

ASX:TSO OTCQB:TSORF

**TESORO** 

# ASX ANNOUNCEMENT 21 JUNE 2023

# **TERNERA SOUTHERN EXTENSION CONTINUITY**

STEP-OUT DRILLING CONFIRMS ADDITIONAL SHALLOW GOLD ZONE OVER +400M

**Tesoro Gold Limited (Tesoro** or **the Company**) (ASX:TSO, OTCQB:TSORF) is pleased to report assay results returned from extensional drilling of the Ternera Gold Deposit (**Ternera**). These results confirm the continuity of a shallow, high-grade southern extension to the Ternera mineralisation along the Dorado Fault Zone (**DFZ**).

# HIGHLIGHTS

- Step-out drilling targeted potential mineralisation along the DFZ, up to 420m south of the existing Ternera Mineral Resource Estimate (**MRE**) boundary.
- Results confirm the continuity of shallow sediment-hosted gold mineralisation over this extent, and that this mineralisation remains open to the south.
- Best results included:
  - 0.40m @ 8.81g/t Au from 156.60m (ZDDH0322).
  - 1.10m @ 1.28g/t Au from 24.30m (ZDDH0323), and;
    - 9.30m @ 0.98g/t Au from 42.20m including;
    - 2.50m @ 1.93g/t Au from 42.20m; and
    - 1.85m @ 2.05g/t Au from 48.80m.
  - 13.73m @ 0.76g/t Au from 53.90m (ZDDH0324A), including;
    - 1.50m @ 1.77g/t Au from 54.50m;
    - 1.30m @ 4.07g/t Au from 65.00m; and
    - 0.50m @ 3.18g/t Au from 112.00m.
  - 4.50m @ 1.32g/t Au from 215m (ZDDH0325).
- Continuous shallow gold mineralisation also extended to the west of the Ternera deposit, providing further target zones for resource growth drilling:
  - 3.00m @ 2.70g/t Au from 16m (ZDDH0321), including;
    - 1.00m @ 7.63g/t Au from 9m.
- Drilling currently underway at the untested Kitsune target, approximately 2.5km north of Ternera.
- Since recommencement of drilling in January 2023, 21 holes have been completed for 4,247m, with assays outstanding for 4 holes.

# Tesoro Managing Director, Zeff Reeves, commented:

"The recent drilling has successfully delineated shallow, continuous gold mineralisation extending over 400m south of the existing Ternera MRE boundary. This extension has been drilled on multiple sections and potentially may deliver a large additional strike extent from which to add ounces to the existing 1.3Moz MRE (802koz Indicated, 479oz. Inferred).<sup>1</sup> Importantly, this emerging southern extension remains open to the south. When coupled with the other zones of Ternera, there is a clear pathway from which we are targeting substantial increases to the existing Ternera MRE.

"We are also now excited to be drilling at the Kitsune target to the north of Ternera. While the Ternera Deposit has significant further growth potential, this regional drilling is targeted at demonstrating the broader district-scale potential of the El Zorro Gold Project."

## Southern Ternera Extension

Assay results have been received for the final seven holes of a 17-hole, 3,635m program completed at Ternera. The program was designed to test the interpreted location of the Dorado Fault Zone (**DFZ**), a primary control on gold mineralisation at Ternera. The DFZ is a 20m to 100m wide zone of faulting and associated brecciation, quartz veining and alteration that has been mapped over 10km from south to north (refer Figure 2).

Holes ZDDH0322 to ZDDH0325 all targeted the southern extension of the DFZ and have confirmed the continuity of gold mineralisation within the DFZ up to 420m south of the existing Ternera 1.3Moz MRE boundary.

Hole ZDDH0321 was drilled targeting the southern extension of a high-grade shallow gold zone in the west of the Deposit. The hole returned a positive result which confirmed the location and continuity of gold mineralisation over 400m and sits outside the existing MRE.

# **Regional Target Drilling Commenced**

Drilling has now commenced at the Kitsune target, with two holes having been completed to date. Kitsune is located approximately 2.5km north of Ternera, with a large surface gold anomaly where the DFZ crosses the favourable EZT lithologies having been identified. The initial program at Kitsune comprises six holes.

One hole has also been completed at the Toro Blanco target, located approximately 1km north of Ternera, with assays pending.

