ASX ANNOUNCEMENT

26 July 2024

Outstanding High-Grade Copper and Gold Assays from Mountain Home Project, NT

Assays of up to 45% Cu and 11.75g/t Au from rock chips along with strongly anomalous soil sampling highlight the Project's significant exploration potential

- **Initial reconnaissance sampling mission highly successful in providing exceptional copper and gold values in selective rock chips and extending the known mineralised structure to 1km in strike extent.**
- **Exceptionally high-grade copper assays, including 45.5% Cu, 39.8% Cu and 38.4% Cu, returned from selective rock chip sampling, with seven of the 15 rock chips returning values in excess of 22% Cu.**
- **High-grade gold values of up to 11.75 g/t Au in selective rock chips.**
- **The mineralised outcrop has been extended by this recent sampling to 1,000m while remaining open along strike to the north and south.**
- **Soil samples taken perpendicular to the mineralised outcrop show anomalous copper values, over widths across-strike of up to 80m, with coincident anomalous gold.**
- **Further field work planned for the current Quarter.**

West Australian-based explorer E79 Gold Mines Limited (**ASX: E79**) ('E79 Gold' or 'the Company') is pleased to provide an update on exploration activities at the recently optioned Mountain Home Copper-Gold Project[1], located in the Northern Territory.

E79 Gold CEO, Ned Summerhayes, said: *"These outstanding rock chip copper and gold results highlight the very exciting discovery potential of the Mountain Home*

[1] Refer to E79 Gold ASX Announcement 28 May 2024

ASX Code: E79
Shares on issue:102M
Market capitalisation: $3.5M
Cash: $1.97M (31 March 2024)
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Project. Encouragingly, we have now encountered high grades in both copper and gold along the entire length of the known mineralised outcrop, now extended to in excess of 1km strike extent and remains open to the north and south.

"The soil sampling results suggest there may be parallel structures given the across-strike width of anomalism in both copper and gold. These results give us confidence to both follow-up with programmes to extend the Mountain Home copper system and also to follow up historic positive stream and soil samples elsewhere on the project. We are aiming to undertake these exploration programs within the current September Quarter."

Northern Territory Project

Mountain Home (EL32470 – NT Minerals Option), EL33886 and EL33886 (both under application – 100% E79)

Assays have been returned from E79 Gold's initial reconnaissance sampling program at Mountain Home, including high-grade copper and gold values along the length of the prospective and extended 1,000m long outcrop. Results for all recent E79 Gold samples are provided (contained below in Table 1) and standout rock-chip assay results (Figure 1) include:

- MHR0004 - **28.9% Cu, 0.16 g/t Au**
- MHR0008 - **0.11% Cu, 11.75 g/t Au**
- MHR0009 - **22.0% Cu, 0.45 g/t Au**
- MHR0010 - **45.5% Cu, 0.08 g/t Au**
- MHR0011 - **38.4% Cu, 0.23 g/t Au**
- MHR0012 - **24.9% Cu, 1.33 g/t Au**
- MHR0013 - **39.8% Cu**, **1.72 g/t Au**
- MHR0014 – **30.0% Cu, 0.29 g/t Au**

It is worth noting that the samples, especially the higher-grade copper results, had abundant oxide-copper mineral malachite (green mineral in Photo 1), that can produce elevated copper results due to supergene (weathering) surficial enrichment. Pure malachite copper content is variable but typically around 57-58% Cu. Experience has been that the sulphide-rich precursor rocks or sulphide-rich unweathered examples in drilling beneath these types of surface copper assay values will typically be lower grade. For example, 100% un-oxidised chalcopyrite has an average copper content of around 35% Cu – the remainder is iron and sulphur.

