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TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE FOR THE GREY FOX PROJECT

(compliant with Regulation 43-101 / NI 43-101 and Form 43-101F1)

Project Location

Latitude: 48º 30´ North; Longitude: 80º 18' West
Hislop Township
Province of Ontario, Canada

Prepared for

Brigus Gold Corp.
56 Temperance Street, Suite 300
Toronto, Ontario M5H 3V5
Canada
Phone: 416-214-9867

Prepared by:

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Val-d'Or (Québec)

Effective Date: June 21, 2013
Signature Date: July 30, 2013

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TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE
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Prepared for

Brigus Gold Corp.
56 Temperance Street, Suite 300
Toronto, Ontario M5H 3V5
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Phone: 416-214-9867

(signed and sealed on original)
Pierre-Luc Richard, MSc, P.Geo.
InnovExplo Inc.
560, 3e Avenue, Val-d'Or,
Québec, Canada, J9P 1S4

Signed at Val-d'Or on July 30, 2013

(signed and sealed on original)
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Signed at Val-d'Or on July 30, 2013

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Signed at Val-d'Or on July 30, 2013

CERTIFICATE OF AUTHOR – PIERRE-LUC RICHARD

I, Pierre-Luc Richard, MSc, PGeo (APGO No. 1714, OGQ No. 1119), do hereby certify that:

1. I am employed as a geologist by and carried out this assignment for: InnovExplo – Consulting Firm in Mines and Exploration, 560, 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.

2. I graduated with a Bachelor's degree in geology from the Université du Québec à Montreal in 2004. In addition, I obtained an MSc from the Université du Québec à Chicoutimi in 2012.

3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ No. 1119) and of the Association of Professional Geoscientists of Ontario (APGO No. 1714).

4. I have worked as a geologist for more than nine (9) years since my graduation from university.

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

6. I am responsible for the preparation of sections 1, 9 to 22, and 24 to 27 of the technical report titled "Technical Report and Mineral Resource Estimate for the Grey Fox Project (compliant with Regulation 43-101 / NI 43-101 and Form 43-101F1)" (the "Technical Report"), effective date of June 21, 2013 and signature date of July 30, 2013. I also supervised the writing of the entire report. I visited the property with Carl Pelletier on March 20, 2013 and on April 29 and 30, 2013.

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.5 of Regulation 43-101 and National Instrument 43-101.

10. I have read Regulation 43-101/National Instrument 43-101 respecting standards of disclosure for mineral projects, as well as Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.

11. [1] I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 30th day of July, 2013.

(signed and sealed on original)

Pierre-Luc Richard, MSc, PGeo
InnovExplo Inc
pierreluc.richard@innovexplo.com

[1] If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph is included in the certificate.

CERTIFICATE OF AUTHOR – BRUNO TURCOTTE

I, Bruno Turcotte, PGeo (APGO No. 2136, OGQ No. 453) do hereby certify that:

1. I am Consulting Geologist of InnovExplo Inc at 560, 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.

2. I graduated with a Bachelor of Geology degree from Université Laval in Quebec City in 1995. In addition, I obtained a Master's in Earth Sciences degree from Université Laval in Quebec City in 1999.

3. I am a member of the Ordre des Géologues du Québec (OGQ, no. 453) and of the Association of Professional Geoscientists of Ontario (APGO 2136).

4. I have worked as a geologist for a total of 18 years since my graduation from university. My exploration expertise has been acquired with Noranda Exploration Inc, Breakwater Resources Ltd, South-Malartic Exploration Inc, and Richmont Mines Inc. My mining expertise was acquired on the Croinor pre-production project and at the Beaufor mine. I have been a consulting geologist for InnovExplo Inc since March 2007.

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

6. I am responsible for the preparation of the sections 2.0 to 8.0, 23.0, and 27.0 of the technical report titled "Technical Report and Mineral Resource Estimate for the Grey Fox Project (compliant with Regulation 43-101 / NI 43-101 and Form 43-101F1)" (the "Technical Report"), effective date of June 21, 2013 and signature date of July 30, 2013.