<sup>&</sup>lt;sup>1</sup> For full Ternera MRE details, refer Tesoro ASX release dated 9 March 2023, *Ternera Mineral Resource Update and Exploration Target*. Other than drilling results received and released in the intervening period, Tesoro confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that ASX release continue to apply and have not materially changed.



**Figure 1 –** Ternera Gold Deposit Drilling Plan on geology and results reported in this announcement showing the approximate position of the Dorado Fault Zone. Shaded pink area shows near surface mineralised zone extending south of Ternera. Datum PSAD56 19S



Figure 2 – Ternera District Gold Prospects and Prospective Gold Corridor associated with the Dorado Fault Datum PSAD56 19S

**Table 1 –** Significant intercepts table for results reported in this announcement. Results are uncut, no top cut has been applied. (Refer Appendix 1 - JORC Tables for data aggregation criteria) Significant intercept is any intercept with grade x width >0.30.

Hole_ID	From (m)	To (m)	Interval	Au (g/t)	Comments	Hole_ID	From (m)	To (m)	Interval	Au (g/t)	Comments
ZDDH0321	8.00	11.00	3.00	2.70		ZDDH0324			0.00		NSI (Abandoned)
ZDDH0321	9.00	10.00	1.00	7.63	including	ZDDH0324A	53.90	67.63	13.73	0.76	
ZDDH0321	28.00	39.00	11.00	0.32		ZDDH0324A	54.50	56.00	1.50	1.77	including
ZDDH0321	32.71	33.47	0.76	1.38	including	ZDDH0324A	65.00	66.30	1.30	4.07	including
ZDDH0322	156.60	157.00	0.40	8.81		ZDDH0324A	92.00	93.00	1.00	0.79	
ZDDH0322	168.00	169.00	1.00	0.99		ZDDH0324A	112.00	112.50	0.50	3.18	
ZDDH0322	173.00	173.90	0.90	0.72		ZDDH0325	95.50	97.00	1.50	0.43	
ZDDH0322	182.60	183.00	0.40	0.51		ZDDH0325	110.00	114.50	4.50	1.32	
ZDDH0323	24.30	25.40	1.10	1.28		ZDDH0325	110.00	112.80	2.80	1.98	including
ZDDH0323	42.20	51.50	9.30	0.98		ZDDH0325	213.00	214.00	1.00	0.54	
ZDDH0323	42.20	44.70	2.50	1.93	including	ZDDH0326	47.00	49.47	2.47	0.44	
ZDDH0323	48.80	50.65	1.85	2.05	including	ZDDH0326	122.00	123.00	1.00	0.87	
ZDDH0323	90.00	91.00	1.00	0.63		ZDDH0326	135.00	136.00	1.00	0.46	
ZDDH0323	121.00	122.00	1.00	2.34		ZDDH0326	173.00	174.00	1.00	2.59	
ZDDH0323	128.00	129.00	1.00	0.71		ZDDH0326	200.25	201.75	1.50	1.29	

		Hole Location			Hole Orientation		Drill Donth (m)	
	Hole ID	Northing	Easting	Elevation	Dip	Azimuth		
	ZDDH00321	341561	7035926	575	-60	240	200.00	
	ZDDH00322	341884	7035899	603	-60	240	280.00	
	ZDDH00323	341830	7035825	581	-60	240	250.03	
	ZDDH00324	341865	7035735	548	-60	240	44.90	
	ZDDH00324A	341867	7035735	548	-60	240	150.00	
	ZDDH00325	341881	7035799	589	-60	240	264.00	
	ZDDH00326	341574	7035680	500	-60	60	249.00	
Table 3 - Constrained Ternera MRE.								
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Table 2 - El Zorro Drill Hole location details for holes reported in this announcement. Datum PSAD56 19S.

	Au g/t		Indicated	d		Inferrec			Total	
Area	cut off	Mt	Au g/t	Koz	Mt	Au g∕t	Koz	Mt	Au g∕t	Koz
Open Pit Resource	0.30	22.5	1.10	795	10.0	1.18	379	32.5	1.13	1,175
Underground Resource	1.50	0.1	2.64	7	1.2	2.64	100	1.3	2.64	107
Total Resources		22.6	1.11	802	11.2	1.34	479	33.7	1.18	1,282

The updated MRE has been constrained to a US\$1,800/oz optimised pit shell, with the underground resource reported at a 1.50 g/t Au cut-off. The underground resource is reported at a cut-off where gold mineralisation is consistently well-developed below the optimised pit shell.