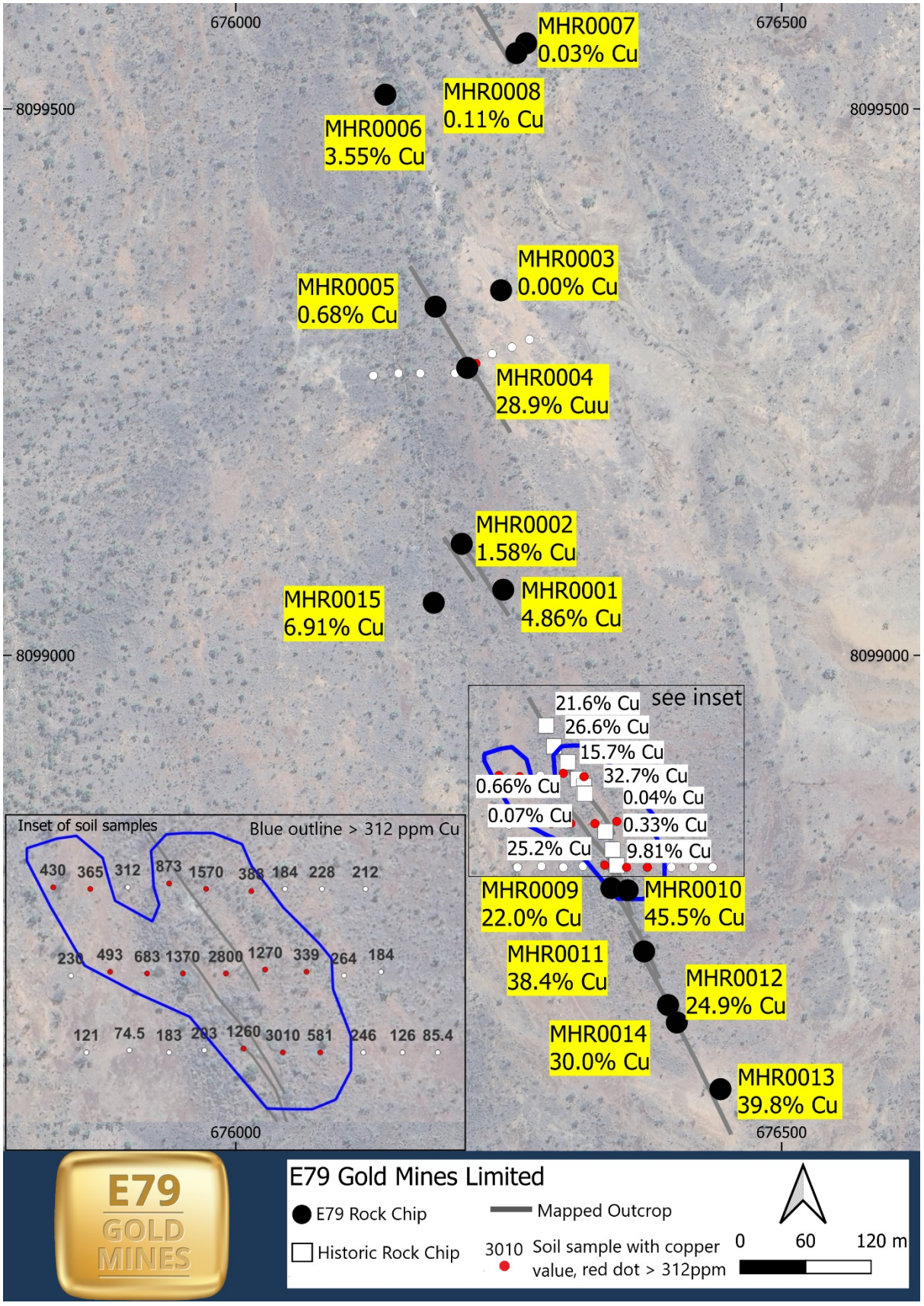

Figure 1: *Map of Rock Chip locations showing copper results*

Photo 1: *Sample MHR0010 which returned a grade of 45.5% Cu. Sample is ~7cm across. Sample location is shown in Figure 1.*

There is a strong positive correlation between copper values and sulphur values in the assays, with MHR0010 (45.5% Cu) showing 5.73% S. These elevated sulphur values are an important vector to finding primary copper mineralisation, and also open up the potential for a wider array of geophysical techniques to be applied in the search for sulphide copper deposits.

These standout rock chips show anomalous gold – which is rare in the region – with 10 of the 15 rock chips taken returning anomalous gold (>0.1 g/t Au), with a maximum value of 11.75g/t Au in MHR0008 (Figure 2). This sample sits in the far north of the sampled area, with the mineralised system open to the north and south.

