

# TDG GOLD UPDATES MINERAL RESOURCE ESTIMATE FOR SHASTA & TAILINGS, TOODOGGONE

White Rock, British Columbia, January 08, 2025 - TDG Gold Corp. (TSXV: TDG) (the "Company" or "TDG") is pleased to announce an updated Mineral Resource Estimate<sup>1</sup> ("MRE") incorporating the results of (1) its relogging, resampling and assay program of 2007 and 2010 historical diamond drillholes comprising ~3,250 metres ("m") at the former producing Shasta gold-silver ("Au-Ag") mine and (2) its 2024 drill program at the Tailings Storage Facility #1 ("TSF1") located adjacent to the Baker Mill. The key outcomes of the updated MRE are improved grades and a significant reduction in the estimated quantity of waste rock within the conceptual mineral resource limiting pit. An updated technical report will be filed on the Company's website and SEDAR within 45 calendar days of this disclosure.

# **Highlights: Updated Mineral Resource Estimate** (see **Table 1**; below for details)

- Indicated Mineral Resource of 515.8 thousand ounces ("koz") gold equivalent ("AuEq\*") grading
  1.35 grams per tonne ("g/t") AuEq\* (see Table 1 below for grades by metal and Table 1 Notes for AuEq\* calculation) contained within 11.9 million metric tonnes ("Mt").
- <sup>2</sup>Inferred Mineral Resource of 505.5 koz AuEq\* grading 1.04 g/t AuEq², contained within 15.14 Mt and including 12,120 oz AuEq\* grading 1.37 g/t AuEq\* contained within TSF1 (see **Table 1** below for grades by metal and Table 1 Notes for AuEq\* calculation).
- **Cut-off grade** maintained at 0.4 g/t AuEq\* cut-off grade ("COG") for the base case.
- **Significant silver contribution** (14.2 million ounces ("Moz") Indicated / 14.3 Moz Inferred) included in the AuEq\* ounces.
- MRE conceptual pit outline extends to within 100 m of the Newberry exploration target zone<sup>3</sup> which has never been drill tested (Figure 1).
- MRE shows continuity and consistency, with an increased COG resulting in a relatively minor reduction in the pit-constrained AuEq\* ounces within the Shasta deposit, while increasing the grade (Table 1). The MRE for TSF1 is an inaugural estimate.
- Shasta deposit remains open at depth and along strike<sup>3</sup> (see TDG news release March 20, 2023).
- MRE does not include any of the Greater Shasta-Newberry<sup>3</sup> satellite exploration target zones, or any of the second Tailings Storage Facility, located adjacent to TSF1<sup>3</sup> (Figure 2).

Fletcher Morgan, TDG's CEO, commented: "The Shasta mineral resource demonstrates continuity and consistency across the deposit and ~25% of the estimated AuEq\* is contributed by silver. There are known parts of the deposit that merit further HQ drilling, as both infill and larger diameter core have consistently increased the grade of the areas drilled. However, the greater opportunity is testing for potential extensions to the mineralized system, particularly the 2.5 kilometre 'Fisher Zone<sup>3</sup>' extending from Shasta to the boundary with the Freeport-Amarc JV ground to southeast (Figure 1); and the Newberry exploration target area<sup>3</sup> immediately north of the Shasta MRE, which has never been drill tested.

The calculated 12,100 AuEq\* ounces within TSF1 is in line with the historical<sup>4</sup> production records at Baker-Shasta from 1981-2012 and is located within our Baker-Shasta Permitted Mine Area. The definition of an inaugural Inferred<sup>2</sup> MRE at TSF1 represents an opportunity to convert a potential liability into a net asset by demonstrating a path to reasonable prospects for eventual economic extraction."

<sup>&</sup>lt;sup>2</sup> Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable their classification as Mineral Reserves. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Measured or Indicated Mineral Resources with continued exploration and additional data.