Authorised by the Board of Tesoro Gold Ltd.

## For more information:

#### Company:

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#### About Tesoro

Tesoro Gold Limited was established with a strategy of acquiring, exploring, and developing mining projects in the Coastal Cordillera region of Chile. The Coastal Cordillera region is host to multiple world class copper and gold mines, has well established infrastructure, service providers and an experienced mining workforce. Large areas of the Coastal Cordillera remain unexplored due to the unconsolidated nature of mining concession ownership, but Tesoro, via its in-country network and experience has been able secure rights to a district scale gold project in-line with the Company's strategy. Tesoro's 95% owned Chilean subsidiary owns 85% of the El Zorro Gold Project.

#### **Competent Persons Statements**

The information in this report that relates to Exploration Results is based on information compiled by Mr Zeffron Reeves (B App Sc (Hons) Applied Geology) MBA, MAIG). Mr Reeves is a member of the Australian Institute of Geoscientists and a Director and shareholder of the Company. Mr Reeves has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Reeves consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Lynn Widenbar, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Widenbar is acting as an independent consultant to Tesoro Gold Limited. Mr Widenbar 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'. 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 announcement on 9 March 2023.

#### Future Performance

This announcement may contain certain forwardlooking statements and opinion. Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties, assumptions, contingencies and other important factors, many of which are outside the control of the Company and which are subject to change without notice and could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forwardlooking statements or other forecast. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Tesoro Gold.



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# **APPENDIX 1: JORC TABLES**

## JORC CODE, 2012 EDITION | TABLE 1

#### Section 1: Sampling Techniques and Data

1	Criteria	JORC Code explanation	Commentary
	Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	Tesoro has completed 336 diamond drill holes for 110,212m in 2017, 2018, 2020, 2021, 2022 and 2023 (ZDDH0001 to ZDDH00329). Diamond drill holes were drilled with HQ. Sampling was half core at geologically defined and significant mineralisation boundaries. The CP considers the sampling methodologies to be appropriate for this style of mineralisation.
)		<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Tesoro Diamond drill holes were drilled with HQ. Sampling was half core at geological and significant mineralisation boundaries. The CP consider this appropriate for the style of mineralisation.
		<ul> <li>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 required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Diamond drilling was used to obtain ½ core samples of various lengths (minimum 0.25m), from which 1kg of material was pulverised passing 200 mesh to produce a 50g charge for fire assay fusion with a gravimetric finish. Multielement assays were completed by 4-acid digest with a 2.5g charge. The CP consider these appropriate assay techniques.
)	Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	Tesoro has completed 336 diamond drill holes for 110,212m at El Zorro. Diamond drill holes were drilled with HQ. Sampling was half core at geological and significant mineralisation boundaries. Standard tube was used.
)	Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Core recovery was estimated using the drillers recorded depth marks against the length of the core recovered. Reviewing the core photos, there are occasional shears/faults where core is broken. There is however no significant core loss.
)		<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	A single tube system was employed and in general core recovery good.
1		<ul> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	There appears to be no potential sample bias as there was no regular loss of core.
	Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	Geological core logging to a resolution of 25 cm was undertaken with a record kept of, inter alia, colour, lithology, weathering, grain size, mineralisation, alteration, geotechnical characteristics etc. Diamond core is stored at the Company's warehouse. Tesoro consider the data to be of an appropriate level of detail to support a future resource estimation