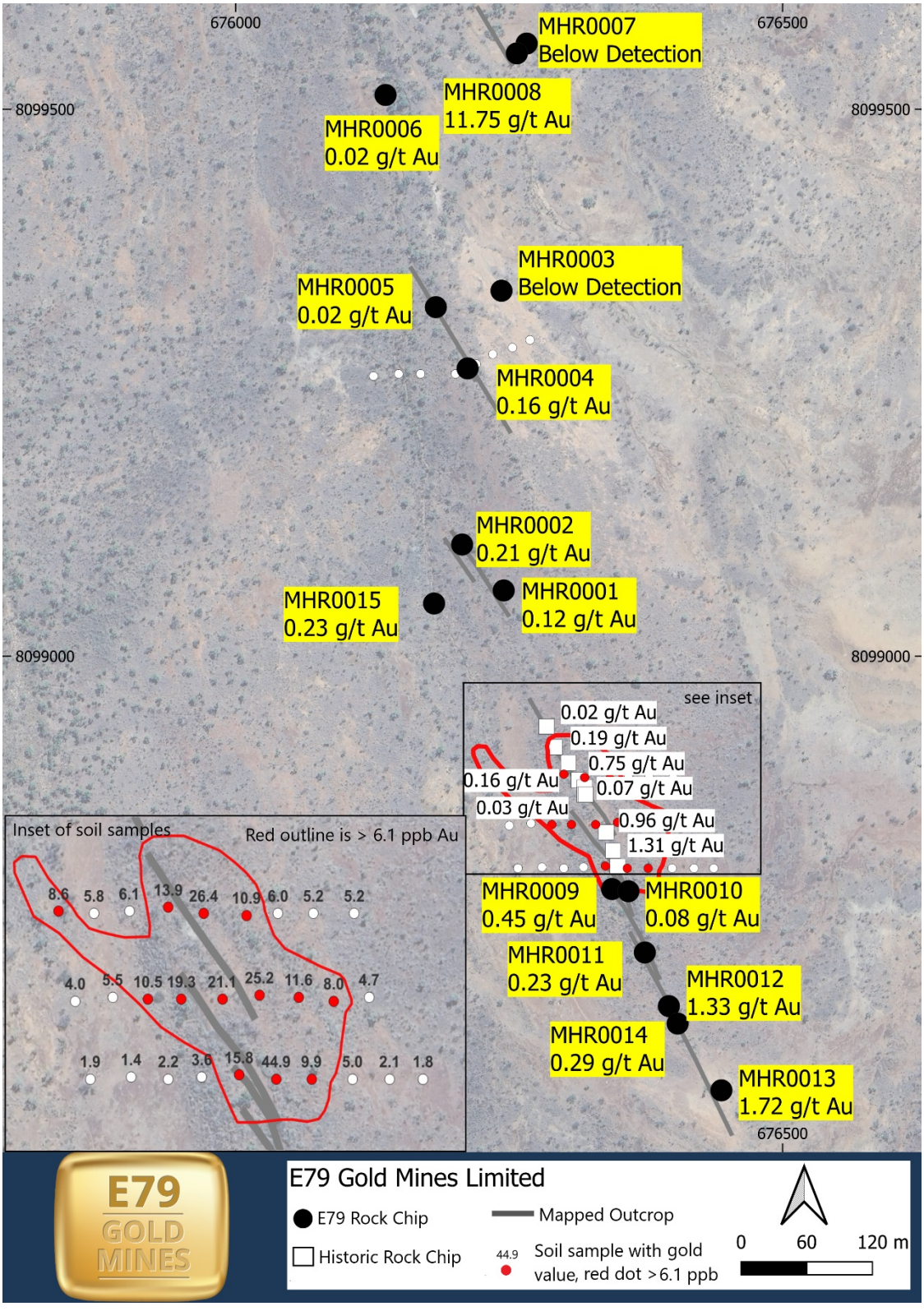

Figure 2: *Map of Rock Chip locations and soil samples labelled with gold values*

A reconnaissance soil sample program was completed during E79 Gold's initial programme, with 36 samples taken on lines oriented perpendicular to the strike of mineralised outcrop. Sample spacing was 20m on approximately 50m line spacings with the sampling focused on the original 150m long and 0.5-4m wide extent of the system defined by historic rock-chip results[2] with the objective to gain an understanding of the extent of the system beyond the mineralised outcrop.

