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TECHNICAL REPORT AND UPDATED MINERAL RESOURCE ESTIMATE OF THE GOLDEN HEART PROJECT, GREATER WADDY LAKE AREA, LA RONGE MINING DISTRICT, NORTHEASTERN SASKATCHEWAN

UTM NAD83 ZONE 13N 575,300 m EAST AND 6,231,000 m NORTH
103°47'09" EAST LONGITUDE AND 56°13'05" NORTH LATITUDE

FOR
GOLDEN BAND RESOURCES INC.

NI 43-101 & 43-101F1
TECHNICAL REPORT

FINAL

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P&E Mining Consultants Inc.
Report 462

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1.0 SUMMARY

P&E Mining Consultants Inc. ("P&E") was contracted by Golden Band Resources Inc. ("Golden Band" or the "Company") to prepare a Technical Report ("Report") and updated Mineral Resource Estimate ("MRE") of the Golden Heart Property (the "Property" or "Project"), in the La Ronge Mining District, northeastern Saskatchewan. Golden Band is a private company incorporated under the laws of the Province of British Columbia. Golden Band's head office is located in the City of Vancouver, B.C.

1.1 PROPERTY DESCRIPTION AND LOCATION

The Golden Heart Property is located 145 km north of the Town of La Ronge, in northeastern Saskatchewan. The Property consists of four mineral claims totalling 2,338 ha in area and is east adjacent to the larger Greater Waddy Lake Claim Block. All the mineral claims are in good standing as of the effective date of this Technical Report.

The Golden Heart Property is 100% owned by Golden Band, which acquired 100% of the Property in 2006. In August 2016, Golden Band ceased to be a publicly traded company and became a 100% wholly owned subsidiary of Procon Holdings Inc. ("Procon"). Matrixset Investment Corp. ("Matrixset") signed a three-way Option Agreement with Procon and Golden Band in 2018. Golden Band as the owner holds the Mineral Properties, the surface leases, and the other Assets. Procon as the Optionor owns 100% of voting shares of the Golden Band. Matrixset as Optionee intends to receive the voting shares of Golden Band on the terms set out in the Option Agreement by exploration of the Property.

1.2 MINERAL PROCESSING AND METALLURGICAL TESTING

Gold recovery can be estimated based on SGS laboratory tests and historical Jolu Process Plant results. Laboratory test results were somewhat erratic, due to an alleged coarse gold nugget effect. The indication of 93% recovery for a combined gravity-leaching process on a composite sample assaying twice the current Mineral Resource gold grade suggests recovery would be <93%.

Based on Jolu Process Plant results for 2013-2014, and assuming a new processing configuration similar to the historical one, the overall gold recovery could be estimated, including consideration for soluble loss, to be at least 90%.

1.3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Golden Heart Deposit area is located 180 road km northeast of La Ronge, SK and ~10 km north-northeast of the Community of Brabant Lake. The Property area is accessible by Provincial Highway No. 102 from La Ronge. The Weedy Lake Road, constructed in 2013, begins 10 km north of Brabant Lake and extends ~14 km to the Property. The Golden Heart Deposit is located four km northeast of the narrows between Upper and Lower Waddy Lakes, and immediately northwest of Weedy Lake.

The Property area is within the boreal forest of the Canadian Shield, with cold winters and warm summers and annual temperatures ranging from -50°C to 35°C. The climate is classified as cold temperate continental. Annual precipitation is from 40 to 60 cm, falling mainly in the summers. Snow begins to accumulate during October and generally persists into April. Lakes in the region are generally frozen-over between December and April each year.

Exploration work can be undertaken year-round on the Property. However, diamond drilling is best performed from mid-January to the end of March, when ice conditions are suitable for safe access to frozen lake and swamp surfaces.

The nearest major source of labour, fuel, and supplies is Town of La Ronge, population 2,561. La Ronge is serviced by regularly scheduled flights from the City of Saskatoon.

1.4 HISTORY

The Greater Waddy Lake Claim Block area was first explored in the late-1930s by prospectors from Consolidated Mining and Smelting (now Teck Cominco Ltd.). After World War II, other firms (Augustus Exploration) and individuals (Eric Partridge) also became active in the area. The most intensive period of gold exploration in the La Ronge Gold Belt ("the Belt") was in the 1980s and early 1990s. During this period, up to 80 senior and junior companies explored the La Ronge Gold Belt. Several of the historical gold occurrences were significantly enhanced (Jojay, Wedge Lake, Twin Lake, Weedy Lake, Komis, and EP). Other deposits discovered and mined during this period were: Star Lake, Jasper, and the Rod Zone (Jolu Mine). The most active companies were SMDC (predecessor to Cameco), Royex, and Golden Rule Resources Ltd. ("Golden Rule"). The most recent discoveries during this period were the Contact Lake Deposit and the Greywacke Deposit (both by Cameco in 1987-1988) and the Bingo Deposit (by Uranerz Exploration and Mining Ltd.) in 1991-1992.

From the mid-1990s onward, only a few exploration companies continued gold exploration in the Belt, most notably Golden Band. The Golden Heart Deposit (known previously as the Weedy Lake B and C Zones) and the A Zone were first discovered by Cominco prospectors in 1948. Since then, these zones have undergone several campaigns of exploration, most notably by Golden Rule Resources (now CDG Investments Inc.) between 1982 and 1997 and since 2002, by Golden Band, which further delineated the Golden Heart Deposit.

In April 2002, Golden Band acquired 49.9% interest in the Property through acquisition agreements with CDG Investments (formerly Golden Rule Resources Inc.) and Cameco Corp. for a total of 1,422,269 shares and 355,558 options in Golden Band. Golden Band also entered into an option agreement with Tyler Resources Inc. ("Tyler Resources") to acquire half (25.05%) of the remaining interest. In August 2006, Golden Band purchased Tyler Resources' 50.1% interest outright for a total of $1,000,000 in cash and 500,000 common share purchase warrants and became 100% owner of the Property. In assessing the Property, Golden Band released Mineral Resource Estimates of the Golden Heart Deposit in 2003, 2006 and 2013, soil gas hydrocarbon sampling was completed in 2007, and minor drilling programs were completed.

During 2013, Golden Band applied for the appropriate construction permits and the ~14 km long road to Golden Heart was started in May and completed in September 2013. Work on the Property started in August, production began in October, and shipment of mined material to the Jolu Process Plant commenced in early November. On December 9, 2013, however, Golden Band announced that it was suspending all mining operations, including Golden Heart, due to high operating costs, declining gold prices and lower than anticipated mineralized material grades. In that short period of time, open pit production at Golden Heart amounted to just under 25,254 tonnes of material with a head grade of ~3.2 g/t Au.

1.5 GEOLOGICAL SETTING, MINERALIZATION, DEPOSIT TYPE

The Golden Heart Property area is located in the northern portion of the Central Metavolcanic Belt of the La Ronge Domain, a granite-greenstone belt in the Saskatchewan segment of the 1.9-1.8 Ga Trans-Hudson Orogen. The Golden Heart Deposit occurs near the intrusive contact of a small quartz diorite stock within a sequence of ca. 1880 to 1870 Ma andesite and rhyolite. The quartz diorite and volcanic rocks are cross cut by northerly-trending feldspar porphyry dykes. Rock units on the Property show a northeasterly structural trend and have been metamorphosed under upper greenschist to lower amphibolite facies conditions.

Three mineralized zones, the Weedy Lake A, B and C Zones, were originally identified. The B and C Zones were subsequently defined as the Golden Heart Deposit. The Deposit consists of mineralized quartz veins and altered wall rock spatially associated with a series of discontinuous, bifurcating, northwest-dipping shear zones. The mineralized shear zones are subparallel and subsidiary to the Byers Lake Tectonic Zone located <250 m to the north.

The main shear zone (B Shear Zone) is 3 to 4 m thick and confined to the quartz diorite body. The B Shear Zone dips steeply to the northwest and shows a strong internal shear foliation that parallels the shear zone margins and regional penetrative deformation. Rotated and sheared diorite clasts within the shear zone are enclosed by an anastomosing system of chloritic shear planes. The shear zone exhibits C-S fabrics and tension gash geometries on horizontal surfaces that indicate a component of dextral movement. A subvertical to steeply northwest-plunging, down-dip extension lineation is also present and colinear with the regional mineral lineation.

Gold mineralization in the B Zone Shear occurs in quartz veins and altered wall rock. On the southeastern margin of the B Zone Shear, mineralization occurs in a shear-hosted quartz vein 50 to 80 cm thick and continuous for 140 m along strike. In the hanging wall, the mineralization occurs in altered wall rock and a stockwork quartz vein zone >25 m thick.

Mineralization in the C Zone (or Contact Zone) is situated ~100 m north of the B Zone. The C Zone mineralization occurs with a 20 m thick system of smaller shears, subparallel to the B Zone Shear, situated at the contact between the quartz diorite and the volcanic rocks. Mineralization in the C Zone is also associated with quartz veins and adjacent altered wall rocks. The main vein is 80 cm thick, steeply north-dipping, and extends for 20 m parallel to the shear foliation. Many smaller veins 1 to 20 cm thick are also present and oriented oblique to the shear zones.

Gold throughout the Golden Heart Deposit occurs in native form in the quartz veins and as inclusions in pyrite and silicate minerals in the altered wall rock. Silicification and pyritization of the host rocks are the main alteration phases. Potassic alteration (biotite and microcline) is also evident. Additional alteration phases are chlorite, albite, carbonate, hematite, hornblende and diopside. Sheared quartz diorite contains up to 15% biotite and is locally cut by mm-scale K-feldspar veinlets. Actinolite occurs in the margins of quartz veins. In addition to pyrite, trace to minor amounts of chalcopyrite, sphalerite and galena are also present. Gold is irregularly distributed throughout the Deposit. The distribution of free gold in quartz veins is very erratic and nuggety.

The Golden Heart Deposit is generally classified as a shear-hosted, mesothermal orogenic gold deposit.

1.6 EXPLORATION AND DRILLING

Since acquisition of the Golden Heart Property, Golden Band has completed till and soil geochemistry surveys, airborne geophysical and remote sensing surveys, petrographic studies and diamond drilling exploration programs. In total, 174 surface drill holes amounting to 31,432 m have been completed on the Property by historical operators and Golden Band.

1.7 SAMPLE ANALYSES, QAQC AND DATA VERIFICATION

It is the Author's opinion that sample preparation, security and analytical procedures for the Golden Heart Project 1982 to 2020 drill programs were adequate, and that the data are of satisfactory quality and suitable for use in the current Mineral Resource Estimate. Future drill core sampling at the Project should include the insertion and monitoring of field and coarse reject duplicates, and to umpire sample a minimum of 5% of all future drill core samples for check assay at a reputable secondary laboratory.

Verification of the Golden Heart Project data, used for the current Mineral Resource Estimate, was undertaken by the Authors, and included multiple site visits, due diligence sampling, verification of drilling assay data, and assessment of the available QA/QC data for the historical and recent drilling data. The Authors consider that there is satisfactory correlation between assay values in Golden Band's datasets and the independent verification samples collected and analysed at Actlabs, and that the supplied data are of satisfactory quality and suitable for use in the current Mineral Resource Estimate for the Golden Heart Project.

1.8 MINERAL RESOURCE ESTIMATE

At a cut-off grade of 0.30 g/t Au, the current updated pit-constrained Indicated Mineral Resource Estimate for the Golden Heart Deposit is 9,804 kt grading 1.59 g/t Au and the updated pit-constrained Inferred Mineral Resource Estimate is 3,237 kt grading 1.12 g/t Au. At a cut-off grade of 2.50 g/t Au, the current updated out-of-pit Inferred Mineral Resource Estimate is 158 kt grading 4.25 g/t Au. (Table 1.1). Total contained metal contents are 501 koz Au in Indicated Mineral Resources and 138 koz Au in Inferred Mineral Resources. The Mineral Resource Estimate is reported with an effective date of July 23, 2024. The Authors consider the mineralization of the Golden Heart Deposit to be potentially amenable to open pit and underground mining methods.

Table 1.1
Mineral Resource Estimate (1-6)

Resource Type	Classification	Au Cut-off (g/t)	Tonnes (kt)	Au (g/t)	Au (koz)
Pit-Constrained	Indicated	0.30	9,804	1.59	500.8
	Inferred	0.30	3,237	1.12	116.1
Out-of-Pit	Inferred	2.50	158	4.25	21.6
Total	Indicated	0.30 & 2.50	9,804	1.59	500.8
	Inferred	0.30 & 2.50	3,395	1.26	137.7

Notes:
1. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
2. *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
3. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
4. *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.*
5. *Historical mined areas were depleted from the reported Mineral Resources.*
6. *The following parameters were used for the pit optimization and the Mineral Resource cut-off value determination: US$1,925/oz Au (approximate two-year trailing average from April 30, 2024); FX US$/CAD$ = 0.75; Au process recovery = 90%; Open pit mining cost for mineralized material = CAD$4.00/t mined; Open Pit Mining Cost for Waste: CAD$3.00/t mined; Open Pit Mining Cost for Overburden = CAD$2.50/t mined; Processing Cost = CAD$18/t processed; G&A = CAD$4/t processed; and Pit slopes = 50°. Out-of-pit mining costs are CAD$175/t mined.*

This updated Mineral Resource Estimate for Golden Heart is based on 159 surface drill holes totalling 29,507 m that intersected the mineralized wireframes. The database for Golden Heart contains 18,716 Au assays, each representing 1-m sample lengths.

Eleven mineralized domains were created based on geology and grade boundary interpretation from visual inspection of drill hole cross-sections. These domains were created with computer screen digitizing on 12.5 m spaced vertical cross-sections. The domain outlines were influenced by the selection of mineralized material ≥0.30 g/t Au that demonstrated lithological and structural zonal continuity along strike and down-dip. In some cases, mineralization <0.30 g/t Au was included for the purpose of maintaining zonal continuity and minimum width. The minimum constrained drill core length for interpretation was approximately 2.0 m. On each cross-section, polyline interpretations were digitized from drill hole to drill hole, but typically were not extended more than 100 m down dip into untested territory. Interpreted polylines from each cross-section were "wireframed" into 3-D domains. The resulting mineralized domains were utilized for statistical analysis, rock coding, grade interpolation and Mineral Resource estimation.

A topographic surface wireframe integrated with the historical open pit was provided by Golden Band and the domain wireframes were truncated to the topographic and overburden surfaces that were created with drill core logging information. The open pit mined volume was depleted from the mineralized domain wireframes.

The Golden Heart block model was constructed using GEOVIA GEMS™ V6.8.4 modelling software. The block model origin and block size are presented in Table 14.7. The block model consists of separate model attributes for estimated gold grade, rock type (mineralization domains), volume percent, bulk density, and classification.

All blocks in the rock type block model were initially assigned a waste rock code of 99, corresponding to the surrounding fresh country rocks. The mineralization domain was used to code all blocks within the rock type block model that contain 0.1% or greater volume within the wireframe domain. Each of these blocks was assigned a rock code. The topography and overburden surfaces were subsequently utilized to assign rock codes 0 and 10 corresponding to the air and overburden respectively, to all blocks ≥50% above the surfaces.

A volume percent block model was set-up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining wireframe domain. As a result, the domain boundary was properly represented by the volume percent model ability to measure individual infinitely variable block inclusion percentages within that domain. The minimum percentage of the mineralization block was set to 0.1%.

The gold grade was interpolated into the model blocks using Inverse Distance weighting to the third power (ID^3). Nearest Neighbour (NN) was run for validation purposes. Multiple passes were executed for the grade interpolation to progressively capture the sample points, to avoid over-smoothing and preserve local grade variability. An average bulk density of 2.80 t/m^3 was applied to the block model of this Mineral Resource Estimate.

In the opinion of the Authors, all the drilling, assaying and exploration works on the Golden Heart Deposit support this Mineral Resource Estimate, which is based on spatial continuity of the mineralization within a potentially mineable shape and is sufficient to indicate a reasonable prospect of eventual economic extraction, thus qualifying it as a Mineral Resource under the 2014 CIM Definition Standards and CIM Best Practices (2019). The Mineral Resource was classified as Indicated and Inferred based on the geological interpretation, variogram performance, confidence level of the data and drill hole spacing. The cut-off value for the pit-constrained Mineral Resource Estimate is 0.30 g/t Au. The Mineral Resource Estimate is reported with an effective date of June 7, 2024,

Mineral Resource Estimate is sensitive to the selection of a reporting Au cut-off values, as demonstrated in Table 1.2.

Table 1.2 Sensitivity of Pit-Constrained Mineral Resource				
Classification	**Au Cut-off (g/t)**	**Tonnes (kt)**	**Au (g/t)**	**Au (koz)**
Indicated	3.0	994	6.39	204.3
	2.5	1,332	5.46	233.9
	2.0	1,898	4.50	274.4
	1.5	2,831	3.58	326.2
	1.0	4,655	2.66	397.8
	0.5	8,148	1.83	479.5
	0.4	8,991	1.70	491.7
	0.3	**9,804**	**1.59**	**500.8**
Inferred	3.0	124	4.46	17.7
	2.5	203	3.79	24.7
	2.0	340	3.16	34.6
	1.5	607	2.53	49.4
	1.0	1,255	1.85	74.5
	0.5	2,727	1.25	109.3
	0.4	3,023	1.17	113.6
	0.3	**3,237**	**1.12**	**116.1**

See notes listed below Table 1.1

1.9 CONCLUSIONS AND RECOMMENDATIONS

At a cut-off grade of 0.30 g/t Au, the current updated pit-constrained Indicated Mineral Resource Estimate for the Golden Heart Deposit is 9,804 kt grading 1.59 g/t Au and the updated pit-constrained Inferred Mineral Resource Estimate is 3,237 kt grading 1.12 g/t Au. At a cut-off grade of 2.50 g/t Au, the current updated out-of-pit Inferred Mineral Resource Estimate is 158 kt grading 4.25 g/t Au. Total contained metal contents are 501 koz Au in Indicated Mineral Resources and 138 koz Au in Inferred Mineral Resources. The Mineral Resource Estimate is reported with an effective date of July 23, 2024. The Authors consider the mineralization of the Golden Heart Deposit to be potentially amenable to open pit and underground mining methods.

The Authors cannot identify any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the Mineral Resource Estimate other than if all the survey information provided by the Company or if downhole survey information provided by the Company is inaccurate. Inaccurate downhole survey information would create potential inaccuracies in the location, size, shape, tonnage, grade and grade distribution of the Mineral Resource Estimate. This could subsequently have a significant impact on any future economic studies and mine plans. However, based on data review and verification, the Authors are of the opinion that the drill hole collar survey information and downhole survey data are to acceptable standards.

The updated Mineral Resource Estimate is of such quality and quantity that the Golden Heart Deposit could potentially resume production based on the parameters listed in Section 14 of this Report. The Authors consider that the Golden Heart Deposit is potentially amenable to open pit mining methods.

The updated Mineral Resource Estimate is of such quality and quantity that the Golden Heart Deposit could potentially return to production based on the parameters listed in Section 14 of this Report. The Authors consider that the Golden Heart Deposit is potentially amenable to open pit mining methods.

The Authors recommend the following actions be undertaken to expand the Mineral Resources base and advance pre-development studies of the Golden Heart Project:

1. Design and execute a drilling program that would test for the presence of significant gold mineralization in the target areas #1, #2 and #3 (Figure 26.1) and potentially add Inferred Mineral Resources;

2. Future drill core sampling at the Project should include the insertion and monitoring of field and coarse reject duplicates, and sampling and submitting a minimum of 5% of all future drill core samples to a reputable umpire laboratory for check assay; and

3. Update the Mineral Resources, complete metallurgical testwork and undertake a Preliminary Economic Assessment ("PEA").

Specific recommendations for additional metallurgical testing include:

- Assemble a composite sample that represents that grade of the updated Mineral Resource Estimate (~1.6 to 1.8 g/t Au). Conduct GRG on a representative sample proportion and cyanide leach testing on gravity separation tails;

- Complete a gold deportment mineralogical study to assist in identifying process strategies to recover a higher percentage (>90%) of gold content;

- Conduct flotation tests on gravity tails to recover the highest possible gold recovery in an acceptable grade and saleable concentrate; and

- Investigate the potential for mineralized material sorting to reduce the amount of material to be processed.

Including administration costs, the total cost estimate for the recommended work programs is $1.7M (Table 1.3). The recommended work programs should be completed in the next 12 months.

Table 1.3 Cost Estimates for Recommended Work Programs at Golden Heart		
Activity	**Units (m)**	**Cost Estimate (CAD$)***
Drilling	3,000	600,000
Geology and Modelling (supervision, logging, sampling, reporting)		106,000
Assays (includes transport)		20,000
Field Supplies		15,000
Food, Lodging, Travel		90,000
Truck Rental, Fuel, Insurance		10,000
Updated Mineral Resource Estimate		75,000
Contingency (20%)		183,000
Subtotal Exploration		**1,099,000**
Preliminary Economic Assessment		
Environmental, Permitting, Social Support		50,000
Mine Design Work		50,000
Metallurgical Testwork		260,000
Reporting		100,000
Contingency (20%)		90,000
Subtotal PEA		**550,000**
Administration		**100,000**
Total		**1,749,000**

** Applicable taxes not included.*

2.0 INTRODUCTION AND TERMS OF REFERENCE

P&E Mining Consultants Inc. ("P&E") have been retained by Golden Band Resources Inc. ("Golden Band" or "the Company") to prepare a Technical Report (the "Report") and updated Mineral Resource Estimate ("MRE") of the Golden Heart Project ("the Project" or "the Property") located in the La Ronge Mining District of northeastern Saskatchewan.

P&E prepared this Report at the request of Michael Zheng, a representative of the Company. Golden Band is currently a private company that incorporated under the laws of the Province of Saskatchewan and has its head office located at:

1630-200 Burrard Street,
Vancouver, British Columbia, Canada
V6C 3L6

The Property is covered by claims 100% owned by Golden Band Resources Inc. ("Golden Band"). In August 2016, Golden Band ceased to be a publicly traded company and became a wholly owned subsidiary of Procon Holdings Inc. ("Procon").

Matrixset Investment Corp. ("Matrixset") signed a three-way Option Agreement with Procon and Golden Band in 2018. Golden Band holds the mineral properties, the surface leases, and the other assets. Procon, the Optionor, owns 100% of the voting shares of the Golden Band. Matrixset, the Optionee, intends to receive the voting shares of Golden Band on the terms set out in the Option Agreement, as a result of exploration of the Property.

The Property consists of four contiguous mineral claims (S-111740, S-111741, S-113345 and S-104792) totalling 2,338 ha. The Golden Heart Property (previously known as the Weedy Lake Property) is immediately adjacent to and partly enclosed within the larger Greater Waddy Lake Claim Block, also held by Golden Band.

This Technical Report is prepared in accordance with the requirements of National Instrument 43-101 ("NI 43-101") and in compliance with Form NI 43-101F1 of the Ontario Securities Commission ("OSC") and the Canadian Securities Administrators ("CSA"). The Mineral Resources in this estimate are considered compliant with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM"), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions. The effective date of this Technical Report is July 23, 2024.

2.1 TERMS OF REFERENCE

P&E is independent of Golden Band and has no beneficial interest in the Golden Heart Project. Fees for this Technical Report are not dependent in whole or in part on any prior or future engagement or understanding resulting from the conclusions of this Report.

2.2 SOURCES OF INFORMATION

2.2.1 Independent Site Visit

Mr. Brian Ray, P.Geo. of P&E and an independent Qualified Person under the terms of NI 43-101, completed a site visit to the Golden Heart Property on October 24, 2023. The site visit included verification of drill sites and drill collars, verification sampling of drill core, and review of operating procedures, particularly the quality control protocols and drill core sampling procedures. The Golden Hearts Property was also previously visited by Mr. Eugene Puritch, P.Eng., FEC, CET of P&E, from March 25 to 26, 2013, for the purpose of completing a site visit and due diligence sampling. The findings of the site visits and verification sampling are summarized in Section 12 of this Report.

2.2.2 Additional Information Sources

In addition to the site visits, the Authors held discussions with technical personnel from Golden Band regarding all pertinent aspects of the Property and carried out a review of available literature and documented results concerning the Property. The reader is referred to those data sources, listed in Section 27 of this Report, for further detail. Sections from reports authored by other consultants have been summarized in this Report and are indicated where appropriate. In particular, some sections of this Report rely heavily on information in the previous Technical Report (Simpson and Hrdy, 2021), which has been cited accordingly. Select technical data, as noted in this Technical Report, were provided by Golden Band, which were reviewed and accepted by the Authors.

The Authors and Co-Authors of each section of this Report are presented in Table 2.1, who in acting as independent Qualified Persons as defined by NI 43-101, take responsibility for those sections of this Report as outlined in the "Certificate of Author" included in Section 28 of this Report. This Report is to be filed on the SEDAR+ website (www.sedarplus.ca).

TABLE 2.1
QUALIFIED PERSONS RESPONSIBLE FOR THIS REPORT

Qualified Person	Contracted By	Sections of Technical Report
William Stone, Ph.D., P.Geo.	P&E Mining Consultants Inc.	2 to 9, 15 to 19, 21 to 24 and Co-author 1, 25, 26, 27
Yungang Wu, P.Geo.	P&E Mining Consultants Inc.	Co-author 1, 14, 25, 26, 27
Jarita Barry, P.Geo.	P&E Mining Consultants Inc.	11 and Co-author 1, 12, 25, 26, 27
D. Grant Feasby, P.Eng.	P&E Mining Consultants Inc.	13 and Co-author 1, 25, 26, 27
Brian Ray, P.Geo.	P&E Mining Consultants Inc.	10 and Co-author 1, 12, 25, 26, 27
Eugene Puritch, P.Eng., FEC, CET	P&E Mining Consultants Inc.	Co-author 1, 12, 14, 25, 26, 27

2.3 UNITS AND CURRENCY

In this Technical Report, all currency amounts are stated in Canadian dollars ("$") unless otherwise stated. At the time of this Technical Report the 24-month trailing average exchange rate between the US dollar and the Canadian dollar is 1 US$ = 1.33 CAD$ or 1 CAD$ = 0.75 US$.

Commodity prices are typically expressed in US dollars ("US$") and will be so noted where appropriate. Quantities are generally stated in Système International d'Unités ("SI") metric units including metric tons ("tonnes", "t") and kilograms ("kg") for weight, kilometres ("km") or metres ("m") for distance, hectares ("ha") for area, grams ("g") and grams per tonne ("g/t") for metal grades. Platinum group metal ("PGM"), gold and silver grades may also be reported in parts per million ("ppm") or parts per billion ("ppb"). Copper metal values are reported in percentage ("%") and parts per billion ("ppb"). Quantities of PGM, gold and silver may also be reported in troy ounces ("oz"), and quantities of copper in avoirdupois pounds ("lb"). Abbreviations and terminology are summarized in Table 2.2 and measurements and units in Table 2.3.

Grid coordinates for maps are given in the UTM NAD 83 Zone 13N or as latitude and longitude.

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
$	dollar(s)
°	degree(s)
°C	degrees Celsius
<	less than
>	greater than
%	percent
µm	micron(s), micrometre(s)
3-D	three-dimensional
Actlabs	Activation Laboratories Ltd.
AA	atomic absorption
AAS	atomic absorption spectrometry
AGAT	AGAT Laboratories Ltd.
AIIP	airborne inductive induced polarization
ALS	ALS Chemex, part of ALS Global
asl	above sea level
AT	avoirdupois tons, short tons
Au	gold
Belt, the	La Ronge Gold Belt
BMWI	Bond ball mill work index
°C	degree Celsius
ca.	circa
CAD$	Canadian Dollar
CanNorth	Canada North Environmental Services
CDN	CDN Resources Laboratories Ltd.

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
CIM	Canadian Institute of Mining, Metallurgy, and Petroleum
cm	centimetre(s)
COMINCO	Consolidated Mining and Smelting Co.
Company, the	Golden Band Resources Inc.
CoV	coefficient of variation
CRM	certified reference material
CSA	Canadian Securities Administrators
$M	dollars, millions
E	east
EM	electromagnetic
FA	fire assay
g	gram
g/t	grams per tonne
G&A	General and Administration
Ga	Giga annum or billions of years
Golden Band	Golden Band Resources Inc.
Golden Rule	Golden Rule Resources Ltd.
GPS	global positioning system
grav	gravimetric
GRG	gravity recoverable gold
ha	hectare(s)
ICP	inductively coupled plasma
ID	identification
ID^3	inverse distance cubed
IP	induced polarization
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
K	potassium
k	thousand(s)
kg	kilograms(s)
kg/t	kilograms(s) per tonnes
km	kilometre(s)
koz	thousands of ounces
kt	kilotonne(s) or thousands of tonnes
LLRIB	Lac La Ronge Indian Band
M	million(s)
m	metre(s)
m^3	cubic metre(s)
Ma	millions of years
MARS	Mineral Administration Registry Saskatchewan

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
Matrixset	Matrixset Investment Corp.
max	maximum
ML	mineral lease
mm	millimetre
MOU	Memorandum of Understanding
MRE	Mineral Resource Estimate
Mt	mega tonne or million tonnes
N	north
NAD	North American Datum
NE	northeast
NI 43-101	National Instrument 43-101
NN	nearest neighbour
no. or No.	number
NSR	Net Smelter Return
NTS	National Topographic System
NW	northwest
OSC	Ontario Securities Commission
oz	ounce
P&E	P&E Mining Consultants Inc.
PEA	Preliminary Economic Assessment
P.Eng.	Professional Engineer
P.Geo.	Professional Geoscientist
ppb	parts per billion
Procon	Procon Holdings Inc.
Property, the	the Golden Heart Property that is the subject of this Technical Report
Project, the	the Golden Heart Project that is the subject of this Technical Report
QA	quality assurance
QAQC or QA/QC	quality assurance/quality control
QC	quality control
QMS	quality management system
RC	reverse circulation
RDI	resistivity depth images
Report, the	this NI 43-101 Technical Report
RQD	rock quality designation
SEDAR	System for Electronic Document Analysis and Retrieval
SGS	SGS Canada Inc.
SMDC	Saskatchewan Mining Development Corporation
SRC	Saskatchewan Research Council
SSR	SSR Mining Inc.
t	metric tonne(s)
TAEM	Terrestrial and Aquatic Environmental Managers

TABLE 2.2 TERMINOLOGY AND ABBREVIATIONS	
Abbreviation	**Meaning**
Taiga	Taiga Consultants Ltd
Technical Report	this NI 43-101 Technical Report
t/m^3	tonnes per cubic metre
TMI	total magnetic intensity
tpd	tonnes per day
TSL	TSL Laboratories Inc.
Tyler Resources	Tyler Resources Inc.
US$	United States dollar(s)
UTM	Universal Transverse Mercator grid system
VLF	very low frequency
VTEM	versatile time (domain) electromagnetic
W	west
WAP	Work Authorization Permit
yr	year
Zn	zinc
ZnEq	zinc equivalent

TABLE 2.3 UNIT MEASUREMENT ABBREVIATIONS			
Abbreviation	**Meaning**	**Abbreviation**	**Meaning**
μm	microns, micrometre	m^3/d	cubic metre per day
$	dollar	m^3/h	cubic metre per hour
$/t	dollar per metric tonne	m^3/s	cubic metre per second
%	percent sign	m^3/y	cubic metre per year
% w/w	percent solid by weight	mØ	metre diameter
¢/kWh	cent per kilowatt hour	m/h	metre per hour
°	degree	m/s	metre per second
°C	degree Celsius	Mt	million tonnes
cm	centimetre	Mtpy	million tonnes per year
d	day	min	minute
ft	feet	min/h	minute per hour
GWh	Gigawatt hours	mL	millilitre
g/mL, g/ml, g.ml	grams per millilitre	mm	millimetre
g/t	grams per tonne	Mt	million tonnes or megatonnes
h	hour	MV	medium voltage
ha	hectare	MVA	mega volt-ampere
hp	horsepower	MW	megawatts
Hz	hertz	oz	ounce (troy)
k	kilo, thousands	Pa	Pascal
kg	kilogram	pH	Measure of acidity

TABLE 2.3 **UNIT MEASUREMENT ABBREVIATIONS**			
Abbreviation	**Meaning**	**Abbreviation**	**Meaning**
kg/t	kilogram per metric tonne	ppb	part per billion
kHz	kilohertz	ppm	part per million
km	kilometre	s	second
kPa	kilopascal	t or tonne	metric tonne
kt	thousands of tonnes or kilotonnes	tpd	metric tonne per day
kV	kilovolt	t/h	metric tonne per hour
kW	kilowatt	t/h/m	metric tonne per hour per metre
kWh	kilowatt-hour	$t/h/m^2$	metric tonne per hour per square metre
kWh/t	kilowatt-hour per metric tonne	t/m	metric tonne per month
L	litre	t/m^2	metric tonne per square metre
L/s	litres per second	t/m^3	metric tonne per cubic metre
L/min, l/min	liters per minute	T	short ton
$L/hr/m^2$, $l/hr/m^2$	liters per hour per square metre	tpy	metric tonnes per year
lb	pound(s)	V	volt
M	million	W	Watt
m	metre	wt%	weight percent
m^2	square metre	yr	year
m^3	cubic metre	yr	year

3.0 RELIANCE ON OTHER EXPERTS

The Authors of this Report have assumed, and relied on the fact, that all the information and existing technical documents listed in the References section of this Report (Section 27) are accurate and complete in all material aspects. Although the Report Authors have carefully reviewed all the available information presented to them, they cannot guarantee its accuracy and completeness. The Authors reserve the right, but will not be obligated to revise the Report and conclusions, if additional information becomes known to the Authors subsequent to the effective date of this Report.

Copies of the tenure documents, operating licenses, permits, and work contracts were not reviewed. Information on land tenure was obtained from Golden Band. The Report Authors relied on tenure information from Golden Band and have not completed an independent detailed legal verification of title and ownership of the Golden Heart Property. Ownership of the mineral claims was independently verified by the Author on July 23, 2024, utilizing the information available through the web page of the Mineral Administration Registry Saskatchewan ("MARS") regarding property status and legal title for the Property (Section 4.2), located at:

https://mars.isc.ca/MARSWeb/publicmap/FeatureAvailabilitySearch.aspx

Furthermore, this Saskatchewan government agency records tenure information for all mineral claims in the Province.

The Authors have not verified the legality of any underlying agreement(s) that may exist concerning the land tenure, or other agreement(s) between third parties, but have relied on and consider they have a reasonable basis to rely on Golden Band to have conducted the proper legal due diligence.

Select technical data, as noted in the Report, were provided by Golden Band and the Authors have relied on the integrity of such data. A draft copy of the Report has been reviewed for factual errors by Golden Band and the Authors have relied on Golden Band's knowledge of the Property in this regard. All statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the effective date of this Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Golden Heart Property (formerly known as the Weedy Lake Property) is located in the La Ronge Gold Belt, ~180 road km northeast of the Town of La Ronge, in northeastern Saskatchewan (Figure 4.1). The approximate centre of the Property is located at UTM NAD83 Zone 13N 575,300 m E and 6,231,000 m N, or 103°47'09" east Longitude and 56°13'05" north Latitude. The corresponding NTS sheet is 64d/04.

4.1 PROJECT OWNERSHIP AND ACQUISITION

Golden Band currently owns 100% of the Golden Heart Property.

In April 2002, Golden Band acquired 49.9% interest in the Property through acquisition agreements with CDG Investments (formerly Golden Rule Resources Inc.) and Cameco Corp. for a total of 1,422,269 shares and 355,558 options in Golden Band. Golden Band also entered into an option agreement with Tyler Resources Inc. ("Tyler Resources") to acquire half (25.05%) of the remaining interest. In August 2006, Golden Band purchased Tyler Resources' 50.1% interest outright for a total of $1,000,000 in cash and 500,000 common share purchase warrants and became 100% owner of the Property.

4.2 MINERAL TENURE

The Golden Heart Property (previously known as the Weedy Lake Property) consists of four mineral claims, all 100% owned by Golden Band (Table 4.1). The total area of the Property is 2,338 ha and the mineral claims are in good standing as of the effective date of this Report. The Golden Heart Property is part of Golden Band's Greater Waddy Lake Claim Block area (Figure 4.2).

FIGURE 4.1 LOCATION OF THE GOLDEN HEART PROJECT IN NORTHEASTERN SASKATCHEWAN

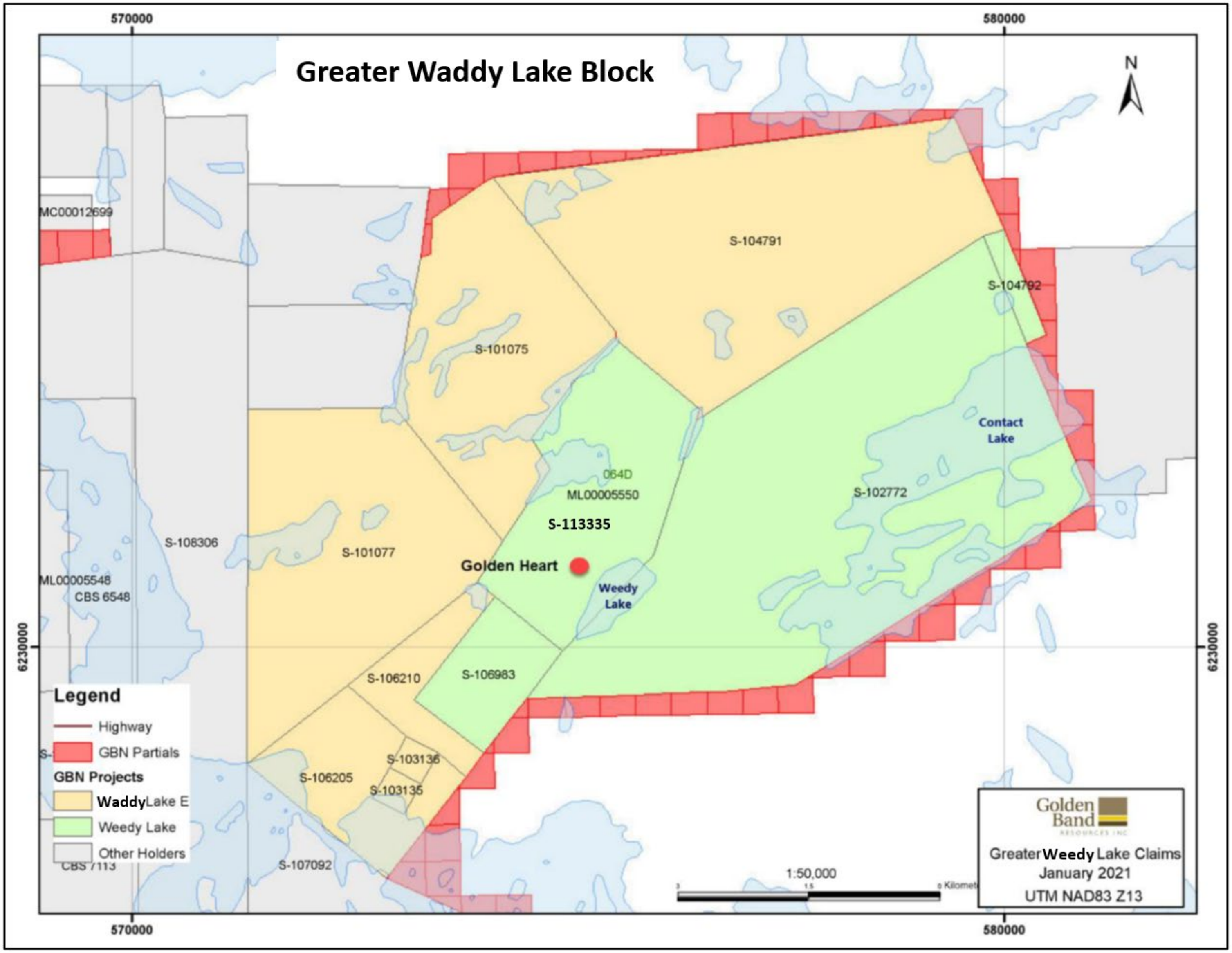
Source: *Simpson and Hrdy (2021)*

TABLE 4.1
GOLDEN HEART MINERAL TENURE*

Disposition	Type	Area (ha)	Effective Date	Expiry Date	Ownership (100%)	Status
S-113335	mineral claim	473	07-Jun-79	05-Sep-32	Golden Band Resources Inc.	active
S-102772	mineral claim	1,681	03-Feb-94	03-May-25	Golden Band Resources Inc.	active
S-104792	mineral claim	34	25-Sep-95	23-Dec-25	Golden Band Resources Inc.	active
S-106983	mineral claim	150	25-Mar-02	22-Jun-25	Golden Band Resources Inc.	active
Total		**2,338**				

Source: *Mineral Administration Registry Saskatchewan (MARS)*
**Mineral tenure information effective July 23, 2024.*

FIGURE 4.2 CLAIMS LOCATION MAP



Source: *Modified by P&E (This Study) from Simpson and Hrdy (2021)*
Note: *Mineral tenure information effective July 23, 2024.*

4.3 MINERAL TENURE IN SASKATCHEWAN

Minerals Claims are reviewed annually to ensure they have adequate assessment requirements to remain valid. Claims not meeting the assessment work requirements are subject to lapse and returned to the disposition pool.

Assessment credits must be filed annually for mining leases and mineral claims and excess credits may be banked. An assessment work commitment for mining leases of $75/ha per year is required in order to maintain tenure. Alternatively, a work deficiency deposit may be paid in lieu of work.

Assessment work commitments for minerals claims is as follows: NIL during the first annual assessment work period; $15.00/ha per assessment work period, from the second to tenth assessment work periods with a minimum of $240.00 per claim per assessment work period; $25.00/ha per assessment work period, for the eleventh assessment work period and all subsequent assessment work periods with a minimum of $400.00 per claim per assessment work period.

Alternatively, a deficiency deposit or non-refundable deficiency payment in lieu of the amount equivalent to the assessment deficiency may be paid. If Golden Band pays a deficiency cash deposit and expends the amount required for the assessment work period that follows the assessment work period in which the deficiency was incurred, in addition to an amount at least equal to the deficiency cash deposit, the deficiency cash deposit is refunded to the holder following registration of the expenditure.

At the effective date of this Report, all mineral dispositions and the mining lease were current with required assessment work commitments, and none had any assessment deficiency. Golden Band currently plans to keep all its mineral dispositions in good standing beyond 2024.

Mineral claims in Saskatchewan are not issued with surface rights. In order to remove mineralized material from the site, the mineral claims must be converted to mineral leases. Mineral claims and leases in Saskatchewan are currently governed by the Mineral Tenure Registry Regulations, which became effective December 1, 2012.

4.4 SURFACE RIGHTS

Mineral claims in Saskatchewan do not grant surface rights to the owner. Mineral claims and leases in Saskatchewan are currently governed by the Mineral Tenure Registry Regulations that became effective December 1, 2012. In order to remove material from the site, a mineral lease is required, which comes with surface rights.

4.5 ROYALTIES

No underlying royalties or encumbrances exist on the Property.

4.6 ENVIRONMENT AND PERMITS

Surface Disturbance Permits are required for mineral exploration in Saskatchewan prior to the start of any work. The permits that may be required are: Temporary Work Camp Permit, Aquatic habitat Protection Permit, Forest Product Permit, and Surface Exploration Permit. Legislation includes the Provincial Lands Regulations, the Environmental Management and Protection Act, and the Forest Resources Management Act. Drilling programs normally require a Term right to Use Water licenses and a Notification Form may need to be submitted to the Department of Fisheries and Oceans Canada ("DFO").

The Property has the following Permit:

- Approval to Operate, Pollutant Control Facilities. Issued pursuant to The Environmental Management and Protection Act, 2010, and the regulations there under. Ministry of Environment, Environment Protection Branch, Uranium and Northern Operations. APPROVAL NO. **P023-048.**

Prior to the initiation of field work, a Work Authorization Permit (or "WAP") must be submitted to Saskatchewan Ministry of Environment that outlines the timing, location, type and scope of work to be performed. A closure report may be required on termination of the work, depending on the nature and extent of the proposed work. An application to Saskatchewan Heritage Branch is required with respect to areas of planned work. The Heritage Branch provides guidance on areas of cultural and archeologically sensitive sites. More information regarding the WAP best practices in Saskatchewan is available on the Saskatchewan Business and Industry web site:

http://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/mineral-exploration-and-mining

4.7 SOCIAL LICENCE

All of Golden Band's activities in the La Ronge Gold Belt are within the traditional lands of the Lac La Ronge Indian Band ("LLRIB"). Golden Band had signed a Memorandum of Understanding ("MOU") with the LLRIB. The MOU encompassed the Company's commitment to work with the LLRIB to establish a mutually beneficial business relationship. To ensure that business and employment opportunities are available to the LLRIB within Golden Band's exploration and development projects, Golden Band had also signed a General Services Agreement with Kitsaki Management Limited Partnership.

The development of a Komis Project would include renewed Social Licensing. Social Licensing will be developed by meaningful consultations and agreements with First Nations, including the LLRIB. Provincial and Federal Permit requirements will be supported by extensive aquatic, terrestrial baseline assessments and the development of Project details and options. Permits will include an Approval to Operate, Pollutant Control Plans, Closure Plans, Fisheries Compensation, Explosives Management etc.

4.8 ENVIRONMENTAL CONSIDERATIONS

Canada North Environmental Services ("CanNorth") completed environmental baseline studies in the Greater Waddy Lake Claim Block area (Canada North, 2005). The Komis area was also studied in 1993 to 1995 in support of the Komis underground mine operation. The environmental baseline studies consisted of aquatic and terrestrial habitat evaluations that include the following detailed studies:

- **Aquatic Habitat**
  - Spring fish spawning;
  - Summer fish and plankton community structure, fish habitat assessment, water and fish chemistry survey, lake morphometry and stream crossing assessments;
  - Fall Spawning, sediment benthic invertebrate survey; and
  - Desktop hydrology study including regional streamflow analysis, flood frequency and magnitude, low flow frequency and magnitude, flow durations, etc.

