NI 43-101

The Toodoggone Portfolio
and the
2023 Resource Estimate for the Shasta Deposit

Omineca Mining Division
British Columbia, Canada

NTS: 094E/011UTM: 617680 E / 6359170 N (NAD 83, Zone 9)
Latitude / Longitude: 57.29° / 127.11°

Submitted to:
TDG Gold Corp.

Effective Date: 11 February 2023
Date of Submittal: 14 June 2023

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DATE & SIGNATURE PAGES

Herewith, our report entitled "The Toodoggone Portfolio and the 2023 Resource Estimate for the Shasta Project" dated 14 June 2023.

"Signed and Sealed"

Sue Bird, P. Eng.
Moose Mountain Technical Services
Principal and V.P. of Resources

Dated the 14th of June 2023

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1 Summary

Moose Mountain Technical Services (MMTS) has prepared a technical report (the Report) for TDG Gold Corp. (TDG) which includes a Resource Estimate of the Shasta deposit, located in the Toodoggone region of north-central British Columbia, Canada. The TDG operates on 25,316-ha of tenures (“Toodoggone Portfolio”) within the prolific Toodoggone mining camp. The Toodoggone Portfolio consists of four different project groupings (“Property”, “Properties”), which include Baker-Shasta, Mets, Oxide Peak, and BOT Properties. The Baker-Shasta and Oxide Peak Properties together form a contiguous claim block. The Oxide Peak Property is an earn-in agreement with ArcWest Exploration Inc. (“ArcWest”). As of December 31st, 2022, TDG notified the optionor that TDG had completed the option requirements for the earn-in agreement. The Baker-Shasta, Mets and BOT Properties are 100% owned by TDG. The size and defining titles for each Property is as follows:

- Baker-Shasta: 6,350-ha claim boundary composed of 63 contiguous, partially overlapping titles which includes 57 mineral claims (“MCX”), 4 placer claims (“PCX”), 1 four-post mineral claim (“MC4”) and 2 mineral leases (“ML”). The two past producing mines, Baker (Chappelle) and Shasta, relate to ML #243451 and #243454, respectively.
- Mets: 439-ha claim boundary composed of 4 contiguous, partially overlapping titles which include 3 PCX and 1 ML (#314708).
- Oxide Peak: 8,438-ha claim boundary composed of 15 contiguous mineral claims. The earn-in agreement is described in the 2020 Technical Report on the Baker-Shasta-Oxide Peak Property (Dorion, 2020).
- BOT: 10,089-ha claim boundary composed of 20 contiguous mineral claims.

All the Properties within the Toodoggone Portfolio are considered early-stage exploration properties as per the definition stated in the National Instrument 43-101 Standards of Disclosure for Mineral Projects (2016).

This Report was written to provide an overview of work completed by TDG since acquiring the Toodoggone Portfolio in 2020 as of the effective date, with focus on the 2023 resource estimate update for the Shasta Deposit.

1.1 Mineral Resource Estimate

The Mineral Resource Estimate (MRE) for the Shasta deposit has an effective date of February 11th, 2023. The resource estimate is summarized in the Table below (Table 1) with the base case cut-off grade of 0.40g/t Au Equivalent (AuEq) highlighted. The resource estimate has been confined to an open pit with “reasonable prospects of eventual economic extraction”. The base case cut-off grade covers the Processing + General and Administrative (“G&A”) costs of CDN$17.00/tonne processed using the prices and smelter terms as detailed in the Notes to the Table.

Table 1-1: Shasta Mineral Resource Estimate

Class	AuEq Cutoff (g/t)	In Situ Tonnage and Grade Tonnage ('000 t)	AuEq (g/t)	Au (g/t)	Ag (g/t)	NSR ($CDN)	AuEq Metal (kOz)	Au Metal (kOz)	Ag Metal (kOz)
Indicated	0.3	15,830	1.083	0.844	29.8	77.58	550.9	429.6	15,167
	0.35	14,026	1.180	0.920	32.5	84.57	532.2	414.9	14,660
	0.4	**12,578**	**1.273**	**0.993**	**35.0**	**91.22**	**514.8**	**401.4**	**14,166**
	0.45	11,300	1.369	1.068	37.6	98.11	497.4	388.0	13,667
	0.5	10,198	1.466	1.144	40.2	105.04	480.6	375.1	13,187
	1	4,579	2.406	1.885	65.1	172.39	354.1	277.5	9,584
Inferred	0.3	19,881	0.854	0.657	24.6	61.18	545.7	419.9	15,718
	0.35	17,391	0.930	0.716	26.8	66.62	519.8	400.1	14,974
	0.4	**15,432**	**1.000**	**0.771**	**28.7**	**71.69**	**496.3**	**382.3**	**14,249**
	0.45	13,762	1.070	0.825	30.6	76.70	473.6	365.2	13,548
	0.5	12,276	1.143	0.883	32.5	81.88	451.0	348.4	12,823
	1	4,610	1.890	1.497	49.1	135.47	280.2	221.9	7,282

Notes to the MRE table:

1. *The Mineral Resource estimate has been prepared by Sue Bird, P.Eng., an independent Qualified Person.*
2. *Resources are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines.*
3. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
4. *The Mineral Resource has been confined by a "reasonable prospects of eventual economic extraction" pit using the following assumptions:*
    a. *Au price of US$1,800/oz, Ag price of US$20/oz at an exchange rate of 0.75 US$ per CDN$;*
    b. *99.8 % payable Au; 95.0 % payable Ag; US$4.25/oz Au and US$1.53/oz Ag offsite costs (refining, transport and insurance);*
    c. *a 1.5 % NSR royalty; and uses a 94.8 % metallurgical recovery for Au and 77.2 % recovery for Ag;*
    d. *Mining costs of CDN$2.56/tonne mineralized material, CDN$2.40/tonne waste, CDN$1.8/tonne overburden;*
    e. *Processing Costs of CDN$12/tonne and G&A of CDN$5.00/tonne processed;*
    f. *Pit slopes of 45 degrees.*
5. *The resulting NSR equation is: NSR (CDN$) = 75.67*Au Grade*0.948 + 0.74*Ag Grade*0.772*
6. *The resulting AuEq equation is: AuEq = Au + Ag*0.008*
7. *The bulk density of the deposit is based on 2021 measurements and is 2.61 throughout the deposit and 2.00 for overburden.*
8. *Numbers may not add due to rounding.*

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.

1.2 Terms of Reference

All currencies are expressed in Canadian dollars ($CDN). Mineral Resources and Mineral Reserves are estimated using the 2019 edition of the Canadian Institute of Mining, Metallurgy and Exploration (CIM) Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines) and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

1.3 Project Description and Location

1.3.1 Location

The Property is located 430 kilometres northwest of George, British Columbia, as shown on Figure 4-1. The Property's is centered at 57.29° latitude and -127.11° longitude. Most of the claims are within NTS map sheet 94E/06, with lesser sections in NTS map sheets: 94E/07, 94E/03, 94E/02, and 94E/11.

1.3.2 Mineral Tenure

The mineral tenure is held in the company TDG BC Assets Corporation, a wholly owned subsidiary of TDG Gold Corporation. The Total Project area consists of 84 Claims and 3 Mining Leases, which total 18,152 hectares and an additional 15 Options from ArcWest totaling 8,438 hectares.

1.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The property is road-accessible, and the most practical route is to turn off at the Finlay- forest service road ("FSR") located 148 kilometres north of Prince George, along Highway 97 towards the town of Mackenzie, British Columbia. Depending on the season, the property is also accessible by float plane on Black Lake and standard, landing gear plane on the Sturdee airstrip.

Approximate temperatures range from a minimum of -32°C in January to a maximum of +26°C in June. Snowfall accumulations can reach up to two metres over the winter months (Smith, 2019).

Infrastructure on the Property includes the historical 200 tonne per day ("TPD") Baker mill, tailings storage facility ("TSF"), limited surface and underground equipment, and a seasonal 50-person camp facility.

The Shasta-Baker deposit area is situated in moderate terrain with elevations ranging from about 1,200 metres a.s.l. along Jock Creek in the eastern part of the property to about 1,900 metres a.s.l. in the central and west parts of the property. Most of the property is above the tree line which is at an elevation of about 1,630 metres a.s.l. Oxide Peak elevations extend from just below 1300 metres a.s.l. in the Belle Lakes area to almost 2200 metres a.s.l. at Mount Gordonia. Mountain peaks in the Mets area average 1980 m ASL, rising abruptly from the major valleys.

1.5 History

The original Shasta group of claims were staked in 1972 by Shasta Mines and Oil Ltd. Esso Minerals Canada Ltd. optioned the property in 1987 and carried out two seasons of exploration. Homestake Mining Canada Ltd. purchased Esso Minerals Canada Ltd.'s interest in the Shasta property in the spring of 1989, and continued exploration during the summer of 1989, with a program of exploration and delineation drilling as well as geochemical and geophysical surveys. By the end of the 1989 field season, total exploration work included 5,140 geochemical soil samples, 200-line km of VLF-R and 4.0-line km of IP geophysical surveys, 4.0 km of backhoe trenches, geological mapping at 1:10,000 and 1:1,000 scales, 13,774 m of exploration diamond drilling and 1,093 m of delineation and condemnation diamond drilling.

In 1990, Sable mined the JM and Creek zones, by both open pit and underground methods, and completed 285 m of diamond drilling in 5 holes (Smith, 2019). Sable completed a small test pit on the Creek zone, and mined and processed 15,000 tons (Craft, 2007). Underground operations resumed in 2007, and between 2008 and 2012, Sable mined approximately 105,000 tons from the Creek zone (TetraTech EBA Inc., 2015; Smith A., 2019).

Please refer to Section 6 of this report for details on the history of the other deposits.

1.6 Geology

The regional geology surrounding the Property has not seen any significant research or changes in understanding since the 2020 Technical Report (Dorion, 2020) and is described as an area measuring approximately 1500 square kilometres in the Toodoggone region that extends from the Kemess South mine area northwestwards to the Chuckachida River. The region occurs within the Intermontane Belt and is underlain by strata of the Stikine Terrane, which consists of Paleozoic to Mesozoic island arc assemblages and overlying Mesozoic sedimentary sequences. The oldest rocks exposed in the region consist of crystalline limestone of the Devonian Asitka Group. They are unconformably overlain by mafic volcanic rocks of the Upper Triassic Takla Group. Takla Group volcanic rocks are in turn overlain by bimodal volcanic and sedimentary strata of the Lower Jurassic Toodoggone Formation of the Hazelton Group (Smith, 2019). Toodoggone Formation pyroclastic and epiclastic volcanic rocks are a predominantly calc-alkaline andesitic to dacitic subaerial succession. Toodoggone volcanic rocks display broad open folds with attitudes generally less than 25° dipping predominantly to the west (Smith, 2019).

Please refer to Section 7 of this report for details on the geology and mineralization of each significant deposit within the Property.

1.6.1 Exploration

Exploration work, outside of drilling, completed by TDG since acquiring the Toodoggone Portfolio includes:

- 2020
  - Airborne Magnetic Survey (Oxide Peak)
  - Ground Geophysical Survey (Oxide Peak)
- 2021
  - Ground Magnetic Survey (Baker, Shasta, Mets)
  - Airborne Magnetic Survey (BOT)
  - Airborne Radiometric and Magnetic survey (Oxide Peak, Baker-Shasta partial)
  - LiDAR Survey (Baker-Shasta, Oxide Peak partial)
- 2022
  - Hyperspectral Survey (Baker-Shasta, BOT, Oxide Peak)
  - Ground Magnetics and Very Low Frequency Geophysical survey (Shasta)
  - Ground Magnetic Geophysical survey (BOT)
  - Geochemical Sampling (Shasta, BOT)
  - Drone-based LiDAR Survey (Shasta, Mets)

1.7 Drilling

Drilling on the Shasta deposit that has collar locations verified consists of 353 drillholes totalling 23,102 m of assayed length.

Please see Section 10 of this report for drill details on the other deposits of the Property.

1.8 Data Verification

Data has been verified by twinned holes and comparison of current drilling to historical. Collars were verified in the field for the majority of drillholes used in the resource estimate. Collars from 2007 and 2010 could not be verified and were not used in the resource estimate. Underground workings were walked where accessible. Certificate checks were made with only a few minor discrepancies noted. The QP concludes that the database used for the Shasta modelled grades is suitable for the current Inferred resource estimate.

1.9 Conclusions and Recommendations

The QP concludes that the mineral resource estimate for the Shasta deposit contained in this Report warrants further exploration as the deposit remains open along strike and down-dip. The targets in the Shasta deposit vicinity (Greater Shasta) warrant drill testing. The Mets project, with a near surface historical (non-43-101 compliant) resource estimate has good drill targets for follow-up and re-examination of the resource potential, utilizing statistical twins and testing extension potential. The historical resource estimate on Mets (Cheni, 1992) is not NI 43-101 compliant and is only presented as reference. The BOT and Oxide Peak projects need further geological evaluation before additional recommendations, and the entire TDG portfolio requires additional geological, geophysical, and geochemical exploration to advance the properties to a drill stage.

The following recommendation are made by the QP:

1.9.1 Shasta Deposit

- Infill/Extension drilling outside of the mineralized footprint.
- Verify/Validate the historical 2007 and 2010 drill collars.
- Continued metallurgical testing of the mineralized rocks at Shasta.
- Finalize the updated geological model.

1.9.2 Greater Shasta

- Drill test: North Shasta, Cody Lee, Fisher, Hood.
- Expand the current ground-based magnetics-VLF survey.

1.9.3 Newberry

- Initial drill test this previously undrilled target.

1.9.4 Baker

- Relog and resample the historical drill core.
- Expand the current ground-based magnetics-VLF survey.

- Conduct an initial test IP grid in anticipation of a larger more comprehensive survey.
- Compile the data and release an inaugural Baker mineral resource estimate in accordance with NI 43-101 standards.

1.9.5 Mets

- Drill statistical twin holes to validate/verify the historical drilling.
- Test near extension of the A-zone potential
- Compile the data and release an inaugural Mets mineral resource estimate in accordance with NI 43-101 standards.

1.9.6 BOT/Oxide Peak

- Further recommendations are dependant on section 1.9.7.

1.9.7 Toodoggone Regional Surface Work

- Conduct a portfolio wide regional stream sediment sampling program.
- Identify anomalous drainages and follow up with i) geological mapping, ii) soil sampling, iii) ground-based geophysics.

1.10 List of Abbreviations used throughout the report:

- *t* *tonnes (Metric)*
- *M* *millions*
- *Mt* *Millions of tonnes*
- *k* *thousands*
- *ROM* *Run of Mine*
- *S/R* *Strip Ratio*
- *LoM* *Life of Mine*
- *NPV* *Net Present Value*
- *Ktpa* *kilo tonnes per annum*
- *G&A* *General and Administrative Costs*
- *USD* *US Dollars*
- *CAD* *Canadian Dollars*
- *BC* *British Columbia*
- *UTM* *Universal Transverse Mercator*
- *SG* *Specific Gravity*
- *RC* *Reverse Circulation*
- *DH* *Drillhole*
- *GSC* *Geological Survey of Canada*
- *PEA* *Preliminary Economic Assessment*
- *PFS* *Preliminary Feasibility study*
- *EA* *Environmental Assessment*

2 Introduction

Moose Mountain Technical Services (MMTS) has prepared a technical report (the Report) for TDG on the Baker-Shasta-Oxide Peak-Mets Property located 430 kilometres northwest from Prince George, British Columbia. The report includes a Resource Estimate on the Shasta deposit as well as geologic information and past and future exploration activities on all deposits within the total Property claims group.

TDG is a Vancouver based precious and base metal exploration company focused on the Toodoggone District of British Columbia.

2.1 Terms of Reference

All currencies are expressed in Canadian dollars ($CDN) unless otherwise noted. Mineral Resources and Mineral Reserves are estimated using the 2019 edition of the Canadian Institute of Mining, Metallurgy and Exploration (CIM) Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines) and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

2.2 Qualified Persons

Sue Bird, P.Eng. of Moose Mountain Technical Services serves as the qualified persons (QPs) for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1.

2.3 Site Visits and Scope of Personal Inspection

Sue Bird visited the Property between July 19th and July 21st, 2021, and from September 16th to September 19th, 2021, to review the progress and results of the 2021 drilling and again from July 19 - 21 to view the 2022 drilling. During the site visits, the historical core was examined, numerous collars of historical drilling were located, and samples were obtained for assay and re-assay. Drill pad locations, drilling and sampling protocols, the core storage, and the QA/QC procedures were also reviewed with pertinent drillholes inspected. The project sites visited include Shasta, Baker, Mets, and Oxide Peak. The previous mine workings at Shasta were examined including the two small open pits and all accessible drifts.

2.4 Effective Dates

The effective date of the Shasta deposit Resource Estimate is February 11th, 2023.

2.5 Information Sources

Information sources used in compiling this Report are included in Section 27.

2.6 Previous Technical Reports

Previous NI 43-101 Technical Reports on the TDG Properties include:

- Technical Report on the Baker Gold Project (Smith, 2017)
- Technical Report on the Baker Gold Project (Smith, 2019)
- National Instrument 43-101 Technical Report on the Baker-Shasta-Oxide Peak Property (Dorion, 2020)
- NI 43-101 Resource Estimate for the Shasta Deposit (Bird, 2022)

3 Reliance on Other Experts

The Qualified Person ("QP") of this Report, Sue Bird, states that they are qualified persons for those areas as identified in the "Certificate of Qualified Person". The QP has relied on and believe there is a reasonable basis for this reliance, the following expert report, which provides information regarding sections of this Report as noted below.

3.1 Mineral Tenure

The QP has not reviewed the mineral tenure, nor independently verified the legal status, ownership of the Project area or underlying property agreements. The QP has fully relied upon, and disclaims responsibility for, information supplied by TDG, and experts retained for TDG for this report. This information was provided by TDG on April 26, 2023, in the following document:

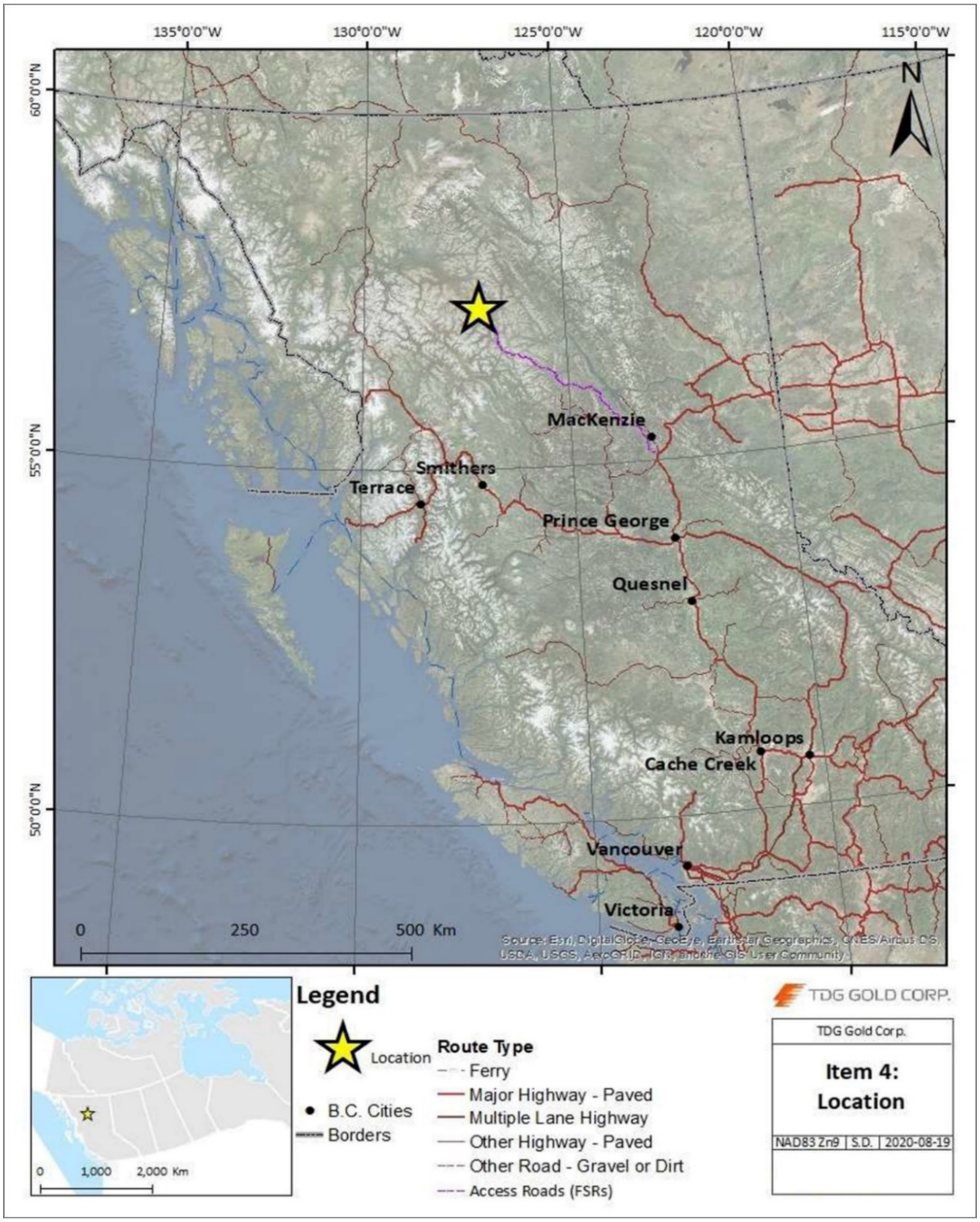
- Maxis Law Corp., 2023: TDG Gold Corp. (the "Company") – Title Opinion – Brokered Private Placement of Charity Flow-Through Units, Non-Flow-Through Units and Flow-Through Shares

The title opinion was requested as part of a financing and was deemed relevant and current.

This information is used in Section 4 of the Report, and in support of the Mineral Resource estimate in Section 14. The QP has assumed that the information in this letter is accurate and understands that the information in such letter may not be relied upon by any other party without the consent of Maxis Law Corp.

4 Property Description and Location

The Property is located 430 kilometres northwest of Prince George, British Columbia, as shown on Figure 4-1. The Property's is centered at 57.29° latitude and -127.11° longitude. Most of the claims are within NTS map sheet 94E/06, with lesser sections in NTS map sheets: 94E/07, 94E/03, 94E/02, and 94E/11.



(Source: TDG Gold, 2023)

Figure 4-1: Location Map of the Property.

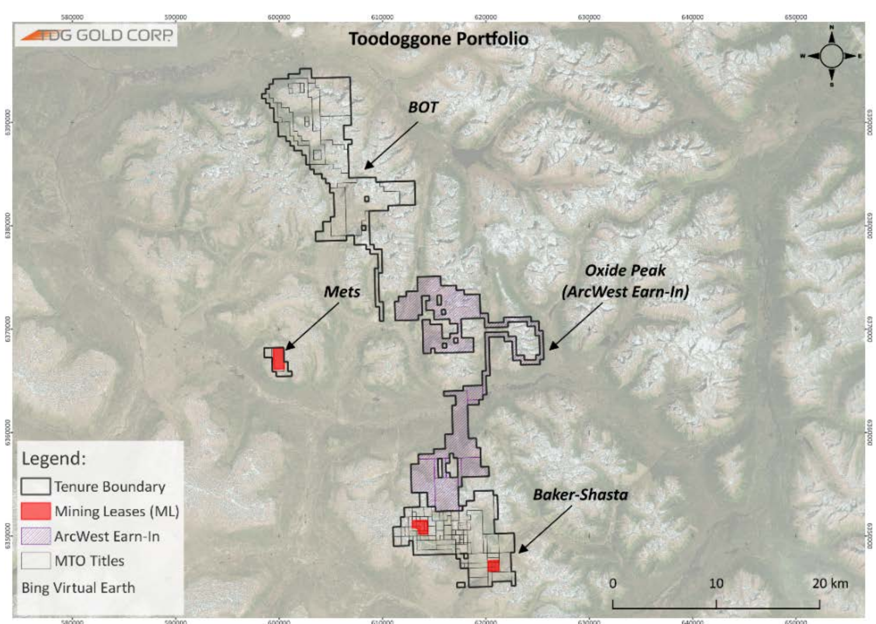
4.1 Mineral Tenure

The claims information as outlined in the lawyer's opinion letter (Maxis Law, 2023) is summarized Figure 4-1. A complete list of the claims is provided in Table 4-1 to Table 4-5, with a map showing the claims outlines for the entire Project illustrated in Figure 4-2, with detailed tenure number listings on 4-3 to 4-6.

The Shasta Mine Lease (243454) Term has been extended until 2050, and the Baker Mine Lease (243451) Term until 2051. The Mets Mining Lease (34708) Term until April 30, 2053, all with First Nation's support.

Table 4-1: Updated Table for Summary of Claims

Property	Title Overlap	Overlap Total (ha)	Actual Size (ha)	Total Titles
Baker-Shasta	Yes	8,388.8	6,349.9	MCX: 57 MC4: 1 ML: 2 PCX: 6 (66)
BOT	No	1,0089.4	1,0089.4	MCX: 21
Mets	Yes	635.5	438.6	ML: 1 PCX: 3 (4)
Oxide Peak	No	8,437.6	8,437.6	MCX: 15
TOTAL		**27,551.4**	**25,316**	**106**



(Source: TDG Gold, 2023)

Figure 4-2: Toodoggone Portfolio Tenure Map

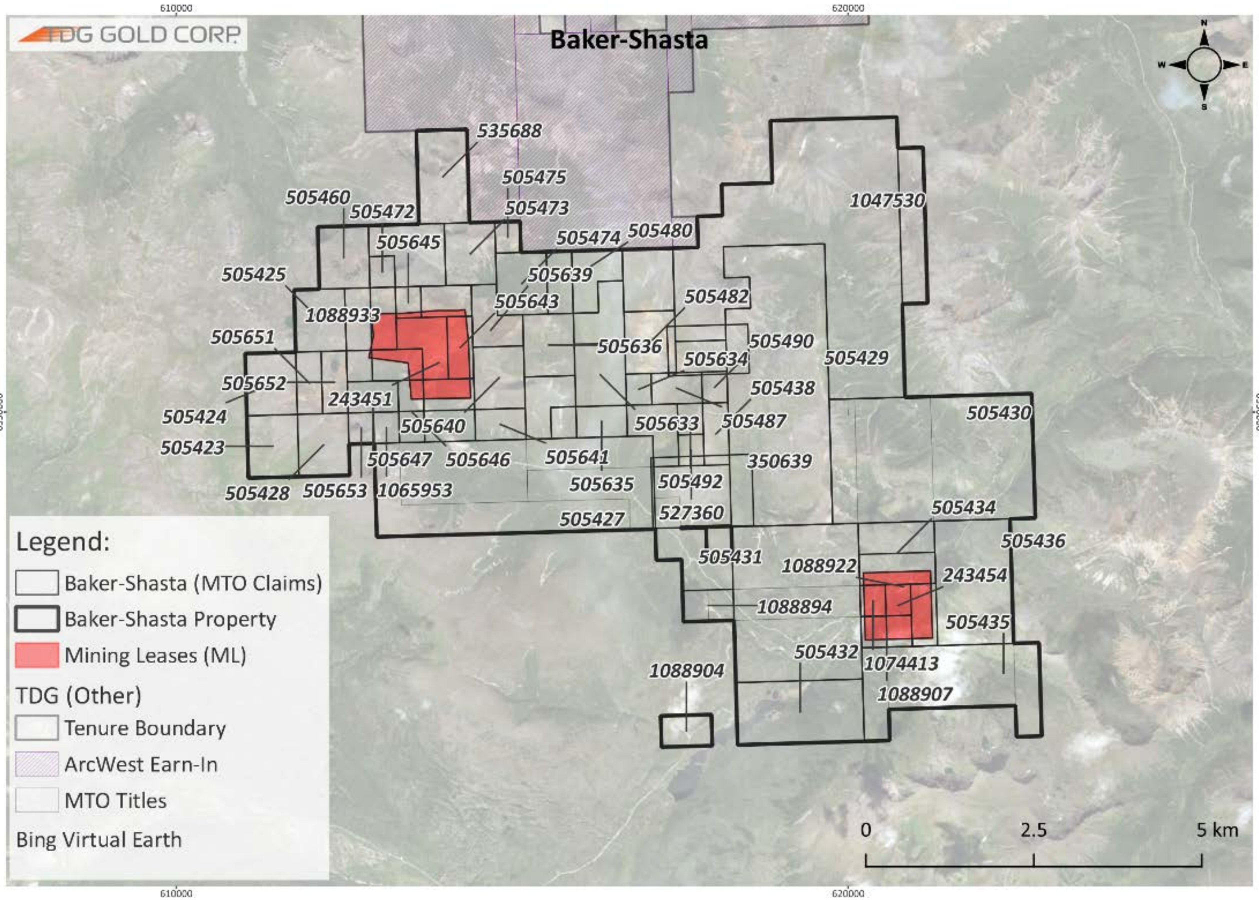
4.1.1 Baker-Shasta Tenure(s)

The Baker-Shasta Property has a total of 8,388.8-ha of registered tenures (Table 4-2), however there is partial overlap titles (MC4, ML and PCX), which when adjusted for the current tenure boundary permitter adds to 6,349.89-ha (Figure 4-3).

Table 4-2: Baker-Shasta Tenure Information (MTO, 2023)

Property	Tenure No.	Title Type	Issue Date	Good-To Date	Size (ha)	Owner	Ownership (%)
Baker-Shasta	350639	MC4	9/11/1996	4/20/2029	450.0	TDG BC ASSETS CORP.	100
Baker-Shasta	1088904	MCX	1/19/2022	1/19/2024	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505429	MCX	2/1/2005	4/20/2029	612.3	TDG BC ASSETS CORP.	100
Baker-Shasta	505460	MCX	2/2/2005	4/20/2029	69.9	TDG BC ASSETS CORP.	100
Baker-Shasta	505473	MCX	2/2/2005	4/20/2029	69.9	TDG BC ASSETS CORP.	100
Baker-Shasta	505474	MCX	2/2/2005	4/20/2029	69.9	TDG BC ASSETS CORP.	100
Baker-Shasta	505475	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505476	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505480	MCX	2/2/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505471	MCX	2/2/2005	4/20/2029	87.4	TDG BC ASSETS CORP.	100
Baker-Shasta	505478	MCX	2/2/2005	4/20/2029	69.9	TDG BC ASSETS CORP.	100
Baker-Shasta	535688	MCX	6/14/2006	4/20/2029	104.9	TDG BC ASSETS CORP.	100
Baker-Shasta	1088901	MCX	1/19/2022	4/20/2029	87.4	TDG BC ASSETS CORP.	100
Baker-Shasta	1047530	MCX	10/31/2016	4/20/2029	821.8	TDG BC ASSETS CORP.	100
Baker-Shasta	505423	MCX	2/1/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505424	MCX	2/1/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505426	MCX	2/1/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505427	MCX	2/1/2005	4/20/2028	577.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505428	MCX	2/1/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505430	MCX	2/1/2005	4/20/2029	560.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505432	MCX	2/1/2005	4/20/2029	175.1	TDG BC ASSETS CORP.	100
Baker-Shasta	505434	MCX	2/1/2005	4/20/2029	105.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505435	MCX	2/1/2005	4/20/2029	280.2	TDG BC ASSETS CORP.	100
Baker-Shasta	505436	MCX	2/1/2005	4/20/2029	245.1	TDG BC ASSETS CORP.	100
Baker-Shasta	505439	MCX	2/1/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505472	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505482	MCX	2/2/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505487	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505490	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505492	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505633	MCX	2/2/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505634	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505635	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505636	MCX	2/2/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100

Property	Tenure No.	Title Type	Issue Date	Good-To Date	Size (ha)	Owner	Ownership (%)
Baker-Shasta	505637	MCX	2/2/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505638	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505639	MCX	2/2/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505640	MCX	2/2/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505641	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505642	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505643	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505644	MCX	2/2/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505645	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505646	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505647	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505649	MCX	2/2/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505651	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505653	MCX	2/2/2005	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505425	MCX	2/1/2005	4/20/2029	70.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505431	MCX	2/1/2005	4/20/2029	437.7	TDG BC ASSETS CORP.	100
Baker-Shasta	505438	MCX	2/1/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	505485	MCX	2/2/2005	4/20/2029	52.5	TDG BC ASSETS CORP.	100
Baker-Shasta	505652	MCX	2/2/2005	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	527360	MCX	2/9/2006	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	1065953	MCX	1/22/2019	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	1074413	MCX	2/5/2020	4/20/2029	17.5	TDG BC ASSETS CORP.	100
Baker-Shasta	1088907	MCX	1/19/2022	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	1088894	MCX	1/19/2022	4/20/2029	35.0	TDG BC ASSETS CORP.	100
Baker-Shasta	243451	ML	9/10/1980	9/10/2051*	157.8	TDG BC ASSETS CORP.	100
Baker-Shasta	243454	ML	6/13/1990	6/13/2050*	100.0	TDG BC ASSETS CORP.	100
Baker-Shasta	1094796	PCX	4/1/2022	4/1/2024	437.7	TDG BC ASSETS CORP.	100
Baker-Shasta	1094797	PCX	4/1/2022	4/1/2024	262.5	TDG BC ASSETS CORP.	100
Baker-Shasta	1088933	PCX	1/19/2022	1/19/2024	262.4	TDG BC ASSETS CORP.	100
Baker-Shasta	1100529	PCX	1/16/2023	1/16/2024	297.6	TDG BC ASSETS CORP.	100
Baker-Shasta	1088922	PCX	1/19/2022	4/1/2024	140.1	TDG BC ASSETS CORP.	100
Baker-Shasta	1102988	PCX	3/10/2023	3/10/2024	210.0	TDG BC ASSETS CORP.	100



(Source: TDG Gold, 2023)

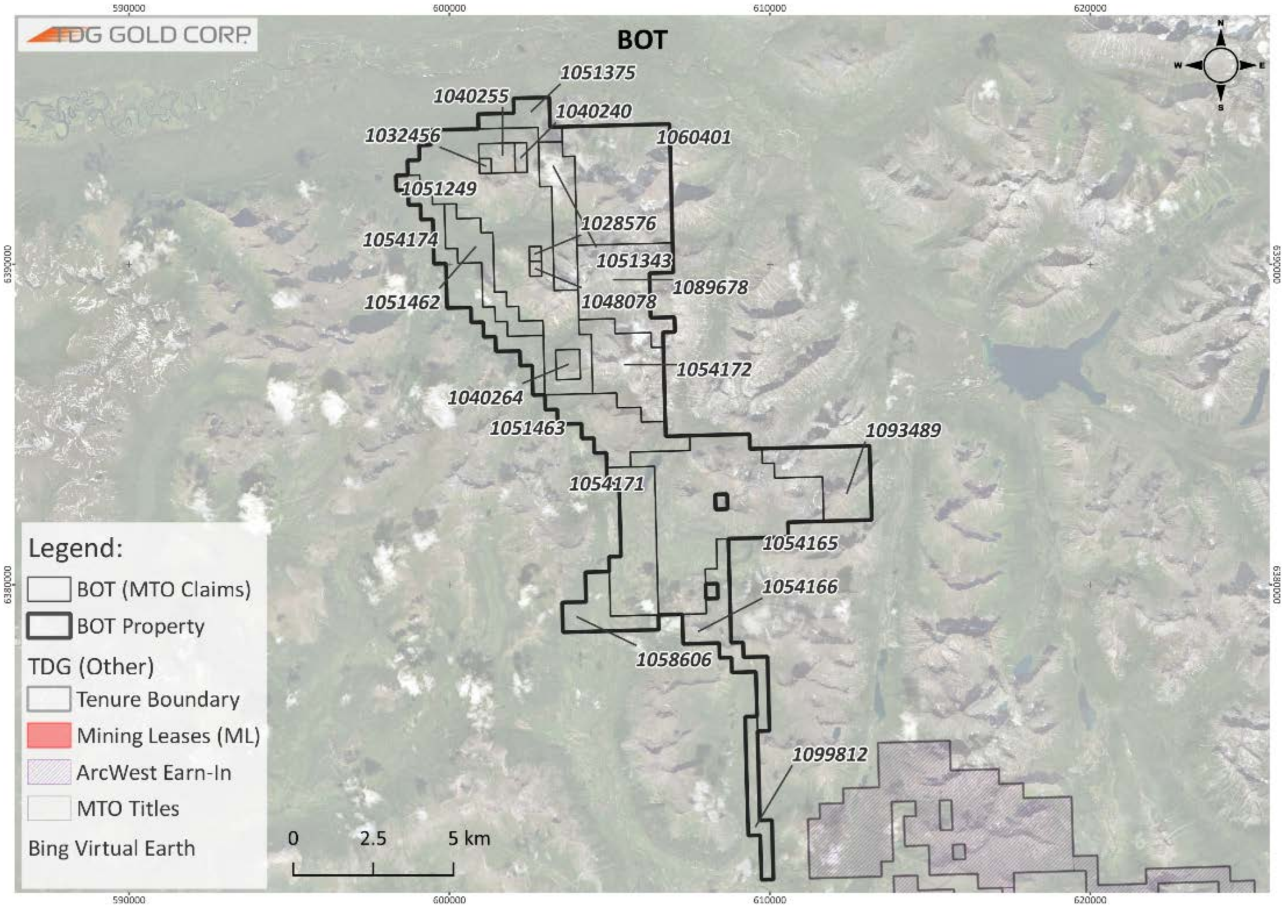
Figure 4-3: Baker-Shasta Project Tenure Map

4.1.2 BOT Tenure(s)

The BOT Property has a total of 10,0089.4-ha of registered mineral tenures (Table 4-3), with no overlapping tenures (Figure 4-4).

Table 4-3: BOT Tenure Information (MTO, 2023)

Property	Tenure No.	Title Type	Issue Date	Good-To Date	Size (ha)	Owner	Ownership (%)
BOT	1028576	MCX	5/28/2014	11/5/2023	17.3	TDG BC ASSETS CORP.	100
BOT	1058606	MCX	2/13/2018	11/5/2023	277.9	TDG BC ASSETS CORP.	100
BOT	1032456	MCX	11/29/2014	11/5/2023	17.3	TDG BC ASSETS CORP.	100
BOT	1054165	MCX	8/20/2017	11/5/2023	1735.5	TDG BC ASSETS CORP.	100
BOT	1054166	MCX	8/20/2017	11/5/2023	416.9	TDG BC ASSETS CORP.	100
BOT	1040255	MCX	12/1/2015	11/5/2023	86.5	TDG BC ASSETS CORP.	100
BOT	1040264	MCX	12/1/2015	11/5/2023	69.3	TDG BC ASSETS CORP.	100
BOT	1051249	MCX	4/6/2017	11/5/2023	1731.8	TDG BC ASSETS CORP.	100
BOT	1051462	MCX	4/18/2017	11/5/2023	346.4	TDG BC ASSETS CORP.	100
BOT	1051463	MCX	4/18/2017	11/5/2023	520.3	TDG BC ASSETS CORP.	100
BOT	1051343	MCX	4/10/2017	11/5/2023	380.9	TDG BC ASSETS CORP.	100
BOT	1054171	MCX	8/20/2017	11/5/2023	607.6	TDG BC ASSETS CORP.	100
BOT	1054172	MCX	8/20/2017	11/5/2023	554.8	TDG BC ASSETS CORP.	100
BOT	1054174	MCX	8/20/2017	11/5/2023	537.1	TDG BC ASSETS CORP.	100
BOT	1051375	MCX	4/12/2017	11/5/2023	190.3	TDG BC ASSETS CORP.	100
BOT	1060401	MCX	5/3/2018	11/5/2023	1142.6	TDG BC ASSETS CORP.	100
BOT	1040240	MCX	11/30/2015	11/5/2023	34.6	TDG BC ASSETS CORP.	100
BOT	1048078	MCX	11/26/2016	11/5/2023	17.3	TDG BC ASSETS CORP.	100
BOT	1089678	MCX	1/21/2022	11/5/2023	693.0	TDG BC ASSETS CORP.	100
BOT	1099812	MCX	12/12/2022	12/12/2023	208.7	TDG BC ASSETS CORP.	100
BOT	1093489	MCX	2/25/2022	11/5/2023	503.2	TDG BC ASSETS CORP.	100



(Source: TDG Gold, 2023)

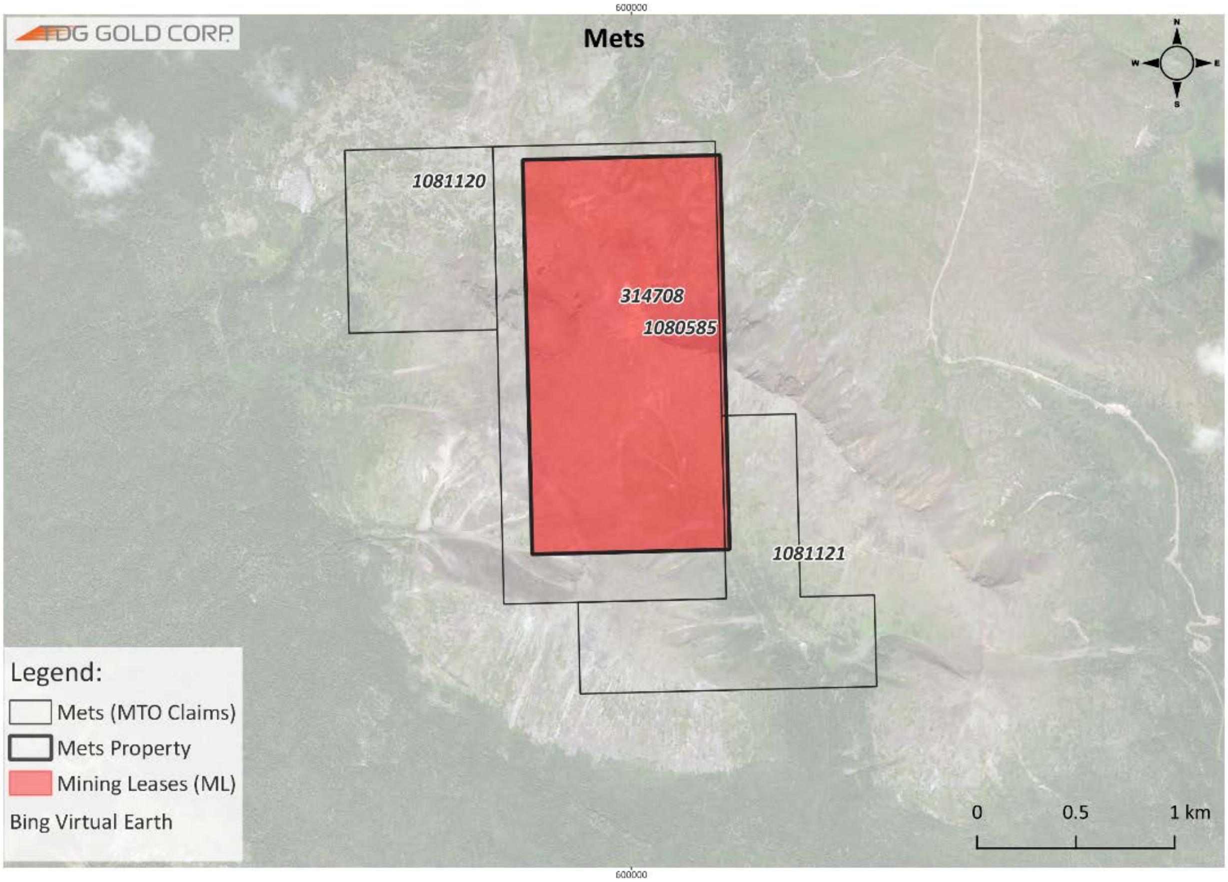
Figure 4-4: Bot Project Tenure Map

4.1.3 Mets Tenure(s)

The Mets Property has a total of 635.5-ha of registered tenures (Table 4-4), however there is partial overlap titles (ML and PCX), which when adjusted for the current tenure boundary permitter adds to 438.6-ha (Figure 4-5).

Table 4-4: Mets Tenure Information (MTO, 2023).

Property	Tenure No.	Title Type	Issue Date	Good-To Date	Size (ha)	Owner	Ownership (%)
Mets	314708	ML	4/30/1993	4/30/2053*	200.0	TDG BC ASSETS CORP.	100
Mets	1081120	PCX	2/11/2021	2/11/2023	69.7	TDG BC ASSETS CORP.	100
Mets	1081121	PCX	2/11/2021	2/11/2023	104.5	TDG BC ASSETS CORP.	100
Mets	1080585	PCX	1/14/2021	2023/2/11	261.3	TDG BC ASSETS CORP.	100



(Source: TDG Gold, 2023)

Figure 4-5: Mets Tenure Information

4.1.4 Oxide Peak Tenure(s)

The Oxide Peak Property has a total of 8437.6-ha of registered mineral tenures (Table 4-5), with no overlapping tenures (Figure 4-6).

Table 4-5: Oxide Peak Tenure Information (MTO, 2023)

Property	Tenure No.	Title Type	Issue Date	Good-To Date	Size (ha)	Owner	Ownership (%)
Oxide Peak	1076921	MCX	6/23/2020	3/28/2029	2348.7	ARCWEST EXPLORATION INC.	100
Oxide Peak	1076922	MCX	6/23/2020	3/28/2029	1010.0	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069494	MCX	7/6/2019	3/28/2029	734.1	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069493	MCX	7/6/2019	3/28/2029	1483.5	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069499	MCX	7/6/2019	3/28/2029	803.7	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069500	MCX	7/6/2019	3/28/2029	104.8	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069501	MCX	7/6/2019	3/28/2029	419.2	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069502	MCX	7/6/2019	3/28/2029	69.9	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069503	MCX	7/6/2019	3/28/2029	69.9	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069506	MCX	7/6/2019	3/28/2029	17.5	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069507	MCX	7/6/2019	3/28/2029	17.5	ARCWEST EXPLORATION INC.	100

Oxide Peak	1069508	MCX	7/6/2019	3/28/2029	17.5	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069549	MCX	7/8/2019	3/28/2029	52.3	ARCWEST EXPLORATION INC.	100
Oxide Peak	1069557	MCX	7/9/2019	3/28/2029	1062.4	ARCWEST EXPLORATION INC.	100
Oxide Peak	1070901	MCX	9/7/2019	3/28/2029	226.7	ARCWEST EXPLORATION INC.	100

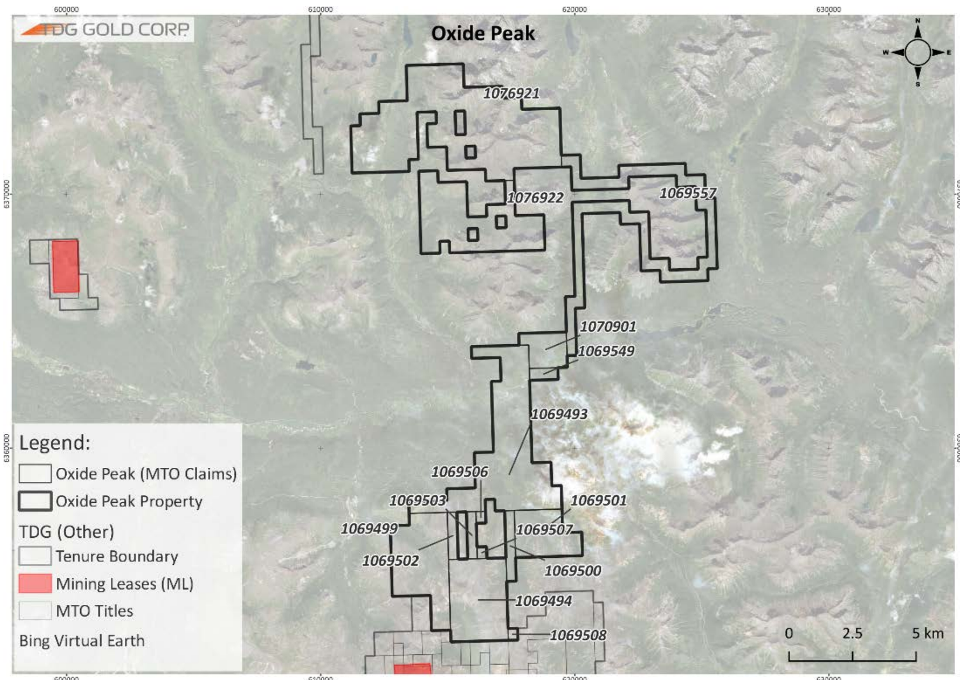


Figure 4-6: Oxide Peak Tenure Information

4.1.5 Crown Grants

There are 4 crown granted mineral claims ("Crown Grant") which supersede MTO mineral titles on the Property and are located immediately south of the Baker Camp, and generally cover the pinnacle-forming limestone cliff exposures of the Astika Group. The respective Crown Grants related to the mineral occurrence (MINFILE, 2023), Castle Mountain (094E 027), which was recognized and initially explored by Cominco in the early 1930s. The Crown Grants are defined by District Lots #6005, #6007, #6008, and #6009. The Crown Grants are registered to Auterra Ventures Inc.

The information respective to the presented Crown Grants was provided by The Land Title and Survey Authority of British Columbia (LTSA). The LTSA is a publicly accountable, statutory corporation formed in 2005 responsible for operating the land title and survey systems of BC.

The information provided by the LTSA (2023) is listed in Table 4-6. The respective information provided by the LTSA (2023) includes the disclaimer that "this certificate is to be read subject to the provisions of section 23(2) of the Land Title Act (R.S.B.C. 1996 Chapter 250) and may be affected by sections 50 and 55-58 of the Land Act (R.S.B.C. 1996 Chapter 245)".

The author has no reason to believe the information provided by the LTSA is neither false nor misleading.

Table 4-6: Crown Grant information for Castle Mountain #1 - #4.

MTO	LTSA			
District Lot	Title #	Charges, Liens, and Interests (Only showing most recent)	Parcel #	Description of Land
6005	PC15352	Nature: UNDERSURFACE RIGHTS Registration #: PD10866 Registration Date and Time: 1990-03-13 14:06 Registered Owner: AUTERRA VENTURES INC. INCOPRATION NO. #343037 Remarks: TRANSFER OF UNDERSURFACE RIGHTS 8603K SEE 8931K R28570 S12476 W22403 AND PC41437	013-586-769	THE SURFACE OF DISTRICT LOT 6005 CASSIAR DISTRICT KNOWN AS CASTLE MOUNTAIN NO.2 MINERAL CLAIM
6007	PC15353	Nature: UNDERSURFACE RIGHTS Registration #: PD10865 Registration Date and Time: 1990-03-13 14:05 Registered Owner: AUTERRA VENTURES INC. INCOPRATION NO. #343037 Remarks: TRANSFER OF UNDERSURFACE RIGHTS 8603K SEE 8931K R28570 S12476 W22404 AND PC41438	013-586-793	THE SURFACE OF DISTRICT LOT 6007 CASSIAR DISTRICT KNOWN AS CASTLE MOUNTAIN NO.1 MINERAL CLAIM
6008	PC15354	Nature: UNDERSURFACE RIGHTS Registration #: PD10868 Registration Date and Time: 1990-03-13 14:07 Registered Owner: AUTERRA VENTURES INC. INCOPRATION NO. #343037 Transfer #: PT4481 Remarks: TRANSFER OF UNDERSURFACE RIGHTS 8887K SEE 8931K R28570 S12476 W22405 AND PC41349	013-586-815	THE SURFACE OF DISTRICT LOT 6008 CASSIAR DISTRICT KNOWN AS CASTLE MOUNTAIN NO.4 MINERAL CLAIM
6009	PC15355	Nature: UNDERSURFACE RIGHTS Registration #: PD10867 Registration Date and Time: 1990-03-13 14:06 Registered Owner: AUTERRA VENTURES INC. INCOPRATION NO. #343037 Transfer #: PT4482 Remarks: TRANSFER OF UNDERSURFACE RIGHTS 8887K SEE 8931K R28570 S12476 W22405 AND PC41350	013-586-831	THE SURFACE OF DISTRICT LOT 6009 CASSIAR DISTRICT KNOWN AS CASTLE MOUNTAIN NO.3 MINERAL CLAIM

4.2 Permitting, Environmental Liabilities, and Other Issue

4.2.1 Mackenzie Land and Resource Management Plan

The Property is not directly encumbered by any provincial or national parks, or other protected areas. The Project lies fully within the Mackenzie Land and Resource Management Plan ("LRMP"). LRMPs provide strategic level direction for managing Crown land resources and identify ways to achieve community, economic, environmental, and social objectives. The Mackenzie LRMP recognizes the importance of mineral resources and mining and, in that regard, provides the following direction (Smith, 2019): “Minerals Objective – Maintain opportunities and access for mineral exploration, development and transportation while having due regard to impacts on other resource values. Provide opportunities for exploration and development of mineral resources within the regulatory framework and consistent with the management intent of this zone. Accommodate localized impacts of advanced exploration and development activities with existing legislation. There is no intention or direction suggested in the objectives and strategies for this zone to cause undue operational approval delays by government for development or exploration proponents.”

4.2.2 Permits

TDG holds a Mines Act permit M-189 for 175 hectares including historical mine workings at Baker A and B veins, Baker mill and camp, tailings storage facilities, forestry road and historical mine workings at Shasta. Permit M-189, Approving Work System and Reclamation Program, was last amended June 11, 2021, and includes a reclamation liability estimate of $1,027,515.00 for the site.

TDG has also been awarded a Special Use Permit SP0006 for the Forestry Road through its properties.

TDG holds the following exploration permits:
Permit MX-10000037 for the Baker Shasta properties was most recently amended on November 2, 2022, to include an area outside the Permitted Mine Area and allows for a total disturbance area of 16.93 ha including surface drilling, exploration access construction, helicopter pads, and geophysical survey. The permit requires a Mine Emergency Response Plan, geotechnical assessment and reporting, environmental land and watercourse protection, as well as a reclamation security of $82,515.00 along with an obligation to reclaim and a comprehensive Reclamation Plan.

Permit MX-100000291 for the BOT property was issued November 21, 2022and allows for a total disturbance area of 4.11 ha including geophysical survey, surface drilling, helipads, trenching, a staging area, and bulk fuel storage. The permit requires a Mine Emergency Response Plan, geotechnical assessment and reporting, environmental land and watercourse protection, as well as a reclamation security of $45,906.00 along with an obligation to reclaim.

Permit MX-100000272 for the METS property was issued September 20, 2022, and allows for a total disturbance area of 7.31 ha including geophysical survey, surface drilling, helipads, one bulk sample, trenching, exploration access construction, staging areas, and bulk fuel storage. The permit requires a Mine Emergency Response Plan, geotechnical assessment and reporting, environmental land and watercourse protection, as well as a reclamation security of $119,891.00 along with an obligation to reclaim.

Permit MX-100000150 for the Oxide Peak property was issued on November 10, 2021, and allows for a total disturbance area of 1.80 ha including IP survey, surface drilling, and trenching. The permit requires a Mine Emergency Response Plan, geotechnical assessments and reporting, environmental land and watercourse protection, as well as a reclamation security of $40,300.00 along with an obligation to reclaim and a comprehensive Reclamation Plan.

TDG was issued Free Use Permits for the following properties: Baker Shasta, BOT and METS. The permits allow for up to 50m^3 of timber to be cut to facilitate the mining operations approved under each respective Mines permit.

Environmental permits issued to TDG for the Baker-Shasta properties are detailed in section 20.2.

4.2.3 Liabilities and Bonding

Significant liabilities exist on the Property in the form of historical mine construction, operations and development infrastructure including, tailings dam(s), a waste dump site, a mill site, a camp site, and other mining related infrastructure, disturbance, and equipment.

Reclamation and closure bonding has been agreed on with the BC Ministry of Energy, Mines and Low Carbon Innovation including a schedule of 3 payments over 24 months: September 1, 2021 (completed), September 1, 2022, (completed) and September 1, 2023. Annual compliance activities include a comprehensive environmental monitoring program, annual dam safety inspection and inspection of water diversions related to the tailings storage facility.

The author is not aware of any other known significant factors or risks related to the Project that may affect access, title or the right or ability to perform exploration work on the property.

4.2.4 Surface Rights

A complete land title review of surface ownership has not been conducted at this time, but TDG Gold is aware that the mineral claims comprising the Project consist of Crown Land for which surface access and rights of use for mineral development can be obtained.

4.3 Indigenous & Traditional Territories

TDG recognizes the inherent rights and title of Indigenous peoples which informs our work as we engage in meaningful ways through all phases of exploration and regulatory processes. TDG commits to early, respectful, and active engagement with Indigenous peoples and their communities and seek to build mutually beneficial partnerships that result in shared prosperity and reduced uncertainty for all parties involved.

TDG expects to build positive lasting relationships with the First Nations that have an expressed interest around the Property. TDG has utilized its dedicated Indigenous Engagement Advisor (who is now their VP of Sustainability) to advance engagement through letters, calls, and emails.

Formal agreements have been reached and signed with the First Nations that have expressed interest in the project area to seek prior input before advancing on work proposed.

4.4 Royalties

The following royalty information was provided by TDG (TDG, 2022).

4.4.1 Baker-Shasta, Mets, and BOT

The Baker and Shasta portions of the Property are subject to a 1% Net Smelter Return ("NSR") payable to Sable Resources Ltd. ("Sable") pursuant to an agreement between Talisker and Sable dated April 18th, 2019. At Shasta, a 0.5% NSR is held by Royal Gold Inc. ("Royal Gold") via International Royalty Corporation of which Royal Gold is the parent company. The Royal Gold NSR was acquired on October 1st, 2008, from Barrick Gold Inc. ("Barrick") which Barrick had acquired as part of its acquisition of Homestake Canada Inc. ("Homestake"). Homestake had been granted an NSR by Sable when it acquired the Shasta claims from Homestake in a transaction dated December 19th, 1994. David Javorsky, a private individual, holds a 2.5% NSR on the "Wild Rose Claims" portion of the Baker property. In its Oxide Peak earn-in agreement with ArcWest dated December 22nd, 2019, TDG agreed to a 1km "Area of Interest" around the Oxide Peak property within which falls a portion of the Baker property.
The Mets mining lease has an additional 1% NSR to Cold Stream Exploration.

4.4.2 Oxide Peak

Certain of the mineral claims forming the Oxide Peak property are subject to a 2% NSR held by Seven Devils Exploration Ltd. ("Seven Devils") as agreed to in a mineral property purchase agreement between ArcWest and Seven Devils of August 6th, 2018. Under the terms, 1% of the NSR may be acquired for $1,000,000. In the Oxide Peak earn-in agreement signed between TDG and ArcWest on December 22nd, 2019, ArcWest received a 2% NSR on the entire of Oxide Peak portion of the Property of which 1% may be acquired for $2,000,000. Where the Seven Devils and ArcWest NSRs overlap, the ArcWest NSR is subject to a Royalty Cap, as defined in the Oxide Peak earn-in agreement, whereby a 2% NSR is the maximum royalty payable by TDG.

Oxide Peak has a 1 km staking/acquisition buffer zone with ArcWest in which ArcWest may also qualify for a capped 2% NSR royalty. The buffer zone does not apply where it overlaps with Baker-Shasta.

4.5 Agreements

4.5.1 Amalgamation Agreement

The following is summarized from TDG Gold, (2021):
On December 11, 2020, the Company completed a reverse take-over transaction whereby the Company acquired all the issued and outstanding common shares of TDG BC Assets Corp. (formerly TDG Gold Corp.) (“TDGBC”) by way of a three-cornered amalgamation (“Amalgamation”) between the Company, TDGBC, and 1266834 B.C. Ltd. (“Numco”), a wholly owned subsidiary of the Company.

Immediately prior to the completion of the Amalgamation:

- the issued and outstanding common shares of the former Kismet were consolidated on a 2:1 basis.
- the Company changed its name from Kismet to TDG.

Pursuant to the Amalgamation:

- the Company issued the former shareholders of TDGBC 25,244,928 common shares (one share for every three shares of TDGBC).
- the shareholders of Kismet retained 2,000,000 common shares valued at $600,000.
- the officers of Kismet retained 200,000 options valued at $34,195. The fair value of the options was determined using the Black-Scholes option pricing model with the following assumptions: a risk-free interest rate of 0.25%; an expected volatility of 100%; an expected life of 1-3 years; a forfeiture rate of zero; and an expected dividend of zero.
- TDGBC amalgamated with Numco as one company under the name TDG BC Assets Corp., a wholly owned subsidiary of the Company.

On completion of the Amalgamation, the former shareholders of TDGBC own more shares of the Company than the former shareholders Kismet and accordingly the Amalgamation has been treated as a reverse take-over transaction with the financial statements of TDGBC being the continuing financial statements of the Company and Kismet being the company acquired.

Concurrent with the Amalgamation, the Company completed a private placement for gross proceeds of $4,033,610.

Also, concurrent with the Amalgamation, the Company issued 18,973,699 common shares to Talisker Resources Ltd. to acquire the Baker-Shasta, Mets, and BOT projects. The common shares of the Company began trading on the TSX-V on December 17, 2020, under the ticker symbol TDG.

4.5.2 Asset Purchase Agreement

TDG entered into an asset purchase agreement dated July 7th, 2020 (the "Asset Purchase Agreement") with Talisker pursuant to which TDG agreed to purchase, and Talisker agreed to sell, the Baker Project, the Shasta Mine and the Baker mill infrastructure and equipment, the Chappelle property, the BOT property, and the Mets lease (collectively, the "Talisker Properties"), all of which are in the Toodoggone region of British Columbia.

4.6 Oxide Peak Option and Joint Venture Agreement

TDG entered into an option and joint venture agreement dated December 22nd, 2019 (the "Option and Joint Venture Agreement") with ArcWest pursuant to which TDG can earn up to an 80% interest in ArcWest's Oxide Peak property (the "Oxide Peak Property") located in the Toodoggone region of British Columbia. Pursuant to the Option and Joint Venture Agreement, TDG must issue to ArcWest 5% of the TDG Shares as of the earlier of December 31st, 2020, and immediately prior to a going public transaction. Following the issuance of the TDG Shares, ArcWest will be entitled to participate in any future issuances of TDG Shares to maintain its percentage interest in TDG until the closing of a going public transaction. The Oxide Peak Property is subject to a 2% net smelter returns royalty that TDG may reduce to a 1% net smelter returns royalty for a cash payment of $1,000,000.

TDG can earn an initial 60% interest in the Oxide Peak Property (the "First Option") by fulfilling the following terms:

- by December 22nd, 2019, paying ArcWest $15,000 (completed);
- by December 31st, 2020, funding $400,000 of exploration expenditures on the Oxide Peak Property and paying ArcWest $15,000 (completed);
- by December 31st, 2021, funding cumulative aggregate exploration expenditures of $900,000 on the Oxide Peak Property and completing a minimum 1,000 metres of drilling (completed);
- by December 31st, 2022, funding cumulative aggregate exploration expenditures of $2,400,000 on the Oxide Peak Property and completing an additional minimum 1,000 metres of drilling;
- by the exercise date of the First Option, paying ArcWest $25,000.

Upon exercise of the First Option, TDG may, at its option, elect to earn an additional 20% interest, for an aggregate 80% interest (the "Second Option"), by funding and causing within two years the preparation and delivery to ArcWest of a preliminary economic assessment with respect to the Oxide Peak Property. Following the exercise or lapse of the Second Option, the parties will form a joint venture to hold and operate the Oxide Peak Project, and each party will fund the costs associated with the Oxide Peak Property proportionate to their respective interest. If a party does not contribute its share of the costs, the other party may contribute the shortfall, in which case, the interest of each party in the Oxide Peak Property will be adjusted in accordance with a dilution formula. Should TDG's or ArcWest's interest be diluted to less than 10%, then that interest will convert to a 2% net smelter return royalty, of which 1% of the royalty can be bought back for a $2,000,000 cash payment at any time.

On December 31, 2022, TDG notified ArcWest that TDG had completed the requirements to satisfy the Option and Joint Venture Agreement.

