Copper Duke Geophysics and Surface Geochemistry Defines Targets

Highlights

- **Surface geochemistry results highlight significant extensions of known copper anomalism across various prospects within Copper Duke**
- **Large scale porphyry systems identified as a result of extensive mineralised quartz veining in several areas across the project:**
  - **11.2m @ 0.98% copper and 4.05m @ 16.4g/t gold and on newly identified structural zone to northwest of El Huato**
  - **26m @ 1.13g/t gold and 0.21% copper – from channel sampling northwest El Huato prospect**
  - **15.3m @ 1.32g/t gold located 1.2km southeast of mineralised UN drillholes (El Huato)**
  - **13m @ 0.46% Copper located 820m southeast of UN drillholes**
- **Additional exploration targets identified by several new high-grade gold quartz veins discovered**
- **Density of veining in some areas provides the potential for high grade gold mineralisation targets within the porphyry field**
- **Results of the aerial geophysical survey have been received for the Copper Duke Project and are being analysed in parallel with the soil sampling**
- **Geochemical and geology datasets for the Copper Duke project systematically integrated into a single database for the first time**
- **Copper Duke drill planning underway and expected to commence Q2 2021 priority targets around the historic UN drillholes with reported intersections of:**
  - **33.1m @ 2.5g/t gold, 154ppm copper, and 2.4ppm Mo, from 9m drill depth and**
  - **8.4m @ 1.9g/t gold, 294ppm copper, and 3.9ppm Mo, from 45.3m – Drill Hole: SON-01**
  - **45.4m @ 1.9g/t gold, 168ppm copper, 3ppm Mo, from surface and**
  - **10.9m @ 1.7g/t gold, 857ppm copper, 2ppm Mo, from 51.85m – Drill Hole: SON-02**

Titan Minerals Limited (**ASX: TTM**) ("**Titan"** or the "**Company"**) is pleased to announce results of surface geochemistry sampling and initial results for the aerial geophysical survey that have been received for the Copper Duke Project, located in the Loja Province of southern Ecuador, and 18km east of the Company's flagship Dynasty Gold Project.

Reported assays include the initial results from an ongoing regional mapping and geochemistry campaign being completed prior to the anticipated maiden drilling next quarter on several priority targets. The preliminary geological interpretation of the geophysics has been completed which allows for ranking of the multiple gold and gold-copper targets at Copper Duke. The interpretation will also assist with prioritising the ongoing field work designed to confirm interpretations and refine targeting for drilling planned in the 2021 field season.

Reported surface geochemistry at Copper Duke totals an additional 925 assay results incorporated into the database from the ongoing mapping and, concurrent validating and updating of recent exploration results. The results continue to highlight significant extensions of known copper anomalism across the Copper Duke Project as the footprint of geochemical coverage expands, and the results identify several new high-grade gold quartz veins that potentially represent additional exploration targets for evaluation.

This most recent update to the database represents the first time all geochemical and geology datasets for the Copper Duke Project have been systematically integrated into a single database structure. Our team now has the

unprecedented opportunity to interrogate all available data in a digital environment, in conjunction with the newly acquired aerial magnetic and radiometric data.

Channel Sampling Results, gold-copper porphyry style mineralisation

Within the sampling corridor, several anomalous zones reported are within a 1.2km proximity to the historical United Nations program drilling (refer to ASX release dated 25 May 2020) completed in 1978. The recent results indicate potential for a 2km long northwest striking corridor of gold and copper anomalism of significant widths, extending southeast from the historical drilling where partially assayed diamond holes report intersections of:

- **33.1m @ 2.5g/t gold**, 154ppm copper, and 2.4ppm Mo, from 9m drill depth and
  8.4m @ 1.9g/t gold, 294ppm copper, and 3.9ppm Mo, from 45.3m – Drill Hole: SON-01
- **45.4m @ 1.9g/t gold**, 168ppm copper, 3ppm Mo, from surface and
  10.9m @ 1.7g/t gold, 857ppm copper, 2ppm Mo, from 51.85m – Drill Hole: SON-02