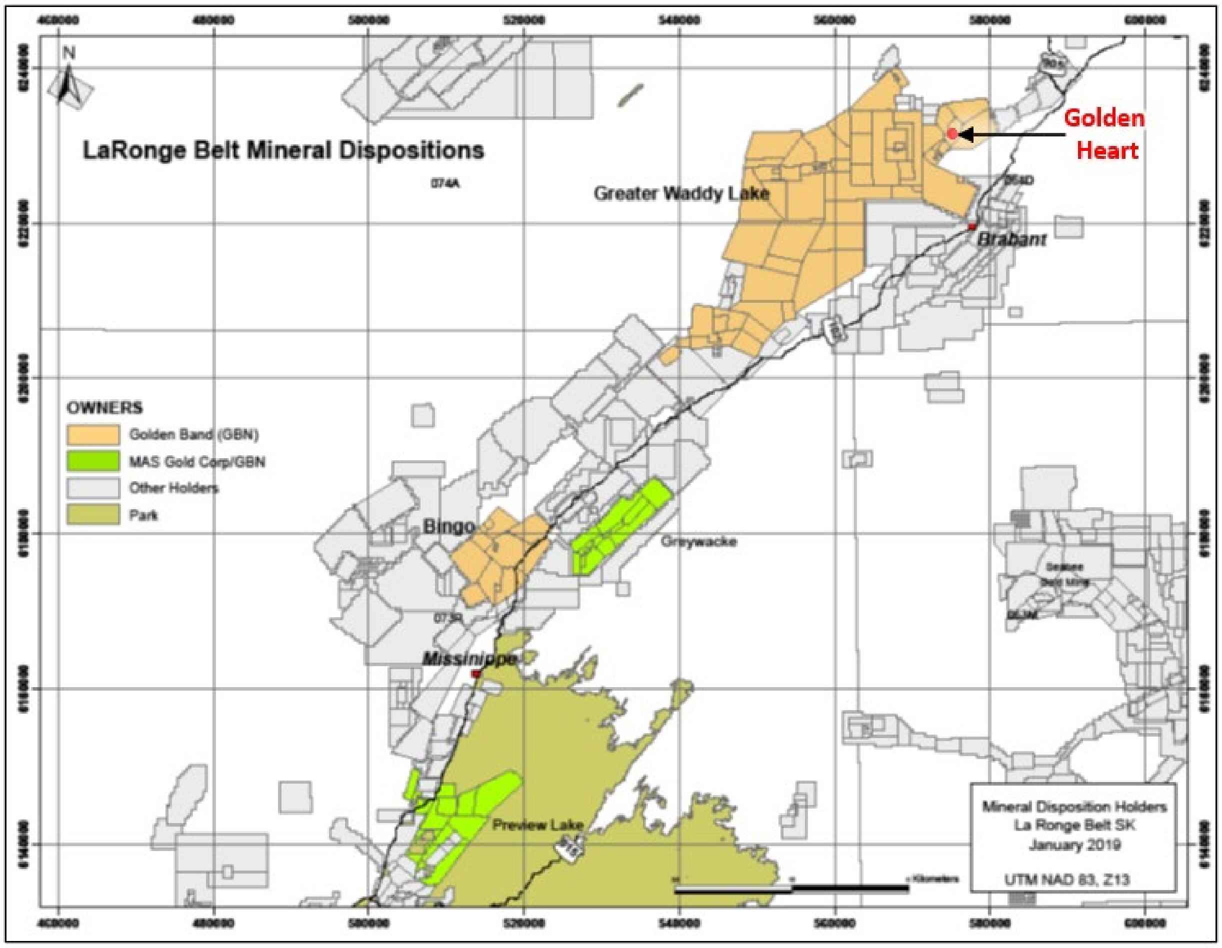
- **Terrestrial Habitat**
  - Winter wildlife tracking survey;
  - Spring raptor survey;
  - Spring ungulate pellet group/browse survey, habitat mapping and development of a caribou mitigation/protection plan;
  - Summer vegetation/rare plant survey; and
  - Ungulate pellet group survey.

This work adds to existing environmental baseline data that includes work initiated by the Terrestrial and Aquatic Environmental Managers ("TAEM"; now CanNorth). TAEM carried out environmental field work in 1988 that involved lake morphometry, fish community, and fish habitat assessments in Tower Lake, Island Lake, Bead Lake, Middle Lake and Unnamed Lake. TAEM also conducted a comprehensive study of the Komis Property area in 1994 and 1995 that included aquatic and terrestrial habitat assessments.

4.9 OTHER PROPERTIES OF INTEREST

The Golden Heart Property is east adjacent to and partly enclosed within the larger Great Waddy Lake Claim Block (Figure 4.3; see also Figure 4.2). The latter claim block is also 100% owned by Golden Band. However, the Golden Heart Property is the subject of this Report.

FIGURE 4.3 LOCATION OF THE GREATER WADDY LAKE CLAIM BLOCK



Source: *Modified by P&E (This study) from Dong (2018)*

4.10 AUTHOR COMMENTS ON SECTION 4

Additional permits may be required for any future Project exploration or development work on the Golden Heart Property. To the extent known, there are no other significant factors and risks that may affect access, title, or right or ability to perform work on the Property.

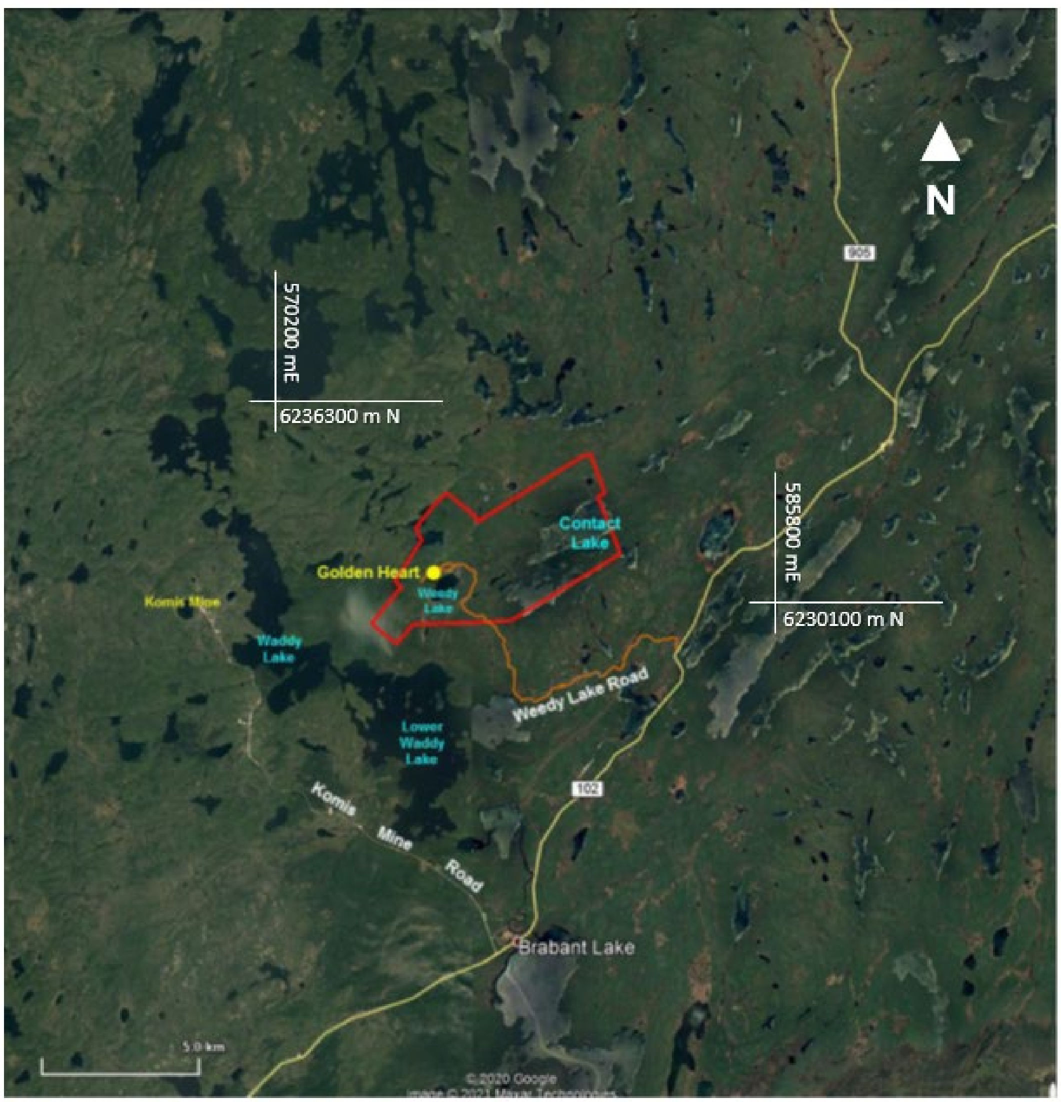
5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESS

The Golden Heart Deposit area is located 180 road km northeast of La Ronge, SK and ~10 km north-northeast of the Community of Brabant Lake (Figure 5.1). Weedy Lake is located at 56°13'03" north latitude and 103°47'13" east longitude. The NTS reference is 64 D4.

The Property area is accessible by Provincial Highway No. 102 from La Ronge. The Weedy Lake Road, constructed in 2013, begins 10 km north of Brabant Lake and extends ~14 km to the Property (Figure 5.1). The Golden Heart Deposit is located four km northeast of the narrows between Upper and Lower Waddy Lakes, and immediately northwest of Weedy Lake.

FIGURE 5.1 SATELLITE IMAGE OF PROJECT AREA AND ACCESS



Source: *Simpson and Hrdy (2021)*

5.2 CLIMATE

The Project area is within the boreal forest of the Canadian Shield, a district with cold winters and warm summers, and with annual temperatures ranging from -50°C to 35°C. The climate in the nearby Tower Lake area is classified as cold temperate continental. Annual precipitation is from 40 to 60 cm, falling mainly in summer. Snow begins to accumulate in October and generally persists into April. Lakes in the region are generally frozen-over between December and April each year.

Weather statistics are not available specifically for the Project area. However, weather statistics are available for La Ronge, located 180 road km to the southwest at the same approximate elevation. The average annual temperature is -0.1°C, with an average daily maximum of 23°C in July and an average daily minimum of -25.8°C in January. Average annual precipitation for La Ronge is 484 mm, which consists of 349 mm of rainfall and 148 cm of snowfall.

Exploration work, specifically diamond drilling is best performed from mid-January to the end of March, when ice conditions are suitable to allow diamond drilling on Tower Lake and the large swamp area to the east.

5.3 PHYSIOGRAPHY

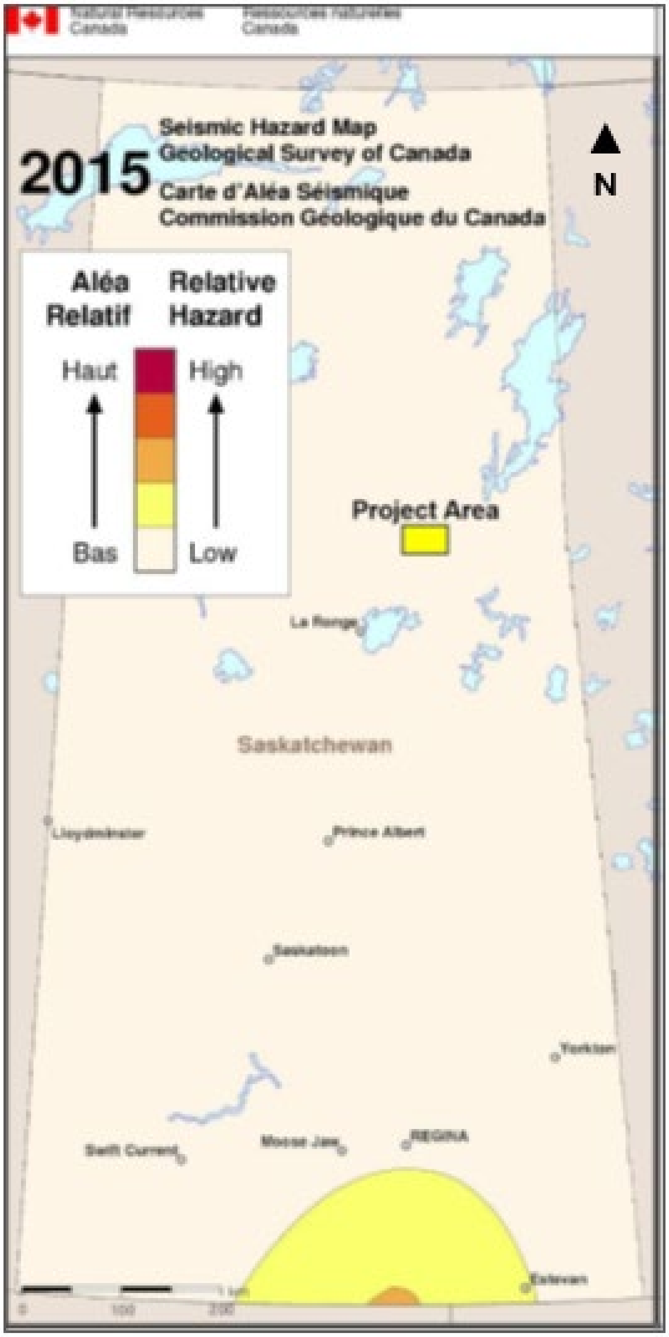
The Property lies in a glaciated terrain with topography typical of that found elsewhere in the Canadian Shield. The terrain is characterized by low rolling hills interspersed with numerous lakes and muskegs. Drainage is southwesterly toward the Churchill River. Bedrock exposure, which varies from <1% to >5%, is masked by a thick cover of moss, muskegs, and (or) glacial deposits. Elevations in the area range from 415 to 460 masl with local relief on the order of a few tens of metres.

Vegetation in the Golden Heart area is typical of coniferous boreal forests elsewhere in northern Canada. Beyond this, the Authors have little information concerning the native vegetation of the area.

5.4 SEISMICITY

The Property area is located in central Saskatchewan, one of the least seismically active areas in Canada (Figure 5.2).

FIGURE 5.2 SEISMIC HAZARD MAP – SASKATCHEWAN



Source: *Simpson and Hrdy (2021)*

5.5 AUTHOR COMMENTS ON SECTION 5

The accessibility, climate, physiography and seismic situation of the Property area are sufficiently well understood to allow for exploration and preliminary study engineering and project design.

6.0 HISTORY

The first reported work in the Golden Heart Property area was completed by J.J. Alcock in 1938. In 1948, A.R. Byers published a report and a 1 inch:1 mile scale geological map of the Waddy Lake area. In 1986, C.T. Harper of Saskatchewan Energy and Mines completed geological mapping of the area at a scale of 1:20,000.

The Greater Waddy Lake area was first explored by prospectors from Consolidated Mining and Smelting (now Teck Resources Limited) in the late-1930s. After mapping the Waddy Lake area by government geologist A.R. Byers in 1948, the area became the focus of industry exploration efforts. This early phase of exploration work uncovered many showings, of which the most notable was the discovery of the Komis Deposit by Eric Partridge in 1958.

The most intensive period of gold exploration in the La Ronge Gold Belt took place in the 1980s, triggered by increased gold prices and a favourable tax regime (flow-through shares). During this period, the mineral deposits at Star Lake, Jolu, and Jasper were discovered and mined, as follows:

- **Star Lake Mine** produced 76,947 ounces gold at an average grade of 14.7 g/t Au;
- **Jolu Mine** produced 203,751 ounces gold at an average grade of 14.4 g/t Au; and
- **Jasper Mine** produced 82,697 ounces gold at an average grade of 18.8 g/t Au.

The production and mineral processing information presented in this section is provided as background historical information. The Authors have not verified the historical gold production or the results of the processing testwork. As a result, this information is provided as a matter of historical record only and no implications are intended with respect to the potential for future production from the Golden Heart Area.

Other showings that received significant exploration work were Wedge Lake, Twin Lake, Weedy Lake, Tower Lake, Komis, EP Zone, and Preview Lake (the latter being located in the southern extension of the Belt). The most active companies were SMDC (predecessor to Cameco), Royex, and Golden Rule Ltd.

The Contact Lake Gold Deposit in 1989, located 50 km north of La Ronge. The decision to put this Deposit into production was made in April 1994 and it produced 188,210 ounces gold at an average grade of 8.0 g/t Au.

The production and mineral processing information presented in this section is provided as background historical information. The Authors have not verified the historical gold production or the results of the processing testwork. As a result, this information is provided as a matter of historical record only and no implications are intended with respect to the potential for future production from the Golden Heart Area.

During the winter of 1993-1994, the Komis Deposit was evaluated by underground test mining. An Environmental Impact Statement ("EIS") was submitted to the authorities in fall of 1995 and production commenced in 1996. Due to lower than predicted gold grade, production was suspended in spring 1997, following the production of 26,885 oz gold.

The production and mineral processing information presented in this section is provided as background historical information. The Authors have not verified the historical gold production or the results of the processing testwork. As a result, this information is provided as a matter of historical record only and no implications are intended with respect to the potential for future production from the Golden Heart Area.

From the mid-1990s onward, a few exploration companies continued gold exploration in the Belt, most notably Golden Band.

6.1 PROPERTY HISTORY

The Golden Heart Deposit area hosts three areas of known gold mineralization: 1) the Golden Heart Deposit, 2) A Zone, and 3) D Zone. The Golden Heart Deposit (known previously as the Weedy Lake B and C Zones) and the A Zone were first discovered by Cominco prospectors in 1948. Since then, these zones have undergone several campaigns of exploration, most notably by Golden Rule Resources (now CDG Investments Inc.) between 1982 and 1997.

In April 2002, Golden Band acquired 49.9% interest in the Property through acquisition agreements with CDG Investments (formerly Golden Rule Resources Inc.) and Cameco Corp. for a total of 1,422,269 shares and 355,558 options in Golden Band. Golden Band also entered into an option agreement with Tyler Resources Inc. ("Tyler Resources") to acquire half (25.05%) of the remaining interest. In August 2006, Golden Band purchased Tyler Resources' 50.1% interest outright for a total of $1,000,000 in cash and 500,000 common share purchase warrants, and became 100% owner of the Golden Heart Property.

The results of the historical exploration at Golden Heart are summarized chronologically below:

- **1937.** F.J. Alcock of the Geological Survey of Canada maps the Waddy Lake District at a scale of 1 inch:2 miles, published in 1938 at a scale of 1 inch:4 miles as Map 528A;

- **1948 to 1955**. In 1948, gold was discovered by prospectors Lozo and Bryenton in the employ of Cominco at Weedy Lake, and the Keewatin claims are staked. Exploration work consisted of prospecting, trenching, and completion of nine drill holes, which led to the definition of the A, B, and C Zones. The results were not sufficiently encouraging to warrant further work and the claims were allowed to lapse;

- **1949.** A.R. Byers completed preliminary geological investigations for the Saskatchewan Department of Mineral Resources in the area, with mapping completed at 1 inch:½ mile;

- **1961**. Hydra Explorations Ltd. prospected the area;

- **1979.** Staked by Golden Rule Resources Ltd. as CBS 6432;

- **1980.** Golden Rule carried out 14.9 line-km of line cutting on 100 m centres; ground magnetometer and VLF-EM surveys at 25 m intervals; the A, B and C Zones were relocated, stripped and resampled; soil and lithogeochemical sampling at 25 m intervals; reconnaissance geological mapping;

- **1981.** Golden Rule completed 28 km of line-cutting on 100 m-spaced lines: VLF-EM and magnetometer surveys; additional trenching, chip sampling and detailed mapping of A, B, and C Zones; soil and lithogeochemical sampling at 25 m intervals on grid, and detailed prospecting in the vicinity of B Zone;

- **1982.** Golden Rule carried out infill line-cutting on 50 m gridlines in vicinity of A, B and C Zones, 1:1,000-scale detailed geological mapping of A and B zones, 20 km of frequency domain IP over A, B, and C Zones, detailed geological mapping, trenching and stripping northeast of B Zone, additional hand trenching and detailed channel sampling of A, B and C Zones, detailed soil geochemistry survey on previously detected anomalies, Wacker basal till sampling in selected areas, and 13 drill holes (W82-1 to W82-13) testing A, B and C Zones;

- **1982 to 1984**. Golden Rule completed 42 drill holes totalling 4,688 m, including 378 m on A Zone, 3,339 m on B Zone, 506 m on C Zone, and 466 m drilled on additional targets;

- **1983.** Golden Rule carried out in-fill Wacker basal till sampling, thin section report (29 rocks, Vancouver Petrographics) and 17 drill holes to delineate B Zone (W83-14 to W83-30). Drilling confirmed the relationship of the gold mineralization with shear structures, whereas the actual geometry of the controlling structures was not recognized due to post-mineralization structural disruption. CBS 6432 was converted to ML 5332;

- **1984.** Photogrammetry and preparation of a 1:2,500-scale contoured orthograph with 2 m contour intervals; 1:20,000-scale colour air photos; 1:1,000-scale base map of A, B and C Zone mineralization; detailed soil geochemistry, trenching and re-mapping of A, B and C Zones; thin section report (J. Casey, SMDC); precise survey control of diamond drill hole collars; 12 drill holes (DH-31 to DH-42) totalling 1,349 m on A, B, C zones and Wacker till anomalies, and report prepared (Preliminary Pit Design, "Ore" Reserves and Geological Reserve by Placer Development Limited);

- **1987.** Tyler Resources Inc. optioned the Property and commenced exploration: grid refurbishing and new baseline cut; precise survey of drill hole collars; prospecting, mapping and trenching in the A, B, and D Zones; diamond drilling on the B and D Zones (12 diamond drill holes: 2,000 m, W87-43 to W87-54); petrographic report on 50 drill core samples. Three major drill campaigns by Golden Rule Resources and Tyler Resources totalled 10,844 m in 46 drill holes;

- **1988.** Evaluation of existing geophysical data with magnetic contours and IP/resistivity anomalies in Golden Heart Zone compiled at 1:1,000-scale; 19 drill holes (W88-55 to W88-73) totalling 4,530 m explored for subsurface extensions of the A Zone (2 drill holes) and tested the B Zone (17 drill holes). Drilling in the B Zone identified a northeast-plunging mineralized shoot referred to as the Golden Heart Zone. The Deposit was outlined down-plunge to 300 m depth from surface;

- **1989.** Golden Rule completed 15 drill holes (W89-74 to W89-88) totalling 4,314 m that tested the down-plunge extension of the Golden Heart Zone and conducted in-fill drilling at intermediate depths. The overall grade of intersections encountered by the drilling were lower than those obtained by earlier drilling, although the intersections appeared to maintain thickness and continuity; and

- **1995-1996.** Two additional Golden Rule drilling campaigns, the first of 29 drill holes totalling 6,139 m and the second with 27 drill holes totalling 6,019 m. Fifty-six drill holes totalling 12,031 m property-wide, of which 29 drill holes (W95-90 to W96-118: 6,139 m) tested Golden Heart Deposit at depth, along strike and down-plunge to increase the confidence of previously estimated in-situ gold mineral reserves.

Drilling between 1882 and 1996 totalled 27,746 m in 145 drill holes (Table 6.1). Total expenses on the Property to May 1996 amounted to CAD$3,789,700.

TABLE 6.1
DRILLING SUMMARY 1982 TO 1996

Year	Operator	Number of Drill Holes	Total (m)	Assayed (m)	Assayed (%)
1982	Golden Rule	13	1,280.90	1,004.85	78.4
1983	Golden Rule	18	2,309.70	2,040.60	88.3
1984	Golden Rule	12	1,223.80	950.00	77.6
1987	Tyler Resources	12	2,000.63	1,725.19	86.2
1988	Tyler Resources	19	4,524.00	3,511.45	77.6
1989	Golden Rule	15	4,314.40	2,060.00	47.7
1995	Golden Rule	11	2,275.90	1,105.55	48.6
1996	Golden Rule	47	9,816.50	4,113.45	41.9
Total		**147**	**27,745.83**	**16,511.09**	

6.2 PRODUCTION HISTORY

In February 2012, Golden Band received Ministerial approval pursuant to the Environmental Assessment Act to develop the Golden Heart Open Pit Mine. The Ministerial approval was based on an NI 43-101 Indicated Mineral Resource of 492,800 tonnes grading 6.62 g/t Au (Wong and Hrdy, 2009) and an environmental impact statement prepared and submitted by the Company. During 2013, Golden Band applied for the appropriate construction permits and the ~14 km road to Golden Heart was started in May and completed in September 2013. Work on the Property started in August, production began in October, and shipment of mined material to the Jolu Process Plant began in early November.

On December 9, 2013, Golden Band announced that it was suspending all mining operations, including Golden Heart, due to high operating costs, declining gold prices and lower than anticipated mineralized material grades.

Golden Band's MD&A report for the year ended April 30, 2014 stated that "*Production from open pit operations at Golden Heart totalled just under 25,254 tonnes of material with a head grade of about 3.2 g/t gold*".

The production and mineral processing information presented in this section is provided as background historical information. The Authors have not verified the historical gold production or the results of the processing testwork. As a result, this information is provided as a matter of historical record only and no implications are intended with respect to the potential for future production from the Golden Heart Area.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The information in this Section is summarized largely from Simpson and Hrdy (2021).

7.1 REGIONAL GEOLOGY

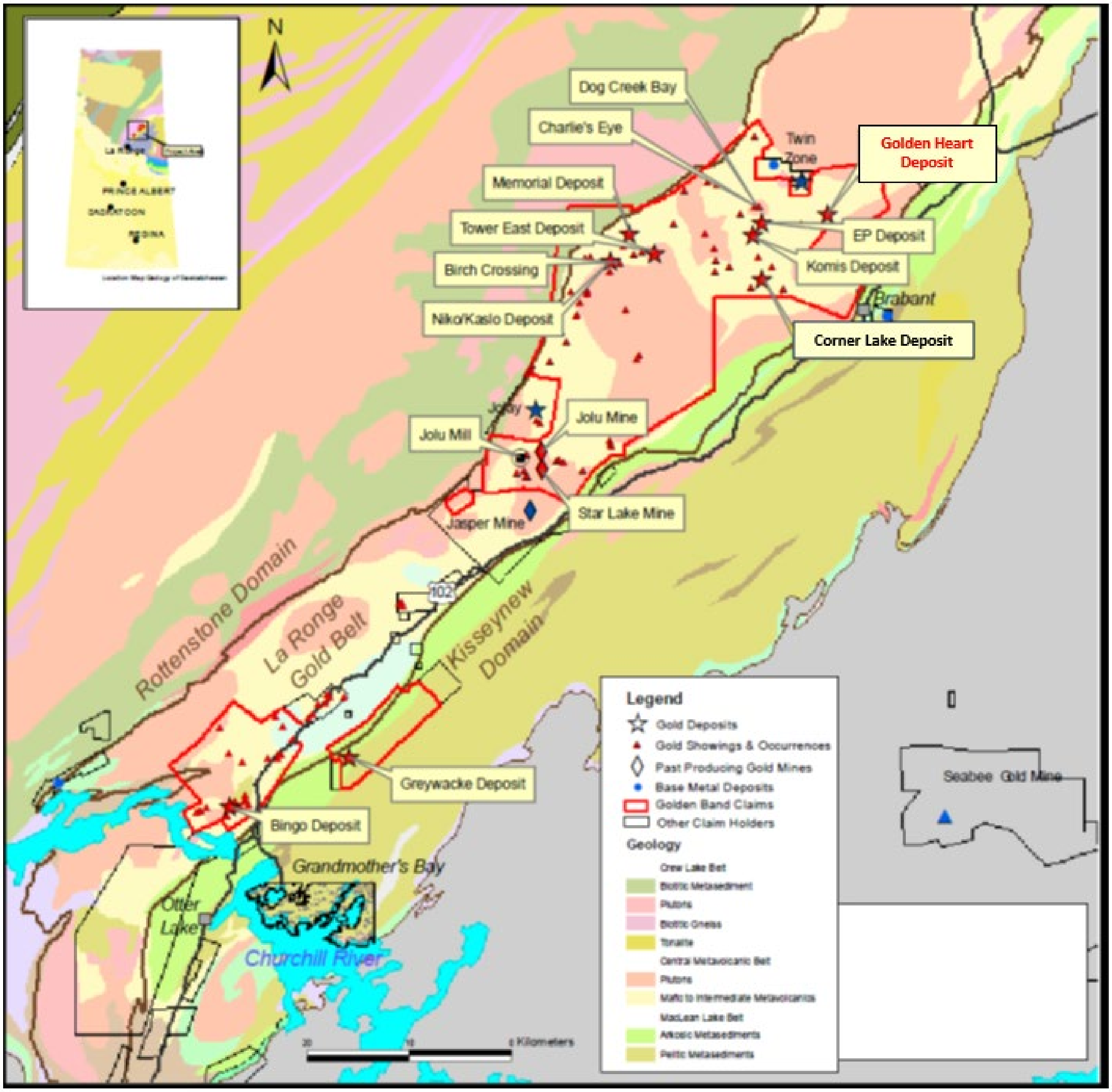
The Greater Waddy Lake Claim Block was geologically mapped by Harper (1985). Bedrock exposure in the area varies from <1% to >5%, due to till and moss cover.

The Greater Waddy Lake Claim Block is located in the northern portion of the Central Metavolcanic Belt in the La Ronge Domain, a granite-greenstone belt in the Saskatchewan segment of the ca. 1.9 to 1.8 Ga Trans-Hudson Orogen (Lafrance and Heaman, 2004) (Figure 7.1). The Saskatchewan segment of the Trans-Hudson Orogen consists of:

- 2.1 to 1.9 Ga continental margin sequence (Wollaston Domain),
- 1.91 to 1.87 Ga marginal sedimentary basin and arc-root complex (Rottenstone Domain),
- 1.91 to 1.87 Ga granite-greenstone arcs (La Ronge, Glennie, Flin Flon Domains), and
- 1.85 to 1.84 Ga oceanic metasedimentary basin (Kisseynew Domain) (Hoffman, 1988; Lewry *et al.,* 1990; Ansdell *et al.,* 1995; Corrigan *et al.,* 1998).

The La Ronge Domain consists of an older sequence of back-arc ultramafic and mafic volcanic rocks, the >1.88 Ga Lawrence Point Volcanic Assemblage (Maxeiner, 1997), and a younger sequence of juvenile arc volcanic rocks of intermediate to felsic composition, the circa. (“ca.”) 1.882 to 1.876 Ga Reed Lake Volcanic Assemblage (Maxeiner, 1999; Maxeiner *et al.,* 2001).

FIGURE 7.1 REGIONAL GEOLOGY



Source: *Simpson and Hrdy (2021)*

The younger Reed Lake Assemblage was deposited during intraoceanic subduction on the older Lawrence Point Assemblage substrate (Lafrance and Heaman 2004). Magmas generated above the subduction zone crystallized as ca. 1.87 Ga diorite to granite plutons in the root of the arc. Erosion of the arc began at ~1.87 Ga, supplying psammitic and pelitic sediments to the marginal basins flanking the arc-subduction zone in the north (Rottenstone Domain-Crew Lake Belt) and to the Duck Lake Sedimentary Assemblage in the south (Maxeiner, 1997; 1999; Maxeiner *et al.*, 2001).

Subduction beneath the La Ronge arc ended by ~1.861 Ga and the arc was accreted to the Hearne Craton (Ansdell *et al.*, 1995). A new, west-dipping, subduction zone developed beneath the La Ronge-Hearne continental margin. This resulted in subduction generated magmas that crystallized across the Rottenstone and Wathaman domain boundary, notably the 1.86-1.85 Ga Wathaman Batholith, and as cogenetic calc-alkaline diorite to granite plutons in the La Ronge Domain (e.g., Brindson Lake Pluton, Tower Lake Property; Fumerton *et al.*, 1984; Meyer *et al.*, 1992; Corrigan *et al.*, 2001).

Continental-arc magmatism ended at ~1.85 Ga and the arc was subsequently eroded from ~1.85 to 1.84 Ga. During the circa ("ca.") 1.83 to 1.80 Ga collisional phase of the Trans-Hudson Orogeny (Bickford *et al.,* 1990), the La Ronge-Hearne Craton collided with the Archean Saskatchewan and Superior Cratons. This was the last significant event that influenced the introduction of gold within the La Ronge Domain and specifically within the Greater Waddy Lake Claim Block area. All lithotectonic domains of the Trans-Hudson Orogen were penetratively deformed during this final collisional event (Lafrance and Heaman, 2004).

7.2 SURFICIAL GEOLOGY

The Quaternary geology of the Waddy Lake District has been mapped and described in considerable detail by Schreiner (1984) and Campbell (1985).

During the Wisconsin glaciation era, northern Saskatchewan was subject to several continental ice advances moving in a northeast-south-westerly direction. The lower till attributable to the last major ice advance is commonly found throughout the La Ronge Domain, except where it has been eroded in glaciofluvial channels. In the Waddy Lake area, a thick blanket of lacustrine sediments is present below an elevation of ~425 masl, which marks the upper limit of proglacial Lake Agassiz in the region. At several locations in the Golden Heart area, an ablation till is also present at the surface, which is related to a minor re-advance (Cree Lake re-advance) during the final stages of glaciation that served to blanket, till covered topographic lows and strip topographic highs of till cover.

Presence of the ablation till over much of the Golden Heart area hinders effective drift prospecting. The ablation till, which is difficult to differentiate from the 'lower till', was more influenced by local topography and now presents a complex environment in which to interpret gold-in-till geochemical anomalies. For the interpretation of gold-in-till anomalies, it is very important to differentiate between these two tills, because the latter may create a false head if no new gold was eroded from the source during the re-advance. The main effect of the upper till is a reshaping of the primary till fan. Backhoe sampling below this layer of outwash sand/ablation till found the lodgement till to be very patchy, and of local origin.

In 1982-1983, Golden Rule carried out a program of basal till sampling using a Wacker Drill. In total, 472 samples were collected from 458 drill holes totalling 2,491 m. Shortcomings of the Wacker overburden sampling technique are an inability to drill through boulders and the relatively small sample size. The results, however, were excellent and showed several clusters of anomalous gold (up to 968 ppb Au), several of them unsourced. For example, on Line 8+50W between 180 and 210 m N, a cluster of three samples graded 40, 416, and 968 ppb Au from samples at a depth of <1 m. On Line 1800W, two samples graded 904 and 36 ppb Au, the high value from a depth of 19.5 m. The success of this program in identifying anomalies in both shallow and in relatively deep overburden indicates that a basal till sampling program utilizing a small, mobile reverse circulation ("RC") drill would be successful.

7.3 PROPERTY GEOLOGY

The geology of the Golden Heart Deposit area consists of variably deformed mafic volcanics, debris flows, gabbros, and mafic schists, which have been intruded by two small diorite/granodiorite bodies (the A-Zone Stock and the B=Zone Stock; Lehnert-Thiel *et al.,* 2002).

The Property is situated within the Byers Fault Zone, a tectonic zone delimited by a regional scale structural break referred to as the Byers Tectonic Zone (a.k.a. Byers Mineral Zone) that extends east-west for 26 km across the northern part of the La Ronge Greenstone Belt. The 100 to >500 m-thick structural zone, which also hosts the Tower East, Komis and Corner Lake Gold Deposits, forms a tectonic zone of polyphase deformation that appears to have influenced the regional emplacement of many gold-bearing porphyritic intrusions along it.

7.3.1 Lithologies

Northwest of the Byers Tectonic Zone, the Property is underlain primarily by pillowed andesites that exhibit a gradational change to volcaniclastics closer to the “A” Zone intrusion. Southeast of the Byers Tectonic Zone, the volcanics are generally more felsic in composition and finer-grained, more intercalated tuffaceous units are present, and a discontinuous band of coarse conglomerate was mapped. Depositional textures are not as well-preserved south of the Byers Fault, due to the degree of metamorphism and because the intensity of shear type deformation appears to increase toward Weedy Lake.

7.3.1.1 Volcanic Rocks

A northeast-trending assemblage of primarily intermediate volcanic flows and pyroclastic rocks occupies the central portion of the Weedy Lake Property east of the Byers Fault. Flows are typically dark green, aphanitic to very fine-grained, and predominantly massive. Locally, they may be finely laminated. A pervasive very weak to weak foliation occurs throughout these rocks. Pyroclastic rocks are grey to dark grey and locally greenish-grey in colour. They consist of finely laminated ash tuffs and crystal or lithic lapilli tuffs. Crystal tuffs are characterized by l to 3 mm long white plagioclase phenocrysts.

7.3.1.2 Intrusive Rocks

Mafic diabase dykes intrude the volcanic rocks. The dykes are grey to dark grey with an aphanitic to very fine-grained matrix. Phenocrysts of probable hornblende compose 10 to l5% of the rock. The dykes are considered to be penecontemporaneous with volcanic activity.

Diorite and granodiorite plutons intrude the volcanic assemblages. Diorite is greenish-grey to dark grey, fine- to medium-gained, equigranular to porphyritic and massive. Diorite plutons are weakly foliated, particularly at or near contact with the volcanic rocks. Foliation tends to become stronger with an increase in the intensity of shearing. Alteration also increases in the vicinity of shear zones.

Granodiorite forms an oval shaped pluton on the westerly side of the volcanics. It is typically pinkish-grey to grey, medium to coarse-grained, equigranular and massive. Locally, it contains diorite and quartz diorite phases. Late-stage feldspar-porphyry dykes cross-cut both diorite and volcanic rocks. The dykes are generally buff to very light grey and siliceous. Plagioclase phenocrysts, 2 to 4 mm in size, constitute ~20 to 25% of the rock. The dykes trend northerly, sub-parallel to the trend of gold mineralization.

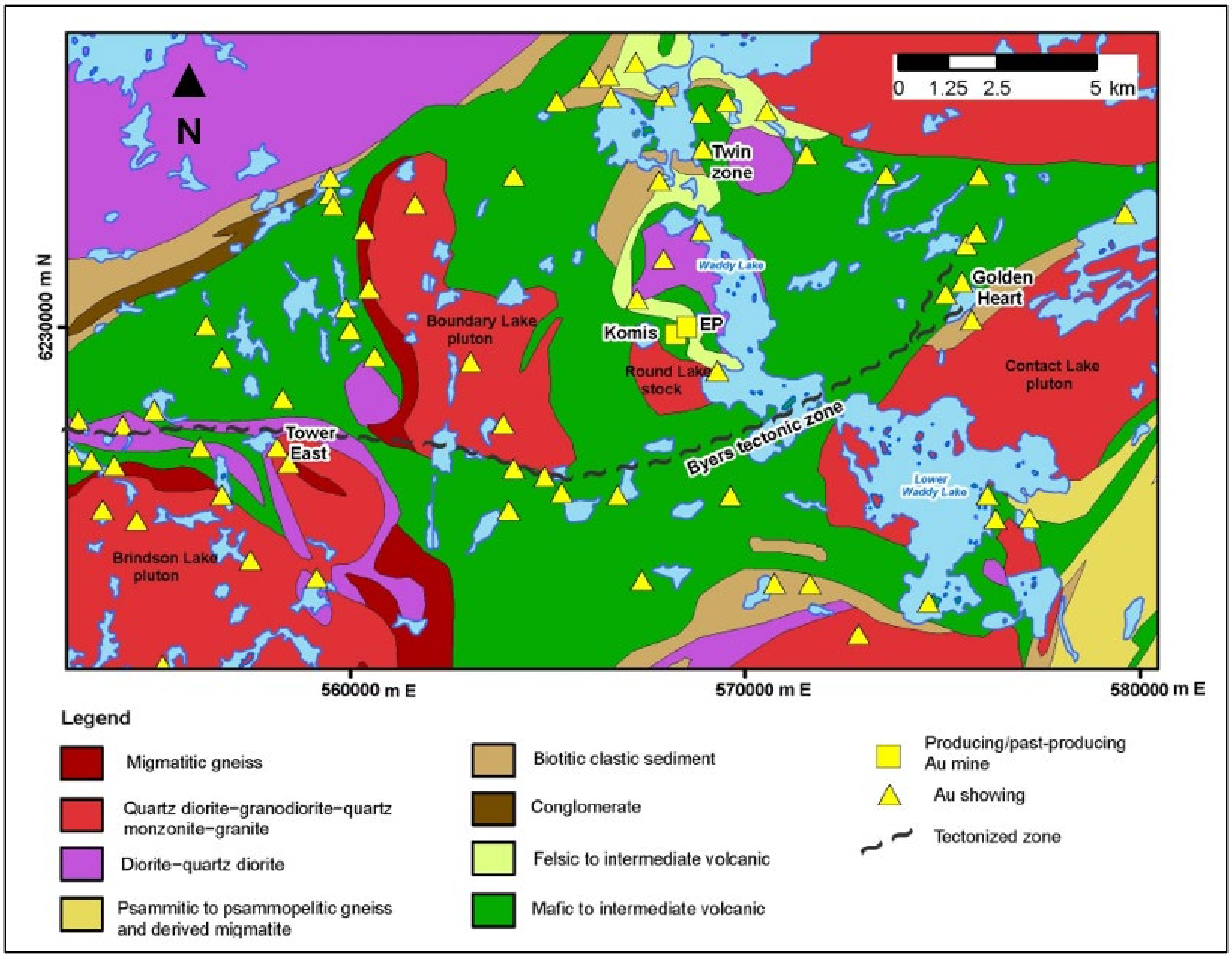
7.3.2 Structural Geology

The area is cross-cut by three shear zones that have juxtaposed the various units and are all likely splays or parts of the Byers Tectonic Zone, which in this area is near its north-eastern terminus (Figure 7.2). The Byers Tectonic Zone consists of several faults and shear zones. The Southeast Fault lies within Weedy Lake, trends north-northeast, dips steeply to the northwest, and is represented by mafic schist. Well-developed slickensides within this unit plunge 58º north, which indicates normal movement and likely postdates the gold mineralization.

The second fault, the B Zone Shear, is defined by a zone of brittle deformation, trending northeast, with a steep northwester dip, entirely with the B Zone Stock (Figure 7.3). The shear zone is defined by a narrow, <5 m-wide zone of deformation. Along its southeast margin is a massive, milky white quartz vein (0.5 to 0.8 m wide) that can be traced on surface for >140 m. The northwest margin of the shear zone is manifest as a >25 m-wide zone of quartz veining strongly potassic-altered (biotite and potassic feldspar) and silicified rusty diorite/tonalite. The quartz veins trend ~50º and dip steeply northwest with orthogonal veins that trend ~10º and 90º. In addition, a set of westerly-trending shallow-dipping (<30º north) quartz veins exist as part of a stockwork. This shear zone hosts the B Zone or the Golden Heart Deposit.

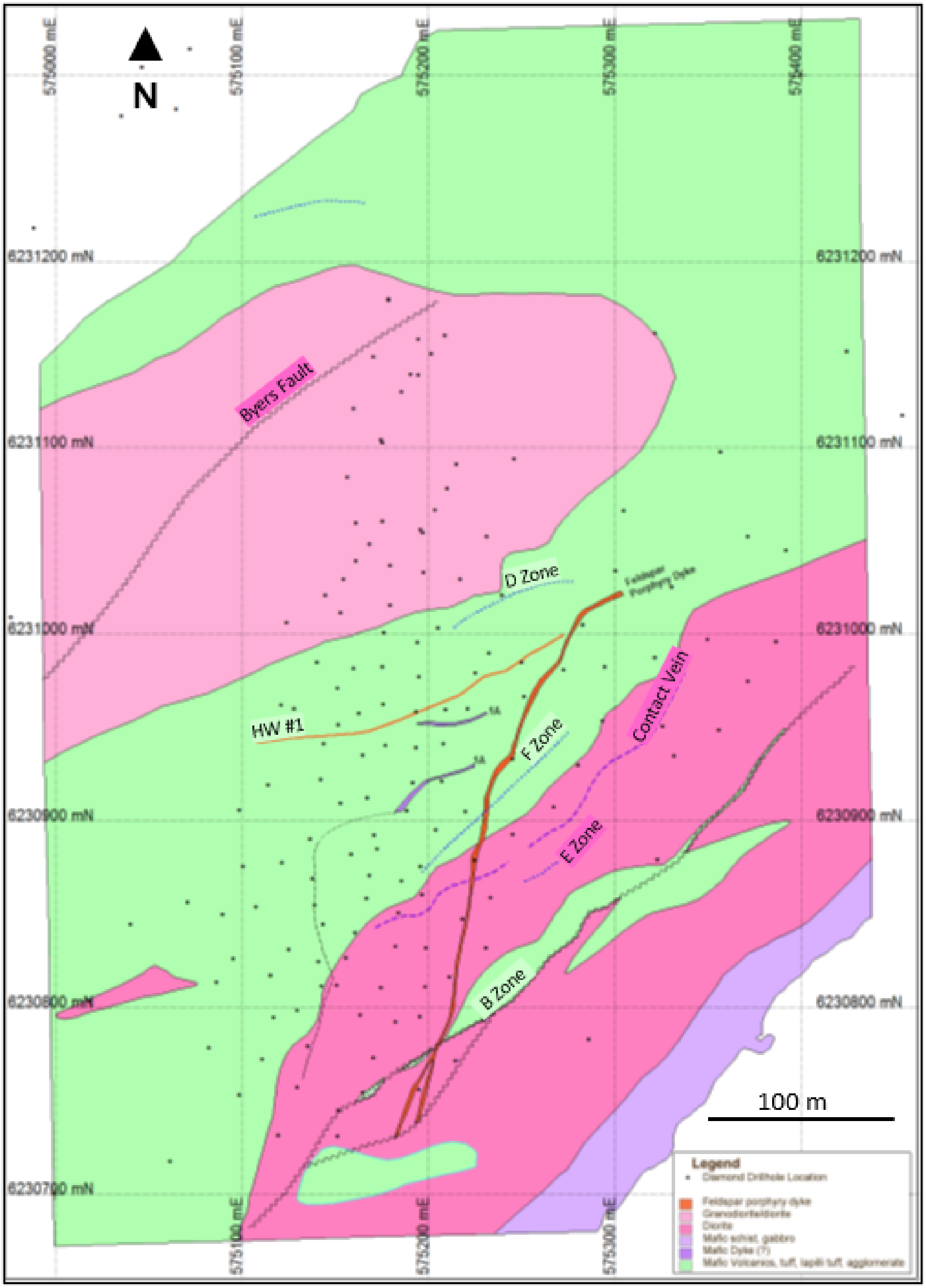
The third shear zone, C Zone or Contact Zone, lies ~65 m to the northwest of and parallel to the B Zone Shear and defines the boundary between the B Zone Stock and mafic volcanics. The Contact Shear Zone trends ~50˚, dips near vertical to steeply west, and is defined by a 20 to 30 m zone of brittle deformed diorite and mafic volcanics intruded by a stockwork of <0.5 m thick quartz veins. The wall rocks have undergone pervasive sulphidic and potassic (biotite and K-feldspar) alteration. Similar to the B Zone Shear, the veins trend to the 30º to 50º and dip-steeply (~55°) to the northwest. There are also orthogonal veins that trend to the north and west, and a series of westerly-trending, shallowly- dipping quartz veins. A well-developed mineral lineation plunges steeply to the northwest and appears to indicate a reverse dextral movement. The Contact Zone is considered part of the Golden Heart Deposit.

FIGURE 7.2 GEOLOGY OF THE GREATER WADDY LAKE AREA



Source: *Morelli and MacLachlan (2012)*

FIGURE 7.3 GEOLOGY OF THE GOLDEN HEART PROPERTY



Source: *Modified by P&E (This Study) from Simpson and Hrdy (2021)*

7.4 DEPOSIT GEOLOGY AND MINERALIZATION

This following summary is derived largely from Morelli and MacLachlan (2012) and Simpson and Hrdy (2021).

The Golden Heart Deposit is located near the intrusive contact of a small, undated, quartz diorite stock (Figure 7.4), the B-Zone Stock (Wong and Hrdy, 2009), within a sequence of ca. 1,880 to

1,870 Ma andesites to rhyolites. The B-Zone Stock and the volcanic rocks are cross-cut by north-trending feldspar porphyry dykes. Rocks in the Property area have a northeast structural trend and have been metamorphosed under upper greenschist to lower amphibolite facies conditions (Harper, 1985).

Drilling in the area originally identified three separate mineralized zones, the Weedy Lake A, B and C Zones (Netolitzky, 1986; Figure 7.4). Of these, the B and C Zones were subsequently defined as the Golden Heart Deposit. This Deposit consists of mineralization in quartz veins and altered wall rock, spatially associated with a series of discontinuous, bifurcating, northwest-dipping shear zones. The mineralized zones are subparallel and subsidiary to the Byers Lake Tectonic Zone, located <250 m to the north.