	Criteria	JC	DRC Code explanation	Commentary
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging of diamond core was qualitative and diamond core was photographed.
/		•	The total length and percentage of the relevant intersections logged.	All drilled intervals are logged and recorded.
1	Subsampling techniques and	•	If core, whether cut or sawn and whether quarter, half or all core taken.	Drill core was cut, and half core was collected for analysis
1	sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Tesoro has not completed any percussion drilling.
)		•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Collection of half core ensured the nature, quality and appropriateness of the collected sample.
)				lab to mm size prior to splitting off a 50g charge (either by cone/quarter or riffle) for pulverisation provides an appropriate and representative sample for analysis.
		•	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Half core was collected for the entirety of the Tesoro drilling, as such there was consistency throughout the drilling. Core was logged by a qualified geoscientist. Each subsample is considered to be representative of the interval.
) 1 1 1		•	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.	Sampling of half core is representative of the in-situ material. There are field duplicate samples collected from the diamond core with irregular results. Field drill core duplicates are irregular by nature and it has been recommended by Tesoro's consultants to use coarse reject material to monitor the sample preparation.
)		•	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes collected were considered appropriate to reasonably represent the material being tested.
)	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.	Assays reported in this report were undertaken at the accredited laboratory of ALS Santiago, which is fully certified. Core samples of various lengths were assayed (minimum 0.25m) from which 1 kg of material was pulverized passing 200 mesh to produce a 50 g charge for fire assay fusion with gravimetric finish. Multielement assays were completed by 4-acid digest with a 2.5 g charge.
				All techniques are appropriate for the element being determined.
)		•	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.	Standard chemical analyses were used for grade determination. There was no reliance on determination of analysis by geophysical tools.
)		•	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 baye been established	QAQC procedures included the insertion of Certified Reference Materials (CRMs) (5%) and blank material (2%), Check samples (5%) and check assaying (5%) Cube Consulting Pty Ltd manage the database for Tesoro.
1				The laboratories used have generally demonstrated analytical accuracy at an acceptable level within 95% confidence limits.
	Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	A number of independent consulting geoscientists (Cube Consulting, Oliver, and Cooley) external to Tesoro have verified the intersections for holes ZDDH0001 to ZDDH0080. Holes ZDDH0081 onwards have been verified by multiple appropriately qualified Company personnel.
		•	The use of twinned holes.	No twinned holes have been completed
		•	Documentation of primary data, data entry procedures, data verification, data	Tesoro drilling is digitally entered and stored following documented core handling protocols.

Criteria	JORC Code explanation	Commentary
	storage (physical and electronic) protocols.	The protocols are considered adequate.
	Discuss any adjustment to assay data.	No adjustments were made to Tesoro Drilling
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	Tesoro drill hole collars have been surveyed accurately using differential GPS for all holes.
	• Specification of the grid system used.	The grid system used PSAD56 19S
	Quality and adequacy of topographic control.	The topography generated from an accurate topographic survey data completed by a registered surveyor and has been used for the current control.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill hole spacing is variable between 25m and 200m
	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.	Areas with up to 50m drill spacing are considered to be suitable for Mineral Resource Estimation. Areas of sparser drilling and at the fringes and depth extents of the deposit have been excluded from the MRE. Where drill spacing is beyond 50m mineralisation has been interpreted to continue and have been used in the estimation of the Exploration Target. Drill spacing up to 200m has been used in the Exploration Target Estimation
	Whether sample compositing has been applied.	Sample compositing was not employed at the sampling stage.
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.	Drill holes were drilled across the interpreted strike of the mineralisation.
	<ul> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	Tesoro diamond drilling at various orientations does not reveal any bias regarding the orientation of the mineralised horizons.
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	Chain of Custody of digital data is managed by the Company. Physical material was stored on site and, when necessary, delivered to the assay laboratory. Thereafter laboratory samples were controlled by the nominated laboratory which to date has been Bureau Veritas and ALS Santiago. All sample collection was controlled by digital sample control file(s) and hardcopy ticket books.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been undertaken.

# Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	Information regarding tenure is included in the company's December 2022 quarterly report released to the ASX on 31 January 2023. Tesoro Resources Ltd, 95% owned Chilean subsidiary, Tesoro Mining Chile SpA, owns 85% of the El Zorro Gold Project Concessions.
	<ul> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The Concession is believed to be in good standing with the governing authority and there is no known impediment to operating in the area.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Little historical exploration has been undertaken in either project area. Coeur d'Alene's Chilean exploration divisior undertook activities on the Ternera prospect, under an option agreement with the previous owners between Apr 1990 and January 1993.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The mineralisation model is considered to be an intrusive related gold deposit. The key characteristics that are consistent with this style deposit include:
		<ul> <li>Low sulphide content, (typically &lt;5%); reduced ore mineral assemblage that typically comprises pyrite and lacks primary magnetite or hematite</li> </ul>
		<ul> <li>Mineralisation occurs as sheeted vein deposits or stockwork assemblages and often combine gold with variably elevated Bi, W, As, Mo, Te, and/or Sb but low concentrations of base metals as seen in the initial four holes by Tesoro at El Zorro</li> </ul>
		<ul> <li>Restricted and commonly weak proximal hydrotherma alteration</li> </ul>
		Intrusions of intermediate to felsic composition.
Drillhole information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:	Exploration results are not being reported. Drill hole data relevant to the MRE is presented in the report.
	<ul> <li>easting and northing of the drillhole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> </ul>	
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>downhole length and interception depth</li> </ul>	
	<ul> <li>hole length.</li> </ul>	
	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	Exploration results are not being reported.
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	Exploration results are not being reported.
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalents are reported.
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	
widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	The mineralisation forms sub-vertical sheeted veins and individual veins and may form plunging zones within the mineralised structures. Drilling by Tesoro has been undertaken to test these orientations.