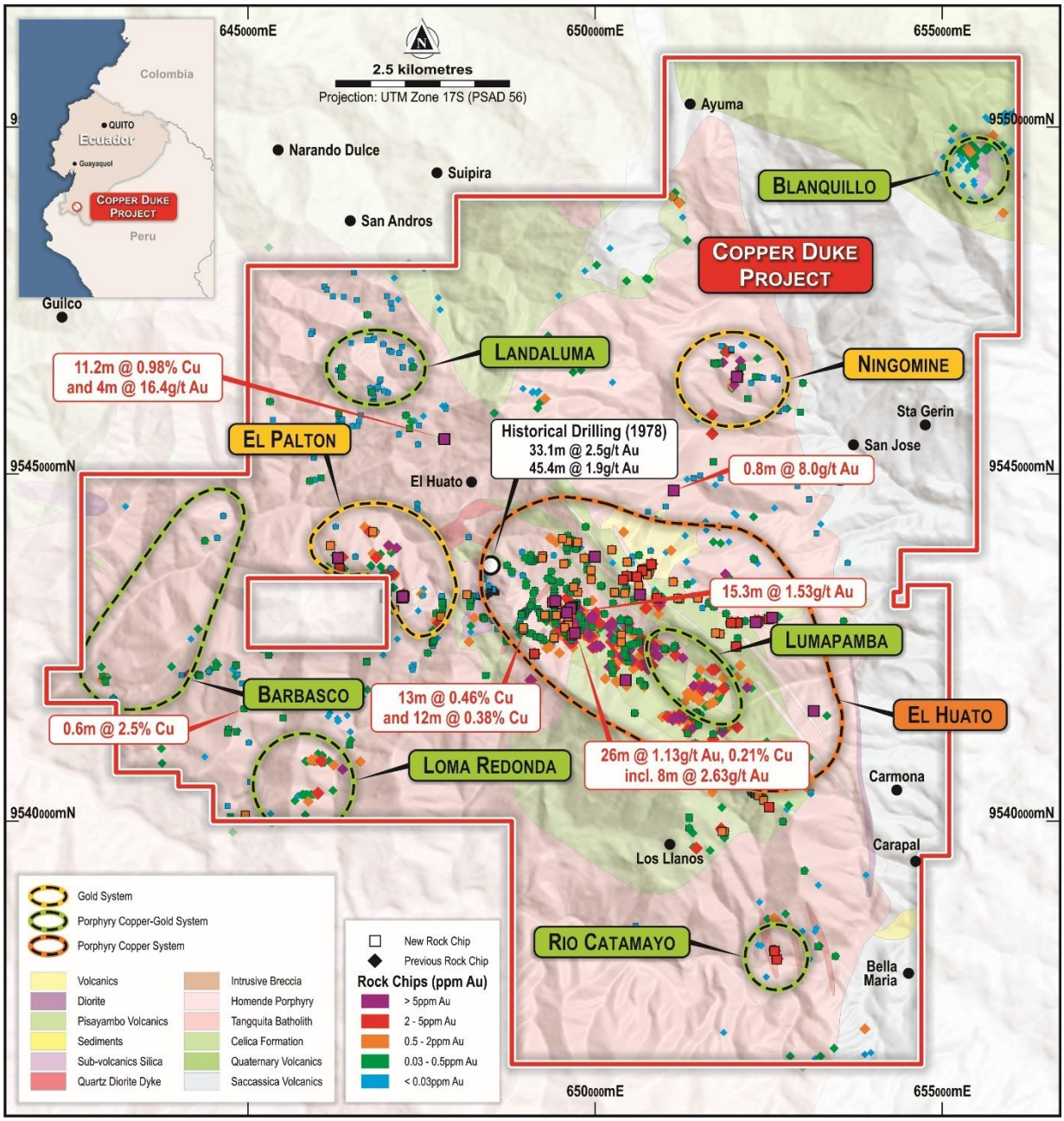

Figure 1 | Locations with gold assay results for both surface chip-channel and rock chip sampling locations for both current and historical rock chip results at the Copper Duke Project, projected onto diagrammatic surface geology interpretation.

The 2km long anomalous corridor in the northwest of the El Huato anomaly includes several zones of favourable anomalism associated with an interpreted intrusion contact mapped from the recent geophysical results. Reported results are from over 800 linear meters of chip channel sampling from natural drainage exposure and road cuts that trend from southwest to northeast and best transect the anomaly highlighted in the geophysics. Significant intercept results in this corridor, located 1.2km southeast of the UN drill location include 27m of linear sampling, with a mapped width at surface of 15.3m averaging 1.13g/t gold.