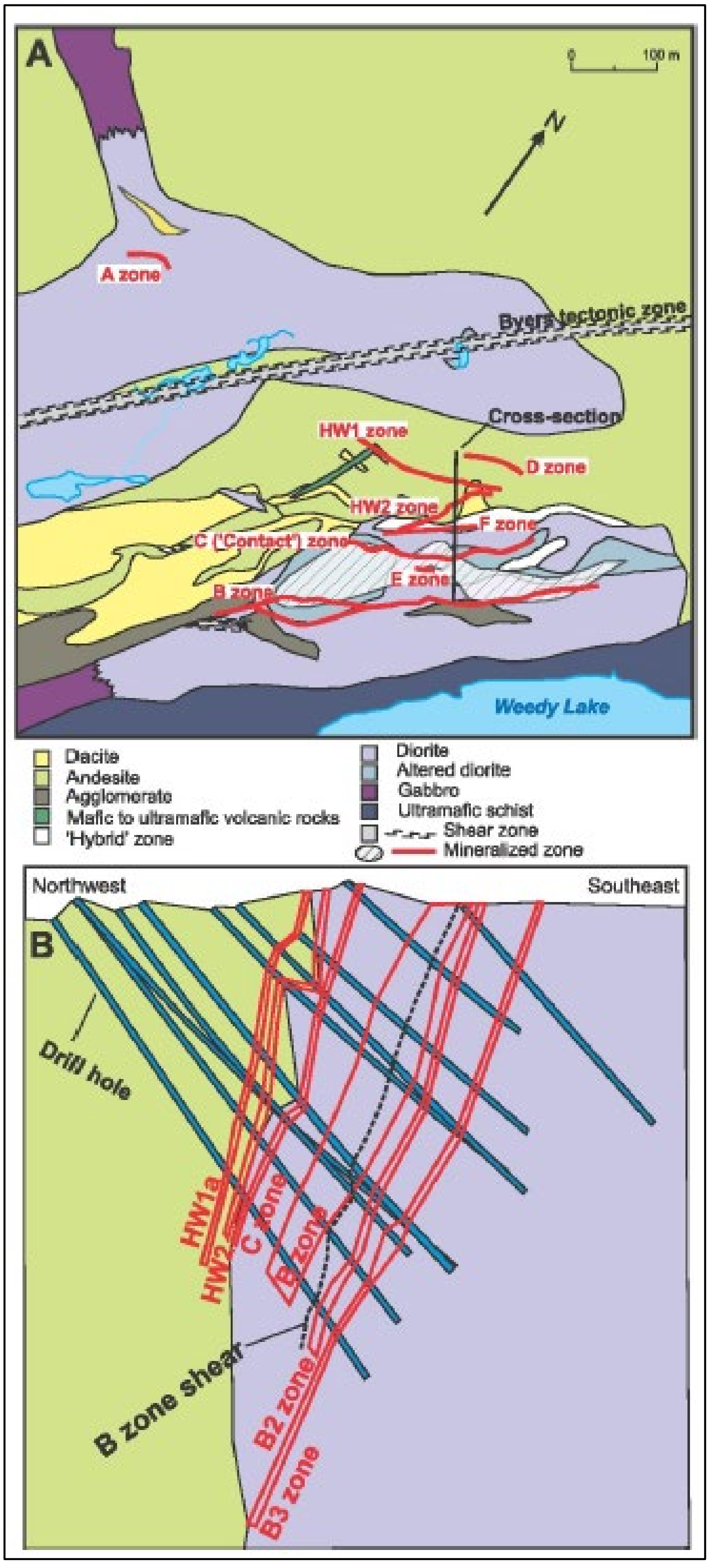
The Golden Heart Deposit is defined by drilling over a strike length of 300 m, vertically to a depth of 250 m (the deepest drill holes are 375 m in length), and down-plunge to an average extent of 350 m. The Deposit exhibits a northeast plunge along a plane striking 50° and dipping 70° to 85° northwest.

In detail, Wong and Hrdy (2009) re-interpreted the Golden Heart Deposit as consisting of seven subparallel, shear-related mineralization zones, including the B, B2, B3, C, HW1, HW1a, and HW2 Zones (Figure 7.4b). The main shear zone, B Zone Shear, is 3 to 4 m thick and confined to the quartz diorite body. It dips steeply to the northwest and has a strong internal shear foliation that generally parallels the shear zone margins and the regional penetrative foliation. Rotated and sheared diorite clasts within the shear zone are enclosed by an anastomosing system of chloritic shear planes. The shear zone exhibits C-S fabrics and tension gash geometries on horizontal surfaces that indicate a component of dextral movement (Schwann, 1989), though a subvertical to steeply northwest-plunging, down-dip extension lineation is also present and is collinear to the regional mineral lineation (Lafrance, 1999).

Gold mineralization associated with the B Zone Shear is hosted in quartz veins and in pervasively altered wall rock. On the southeastern margin of the B Zone Shear, mineralization occurs in a single shear-hosted quartz vein that is 50 to 80 cm thick and continuous for 140 m along strike. Adjacent to the shear on the hanging wall side, mineralization occurs in altered wall rock and quartz veining within a stockwork zone >25 m wide. The quartz veins in this stockwork compose steeply dipping sets that trend ~010°, 050°, and 090°, and an additional set that dips <30° to the north, all of which locally contain mineralization (Wong and Hrdy, 2009).

In addition to the B Zone, several quartz vein systems in the hanging wall and footwall to the B Zone were identified in previous drilling programs. Silicification tends to be more intense and there is an increase in the amount of quartz veining in the hanging wall zones. Two of these vein systems (HW No. 1 and HW No. 2) occur within volcanic rocks. The HW No. 1 system strikes northeasterly and dips steeply northwest. Here, a quartz vein or veins associated with shearing generally contains abundant visible gold. A second vein system in the volcanics (HW No. 2) is less well defined; however, it contains the highest gold values of all the mineralized zones. Another mineralized zone occurring in the footwall below the B-Zone Shear was referred to as the FW Zone.

FIGURE 7.4 GEOLOGY OF THE GOLEN HEART DEPOSIT



Source: *Morelli and MacLachlan (2012)*

Figure 7.4 Description: *A) Plan view of generalized geological setting and surface projection of the mineralized zones. B) Interpreted cross sectional projection through the mineralized zones and the B zone shear, based on drill hole intersections along the 1000W easting line on the Property grid.*

Mineralization in the C Zone (or Contact Zone) is situated ~100 m north of the B Zone Shear and exhibits many of the same features as the B Zone Shear mineralization. The C Zone mineralization is associated with a 20 m thick system of smaller shears subparallel to the B Zone Shear, situated at the contact between the quartz diorite and the volcanic rocks. Similar to the B Zone Shear, mineralization in the Contact Zone is associated with quartz veins and proximal altered wall rock. The main vein is 80 cm thick, steeply north-dipping, and extends for 20 m along a strike of 215°, parallel to the shear foliation (Lafrance, 1999). Numerous smaller veins 1 to 20 cm thick are also present and oriented oblique to the shear zones. A set of cm-thick extensional veins that trend 255° and dip 70° north and are oriented 20 to 45° clockwise to the shear zone margins are reported by Lafrance and Heaman (2004). A stockwork of veins of variable orientations, including moderately northwest-dipping veins trending between 30° and 50°, north- and west-trending subvertical veins, and west-trending veins with shallow dips to the north, is also present (Wong and Hrdy, 2009).

According to Wong and Hrdy (2009), native gold throughout the Golden Heart Deposit occurs in the quartz veins and as inclusions in pyrite and in silicate minerals in the altered wall rock. Silicification and pyritization of the host rocks are the main alteration types, though potassic alteration (biotite and minor microcline) is also evident. Additional alteration phases are chlorite, albite, carbonate, hematite, hornblende, and diopside. Sheared quartz diorite contains up to 15% biotite and is cut locally by mm-scale K-feldspar veinlets; actinolite is locally present on the margins of quartz veins (Schwann, 1989). In addition to pyrite, trace to minor amounts of chalcopyrite, sphalerite, and galena are also present. Gold is distributed irregularly throughout the Deposit. The distribution of free gold in the quartz veins is particularly erratic. The higher grades might occur in the altered wall rocks adjacent to quartz veins (Netolitzky, 1986).

According to Fraser (1997), the sequence of events of gold emplacement in the Byers Belt is interpreted to be follows:

- Intrusion of a diorite to gabbro suite of rocks as part of the polyphase emplacement of the various plutons (such as the Nistoassini and Contact Batholiths) in the Byers Belt area;

- High-level felsic intrusive activity along the outer phase of the pluton, accompanied by brittle fracturing, albitization and hydrothermal alteration;

- Regional deformation (D1) with local brittle fracturing and formation of Byers Fault lineament along the outer margins of adjacent plutons;

- Emplacement of auriferous quartz/quartz-calcite veinlets, pyrite, biotite, interstitial carbonate (dolomite), muscovite, albite, chalcopyrite; accompanied by pyrite formation (pyrite after magnetite), silica-biotite-actinolite-magnesian chlorite flooding-dominated wall rock alteration (hydrothermal-sulphidic-potassic alteration), and introduction of gold;

- Regional deformation (D2), formation of foliation, local mylonitic fabric, and shearing along the Byers Fault;

- Metamorphism (M1) lower amphibolite facies, static recrystallization of sulphides, gold, carbonates, and most silicates; and

- Brittle deformation (D3), formation of the present open-spaced structural characteristics of the Byers Fault, accompanied by retrograde greenschist facies metamorphism (M2), formation of fracture controlled retrograde alteration assemblage (deep oxidation), including hematite, goethite, bornite, ferroan chlorite, and carbonate.

More recently, Lafrance and Heaman (2004) interpreted the Golden Heart Deposit to have formed in shear zones that slightly postdated development of the main regional D2 fabrics. This interpretation is in contrast to some of the other gold deposits in the Greater Waddy Lake Claim Block area, such as the Komis Deposit, which is considered to have formed during development of the D2 fabric.

7.5 AUTHOR COMMENTS ON SECTION 7

The regional and deposit-scale geology and controls on mineralization of the Golden Heart Deposit are sufficiently well understood to permit the construction of geological models and estimation of Mineral Resources.

8.0 DEPOSIT TYPES

The Golden Heart Deposit is generally classified as a shear-hosted, mesothermal orogenic gold deposit (Figure 8.1). The mineralization is related to late-stage, upper level or sub-volcanic intrusive events occurring near the margins of a larger multi-phase batholith of mainly granodiorite composition that, in turn, is a late-stage event of the Hudsonian Orogeny. Gold-sulphide mineralization within these intrusions commonly occurs as moderately- to steeply-dipping, steeply-plunging, discrete mineralized zones of disseminated 'free' gold intimately associated with increased levels of pyritization (3 to 10%), albitization, strong silicification, and quartz or quartz-carbonate veins or stockworks.

Although the gold-sulphide mineralization is spatially related to broad zones of polyphase deformation and possibly folding, the individual zones do not appear to be directly controlled by discrete faults or shears. The gold mineralization was emplaced early in the geological sequence of events and is related to the waning stages of the plutonic cycle and controlled by the associated pervasive brittle deformation and hydrothermal activity.

At least seven shear zones have been identified that have quartz veining and gold mineralization. These mineralized shears pre-date the last movement on the Byers Tectonic Zone and are sub-parallel to, and located on, both sides of the fault structure. The mineralized shears are considered to represent earlier movement along the same zone of crustal weakness.

8.1 DEPOSIT MODELS

Two groups of gold occurrences have been noted in the La Ronge Domain and specifically in the Greater Waddy Lake Claim Block area (Lafrance and Heaman, 2004):

- **Group I** gold occurrences include the Komis Gold Deposit and consist of single quartz veins or swarms of quartz veins having extensive biotite-pyrite-carbonate alteration haloes that are up to 15 times as thick as the thicknesses of the single quartz veins. At Komis, single quartz veins and swarms of quartz veins cut mafic volcanic rocks and the east-striking dykes. It has been interpreted that the dykes and the northwest-striking volcanic host rocks were in the strain shadow of the Round Lake Stock during the development of regional east-northeast striking S2 foliation. Tensile fractures opened in the volcanic rocks and dykes, hydrothermal fluids flowed into the fractures and quartz crystallized, sealing the fractures; and

- **Group II** gold occurrences are shear-hosted mineralization, including the Golden Heart and Corner Lake Gold Deposits. Quartz veins within the shears at both deposits have been classified as extensional veins that predate the shearing. Hence, these veins resemble the Group I veins discussed above, but they have been overprinted by the shear zones.

FIGURE 8.1 GOLD MINERAL SYSTEM MODELS

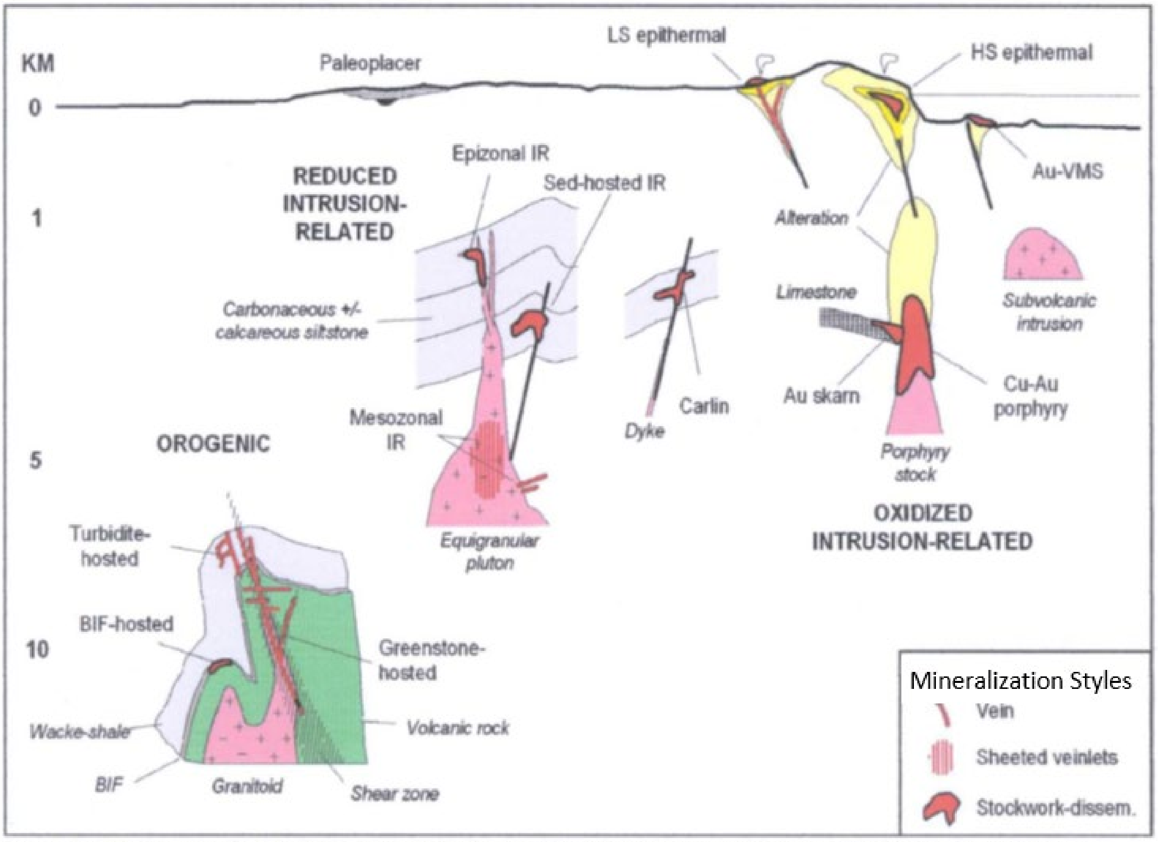


Figure 1: Schematic cross section showing the key geologic elements of the main gold systems and their crustal depths of emplacement. Note the logarithmic depth scale. Modified from Poulsen et al. (2000), and Robert (2004a).

Source: *Modified by P&E (This Study) from Robert et al. (2005)*

Throughout the Greater Waddy Lake Claim Block, gold occurs in quartz veins and pyritized wall rocks. The similar mineralization style and upper greenschist to amphibolite grade metamorphism associated with the alteration of numerous gold occurrences throughout the area suggests gold was introduced during a regional, hypozonal, mineralizing event. Furthermore, the similarity of the Group I and Group II gold occurrences suggest formation during the same deformation event, specifically D2 - formed in the La Ronge Domain during the collision of the Rae-Hearne Craton with the Superior and Saskatchewan Cratons (Lewry *et al.,* 1990; Ansdell *et al.,* 1995; Schwerdtner and Côté, 2001).

During the collisional event, regional compression across the La Ronge Domain resulted in localized deformation, which produced reverse and dextral shear zones along lithological contacts between more competent and less competent rock units (Lafrance and Heaman, 2004). Group I gold occurrences were deposited during the development of the regional D2 fabrics, which are locally overprinted by the late D2 shear zones that host the Group II gold occurrences.

8.2 AUTHOR COMMENTS ON SECTION 8

The Authors consider that a shear-hosted, mesothermal orogenic deposit model for Golden Heart is appropriate for exploration and Mineral Resource estimation.

9.0 EXPLORATION

9.1 ACCESS TRAILS AND CUT-LINE GRIDE

In 2002, Golden Band constructed a 15 km access trail from a point 10.5 km north of the community of Brabant Lake to the Weedy Lake area. The trail is suitable for bulldozers and quads, and 90% of it was drivable by 4-wheel drive trucks.

An 11.5 km grid was established over the Golden Heart Deposit area that utilized the 1982 tie-lines and cross-lines. The trenches and stripped areas reported in earlier work were largely caved in or grown over. The area was re-mapped and some sections of the drill core re-examined. The drill core is stored at the former campsite on the northeast shore of Weedy Lake. Several of the drill core racks have collapsed, making access difficult in those cases. In addition, all the mineralized intervals from the 1995 and 1996 drilling programs had been removed, presumably for metallurgical testing.

9.2 GEOCHEMISTRY

A total of 233 bulk till samples were taken from the Weedy Lake area, of which 38 were taken from the access trail between Weedy Lake and Highway 102. Several anomalous samples were identified; however, they were difficult to evaluate due to the post-glacial events overprinting the till. After the retreat of the ice, the Weedy Lake area was subject to flooding by Glacial Lake Agassiz. The critical elevation range is between 420 and 450 masl, which marks the upper limit of the flooding during the main Lake Agassiz phase. In the Weedy Lake area, the till covered basement ridges in that elevation range were swept clean by Lake Agassiz wave action, producing raised beaches and bedrock outcrops. Below that elevation, extensive lacustrine silt and clay deposits were created covering the local till deposits. These clay and silt deposits can exceed tens of metres in thickness in the valleys between the bedrock ridges. Almost all the samples taken during the 2002 field season fall into this critical elevation range. The pits at the higher elevation range ended up in beach gravel and the lower ones in silt and clay deposits. The 3-m reach of the backhoe was unable to penetrate through to the underlying tills.

In 2007, a soil gas hydrocarbon sampling program was undertaken on the Property.

9.3 GEOPHYSICS AND REMOTE SENSING

Airborne geophysical surveys were completed over the Greater Waddy Lake Claim Block area in 2012 and 2018. Results from each of these surveys are presented below.

9.3.1 2012 Airborne Geophysical and Remote Sense Surveys

A detailed airborne magnetic and VLF-EM survey totalling 700 line-km was completed in June 2012 over the Upper Waddy Lake region by Tundra Airborne Surveys (Chisholm and Jamieson, 2012). The survey was designed to provide a high-resolution view of the Project and lithological and structural data in an area with government geological mapping coverage, and to provide context and guidance for future gold exploration.

Very high-resolution orthophoto coloured imagery was sourced from the Province of Saskatchewan and provides a strong complement to the magnetic data collected by the airborne survey, whereas existing geological data were examined for useful data to support the survey interpretation. The geological interpretation was completed by Taiga Consultants Ltd ("Taiga") on the combined data set and the interpretation has been shown on an orthophoto base.

Previous government and academic interpretations of the regional geology were found, for the most part, to be accurate. The survey provided additional geological information in areas of limited outcrop. On the large-scale, Taiga interprets the geology to be that of three related sub-domains of the Central Magmatic Belt that are separated by large strike-slip fault structures. These major structures likely represent paleo-physiographic breaks that likely would have been present during the formation of the Central Volcanic Belt and during the deposition of the known gold mineralization.

The survey interpretation highlights the large number of major fault structures that cross-cut the local stratigraphy and provide a basis for an understanding of the litho-structural setting of the known gold deposits and occurrences. The study provides guidance as to which areas merit further exploration for new deposits. At the same time, the interpretation of the magnetic and supporting data was used to identify the regional geologic context of the immediate Property area.

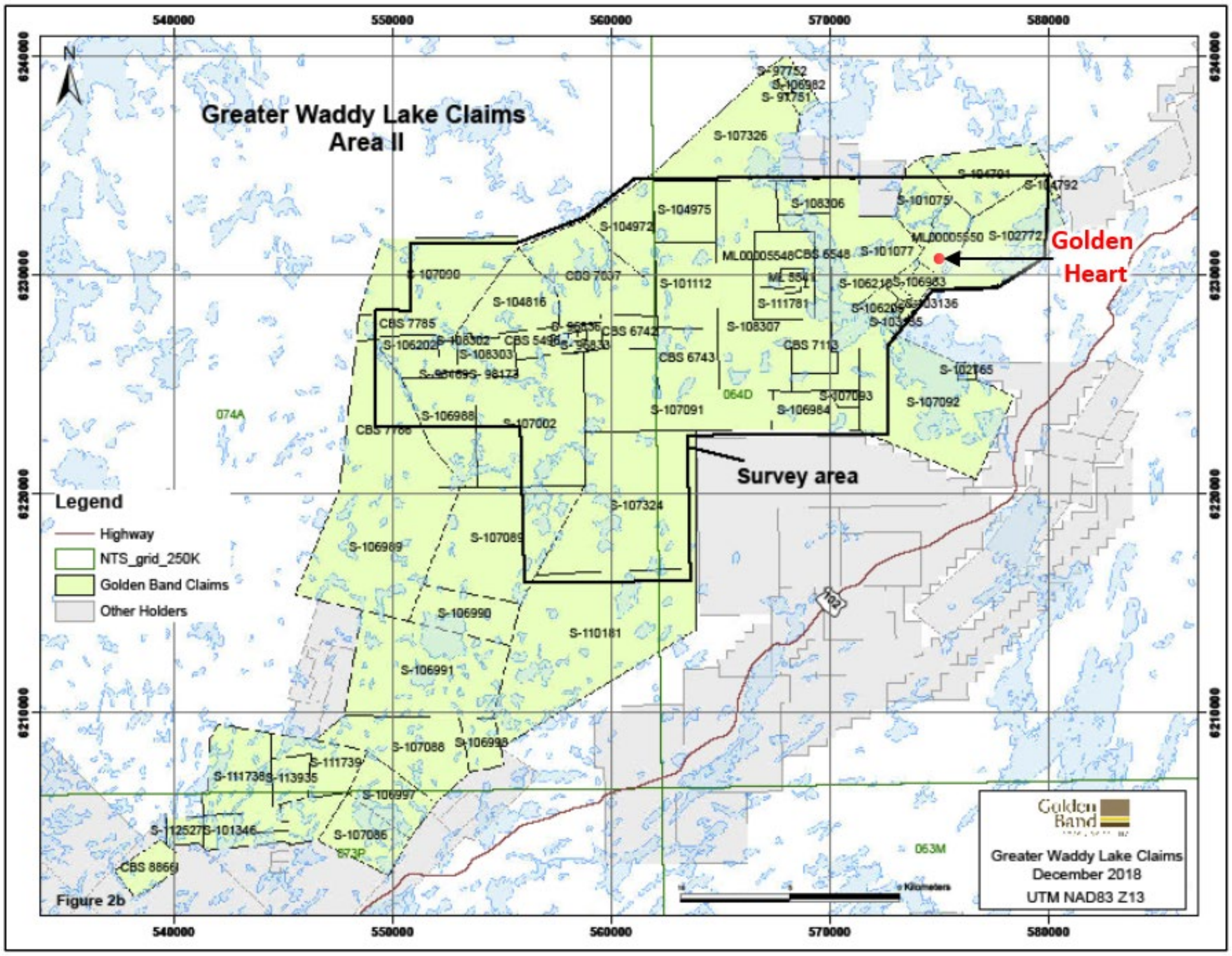
Gold occurrences and deposits in the Greater Waddy Lake Claim Block area have historically been known to have strong relationship to east-northeast trending faults of the Byers Fault and Byers Deformation Zone, and to young, high-level felsic "G3" stocks of the Round Lake Stock suite. The east-west felsic dyke corridor that hosts much of the Komis Deposit likely is also related to the Byers Fault direction. During this study, it was also found that deposits and occurrences have a strong spatial association with north-south striking faults that cut both the volcanic and intrusive rocks in the area. Although this conclusion is recent (Simpson and Hrdy, 2021), it is based on the observations of previous exploration workers. The importance of these structures is supported by the fact that the known Komis Deposit mineralization occurs in north-south veining and where these veins intersect east-west structures containing felsic dykes.

9.3.2 2018 VTEM Survey

The following summary is derived largely from Geotech (2018) and Dong (2018).

From July 9 to August 13, 2018, Geotech Ltd. Completed a helicopter-borne geophysical survey over the Greater Waddy Lake Claim Block (Figure 9.1). The main geophysical sensors were a versatile time domain electromagnetic (VTEM™max) system and a caesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. Total area coverage by the survey was 323 km^2 and 3,547 line-km of geophysical data were acquired during the survey (Figure 9.2).

FIGURE 9.1 LOCATION MAP SHOWING 2018 VTEM SURVEY AREA OF THE GREATER WADDY LAKE CLAIM BLOCK

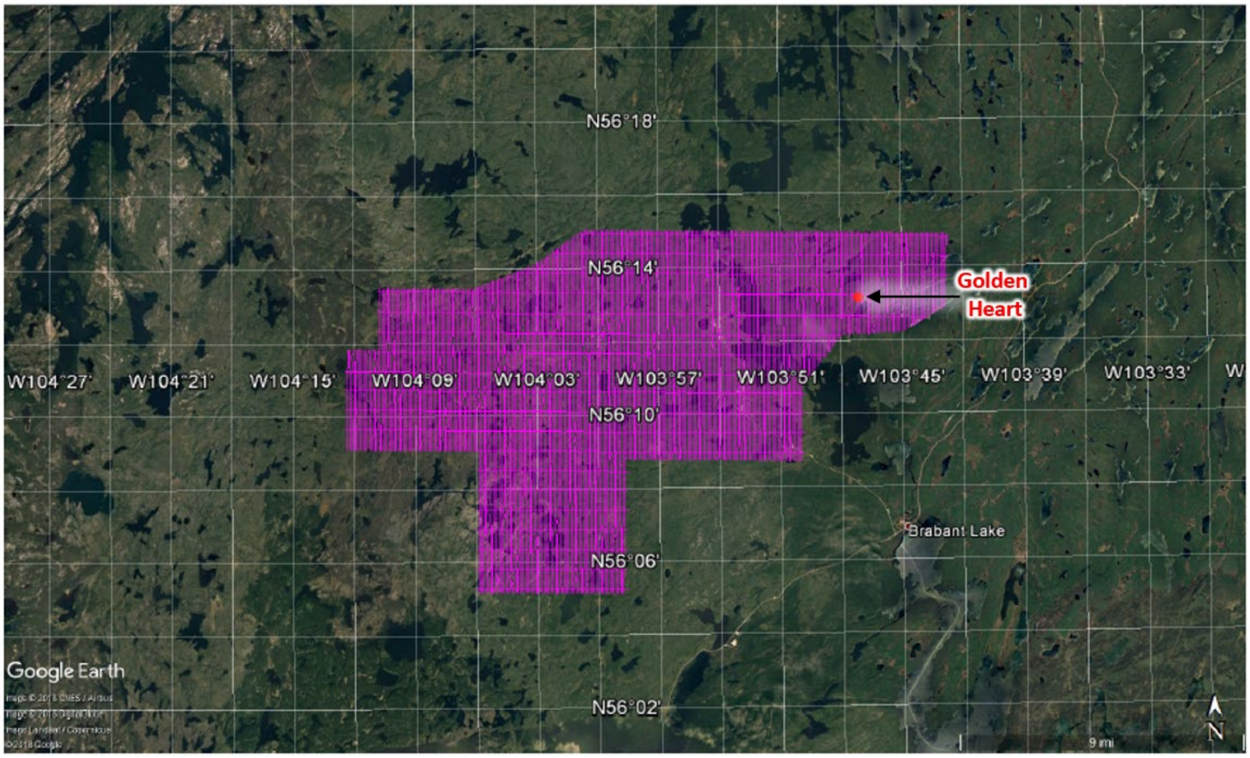


Source: *Modified by P&E (This Study) from Dong (2018)*

In-field data quality assurance and preliminary processing were completed out daily during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products, were undertaken from Geotech Ltd. office in Aurora, Ontario. The processed survey results were presented to Golden Band as the following maps:

- Electromagnetic stacked profiles of the B-field Z component;
- Electromagnetic stacked profiles of the dB/dt Z component;
- B-Field Z Component Channel grid;
- Fraser Filtered dB/dt X Component Channel grid;
- Total Magnetic Intensity (“TMI”);
- Calculated Time Constant (Tau) with Calculated Vertical Derivative contours; and
- Resistivity Depth Images (“RDI”) sections.

FIGURE 9.2 VTEM FLIGHT LINES OVER THE GREATER WADDY LAKE SURVEY AREA



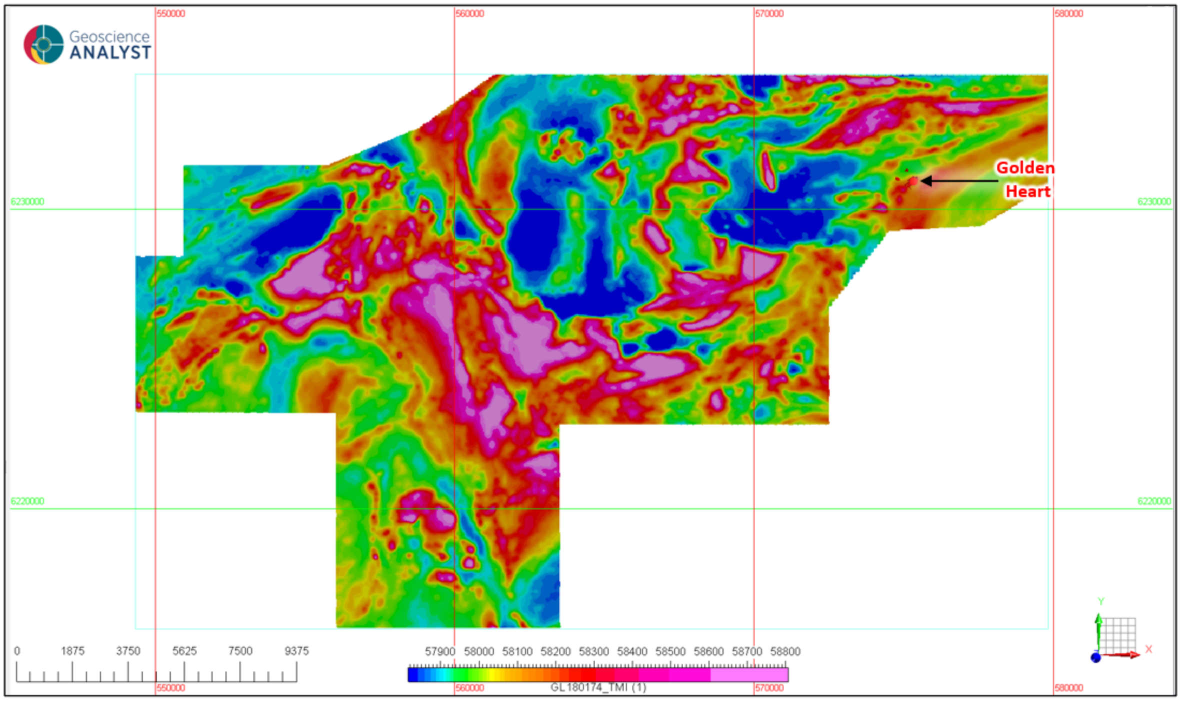
Source: *Modified from P&E (This Study) from Geotech (2018)*

Digital data includes all magnetic and electromagnetic products plus ancillary data, including the waveform. The survey report describes the procedures for data acquisition, description of equipment, processing, final image presentation, and the specifications for the digital data set.

A formal interpretation was not requested or included. On a Total Magnetic Intensity ("TMI") image, Golden Heart Deposit occurs on the boundary between an area of moderate magnetic response to the northwest and an area of high magnetic response to the southeast (Figure 9.3). Furthermore, based on geophysical observation, the B Field Z component channel 30 shows three main anomalous zones: one in the north-centre of the Property; the second in the northwestern side; and the third in the South (Figure 9.4). None of these three zones overlap with the Golden Heart Deposit. However, a single point conductor is evident immediately northeast along strike of the Deposit. Whether this conductor is artifactual or natural remains to be determined. All the anomalous VTEM zones have an approximate apparent resistivity value of <5 Ohm-m.

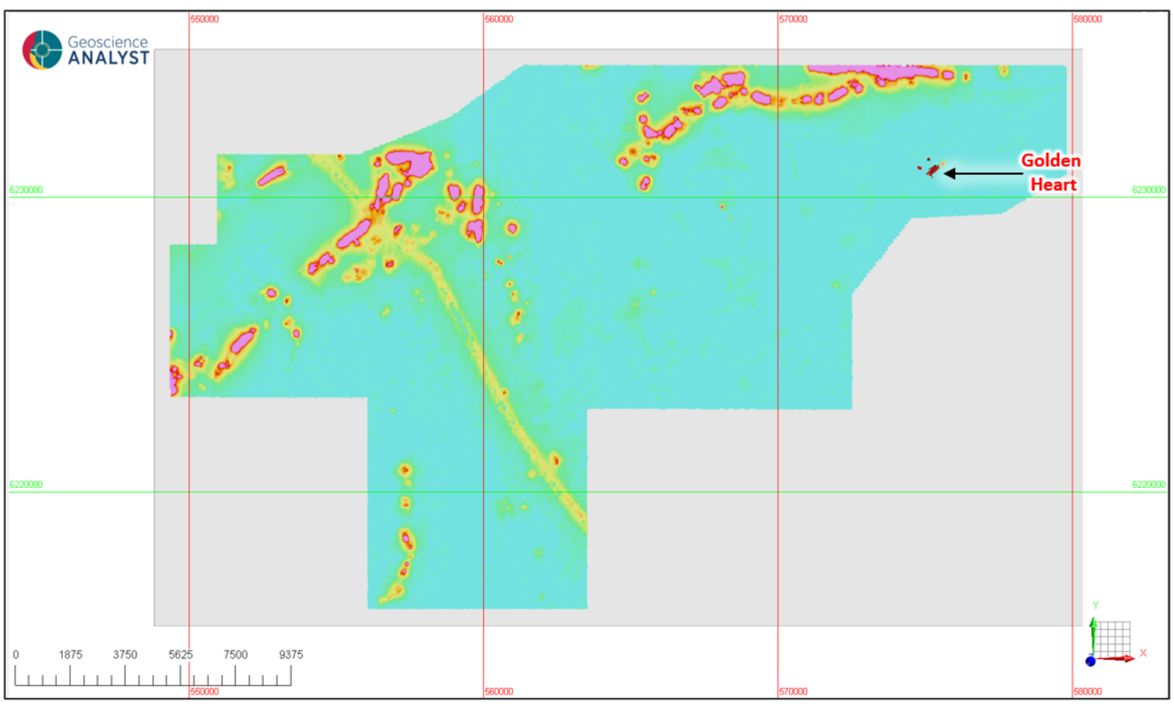
If the conductors correspond to an exploration model, an airborne inductive induced polarization ("AIIP") survey with EM and anomaly picking was recommended for the area (Geotech, 2018). EM Maxwell plate modelling was also recommended prior to ground follow-up and drill testing.

FIGURE 9.3 TOTAL MAGNETIC INTENSITY IMAGE OF THE GREATER WADDY LAKE VTEM SURVEY AREA



Source: *Modified by P&E (This Study) from Geotech (2018)*

FIGURE 9.4 VTEM B-FIELD Z COMPONENT CHANNEL 30



Source: *Modified by P&E (This Study) from Geotech (2018)*

Figure 9.4 Description: *B-field Z Channel 30 = Time Gate 0.880 ms – Greater Waddy Lake Block. The hotter colours (magenta) represent higher conductivity.*

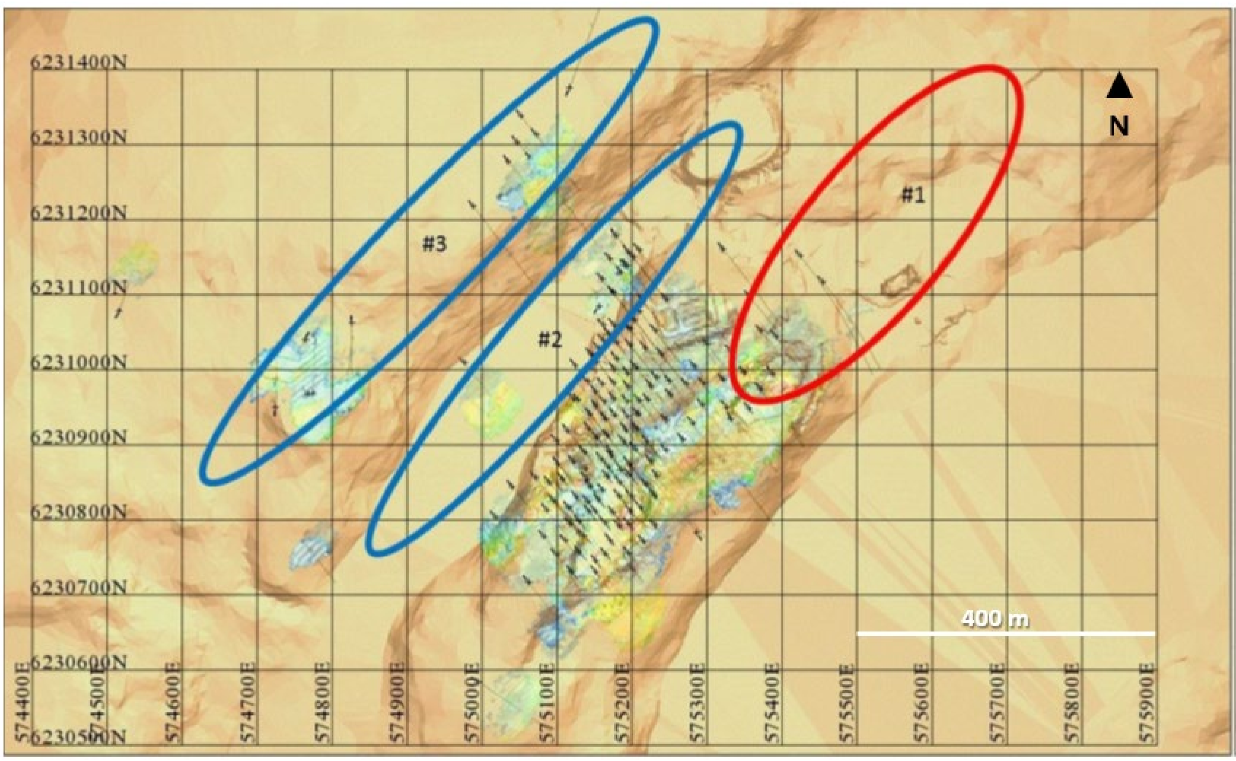
9.4 PETROGRAPHIC STUDIES

Three petrographic studies were completed in 1988 on drill core samples from the Golden Heart Deposit.

9.5 EXPLORATION POTENTIAL

The area shown in Figure 9.5 below is a plan view of the Golden Heart Deposit with topography, drill hole (collar) locations and traces, and known gold mineralization (shown in coloured blocks). The locations labelled #1, #2 and #3 are areas considered by Simpson and Hrdy (2020) to have significant potential for discovery of additional gold mineralization.

FIGURE 9.5 EXPLORATION DRILL TARGETS



Source: *Simpson and Hrdy (2021)*

9.6 AUTHOR COMMENTS ON SECTION 9

Interpretation of the exploration data, including mapping, petrography, geochemical sampling and geophysics, is sufficiently detailed to support the definition of shear-hosted gold targets on the Property.

10.0 DRILLING

Between 1982 and 1996, Golden Rule completed 145 drill holes totalling 27,690 m. This drilling is described in Section 6 of this Report and in previous Technical Reports (Simpson, 2006 and Wong and Hrdy, 2009).

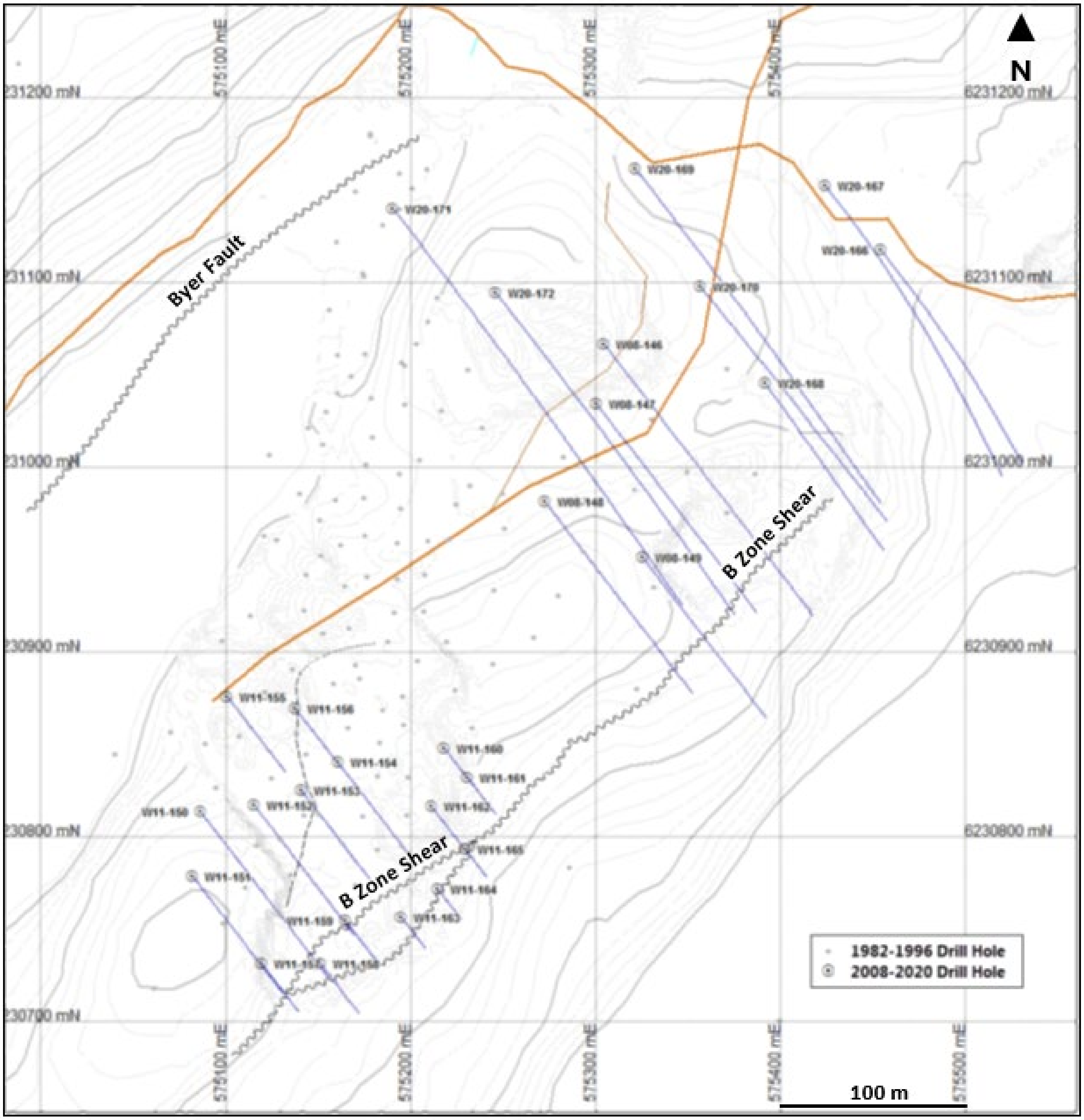
In 2008, Golden Band completed four diamond drill holes totalling 804 m on the Property. The drilling objective was to increase the level of confidence in the continuity of near-surface higher-grade gold mineralization in the northeast portion of the Golden Heart Deposit. All four drill holes intersected gold mineralization with grades and widths that were consistent with the geological model.

In 2011, Golden Band completed 16 in-fill drill holes totalling 1,152 m in southwest portion of the Deposit. These drill holes tested the high-grade zones within the preliminary pit design limits to enable the Inferred Mineral Resource to be upgraded to the Measured and Indicated classifications.

In 2020, Golden Band completed six drill holes totalling 1,550 m in the northeast portion of the Deposit.

In total, 174 surface drill holes amounting to 31,432 m have been completed on the Property by historical operators and Golden Band. The locations of the 2008 to 2011 drill holes are shown in Figure 10.1 and listed in Table 10.1.

FIGURE 10.1 DRILL HOLE COLLAR LOCATIONS AND TRACES 2008 TO 2020



Source: *Modified by P&E (This Study) from Simpson and Hrdy (2021)*

Table 10.1 Drill Hole Collar Locations and Orientations						
Drill Hole ID	**Easting**	**Northing**	**Elevation (masl)**	**Length (m)**	**Collar Azimuth (°)**	**Collar Dip (°)**
W08-146	575,305	6,231,066	419.88	252.07	142	-45
W08-147	575,301	6,231,034	417.50	200.25	142	-45
W08-148	575,273	6,230,981	421.04	200.25	142	-50
W08-149	575,326	6,230,951	426.94	151.49	142	-45
W11-150	575,086	6,230,813	430.18	175.91	142	-50
W11-151	575,082	6,230,778	434.18	124.30	142	-50
W11-152	575,115	6,230,817	428.18	137.90	142	-50
W11-153	575,141	6,230,825	432.18	102.74	142	-55
W11-154	575,161	6,230,840	423.18	96.30	142	-50
W11-155	575,101	6,230,876	428.18	81.40	142	-50
W11-156	575,138	6,230,869	423.18	60.60	142	-50
W11-157	575,119	6,230,731	431.18	50.91	142	-50
W11-158	575,151	6,230,731	428.18	50.91	142	-50
W11-159	575,165	6,230,754	428.18	50.91	142	-50
W11-160	575,219	6,230,848	425.68	44.82	142	-50
W11-161	575,231	6,230,832	425.68	38.72	142	-50
W11-162	575,211	6,230,816	425.68	41.77	142	-50
W11-163	575,195	6,230,756	423.18	32.62	142	-50
W11-164	575,215	6,230,772	423.18	32.62	142	-50
W11-165	575,230	6,230,793	425.68	29.57	142	-50
W20-166	575,454	6,231,117	406.48	180.00	142	-45
W20-167	575,425	6,231,152	407.51	225.00	142	-43
W20-168	575,392	6,231,045	411.88	150.00	142	-44
W20-169	575,322	6,231,161	413.68	300.00	142	-45
W20-170	575,357	6,231,098	418.73	225.00	142	-46
W20-171	575,191	6,231,139	413.17	350.00	142	-44
W20-172	575,246	6,231,094	426.23	300.00	142	-45

Source: *Simpson and Hrdy (2021)*

10.1 DRILL CORE RECOVERY

Core recovery was excellent averaging 98% overall for the drill programs completed between 2008 and 2020.

