizing modern technology : Innovation viewed with a Rear Vision Mirror.

- 3D Review of planned drillholes to target connectivity of mineralization.
  - All Triple tube diamond drilling to date.
    - Careful attention to core orientation.
  - Structure measurements backed up by use of Core Orienting Frame .
- Careful attention to Core Recovery, Mark-Up, Presentation & Core Sawing
- Full JORC Compliant QA-QC, Blank sand, Matrix matched Internal standards as well as full range of CRMs.
  - Sludge sampling with PXRF analysis with results in real time.
  - Multi-element geochemical analysis , 4 acid digest, supported by PXRF.
  - Sophisticated statistical Geochem analysis utilizing Principal Component Analysis.







# The Triple Tube Advantage



- Delicate crush zones, preserved with triple tube, Including structural information.
- Likely to be completely destroyed without triple tube.











# Core orientation : key to understanding breccia and mineralized structure geometry and attitudes.









# Breccia Orientation : slabs generally flat & dipping east – not drilling down-dip.











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# Steep High Grade Structures

LHS High grade chalcopyrite –pyrite vein . Hole # 11, 190m-191m assays 1m @ 7.73% Cu,5.47 g/t Au, 140.8 g/t Ag, 17.92 % S. Looking east along E-W structure

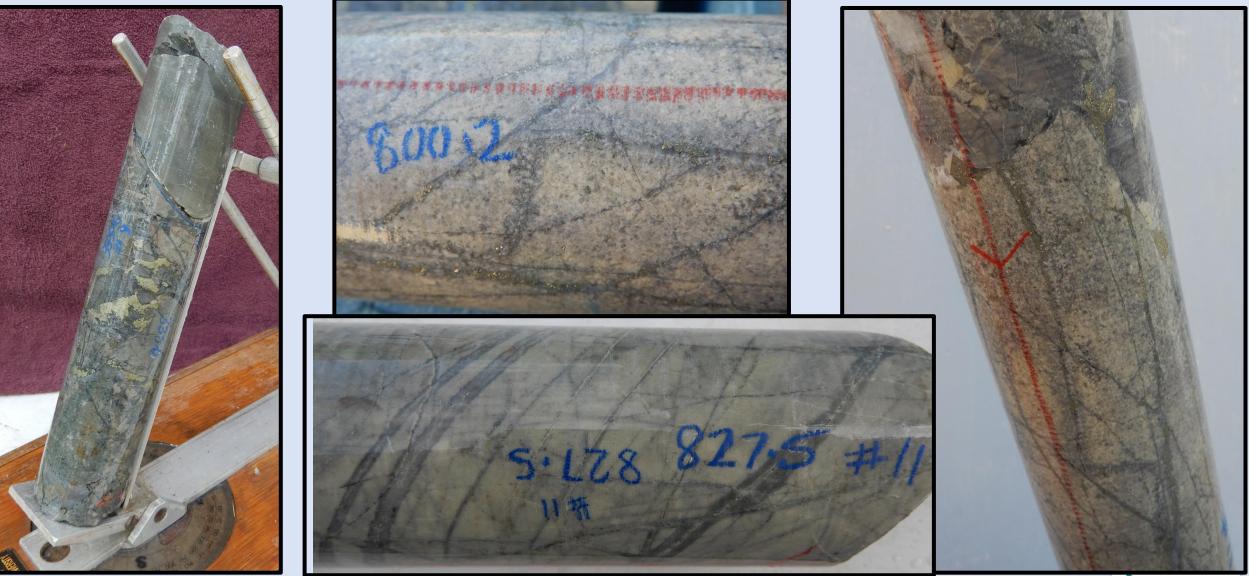
RHS Sulphidic High grade gold structure. Hole # 7 450m to 451m :1m @ 81.64 g/t Au, 107.3 g/t Ag, 0.14 % Cu, 30.5 % S. Looking SE along steep structure.







# Other Geological Features (LHS) Post Mineral Andesite Dykes, (RHS) Porphyry stockwork veined clasts – at 800m plus but probably carried up from depth.