**Table 1** - Shasta Updated 2024 Mineral Resource Estimate including Sensitivity (base case highlighted)\*

	AuEq	In Situ Tonnage and Grade					AuEq*	Au	Aa Motol
Class	Cutoff		AuEq*	Au	Ag	NSR	Metal	Metal	Ag Metal
	(g/t)	Mt	(g/t)	(g/t)	(g/t)	(\$CDN)	(koz)	(koz)	(koz)
	0.30	15.169	1.13	0.86	31.2	101	552.3	417.2	15,231
	0.35	13.327	1.24	0.94	34.4	111	533.1	402.6	14,718
Indicated	0.40	11.881	1.35	1.02	37.3	120	515.8	389.3	14,256
(Shasta)	0.45	10.710	1.45	1.10	40.2	129	499.8	377.1	13,832
	0.50	9.743	1.55	1.17	42.9	138	485.1	365.9	13,438
	1.00	4.580	2.50	1.89	69.3	223	368.5	278.0	10,207
	0.30	19.331	0.87	0.65	24.9	78	543.1	405.9	15,469
	0.35	16.927	0.95	0.71	27.0	85	518.1	387.9	14,683
Inferred	0.40	14.865	1.03	0.78	29.1	92	493.4	370.2	13,888
(Shasta)	0.45	12.930	1.12	0.85	31.4	100	467.0	351.1	13,066
	0.50	11.482	1.21	0.91	33.5	107	444.9	335.2	12,374
	1.00	4.388	2.02	1.56	51.9	180	284.5	219.6	7,323
Inferred									
	N/A	0.276	1.37	0.97	45.0	122	12.1	8.6	398
(TSF1)									

#### \*Notes to the MRE table:

- 1. The Mineral Resource estimate has been prepared by Sue Bird, P.Eng., an independent Qualified Person. The effective date of the mineral resource estimate is December 29, 2024.
- 2. Mineral Resources are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines, as required by NI43-101.
- 3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that all Mineral Resources will be converted into Mineral Reserves.
- 4. The Mineral Resource has been confined by a "reasonable prospects of eventual economic extraction" pit using the following assumptions, which were estimated from comparable projects:
  - a. Au price of US\$2,250/oz, Ag price of US\$25/oz at an exchange rate of 0.74 US\$ per CDN\$;
  - b. a 1.5 % NSR royalty;
  - c. 93 % metallurgical recovery for Au, based on past TDG test work, historical mill records<sup>4</sup> and nearby project comparables<sup>6</sup>;
  - d. 86 % recovery for Ag based on nearby project comparables<sup>6</sup> and, while prior MREs assumed somewhat lower Ag recoveries based on historical mill records<sup>4</sup> and limited past TDG test work, test work was not optimized for Ag recoveries. Further, test work at comparable projects indicate that improvement could be expected;
  - e. 99.9 % payable Au; 95.0 % payable Ag; US\$7.00/oz Au and US\$3.00/oz Ag offsite costs (refining, transport and insurance);
  - f. Mining costs of CDN\$4.00/tonne mineralized material;
  - g. Processing Costs of CDN\$15/tonne and G&A of CDN\$8.00/tonne processed;
  - h. Pit slopes of 45 degrees.
- 5. The resulting NSR equation is: NSR (CDN\$) = 95.79\*Au Grade\*0.93 + 0.92\*Ag Grade\*0.86
- 6. The resulting AuEq equation is: AuEq = Au + Ag\*0.00887
- 7. The bulk density of the deposit is based on 2021 & 2022 measurements and is assumed to be 2.61 throughout the deposit and 2.00 for overburden.
- 8. Numbers may not sum due to rounding.