10.2 DRILL HOLE LOCATION SURVEYS

Tri-City Surveyors of Saskatoon, Saskatchewan were contracted to survey drill collars on completion of the drilling programs. Since 2008, the surveys were completed as a real time GPS survey using a Trimble model SP850 modular GPS receiver serving as a base station. The base station receives data through the L2C code and L5/GLONASS carrier signals and incorporates an integrated 450 MHz radio frequency transmitter and receiver to a Trimble Zephyr model 12 handheld controller/rover unit, which captures and records the survey data. Measured accuracies for the survey work are reportedly on the order of ±1 cm for X, Y and Z co-ordinates.

10.3 DOWNHOLE SURVEYS

For historical drilling prior to 2008, downhole deviations were recorded by taking acid test readings at ~60 m intervals. Tests were also carried out at the base of casing and at the end of the drill hole.

In 2008, downhole surveys were taken with a Tropari instrument. However, the spacing of the measurements was inconsistent. Normally a reading was taken below the casing and one at the end of the drill hole. The average spacing below the top reading was ~140 m.

In 2011, a Reflex EZ-Shot instrument was used. Most drill holes had only one or two downhole surveys, the first typically at 11 m below the drill hole collar. Average spacing below the top measurement was 108 m.

In 2022, a Reflex multi-shot instrument was used to take measurements at 3 m intervals. Results from these tests showed that only 1 out of the 7 drill holes (W20-167) had significant deviation, flattening from 43 to 26.5° over 154 m and veering slightly in azimuth from 142 to 154°.

10.4 SELECTED DRILL HOLE INTERSECTIONS

Significant intercepts from the 2008 to 2020 drilling programs are listed in Table 10.2. True width is based on the orientation of the B-Zone Shear, which appears to be a controlling structure and strikes northeast with a dip of 74° to the northwest. With drill hole inclinations of 45 to 50°, true widths are typically 85% of the intercept length.

TABLE 10.2
SIGNIFICANT MINERALIZED INTERVALS IN 2008 TO 2020 DRILLING

Drill Hole ID	From (m)	To (m)	Interval (m)	True Thickness (m)	Au (g/t)
W08-146	120.25	129.50	9.25	8.09	1.123
W08-146	164.00	180.00	16.00	13.99	1.050
W08-147	83.50	95.20	11.70	10.23	1.316
W08-147	132.00	152.00	20.00	17.49	0.699
W08-147	164.00	171.50	7.50	6.56	1.132
W08-148	84.00	99.00	15.00	12.44	0.982
W08-148	123.35	137.00	13.65	11.32	0.844
W08-149	34.00	64.50	30.50	26.68	1.560

TABLE 10.2 SIGNIFICANT MINERALIZED INTERVALS IN 2008 TO 2020 DRILLING					
Drill Hole ID	**From (m)**	**To (m)**	**Interval (m)**	**True Thickness (m)**	**Au (g/t)**
W11-150	0.00	8.76	8.76	7.26	0.933
W11-150	68.45	94.47	26.02	21.57	2.074
W11-152	68.54	92.38	23.84	19.76	0.702
W11-152	98.33	107.25	8.92	7.40	0.800
W11-153	31.79	40.20	8.41	6.97	1.282
W11-153	45.84	86.86	41.02	34.01	0.989
W11-154	23.57	82.32	58.75	48.71	1.441
W11-156	53.52	60.06	6.54	5.42	1.849
W11-159	12.11	26.47	14.36	11.90	1.166
W11-160	13.82	44.82	31.00	25.70	0.945
W11-161	16.56	38.72	22.16	18.37	0.810
W11-162	7.67	31.92	24.25	20.10	0.929
W20-168	96.50	103.50	7.00	6.16	4.765
W20-169	233.50	242.00	8.50	7.43	0.439
W20-171	7.50	15.00	7.50	6.60	3.370
W20-171	22.50	30.00	7.50	6.60	0.670
W20-171	288.50	313.00	24.50	21.56	0.693
W20-171	328.70	350.00	21.30	18.74	0.652
W20-172	162.50	168.70	6.20	5.42	8.825
W20-172	180.50	186.50	6.00	5.25	0.510
W20-172	201.50	218.00	16.50	14.43	0.899
W20-172	227.00	240.50	13.50	11.81	0.622

Source: *Simpson and Hrdy (2021)*
Notes: *Cut-off grade = 0.3 g/t; minimum interval = 5 m; maximum internal dilution = 5 m.*

10.5 AUTHOR COMMENTS ON SECTION 10

All the historical drilling work and reporting was completed in a local grid system. Starting in 2008, drill programs used the UTM Zone 13 NAD83 (CSRS) CGVD28 grid system and all historical drill collar coordinates were converted to that system.

In the Author's opinion, the drilling methods and drill hole designs are suitable for construction of a Mineral Resource model for the Golden Heart Deposit.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

The following section describes sample preparation, analyses and security procedures conducted by Golden Rule Resources Ltd., ("Golden Rule") between 1982 and 1996, Golden Band between 2008 and 2011 and in 2020 at the Golden Heart Project.

11.1 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1.1 Drill Core Sampling 1982 to 1996

Historical drill core samples were generally taken within obviously mineralized or altered intervals of ~1-m or less and assayed for gold. In 1987, all drill core was split and sampled at 1-m intervals throughout the entire drilled intersections. In areas of homogeneous geology containing no alteration, structure or significant sulphide mineralization, 1-m drill core samples were taken from every 4 m of drill core. All samples collected were assayed for their gold content by Terramin Labs Ltd. of Calgary, Alberta. From 1995 to 1996, mineralized intervals were generally sampled at 1.0 m intervals or at geological boundaries. Periodically, sample intervals were adjusted where the distribution of mineralization was more complex, particularly where visible gold was present. Samples collected between this period were sent to Dunn Analytical Laboratories Inc., Saskatchewan Research Council ("SRC") and TSL Laboratories ("TSL") for fire and (or) metallic assay.

TSL (now operated by SRC) has been in continuous operation since 1981. The TSL quality system conforms to requirements of ISO/IEC Standard 17025 guidelines, and the lab participates in the Proficiency Testing program sponsored by the Canadian Certified Reference Materials Project. SRC laboratory runs a quality management system, and selected methods are ISO/IEC 17025:2005 accredited by the Standards Council of Canada. The laboratory is also compliant to ASB, Requirements and Guidance for Mineral Analysis Testing Laboratories and participates in regular inter-laboratory tests for many of its package elements. Both laboratories are independent of Golden Band and P&E.

Information regarding the accreditation of both Terramin Labs Ltd. and Dunn Analytical Laboratories Inc. is not available. Both labs were small operators at the time and no longer operating by the end of the 1990s.

The geologist responsible for logging the drill hole marked the desired sample intervals on the drill core box with a black marker and on the drill core with a china crayon to indicate the start and end of an interval with a line perpendicular to the drill core and an arrow to define the from and to of each sample interval. The geologist then assigned each marked sample interval a sample number, marked the sample number on the drill core and drill core box, and recorded the sample interval and sample number in a sample book and later in an Excel® spreadsheet. The practice prior to the 2008 drilling was to record each sample interval in an assay-sample log sheet. The marked drill core was split in half by manual drill core splitters.

11.1.2 Drill Core Sampling 2008 to 2011

All drill holes were logged and mechanically split on-site at the Weedy Lake Camp, with the drill core stored on-site in racks at the camp. Drill holes were sampled based on visible aspects of the drill core (quartz veins, sulphides, shearing), and in zones thought to correspond with gold mineralized areas in adjacent drill holes. Sample lengths were generally 1.0 to 1.5 m, with a minimum sample length of 0.3 m, maximum sample length of 2.07 m and an average sample length of 1.4 m. The marked drill core was cut in-half using a rock saw with one-half placed into a sample bag (numbered with a marker), along with a corresponding sample tag and secured with a zip tie and then placed in a shipping pail. Care was taken during the splitting of the drill core to ensure a representative split of the sample. The fines from each split sample were collected in bread pans below the splitter and included in the sample placed in the sample bag. The other half of the drill core was returned to the drill core box in its proper interval location.

Upon completion of sampling a drill hole, the entire drill hole was systematically placed into a drill core rack. Boxes of split drill core were labelled with an aluminum tag indicating the drill hole number, box number and the measured from and to in metres of the core contained in each core box.

All 2008 samples were sent for geochemical analysis to ALS Chemex ("ALS") in Vancouver, B.C., and assayed by fire assay method (method Au-AA23 or Au-AA24) on a 50 g aliquot, with either an AAS or gravimetric finish. Samples were logged in the tracking system, weighed, dried and finely crushed to better than 70% passing a 2 mm screen. A split of up to 250 g was taken and pulverized to >85% passing a 75 micron screen. Samples returning results of >10 g/t Au were subject to repeat analysis of the sample pulp. Samples containing visible gold were analysed by the screen metallic method (Au-SCR24).

Samples in 2011 were sent to SRC in Saskatoon, SK, for standard fire assay analysis. Standard fire assay results >3 g/t gold were re-assayed using the metallic screening method. Samples at SRC were sorted and dried, jaw crushed to 60% -1.7 mm, riffled from which a 250 g aliquot split was obtained, and pulverized to 90% -106 microns. A 30 g sample of rock pulp was then fire assayed followed by an ICP finish.

Samples containing gold values >3 g/t gold were submitted for metallic gold assay. The metallic assay procedure consisted of jaw crushing the drill core sample to 60% -1.7 mm, riffling the sample, splitting the sample in half, pulverizing one half of the sample to 95% -106 microns, and then screening the pulp at ±106 microns. The ±106-micron fractions are then weighed, and fire assays performed on all the 106 micron fraction and on the -106 micron fraction using two 30 g duplicates. Results for the plus and minus fractions are reported and, from this, the metallic gold assay is calculated and reported in grams/tonne as a weighted average of the -106 and 106 micron fractions. Metallic assays were performed primarily to determine the relative contribution of fine and coarse gold fractions to the overall gold content in the high-grade samples.

ALS has developed and implemented strategically designed processes and a global quality management system at each of its locations. The global quality program includes internal and external inter-laboratory test programs and regularly scheduled internal audits that meet all requirements of ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures. SRC laboratory runs a quality management system, and selected methods are ISO/IEC 17025:2005 accredited by the Standards Council of Canada. The laboratory is also compliant to ASB, Requirements and Guidance for Mineral Analysis Testing Laboratories and participates in regular inter-laboratory tests for many of its package elements. Both laboratories are independent of Golden Band and P&E.

11.1.3 Drill Core Sampling 2020

Drill core from the 2020 drill program at Golden Heart was delivered daily to the on-site drill core shacks at Jolu Process Plant by employees of the contract drilling company. Two drill core shacks and several drill core racks were established to facilitate drill core logging and splitting, which is secured by a gate all year round.

When the drill core was received at the drill core shack, the drill core logger responsible for that particular drill hole would firstly mark each drill core box with "hole number", "box number" and "from-to" with a black marker. Geotechnical information, such as recovery rate, RQD and fracture number, was then obtained, after which lithology, alteration and structure were marked on the drill core with a white china crayon. This information was input into a prepared Excel logging sheet. Significant mineralized zones were also identified by the drill core logger and marked on the drill core with an orange china crayon. The drill core logger then selected particular samples by marking sample intervals on the drill core and assigning sample numbers to each marked sample interval. Each sample number was recorded in a sample book and later in the Excel logging sheet.

The 2020 drill core logging and sampling procedures were always guided and overseen by an on-site senior geologist. Upon completion of sampling, each drill core box was moved onsite to a pallet and cross stacked. Each drill hole was stacked onto a single pallet, with a large drill core box number marked on top. Aluminium tags containing the "drill hole number", "box number" and the measured "from and to" in metres were stapled on the vertical short edge of each drill core box. After one drill hole was sampled, the remaining drill core was then transferred for archiving to the nearby drill core yard.

The marked drill core was cut in-half lengthwise by rock saw operators. During drill core splitting, rock saw operators carefully cut the drill core, ensuring that no drill core sections were missed or mis-labelled. If any unclear marks appeared on the drill core samples, the rock saw operator doubled-checked the information with the drill core logger before cutting and collection took place. One-half of the drill core was collected in a sample bag, with the sample number written on the sample bag and a corresponding sample tag inside before sealing the bag with a zip tie. A total of twenty sample bags were placed into a large rice bag before being sealed for shipment to TSL, where they were analysed by standard fire assay or metallic screening method.

Samples at TSL were sorted, dried, and then crushed in a jaw crusher to a minimum of 70% passing 1.7 mm (10 mesh). A representative split was obtained by passing the entire reject sample through a riffler. From this, a 250 g split was obtained and pulverized to minimum 95% passing 106 micron (150 mesh), from which a 30 g charge was fire assayed with an atomic absorption finish and reported in ppb utilizing a lower detection limit of 5 ppb Au. Assay values ≥1,000 ppb Au were re-assayed using FA/gravimetric finish (1 AT, short ton) and reported in g/t Au with a lower detection limit of 0.03 g/t Au.

TSL (now operated by SRC) has been in continuous operation since 1981. The TSL quality system conforms to requirements of ISO/IEC Standard 17025 guidelines, and the lab participates in the Proficiency Testing program sponsored by the Canadian Certified Reference Materials Project.

11.1.4 Sample Security

Samples collected at the Project were placed into well-marked sample bags with the corresponding sample tag placed inside the bag, securely tied with a zip tie (staples were used 1982 to 1996 drill programs). A full sample bag was then placed into a 20-litre sample pail. When the pail was full (~7 to 10 samples per pail), the samples contained in each pail and the drill hole from which the samples originated were recorded on a form. Prior to shipping of sample consignments from the field, the number of pails and contained samples were recorded. All pails were tightly secured with lids and reinforced with packing tape. A local expediter from La Ronge was used to transport the samples from the site to La Ronge, and then directly to a shipping outlet from where the samples were trucked to Saskatoon for assaying. Upon arrival, the labs notified head office of their arrival and the received samples were cross-referenced with sample numbers listed on the shipping form that accompanied the sample consignment.

11.2 BULK DENSITY DETERMINATIONS

A total of 20 composite samples, prepared from drill core within the Golden Heart Deposit, were measured for bulk density by water displacement method at SGS Canada Inc., for the Indicated Mineral Resource Estimate undertaken by Simpson and Hrdy (2021). Bulk density measurements ranged from 2.74 t/m^3 to 2.83 t/m^3, with a mean and median value of 2.79 t/m^3.

Independent verification sampling carried out in March 2013 and October 2023 by the site visit Authors, confirmed SGS's on-site measurements. A total of 24 due diligence samples were measured independently at Actlabs and AGAT, returning a mean bulk density of 2.82 t/m^3, median value of 2.82 t/m^3, minimum value of 2.70 t/m^3 and a maximum value of 2.91 t/m^3.

11.3 QUALITY ASSURANCE/QUALITY CONTROL

11.3.1 Quality Assurance/Quality Control 1982 to 1996

Prior to Golden Band's involvement, there were no Quality Assurance/Quality Control ("QA/QC") practices in place; however, from 1986 through 1996 the operator of the Project, Golden Rule, was rigorous in their check assaying, sending numerous samples from each drill program for follow-up check assaying at various laboratories. Golden Rule also used various assay techniques during the check assaying procedure, including fire assay, metallic assays, 1-assay ton fire assay, 4-assay ton fire assay, assaying of the heavy mineral separates, assaying of pulps and coarse rejects, and assaying a second split of the original drill core retained in the drill core box. A total of 970 repeat analyses were performed between 1982 and 1996, with 24% of the samples showing >50% relative difference, which is considered typical for this style of gold deposit.

11.3.2 Quality Assurance/Quality Control 2008 to 2011

Golden Band implemented a QA/QC program for the 2008 and 2011 drilling programs. Certified Reference Material ("CRMs" or "standards") and blanks were routinely inserted into the sample stream, with one CRM standard/blank inserted for every 14 drill core samples. No field duplicates were taken during the 2008 drilling program; however, 13 field duplicates were taken in the 2011 program. Pre-packaged blanks were supplied by Rocklabs Ltd., of New Zealand, and the five CRM standards supplied by CDN Resources Laboratories of Langley, B.C. The five CRMs used were CDN-GS-2B (mean value of 2.03 g/t Au), CDN-GS-10B (mean value of 8.64 g/t Au), CDN-GS-P7A (mean value of 0.77 g/t Au), CDN-GS-1P5B (mean value of 1.46 g/t Au), and CDN-GS-6P5 (mean value of 6.74 g/t Au).

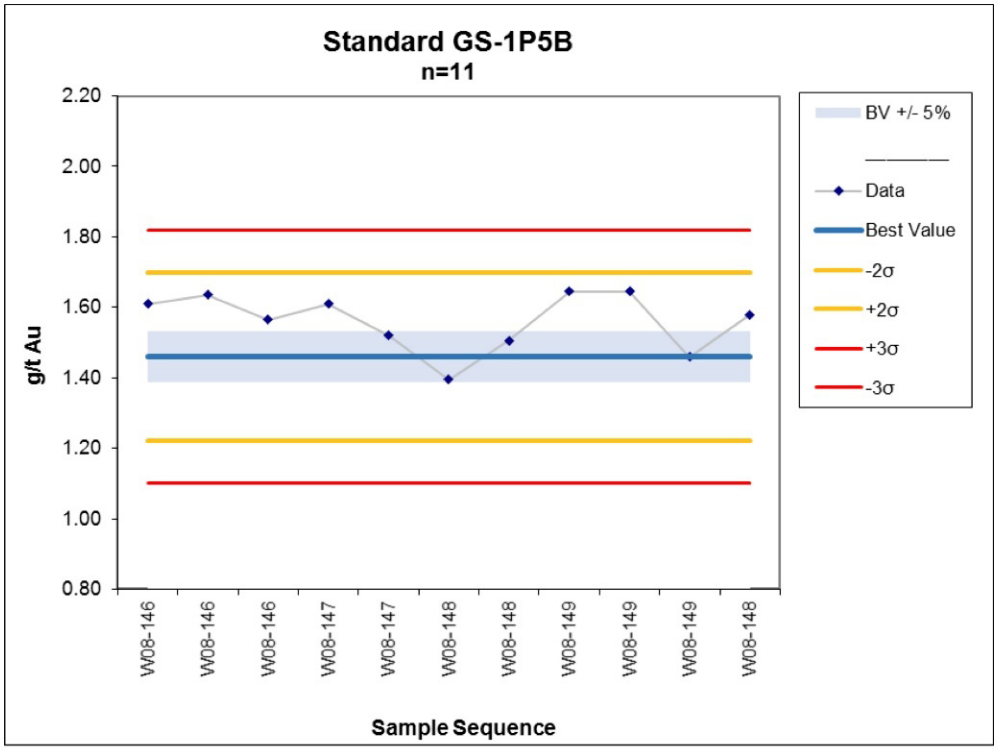
Criteria for assessing CRM performance are based as follows: data falling within ±3 standard deviations from the accepted mean value pass and data falling outside ±3 standard deviations from the accepted mean value fail. There was a total of 33 CRM standards and four blanks analysed in 2008 and the results are summarized in Table 11.1 and the performance charts for CRM standards with more than two analyses are presented in Figures 11.1 to 11.3. The Author considers CRM and blank performance to be acceptable.

TABLE 11.1
SUMMARY OF CERTIFIED REFERENCE MATERIALS USED AT GOLDEN HEART IN 2008

Certified Reference Material	Number Analysed	Certified Au Value (g/t)	Assay Results		Mean Assay	Median Assay	Deviation	
			Max Assay	Min Assay			Max Value	Min Value
Blank	4	<0.005	0.008	<0.005	<0.005	<0.005		
CDN-GS-2B	11	2.03	2.4	1.89	2.07	2.06	3.08	-1.21
CDN-GS-10B	2	8.64	9.35	8.94	9.14	9.14	1.45	0.61
CDN-GS-P7A	8	0.77	0.86	0.74	0.79	0.78	1.58	-0.50
CDN-GS-1P5B	11	1.46	1.64	1.40	1.56	1.58	1.54	-0.54
CDN-GS-6P5	1	6.74	6.52	6.52	6.52	6.52	-0.98	-0.98

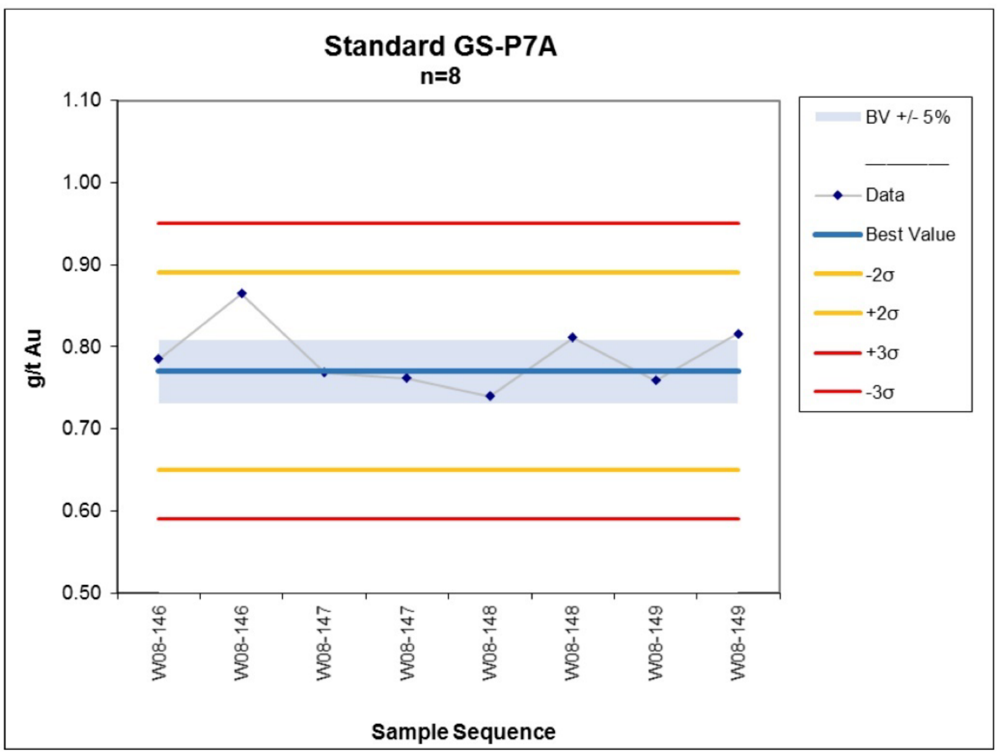
Source: *Simpson and Hrdy (2021)*

FIGURE 11.1 PERFORMANCE OF CDN-GS-1P5B AU CRM FOR 2008 DRILLING



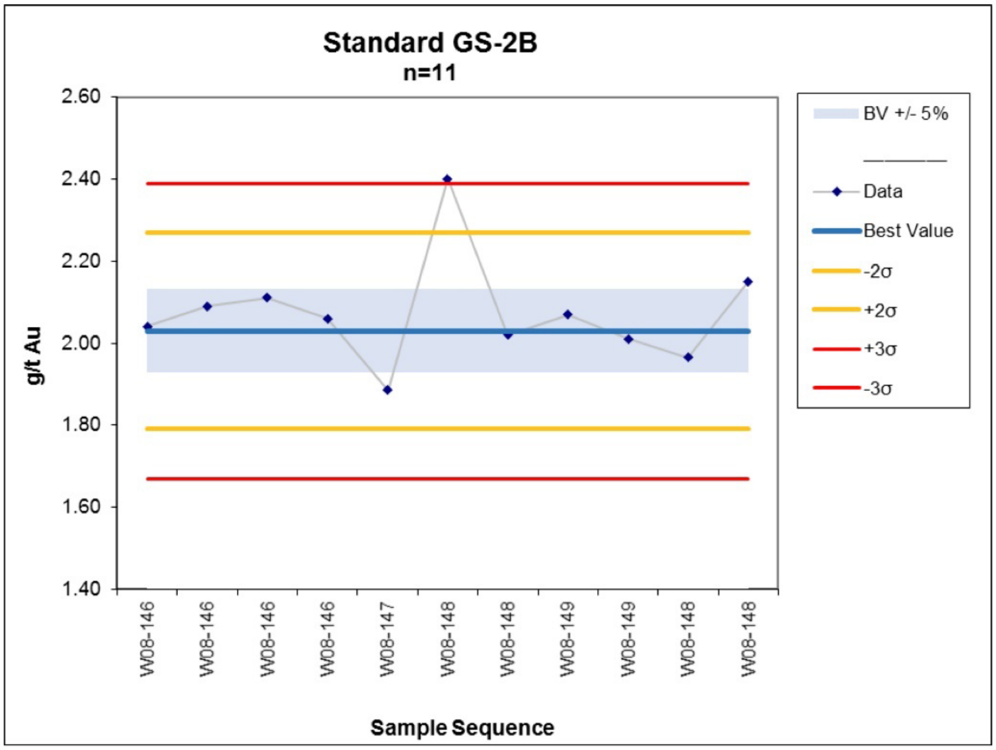
Source: *Simpson and Hrdy (2021)*

FIGURE 11.2 PERFORMANCE OF CDN-GS-P7A AU CRM FOR 2008 DRILLING



Source: *Simpson and Hrdy (2021)*

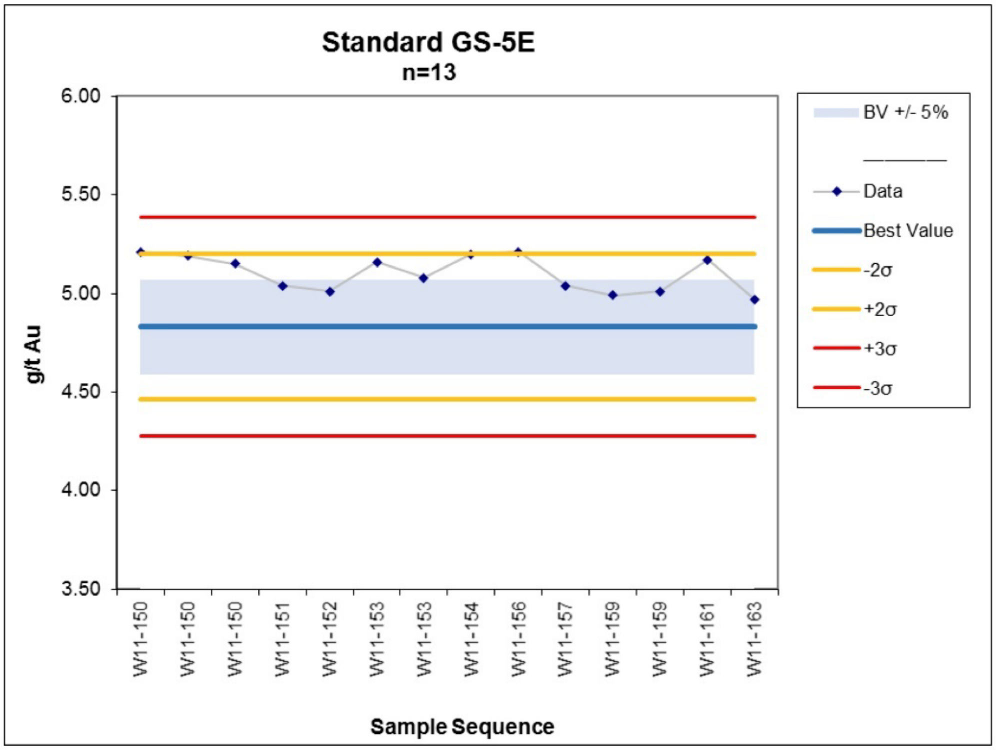
FIGURE 11.3 PERFORMANCE OF CDN-GS-2B AU CRM FOR 2008 DRILLING



Source: *Simpson and Hrdy (2021)*

During the 2011 drilling program at Golden Heart, 25 CRMs sourced from CDN Resources Laboratories, and one blank were routinely inserted in the sample sequence, at the rate of approximately one in every 14 samples. A CRM standard performance chart for the CDN-GS-5E CRM standard, the only CRM with adequate analyses, is presented in Figure 11.4 and a minor high bias is evident.

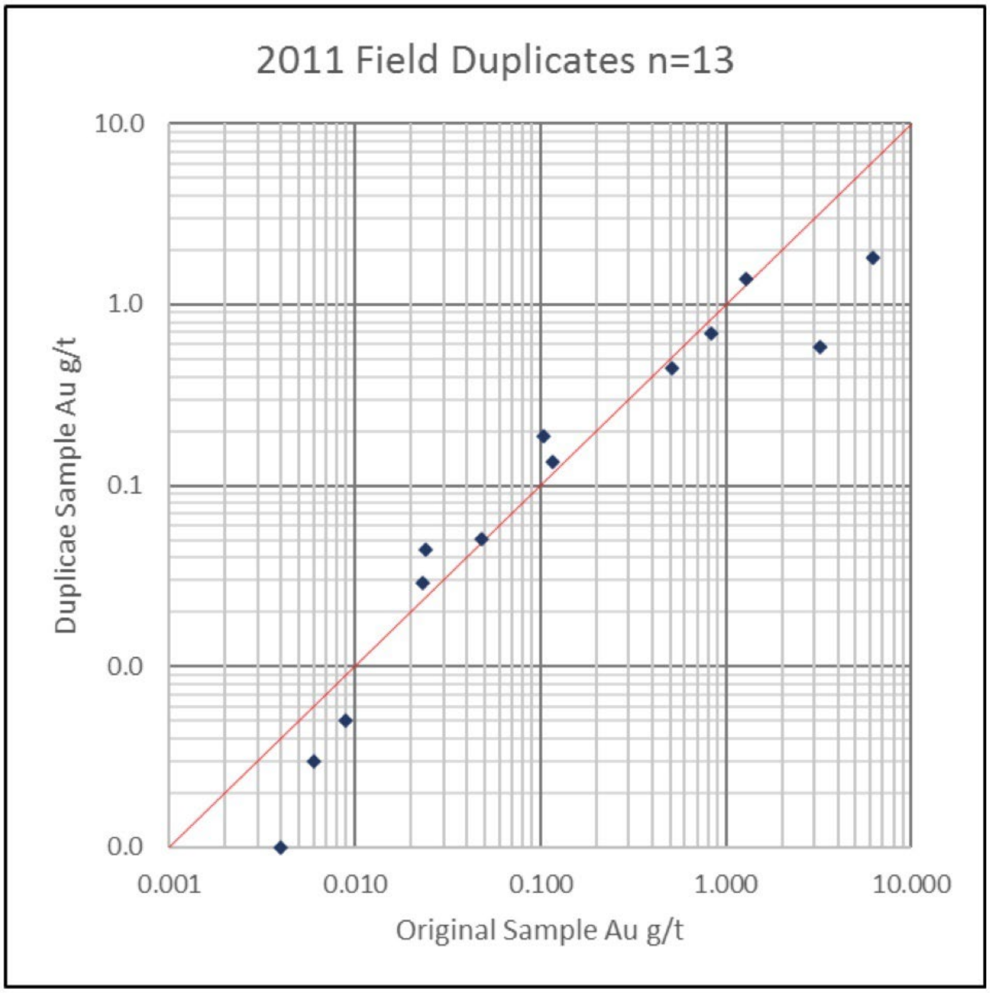
FIGURE 11.4 PERFORMANCE OF CDN-GS-2B AU CRM FOR 2011 DRILLING



Source: *Simpson and Hrdy (2021)*

During the 2011 drill program, 13 field duplicates were taken and the results plotted in Figure 11.5. The results show considerable spread attributed to a nugget effect, but no significant bias.

FIGURE 11.5 SCATTER PLOT OF 2011 FIELD DUPLICATE PAIRS



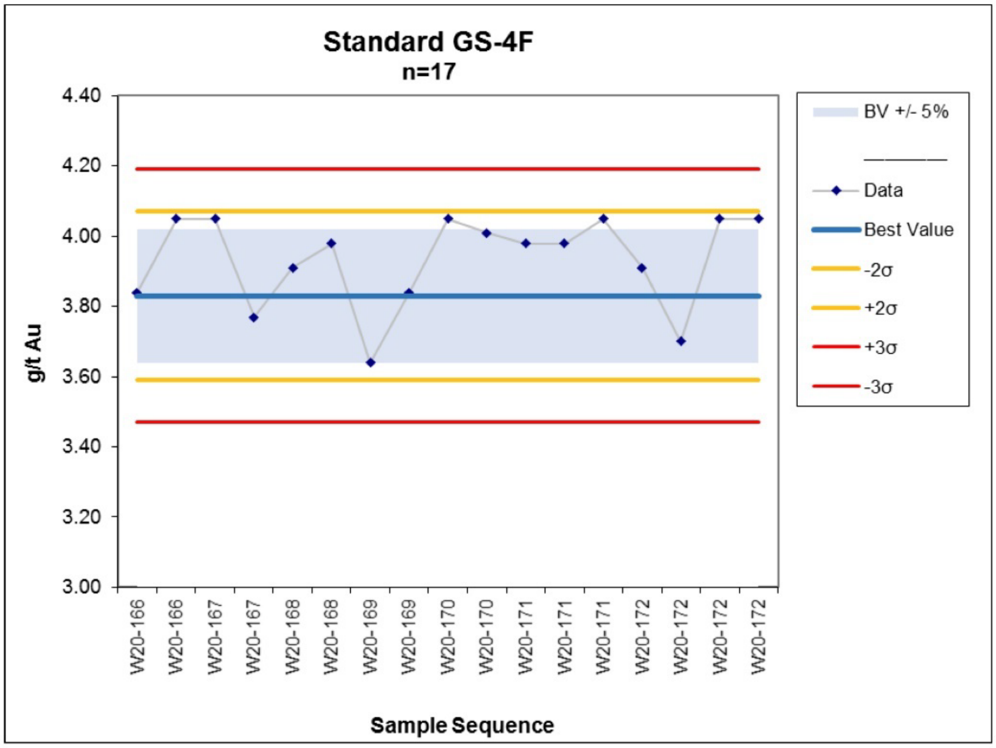
Source: *Simpson and Hrdy (2021)*

11.3.3 Quality Assurance/Quality Control 2020

The QA/QC program implemented for the 2020 drill program consisted of the routine insertion of CRMs and blanks into the drill core sample stream, at a rate of one CRM standard/blank inserted for every 18 drill core samples. No field duplicates were inserted during the 2020 drilling program. Pre-packaged blanks were supplied by Rocklabs Ltd., of New Zealand, and the three CRM standards supplied by CDN Resources Laboratories of Langley, B.C. The three CRMs used were CDN-GS-4F (mean value of 3.83 g/t Au), CDN-GS-7F (mean value of 6.90 g/t Au) and CDN-GS-9D (mean value of 9.43 g/t Au).

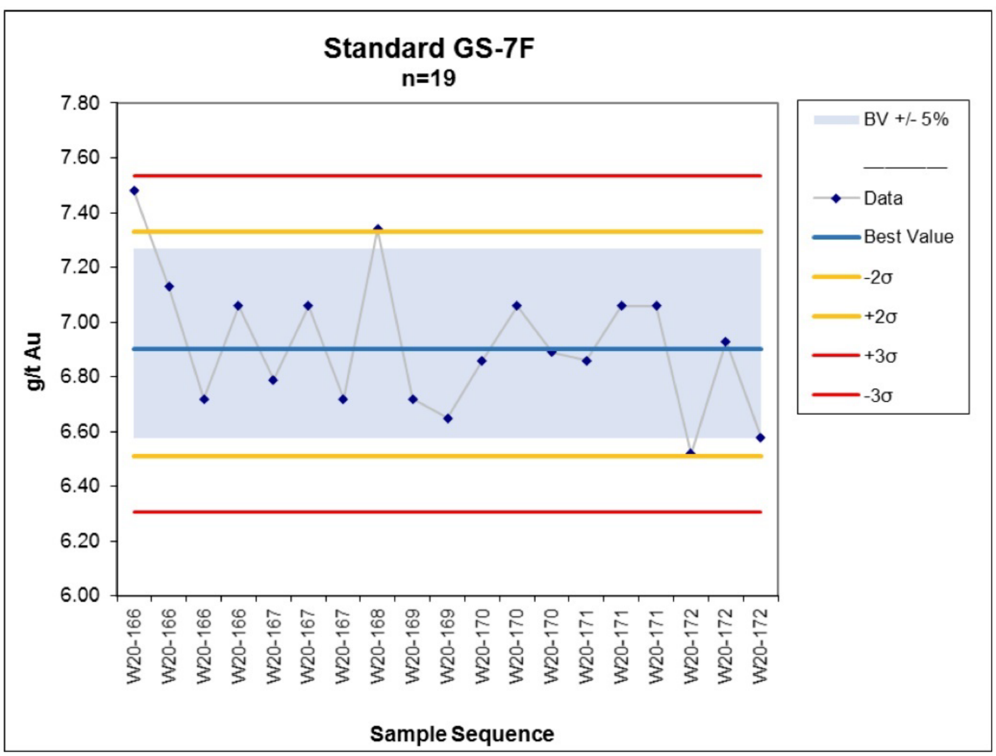
There was a total of 51 CRM standard and 51 blank results to assess. Assessment criteria for the CRMs as described in Section 11.3.2. CRM standard performance is presented in Figures 11.6 to 11.8 and all three CRM standards demonstrate acceptable performance. The blank results do not indicate that contamination is an issue with the 2020 drill core data.

FIGURE 11.6 PERFORMANCE OF CDN-GS-4F AU CRM FOR 2020 DRILLING



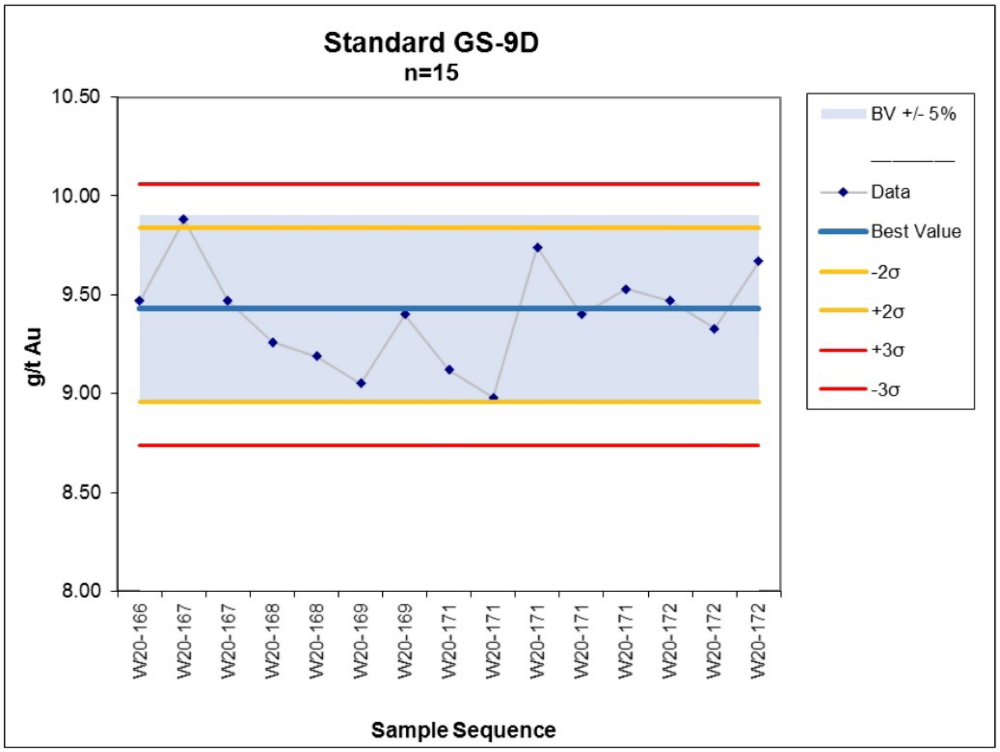
Source: *Simpson and Hrdy (2021)*

FIGURE 11.7 PERFORMANCE OF CDN-GS-7F AU CRM FOR 2020 DRILLING



Source: *Simpson and Hrdy (2021)*

FIGURE 11.8 PERFORMANCE OF CDN-GS-9D AU CRM FOR 2020 DRILLING

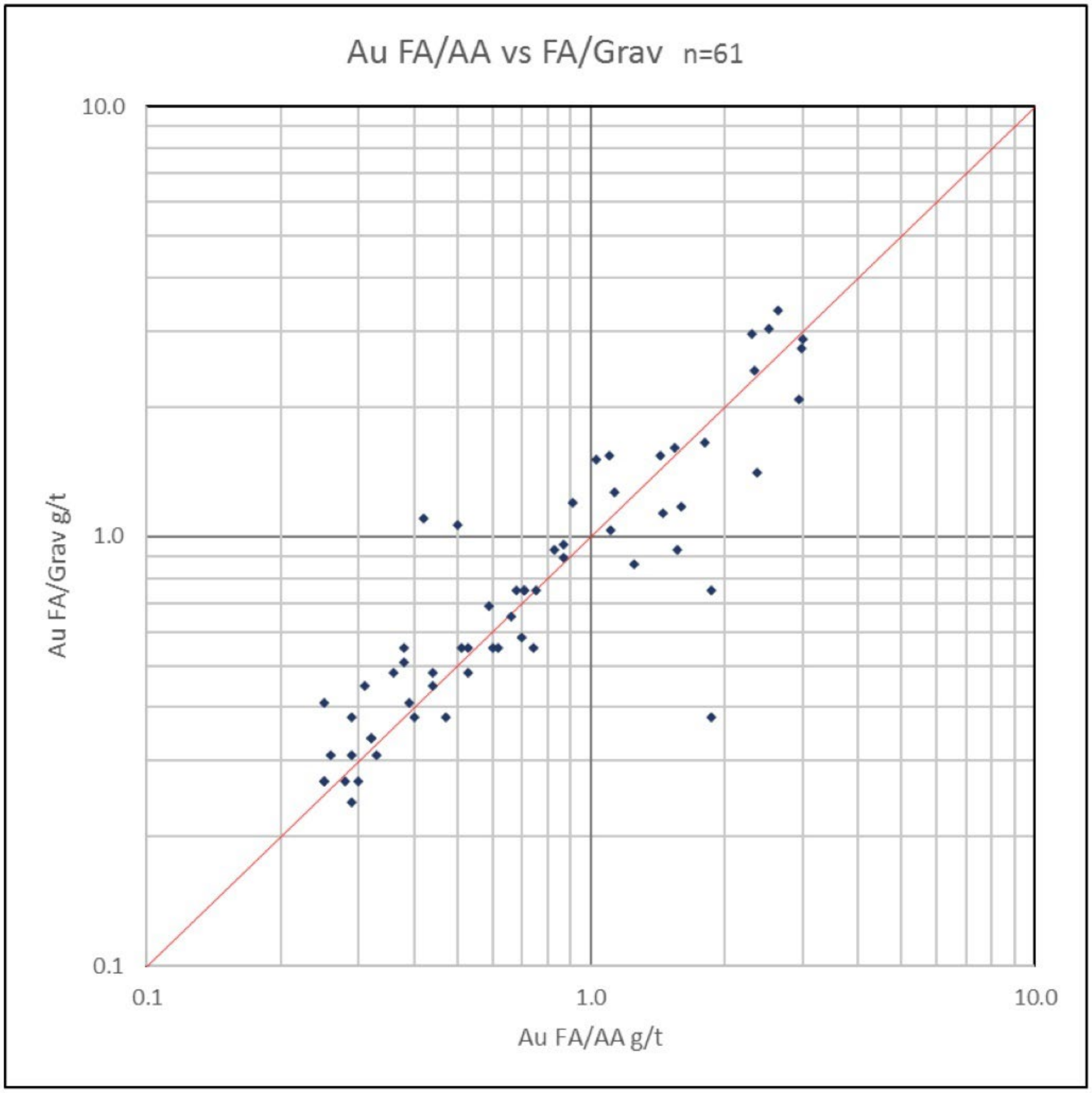


Source: *Simpson and Hrdy (2021)*

11.3.4 Comparison of the Different Analytical Methods

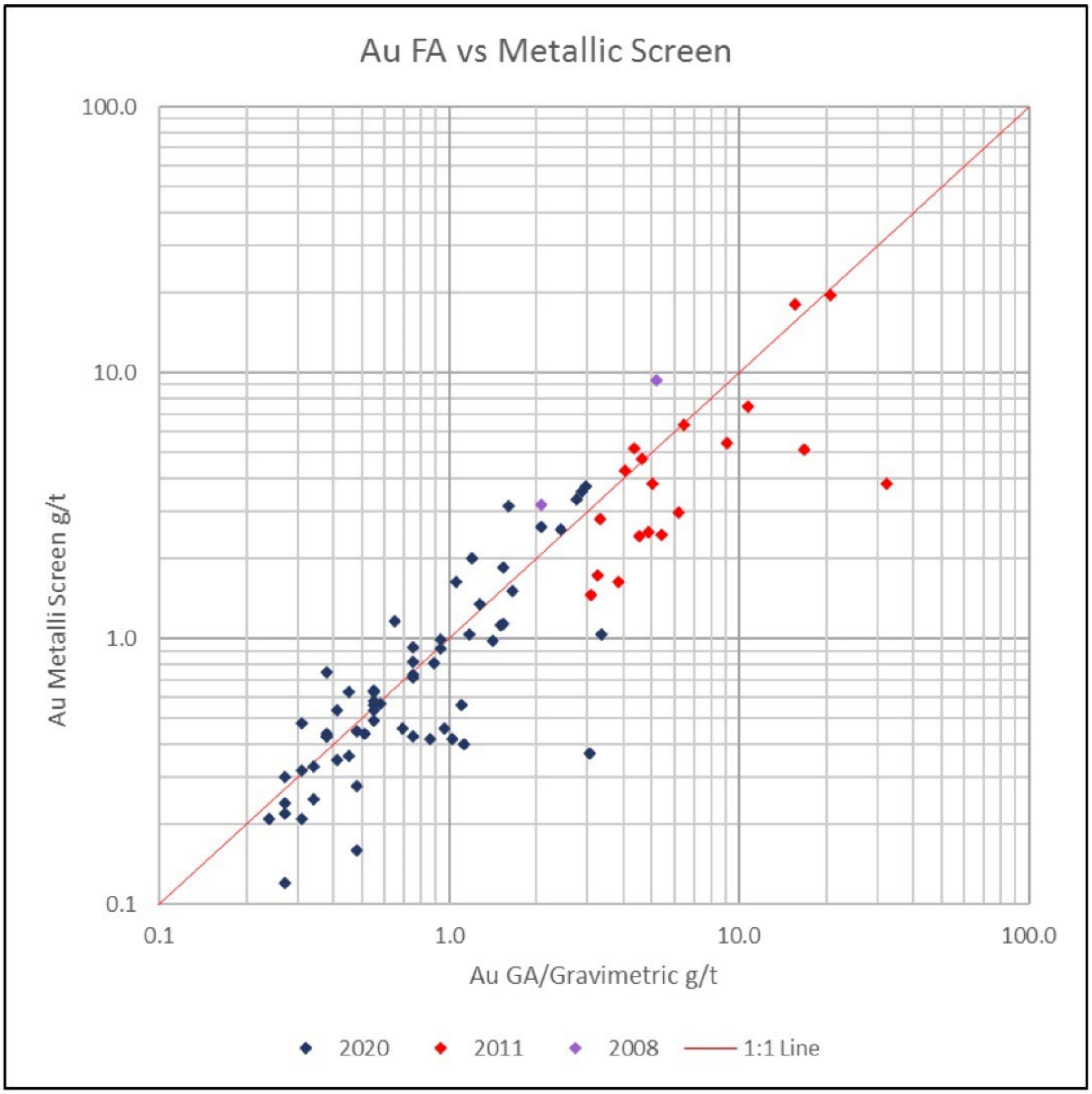
Comparison of fire assays using an AA finish with those using a Gravimetric finish show variation consistent with a nugget effect, but no significant bias (Figure 11.9). Comparisons of standard Fire Assay to Fire Assay using the metallic screening method are presented in Figure 11.10. No significant bias is evident in the 2020 data and only two data points are indicated for the 2008 data. The data from 2011 shows a minor high bias in the gravimetric results compared to the metallic screen results. The 2011 results tend to fall within a higher-grade population than the 2020 samples.