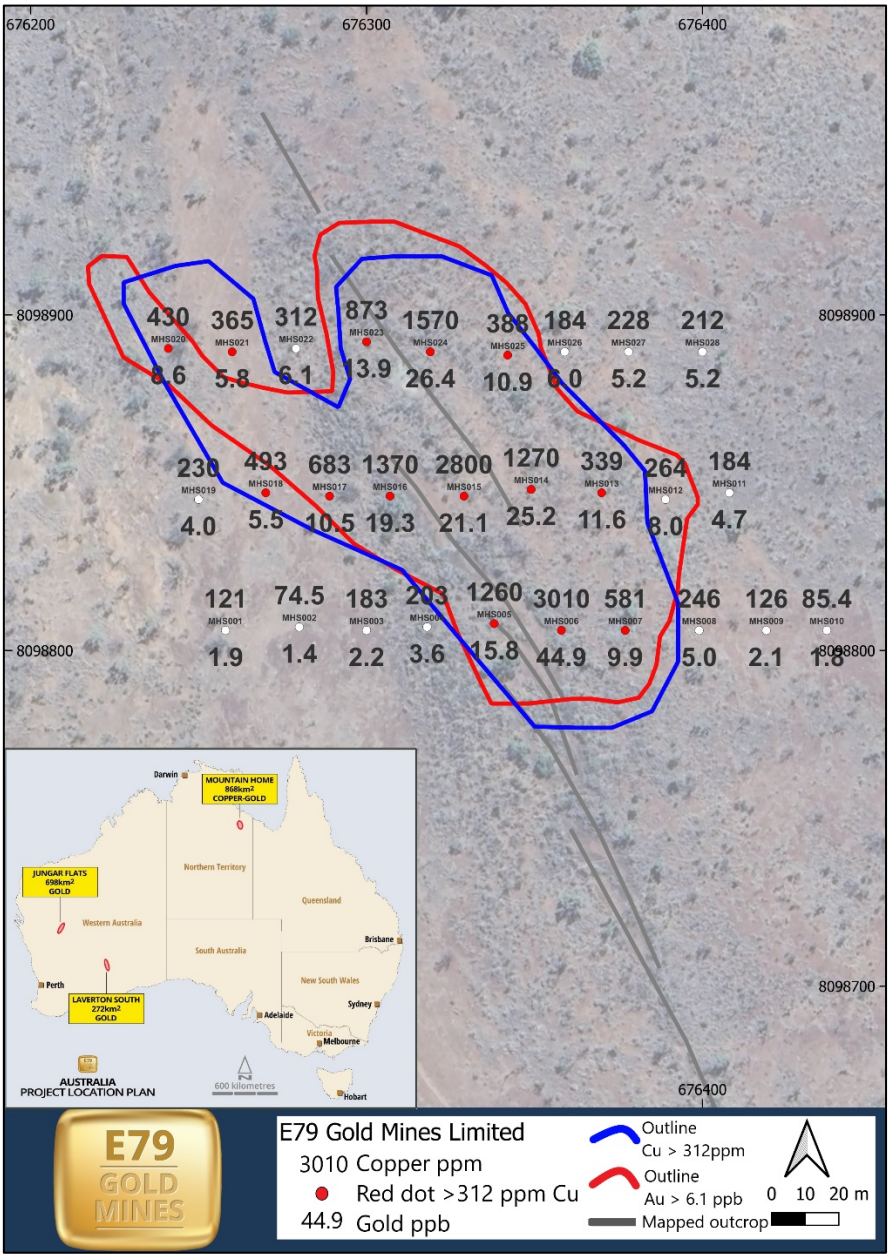

Figure 3: *Map of coincident copper and gold anomalies in soil samples*

The recent reconnaissance results (contained below in Table 2) demonstrate an 80m wide, coincident anomalous copper and gold zone, across the strike of the outcrop (Figure 3).

[2] Refer to NT Minerals ASX Announcement 14 December 2023

The outstanding success of this initial reconnaissance program paves the way for larger-scale comprehensive sampling programs to be undertaken. Historic soil sampling programs were more regional in nature and were completed on a very wide-spaced sampling basis utilising 500m sample spacing and 2km line spacing, which aims to identify large regional trends but may be less effective at a deposit scale.