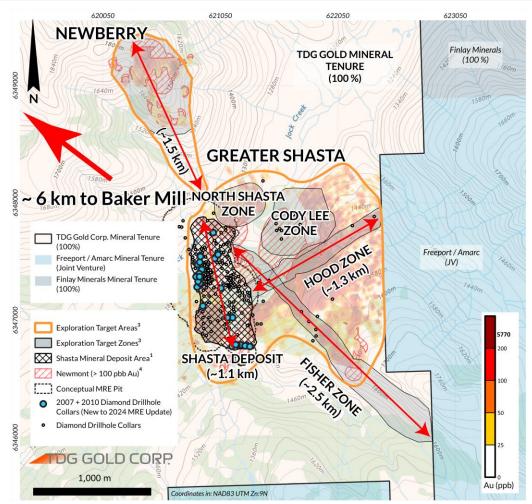


Figure 1: Shasta Plan Map with MRE Resource-limiting Pit Outline

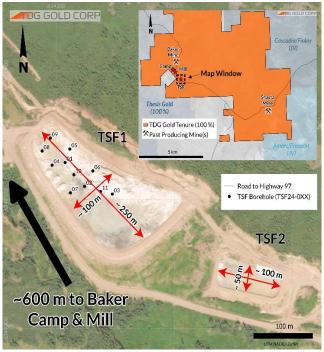
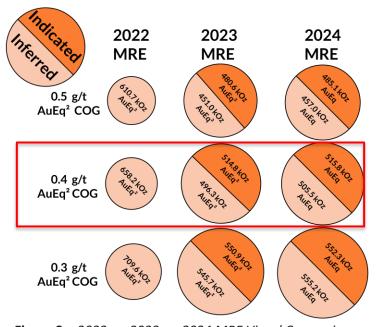


Figure 2: Tailings Storage Facility 1 & 2



#### Overview

The 2024 MRE update was based on the incorporation of ~3,250 m of historical diamond drilling from the 2007 (16 drillholes now included) and 2010 (10 drillholes now included) drill campaigns. These drillholes were not included in prior MRE calculations as collars could not accurately be validated and/or assay data was not recovered as part of the acquisition. However, TDG has since: (i) re-logged, re-sampled and assayed the cores (where available) with modern assaying techniques, and (ii) completed a comprehensive data validation and ground-truthing to confidently place those collars in 3D space. This endeavour was one of the 'low hanging fruit' objectives from the Shasta MRE forward plan (see TDG news release May 01, 2023). The result is an increase in grade and decrease in tonnage (Figure 3). Additionally, metal prices and NSR derived costs have been updated to reflect a higher price environment.



**Figure 3** – 2022 vs. 2023 vs. 2024 MRE Visual Comparison.

Note: the 2022, 2023 and 2024 MREs each have their own set of assumptions and modifying factors and are not directly comparable estimates, but this figure is provided for illustration purposes.

#### **Mineral Resource overview**

The Shasta deposit mineral resource database consists of 367 drillholes with 19,896 assay intervals from 1983 through 2022 drilling. This represents 23,936 m of assayed intervals at an average interval of 1.3 m per assay interval. Approximately 50 % of all assayed interval lengths of core used in the mineralized domains is comprised of TDG's modern, HQ diameter, oriented, diamond drill core from 2021 and 2022. The remaining assay intervals from the mineralized domains are from historical<sup>4,5</sup> drilling. All data used for the MRE has been validated statistically to show no significant bias, either by twinned drillholes in 2021 or through statistical comparison of historical<sup>4,5</sup> data with TDG drilling using Point Validation. Historical collar locations have also been validated by field validation of collar locations.

Two mineralized domains were generated based on: (i) the major north-south Shasta fault system as well as, (ii) the northwest trending, sub-vertical JM zone. The block model has a block size of 5 m x 5 m x 5 m to correspond to expected selective mining unit, with interpolation of Au and Ag by Inverse Distance Cubed ("ID3"). The interpolations were limited by the domain boundaries and were clipped to the overburden surface. Historical mine workings<sup>4</sup> were removed from the in-situ mineral MRE.

There are no other known factors or issues that materially affect the MRE other than normal risks faced by mining projects in the province of British Columbia, Canada, in terms of environmental, permitting,



taxation, socio-economic, marketing, and political factors and additional risk factors as listed in the "Cautionary Note Regarding Forward-Looking Information" section below.

# Mineral Resource growth potential & Forward Plan

The Shasta Deposit still has many avenues for further improvements, including in-fill drilling to improve the confidence and continuity and potentially improve grade and/or classification as well as test the zones of known mineralized extension. Additionally, the Greater Shasta-Newberry project offers potential for the discovery of new mineralized zones<sup>3</sup> that could increase the existing 2024 MRE. Such potential endeavours include:

- 1) 'Scout' Drilling. Using a small mobile drill to drill test the Greater Shasta area following up on historical drilling and exploration that suggest additional proximal zones of mineralization, adjacent to the Shasta Deposit (Fisher, Hood, Cody Lee and North Shasta Zones<sup>3</sup>)
- 2) Expansion Potential. The Shasta Deposit remains open along the strike and at depth, beyond the known and defined mineralized zones<sup>3</sup>. Further diamond drilling could unlock more mineralization to be incorporated into the Shasta Deposit MRE.
- 3) 'Upgrade' Drilling. From data analysis, replacing historical holes (small diameter, historical assay methods) with modern, HQ (large diameter) diamond drilling coupled with modern precious metal assays has the potential to increase grade and confidence by providing more representative samples.
- 4) Metallurgical testing. TDG has initiated Phase 1 metallurgical testing of core samples collected from the Shasta Project in order to optimize metallurgical recoveries and support future economic studies.
- 5) Economic Studies. To take the known mineral deposit area in accordance with NI 43-101 and advance through studies to evaluate potential economic scenarios.