7. I have not had prior involvement with the property that is the subject of the Technical Report. I did not visit the Grey Fox property.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report and that the omission to disclose would make the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.5 of Regulation 43-101 and National Instrument 43-101.

10. I have read Regulation 43-101 / NI 43-101 respecting standards of disclosure for mineral projects, as well as Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority, and any publication by them of the Technical Report for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.[1]

Dated this 30th day of July, 2013.

(signed and sealed on original)

Bruno Turcotte, MSc, PGeo
bruno.turcotte@innovexplo.com

[1] If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph is included in the certificate.

CERTIFICATE OF AUTHOR – CARL PELLETIER

I, Carl Pelletier, PGeo (APGO No. 1713, OGQ No. 384) do hereby certify that:

1. I am Consulting Geologist of: InnovExplo Inc, 560 3e Avenue, Val d'Or, Québec, Canada, J9P 1S4.

2. I graduated with a Bachelor's degree in Geology (B.Sc.) from Université du Québec à Montréal (Montréal, Québec) in 1992, and I initiated a Master's degree at the same university for which I completed the course program but not the thesis.

3. I am a member of the Ordre des Géologues du Québec (OGQ, no. 384), the Association of Professional Geoscientists of Ontario (APGO, no. 1713), and of the Canadian Institute of Mines (CIM), Harricana Section.

4. I have worked as a geologist for a total of 20 years since my graduation from university. My mining expertise has been acquired in the Silidor, Géant Dormant, Bousquet II, Sigma-Lamaque and Beaufor mines, whereas my exploration experience has been acquired with Cambior Inc. and McWatters Mining Inc. I have been a consulting geologist for InnovExplo inc. since February 2004.

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

6. I am responsible for supervising the preparation of the Mineral Resource Estimate of the Grey Fox Project, as well as supervising the preparation of all the sections of the technical report titled "Technical Report and Mineral Resource Estimate for the Grey Fox Project (compliant with Regulation 43-101 / NI 43-101 and Form 43-101F1)" (the "Technical Report"), effective date of June 21, 2013 and signature date of July 30, 2013. I was accompanied by Pierre-Luc Richard for the visits of the property on March 20, 2013 and on April 29 and 30, 2013.

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.5 of Regulation 43-101 and National Instrument 43-101.

10. I have read Regulation 43-101 / NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

11. [1] I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 30th day of July, 2013.

(signed and sealed on original)

Carl Pelletier, BSc, PGeo
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[1] If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph is included in the certificate.

1. SUMMARY

On January 4 2013, InnovExplo Inc. ("InnovExplo") was contracted by Howard Bird, Senior Vice President of Exploration of Brigus Gold Corp. ("Brigus Gold" or "the issuer"), to complete a Mineral Resource Estimate and a Technical Report ("the report") for the Grey Fox project ("the project" or "the property") in compliance with Regulation 43-101 and Form 43-101F1. The issuer, Brigus Gold Corp., is a Canadian mineral exploration company trading publicly on the TSX in Toronto (TSX-T: BRD). InnovExplo is an independent mining and exploration consulting firm based in Val-d'Or (Québec).

The authors, Pierre-Luc Richard, MSc, PGeo (APGO #1714; OGQ #1119), Bruno Turcotte, MSc, PGeo (APGO #2136; OGQ #453), and Carl Pelletier, BSc, PGeo (APGO #1713; OGQ #384), are all Qualified and Independent Persons as defined by Regulation 43-101. Pierre-Luc Richard completed the Mineral Resource Estimate after reviewing the available data, previous surveys, and all other relevant information deemed adequate and reliable. Pierre-Luc Richard and Bruno Turcotte wrote the report. The Mineral Resource Estimate and report were prepared under the supervision of Carl Pelletier. Technical support and collaboration were provided by Vincent Jourdain (PEng), Louise Charbonneau, Daniel Turgeon, all of InnovExplo. Venetia Bodycomb of Vee Geoservices provided the linguistic editing.