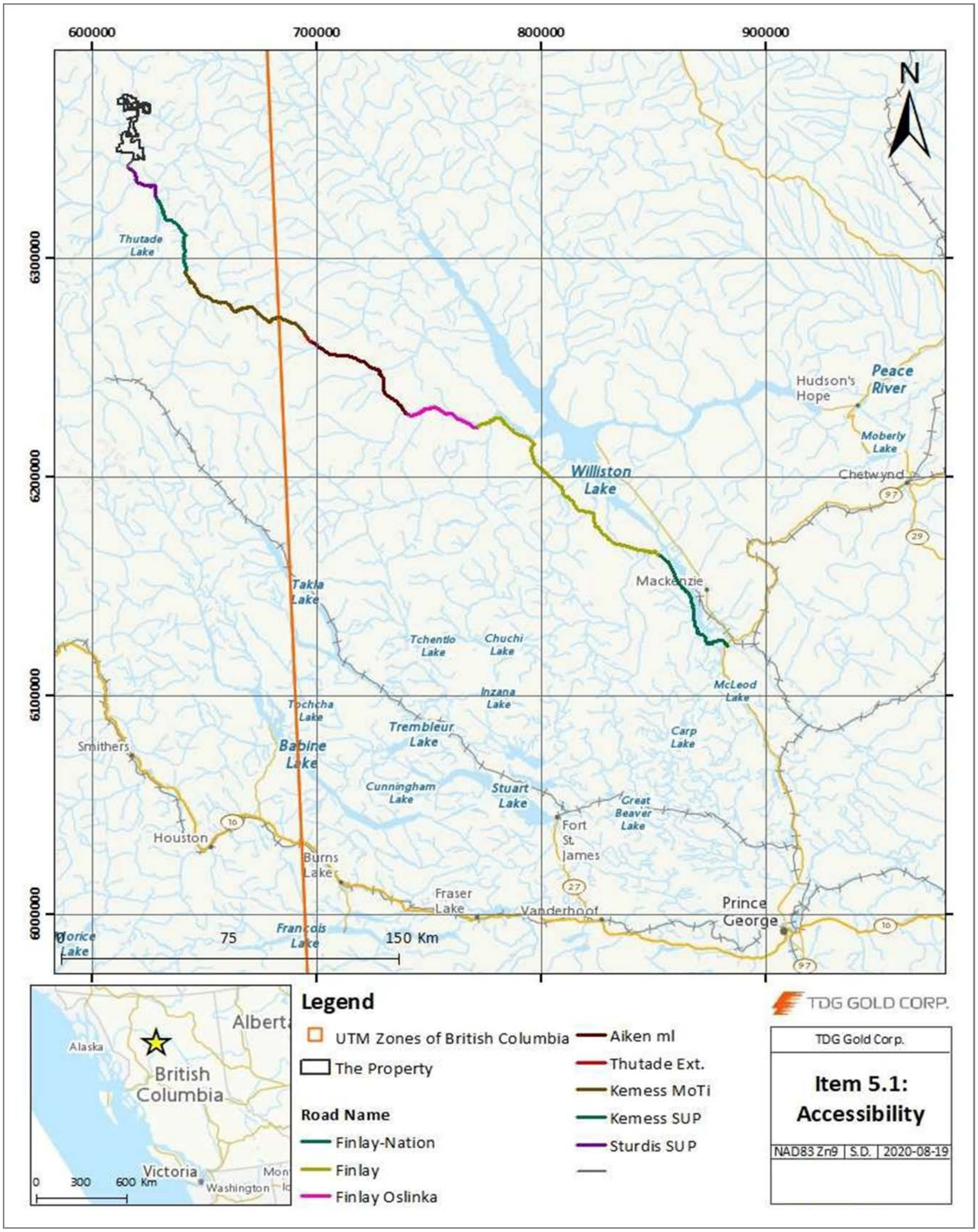
5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The property is road-accessible, and the most practical route is to turn off at the Finlay FSR located 148 kilometres north of Prince George, along Highway 97 towards the town of Mackenzie, BritishColumbia. (Source: TDG Gold, 2023) Figure 5-1 displays the Omineca Resource Access Road (ORAR) network from the Highway 97 turnoff required to access the Property. The total driving distance using the described route from Prince George, British Columbia, to the Property is approximately 577 km.

Table 5-1: Road network from Highway 57 (turn-off t TDG Property)

FSR / MOTI / SUP (Access Roads)	RR (Range Road) Frequency	Road Distance (km)	RR Junction from Highway 97 Distance
Finlay-Nation	RR2	62	HWY 97/Finlay-Nation: 62km
Finlay	RR-5 / RR-6 / RR-7	119.5	Finlay-Nation/Finlay: 181.5km
Finlay-Oslinka	RR-8	38	Finlay/Finlay-Oslinka: 219.5km
Thutade Ext MOTI	RR-6	64.5	Aiken ml/Thutade ext: 284km
Kemess MOTI	RR-6	72	Thutade ext/Kemess MoTi: 356km
Kemess SUP	RR-6	44	Kemess MoTi/Kemess SUP: 400km
Sturdis SUP	RR-6	23	Kemess SUP/Sturdis SUP: 423km
unnamed trails	LAD 2	6	Sturdis SUP/*unnamed trails*: 429km



(Source: TDG Gold, 2023)

Figure 5-1: Access to the Property

Depending on the time of the season, the property is accessible by float plane on Black Lake and by standard landing gear plane on the Sturdee airstrip. The Sturdee airstrip is located approximately 9 km south-southeast and 8 km southwest from the Baker and Shasta mine sites, respectively. During the winter, a ski-plane can be used.

The Oxide Peak option is located immediately north of the historical Baker Mine and extends to the north, 10 km NE of Toodoggone Lake. The property is helicopter access only, with the closest road access from the Baker Mine Road, a branch off the Omineca Resource Road, 2 km southwest of the southern boundary of the claims. The southern portion of the property, historically referred to as the SWAN property, is located immediately south of the Toodoggone River and 9 km west of Toodoggone Lake.

The Mets deposit, which is being optioned from ArcWest, is situated on Metsantan Mountain 16 km northwest of the Lawyers Project. The BOT claims group is further north from Oxide Peak and Mets and consists of an extensive group of claims with no known drilling done to date.

5.2 Climate

The climate of the Project can be described as cool continental with cool summers and cold winters. The summer field season typically extends from the beginning of June to late September. The temperatures and weather can be quite erratic during this period and sporadic rain and snow showers can occur at any time. Approximate temperatures range from a minimum of -32°C in January to a maximum of +26°C in June. Snowfallaccumulations can reach up to two metres over the winter months (Smith, 2019). At the BOT property, the mean annual precipitation ranges from 50 to 75 cm, most of this occurring as rainfall during the summer months. Average temperatures vary from -20°C in winter to +12°C in the summer. The onset of winter conditions limits exploration past October, and snow can persist at higher elevations until late June.

5.3 Local Resources

The closest major supply centre by air is Smithers, about 300 km to the south. Smithers has a population of about 6,000 and services roughly 15,000 people living in the Bulkley Valley region. It is a major service centre along the Yellowhead Highway ("Highway 16") and along the Canadian National Railway ("CNR")line midway between Prince George and the port city of Prince Rupert (Smith, 2019).

Smithers has an extensive history of supporting mineral exploration and mining development in north-central and northwest B.C., including major past producing mines such as Bell and Granisle in the Babine Lake area, Equity Silver near Houston, Kemess South in the Toodoggone region, and Eskay Creek and Snip in the Iskut Riverarea. Smithers has an available and skilled workforce for exploration and mining and is the operational base formany companies that provide a range of services, such as contract diamond drilling, to mining exploration companies.

The closest supply centre by road is Mackenzie, a driving distance of about 400 km to the southeast of the Project. Mackenzie has a population of about 4,500 and provides services to a primarily forestry-based economy (logging, softwood lumber and pulp manufacturing facilities). Active logging includes areas serviced bythe Findlay Forest Service Road and the ORAR corridors several hundred kilometres northwest of the town. Mackenzie also provides services to the Mt. Milligan copper- gold mine, a major open-pit operation owned and operated by Centerra Gold, located approximately 95 km to the west. CNR operates a 37 km spur line that connects Mackenzie to its mainline, providing rail service to the ports of Vancouver and Prince Rupert. Mackenzie is supported by the larger industrial hub city of Prince George, population 70,000, located 183 km to the south (Smith, 2019).

5.4 Infrastructure

The closest major infrastructure facility is at the site of previous operator, Kemess South mine which is currently on “care and maintenance”. The current owner is Centerra Gold Inc. ("Centerra") who have been exploring in the area since 2018. A Feasibility Study of the Kemess Underground project was conducted in 2016 and a Preliminary Economic Assessment of Kemess East was done in 2017, both by then-owner Aurico Metals Inc. Existing facilities include electrical power connected to the B.C. Hydro grid via a 340 km powerline extending from Mackenzie; a 1,424 m gravel airstrip now serviced periodically by flights from Smithers and Prince George; a large mine camp that provides room and board to the workforce; and an all-weather road that connects to major supply centres to the south (Smith, 2019).

Infrastructure located on the Shasta-Baker Property consists of the 200 tpd Baker mill, a tailings dam, limited surface, and underground equipment, and seasonal 50 persons camp facilities.

5.5 Physiography

5.5.1 Baker-Shasta

Shasta-Baker is situated in moderate terrain with elevations ranging from about 1,200 metres a.s.l. along Jock Creek in the eastern part of the property to about 1,900 metres a.s.l. in the central and west parts of the property. Most of the property is above tree line which is at an elevation of about 1,630 metres a.s.l. Below tree line, sparse cover consists of birch and willow shrubs and scattered groves of white spruce and sub-alpine fir. In alpine areas, dwarf shrubs, grassy meadows, lichens, and rocky tundra are common. Bedrock exposures are relatively scarce and are primarily limited to ridges and steeper creek gullies. Several creeks are present on the property; these have been used for exploration water sources into October before freezing. Most creeks on the property appear groundwater fed (Smith, 2019).

5.5.2 Oxide Peak

The Oxide Peak deposit is located within the Metsantan Range, one of the Swannell Ranges of the Omineca Mountains. The property occupies an area of deeply incised, glaciated mountainous terrain with elevations extending from just below 1300 metres a.s.l. in the Belle Lakes area to almost 2200 metres a.s.l. at Mount Gordonia, near the northern boundary of the property.

The geomorphic form of the northern half of the Oxide Peak claim area is represented by three steep sided, block like mountain ranges centered on Oxide Peak, Mt. Gordonia and Toodoggone Peak. Elevation ranges from 1300 metres a.s.l. in the valley bottoms to 2200 metres a.s.l. on Mt. Gordonia. These highlands are separated by low broad glacial valleys of Bell Creek and Mulvaney Creek. In general, each mountain block is separated from the other by a linear, flat to gently undulating valley of less than 1 kilometre to greater than 3 kilometres in width. The width of these valleys is usually devoid of outcrop and filled with glacial outwash.

The southern portion of Oxide Peak covers an area of mainly northerly draining mountainous terrain of moderate relief ranging from 1300 metres a.s.l. at the northern edge to 2050 metres a.s.l. on local peaks. Vegetation ranges from widely spaced jack pine and spruce at Toodoggone River, through stunted balsam and willows at tree line at 1600 metres a.s.l., to barren rock with patchy balsam and sedges at higher elevation. The central, northward flowing streams follow alpine glacial valleys. Hills are covered by variable thickness of till, overlain by talus slides at higher elevations.

The entire Oxide Peak claim group lies within the Spruce-Willow-Birch Bio-geoclimatic Zone, with vegetation cover occurring in the main valleys, surrounding broad alpine areas. A variety of wildlife inhabits the area including black bears, grizzlies, wolves, fox, moose, and caribou.

Seasonal temperatures vary from -35^o C in winter and over 30o C during the 4 months of summer. The mean daily temperatures for July and January are approximately 14^o C and -15^{o}C to -20^{o}C, respectively. Precipitation between 50 and 75 centimetres occurs annually, with most during the winter months as snow cover of approximately 2 metres.

The optimal time for surface exploration on the Oxide Peak property is between mid-late June and early October.

5.5.3 Mets

The Mets mining lease lies within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region is entirely glaciated and is characterized by wide U-shaped drift-filled major valleys and deeply incised V-shaped interior upland valleys. Mountain peaks in the area average 1980 m a.s.l., rising from the major valleys. The topography of the areas underlain by Toodoggone volcanic rocks is usually more subdued than in those areas underlain by Takla Group volcanic rocks toward the east.

5.5.4 BOT

The BOT property is moderately rugged, with elevations ranging between 1250 and 2500 m a.s.l. Slope gradients commonly reach 60 percent. Most of the property is covered by a talus at elevation. Tree line is at approximately 1600 m a.s.l. Drainage is provided by several small creeks which feed into the Chukichida River, a tributary of the Stikine River.

Overburden depth is variable, ranging from 0m (outcrop) to 20m depending on location, but averages somewhere between 1 and 4 m over much of the property. Bedrock surface below the overburden is glacially modified, being highly irregular or hummocky.

6 History

Historically, the Baker claims (formerly referred to as Chappelle) and the Shasta group claims were divided due to separate ownership. The Baker/Chappelle and Shasta groups contain the past producing mines: DuPont/Baker 'A' and Multinational 'B' mines, and the Shasta mine. Sable merged the properties to create the Baker Project, which forms the modern claim shape.

In 1824, explorer Samuel Black noted many unusually colorful gossans in the headwaters of the Findlay River system. In 1915, prospector Charles McClair mined alluvial gold from the gravels of a creek north of Toodoggone Lake that would later bear his name. In 1929, Cominco explored several base metals showings in the region (Smith, 2019).

Kenneco Explorations (Western) Limited staked the Chappelle claims in 1969. Conwest Exploration Ltd. optioned the property in 1973 from Kenneco and constructed an airstrip at Blake Lake and a road to the property prior to dropping the option in 1974. DuPont of Canada Exploration Limited acquired the property in 1974 and in 1979 the decision to put the property into production Dupont/Baker mine was made. Multinational Mining Inc. acquired the mineral rights from Dupont in 1985. Sable acquired the Dupont/Baker mill infrastructure in 1989 from Dupont to process material from the Shasta mine, and subsequently acquired Multinational Mining Inc. and their claims (Smith, 2019).

As a combined Baker-Shasta property, Sable conducted an exploration program in 2017 which included a 116-sample stream sediment geochemistry survey, a 10 line-km IP survey, a 982-line-km property-wide ZTEM airborne geophysical survey and drilled 1811.86 metres over 5 diamond drillholes (Smith, 2019). All 5 drillholes encountered extensive pyrite-magnetite-quartz mineralization, hosted in Takla group basalts and feldspar porphyry dikes/sills, but returned disappointing assays for gold and copper. For a detailed review of the 2017- 2019 period, readers are recommended to review the 2019 released NI 43-101 by Eurocontrol Technics Group Inc. (Smith, 2019).

6.1 Baker

The Baker group, formerly referred to as the Chappelle group, was discovered in 1969 by Kennco Explorations (Western) Limited. Several quartz vein structures were identified, which included the discovery of the 'A' vein.

6.1.1 'A' Vein Mine

Conwest Exploration Ltd. optioned the property in 1973 and constructed an airstrip at Black Lake and a road to the property prior to driving a 200-metre adit to further the explore 'A' vein. Underground diamond drilling was carried out during this time, but no encouraging results were returned, and the property option was terminated in 1988 (Carter, 1988).

In 1974, DuPont of Canada Exploration Limited acquired the property and completed 8,700 metres of diamond drilling and 460 metres of underground development on the 'A' vein structure over a five-year period. The mine was put into production as the Baker mine in 1979, and an airstrip was constructed at

Sturdee River Valley to facilitate air freighting of all equipment which included a 90 tpd mill (Carter, 1988). Referred to as the DuPont/Baker 'A' deposit at the time, the Baker Mine was operated by DuPont Canada during the period of 1981 to 1983 as an underground and open-pit gold-silver mine. The operation involved a 90 tpd whole ore cyanidation plant, using the Merrill-Crowe process (Carter, 1988). Sable acquired the Baker site, including the processing facility in 1989 and subsequently modified it to a flotation circuit with optional concentrate cyanidation (Smith, 2019).

6.1.2 'B' Vein Mine

The Multinational 'B' deposit, located adjacent to Adit Creek and upstream of the 'A' deposit, was a high-grade gold-silver-copper deposit from which flotation concentrates were shipped off-site. This mine was intermittently operated by Sable between 1991 and 1997 (Craft, 2003).

No reliable historical resource or reserve estimate could be located for either the Multinational 'B' or DuPont 'A' deposits. Craft (2001) reports that DuPont of Canada Exploration Ltd. produced 95,000 tons from the DuPont 'A' between 1981 and 1983, at an average production grade of 0.9 oz/t gold equivalent and that Sable produced 17,500 tons from the Multinational 'B' deposit at a grade of 0.5 oz/t gold, 5 oz/t silver, and 1% copper (Smith, 2019). The B-vein saw much of its exploration between 1986 and 1988, with a total of 11,935 metres of drilling completed over 104 holes (Smith, 2019).

6.1.3 Black Gossan

The Black Gossan target saw sporadic exploration between 1997 and 2017. In 2002, at the Black Gossan, 9 Diamond Drillholes were drilled by Sable, two trenches were excavated, and a soil grid was expanded (ARIS, 2020). In 2004, Sable drilled three holes into the Black Gossan Zone. This was to be a progressive program that explored deeper into the zone. The deepest hole that was to go 600 m was stopped at 166.76 m due to squeezing ground. The drilling did demonstrate that a copper-gold system exists and is increasing in grade with depth (ARIS, 2020). In 2006, at the Black Gossan, Sable Resources drilled two NQ sized diamond drillholes, totaling 170.7 metres. These were abandoned at the porphyry target due to poor ground conditions. The holes intersected propylitic altered Takla Group volcanics over their entire length. Pyrite accounted for 1 to 2 per cent and was the only sulphide noted. No assays were completed (ARIS, 2020). In 2017, 3 of the 5 diamond drillholes tested the Black Gossan zone: BK17-01, BK17-02, and BK17-05. The total metres drilled on the Black Gossan zone in 2017 was 1,153.97 metres of the 1,811.86 drilled metres completed that year.

6.2 Shasta

The original Shasta group of claims were staked in 1972 by Shasta Mines and Oil Ltd., who later changed their name to International Shasta Resources Ltd. Prospecting, soil and rock geochemical surveys, geological mapping, and magnetometer surveys were carried out between 1973 and 1975 by W. Meyers and Associates Ltd on behalf of the owner. Most of this work was carried out on the south side of Jock Creek. In 1978, the property was optioned by Asarco Ltd. But due to poor results from resampling of old trenches, the option was terminated. Newmont Exploration Canada Ltd. optioned the property in 1983 and during the next two years staked additional claims. Newmont Exploration Canada Ltd. completed extensive soil geochemical, geological, and geophysical surveys, and completed 2,675m of diamond drilling. Newmont Exploration Canada Ltd.'s drilling identified the Creek Zone and two other mineralized structures, the Rainier and Jock Zones (Holbek P., 1988; Smith A., 2019).

Esso Minerals Canada Ltd. optioned the property in 1987 and carried out two seasons of exploration. The exploration programs involved geological mapping, soil geochemistry and VLF-R geophysical surveys, backhoe trenching and diamond drilling. The main result of this work was the discovery of the JM and O-Zones (Smith, 2019).

Homestake Mining Canada Ltd. purchased Esso Minerals Canada Ltd.'s interest in the Shasta property in the spring of 1989, and continued exploration during the summer of 1989, with a program of exploration and delineation drilling as well as geochemical and geophysical surveys. By the end of the 1989 field season, total exploration work included 5,140 geochemical soil samples, 200-line km of VLF-R and 4.0-line km of IP geophysical surveys, 4.0 km of backhoe trenches, geological mapping at 1:10,000 and 1:1,000 scales, 13,774 m of exploration diamond drilling and 1,093 m of delineation and condemnation diamond drilling. Cumulative expenditures by Newmont Exploration Canada Ltd., Esso Minerals Canada Ltd. and Homestake Mining Canada Ltd. to the end of 1989 totaled approximately $2.8 million (Holbek P. M., 1991). In 1989 International Shasta Resources Ltd. and Sable completed a mining and assignment agreement whereby Sable would mine 100,000 tonnes and process it at the Baker mill which Sable had recently acquired the rights to. Sable mined the JM and Creek zones, by both open pit and underground methods, and completed 285 m of diamond drilling in 5 holes (Smith, 2019).

In 1990, Homestake Mining Canada Ltd. continued to work the property, and completed 9.27-line km of geochemical soil sampling, 14.94-line km of VLF-R geophysical surveys, and 4,777 m of BQ-thinwall diamond drilling in twenty-seven holes. Following the exploration program in 1990, Homestake Mining Canada Ltd. dropped the option, and Sable acquired the Shasta property from International Shasta Resources Ltd. Sable continued to operate the mine under the mining and assignment agreement until 1991 (Smith, 2019).

Sable resumed exploring the property in 1994, and between 1994-1998 completed 1,968 m in over 32 diamond drillholes. Exploration again resumed in 2003, and between 2003 and 2010 Sable completed 6,929 m of diamond drilling in 89 holes (Craft E.M., 2005; Smith A., 2019).

On a seasonal basis in 2004 and 2005, Sable completed a small test pit on the Creek zone, and mined and processed 15,000 tons (Craft, 2007). Underground operations resumed in 2007, and between 2008 and 2012, Sable mined approximately 105,000 tons from the Creek zone (TetraTech EBA Inc., 2015; Smith A., 2019).

6.3 Oxide Peak

A summary of the exploration history of the Toodoggone district is presented in Diakow et al. (1993) with the earliest placer mining in the district recorded in the mid 1920's at McClair Creek, located within the central portion of the Oxide Peak claim group.

Bradford (2019) summarizes the exploration history of the northern half of the Oxide Peak claim group, which includes: the Oxide Peak, Mt. Gordonia, Tarn, and Falcon targets. A ground magnetometer survey was completed by Red Rock Mines in the northern part of the property near Mount Gordonia in 1970 as a follow-up on the discovery of bornite and copper staining (McKelvie, 1970). In 1974, Union Miniere carried out geological mapping, soil sampling, and an EM survey in the eastern part of the property (Burgoyne, 1974). A variety of small geochemical (soil and rock) sampling programs were carried out north and south of Mount Gordonia in the 1980's, as well as a 110 line-kilometer airborne magnetic survey was flown in 1986 (Woods, 1988). This survey outlined two large magnetic highs on the east side of Belle Creek valley. In 1980 SEREM carried out a program of geological mapping, and soil and silt sampling around the Oxide Peak alteration zone along the northwestern portion of the current Oxide Peak claim group (Crawford & Vulimiri, 1981). Additional mapping and sampling were carried out in Yeager & Ikona (1986) and Lyman (1988). Stealth Minerals carried out the most extensive geochemical sampling program on the Gordonia and Oxide Peak areas in 2004 (Kuran & Barrios, 2005), collecting 628 rock samples, 30 soils, and 10 silt samples, as well as doing portable infrared mineral analyses (PIMA) of 274 rock samples. This program detailed widespread high Cu, Au, Ag, and other base metal anomalies. Seven Devils Exploration carried out a small prospecting and geochemical sampling program in 2016, collecting 26 rock samples, and assessing the prospectivity of the Oxide Peak, Gordonia, Tarn and Falcon zones for porphyry copper-gold deposits.

The Saunders region is the main target historically explored with the southern half of the Oxide Peak claim group; this region includes the Saunders prospect (Minfile #: 094E 017), Golden Neighbor developed prospect (Minfile #: 094E 037), Som showing (Minfile #: 094E 040), Golden Neighbor showing (Minfile #: 094E 152), Camp 1 showing (Minfile #: 094E 153), Saunders South showing (Minfile #: 094E 154), Saunders North showing (Minfile #: 094E 155), Saunders Northwest showing (Minfile #: 094E 156), and Saunders Southwest showing (Minfile #: 094E 157). The earliest recorded exploration work, involving geological mapping and sampling, was completed by Cominco Ltd. on the Som showing in 1969. No work was completed on the in the immediate area during 1969 and 1971. Between 1971 and 1998 geological mapping, sampling, and prospecting was completed by Kennco Exploration (Canada), Denson Mines, Bow River Resources, Golden Rule Resources, and Great Western Petroleum. In 1987, five diamond drillholes totaling a length of 605.02 m were completed by Lacana Ex. targeting a fault zone with intense argillic alteration (Johnston, 1987). Drilling identified quartz veins and silicified volcanics with frequent chalcopyrite, sphalerite, and lesser galena, molybdenite, pyrite and scheelite (Johnston, 1987). Assays did not recognise any significant gold or silver values (Johnston, 1987). An airborne magnetic geophysical survey was completed in 1973 by McPhar Geophysics Ltd. on behalf of Kennco Exploration (Canada) (Smith & Mullan, 1973).

Although explored intermittently from 1969, much of the exploration work completed on the southern portion of the Oxide Peak claim group was completed by, or on behalf of, Stealth Minerals Ltd. between 2003 and 2007 (Dawson, 2008). Prospecting, stream sampling and an airborne helicopter magnetic and radiometric survey were completed in 2003 (Kuran, 2004). Further geological mapping, prospecting, and sampling to follow-up on the previous year's results in 2004 and 2006 and to confirm potential extensions and continuity of mineralized structures and zones (Smith, 2005; Barrios and Kuran, 2006). The property was revisited in 2007 to sample the Saunders vein system, Copper Breccia and Som showings, and a total of 914 metres over seven diamond drillholes within the Saunders prospect and 903.15 metres over two holes on the Som showing was completed (Dawson, 2008).

6.4 Mets

The Mets deposit was discovered by Golden Rule Resources Ltd. in 1980 and is currently covered by Mining Lease # 314708. The property hosts several quartz-barite breccia zones for which Golden Rule, from surface diamond drilling and trenching. Golden Rule defined a historical "measured geological resource" of 143,321 tonnes @ 11.31 g/t Au on the "A" Zone (Evans, 1988). This historical estimate was completed before NI43-101 Standards of Disclosure for Mineral Projects and uses categories other than those stipulated for current use. The author has not done sufficient work to classify the above historical estimates as a current mineral resource or reserve. The author has been unable to verify data or work, or the key assumptions, methods or parameters used to prepare the historical resource estimate. The historical resource estimate should not be considered as a current mineral resource or mineral reserve.

Cheni Gold Mines optioned the property in July 1992. From the above historical resource estimate, Cheni estimated a "probable geological reserve" of 75,000 tons grading 0.384 oz. Au per ton (Cheni, 1992). This revised historical estimate was completed before the coming into force of NI 43-101 Standards of Disclosure for Mineral Projects. It uses categories other than those stipulated for current use. By September 1992, Cheni had developed the property (using trackless equipment) with a 60 m decline to crosscut the A Zone and a 120 m-long exploration drift along the zone, mining about 2,300 tonnes of ore and 3,700 tonnes of waste. After the underground program, Cheni estimated diluted reserves of 53,357 tonnes @ 12.0 g/t Au (Cheni Gold Mines Inc., 1992). Later in 1992, with additional data, Cheni re-calculated mineable reserves to be 48,564 tonnes @ 11.62 g/t Au. The reduction of reserves was in part due to a grade reduction based on underground sampling of the zone (Smith, 2019). The author has not done sufficient work to classify the above historical estimates as a current mineral resource or reserve. The author has been unable to verify data or work, or the key assumptions, methods or parameters used to prepare the historical resource estimate. The historical resource estimate should not be considered as a current mineral resource or mineral reserve.

7 Geological Setting and Mineralization

7.1 Regional Geology

The regional geology surrounding the Property has not seen any significant research or changes in understanding since the 2017 technical report and is described as an area measuring approximately 1500 square kilometres in the Toodoggone region that extends from the Kemess South mine area northwestwards to the Chuckachida River. The region occurs within the Intermontane Belt and is underlain by strata of the Stikine Terrane, which consists of Paleozoic to Mesozoic island arc assemblages and overlying Mesozoic sedimentary sequences. The oldest rocks exposed in the region consist of crystalline limestone of the Devonian Asitka Group. They are unconformably overlain by mafic volcanic rocks of the Upper Triassic Takla Group. Takla Group volcanic rocks are in turn overlain by bimodal volcanic and sedimentary strata of the Lower Jurassic Toodoggone Formation of the Hazelton Group (Smith, 2019). Toodoggone Formation pyroclastic and epiclastic volcanic rocks are a predominantly calc-alkaline andesitic to dacitic subaerial succession. Toodoggone volcanic rocks display broad open folds with attitudes generally less than 25° dipping predominantly to the west (Smith, 2019).

Potassium-argon dating of hornblende and biotite indicate that the age of Toodoggone volcanism ranges from 204 to 182 Ma. This age range appears to be divisible into two main groups: an older, lower stage of volcanism dominated by andesitic pyroclastics and flows characterized by widespread propylitic and zeolitic alteration; and a younger, upper stage of volcanism dominated by andesitic ash-flow tuffs which generally lack significant epithermal alteration (Diakow, Panteleyev, & Schroeter, 1993). All the known epithermal gold-silver deposits and occurrences are restricted to the lower Toodoggone Formation volcanics and underlying units (Smith, 2019).

Unconformably overlying volcanic strata of the Toodoggone Formation are sedimentary strata of Cretaceous age, including fine-grained clastics of the Skeena Group and chert pebble conglomerates and finer grained clastics of the Sustut Group. These sediments are structurally unaffected and are horizontal, forming cap rocks to high-standing plateaus primarily on the western edge of the Toodoggone region (Smith, 2019).

Late Triassic to Middle Cretaceous intrusions is exposed throughout the Toodoggone region. The most significant of these in terms of precious metal and porphyry mineralization are Early Jurassic granodioritic to quartz monzonitic bodies known as the Black Lake Suite of Intrusions. These intrusions host porphyry copper- gold mineralization in several localities, including the former Kemess South mine and several other deposits on the Kemess property in the southeastern part of the Toodoggone region (Smith, 2019).

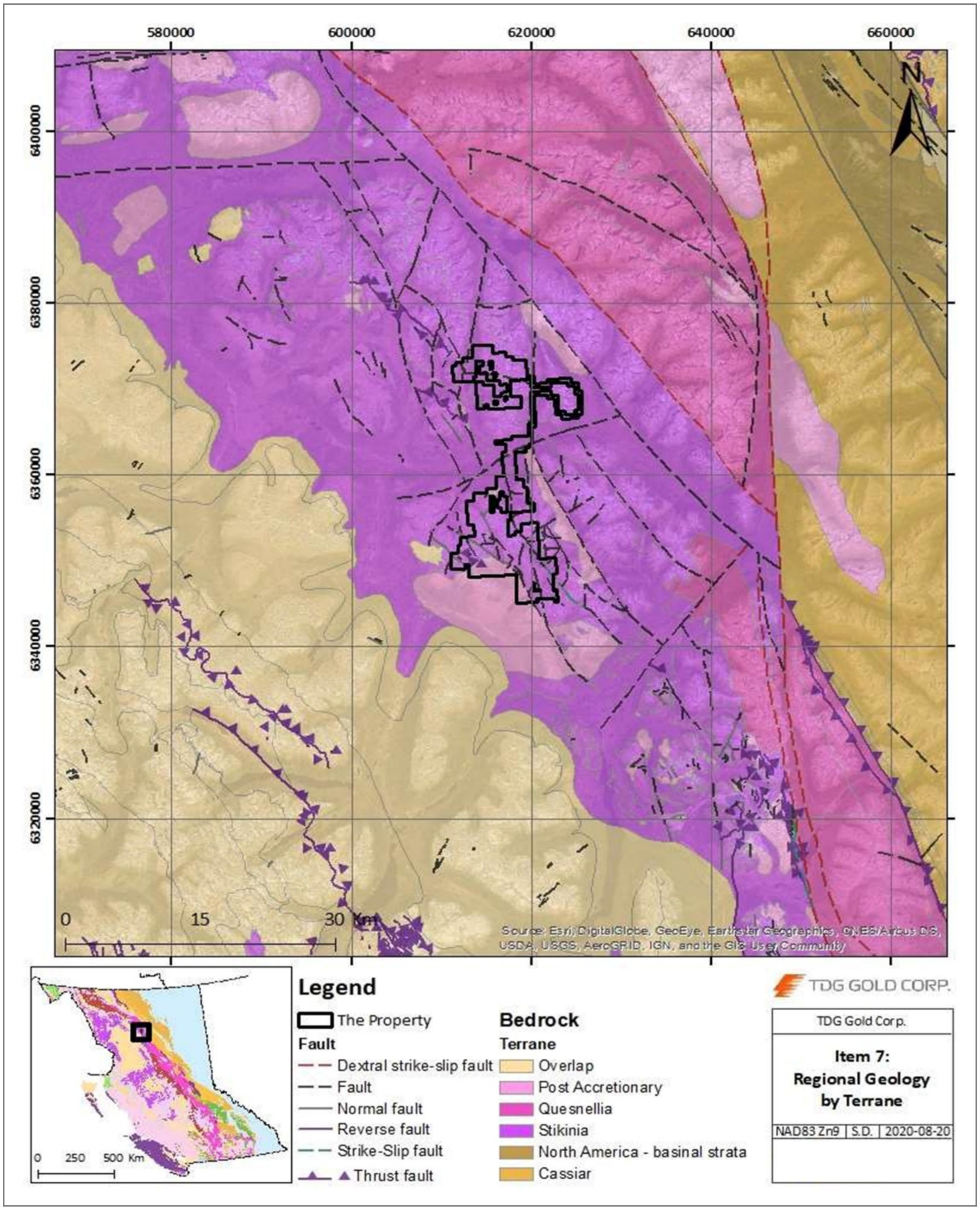
A northwest-trending set of younger, steeply dipping faults and half-grabens are the principal structures found in the region. Major structural breaks are postulated to have been caused by, or be the result of, a northwest- trending line of volcanic centres (Diakow, Panteleyev, & Schroeter, 1993). Small stocks are also aligned northwesterly, suggesting they were also influenced by the same structural trend. After volcanism and intrusion, younger faults are recognizable as northwest-trending lineaments (Smith, 2019).

Regional geology of the Toodoggone River district was compiled in Diakow et al. (1985) and revised by Diakow (2006). The following general summary of the regional geology and metallogeny of the northern Toodoggone district is adapted by Bradford (2019) from McBride and Leslie (2014): "The Toodoggone volcanic sequence, which appears to underlie most of the Oxide Peak Property, occurs in the northeastern part of the Intermontane tectonic belt, within the Stikine and northern Quesnel terranes. This lower Jurassic unit, comprising calc-alkaline latite and dacite subaerial volcanic rocks of distinctive lithologies and comagmatic plutons, accounts for most of the island arc-forming Hazelton Group rocks exposed between the Finlay and Chukachida Rivers. Unconformably underlying this sequence is the late Triassic Takla Group, dominated by island arc basaltic to andesitic flows, tuffs and breccias with subordinate sedimentary clastics and limestone. The oldest rocks of the region, intensely deformed late Carboniferous to Permian Asitka Group volcanics and sedimentary rocks, are of limited extent, cropping out in uplifted blocks and around pluton margins as in the Baker mine area. Continental clastic sediments of the Cretaceous Sustut Group unconformably cap the volcanic successions. The stratigraphy of the region is summarized in Table 7-1 with regional maps in Figure 7-1 and Figure 7-2 of the terrane and stratigraphic units of the area respectively.

Associated with an elongate, northwesterly trending, volcanic-tectonic structural development, the Toodoggone volcanics represent a voluminous accumulation of material over a 90 km by 25 km area within an asymmetric collapse feature in a continental arc setting. Two eruptive cycles are recognized within the Toodoggone. The lower cycle is characterized by plateau forming dacitic ash-flow and air-fall tuffs interspersed with and followed by latite flows and lahars. Following an erosional event which partially unroofed previous co-magmatic plutons, the upper cycle proceeded with explosive dacite pyroclastic eruptions, culminating with voluminous ashflow tuff accumulations. A variety of mineral deposit types are related to the Toodoggone eruptive cycles and co-magmatic events (Diakow et al., 1991; During et al., 2009). These include gold- and silver-rich, low-sulphidation epithermal systems characterized by quartz veins, stockworks and breccias with associated adularia, sericite, and calcite; high-sulphidation systems with associated fine-grained silica, alunite, barite, and clay; and porphyry copper-gold systems within and marginal to early Jurassic plutons. The common type of sericite adularia mineral occurrence is typified by the Lawyers and Shasta deposits. The acid sulphate deposits include the Ranch (BV/Al), Baker and Silver Pond prospects. The Kemess South mine and the Kemess North and Kemess East deposits, examples of copper - gold porphyry systems, are characterized by chalcopyrite, pyrite and minor molybdenite (+/- magnetite) occurring as disseminations and polyphase quartz stockworks."

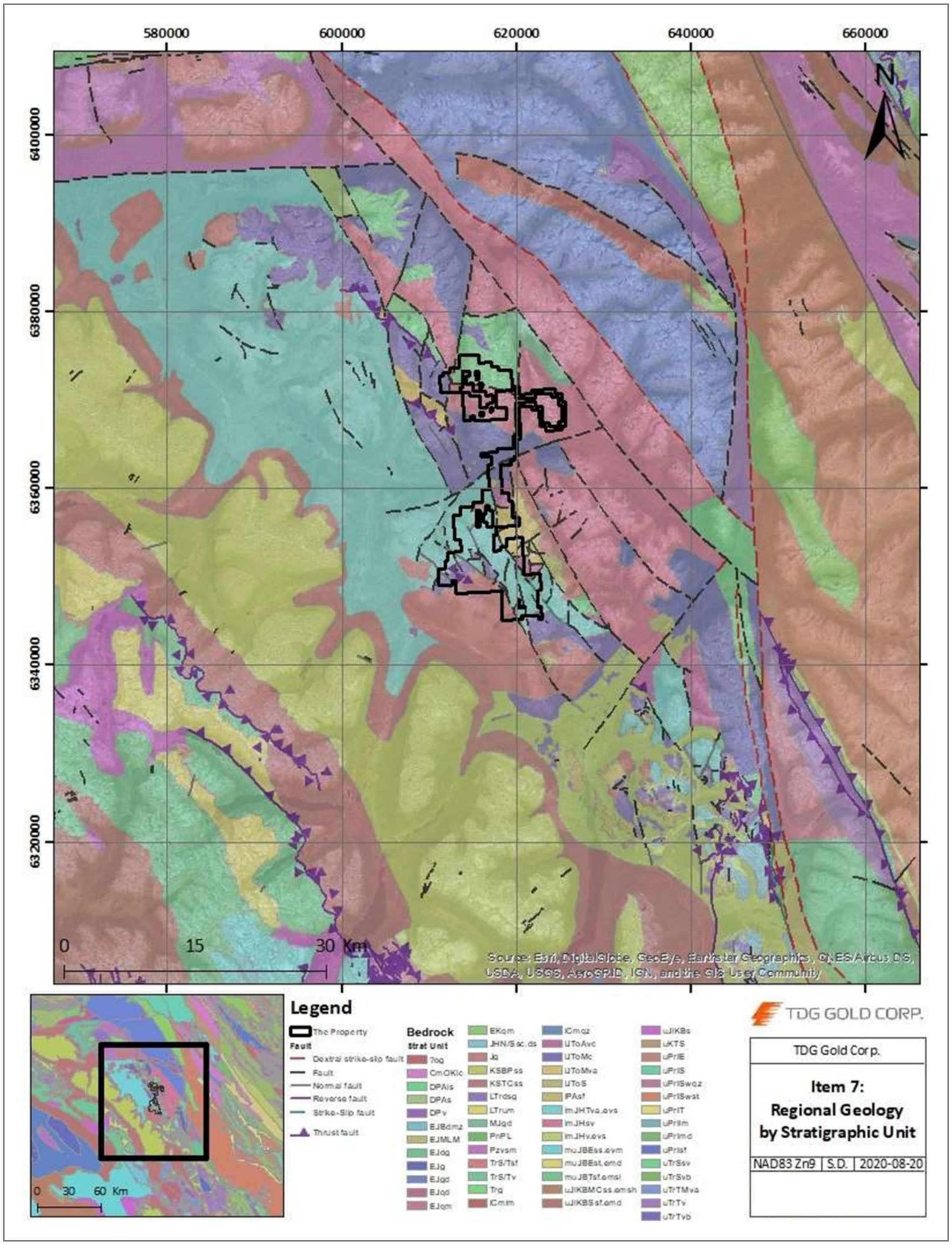
Table 7-1: Regional Stratigraphy of the Toodoggone Region (Diakow et al., 1993; Smith, 2019)

Period	Group	Formation	Lithology
Upper and Lower Cretaceous	Sustut	Brothers Peak TangoCreek	Nonmarine conglomerate, siltstone, shale, sandstone; minor ash-tuff
			Cassiar Intrusions: Quartz, monzonite, and granodiorite
Major Unconformity			
Lower Cretaceous to Middle Jurassic	Bowser Lake		Marine and nonmarine shale, siltstone, and conglomerate
Comfortable Contact			
Middle and LowerJurassic	Spatsizi Hazelton	Toodoggone	Marine equivalent of the Hazelton Group; shale siltstone andconglomerate, subordinate fine tuffs Subaerial andesite to dacite flow and tuffs, rare basalt, and rhyolite flows; subordinate volcanic siltstone to conglomerate; rare limestonelenses
			Black Lake Intrusive Suite: Granodiorite and quartz monzonite
Unconformity			
Upper Triassic	Takla		Submarine basalt to andesite flows and tuffs, minor limestone, and argillite
Unconformity			
Lower Permian	Asikta		Limestone, chert, argillite
Major Terrane Boundary Fault			
Cambrian & Proterozoic			Siltstone, shale, sandstone, limestone; regionally metamorphosedto greenschist and amphibolite grade



(Source: TDG Gold, 2023)

Figure 7-1: Regional Geology surrounding the Property by Terrane and arranged by Age. ***1:500,000***



(Source: TDG Gold, 2023)

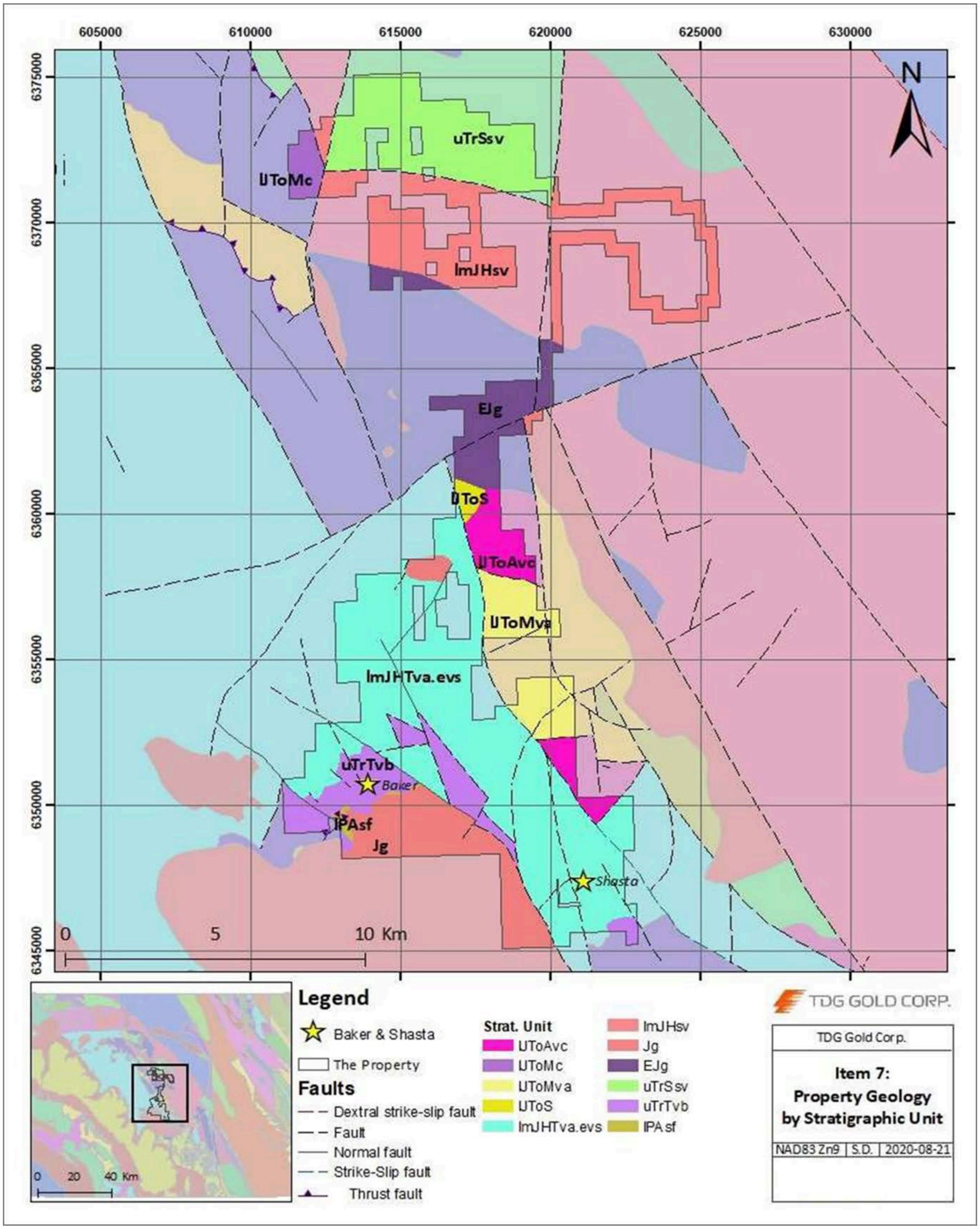
Figure 7-2: 1:500,000 Regional Geology surrounding the Property by Stratigraphic Unit; arranged alphabetically.

7.2 Property Geology

The property geology is divided into four sections: Baker, Shasta, Oxide Peak and Mets. The overall geological understanding of the Baker and Shasta claims have not changed significantly since the 2019 technical report, the following sections have been either been paraphrased or are directly quoted from Smith (2019). Stratigraphic units from regional government mapping completed by the GSC (Evenchick et al., 2007) and BCGS (Mihalynuk et al., 1996), which includes the bedrock geology of the Property are displayed in Table 7-2 and Figure 7-3.

Table 7-2: Summary of Stratigraphic units within the Property Boundary

Strat. Unit	Strat. Age	Strat. Name	Primary Rock Type	Belt	Terrane
lJToAvc	Lower Jurassic	Toodoggone Volcanics - Attycelley Member	volcaniclastic rocks	Intermontane	Stikinia
lJToMc	Lower Jurassic	Toodoggone Volcanics - McClair Member	andesitic volcanic rocks	Intermontane	Stikinia
lJToMva	Lower Jurassic	Toodoggone Volcanics - Metsantan Member	andesitic volcanic rocks	Intermontane	Stikinia
lJToS	Lower Jurassic	Toodoggone volcanics - Saunders Member	dacitic volcanic rocks	Intermontane	Stikinia
lmJHsv	Lower Jurassic to Middle Jurassic	Hazelton Group	marine sedimentary and volcanic rocks	Intermontane	Stikinia
lmJHTva.evs	Lower to Middle Jurassic	Hazelton Group - Toodoggone Formation	andesite	Intermontane	Stikinia
Jg	Jurassic		undivided intrusive rocks	Intermontane	Post Accretionary
EJg	Early Jurassic		intrusive rocks, undivided	Intermontane	Stikinia
uTrSsv	Upper Triassic	Stuhini Group	marine sedimentary and volcanic rocks	Intermontane	Stikinia
uTrTvb	Upper Triassic	Takla Group	mafic lava	Intermontane	Stikinia
lPAsf	Lower Permian	Asitka Group	argillite	Intermontane	Stikinia



(Source: TDG Gold, 2023)

Figure 7-3: Property Geology by Stratigraphic unit; arranged by Age.

7.2.1 Baker

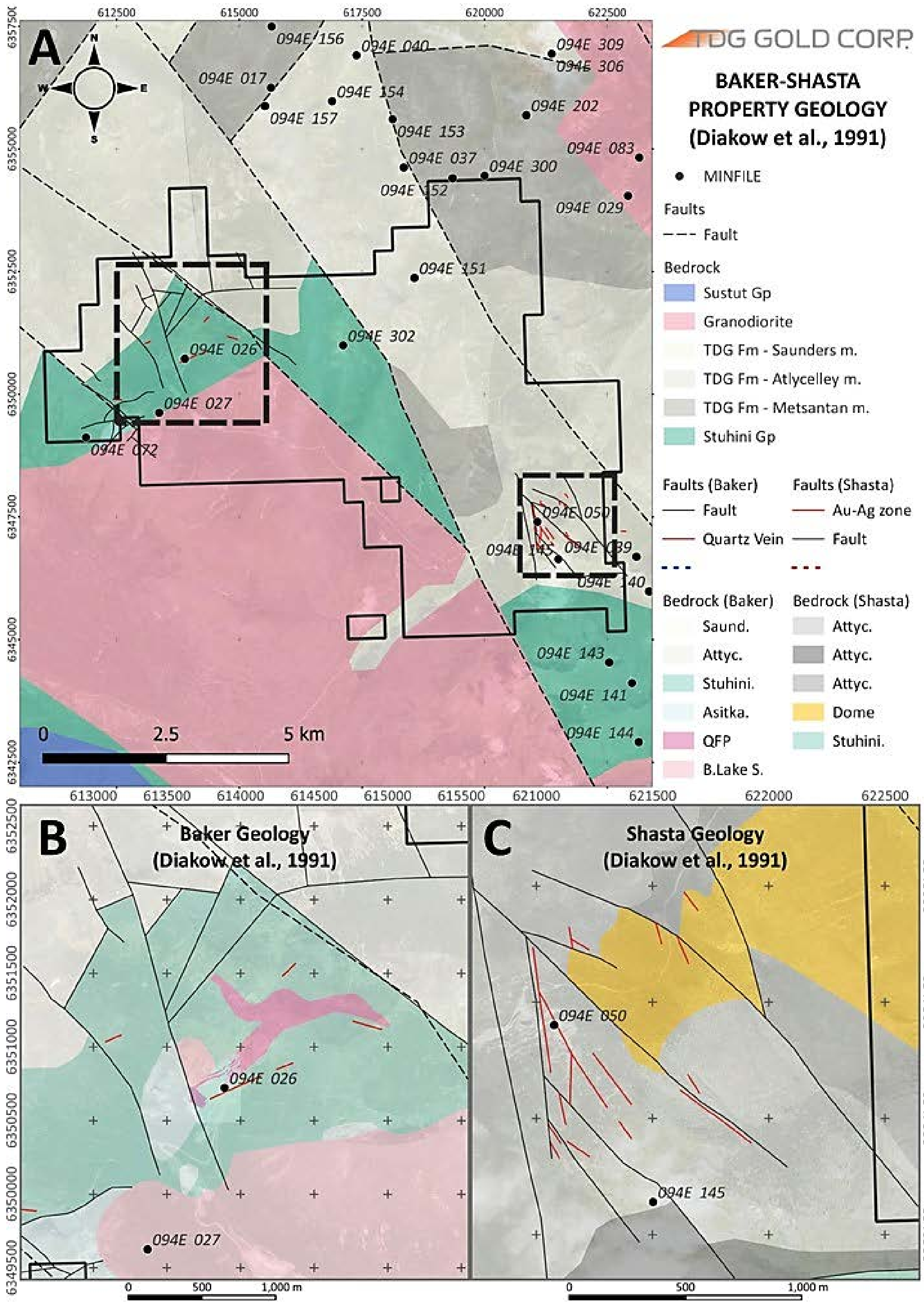
The western “Chappelle Group” claims of the Baker section of the Property are primarily underlain by an uplifted fault block of Takla Group volcanics in thrust contact with Asikta limestone both having been intruded by quartz monzonite of the Black Lake stock (Figure 7-4). The stock is exposed at the southern margin of the property and has locally altered the limestone to an epidote-diopside skarn along their contact. The limestone also occurs towards the south of the property and forms the prominent cliffs of Castle Mountain. Broken and iron-oxide-stained augite phyric andesite to basalt flows of Takla Group are the dominant rock types on this part of the property and are the principal host of mineralization at the DuPont/Baker ‘A’ and Multinational ‘B’ deposits. To the north, upper cycle Toodoggone formation volcanics of Diakow (1990) are present in fault contact with Takla Group rocks. Numerous hornblende-feldspar porphyritic apophyses of the Black Lake stock intrude and brecciate the Takla host rocks. The similar composition to the overlying Toodoggone volcanics suggests that these may be feeders for the overlying volcanism (Smith, 2019).

Dominant structures on the Baker section of the Property consist of steeply dipping normal faults, and north to northwest-trending strike-slip faults. One of the latter (the Saunders fault) borders the Shasta deposit to the east and has an estimated ~5 km right-lateral displacement (Diakow, Panteleyev, & Schroeter, 1993). Several of the Toodoggone area deposits, including Lawyers, Baker, and Shasta lie near northwest-trending faults. Diakow (1990) proposed that these deposits lie along the margin of a fault-bounded trough which may have ponded later volcanics and localized hydrothermal fluids during extension.

Alteration for the property consists of regional scale propylitic alteration of chlorite-epidote +/- calcite and pyrite. At the deposit scale, the Chappelle group of claims has undergone intense propylitic chlorite-epidote-pyrite alteration, and locally strong sericitic alteration (Smith, 2019).

Numerous hornblende-feldspar porphyritic apophyses of the Black Lake stock intrude and brecciate the Takla host rocks. The similar composition to the overlying Toodoggone volcanics suggests that these may be feeders for the overlying volcanism. The largest of these, intrusions, the Black Lake stock, extends 9 kilometres southeastfrom the Baker property. Its composition varies from granodiorite to quartz monzonite. Radiometric potassium- argon dates obtained by the Geological Survey of Canada on hornblende from this pluton indicate an emplacement age of 186 Ma. Another pair yielded ages of 189 Ma and 200 Ma on biotite and hornblende respectively (Diakow 1993). Two small syenomonzonite intrusions occur immediately to the north of the Black Lake stock near the A vein. Highly altered quartz feldspar porphyry which appears to be a late phase of the syenomonzonite intrusions, occurs immediately to the north of the A vein. The main portion of this porphyry unit lies at the fault contact between Asitka Group and Takla Group rocks near the western end of the A vein.

Dike-like apophyses of this body, varying from 1 to 30 metres in thickness, subparallel and intersect thenortheast extension of the A vein (Smith, 2019).



(Source: TDG Gold, 2023)

Figure 7-4: Baker-Shasta Geology (A-Baker Shasta Property, Geology B-Baker locale geology, C-Shasta locale Geology)

7.2.2 Shasta

To the east the "Shasta Group" claims, and locally the "Chappelle Group" claims, the project area is underlainprimarily by volcanic rocks of the Jurassic Toodoggone Formation. The Toodoggone Formation is a compositionally uniform subaerial volcanic succession that consists of six lithostratigraphic members divided into Lower and Upper Eruptive Cycles (Table 7-2). The members are comprised of high potassium, calcalkaline latite and dacite volcanic strata emplaced along a north-northwest trending, elongate volcano-tectonic depression (Diakow et al., 1993). The Attycelley and Saunders members are the predominant volcanic units tothe east and north of the Project area (Smith, 2019).

At Shasta, structurally controlled mineralized zones also have northwest trends, and may similarly reflect syn- to immediately post-volcanic normal fault activity. Small stocks in the area are also aligned northwesterly, suggesting they were also influenced by the same structural trend. Subsequent to volcanism and intrusions, younger faults are recognizable as northwest-trending lineaments (Smith, 2019).

Alteration for the property consists of regional scale propylitic alteration of chlorite-epidote +/- calcite andpyrite. The lower grade regional alteration has been overprinted at Shasta by extensive potassic (quartz- adularia) alteration assemblage associated with a low-sulphidation epithermal system (Smith, 2019). A plan map of the Shasta geology is illustrated in Figure 7-4.

7.2.3 Mets

The Mets developed prospect consists of a tabular core of silicified rock in three separate but genetically linked zones: the A Zone (and its extension), the Footwall Zone and the 400 South Zone. The A zone has a strike length of 140 m, a true thickness of 6 to 10 m and a vertical extent of up to 75 m; it strikes 340° and dips 70°-85° to the west. A mineralized shoot within the A Zone has a gentle northwest plunge (Smith, 2019).

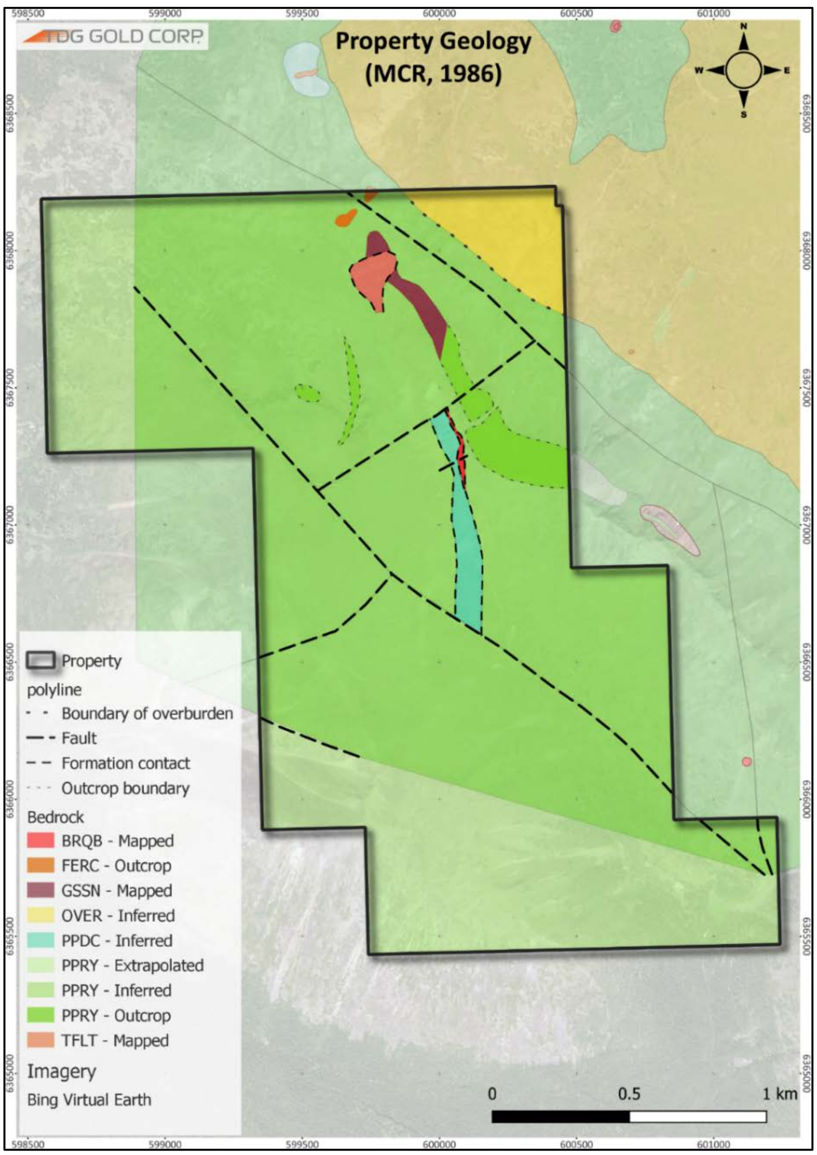
The A Zone is hosted by a quartz-barite breccia zone which occurs near the vertical contact between a footwall andesite and a hangingwall dacite unit. Steeply-dipping, thin breccias generally are higher in grade; when the breccia orientation flattens, as it does at depth, grades drop off rapidly. Native gold is the primary ore mineral present with rare occurrences of electrum, argentite, tetrahedrite, pyrite and galena. Gold occurs as free grains and flakes 0.005-2 mm in diameter, adjacent to fragments of quartz and barite within the breccia system. Sulphide mineralization is practically nonexistent in the A Zone (Smith, 2019).

At its northern end, the A Zone is truncated by the N75 fault, a vertical graben structure striking 050° and dipping 80° south. The block of rock north of the fault is down dropped, with up to 110 m of vertical displacement. In 1987, deep drilling north of the fault intersected a 4 m wide quartz breccia body (the N75 or A Extension Zone).

The Footwall Zone is a quartz-carbonate breccia body situated within the footwall andesite unit. It has been exposed over a 260 m strike length and is interpreted to strike 340°, with an indeterminate dip. It pinches and swells with a maximum width on surface of 4 m. Its Ag:Au ratio is 2:1 or greater contrasting with an Au:Ag ratio of 10:1 or greater for the A Zone.

Alteration at the Mets deposit consists of an extensive outer propylitic zone (epidote, chlorite, are pyrite) and a proximal advanced argillic zone (sericite, kaolinite, dickite) enveloping inner silicic (quartz +/- barite) zones, in both the hangingwall and footwall rocks to the silicic zones. Argillic alteration is primarily developed within the footwall side of the deposit where the alteration envelope can range up to 40 m in thickness (Evans, 1988; Smith A., 2019).

A plan map of the Mets geology is illustrated in Figure 7-5, completed historically by Manson Creek Resources.



(Source: TDG Gold, 2023)

Figure 7-5: Mets Geology

7.2.4 Oxide Peak

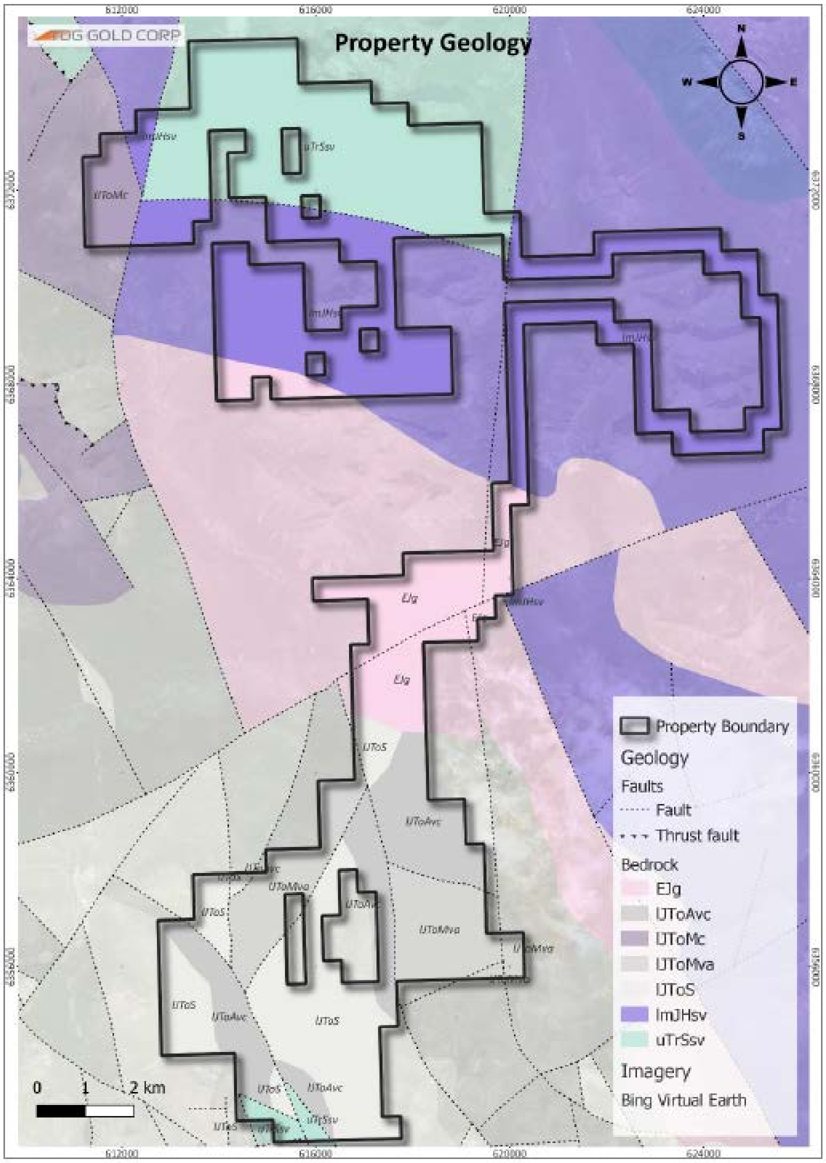
The current contiguous Oxide Peak Claim Group has never been explored simultaneously, as such there is not a complete property-wide geological assessment to date. The northern half of the Oxide Peak claims, referred to as the Oxide Creek, Gordonia, and Falcon area, have been worked separately from the Saunders area (southern half) of the claim group.

The most recent geological compilation by Diakow (2006) includes the Oxide Peak property east of McClair Creek and the Belle Lakes and describes the general stratigraphy north of the Toodoggone River as the following:

- McClair Pluton: Early Jurassic quartz monzonite (Black Lake plutonic suite).
- Late Triassic Takla Group includes basalt and andesite lava flows; typically, fine- to medium-grained clinopyroxene-plagioclase porphyries and aphanitic lavas; typically, massive and inherently difficult to subdivide (uTTa); also, sandstone and siltstone; drab olive green, dominated by plagioclase and lesser pyroxene grains; bedded section between lava flows of unit uTTa (uTTs).
- Early Jurassic Hazelton Group, Upper Toodoggone Formation: includes conglomerate and sandstone dominated by fine-grained basaltic detritus that is presumably derived in part from units TJv or uTTa; reworked polymictic lapilli tuffs and breccias; heterolithic unit comprising diffusely layered very thick beds(TJs); also basalt and andesite lava flows characterized by crowded plagioclase 1 mm long or less and relatively fresh pyroxene; minor pyroxene bearing sandstone interbeds (TJv); also dacite ash-flow tuff, light green to maroon, texturally variable including non-welded, locally lithic rich, and thick (100-150 m) welded columnar jointed zones; diagnostic accidental pyroclasts include pink, quartz-biotite dacite porphyry and biotite-hornblende quartz monzonite; rare cross-laminated ground surge tuff or layered fallout ash and fine lapilli tuff at the base (TG).

The gently to moderately north dipping Takla - Hazelton unconformity is mapped along the south flank of Mount Gordonia in the north-central part of the property. A U/Pb zircon age date of 194.7 ± 0.4 Ma was obtained from asite about 0.5 kilometres southeast of the peak (Diakow, 2006).

A plan map of the Oxide Peak geology is illustrated in Figure 7-6.