This mineralised outcrop sits within the highly prospective McArthur Basin, where E79 Gold now controls a tenement package of 868km^2 (Figure 4). This district hosts the world-class McArthur River Zinc-Lead Mine, the Teena Zinc-Lead Deposit and numerous other base metal prospects.

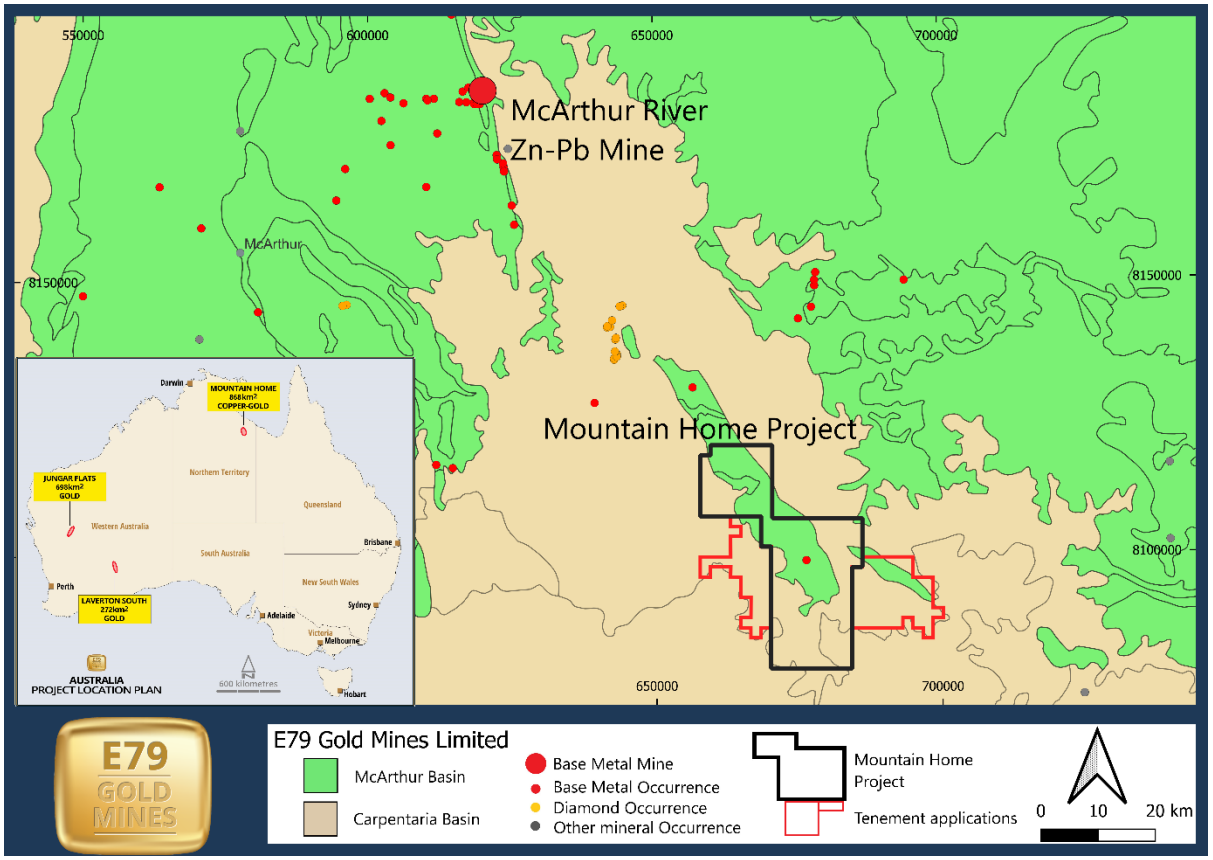

Figure 4: *Location map of the Mountain Home Project with McArthur and Carpentaria Basins*

Upcoming Presentations

- **October 2024** Present at AMEC - Perth

Our motto: Money in the ground.