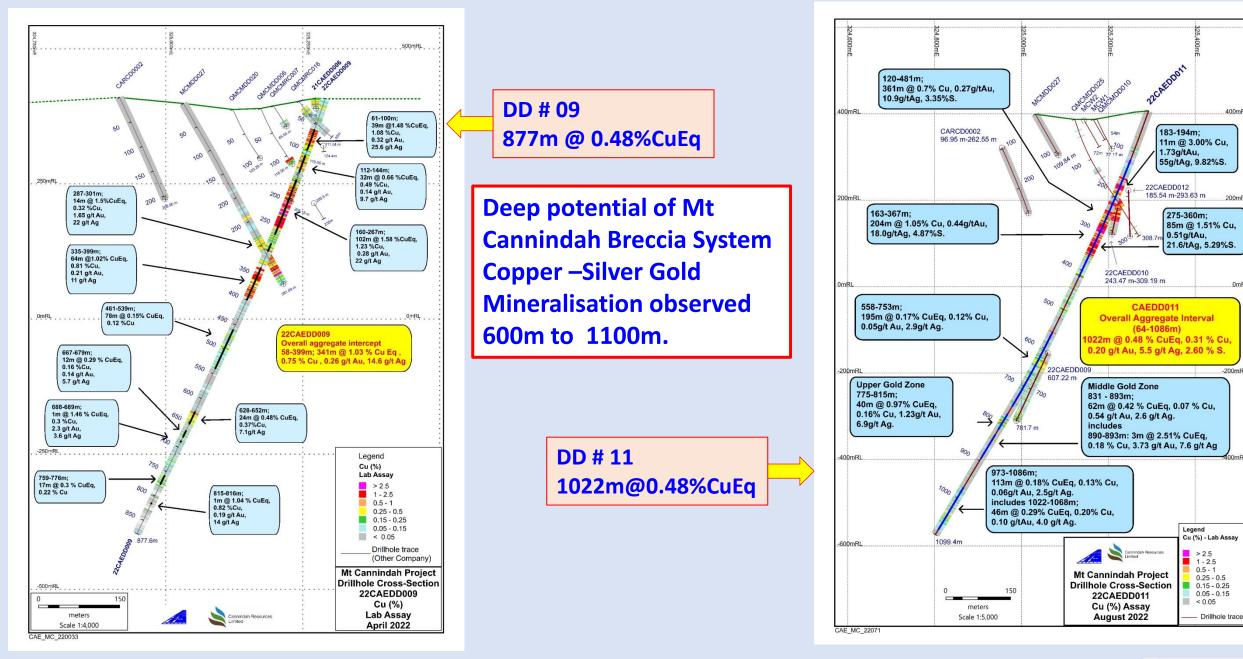
Chlorite matrix breccia sits below chalcopyrite-pyrite-calcite-quartz infill breccia. Still copper bearing down to 800 plus metres. Often overprinted by sericite.













400ml

200mF

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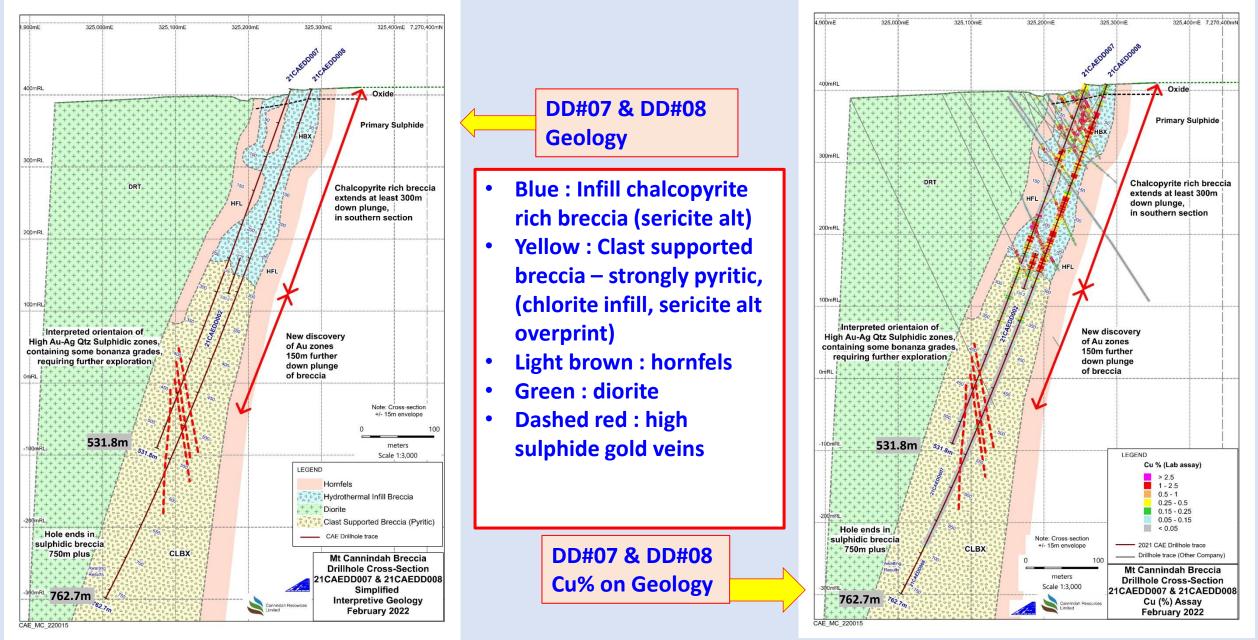
#### Deep Copper Gold Mineralised Breccia : Hole #9 679m, 720m; Hole # 11 1085m.