(Source: TDG Gold, 2023)
Figure 7-6: Oxide Peak Geology

7.2.4.1 Target Areas - Oxide Creek, Mt. Gordonia, Drybrough and Falcon

In 2005, Stealth Minerals compiled at 1:10,000 scale geological map of the then named Gordo-Too-Oxide claims; now considered the northern half of the Oxide Peak claim group that covers the prospective areas of Oxide Creek, Mt. Gordonia and Falcon (Barrios and Kuran, 2005). This mapping was focussed on Mt. Gordonia. The following is an adapted description of the geology within the Oxide Creek-Mt. Gordonia-Falcon area from Barrios and Kuran (2005) illustrated in Figure 7-7.

The oldest unit in the Toodoggone is the Permian Asitka Group, which includes limestones, cherts and calcareous-siltstones and mudstones. There are also Permian lapilli tuffs, porphyry andesitic and dacitic lava flows forming pendants adjacent to the Duncan Plutons. No Permian units were identified during the 2005 mapping program. Asitka limestones were mapped 3 km north of the Mt. Gordonia (Barrios & Kuran, 2005), and there are limestones 3 km northeast of the Oxide Peak.

Stratigraphically above the Permian Group is the upper Triassic Takla group. Takla rocks are primarily identified by plagioclase and augite basalt porphyry flows, fine-grained/aphanitic green-grey volcanic flows, and rare limestone lenses. This unit is represented as uTTv in Figure 7-8. Takla volcanics cover a large portion of the northern Oxide Peak claim group. Majority of the rocks along the western claim boundary were fine-grained Takla Group, often with weakly-moderately propylitic-altered andesitic-basalt flows.

There is also a sediment package (uTTs) in the Takla Group; light-dark green coloured sandstone and siltstones which are well sorted with occasional augite and plagioclase crystals. Both volcanic and sedimentary Takla rocks were identified on the claim. A two-kilometre-long exposure of green Takla siltstones and mudstones located in the south measured up to 200-250 m thick with individual beds up to 2 m thick. Bedding measurements from these sediments strike generally NW between 290° and 310° and dip shallowly to the NE between 19° and 25°. The eastern portion of the ridge, however, has a significantly different bedding, striking north at 003° to 010° dipping 50°-60°. The sediments on the eastern part of this ridge are believed to be part of the Junkers Member Toodoggone rocks (TJs).

Barrios and Kuran (2005) recognised the importance of marker beds within the lower Jurassic Toodoggone rocks for determining the stratigraphy. The most significant marker bed is the Graves member ash flow tuff (TG). The Graves member ash flow tuff (pyroclastic) is identified by up to 40% lithic fragments including the diagnostic pink aphanitic rhyo-dacitic fragments and biotite-hornblende-bearing granitic fragments. Plagioclase with rare quartz and biotite comprise the matrix of the Graves member. Welded sections in the Graves member occur in selective locations. Welding of the Graves Member was noted on the ridge south of Crater Lake. Welding through this section was primarily identified by elongated cavities in the rock where welded fragments have since been eroded.

Fragments in the Graves Member on a large portion of the claim group were difficult to see on fresh surfaces. Fragments in these areas were easier to make out on weathered surfaces and adjacent float samples. There is also a fragmental ash flow tuff (pyroclastic) as part of the Junkers Member (TJp). This fragmental rock is a matrix supported ash flow with subangular-subrounded clasts typically >64 mm and up to 80 cm. Distinguishing between these two ash flows is important to identify rocks units correctly stratigraphically.

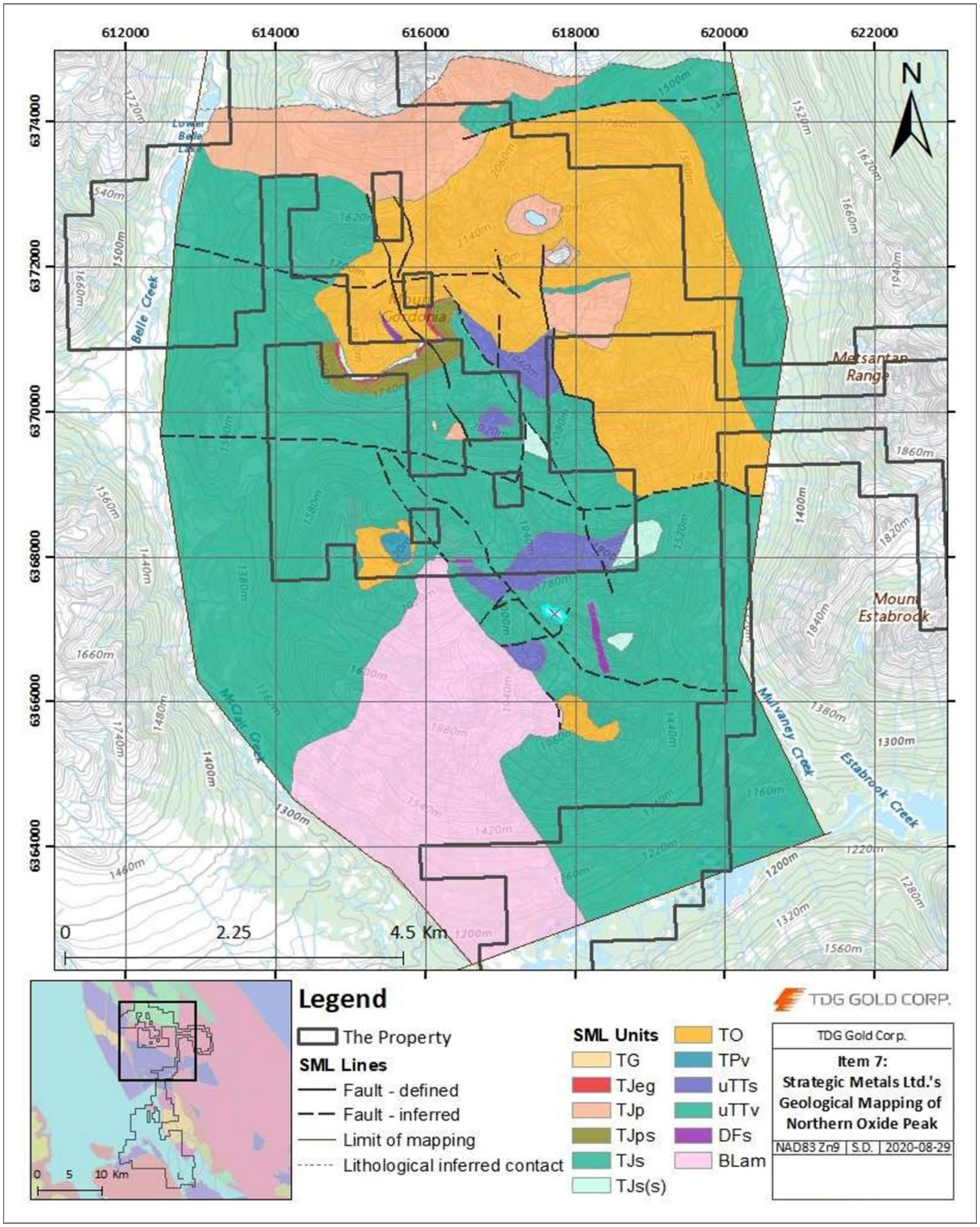
The Junkers Member includes the ash flow tuff (TJp); a debris flow conglomerate unit (TJcg); tuffaceous sandstones and interbedded siltstones/mudstones (TJs); andesite flows (TJa) and rhyolite to dacite flows (TJr).

Mount Gordonia provides an excellent stratigraphic section of the Junkers Member rocks. The lower most unit is a rare quartz-phyric andesite flow TJa(q) which lies above the Triassic Takla volcanics.

Above this unit are the Junkers pyroclastic (TJp) unit interbedded with sandstones (TJs) denoted in this case as (TJsp). The conglomerate unit (potentially evidence of a lahar) lies above the pyroclastic /sedimentary unit and is between 10 and 15 metres thick. This unit has an oxidized red muddy matrix with subangular to rounded boulders of monolithic medium-grained andesite porphyry as recognised by the BCGS. Coarse bladed feldspar lavas (basaltic-andesitic in composition) with a characteristic red oxidation including liesegang rings, and oxidized pyroxenes are found above the conglomerate unit. The above Junkers Member units are shallowly dipping (20-25°) towards the N to NW. The upper most unit on Mt. Gordonia are Graves Member ash flow tuffs- up to 70m thick. Junkers Member andesite lava flows (TJa) located in the southeast portion of the historical Gordo claims are characterized by their grey-green to hematite-red oxidized groundmass, up to 30% subhedral plagioclase between 2 and 5 mm and up to 3-5% sub-vitreous clinopyroxene phenocrysts. Lower Jurassic Pillar Member andesite lava flows (TPv) have a similar composition to the TJa lava flows, therefore marker beds such as the Graves Member are important in deciding which andesite lava flow belongs to which group.

A quartz-monzonite body intruding into Takla volcanics in the southern portion of the property is shown in Figure 7-5**.** This Black Lake type (BLqm) intrusive was described as an equigranular quartz-monzonite, identified by 70% coarse-grained anhedral sub-porphyritic plagioclase and interstitial K-spar; 5-20% fine- to coarse- grained, euhedral to anhedral hornblende; 10-15% fine-medium quartz; trace of biotite, magnetite and titanite (sphene). Black Lake intrusives are of early Jurassic age. It is likely that this intrusive is connected to a quartz monzonite intrusive located immediately south of the Toodoggone River.

Detailed mapping has not been completed to the east or west of Mt. Gordonia. Geological observations made in 2004 suggest the eastern margin of the Oxide Peak property is underlain by Toodoggone Group volcanic rocks comprised mainly of reddish fine lapilli tuff and include feldspar porphyry, rhyo-dacite flows and polylithic volcanic conglomerate. This intrusive body is in the order of 2 km wide and 3 km long. Oxide Creek/Peak to the west is an oxidized gossanous mountain located on the west side of Bell Creek. Observations in 2004 (Kuran & Barrios, 2005) suggest that the lithology of Oxide Peak is mainly Toodoggone volcanics separated by a major east-west structure along Oxide Creek. Lithologies on the north side of Oxide Creek are believed to be Takla and Asitka volcanics.



(Source: Barrios and Kuran, 2006)

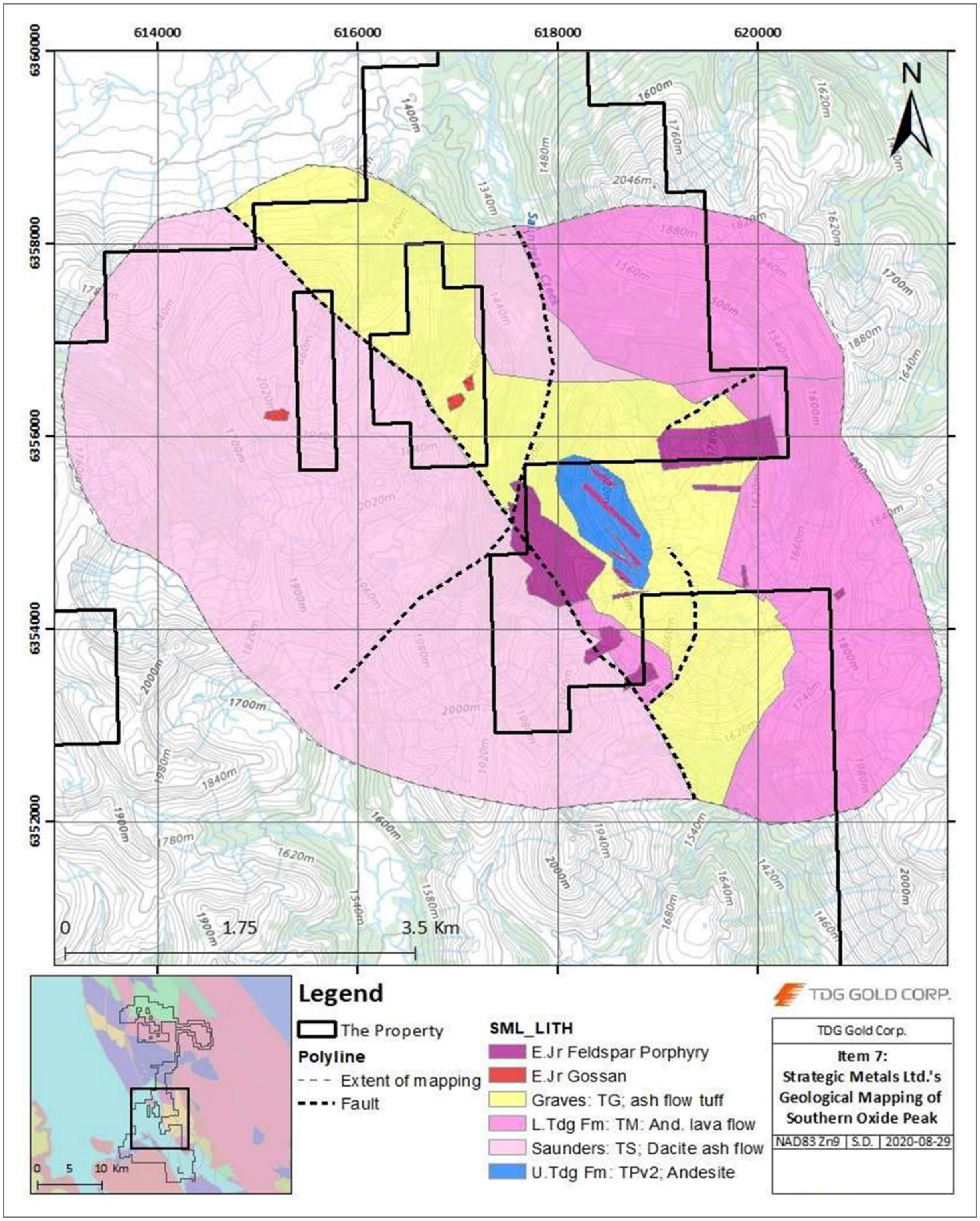
Figure 7-5: Geology of the Northern Section of Oxide Peak; Mt. Gordonia and Falcon

7.2.5 Local Geology: Saunders

The Saunders region is centred mainly on volcanic members of the Toodoggone Formation. The property geology of the Saunders area shown in Figure 7- was compiled after Barrios and Kuran (2006) after conducting outcrop mapping at 1:20,000 scale during the 2006 field season.

Toodoggone volcanics are intruded on the northeast by a northwest-elongated granodiorite stock. To the south the Toodoggone Formation is in contact with uplifted blocks of Takla Group volcanic rocks that are, in turn, intruded by granodiorite of the Black Lake stock. Porphyritic andesite flows of the Metsantan Member (TM), mapped in the eastern part of the property, host the pyrite-chalcopyrite-bornite veins and breccia of the Copper Breccia showing. Gossans, quartz-sericite-pyrite altered rocks, and both the Saunders North and South showings are located along the trace of the Saunders Fault. Low sulphidation epithermal quartz-sulphide veins of Saunders Main showing are located along a subsidiary north-south trending fault in lithic and crystal tuffs of the Saunders Member.

All four Toodoggone members are intruded by felsic granitoid dykes. As shown on Figure 7-6, a set of feldspar-phyric monzonite porphyry dykes intrudes the Pillar, Metsantan and Graves members in a dominantly northwestern trend at Golden Neighbour 1 and 2 and Copper Breccia showings. Dykes range up to about 10 m wide, but one outcropping of monzonite porphyry is interpreted to represent a dyke or stock about 350-400 m wide.



(Source: Barrios and Kuran, 2006)

Figure 7-6: Geology of the Southern Section of Oxide Peak; Saunders Prospective Area

7.3 Mineralization

The Toodoggone region is host to several mineral deposit types including epithermal gold-silver mineralization, calc-alkalic porphyry copper-gold mineralization, and occasional iron or copper (+/- gold-silver) skarn mineralization. All these styles of mineralization are genetically related to Early Jurassic volcanic and intrusive activity in an extensional setting (Diakow, Panteleyev, & Schroeter, 1993). A list of known occurrences is summarized in Table 7-3.

Epithermal gold-silver mineralization is hosted primarily by strata of the Toodoggone Formation, to a lesser degree by coeval intrusions, and locally within strata of the Takla Group. Epithermal mineralization is generally structurallycontrolled, and both vertical and lateral zoning in mineralization and alteration are common (Panteleyev, 1986).

Porphyry copper-gold mineralization at Kemess is spatially and genetically associated with Black Lake Suite intrusions which have intruded Takla Group volcanic and sedimentary rocks. High-sulphidation epithermal mineralization systems formed at ca. 201 – 182 Ma and coincide with district wide plutonism and porphyry copper +/- gold +/- molybdenum mineralization, whereas low-sulphidation systems formed later at ca. 192 – 162 Ma, commonly coinciding with the emplacement of felsic dykes and Toodoggone Formation volcanism (Duuring, et al., 2009).

Table 7-3: List of known Minfile Occurrences within the Property Boundary (ARIS, 2020)

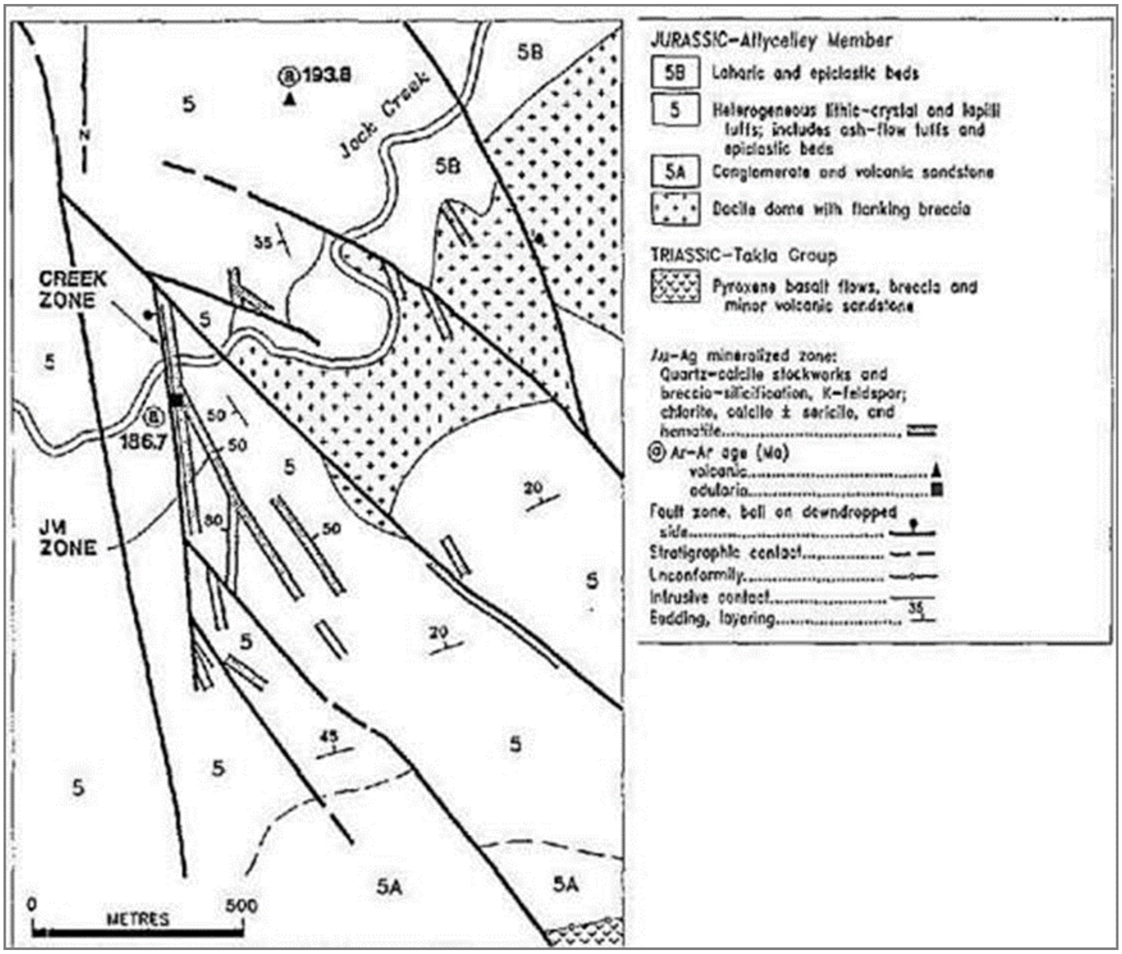
Minfile #	Official Name	Other Name(s)	Status	Ranked Commodity	Deposit Type	Character	Classification
094E 027	CASTLE MTN.	CASTLE 1-4	Showing	Silver; Zinc; Lead; Copper; Gold	Pb-Zn skarn	Stratabound *and/or* Podiform	Skarn *and/or* Replacement
094E 298	GORDO 5D	GORDO 5	Showing	Silver; Copper; Lead; Zinc	Polymetallic veins Ag-Pb-Zn+/-Au *and/or* Epithermal Au-Ag: low sulphidation	Vein	Hydrothermal *and/or* Epigenetic
094E 151	DAVE PRICE	ARTFUL DODGER	Prospect	Silver; Gold	Epithermal Au-Ag: low sulphidation	Vein *and/or* Breccia	Epithermal *and/or* Epigenetic
094E 145	SILVER REEF		Showing	Gold; Silver	Epithermal Au-Ag: low sulphidation	Vein *and/or* Breccia	Epigenetic *and/or* Epithermal
094E 072	PAU	MASON1	Prospect	Gold; Silver; Lead; Zinc; Copper	Epithermal Au-Ag: low sulphidation *and/or* Pb-Zn skarn	Vein *and/or* Breccia	Epithermal *and/or* Skarn
094E 235	JD-HAIRY	HAIRY	Unknown	Gold; Silver	Epithermal Au-Ag: low sulphidation	Vein	Epithermal *and/or* Epigenetic
094E 293	GORDO 2B	GORDO 2	Showing	Gold; Copper	Epithermal Au-Ag: low sulphidation	Vein	Epithermal *and/or* Hydrothermal
094E 294	GORDO 2C	GORDO 2	Showing	Gold; Silver; Copper	Epithermal Au-Ag: low sulphidation	Vein	Epigenetic *and/or* Hydrothermal
094E 295	GORDO 5A	GORDO 5	Showing	Gold; Silver; Copper	Epithermal Au-Ag: low sulphidation	Vein *and/or* Breccia	Hydrothermal *and/or* Epigenetic
094E 296	GORDO 5B	GORDO 5	Showing	Gold; Silver; Copper	Epithermal Au-Ag: low sulphidation	Vein	Hydrothermal *and/or* Epigenetic
094E 297	GORDO 5C	GORDO 5	Showing	Gold; Silver; Copper	Epithermal Au-Ag: low sulphidation	Vein	Hydrothermal *and/or* Epigeneitc
094E 026	BAKER	BAKER MINE	Past Producer	Gold; Silver; Copper; Zinc; Lead	Epithermal Au-Ag: low sulphidation	Vein	Epithermal
094E 050	SHASTA	SABLE	Past Producer	Gold; Silver; Zinc; Copper; Lead	Epithermal Au-Ag: low sulphidation	Stockwork *and/or* Breccia	Epithermal
094E 302	BLACK GOSSAN	CLANCEY	Showing	Gold; Silver; Lead; Zinc	Porphyry Cu +/- Mo +/- Au	Disseminated *and/or* Stockwork	Porphyry

7.3.1 Mineralization - Shasta

The Shasta deposit is an epithermal multiphase quartz-carbonate stockwork vein/breccia deposit containing significant silver and gold mineralization. It is spatially related to a dacitic dome of Lower to Middle Jurassic age. Mineralized zones are hosted by pyroclastic rocks that were deposited on the flank of the coeval dacite dome. The pyroclastic rocks, which unconformably overlie Stuhini Group volcanic rocks, belong to the Attycelley Member of the Upper Volcanic Cycle of the Toodoggone Formation (Smith, 2019).

The Shasta deposit comprises several tabular to curviplanar mineralized zones, of which the Creek and JM zones are the largest. The Creek zone strikes approximately N-S, has a known length of over 1 km and a variable true width average about 35m of mineralization considered significant to a potential open pit mine. The current modelled depth is about 300 m at a dip of about 50° west but is open at depth. The JM zone strikes at approximately 340° for over 1 km and width averaging about 25m dipping at about 80° east. Modelled depth is currently about 300m. These attitudes produce an inverted ``V'' geometry that plunges shallowly to the northwest. Rocks hosting the deposit are probably equivalent to the Attycelley Member of the Toodoggone Formation, described by Diakow (1993) as green to mauve lapilli ash tuffs and lapilli-block tuffs with minor ash-flows, lava flows and epiclastic rocks (Marsden & Moore, 1990; Smith A., 2019).

The structure of the area is dominated by north- to northwest-trending normal and/or dextral strike-slip faults, with trends like the mineralized zones; later northeast-trending faults truncate mineralization. It is likely that syn-volcanic normal faults have been remobilized by younger transpressional tectonic activity. In the mine area, the most prominent northerly trending structure is the Shasta fault, which strikes 180° and dips 50° west. This fault separates pyroclastic host rocks in the footwall from overlying epiclastic rocks in the hangingwall as shown in Figure 7-7. The Shasta fault displays post-mineralization movement, forming the hangingwall to the Creek zone near surface, but curving away from this zone at depth. In the JM zone, a late-stage carbonate vein (CB vein) forms the hangingwall to mineralization. The CB vein, which is essentially parallel to the JM zone, is semi-continuous over 200 m and varies from a 1.5 m wide vein to a 15 cm wide gouge- filled seam. Given that both the CB vein and the Shasta fault are parallel to zones of mineralization and form the hangingwall of the mineralized zones, it is likely that these structures were the result of post-mineralization movement on faults that initially controlled permeability and focused hydrothermal fluids (Thiersch et al., 1997; Smith A., 2019).



(Source: Diakow et al., 1993)

Figure 7-7: Geology and select Mineralization from the Shasta Deposit

Mineralized zones consist of cross-cutting, multi-stage quartz-calcite stockwork and breccia veins up to 30m wide, enclosed by salmon-pink alteration envelopes up to 100 m wide. Individual stockwork veins are massive to crudely banded and 1 to 75 cm thick. Breccia veins pinch and swell along strike and down dip within the stockwork zones, forming discontinuous, subparallel or en-echelon pods up to 15 m wide, and consist of hydrothermally altered wallrock and vein fragments cemented by quartz and/or calcite. They range from narrow single stage breccias of "jigsaw" type, to wider multi-stage breccias with repeatedly fractured and re-cemented fragments 1 to 100 cm in diameter.

Based on mineral assemblages described below, hydrothermal alteration associated with the deposit can be classified as propylitic, potassic and sericitic. Propylitic alteration is regional in extent, and adjacent to the deposit grades into potassic assemblages over several metres. Potassic alteration is directly associated with quartz stockworks and veins and forms broad pinkish haloes that surround stockwork zones. Sericite locally overprints potassic alteration. Propylitic alteration consists of an assemblage of chlorite, albite, epidote, calcite, and pyrite. Lapilli are generally chloritized, and plagioclase phenocrysts are replaced by fine- grained chlorite and epidote; however, primary textures are usually well preserved. Potassic alteration is characterized by replacement of plagioclase phenocrysts and lapilli by K-feldspar and minor calcite, and pervasive silicification of the groundmass.

Mass balance calculations based on whole rock geochemistry indicate that potassic alteration was accompanied by significant additions of K and Si, and a loss of Na (Thiersch 1997). The intensity of alteration is related directly to quartz vein density and, in areas of high vein density, secondary K-feldspar and quartz completely obscure primary textures. Epidote is present only in areas of weak potassic alteration and is associated primarily with late-stage fractures. Sericitic alteration occurs in minor, irregular patches throughout the deposit area, and appears to be associated with late-stage faulting and post- mineralization hydrothermal activity. Sericitic assemblages consist of fine-grained sericite, quartz and pyrite that replace the original mineralogy and generally destroy primary textures.

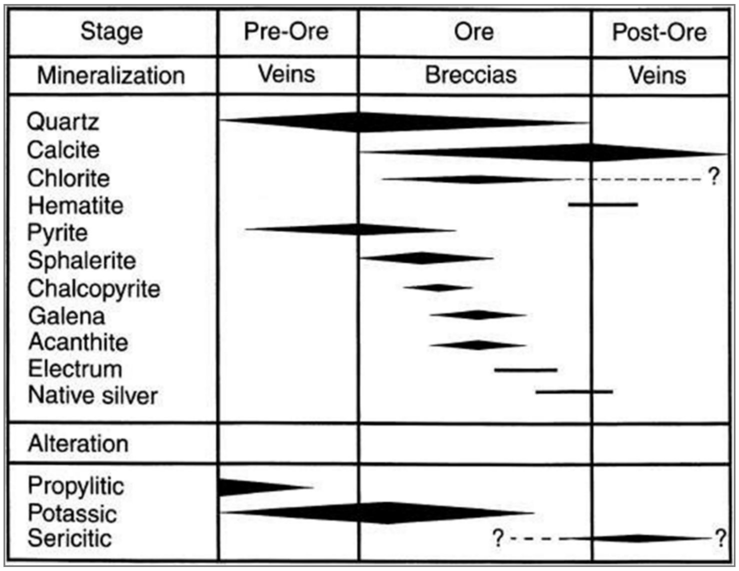
Veins and breccia cement consist mainly of quartz and calcite. Quartz is dominant at higher levels and in the periphery of stockwork zones, and calcite is more abundant at lower levels and in the central part of the breccia zones. Quartz is characteristically fine-grained and locally chalcedonic, whereas calcite tends to be relatively coarse-grained. Veins commonly display multistage crack and fill textures, although open space-filling textures are also observed. Vugs are rare but are more common in calcite veins than in quartz veins. Minor chlorite and hematite, and rare late-stage barite are also present in veins.

Chlorite occurs typically as fine selvages along vein walls or between calcite layers in banded veins, and is particularly abundant in high-grade breccias, where it forms up to 20% of the gangue. Hematite is restricted to post-ore calcite veins. Cross-cutting veins and breccias attest to multiple episodes of fracturing and infilling.

Quartz-only veins formed early, whereas calcite-only veins are always late in the sequence of alteration/mineralization. Multi-stage veins typically show evidence of sequential filling of the fracture, beginning with fine- grained quartz at the vein wall, followed by euhedral crystalline quartz, and medium- to coarse-grained calcite. At the transition from quartz to calcite, the two minerals are commonly intergrown, and were evidently co-precipitated.

Multiple stage breccias are composed typically of silicified wallrock and quartz vein fragments cemented by quartz and calcite, or calcite alone. In order of decreasing abundance, sulfide and precious metal minerals consist of pyrite, sphalerite, galena, chalcopyrite, acanthite, native silver and electrum. These minerals are typically fine-grained and occur with chlorite at vein margins and are conspicuous at the contact between quartz and calcite zones in mixed quartz-calcite veins and breccias. The sulfide and precious metal minerals constitute generally less than 5% of the rock within the ore zones. Nevertheless, high-grade breccias may contain >10% sulfides, and yield assays as high as 1,015 g/t Au, 8.8% Ag, and several percent Cu, Pb and Zn (Thiersch et al., 1997; Smith, 2019).

Paragenetic relationships described already can be represented by a sequence consisting of pre-mineralization, mineralization and post-mineralization stages as shown in Figure 7-8. In the pre-mineralization stage, euhedral pyrite was deposited in early quartz veins, with minor sphalerite and chalcopyrite. At the onset of deposition, veins were re-opened and/or brecciated, resulting in pyrite catalases. This was followed by deposition of most of the sphalerite and chalcopyrite, and subsequently galena, argentite, electrum, and native silver (in this order) precipitated in the spaces created by renewed fracturing. Quartz was the main gangue mineral deposited during the early ore stage and was joined by calcite at the peak of precious metal mineralization. In the post-mineralization stage, minor amounts of hematite were deposited in generally barren calcite veins (Smith, 2019).



(Source: Thiersch, 1997)

Figure 7-8: Paragenetic Sequence - Shasta Deposit Mineralization – Dave Price Prospect

The Dave Price prospect is located approximately 7.5 kilometres north-northwest of the Shasta mine site and is underlain by Toodoggone Formation volcanic rocks of the upper volcanic cycle. These consist of a heterogeneous mixture of green, grey, and mauve lapilli ash and lesser block tuff, with lesser interspersed ash flows and lava flows and interbedded epiclastics of the Attycelley Member and partly welded, crystal-rich dacitic ash flows of the conformably overlying Saunders Member (Smith, 2019).

Mineralization consists of a network of quartz-sericite-pyrite brecciated veins in an elliptical shaped alunite clay cap approximately six hundred metres in diameter. Earlier property work identified this clay cap as being part of a jarositic vent rim. Four separate zones of alteration have been identified and collectively comprise the prospect. Pyrite is the only metallic mineral identified within these alteration zones (Smith, 2019).

Two of these quartz breccia systems were sampled prior to trenching in 1987 and yielded assay values ranging from 0.1 to 1.7 grams per tonne silver and 0.005 to 0.045 gram per tonne gold (Gower, 1988). A trench, twelve metres long by two metres wide and averaging 1.5 metres deep, was blasted on one of these zones in 1987. Subsequent chip sampling across this trench yielded anomalous silver and gold. Sample DP-87-1001, a 20- centimetre chip sample from the east wall at the southern end of the trench, analyzed 1.71 grams per tonne gold, 215.9 grams per tonne silver and 0.005 per cent copper (Gower, 1988). Sample material consisted of bluish silica with jarosite, pyrite and altered crystal tuff fragments (Smith, 2019).

7.3.2 Mineralization – Greater Shasta: Shasta North

The Shasta North Exploration Target (see TDG News Release January 25, 2023) lies on the north side of Jock Creek and is opposite, and likely along strike of, the Cody Lee Target Area (see below) on the south side of Jock Creek. Geochemical support for the Shasta North Exploration Target consists of a large 350 m x 400 m Au in soil geochemistry anomaly overlying an area of intense silicification and quartz stockworks and heavy iron-oxide staining in outcrops along the base of a steep slope to the north. The large equant soil anomaly contains several linear north-

northwest striking 'fingers' with higher Au concentrations that potentially represent structures and/or more intense alteration zones. The westernmost 'finger' corresponds to the southern extent of the strong geophysical features present at the Newberry Target and just northeast of the JM Zone in the main Shasta Deposit. Two historical small diameter and only partially assayed shallow drillholes were drilled into portions of this soil anomaly and intersected weak precious metals mineralization but may have been oriented inappropriately to evaluate the volcanic stratigraphy and structures adequately. The widespread and intense silicification in this area is somewhat different than alteration elsewhere in the project area and may represent a lithocap over a larger hydrothermal system.
The best-defined portions of the Shasta North Exploration Target have approximate dimensions of 75 m wide, 600-900 m along strike and is exposed over 50-75 m vertical extent.

7.3.3 Mineralization – Greater Shasta: Cody Lee

The Cody Lee Exploration Target (see TDG News Release January 25, 2023) is supported by both surficial soil geochemical sampling results and several shallow, short, small diameter drillholes completed by previous operators. The zone lies adjacent to a 350 m x 350 m Au in soil anomaly and is poorly exposed along a steep slope and roadcuts through glacial overburden. Several drillholes outlined and only partially evaluated at least three north-northwest striking quartz-carbonate vein and stockwork zones coincident with a historical soil anomaly and mapped alteration along the roadcuts and in old trenches.
The historical drill data is limited, and assaying is spotty and the true orientation of the source of the Cody Lee soil anomaly is unknown. Mapping along the feature suggests it strikes north-northwest and is likely steeply dipping to the north. Based on the soils, geophysical anomalies, and available drill data, the best-defined portions of the Cody Lee Exploration Target have approximate dimensions of 100-150 m in width, 300-450 m along strike and is exposed over 100-150 m of vertical extent.

7.3.4 Mineralization – Greater Shasta: Hood/Fisher

Geochemical support for the Fisher Exploration Target (see TDG News Release January 25, 2023) consists of a large linear Au-in-soil geochemical anomaly up to approximately 90 m wide x 800 m long, which is open to the north and south. The northern extent merges with and intersects a nearly perpendicular up to 120 m wide x 800-1,000 m long west-southwest trending Au-in-soil anomaly which has been named the 'Hood Exploration Target'.

The Fisher Exploration Target is coincident with a linear airborne magnetic susceptibility low (1.1 km long and 200 m wide) that likely reflects the destruction of magnetite and other primary mafic minerals by hydrothermal fluids associated with the vein systems and stockworks present.

Approximately 250 m of the strike length of the coincident soil and geophysical features corresponds to two parallel north-northwest trending, southwest dipping mineralized zones present in previous historical small diameter scout drilling. The lower lens has an apparent true thickness of approximately 25-45 m and the upper lens approximately 10-15 m and can be traced down dip approximately 250 m. These zones appear to dip approximately 45 degrees or less to the southwest and define a 250 m long segment within the trace of the longer 850 m combined soils and geophysical feature. The drilling to date at the Fisher Exploration Target did not adequately evaluate the soil geochemistry and geophysical anomaly nor fully define its geometry but based on available data, the Hood Exploration Target is 30-40 m wide, extends 250-800 m along strike and extends up to 125 m vertically.

Airborne geophysical surveys, as well as 2022 ground magnetics and VLF survey work, suggest the Hood Exploration Target feature may continue to the west-southwest and may intersect the JM Zone within the Shasta Deposit based on 2022 field reconnaissance and interpretation of drill data at the Shasta mineral resource area.

The bedrock source and true strike and dip of the source of soil anomaly at the Hood Exploration Target is unknown. Mapping along the feature suggests there is a fault zone parallel to, and likely coincident with, the soil anomaly and is likely steeply dipping to the north, or potentially vertical. Based on these results, the target may range from 30-40 m in width, extend over a strike length of approximately 900 m and could extend down dip for 100-150 m.

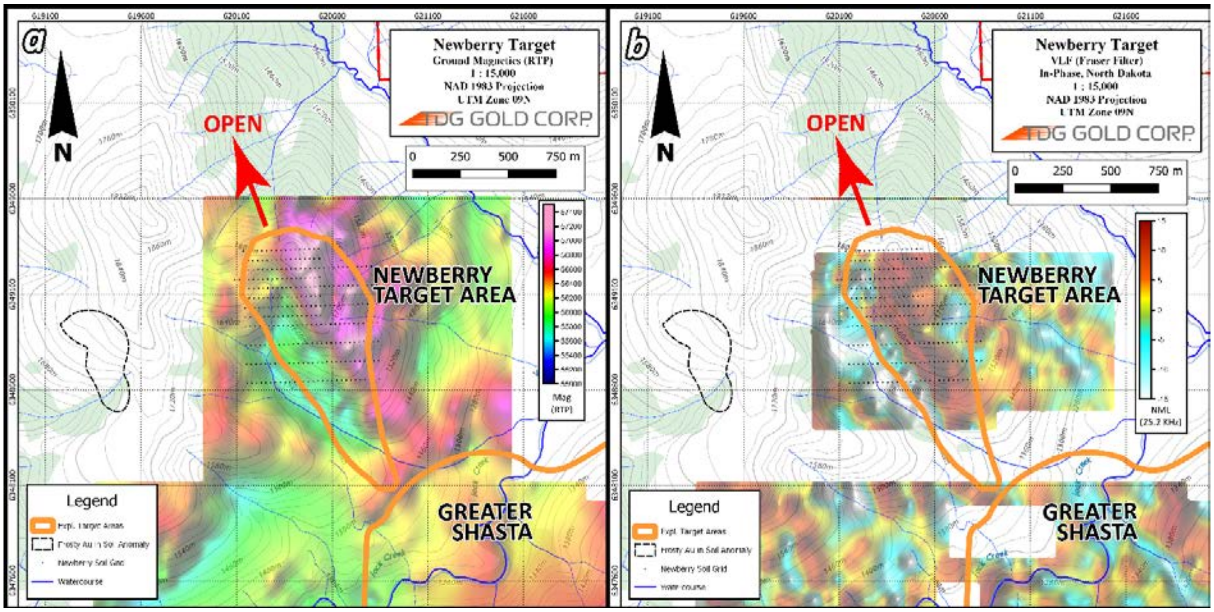
7.3.5 Mineralization - Newberry

The Newberry prospect is a large multi-element geochemical and geophysical anomaly associated with moderate to intense alteration northwest of and along strike from the Greater Shasta exploration target zone (See TDG News Release January 17, 2023). The prospect was first identified in the early 1970s during follow-up of anomalous precious metals in stream sediment sampling and underwent sporadic prospecting by Shasta Mines and Oil Ltd., later International Shasta Oil and later by Newmont in 1983-84, and Esso Minerals in 1987. Shasta Oil and Newmont completed grid sampling that included collection of 74 and 202 conventional -80 mesh soil samples, respectively. Both groups completed ground magnetic and Very Low Frequency ("VLF") Electromagnetic ("EM") surveys. Newmont also discovered the Shasta deposit during the same field program. The property was recommended for drilling but was caught up in litigation between operators for many years, and therefore no further work at Newberry was completed. The Shasta mining lease and surrounding mineral claims were subsequently consolidated – removing this impediment to exploration. TDG acquired the consolidated tenures in December 2020.

The area was historically surveyed with conventional EM-16R VLF instruments and ground magnetometers, which reportedly outlined north-northwest trending linear trends of high apparent conductivity and high apparent resistivity, but the raw data has not been recovered to date. TDG applied the same exploration approach used by Newmont consisting of a soil geochemistry in combination with ground magnetics and VLF surveying.

The survey area was covered by a high precision airborne VTEM, aeromagnetic and radiometric survey in 2017 which delineated several linear geophysical features in the target area including a pronounced linear magnetic susceptibility low coincident with the Creek and JM zones within the Shasta Deposit along strike to the south and continuous to the north to the Newberry prospect. This magnetic susceptibility low likely reflects destruction of magnetite, common in the volcanic and epiclastic rocks in the area, and alteration by hydrothermal fluids and represents the alteration halo around mineralized zones.

TDG conducted ground magnetic and VLF surveys in 2022 and outlined a sharp magnetic gradient from ground magnetics (Figure 7-9a) and conductive feature from Fraser Filtered VLF EM surveys (Figure 7-9b) that corresponds to the soil and alteration anomaly and suggest the feature, presumably the expression of the West Fault mapped by Marsden and Moore (1990), and may be associated with mineralization and may extend along strike to the NW and SE for considerable distances beyond the soil grid limits.



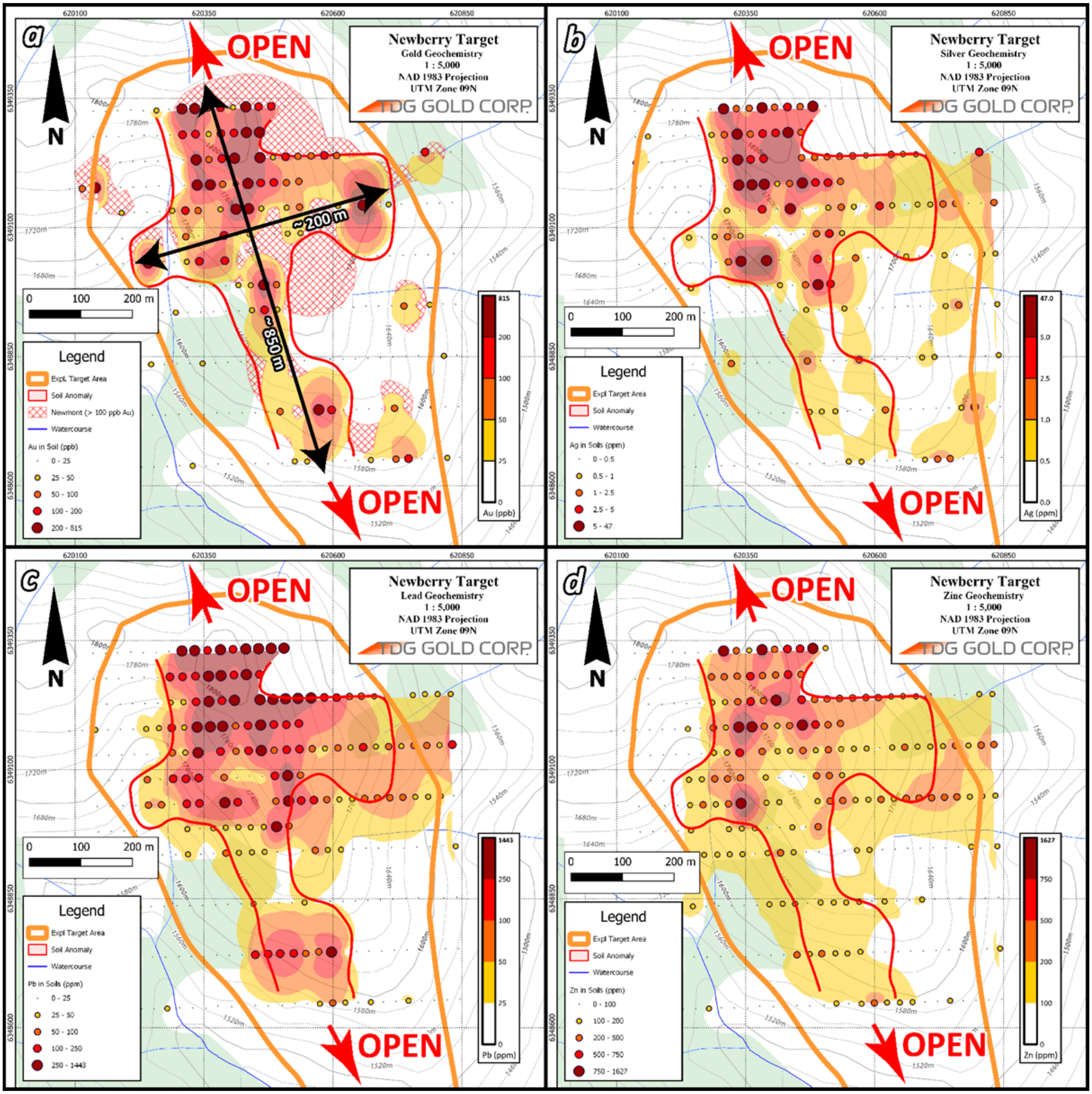
(Source: TDG Gold, 2023)

Figure 7-9: 2022 Geophysical Results: a) Reduced to Pole (RTP) Ground Magnetics & b) Fraser Filtered VLF (25.2 KHz – North Dakota)

The property has been the subject of reconnaissance scale geologic mapping, but outcrop is sparse and discontinuous. Several faults have been mapped across the property that parallel or overlap with soil geochemical and geophysical anomalies. Grid soil sampling by previous operators has delineated an open-ended, oblong, NNW trending multi-element gold - + silver - + lead + zinc anomaly that ranges from 100 m wide at its southern end to 350 m in width at its northern end (Figure 7-10). The area of anomalous metals is at least 850 m long and extends to the limits of the existing grid and is open in along strike. Metal enrichments from soils within the anomaly are significantly higher than the overall grid background levels (Table 7-4). Five grab, talus and outcrop rock samples collected by previous operators from within the soil anomaly and area of alteration average 1.6 g/t Au, 66 g/t Ag, 217 ppm Cu, 0.21 % Pb and 0.43 % Zn. Steep slopes suggest some downslope dispersion of the anomalous soils from their likely source areas near the crest of the hill.

As noted above, Marsden and Moore (1990) mapped a north-northwest trending down to the east fault across the area, which they named the West Fault, that is coincident with the soil anomaly, outcropping alteration, and mineralization. It appears to trend towards the trace of the Shasta Fault, but glacial and alluvial cover in the intervening area makes accurate mapping from surficial exposures difficult and it may be a separate structure and the sense of displacement appears opposite than the main Shasta Fault. In the area of the Newberry prospect, rocks that are poorly exposed west of the fault include a complex sequence of quartz-free biotite-hornblende-feldspar-phyric volcanic breccia and spherulitic lapilli tuffs. Rocks exposed east of the fault consist of an interpreted younger package of grey dacite known as the Saunders Creek Dacite that consists of dark grey lapilli tuffs containing quartz, biotite, hornblende, and feldspar crystals, moderately flattened feldspar-phyric lapilli and intrusive fragments that are contained both within the lapilli and the matrix. The matrix consists of flattened and welded glass shards. Both these units are texturally and compositionally like those that occur in the hanging wall and footwall to the Shasta Deposit, 2 km to the south-southeast, but are interpreted to be higher and younger in the volcanic stratigraphic section by Marsden and later operators.

Mapped alteration around the prospect consists of calcite and quartz cemented breccias, quartz flooding and salmon-pink potassium feldspar replacement of the rock matrix, crystals, and lithic fragments. Extensive iron oxides are present producing a small gossanous area near the top of the hill and the iron oxides appear to be the results of weathering of iron-rich lithologies and weathered sulfides minerals and the quartz-potassium feldspar flooding patterns mimic the trace of the soil anomalies and iron oxide occurrences. Sulfides reported from hand specimens include pyrite, sphalerite, galena minor chalcopyrite and their oxidized equivalents.



(Source: TDG Gold, 2023)

Figure 7-10: Newberry Soil Geochemistry: a) Au in Soil, b) Ag in Soil, c) Pb in Soil &, d) Zn in Soil.

Table 7-4: Newmont Soil Grid Statistics

Element	Minimum (Concentration)	Maximum (Concentration)	Grid Mean (Concentration)	Anomalous Zone Mean (Concentration)
Au (ppb)	1	815	47	128
Ag (ppm)	0.1	47	1	3
Pb (ppm)	2	1443	94	246
Zn (ppm)	28	1627	176	361

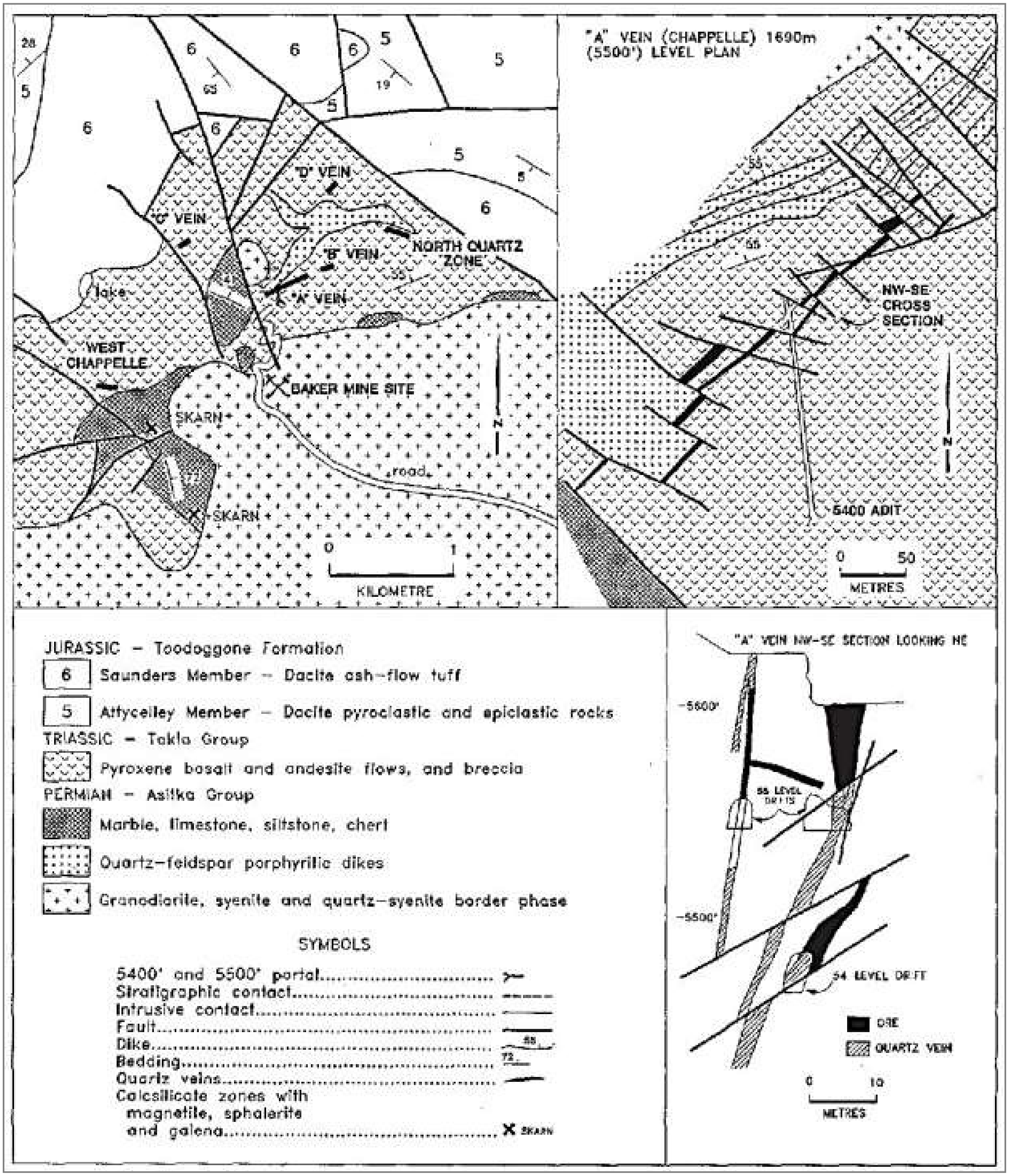
7.3.6 Mineralization - Baker

Previously described propylitic and sericitic alteration on the property has weathered areas to a gossanous rust color. An assemblage of quartz-sericite-chlorite-pyrite gives way to an argillic clay assemblage proximal to veins. Milky quartz veins are the principal host to economic mineralization, and commonly exhibit polyphase breccia, and vuggy textures. Gold-silver mineralization is associated with pyrite, sphalerite, galena, and chalcopyrite, with precious metal mineralization in the form of electrum and acanthite (Smith, 2019).

Mineralization occurs within steeply dipping structures on the property, commonly with a northeast strike (Figure 7-11). The hypabyssal hornblende-feldspar porphyry has exploited these structures, and silicification with or without mineralization, occurs along these intrusive contacts. Wall rocks are variably silicified and altered to sericite, clay minerals and carbonate with intensity increasing with proximity to vein structures (Smith, 2019).

The main production occurring on the Chappelle Group claims was at the Dupont/Baker ‘A’ vein, a fault- controlled quartz vein system composed of two or more subparallel veins which strike northeast and dip from 80 degrees southeast to approximately 70 degrees northwest. The quartz vein system has been traced for a strike length of 435 metres and across a width varying from 10 to 70 metres. Individual veins within the system vary from 0.5 to 10 metres in width. Drilling indicated that the vein system persists for at least 150 metres vertically from surface.

The A vein system is cut by numerous cross faults which offset portions of individual veins, commonly for 1 to 15 metres and in one instance, for an inferred plan offset of thirty metres in a small graben structure. Most of the faults are northwest striking normal and reverse faults dipping to the northeast, and dip-slip strike faults dipping at shallow angles, generally to the southeast. Wallrocks, particularly in the hangingwall, are badly broken. The quartz vein is broken into segments less than 30 metres in length. A variety of quartz vein textures and crosscutting relationships indicate a complex history of veining with multiple depositional stages. Much of the quartz is massive and drusy, whereas a distinctive earlier ribboned variety is common, particularly near vein contacts. The quartz varies in colour from white to grey to dark grey (Smith, 2019).



(Diakow et al., 1993)

Figure 7-11: Geology and select Mineralized Zones - Dupont/Baker 'A' Mine

Gold-silver values are generally associated with highly fractured and occasionally brecciated white to grey, vuggy quartz veins containing 1 to 10 per cent pyrite, and to a lesser extent occur in silicified wallrock. Xenoliths of altered andesite and dacite frequently occur in the veins. The only other common gangue mineral is carbonate, which fills fractures (Smith, 2019).

Higher grade mineralization is associated with grey quartz, which occasionally contains visible argentite, commonly associated with disseminated grains of pyrite, chalcopyrite, and very minor sphalerite. High grade gold-silver values occasionally occur in narrow (1 to 5 centimetres) crosscutting silicified shears. Visible gold is rare. Significant precious metals were found to be contained in a flat-lying shoot two hundred metres in length by 3 metres wide and extending to a depth of 40 metres below surface (Smith, 2019).

Polished section, x-ray diffraction, and electron microprobe studies indicate that pyrite is the dominant mineral, constituting about 90% of sulphide mineralization. It occurs as euhedral grains and includes blebs of chalcopyrite, electrum, argentite, bornite and sphalerite. Sphalerite constitutes about 3% of the sulphides and is commonly enclosed in pyrite. Argentite is commonly interstitial between pyrite, chalcopyrite, and gold. Electrum is frequently associated with argentite. The form of occurrence of gold is like that of argentite and electrum. Bornite occurs as blebs in pyrite or with chalcopyrite. Galena occurs as rare discrete disseminated grains. Chalcocite forms thick coatings on chalcopyrite and covellite forms a thin coating on both chalcocite and chalcopyrite in the oxidized part of the A vein (Smith, 2019).

7.3.7 Mineralization - Pau

The Pau prospect is located approximately 2.5 kilometres southwest of the former Baker mine (094E 026) and is underlain by the dominant lithologies of augite feldspar phyric andesitic flows of the Takla Group and feldspar porphyry of the Toodoggone Formation. Other lithologies cropping out in the vicinity include limestone and marble of the Asitka Group, and porphyritic andesitic crystal and lithic tuffs and breccias. Structurally the units in the area are intensively disrupted by steep dipping northeast-striking faults (Smith, 2019).

Mineralization consists of galena, tetrahedrite, argentite, chalcopyrite and sphalerite hosted in quartz veins, breccias and silicification forming a zone that has been traced over a strike length more than eighty metres with apparent surface widths between 4 and 12 metres. Minor amounts of chalcedony are found in some quartz veins. The Asitka Group limestone is locally metamorphosed to a pale green actinolite-bearing calcsilicate skarn. Skarn mineralization includes galena, chalcopyrite, sphalerite, and pyrite. Most of both types of mineralization occur near the intrusive contact (Smith, 2019).

Property exploration consisting of soil, silt and rock geochemistry, geological mapping and prospecting, and ground magnetic surveys by Cheni Mines from 1980 to 1982, led to the discovery of a zone of intense quartz veining and silicification. This zone became known as the Black Pete zone. Hand trenching was completed over the zone and assay values up to 3.77 grams per tonne gold and 298.28 grams per tonne silver across one metre were obtained (Reid, 1987). In 1985 and 1986, bulldozer and backhoe trenches were dug. Assay values up to
164.9 grams per tonne gold and 2694.85 grams per tonne silver over three metres were obtained (Reid, 1987; Smith A., 2019).

In 1987, diamond drilling was undertaken to determine the continuity at depth of gold and silver mineralization in quartz veins, breccias and silicified zones. Core from eight drillholes, totaling 1122.13 metres, was intensely fractured indicating the area is strongly faulted. Continuity of ore intersections between drillholes was also poor. The best assay values were from drillhole 87PM6. A 0.5-metre intersection from 98 to 98.5 metres analyzed 3.08 grams per tonne gold and 1165.7 grams per tonne silver (Reid, 1987). These values were from within a broader 21.6-metre-wide anomalous zone yielding weighted averages of 100.46 grams per tonne silver and 0.31 gram per tonne gold (Reid, 1987). The upper 10.6 metres consisted of a volcanic breccia with a density of irregular quartz stringers followed by a quartz vein ten metres wide (Smith, 2019).

Significant but sporadic gold mineralization was intersected in all other drillholes. Drillhole 87PM3 intersected a 0.72-metre-wide quartz vein, from 27.53 to 28.5 metres, which yielded 600.9 grams per tonne silver and 2.74 grams per tonne gold (Reid, 1987). Drillhole 87PM4 intersected a 0.75-metre quartz vein which analyzed 157.7 grams per tonne silver and 0.343 gram per tonne gold (Reid, 1987). An 8.92-metre-wide quartz vein intersected in drillhole 87PM1 analyzed 123.42 grams per tonne silver and 0.343 gram per tonne gold over a 1-metre interval (Reid, 1987; Smith A., 2019).

7.3.8 Mineralization - Castle Mountain

The Castle Mountain showing is located approximately 1.2 kilometres southwest of the former Baker mine (094E 026) and is underlain by limestone of the Asitka Group and volcanic rocks of the Takla Group. Dark green augite plagioclase phyric andesite to basalt flows with lesser interbedded siltstone, tuffaceous sediments and chert comprise lithologies of the Takla Group. These lithologies have in turn been intruded by Early Jurassic granodiorite to quartz monzonite of the Black Lake stock (Smith, 2019).

The intrusion of the Black Lake stock has led to the development of skarn mineralization at the Castle Mountain showing, which was first recognized and explored by Cominco in the early 1930s. Sphalerite, galena, chalcopyrite, magnetite, pyrite and pyrrhotite mineralization is sporadically distributed in pods rarely more than 1 to 2 metres long but are traceable over a strike length of 304 to 426 metres in a zone up to 3 metres thick.

Associated skarn mineralogy includes green amphibole, garnet, and epidote. Silver content is erratic and ranges up to 1714.28 grams per tonne but averages closer to 68.57 to 102.85 grams per tonne; gold values are generally low. The highest values from assays were 9.25 grams per tonne gold, 1904.91 grams per tonne silver and 76.7 per cent lead from a small skarn lens on the Castle Mountain 3 Crown grant. Another small lens on the Castle Mountain 4 Crown grant yielded trace gold, 47.99 grams per tonne silver, 32.5 per cent zinc, 3.9 per cent lead and 0.79 per cent copper (Floyd & White, 1986; Smith A., 2019).

7.3.9 Silver Reef

The Silver Reef showing is located approximately one kilometre southeast of the Shasta mine site and is underlain by the Attycelley and overlying Saunders members of the Toodoggone Formation volcanics. The Attycelley Member (a pyroclastic series) unconformably overlies pyroxene feldspar phyric basalt flows and breccias of the Takla Group. To the north of the Silver Reef showing, the Attycelley Member consists of dacitic feldspar quartz crystal tuffs, chloritic and heterolithic lapilli tuffs, and an underlying feldspar-quartz-biotite porphyry flow. These units all contain characteristic orange-weathering plagioclase feldspars. The Saunders Member (an epivolcaniclastic series) consists of green to maroon feldspar phyric tuffs, heterolithic agglomerates, lahars, and ash tuffs.

Locally the volcanic rocks of the Toodoggone Formation are feldspathized and silicified in quartz vein and brecciated vein stockwork zones. These zones weather a distinctive pink-white and are frequently accompanied by limonite and jarosite staining. Composition of these veins is 30 to 70 per cent feldspar in a dark green matrix containing small vitreous quartz crystals and finely disseminated pyrite. Brecciated zones within veins contain elongate drusy cavities 2 to 10 millimetres wide. Manganese oxide staining is common on quartz crystals.

Extensive silicification is common in country rocks adjacent to breccia zones (Smith, 2019).
The main exposure, in a steep bluff on trend with the Shasta mine, strikes approximately three hundred degrees with an easterly dip of 50 to 90 degrees. Here the altered zone is 1 to 3 metres wide, consisting mainly of silicified stockwork bands in unaltered fresh volcanics. Mineralization is minimal in veins from this zone and samples assayed negligible precious and base metals. Sample 32130 yielded the highest precious metals values; 1.028 grams per tonne silver and 0.27 gram per tonne gold (Fairbank & Croft, 1981; Smith A., 2019).

Two distinct zones occur 450 and 700 metres east of the main zone, respectively. These zones trend northwestward and dip steeply northeast. One band was traced for about one hundred metres along strike. Variable amounts of pyrite (up to 15 per cent) occur in veins and jarosite alteration is common. Four small trenches were blasted to uncover fresh vein material. Assay results from these trenches were up to 0.04 per cent lead, 0.02 per cent zinc, 0.686 gram per tonne silver and 0.343 gram per tonne gold (Fairbank & Croft, 1981; Smith A., 2019).

Silicification in the northeast zone is limited. Vein material assayed only trace amounts of base and precious metals (Assessment Report 9886). Assay results from soil samples at this zone indicated strong lead, zinc, silver, and gold anomalies, suggesting the possibility of mineralized vein material nearby (Fairbank & Croft, 1981; Smith A., 2019).

7.3.10 Mineralization - JD-Hairy

The JD-Hairy was discovered in 1995 by AGC Americas Gold when a grab sample taken from quartz veins in silicified intermediate to mafic volcanics analysed 18.5 grams per tonne gold and 143.2 grams per tonne silver (Krause, 1996). The area is underlain by volcanic rocks (dacite?) of the Upper Triassic Stuhini (Takla) Group.

Rocks of the Lower Jurassic Toodoggone Formation, Hazelton Group occur nearby to the south (ARIS, 2020).

In 1995, AGC Americas Gold Corp acquired six new claims totaling 120 units which tie onto the eastern boundary of their JD property (see 094E 171). This initial program was set up to sample gossans or zones of alteration seen on the property. Work was largely restricted to the Hairy in the north and Spur in the south. It resulted in the discovery of the JD-Hairy showing (094E 235). Work on the Spur occurred around the Falcon A2 (094E 185) and Falcon A1 (094E 184) (ARIS, 2020).

In 2004, Stealth Minerals held the Gordo Group of claims which covered the Joanna occurrences and the Falcon occurrences (094E 185 and 185) to the south and Oxide Peak occurrences (094E 179, 180 and 181) to the west. Stealth collected 854 rock samples for analysis and 274 samples were taken PIMA rock spectroscopy for alteration identification (Kuran & Barrios, 2005). Ten silt and thirty soil samples were also taken (ARIS, 2020).

Refer to the Joanna West showing (094E 175) for details of the Joanna work History. The JD-Hairy appears to be within the northern boundary of the Joanna property that was worked on in the 1980s (ARIS, 2020).