Approximately 820m to the southeast of the UN holes along the geophysical feature referenced above, two zones of channel sampling return 13m @ 0.46% copper and 12m @ 0.38% copper. Then, on a 1.5km step out from historical drilling in approximately the same direction, a 26m interval on a road cut delivers gold and copper mineralisation associated with quartz-magnetite stockworks in a hornblende porphyry unit returning 26m @ 1.13g/t gold with 0.21% copper, with the interval including 8m @ 2.63g/t gold associated with the higher vein density material reported in mapping.

With previous work focused on naturally occurring outcrops and existing road cuts, follow-up work planned will include additional trench activity along mineralised trends highlighted in the surface geochemistry, where additional sampling will transect the interpreted mineralised trend as supported by the geophysical datasets. Soil sampling programmes for systematic geochemical coverage are also planned to commence in the coming month.

Rock Chip Sampling, high-grade gold potential

The recent sampling also identified several new high grade gold veins located at various locations across the project. Additional sampling and detailed mapping will be required to assess the potential of these targets. The significant extent of mineralised quartz veining in several areas across the project area is encouraging for conceptually targeting large scale porphyry systems. The density of veining in some areas also provides potential for high grade gold mineralization targets within the porphyry field. Reported intercepts include extensions to the El Huato and El Palton prospect with better results from veins not recognised from previous sampling activity including:

- **4.05m @ 16.4g/t gold on vein extensions to northwest of El Huato Prospect**
- **0.8m @ 8.18g/t gold and 16g/t silver in quartz veining – over 1km northeast of El Huato Prospect**
- **0.6m @ 9.65g/t gold and 3g/t silver in veining – 1.3km south of El Palton Prospect**
- **1m @ 13.7 and 0.6m @ 16.6g/t gold in veining – additional vein sets within El Palton Prospect**

Airborne Geophysical Survey

In late October, Titan mobilised a geophysical crew to complete a helicopter borne, high resolution magnetic and radiometric survey on 100m line spacing across the Copper Duke Project area, immediately following completion of the Dynasty project geophysical survey (refer to ASX release dated 21 October 2020). Terra Resources of Perth, Western Australia was engaged for quality control during the surveys, and follow-up studies with re-processed datasets and interpretive work. Terra Resources is a group specialising in survey design, processing/modelling, and integration of new data with all existing geo-scientific data. They are now finalising geophysical interpretation maps and reporting on targeting recommendations.