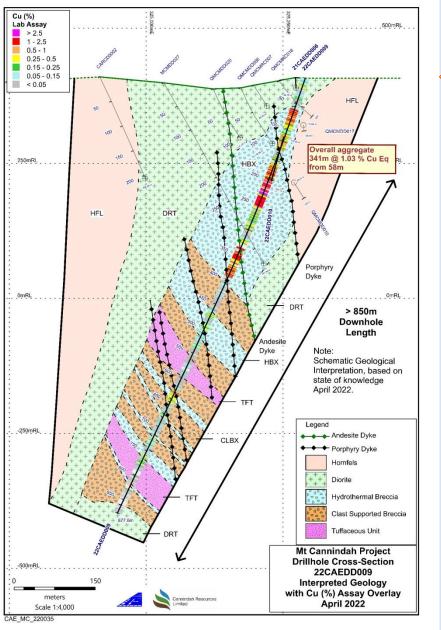




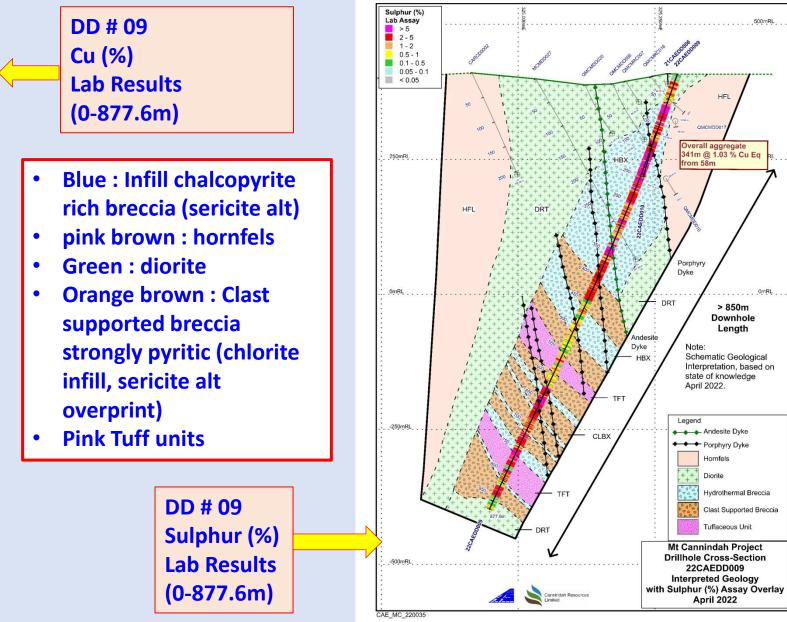


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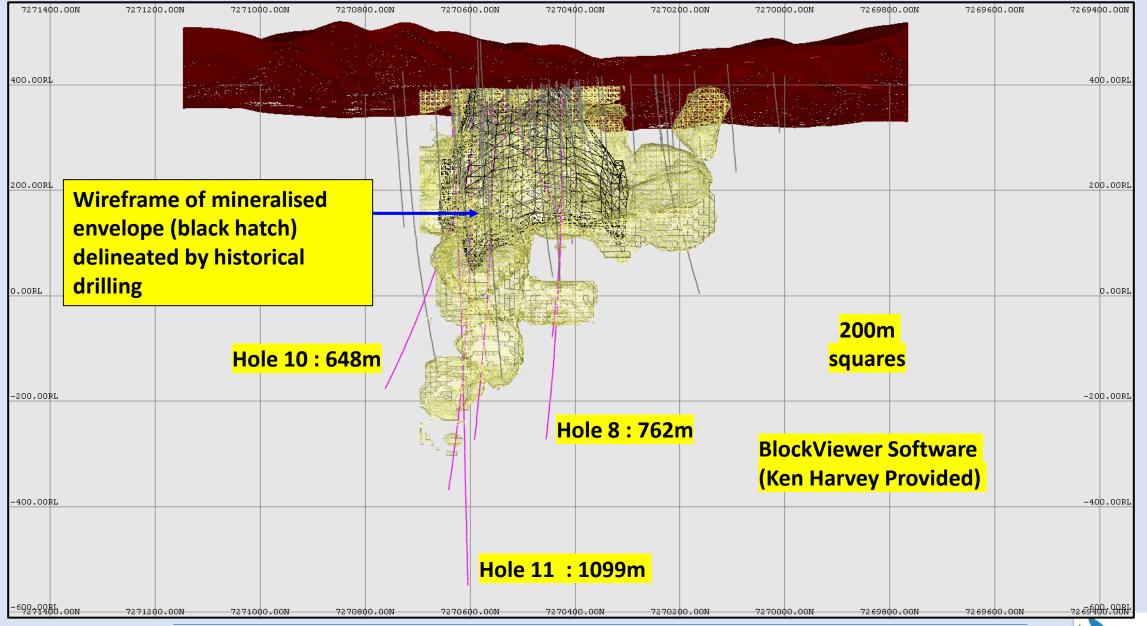
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### **3D visualization of mineralization envelope at Mt Cannindah, July 2022 , Looking East**