Yours sincerely,

Ned Summerhayes

Chief Executive Officer

The information in this report that relates to Exploration Results is based on information compiled by Mr Ned Summerhayes, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr Summerhayes is a full-time employee, a shareholder and an option holder of the Company. Mr Summerhayes has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Summerhayes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Previously Reported Information: The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Authorised for release by the CEO of E79 Gold Mines Limited.

For Further Information, please contact:

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ABOUT E79 GOLD MINES LIMITED (ASX: E79)

E79 Gold's Projects comprise ~1,838km^2 of highly prospective ground including within the McArthur Basin of the Northern Territory, which is the world's largest accumulation of Zn-Pb-Ag and is prospective for copper, gold and diamonds, and within the Laverton Tectonic Zone and Murchison Goldfields, both of which are endowed with >30 million ounces of gold and located within the Yilgarn Craton of Western Australia.

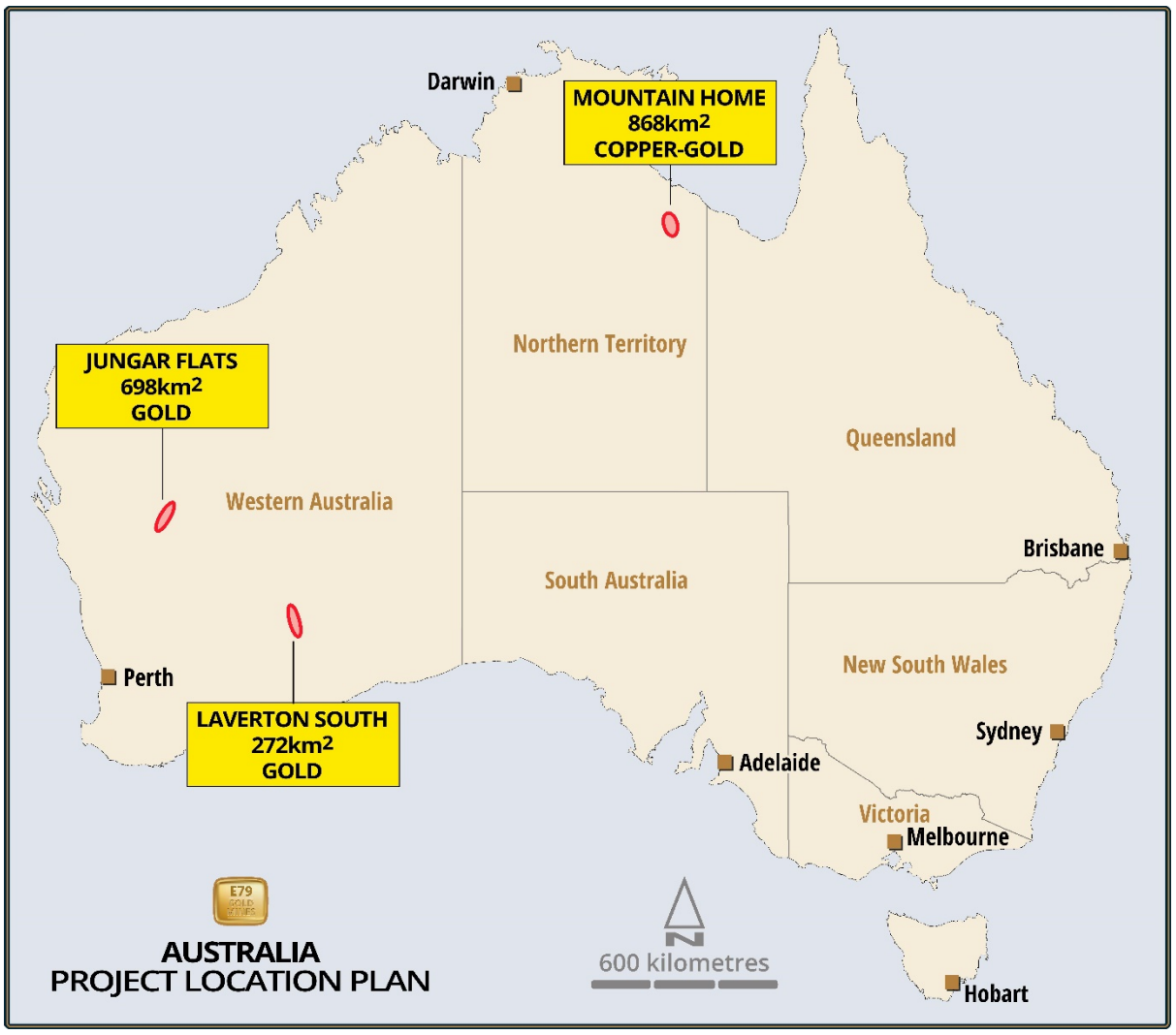

Figure 5: *Map of E79 Gold's exploration projects*

Table 1: Rock chip sample locations (MGA2020_53S).