7.3.11 Mineralization - Gordo 2B-2C, 5A-D

Mt. Gordonia is located within the far north of the Oxide Peak claim group and is a collection of copper showings. The occurrences within the Property boundary include Gordo 2B (MinFile #: 094E 293), Gordo 2C (MinFile #: 094E 294), Gordo 5A (MinFile #: 094E 295), Gordo 5B (MinFile #: 094E 296), Gordo 5C (MinFile #: 094E 297), Gordo 5D (MinFile #: 094E 298).

The showings are similar in geology, notably underlain by a thick sequence of volcanic rocks consisting of green and purple feldspar porphyritic andesite flows, cherty andesites and porphyritic andesitic pyroclastics, ranging from tuff to agglomerate. Outcrops consisting of pink monzonite dykes and small stocks are scattered around the occurrence and are related to Early to Middle Jurassic plutons to the northwest and south. Mineralization is commonly associated with large gossanous areas that can be traced for several tens of metres across the ridge.

Mineralization consisting of chalcopyrite, galena, sphalerite, and pyrite occur in quartz veins. Alteration consists of associated envelopes of silicification, carbonate and argillic alteration, and oxidization and leaching (Burgoyne, 1974). The Gordo 2C area is underlain by dacitic rock of the Upper Triassic Stuhini (Takla) Group.

Sample (#192822) of quartz vein with pyrite and chalcopyrite assayed 0.84 gram per tonne gold, 21.3 grams per tonne silver and greater than 1 per cent copper (Kuran & Barrios, 2005).

7.4 Black Gossan

The Black Gossan occurs in a fault block of Upper Triassic Takla (Stuhini) Group andesite to basalt. To the northeast and southwest, the Upper Triassic Takla rocks are in fault contact with Toodoggone formation volcanics. Strong propylitic alteration is pervasive, with argillic alteration assemblages on fault surfaces. Strong oxidized pyritic and gossanous alteration forms a prominent supergene cap over the target (Smith, 2019).

Drilling in 2002 yielded only low values with one of the best being 0.14 gram per tonne gold and 2.2 grams per tonne silver and 88 parts per million copper (Craft, 2003). This 1.83 metre drill interval contained pyritic veins with up to 8 per cent pyrite (Smith, 2019).

It is reported (Craft, 2007) that to the north of the Black Gossan zone, is the Clancey showing which consists of vuggy zinc-lead quartz veinlets, in weakly propylitic Takla volcanics. This association of zinc-lead veinlets distal to copper-gold porphyry systems has been established at the nearby Kemess South Mine and is thought to support the interpretation of the Black Gossan being a porphyry system (Smith, 2019).

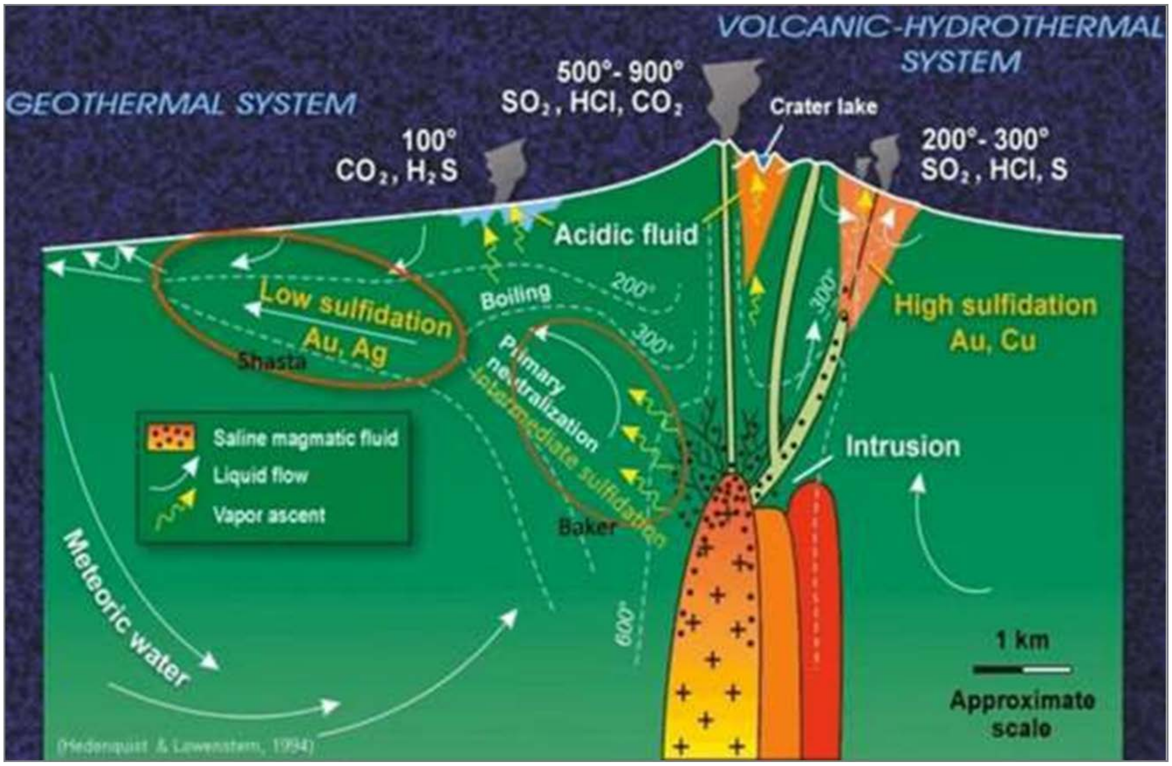
8 Deposit Types

The Toodoggone district within the Stikine terrane of northeastern British Columbia is described as one of the few districts in the world which host a significant number of preserved Early Jurassic high- and low-sulphidation epithermal-type deposits (Bouzari, Bissig, Hart, & Leal-Mejia, 2019). These deposits are described by Bouzari et al. (2019) as “a thick (>2km) succession of Early Jurassic sub-aerial andesitic and dacitic volcanic rocks of Toodoggone Formation. These and underlying strata were probably covered by thick successions (>4 km) of Jurassic and Cretaceous Bowser and Sustut basin clastic strata that protected and facilitated preservation of the epithermal deposits during subsequent, post-Late Cretaceous uplift.”

Deposit types in the Toodoggone region genetically links the epithermal Au-Ag and Cu-Au porphyry mineralization to Early Jurassic volcanic and intrusive activity in an extensional setting (Diakow, Panteleyev, & Schroeter, 1993).

The descriptions of deposit types in this section are based, in large measure, on the B.C. Geological Survey’s Bulletin 86, titled “Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia” (Diakow et al., 1991 & 1993; Duuring et al., 2009; Smith A., 2019). Figure 8-1 displays a cross-section of the deposit types and their zonal relationships for Baker and Shasta.

Porphyry copper and epithermal gold-silver deposits typically form in the upper parts of large magmatic- hydrothermal systems that result from fluids generated from the crystallization of intermediate composition calc-alkalic igneous magmas in island and continental margin arcs (Sillitoe, 2010; Bouzari et al., 2019).



(Source: *Hedenquist & Lowenstern, 1994)*

Figure 8-1: Schematic Epithermal Mineralization Relative to Sub- Volcanic Intrusions

Sections 8.1 – 8.5.1 are summarized from Smith (2019).

8.1 Epithermal – Low Sulphidation

Low sulphidation epithermal gold-silver deposits are also called adularia-sericite or quartz-adularia types which form in high-level (epizonal) to near-surface environments. They consist of quartz veins, stockworks and breccias, commonly exhibiting open-space filling textures and are associated with volcanic-related hydrothermal or geothermal systems. The deposits occur within volcanic island and continent-margin magmatic arcs and/or continental volcanic fields in an extensional structural setting.

The depth of formation of these high-level deposits is from surface (in hot springs systems) to about 1 km below surface along regional-scale fracture zones related to grabens, resurgent calderas, flow-dome complexes and rarely, maar diatremes. Settings also include extensional structures (normal and splay faults, ladder veins and cymoid loops, etc.) in volcanic fields; locally graben or caldera-fill clastic rocks are present. High-level, subvolcanic stocks and/or dykes and pebble breccia diatremes occur in some areas. Locally resurgent or domal structures are present and are related to underlying intrusive bodies.

The age of this type of epithermal mineralization varies. Tertiary deposits are most abundant world-wide but in B.C. Jurassic deposits are important. Mineralization appears closely related in time to the host volcanic rocks but invariably it is slightly younger in age.

Silicification of host rocks is extensive, occurring as multiple generations of quartz and chalcedony commonly accompanied by adularia and calcite. Pervasive silicification in vein envelopes is flanked by sericite-illite-kaolinite assemblages. Intermediate argillic alteration (kaolinite-illite- montmorillonite [smectite]) forms adjacent to some veins and advanced argillic alteration (kaolinite-alunite) may form at the tops of mineralized zones. Propylitic alteration dominates at depth and peripherally. Weathered outcrops are often characterized by resistant quartz +/- alunite 'ledges' flanked by extensive bleached, clay-altered zones with supergene alunite, jarosite, and limonite.

8.2 Epithermal – Intermediate Sulphidation

Most intermediate sulphidation epithermal veins show a metal signature comprising gold and silver, with lesser zinc, lead, and copper. Total sulphide content typically ranges from 5 to >20% (by volume) with pyrite > sphalerite > galena > chalcopyrite (if present). Sphalerite is usually vertically zoned from black, iron-rich (Fe>Zn), higher temperature species at depth, through brown and red, to yellow, iron-poor (Zn>Fe), low temperature species at shallower levels. Tellurides may be common in some systems—selenides are uncommon. Manganese is often present (usually in association with carbonate gangue). Tetrahedrite-tennantite may be present.

Quartz and carbonate are the dominant gangue minerals (the commercially worth-are often less minerals within a mineral deposit that surround, or are intergrown with, the minerals of economic interest) in intermediate sulphidation epithermal systems. Barite, gypsum, anhydrite and manganiferous silicates may be locally important. Pyrite is the dominant sulphide gangue.

Multiple episodes of quartz deposition are the norm as evidenced by cross-cutting quartz phases and varied quartz textures. Vein-filling crustiform and comb quartz are common which reflects the higher temperature of formation as compared to low sulphidation quartz veins. Equant space-filling, saccharoidal, fine crystalline and open space quartz flooding may be present. Colloform banded quartz (ginguro texture) and other boiling textures typical of low sulphidation epithermal systems are generally not present.

Vein-filling carbonate is the dominant gangue in the upper parts of intermediate sulphidation epithermal veins. The Ca/Mg carbonate end members (calcite, Mg-calcite, and dolomite) form at the deepest levels, whilst Fe/Mn carbonate end members (siderite and rhodocrosite) form at shallower levels under cooler conditions.

Carbonates may form fine crustiform bands which alternate with thin quartz-rich carbonate bands, especially within the transition zone from quartz-dominant to carbonate-dominant phases. Blocky and massive vein-filling carbonate is common. Barite, if present, generally forms vein fill in the uppermost parts of the system. Gypsum and anyhydrite may be present as late phases in the uppermost parts of intermediate sulphidation epithermal systems.

The majority of intermediate sulphidation deposits form steeply dipping veins which may contain bonanza gold grade shoots (especially within quartz-base metal sulphide veins and breccias). Within a given district, multiple veins are common and typically form sub-parallel to anastomosing vein swarms, as is typical within the Baguio District, Phillipines. Vein breccias and larger breccia bodies (e.g. the Rosia

Montana Deposit: Lexa, 1999) may be developed. Vein breccias especially may be high grade even within narrow vein deposits.

Stockworks are common in the hangingwall of deposits—they range from narrow selvages that extend metres from veins and silicified structures to extensive stockworks that may be of sufficient density and grade to justify an open pitable bulk tonnage mine. Disseminated mineralization is less common but important in some deposits such as Creede in the USA and San Cristóbal in Bolivia (Wilson & Motton, 2015).

Alteration minerals in intermediate sulphidation epithermal gold systems are zoned in a similar manner to thatof gangue mineralogy. Proximal to mineralization quartz-sericite dominates at depth whilst carbonate dominates in the shallower parts of the system. Pyrite is ubiquitous. Further from mineralization illite-smectitepasses outwards to epidote-chlorite (prophylitic).

Intermediate sulphidation systems are generally distinctly zoned. Ores tend to be dominated by quartz-pyrite- base metal sulphides at depth and become more carbonate rich at the expense of these phases at progressively shallower levels. Carbonate deposition may also postdate and cross- cut earlier quartz sulphide phases as the fluid system cools and collapses. Barite, gypsum, and anhydrite, if present, are formed in the uppermost parts of the system and/or are the latest depositional event.

Gold mineralization predominantly develops in association with base metal sulfide deposition. Whilst most base metal sulphides are deposited with quartz, minor base metal sulphide mineralization extends into the carbonate event in many deposits, as evidenced in the Baguio District, Philippines, where carbonate veins may be significantly gold mineralized (especially where manganoan carbonates are present, e.g. the Sangilo deposit) (Wilson & Motton, 2015).

Gold typically occurs in its native state, either as inclusions in pyrite and/or base metal sulfides, intergrown with carbonate, or filling fractures and vugs in earlier quartz, and generally does not pose metallurgical problems.

Unlike low sulphidation epithermal gold-silver deposits (in which boiling is the main mechanism for deposition of metals) which typically have relatively restricted vertical precious metal interval of approximately 200 to 250 metres, Intermediate sulphidation systems can have precious metal intervals that extends over 100s to potentially >1 kilometre.

8.3 Epithermal – High Sulphidation

High sulphidation epithermal deposits are also called acid-sulphate, quartz-alunite, alunite-kaolinite-pyrophyllite or advanced argillic types. They occur as veins, vuggy breccias and sulphide-silica replacement pods to massive lenses within volcanic host rocks associated with high level hydrothermal systems marked by acid-leached, advanced argillic and silicic alteration. Their setting is usually within extensional and trans-tensional environments, commonly in volcano-plutonic continent-margin and oceanic arc and back-arc settings. They occur in zones with high-level magmatic emplacements where strato-volcanoes and other volcanic edifices are constructed above plutons.

Deposits are commonly irregular in shape, controlled in part by host rock permeability and the geometry of ore- controlling structures. Multiple, cross-cutting composite veins are common; texturally the mineralization is characterized by vuggy, porous silica derived as a residual product of acid leaching. Hydrothermal breccias and massive wallrock replacements associated with fine grained quartz are also common features associated with high sulphidation deposits.

Mineralization consists of pyrite, enargite/luzonite, chalcocite, covellite, bornite, gold, electrum, and less commonly chalcopyrite, sphalerite, tetrahedrite/tennantite, galena, marcasite, arsenopyrite, silver sulphosalts and tellurides including goldfieldite. Two types of ore are commonly present: (i) massive enargite-pyrite and/or (ii) quartz-alunite-gold. Gangue mineralogy consists principally of quartz-pyrite or quartz-barite; carbonate minerals are absent.

Alteration minerals consist principally of quartz, kaolinite/dickite, alunite, barite, hematite, sericite/illite, amorphous clays, pyrophyllite, andalusite, diaspore, corundum, tourmaline, and native sulphur with subordinate amounts of dumortierite, topaz, zunyite and jarosite. Advanced argillic alteration is a common alteration type and can be aerially extensive and visually prominent. Quartz occurs as fine- grained replacements and as vuggy, residual silica in acid-leached rocks. Weathered rocks may contain abundant limonite, jarosite, goethite and/or hematite, generally in a groundmass of kaolinite and quartz. Fine-grained supergene alunite veins and nodules are common.

Ore controls in volcanic edifices are commonly caldera ring and radial fractures, (particularly at their intersections), fracture sets in resurgent domes and flow-dome complexes, and hydrothermal breccia pipes and diatremes. Faults and breccias in and around intrusive centers appear to be important controls. Permeable lithologies can also be favorable host rocks, capped in some deposits by less permeable, hydrothermally altered silica, clay, and alunite-bearing ‘lithocaps’. The deposits can occur over considerable depths, ranging from high- temperature solfataras (sulfurous fumaroles) at the paleosurface down into cupolas of intrusive bodies at depth.

8.4 Porphyry

The porphyry deposit type consists of bulk tonnage-style copper-molybdenum-gold mineralization commonly related to feldspar porphyritic intrusions. Core areas consist of intrusive-hosted, disseminated copper sulphides, largely chalcopyrite and bornite, commonly with accessory molybdenum and gold. Mineralization is spatially associated with the core intrusion, but not necessarily confined to it. Stocks are typified by concentric zones of potassic, phyllic (sericitic) and propylitic alteration, commonly with argillic (clay) alteration and overlying zones of advanced argillic alteration. Some secondary (supergene) mineralization commonly occurs near-surface, marked by oxidation of sulphide minerals and enrichment of economic minerals. Deposit boundaries are determined by economic factors that outline ore zones within larger areas of low-grade, concentrically zoned mineralization.

The Kemess South and North copper-gold deposits belong to the calc-alkaline variety of the porphyry deposit type, which are adjacent properties and are further described in 23.3.1 and 23.3.2 of this report. Pyrite, chalcopyrite, and magnetite are associated with well-developed quartz stockwork veins and veinlets within potassically-altered zones hosted by porphyritic quartz monzonite intrusions and adjacent wall rocks. The Jurassic age mineralization is spatially, temporally, and genetically associated with the intrusions. Alkaline porphyry copper-gold deposits are associated with syenitic and other alkalic rocks and are a distinct deposit type.

Pyrite is the predominant sulphide mineral in porphyry deposits. Magnetite and rarely hematite are abundant in some deposits. Ore minerals include chalcopyrite, molybdenite, lesser bornite and rare (primary) chalcocite. Subordinate minerals are tetrahedrite/tennantite, enargite and minor gold, electrum and arsenopyrite. In many deposits late veins commonly contain galena and sphalerite in a gangue of quartz, calcite, and barite. Gangue minerals in mineralized veins are mainly quartz with lesser biotite, sericite, K-feldspar, magnetite, chlorite, calcite, epidote, anhydrite, and tourmaline. Many of these minerals are also pervasive alteration products of primary igneous mineral grains.

Alteration mineralogy consists of quartz, sericite, biotite, K-feldspar, albite, anhydrite/gypsum, magnetite, actinolite, chlorite, epidote, calcite, clay minerals and tourmaline. Early formed alteration can be overprinted by younger assemblages. Central and early formed potassic zones (K-feldspar and biotite) commonly coincide with ore. This alteration can be flanked in volcanic host rocks by biotite-rich rocks (biotite 'hornfels') that grade outward into propylitically-altered rocks. The older alteration assemblages in copper-bearing zones can be partially to completely overprinted by later potassic, phyllic and less commonly argillic alteration assemblages. Rarely, in the uppermost parts of some porphyry deposits, advanced argillic (kaolinite-pyrophyllite) alteration is present.

8.5 Exploration Model

The primary exploration targets on the Property are structurally controlled veins, stockworks or breccia style low-to-intermediate sulphidation epithermal gold-silver deposit like the deposits that have seen past production on the property.

A secondary, but no less important target type is a bulk-tonnage porphyry style of mineralization associated with the large gossanous pyrite alteration zone covering much of the Chappelle claims. The demonstrated genetic link of the Dupont/Baker 'A' and Multinational 'B' veins to porphyry fluids (Duuring, et al., 2009), and the broad alteration zone of Chlorite-Epidote-Pyrite to Quartz-Sericite-Chlorite-Pyrite consistent with alteration seen atthe nearby Kemess underground deposit and general Porphyry alteration models, suggest a buried porphyry deposit may be present on the property.

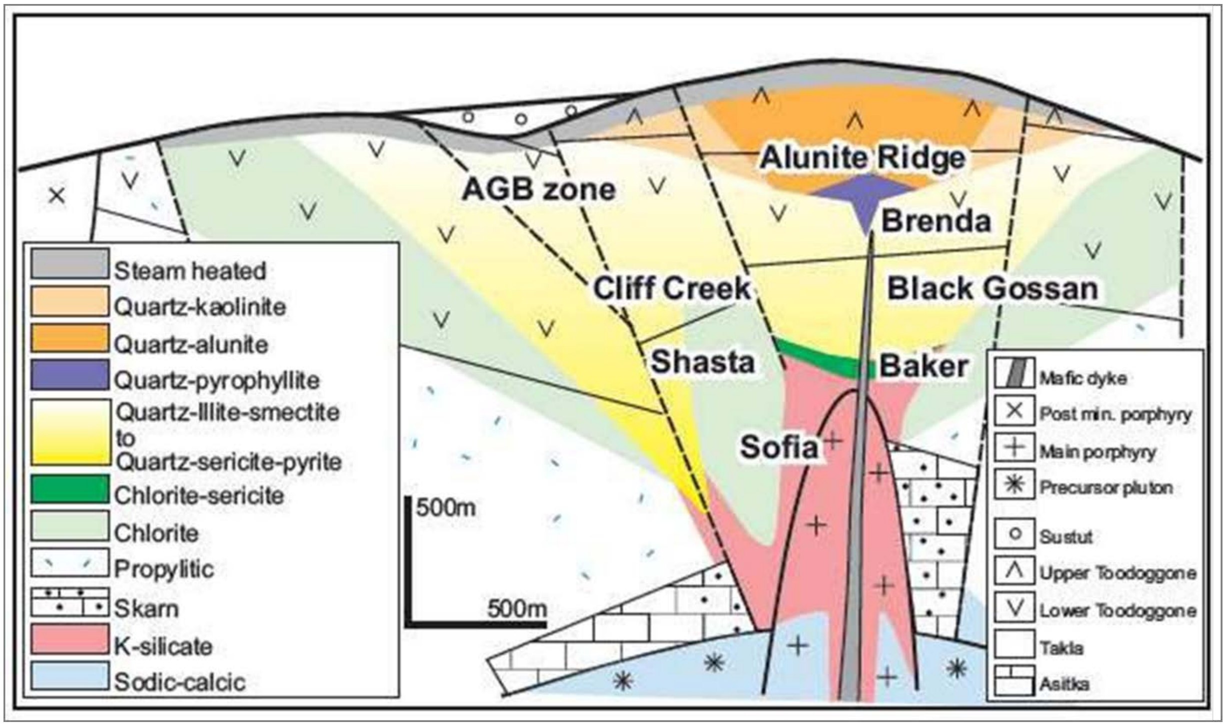
A suitable, descriptive geological model for the epithermal environment, from Hedenquist and Lowenstern (1994), has been provided above. In it, one could place the Shasta deposit in the upper left-handside of the figure, where the highlighted text "Low sulfidation Au, Ag" is circled in orange. The Dupont/Baker veins could be placed in the centre-left of the figure where the highlighted text "Intermediate sulfidation" is shown.

The depth potential of the Dupont/Baker 'A' and Multinational 'B' veins, as well as the peripheral veins, remainsunder-tested. The lowest holes on both previously mined zones have significant intercepts in holes 74-16 intersecting 1.2 metres at 0.58/0.24 oz/short ton Au/Ag, and M87-24 intersecting 1.83 metres at 0.091/0.06 oz/short ton Au/Ag respectively (quoted intervals are considered historical in nature and have not been confirmed by the author). The genetic model of intermediate sulphidation veins does not depend on a boiling zone relative to the paleosurface such as in low-sulphidation veins, and as such, the potential vertical extent of mineralization can reach up to 1 km (Smith, 2019).

8.5.1 2020 Model

Bouzari et al. (2019) suggests that new age relationships show epithermal-type deposits formed contemporaneously with pluton emplacement and porphyry type K-silicate alteration at depth. Age dating, complemented with field observations, alteration assemblages, vein types, trace metal concentrations and theevaluation of fluid inclusions indicate that some of the epithermal-type veins that were previously classified as low-sulphidation have alteration features indicative of shallow-level porphyry systems (Bouzari, Bissig, Hart, &Leal-Mejia, 2019). Bouzari et al. (2019) states: “K-silicate alteration also occurs in several valley cuts into the deeper exposed plutons in the district such as at Black Gossan, suggesting that porphyry-level alteration is exposed” and describes the occurrence of quartz-magnetite ± pyrite ± chalcopyrite mineralization from drillholes at the historical Baker mine indicate a transition towards porphyry alteration just 100-150 metres below the surface. The transition to a porphyry center is further supported by the high concentrations of Cu, Mo, W, and Sn (which are typically enriched in the core of porphyry system) relative to Sb, As, Ag, Li, and Tl (which are typically enriched in shallow level above porphyry systems). A normalized-element ratio index, the MDRU Porphyry Index (MPIx) is developed and applied to the Toodoggone district. This index indicates the Baker mine has a distinct porphyry character and that other deposits or prospects which include Shasta and Black Gossan to also have notable porphyry affinities. Results from this study indicate that there are a range of mineralization types in the central Toodoggone district from the deep porphyry to shallow epithermal environments which formed episodically over the period from ca. 196 to 186 Ma. A new framework proposed herein indicates the potential for exploration of porphyry-type copper mineralization in areas previously knownfor epithermal mineralization (Bouzari, Bissig, Hart, & Leal-Mejia, 2019).

Bouzari et al. (2019) suggests implications for future exploration in the Toodoggone region, and places the Baker, Shasta and Black Gossan portions of the Property in different locations, shown in Figure 8-2, versus the traditionally accepted exploration model project locations presented in the low-to-intermediate sulphidation model presented in Figure 8-1.



Source: (Diakow et. al, 1993, Sillitoe, 2010, Bouzari, 2019)

Figure 8-2: Cross section of the Toodoggone district showing Deposits Relative to Porphyry Alteration

9 Exploration

Recent exploration (conducted by TDG) includes the following:

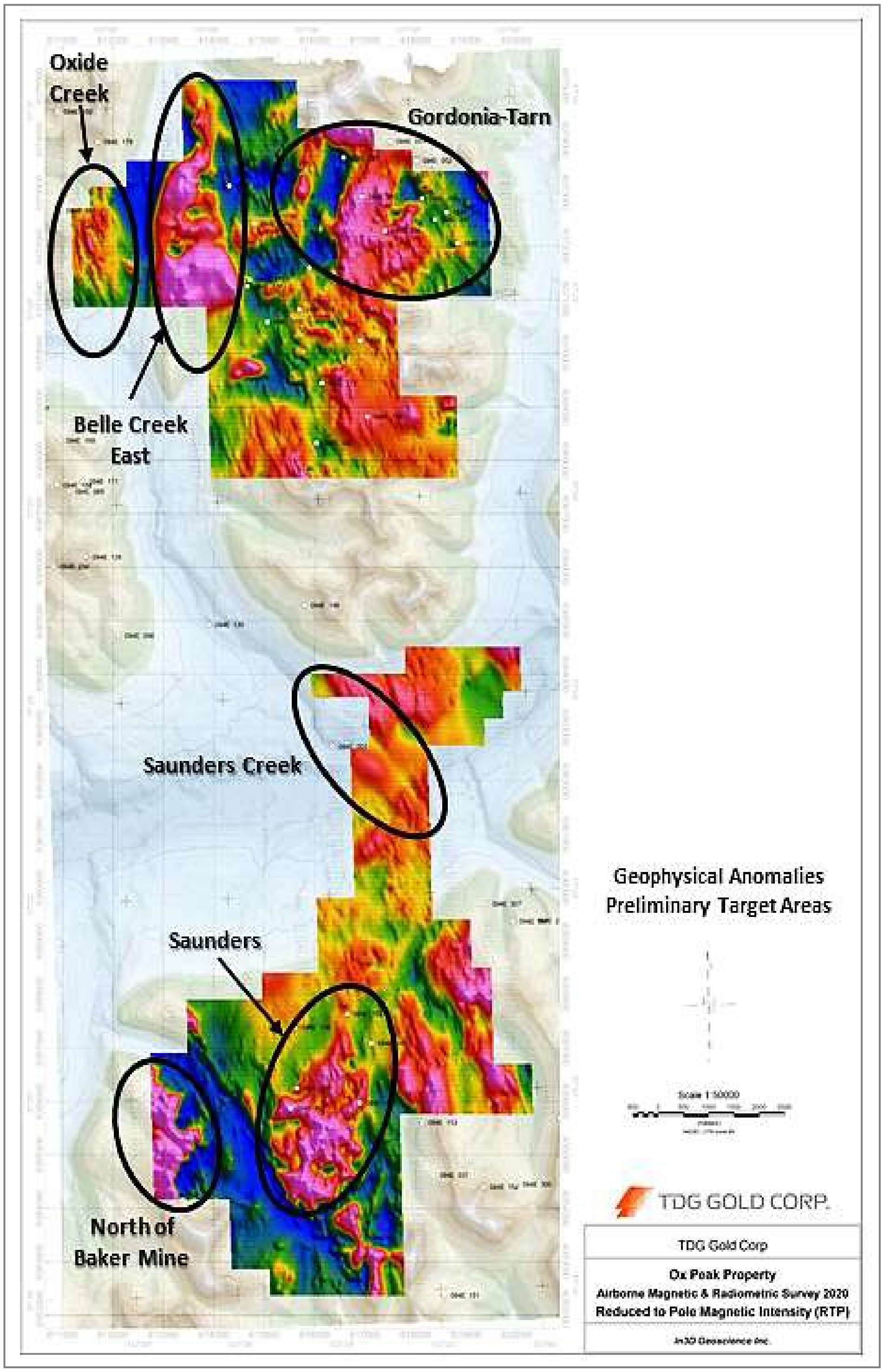
- 2020 Airborne Magnetic Survey at Oxide Peak
- 2020 Ground Geophysical Survey at Oxide Peak
- 2021 Ground Magnetic Survey at Baker, Shasta, and Mets
- 2021 Airborne Magnetic Survey at BOT
- 2021 Airborne Radiometric and Magnetic survey at Oxide Peak
- 2021 Claim Group Lidar Survey
- 2022 Hyperspectral Survey at Baker, Shasta, BOT, and Oxide Peak
- 2022 Geophysics (Ground Magnetics and Very Low Frequency) Survey at Shasta and Bot
- 2022 Geochemical Sampling at Shasta and BOT
- 2022 Drone (UAV) Photography/Photogrammetry at Mets

All other work on the Property to date is considered historical or Drilling and is reported in Section 6 and Section 10 of this report, respectively.

9.1 2020 Airborne Magnetic Survey

Precision GeoSurveys Inc. was commissioned by TDG between dates July 27th – July 29th, 2020, to complete a 931-line kilometre Magnetics-Radiometrics airborne survey over the Oxide Peak section of the property.

The survey was flown as Block A (north block) and Block B (south block) totaling 931 line-km. Block A totaled 442-line km and block B totaled 489 line-km. The east-west survey flight lines were spaced at 100-metres and flown at a nominal terrain contouring clearance of 40 metres. The mean survey height was 49 metres for block A and 43 metres for block B. Figure 9-1 show the surveyed areas and preliminary target areas.



(Source: TDG Gold, 2020)

Figure 9-1: Oxide Peak Option's Geophysical Anomalies and Preliminary Target areas

Preliminary interpretation has identified several magnetic and/or radiometric anomalies coincident with or proximal to areas of documented mineralization. Some of these have been previously documented but the Precision GeoSurvey data provides the most advanced measurements to date on the property, as shown in Figure 9-2.

Block A - Oxide Creek:

- At the western limit of the project area, the eastern slope of Oxide peak is underlain by gossanous chlorite-epidote-pyrite and silica-clay-sericite-pyrite altered intermediate volcanic rocks. This area is defined in the 2020 airborne survey as a coincident magnetic high-radiometric high oriented north- northwest for 1700 metres and up to 750 metres in width. Both magnetic and radiometric highs are open north of Oxide Creek and extend north beyond the claim boundary. Several altered and variably mineralized intrusive dykes ranging in composition from monzodiorite to quartz monzonite are recognized at lower elevation in Oxide Creek. With assays up to 1,988 g/t Cu, 21 g/t Mo and 77 ppb Au, proximity to a buried, untested porphyry system is inferred.

Block A – Belle Creek:

- The most prominent magnetic feature in Block A is a strong northerly oriented magnetic high east of Oxide Peak and immediately east of Belle Creek with a large circular lobe 1.5 kilometres in diameter, at the southern claim boundary. This area is believed to be underlain by Takla volcanic rocks in an uplifted block but is unexplained based on known geology. Radiometric highs flanking this magnetic feature along the eastern margin and to the southwest require investigation in the field.

Block A – Gordonia-Tarn:

- A regional scale broadly coincident magnetic high and radiometric high characterizes the geophysical response at Mt. Gordonia and the area of extreme topographic relief to the east at Tarn Lake. There is a reasonable correlation with a the stratigraphically higher Graves Member of the Upper Toodoggone formation described as a unit of dacitic ash flow tuffs with clasts of intrusive porphyries and quartz monzonite. These clasts may represent underlying feeder intrusions of similar composition. Linear breaks may represent structures as possible host to high copper, gold, silver mineralization in the area.

Block B – Saunders Creek

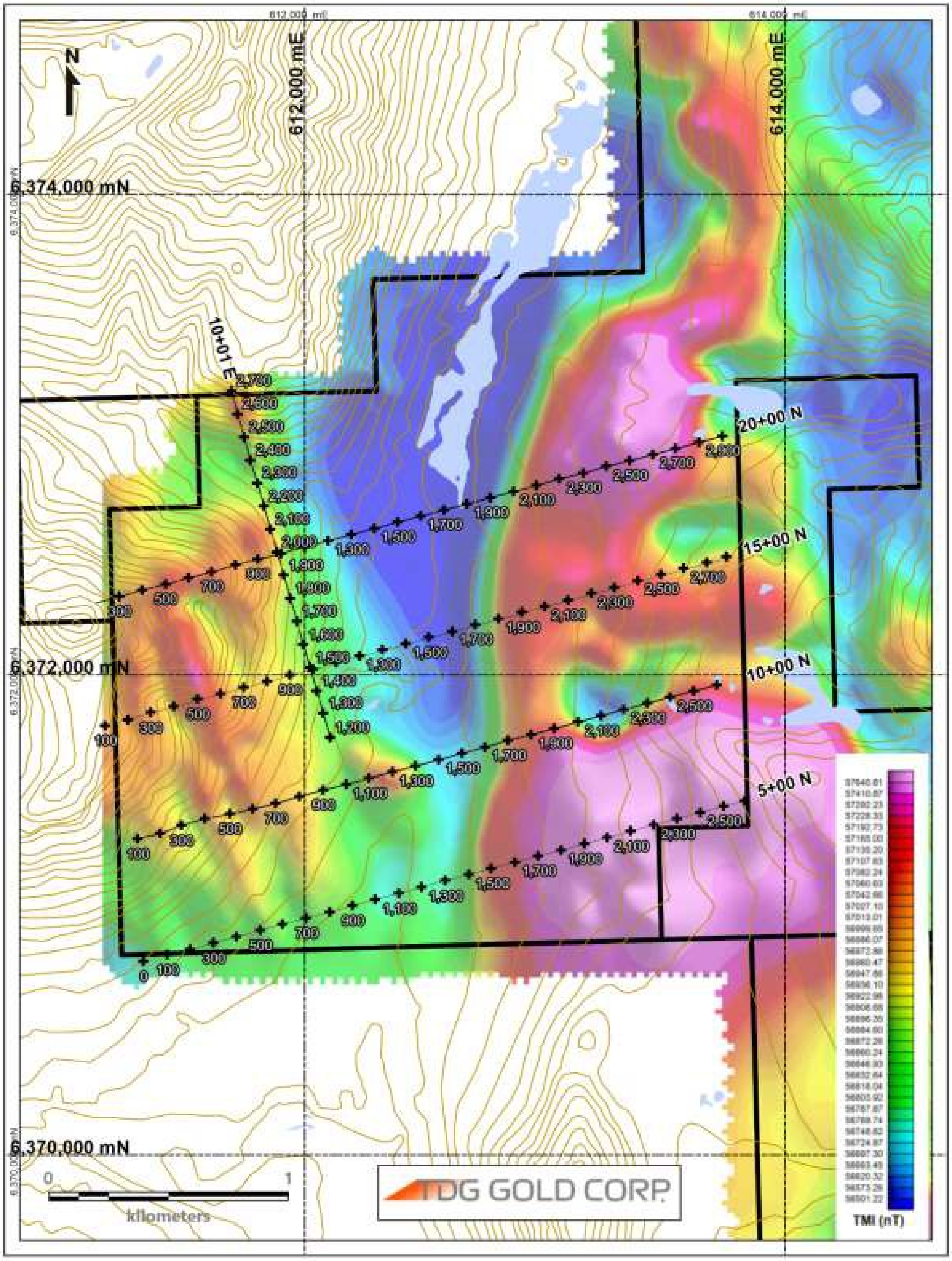
- The extreme northern part of the Block B airborne survey, north of the Toodoggone River, is underlain by the McLair Pluton, a quartz-monzonite phase of the Early Jurassic Black Lake suite, intruding late Triassic Takla volcanics. The area is expressed as broad, moderate to strong magnetic high. South of the Toodoggone River, magnetic data displays a strong northwest fabric that may represent the southern extension of the McLair Creek fault, a structure enveloped by quartz-sericite-pyrite alteration and mineralization on the JD property roughly 6 kilometres to the north.

Block B – Saunders
The southern part of the Block B survey is underlain predominantly by a dacite ash-flow tuff of the Saunders member, lower Toodoggone. This entire area is expressed as a radiometric high in the geophysical dataset. There is a spatial relationship between local high grade low-sulphidation, epithermal Au-Ag veins and the northern margins of a prominent magnetic high central to the Sanders area.

Block B – North of Baker Mine
A strong magnetic high in the southwestern project area is immediately southeast of the Lawyers low-sulphidation, epithermal Au-Ag vein system and immediately north of the Baker Mine area. Follow up surface exploration is recommended to evaluate this anomaly.

9.2 2020 Ground Geophysics

In the period between August 16th and 26th, 2020, geophysical contractor Peter E. Walcott & Associates conducted induced polarization (IP) surveying on the Oxide Peak Property. The area surveyed is located at the north-west Oxide Peak property boundary targeting known copper mineralization. Figure 9-2 displays the magnetic anomaly referred to as 'Oxide Creek', identified during the 2020 airborne magnetics survey.



(Source: TDG Gold, 2020)

Figure 9-2: Geophysical IP Survey Oxide Creek Zone

The Survey parameters for the August 2020 IP survey consisted of a pole-dipole array with dipole spacing at 100 metres (a=100) utilizing a 6-channel receiver (n=6). Four lines were oriented at UTM azimuth 075°, orthogonal tothe regional NNW oriented airborne magnetic trend. These four lines were spaced 500 metres apart ranging from 2.5 to 2.7 kilometres in length. A fifth line oriented at UTM azimuth 344°, parallel to the regional magnetic trend, was surveyed to transect mineralized intrusive rocks outcropping in Oxide Creek. Total line-kilometres surveyed consisted of 11.9 kilometres within a 5 km^2 area.

The western section of the survey area is underlain by gossanous andesite to basalt flows and volcaniclastics cutby a suite of intrusive dykes that may be interpreted as lithocap-style porphyry alteration. These epidote- chlorite altered and locally intensely sericite-silica-pyrite altered rocks are interpreted to be Duncan member volcanic rocks of the Lower Toodoggone Formation (Wetherup, 2019). Preliminary mapping has identified an earlier feldspar megacrystic quartz monzonite phase with disseminated pyrite-chalcopyrite and spatially related,magnetite destructive propylitic, phyllic and argillic alteration. Cu-bearing sulphide mineralization and porphyry-style veins in these rocks are cut by NNW trending, late phase biotite-feldspar monzonite dykes that are magnetic but weakly chlorite-epidote altered. Airborne magnetic highs with similar orientation occur along the eastern flank of Oxide Peak Mountain and may be related to these late dykes.

The geophysical IP survey has in part defined a moderate to strong IP chargeability high at or near the northwestern claim boundary that is roughly coincident with NNW oriented, linear airborne magnetic highs. An orthogonal survey line 1001 E surveyed across outcropping porphyritic quartz monzonite in Oxide Creek further defines the chargeability feature.

9.3 2021 Ground Magnetic Survey

In July 2021 TDG completed the following ground based magnetic surveys:

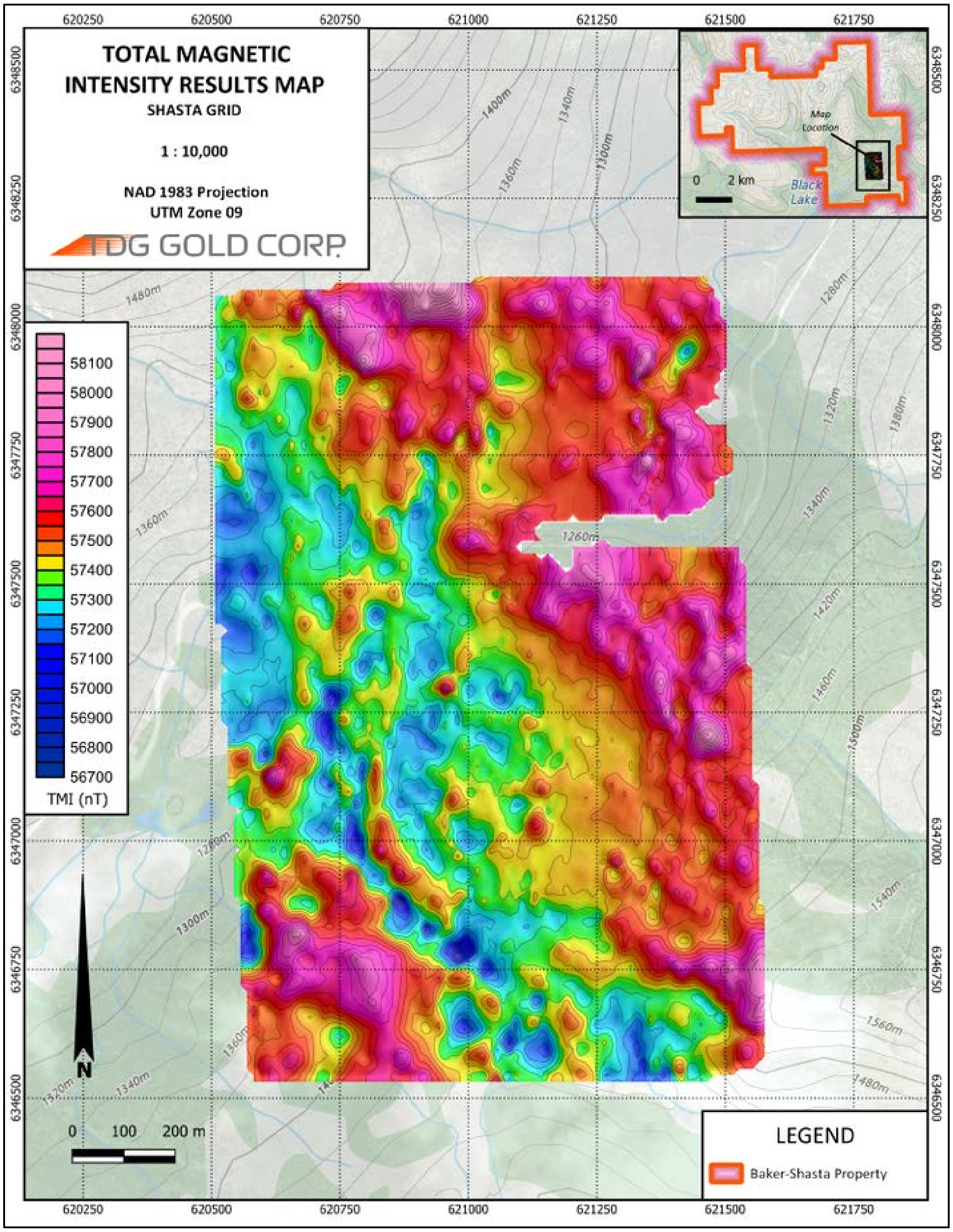
20.8 line-km and 224 hectares of realized coverage at Baker. 33 total survey lines with 50m spacing.
32.5 line-km and 158 hectares of realized coverage at Shasta. 32 total survey lines with 50m spacing.
27.5 line-km and 124 hectares of realized coverage at Mets. 32 total survey lines with 50m spacing.

The purpose of the surveys was to measure the magnetic intensity and geometry of magnetic features within the survey area to aid in geological mapping, as well as detect structures in the underlying bedrock which could host gold mineralization.

The survey was conducted with two backpack mounted GSM-19W Overhauser “Walking” magnetometers and a stationary GSM-19T “Proton” base station unit, which was set up to record diurnal variations in the regional magnetic field during the survey. Positioning data was provided by handheld Garmin GPS64 units which were carried by each instrument operator in the field.

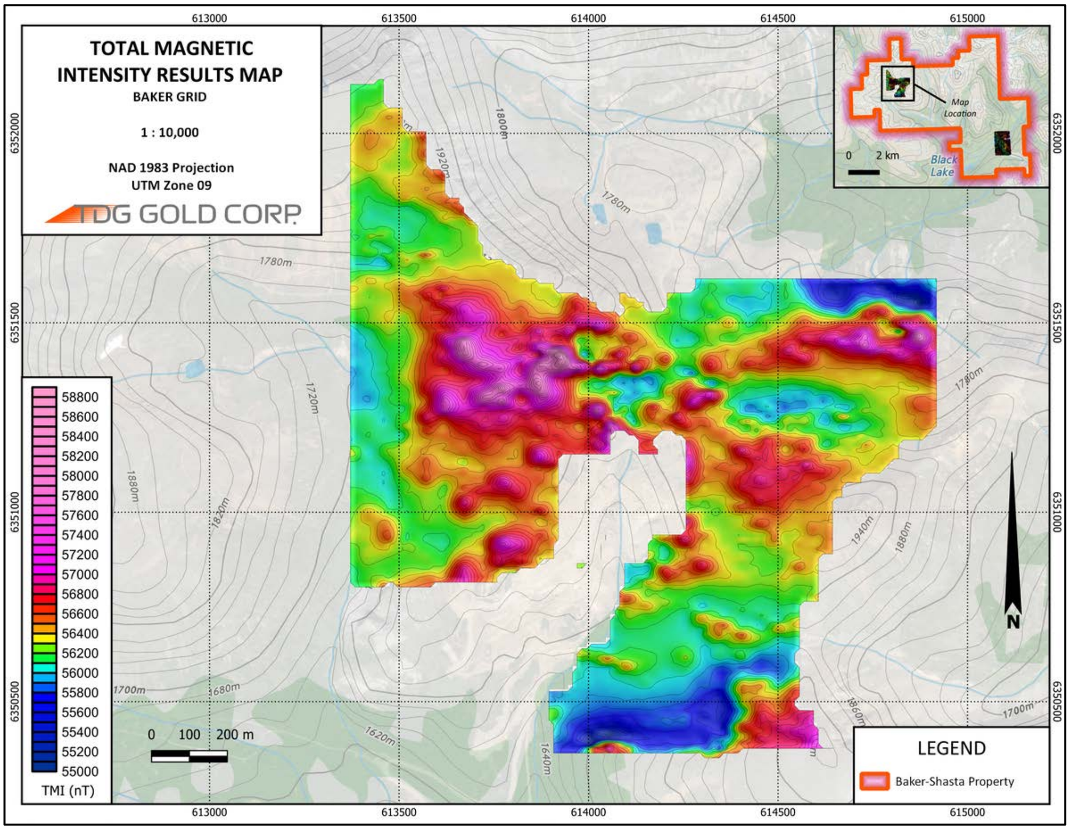
Following the completion of the survey, a set of corrections and quality control (QC) procedures were applied to the magnetic data file including diurnal correction, low-pass noise reduction, and individual operator leveling. After this QC process was completed, the data was interpolated using industry-standard Golden Surfer 12 software. After gridding, high-resolution Total Magnetic Intensity (TMI) imagery was exported as a georeferenced TIFF image with matching contour shapefile. An additional Google Earth overlay was also created from the same magnetic data.

The survey imagery contains visible magnetic features at varying scales, some of which may be considered exploration targets and extensions from known mineralized areas. The area surveyed and results of the work are shown in Figure 9-3 through Figure 9-5 for Shasta, Baker, and Mets respectively.



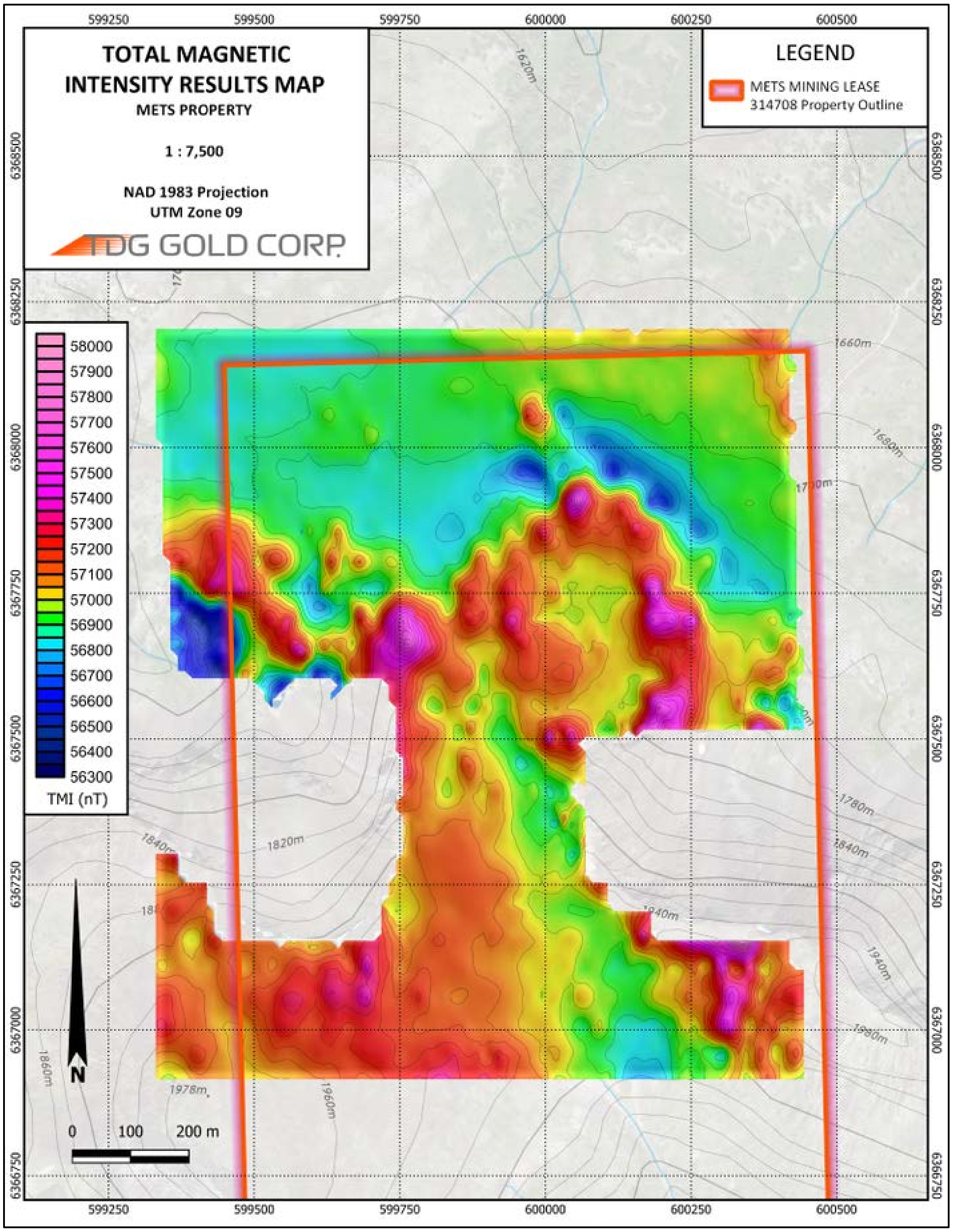
(Source: TDG Gold, 2021)

Figure 9-3: Shasta Magnetic Survey Results Map



(Source: TDG Gold, 2021)

Figure 9-4: Baker Magnetic Survey Results Map



(Source: TDG Gold, 2021)

Figure 9-5: Mets Magnetic Survey Results Map

9.4 2021 Airborne Magnetic Survey

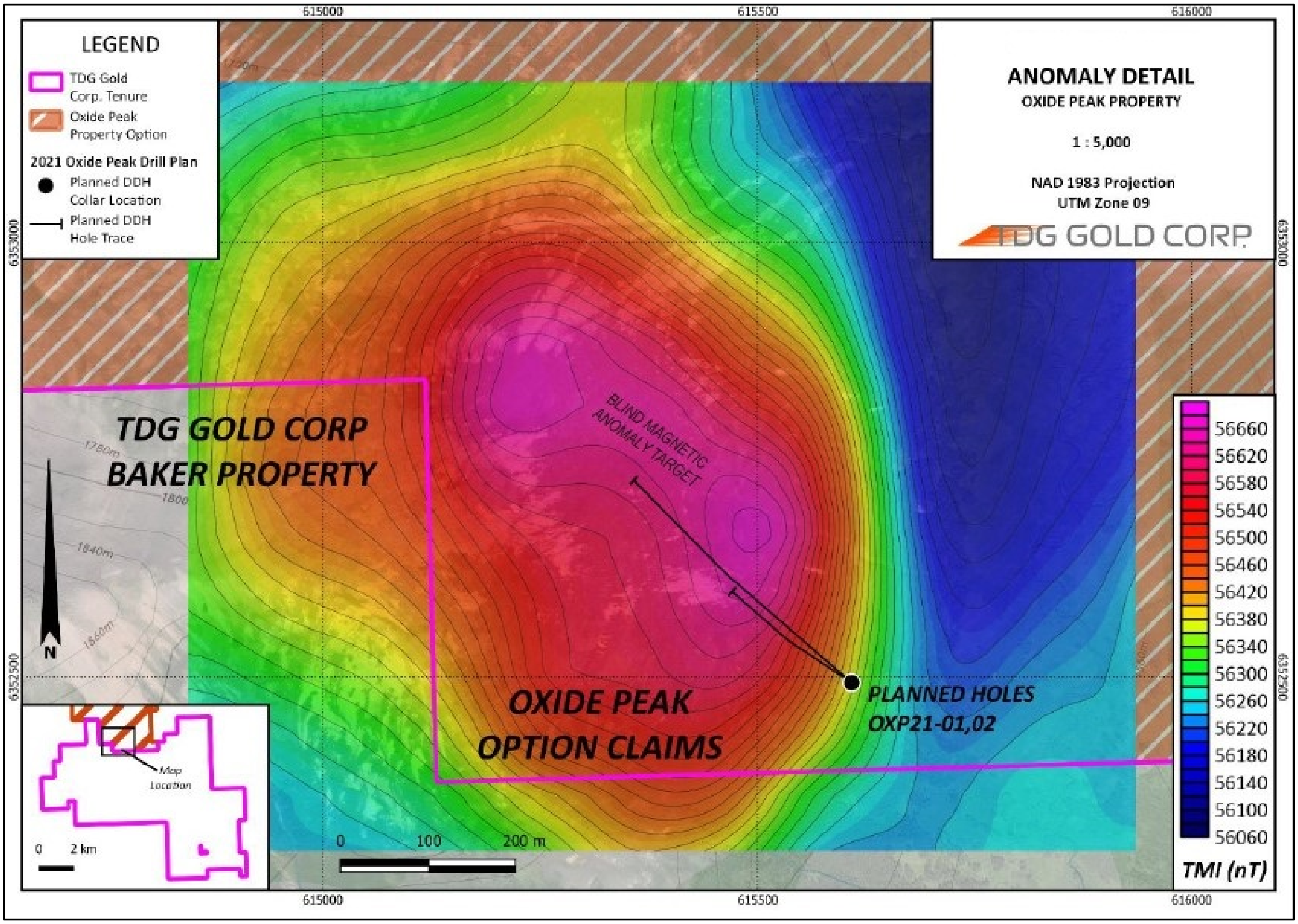
9.4.1 BOT Property

During the 2021 exploration season, TDG completed an airborne magnetometer and radiometric survey of the BOT property performed by Precision GeoSurveys Incorporated, of Langley BC. A total of 1,459 line-km was flown over an area of 132.6 km2. The survey block was flown at 100 m line spacing at a heading of 072°/252°. Tie lines were flown at 1,000 m spacing at a heading of162°/342°.

The 2021 airborne magnetic and radiometrics survey highlights several lineaments characterized as magnetic lows that transect the entire Property as shown in Figure 9-6. The deep lows are representative of regional scale faulting, particularly on the western Property boundary, with numerous associated subordinate faults. Cross faults, perpendicular to the regional main faults are of note as they illustrate spatial correlation with MINFILE mineralized occurrences. Magnetic lineaments are also coincident with anomalous base and precious metal concentrations and surface gossan locations, which suggest a structural control can be identified by geophysics on mineralization at the BOT claims group.

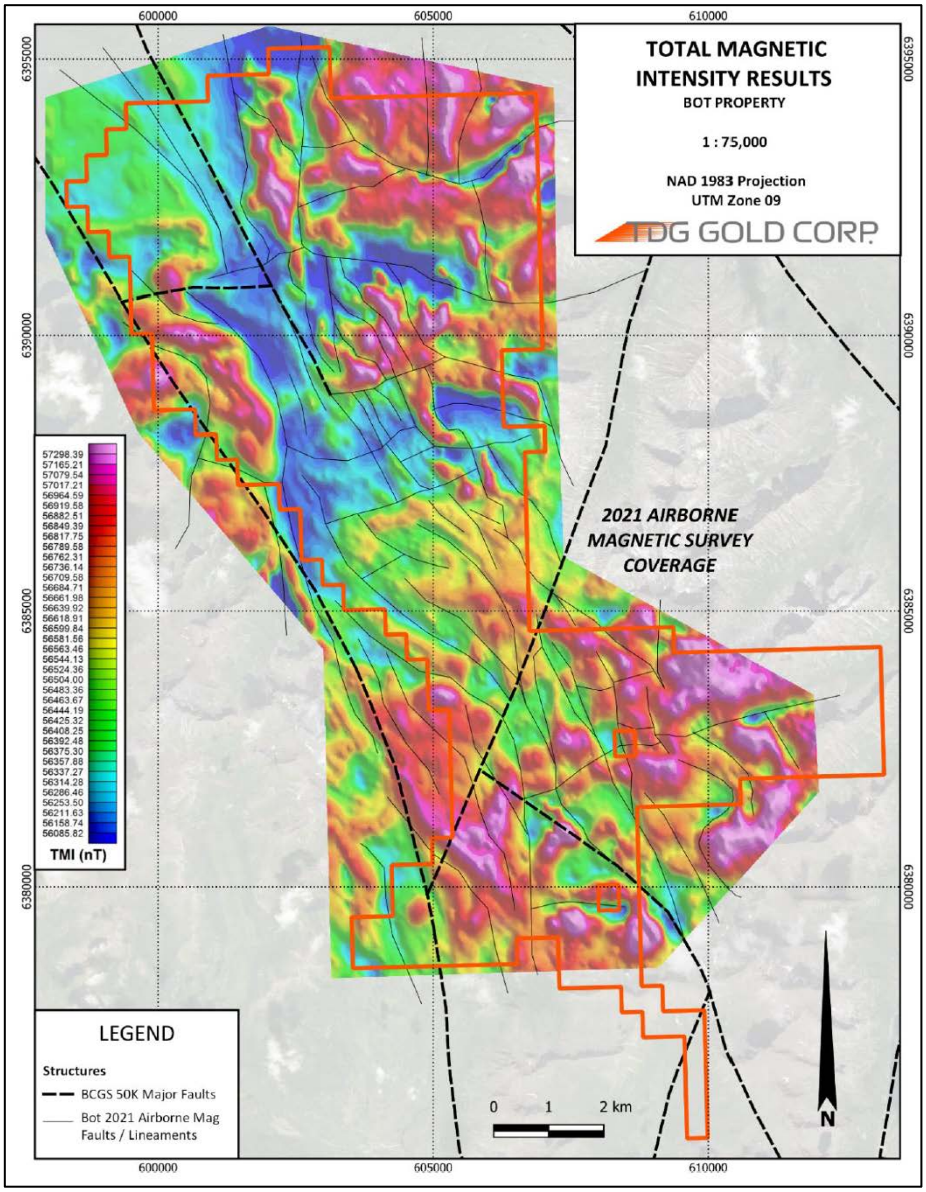
9.4.2 Oxide Peak

In 2021 airborne radiometric and magnetic surveys were completed at the Oxide Peak Property. The survey was completed by Precision GeoSurveys, of Langley, BC. Figure 9-6 illustrated the Drybrough anomaly which is postulated to be a buried porphyry intrusion or mineralized centre.



(Source: TDG Gold, 2021)

Figure 9-6: Geophysical Anomaly at Oxide Peak



(Source: TDG Gold, 2021)

Figure 9-7: BOT - Total Magnetic Intensity Results

9.5 2021 LIDAR Survey

In 2021 TDG also completed a property scale LiDAR survey over the entire Baker-Shasta tenure block. The survey was contracted to McElhanney Ltd., of Vancouver, BC. The survey was completed successfully from the dates of August 13th, 23rd, and September 2nd, 2022.

The survey was conducted using a fixed wing aircraft using a belly mounted LiDAR sensor.

9.6 2022 Hyperspectral Survey

SpecTIR LLC. was commissioned by TDG between dates August 19th – August 21, 2022, to complete a Toodoggone portfolio wide airborne hyperspectral survey on the: i) Baker-Shasta, ii) BOT, and iii) Oxide

Peak properties. Data extrapolation and processing was completed by SpecTIR LLC and delivered with a logistics report to TDG on December 22nd, 2022. Further descriptions on methodology, such as survey parameters, equipment specifications and data processing extrapolation, the reader is referred to ARIS reports authored by Dorion (2023a, 2023b:in publication) for the Baker-Shasta and Oxide Peak properties, respectively and Tardiff (2022) for the BOT property.

9.6.1 Baker-Shasta Hyperspectral Results

The hyperspectral survey L2 data returned from the hyperspectral survey included an imagery mosaic. The respective L3 data returned results for mineralogy, chlorite chemistry, chlorite crystallinity, illite chemistry, illite crystallinity, and iron RGB (Dorion, 2023a).

The L3 data mineralogy results, include:

- Alunite: rarely detected on the northern sections of the Property, notably around MINFILE 094E 416 and 151.
- Calcite: detection synonymous with mapped Asitka Group around the Baker project (MINFILE 094E 027).
- Chlorite: detected throughout the northern section of the Property.
- Chlorite-Illite: detected readily throughout the Property, notably around MINFILE 094E 026, 302, and 050. The detection at Shasta (094E 050) highlights the historical open cuts and mine dump locations.
- Dickite: only detection on the Property is at MINFILE 094E 151.
- Kaolinite: rarely detected on the Property, notably at MINFILE 094E 416, 151, 406, and 026.
- Muscovitic Illite: notably detected at MINFILE 094E 302; minor elsewhere on the Property.
- Paragonitic Illite: scarcely detected, most notable around MINFILE 094E 420, 151, and 302.
- Phengitic Illite: detected readily throughout the Property and highlights main tributaries.
- Pyrophyllite: only detection on the Property is at MINFILE 094E 151.

9.6.2 BOT Hyperspectral Results

The hyperspectral survey L2 data returned from the hyperspectral survey included an imagery mosaic. The respective L3 data returned results for mineralogy, chlorite chemistry, chlorite crystallinity, illite chemistry, illite crystallinity, and iron RGB (Tardiff, 2022).

The L3 data mineralogy results, include:

- Alunite: not detected on the Property.
- Calcite: detected only in the northeastern section of the Property.
- Chlorite: detected throughout the Property above elevation.
- Chlorite-Illite: detected throughout the Property above elevation.
- Dickite: not detected on the Property.
- Kaolinite: faintly detected in the central region of the Property.
- Muscovitic Illite: faintly detected in the northeastern and southern limits of the Property.
- Paragonitic Illite: scarcely detected in the southern limits of the Property.
- Phengitic Illite: detected readily throughout the Property.
- Pyrophyllite: not detected on the Property.

9.6.3 Oxide Peak Hyperspectral Results

The hyperspectral survey L2 data returned from the hyperspectral survey included an imagery mosaic. The respective L3 data returned results for mineralogy, chlorite chemistry, chlorite crystallinity, illite chemistry, illite crystallinity, and iron RGB (Dorion, 2023b).

The L3 data mineralogy results, include:

- Alunite: not detected on the Property.
- Calcite: not detected on the Property.
- Chlorite: detected throughout the Property above elevation.
- Chlorite-Illite: detected throughout the Property above elevation.
- Dickite: not detected on the Property.
- Kaolinite: not detected on the Property.
- Muscovitic Illite: detected at the target zone and faintly in the southern limits of the Property.
- Paragonitic Illite: scarcely detected; correlated to Muscovitic Illite.
- Phengitic Illite: detected readily throughout the Property above elevation.
- Pyrophyllite: not detected on the Property.

9.7 2022 Ground Magnetics and VLF Geophysics

9.7.1 Shasta Geophysical Methodology

Aurora Geosciences Ltd. provided the personnel and equipment required to complete a ground-based magnetometer and very-low frequency (“VLF”) survey for TDG on the Shasta project. A crew of four, using backpack-mounted Overhauser GSM-19 magnetometers and GEM VLF sensors, completed a total of 108.1-line km of mag-VLF geophysical surveys on the Shasta zones between August 19th to August 24th and August 31st to September 6th, 2022. Magnetic-VLF work at Shasta’s northern survey area (Newberry) was helicopter-assisted.