Criteria	JORC Code explanation	Commentary
	<ul> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</li> </ul>	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</li> </ul>	Relevant maps and diagrams are included in the body of the report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Exploration results are not being reported.
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.	All material exploration data is reported in the body of the report.
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).	Further work will be focused on drill testing the Ternera mineralisation and additional prospects as defined in the work program. Core will be used for metallurgical testwork and further resource modelling is planned.
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Diagrams have been included in the body of this report.

#### Section 3: Estimation and Reporting of Mineral Resources and Exploration Target

	Criteria	JORC Code explanation	Commentary
)	Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> </ul>	The Tesoro drill hole database is managed and validated by Cube Consulting. Drill core is logged with digital templates and codes are automatically validated during entry. Assay data is provided digitally by the laboratory and automatically uploaded to the database.
)		Data validation procedures used.	The data is stored in an SQL database system and exported to an MS Access database when required.
			Drill hole data was provided to Widenbar in Microsoft Access database format (file: Surpac_ElZorro_Current_20221116.mdb) and exported to Excel spreadsheet format prior to import into Micromine software.
			<ul> <li>All drill hole data was validated in Micromine after import, including:</li> <li>Checks for duplicate collars</li> <li>Checks for missing samples</li> <li>Checks for down hole from-to interval consistency</li> <li>Checks for overlapping samples</li> <li>Checks for samples beyond hole depth</li> </ul>

Criteria	JORC Code explanation	Commentary
Site visits	Comment on any site visits undertaken by the Competent Person and the	Due to Covid-19 and related travel restrictions, the Competent Person has not yet made a site visit.
þ	<ul> <li>outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	The site has been visited multiple times by the Competent Person for Exploration Results, and many detailed discussions have taken place to confirm to the MRE CP the procedures in place relevant to drilling, sampling, logging and general drill hole data collection processes.
		The CP for the Exploration Target has visited the site many times for extended periods.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> </ul>	There is good confidence in the differentiation of the modelled rock types and in the continuity of the various tonalite domains. Both drilling and mapping have been utilised in arriving at the interpretation and new drilling results have generally confirmed existing models.
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	3D geological models have been constructed for the tonalite domains to control interpolation of gold grades.
	The use of geology in guiding and controlling Mineral Resource estimation.	
	Ine factors affecting continuity both of grade and geology.	
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The mineralisation extends over a strike length of 1,100 km and a width of 600m. Mineralisation extends up to 600m below the topographic surface.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation	A geological block model was constructed using Micromine 2023 software. The block size was $10m \text{ E x } 10m$ N x 10m RL with sub-blocking to $1.25 \times 1.25 \times 1.25 \text{ m}$ to honour topographic and geological boundaries. A first pass estimation of gold grade constrained by the tonalite and fault domains and using 1m composites by an Ordinary Kriging mothodology was used to appendix
	<ul> <li>method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates,</li> </ul>	mineralised and waste sub-domains. Gold grades and density were then interpolated into these sub-domains. Only diamond drill holes were used in grade estimation
	previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	In tonalite domains the first pass search ellipse was 20x20x8m, with a second pass of 35x35x10m and a third pass of 50x50x12m.
	<ul> <li>The assumptions made regarding recovery of by-products.</li> </ul>	In fault the first pass search ellipse was 10x5x15m, with a second pass of 25x10x25m and a third pass of 50x12x50m.
	<ul> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine</li> </ul>	Density estimation used similar parameters, except for pass 3, which was expanded to 150x30x50 due to the sparser nature of density samples in some areas.
	<ul> <li>drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and</li> </ul>	Ihe minimum number of samples is 8 in pass 1, 6 in pass 2 and 4 in pass 3. Maximum number of samples is 20 in all passes. Minimum number of holes is 2 in all passes. Minimum
	<ul><li>the search employed.</li><li>Any assumptions behind modelling of</li></ul>	number of samples per hole is 2 in all passes. Maximum number of samples per hole is 6 in all passes.
	<ul> <li>selective mining units.</li> <li>Any assumptions about correlation between variables.</li> </ul>	Ine mineralised envelope within each tonalite or fault domain is used as a hard boundary for estimation; no composite data from outside of the envelope is used to
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	envelope. Blocks outside the mineralised envelope are similarly modelled.
	Discussion of basis for using or not using grade cutting or capping.	A top cut for Au was determined from review of log probability plots. It varies between 10 and 30 g/t depending on domain.
	Ine process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available	The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay