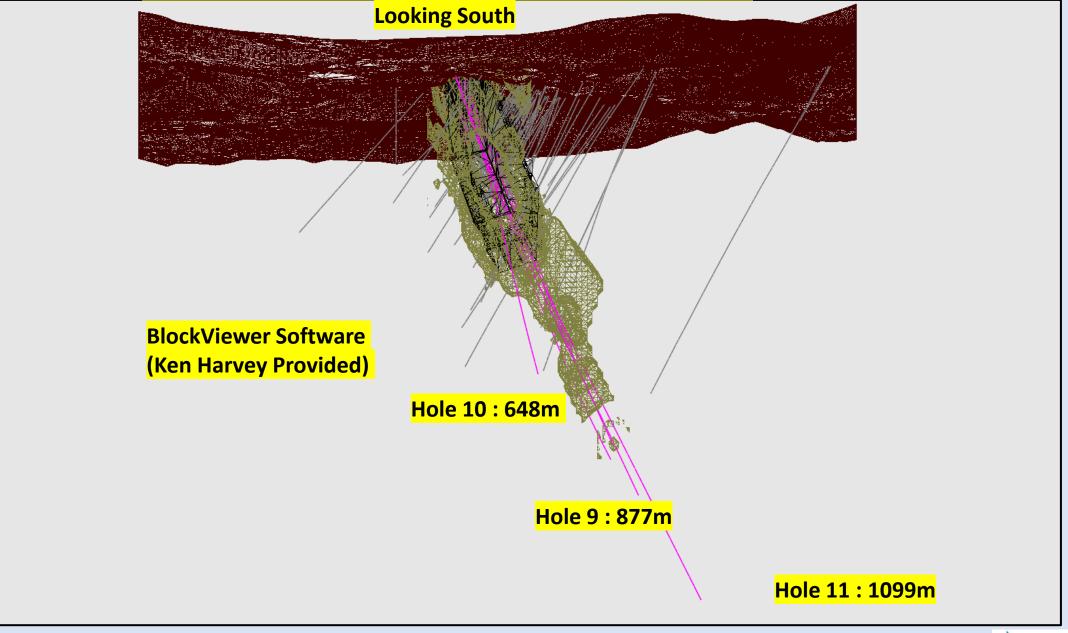






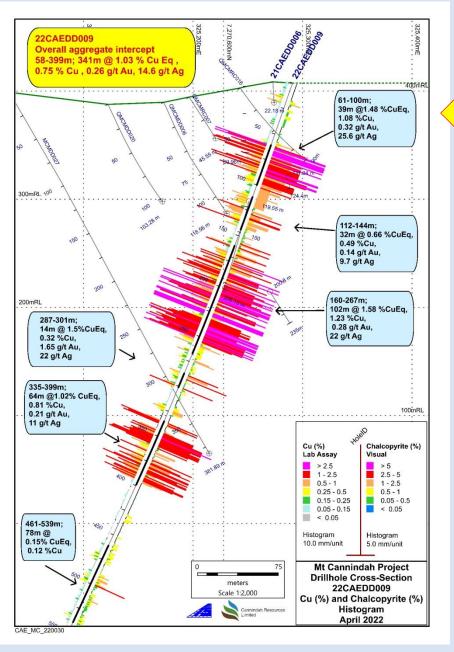
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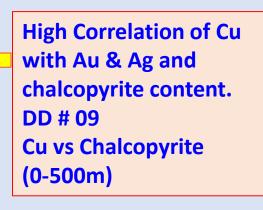
#### **3D** visualization of mineralization envelope at Mt Cannindah.





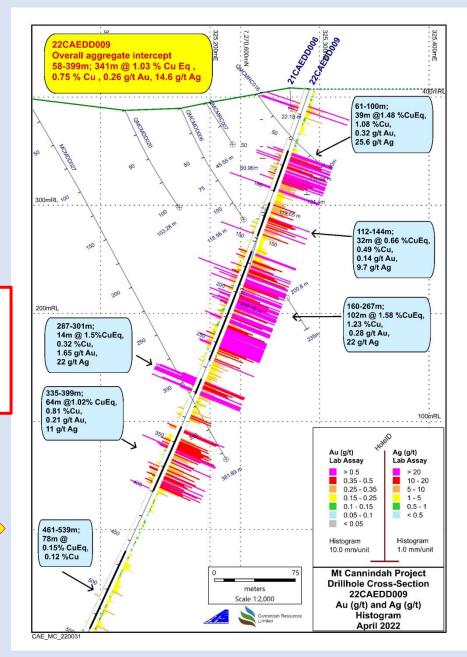






DD # 09 341m @ 1.03%CuEq, 0.75%Cu, 0.26 g/t Au,4.6 g/t Ag (58-399m)