The reader is referred to Rocha, 2022 (contained in Dorion 2023a) for a full description on the methodology for ground-based magnetic-VLF geophysical surveys, specifications on the equipment, data processing, and deliverables.

9.7.2 Shasta Geophysical Results

The results of the 2022 ground-based mag-VLF geophysical survey Dorion (2023a) included total magnetic field (“TMF”) ranging between 55,536 – 56,859 nanoteslas (nT) and VLF recordings at 25.2 KHz (NML; LaMoure, North Dakota), 24.0 KHz (NAA; Culter, Maine), and 21.4 KHz (NPM; Lualualei, Hawaii). Associated figures can be found in Dorion (2023a).

9.7.3 BOT Geophysical Methodology

Aurora Geosciences completed a magnetometer survey on the Property between August 25th and August 30th, 2022.

Descriptions on methodology, such as survey parameters, equipment specifications and data processing extrapolation, is listed in Aurora Geosciences, (2022 contained in Tardiff, 2022).

9.7.4 BOT Geophysical Results

Total magnetic field (‘TMF’) varied from 55,817 to 57,310 nT and associated figures can be found in Tardiff (2022).

9.8 2022 Geochemical Sampling

9.8.1 Shasta Geochemical Sampling

Soil samples retrieved during the 2022 field season were retrieved using industry-standard methods using a combination of soil auger, shovel, pick mattock and/or trowel. Wearing the proper protective person equipment, a soil station was dug to target the B-horizon, also known as the subsoil. The B-horizon is often greatly composed of material illuviated (washed in from) layers above it, mostly clay, iron, aluminum oxides (deposited by elluviated water), and minerals that formed in the layer (Brady & Weil, 2004). The average depth from surface of the B-horizon on the Shasta property was 0.34 m, ranging from 0.1 to 0.8 m. When the target horizon was reached, a sample was collected and placed into a Kraft or polyethylene soil sample bag with a unique sample tag (Sample ID). Sample weights of soil sample material collected during the 2022 season the Shasta property ranged from 0.37 to 3.65 kg, averaging 1.18 kg. Sample information was later recorded into a sample shipment and a laboratory-issued submission form. A strict chain of custody was followed, from sampling to transportation. All 2022 surface sampling were sent to SGS laboratories, located at 3260 Production Way, Burnaby, British Columbia. SGS is an accredited laboratory. The reader is referred to the SGS brochure (SGS, 2020) for a detailed review of the detectable ranges of reported analytes for each method code presented in this section. Once shipped to SGS Labs in Burnaby, the stream sediment samples were further sieved to a 180 mesh [SCR_D], weighed [G_WGH_KG], and analyzed using 'Au, Pt, Pd, FAS, exploration grade, ICP-AES, 30g-50mL' [GE_FAI30V5], '4 Acid Digest (HCL/HCLO4/HF/HNO3), ICP' [GE_ICP40Q12], and '4 Acid Digest Package (HCL/HCLO4/HF/HNO3), ICP-MS' [GE_IMS40Q12].

The only QAQC completed in the field was soil duplicate stations at an average of every 20 stations. No other field based QAQC controls were added, relying on internal lab protocols. The labs internal QAQC used blanks and the following certified reference material: SL 107, SN117 and OREAS L13, 250b, 501d 601b, and 905.

Data was analyzed and presented using Microsoft Excel and QGIS 3.28.2 Firenze.

9.8.2 Shasta Geochemical Sampling Results

All 674 reported soil samples were retrieved in B-horizon soils. The soils were regularly observed as brown coloured material with partial manganese and/or iron oxide staining on the lithic fragments. The soil samples returned between <1 to 1,790 ppb Au, averaging 112.83 ppb Au, with 7 samples returning over 1,000 ppb Au. Figure 9-7 displays the Au-in-soil results from the 2022 sampling on the reportable area outside of the Shasta ML. Soils were completed between Sept.18th-24th, 26th-28th, and 30th, 2022. Using BDL-corrected assays, the strongest element correlation to Au is antinomy (Sb) at 0.43. Full results and associated figures can be found in Dorion (2023a).

9.8.3 BOT Geochemical Sampling

All 2022 surface sampling was sent to SGS laboratories, located at 3260 Production Way, Burnaby, British Columbia. SGS is an accredited laboratory. Laboratory methodologies were specific to the sample type and the reader is referred to the 2022 SGS brochure for a detailed review of the detectable ranges of reported analytes for each method code presented.

9.8.4 BOT Geochemical Sampling – Select Grabs and Composite Chips

Select grab samples retrieved during the 2022 field season were chosen based off observable geological identifiers (mineralization, alteration, texture, structure) and respective location to a known occurrence when relevant. Wearing the proper protective person equipment, the sample was broken using a standard rock hammer. In the case of composite chips, a measuring tape was used to note the interval length of the hammer and chisel sampling. The sample was then photographed with sample tag visible and cataloged. The sample was placed in a medium-sized polyurethane bag and sealed with a one-way tie strap. Sample information was later recorded into a sample shipment and an SGS laboratory-issued submission form. A strict chain of custody was followed, from sampling to transportation. The appropriate lab method for the select grabs and chip sampling, after being weighed [G_WGH_KG], was ‘Au, Pt, Pd, FAS, ore grade, ICP-AES, 50g-10mL’ [GO_FAI50V10], ‘4 Acid Digest (HCL/HCLO4/HF/HNO3)’ [GE_ICP40Q12], and ‘4 Acid Digest Package (HCL/HCLO4/HF/HNO3), ICP-MS’ [GE_IMS40Q12].

Due to the limited sampling retrieved during the site visit, no field based QAQC controls were added, relying on internal lab protocols. The labs internal QAQC used blanks, reps (D00210654 and D00210702), and OREAS 905, 601b, 680, and CDN-PGMS-27 standards (certified reference material).

9.8.5 BOT Geochemical Sampling – Stream Sediment Samples

The 2022 stream sediment sampling following methodologies described by Zastavnikovich (2017). Zastavnikovich (2017) uses a proprietary sieving instrument which TDG did not have on site during the 2022 stream sampling survey. A sieve stack, similar in design to a dim sum, was brought with crews into the field which had a 2mm, 16micron and 32micron screens (“mesh”) in the solid metal housing. Crews would sieve sediment from a stream bottom or immediate embankment (stream wash) down to at least 16 mesh into an industry standard gold pan, and using panning techniques described by Zastavnikovich (2017), would attempt to partition and wash the organic material from the silt and clay by swirling the material in the pan in such a way that the organic material, ideally suspended in the swirl, would wash away, leaving only truly representative sediment at that spot location in the pan. The sediment sample would be placed in a cloth canvas bag, along with a unique sample identification number, and sealed.

Once shipped to SGS Labs in Burnaby, the stream sediment samples were further sieved to a 180 mesh [SCR_D], weighed [G_WGH_KG], and analyzed using ‘Au, Pt, Pd, FAS, exploration grade, ICP-AES, 30g-50mL’ [GE_FAI30V5], ‘4 Acid Digest (HCL/HCLO4/HF/HNO3), ICP’ [GE_ICP40Q12], and ‘4 Acid Digest Package (HCL/HCLO4/HF/HNO3), ICP-MS’ [GE_IMS40Q12].

Due to the limited sampling retrieved during the site visit, no field based QAQC controls were added, relying on internal lab protocols. The labs internal QAQC used blanks and OREAS L13, 250b, 601b, and 905 standards (certified reference material).

A full table or results and figures can be found in Tardiff (2022).

9.9 Mets Drone (UAV) Photography

In 2022, TDG completed a high-resolution drone imagery survey (John Tyler Geoscience) over the Mets mining lease. This included aerial photograph and data collection for the creation of a topographic surface (DEM) to validate historical drill collars and a potential mineral resource estimate.

10 Drilling

10.1 Drilling - Shasta

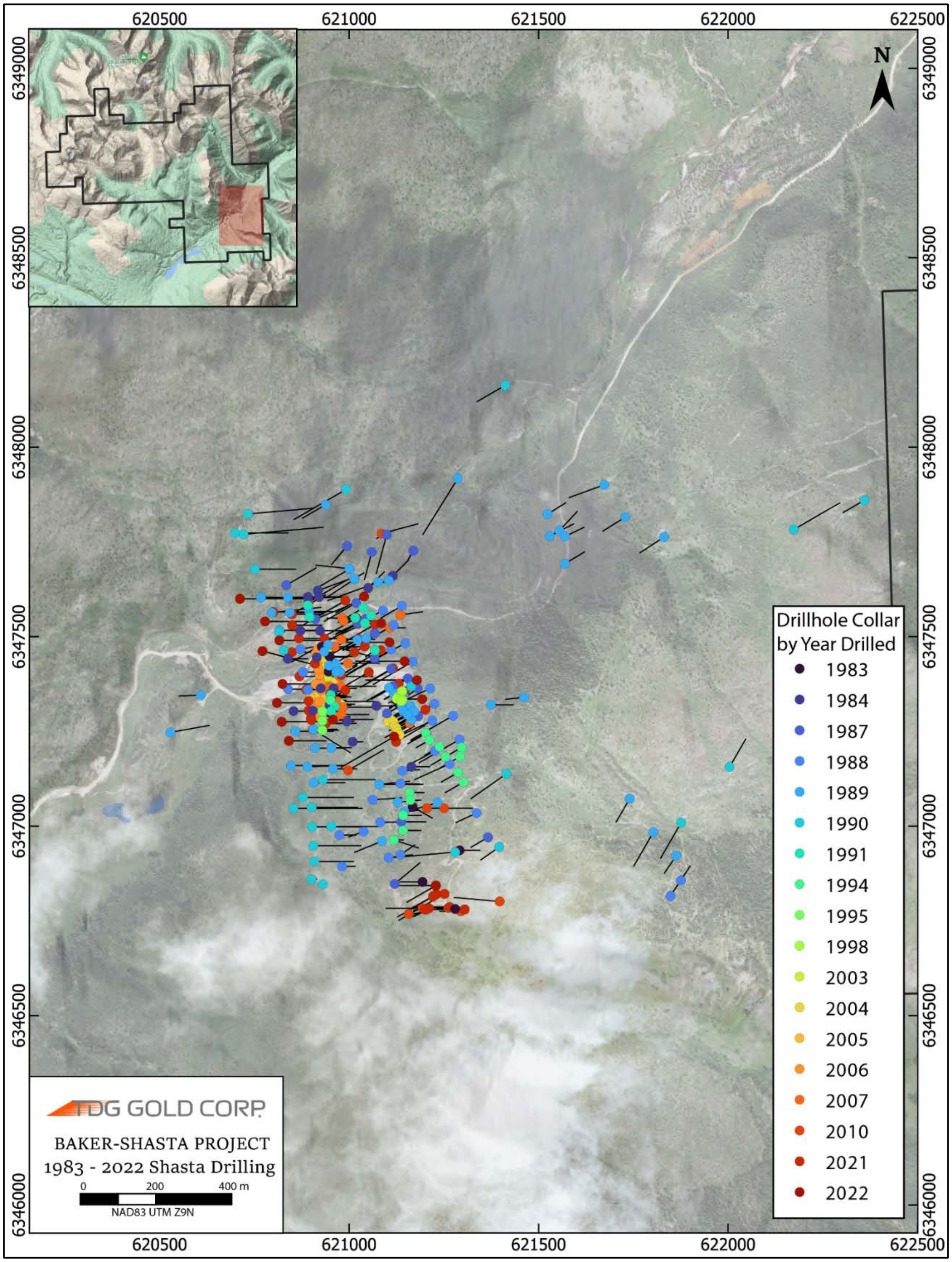
The Shasta diamond drilling database as provided to MMTS by TDG Gold represents the compilation of data produced by several different operators over a period of close to 40 years and 18 drill programs. These are listed in Table 10-1 along with the number of drillholes within the resource by year and the actual number of sample intervals utilized for this current resource estimation. It should be noted that drilling from 2007 and 2010 has not been included in the resource estimate and is not reported below due to inability to confirm the location of the drillhole collars.

All data acquired before 2021 is considered historic. For several historical drilling campaigns between 1988 and 2007 MMTS and TDG Gold were not able to locate ARIS Reports or other original documentation to perform certificate checks on the assays for these years. This data has been validated as discussed below.

Table 10-1: Historical and Current Drill Program Detail - Shasta

Year	Total for all the Shasta Deposit				Source
	# Drillholes	Total Length (m)	Assayed Length (m)	% Assayed	
1983	9	673	514	76%	Aris Report 11715
1984	18	1,899	1,223	64%	PF861856 (Project Files)
1987	24	2,386	1,422	60%	Aris Reports 17519/16698
1988	31	3,665	1,572	43%	N/A
1989	63	6,117	2,777	45%	N/A
1990	27	4,777	1,806	38%	Aris Report 20821
1991	13	978	143	15%	N/A
1994	20	1,442	298	21%	N/A
1995	4	243	27	11%	N/A
1998	9	299	169	57%	Aris Report 26004A
2003	8	314	59	19%	N/A
2004	27	1,486	467	31%	Aris Report 27653A
2005	6	526	65	12%	N/A
2006	20	1,519	421	28%	Aris Report 29168
2021	54	8,235	7,391	90%	2021 SGS Certificates
2022	20	5008	4749	95%	2022 ALS Certificates
Total	**353**	**39,567**	**23,102**	**58%**	

Of the assay intervals used in the Shasta Resource Estimate, approximately 50% have been drilled as oriented core, HQ-diameter and sampled by TDG Gold in 2021 and 2022. Figure 10-1 is a plan map of the drilling on the Shasta deposit showing the year drilled.



(Source: MMTS, 2023)

Figure 10-1: Plan view of Shasta Drillholes and Year Drilled

Drilling in 2022 took place in the West, North, East (JM), JM, and Cayley Zones. The drill campaign succeeded in extending known mineralization, including in two >300 m step-outs along trend to the south. Depth to mineralization was generally consistent with as previously modelled, except in Shasta West, where Au-Ag mineralization was intercepted at shallower depths than expected.

In the West Zone, drillholes SH22-054 – 060 yielded several significant intercepts, most notably SH22-057 yielded 11.14 g/t AuEq over 9.5 m within a broader interval of 3.71 g/t AuEq over 33.0 m (

Table 10-2). Similarly, SH22-060 yielded 37.7 m of 1.95 g/t Au and 24 g/t Ag (2.26 g/t AuEq), including 8.0 m of 9.43 g/t AuEq. Holes SH22-055 and -056 each returned four separate intervals of lower-grade (0.22 – 0.59 g/t AuEq), 2.5 – 34.1 m wide.

The North Zone drillholes typically intersected mid-grade Au-Ag mineralization over tens of metres (e.g. 1.28 g/t Au and 17 g/t Ag over 43.5 m in SH22-065), often including shorter higher-grade intervals (e.g., 9.85 g/t Au and 328 g/t Ag over 4.0 m in SH22-061).

Mineralization at the East (JM) Zone included both short, high-grade intervals (e.g., 14.05 g/t Au and 634 g/t Ag over 1.5 m in SH22-068) and long, low-grade intervals (e.g. 0.38 g/t Au and 15 g/t Ag over 71.0 m in SH22-069).

Table 10-2 lists significant intercepts from the 2022 drill program. The AuEq formula used for the table is AuEq (g/t) = Au + (Ag/80), which differs slightly from the AuEq equation used for the resource estimate because recoveries have not been accounted for in this table. The tables and AuEq grades match the company News Releases (NRs) previously disclosed.

Table 10-2: Selected 2022 Significant Intercepts as disclosed in News Releases

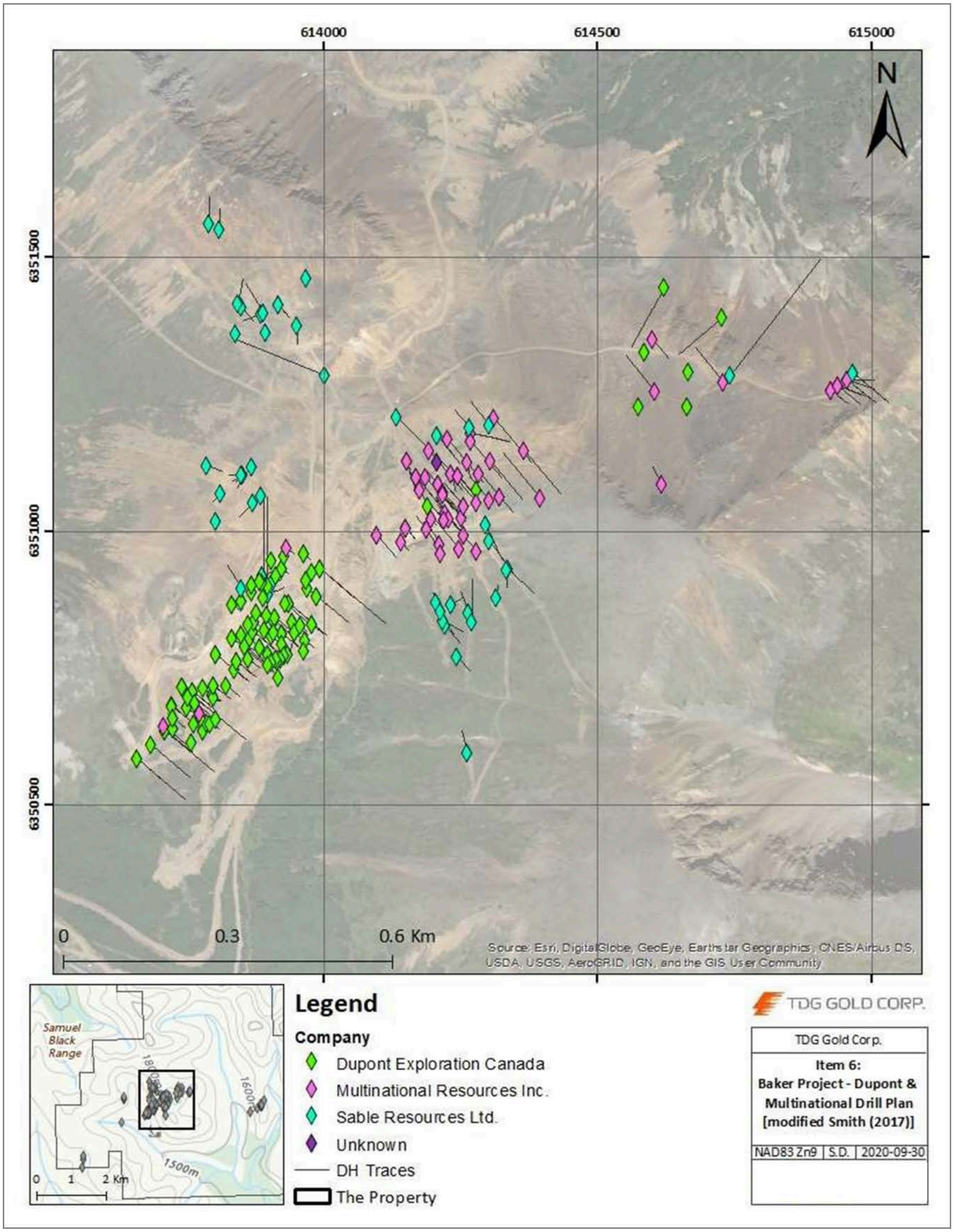
Hole	Zone	From (m)	To (m)	Length (m)*	Au (g/t)	Ag (g/t)	AuEq (g/t)
SH22-054	West	106.0	118.0	12.0	0.21	24	0.51
and		151.0	157.0	6.0	0.46	23	0.75
SH22-055	West	103.0	108.0	5.0	0.43	5	0.49
and		112.4	133.0	20.6	0.1	10	0.22
and		165.0	171.0	6.0	0.4	15	0.59
and		186.0	190.0	4.0	0.21	5	0.28
SH22-056	West	33.0	52.5	19.5	0.15	17	0.37
and		116.5	119.0	2.5	0.44	6	0.52
and		140.0	150.4	10.4	0.16	5	0.22
and		179.4	213.5	34.1	0.34	16	0.54
SH22-057	West	121.0	154.0	33.0	2.52	95	3.71
including		143.0	152.5	9.5	7.76	271	11.14
SH22-058	West	94.0	121.0	27.0	0.98	18	1.21
and		134.0	138.0	4.0	0.56	53	1.22
and		162.1	199.0	36.9	0.5	20	0.75
including		185.0	196.0	11.0	0.96	33	1.37
SH22-059	West	107.0	115.0	8.0	0.49	20	0.74
and		131.9	151.0	19.1	0.11	5	0.17
SH22-060	West	118.3	156.0	37.7	1.95	24	2.26
including		118.3	121.0	2.7	0.67	64	1.47
including		148.0	156.0	8.0	8.59	67	9.43
SH22-052	JM	66.0	94.0	28.0	0.21	5	0.27
SH22-053	Cayley	28.0	47.0	19.0	0.09	8	0.19
SH22-061	North	130.5	178.5	48.0	1.29	44	1.85
including		141.2	145.2	4.0	9.85	328	13.95
and		191.7	197.0	5.3	0.76	19	1
SH22-062	North	120.0	136.0	16.0	1.02	99	2.26
including		126.0	129.0	3.0	3.67	366	8.25
and		162.7	180.0	17.3	0.21	14	0.38
SH22-063	North	116.0	165.0	49.0	0.72	18	0.94
including		116.0	138.8	22.8	1.3	31	1.68
and		170.1	176.5	6.3	0.25	10	0.37
SH22-064	North	135.9	175.0	39.1	0.35	9	0.46
SH22-065	North	121.5	165.0	43.5	1.28	17	1.48
including		121.5	142.0	20.5	2.3	25	2.61
and		170.0	221.0	51.0	0.49	16	0.68
SH22-066	North	84.0	95.4	11.4	1.41	13	1.57
and		250.0	268.0	18.0	0.22	7	0.31
SH22-067	North	177.5	224.0	46.5	0.48	10	0.61
and		239.0	245.0	6.0	0.43	4	0.49
SH22-068	East (JM)	21.5	36.9	15.4	1.5	66	2.32
including		32.0	33.5	1.5	14.05	634	21.98
and		121.5	138.0	16.5	0.22	1	0.23
and		162.0	174.0	12.0	0.29	1	0.3
and		208.0	212.0	4.0	0.18	11	0.32
SH22-069	East (JM)	26.0	97.0	71.0	0.38	15	0.57
and		108.0	113.0	5.0	0.42	1	0.43
and		118.0	134.0	16.0	0.99	2	1.02
and		155.0	167.0	12.0	0.19	2	0.22
SH22-070	North	116.4	121.6	5.2	0.29	33	0.7
and		173.0	177.5	4.5	0.23	33	0.64
and		213.0	249.8	36.8	0.39	8	0.49
SH22-071b	North	179.5	200.7	21.2	0.35	8	0.45
and		223.0	258.5	35.5	0.23	2	0.25

10.2 Drilling - Baker

A summary of the previous drilling done at the Baker is provided in the table below. There are some historical years where not all drill intervals or assay records are available (i.e.. 1989, 1994 drill records at Baker are incomplete). Drilling from 1974-1984 concentrated on the "A" Vein, with drilling from 1986-1988 on the "B" Vein, as illustrated in Figure 10-2. Additional drilling by Sable Resource Ltd. focussed on peripheral targets and showings known as Black Gossan, West Chapelle, "C" Vein, "D" Vein, Knob, Perry Mason, and the North Quartz zones, as illustrated in Figure 10-3. Of note is the low percentage of total drill length that has been assayed at Baker.

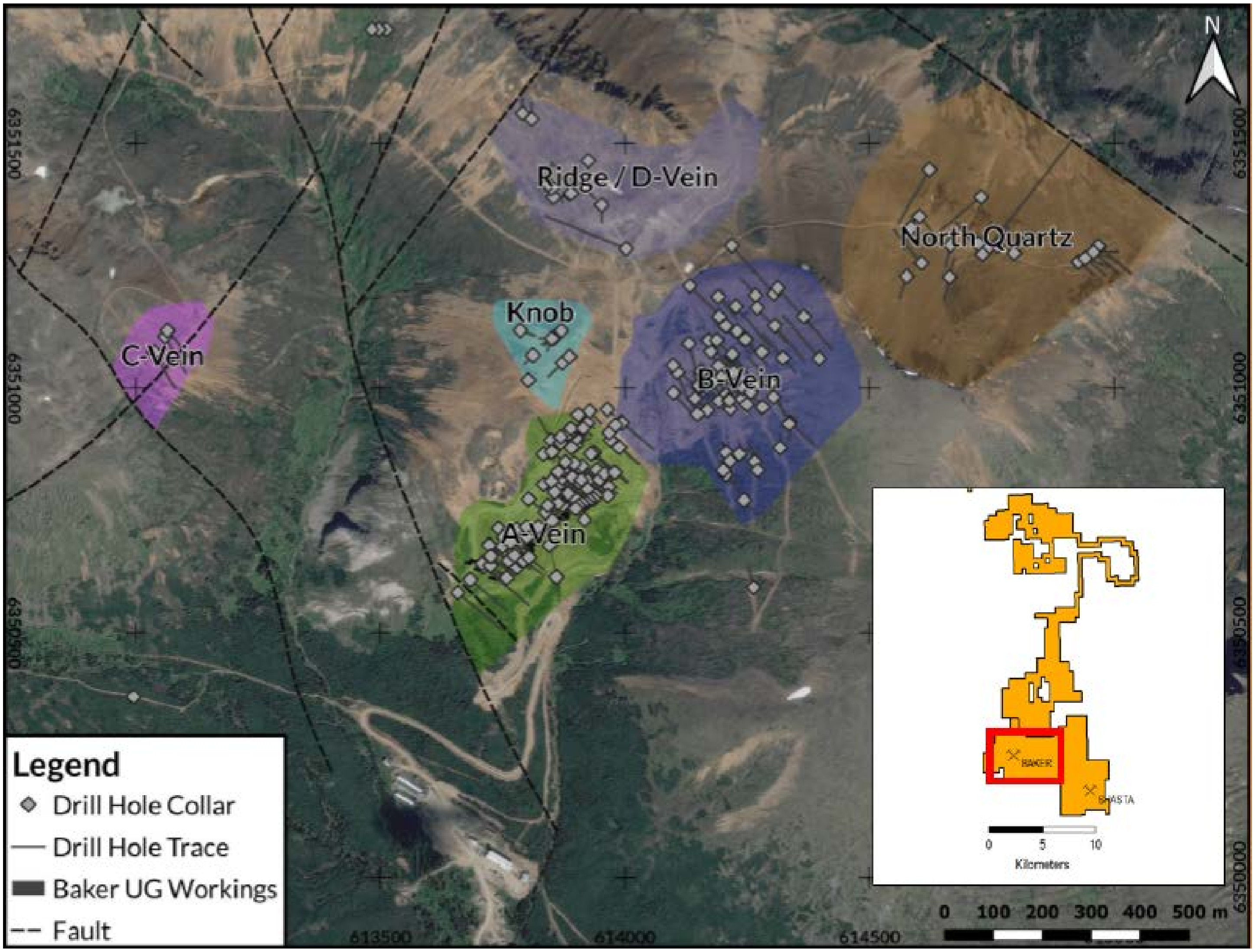
Table 10-3: Historical Drill Program Details - Baker

Year	Total for all the Baker Deposit			
	# Drillholes	Total Length (m)	Assayed Length (m)	% Assayed
1973	11	546	0	0%
1974	20	2,306	326	14%
1975	24	2,641	225	9%
1976	20	820	198	24%
1979	38	2,988	234	8%
1981	3	458	49	11%
1982	23	1,322	81	6%
1983	34	2,095	102	5%
1985	7	240	0	0%
1986	23	2,034	375	18%
1987	36	4,739	598	13%
1988	24	2,272	357	16%
1989	1	unknown	0	an
1994	11	898	21	2%
1997	8	578	179	31%
1998	22	1,430	239	17%
1999	16	829	145	17%
2000	8	282	0	0%
2001	5	417	33	8%
2002	14	1,065	54	5%
2004	8	1,134	180	16%
2006	5	669	16	2%
2017	5	1,812	639	35%
Total	**366**	**31,575**	**4,053**	**13%**



(Source: TDG Gold, 2021)

Figure 10-2: Plan view of Baker Drillholes by Owner



(Source: TDG Gold, 2022)
Figure 10-3: Plan view of Baker Drillholes by Showing

Assay intervals of note are summarized in the table below for the “A” and “B” veins of the Baker deposit.

Table 10-4: Selected Historically Significant Intercepts – Baker

"A" Vein Intercepts				
DHID	**From (m)**	**Length (m)**	**Au (g/t)**	**Ag (g/t)**
DD74-01	53	4.7	1.8	14
	69	5.2	0.28	7
DD74-10	70	7.6	32	704
	including	3.7	66	1450
DD74-13	56	9.1	13	105
	including	5.9	20	151
S83-04	19	11	1.5	81
	including	3.5	2.5	129
	including	3.7	1.8	117
M88-19	42	7.6	1.6	23
	including	4.4	2.4	38
"B" Vein Intercepts				
DHID	**From (m)**	**Length (m)**	**Au (g/t)**	**Ag (g/t)**
DD86-01	42	3.3	0.9	2
	47	3.8	0.7	0.3
	66	3.1	2.2	175
DD86-10	97	3.6	6.9	18
DD86-14	47	10.4	6.6	101
	including	4.5	13.7	227
DD86-19	39	16.8	14.6	28
DD86-23	33	8.8	31	392

10.3 Drilling – Oxide Peak

In 1987, five diamond drillholes totaling a length of 605.02 m were completed by Lacana Ex. targeting a fault zone with intense argillic alteration (Johnston, 1987). Drilling identified quartz veins and silicified volcanics with frequent chalcopyrite, sphalerite, and lesser galena, molybdenite, pyrite and scheelite (Johnston, 1987). Assays did not recognise any significant gold or silver values (Johnston, 1987).

In 2007, a total of 914 metres over seven diamond drillholes within the Saunders prospect and 903.15 metres over two holes on the Som showing was completed (Dawson, 2008).

In 2021 two holes were drilled for 1,029m of diamond drilling. OP21-01 intersected 4.11g/t Ag over 3.36m at the end of the drillhole (510m downhole depth) at the Drybrough target which was delineated by the airborne magnetic and radiometric survey flow in in August/September 2021.

In 2022 two holes were drilled for 1,022 m of diamond drilling. Both drillholes intersected broad intervals of anomalous concentrations of base and precious metals associated with an assemblage of high to medium sulphidation minerals. Elevated concentrations of pathfinder elements (telluirium, tungsten and/or bismuth) may suggest the presence of a porphyry adjacent to the 2022 drilling.

10.4 Drilling – Mets

Historical drilling at Mets is summarized in Table 10-5, with a plan map of drillholes illustrated in Figure 10-4.

Table 10-5: Historical Drill Program Details – Mets

Year	Total for all the Mets Deposit			
	# Drillholes	Total Length (m)	Assayed Length (m)	% Assayed
1985	4	231	120	52%
1986	20	1,652	448	27%
1987	40	6,061	1,641	27%
Total	**64**	**7,944**	2,208	28%

Assay intervals of note are summarized in Table 10-6 below for the Mets deposit.

Table 10-6: Selected Historically Significant Intercepts – Mets

Mets				
DHID	From (m)	Length (m)	Au (g/t)	Ag (g/t)
MT87-55	53	46.4	3.57	2.36
	including	11.8	13.93	2
MT86-05	53	42.4	3.52	2.27
MT86-08	22	26	9.52	1.92
	including	17.52	13.97	1.28
MT87-31	86	7	1.34	1.05
MT87-50	163	25	0.6	2.27
	including	2.3	5.92	3.23

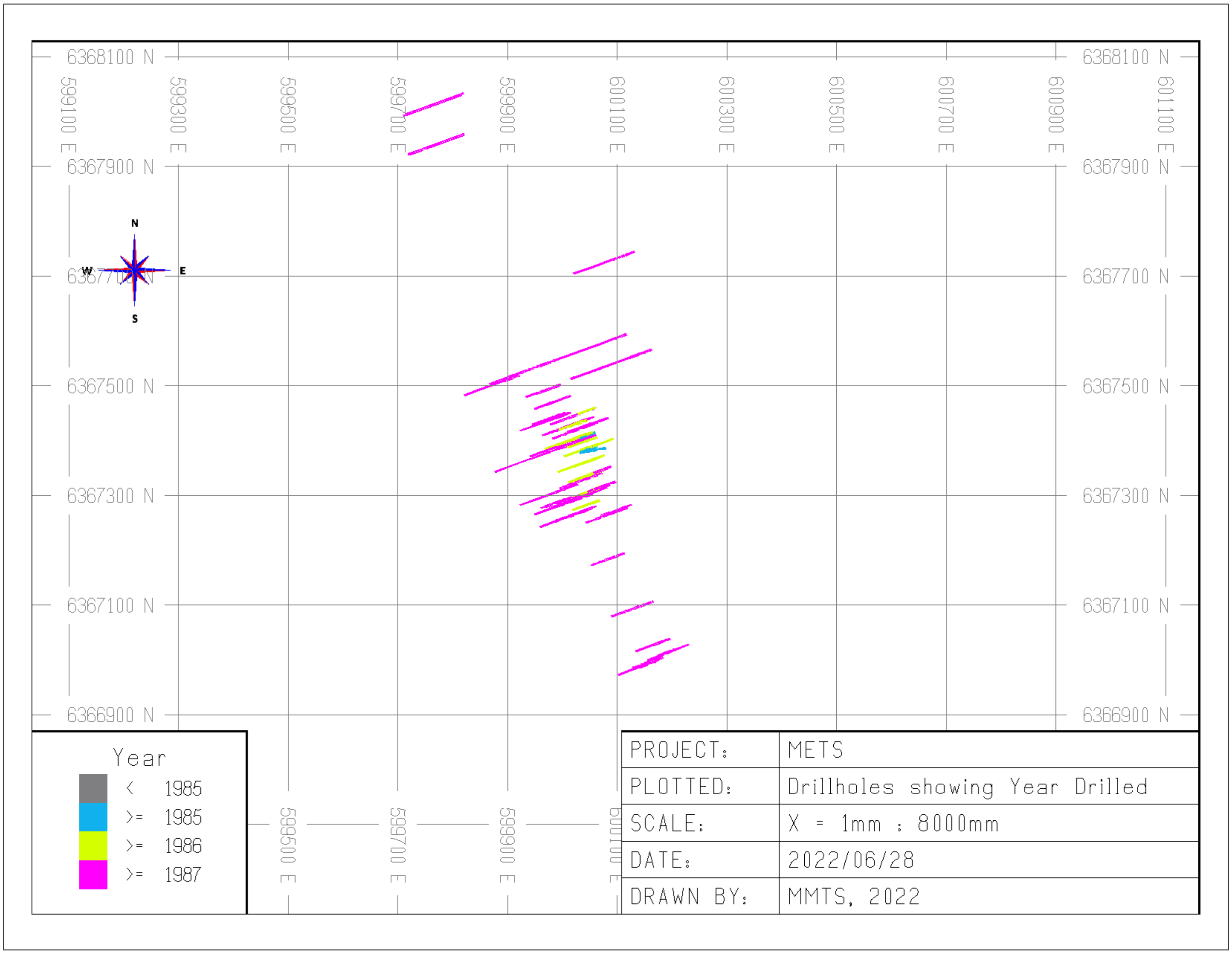


Figure 10-4: Plan View of Mets Drillholes and Year Drilled

11 Sample Preparation, Analysis and Security

11.1 2022 Data

Readers are referred to Bird (2022) for details on previous years' data collection and quality. The 2022 drill core data summarized in this section and utilized for Resource Estimation has been collected by TDG Gold. The sample preparation, analyses and security procedures implemented by TDG Gold meet standard practices and the data collected are of adequate quality and reliability to support the estimation of Mineral Resources to the level of Inferred and Indicated Resources as presented in this report.

11.1.1 Sample Preparation at Site

For the 2022 diamond drilling campaign, HQ drill core was transported from the rig to the core preparation site at the Baker camp site. Geotechnical data (core recovery and RQD) was recorded by field assistants, geological core logging and sample interval selection was completed by qualified geologists. Sample intervals vary in length from 0.5m to 3.86m, honouring geological contacts, with an average sample length of 1.53m. To maximize sample precision in mineralized intervals, the geologist provided core cutting guidance by drawing a center line on the core to be sampled. A sample sheet was provided to the core cutter containing sample numbers and from-to intervals as well as field duplicate sample designations. In addition to the sheet, a professional sample tag booklet system was used, with a sample tag with hand-written from-to information attached to the box at each sample interval start, while a corresponding tag was placed in the sample bag along with the core sample. The sample tag books have been retained for future reference. Each core box was photographed both dry and wet before cutting.

TDG Gold, during both 2021 and 2022, collected half-core as a primary sample while the other half of the core remained in the box for future examination and reference. The sampled half-core was typically cut into two quarter-core samples for field duplicate sampling purposes (sampling precision) at regular intervals. In 2022, a common 1.5m HQ half-core sample interval at Shasta generates about 5.9kg of material to send for analysis, while duplicate material averaged 2.95kg at the same core length.

11.1.2 Security

A Chain of Custody form is used to track the samples once they leave the core facility at Baker. Only project-level staff are involved with the selection and preparation of samples, using security tags and/or zip ties to seal rice bags which contain 2-5 samples at a time. Samples were transported from the Baker/Shasta site to Bandstra in Prince George, either by TDG Gold personnel or a third-party freight contractor, with Bandstra delivering the samples directly to the ALS laboratory facilities in Kamloops, BC. Remaining core is currently being stored in a locked-up and heated building at site, and lab rejects and pulps of the 2022 program are currently being held at ALS for further investigations.

11.1.3 Sample protocol at ALS

All 2022 samples have been prepared at ALS Canada Ltd.'s facilities in Kamloops; pulps have then been sent to North Vancouver for analysis. ALS Canada Ltd. is independent of TDG Gold and is ISO 17025 accredited. The ALS method summaries are as follows:

Sample Preparation: The received sample is weighed to obtain an initial weight, and dried, if received wet or if specified by the customer. The dried sample is crushed to 70% passing 2 mm (CRU-31). The crushed sample is split via a riffle splitter (SPL-21) to divide the sample into a ~1000g sub-sample for analysis and the remainder is stored as a reject. Samples are pulverized to 85% passing 0.075 mm (200 mesh) (PUL-32).

Analytical Procedures:
Pulps are digested using a four-acid digestion (HCl, HNO_3, HF and $HClO_4$) and heated until dry. The residue is then dissolved in HNO_3 and HCl. A 0.25g subsample is then analysed for 48 elements using ICP-MS (method ME-MS61). It is noted on certificates that REEs may not be soluble in this method.

Au is analysed for using method Au-ICP22 on a 50g sample, which includes a fire assay and inductively coupled plasma atomic emission spectroscopy (ICP-AES) for a reporting range of 0.001 – 10 g/t Au. Samples which exceeded 10 g/t Au were further analysed by fire assay and gravimetric finish on a 50g sample, giving a reporting range of 0.05 – 10,000 g/t Au (Au-GRA22).

Lab QA/QC Procedures:
For each assay certificate, ALS provides a QC Certificate which details the results of their internal QC sample analysis, including multiple gold standards (method Au-ICP22), multi-element standards (ME-MS61), blanks, duplicates, and prep duplicates (1/50) at regular intervals.

Table 11-1: ME-MS61 Reported Elements and Reporting Limits

Element	Reporting Limit (ppm)	Upper Limit (ppm)	Element	Reporting Limit (ppm)	Upper Limit (ppm)	Element	Reporting Limit (%)	Upper Limit (%)
Ag	0.01	100	Ni	0.2	10,000	Al	0.01	50%
As	0.2	10,000	P	10	10,000	Ca	0.01	50%
Ba	10	10,000	Pb	0.5	10,000	Fe	0.01	50
Be	0.05	1,000	Rb	0.1	10,000	K	0.01	10
Bi	0.01	10,000	Re	0.002	50	Mg	0.01	50
Cd	0.02	1,000	Sb	0.05	10,000	Na	0.01	10
Ce	0.01	10,000	Sc	0.1	10,000	S	0.01	10
Co	0.1	10,000	Se	1	1,000	Ti	0.005	10
Cr	1	10,000	Sn	0.2	500			
Cs	0.05	10,000	Sr	0.2	10,000			
Cu	0.2	10,000	Ta	0.05	500			
Ga	0.05	10,000	Te	0.05	500			
Ge	0.05	500	Th	0.01	10,000			
Hf	0.1	500	Tl	0.02	10,000			
In	0.005	500	U	0.1	10,000			
La	0.5	10,000	V	1	10,000			
Li	0.2	10,000	W	0.1	10,000			
Mn	5	100,000	Y	0.1	500			
Mo	0.05	10,000	Zn	2	10,000			
Nb	0.1	500	Zr	0.5	500			

11.1.4 QA/QC Summary
In 2022, TDG Gold's quality assurance (QA) protocol involved the use of standard practice procedures for sample collection as described above, supervised by experienced geologic staff during data

collection. Quality control (QC) measures as implemented by the company included in-stream sample submittal of two (2) blind OREAS standard reference materials (OREAS-233 and OREAS-250b) of appropriate Au and Ag grades, rock blanks, and field duplicate (quarter-core) sampling.

QA/QC performance was graphically tracked by TDG Gold's geologic staff, with a detailed review of the data by MMTS for this report. For the blanks, 5*LOD and 10*LOD of the respective analysis methods for both Au and Ag were used as 'warning' and 'failure' thresholds for contamination.

For the CRMs, +/-2 to +/-3 standard deviations (SD) from expected value (EV) as certified were included in the control graphs to determine accuracy of Au and Ag results. To monitor core sampling and sample preparation precision, TDG Gold selected regular intervals within the sample stream for field (quarter-core) sample duplication. Control sample insertion rate for 2022 is shown in Table 11-2.

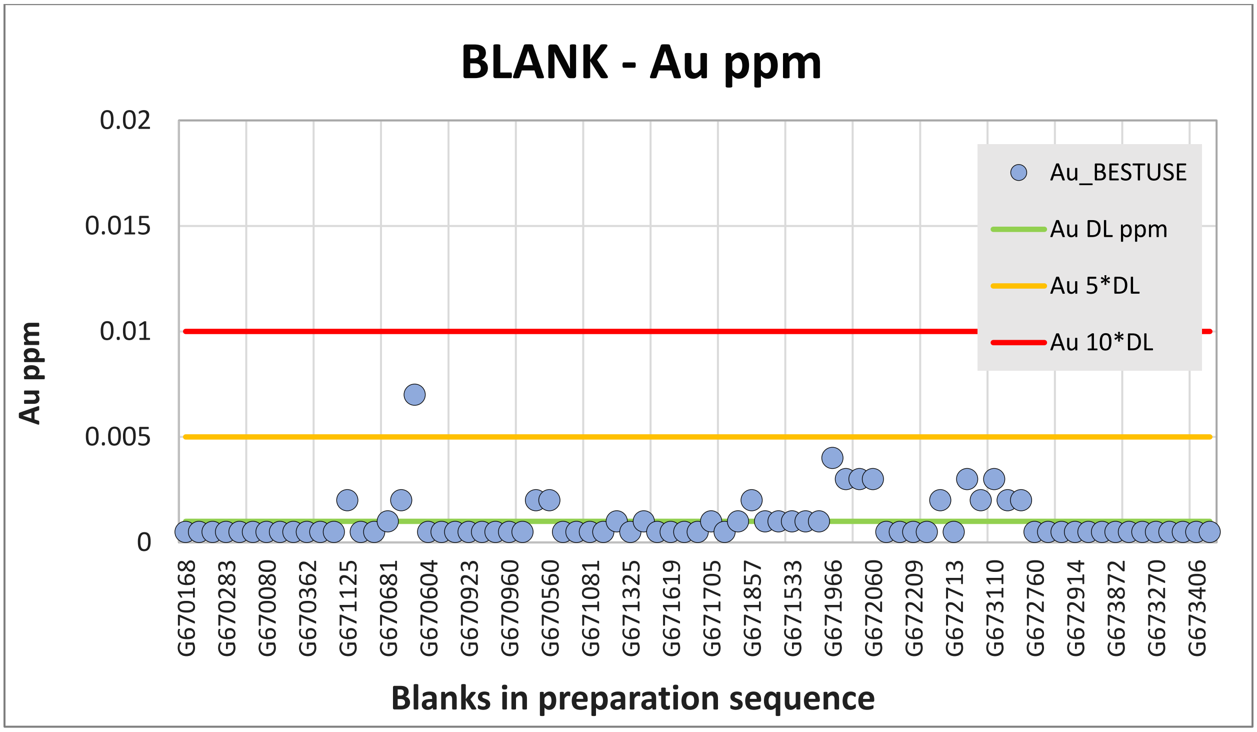
Table 11-2: 2022 Control Sample Insertion Rate

Sample Type	Count	% of total	Primary/QAQC Ratio
Half Core	3104	91.16%	
Blanks	77	2.26%	40:1
Standards	149	4.38%	21:1
Field Duplicates	75	2.20%	41:1
Total	3405	100.00%	
All QA/QC	301	8.84%	10:1

11.1.5 Blanks

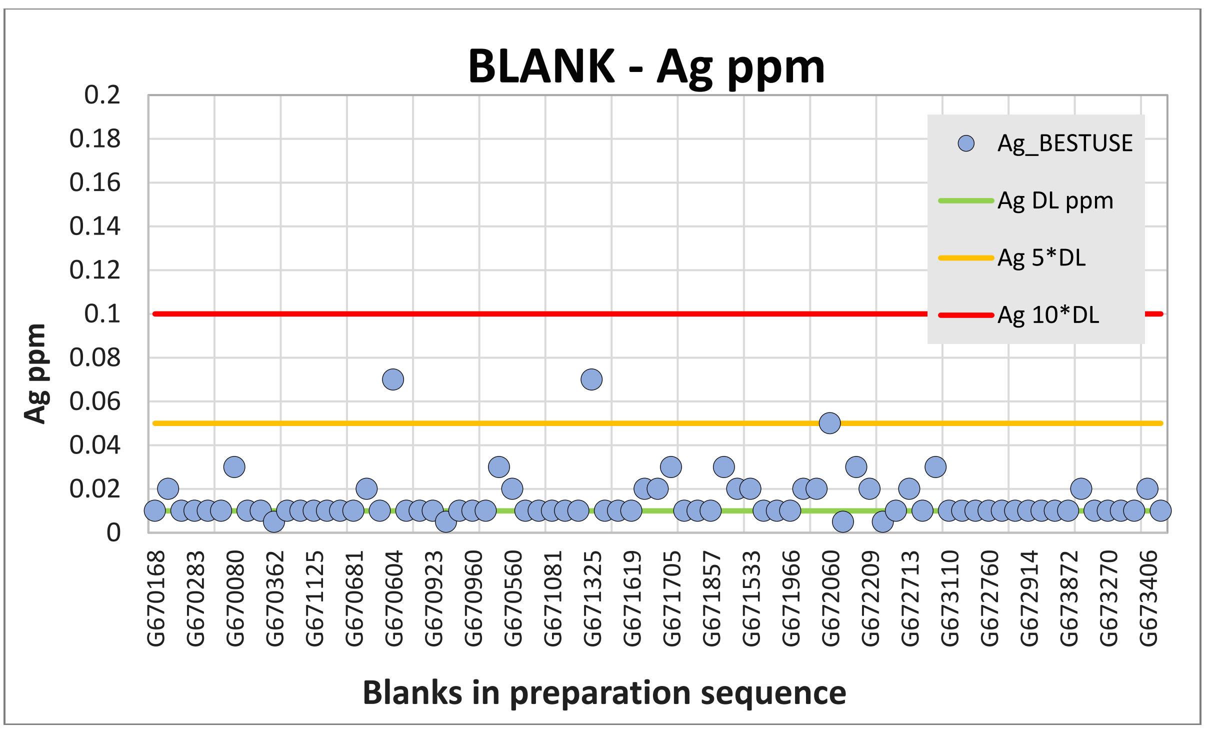
A total of 77 rock blanks ranging from 0.45 – 4.72 kg were inserted into the sample stream in 2022. Blanks performed well, with no significant contamination due to lab sample preparation detected and no re-runs triggered (Figure 11-1 to Figure 11-2).

One blank exceeded the 5*DL warning level for Au and three (3) different blanks met or exceeded the 5* DL warning level for Ag (Figure 11-1 and Figure 11-2).



(Source: MMTS, 2023)

Figure 11-1: 2022 Rock Blank Au Performance



(Source: MMTS, 2023)

Figure 11-2: 2022 Rock Blank Ag Performance

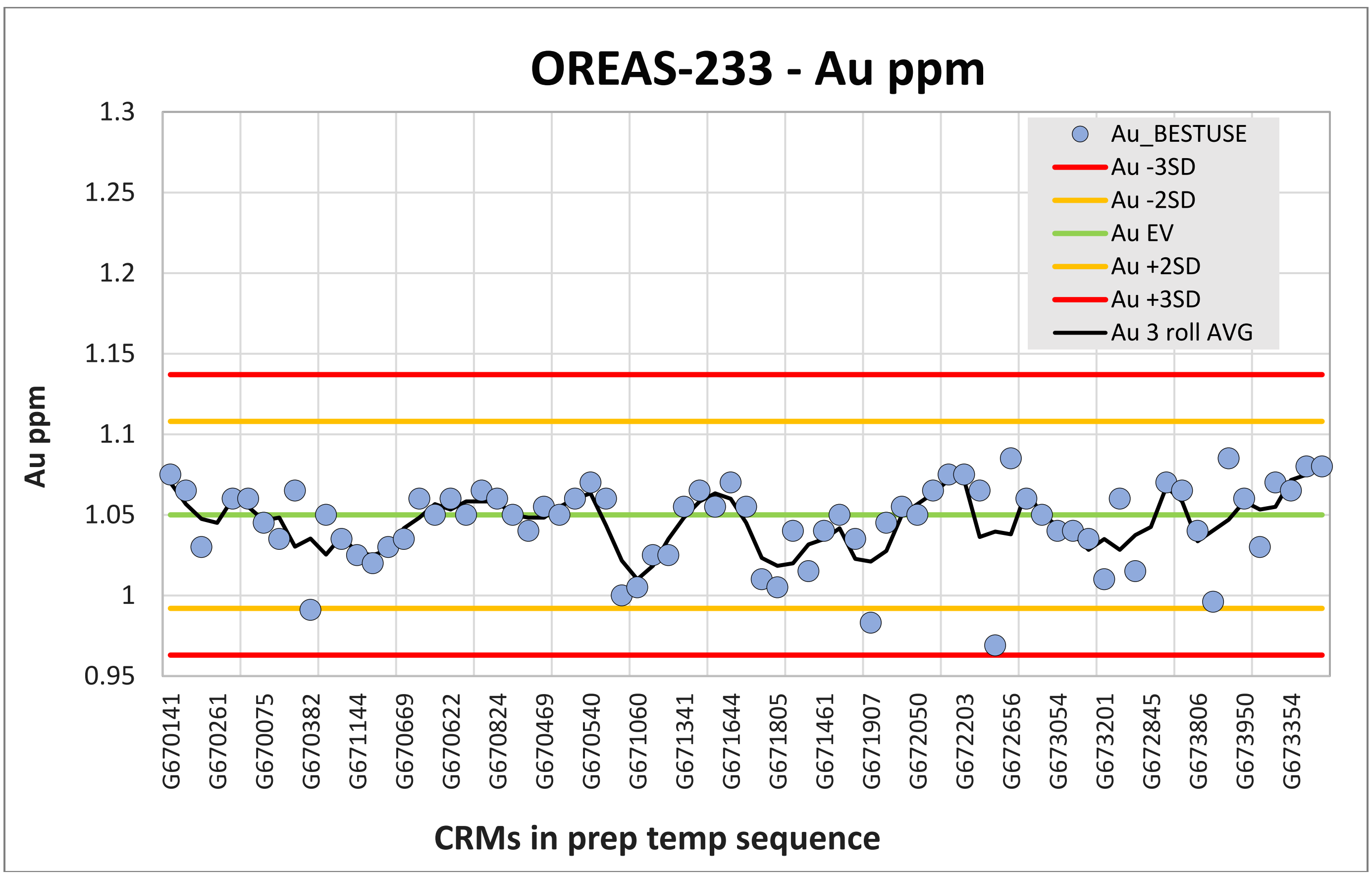
11.1.6 Certified Reference Material

A total of 149 pulp standards ("CRMs") from OREAS were inserted into the 2022 sample stream. Two of the OREAS-233 and three of the OREAS-250b CRMs were of insufficient quantity (NSS) for Au analysis.

CRMs generally performed very well for Au and reasonably well for Ag. Two OREAS-233 were below the Au EV-2SD, while 5 of the OREAS-250b were below this threshold, including 2 samples below the Au -3SD threshold. Mean Au (g/t) was equal to the EV for OREAS-233, and 3.61% below the EV for OREAS-250b (Table 11-3). Five (5) of the OREAS-233 CRMS returned Ag > EV + 2SD, including two > EV + 3SD; four (4) of the OREAS-250b samples yielded Ag < EV – 2SD including three (3) with Ag < EV – 3SD (Figure 11-3). Eight (8) OREAS-250b met the Ag EV + 2SD, and five exceeded this threshold, including four (4) above the EV +3SD threshold and up to 0.27 g/t Ag. Both CRMs show a slight positive bias for Ag, with a mean 5.96% above the EV (OREAS-233) and 8.90% above (OREAS-250b).

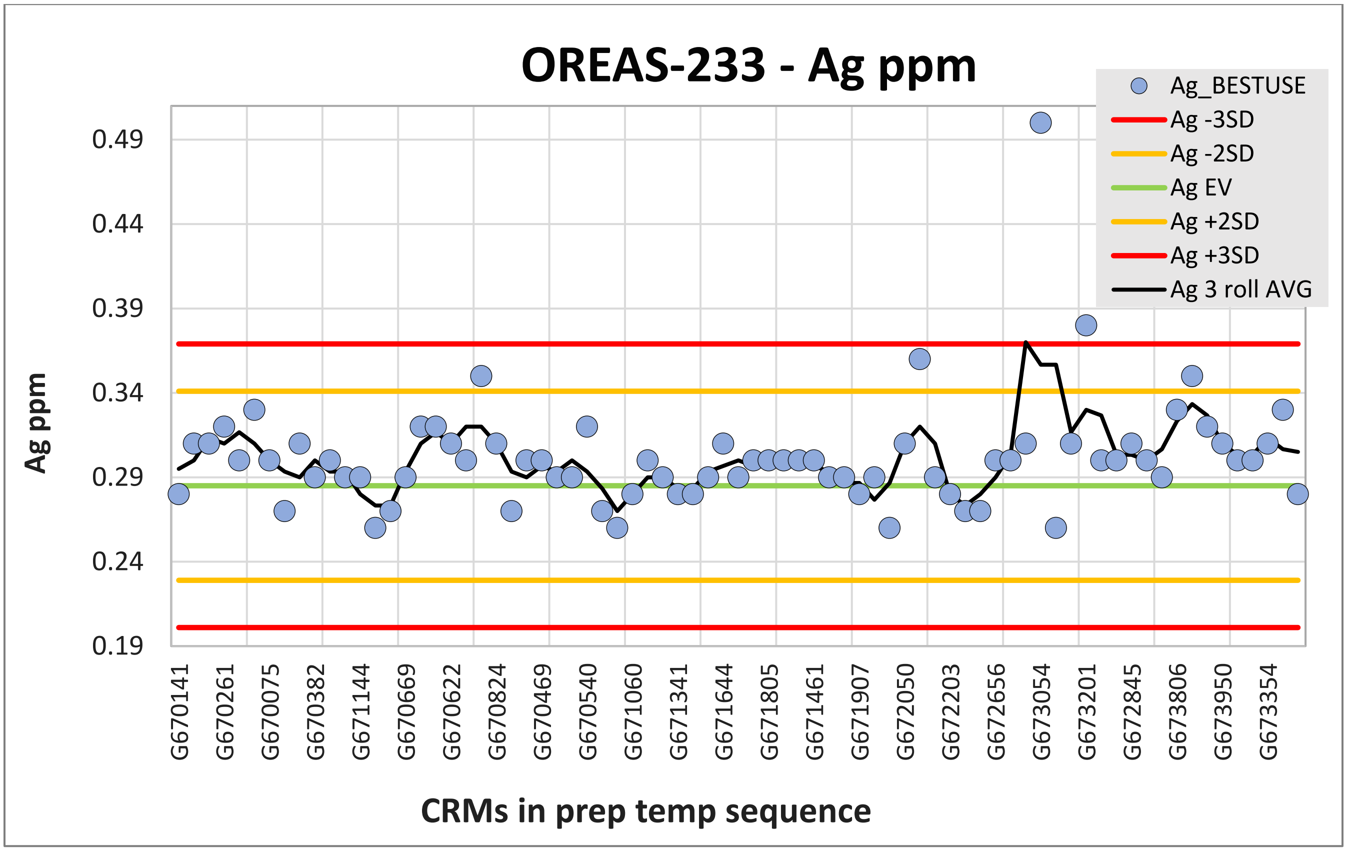
Table 11-3: CRM Mean Grade Difference

CRM	Count	EV Au (g/t)	Mean Au (g/t)	EV Ag (g/t)	Mean Ag (g/t)	Au ARD %	Ag ARD %
OREAS-233	75	1.05	1.05	0.285	0.302	0.00%	5.96%
OREAS-250b	74	0.332	0.32	0.073	0.0795	-3.61%	8.90%



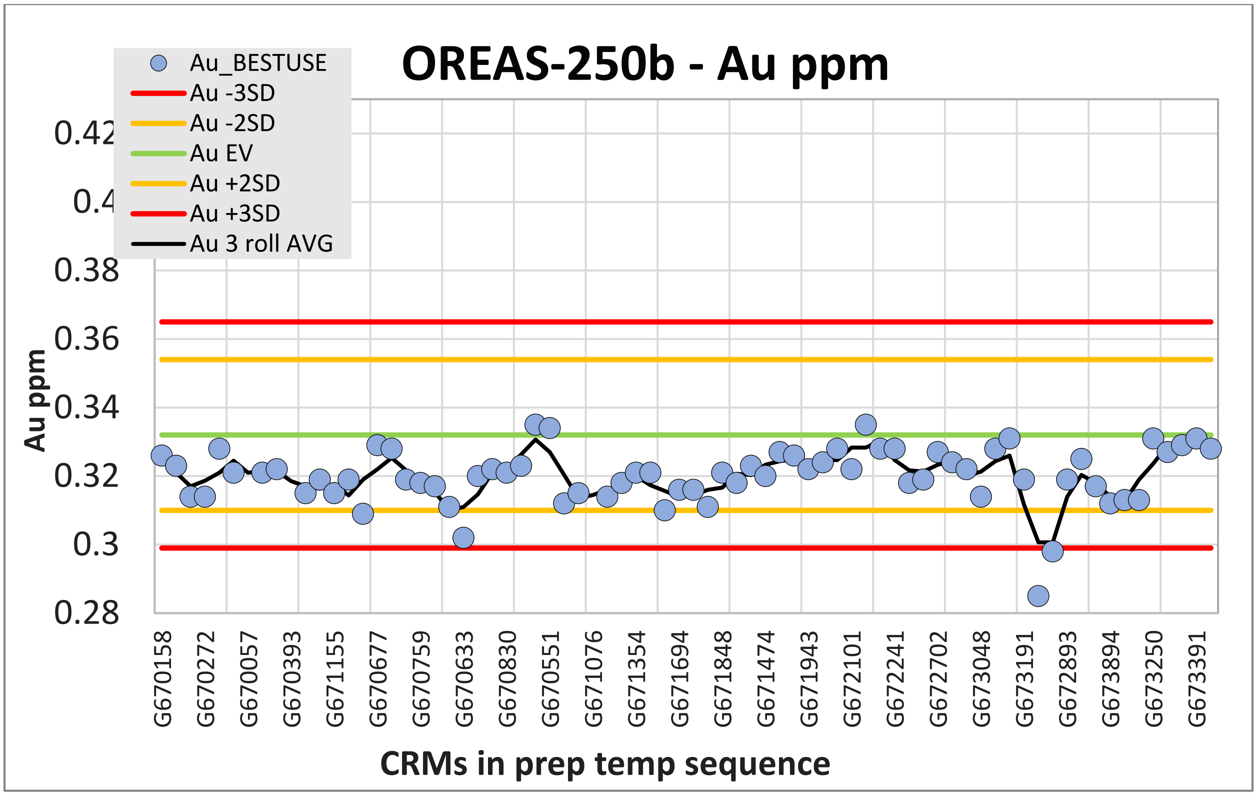
(Source: MMTS, 2023)

Figure 11-3: OREAS-233 CRM Au performance for 2022 drilling



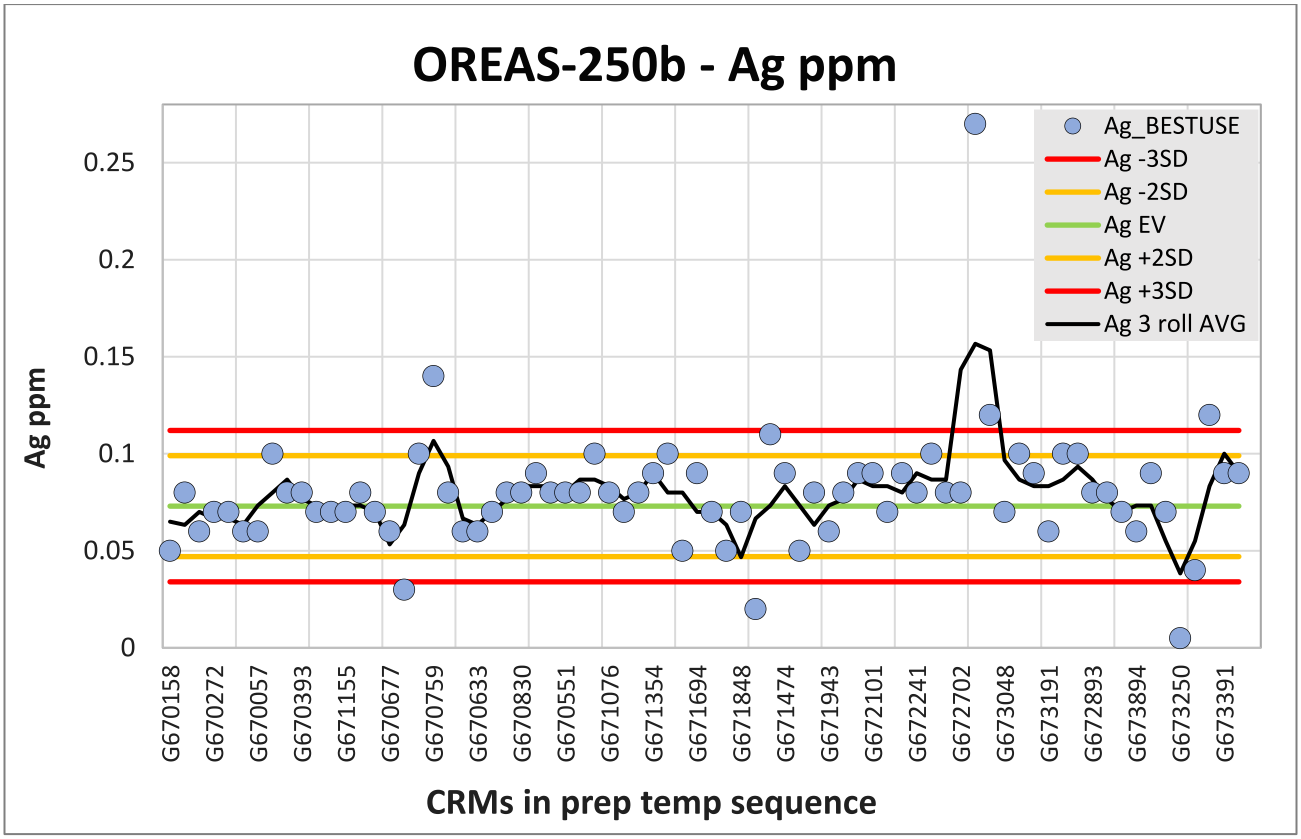
(Source: MMTS, 2023)

Figure 11-4: OREAS-233 CRM Ag performance for 2022 Drilling



(Source: MMTS, 2023)

Figure 11-5: OREAS-250b CRM Au performance for 2022 Drilling



(Source: MMTS, 2023)

Figure 11-6: OREAS-250b CRM Ag performance for 2022 Drilling

11.1.7 Field Duplicates

Duplicate performance in 2022 was reasonable for both Au and Ag, given the deposit style and spatial variability inherent in quarter-core duplicates of vein-hosted mineralization.