FIGURE 11.9 COMPARISON OF AU FA/AA VERSUS FA/GRAV



Source: *Simpson and Hrdy (2021)*

FIGURE 11.10 COMPARISON OF AU FA VERSUS METALLIC SCREEN ASSAY



Source: *Simpson and Hrdy (2021)*

11.4 CONCLUSION

The Author has reviewed the historical sample preparation, analyses and security procedures and is of the opinion that the 2008 and 2011 Golden Band data are suitable for use in the current Mineral Resource Estimate. Drill core sampling carried out by Golden Rule between 1982 and 1996 however, did not undergo the same QA/QC scrutiny, and there is less confidence in this data as a result. There was a great deal of check assaying undertaken during this period of drilling and the results are in-line with expectations for this style of gold deposit. It is also evident that Golden Rule used methodical and industry-standard sampling procedures for that time and the Author considers it likely that the data are of good quality.

A thorough QA/QC program was implemented at the Project in 2020 and examination of the available QA/QC results for sampling undertaken during 2020 indicates no material issues with accuracy or contamination in the data.

For future drill programs at Golden Heart, the Author recommends implementation of the following protocols:

- Initiate field and coarse reject duplicate sampling, ensuring a representative range of grades is sampled; and
- Commence submitting a minimum of 5% of future samples analyzed at the primary laboratory to a reputable secondary laboratory, ensuring that the appropriate QC samples are inserted into the sample stream to be sent for check analyses, to aid in identifying potential issues with a particular lab.

In the opinion of the Author, the sample preparation, security and analytical procedures for the Golden Heart Project were adequate, and the data are of good quality and satisfactory for use in the current Mineral Resource Estimate.

12.0 DATA VERIFICATION

12.1 2024 P&E DATA VERIFICATION

12.1.1 July 2024 Data Verification

The Authors conducted verification of the Golden Heart Deposit drill hole assay data for gold by comparison of the database entries with assay certificates supplied directly to the Authors by Golden Band (supplied in Portable Document Format (PDF) file format).

Assay data from the 2020 drill program were verified for the Golden Heart Project by the Authors. Approximately 13% of the overall data (90 out of 680 samples) were verified for gold and no errors were encountered in the data during the verification process.

Assay data from the 1987 to 2008 programs were also verified for the Golden Heart Project by the Authors, by comparison of the database entries with assay certificates appended to publicly available assessment reports. Approximately 15% of the overall data were verified for gold. Very few minor errors were encountered in the data during the verification process, which are not considered material to the current Mineral Resource Estimate.

The Authors randomly selected 19 of the 1987 to 2008 drill holes in the database (representing ~20% of all data) for checking against the original "From-To" intervals, lithology descriptions and down-hole deviation measurements in the original drill logs. No material errors were observed in the data.

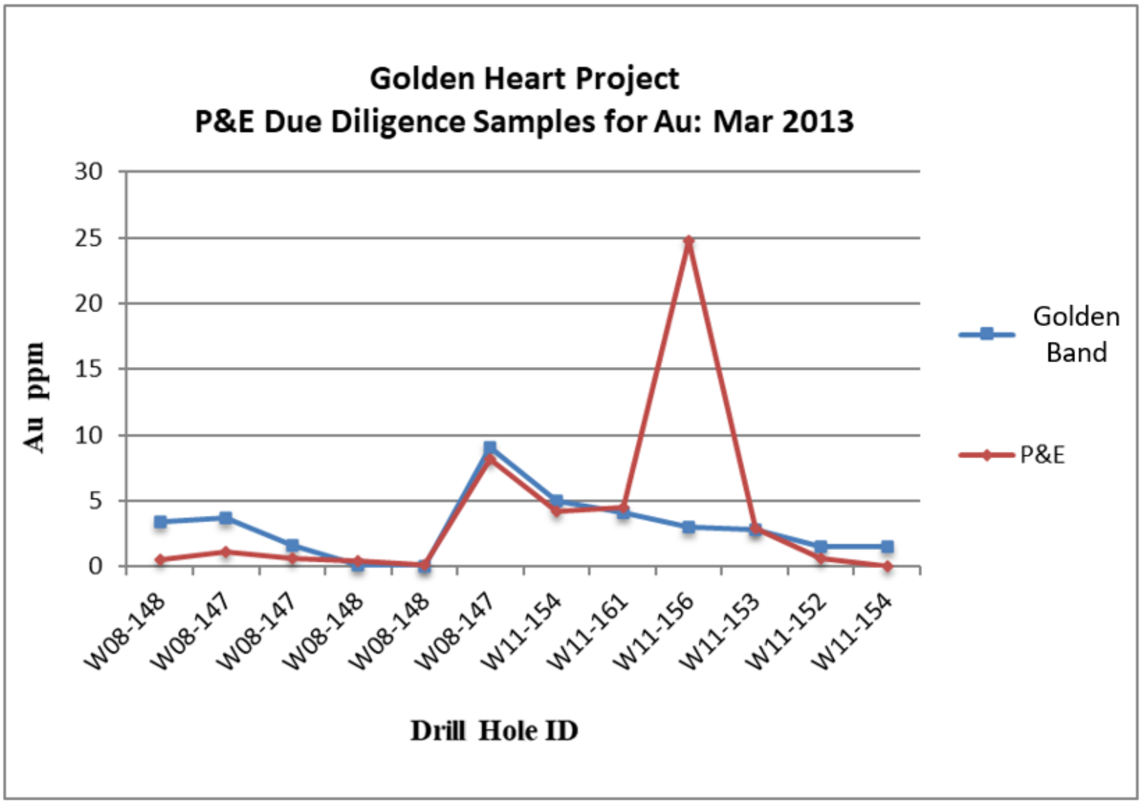
12.1.2 Drill Hole Data Validation

The Authors also validated the Mineral Resource database in GEMS™ by checking for inconsistencies in analytical units, duplicate entries, interval, length, or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate drill hole collar locations, survey and missing interval and coordinate fields. A few errors were identified and corrected in the database.

12.2 P&E SITE VISIT AND INDEPENDENT SAMPLING

The Golden Heart Deposit was visited by Mr. Eugene Puritch, P.Eng., of P&E, from March 25 to 26, 2013, for the purpose of completing a site visit and due diligence sampling. During the site visit, Mr. Puritch collected 12 samples from seven diamond drill holes drilled in 2008 and 2011. A range of high-, medium- and low-grade samples were selected from the stored drill core. Samples were collected by taking a quarter drill core, with the other quarter core remaining in the drill core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and sent by courier to AGAT Laboratories in Mississauga, ON for analysis. Gold was analysed using fire assay on a 30 g aliquot with an AAS finish. Samples yielding values >10 g/t Au were re-assayed and quantitatively determined using the gravimetric method. Bulk density determinations were also measured on all samples. AGAT is independent of P&E and Golden Band and has developed and implemented at each of its locations a Quality Management System ("QMS") designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards. AGAT maintains ISO registrations and accreditations (ISO 9001:2015 and ISO/IEC 17025:2017). Results of the Golden Heart Deposit site visit verification samples for gold are presented in Figure 12.1.

FIGURE 12.1 RESULTS OF THE MARCH 2013 AU VERIFICATION SAMPLES



Source: *This Study*

The Golden Heart Project was visited more recently by Mr. Brian Ray, P.Geo., of P&E, on October 24, 2023, for the purpose of completing a site visit that included:

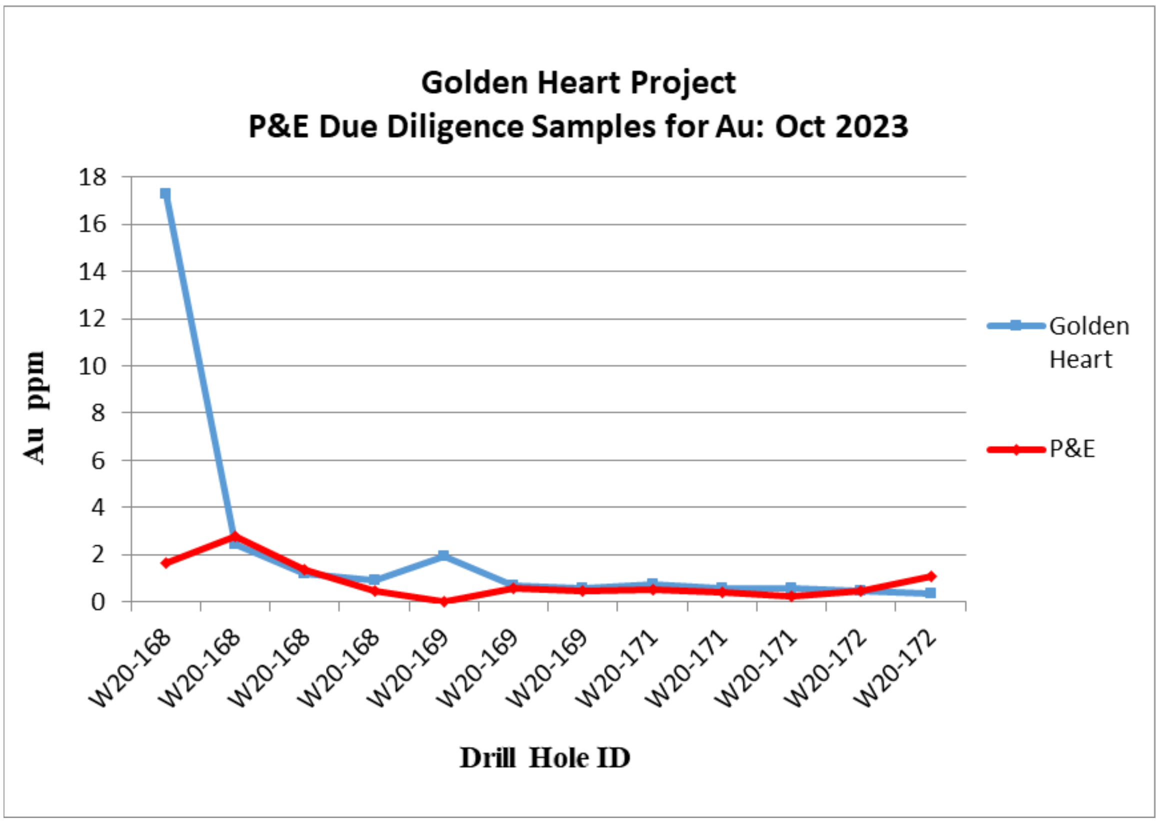
- Visiting 2020 diamond drilling sites;
- Inspection of on-site drill core logging and drill core storage facilities;
- GPS location verifications;
- Inspection of the drill core storage facility;
- Review of exploration procedures and protocols; and
- Verification sampling.

Mr. Ray collected 12 verification samples from four diamond drill holes completed in 2020. Samples were collected by taking the remaining half drill core, with the remaining pulp material of each sample returned to the Company. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag. Mr. Ray couriered the samples to Actlabs, a certified laboratory in Ancaster, Ontario for analysis.

Samples at Actlabs were analysed for gold by fire assay with AA finish and samples returning grades of >5,000 ppb Au were further analysed by fire assay with gravimetric finish. Bulk density determinations were measured on all drill core samples by water immersion.

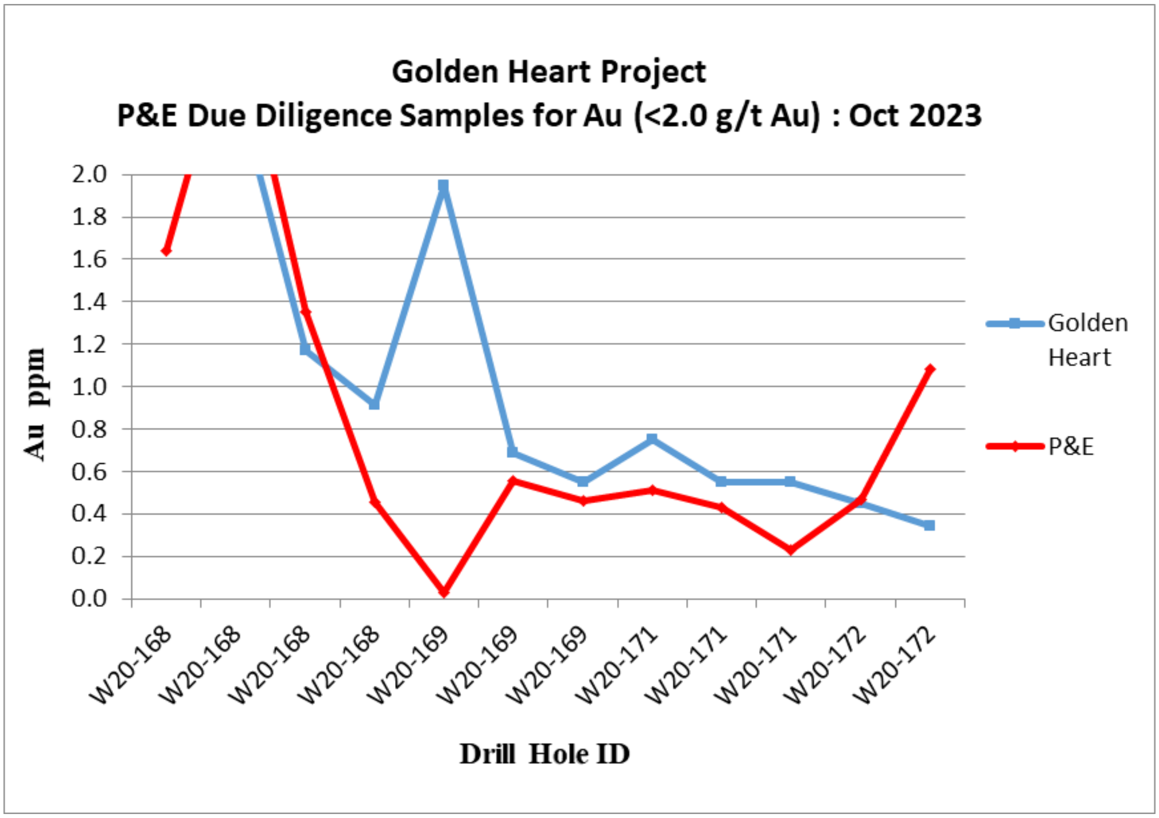
Actlabs is independent of Matrixset and P&E and operates a Quality System that is accredited to international quality standards through ISO/IEC 17025:2017 and ISO 9001:2015. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Results of the 2023 Golden Heart site visit verification samples are presented in Figures 12.2 and 12.3.

FIGURE 12.2 RESULTS OF THE OCTOBER 2023 AU VERIFICATION SAMPLES (ALL RESULTS)



Source: *This Study*

FIGURE 12.3 RESULTS OF THE OCTOBER 2023 AU VERIFICATION SAMPLES (<2.0 G/T AU)



Source: *This Study*

12.3 ADEQUACY OF DATA

Verification of the Golden Heart Project data, used for the current Mineral Resource Estimate, was undertaken by the Authors, and included multiple site visits, due diligence sampling, verification of drilling assay data from electronic assay files and assessment of the available QA/QC data for the historical and recent drilling data. Further verification of "From-To" intervals, lithology descriptions and down-hole deviation measurements was also undertaken by comparison against pdfs of the original assessment reports, hardcopy drill logs, plans and sections. Verification of the historical data collected by Golden Rule and Golden Band reveals no current material issues with the data, and the Authors consider that there is satisfactory correlation between assay values in Golden Band's database and the independent verification samples collected and analyzed at AGAT and Actlabs. There is evidence of a nugget effect within the verification samples, as expected for this type of mineralization, and correlation between the two sets of data is considered acceptable.

The Authors are satisfied that sufficient verification of both the historical and recent drill hole data has been undertaken and that the supplied data are of satisfactory quality and suitable for use in the current Mineral Resource Estimate for the Golden Heart Project.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 GENERAL – GOLDEN HEART RESOURCE

The Golden Heart Mineral Resource is a moderate grade gold deposit that has been mined to a limited extent in the past, with a moderate amount of mineralized material transported 70 km southwards to the Jolu Process Plant, from November 2013 to January 2014. Golden Heart mineralized material was processed by crushing, grinding, gravity separation and cyanide leaching of gravity tails.

The Golden Heart Mineral Resource Estimate consists of 9.8 Mt grading 1.60 g/t Au. Key contents of a composite Golden Heart sample tested by SGS in 2006 are shown in Table 13.1.

TABLE 13.1
GOLDEN HEART COMPOSITE SAMPLE ANALYSES

Element	Assay	Element	Assay
Au	3.79 g/t	Fe	5.70%
S^{2-}	2.55%	Ni	39 g/t
Ag	<5 g/t	Pb	<40 g/t
As	<30 g/t	Se	<30 g/t
Cd	<2 g/t	Y	14 g/t
Co	37 g/t	Zn	54 g/t
Cu	72 g/t	S.G.	3.04

Source: *SGS (2006)*

13.2 MINERALOGY

A "Rapid Mineral Scan" was performed on a Golden Heart sample, cut from the composite and ground to 80% minus 100-120 µm. Quartz was shown to be the most abundant mineral with smaller amounts of feldspar, mica and additional silicate minerals. Minor and trace amounts of pyrite, pyrrhotite and gold were identified. Gold was identified as fine-grained particles attached to opaque minerals.

13.3 METALLURGICAL TEST WORK AND RESULTS

13.3.1 Comminution Testing

The Bond Ball Mill Work Index ("BMWI") for the Golden Heart composite sample was determined by SGS to be 13.1 kWh per tonne ("kWh/t") – an average value when compared to historical values in an extensive SGS grindability database.

13.3.2 Gravity Concentration Testing

Gravity concentration tests using a laboratory-scale Nelson concentrator (combined with a Mozley mineral separator) was successful in recovering 42 to 50% of the gold in concentrates assaying between 2,900 g/t and 10,900 g/t Au. The principal variance related to gold concentration was a grind to a K_{80} of 89 and 55 µm, respectively. For an approximate process feed rate of 2,000 tpd, ~360 kg per day of gravity concentrate would be produced.

13.3.4 Flotation Concentration of Gold from Gravity Tails

The rougher flotation recovery of gold from gravity tails resulted in 83% of the gold in 16% of the feed mass. The gold concentration was moderate at 10 g/t from a 1.8 g/t Au gravity tails feed. Total gravity plus flotation recovery was 90.1%, also a moderate value.

The moderate concentrate grade and recovery suggests that further tests would be required to produce a saleable flotation concentrate. A potential strategy might be the use of a vigorous rougher flotation recipe followed by concentrate regrind and cleaner flotation to produce a concentrate containing several ounces per tonne of gold.

13.3.5 Mineralized Material Leaching and Gravity Tails Leaching

Whole mineralized material cyanidation of a finely ground Golden Heart sample resulted in another moderate result – 87.6% extraction. Sodium cyanide consumption was slightly elevated at 1.05 kg/t. Oxygen consumption was also elevated suggesting a full-scale process would require oxygen injection. The presence of pyrrhotite was identified as the reason for the high cyanide and oxygen consumption.

Leaching of a finely ground gravity tails sample, following an extended oxidation of the pyrrhotite by oxygen sparging resulted in a gold extraction slightly > 90%. Combined with gravity separation, the total "recovery" (actually extraction) exceeded 95%. Including an estimated soluble loss of 2% in a full-scale process, the actual total recovery would be ~93%.

13.4 PROCESSED TONNAGE AND RESULTS

13.4.1 Tonnage Processed

Golden Band reported in April 2014, that 25,254 t of mineralized material from Golden Heart had been processed at the Jolu Process Plant between the beginning of November 2013 until January 2014. Golden Heart material was co-processed with Roy Lloyd material (Bingo Project) at a ratio of 2:1. The daily process rate was consistently <500 tpd. The Golden Heart/Roy Lloyd feed grade was 4 to 5 g/t Au.

13.4.2 Metallurgical Results

Several daily Jolu Process Plant reports were available, which provide an indication of process plant performance. During the 3-month period of Golden Heart processing, the average metallurgical gold recovery was 90.3%. Solution loss and tailings gold loss were each 5%, in particular for solution loss, a significantly high value.

13.5 PREDICTED RECOVERIES AND OPTIONS

13.5.1 Recovery Indicated by Available Information

Gold recovery can be estimated based on SGS laboratory tests and historical Jolu Process Plant results. Laboratory test results were somewhat erratic, due to an alleged coarse gold nugget effect. The indication of 93% recovery for a combined gravity-leaching process on a composite sample assaying twice the current Mineral Resource gold grade suggests recovery would be <93%.

Based on Jolu Process Plant results for 2013-2014, and assuming a new processing configuration similar to the historical one, the overall gold recovery could be estimated, including consideration for soluble loss, to be at least 90%.

13.5.2 Golden Heart Processing Options

Processing at the Jolu Plant is a possibility, but its capacity is inconsistent with the size of the Golden Heart Mineral Resource. At an approximate capacity of 500 tpd, the Golden Heart Mine open would feed the process plant for >50 years. A quadruple expansion of the Jolu facility would reduce the processing to fourteen years.

Subject to mineralogical studies and tests on a significant amount of a representative sample, mineralized material sorting could be a mine-site preconcentration option. For an optimistic mineralized material sorting result, up to 40% of the Mineral Resource mass could be rejected as low-content gold waste rock, and the tonnage to be hauled to Jolu or to a new processing facility would be ~1,200 tpd over 14 years.

Options for processing ROM Golden Heart mineralized material include:

- Transporting by truck from mine to Jolu – processing at 500 tpd – 56 years of operation. Not practical;
- Transport and processing at an expanded Jolu at 2,000 tpd – 14 years of operation. Also not practical;
- New processing facilities at or near the Golden Heart Mine. Production of a gravity concentrate at the Golden Heart Mine site, processing the gravity concentrate in an intense leaching circuit at Golden Heart or at Jolu if it happens to be operating. Options for the gravity tails at the Golden Heart Mine site include:

- Conventional cyanide leaching at the Golden Heart Mine site,
- Heap leaching of agglomerated tails at the Golden Heart Mine site, and
- Production of a gold-sulphide concentrate for sale. Disposal of tailings near the Golden Heart Mine.

In the absence of detailed engineering and cost studies, it appears that the development of a new gravity-leach processing facility near the Golden Heart Mine could be the favourable option. The consideration of either heap leaching or gold-sulphide concentrate production would require extensive test confirmation.

13.6 RECOMMENDED ADDITIONAL TESTING

A gold deportment study would provide guidance concerning the potential production of two gold concentrates (gravity and float concentrate) for sale. Although not previously confirmed, it is possible that there is a close association of fine gold with iron sulphides, which would indicate that flotation concentration of fine gold from gravity tails could produce a marketable gold concentrate. Additional GRG (gravity recoverable gold) tests, flotation concentration of residual gold with regrinding of a flotation concentrate should be undertaken. Confirmation of the satisfactory recovery performance of a gravity-leach combination on Mineral Resource grade mineralized material should be considered.

Some disadvantages of on- or near-mine site processing include the need for extensive new facilities and infrastructure and challenges in selecting and acquiring approval for a new tailings management facility.

A gold deportment study could also provide guidance to consideration for process alterations, including mineralized material sorting – a technique that could improve grade of material processed and reduce processing costs. A credible sorting test would require well over 100 kg of sample crushed to -50 mm and screened to three or more coarse fractions.

13.7 ENVIRONMENTAL TESTING

Following the selection of a preferred processing option for Golden Heart, a range of environmental tests would be needed to provide management strategies for tailings and effluents storage. The historical Jolu strategy for management of tailings and effluents storage may not be consistent with the large Mineral Resource tonnage at Golden Heart. Reliance on natural degradation of cyanide in a tailings facility could not be expected to be adequate.

14.0 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The purpose of this Report section is to update Mineral Resource Estimate on the Golden Heart Deposit.

The Mineral Resource Estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and is estimated in conformity with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines" (November 2019) and reported using the definitions set out in the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves. Mineral Resources that are not converted to Mineral Reserves do not have demonstrated economic viability. Confidence in the estimate of Inferred Mineral Resource is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral Resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource Estimates.

This Mineral Resource Estimate, based on information and data supplied by Golden Band, was undertaken by Qualified Persons Yungang Wu, P.Geo. and Eugene Puritch, P.Eng., FEC, CET of P&E Mining Consultants Inc. of Brampton, Ontario. All Qualified Persons are independent of Golden Band as defined in NI 43-101.

The effective date of this Mineral Resource Estimate is June 7, 2024.

14.2 PREVIOUS MINERAL RESOURCE ESTIMATE

A previous Mineral Resource Estimate for the Golden Heart Deposit with an effective date February 1, 2021, is presented in Table 14.1. This previous Mineral Resource Estimate is superseded by the Mineral Resource Estimate reported herein.

TABLE 14.1
GOLDEN HEART MINERAL RESOURCE ESTIMATE
AT 0.30 G/T AU CUT-OFF
Effective February 1, 2021

Classification	Tonnes (k)	Au (g/t)	Au (koz)
Indicated	16,126	1.05	544.4
Inferred	5,566	0.75	134

14.3 DATABASE

All the drill hole data were provided by Golden Band in the form of Access data files. The GEOVIA GEMS™ V6.8.4 database compiled by the Authors for this Mineral Resource Estimate consisted of 174 surface drill holes totalling 31,432 m, of which 159 drill holes totalling 29,507 m intersected the mineralized wireframes and were utilized for this Mineral Resource Estimate. A drill hole plan is shown in Appendix A.

All drill hole survey and assay values are expressed in metric units and the grid coordinates are projected in the UTM NAD 83 Zone 13 UTM system.

The database for Golden Heart contains 18,716 Au assays with Au >0.005 g/t. The basic gold raw assay statistics are presented in Table 14.2.

TABLE 14.2
DRILL HOLE AU ASSAY DATABASE STATISTICS

Variable	Au	Length
Number of Samples	18,716	18,716
Minimum Value*	0.006	0.10
Maximum Value*	932.50	4.70
Mean*	1.08	0.95
Median*	0.15	1.00
Variance	114.22	0.07
Standard Deviation	10.69	0.26
Coefficient of Variation	9.91	0.28
Skewness	54.66	0.32
Kurtosis	3,992.92	9.08

Note: **Au units are g/t and length units are metres.*

14.4 DATA VERIFICATION

Assay database verification was undertaken against laboratory certificates that were obtained independently from SRC in Saskatchewan. The Authors validated the Mineral Resource database in GEMS™ by checking for inconsistencies in analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, survey and missing interval and coordinate fields. A few errors were identified and corrected in the database. The Authors are of the opinion that the supplied database is suitable for Mineral Resource estimation.

14.5 DOMAIN INTERPRETATION

Eleven mineralized domains were created based on geology and grade boundary interpretation from visual inspection of drill hole cross-sections. These domains were created with computer screen digitizing on 12.5 m spaced vertical cross-sections. The domain outlines were influenced by the selection of mineralized material ≥0.30 g/t Au that demonstrated lithological and structural zonal continuity along strike and down-dip. In some cases, mineralization <0.30 g/t Au was included for the purpose of maintaining zonal continuity and minimum width. The minimum constrained drill core length for interpretation was approximately 2.0 m. On each cross-section, polyline interpretations were digitized from drill hole to drill hole, but typically were not extended more than 100 m down dip into untested territory. Interpreted polylines from each cross-section were "wireframed" into 3-D domains. The resulting domains were utilized for statistical analysis, rock coding, grade interpolation and Mineral Resource estimation. The 3-D domain wireframes are presented in Appendix B.

A topographic surface wireframe integrated with historical open pit was provided by Golden Band and the mineralized domain wireframes were truncated to the topographic surface and overburden surface created with drill core logging information. The open pit mined volume was depleted from the mineralized domain wireframes.

14.6 ROCK CODE DETERMINATION

A unique rock code was assigned to each mineralized domain in the Mineral Resource model as presented in Table 14.3.

TABLE 14.3
ROCK CODE AND VOLUME USED FOR THE MINERAL RESOURCE ESTIMATE

Domains	Rock Codes	Volume (m^3)
GH-A	100	41,859
GH-B	200	456,524
GH-C	300	461,227
GH-D	400	3,369,136
GH-E	500	1,225,789
GH-E2	550	183,824
GH-F	600	65,932
GH-G	700	54,435
GH-H	800	23,958
GH-I	900	10,120
GH-J	1000	237,433

14.7 MINERALIZED DOMAIN CONSTRAINED ASSAYS

Mineralized domain constrained assays were back coded in the assay database with rock codes that were derived from intersections of the mineralization solids and drill holes. The basic statistics of mineralized domain constrained assays are presented in Table 14.4.

TABLE 14.4
BASIC MINERALIZED DOMAIN CONSTRAINED ASSAY STATISTICS

Variable	Au (g/t)	Assay Length (m)
Number of Samples	9,309	9,309
Minimum Value*	0.00	0.10
Maximum Value*	932.50	3.50
Mean*	2.00	0.90
Median*	0.52	1.00
Variance	227.30	0.07
Standard Deviation	15.08	0.27
Coefficient of Variation	7.53	0.29
Skewness	38.96	-0.01
Kurtosis	2,017.70	5.61

Note: **Au units are g/t and length units are metres.*

14.8 COMPOSITING

In order to regularize the assay sampling intervals for grade interpolation, a 1.0 m compositing length was selected for the drill hole intervals that fell within the constraints of the above-noted Mineral Resource mineralized domains. The composites were calculated for gold over 1.0 m lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted on exit from the footwall of the 3-D mineralized domain constraint. A nominal waste value of 0.001 g/t Au was assigned to the missing assay intervals. If the last composite interval was <0.5 m, the composite length was adjusted to make all composite intervals of the domain intercept of equal length. This process would not introduce any short sample bias in the grade interpolation process. The constrained composite data were extracted to a point area file for grade capping analysis. The composite statistics are summarized in Table 14.5.

TABLE 14.5
BASIC STATISTICS OF COMPOSITES AND CAPPED COMPOSITES

Variable	Au_Comp**	Au_Cap**	Composite Length
Number of Samples	8,794	8,794	8,794
Minimum Value *	0.001	0.001	0.75
Maximum Value *	242.00	45.00	1.25

TABLE 14.5 BASIC STATISTICS OF COMPOSITES AND CAPPED COMPOSITES			
Variable	**Au_Comp****	**Au_Cap****	**Composite Length**
Mean *	1.53	1.35	1.00
Median *	0.52	0.52	1.00
Variance	42.80	11.15	0.00
Standard Deviation	6.54	3.34	0.02
Coefficient of Variation	4.27	2.47	0.02
Skewness	21.08	8.04	-0.81
Kurtosis	598.33	86.27	31.43

Notes: ** Au units are g/t and length units are m.*
*** Au_Comp: gold composites; Au_Cap: gold-capped composites.*

14.9 GRADE CAPPING

Au grade capping was performed on the 1.0 m composite values in the database within the mineralized constraining domains to control the possible bias resulting from erratic high-grade composite values in the database. Log-normal histograms and log-probability plots for gold composites were generated for each mineralized domain. Selected histograms and log-probability plots are presented in Appendix C. The capped composite statistics are summarized in Table 14.5 (see above) and the Au grade capping values are shown in Table 14.6. The capped composites were utilized to develop variograms and for block model grade interpolation.

14.10 VARIOGRAPHY

A variography analysis was attempted using the gold-capped composites within each individual mineralized domain as a guide to determining a grade interpolation search distance and ellipse orientation strategy. Selected variograms are presented in Appendix D.

Continuity ellipses based on the observed ranges were subsequently generated and utilized as the basis for estimation search ranges, distance weighting calculations and Mineral Resource classification criteria.

14.11 BULK DENSITY

This section is summarized from Simpson and Hrdy (2021).

Twenty composite samples prepared from drill core within the Golden Heart Deposit were measured for bulk density by SGS Canada Inc. The tests resulted in an average bulk density of 2.80 t/m^3 that was applied to the block model of this Mineral Resource Estimate.

TABLE 14.6
GOLD GRADE CAPPING VALUES

Mineralized Domains	Total No. of Composites	Capping Value (Au g/t)	No. of Capped Composites	Mean of Composites (Au g/t)	Mean of Capped Composites (Au g/t)	CoV of Composites	CoV of Capped Composites	Capping Percentile (%)
GH-A	103	10	3	2.36	0.90	5.25	2.16	97.1
GH-B	481	25	3	1.61	1.45	3.29	2.46	99.4
GH-C	688	25	2	1.20	1.03	4.74	2.32	99.7
GH-D	5,391	45	14	1.64	1.49	3.85	2.45	99.7
GH-E	1,603	41	2	1.38	1.16	5.88	2.51	99.9
GH-E2	176	10	2	1.24	0.96	3.18	1.38	98.9
GH-F	95	11	4	1.93	1.57	2.26	1.94	95.8
GH-G	49	7	1	1.34	1.22	1.55	1.24	98.0
GH-H	12	No Cap	0	0.79	0.79	0.87	0.87	100.0
GH-I	7	No Cap	0	0.98	0.98	0.87	0.87	100.0
GH-J	189	No Cap	0	0.54	0.54	1.93	1.93	100.0

Note: *No. = number, CoV = coefficient of variation.*

14.12 BLOCK MODELLING

The Golden Heart block model was constructed using GEOVIA GEMS™ V6.8.4 modelling software. The block model origin and block size are presented in Table 14.7. The block model consists of separate model attributes for estimated gold grade, rock type (mineralization domains), volume percent, bulk density, and classification.

TABLE 14.7
BLOCK MODEL DEFINITION

Direction	Origin	Number of Blocks	Block Size (m)
X	574,512.978	400	2.5
Y	6,230,956.38	210	5
Z	470	98	5
Rotation	52^0 (Clockwise)		

Note: *Origin for a block model in GEMS™ represents the coordinate of the outer edge of the block with minimum X and Y, and maximum Z.*

All blocks in the rock type block model were initially assigned a waste rock code of 99, corresponding to the surrounding fresh country rocks. The mineralized domain was used to code all blocks within the rock type block model that contain 0.1% or greater volume within the wireframe domain. Each of these blocks was assigned a rock code as presented in Table 14.3. The topography and overburden surfaces were subsequently utilized to assign rock codes 0 and 10 corresponding to the air and overburden respectively, to all blocks ≥50% above the surfaces.

A volume percent block model was set-up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining wireframe domain. As a result, the domain boundary was properly represented by the volume percent model ability to measure individual infinitely variable block inclusion percentages within that domain. The minimum percentage of the mineralization block was set to 0.1%.

The gold grade was interpolated into the model blocks using Inverse Distance weighting to the third power (ID^3). Nearest Neighbour (NN) was run for validation purpose. Multiple passes were executed for the grade interpolation to progressively capture the sample points, to avoid over-smoothing and preserve local grade variability. Grade blocks were interpolated using the parameters in Table 14.8.

TABLE 14.8 BLOCK MODEL AU GRADE INTERPOLATION PARAMETERS						
Pass	**Number of Composites**			**Search Range (m)**		
	Min	**Max**	**Max per Drill Hole**	**Major**	**Semi-Major**	**Minor**
I	5	12	2	25	15	10
II	3	12	2	40	25	15
III	2	12	2	120	75	45

Selected vertical cross-sections and plans of gold blocks are presented in Appendix E.

14.13 MINERAL RESOURCE CLASSIFICATION

In the opinion of the Authors, all the drilling, assaying and exploration works on the Golden Heart Deposit support this Mineral Resource Estimate that is based on spatial continuity of the mineralization within a potentially mineable shape and is sufficient to indicate a reasonable potential for economic extraction, thus qualifying it as a Mineral Resource under the 2014 CIM Definition Standards and CIM Best Practices (2019). The Mineral Resource was classified as Indicated and Inferred based on the geological interpretation, variogram performance, confidence level of the data and drill hole spacing.

Indicated Mineral Resources were classified for the blocks interpolated with Pass I and II in the Table 14.8, which used at least two holes within a 40 m spacing. Inferred Mineral Resources were classified for the blocks interpolated with Pass III in Table 14.8, which were estimated with at least one hole. The classifications were manually adjusted on a longitudinal projection to reasonably reflect the distribution of each classification. Selected classification block model vertical cross-sections and plans are attached in Appendix F.

14.14 AU CUT-OFF VALUE FOR MINERAL RESOURCE REPORTING

The Golden Heart Mineral Resource Estimate was investigated with a pit optimization to ensure that reasonable prospects of eventual economic extraction could be made (see pit shell in Appendix G). The pit-constrained Mineral Resource Estimate was derived from applying Au cut-off values to the block models and reporting the resulting tonnes and grades for potentially mineable areas. The following parameters were utilized for the pit-constrained and out-of-pit Mineral Resource Au cut-off value determination:

- **US$/CAD$ Ratio:** 0.75;
- **Au Price:** US$1,925/oz (approximate two-year trailing average on April 30, 2024);
- **Au Process Recovery:** 90%;
- **Open Pit Mining Cost for Mineralized Material**: CAD$4.00/t mined;
- **Open Pit Mining Cost for Waste**: CAD$3.00/t mined;
- **Out-of Pit Mining Cost**: CAD$175/t mined
- **Open Pit Mining Cost for Overburden**: CAD$2.50/t mined;
- **Processing Cost:** CAD$18/t processed;

- **G&A:** CAD$4/t processed; and
- **Pit Slopes:** 50º.

The pit-constrained Au cut-off = ($18 + $4)/($1,925/0.75 x 96%/31.1035) = 0.296. Use 0.30 g/t Au.

The out-of-pit Au cut-off = ($175 + $18 + $4)/($1,925/0.75 x 96%/31.1035) = 2.487. Use 2.50 g/t Au.

14.15 MINERAL RESOURCE ESTIMATE

The Mineral Resource Estimate is reported with an effective date of June 7, 2024, and is tabulated in Table 14.9. The Authors consider the mineralization of the Golden Heart Deposit to be potentially amenable to open mining methods.

TABLE 14.9
MINERAL RESOURCE ESTIMATE (1-6)

Resource Type	Classification	Au Cut-off (g/t)	Tonnes (kt)	Au (g/t)	Au (koz)
Pit-Constrained	Indicated	0.30	9,804	1.59	500.8
	Inferred	0.30	3,237	1.12	116.1
Out-of-Pit	Inferred	2.50	158	4.25	21.6
Total	Indicated	0.30 & 2.50	9,804	1.59	500.8
	Inferred	0.30 & 2.50	3,395	1.26	137.7

Notes:
1. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*
2. *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
3. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
4. *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.*
5. *Historical mined areas were depleted from the reported Mineral Resources.*
6. *The following parameters were used for the pit optimization and the Mineral Resource cut-off value determination: US$1,925/oz Au (approximate two-year trailing average from April 30, 2024); FX US$/CAD$ = 0.75; Au process recovery = 90%; Open pit mining cost for mineralized material = CAD$4.00/t mined; Open Pit Mining Cost for Waste: CAD$3.00/t mined; Open Pit Mining Cost for Overburdened = CAD$2.50/t mined; Processing Cost = CAD$18/t processed; G&A = CAD$4/t processed; and Pit slopes = 50°. Out-of-pit mining costs = CAD$175/t mined*

14.16 MINERAL RESOURCE ESTIMATE SENSITIVITY

Mineral Resource Estimate is sensitive to the selection of a reporting Au cut-off values, as demonstrated in Table 14.10.

TABLE 14.10 SENSITIVITY OF PIT-CONSTRAINED MINERAL RESOURCE				
Classification	**Au Cut-off (g/t)**	**Tonnes (kt)**	**Au (g/t)**	**Au (koz)**
Indicated	3.0	994	6.39	204.3
	2.5	1,332	5.46	233.9
	2.0	1,898	4.50	274.4
	1.5	2,831	3.58	326.2
	1.0	4,655	2.66	397.8
	0.5	8,148	1.83	479.5
	0.4	8,991	1.70	491.7
	0.3	**9,804**	**1.59**	**500.8**
Inferred	3.0	124	4.46	17.7
	2.5	203	3.79	24.7
	2.0	340	3.16	34.6
	1.5	607	2.53	49.4
	1.0	1,255	1.85	74.5
	0.5	2,727	1.25	109.3
	0.4	3,023	1.17	113.6
	0.3	**3,237**	**1.12**	**116.1**

14.17 MODEL VALIDATION

The block model was validated using several industry standard methods, including visual and statistical methods.

- Visual examination of composites and block grades on successive plans and sections were performed on-screen to confirm that the block models correctly reflect the distribution of composite grades. The review of estimation parameters included:

  - Number of composites used for estimation;
  - Number of drill holes used for estimation;
  - Number of interpolation passes used to estimate grade;
  - Mean distance to sample used;
  - Mean value of the composites used;
  - Actual distance to closest point; and
  - True grade of closest point.

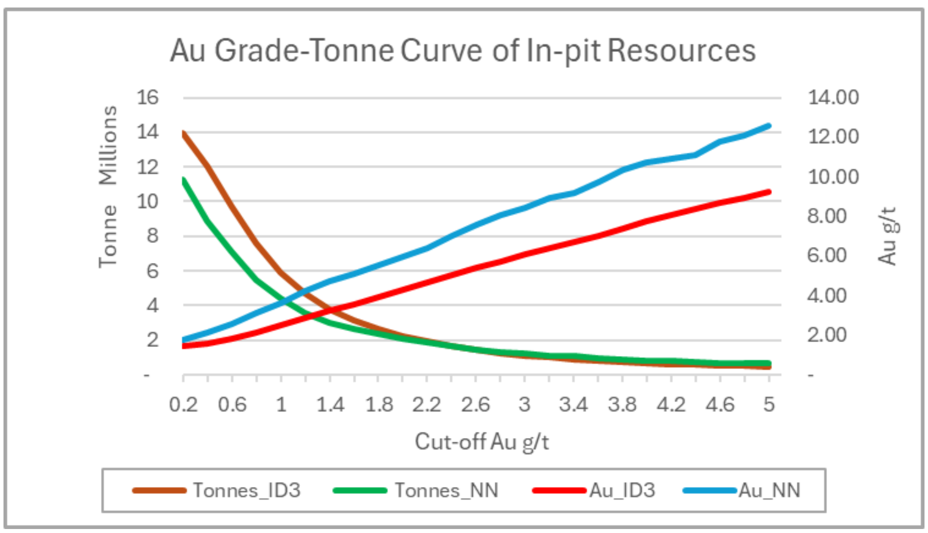
- The Inverse Distance Cubed (“ID^3”) estimate was compared to the Nearest-Neighbour (“NN”) estimates along with composites. A comparison of composite mean grades with the block models are presented in Table 14.11.

TABLE 14.11 **AVERAGE GRADE COMPARISON OF COMPOSITES WITH BLOCK MODEL**	
Data Type	**Au (g/t)**
Composites	1.53
Capped composites	1.35
Block model interpolated with ID^3	1.28
Block model interpolated with NN	1.25

The Table 14.11 comparison shows the average grade of block model was slightly lower than that of the capped composites used for grade estimation. These were most likely due to grade interpolation process. The block model values will be more representative than the composites due to 3-D spatial distribution characteristics of the block models.

- Au grade-tonnage curve of pit-constrained Mineral Resources is presented in Figure 14.1.

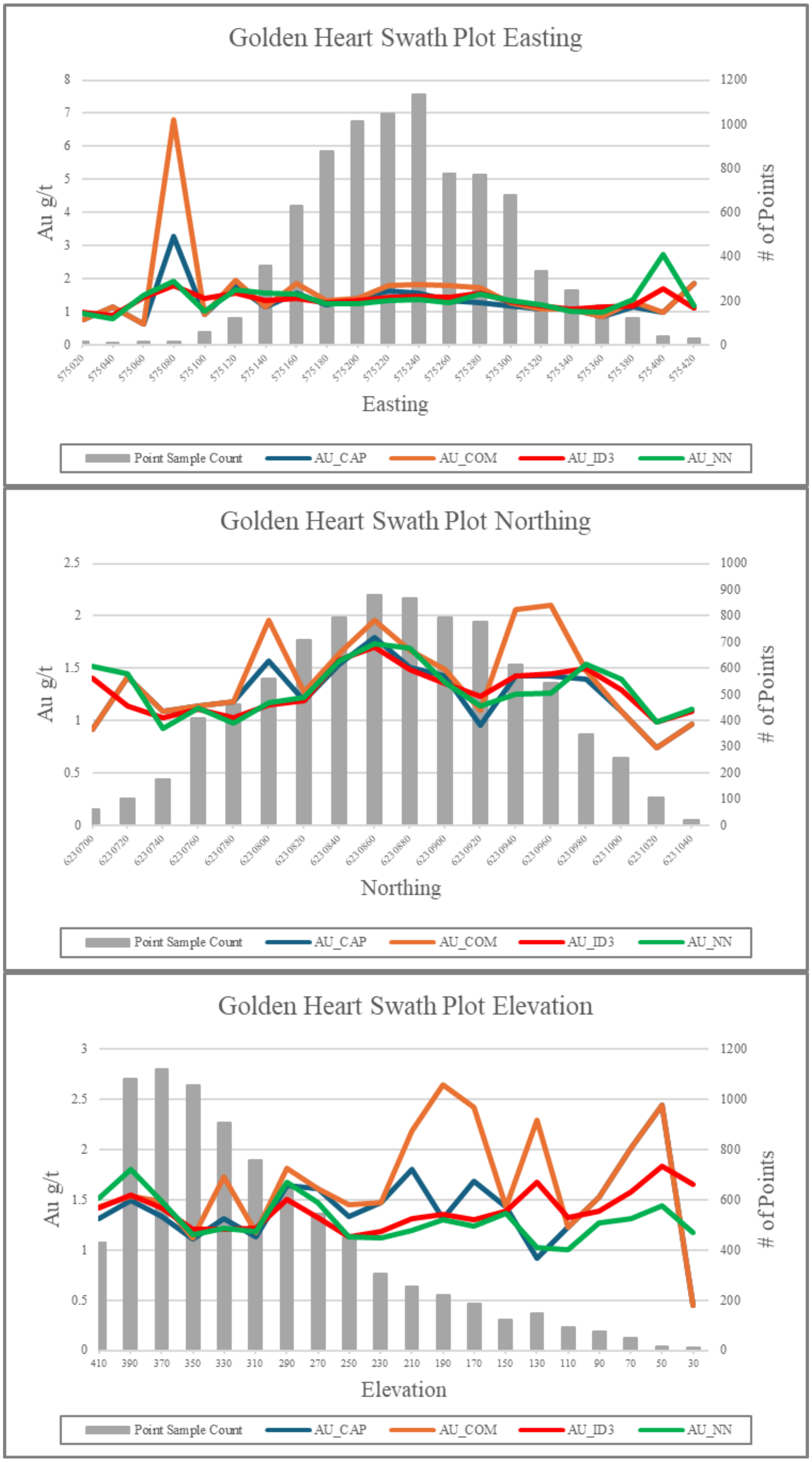
FIGURE 14.1 AU GRADE–TONNAGE CURVE OF PIT-CONSTRAINED MINERAL RESOURCES



Source: *This Study*

- Local trends of gold were evaluated by comparing the ID^3 and NN estimate against the composites. The special swath plots are shown in Figure 14.2.