Authors Pierre-Luc Richard and Carl Pelletier visited the Grey Fox project for the first time on March 20, 2013 and a second visit took place on April 29 and 30, 2013. All the authors have a good knowledge of the geological setting of the area and its mineral potential. The authors also have a good understanding of mineral deposit exploration models for Archean gold deposits. InnovExplo conducted a review and appraisal of the information used to prepare the report and to formulate its conclusions and recommendations, and believes that such information is valid and appropriate considering the status of the project and the purpose for which the report is prepared. The author has fully researched and documented the conclusions and recommendations made in the report. The authors, by virtue of their technical review of the project's production potential, affirm that the work program and recommendations presented in the report comply with Regulation 43-101 and CIM technical standards.

Property description and location

The Grey Fox property is located in Hislop Township, approximately 12 km east-southeast of the town of Matheson, in the province of Ontario, Canada. The property lies within NTS map sheet 42A/08. The approximate coordinates for the geographic centre of the Grey Fox property are 48°30'20.0"N and 80°18'20.0"N (UTM coordinates: 551100E and 5372750N, NAD 83, Zone 17). The surrounding land has an altitude of about 900 to 950 metres above mean sea level.

Claim status was supplied by Howard Bird, Senior Vice President of Exploration of Brigus Gold Corp. The property consists of one (1) block of land comprised of seven (7) parcels for a total of 284.46 ha. InnovExplo verified the status for all claims using the Ontario government's online claim management system via the Geo-Claims website.

Geological setting

The Grey Fox property lies within the Archean Superior Province, which forms the core of the North American continent and is surrounded by provinces of Paleoproterozoic age to the west, north and east, and the Grenville Province of Mesoproterozoic age to the southeast.

The Grey Fox property lies within the Abitibi subprovince (Abitibi Greenstone Belt) of the Archean Superior craton, in eastern Canada, along the northern margin of the Porcupine-Destor-Manneville deformation zone. This and the Larder Lake-Cadillac deformation zones are the most important deformation zones within the Abitibi subprovince in terms of both structural effects and gold production.

The local geological setting is represented by Neoarchean supracrustal rocks, which are intruded by Paleoproterozoic and Keweenawan-age diabase and Mesozoic kimberlite dikes and pipes, underlie the Highway 101 area. The supracrustal rocks are composed of ultramafic, mafic, intermediate and felsic metavolcanic rocks, related intrusive rocks, clastic and chemical metasedimentary rocks, and a suite of ultramafic to felsic alkalic plutonic and metavolcanic rocks (Berger, 2002). These rocks are divisible into five (5) distinct packages based on morphology, petrography, geochemistry and geochronology. These packages or assemblages (cf. Thurston 1991) in the Highway 101 area are correlated with regional assemblages proposed by Jackson and Fyon (1991) and modified by Ayer et al., (1999b). The five (5) assemblages, from oldest to youngest, are the Kidd-Munro, Tisdale, Kinojevis, Porcupine and Timiskaming assemblages. The first three are predominantly composed of metavolcanic rocks; the latter two are predominantly composed of metasedimentary rocks, although alkaline metavolcanic rocks and related intrusions occur within the Timiskaming Assemblage. The Grey Fox property is essentially covered by the Tisdale, and Timiskaming assemblages, but also by tiny part of the Kinojevis Assemblage.

Drilling

Brigus started drilling the Grey Fox property in 2008. This report, using the established cut-off date of June 10, 2013, considers 725 holes drilled, logged and sampled by the company totalling 245,793.07 metres. Out of those 725 holes, 689 holes (totalling 233,482.17 m) were included in the current Resource Estimate. The discarded 36 holes were located outside the Grey Fox deposit.