Criteria	JORC Code explanation	Commentary
		data and swathe plots. All methods showed good correlation between drill data and block model.
		For calculation of the Exploration Target the following criteria were modified from the MRE –
D		<ul> <li>In tonalite and fault domains first pass search ellipse of 100mx100mx15m and a second and final pass of 150mx150mx25m</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	All tonnages are estimated on a dry basis and moisture content is not considered in the resource estimate.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	The resource has been reported at a 0.3 g/t Au cutoff. This is based on the costs and recoveries used in generating the optimal pit shell for a US\$ 1,800 per ounce gold price. Details of these parameters are included in the body of the report.
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	It is assumed that mining will be by open pit methods. The resource is reported in-situ with no dilution or mining recovery factors applied.
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	Preliminary metallurgical test work was completed on core samples from the project area (ASX Release 9 June 2020). This reported mineralised material is free milling with gold recoveries up to 99%. Additionally, the material was amenable to gravity concentration with 55% to 75% of the gold reporting to the gravity concentration. Initial test work indicates the potential to use a gold processing circuit consisting of conventional gravity concentration with CIL. More recent, detailed metallurgical test work results (ASX Release 10 December 2021) indicate achievable gravity recovery of 45% and overall recovery of 94.5% at a 150 µm grind size and up to 98% at finer grind sizes. As with the Phase 1 test work, the Phase 2 leach test work demonstrated rapid leach times with the majority of tests achieving total gold extraction in excess of 90% within 8 hours. These results will be used to set the process design criteria for Ternera confirming the potential for ore processing using a simple, conventional crush, grind, gravity recovery and leach flowsheet achieving high recoveries.
Environment al factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be</li> </ul>	Environmental considerations have not been factored into this Mineral Resource Estimate.

Criteria	JORC Code explanation	Commentary
	reported with an explanation of the	
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density</li> </ul>	There are 26,204 density samples in the MRE area, allowing density to be interpolated using Ordinary Kriging. Average density is 2.65 t/m <sup>3</sup> .
Classification	estimates used in the evaluation process of the different materials.	The Mineral Descurse has been classified in the Indicated
	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource has been classified in the Indicated (69%) and Inferred (31%) categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code).</li> <li>A range of criteria has been considered in determining this classification including: <ul> <li>Geological continuity;</li> <li>Data quality;</li> <li>Drill hole spacing;</li> <li>Modelling technique;</li> <li>Estimation properties including search strategy, number of informing data and average distance of data from blocks.</li> </ul> </li> <li>Resource classification is based on drill spacing and the average distance to, and the number of samples and drill holes used in the estimation of each block.</li> <li>Indicated material is generally assigned to blocks within areas of ~20m to 25m drill spacing, while Inferred material has up to ~40m to 50m drill spacing. Blocks with more widely spaced drill spacing are estimated but are not classified as part of the Mineral Resource.</li> <li>The Mineral Resource Estimate appropriately reflects the Competent Person's views of the deposit.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The current model has not been audited by an independent third party.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to the chnical and economic evaluation. Documentation should include</li> </ul>	The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenor of mineralisation within the deposit. The mineral resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model. No production data is available.

Criteria	JORC Code explanation	Commentary
	assumptions made and the procedures used.	
	<ul> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	