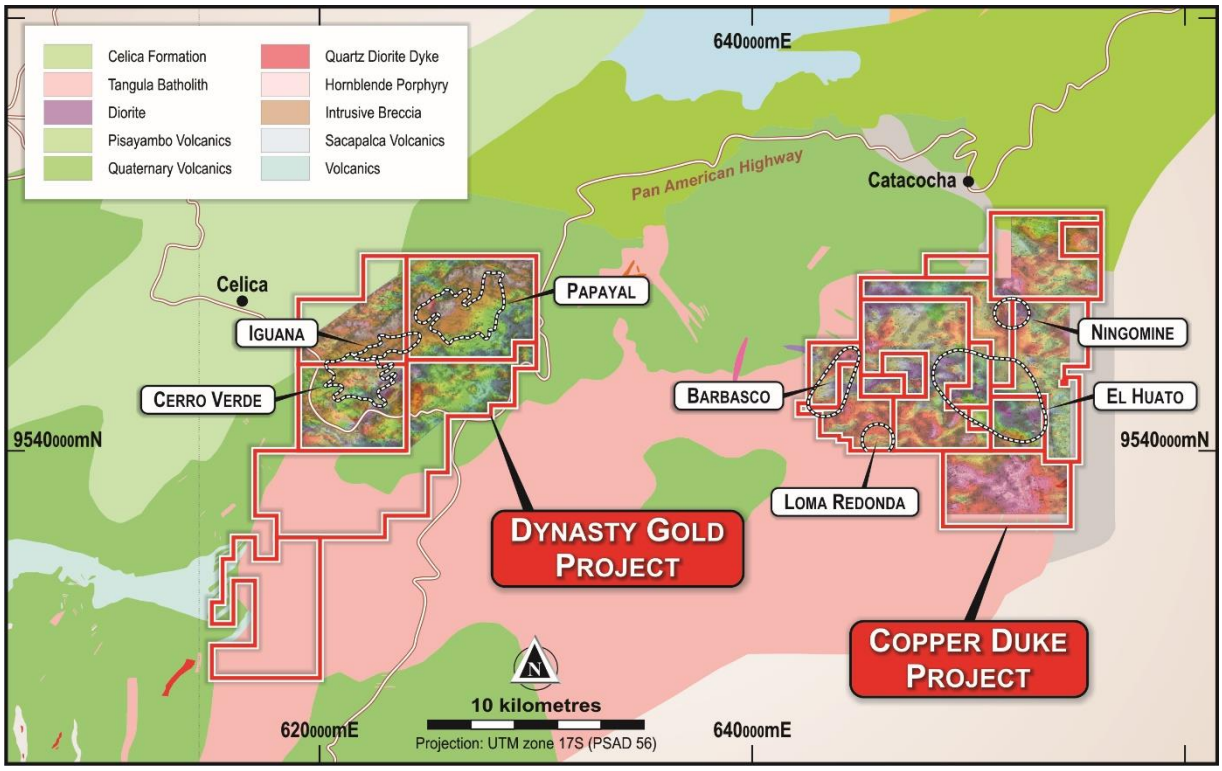

Figure 2 | Geophysical Survey outlines with total magnetic intensity (TMI) results for the Dynasty and Copper Duke project areas

Interpretive results for the aerial geophysical survey have been received for the Copper Duke Project. Several high priority targets for immediate follow-up are clearly defined. Follow-up work includes soil grids over geophysical anomalies to better assess scale and tenor of targets, concurrent with mapping projects to confirm updated geological interpretation. The ongoing field work will provide additional data for ranking of targets for maiden drill testing.

-ENDS-

Released with the authority of the Board.

For further information on the Company and our projects, please visit: **www.titanminerals.com.au**

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Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr. Travis Schwertfeger, who is a Member of The Australian Institute of Geoscientists. Mr. Schwertfeger is the Chief Geologist for the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Schwertfeger consents to their inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX A

Significant Intercepts from representative channel sampling at surface from recent sampling campaigns reported at a >0.5g/t gold or >0.2g/t Copper cut-off grades for representative sampling at a minimum 0.5m sample length.

Prospect	Channel_ID	Azimuth	Easting	Northing	Elevation	From (m)	To (m)	Interval Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Molybdenum (ppm)
El Huato	NWH555	030	649596	9543019	1,802	0	0.3	0.3	16.5	1.2	0.10%	121
El Huato	NWH739	198	649666	9542689	1,924	0	2	2	2.52	73.0	<0.005%	3.0
El Huato	NWH648	214	649616	9542837	1,848	0	3	3	1.14	1.4	0.14%	103
El Huato	CH-N738-719	245	649537	9542372	1762	10	36	26	1.13	1.4	0.21%	18
						28	36	8	2.63	2.4	0.18%	7.0
El Huato	NWH621	191	649616	9542883	1,794			0.7	1.86	1.4	0.23%	69
El Huato	CH-N517-507	050	649635	9543074	1,798	3	18.25	15.3	1.32	0.50	0.07%	23
El Huato W-Ext	CH-N787-792	30	648986	9542998	1,898	0	13	13	0.023	0.24	0.46%	41
El Huato W-Ext	CH-N795-798	30	649005	9543028	1,890	0	12	12	0.018	0.33	0.38%	39
El Huato W-Ext	CH-N941-937	245	648388	9542946	1,849	0	8.9	8.9	0.168	10.1	0.29%	31
El Palton	NWH1033		647230	9543242	1,756			0.6	7.97	371	0.37%	30
El Palton	NWH1034	315	647221	9543233	1,853			0.6	16.60	100	0.24%	9.0
El Palton	NWH1035	322	647220	9543241	1,854			0.9	7.90	155	0.13%	8.0
El Palton	NWH1036	322	647224	9543243	1,856			1.1	1.60	52	0.24%	11
El Palton	NWH1037	322	647230	9543247	1,859			1	13.70	260	0.22%	12
New Area	NWH1012	166	647144	9541865	1,430			0.6	9.65	3.0	<0.005%	31
barbasco	NWH966	353	647740	9542872	1,864			1	0.171	5.4	0.35%	2.0
Barbasco SE-ext	NWH1047	200	645505	9541495	1,304			1.9	0.288	236	0.96%	23
Barbasco SE-ext	NWH1049	164	645036	9540573	1,141			0.4	0.023	119	0.68%	14
Barbasco SE-ext	NWH1050	160	644963	9540098	1,126			0.9	1.85	4.0	0.63%	14