The original objective of the program was to investigate historical gold intervals that a limited number of drill holes had encountered between 1993 and 1997. This objective was quickly upgraded to systematic drilling of the mineralized zones when significant gold intervals were encountered. All holes were supervised, logged and sampled by Brigus personnel. The program produced 88,264 samples averaging 0.99 metre.

Data Verification

The diamond drill hole database used for the Resource Estimate presented herein was provided by Brigus and is referred to as the Brigus database in this item. A drilling program was underway at the time that this Report was written. Therefore, a cut-off date of June 10 2013 was established for the current Resource Estimate.

InnovExplo's data verification included field visits, a review of core, a review of the drill hole collar locations, a review of the assays, a review of lithologies, alterations, and structural descriptions, and a review of downhole surveys.

Metallurgical Testing

The latest metallurgical study was performed in March 2013 by SGS on the 147 and Contact areas. As reported in Legault and Geldart (2013), metallurgical testwork was conducted on the 147 and Contact Master Composites and on 16 Variability Composites. The Variability Composites represent 16 grid zones, 8 from the 147 area and 8 from the Contact area. The 147 and Contact Master Composites were submitted for gravity separation followed by carbon in-leach cyanidation (CIL) of the gravity tailing. The Variability Composites were submitted for whole ore carbon-in leach.

The recovery of gold from the 147 Master Composite by gravity separation ranged from 33% to 38%. The gold recovery from the Contact Zone Master Composite ranged from 9% to 18%. The gold recovery of the Variability Composites (whole ore carbon in leach test) ranged from 63% for 147 Zone 8 (test CN-8) at 93 µm to 94% for both the 147 Zone 3 (Test CN-3) at 71 µm and Contact Zone 5 (test CN-13) at 46 µm.

Mineral Resource Estimate

The 2013 Mineral Resource Estimate herein was performed by Pierre-Luc Richard, MSc, PGeo, under the supervision of Carl Pelletier, BSc, PGeo, using all available results. The main objectives of InnovExplo's work were to: 1) update the interpretation; and 2) publish the results of an updated Mineral Resource Estimate for the Grey Fox Project. The mineral resources presented herein are not mineral reserves since they have no demonstrable economic viability. The result of the study is a single Mineral Resource Estimate for all mineralized zones, with Indicated and Inferred Resources, for both a Whittle-optimized in-pit volume and a complementary underground volume. The effective date of this Mineral Resource Estimate is June 21, 2013.

The Mineral Resource Estimate detailed in this report was made using 3D block modelling. Krigging and the inverse distance square interpolation (ID2) methods were used for an area of the Grey Fox Project with a strike-length of 1.3 kilometres and a width of up to approximately 1.0 kilometres, down to a vertical depth of 600 metres below surface. In order to conduct accurate resource modeling of the Grey Fox Project, InnovExplo, in close collaboration with Brigus geologists, updated a geological-zone solid model delimiting the geologically defined extent of the mineralized zones using a 1.3 kilometres strike-length corridor measuring 1.0 kilometre wide and extending down to 600 metres below surface. The geological-zone model was constructed to outline zones of geological continuity. Overall, fifteen geological zones have been interpreted along a steep, roughly north-northwest trend.

Given the density of the processed data, the search ellipse criteria, and the specific interpolation parameters, InnovExplo is of the opinion that the current Mineral Resource Estimate can be classified as Indicated and Inferred Resources. The estimate is compliant with CIM standards and guidelines for reporting mineral resources and reserves. Table 14.8 presents the combined resources by category for the overall Grey Fox project.