Sample ID	East	North	RL	Au g/t	Ag g/t	Cu %	S %	Bi g/t	Rock Description
MHR0001	676245	8099060	182	0.12	9.57	4.86	0.08	168.0	Brecciated sediment with minor qtz, malachite staining
MHR0002	676207	8099102	180	0.21	1.32	1.58	0.28	164.5	Brecciated sediment within outcrop. Malachite staining
MHR0003	676243	8099334	178	0.01	0.01	0.00	0.19	0.15	Dark grey metamorphosed limestone
MHR0004	676212	8099263	182	0.16	12.95	**28.90**	0.95	481	Foliated sediment, malachite in matrix
MHR0005	676183	8099319	176	0.02	0.28	0.68	0.02	24.4	Malachite staining on fine grained sediment
MHR0006	676137	8099513	174	0.02	1.09	3.55	0.30	39.0	Float. Iron rich sediment with malachite on fractures
MHR0007	676266	8099560	179	0.01	0.03	0.03	0.01	0.69	Dark grey metamorphosed limestone
MHR0008	676257	8099551	178	**11.75**	1.71	0.11	0.02	23.0	Qtz crystals on brecciated sediment
MHR0009	676344	8098787	189	0.45	1.03	**22.00**	0.18	38.3	Vuggy sediment with malachite, minor qtz
MHR0010	676359	8098785	184	0.08	9.29	**45.50**	5.73	344	Dark brown brecciated sediment, malachite in matrix
MHR0011	676374	8098729	188	0.23	3.30	**24.90**	2.33	487	Band of fine grained dark grey sediment, with band of malachite and oxidised sediment
MHR0012	676396	8098680	187	**1.33**	8.84	**24.90**	0.76	499	Medium grained sediment with minor qtz
MHR0013	676444	8098603	187	**1.72**	23.40	**39.80**	3.34	432	Float. Brecciated sediment with malachite in matrix
MHR0014	676404	8098664	186	0.29	7.78	**30.00**	2.42	617	Brecciated sediment with malachite in matrix
MHR0015	676181	8099048	180	0.23	1.78	6.91	0.20	831	Float. Brecciated sediment with qtz, malachite as fracture fill

Table 2: Soil sample locations (MGA2020_53S).

Name	East	North	RL	Au_ppb	Cu_ppm
MHS001	676258	8098806	185	1.9	121
MHS002	676280	8098807	186	1.4	74.5
MHS003	676300	8098806	186	2.2	183
MHS004	676318	8098807	186	3.6	203
MHS005	676338	8098808	185	15.8	1260
MHS006	676358	8098806	185	44.9	3010
MHS007	676377	8098806	187	9.9	581
MHS008	676399	8098806	185	5.0	246
MHS009	676419	8098806	184	2.1	126
MHS010	676437	8098806	183	1.8	85.4
MHS011	676408	8098847	184	4.7	184
MHS012	676389	8098845	186	8.0	264
MHS013	676370	8098847	185	11.6	339
MHS014	676349	8098848	185	25.2	1270
MHS015	676329	8098846	185	21.1	2800
MHS016	676307	8098846	187	19.3	1370
MHS017	676289	8098846	186	10.5	683