Steven Kramar, TDG's VP Exploration, commented: "Our systematic review of Greater Shasta continued throughout 2024, incorporating ~4,500 m of historical diamond drill core information that we recovered in 2023, in addition to the ~3,250 m of 2007 and 2010 specific information. We're now ready to launch a scout drill campaign, having identified multiple target locations to evaluate the four known extensions<sup>3</sup> to the Shasta mineral deposit area with a priority focus on the Fisher Zone<sup>3</sup>. Our aim would be to follow-up with HQ diamond drilling to rapidly add additional mineral resources<sup>3</sup> that offer the best potential to improve the overall scale and economics of the project. A similar approach would apply for expanding the high-grade gold Mets mining lease<sup>3</sup>. We continue to believe that Greater Shasta-Newberry & Mets, in combination, represent a compelling opportunity for the definition of a substantial global mineral resource in an established mining district."

#### **Data Verification**

TDG followed industry standard Quality Assurance/Quality Control ("QA/QC") protocols for the 2021 and 2022 drill programs by inserting blind certified reference materials ("CRMs"), field duplicates and blanks into the sample stream of core samples at sufficient proportions to primary core samples. QA/QC is maintained internally at the lab through rigorous use of internal CRMs, blanks, and duplicates.

If a QA/QC sample returned an unacceptable value an investigation into the results is triggered and, when deemed necessary, the samples that were tested in the batch with the failed QA/QC sample were retested.

The drill cores from 2021 and 2022 drilling were delivered to the core shack at TDG's Baker Mine site, and processed by geologists who inserted QA/QC samples into the sampling sequence. The drill core was cut in half (1/2 HQ core) and placed in zip-tied polyurethane bags, then in security-sealed rice bags before



being delivered directly from the Baker Mine site to Bandstra Transportation Systems in Prince George, B.C., enroute to either:

- 1) SGS' laboratory in Burnaby, B.C., for preparation and analysis of 2021 drillcore samples. Samples were prepared and analyzed following procedures summarized in **Table 2**, where information about methodology can be found on the SGS Canada Website, in the analytical guide (here).
- 2) ALS' preparation facility in Kamloops, B.C., and ultimately to the ALS' laboratory in North Vancouver, B.C., for 2022 and 2023 drillcore samples. Samples were prepared and analyzed following procedures summarized in **Table 2**, where information about methodology can be found on the ALS Global website, in the analytical guide (<a href="https://examples.com/here">here</a>.

**Table 2 – 2021 & 2022 Assay Methodology** 

Year	Lab	Method (Au)	Method (Ag)	Method (Overlimit - Au)	Method (Overlimit – Ag)
2021	SGS	GO_FAI50V10	GE_IMS40Q12	N/A	GO_ICP42Q100/GO_FAG37V
2022	ALS	AU-ICP22	MEMS61	Au-GRA22	Ag-GRA22
2023	ALS	AU-ICP22	MEMS61	Au-GRA22	Ag-GRA22

Historical<sup>4,5</sup> data were verified using Point Validation, by interpolating the Au and Ag grades to locations of the historical<sup>4,5</sup> data for comparison. In addition, two of the 2021 drillholes were twins of historical<sup>4,5</sup> drilling. Based on these analyses, the historical<sup>4,5</sup> drilling for years 1983 to 2006 show no significant bias.

Drill collar validation was completed using handheld (GARMIN GPSMAP64 or equivalent) GPS equipment, selecting a subset of historical<sup>4,5</sup> collars to validate positions inherited from the historical<sup>4,5</sup> database. In 2022, a DGPS was utilized to further validate historical<sup>4,5</sup> collars and rectify locations into modern UTM NAD83 Zone: 9 north coordinate system (from a locally derived mine grid). Collar locations from the 1980/90s era drilling were validated for use in the mineral resource database.