Mineral Resource Estimate results for the Grey Fox project (Section 14 – Table 14.8)

Grey Fox - 2013 MINERAL RESOURCE ESTIMATE					
Resource Class	Cut-off Grade (g/t Au)	Potential Material	Tonnes	Capped Au (g/t)	Contained Au (oz)
Indicated	>2.84	Underground	1 275 000	6.2	255 000
	>0.72	Open Pit	3 041 500	2.6	252 400
		Total Indicated	**4 316 500**	**3.7**	**507 400**
Inferred	>2.84	Underground	1 025 100	5.6	184 800
	>0.72	Open Pit	488 900	2.8	43 800
		Total Inferred	**1 514 000**	**4.7**	**228 600**

- The Independent and Qualified Persons for the Mineral Resource Estimate, as defined by Regulation 43-101, are Pierre-Luc Richard, MSc, PGeo (InnovExplo Inc), and Carl Pelletier, BSc, PGeo (InnovExplo Inc), and the effective date of the estimate is June 21, 2013.
- The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
- While the results are presented undiluted and in situ, the reported mineral resources are considered to have reasonable prospects for economic extraction.
- CIM definitions and guidelines were followed for Mineral Resources.
- The resource was estimated using Gemcom GEMS 6.5. The database used for the estimate contained diamond drill core composites and assays. All samples were collected by Brigus personnel. The estimate is based on 724 diamond drill holes (246,191m) drilled from 1993 to 2013, of which the vast majority (>95%) were drilled between 2008 and 2013. A minimum true thickness of 5.0 m was applied, using the grade of the adjacent material when assayed or a value of zero when not assayed.
- Supported by statistical analysis and the high grade distribution within the deposit, a top cut varying from 50 g/t and 100 g/t was applied to assay grades prior to compositing grades for interpolation into model blocks using Ordinary Kriging and Inverse Distance Weighting Squared methods, and was based on 1.5 m composites within a 3m long x 3m wide x 3m high block model. The ordinary kriged grade model for part of the 147 and Contact zones and ID2 for the rest of the deposit was felt to best represent the continuity and distribution of the gold grade based on the current geological models.
- Two passes for each of the geological zones were used for interpolation. Based on geostatistics, the ellipse maximum ranges for interpolation were 102m x 38m x 10m for the 147 Main geological zone, 76m x 42m x 10m for the Contact Main geological zone and 60m x 30m x 10m for remaining zones.
- Bulk densities were calculated for individual interpreted lithological domains based on 638 density measurements. The calculated bulk densities vary from 2.76 g/cm3 to 2.96 g/cm3.
- A Whittle optimized constraining shell was generated to constrain the potential open pit material for the 147 and Contact Zone. The potential underground material for the 147 and Contact zones is based on the remaining resource outside of the pit shells. No open pit constraining shell was run for the Grey Fox South zone and all of the resource is classified as underground potential material. In-Pit and Underground resources were compiled at cut-off grades from 0.40 to 5.00 g/t Au (for sensitivity characterization). A cut-off grade of 0.72 g/t Au was selected as the official in-pit cut-off grade and a cut-off grade of 2.84 g/t Au was selected as the official underground cut-off grade. Cut-off grades must be re-evaluated in light of prevailing market conditions (gold price, exchange rate and mining cost).
- A gold price of US$1,400/oz and an exchange rate of US$1.00=C$1.01 was used in the gold cut-off grade calculations of 2.84 g/t for potential underground and 0.72 g/t for potential open-pit Mineral Resources. Underground and open-pit mining costs, process costs and G&A costs were estimated using experience gained from Brigus' Black Fox mine.
- The Indicated category is defined by combining various statistical criteria, such as a minimum of three drill holes within the search area, a maximum distance of 15m to the closest composite, and a maximum average distance of 25m to composites. Finally, a clipping boundary was interpreted to either upgrade or downgrade some of the resource based on confidence and geological continuity.
- The pit shell used for the resource estimate extends slightly beyond the property limits in its southern portion of the 147 Zone. Although the entire resource lies within the property limits, some material outside the property limits will need to be removed to access some of the resource. Consequently, this portion of the pit may need to be re-considered in a future economic study. For the purpose of this study, such material outside the property limits was attributed a grade of 0 g/t Au.
- Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes and g/t).
- The number of metric tons was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations in Regulation 43-101.
- InnovExplo is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue that could materially affect the Mineral Resource Estimate.