MHS018	676270	8098847	185	5.5	493
MHS019	676250	8098845	184	4.0	230
MHS020	676241	8098890	184	8.6	430
MHS021	676260	8098889	184	5.8	365
MHS022	676279	8098890	184	6.1	312
MHS023	676300	8098892	184	13.9	873
MHS024	676319	8098889	185	26.4	1570
MHS025	676342	8098888	182	10.9	388
MHS026	676359	8098889	182	6.0	184
MHS027	676378	8098889	181	5.2	228
MHS028	676400	8098889	181	5.2	212
MHS029	676126	8099256	183	1.3	64
MHS030	676149	8099258	181	1.3	81.8
MHS031	676169	8099258	180	2.5	199
MHS032	676201	8099258	182	3.5	202
MHS033	676220	8099267	183	4.9	343
MHS034	676235	8099276	180	1.6	130
MHS035	676253	8099282	183	1.1	75.2
MHS036	676269	8099289	184	0.6	48.6

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

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 down hole 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*	• E79 Gold has recently undertaken rock chip and soil sampling activities within the Mountain Home Project • Selective rock chip samples were collected by hand and soil samples were taken from ~10cm deep holes and sieved to 1mm. • Rock chips have undergone 4 acid multi-element analysis

Criteria	JORC Code explanation	Commentary
	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.	
Drilling techniques	• *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).*	• Soils holes were hand dug to a depth of ~10cm
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.*	• Not applicable as no drilling occurred
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.*	• Soil sample location and depth were recorded
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*	• Rock chip samples have undergone industry standard sample preparation techniques consisting of crushing and grinding. • Soil samples were sieved to 1mm in the field, with no further sample preparation required

Criteria	JORC Code explanation	Commentary
	for instance results for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	• All soil samples were analysed using LabWest's UltraFine+™ technique, whereby the sub 2 micro clay fraction is separated and analysed with the latest microwave technique and ICP-MS or ICP_OES machines. • Samples will be digested using an UltraFine+™ Technique followed by analysis of gold by ICPMS with lower detection limit of 0.5ppb Au. 50 multi-elements analysed by ICPMS/ICPOES and include; Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Nb, Nd, Ni, Pb, Pd, Pr, Pt, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr • No external standards were used • Rock chips were analysed at ALS laboratories with a 4 acid digest with ICP-MS or ICP_OES finish. 48 Elements were analysed including; Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr • In the rock chips Gold will be analysed using a Fire assay with a 50gm charge.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Data is logged onto paper in the field and entered into excel to go to a centralised database.

Criteria	JORC Code explanation	Commentary
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sample locations were recorded with a handheld GPS in MGA94 Zone 53S. • RL was also recorded with handheld GPS but accuracy is variable.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Soil sample spacing is 20m along lines and ~50m between lines. • Rock chips were taken in an uneven distribution based on rock outcrops
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.* • *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.*	• Soil sample lines were completed on an east west pattern, roughly perpendicular to the trend of the main geological units. • Rock chips were taken generally along strike of known mineralisation
Sample security	• *The measures taken to ensure sample security.*	• Samples were stored on site and taken directly to the laboratory by a freight company
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken.

Section 2 Reporting of Exploration Results

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

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 security of the tenure held at the time of reporting along with*	• The sampling program occurred on tenement EL32470, under the control of E79 Gold Mines

Criteria	JORC Code explanation	Commentary
	any known impediments to obtaining a licence to operate in the area.	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Limited exploration has occurred on EL32470, in part due to the remote location of the project. From 1966-1968 ?Company? undertook stream sediment samples, mapping soil samplings and Induced Polarisation (IP) surveys with copper found in samples around old workings. From 1990-1992 CRA undertook diamond exploration via stream sediment sampling, gravel sampling and rock chip sampling. More recently, NT Minerals undertook broad spaced soil sampling and rock chip sampling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	To date there is not enough information to determine deposit type. Geological setting of the Mountain Home Project and adjoining areas is dominated by fault bounded lithologies of lower McArthur Basin Stratigraphy (Paleoproterozoic aged units of the Tawallah Group) exposed as a series of inliers surrounded by younger (Cambrian Age) Bukalara Sandstone.
Drill hole Information	• *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *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.*	• Not applicable as no drilling reported.

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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable as no drilling reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Not applicable as no drilling reported.
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.*	• Appropriate maps are included within the body of this report.
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.*	• Results of key elements are presented for all samples within the body of this report.
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 characteristics; potential deleterious or contaminating substances.*	• Relevant geological observations are included in this report.

Criteria	JORC Code explanation	Commentary
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional geochemical surveys may be carried out in the future in order to assist in the delineation of drilling targets.