Sludge (diamond drill cuttings) sampling. With PXRF analysis provides timely geochem data during drilling Retro Innovation : Sample Collection at drill collar on water return line.









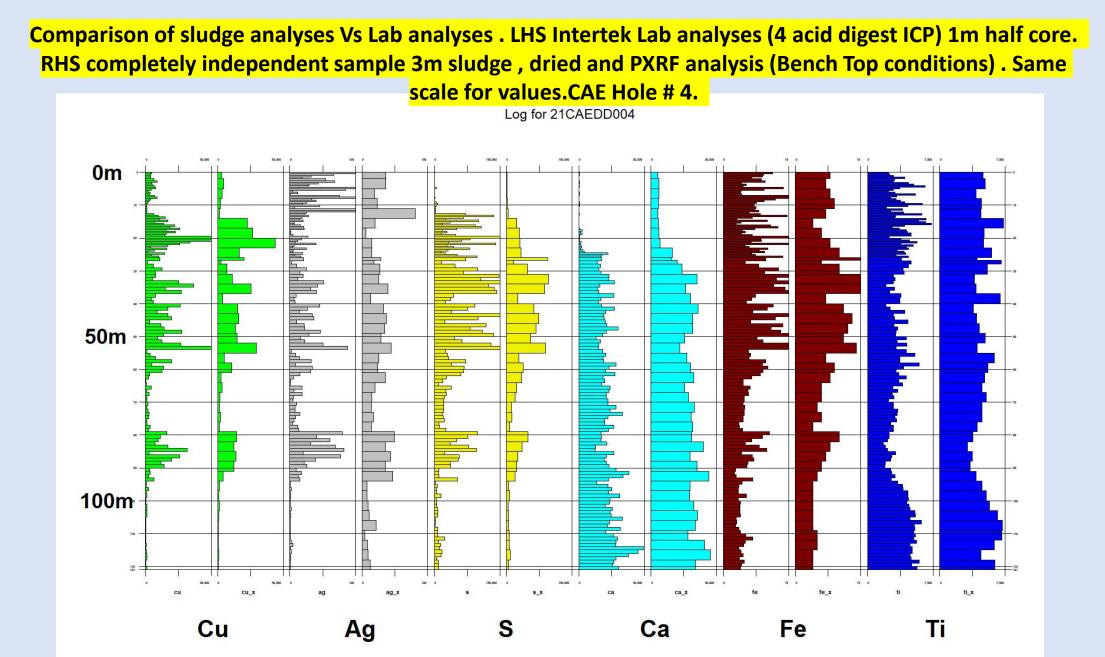
## Sludge (diamond drill cuttings) sampling. With PXRF analysis provides timely geochem data during drilling Retro Innovation : Drying of slurry samples