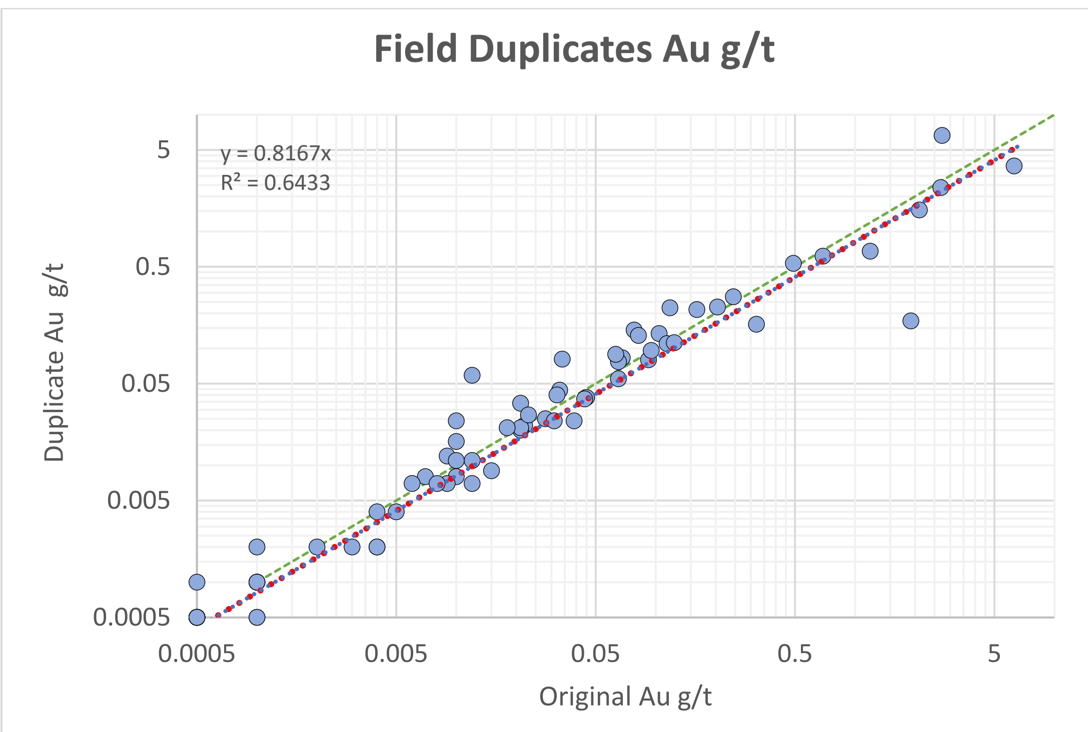
The XY scatter plot trendline for Au (Figure 11-7) reports a bias towards the original sample series, influenced by one sample for which the original yielded 1.905 g/t Au while the duplicate yielded only 0.172 g/t Au. Most samples perform relatively well, but scatter leads to only moderate correlation for Au values (R^2 = 0.6433). Mean Au values for the original-duplicate samples are 0.275 and 0.254 g/t, respectively; percentiles are comparable until the 95th percentile, which is significantly greater for the original samples (Table 11-4).

Ag field duplicates show strong correlation to Ag field primary data, with but with a strong duplicate-positive bias (Figure 11-8). The standard deviation in Ag grades is significantly more in the duplicate samples, and the mean grade of 16.809 g/t is greater than the mean of the original samples (11.045 g/t). Percentiles of Ag grades are generally comparable, though the 95th percentile of the duplicate samples is lower than that of the original samples (Table 11-4).

Table 11-4: 2022 Field Duplicate Statistics

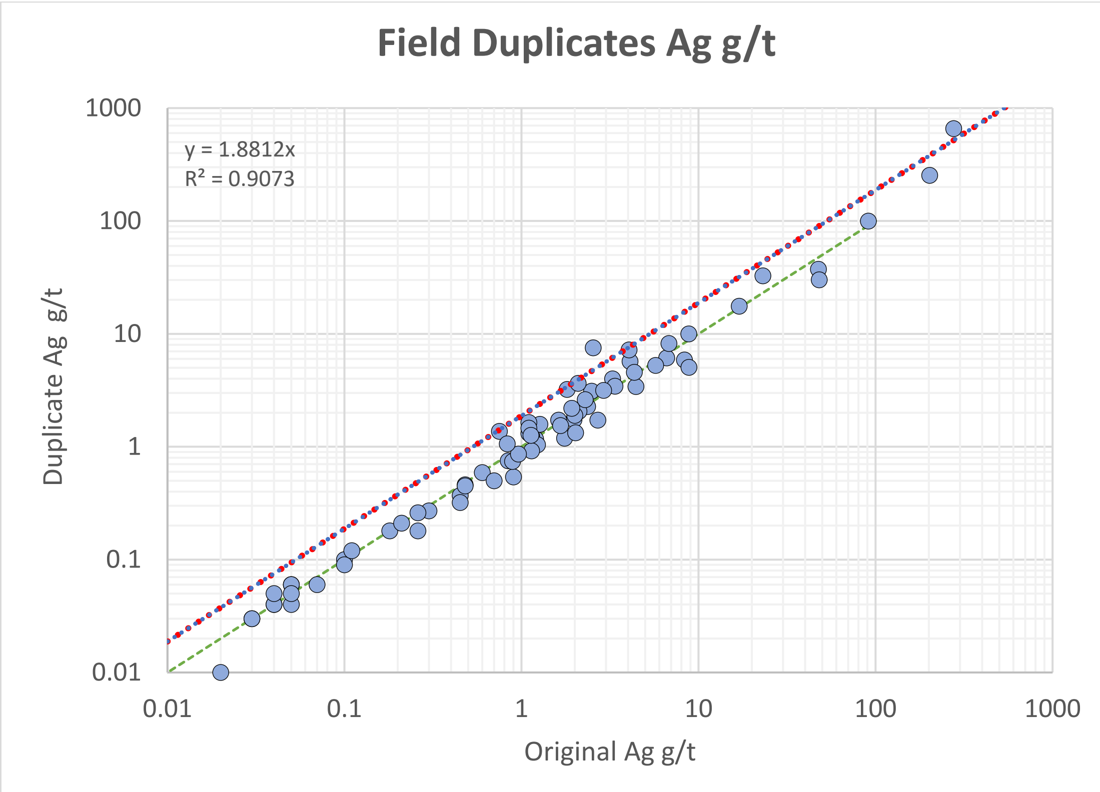
TDG Gold FD 2022	Primary Au (g/t)	Duplicate Au (g/t)
Count Numeric	75	75
Minimum	0.001	0.001
Maximum	6.280	6.650
Mean	0.275	0.254
Median	0.018	0.021
Range	6.280	6.650
Standard Deviation	0.887	0.910
5 percentile	0.001	0.001
25 percentile	0.003	0.002
50 percentile	0.018	0.021
75 percentile	0.080	0.093
95 percentile	1.964	0.935

TDG Gold FD 2022	Primary Ag (g/t)	Duplicate Ag (g/t)
Count Numeric	75	75
Minimum	0.020	0.010
Maximum	276.000	658.000
Mean	11.045	16.809
Median	1.200	1.330
Range	6.280	0.000
Standard Deviation	40.340	80.871
5 percentile	0.040	0.040
25 percentile	0.375	0.295
50 percentile	1.200	1.330
75 percentile	3.090	3.540
95 percentile	47.750	34.110



(Source: MMTS, 2023)

Figure 11-7: Field Duplicates Scatter Plot - Au



(Source: MMTS, 2023)

Figure 11-8: Field Duplicates Scatter Plot - Ag

11.2 2021 Data

2021 drill core data summarized in this section and utilized for Resource Estimation has been collected by TDG Gold. The sample preparation, analyses and security procedures implemented by TDG Gold meet standard practices in most cases. Refinements to several protocols are required to achieve the best possible quality control (QC) of sampling. The data collected is of adequate quality and reliability to support the estimation of Mineral Resources to the level of Inferred Resources as presented in this report.

Substantial historical drill core data as collected by previous operators has been utilized for Resource Estimation and will be included in this section, where applicable. Descriptions and quantities of samples are limited to drilling within the immediate Shasta deposit resource area; various drilling outside of the deposit area are not considered relevant to this section.

11.2.1 Sample Preparation at Site

For the 2021 diamond drilling campaign, HQ drill core was transported from the rig to the core preparation site at the Baker camp site. Geotechnical data (core recovery and RQD) was recorded by field assistants, geological core logging and sample interval selection was completed by qualified geologists. Sample intervals vary in length from 0.3m to 3m, honouring geological contacts, with an average sample length of 1.3m. To maximize sample precision in mineralized intervals, the geologist provided core cutting guidance by drawing a center line on the core to be sampled. A sample sheet was provided to the core cutter containing sample numbers and from-to intervals as well as field duplicate sample designations. In addition to the sheet, a professional sample tag booklet system was used, with a sample tag with hand-written from-to information attached to the box at each sample interval start, while a corresponding tag was placed in the sample bag along with the core sample. The sample tag books have been retained for future reference. Each core box was photographed both dry and wet before cutting.

TDG Gold, during 2021, collected half-core as primary sample while the other half of the core remained in the box for future examination and reference. The sampled half-core was cut into quarter-core for field duplicate sampling purposes (sampling precision) at regular intervals. A common 1.5m HQ half-core sample interval at Shasta generates about 5.6kg of material to send for analysis, while duplicate material averaged 2.77kg at the same core length.

11.2.2 Security

A Chain of Custody form is used to track the samples once they leave the core facility at Baker. Only project level staff are involved with the selection and preparation of samples, using security tags and/or zip ties to seal rice bags which contain 2-5 samples at a time. Samples were transported from the Baker/Shasta site to Bandstra in Prince George, either by TDG Gold personnel or a third-party freight contractor, with Bandstra delivering the samples directly to the SGS laboratory facilities in Burnaby, BC. Remaining core is currently being stored in a locked-up and heated building at site, and lab rejects and pulps of the 2021 program are currently being held at SGS for further investigations.

11.2.3 Sample protocol at SGS

All 2021 samples have been prepared and analysed at SGS Labs. facilities in Burnaby, British Columbia. SGS Labs is independent of TDG Gold and is ISO 17025 accredited.

The SGS method summaries are as follows:

Prep (G_PRP): The received sample is weighed to obtain an initial weight, and dried, if received wet or if specified by the customer. The dried sample is crushed to 75% passing 2 mm using a Boyd Crusher. The crushed sample is split via a riffle splitter or Rotating Sample Divider (RSD) to divide the sample into a ~250g sub-sample for analysis and the remainder is stored as a reject. Pulverizing is performed using a vibratory mill and hardened chrome steel or agate ceramic (mortar and pestle) but may depend on the analysis requested and sample type. Samples are pulverized to 85% passing 0.075 mm (200 mesh). For internal quality control, SGS adheres to the parameters shown in Table 11-5.

Table 11-5: SGS Internal Preparation Parameters

Crushing / Pulverizing Parameters	Frequency	Quality control Requirements
Barren Wash	Between jobs or when equipment requires	ensure equipment is clean
Prep. Blank	At the start of the job	Monitor contamination with each job.
First Sample	At the start of every job, and every 50 samples	75% pass (crush); 85% pass (pulverizing)
Prep. Duplicate	~ 50 samples	First split at crush
Prep. Replicates	~ 50 samples	Sample aliquot taken at weighing from same pulp bag (after pulverization)

GO_FAI50V10: Weighed representative samples (50g) are mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button. The bead is dissolved using HCl and HNO3 and the resulting solution is submitted for analysis. The digested sample solution is analyzed by inductively coupled plasma Optical Emission Spectrometer (ICP-OES). The reporting limit for Au, Pt, and Pd is 0.01 g/t, with and upper reporting limit of 100 g/t for all 3 elements.

Quality control materials include method blanks, replicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~11%. Quality control materials will also include BRM (Barren reference materials, or preparations blanks) and duplicates if samples have been taken through the sample reduction process. Instrument calibration is performed for each batch or work order and calibration checks are analyzed within each analytical run.

GE_FAI50V5: essentially the equivalent to GO_FAI50V10 but optimized for exploration samples instead of ore grade samples. Its overall lower dilution factor results in lower detection for Au compared to GO_FAI50V10.

GO_FAG50V (ore grade Au samples): Weighed (50g) representative samples are mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button. The bead is transferred into porcelain crucibles; silver is removed by heating gently with dilute HNO3. The amount of the analyte is determined using Gravimetric analysis on a micro balance. The lower reporting limit is 0.5 g/t.

GO_FAG37V (ore grade Ag samples): Weighed representative samples are mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button. The bead is digested using 1:1 HNO3 and HCl and the resulting solution is submitted for analysis. Any gold and/or silver in the sample is extracted into a lead button. The lead is removed by cupellation, resulting in the isolation of the gold and silver metals in a bead which can be measured gravimetrically. The concentration of gold is determined by atomic absorption spectrometry, while the silver is determined by difference and is corrected to a series of proofs to adjust for furnace loses. The method has a lower reporting limit of 10 g/t Ag.

GE_ICM40Q12 (includes GE_ICP40Q12): Weighed (0.2g) representative samples are digested with HCl, HNO3, HF and HCLO4 and heated until dry. The residue is then dissolved in HNO3 and HCl. The digested sample solution is analyzed by inductively coupled plasma Mass Spectrometer (ICP-MS) and inductively coupled plasma Optical Emission Spectrometer (ICP-OES). Table 11-6 details reporting limits for each element and indicates which element is generally being reported by ICP-OES (bold).

Table 11-6: GE_ICM40Q12 Reported Elements and Reporting Limits

Element	Reporting Limit (ppm)	Upper Limit (ppm)	Element	Reporting Limit (ppm)	Upper Limit (ppm)	Element	Reporting Limit (%)	Upper Limit (%)
Ag	0.02	100	Ni	1	10,000	Al	0.01	15
As	1	10,000	Pb	0.5	10,000	Ca	0.005	15
Ba	1	10,000	Rb	0.1	10,000	Fe	0.01	15
Be	0.05	2,500	Sb	0.05	10,000	K	0.01	15
Bi	0.01	10,000	Sc	0.1	10,000	Mg	0.002	15
Cd	0.02	10,000	Se	1	1,000	Na	0.005	15
Ce	0.05	1,000	Sn	0.2	1,000	P	0.001	15
Co	0.1	10,000	Sr	0.5	10,000	S	0.005	5
Cr	1	10,000	Ta	0.05	10,000	Ti	0.001	15
Cs	0.05	1,000	Tb	0.05	10,000			
Cu	0.5	10,000	Te	0.05	1,000			
Ga	0.05	500	Th	0.01	10,000			
Hf	0.02	500	Tl	0.02	10,000			
In	0.005	500	U	0.05	10,000			
La	0.05	10,000	V	2	10,000			
Li	0.2	10,000	W	0.1	10,000			
Lu	0.01	1,000	Y	0.1	10,000			
Mn	2	10,000	Yb	0.1	1,000			
Mo	0.05	10,000	Zn	1	10,000			
Nb	0.1	1,000	Zr	0.5	10,000			

GO_ICP42Q100 (ore grade Ag/Cu/As/Pb/Zn among others): 0.2g of ore grade samples are digested using HNO3, HCl, HF and HClO4. The digested sample solution is analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). Samples are analyzed against known calibration materials to provide quantitative analysis of the original sample.

GE_CSA06V: The sample is weighed (generally 0.1-0.3g), varying with sample size used, into a tared ceramic crucible to be combusted under a purified oxygen stream in an induction furnace at 1350°C. The Carbon and sulfur components are converted into CO2 and SO2 respectively and measured by infrared cells and the results reported automatically in percent carbon and sulfur. Samples are analyzed against known calibration materials to provide quantitative analysis of the original sample. The lower reporting limit for both S and C is 0.005%, the upper limit is 30%.

In general, all 2021 samples were analysed using the four-acid digestion (GE_ICP40Q12) with a regular ICP finish for 19 elements and the ICP-MS finish for another 30 elements, including Ag. Au grade was generally determined using method GE_FAI50V10, except for 381 samples for which GE_FAI50V5 was used. Samples exceeding 10g/t Au within this group of 381 were re-run using fire assay with gravimetric finish (GO_FAG37V or GO_FAG50V), and no sample exceeded the 100g/t Au upper reporting limit of GE_FAI50V10. Samples exceeding 100g/t Ag in GE_ICP40Q12 have automatically been re-analysed using GO_ICP42Q100 (higher analyte dilution to 100ml) or GO_FAG37V.

11.2.4 QA/QC Summary

Again for 2021, TDG Gold's quality assurance (QA) protocol involved the use of standard practice procedures for sample collection as described above, supervised by experienced geologic staff during data collection. Quality control (QC) measures as implemented by the company included in-stream sample submittal of 4 blind OREAS standard reference materials (CRM or STD) of appropriate Au and Ag grades, 2 external blanks of different composition and fraction size, field duplicate sampling and pulp duplicate splits at the lab.

QA/QC performance was graphically tracked by TDG Gold's geologic staff, with a detailed review of the data by MMTS for this report. For the blanks, 5*LOD and 10*LOD of the respective analysis methods for both Au and Ag were used as 'warning' and 'failure' thresholds for contamination.

For the CRMs, +/-1 to +/-3 standard deviations (SD) from expected value (EV) as certified were included in the control graphs to determine accuracy of Au and Ag results. A process control chart for Au was maintained that graphed the EV-normalized performance all 4 CRMs over time (Figure 11-9).

To monitor core sampling and sample preparation precision, TDG Gold selected regular intervals within the sample stream for 2 types of sample duplication: field duplicates (FD) and pulp duplicates (PD). These data were plotted directly against the corresponding original samples, and a linear regression plus R2 was calculated to assess level of correlation and bias.

Control sample insertion rate for 2021 is shown in Table 11-7.

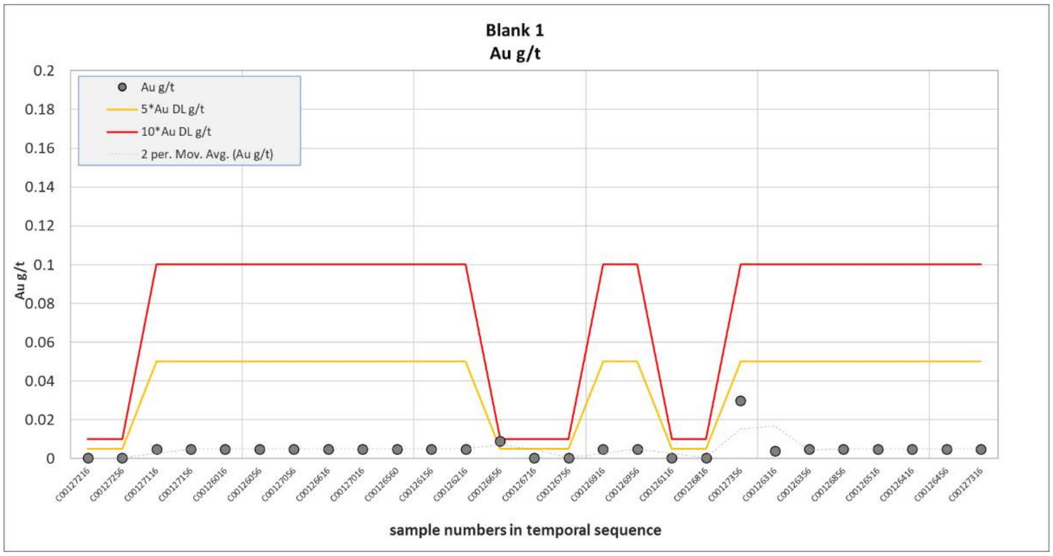
Table 11-7: 2021 Control Sample Insertion Rate

Sample Type	Count	% of Total	Primary/QAQC Ratio
Blanks	118	1.9%	48:1
Field duplicates	58	0.9%	98:1
Pulp duplicates	83	1.4%	67:1
Standards	183	3.0%	31:1
Unknown	7	0.1%	
Primary	5,692	92.7%	
Grand Total	6,141	100%	
% QAQC	7.2%		13:1

11.2.5 Blanks

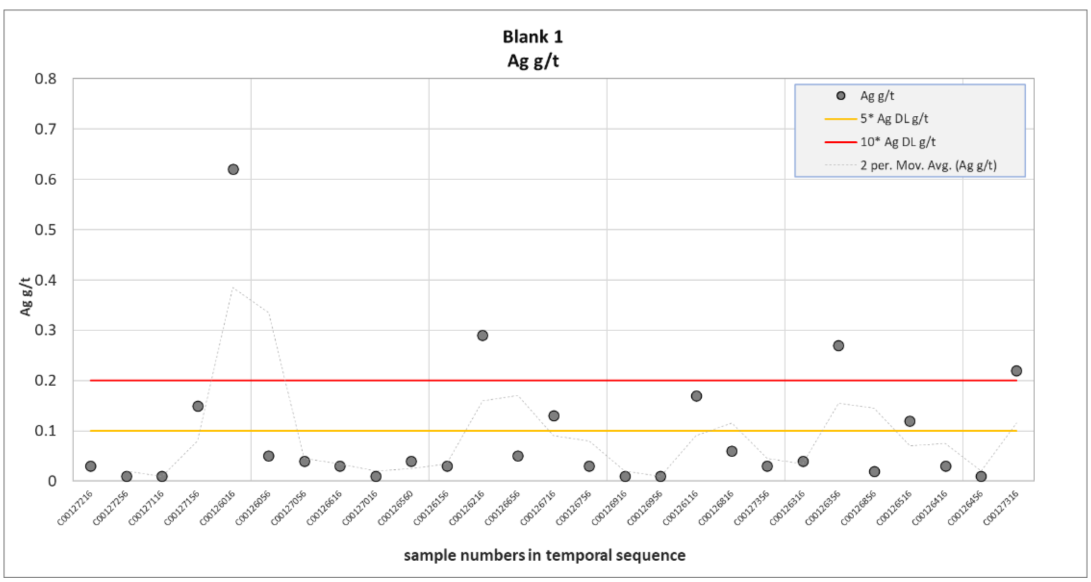
Inserted blanks performed well, no significant contamination due to lab sample preparation was detected, and no re-runs were triggered (Figure 11-9 to Figure 11-12). Select blanks exceeded the 10*DL Ag limits but given the still very low results (<1g/t) and the lack of correlation to low-Ag and high-

Ag preceding samples, this is not considered a concern. Blank 1 represents a coarse quartz, blank 2 a pulverized unmineralized rock purchased from OREAS.



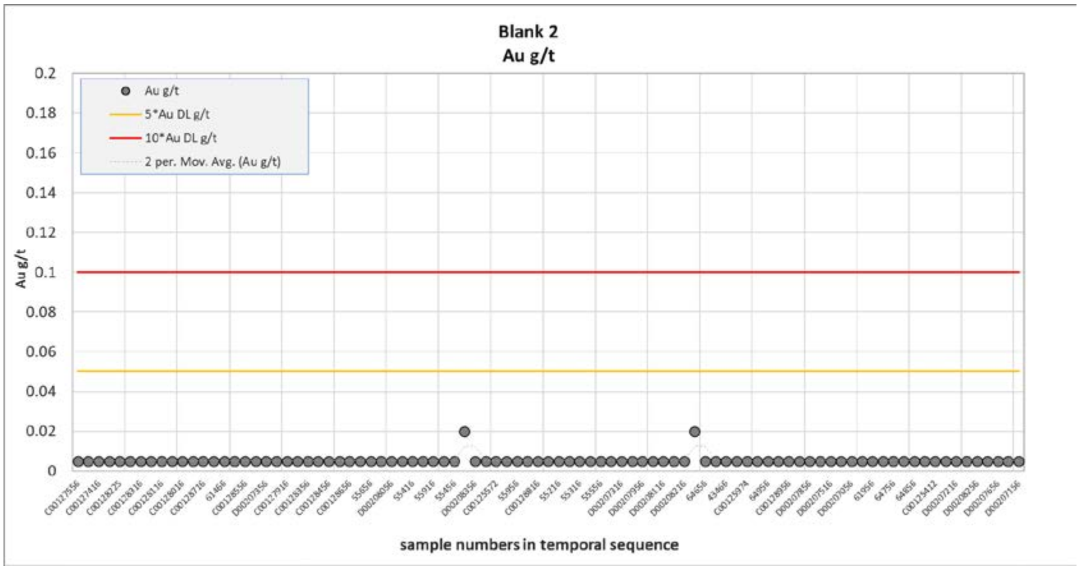
(Source: MMTS, 2022)

Figure 11-9: Blank 1 Au Performance



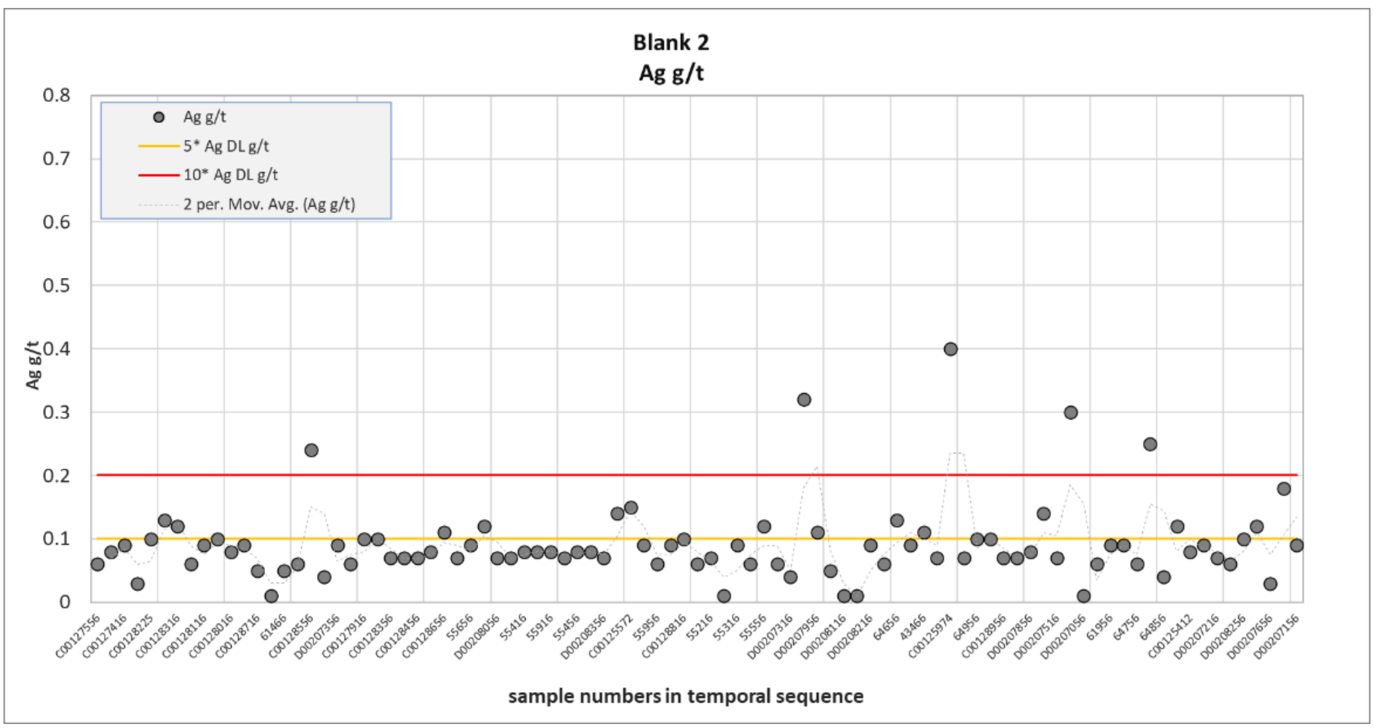
(Source: MMTS, 2022)

Figure 11-10: Blank 1 Ag Performance



(Source: MMTS, 2022)

Figure 11-11: Blank 2 Au Performance



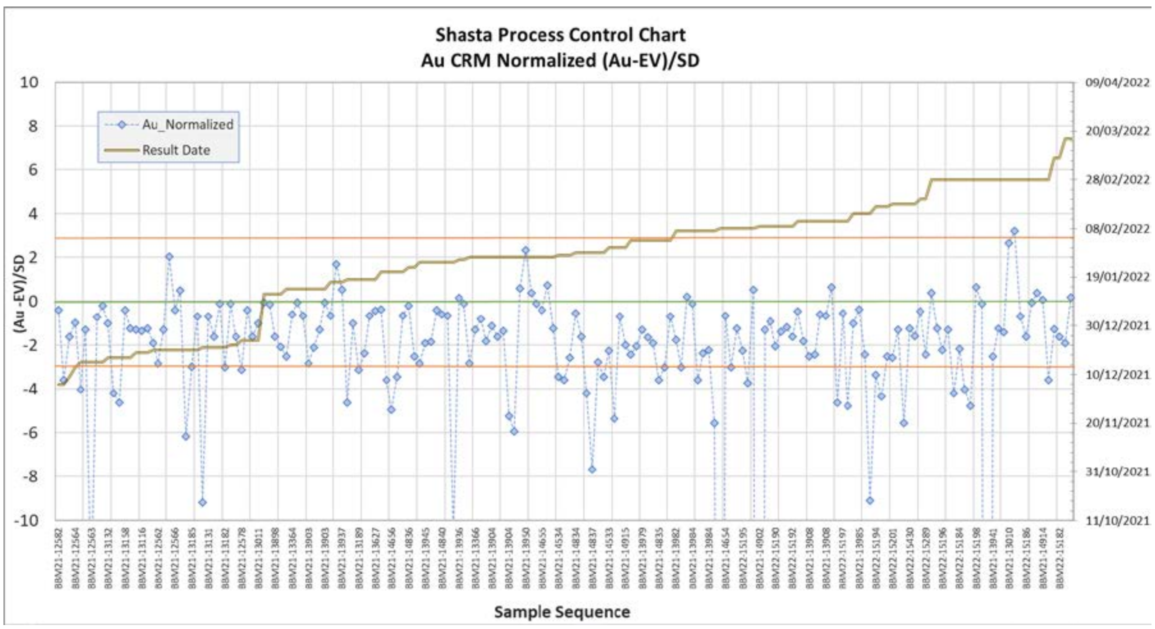
(Source: MMTS, 2022)

Figure 11-12: Blank 2 Ag Performance

11.2.6 Certified Reference Material

Au grades for all 4 CRMs used across the full 2021 drilling campaign show a significant low bias as illustrated in the Process control chart (PCC) of Figure 11-13. Ag performed well in OREAS 210 which is the only CRM of the group certified for Ag as illustrated in the PCC of Figure 11-15. It should be noted that the utilized CRMs are predominantly made from an Archean greenstone-hosted orogenic gold deposit.

Graphed below are the normalized Au results of all CRMs in temporal sequence of analysis, illustrating the consistent low bias as 89.6% of the data plots below zero. Table 11-8 lists the mean grade difference for each CRM.

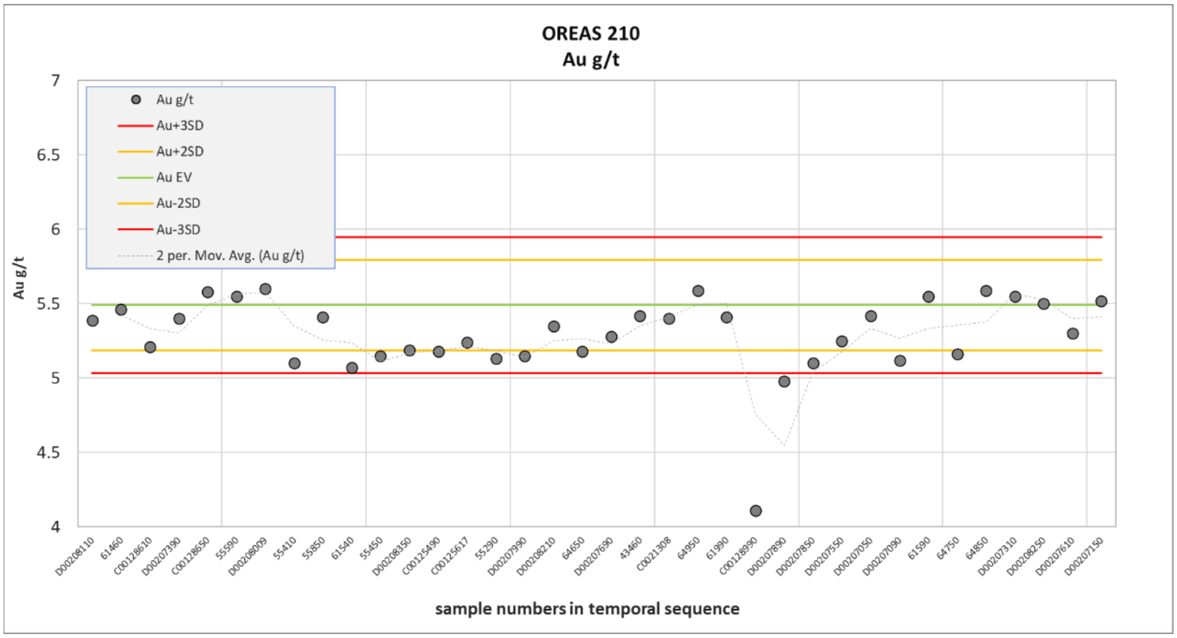


(Source: MMTS, 2022)

Figure 11-13: PCC for Au, Data Normalized

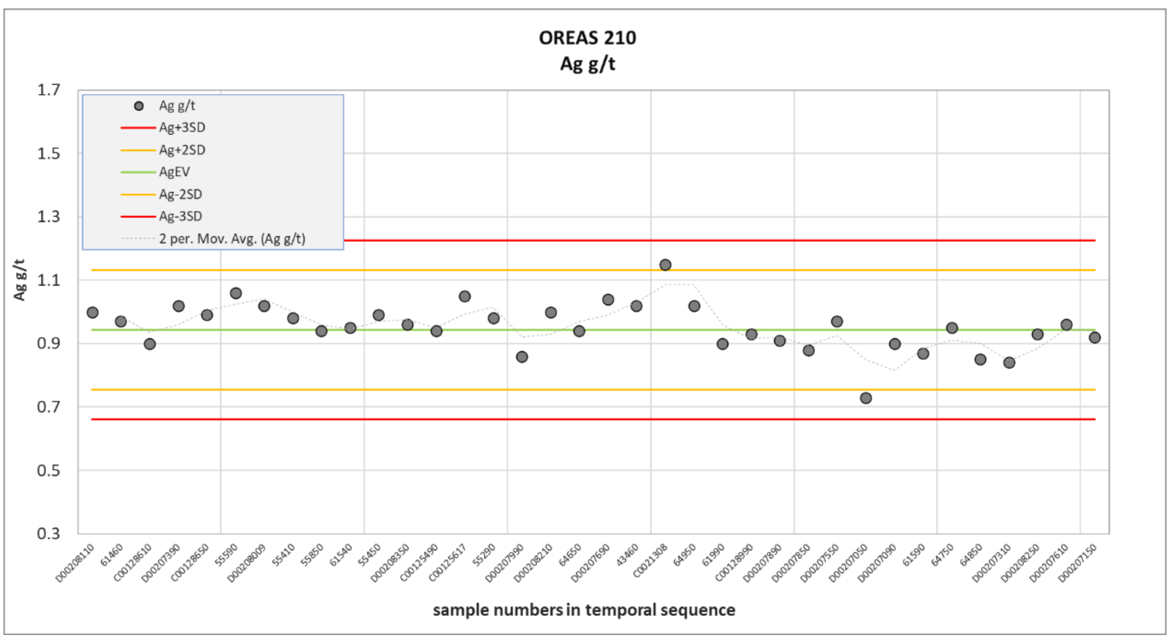
Table 11-8: CRM Mean Grade Difference

CRM	Count	EV Au g/t	Mean Au g/t final	ARD %
OREAS 210	36	5.490	5.294	-3.6%
OREAS 218	43	0.531	0.497	-6.6%
OREAS 222	81	1.223	1.128	-8.1%
OREAS 228	21	8.730	8.411	-3.7%
CRM	**Count**	**EV Ag g/t**	**Mean Ag g/t final**	**ARD %**
OREAS 210	36	0.943	0.953	1.1%



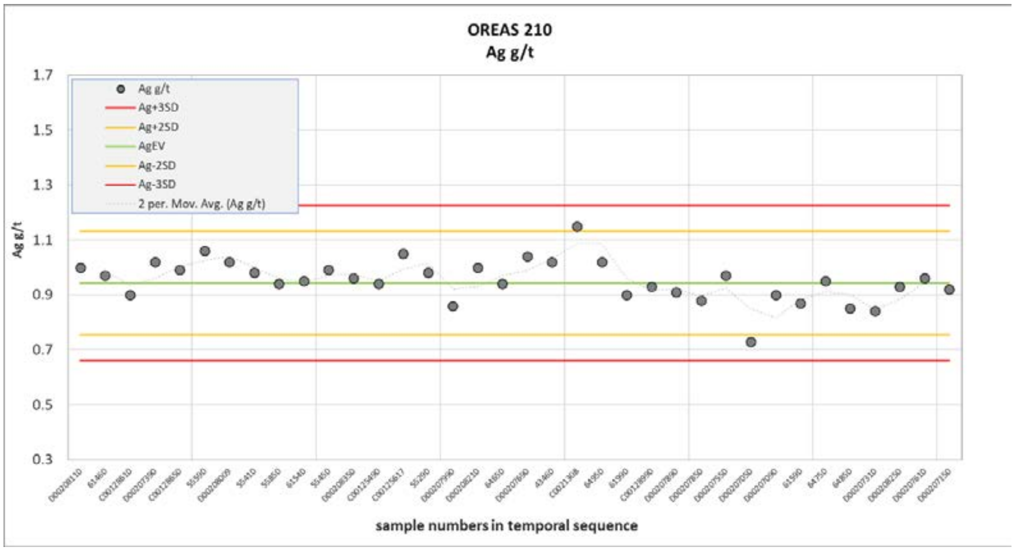
(Source: MMTS, 2022)

Figure 11-14: CRM OREAS 210 Au



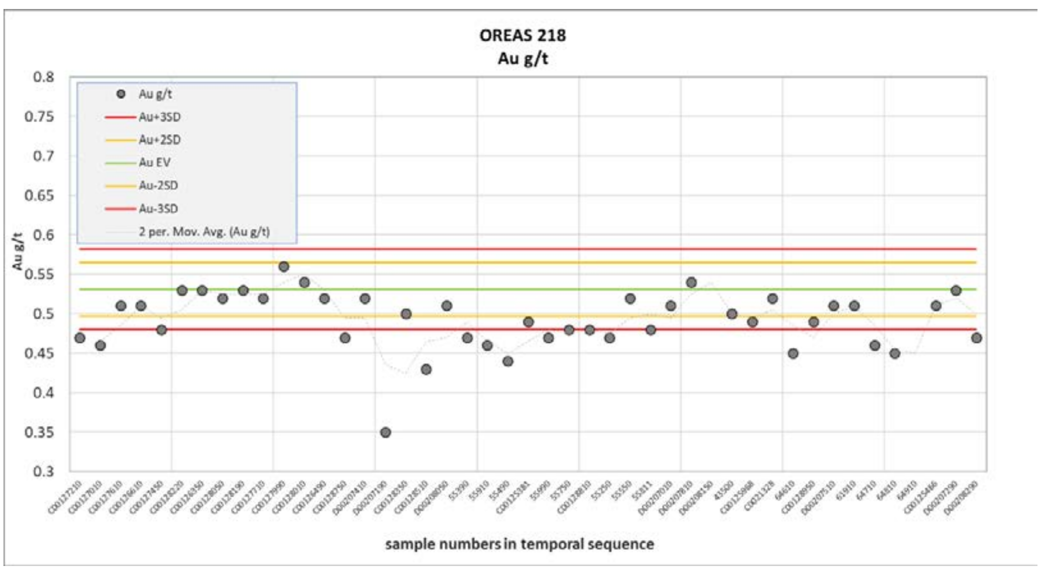
(Source: MMTS, 2022)

Figure 11-15: CRM OREAS 210 Ag



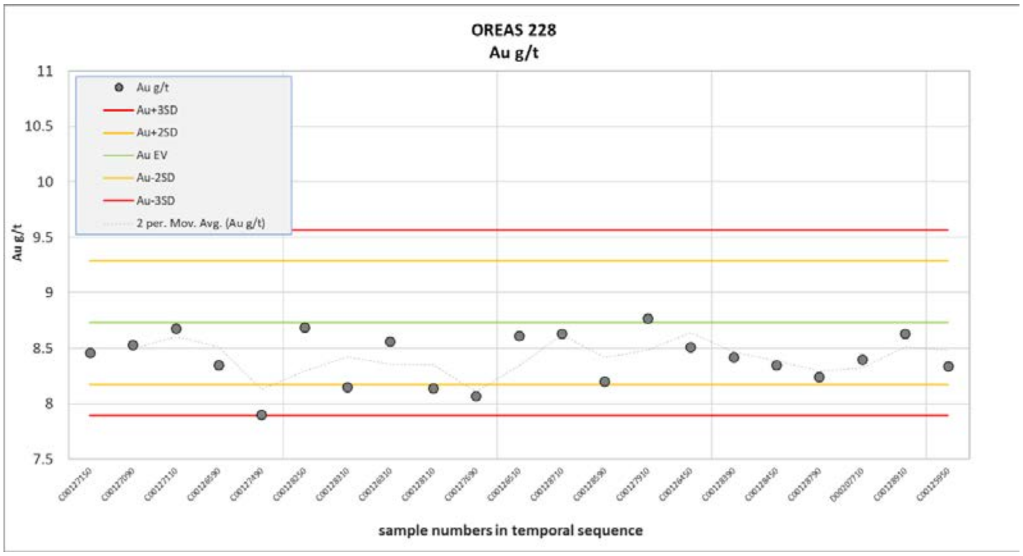
(Source: MMTS, 2022)

Figure 11-16: CRM OREAS 218 Au



(Source: MMTS, 2022)

Figure 11-17: CRM OREAS 222 Au



(Source: MMTS, 2022)

Figure 11-18: CRM OREAS 228 Au

11.2.7 Field Duplicates

Field duplicate (FD) performance in 2021 was reasonable for both Au and Ag, given the deposit style, with good correlations and acceptable HARD%. The XY scatter plot trendline for Au in Figure 11-19 reports a significant bias towards the duplicate sample series, influenced by the two highest-grade pairs, both of which have a higher duplicate result. The colouring by half absolute relative difference (HARD, in %) for sample weight confirms that results are not affected by sample pair weight variability.

Au means for the original-duplicate samples (un-weighted intervals) are 0.43 and 0.52g/t, respectively, higher than the Au mean of all 2021 primary samples (0.38g/t) but lower than the mean for all samples used for resource estimation (0.63g/t). MMTS views these data as representative and acceptable.

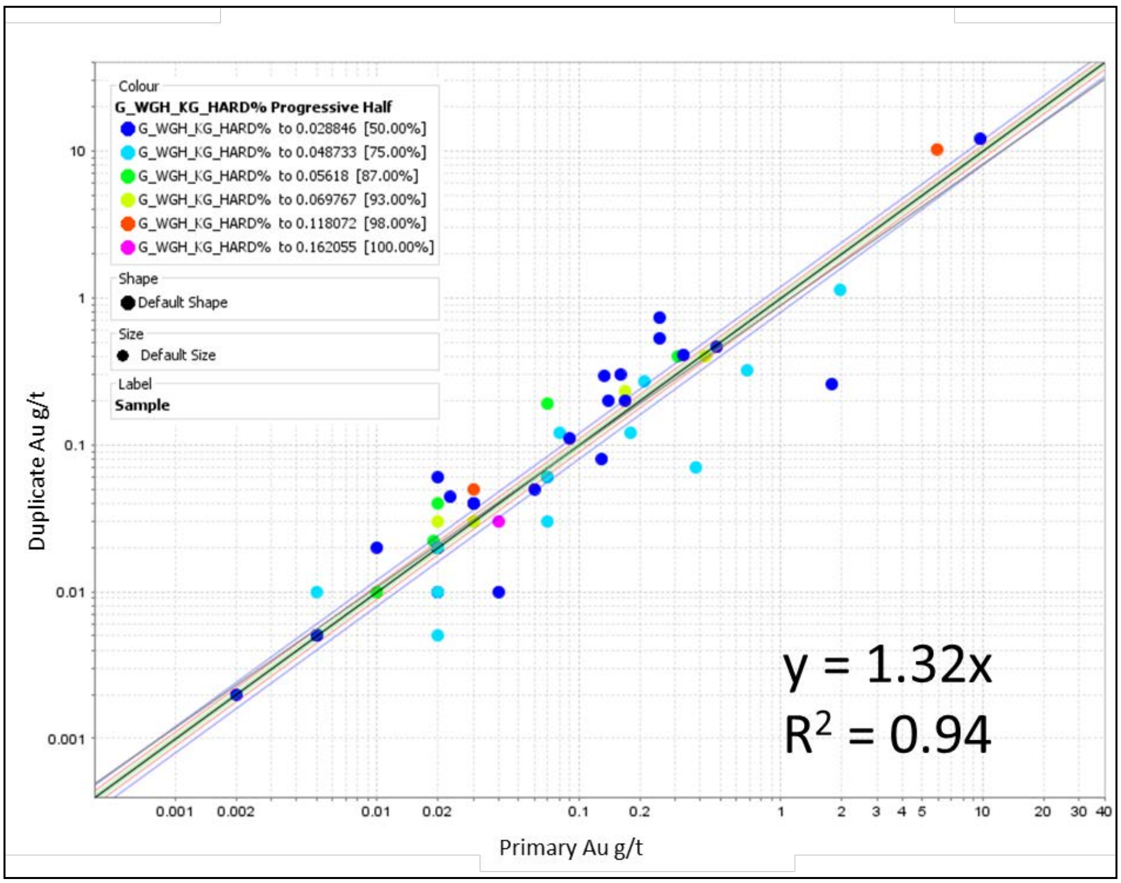
Figure 11-20 illustrates that for Au 70% of all field duplicate pairs report below the 30% HARD which is an acceptable result for the deposit style. Colouring by Au grade in g/t does not indicate a correlation between Au grade and HARD% Au. It must be noted that 8 sample pairs reported below detection for both sides, influencing the conclusions drawn from the graph. Removing all <0.1g/t Au data from the plot reduces the % of the population <30% HARD to 67%.

The mean Ag grade of 16.0 g/t for the field duplicate pairs is lower than the mean of all (un-weighted) intervals used in the resource estimation (25.5 g/t) but exceeds the mean of the 2021 primary sample Ag grades which is 14g/t (Table 11-9).

Table 11-9: Field Duplicate Summary Statistics

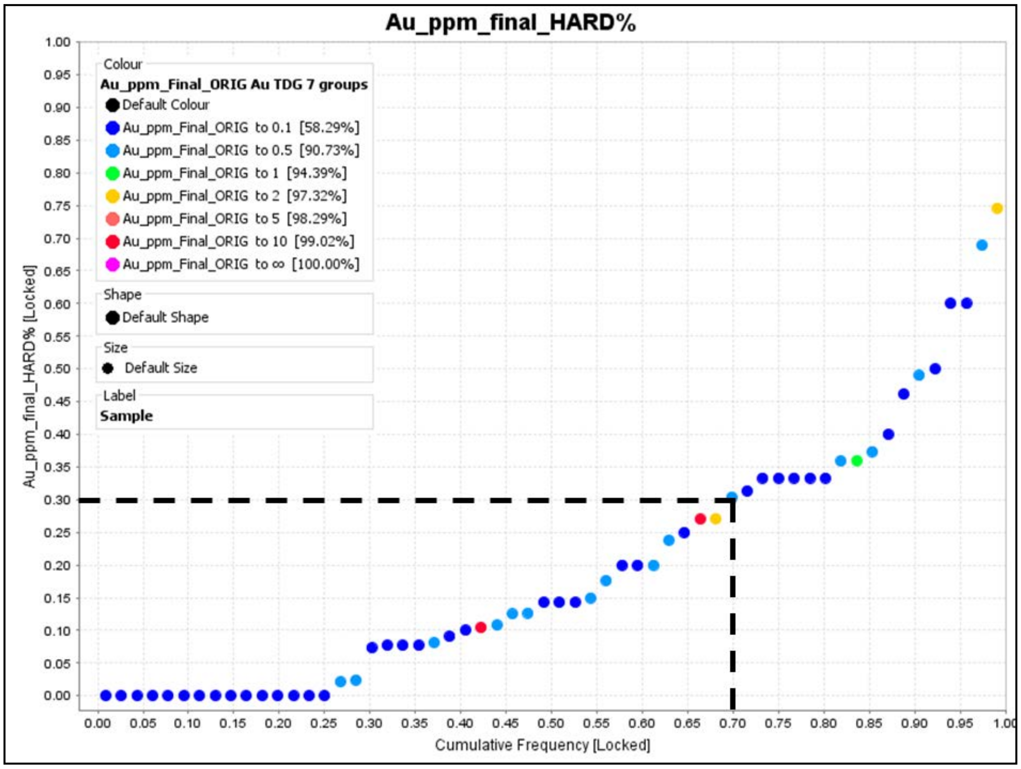
TDG Gold FD	Primary	Duplicate
	Au (g/t)	Au (g/t)
Count Numeric	58	58
Minimum	0.002	0.002
Maximum	9.76	12.03
Mean	0.43	0.52
Median	0.04	0.047
Range	9.76	12.03
Standard Deviation	1.50	2.05
5 percentile	0.005	0.005
25 percentile	0.020	0.010
50 percentile	0.04	0.05
75 percentile	0.17	0.24
95 percentile	2.17	1.59

TDG Gold FD	Primary	Duplicate
	Ag (g/t)	Ag (g/t)
Count Numeric	58	58
Minimum	0.05	0.03
Maximum	427	549
Mean	16.2	16.0
Median	2.2	2.3
Range	427	549
Standard Deviation	62.8	72.9
5 percentile	0.1	0.1
25 percentile	0.9	0.8
50 percentile	2.2	2.3
75 percentile	4.7	6.1
95 percentile	94.0	52.4



(*Source: MMTS, 2022)*

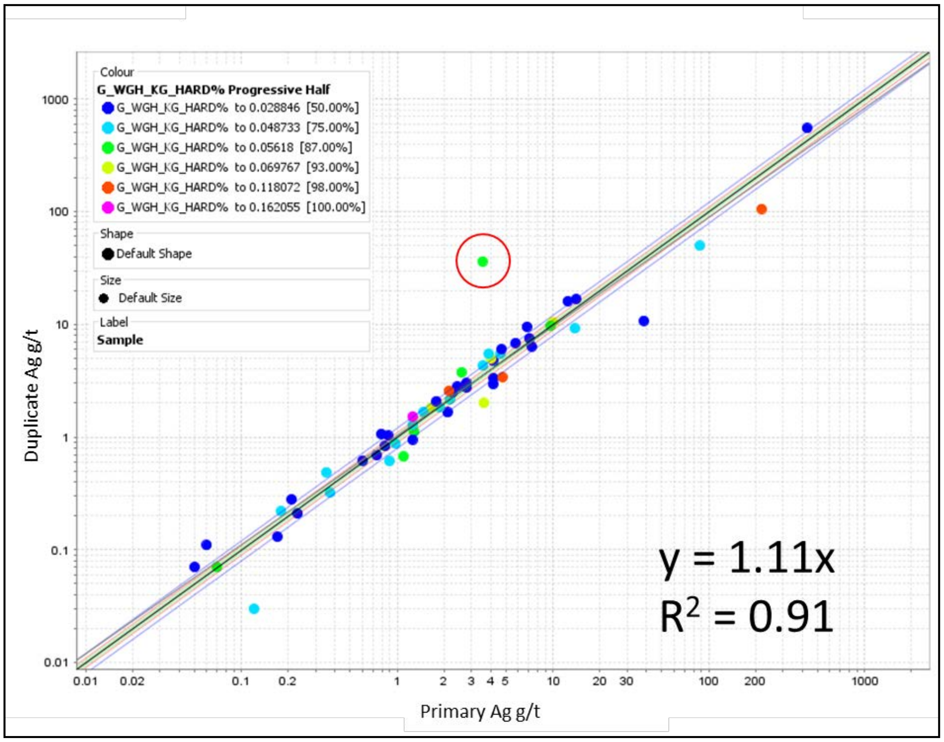
Figure 11-19: Field Duplicates Scatter Plot - Au



(Source: MMTS, 2022)

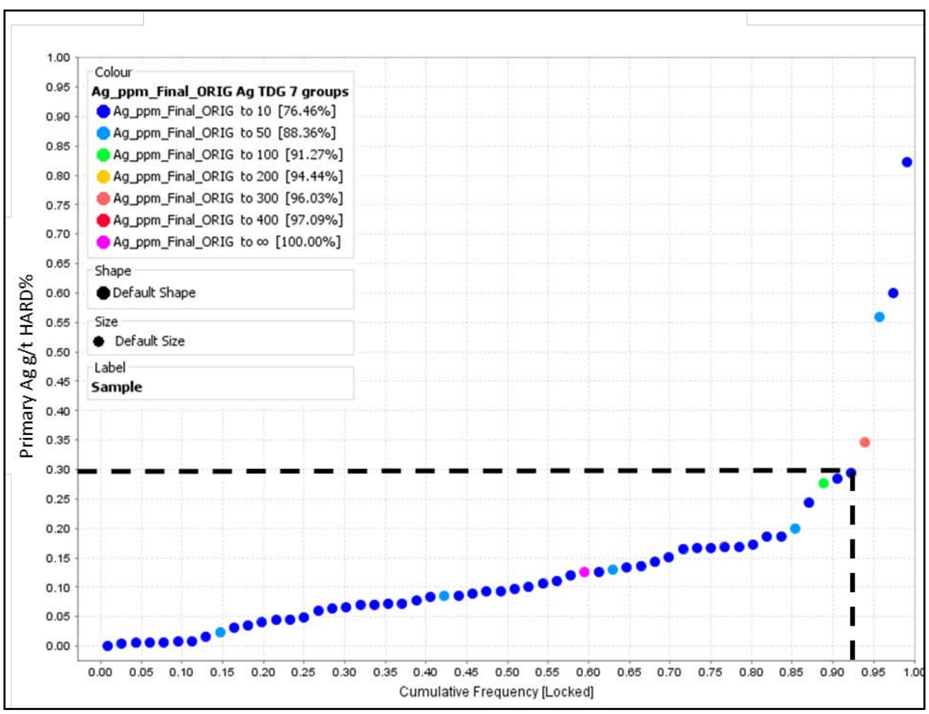
Figure 11-20: Field Duplicates HARD% Au Plot

Ag field duplicates show good correlation to Ag field primary data, with one single outlier as circled red in Figure 11-21. In line with Au, the data trends towards a slight duplicate-positive bias. No correlation between weight variability and Ag grade was noted. MMTS classifies these results as good. 92% of Ag data pairs fall below the arbitrary 30% HARD Ag line, with is considered a good result. No correlation between HARD % and Ag grade could be shown.



(Source: MMTS, 2022)

Figure 11-21: Field Duplicates Scatter Plot - Ag



(Source: MMTS, 2022)

Figure 11-22: Field Duplicates HARD% Plot - Ag

11.2.8 Pulp Duplicates

TDG Gold requested 83 pulps to be split and analysed separately, generating pulp duplicate data to determine the quality control the final procedural steps at SGS, i.e., fusion, cupellation, digestion, and analysis. The basic statistics of the pulp duplicates is summarized in Table 11-10 illustrating that the means of both Au and Ag are lower, with medians and percentile values similar.

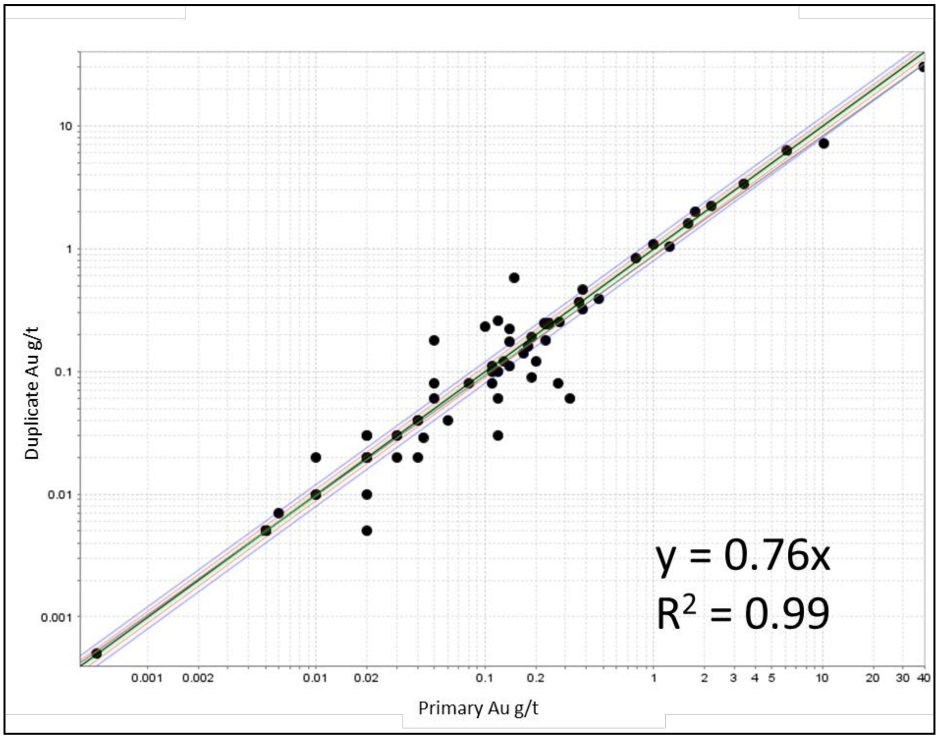
The scatter plot in Figure 11-23 visualises a wide Au grade range for the selected samples and demonstrates a very good correlation between original and duplicate data, despite the relatively strong scatter at the 0.1-0.5g/t grade range. The significant amount of scatter at low Au grades is consistent with lab-internal duplicate and replicate scatter (not shown).

A strong bias towards the original data series is indicated by the low slope of 0.76x. The pulp duplicate dataset only contains 82 data points, and the highest two pairs happen to both be original-positive which disproportionally influences the otherwise acceptable data. As an illustration of the influence of said pairs, removing them would raise the Y to 0.94x with a reduction of R^2 to 0.89, while a theoretical swap of Au results for the highest pair only would increase Y to 1.23x with R^2 at 0.97. MMTS therefore does not have concerns of systematic bias and considers the data acceptable.

The HARD (Half the absolute relative difference) plot for Au shown in Figure 11-24 demonstrates that 85% of pulp duplicate data plots below 30% HARD Au, including all higher-grade pairs. This is above industry expectation for pulp duplicates of Au.

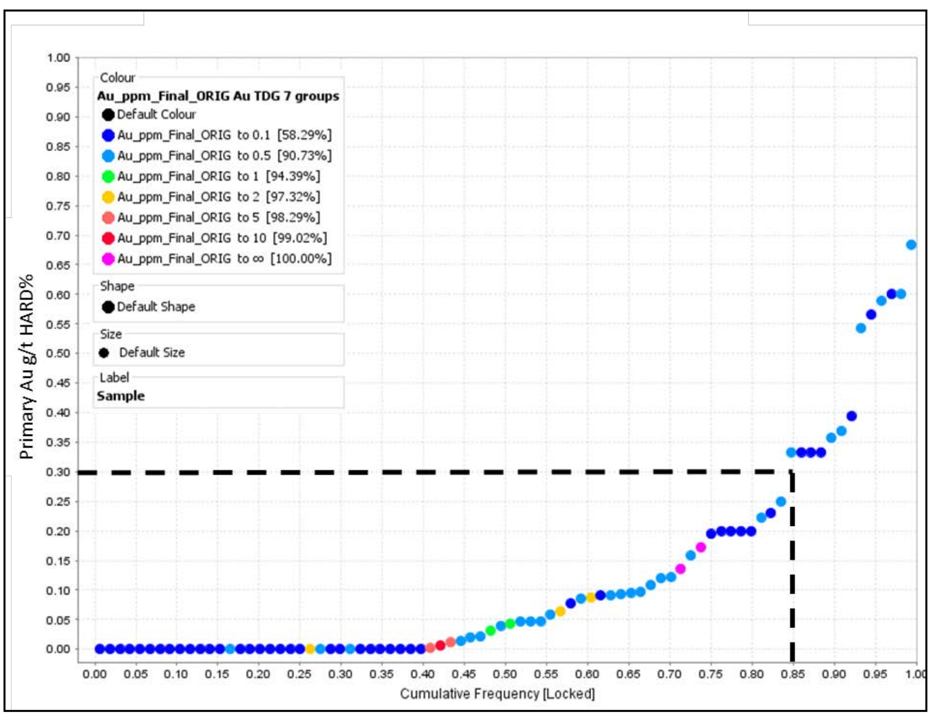
Table 11-10: Pulp Duplicates Summary Statistics

TDG Gold PD	Primary	Duplicate	TDG Gold PD	Primary	Duplicate
	Au g/t	Au g/t		Ag g/t	Ag g/t
Count Numeric	82	82	**Count Numeric**	82	82
Minimum	0.0005	0.0005	**Minimum**	0.01	0.01
Maximum	39.63	30.12	**Maximum**	2035	1935
Mean (weighted)	0.96	0.79	**Mean (weighted)**	39.5	37.2
Median	0.07	0.06	**Median**	2.0	2.1
Range	39.63	30.12	**Range**	2035	1935
Standard Deviation	4.54	3.47	**Standard Deviation**	225.0	213.9
5 percentile	0.005	0.005	**5 percentile**	0.0	0.0
25 percentile	0.018	0.010	**25 percentile**	0.5	0.6
50 percentile	0.07	0.06	**50 percentile**	2.0	2.1
75 percentile	0.23	0.24	**75 percentile**	7.1	8.6
95 percentile	3.23	3.22	**95 percentile**	97.2	101.0



(Source: MMTS, 2022)

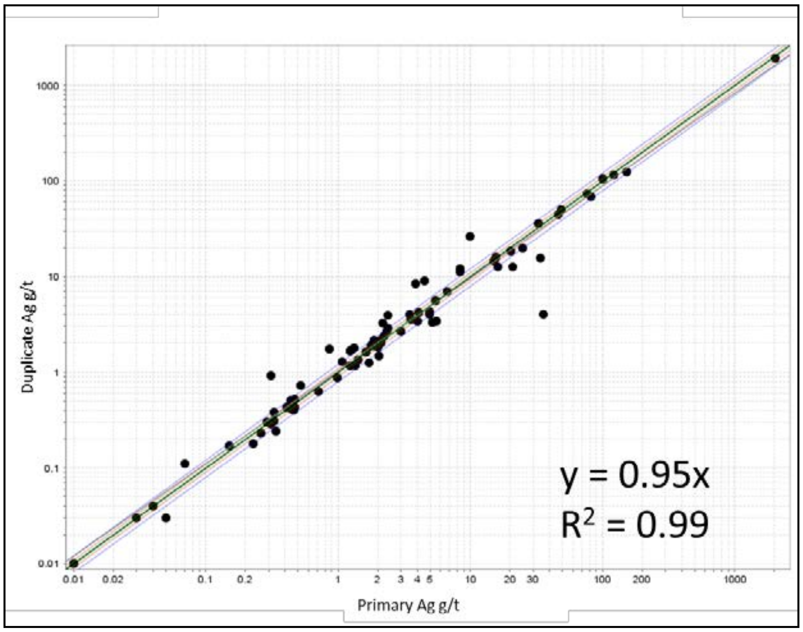
Figure 11-23: Pulp Duplicates Scatter Plot - Au



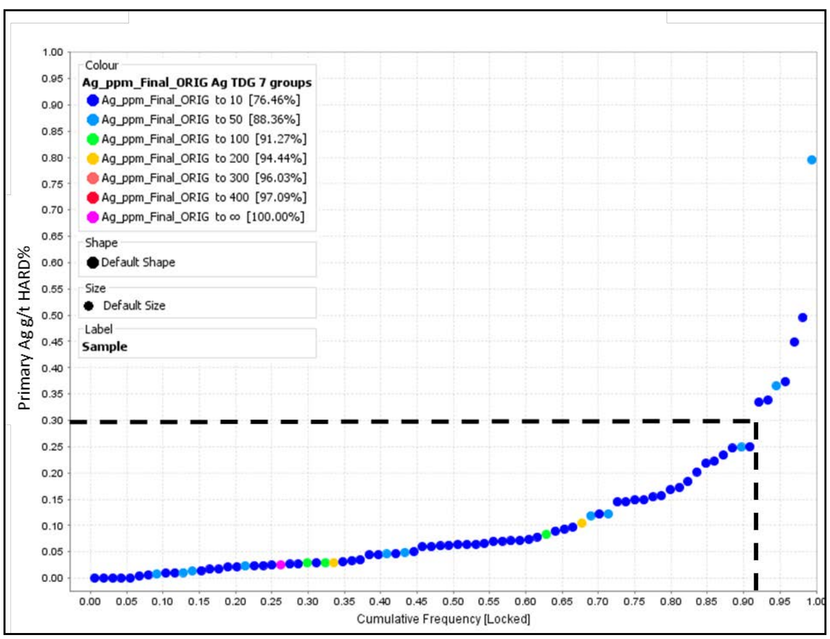
(Source: MMTS, 2022)

Figure 11-24: Pulp Duplicates HARD% Plot - Au

For Ag, lab precision is very good across a wide and representative range of grades (<1g/t to 200g/t) as illustrated in Figure 11-25 below. The HARD plot for Ag in Figure 11-26 also shows very good results with 92% below 30% difference.



(Source: MMTS, 2022)
Figure 11-25: Pulp Duplicates Scatter Plot – Ag



(Source: MMTS, 2022)
Figure 11-26: Pulp Duplicates HARD% Plot – Ag

11.3 Historical data

Limited information is available about sampling protocols, laboratory procedures, lab internal and external QAQC for all data the pre-dates 2021, and for some years no records could be located as shown in Table 10-1. The following paragraphs are largely taken directly from the respective annual reports.