#### Methods Used for the Mineral Resource Estimate

## **Grade Capping**

Cumulative probability plots ("CPPs") for the assays within both domains have been used to determine high grade outliers which were capped (**Table 3**). CPPs of the composited data (composited at 2 m) have also been used to determine the Outlier Restriction during interpolation. Outlier restriction values are applied for distances beyond 5 m from the composite locations.

**Table 3** – Capping and Outlier Restriction Values

	Assay Capping Values				Composite Outliers			
DOM	Au (g/t)	# capped	Ag (g/t)	# capped	Au (g/t)	# of outliers	Ag (g/t)	# of outliers
1	100	1	5000	1	30	10	5	5
2	50	1	3000	1	5	9	1000	2

# Variography and Interpolations

Variography was completed on each domain for Au and Ag to determine appropriate search parameters. Interpolation has been done by ID3 in 4 passes with increasing search distances up to 150 m for the major



and minor axes. The modelled grades have been validated using de-clustered composites (Nearest Neighbour or Polygonal model) and indicate no global bias with appropriate smoothing throughout the grade-tonnage curves.

# Classification of Mineral Resource Criteria

Volumes of the mineral resource that contained 2021 and/or 2022 drilling data with an average distance between two drillholes of 50 m (or less), were considered Indicated. The mineral resource was assigned to Inferred for all other blocks interpolated, with a Au grade.

# Cut-off Grade

The COG was selected using AuEq\* to cover, as a minimum, the processing and G&A costs and to account for the metallurgical recovery, smelter terms and royalties. In 2022, the base case COG was 0.3 g/t AuEq\* which approximates the marginal economic COG; and in the 2023 and in the current, 2024 MRE the base case COG is assigned at 0.4 g/t AuEq\*.

## **Qualified Person**

The technical content of this news release has been reviewed and approved by Steven Kramar, MSc., P.Geo., Vice President, Exploration for TDG., a qualified person as defined by National Instrument 43-101.

The technical information relating to the mineral resource estimate has been prepared by Sue Bird, P.Eng. (Moose Mountain Technical Services) a Qualified Person, as defined under National Instrument 43-101 and who is independent of TDG.

<sup>1</sup>Mineral Resource Estimate (MRE): All scientific and technical information relating to the TDG's Shasta Project pertaining to the Mineral Resource Estimate ("Shasta MRE") contained in this news release is derived from the Technical Report dated June 14, 2023 (with an effective date of February 11, 2023) titled "The Toodoggone Portfolio and the 2023 Resource Estimate for the Shasta Deposit" (the "2023 Technical Report") prepared by Sue Bird, MSc., P.Eng. of Moose Mountain Technical Services. The information contained herein in respect of the Shasta MRE is subject to all of the assumptions, qualifications and procedures set out in the 2023 Technical Report and reference should be made to the full text of the 2023 Technical Report, a copy of which has been filed with the securities regulators in each of the provinces of Canada (except Québec) and is available on <a href="https://www.sedarplus.ca/">https://www.sedarplus.ca/</a>. An updated technical report for the 2024 MRE will be filed within 45 days of this release.

<sup>2</sup>Inferred Mineral Resources: Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable their classification as Mineral Reserves. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Measured or Indicated Mineral Resources with continued exploration and additional data.

<sup>3</sup>Mineral Exploration/Exploration Target Area(s): Exploration targets and/or Exploration zones and/or Exploration areas are speculative and there is no certainty that any future work or evaluation will lead to the definition of a mineral resource.

<sup>4</sup>Historical Data: This news release includes historical information that has been reviewed by TDG's qualified person (QP). TDG's review of the historical records and information reasonably substantiate the validity of the information presented in this news release; however, TDG cannot directly verify the accuracy of the historical data, including (but not limited to) the procedures used for sample collection and analysis. Therefore, any conclusions or interpretations borne from use of this data should be considered too speculative to suggest that additional exploration will result in mineral resource delineation. TDG encourages readers to exercise appropriate caution when evaluating these data and/or results.