FIGURE 14.2 AU GRADE SWATH PLOTS



Source: *This Study*

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable to this Report.

16.0 MINING METHODS

This section is not applicable to this Report.

17.0 RECOVERY METHODS

This section is not applicable to this Report.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to this Report.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to this Report.

20.0 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS

This section is not applicable to this Report.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to this Report.

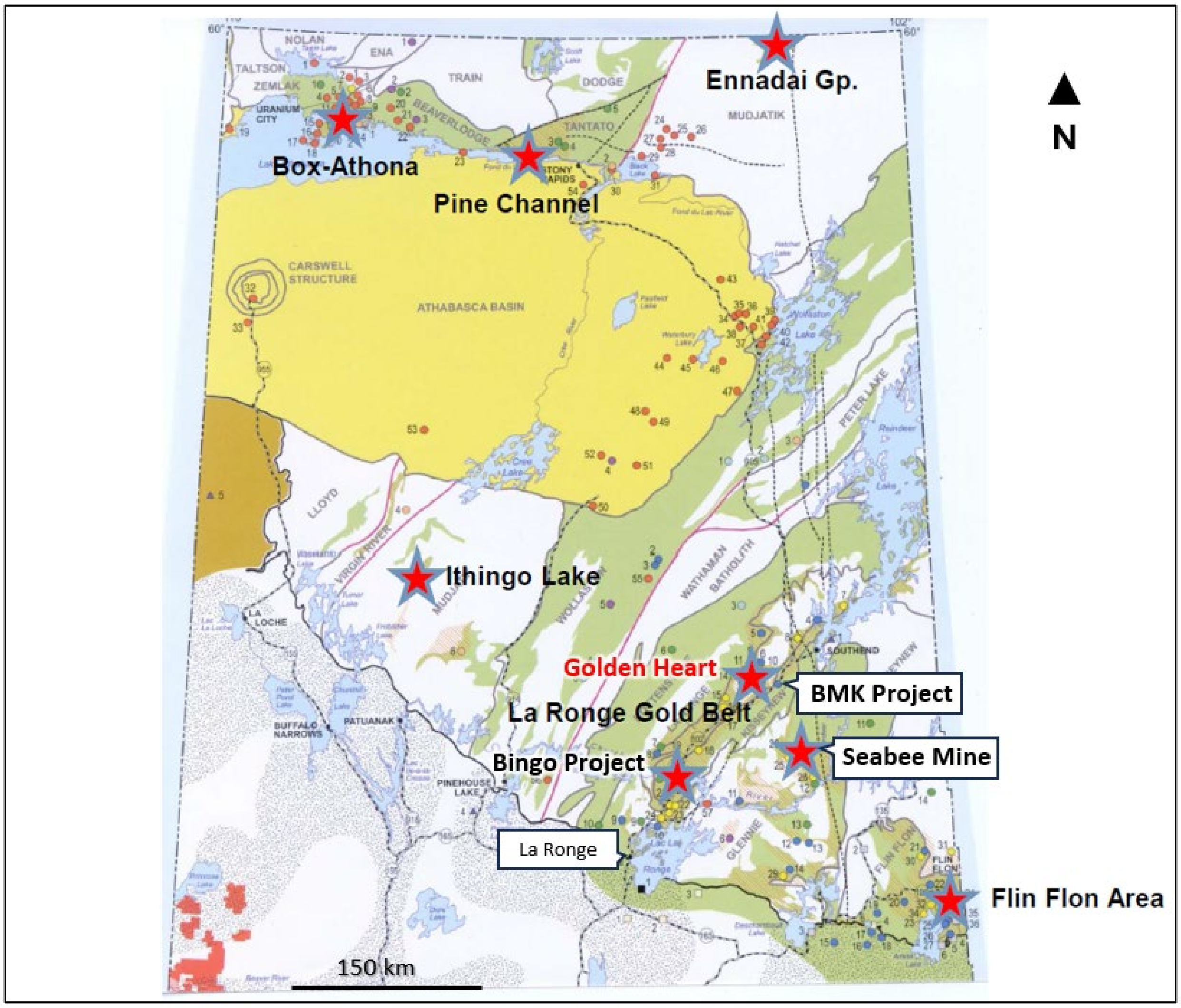
22.0 ECONOMIC ANALYSIS

This section is not applicable to this Report.

23.0 ADJACENT PROPERTIES

The only significant adjacent properties in the Golden Heart area that are not owned by Golden Band are the Seabee Mine Operations and the BMK Project (Figure 23.1).

FIGURE 23.1 ADJACENT PROPERTIES SEABEE MINE OPERATIONS AND BMK PROJECT



Source: *Modified by P&E (This Study) from Rogers (2010)*

23.1 SEABEE MINE OPERATIONS

The following information on the Seabee Mine Operations Project is taken largely from the SSR Mining website: www.ssrmining.com.

The Seabee Gold Mine Operations are located 170 km southeast of Golden Heart, in the Glennie Domain, and owned by SSR Mining Inc. ("SSR"). The operations include the Santoy and Seabee Gold Mines and the Seabee Process Plant. The Santoy underground mine has been in continuous commercial production since 2014. Commercial production at the Seabee underground mine commenced in 1991 and exhausted Mineral Resources in 2018. All mined mineralized material is treated at the Seabee Process Plant, which has been in operation since 1991. The Seabee Process Plant produces gold doré bars that are shipped to a third-party refinery. Access to the mine site is by fixed wing aircraft to a 1,275 m airstrip located on the Property. Equipment and large supplies are transported to the site along a 60 km winter ice road from January through March.

SSR Mining acquired Seabee on May 31, 2016 through the acquisition of Claude Resources Inc. On April 14, 2022, SSR Mining expanded its exploration platform at Seabee through the acquisition of Taiga Gold.

Highlights of the Seabee Operations include:

- **Mineral Reserves**: Proven and Probable Mineral Reserves of 343,000 ounces of gold at an average grade of 5.17 g/t Au as of December 31, 2023 (SLR, 2023).

- **Potential for Mine Life Extension**: Measured and Indicated Mineral Resources of 218,000 ounces of gold at an average grade of 4.36 g/t. Inferred Mineral Resources of 463,000 ounces of gold at a grade of 5.20 g/t. Mineral Resources are as of December 31, 2023.

- **Exploration Potential:** Seabee has successfully replaced gold Mineral Reserves over the mine's 30-year operating life. Current exploration programs are focused on new Mineral Reserve growth at both Santoy and the Gap hanging wall targets. In addition, the SSR is continuing to advance analysis and permitting to potentially support future mining at the Porky/Porky West area where mineralization has been identified over more than 2.5 km of strike.

23.2 BMK PROJECT

The following information on the BMK Project is taken largely from the Murchison Minerals Ltd. website: www.murchisonminerals.ca.

The BMK (previously Brabant-McKenzie) Project is a metamorphosed and deformed volcanogenic massive sulphide deposit located in the Kissynew Domain, 80 km northeast of Bingo and owned by Murchison Minerals Limited. BMK is an exploration drilling stage project with current Mineral Resource Estimates of 2.1 Mt grading 9.98% ZnEq in the Indicated classification and 7.5 Mt grading 6.29% ZnEq in the Inferred classification (Bakker and Pearson, 2018).

The Author has not independently verified this information, which is not necessarily indicative of the mineralization on the Golden Heart Property that is the subject of this Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the Authors' knowledge, there are no other relevant data, additional information or explanation necessary to make this Report on the Golden Heart Property more understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

P&E was contracted by Golden Band to prepare a Technical Report ("Report") and updated Mineral Resource Estimate ("MRE") of the Golden Heart Property, in the La Ronge Domain, northeastern Saskatchewan. Golden Band is a private company incorporated under the laws of the Province of British Columbia. Golden Band's head office is located in the City of Vancouver, B.C.

The Golden Heart Property is located 180 road km north of the Town of La Ronge. The Property consists of four mineral claims totalling 2,338 ha in area and is located east adjacent to Waddy Lake. All the mineral claims of the Golden Heart Property are in good standing as of the effective date of this Technical Report.

The Golden Heart Property is 100% owned by Golden Band, which acquired 100% of the Property in 2006. In August 2016, Golden Band ceased to be a publicly traded company and became a 100% wholly owned subsidiary of Procon. Matrixset signed a three-way Option Agreement with Procon and Golden Band in 2018. Golden Band as the owner holds the Mineral Properties, the surface leases, and the other Assets. Procon as the Optionor owns 100% of voting shares of the Golden Band. Matrixset as Optionee intends to receive the voting shares of Golden Band on the terms set out in the Option Agreement by exploration of the Property.

The Golden Heart Deposit area is located ~10 km north-northwest of the Community of Brabant Lake. The Property area is accessible by Provincial Highway No. 102 from La Ronge. The Weedy Lake Road, constructed in 2013, begins 10 km north of Brabant Lake and extends ~14 km to the Property. The Golden Heart Deposit is located four km northeast of the narrows between Upper and Lower Waddy Lakes, and immediately northwest of Weedy Lake.

The Property area is within the boreal forest of the Canadian Shield, with cold winters and warm summers and annual temperatures ranging from -50°C to 35°C. Exploration work can be undertaken year-round on the Property. However, diamond drilling is best performed from mid-January to the end of March, when ice conditions are suitable for safe access to frozen lake and swamp surfaces. The nearest major source of labour, fuel, and supplies is La Ronge. La Ronge is serviced by regularly scheduled flights from the City of Saskatoon.

The Golden Heart Deposit (known previously as the Weedy Lake B and C Zones) and the A Zone were first discovered by Cominco prospectors in 1948. Since that time, these zones were explored mainly by Golden Rule Resources between 1982 and 1997 and since 2002, by Golden Band, which further delineated the Golden Heart Deposit. In April 2002, Golden Band acquired 49.9% interest in the Property through acquisition agreements with Golden Rule Resources Inc. (now CDG Investments) and Cameco Corp. Golden Band also entered into an option agreement with Tyler Resources Inc. to acquire half the remaining interest. In August 2006, Golden Band purchased Tyler Resources' 50.1% interest outright and became 100% owner of the Property. In assessing the Property, Golden Band released Mineral Resource Estimates of the Golden Heart Deposit in 2003 and 2006, carried out soil gas hydrocarbon sampling in 2007, and completed minor drilling programs.

During 2013, Golden Band applied for the appropriate construction permits and the ~14 km long road to Golden Heart was started in May and completed in September 2013. Work on the Property started in August, production began in October, and shipment of mined material to the Jolu Process

Plant commenced in early November. In December 2013, however, Golden Band suspended all mining operations, including Golden Heart. In that short period of time, open pit production at Golden Heart amounted to just under 25,254 tonnes with a head grade of 3.2 g/t Au.

The Golden Heart Property is located in the northern portion of the Central Metavolcanic Belt of the La Ronge Domain, a granite-greenstone belt in the Saskatchewan segment of the 1.9-1.8 Ga Trans-Hudson Orogen. The Golden Heart Deposit occurs near the intrusive contact of a small quartz diorite stock within a sequence of ca. 1,880 to 1,870 Ma andesite and rhyolite. The quartz diorite and volcanic rocks are cross-cut by northerly-trending feldspar porphyry dikes. Rock units on the Property show a northeasterly structural trend and have been metamorphosed under upper greenschist to lower amphibolite facies conditions.

Three mineralized zones, the Weedy Lake A, B and C Zones, were originally identified. The B and C Zones were subsequently defined as the Golden Heart Deposit. The Deposit consists of mineralized quartz veins and altered wall rock spatially associated with a series of discontinuous, bifurcating, northwest-dipping shear zones. The mineralized shear zones are subparallel and subsidiary to the Byers Lake Tectonic Zone located <250 m to the north. Gold mineralization in the B Zone Shear occurs in quartz veins and vein stockworks and pervasively altered wall rock. On the southeastern margin of the B Zone Shear, mineralization occurs in a single shear-hosted quartz vein 50 to 80 cm thick and continuous for 140 m along strike. Mineralization in the C Zone (or Contact Zone) is situated ~100 m north of the B Zone. Mineralization in the C Zone is also associated with quartz veins and adjacent altered wall rocks. The main vein is 80 cm thick, steeply north-dipping, and extends for 20 m parallel to the shear foliation.

Gold throughout the Golden Heart Deposit occurs in native form in the quartz veins and as inclusions in pyrite and silicate minerals in the altered wall rock. Silicification and pyritization of the host rocks are the main alteration phases. Potassic alteration (biotite and microcline) is also evident. Additional alteration phases are chlorite, albite, carbonate, hematite, hornblende and diopside. In addition to pyrite, trace to minor amounts of chalcopyrite, sphalerite and galena are also present. Gold is irregularly distributed throughout the Deposit. The distribution of free gold in quartz veins is very erratic and nuggety.

Since acquisition of the Golden Heart Property, Golden Band has completed till and soil geochemistry surveys, airborne geophysical and remote sensing surveys, petrographic studies and diamond drilling exploration programs. In total, 174 surface drill holes amounting to 31,432 m have been completed on the Property by historical operators and Golden Band.

It is the Author's opinion that sample preparation, security and analytical procedures for the Golden Heart Project 1982 to 2020 drill programs were adequate, and that the data are of satisfactory quality and suitable for use in the current Mineral Resource Estimate. Future drill core sampling at the Project should include the insertion and monitoring of field and coarse reject duplicates, and to sample and submit a minimum of 5% of all future drill core samples for check assay at a reputable umpire laboratory.

Verification of the Golden Heart Project data, used for the current Mineral Resource Estimate, was undertaken by the Authors, and included multiple site visits, due diligence sampling, verification of drilling assay data, and assessment of the available QA/QC data for the historical and recent drilling data. The Authors consider that there is satisfactory correlation between assay values in Golden Heart's database and the independent verification samples collected and analysed at Actlabs, and that the supplied data are of satisfactory quality and suitable for use in the current Mineral Resource Estimate for the Golden Heart Project.

Gold recovery can be estimated based on SGS laboratory tests and historical Jolu Processing Plant results. Laboratory test results were somewhat erratic, due to an alleged coarse gold nugget effect. The indication of 93% recovery for a combined gravity-leaching process on a composite sample assaying twice the current Mineral Resource gold grade suggests recovery would be <93%. Based on Jolu Process Plant results for 2013-2014, and assuming a new processing configuration similar to the historical one, the overall gold recovery could be estimated, including consideration for soluble loss, to be at least 90%.

At a cut-off grade of 0.30 g/t Au, the current updated pit-constrained Indicated Mineral Resource Estimate for the Golden Heart Deposit is 9,804 kt grading 1.59 g/t Au and the updated pit-constrained Inferred Mineral Resource Estimate is 3,237 kt grading 1.12 g/t Au. At a cut-off grade of 2.50 g/t Au, the current updated out-of-pit Inferred Mineral Resource Estimate is 158 kt grading 4.25 g/t Au. Total contained metal contents are 501 koz Au in Indicated Mineral Resources and 138 koz Au in Inferred Mineral Resources. The Mineral Resource Estimate is reported with an effective date of July 23. 2024. The Authors consider the mineralization of the Golden Heart Deposit to be potentially amenable to open pit and underground mining methods. The sensitivity of the Mineral Resource to changes in cut-off grade was also calculated across a range of potentially economic gold grade cut-offs.

The Mineral Resource Estimates have been classified with respect to CIM Standards as Indicated Mineral Resources and Inferred Mineral Resources, according to the geological confidence and sample spacing that currently define the Deposits. The Authors are of the opinion that the current Mineral Resource Estimate meets the reasonable prospect of eventual economic extraction. The Authors have experience with other similar projects and are of the opinion that the cut-off grade and cost assumptions are reasonable.

The Authors are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that may materially affect the Mineral Resource Estimate. A material decrease in metal prices below those utilized for the current Mineral Resource Estimates or a significant increase in operating costs could materially affect the cut-off and average grades, and potentially result in a revised lower Mineral Resource Estimate tonnage.

26.0 RECOMMENDATIONS

The updated Mineral Resource Estimate is of such quality and quantity that the Golden Heart Deposit could potentially return to production based on the parameters listed in Section 14 of this Report. The Authors consider that the Golden Heart Deposit is potentially amenable to open pit mining methods.

The Authors recommend the following actions be undertaken to expand the Mineral Resources base and advance pre-development studies of the Golden Heart Project:

1. Design and execute a drilling program that would test for the presence of significant gold mineralization in the target areas #1, #2 and #3 (Figure 26.1) and potentially add Inferred Mineral Resources;

2. Future drill core sampling at the Project should include the insertion and monitoring of field and coarse reject duplicates, and sampling and submitting a minimum of 5% of all future drill core samples to a reputable umpire laboratory for check assay; and

3. Update the Mineral Resources, complete metallurgical testwork and undertake a Preliminary Economic Assessment ("PEA").

Specific recommendations for additional metallurgical testing include:

- Assemble a composite sample that represents that grade of the updated Mineral Resource Estimate (~1.6 to 1.8 g/t Au). Conduct GRG on a representative sample proportion and cyanide leach testing on gravity separation tails;

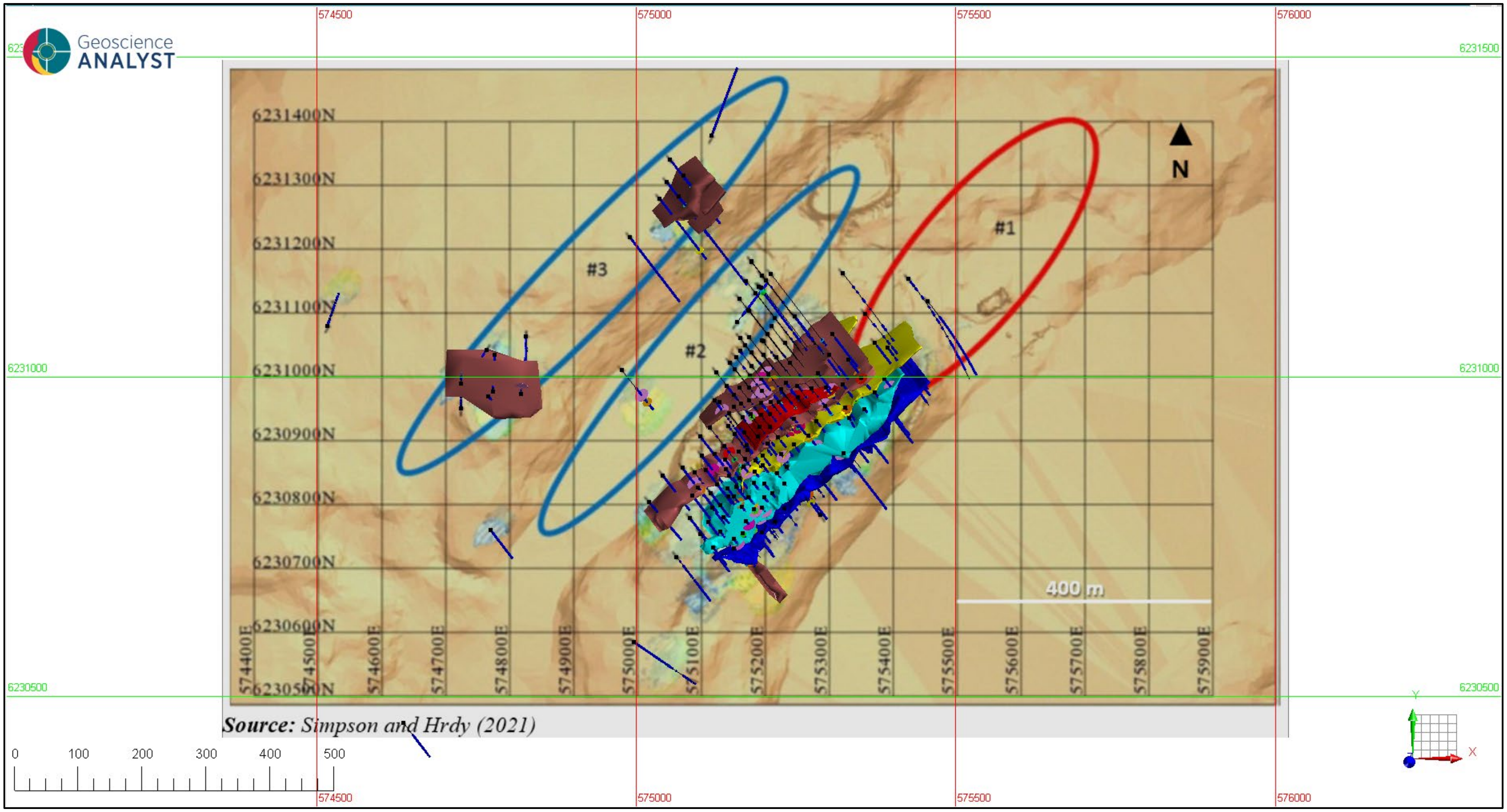
- Complete a gold deportment mineralogical study to assist in identifying process strategies to recover a higher percentage (>90%) of gold content;

- Conduct flotation tests on gravity tails to recover the highest possible gold recovery in an acceptable grade and saleable concentrate; and

- Investigate the potential for mineralized material sorting to reduce the amount of material to be processed.

Including administration costs, the total cost estimate for the recommended work programs is $1.7M (Table 26.1). The recommended work programs should be completed in the next 12 months.

FIGURE 26.1 EXPLORATION TARGETS OUTLINED AT GOLDEN HEART



Source: Simpson and Hrdy (2021)

Table 26.1 Cost Estimates for Recommended Work Programs at Golden Heart		
Activity	**Units (m)**	**Cost Estimate (CAD$)***
Drilling	3,000	600,000
Geology and Modelling (supervision, logging, sampling, reporting)		106,000
Assays (includes transport)		20,000
Field Supplies		15,000
Food, Lodging, Travel		90,000
Truck Rental, Fuel, Insurance		10,000
Updated Mineral Resource Estimate		75,000
Contingency (20%)		183,000
Subtotal Exploration		**1,099,000**
Preliminary Economic Assessment		
Environmental, Permitting, Social Support		50,000
Mine Design Work		50,000
Metallurgical Testwork		260,000
Reporting		100,000
Contingency (20%)		90,000
Subtotal PEA		**550,000**
Administration		**100,000**
Total		**1,749,000**

** Applicable taxes not included*

27.0 REFERENCES

Allan J.R. 2002. Geological Evaluation Report, Waddy Lake-Star Lake Properties (Gold Exploration Properties), La Ronge District, Saskatchewan; unpublished company report for Golden Band Resources Inc. Internal Company Report No. GR 81-07.

Ansdell, K.M., Lucas, S.B., Connors, K. and Stern, R.A. 1995. Kisseynew Metasedimentary Gneiss Belt, Trans-Hudson orogen (Canada): back-arc origin and collisional inversion. Geology 23, 1039-1043.

Aussant C.H. 1981. Geological Evaluation of the Upper Waddy Lake Property, CBS 5205, Saskatchewan, for Golden Rule Resources Ltd. Unpublished company report by Taiga Consults Ltd. Internal Company Report No. GR 81-07.

Avery, R. and Senkow, M. 2004. Report on the Winter 2004 Diamond Drilling Results of the Greater Waddy Lake Project; unpublished company report. Internal company report GBN 04-11.

Bickford, M.E., Collerson, K.D., Lewry, J.F., Van Schmus, W.R. and Chiarenzelli, J.R. 1990. Proterozoic collisional tectonism in the Trans-Hudson Orogen, Saskatchewan. Geology 18, 14-18.

Butrenchuk, S.B. 1996. Summary Report 1005=1996 Diamond Drill Program, Golden Heart Deposit, Weddy Lake Property, La Ronge Mining District, Saskatchewan. Internal report prepared for Tyler Resources Inc., 17 pages.

Campbell J.E. 1985. Quaternary Geology of the Waddy Lake Area Applied to Prospecting for Gold: In Summary of Investigations 1985, Saskatchewan Geological Survey; Saskatchewan Energy and Mines, Misc. Report 85-4.

Canada North Environmental Services. 2005. Aquatic and Terrestrial Baseline Investigations of the Bingo Gold Project Area Near La Ronge, Saskatchewan – Final Report. June 2005.

Chisholm, R. and Jamieson M. 2012. Preliminary Geologic Interpretation of Geophysical and Remote Sensing Data, Upper Waddy Lake (Komis) Project, Laronge District, Saskatchewan – November 10, 2012.

Cormie J.M. and Friesen P.S. 1962. Augustus Withdrawal Area, Reindeer River Area, Northern Saskatchewan, Report for 1962. SIR Assessment Files 64 D04-NE-0004.

Corrigan, D., MacHattie, T.G., Piper, L., Wright, D., Pehrsson, S., Lassen, B. and Chakungal, J. 1998. La Ronge – Lynn Lake bridge project; new mapping results from Deep Bay (parts of 64D-6 and -7) to North Porcupine Point (parts 64E-7 and -8), Reindeer Lake. In Summary of Investigations 1998. Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Miscellaneous Report 98-4, 111-122.

Corrigan, D., Maxeiner, R.O. and Harper, C.T. 2001. Preliminary U-Pb results from the La Ronge – Lynn Lake Bridge Project. In Summary of Investigations 2001. Vol. 2. Saskatchewan Geological Survey, Saskatchewan Energy and Mines. Miscellaneous Report 2001-4.2, 111-115.

Dong, P. 2018. A Helicopter-borne Versatile Time Domain Electromagnetic (VTEM™ Max) and Aeromagnetic Geophysical Survey on Bingo and Greater Waddy Lake Blocks. Matrixset Investment Corporation Assessment Report, October 2018. 27 pages.

Evans, B.T. 1988. 1988 Exploration Program, Summary Report, Weedy Lake Project, SK, ML 5332, NTS 64 D/4 NW.

Fumerton, S.L., Stauffer, M.R., and Lewry, J.F. 1984. The Wathaman Batholith: Largest known Precambrian pluton. Canadian Journal of Earth Sciences 21, 1082-1097.

Geotech. 2018. Report on a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM™ max) and Aeromagnetic Geophysical Survey. Report prepared by Nick Venter, Julian Boada, Kanita Khaled, Joseli Soares and Alexander Prikhodko of Geotech Ltd., for Matrixset Investment Corporation and dated October 2018. 67 pages.

Hardy, F., Haywood, G. and Haywood, G. 2009. Golden Band Resources Inc., La Ronge Gold Project, Ten Year Strategic Business Plan. March 30, 2009. *Edited by* Netolitzky, R., Lehnet-Thiel, K. and Orr, R. Golden Heart Gold Deposit. Golden Heart Gold Project Page 20-2

Harper, C.T. 1984. Report on Geological Mapping in the Waddy Lake area, Saskatchewan, Geological Survey, Miscellaneous Report 84-5.

Harper, C.T. 1985. Bedrock Geological Mapping, Waddy-Tower Lakes Area; Saskatchewan Energy & Mines Misc. Report 85-4.

Heaman, L.M., Kamo, S.L., Delaney, G.D., Harper, C.T., Reilly, B.A., Slimmon, W.L. and Thomas, D.J. 1991. U-Pb geochronological investigations in the Trans-Hudson orogen, Saskatchewan: preliminary results in the ROM Laboratory 1990-1991. *In* Summary of Investigations 1991, Saskatchewan Geological Survey, Saskatchewan Energy and Mines. Miscellaneous Report 91-4, 74-75.

Hoffman, P.F. 1988. United plates of America, the birth of a craton: Early Proterozoic assembly and growth of Laurentia. Annual Review of Earth and Planetary Sciences 16, 543-603.

Hugregtse, J.J. 1987. Preliminary Petrographic Report, Weedy Lake Project for Golden Rule Resources Ltd. Unpublished company report.

Hugregtse, J.J. 1988. Petrographic Report on the Gold-Sulphide Mineralization of the B-Zone of the Weedy Lake Project for Golden Rule Resources Ltd. unpublished company report.

Lafrance, B. 2002. Shear-hosted gold occurrences in the Proterozoic La Ronge volcanic belt, northern Saskatchewan. Geological Association of Canada, Field Trip Guide, Trip A3, Saskatoon, May 24-26, 2002.

Lafrance, B. and Heaman, L.M. 2004. Structural controls on hypozonal orogenic gold mineralization in the La Ronge Domain, Trans-Hudson Orogen, Saskatchewan. Canadian Journal of Earth Sciences 41, 1453-1471.

Laporte B.P. 1982. Energy Reserves Canada (Sask.) Ltd., Oven Lake Joint Venture and Tower Lake Joint Venture, 1982 Summer Exploration Results; unpublished company report, ERC. Internal Company Report No. GR 82-08.

Lewry, J.F. and Collerson, K.D. 1990. The Trans-Hudson Orogen: Extent, Subdivision and Problems. Geological Association of Canada, Special Paper 37, 121-141.

MarKey, A. 2008. Report on the Fall 2008 Exploration Results of the Golden Heart Deposit (Golden Heart Project), Mineral Claims: S-106203, S-106983, S-102772, GBN Report 09-8.

Maxeiner, R.O. 1997. Geology of the Lawrence Bay (Reindeer Lake) Area, Northeastern La Ronge Domain. *In* Summary of investigations 1997. Saskatchewan Geological Survey, Saskatchewan Energy and Mines. Miscellaneous Report 97-4, 3-17.

Maxeiner, R.O. 1999. La Ronge-Lynn Lake Bridge: Geology of the Wapus Bay – Lowdermilk Bay (Reindeer Lake) area. *In* Summary of investigations 1999. Vol. 2. Saskatchewan Geological Survey, Saskatchewan Energy and Mines. Miscellaneous Report 99-4.2, 143-158.

Maxeiner, R.O., Corrigan, D., Harper, C., MacDougall, D. and Ansdell, K. 2001. Lithogeochemistry, Economic Potential, and Plate Tectonic Evolution of the 'La Ronge – Lynn Lake Bridge', Trans-Hudson Orogen. In Summary of investigations 2001. Volume 2. Saskatchewan Geological Survey, Saskatchewan Energy and Mines. Miscellaneous Report 2001-4.2, 87-110.

Mehner, D. 2004. Oven Lake Project, Interpretation of the Mineralized Zone and Resource Estimate, Waddy Lake Area, La Ronge Gold Belt, Saskatchewan: for Golden Band Resources. Internal Company Report No. Golden Heart Gold Project Page 20-3 GBN 04-03.

Meyer, M.T., Bickford, M.E. and Lewry, J.F. 1992. The Wathaman Batholith: an Early Proterozoic Continental Arc in the Trans-Hudson Orogenic Belt, Canada. Geological Society of America Bulletin 104, 1073-1085.

Morelli, R.M. and MacLachlan, K. 2012. Saskatchewan Gold: Mineralization Styles and Mining History; Saskatchewan Ministry of Energy and Resources, Report 262, 171 pages.

Netolitzky, R.K. 1986. An Exploration Review of the Weedy Lake, Tower Lake and Wedge Lake Gold Deposits, Saskatchewan. CIMM Special Volume 38, 229-252.

Payne, J.G. 1988. Petrological Report for Golden Rule Ltd. by Vancouver Petrographics Ltd.; unpublished company report.

Robert, F., Paulsen, K. H., Cassidy, K. F. and Hodgson, C. J. 2005. Gold Metallogeny of the Yilgarn and Superior Cratons Economic Geology, Society of Economic Geologists, 100^{th} Anniversary Volume.

Rogers, M. 2010. Comments on the Saskatchewan Mineral Deposits Models with the Structurally Controlled Mesothermal Lode Gold Model as an Example. Ministry of Energy and Resources, Saskatchewan Geological Survey, 38 pages.

Salat, H. 1988. Petrological Report for Golden Rule Ltd.; unpublished company report.

Schreiner, B.T. 1984. Quaternary Geology of the Precambrian Shield, Saskatchewan; Saskatchewan Energy and Mines, Report 221, 106 pages.

Schwann, P. L. 1989. La Ronge Gold Belt Geology: Gold Deposits in the Byers Fault Area (part of 64D-4). *In* Summary of Investigations, 1989, Saskatchewan Geological Survey; Saskatchewan Energy and Mines; Miscellaneous Report 89-4.

Schwerdtner, W.M. and Côté, M.L. 2001. Patterns of Pervasive Shear Strain Near the Boundaries of the La Ronge Domain, inner Trans-Hudson Orogen, Western Canadian Shield. Precambrian Research, 107: 93-116.

SGS. 2006. An Investigation into the Recovery of Gold from Greater Waddy Lake Project Samples. Prepared for Golden Band Resources Inc. and dated June 7, 2006. 139 pages.

Simpson, R. G. 2006. Technical Report and Resource Estimate, Golden Heart Gold Deposit, Greater Waddy Lake Project, Claim S-106203, Greater Waddy Lake District, Saskatchewan. NTS 64-D-4, Golden Band Resources Inc. Report: GBN-06-5.

Simpson, R.G. and Hrdy, F. 2021. Golden Heart Project, Saskatchewan, Canada. NI 43-101 Technical Report prepared by R.G. Simpson (GeoSim Services Inc.) and Frank Hrdy (CanMine Consultants) for Matrixset Investment Corporation, dated February 1, 2021. 87 pages.

TAEM. 1988. Baseline Fisheries Investigations for the Proposed Tower Lake Project, Saskatchewan, Prepared by Terrestrial & Aquatic Environmental Managers Ltd for Golden Rule Resources Ltd., December 1988. Saskatoon, SK.

Thomas, D.J. 1993. Geology of the Star Lake-Otter Lake Portion of the Central Metavolcanic Belt, La Ronge Domain; Saskatchewan Energy & Mines Report 236.

Wong, J.H. and Hrdy, F. 2009. Technical Report and Mineral Resource Estimate – Golden Heart Gold Deposit, Greater Waddy Lake Project. Effective date December 18, 2009. 132 pages.

28.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON

WILLIAM STONE, PH.D., P.GEO.

I, William Stone, Ph.D., P.Geo, residing at 4361 Latimer Crescent, Burlington, Ontario, do hereby certify that:

1. I am an independent geological consultant working for P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I am a graduate of Dalhousie University with a Bachelor of Science (Honours) degree in Geology (1983). In addition, I have a Master of Science in Geology (1985) and a Ph.D. in Geology (1988) from the University of Western Ontario. I have worked as a geologist for about 35 years since obtaining my M.Sc. degree. I am a geological consultant currently licensed by the Professional Geoscientists of Ontario (License No 1569).

   I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

   My relevant experience for the purpose of the Technical Report is:

• Contract Senior Geologist, LAC Minerals Exploration Ltd.	1985-1988
• Post-Doctoral Fellow, McMaster University	1988-1992
• Contract Senior Geologist, Outokumpu Mines and Metals Ltd.	1993-1996
• Senior Research Geologist, WMC Resources Ltd.	1996-2001
• Senior Lecturer, University of Western Australia	2001-2003
• Principal Geologist, Geoinformatics Exploration Ltd.	2003-2004
• Vice President Exploration, Nevada Star Resources Inc.	2005-2006
• Vice President Exploration, Goldbrook Ventures Inc.	2006-2008
• Vice President Exploration, North American Palladium Ltd.	2008-2009
• Vice President Exploration, Magma Metals Ltd.	2010-2011
• President & COO, Pacific North West Capital Corp.	2011-2014
• Consulting Geologist	2013-2017
• Senior Project Geologist, Anglo American	2017-2019
• Consulting Geoscientist	2020-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 2 to 9, 15 to 19, 21 to 24, and co-authoring Sections 1, 25, 26, and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024
{SIGNED AND SEALED}
[William Stone]

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William E. Stone, Ph.D., P.Geo.

CERTIFICATE OF QUALIFIED PERSON

YUNGANG WU, P.GEO.

I, Yungang Wu, P.Geo, residing at 3246 Preserve Drive, Oakville, Ontario, L6M 0X3, do hereby certify that:

1. I am an independent consulting geologist contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I am a graduate of Jilin University, China, with a Master's degree in Mineral Deposits (1992). I have worked as a geologist for 30 plus years since graduating. I am a geological consultant and a registered practising member of the Professional Geoscientists Ontario (Registration No. 1681).

   I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

   My relevant experience for the purpose of the Technical Report is as follows:

   - Geologist –Geology and Mineral Bureau, Liaoning Province, China 1992-1993
   - Senior Geologist – Committee of Mineral Resources and Reserves of Liaoning, China 1993-1998
   - VP – Institute of Mineral Resources and Land Planning, Liaoning, China 1998-2001
   - Project Geologist–Exploration Division, De Beers Canada 2003-2009
   - Mine Geologist – Victor Diamond Mine, De Beers Canada 2009-2011
   - Resource Geologist– Coffey Mining Canada 2011-2012
   - Consulting Geologist 2012-Present
4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for co-authoring Sections 1, 14, 25, 26, and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024

{SIGNED AND SEALED}
[Yungang Wu]

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Yungang Wu, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

JARITA BARRY, P.GEO.

I, Jarita Barry, P.Geo., residing at 9052 Mortlake-Ararat Road, Ararat, Victoria, Australia, 3377, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I am a graduate of RMIT University of Melbourne, Victoria, Australia, with a B.Sc. in Applied Geology. I have worked as a geologist for over 17 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by Engineers and Geoscientists British Columbia (License No. 40875) and Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 08399). I am also a member of the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397);

   I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

   My relevant experience for the purpose of the Technical Report is:
   - Geologist, Foran Mining Corp. 2004
   - Geologist, Aurelian Resources Inc. 2004
   - Geologist, Linear Gold Corp. 2005-2006
   - Geologist, Búscore Consulting 2006-2007
   - Consulting Geologist (AusIMM) 2008-2014
   - Consulting Geologist, P.Geo. (EGBC/AusIMM) 2014-Present
4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 11 and co-authoring Sections 1, 12, 25, 26, and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024

{SIGNED AND SEALED}
[Jarita Barry]

Jarita Barry, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

D. GRANT FEASBY, P. ENG.

I, D. Grant Feasby, P. Eng., residing at 12,209 Hwy 38, Tichborne, Ontario, K0H 2V0, do hereby certify that:

1. I am currently the Owner and President of:
   FEAS - Feasby Environmental Advantage Services
   38 Gwynne Ave, Ottawa, K1Y1W9
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I graduated from Queens University in Kingston Ontario, in 1964 with a Bachelor of Applied Science in Metallurgical Engineering, and a Master of Applied Science in Metallurgical Engineering in 1966. I am a Professional Engineer registered with Professional Engineers Ontario. I have worked as a metallurgical engineer for over 50 years since my graduation from university.

   I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

   My relevant experience for the purpose of the Technical Report has been acquired by the following activities:
   - Metallurgist, Base Metal Process Plant.
   - Research Engineer and Lab Manager, Industrial Minerals Laboratories in USA and Canada.
   - Research Engineer, Metallurgist and Plant Manager in the Canadian Uranium Industry.
   - Manager of Canadian National Programs on Uranium and Acid Generating Mine Tailings.
   - Director, Environment, Canadian Mineral Research Laboratory.
   - Senior Technical Manager, for large gold and bauxite mining operations in South America.
   - Expert Independent Consultant associated with several companies, including P&E Mining Consultants, on mineral processing, environmental management, and mineral-based radiation assessment.
4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 13 and co-authoring Sections 1, 25, 26, and 27 of this Technical Report.
6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024

{SIGNED AND SEALED}
[D. Grant Feasby]

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D. Grant Feasby, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

BRIAN RAY, M.SC., P.GEO.

I, Brian Ray, M.Sc., P.Geo., residing at 11770 Wildwood Crescent N, Pitt Meadows, British Columbia, Canada, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I am a graduate of the School of Mining and Geology "Hristo Botev", Pernik (1980) with a Bachelor of Science degree in Geology and Exploration of Minerals, and the University of Mining Engineering and Geology "St. Ivan Rilsky"' Sofia with a Master of Science degree in Geology and Exploration of Mineral Resources (1993). I have worked as a geologist for over 40 years. I am a geological consultant currently licensed by the Professional Geoscientists of British Columbia (License No 33418).

   I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

   My relevant experience for the purpose of the Technical Report is:

• Senior Geologist, Bulgarian Academy of Sciences – Geological Institute, Sofia	1980-2002
• Contract Geologist, Barrick Gold Corporation (Williams Mine), Marathon, ON	July 2005-Oct 2005
• Chief Mine Geologist, YGC Resources (Ketza River Mine), Yukon	Oct 2005-Oct 2006
• Resource Program Manager, Miramar Mining Corp. (Hope Bay), Nunavut	2006-2007
• Senior District Geologist, Newmont Mining Corp. (Hope Bay), Nunavut	2007-Jun 2008
• Geological Consultant, AMEC Americas Ltd., Vancouver, BC	Jun 2008-Dec 2008
• Independent Geological Consultant	Dec 2008-June 2009
• Country Exploration Manager, Sandspring Resources Ltd.	May 2013-Dec 2013
• Principal Resource Geologist, Ray GeoConsulting Ltd.	2013-present

4. I have visited the Property that is the subject of this Technical Report on October 24, 2023.
5. I am responsible for authoring Section 10 and co-authoring Sections 1, 12, 25, 26, and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024

{SIGNED AND SEALED}
[Brian Ray]

____
Brain Ray, M.Sc., P.Geo.

CERTIFICATE OF QUALIFIED PERSON

EUGENE PURITCH, P. ENG., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Golden Heart Project, Greater Waddy Lake Area, La Ronge Mining District, Northeastern Saskatchewan", (The "Technical Report") with an effective date of July 23, 2024.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University. In addition, I have also met the Professional Engineers of Ontario Academic Requirement Committee's Examination requirement for a Bachelor's degree in Engineering Equivalency. I am a mining consultant currently licensed by the: Professional Engineers and Geoscientists New Brunswick (License No. 4778); Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998); Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216); Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252); Professional Engineers of Ontario (License No. 100014010); Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912); and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877). I am also a member of the National Canadian Institute of Mining and Metallurgy.