In Aris Report 11715 of 1983, Newmont exploration drilled a total of 9 holes on the property, resulting in 674m of BQ-sized core, which was split in half, with one half getting sent Chemex Labs in North Vancouver to be analysed for Au and Ag by way of fire assay. There is no record of QAQC samples.

For 1987, authors P. Holbeck and P. Tiersch for Esso Minerals Canada reported the following in Aris Report 17519:

‘’The diamond drill program was conducted from August 26 to October 1, 1987. Twenty-four BQ diameter holes, for a total of 2369m, were drilled with a J.K. Smit-300 diamond drill rig. The drill contractor was J.T. Thomas Diamond Drilling Ltd. Of Smithers, B.C. Drill mobilization was from Smithers. A Hughs 500D helicopter, supplied by Northern Mountain Helicopters Ltd., was used for drill moves between the first nine holes. The drill rig was then transferred to skids and the remaining moves made with a Caterpillar D6 tractor.
Drill core was logged on site using the GEOLOG format of Lynx Geosystems Inc. Core is stored in racks near the camp area at UTM coordinates N6347270/E620850.

Core was manually split over irregular length intervals within the altered and/or mineralized sections of the hole. Split core was shipped to Acme Analytical Laboratories Ltd. in Vancouver for silver and gold assays. Assay method was fire assay with atomic absorption finish on one assay-ton (29g) sub-samples. Reproducibility of gold and silver assays commonly exceed 20% variation over the typical concentration range (0.1-10.0 g/t Au). Causes of this poor reproducibility are currently being investigated. Assay results are included within the drill logs. Assay lab reports are contained in Appendix III.’’

In 1990, M.D. McPherson and H. Oiye reported for Homestake Mining in Aris Report 20821 that ‘’the diamond drill program was conducted from July 4 to July 7, 1990. A single BQ-thinwall hole was drilled, using a JKS300 diamond drill contracted from Van Alphen Diamond Drilling of Smithers, BC. Drill moves were accomplished with a John Deere 750 tractor supplied by the drill contractor. The location of the drillhole collar was surveyed by A.A. de Bruynes of Smithers, BC.

Drill core was logged using the GEOLOG format from Lynx Geosystems Inc. Of Vancouver, BC. The core is stored in racks at the Shasta camp at UTM coordinates N6347270/E620850. The drill log can be found in appendix I. The core was manually split and shipped to Min-En Laboratories in Smithers, BC, for gold and silver assaying. Analytical data is in Appendix II.’’

Appendix II of report 20821 shows the copy of a certificate by Min-En Laboratories that indicates that 26 samples were analysed, though the certificate contains data of 67 samples. 3 STDs and 3 blanks have been inserted by the lab itself and the lab report is in g/tonne.

Aris Report 26004A details the 1998 drill results. Core samples were analysed for Au and Ag at the site lab and recorded by hand in oz/T next to the respective sample numbers. No further detail about lab methods and procedures has been given.

E.W. Craft detailed in Aris Report 27653A that for the 2004 drill program ''all assaying was conducted by IPL in Vancouver. The assay certificates are attached to the report in Appendix 6. The selected core sections were split in a mechanical splitter. In the first shipment, the total of the sample was shipped for assay. In subsequent shipments the split sample was crushed to ¼ inch and run through a riffle splitter twice to cut the sample to ¼, this was then shipped for assay with the splitter rejects bagged, tagged, and stored on site for future reference if required.''

Copies of 4 IPL certificates are available towards the end of the report. For Au, used a fire assay method with AAS finish, while Ag was analysed by fire assay and gravimetric finish. Reporting was in g/mt for both elements. IPL used 18 sample repeats, 2 lab blanks, and one CRM inserted twice for internal controls.

In Aris Report 29168 for the year 2006, E.W. Craft reported that ''20 DD holes of NQ size were drilled at Shasta for a total of 1518.5m, with Britton Brothers of Smithers, BC, as the drilling contractor.'' Collars were reported in mine grid coordinates and the hole names (DD06-01 to DD06-22) differ from todays names (SH06-01 to SH06-22). ''Core was logged, split and fire assayed for gold and silver at the Baker camp facility roughly 11 km west of the deposit, where the core is now stored. Random check samples and duplicates were sent to ALS Chemex Labs in North Vancouver to verify onsite assays. The results of the ALS Chemex check assays and the onsite assays were consistent. ''

The Baker camp assay results are in oz/t for both Au and Ag, lab internal QAQC sample inserts could not be identified from the report. ALS Chemex certificates for random check samples and duplicates as mentioned above are not available in the report.

For the 2010 drill campaign, Joel Gillham of Sable Resources Ltd. in Aris Report 33171 only provided information for 2 of 13 holes drilled that season, DDH10-08 and DDH10-13 (renamed to SH10-08 and SH10-13). The remaining holes of the program were drilled on a mining lease and assay results have become available through scans of hard copies located at the Baker Mill assay lab.

As per Gillham, ''a total of 324 m of NQ diamond drilling was completed in 2 holes for the program outlined in this report. The drill rig used was an AR 125, contracted from DJ Drilling Ltd of Aldergrove BC. The drill pads were constructed using Sable's D6D Caterpillar dozer and 345B Caterpillar excavator, the drill rig was moved with the 345B excavator. Drill core was logged at the Baker Mill site, and is stored there at the core-yard, with approximate coordinates of Lat 57.28° N and Long 127.11° W. All coordinates for drillholes are consistent with the Shasta mine grid, which is based loosely on the last four digits of a UTM grid referenced to NAD27.

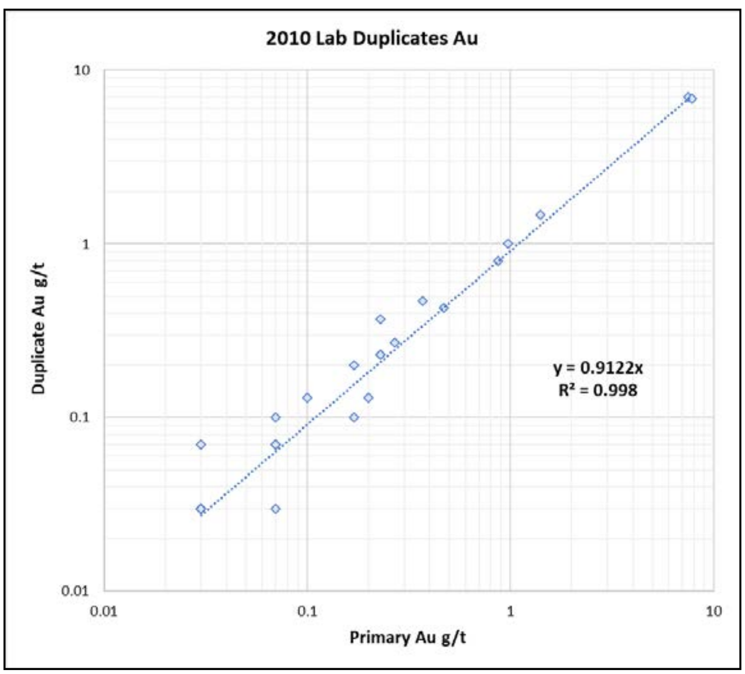
Drill core was split on-site and delivered to the Baker Mill Assay Lab for analysis by fire assay. Assay sample numbers are made up from two digits for the year, another two digits for the hole number, and eight digits for the from and to interval (in metres) without decimals or dashes. For example, the sample # for the interval 99.2 to 101.0 from hole DD10-03 would be 100309921010.

All assays for this drill program were completed at the Baker Mill Assay Lab. Delivered split-core was prepared in the lab for analysis by crushing with a bench-top jaw crusher. Crushed sample was then put through a riffle splitter to produce a 200-300g split, which was then pulped by a ring and puck pulveriser.

A 30g sample of the pulverised pulp was weighed on a triple beam balance and added to a crucible along with the assay flux (borax, soda ash, silica, and litharge) and known quantity of silver. The crucible is then fused at 1060 °C for about 60 minutes before being poured into a mould to separate the slag from the gold-silver containing lead button. The lead button is then cupelled at 950 °C to remove the lead leaving an Au-Ag dore prill. The dore prill is weighed on a microbalance before being parted with nitric acid to produce gold flake, which is then annealed and weighed gravimetrically on the microbalance.’’

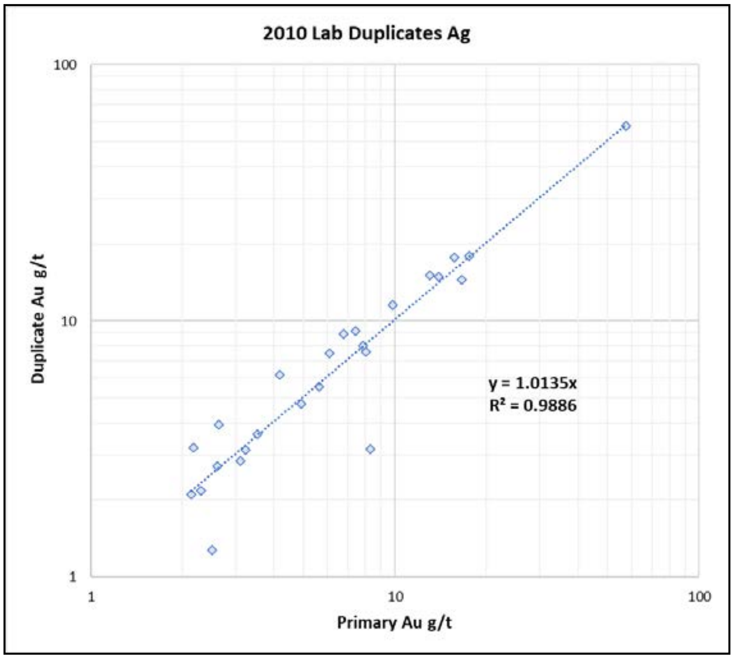
For holes DDH10-08 and DDH10-13, 5 lab duplicate analyses are available, while the scanned original (hand-written and partially illegible) assay reports for the samples from all other holes in 2010 offer a more comprehensive and quantitatively appropriate set of QC in form of lab duplicates, lab blank and lab CRM insertions for each hole. The lab duplicate performance is shown Figure 11-27 and Figure 11-28 for Au and Ag respectively, illustrating acceptable results. DDH10-12 was apparently not sampled.

Collar location information is currently not confirmed to be sufficiently accurate and therefore the 2010 data has not been used for resource estimation purposes in this report. MMTS does expect to use the 2010 data for future estimations once uncertainties have been resolved.



(Source: MMTS, 2022)

Figure 11-27: 2010 Lab Duplicate Performance – Au



(Source: MMTS, 2022)

Figure 11-28: 2010 Lab Duplicate Performance – Ag

12 Data Verification

12.1 2021 Field sampling and lab sample weight records

During the review of the 2021 drill data and lab reports, MMTS noted several inconsistencies with regards to the designation of field (FD) and pulp (PD) duplicates, but also sample intervals. Using original lab certificates, in particular the reported sample weight as received, and TDG Gold core box photos including sample tags, these inconsistencies were corrected, and the respective sample intervals adjusted in time for resource estimation.

Data from certificates BBM21-14835 and BBM21-14836 (drillhole SH21-034) indicate a strong sample weight variability that is not supported by the recorded sample interval/core length and remains unexplained.

12.2 2021 Assay Data Validation

The 2021 drill program resulted in 98 original lab certificates, all of which were available to MMTS in multiple formats. For Au and Ag assay result validation purposes, 488 intervals (8.5% of utilized data) across 21 certificates and drillholes were randomly selected from the data package used for resource estimation and electronically compared against said originals. For Au, not a single discrepancy was found, however for Ag 30 samples indicated a rounding error at very low grades (<0.05g/t) which is inconsequential.

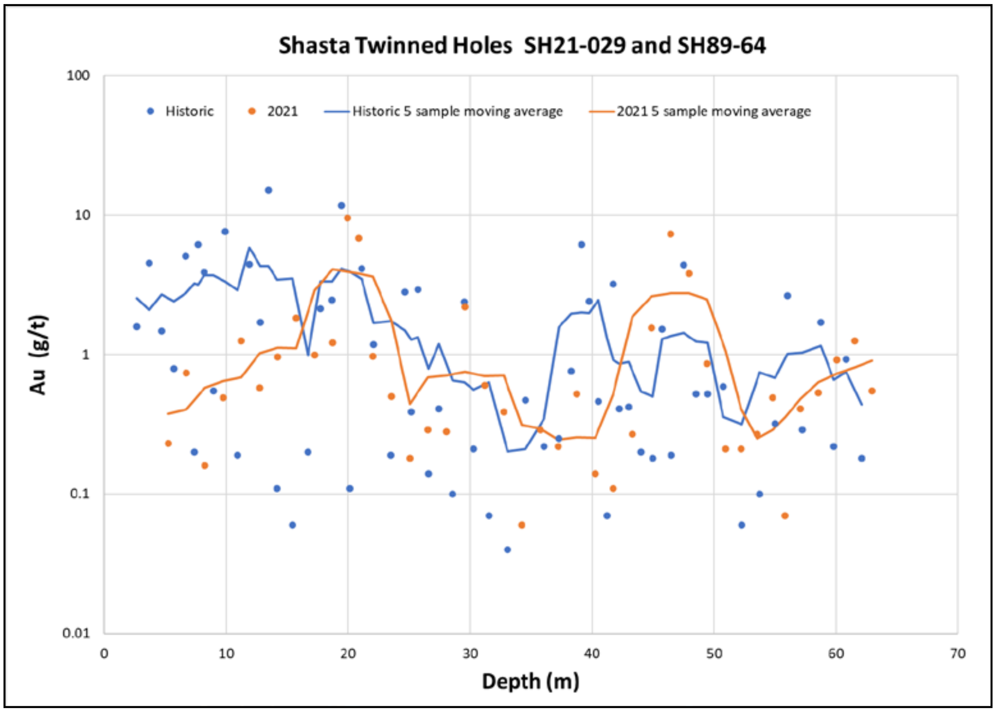
12.3 Historical Assay Validation

MMTS was only able to validate historical assays of drill campaigns for which Aris Reports or Shasta/Baker lab original records are available, as listed inTable 10-1.

All available Au and Ag data from these years was validated by comparison of the Certificates and Drill logs with the database. Any observed discrepancy was recorded, and the respective interval classified into one of 6 confidence groups or flagged for correction. Years without historical reports were flagged as lowest confidence. Overall, the utilized Au and Ag data was found to match historical records, and the few errors that were identified during validation (typos and minor data shifts) were corrected and the corrected data subsequently used for resource estimation.

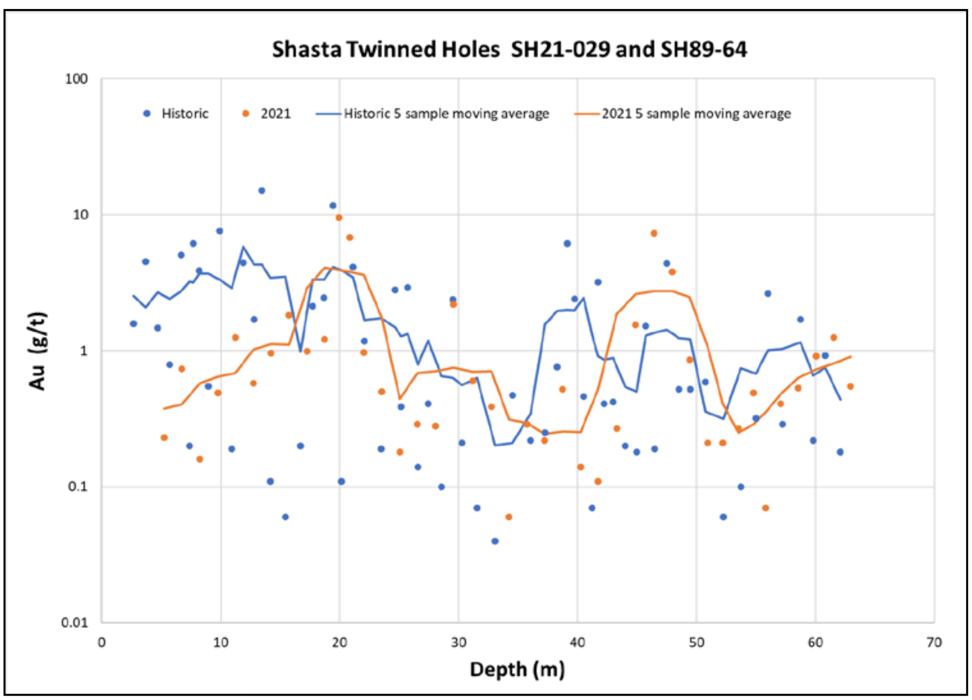
12.4 Twinning of Historical Drillholes

Holes SH21-026 and SH21-029 function as twins of historical holes SH87-23 and SH89-64, respectively, with acceptable comparability between historical and current results. Figure 12-1 and Figure 12-2 demonstrate the variability of Au grade over aligned hole depth, using calculated sample interval mid-points. MMTS considers the data comparable.



(Source: MMTS, 2022)

Figure 12-1: Downhole Au Distribution in DH SH21-029 and SH89-64



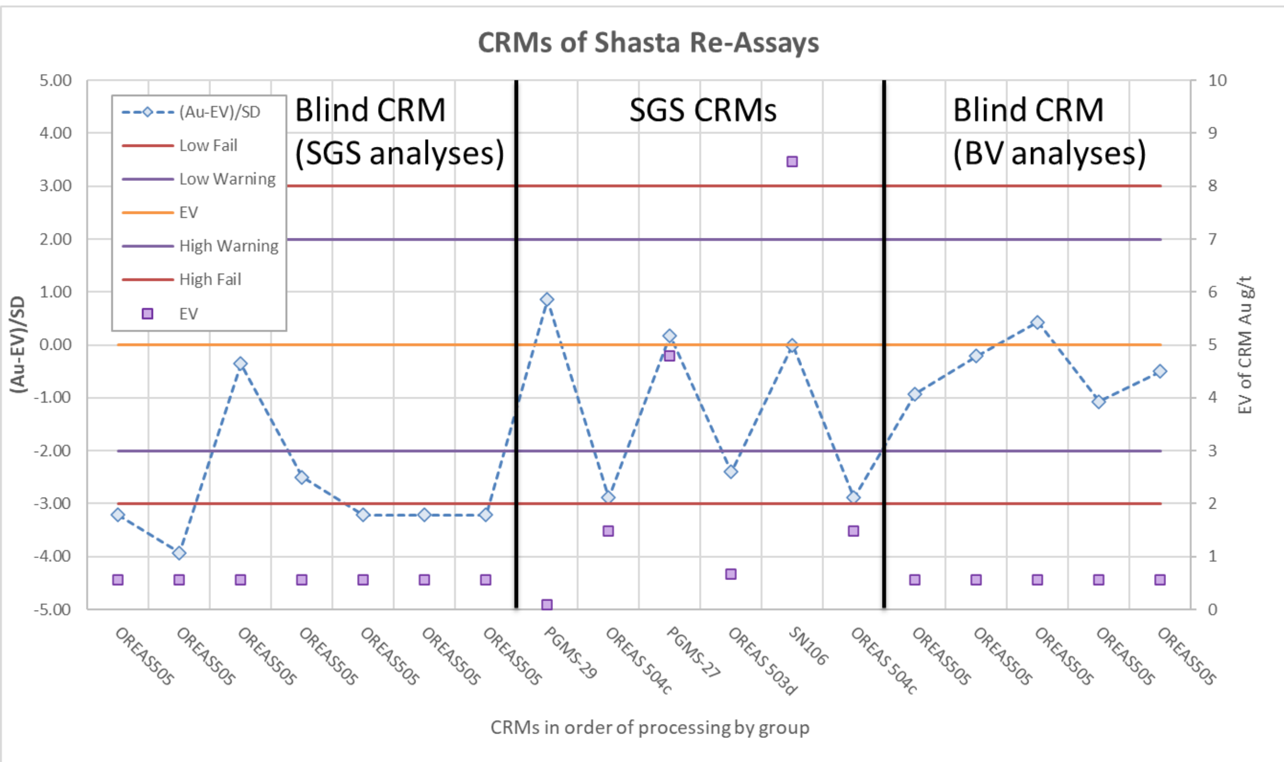
(Source: MMTS, 2022)

Figure 12-2: Downhole Au Distribution in DH SH21-026 and SH87-23

12.5 Re-assaying of Select Intervals

A significant low Au bias of approx. 5% was determined in control charts for blind CRMs across all original certificates pertaining to method GO_FAI50V10 as shown in Figure 11-5.

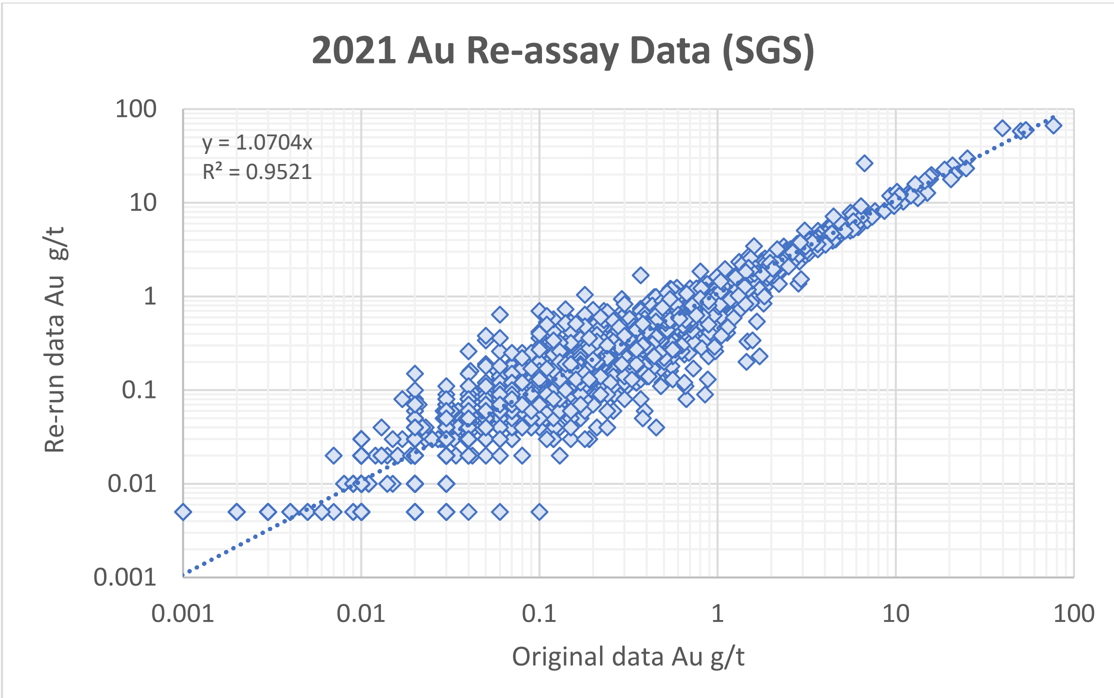
109 select pulps were re-submitted for re-assaying at SGS, including multiple insertions of a new blind CRM (OREAS 505) which consistently recorded below expected certified value as well, confirming the bias as illustrated in Figure 12-3, below. Subsequently, the exact same sample subset was sent to Bureau Veritas in Vancouver, BC, for an independent re-assay using method FA350 (fire assay with 2ppb DL), and again fresh blind CRM material (OREAS 505) was inserted into the sample stream. The Bureau Veritas assay results came in slightly below the Expected Value (EV) on average but well within defined warning limits, therefore not confirming the low Au bias in CRM OREAS 505 as shown by SGS.



(Source: MMTS, 2022)

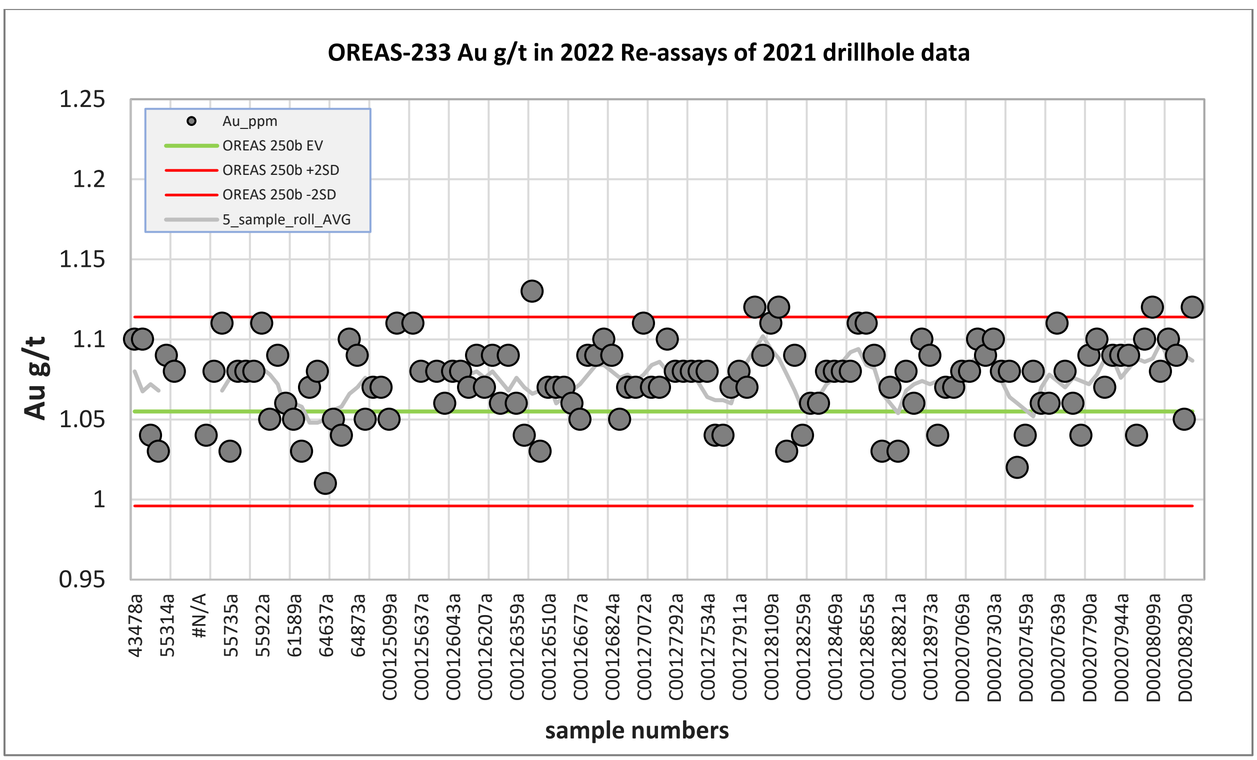
Figure 12-3: Re-Assay Results for Au in CRM

Consequently, all 2021 samples are in the process of being re-analysed for Au by SGS in May/June 2022 and all certificates will be re-issued with updated Au results. Comparison of re-run Au values with original values shows very strong correlation, with a slight increase (7%) in the re-run assay data (Figure 12-4). CRMs submitted with the re-run assay program at SGS (OREAS-233 and OREAS-250b) performed well, with only 5 of the 269 CMRs submitted yielding slightly over the Au EV + 2 SD (Figure 12-5 and Figure 12-6).



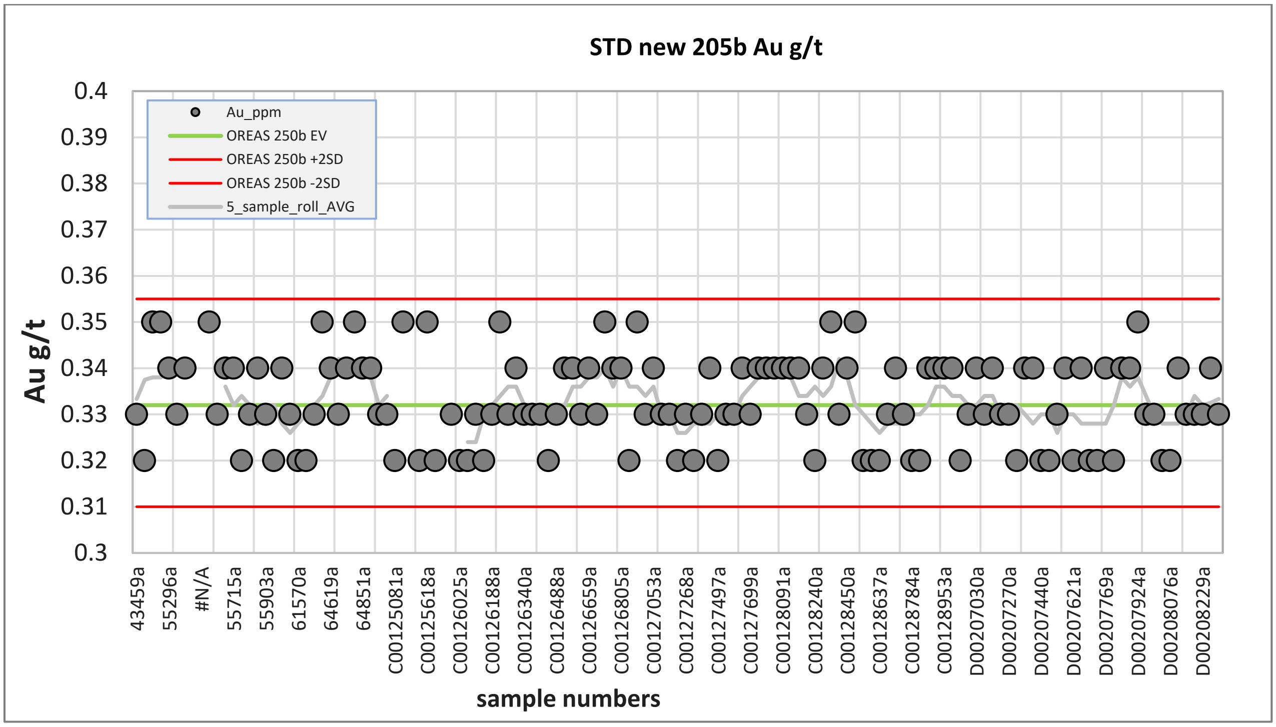
(Source: MMTS, 2022)

Figure 12-4: Re-Assay Results for 2021 drill core samples with > LOD in first round of assays.



(Source: TDG 2022)

Figure 12-5: OREAS-233 performance in SGS re-assay of 2021 data.



(Source: TDG 2022)

Figure 12-6: OREAS-250b performance in SGS re-assay of 2021 data

13 Mineral Processing and Metallurgical Testing

The Baker mill was originally designed to process the mill feeds from the Baker mine at a mill feed rate of 100 short tons per day (st/d) and was upgraded to approximately 200 tonnes per day (t/d).

The mill used conventional processing methods. Comminution consisted of two stages of crushing and one stage of ball mill grinding. The gold and silver recovery process used at the early stage of the operation was whole-ore cyanide leaching followed by Merrill Crowe treatment to recover gold and silver from the leaching solution. Due to changes in mineralogical property in the late operation, the processing flowsheet was modified by incorporating a flotation pre-concentration circuit to recover gold and gold-bearing minerals into a flotation concentrate, which was further treated by cyanide leaching and Merrill Crowe process to recover gold and silver from the concentrate. The flotation tailings bypassed the cyanide leaching circuit and was disposed, together with the leach residue, to the tailings storage facility ("TSF"). Ore from the Shasta deposit was intermittently processed at the Baker mill between 1989-1991 and 2008-2012 before the mill was put under care and maintenance.

It is assumed that metallurgical test programs were on Baker and Shasta feed material was done prior to and in conjunction with operations, but no records have been found. There is also no metallurgical test work available for Oxide Peaks or Mets. Therefore, the only known test work is that which was done by TDG Gold Corp. in 2021 and 2022.

13.1 Mineralogy

At Baker and Shasta economic gold-silver values are generally associated with highly fractured and occasionally brecciated quartz veins containing pyrite, and to a lesser extent occur in silicified wallrock. Higher grade mineralization is associated with grey quartz, which occasionally contains visible argentite, commonly associated with disseminated grains of pyrite, chalcopyrite, and very minor sphalerite.

13.2 Metallurgical test work 2021/ 2022

The 2021/2022 metallurgical program consisted of analysis conducted by Bureau Veritas Minerals (BVM) Metallurgical Division; an accredited facility located in British Columbia. Analysis was provided by TetraTech Canada Inc. Tests were done on grindability, gravity concentration, flotation, direct cyanidation, and a combination of flotation and flotation concentrate cyanidation.

13.2.1 Sample Origin and Grade

Two 20kg composite samples were constructed from diamond drillholes SH21-004 and SH21-005 from the 2021 drilling program. Figure 13-1 shows their location.

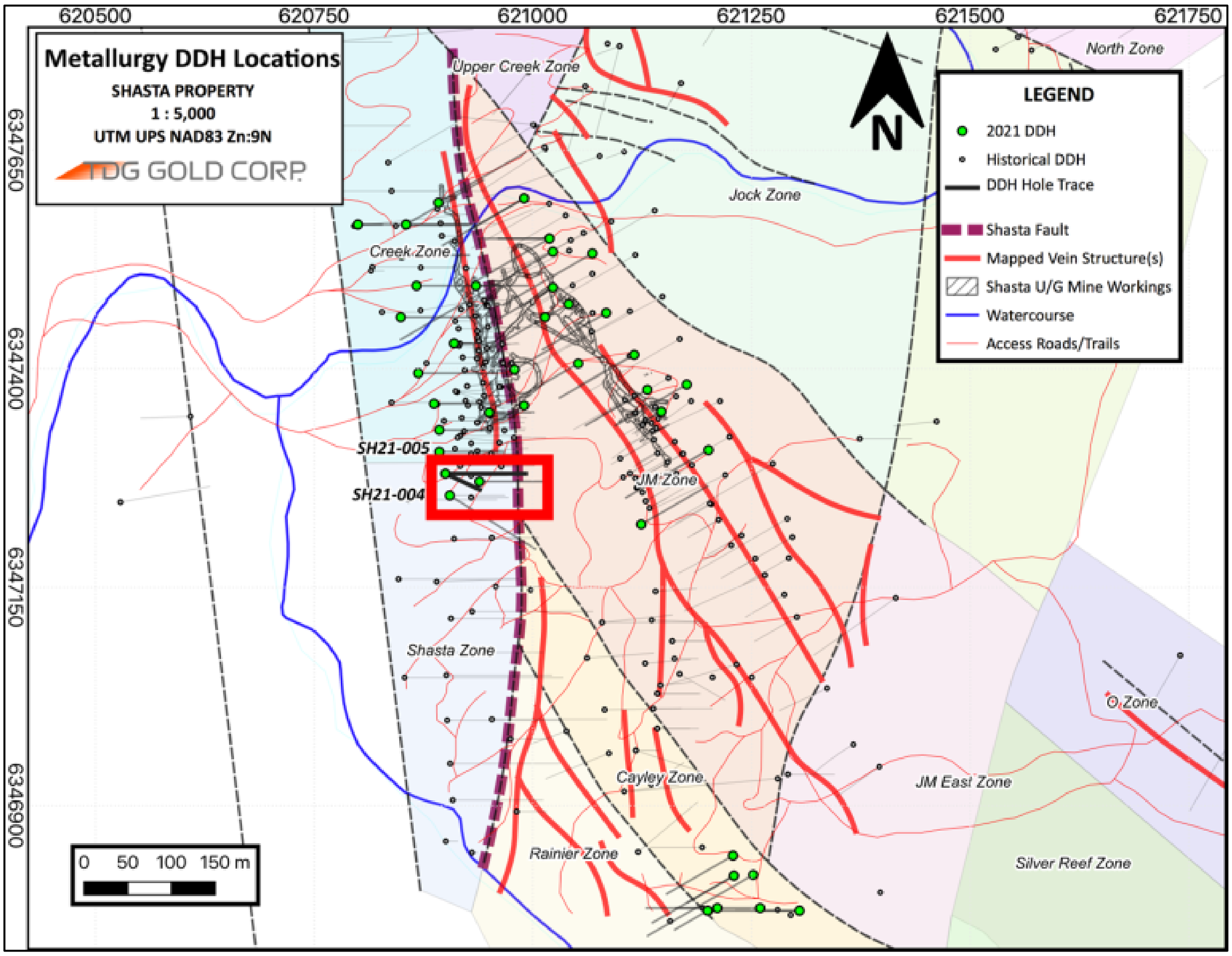


Figure 13-1: Metallurgical Sample Locations

13.2.2 Comminution

Bond ball mill tests were conducted on the two composites. The Bond ball mill work index was measured to be 16.4 kWh/t for Sample #2 and 17.4 kWh/t for Sample #1, which are classified as moderate hardness for ball mill grinding.

13.2.3 Gravity Concentration

Gravity concentration testing was conducted on each of the two samples using two-pass centrifugal concentration followed by panning on the concentrates produced from the centrifugal concentration. The test results indicate that the two samples may contain free nugget gold grains, especially for Sample #2. Approximately 37.6% of the gold and 12.8% of the silver in Sample #2 were concentrated into the pan concentrate containing 349.7 grams per tonne ("g/t") Au and 4,816 g/t Ag. Compared to Sample #2, Sample #1 appears less responsive to the gravity concentration procedure, only 15.9% of the gold was recovered into the pan concentrate with 48.3 g/t Au and 892 g/t Ag.

13.2.4 Flotation

The flotation test results indicate that the two samples responded well to the flotation procedure at a coarse primary grind size of 80% passing approximately 200 µm. The gold ("Au") recovery reporting to rougher flotation concentrates ranged from 97.2% to 99.0% for Sample #2 and 93.3% to 97.2% for Sample #1 at different primary grind sizes, ranging from approximately 80% passing (P80) 72 µm to 209 µm. The average silver ("Ag") recoveries to the rougher flotation concentrates were 90.3% for Sample #1 and 96.4% for Sample #2.

13.2.5 Direct Cyanidation

The cyanide leach test results show both Sample #1 and Sample #2 responded well to the direct cyanidation. The average gold extraction rates were 87.3% for Sample #1 and 95.0% for Sample #2. On average the silver extraction rates were 72.5% for Sample #1 and 76.9% for Sample #2. The test results also indicate that the cyanide leaching kinetics were relatively rapid, approximately more than 70% and 50% of the gold were respectively extracted from Sample #1 and Sample #2 within a leaching retention time of 7 hours. The total leach retention time was 48 hours. The test results are summarized in Table 13-1.

The reagent consumptions generally are at reasonable levels. The average sodium cyanide (NaCN) consumptions were 0.62 kilograms per tonne ("kg/t") and 0.83 kg/t respectively for Sample #1 and Sample #2. The average hydrated lime (Ca(OH)2) consumptions were low, at 0.43 kg/t for Sample #1 and 0.35 kg/t for Sample #2 separately.

Table 13-1: Direct Cyanidation Results – Head Samples

Sample ID	Particle Size	Calculated Head, g/t		Extraction, %		Consumption, kg/t	
	P80, µm	Au	Ag	Au	Ag	NaCN	Lime
Sample 1	143	0.60	29	84.7	72.7	0.63	0.46
Sample 1	103	0.63	29	87.9	75.8	0.55	0.44
Sample 1	72	0.60	32	89.3	69.1	0.69	0.38
Sample 2	148	2.11	78	93.4	73.2	0.82	0.34
Sample 2	107	2.14	78	95.1	77.0	0.82	0.34
Sample 2	72	2.27	77	96.4	80.5	0.85	0.36

13.2.6 Flotation + Cyanidation

Using the bulk flotation procedure developed from the flotation tests, gold bearing bulk concentrates were produced from the 20-kg head samples at a primary grind size of 80% passing 200 µm. The concentrates were then reground at three different particle sizes, ranging from 80% passing 15 µm to 49 µm and then cyanide leached for 48 hours at a sodium cyanide concentration of 2 grams per litre ("g/L"). The test results are shown in Table 13-2.

Table 13-2: Flotation + Flotation Concentrate Regrinding and Cyanidation

Sample ID	Flotation*			Cyanidation		Flotation + Cyanidation
	Calculated Head Grade*, g/t	Concentrate Grade g/t	Recovery %	Regrind size, P80	Extraction, %	Recovery, %

	Au	Ag	Au	Ag	Au	Ag	Mass	µm	Au	Ag	Au	Ag
Sample 1	0.71	23	6.6	205	94.3	88.4	10.1	49	93.0	73.3	87.7	64.8
								38	94.5	73.4	89.1	64.9
								19	93.4	73.9	88.0	65.4
Sample 2	1.90	68	18.3	639	98.0	96.0	10.2	47	96.0	78.4	94.1	75.3
								37	96.7	80.4	94.8	77.2
								15	96.3	79.0	94.3	75.8

** at a primary grind size of 80% passing approximately 200 µm; based on flotation head*

In general, the reground flotation concentrate responded well to the cyanidation. In the tested regrind size range, the gold and silver extractions were not sensitive to the regrind size. On average, gold and silver extractions were approximately 93.6% Au and 73.5% Ag for the Sample #1's concentrate and 96.3% Au and 79.2% Ag for the Sample #2's concentrate. Overall gold and silver recoveries (flotation + cyanidation) are calculated to be 88.3% Au and 65.0% Ag for Sample #1 and 94.4% Au and 76.1% Ag for Sample #2 respectively. The test results show that reagent consumptions, including sodium cyanide, are at the reasonable levels.

13.2.7 Conclusions

The samples tested responded well to gold and silver recoveries by conventional flotation, direct cyanidation and a combination of flotation and cyanidation treatments, which is similar to the historical processing flowsheet used at the Baker mill. Some of the gold occurs as coarse nugget grains which are amenable to gravity concentration.

Direct cyanidation achieved extraction percentages of 84.7% to 96.4% for gold, and 69.1% to 80.5% for silver (see Table 13-1). Flotation testing delivered recoveries of 94.3% and 98.0% for gold, and 88.4% and 96.0% for silver (see Table 13-2). Flotation concentrate regrind and cyanidation delivered recoveries of 87.7% to 94.8% for gold, and 64.8% to 77.2% for silver.

The results suggests that gold and silver recoveries for mineralized material from Shasta are responsive to conventional process technology. For evaluating Mineral Resources, it is reasonable to use 94.8% Au recovery and 77.2% Ag recovery, which are the results of the best single set of conditions using flotation concentrate regrind and cyanidation.

13.2.8 Recommendations

For the next stage of testing TDG plans to undertake further metallurgical testing on various mineral samples, especially the samples representative to different lithological and alteration domains and spatial locations.

14 Mineral Resource Estimate

14.1 Summary

The Mineral Resource Estimate (MRE) for the Shasta deposit has an effective date of February 11, 2023. The resource estimate is summarized in the Table below with the base case cut-off grade of 0.40g/t Au Equivalent (AuEq) highlighted. The resource estimate has been confined to an open pit with "reasonable prospects of eventual economic extraction". The base case cut-off grade covers the Processing + General and Administrative ("G&A") costs of CDN$17.00/tonne processed using the prices and smelter terms as detailed in the Notes to the Table.

Table 14-1: Shasta Mineral Resource Estimate

Class	AuEq Cutoff (g/t)	In Situ Tonnage and Grade Tonnage ('000 t)	AuEq (g/t)	Au (g/t)	Ag (g/t)	NSR ($CDN)	AuEq Metal (kOz)	Au Metal (kOz)	Ag Metal (kOz)
Indicated	0.3	15,830	1.083	0.844	29.8	77.58	550.9	429.6	15,167
	0.35	14,026	1.180	0.920	32.5	84.57	532.2	414.9	14,660
	0.4	**12,578**	**1.273**	**0.993**	**35.0**	**91.22**	**514.8**	**401.4**	**14,166**
	0.45	11,300	1.369	1.068	37.6	98.11	497.4	388.0	13,667
	0.5	10,198	1.466	1.144	40.2	105.04	480.6	375.1	13,187
	1	4,579	2.406	1.885	65.1	172.39	354.1	277.5	9,584
Inferred	0.3	19,881	0.854	0.657	24.6	61.18	545.7	419.9	15,718
	0.35	17,391	0.930	0.716	26.8	66.62	519.8	400.1	14,974
	0.4	**15,432**	**1.000**	**0.771**	**28.7**	**71.69**	**496.3**	**382.3**	**14,249**
	0.45	13,762	1.070	0.825	30.6	76.70	473.6	365.2	13,548
	0.5	12,276	1.143	0.883	32.5	81.88	451.0	348.4	12,823
	1	4,610	1.890	1.497	49.1	135.47	280.2	221.9	7,282

Notes to the MRE table:

1. *The Mineral Resource estimate has been prepared by Sue Bird, P.Eng., an independent Qualified Person.*
2. *Resources are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines.*
3. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
4. *The Mineral Resource has been confined by a "reasonable prospects of eventual economic extraction" pit using the following assumptions:*
    a. *Au price of US$1,800/oz, Ag price of US$20/oz at an exchange rate of 0.75 US$ per CDN$;*
    b. *99.8 % payable Au; 95.0 % payable Ag; US$4.25/oz Au and US$1.53/oz Ag offsite costs (refining, transport, and insurance);*
    c. *a 1.5 % NSR royalty; and uses a 94.8 % metallurgical recovery for Au and 77.2 % recovery for Ag;*
    d. *Mining costs of CDN$2.56/tonne mineralized material, CDN$2.40/tonne waste, CDN$1.8/tonne overburden;*
    e. *Processing Costs of CDN$12/tonne and G&A of CDN$5.00/tonne processed.*
    f. *Pit slopes of 45 degrees.*
5. *The resulting NSR equation is: NSR (CDN$) = 75.67*Au Grade*0.948 + 0.74*Ag Grade*0.772*
6. *The resulting AuEq equation is: AuEq = Au + Ag*0.008*
7. *The bulk density of the deposit is based on 2021 measurements and is 2.61 throughout the deposit and 2.00 for overburden.*
8. *Numbers may not add due to rounding.*

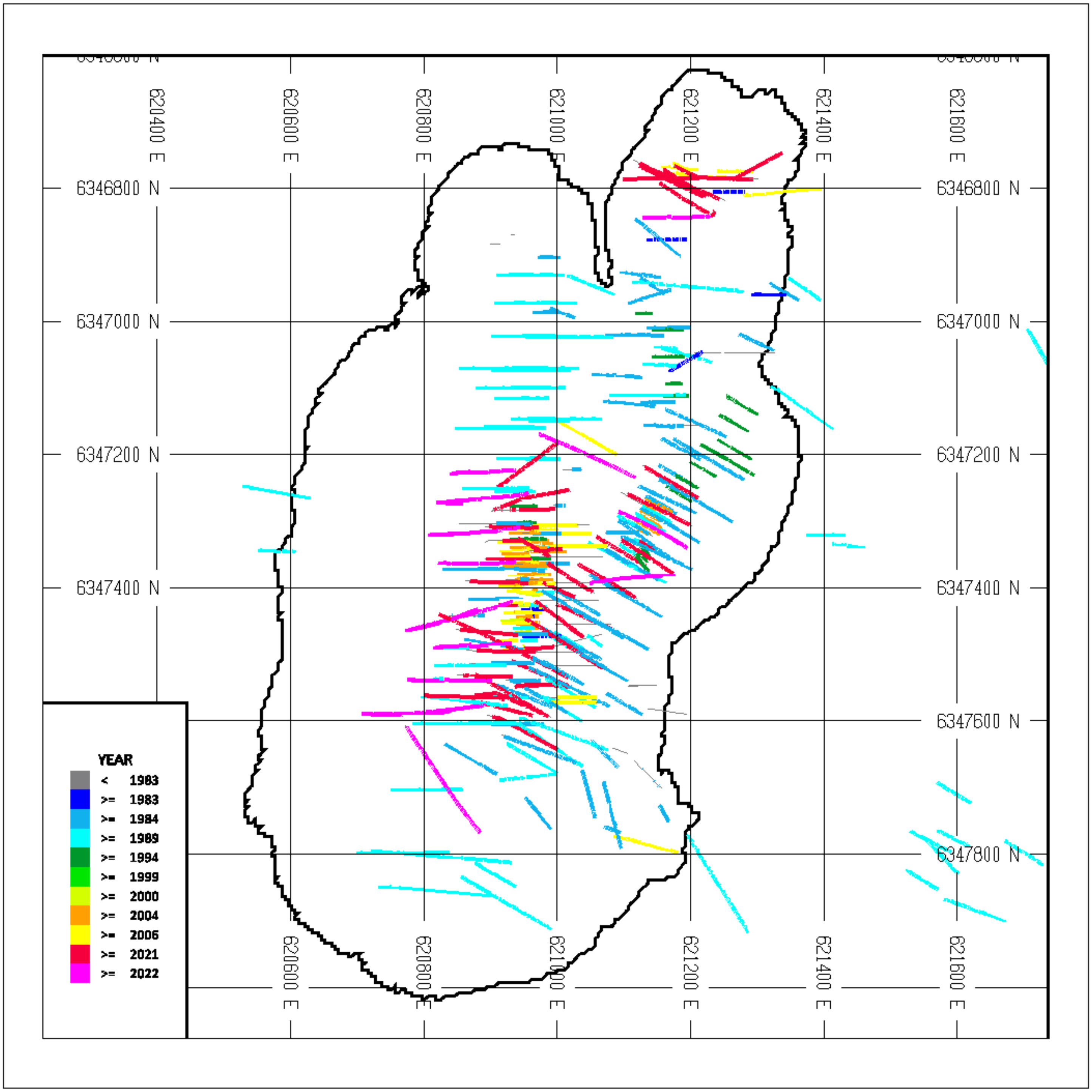
There are no other known factors or issues that materially affect the MRE other than normal risks faced by mining projects in the province of British Columbia, Canada, in terms of environmental, permitting, taxation, socio-economic, marketing, and political factors.

14.2 Key Assumptions and Data used in the Resource Estimate

A summary of the drillholes used for the resource estimate of the Shasta deposit is summarized in the Table below. Figure 14-1 is a plan map of all drillholes. Twinning of historical drillholes returned acceptable results as discussed in Section 12.4 and comparison of 2021 and 2022 drilling to historical drilling does not indicate significant bias. Therefore, all drillholes shown in the figure have been used for the resource estimate. It is noted that drillholes from 2007 and 2010 could not have their locations verified in the field and therefore were not included in the interpolations for the resource model.

Table 14-2: Summary of Drillholes and Assays used in the Shasta Resource Estimate

Year	DHs within Area used for Resource Estimate				Source
	# Drillholes	Total Length (m)	Assayed Length (m)	% Assayed	
1983	5	323	175	54%	Aris Report 11715
1984	17	1,815	1,132	62%	PF861856 (Project Files)
1987	21	2,100	1,233	59%	Aris Reports 17519/16698
1988	14	2,089	787	38%	N/A
1989	37	3,210	1,512	47%	N/A
1990	5	814	97	12%	Aris Report 20821
1991	13	978	141	14%	N/A
1994	6	415	83	20%	N/A
1995	4	243	25	10%	N/A
1998	9	299	131	44%	Aris Report 26004A
2003	8	314	57	18%	N/A
2004	27	1,486	460	31%	Aris Report 27653A
2005	6	526	63	12%	N/A
2006	20	1,519	416	27%	Aris Report 29168
2021	44	6,593	4,605	70%	2021 SGS Certificates
2022	20	5,008	4,749	95%	2022 ALS Certificates
Total	**256**	**27,732**	**15,666**	**56%**	



(Source: MMTS, 2023)

Figure 14-1: Plan view of Drillholes by Year with Outline of Holes used for Resource Estimate Geologic Models

Gold and Silver mineralization at Shasta occurs in two main trends named the Shasta (or Creek) Zone and the JM zone. The western Shasta Zone is associated with the Shasta Fault. It strikes north (azimuth = 0 degrees) and dips between approximately 20 and 45 degrees west. The eastern JM Zone is sub-vertical with a strike of approximately 340 degrees.

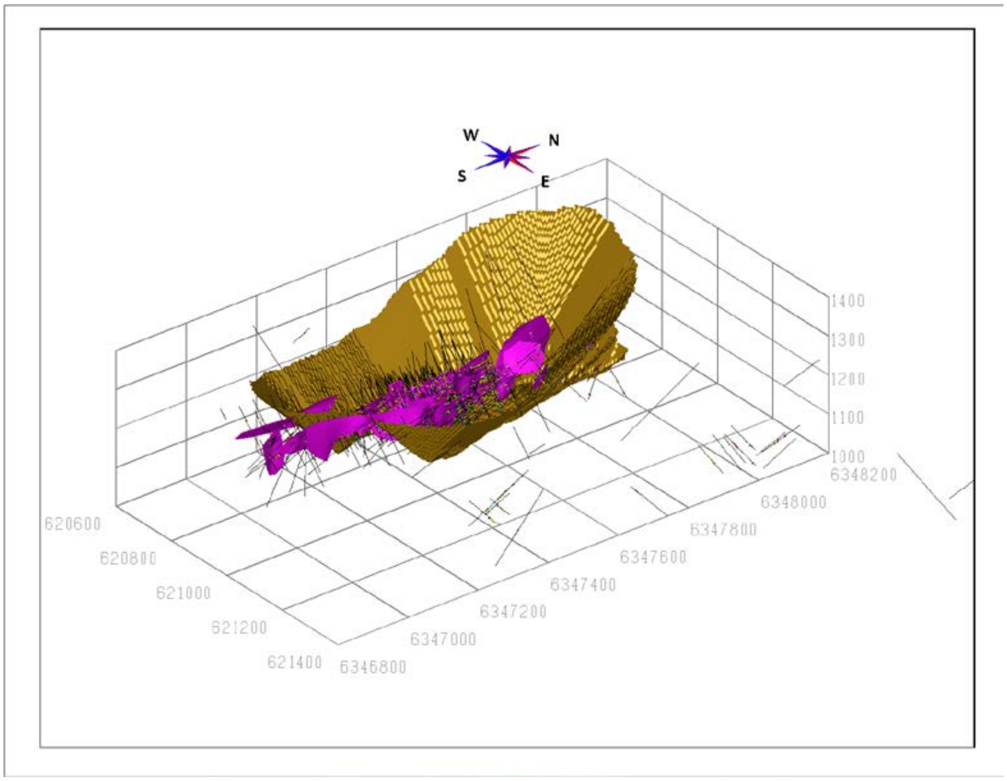
Au and Ag mineralization crosses lithological and alteration boundaries. The Shasta zone is associated with the Shasta fault, but the fault is not a hard boundary since economic mineralization occurs on both sides of it. Therefore, economic grade has been used as the primary basis of 3D modeling at both areas.

A set of “higher-grade” and “lower-grade” domains and an overburden surface have been modeled. The high-grade domains were modeled initially as part of an effort to establish directional trends to the mineralization. The low-grade zones were modeled afterwards with the intent of honouring the direction of the high grade and capturing the extent of the economic levels of mineralization. The overburden surface is used to limit mineralization near surface.

The high-grade domains have been modeled to target grade above 3g/t AuEq (where AuEq=Au+0.008*Ag), with lower grade intervals included only as necessary for continuity and where they are markedly higher grade than their adjacent down hole assays. Eleven high grade domains have been modeled in the Shasta Zone and 8 in the JM zone, as show in Figure 14-2.

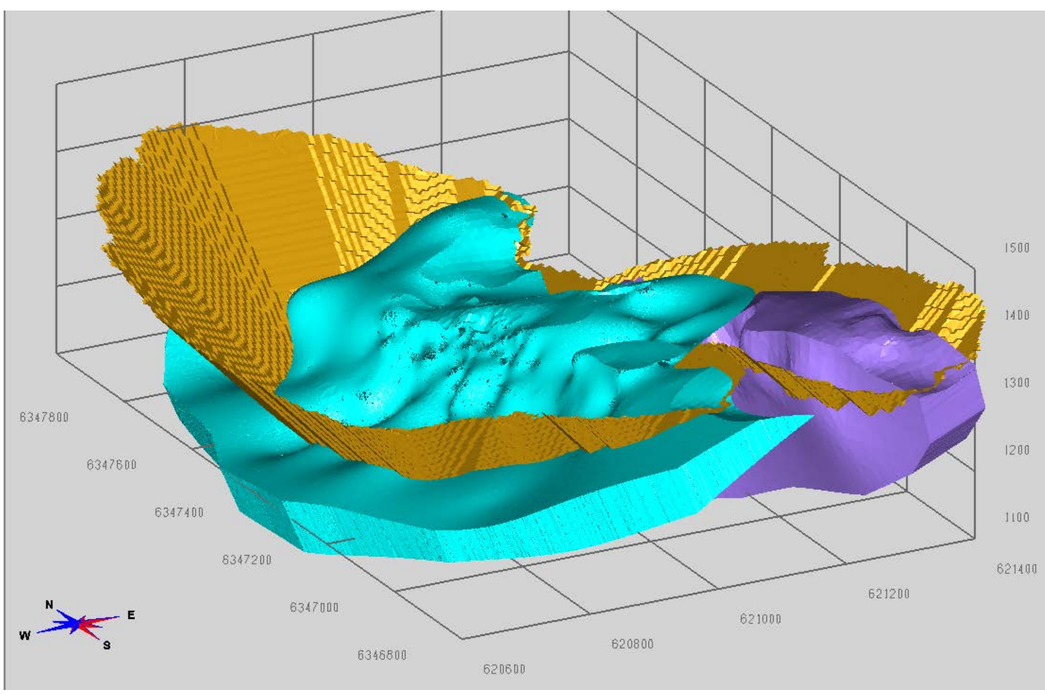
The lower grade domains target 0.15 g/t AuEq. One domain has been modeled for each of the Shasta and JM zones. In the northern area of the deposit where the zones converge the Shasta zone is clipped to the JM zone because variography shows the vertical orientation to be the stronger of the two directional trends. The remaining eastern portion of the Shasta zone has been treated as its own domain which interpolates using a soft boundary between it and the JM and main Shasta domains. The low-grade domains are shown in Figure 14-3. The domain solids have been clipped to the overburden surface.

To simplify the block modelling only the lower grade domains have been used to constrain Au and Ag interpolations in the 3D block model.



(Source: MMTS, 2022)

Figure 14-2: Shasta and JM High Grade Domains – Looking Northwest



(Source: MMTS, 2023)

Figure 14-3: Shasta (Cyan) and JM (Purple) Domains – Looking Northeast

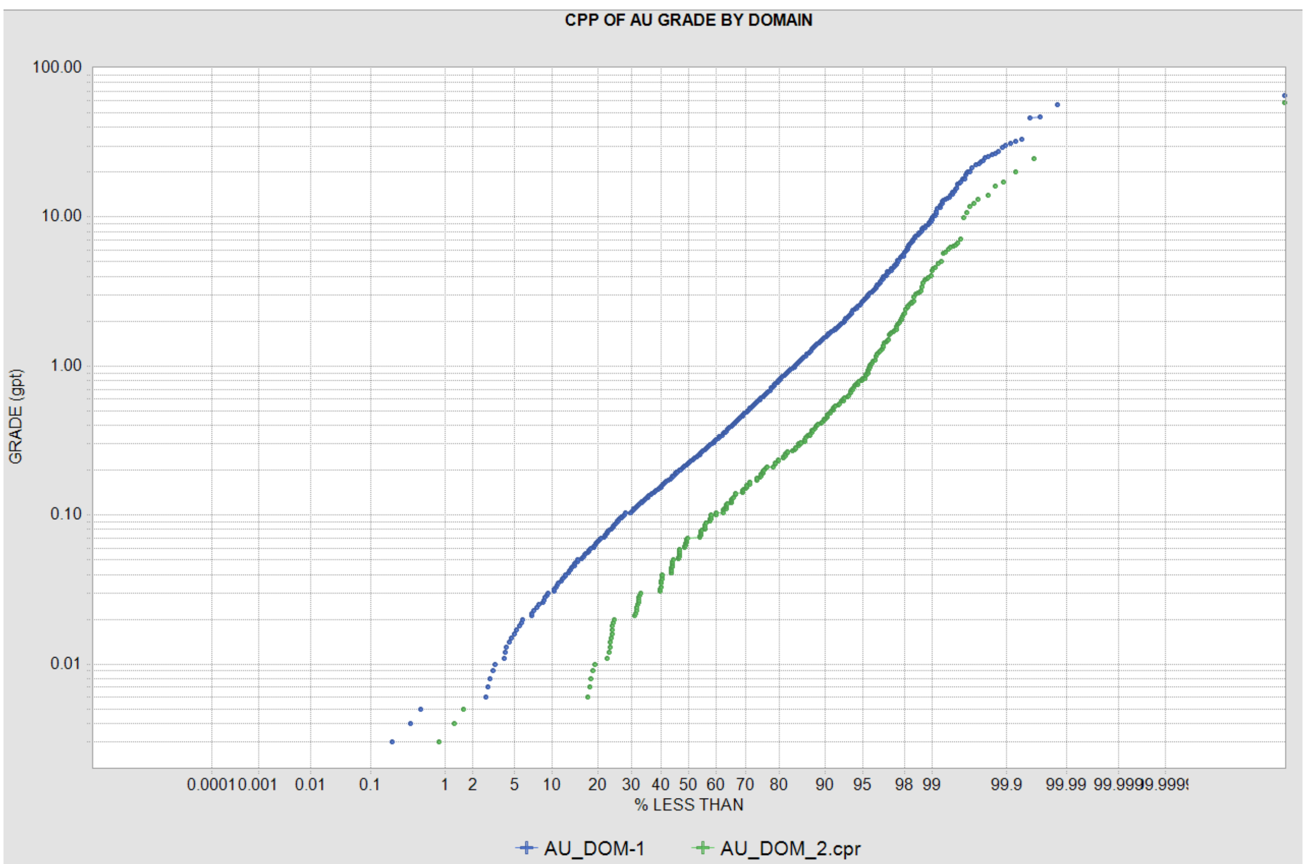
14.3 Assay Statistics, Capping, and Outlier Restriction

The assay statistics were examined using boxplots, histograms, and cumulative probability plots (CPPs). Figure 14-4 and Figure 14-5 are CPPs for the Au and Ag by domain, respectively.

The capping values for each area and domain are summarized in Table 14-3. Also summarized in this Table are the Outlier Restriction values used during interpolation. These are shown here for clarity on how the high-grade outliers have been confined during interpolations. This is discussed further in Section 14.8 which summarizes the block modelling parameters.