Conclusion and Recommendation

The Grey Fox deposit is at an advanced stage of exploration and hosts significant gold mineralization. Based on the density of the processed data, the search ellipse criteria, and the specific interpolation parameters, the authors are of the opinion that the current Mineral Resource Estimate can be classified as Indicated and Inferred Resources. The estimate follows CIM standards and guidelines for reporting mineral resources and reserves. A minimum mining width of five (5) metres (true width) and a cut-off grade of 0.72g/t Au (Open pit potential) and 2.84g/t Au (Underground potential) were used for the Mineral Resource Estimate. InnovExplo estimates that the Grey Fox deposit has Indicated Resources of 4,316,500 tonnes grading 3.7 g/t Au (507,400 ounces of gold) and Inferred Resources of 1,514,000 tonnes grading 4.7 g/t Au (228,600 ounces of gold).

InnovExplo, in close collaboration with Brigus geologists, updated the Grey Fox deposit using section views leading to fifteen (15) lithological zones, of which thirteen (13) are mineralized.

After conducting a detailed review of all pertinent information and completing the present Mineral Resource Estimate, InnovExplo concludes the following:

- The Grey Fox Project contains at least thirteen (13) continuous mineralized lithological zones;
- The geological and grade continuities of the gold mineralized zones of the Grey Fox project were demonstrated;
- Grade continuity is better defined within oreshoots throughout the deposit;
- The mineralized zones have strike lengths ranging up to 1.3 kilometres;
- In spite of the current drill spacing, the geological continuity seems steady throughout the mineralized zones;
- The mineralized zones encountered at the Grey Fox deposit have the possibility to expand at depth and to the south although the deposit currently reaches the property boundary in that direction;
- The potential is high for adding new resources within oreshoots with additional diamond drilling;
- The potential is high for upgrading Inferred Resources to Indicated Resources with more diamond drilling in all of the zones;
- There is a possibility for identifying new parallel zones with additional diamond drilling.

The property is strategically positioned in an area known to be associated with gold mineralization. InnovExplo considers the present Mineral Resource Estimate to be reliable, thorough, based on quality data, reasonable hypotheses, and parameters compliant with Regulation 43-101 and CIM standards regarding mineral resource estimations. InnovExplo believes that the Grey Fox project Mineral Resources are sufficiently advanced for a prefeasibility study.

InnovExplo recommends additional work to confirm the economic potential of the Grey Fox deposit and the rest of the Grey Fox property.

The potential being high for upgrading Inferred Resources to Indicated Resources with more diamond drilling, the authors recommend additional in-fill drilling.

Also, the mineralized zones encountered at the Grey Fox deposit have significant possibility to expand at depth and the potential is high for adding new underground resources within oreshoots of the Contact and 147 areas and both underground and open pit potential in the Grey Fox South area. Additional drilling is therefore warranted.

Following in-fill and at depth drilling program, InnovExplo recommends a feasibility study to determine the potential economic viability of the Mineral Resources. Both open pit and underground scenarios should be evaluated under the same model for the Grey Fox deposit.

Based on the current interpretation of the Grey Fox deposit, the authors believe that, based on the geological setting of the property, there is reasonable potential for identifying new zones parallel to the ones already identified. A comprehensive compilation of historical work over the entire property is recommended to fully understand the relationship between faults, shear zones and gold mineralization. A property-scale drilling program should be performed at Grey Fox to assess its full economic potential.

InnovExplo is of the opinion that the character of the Grey Fox property is of sufficient merit to justify the recommended exploration program described below. The program is divided into two (2) phases. Expenditures for Phase I of the work program are estimated at C$5,807,500 (including 15% for contingencies). Expenditures for Phase II of the work program are estimated at C$4,945,000 (including 15% for contingencies). The grand total is C$10,752,500 (including 15% for contingencies). Phase II of the program is contingent upon the success of Phase I.