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Prospect	Channel_ID	Azimuth	Easting	Northing	Elevation	From (m)	To (m)	Interval Width (m)	Gold (g/t)	Silver (g/t)	Copper (%)	Molybdenum (ppm)
Barbasco SE-ext	NWH1055	331	644541	9542224	1,634			0.35	0.021	11	1.00%	3.0
Barbasco SE-ext	NWH1056	185	642909	9542090	1,160			0.4	0.227	95	1.72%	293
Barbasco SE-ext	NWH1059	163	643060	9541777	1,215			3	0.009	1.8	0.90%	81
Barbasco SE-ext	NWH1069	168	644943	9541626	1,497			0.6	0.197	13	2.55%	70
Barbasco SE-ext	NWH1070	207	644719	9541330	1,432			0.5	0.105	17	0.53%	25
El Huato NW-ext	CH-N1137-1147	240	647860	9545540	1,675	0	11.2	11.2	0.083	1.6	0.98%	2.5
						20	23	3	0.645	4.0	0.36%	3.0
						35.1	39.15	4.05	16.4	8.6	0.07%	4.7
Ningomine	NWH1173	271	651787	9546611	1,662			1.9	0.303	51	4.11%	13
Ningomine E-Ext	CH-N1174-1175	271	652743	9546177	1,343	0	3.2	3.2	0.158	10.2	1.41%	4.6
Ningomine S-Ext	NWH1186	120	651704	9545183	1,611			0.8	0.453	117	0.27%	23
Ningomine SE-Ext	NWH1189	255	652915	9544834	1,300			1	0.027	27	0.92%	3.0

APPENDIX B

Copper Duke Project - 2012 JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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.* *ses where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Reported Channel Sampling was done as continuous and representative chip sampling of an outcrop or excavated exposure of in-situ material to provide a representative sample of material sampled that best approximates the true width of the mapped exposure. Excavations of up to 0.8m width completed to bedrock. • Rock chip samples are composite or selective grab samples collected from in situ outcrops, sub-crop or float as selected by the field geologist.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Representative channel sampling was completed from naturally occurring outcrops in erosional drainages, road cuts, or hand dug trenches to a depth of approximately 20 to 30cm where a cut sample was collected.
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.*	• No assessment of relationship between sample recovery and grade completed to date. Results reported are not of a quality to be included in a mineral resource estimation.
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.*	• Reported samples are logged for lithology, structure and alteration. No consistent use of lithologic codes, or entry into a self-validating database is available from historical datasets. • Channel and rock chip locations are not systematically photographed, but are systematically, mapped and structurally measured where exposures lend themselves to data collection and lithologic textures and fabrics logged.
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* *ple preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sub-sampling technique information provided in historical reports • Samples collected from cut channels, or representative chip channel sampling methods across outcropping exposures or existing road cuts. • Sample sizes collected in field and subsequent sub-sampling and laboratory analysis are assessed to be appropriate in size and analytical method for the style and setting of gold mineralisation being assessed. • Channel samples collected are continuous and equal sampling of an outcrop or excavated exposure in a channel sampling method of in-situ material to provide a representative sample of material sampled. • Channel samples are oriented perpendicular to measured or interpreted orientations or trends and sample predominantly sampled to lithologic boundaries as defined by the sampling geologist at site.