   I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

   I have practiced my profession continuously since 1978. My summarized career experience is as follows:
   - Mining Technologist - H.B.M.& S. and Inco Ltd., 1978-1980
   - Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
   - Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
   - Self-Employed Mining Consultant – Timmins Area, 1987-1988
   - Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
   - Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
   - President – P&E Mining Consultants Inc, 2004-Present
4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for co-authoring Sections 1, 12, 14, 25, 26, and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: July 23, 2024
Signed Date: August 22, 2024

{SIGNED AND SEALED}
[Eugene Puritch]

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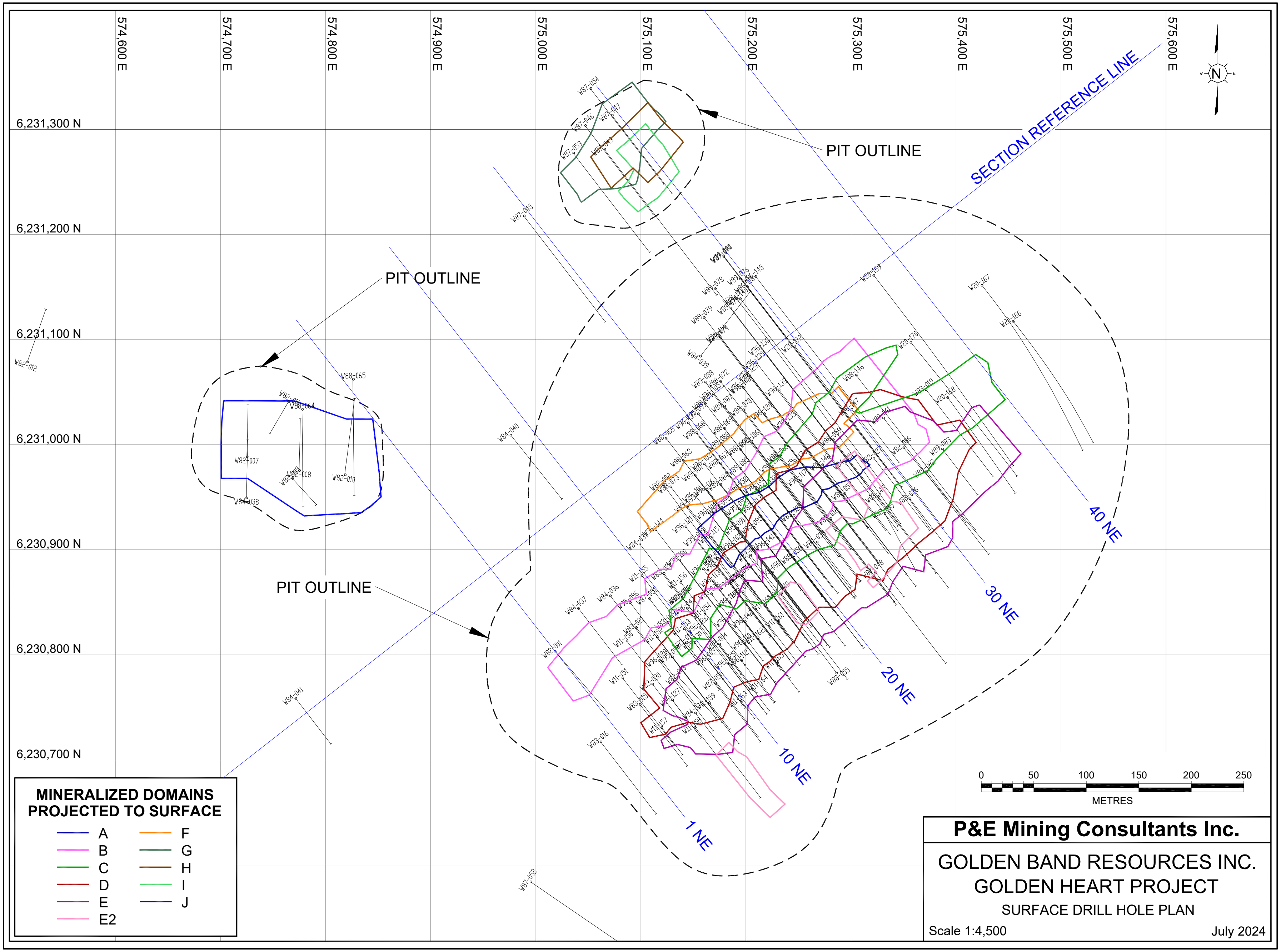
Eugene Puritch, P.Eng., FEC, CET

APPENDIX A DRILL HOLE PLAN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574,700 E
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6,231,100 N
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PIT OUTLINE
PIT OUTLINE
PIT OUTLINE
SECTION REFERENCE LINE
1 NE
10 NE
20 NE
30 NE
40 NE
0 50 100 150 200 250
METRES
MINERALIZED DOMAINS PROJECTED TO SURFACE
A
B
C
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E2
F
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H
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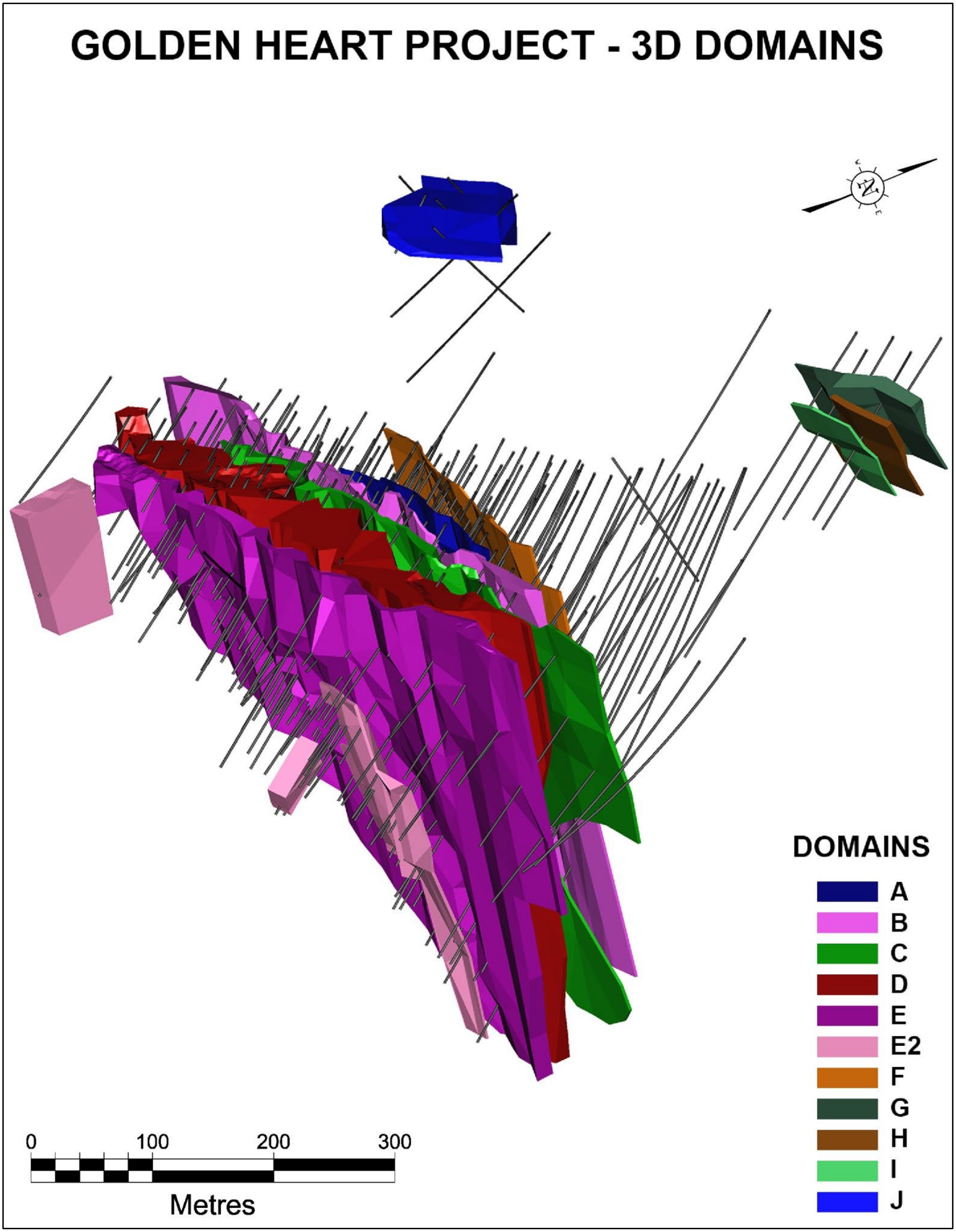
J
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
SURFACE DRILL HOLE PLAN
Scale 1:4,500
July 2024

APPENDIX B 3-D DOMAINS


GOLDEN HEART PROJECT - 3D DOMAINS
DOMAINS
A
B
C
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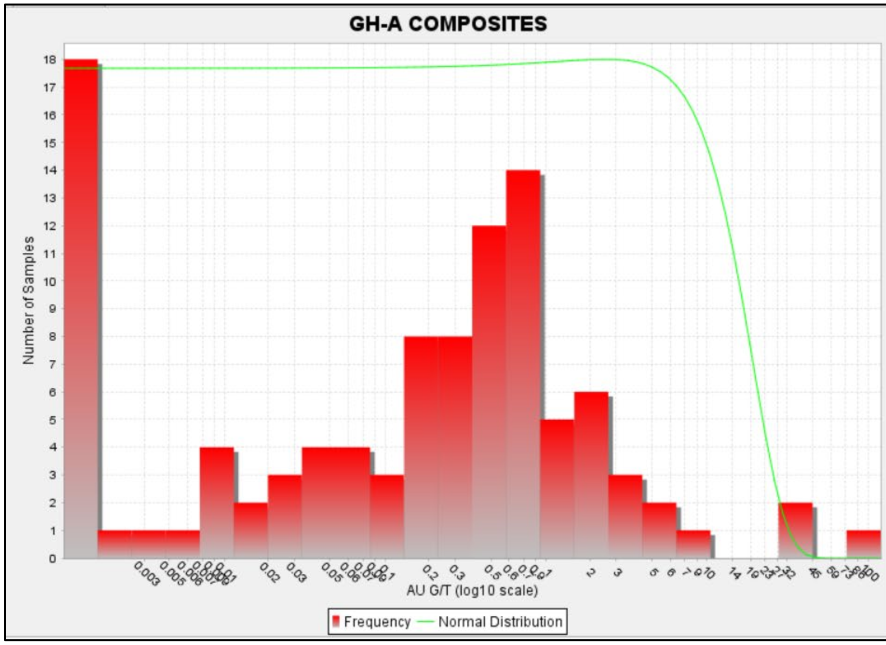
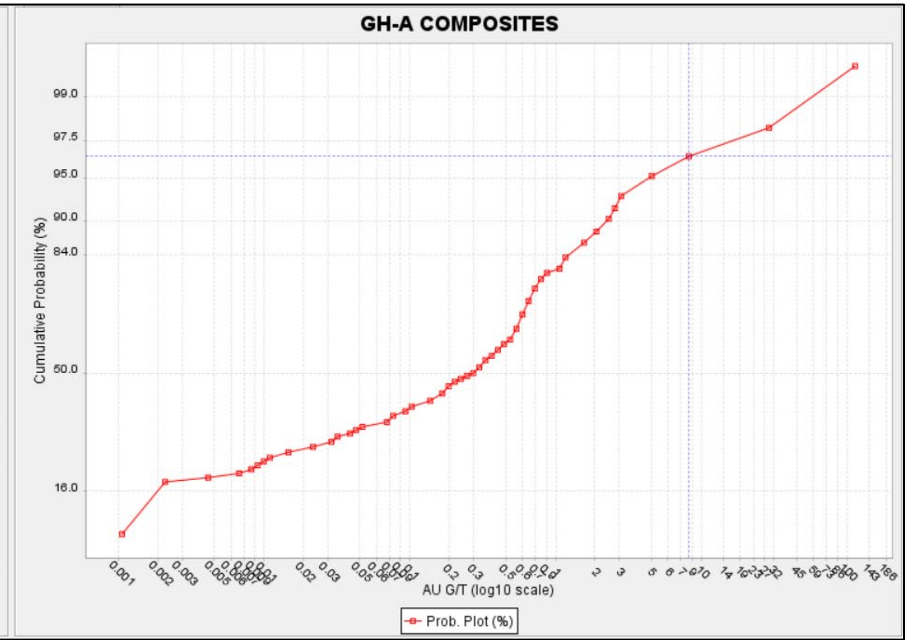
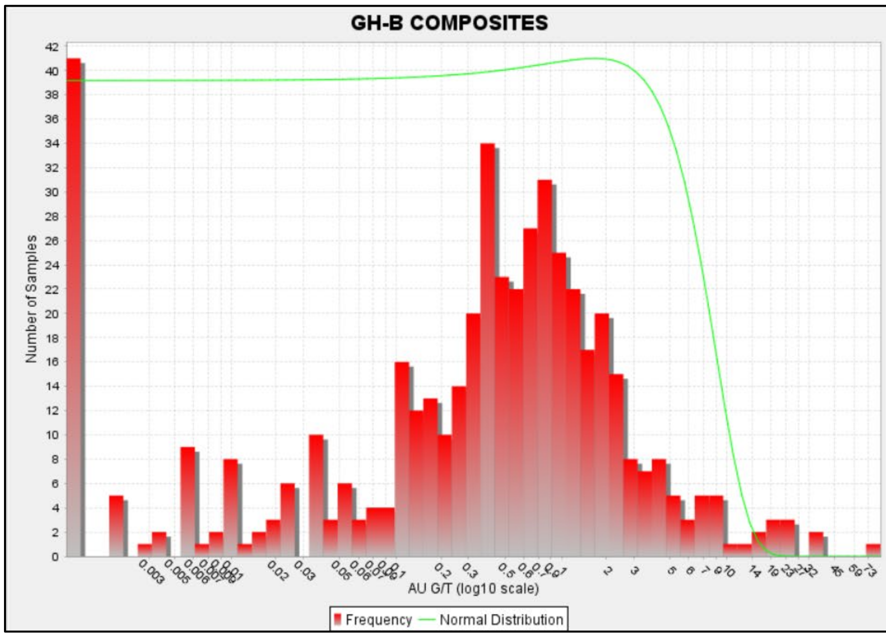
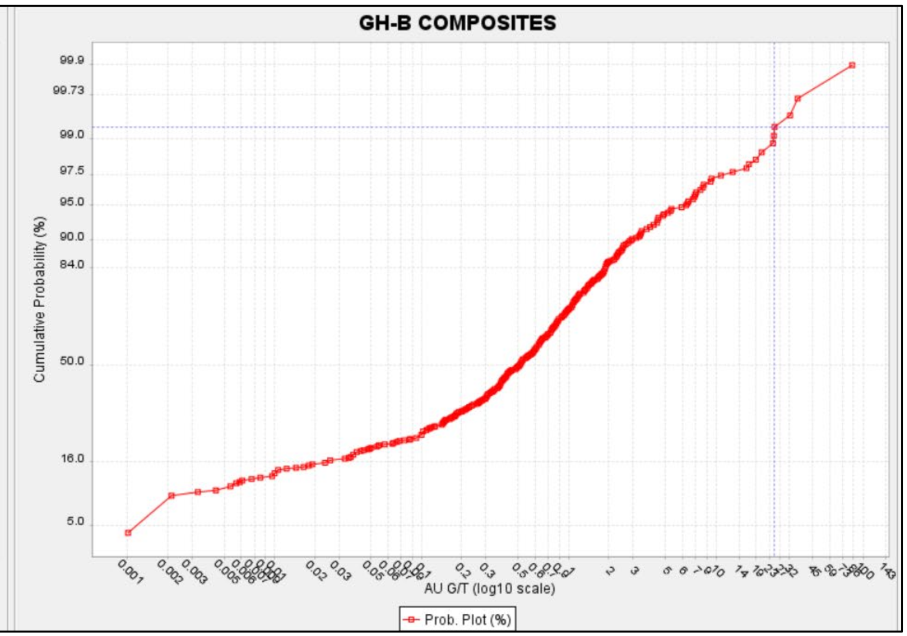
E
E2
F
G
H
I
J
0
100
200
300
Metres

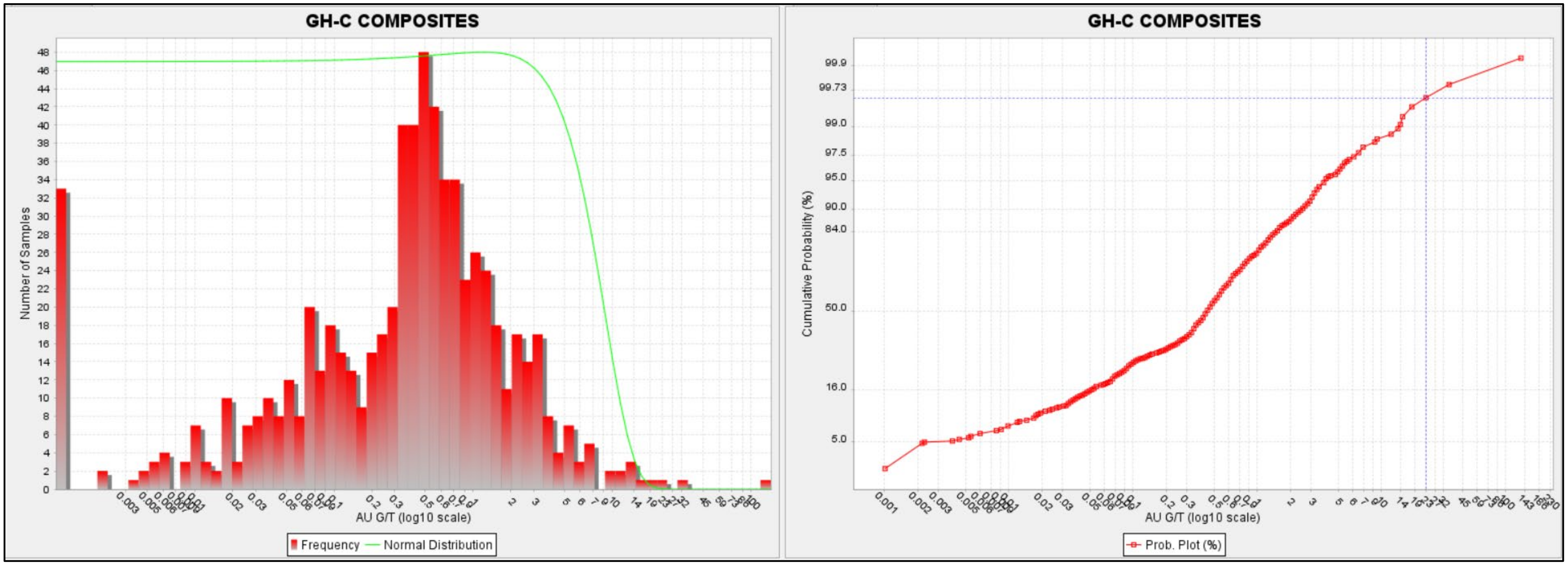
APPENDIX C LOG NORMAL HISTOGRAMS AND PROBABILITY PLOTS

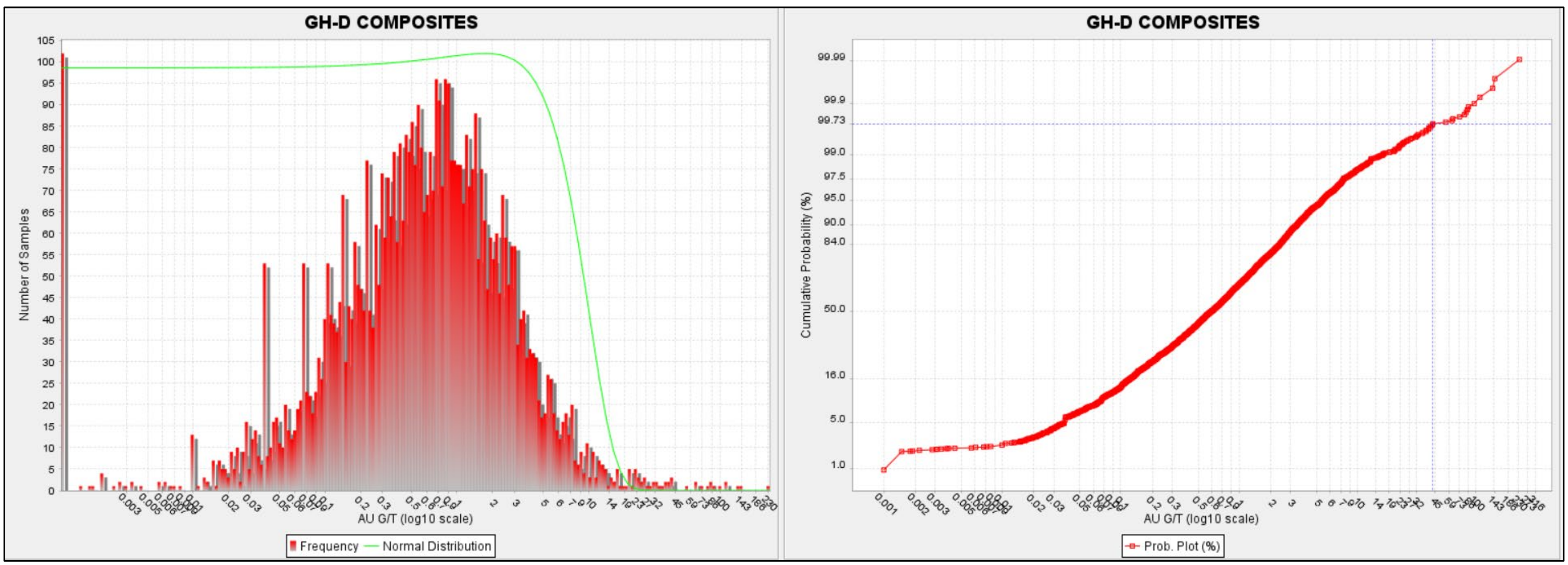

GH-A COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution

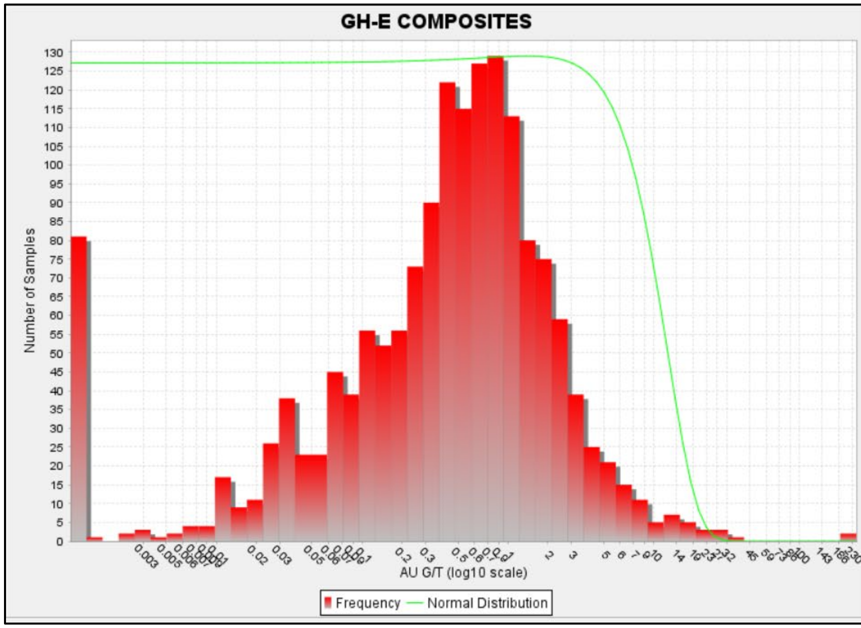

GH-A COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

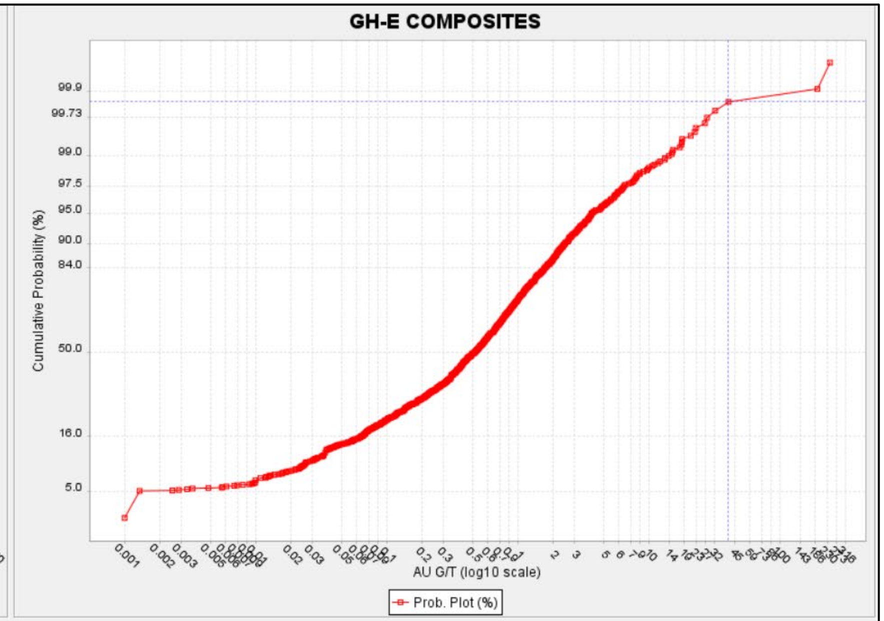

GH-B COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution

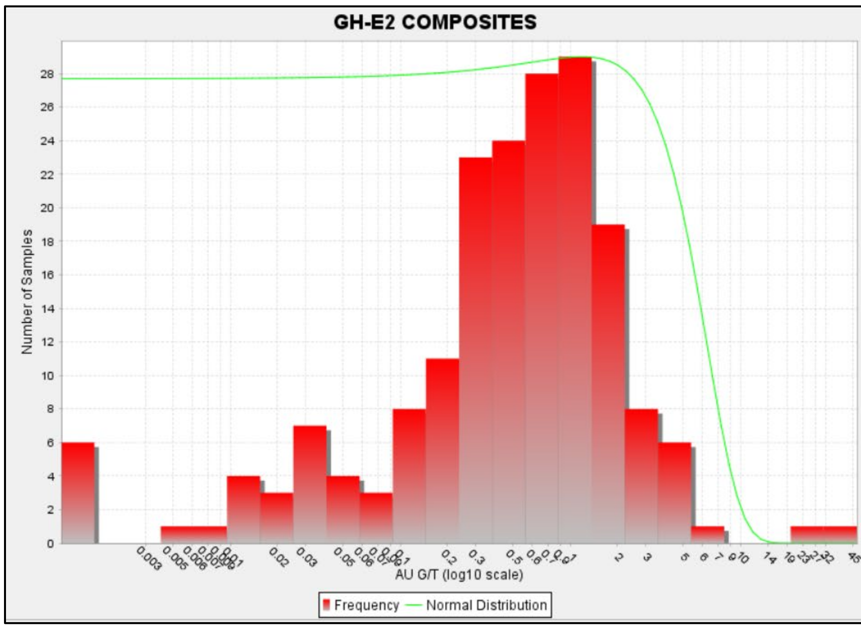

GH-B COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

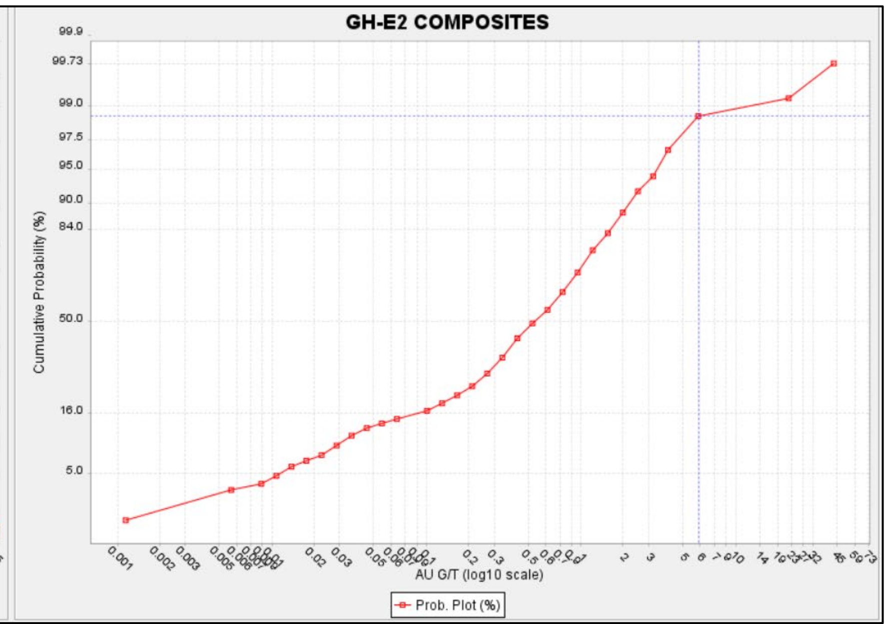

GH-C COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution
GH-C COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

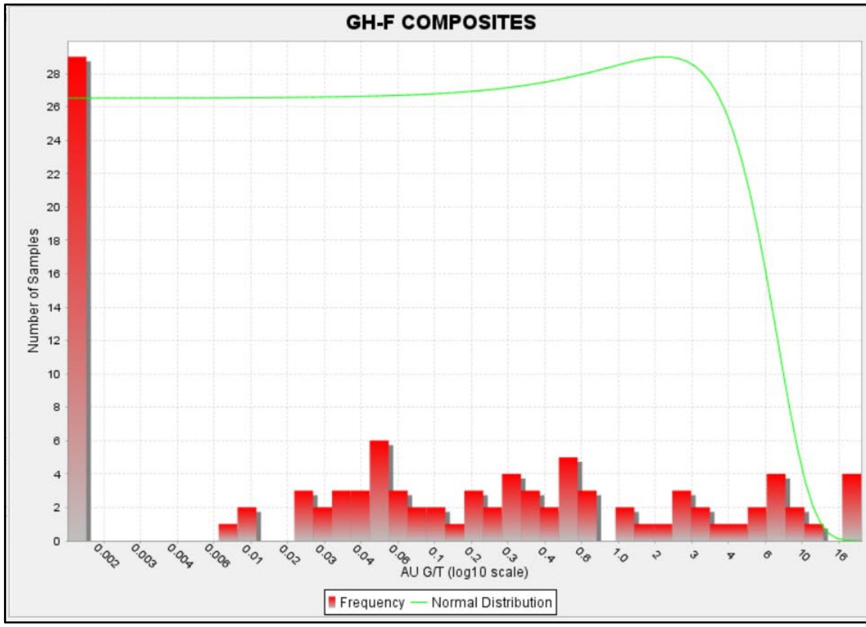

GH-D COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution
GH-D COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

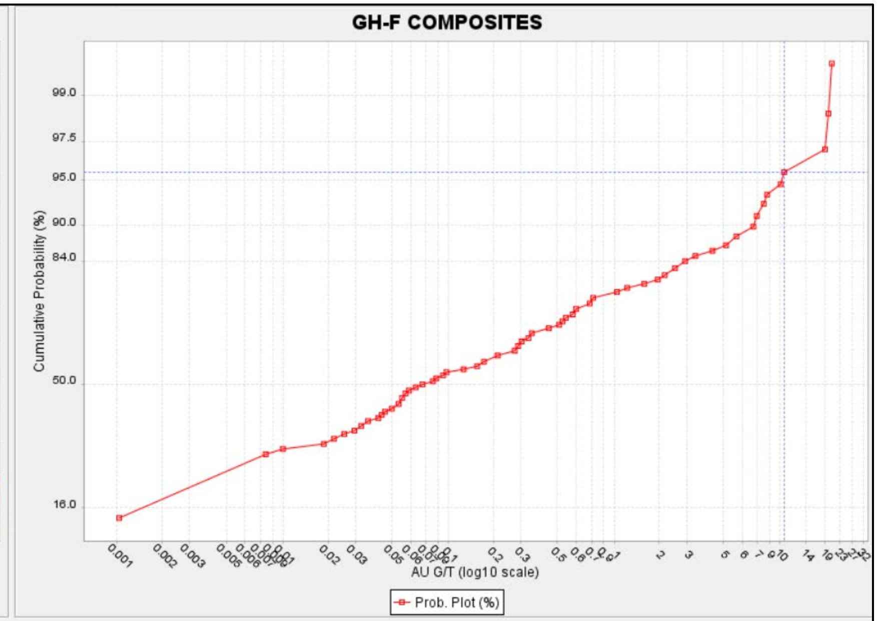

GH-E COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution

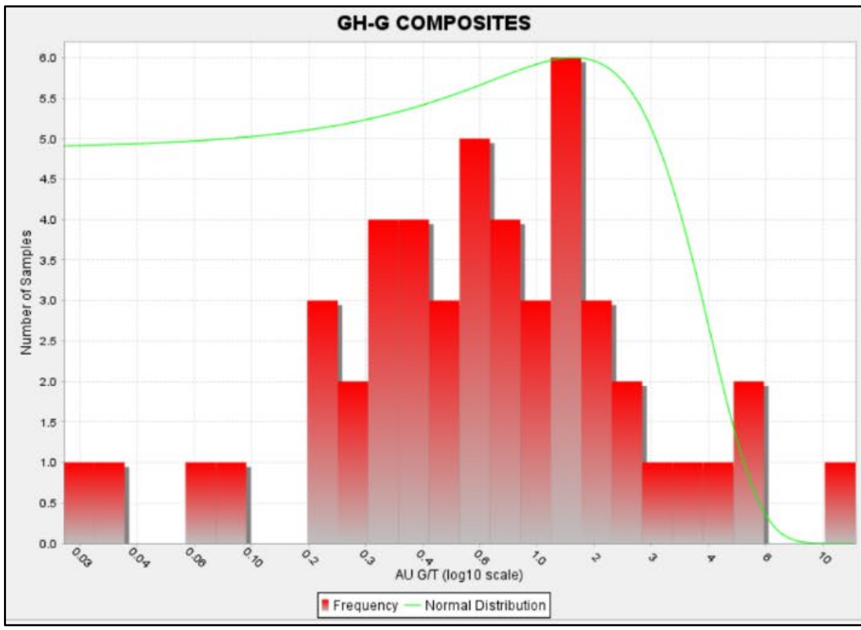

GH-E COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

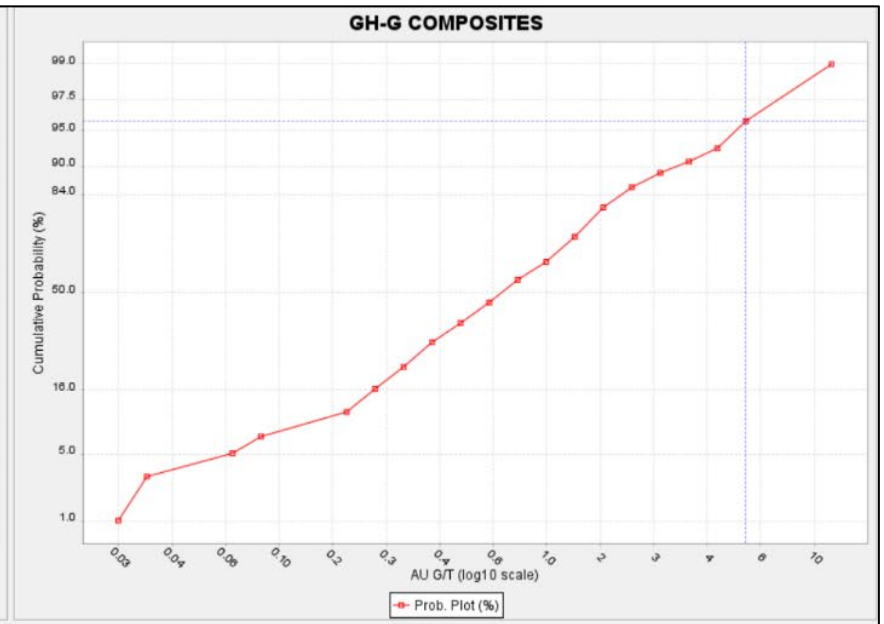

GH-E2 COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution


GH-E2 COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

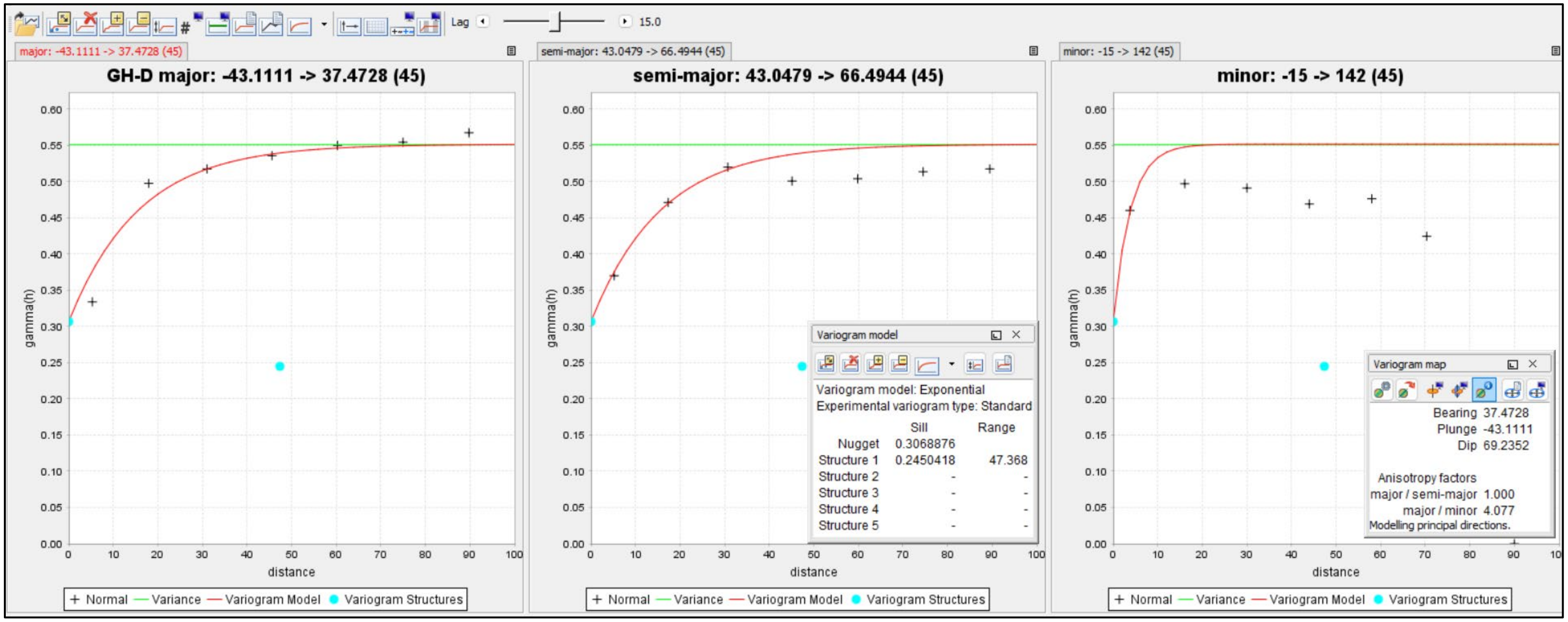

GH-F COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution

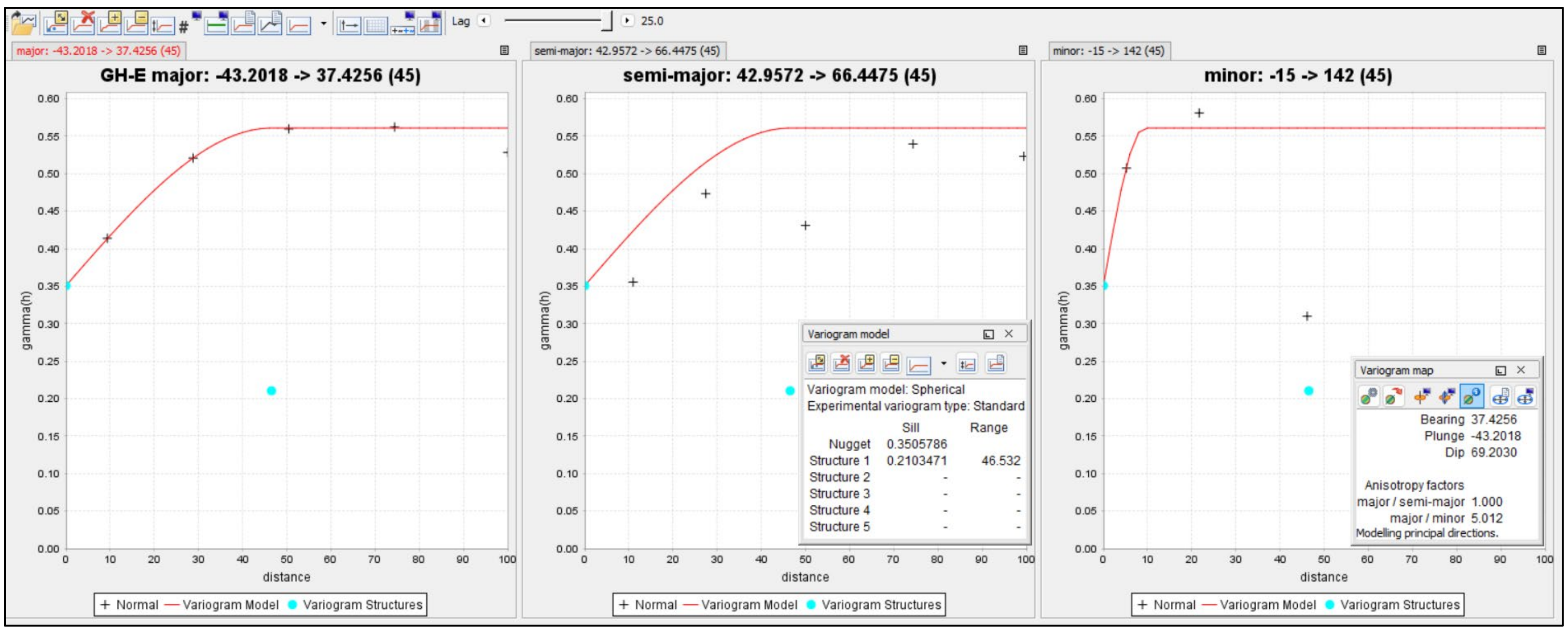

GH-F COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)


GH-G COMPOSITES
Number of Samples
AU G/T (log10 scale)
Frequency
Normal Distribution

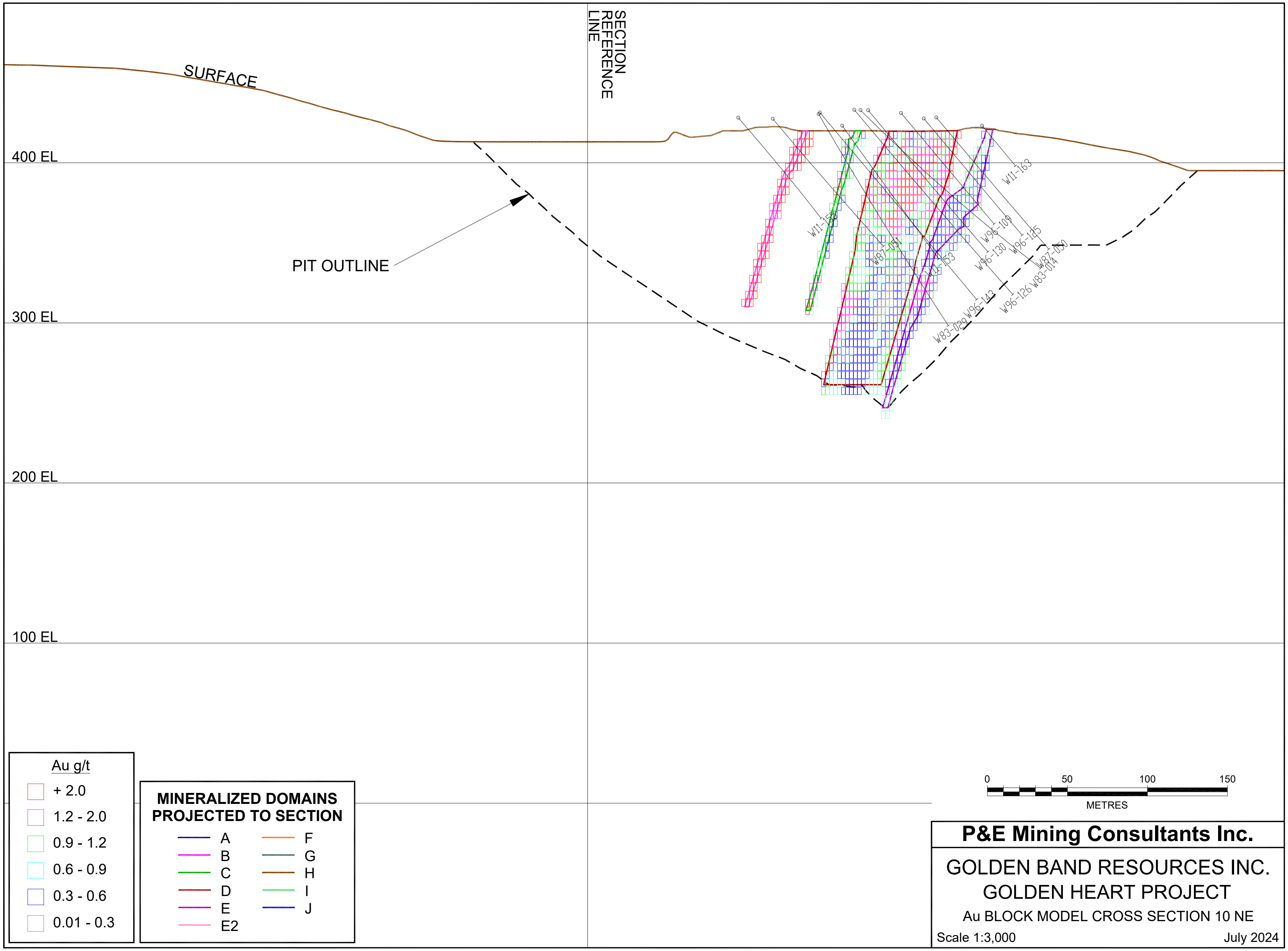

GH-G COMPOSITES
Cumulative Probability (%)
AU G/T (log10 scale)
Prob. Plot (%)

APPENDIX D VARIOGRAMS

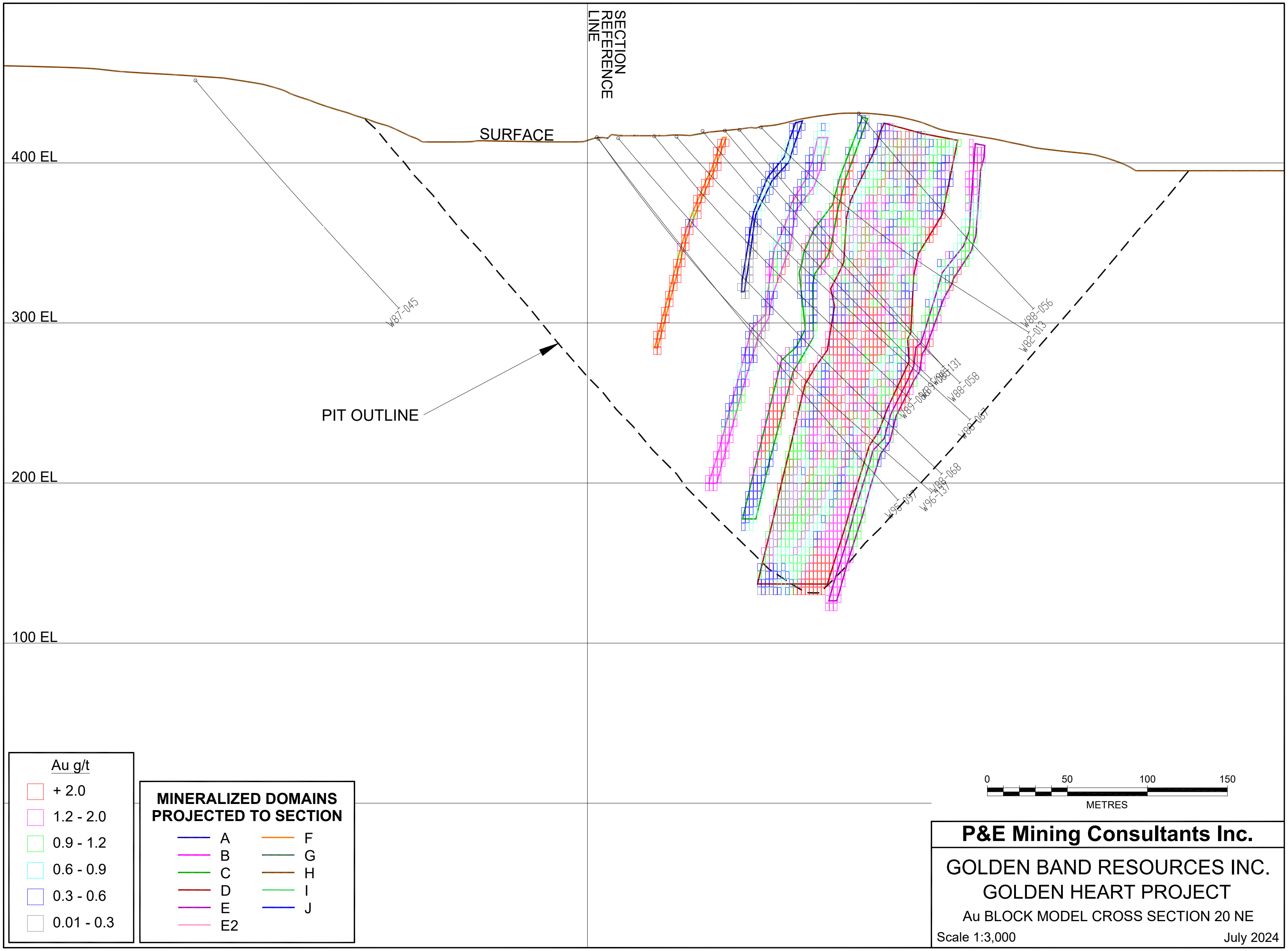

GH-D major: -43.1111 -> 37.4728 (45)
semi-major: 43.0479 -> 66.4944 (45)
minor: -15 -> 142 (45)
Lag 15.0
gamma(h)
distance
Variogram model
Variogram model: Exponential
Experimental variogram type: Standard
Sill Range
Nugget 0.3068876
Structure 1 0.2450418 47.368
Structure 2 - -
Structure 3 - -
Structure 4 - -
Structure 5 - -
Variogram map
Bearing 37.4728
Plunge -43.1111
Dip 69.2352
Anisotropy factors
major / semi-major 1.000
major / minor 4.077
Modelling principal directions.
Normal Variance Variogram Model Variogram Structures