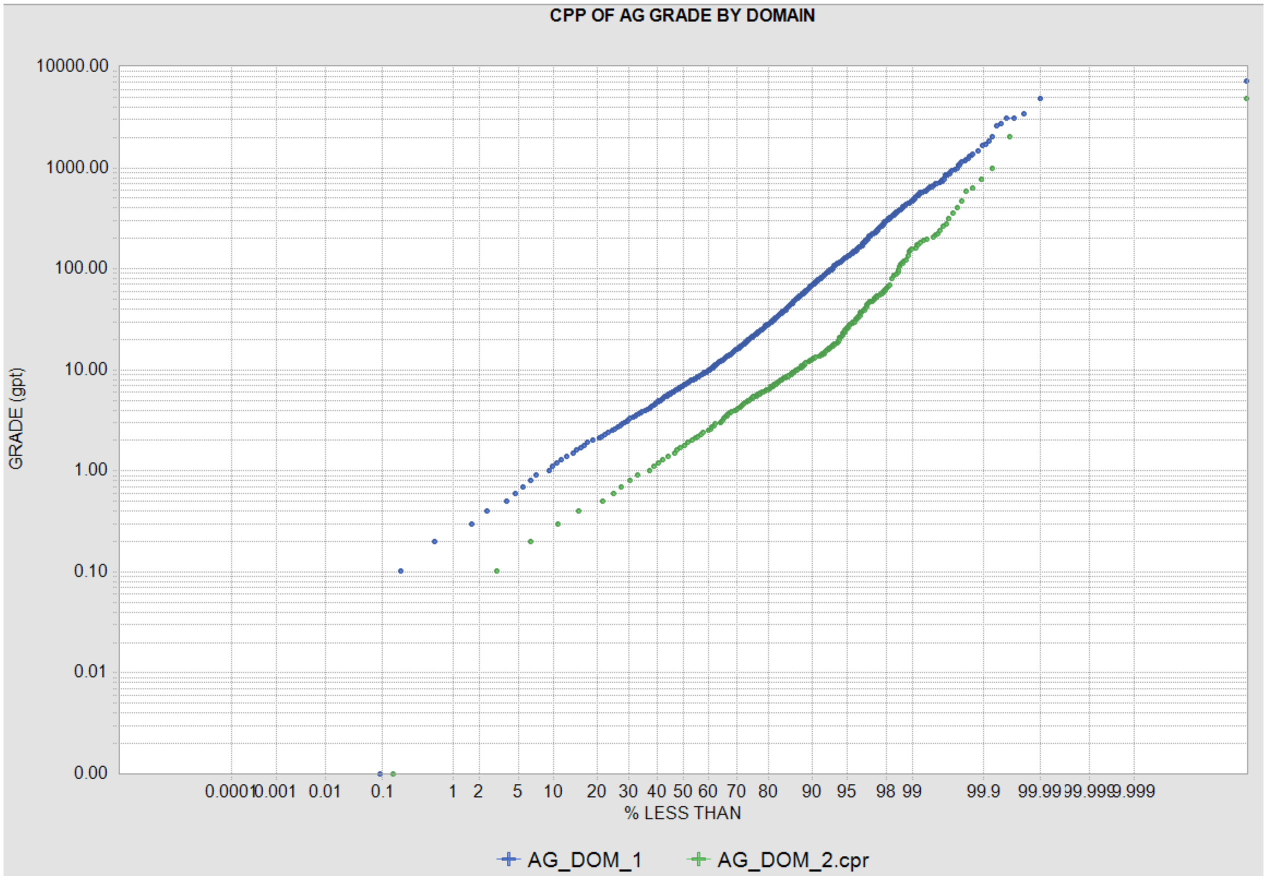
Table 14-3: Summary of Capping and Outlier Restriction by Domain

	Assay Capping Values				Composite Outliers			
DOM	Au (gpt)	# capped	Ag (gpt)	# capped	Au (gpt)	# of outliers	Ag (gpt)	# of outliers
1	100	1	2000	8	50	2	1000	10
2	50	1	3000	1	50	na	1000	2



(Source: MMTS, 2023)

Figure 14-4: CPP of Au Assay Grades by Domain



(Source: MMTS, 2023)

Figure 14-5: CPP of Ag Assay Grades by Domain

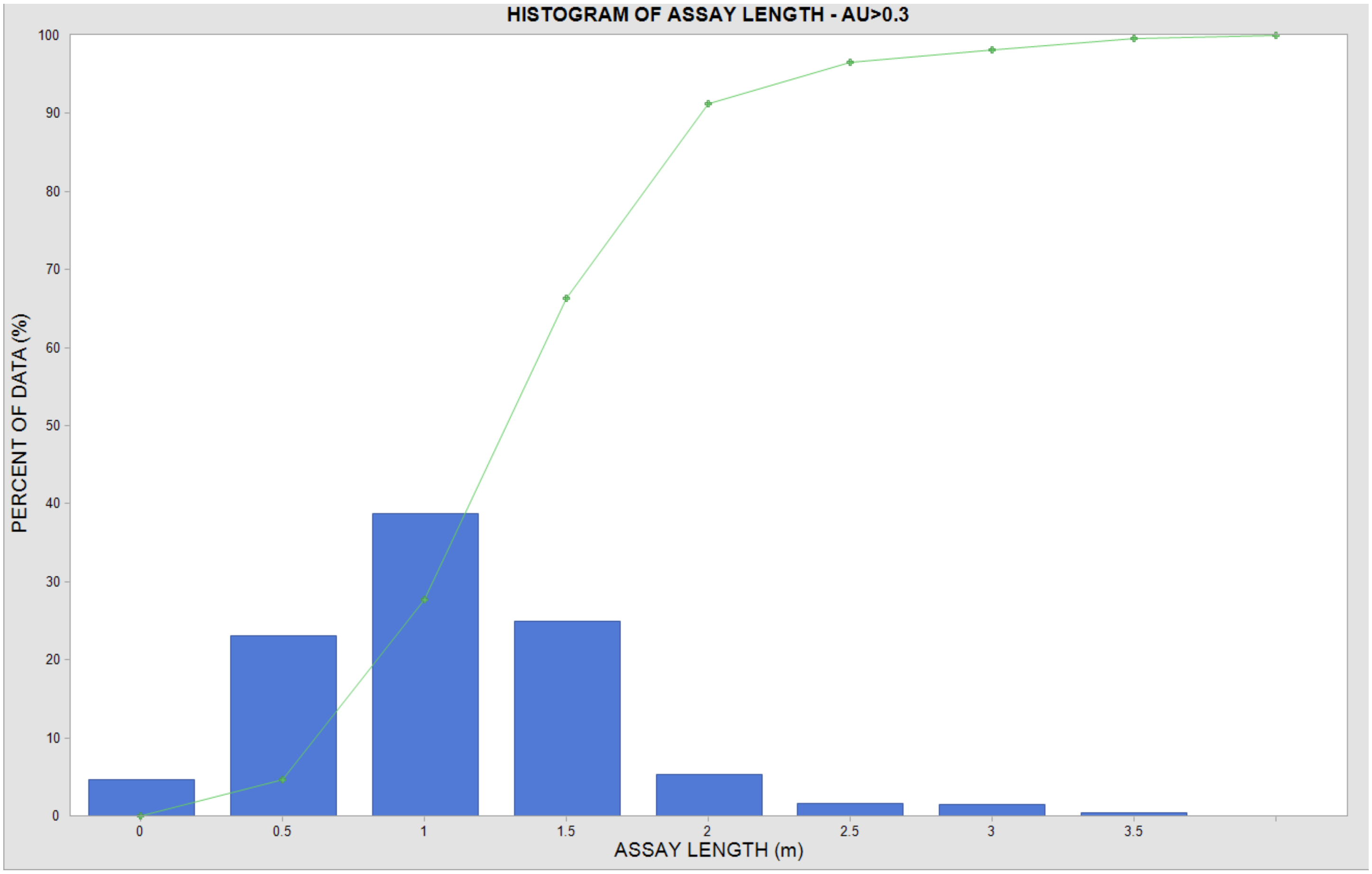
Assay and composite statistics for the capped gold grades are summarized in Table 14-4, illustrating that the composited grades equal assayed grade and therefore compositing has not introduced a bias. Also illustrated is that the grade distribution is generally lognormal. The Coefficient of Variation (C.V.) is somewhat high for some domains, but it further restricted during interpolation by Outlier Restrictions.

Table 14-4: Assay Statistics Compared to Composite Statistics

Source	Parameter	Capped					
		Au		Ag		Au	Ag
		1	2	1	2	All	All
Assays	Num Samples	9954	2860	9956	2860	12814	12816
	Num Missing	514	159	512	159	673	671
	Minimum (g/t)	0	0	0	0	0	0
	Maximum (g/t)	100	50	2000	3000	100	3000
	Wtd. Mean (g/t)	0.7589	0.2898	28.3	10.65	0.6568	24.46
	Weighted CV	3.8644	5.1652	3.38	7.87	4.1007	3.82
Composites	Num Samples	6886	1940	6887	1940	8826	8827
	Num Missing	2176	642	2175	642	2818	2817
	Minimum (g/t)	0.001	0.001	0	0.1	0.001	0
	Maximum (g/t)	65.45	37.746	2000	2267	65	2267.3
	Wtd. Mean (g/t)	0.7748	0.2859	29	10	1	25.05
	Weighted CV	3.0814	4.0029	2.82	6.3	3.2747	3.16
Difference (%)		**2%**	**-1%**	**3%**	**-3%**	**2%**	**2%**

14.4 Compositing

Compositing has been done on 2m composites, honoring the domain boundaries. This length is chosen to be larger than the majority of existing assay intervals within the domain, as illustrated in the histogram below (Figure 14-6).



(Source: MMTS, 2023)

Figure 14-6: Histogram of Assay Lengths

14.5 Specific Gravity Assignment

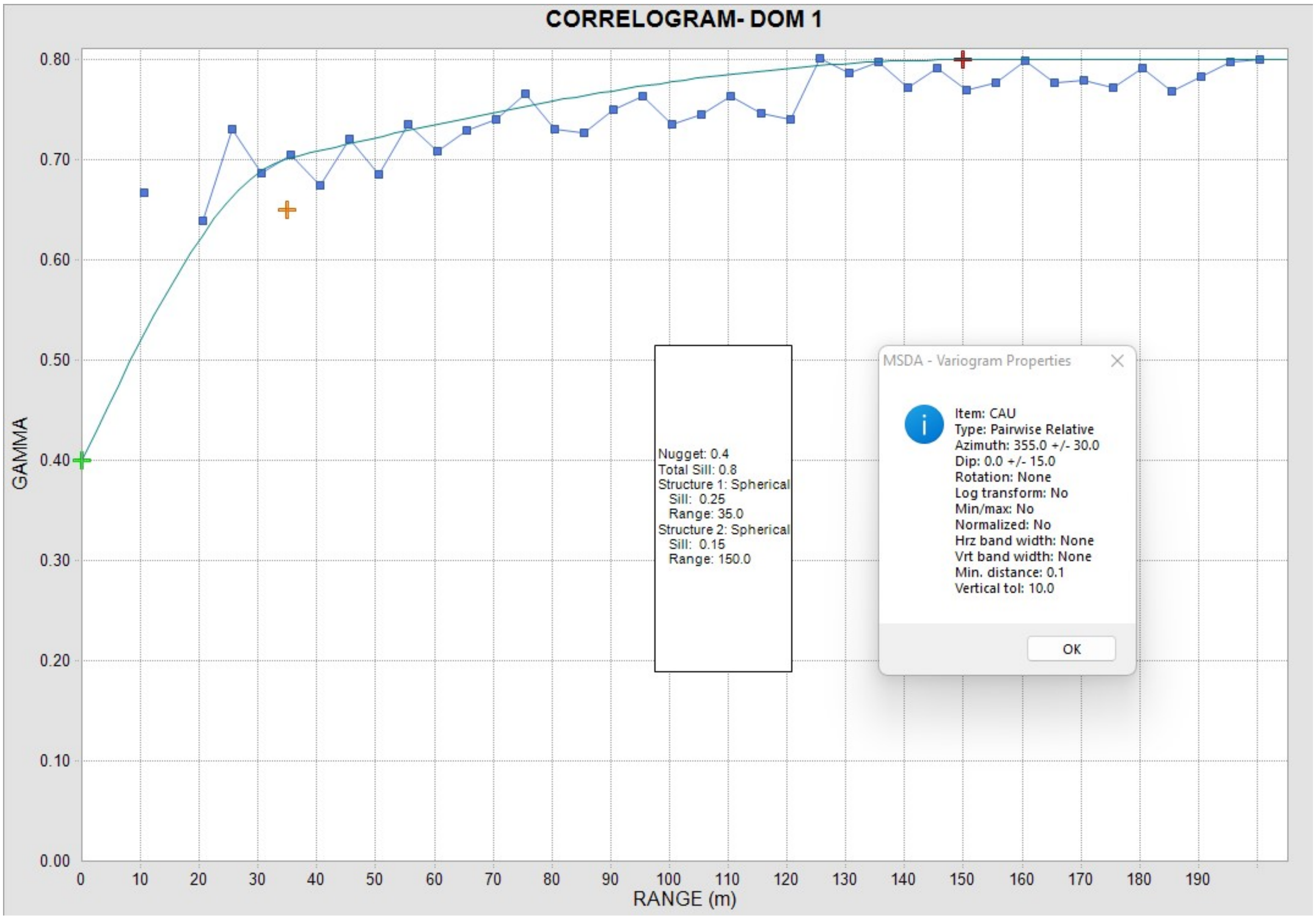
The specific gravity (sg) has been assigned based on 658 measurements of from the 2021 drilling. A value of 2.61 has bee used for the mineralized domains. This is the mean sg of 188 samples with an Au grade greater than or equal to 0.25g/t. The bulk sg of the overburden is assumed to be 2.0.

The methodology for measurement of sg is as follows: dry solids are placed in a dry graduate and then a measured volume of water (approximately 500 milliliters) is added to the this. The increase in volume caused by the dry solids displacing some of the water is then measured to determine the volume of solids. Assume the new volume is 550 c.c. The displacement, then, is 50 c.c. (550-500). Divide the weight of the dry solids (200 gr.) by the difference in volume (50 c.c.). The result, 4.00, is the specific gravity of the dry solids.

14.6 Variography

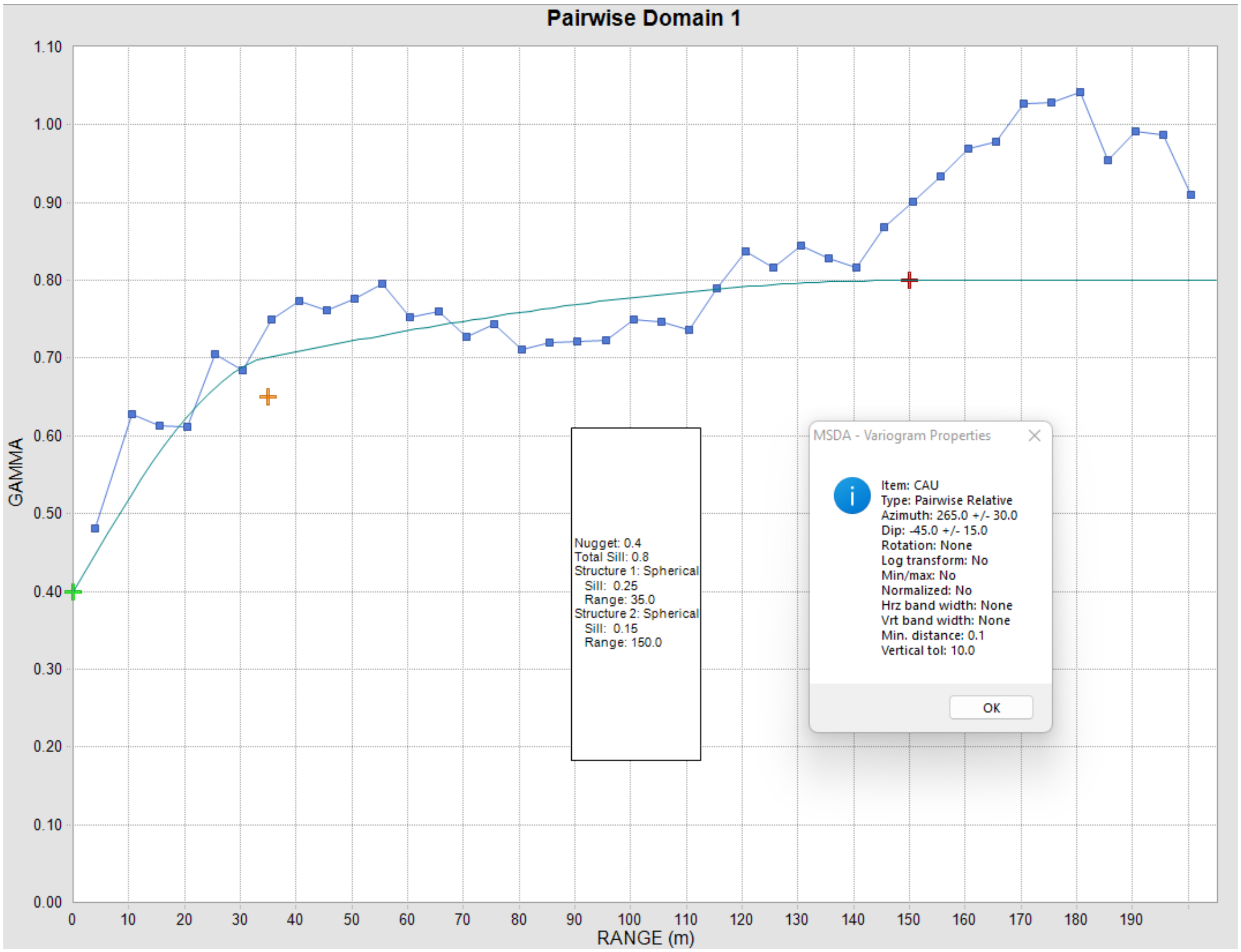
Variography has been done on the two main domains to determine the primary anisotropy and aid in search distances to be used during interpolations, and in Classification. *(Source: MMTS, 2023)*

Figure 14-7 below illustrates the variogram models for Au in the Shasta domain (Domain 1) with the principal axes aligned with the Shasta fault. Similar search parameters were used for all three domains, with Domain 3 having the same orientation as Domain 1 and Domain 2 following the trend of the JM zone.



(Source: MMTS, 2023)

Figure 14-7: Variogram Models for Au in The Shasta Domain (Domain 1)



(Source: MMTS, 2022)

Figure 14-8: Variography of Au in the Shasta Zone

14.7 Block Modelling

Block dimensions are 5m x 5m x 5m with the extent of the block model summarized in Table 14-5.

Table 14-5: Shasta Model Extents

Direction	Minimum	Maximum	Size	# Blocks
Easting	620,500	622,400	5	380
Northing	6,346,700	6,348,200	5	300
Elevation	1000	1,600	5	120

Search parameter orientations varied based on the mineralized zone orientations as summarized in Table 14-6. The rotation values Major, Minor and Vertical are the rotation of the principal axes about the Y-axis, X-axis, and Z-axis, respectively, using the right-hand rule with positive rotation upwards. Interpolation has been done using inverse distance (ID3) in all cases.

Table 14-6: Summary of Search Orientations

Rotation Axis Direction	Domain	
	1	2
Y	355	340
X	0	0
Z	45	-80

The restrictions on search distances and composite selection for each of the four passes of the interpolations are given in Table 14-7.

Table 14-7: Summary of Search Distances and Composites Selection

PASS	Distance (m)			Sample Selection			
	Y	X	Z	Min Comps	Max. Comps	Max / Hole	Max / Quad
1	25	25	10	4	12	2	2
2	50	50	10	4	12	2	2
3	100	100	15	4	12	2	2
4	150	150	25	4	12	2	2

The interpolations have also restricted the high-grade outliers to ensure that metal content is not over-estimate in any domains. The outlier values are summarized in Table 14-3 along with the capping values, for clarity on how the high grades are constrained. Composite values above the Outlier values are used in the interpolations only up to 5m from the composite.

14.8 Classification

The resource estimate is classified as Indicated using only holes drilled in 2021 and 2022. If the distance to the closest two drillholes drilled in these two years and the block is within the modelled domains and has been interpolated, it is classes as Indicated. All other blocks within the domains that have been interpolated are classed as Inferred. It is noted that drilling in 2021 and 2022 showed good agreement in the twinned holes (2 holes as summarized in Section 12.4) and comparison of grades to historical grades did not show significant bias. Figure 14-9 illustrates the Classification with the top view showing only Indicated and the bottom model view showing Indicated and Inferred. No blocks are considered as Measured for the resource estimate.

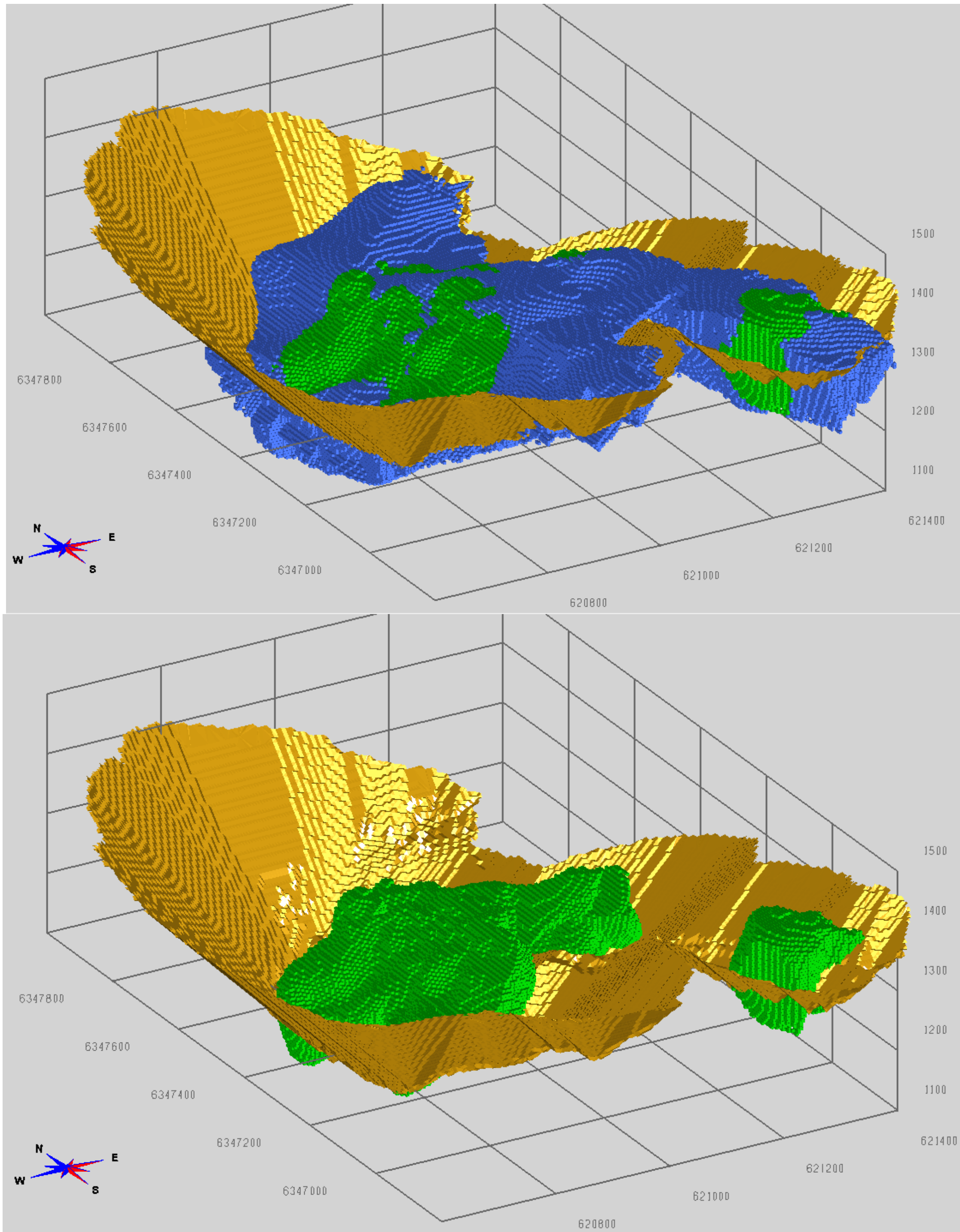


Figure 14-9: Three-dimensional view of the resource pit with the Classification (Indicated in green, Inferred in blue)

14.9 Model Validation

14.9.1 Global Grade Validation

Resource validation to ensure there was no global bias compared NN grades to those of the final grade interpolation at zero cut-off. Table 14-8 and Table 14-9. Figure 14-10 summarizes this comparison, illustrating that the difference between the de-clustered composite data (NN model) and the final modelled grades is minimal.

Table 14-8: Summary of Model Grade Comparison with De-Clustered Composites - AU

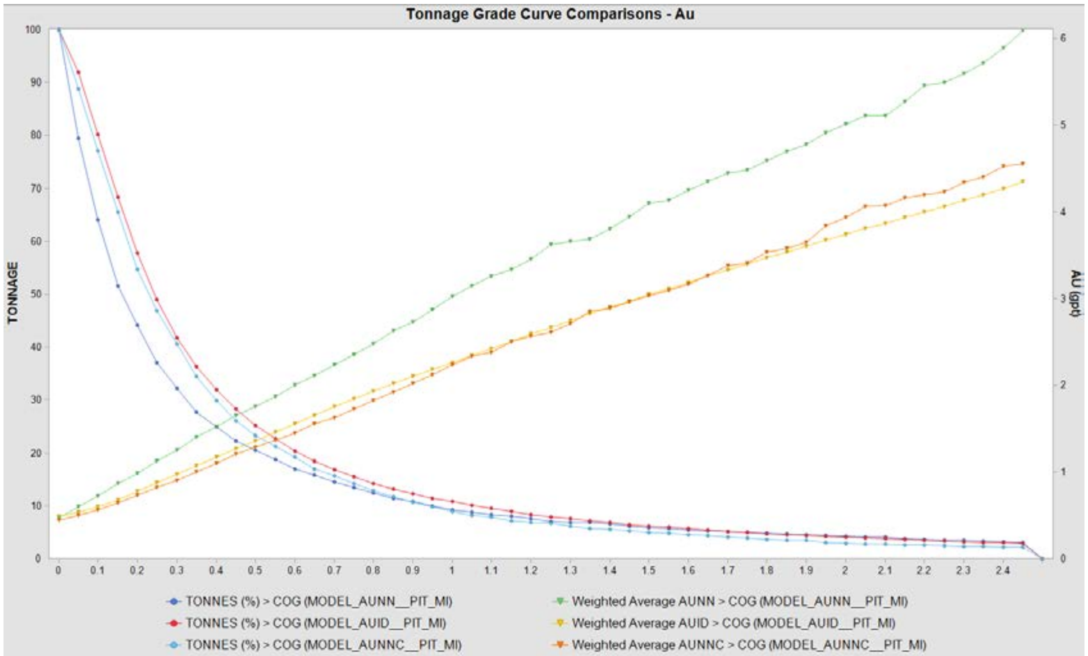
Class	Cutoff (gpt)	Au Metal (Koz)		Difference
		ID	NN	
Indicated	**0**	492.9	478.8	2.9%
	0.3	409.1	405.3	0.9%
	0.35	391.6	390.5	0.3%
	0.4	375.1	380.0	-1.3%
	0.45	359.8	368.9	-2.5%
	0.5	345.1	360.5	-4.3%
	1	245.0	281.1	-12.8%

Table 14-9: Summary of Model Grade Comparison with De-Clustered Composites- AG

Class	Cutoff (gpt)	Ag Metal (Koz)		Difference
		ID	NN	
Indicated	**0**	17,423	17,423	0.0%
	2	17,281	17,181	0.6%
	5	16,520	16,362	1.0%
	10	14,873	15,022	-1.0%
	15	13,375	13,933	-4.0%
	20	11,994	13,099	-8.4%
	25	10,854	12,345	-12.1%

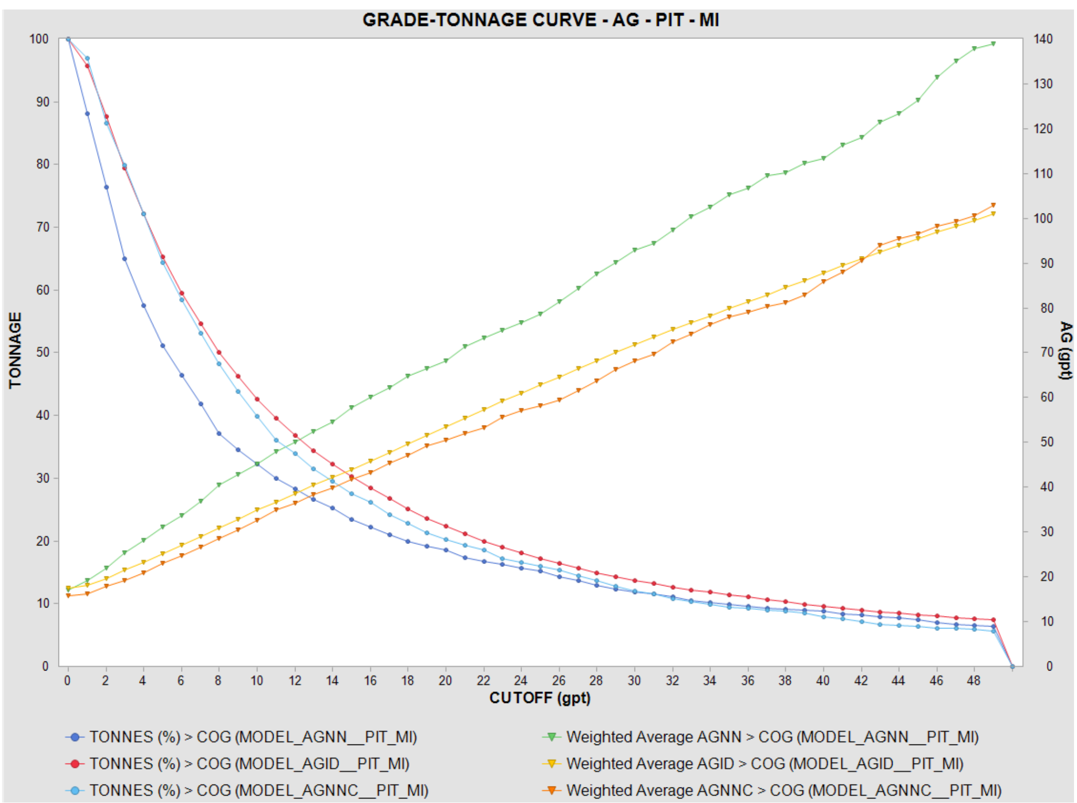
14.10 Grade-Tonnage Curves

Grade–tonnage curves were also created to compare interpolated grades with the de-clustered composite grades through the grade distribution. Figure 14-10 and Figure 14-11 illustrate this comparison for Au and Ag respectively, showing increased smoothing (reduced grades and increased tonnage) compared to the NN grade curves. The NN model has also been corrected for Volume-Variance affects using the Indirect Lognormal correction (ILC) to account for the reduction in variance from composite sample size to block size, as illustrated in the Grade-Tonnage figures. The final modelled grades (labelled ID in the figures) are at or below the Volume-Variance corrected Grade-tonnage curves (labelled NNC) throughout the grade distribution.



(Source: MMTS, 2023)

Figure 14-10: Grade-Tonnage Curve Comparison for Au



(Source: MMTS, 2023)

Figure 14-11: Grade-Tonnage Curve Comparison for Ag

14.11 Visual Comparisons

Further validation on local grade estimation has been done through visual comparisons of the modelled grades with the assay and composite grades in section, plan and through three-dimensional checks. Figure 14-12 and Figure 14-13 illustrate the block grades and assay grades in east-west cross-sections for Au and Ag respectively. The resource pit shape is also illustrated on the sections. Modelled grades show similar grade distributions and values throughout the model to that of the drillhole data.

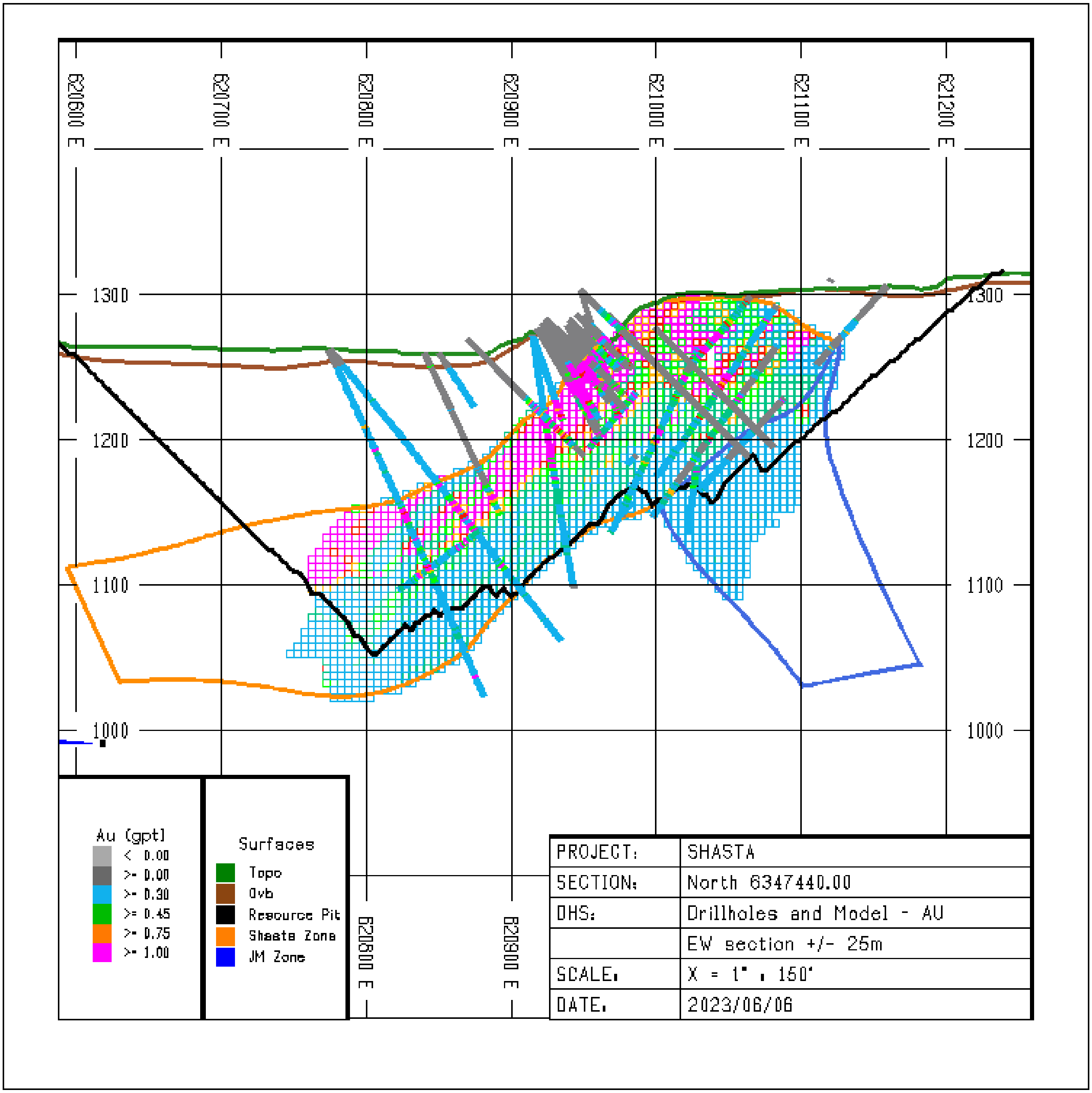


Figure 14-12: Model Compared to Assays (+/- 25m) - Au

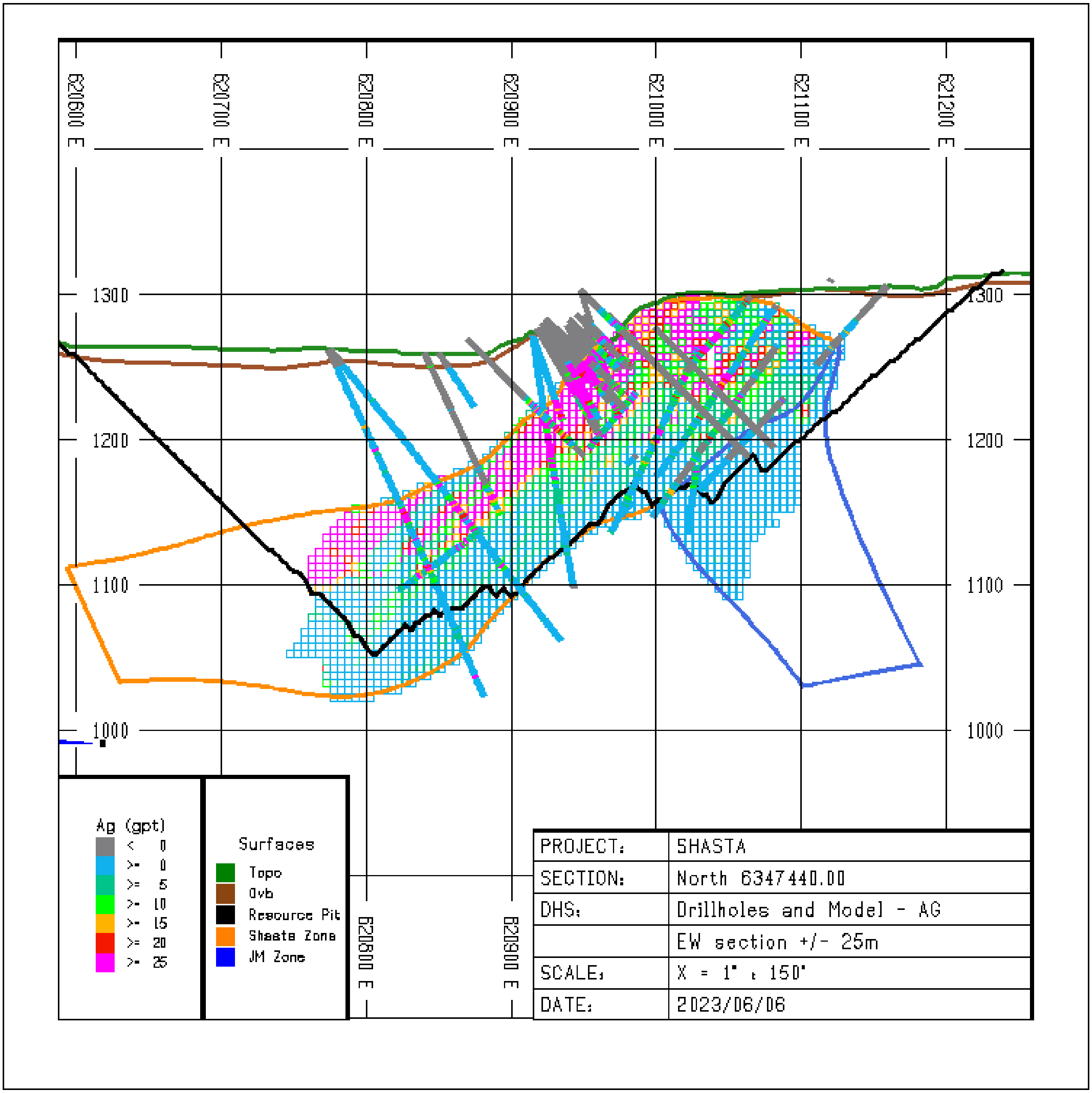


Figure 14-13: Model Compared to Assays (+/- 25m) – Ag

14.12 Reasonable Prospects of Eventual Economic Extraction

The metal prices, recoveries, smelter terms and net smelter prices (NSP) are summarized in Table 14-10. Metal prices for both Au and Ag are based on the Kitco 3-year trailing average price charts (Kitco, 2023) have been used.

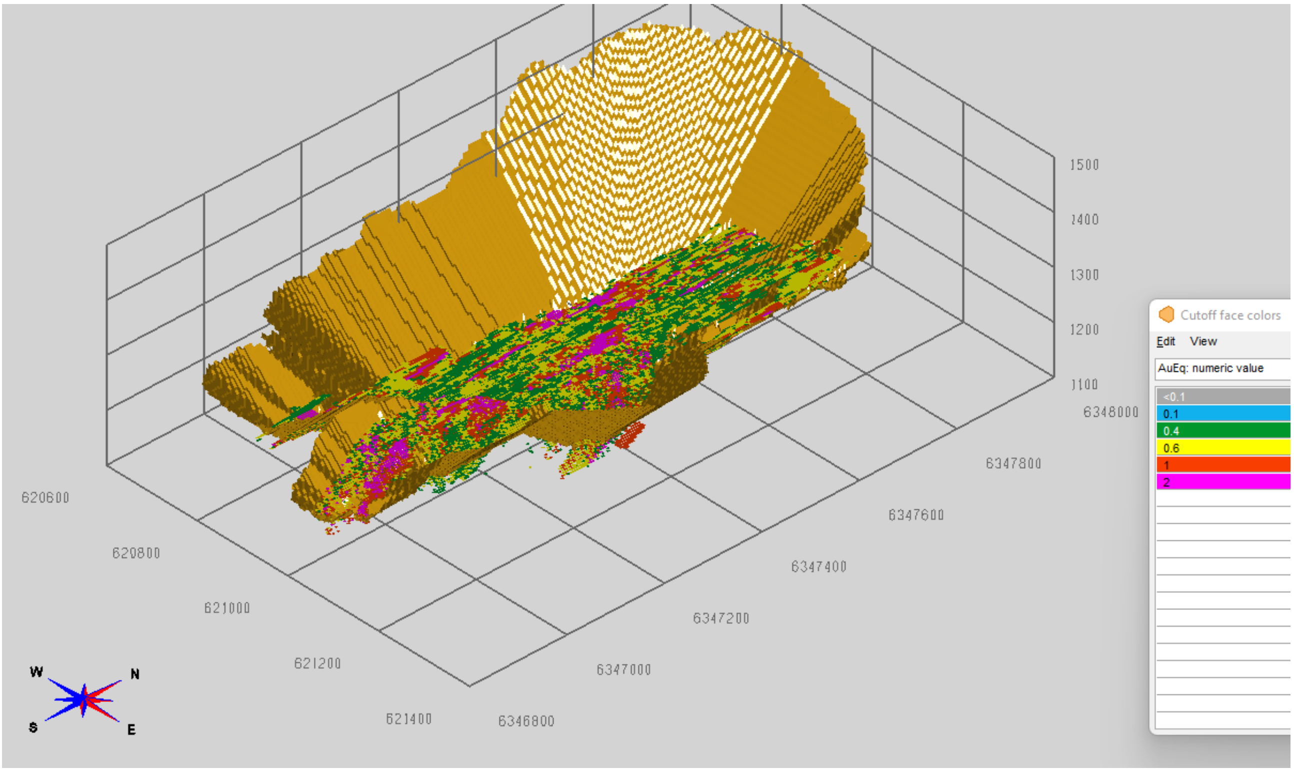
The resulting NSR equation is: NSR (CDN$) = 75.67*AuGrade*0.948 + 0.74*AgGrade*0.772
The resulting AuEq equation is: AuEq = Au + Ag*0.008

Table 14-10: Metal Prices, Recoveries, Smelter Terms and Net Smelter Price (NSP)

Parameter	Value	Units
Forex	0.75	US$:C$
Gold Price	$1,800.00	US$/Oz
Gold Payable	99.80%	
Gold Refining	1.00	US$/Oz
Gold Transport	1.00	US$/Oz
Insurance	2.250	US$/Oz
Au Royalty	1.5%	
Net Smelter Gold Price	$75.67	C$/g
	$2,353.60	C$/oz
Silver Price	$20.00	US$/Oz
Silver Payable	95.00%	
Silver Refining	0.50	US$/Oz
Silver Transport	1.00	US$/Oz
Insurance	0.025	US$/Oz
Ag Royalty	1.5%	
Net Smelter Ag Price	$0.74	C$/g
	$23.02	C$/oz
Gold Process Recovery	94.8%	
Silver Process Recovery	77.2%	

Open pit resources are confined by a “reasonable prospects of eventual economic extraction” shape defined by a Lerchs-Grossman pit using the 120% case of the NSPS in the Table above, pit slopes of 45 degrees open pit mining costs of CDN$2.56/tonne within mineralized material, CDN$2.40/tonne within waste material and CDN$1.8/tonne overburden. Processing Costs are estimated from comparable projects at CDN$12/tonne and G&A of CDN$5.00/tonne processed. All pit slopes are assumed to be 45 degrees for the Lerchs-Grossman pit.

The final resource pit with modelled AuEq grades above the base case cutoff of 0.45% AuEq is illustrated in Figure 14-14.



(Source: MMTS, 2023)

Figure 14-14: Three-dimensional view looking NW of the Resource Pit showing Modelled AuEq Grades

14.13 Independent Check

An independent check on the modelling has been done by George Dermer, P.Eng of MMTS who checked:

- the resource shapes
- the model coding
- the "reasonable prospect" pit shapes and inputs
- the interpolation runs

14.14 Risk Assessment

A description of potential risk factors is given in Table 14-11 along with either the justification for the approach taken or mitigating factors in place to reduce any risk.

Table 14-11: List of Risks and Mitigations/Justifications

#	Description	Justification/Mitigation
1	Classification Criteria	Based on Variogaphy
2	Geologic Model	Geologic interpretations and orientations of previous underground working considered when creating new geologic confining shapes for the resource interpolations. Shasta Fault, JM zone and High-grade mineralization used to determine mineralized orientations.
3	Metal Price Assumptions	Cut-off is based on US$1800/oz Au, and US$20/oz which are all below the current prices and based on 3-year trailing average.
4	High Grade Outliers	Capping and outlier restriction applied to ensure mean grade match data. Grade-tonnage curves show model validates well with de-clustered composite data throughout the grade distribution.
5	Processing and Mining Costs	Assumed from comparables. Cutoff grade more than covers Processing plus G&A costs
6	Previous underground mining	Underground workings examined during site visit. 2021 drilling did not hit un-expected voids.

15 Mineral Reserve Estimates

Not Applicable.

16 Mining Method

Not Applicable.

17 Recovery Methods

Not Applicable.

18 Project Infrastructure

Not Applicable.

19 Market Studies and Contracts

Not Applicable.

20 Environmental Studies, Permitting and Social or Community Impact

20.1 Environmental Studies

TDG has contracted Sasuchan Environmental LP (SELP), a joint venture between Takla Nation and Environmental Dynamics Inc, and Chu Cho Environmental, owned by Tsay Key Dene Nation, to carry out environmental monitoring and reporting. TDG continues water quality monitoring and management however, no other environmental studies have been undertaken yet as the project has been in exploration.

In 2022, TDG retained Palmer Environmental to conduct a Hydrogeological Level 2 Technical Assessment to support the addition of a ground water well to provide potable water to the camp facility at Baker. Water samples taken from the ground water well proved the well is a viable source of potable water.

20.2 Permitting

The Shasta-Baker property operates under Environmental Management Act permits PE-5807 (air discharge), PE-5808 (amended PR05808; air and refuse discharge), PE-5809 (effluent discharge), PE-5892 (effluent discharge) and PE-8467 (effluent discharge). These permits outline the maximum effluent rate of discharge and requirements for sampling, monitoring, and reporting. Reporting includes an Environmental Effects Monitoring program implemented every three years. All EMA permits were transferred to TDG on August 10, 2021, and since then TDG has been performing monitoring and reporting following permit requirements.

In 2022, TDG contracted TetraTech, the Engineer of Record for the Tailings Storage Facility, to carry out a Dam Safety Inspection. Knight Piesold was also contracted in 2022 to conduct a Dam Safety Review. TDG brought in Clint Logue of Blackthorn Geo in 2022 as well to ensure compliance with the International Tailings Review Board.

TDG acquired a water license on December 19, 2022, which allows for a combined total of 28.5m^3 of water per day from an authorized aquifer and Galen Creek for the camp facility on-site. TDG has submitted applications with Northern Health for Water System Construction, Water System Operation, as well as a Sewerage System permit.

Exploration permits held by TDG for the Baker, Shasta, BOT, Mets, and Oxide Peak properties are described in section 4.2.2.

20.3 Considerations of Social and Community Impacts

TDG is committed to meaningful and transparent engagement with Indigenous nations, the public, local community members and other stakeholders as it relates to the Shasta-Baker Project (the Project; Shasta-Baker). Since acquiring the Project, TDG has committed to building relationships with four Indigenous nations in whose traditional territory the project is located. The company intends to maintain and strengthen these relationships through all phases of the Project.

20.3.1 Social Setting

The Shasta-Baker Project is in the unincorporated, and sparsely populated Stikine Region of British Columbia (BC), approximately 430 km northwest of Prince George. The nearest communities to the Project are Fort Ware, Ingenika Point, and Mackenzie to the southeast.

TDG recognizes the inherent rights and title of Indigenous peoples which informs our work as we engage in meaningful ways through all phases of exploration and regulatory processes. TDG has committed to early, respectful, and active engagement with four Indigenous communities in proximity to Shasta-Baker: Kwadacha Nation, Tsay Keh Dene Nation, Tahltan Nation and the Takla Nation.

The Project is in an area of BC known for mining, with several other mining and exploration projects nearby. Other predominant industries in the area include forestry and silviculture, mining support industries, oil and gas extraction, transportation, and construction (Statistics Canada 2017).

20.3.2 Engagement and Consultation

Engagement with the four interested Indigenous nations has been ongoing since TDG acquired the Shasta-Baker Project in 2020. Engagement has included establishing points of contact for each community, informing the Nations of next steps in regulatory processes, explanations of exploration work to be undertaken, updates on the Project, sharing of work plans and employment opportunities and responses to concerns and questions raised.

Formal agreements have been signed with the Indigenous nations setting out parameters around environmental monitoring and protection, communication, benefits and capacity building, traditional activities and access, heritage resources and traditional knowledge, and employment and contracting opportunities. Correspondence and communication is ongoing, and will continue throughout the life of the Project.

As the project has just been in the exploration phase, public engagement and consultation has yet to be undertaken.

Governmental engagement has been undertaken by TDG through required regulatory processes. TDG will engage and collaborate with federal, provincial, and regional government bodies as required, and in respect to the Project and other relevant matters.

21 Capital and Operating Costs

Not Applicable.

22 Economic Analysis

Not Applicable.

23 Adjacent Properties

23.1 Lawyers

The Lawyers Group of prospects consists of a combination of quartz veins, stockwork zones and chalcedony breccia bodies that developed along northwest and north-northwest trending fracture systems. Low- sulphidation epithermal gold-silver mineralization consists predominantly of pyrite, with minor chalcopyrite, sphalerite, galena, native gold, native silver, electrum and acanthite in a gangue of quartz, chalcedony, amethyst, minor calcite, and occasional barite. Three principal zones have been discovered to date and include the Amethyst Gold Breccia (AGB) Zone, the Cliff Creek Zone with its North, Central and South sub-zones, and the Duke's Ridge Zone.

The Lawyers mine was operated by Cheni from 1989 to 1992 with the first doré bar being poured on January 8th, 1989. Underground development of Cliff Creek North began in 1990 and included a 750 m access ramp, a spiral decline with five sublevels, and an incline to access two upper levels. The high-grade Phoenix Zone was discovered in 1991 and trenched, drilled, accessed, and mined by November 1992. During its four years of operation the mine produced a total of 171,246 ounces of gold and 3,546,400 ounces of silver from the AGB, Cliff Creek North and Phoenix deposits, and from test mining on one satellite property. During the mid-1990s, Cheni fully reclaimed the mine site and later allowed the mineral tenure covering the area to lapse.

In 2022, Benchmark Metals ("Benchmark") released a Preliminary Economic Assessment (PEA) on their flaghsip 'Lawyers' Property, immediately adjacent to the north and west of the Baker-Shasta and Oxide Peak Properties. Highlights of the PEA (Church et al., 2022) include:

- Pre-tax NPV5% of C$939M, with an IRR 31.4%, and 2-year payback
- Pre-tax Net Operating Income of C$2,157M
- Base case metal price parameters of US$1,735 per ounce of gold and US$21.75 per ounce of silver
- After-tax NPV5% of C$589M, IRR 24.1%, and 2.8-year payback

Capital development

- Initial capital of C$484M (including C$72.8M in contingency)
- Life of Mine capital of C$626M
- Strong 1.9:1 Pre-tax NPV5% to Initial Capex ratio
- Minimal pre-strip limited to TSF starter dam construction

Low All-In Sustaining Costs (AISC)

- US$ 786/Au oz (net of by-products)[1]

Long Mine Life with Expansion Opportunity

- Total resource production of 46.7 M tonnes over 12-year mine life
- Average annual Au average production of 136 KozAu/year and 2.124 Moz Ag/year for a total of 163 Koz AuEq (at 80:1 Ag:Au ratio)[2]
- LOM production 1.95M payable AuEq ounces
- Average AuEq Head Grade of 1.41 g/t

- Average gold recovery of 92.4%

All-In Sustaining Costs (Net of By-Products) are calculated for the purpose of the Study as the sum of all operating costs (mining, processing, site administration and refining), reclamation and sustaining capital, minus the revenue from Ag, all divided by the gold ounces sold to arrive at the per ounce Au figure.

Price basis for the PEA was done at USD $1735oz Au, USD $21.75/oz Ag, FX of 0.77.

The author of this report has not reviewed the technical material reported in Benchmark Metal's 2022 PEA and is relying on the information provided by the JDS Energy & Mines Inc. qualified person(s) involved in the authoring of 'Preliminary Economic Assessment Lawyers Gold-Silver Project Stikine Terrane, B.C.' with effective date September 30, 2022 (Church et al., 2022).

23.2 Kemess Mineral Deposits

The following descriptions provide the reader with background information on the sizes, styles, and modes of occurrence of the porphyry copper-gold deposits on the Kemess property, located in the southeastern part of the Toodoggone region (Smith, 2019).

23.2.1 Kemess South

The Kemess South porphyry copper-gold operation was a low-grade bulk tonnage operation. The mine was planned as a large open pit operation at a rate of 40,000 tons of ore per day, with a fifteen-year mine life. The average stripping ratio for the project over its mine life was estimated to be about 1.18 to 1. Gold-copper concentrate was trucked along the ORAR to the railhead at Mackenzie, B.C., where it was loaded into covered rail cars for shipment to the Horne Smelter in Rouyn-Noranda, Quebec, Canada (Smith, 2019).

Production commenced in April 1998 and continued without interruption until March 2011. Total production statistics include 473,376,688 tonnes mined and 228,732,478 tonnes milled, yielding 91,903,400 grams (2,954,763 oz.) gold, 4,871,000 grams (156,606 oz.) silver and 355,450,336 kg (783,633,852 lb.) copper (AuRico Gold Inc., 2012; Smith, 2019).

The Kemess South deposit is hosted by the Early Jurassic Maple Leaf intrusion, a gently inclined sill-like body of quartz monzodiorite which intrudes Takla Group volcanic and sedimentary rocks. The ore body measures 1,700 m long by 650 m wide and ranges from 100 m to over 290 m thick (Smith, 2019).
A blanket of copper- enriched supergene mineralization containing native copper overlies hypogene ore and comprises 20% of the deposit (Smith, 2019).
The highest grades of gold and copper in the deposit correlate with zones of intense quartz stockwork development, accompanied by intense potassium feldspar selvages and local magnetite stringers and disseminations. The potassic alteration is strongly developed in the western two-thirds of the deposit where it overprints earlier sericite and calcite alteration. Sericitization does not show a consistent association with gold or copper mineralization (Smith, 2019).

The above information on the Kemess South deposit, and its past production data, is not necessarily indicative of the mineralization on the Shasta-Baker Property.

23.2.2 Kemess North (Underground)

Kemess North is located about 6 km north of Kemess South.

At Kemess North, a sub-volcanic quartz monzonite stock and related dykes have intruded Takla Group volcanic rocks. Porphyry-style copper-gold mineralization is hosted in potassically-altered zones developed both within the monzonite and adjacent country rock. Higher grade copper- gold mineralization is associated with stockworks, veins and disseminations of pyrite, chalcopyrite and magnetite that form as replacements of earlier ferromagnesian silicate minerals. Outward from the potassically-altered zone, the onset of a propylitic alteration assemblage of chlorite, carbonate, pyrite, pink zeolite, and minor epidote is marked by a pronounced decrease in copper and gold concentrations (SRK Consulting Inc., 2016; Smith A., 2019).

23.2.3 Kemess East

The Kemess East deposit is located one kilometre east of the Kemess Underground deposit. Exploration drilling carried out by AuRico in 2013 - 2014 was guided in part by the results of a deep- penetrating induced polarization survey completed in 2006 by Quantec Geoscience. The drilling outlined a deep copper-gold mineral resource which, as of December 31, 2014, totaled 55.9 million indicated tonnes grading 0.41% Cu and 0.52 g/t Au, containing 503.7 million pounds of copper and 939,000 ounces of gold, and an additional 117.2 million inferred tonnes grading 0.34% Cu and 0.38 g/t Au, containing 871.4 million pounds of copper and 3.4 million ounces of gold. Base case commodity prices used for the resource estimate were US$3.00 per pound for copper and US$1,300 per ounce for gold. As the Kemess East deposit is proximal to Kemess Underground, any proposed development of the former will potentially share infrastructure with the latter (SRK Consulting Inc., 2016; Smith A., 2019).

Kemess East is typical of calc-alkaline porphyry copper-gold deposits in the western cordillera. The deposit is deeply buried; mineralization starts at an average depth of 900 m below surface and extends to 1500 m below surface. Unlike Kemess Underground, there is no significant low-grade mineralization associated with Kemess East. The deposit is mainly hosted by a potassically-altered porphyritic diorite pluton which is part of the Black Lake intrusive suite. In its eastern portion, it is hosted within potassically- altered Takla volcanic rocks. The host diorite body appears to be nearly flat lying and dipping gently to the south. Higher grade copper-gold mineralization is characterized by strong secondary biotite alteration in the plutonic rocks. Better copper and gold grades within Takla volcanic rocks are associated with potassic (biotitic) alteration assemblages. Toodoggone volcanic rocks in the Kemess East area are relatively fresh to weakly propylitically-altered, generally lack significant sulphides, and contain no ore grade mineralization (SRK Consulting Inc., 2016; Smith A., 2019).

The above information on the Kemess North, Kemess Underground and Kemess East deposits, and the proposed underground development of Kemess Underground, is not necessarily indicative of the mineralization on, or the development potential of the Property. This information demonstrates the potential for the mining of porphyry-type deposits, by bulk underground methods, in the Toodoggone region.

24 Other Relevant Data and Information

There is no known additional relevant data or information.

25 Interpretation and Conclusions

The QP interprets the geology and modelling done for this report and concludes the following:

- Historical drilling of the Shasta deposit has been verified by the 2021 and 2022 drilling and are considered suitable to be used in the current resource estimate.
- The QAQC procedures for the 2021 and 2022 drilling at Shasta are within industry standards and illustrate that the assaying is suitable for mineral resource estimation.
- The mineral resource estimate for the Shasta deposit contained in this Report warrants further exploration as the deposit remains open along strike and down-dip.
- The Mets deposit, with a near surface historical resource estimate has good drill targets for follow-up and re-examination of the resource potential.
- The Oxide Peak and BOT deposits represent excellent exploration potential deposits.
- The Greater Shasta/Newberry area contains excellent exploration and potential deposits and some of those targets are considered drill ready (see Section 26).

26 Recommendations

The following recommendations are made by the QP.

26.1 Shasta Deposit

The Shasta deposit remains open along strike and down dip. 7,500 m of additional oriented HQ sized diamond drilling is recommended to test the extensions of the deposit in addition to continuing to upgrade classification on the current resource. This drilling will be outside of the footprint of the historical drilling.

In addition, the company should endeavour to verify the 2007 and 2010 historical collars on Shasta that were excluded from the Mineral Resource Estimate and continue to conduct metallurgical testing on different types of mineralization/alteration styles on the Shasta mineralized rocks.

Finalize the updated geological model (in progress) using modern lithogeochemical techniques and geological information obtained through large diameter (HQ sized) oriented core data collected in 2021 and 2022. This geological model will be utilized for future mineral resource updates.

26.2 Greater Shasta

Greater Shasta contains 4 drill ready targets: i) Shasta North, ii) Cody Lee, iii) Fisher and iv) Hood. These targets are supported by coincident geophysical, geochemical, and geological anomalies and limited small diameter historical drilling of precious metal mineralization (where applicable). These targets each warrant approximately 1,000 m (each) of drilling to validate the historical drilling (where applicable) and to test the extent of the mineralized system. In addition, the ground based magnetic-VLF grid should be expanded to include areas not surveyed currently to wards the east and the south (towards the property boundary) and to the west.

26.3 Newberry

The Newberry target is defined by coincident geochemical, geological, and geological evidence and has not been drill tested to date. This target should also be advanced with geological surface work including mapping, sampling, and prospecting outside of the historically worked footprint. The final drill collar location and orientation will be selected on success of the geological ground-based fieldwork.

26.4 Baker

The historical Baker core assay density (metres assayed/metres drilled) is approximately 14%. The author recommends that all the historical core is re-logged (as much as potentially salvageable) and assayed for previous metals (Au/Ag) and critical (base) metals (Cu, Zn, Pb, Mo) in addition to pathfinder elements that may be important to the discovery of a Cu-Au porphyry system. In addition, an initial test grid of approximately 25 line-kilometres of IP surveying be conducted to test the response in anticipation of a larger IP program to follow. The ground based magnetic-VLF grid warrants expansion from the current extent conducted in 2021. The aim of this program is to release an inaugural mineral resource estimate in accordance with NI 43-101 standards on Baker which includes the potential for a shallow porphyry copper-gold target. The inaugural mineral resource estimate will be complimented with an updated geological model.

26.5 Mets

Drilling of at least 2 statistical twin holes to confirm the historical drilling, test the near A-Zone extension potential in the anticipation of releasing an inaugural mineral resource estimate in accordance with NI 43-101 standards.

26.6 BOT

Further recommendations are dependant on the regional surface work (described in 26.8, below).

26.7 Oxide Peak

Further recommendations are dependant on the regional surface work (described in 26.8, below).

26.8 Toodoggone Regional Surface Work

In concert with the recommendations (above) the company should conduct a regional, Toodoggone property wide geochemical, geological, and prospecting survey to collect high quality stream sediment geochemical samples to identify potential sources of base and precious metals. Anomalous samples will be followed-up with traditional soil samples on prospective areas and advanced with good geological mapping and geophysical data capture assisting to move all the projects forward to a drill decision.

The $12,000,000 CAD budget for Phase 1 of the projected exploration program is summarized in Table 26-1.

Table 26-1: Phase I Proposed Budget

Work Program	Schedule	Budget
** May require helicopter assistance (estimated hours included 'Helicopter').*		
(1) DIAMOND DRILLING		
Shasta - 7,500 drilled metres	150 days (based on 50 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$6,000,000.00
Newberry - 1,000 metres*	13 days (based on 75 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$520,000.00
Cody Lee - 1,000 metres*	13 days (based on 75 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$520,000.00
Fisher - 1,000 metres*	13 days (based on 75 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$520,000.00
Hood - 1,000 metres*	13 days (based on 75 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$520,000.00
Mets - 1,000 drilled metres*	20 days (based on 50 drilled metres / 24 hour shift using a $40,000 all-in drilling day rate)	$800,000.00
(2) GEOPHYSICAL SURVEY (IP/RESISTIVITY)		
Baker - 25-line km*	10 days (based on 2.5-line km/crew (4 persons)/day using a $10,000 all-in survey day rate)	$100,000.00
(3) GEOPHYSICAL SURVEY (MAG-VLF)		
Baker - 200-line km	10 days (based on 20-line km/crew (4 persons)/day using a $5000 all-in survey day rate)	$50,000.00
Shasta - 100-line km*	5 days (based on 20-line km/crew (4 persons)/day using a $5000 all-in survey day rate)	$25,000.00
Mets - 50-line km*	2.5 days (based on 20-line km/crew (4 persons)/day using a $5000 all-in survey day rate)	$12,500.00
BOT - 50-line km*	2.5 days (based on 20-line km/crew (4 persons)/day using a $5000 all-in survey day rate)	$12,500.00
(4) GEOCHEMICAL SURVEY (SILTS; STREAM SEDIMENT SAMPLING)		
Baker - 200 samples*	4 days (based on 50 samples/crew (4 persons)/day using $2,500 all-in survey day rate)	$10,000.00
Shasta - 200 samples*	4 days (based on 50 samples/crew (4 persons)/day using $2,500 all-in survey day rate)	$10,000.00
Mets - 100 samples*	2 days (based on 50 samples/crew (4 persons)/day using $2,500 all-in survey day rate)	$5,000.00
Oxide Peak - 250 samples*	5 days (based on 50 samples/crew (4 persons)/day using $2,500 all-in survey day rate)	$12,500.00
BOT - 250 samples*	5 days (based on 50 samples/crew (4 persons)/day using $2,500 all-in survey day rate)	$12,500.00
(5) BAKER HISTORICAL RELOGGING		
Baker - approx. 320 drillholes	80 days (based 4 drillholes relogged / day / crew (3 persons) using a $2,000 all-in relog day rate)	$160,000.00
Baker - approx. 320 drillholes	Approximately 10,000 Samples taken ($75 / sample all-in laboratory cost)	$750,000.00
(6) HELICOPTER ***(Airbus Helicopters H125 (Eurocopter AS350 "A Star") 'B2' helicopter)***		
Drilling - 30 hours (Shasta Area Drilling)	Drill mobilization and crew changes; 45 km-round trip from Baker Camp ($2,000/hour all-in)	$60,000.00
Drilling - 30 hours (Mets Area Drilling)	Drill mobilization and crew changes; 45 km-round trip from Baker Camp ($2,000/hour all-in)	$60,000.00
Geophysical survey (Mag/VLF) - 30 hours	Crew drops and/or pick up at TDG survey sites; varying distances ($2,000/hour all-in)	$60,000.00
Geophysical survey (IP/Resistiviy) - 30 hours	Crew drops and/or pick up at TDG survey sites; varying distances ($2,000/hour all-in)	$60,000.00
Geochemical survey - 30 hours	Crew drops and/or pick up at TDG survey sites; varying distances ($2,000/hour all-in)	$60,000.00
(7) BAKER CAMP ***(Room and Board)***		
Drill crew - 5 persons (60 days)	Foreman, day/nightshift driller and helper ($550 per person/day avg.)	$165,000.00
Geophysics crew - 4 persons (23 days)	Crew boss, operators ($550 per person/day avg.)	$50,600.00
Sampling crew - 4 persons (20 days)	Crew boss, field samplers ($550 per person/day avg.)	$44,000.00
Relogging crew - 3 persons	Geologist, geotechnicians ($550 per person/day avg.)	$165,000.00
Camp support - 3 persons	Mine manager, camp maintenance, support staff ($550 per person/day avg.)	$165,000.00
	SUBTOTAL ($):	$10,929,600.00
	CONTINGENCY (10%)	$1,092,960.00
	SUBTOTAL ($):	**$12,022,560.00**

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CERTIFICATE OF QUALIFIED PERSON

I, Sue Bird, P.Eng. am a Geological and Mining Engineer with Moose Mountain Technical Services, with a business address of #210 1510 2nd St North Cranbrook BC, V1C 3L2.

This certificate applies to the technical report titled "**"NI43-101 The Toodoggone Portfolio and the 2023 Resource Estimate for the Shasta Deposit"** with an effective date of February 11, 2023 (the "technical report"). I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

I am a Professional Engineer in the Province of British Columbia. (#25007). I graduated with a Geologic Engineering degree (B.Sc.) from the Queen's University in 1989 and a M.Sc. in Mining from Queen's University in 1993.

I have worked as an engineering geologist for over 25 years since my graduation from university. I have worked on precious metals, base metals and coal mining projects, including mine operations and evaluations.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).

I visited the Shasta Project July 19 through July 21, 2021, from September 16 to September 19, 2021, and again from July 19 through July 21, 2023 to review the progress and results of the 2021 and 2022 drilling.

I am responsible for the entire NI43-101 technical report.

I am independent of TDG Gold as independence is described by Section 1.5 of NI 43–101.

I previously authored the 2022 report entitled: NI43-101 Resource Estimate for the Shasta Deposit with an effective date of May 16, 2022 for the TDG Gold Shasta-Baker Project.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 14 June 2023

"Signed and sealed"

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Sue Bird, P.Eng.