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Criteria	JORC Code explanation	Commentary
		• Field samples are assessed to be of adequate size for the material being sampled and subsequent analysis undertaken.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Historical Laboratory procedures for surface geochemistry work considered to be appropriate and in accordance with best practices for the type and style of mineralisation being assayed with Gold Fire Assay techniques used is considered to be a total recovery technique for gold analysis. This technique is considered an appropriate method to evaluate total gold content of the samples, and suitable for exploration work with no resource calculations required. • No geophysical tools used in relation to the reported exploration results. • In addition to the laboratory's own quality control procedure(s), Dynasty Mining and Metals had its own certified reference materials, blanks, and field duplicate samples regularly inserted into the sample preparation and analysis process with approximately 3.3% of all samples being related to quality control for early-stage surface exploration sampling programmes related to this report. • For sample reporting of material analysed from 2004 to 2007, historical reports state reference standards were inserted one for every 40 samples (2.5%) and field duplicates were inserted at intervals range from 1 per 40 samples to 1 per 60 samples collected.
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.*	• Titan has composited multiple sources of exploration datasets from Core Gold and has developed a self-validating database from multiple datasets in various digital and scanned formats. Only limited field sampling work to verify mineralisation in the field has been completed. • Twin holes have not been used in the reported exploration results. • Data on paper log sheets and data entry made into self validating spreadsheets. Historically, previous management did not maintain a database for exploration results. Multiple sources of exploration datasets acquired from Core Gold and from an independent laboratory were composited for development of a validated database. • No adjustment to data is made in the reported results
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.*	• Channel samples are all located by a single point at the Channel's "Start point" surveyed by handheld GPS. Surveys are accurate to < 5m in horizontal precision. • All surveyed data was collected and stored in PSAD56 datum. • Topographic control for reported datasets is based on digital elevation models for the area at the time. The method of topographic control is deemed adequate at this exploration stage of the project. All datasets are systematically being upcycled to satellite dataset topography control and is in progress prior to completion of any planned drilling or future mineral resource estimation work.
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.*	• Data spacing for reported trench/chip channel sampling varies by prospect area and geomorphological setting providing for outcrop or recovery of in-situ samples from shallow excavations. Samples collected on nominal 2m spacing and vary based on geology and discretion of the geologist with channel samples in reported datasets ranging from 0.1m to 4m in length. • Data Spacing and distribution is not sufficient to complete a minerals resource estimation in accordance with the principle of the JORC Code. • No Sample compositing has been applied in reported exploration results.

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Criteria	JORC Code explanation	Commentary
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.*	• The orientation of sampling is perpendicular to mapped orientation of veins observed in outcrop where possible. Orientation of sampling associated with naturally exposures and road cuts may not represent true width of mineralisation. • No drilling results included in the reported exploration results.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by Dynasty Mining and Metals personnel and held in a secured yard prior to shipment for laboratory analysis. Summary reports indicate best practices used for chain of custody procedures; however, no historical chain of custody documentation is preserved.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None available for the reported results.

Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Titan's subsidiary Core Gold indirectly holds a wholly owned Ecuadorian subsidiary, Elipe S.A. ("Elipe"). Elipe is the owner of a portfolio of exploration properties in the Loja and El Oro Provinces of Ecuador. Amongst these, Elipe holds a 100% interest in the following concessions comprising the Copper Duke Project: • The property is not subject to any back-in rights, payments or other agreements of encumbrances. Mineral concessions in Ecuador are subject to government royalty, the amount of which varies from 3% to 8% depending on scale of operations and for large scale operations (>1,000tpd underground or >3,000tpd open pit) is subject to negotiation of a mineral/mining agreement. • The Copper Duke concessions are currently issued under the small-scale mining and exploration regime in Ecuador. Mineral concessions require the holder to (i) pay an annual conservation fee per hectare, (ii) provide an annual environmental update report for the concessions including details of the environmental protection works program to be followed for the following year. These works do not need approval; and (iii) an annual report on the previous year's exploration and production activity. Mineral Concessions are renewable by the Ecuadorian Ministry of Oil, Mining and Energy in accordance with the Mining Law on such terms and conditions as defined in the Mining Law.

BARBASCO	BARBASCO 4
COLANGA	LUMAPAMBA
BARBASCO 1	LUMAPAMBA 1
BARBASCO 2	GONZA 1
GLORIA	CAROL
GLORIA 1	CATACOCHA
COLANGA 2	