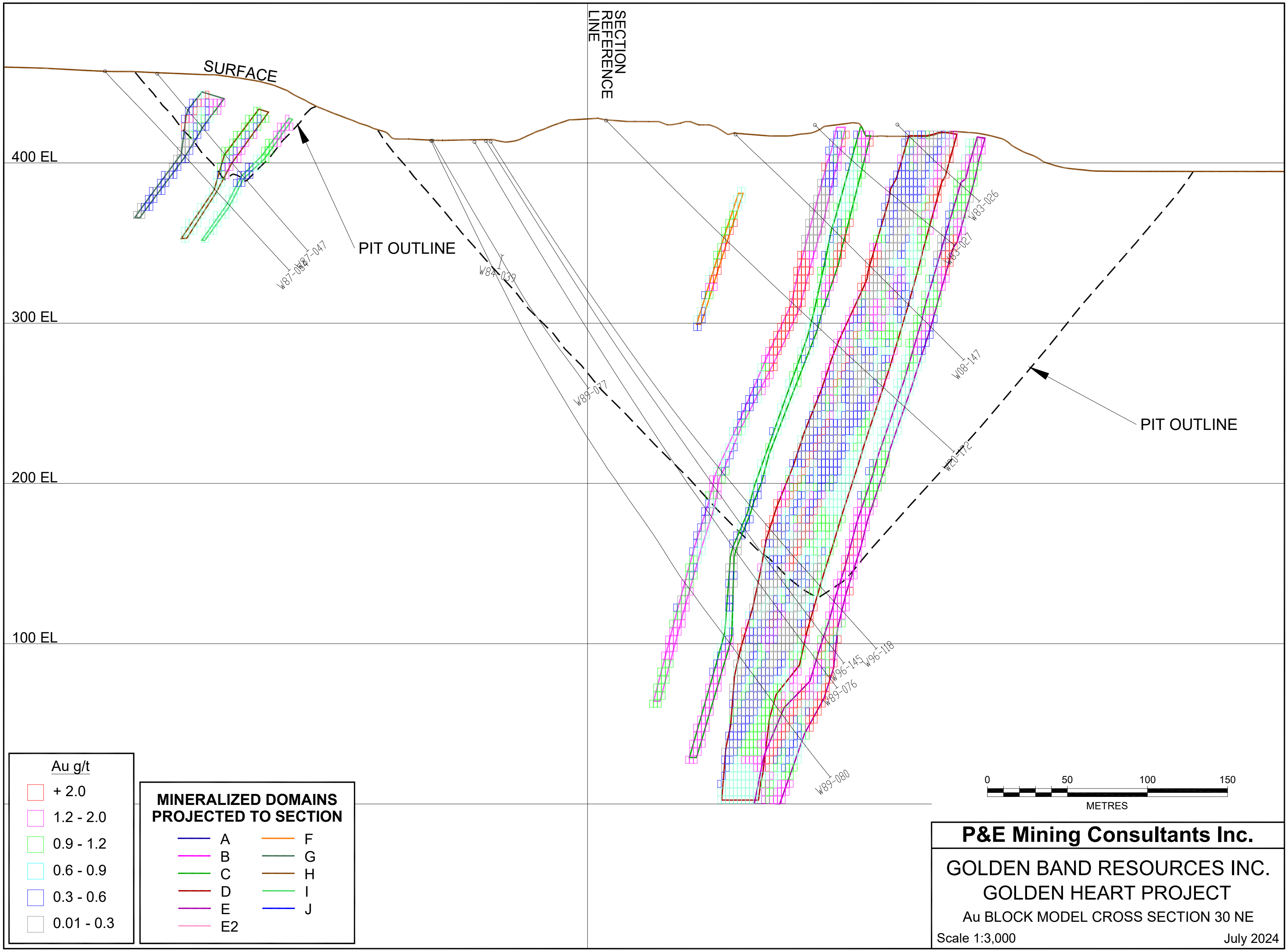

GH-E major: -43.2018 -> 37.4256 (45)
semi-major: 42.9572 -> 66.4475 (45)
minor: -15 -> 142 (45)
Lag 25.0
gamma(h)
distance
Variogram model
Variogram model: Spherical
Experimental variogram type: Standard
Sill Range
Nugget 0.3505786
Structure 1 0.2103471 46.532
Structure 2 - -
Structure 3 - -
Structure 4 - -
Structure 5 - -
Variogram map
Bearing 37.4256
Plunge -43.2018
Dip 69.2030
Anisotropy factors
major / semi-major 1.000
major / minor 5.012
Modelling principal directions.
Normal Variogram Model Variogram Structures

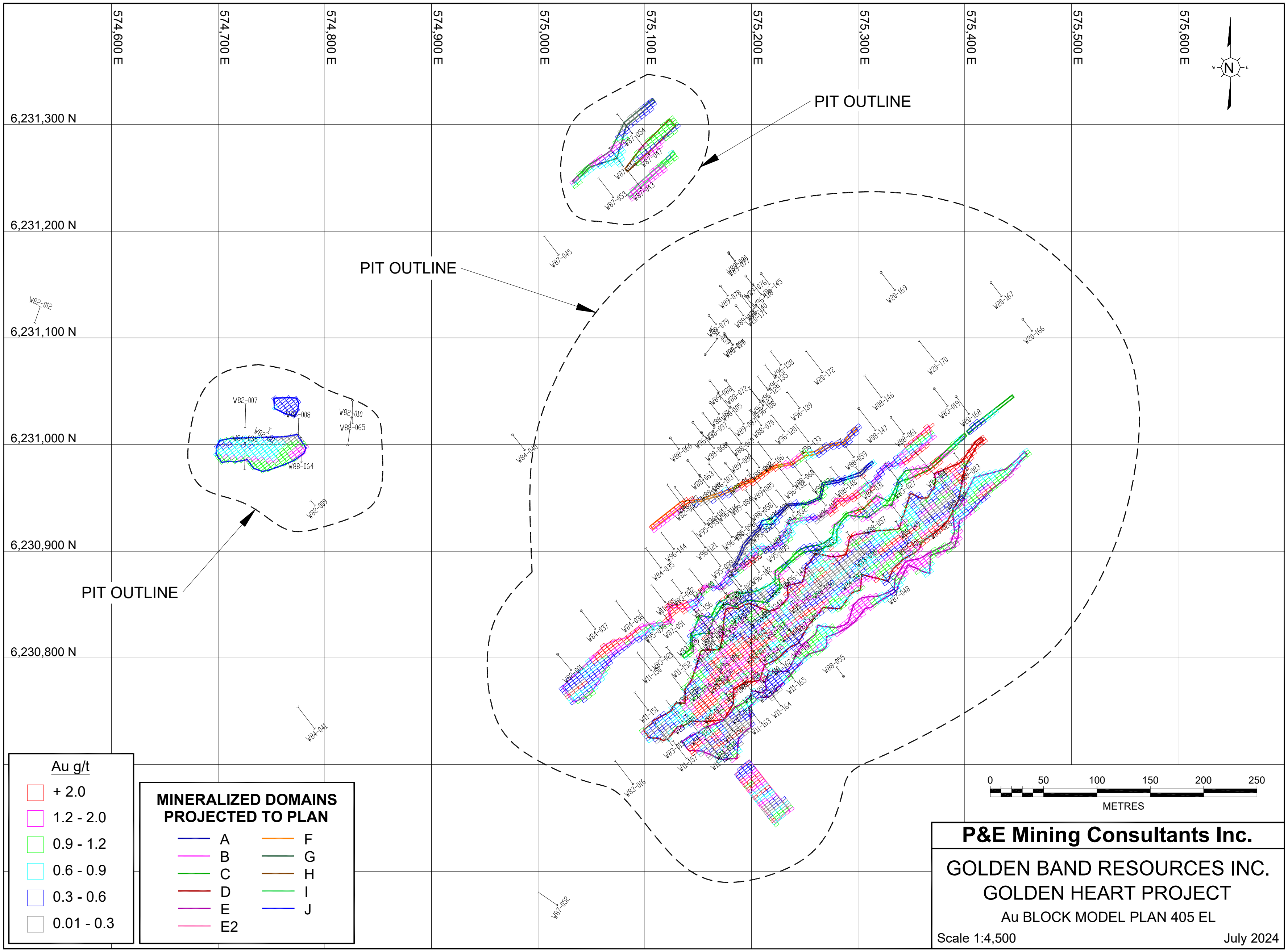
APPENDIX E AU BLOCK MODEL CROSS SECTIONS AND PLANS



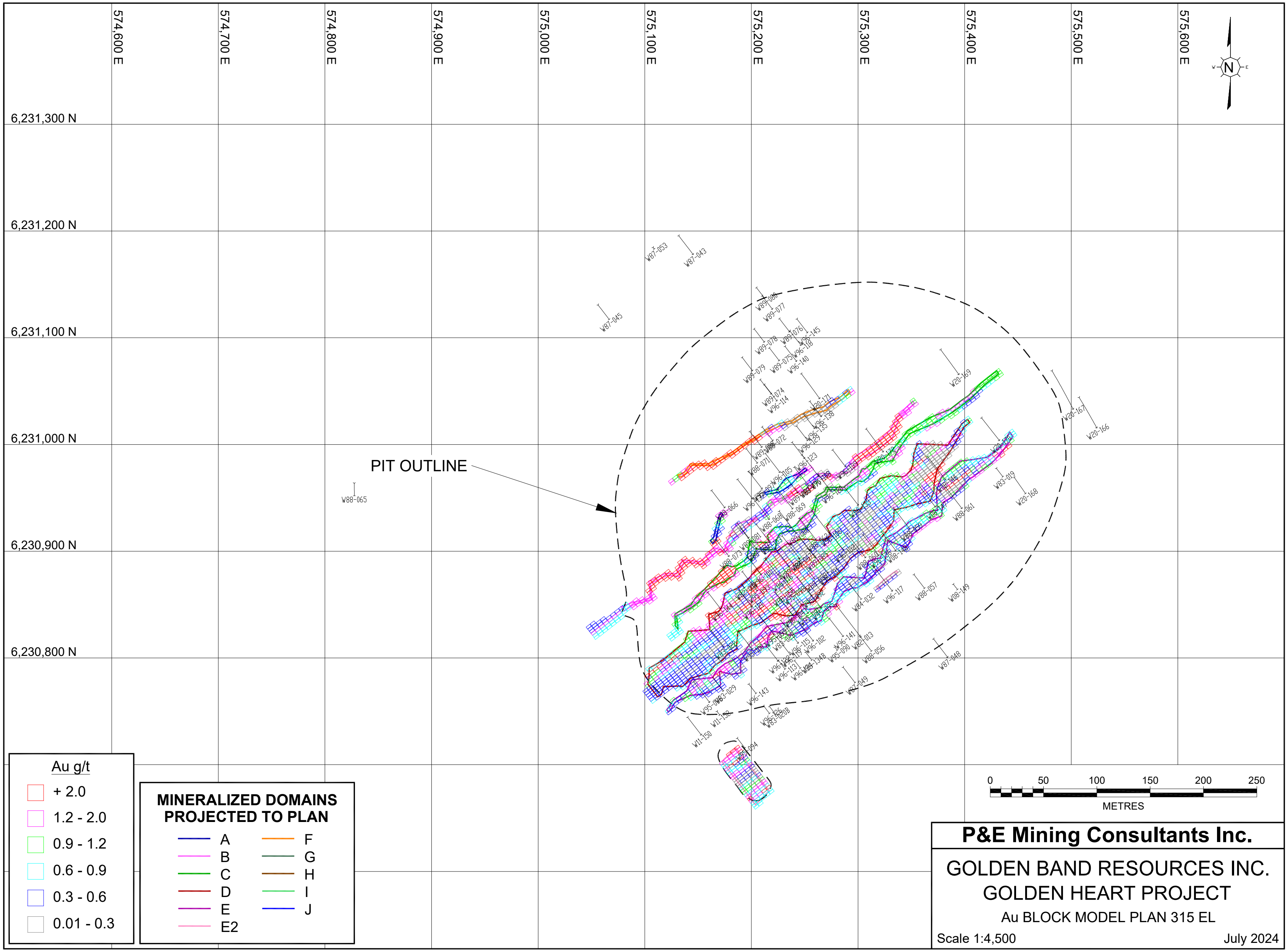
SECTION REFERENCE LINE
SURFACE
PIT OUTLINE
400 EL
300 EL
200 EL
100 EL
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
0 50 100 150
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL CROSS SECTION 10 NE
Scale 1:3,000
July 2024

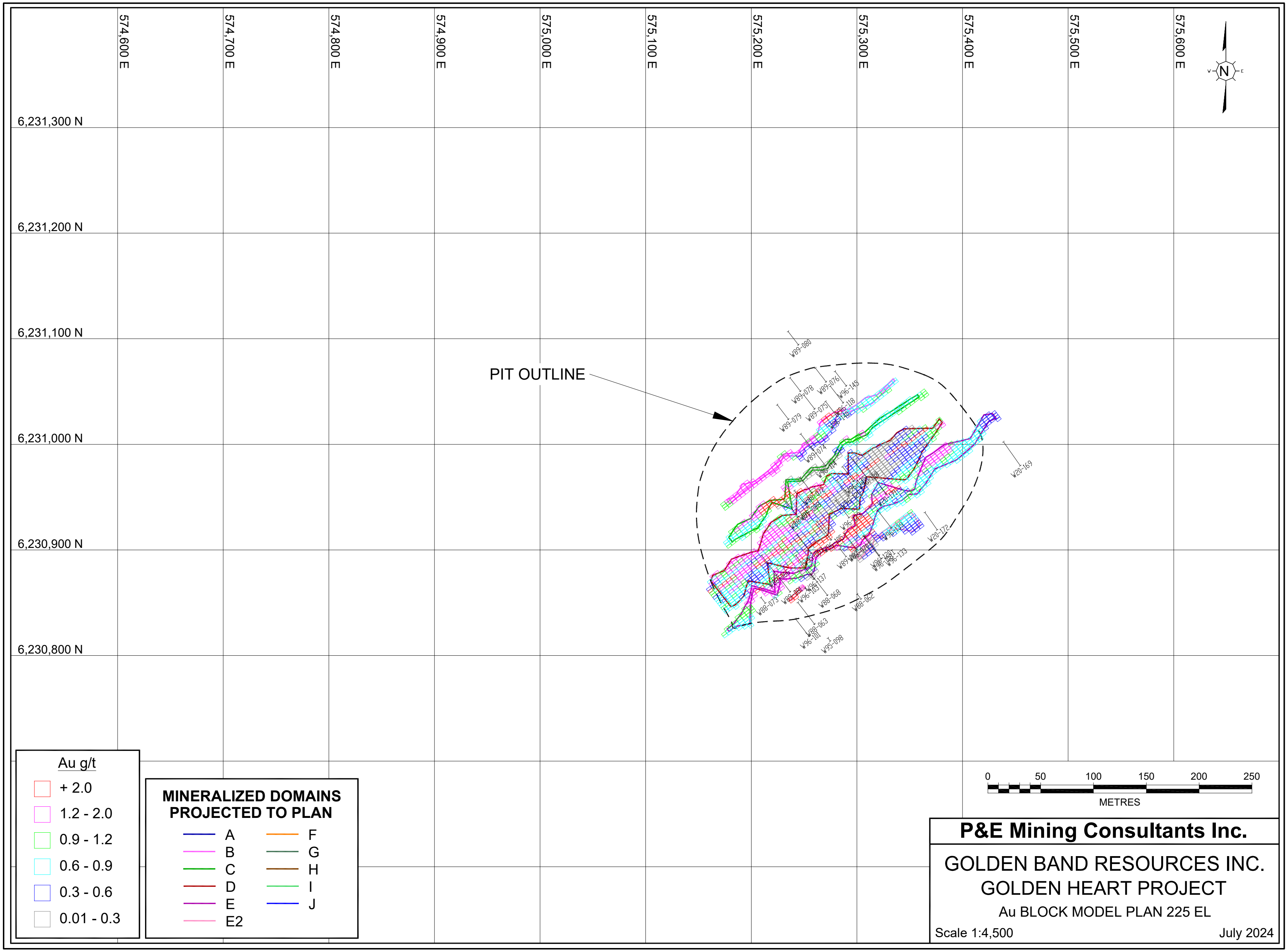

SECTION REFERENCE LINE
SURFACE
400 EL
300 EL
200 EL
100 EL
PIT OUTLINE
W87-045
W88-056
W82-013
W88-058
W88-068
W96-137
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
0
50
100
150
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL CROSS SECTION 20 NE
Scale 1:3,000
July 2024


SECTION REFERENCE LINE
SURFACE
400 EL
300 EL
200 EL
100 EL
PIT OUTLINE
PIT OUTLINE
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
0
50
100
150
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL CROSS SECTION 30 NE
Scale 1:3,000
July 2024

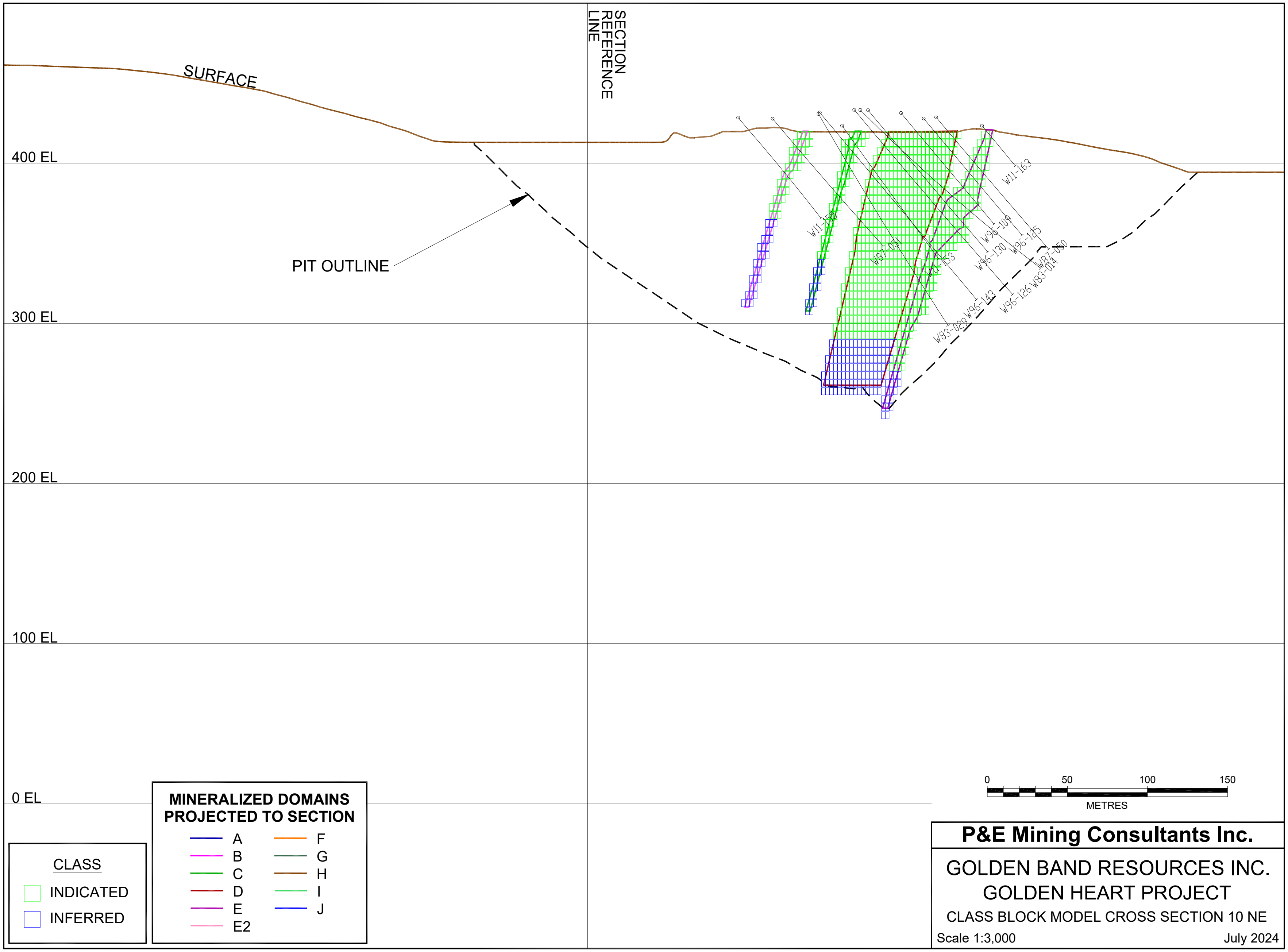


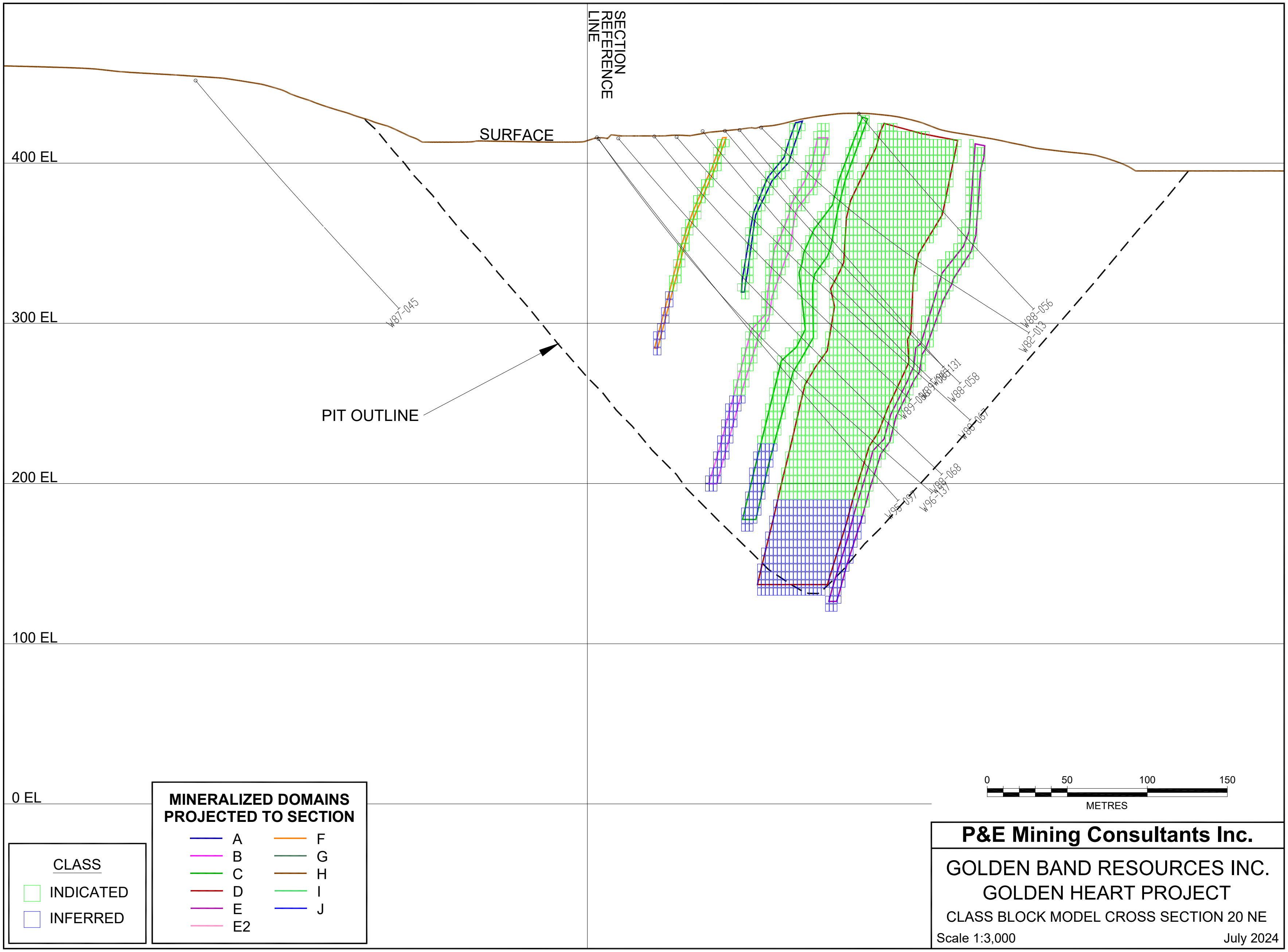
574,600 E
574,700 E
574,800 E
574,900 E
575,000 E
575,100 E
575,200 E
575,300 E
575,400 E
575,500 E
575,600 E
6,231,300 N
6,231,200 N
6,231,100 N
6,231,000 N
6,230,900 N
6,230,800 N
PIT OUTLINE
PIT OUTLINE
PIT OUTLINE
N
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
0
50
100
150
200
250
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL PLAN 405 EL
Scale 1:4,500
July 2024

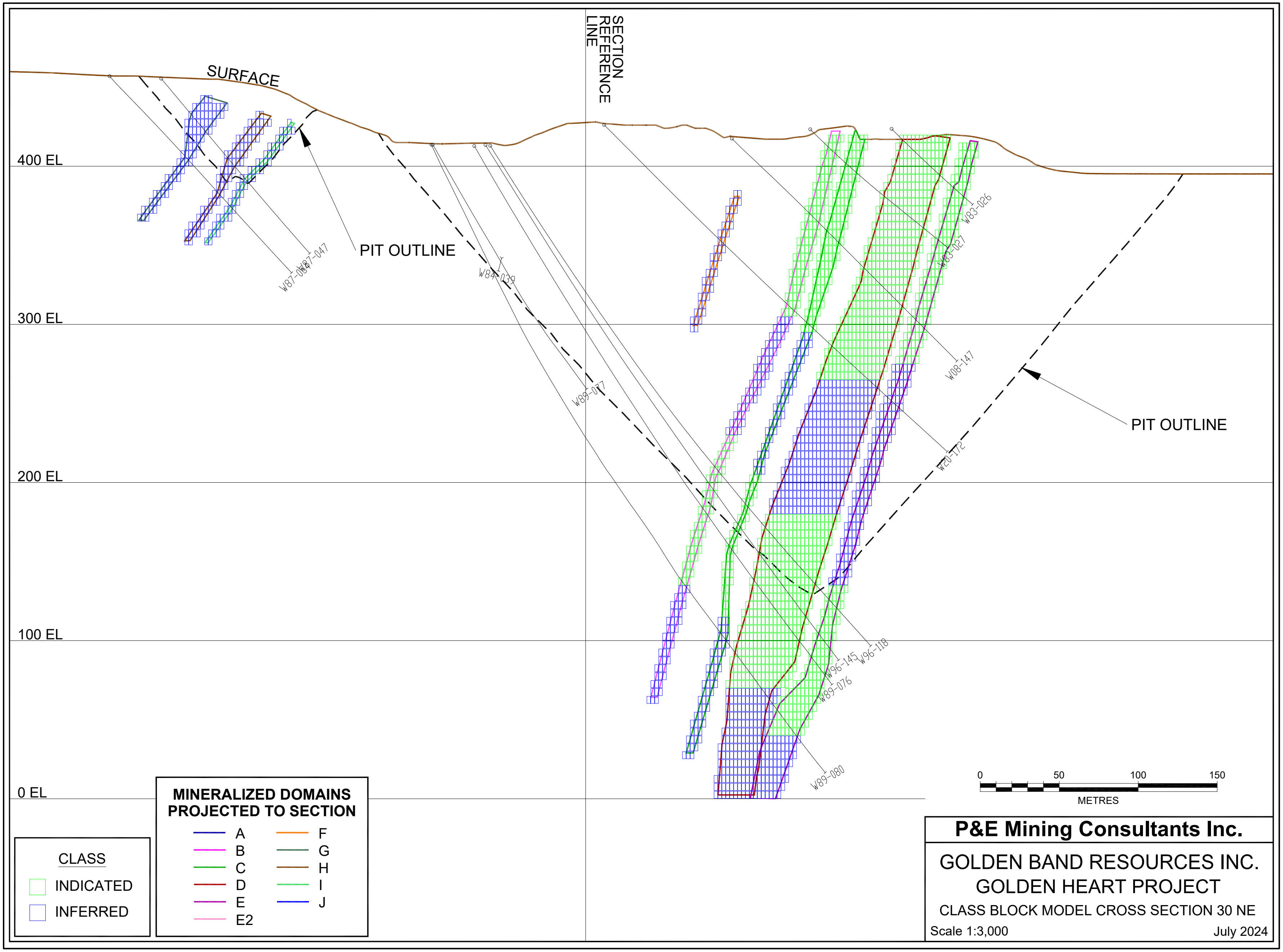

574,600 E
574,700 E
574,800 E
574,900 E
575,000 E
575,100 E
575,200 E
575,300 E
575,400 E
575,500 E
575,600 E
6,231,300 N
6,231,200 N
6,231,100 N
6,231,000 N
6,230,900 N
6,230,800 N
N
PIT OUTLINE
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS
PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
0
50
100
150
200
250
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL PLAN 315 EL
Scale 1:4,500
July 2024


574,600 E
574,700 E
574,800 E
574,900 E
575,000 E
575,100 E
575,200 E
575,300 E
575,400 E
575,500 E
575,600 E
6,231,300 N
6,231,200 N
6,231,100 N
6,231,000 N
6,230,900 N
6,230,800 N
N
PIT OUTLINE
Au g/t
+ 2.0
1.2 - 2.0
0.9 - 1.2
0.6 - 0.9
0.3 - 0.6
0.01 - 0.3
MINERALIZED DOMAINS
PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
0
50
100
150
200
250
METRES
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
Au BLOCK MODEL PLAN 225 EL
Scale 1:4,500
July 2024

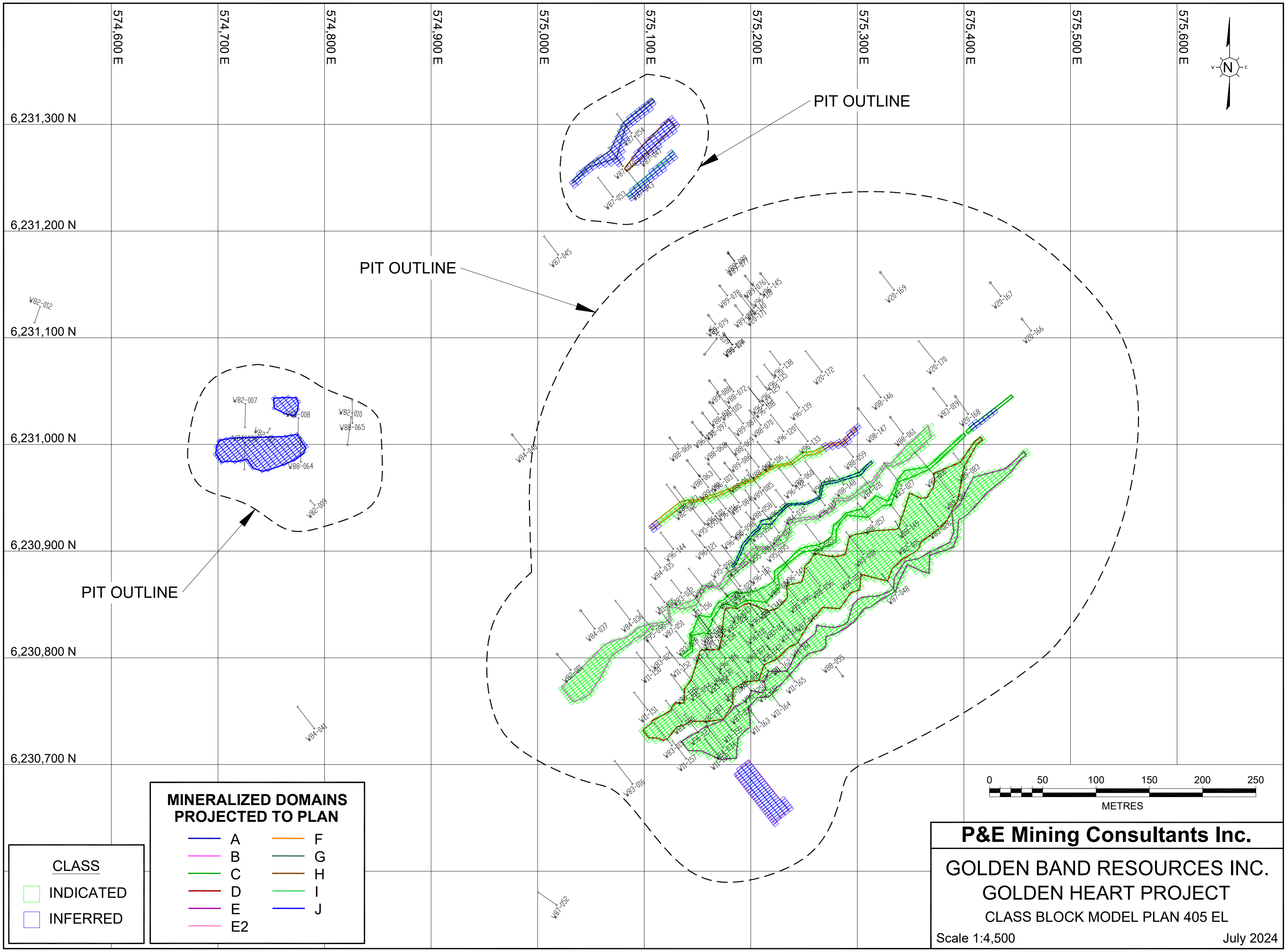
APPENDIX F CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS


SECTION REFERENCE LINE
SURFACE
400 EL
300 EL
200 EL
100 EL
0 EL
PIT OUTLINE
W11-155
W97-051
W11-153
W83-029
W96-143
W96-130
W96-109
W96-126
W96-135
W83-014
W87-050
W11-163
0 50 100 150
METRES
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
CLASS
INDICATED
INFERRED
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL CROSS SECTION 10 NE
Scale 1:3,000
July 2024

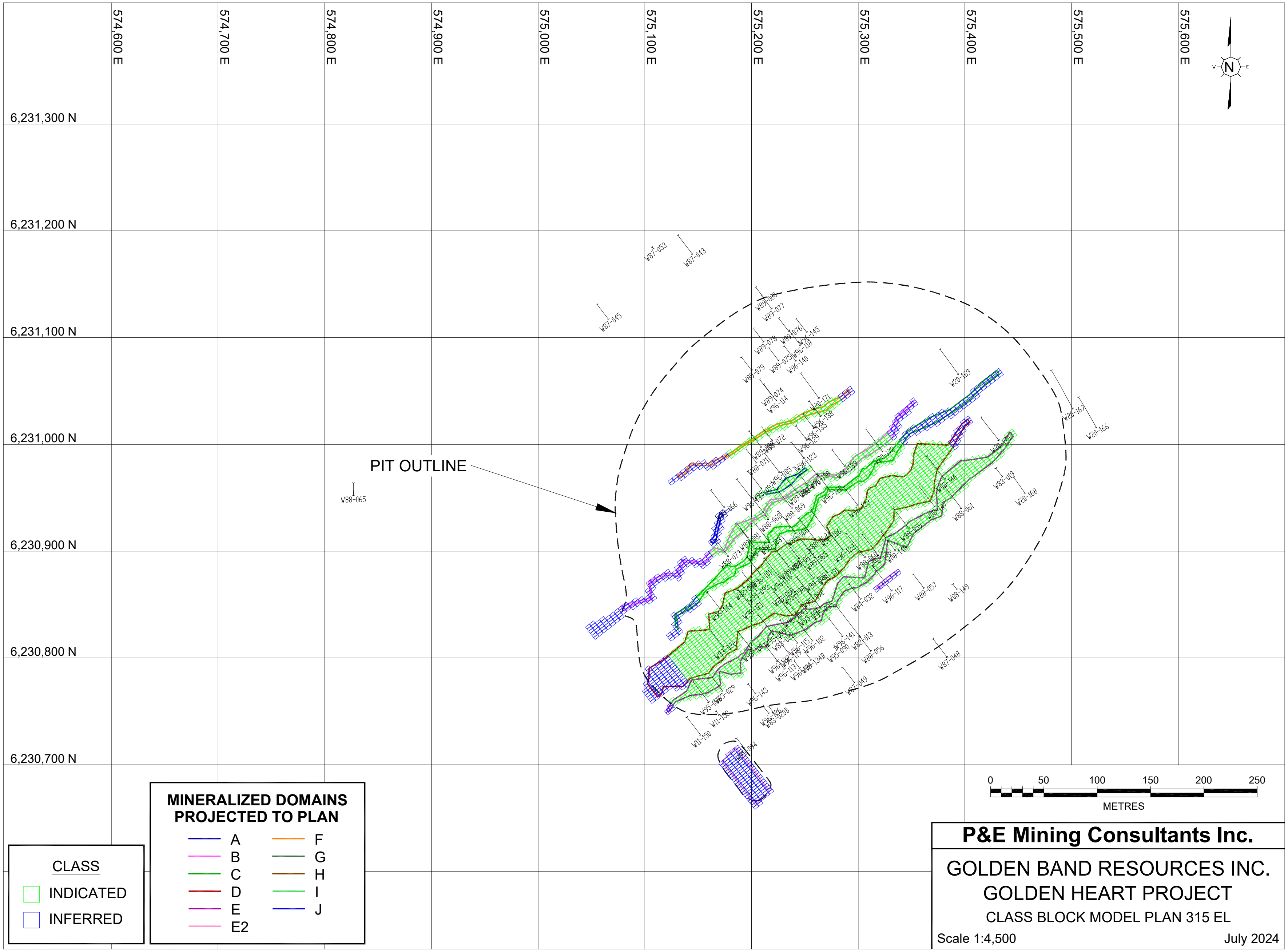

SECTION REFERENCE LINE
SURFACE
400 EL
300 EL
200 EL
100 EL
0 EL
PIT OUTLINE
W87-045
W88-056
W82-013
W88-058
W88-068
W95-097
W96-137
0
50
100
150
METRES
CLASS
INDICATED
INFERRED
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL CROSS SECTION 20 NE
Scale 1:3,000
July 2024



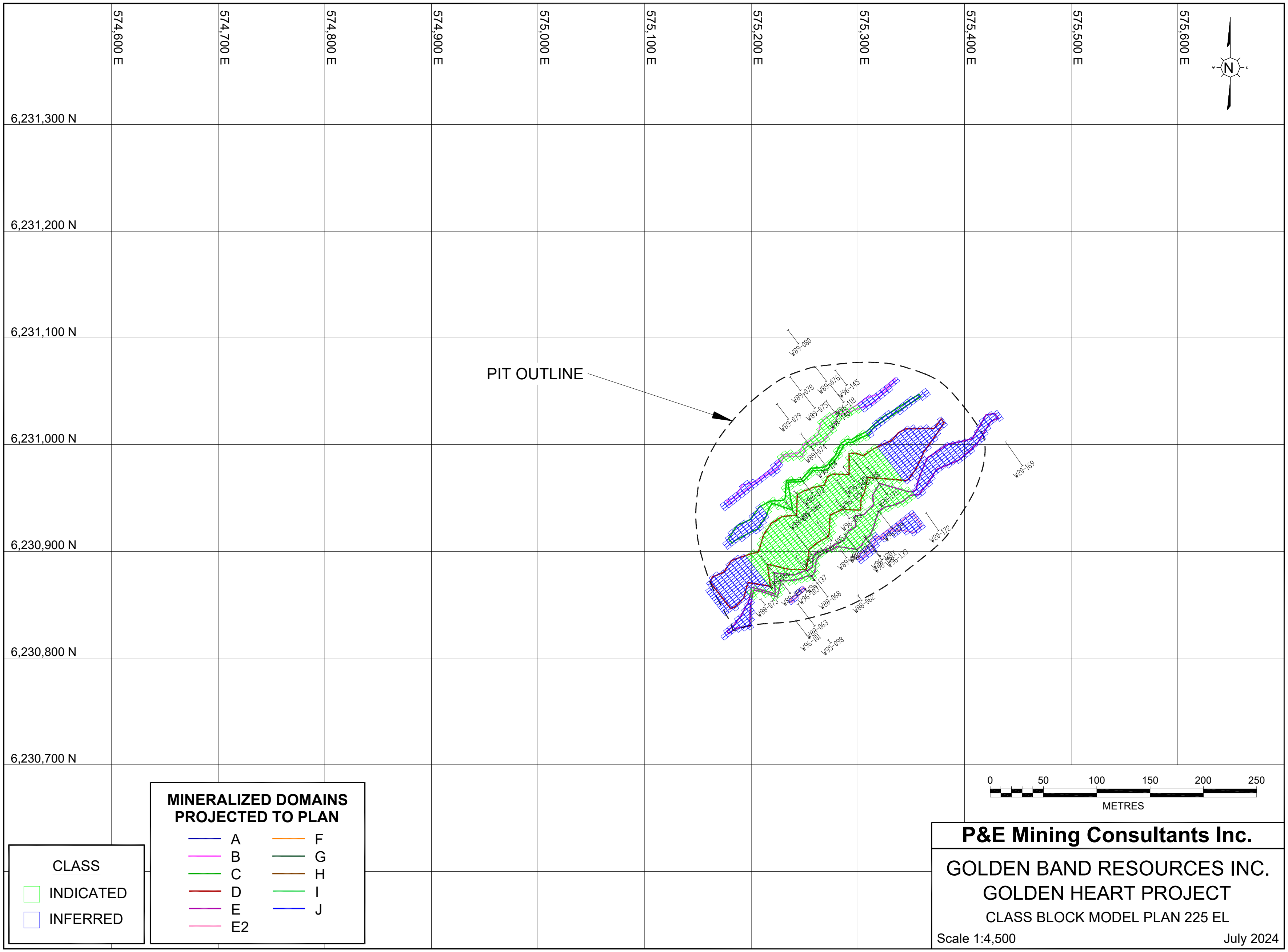
SECTION REFERENCE LINE
SURFACE
400 EL
300 EL
200 EL
100 EL
0 EL
PIT OUTLINE
PIT OUTLINE
W87-047
W84-039
W89-077
W83-026
W83-027
W08-147
W20-172
W96-145
W96-118
W89-076
W89-080
0
50
100
150
METRES
CLASS
INDICATED
INFERRED
MINERALIZED DOMAINS PROJECTED TO SECTION
A
B
C
D
E
E2
F
G
H
I
J
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL CROSS SECTION 30 NE
Scale 1:3,000
July 2024



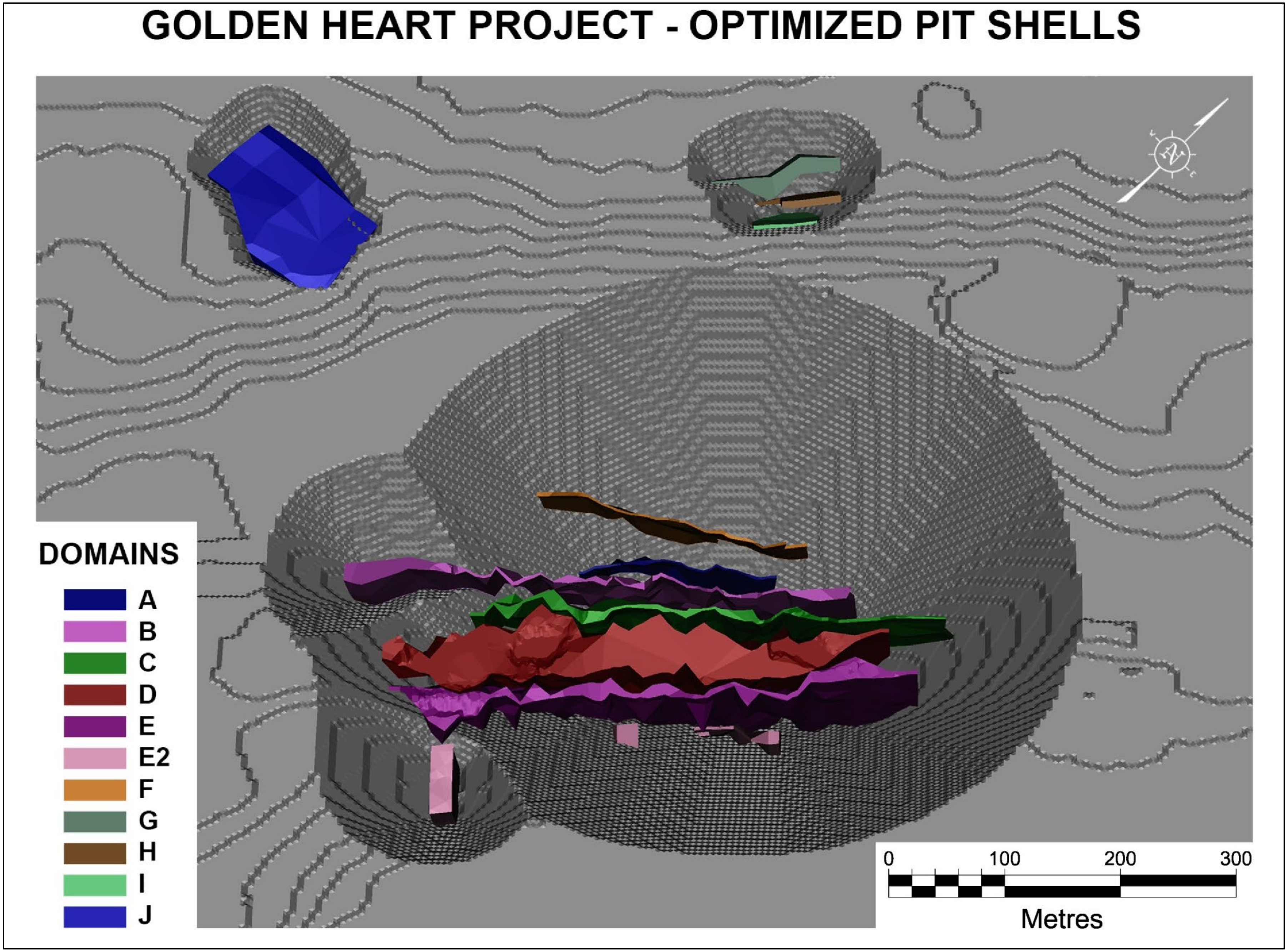
PIT OUTLINE
PIT OUTLINE
PIT OUTLINE
MINERALIZED DOMAINS PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
CLASS
INDICATED
INFERRED
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL PLAN 405 EL
Scale 1:4,500
July 2024
METRES



574,600 E
574,700 E
574,800 E
574,900 E
575,000 E
575,100 E
575,200 E
575,300 E
575,400 E
575,500 E
575,600 E
6,231,300 N
6,231,200 N
6,231,100 N
6,231,000 N
6,230,900 N
6,230,800 N
6,230,700 N
N
PIT OUTLINE
0 50 100 150 200 250
METRES
MINERALIZED DOMAINS PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
CLASS
INDICATED
INFERRED
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL PLAN 315 EL
Scale 1:4,500
July 2024


574,600 E
574,700 E
574,800 E
574,900 E
575,000 E
575,100 E
575,200 E
575,300 E
575,400 E
575,500 E
575,600 E
6,231,300 N
6,231,200 N
6,231,100 N
6,231,000 N
6,230,900 N
6,230,800 N
6,230,700 N
N
PIT OUTLINE
0
50
100
150
200
250
METRES
CLASS
INDICATED
INFERRED
MINERALIZED DOMAINS PROJECTED TO PLAN
A
B
C
D
E
E2
F
G
H
I
J
P&E Mining Consultants Inc.
GOLDEN BAND RESOURCES INC.
GOLDEN HEART PROJECT
CLASS BLOCK MODEL PLAN 225 EL
Scale 1:4,500
July 2024

APPENDIX G OPTIMIZED PIT SHELLS


GOLDEN HEART PROJECT - OPTIMIZED PIT SHELLS
DOMAINS
A
B
C
D
E
E2
F
G
H
I
J
0
100
200
300
Metres