<sup>5</sup>Historical Drill core Sampling & Assay Methodology: Historical core was geologically logged with lithologies identified and notable geological features recorded. Historical core was cut in half (and in rare cases sawn in half) along sample intervals (lithology and mineralization dependant) generally less than 3 m. Chemical analysis was performed dominantly for precious metal analysis (Au and Ag), and infrequently for base metals (Pb, Zn and Cu), and rarely for major elements and trace elements. Historically, different commercial laboratories were utilized in addition to an assay lab at Baker Mine site. These lab facilities may or may not have had accreditation and in all cases accreditation (if applicable) pre-dated current ISO standards. Over that period, a variety of digestion and assay methods were used, including atomic absorption, fire assay atomic absorption, aqua regia atomic absorption and aqua regia ICP with varying detection limits. Reference materials (if any) were inserted at the analytical level and thus were unblind to the facility processing the samples.

<sup>6</sup>Adjacent Properties: The Company has no interest in, or rights to, any of the adjacent properties mentioned, and mineral deposits on adjacent properties are not necessarily indicative of mineralization on the Company's properties. Any references to resources, grades, metallurgical or process studies, engineering studies or historical results are provided for information only and do not imply any certainty of achieving similar results on the Company's properties.



### **About TDG Gold Corp.**

TDG is a major mineral tenure holder in the historical Toodoggone Production Corridor of north-central British Columbia, Canada, with over 32,000 hectares of brownfield and greenfield exploration opportunities under direct ownership. TDG's flagship projects are the former producing, high-grade gold-silver Shasta and Baker mines, which produced intermittently between 1981-2012, and the historical high-grade gold Mets developed prospect, all of which are road accessible, and combined have over 65,000 m of historical drilling. The projects have been advanced through compilation of historical data, new geological mapping, geochemical and geophysical surveys and, at Shasta, 13,250 m of modern HQ drill testing of the known mineralization occurrences and their potential extensions. In May 2023, TDG published an updated Mineral Resource Estimate for Shasta (news release May 01, 2023) which remains open at depth and along strike. In January 2023, TDG defined a larger exploration target area adjacent to Shasta ('Greater Shasta-Newberry'; news release Jan 25, 2023). In Fall 2023, TDG published the first modern drill results from the Mets mining lease (news releases Sep 07, 2023, Sep 11, 2023 and Nov 28, 2023). In early 2024, TDG identified new copper-gold target areas over an expanded footprint covering "53 sq.km known as the 'Baker Complex' (news release Feb 28, 2024).

## ON BEHALF OF THE BOARD

Fletcher Morgan Chief Executive Officer

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Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

# **Forward Looking Statements**

This news release contains forward-looking statements that are based on the Company's current expectations and estimates. Forward-looking statements are frequently characterized by words such as "expand", "expect", "demonstrate", "outcome", "continue" "potential", "improve", "discover", "priority", "significant", "opportunity", "compel" "continuity", "consistent", "expected", "relative", "comprehensive", "confident", "concept", "unlock", "identify", "modest", and variations of these words as well as other similar words or statements that certain events or conditions "could", "may", "would" or "will" occur. Such forwardlooking statements involve known and unknown risks, uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results implied or expressed in such forward-looking statements. Such factors include, among others: the actual results of current and planned exploration activities; the potential to expand the Shasta MRE beyond its current limits and to convert unclassified material within the MRE-limiting pit to mineral resources; the interpretation of the Fisher, Hood, Cody Lee and other Zones as representing potential mineralized trends, and the potential for extensions to the Fisher, Hood, Cody Lee and other Zones; the interpretation that the Greater Shasta-Newberry Target Area represents a larger mineralized system encompassing several target zones and the potential that such zones may represent additional Shasta-like deposits; the ability to further improve confidence in the Shasta MRE and the potential for, and timing of, a larger, updated MRE; the timing, results and conclusions of future economic evaluations; the improvement of the Shasta MRE by future drilling in the known historical areas utilizing larger diameter core and modern assay practices; changes in project parameters as plans to continue to be refined; results of current and future metallurgical testing; possible variations in grades of mineralization and/or future actual recovery rates; accidents, labour disputes and other risks of the mining industry; the availability of sufficient funding on terms acceptable to the company to complete the planned work programs; delays in obtaining governmental approvals or financing; and fluctuations in metal prices. There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.