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		• The Company is not aware of any social, cultural, or environmental impediments to obtaining a licence to operate in the area at the time of this report beyond the scope of regular permitting requirements as required under Ecuadorian Law.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Copper Duke Project • Early 1970's a United Nations Survey was completed on the El Huato and Santa Rita Sectors with a systematic soil survey and additional rock sampling assayed for base metals. A base metal anomaly of approximately 14sq km in the El Huato area was defined. • 1975 to 1976 the Spanish Geological Mission completed a survey of south Ecuador, and in 1976 a geophysical study resulted with a coincident anomaly at El Huato (however geophysical results have not been located) • 1978, the Spanish government company Adaro drilled two diamond core holes at the El Huato anomaly each to 220m drill depth. • 2003 through 2019 Dynasty Mining and Metals (later Core Gold) completed mapping, limited ground geophysical surveys and exploration sampling activity including 201 drill holes totalling 26,733.5m and 2,033 rock channel samples were taken from 1,161 surface trenches at Cerro Verde, Iguana Este, Trapichillo and Papayal in support of a maiden resource estimation. • 2000-2001 Iamgold Corporation sampled ridgeline soils in an extensive geochemical program where it obtained 527 soil samples and 103 rock samples. Results ranged from <20ppb Au to peak assay of 1,665ppb Au, and peak base metal results of 1,310 (0.13%) Cu and 19ppm Mo were found in the soil samples and up to 7,134ppb Au; 0.22% Cu and 40ppm Mo in rock samples, obtaining a similar anomaly to the UN program. • 2004 to 2007, Dynasty Metal and Mining (later becomine Core Gold Inc. exposed several veins in reso.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Regionally, the Copper Duke Project lies within the Occidental Andean Cordillera volcanic terrain in Southern Ecuador. The Project area is dominated by andesitic volcanic and sedimentary lithologies of the Cretaceous Celica formation and plutonic granodiorite-diorite of the multi-phase Cretaceous Tangula batholith • At the project scale, gold-silver bearing quartz veins are hosted in the intermediate volcanics located proximal to the Cretaceous Tangula Batholith that extends north from Peru. The Tangula Batholith is a multiphase intrusive body consisting of diorites, tonalites and granodiorites. adic hornblende-plagioclase porphyries intrude both the intermediate volcanics and the Tangula batholith. A quartz-diorite intrusion is emergent near the boundary of the volcanics and the Tangula Batholith. It occupies an area of about four-square kilometres and is interpreted as a control for Porphyry intrusion style mineralisation hosting copper, gold, silver and other base metal mineralization which has also been mapped at several areas within the Copper Duke project area.

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		• Copper occurs in various forms of Cu oxide minerals at surface and as disseminated style chalcopyrite observed in shallow excavations at several locations within the project area.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• No drilling results included in the reported exploration results.
		• A summary of significant intercepts from representative sampling for samples of greater than 0.5m measured width included in Appendix A

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.*	• No high-grade assay cut was applied to reported exploration results. Lower cut-off for reported intercepts is 0.5g/t Au with up to 3m of internal dilution (results with <0.5g/t Au or un-sampled intervals where null values are taken as a zero-gold grade in calculating significant intercepts) are allowed within a reported intercept. • Significant Intercepts in Appendix A are reported for aggregate intercepts of sample intervals that are weight averaged by length of sample for results above a 0.5g/t gold cut-off (or a 0.2% Cu cut-off). • No metal equivalent reporting is applicable to this announcement.
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 (eg 'down hole length, true width not known').*	• All reported intersections are measured sample lengths and true thickness is estimated where adequate information is available on the orientation of target structures. • True widths estimated where adequate data is available. Where the geometry between veining and drilling is not defined then either additional data through re-logging or completion of oriented drilling in and commencement of 3D visualisation and modelling work is required. Further information will be disclosed as understanding of the geometry of mineralisation evolves with additional exploration activity. • All reported intercepts in this report are down-hole lengths unless otherwise indicated to be true width.
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.*	• Included in body of report as deemed appropriate by the competent person
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All material exploration results for drilling are included in this report, and location of all reported results are included in Figures provided in their entirety. • Reported significant intercepts (Appendix A) are reported for assays at a >0.5g/t gold cut-off or >0.2g/t copper cut-off with a minimum 0.5m interval width for prospects that merit further exploration activity. • Surface sampling of representative samples at surface or from shallow excavations range from below detection gold values up to peak assay values included in the body of this report, where total number of samples reported is 925 samples

APPENDIX B

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.*	• Geological interpretation and summary of previously reported geochemical survey results included in figures. • No other available datasets are considered relevant to reported exploration results. • No bulk density, or groundwater tests have been completed on areas related to the reported exploration results. • No mineral processing or metallurgical testing analyses have been carried out for the Copper Duke Project and no previous mineral resource estimate has been calculated.
Further work	• *The nature and scale of planned further work (eg 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.*	• Further mapping and sampling is to be conducted along strike of reported work to refine and prioritise targets for drill testing. • Included in body of report as deemed appropriate by the competent person