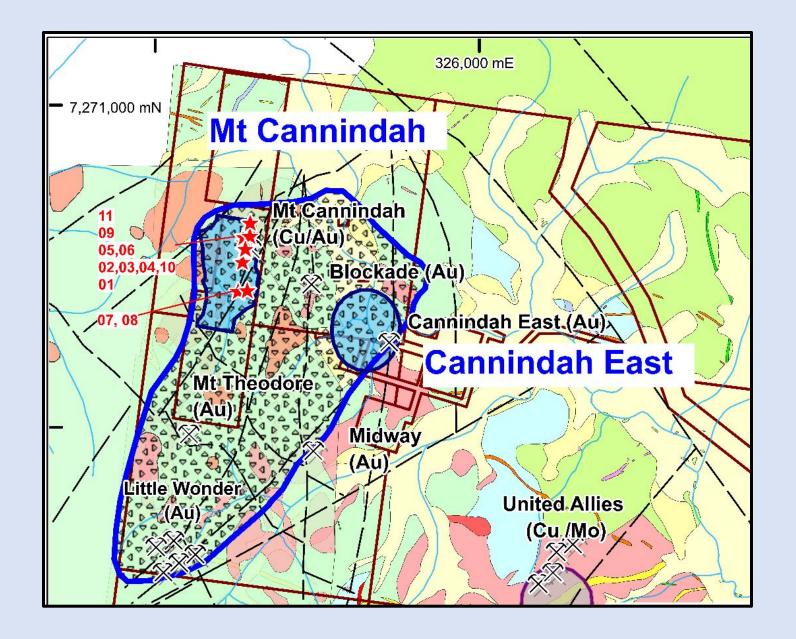






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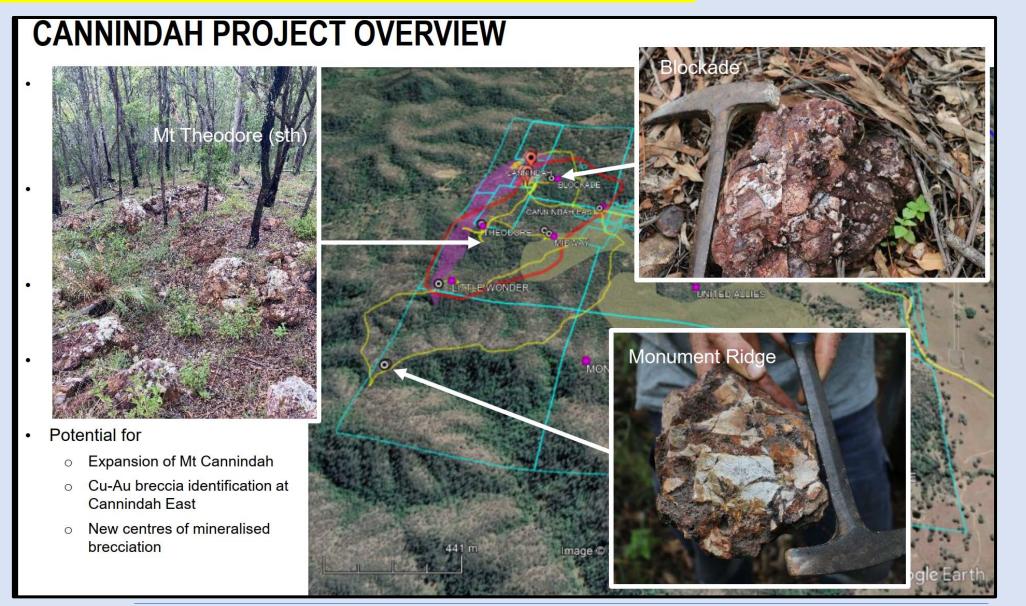


2021-2022 Drilling Program Drilling Hole 14, Late August, 2022





Exploration Success at Mt Cannindah highlights the potential of other breccia & porphyry systems within CAE's strong tenement position in the district. More drilling to come.





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