Phase I – Drilling program on the Grey Fox deposit and property-scale compilation

Phase 1a) In-fill Drilling on the Grey Fox Deposit

InnovExplo recommends further definition drilling to upgrade Inferred resources to an Indicated category, in particular within the oreshoots already defined.

Phase 1b) Drilling Extensions of the Mineralized Zones

InnovExplo recommends further exploration drilling on the Grey Fox deposit to increase Inferred Resources. More specifically, the program should target the already identified oreshoots at depth and gaps within those close to surface. Lack of drilling close to surface in the Grey Fox South area should be prioritized in order to add open pit potential material.

Phase 1c) Compilation, Surface Mapping and Structural Study

A comprehensive compilation of all historical work should be undertaken in order to potentially provide new insights and targets on the property. Based on such a compilation, property-scale exploration programs, such as geophysics surveys, could be recommended. The main objectives of such studies should be to: 1) better understand the gold distribution of already known showings; and 2) establish new targets on the property.

Phase 1d) Metallurgical Testing and Rock Mechanic Studies

Additional metallurgical testing is warranted to better understand recovery throughout the deposit and in the Grey Fox South area where no metallurgical testing was ever conducted. A lithology approach should be considered and treated independently. Rock mechanics studies should also be initiated in order to provide adequate data for future economic studies.

Phase II – Prefeasibility and property-scale drilling program

Phase 2a) Resource Estimate Update and Prefeasibility Study on the Grey Fox Deposit

InnovExplo recommends producing a Resource Estimate update following Phase 1 and initiating a prefeasibility study to determine the potential economic viability of the Mineral Resource. Both open pit and underground scenarios should be evaluated within the same model for the Grey Fox deposit.

Phase 2b) Property-scale Drilling Program

InnovExplo recommends further exploration drilling on the Grey Fox property. Such targets will need to be determined after completing Phase 1. A provision has been included in this budget, but will need to be adjusted based on the results of Phase 1.

Budget estimate for the Phase I and II work programs (Section 26 – Table 26.1)

Phase 1 - Work Program Drilling program on the Grey Fox deposit and property-scale compilation		Budget	
		Description	Cost
1a	In-fill drilling on the Grey Fox deposit	20,000 m	$ 2,000,000
1b	Drilling along the extensions of the mineralized zones	20,000 m	$ 2,000,000
1c	Compilation, surface mapping and structural study		$ 250,000
1d	Metallurgical testing and rock mechanics studies		$ 650,000
	Contingencies (~ 15%)		$ 735,000
	Phase 1 subtotal		**C$ 5,635,000**

Phase 2 - Work Program Prefeasibility and property-scale drilling program		Budget	
		Description	Cost
2a	Mineral Resource Estimate update and prefeasibility study		$ 300,000
2b	Property-scale exploration drilling	10,000 m	$ 1,100,000
	Contingencies (~ 15%)		$ 210,000
	Phase 2 subtotal		**C$ 1,610,000**

TOTAL (Phase 1 and Phase 2) **C$ 7,245,000**

2. INTRODUCTION

On January 4 2013, InnovExplo Inc. (“InnovExplo”) was contracted by Howard Bird, Senior Vice President of Exploration of Brigus Gold Corp. (“Brigus Gold” or “the issuer”) to complete a Mineral Resource Estimate and a Technical Report (“the report”) for the Grey Fox project (“the project” or “the property”) in compliance with Regulation 43-101 and Form 43-101F1. Brigus Gold Corp. is a Canadian mineral exploration company trading publicly on the TSX in Toronto (TSX-T: BRD).

Brigus Gold Corp. was formed pursuant to Articles of Arrangement dated June 25, 2002 under the Business Corporations Act (Ontario) as the result of a plan of arrangement in accordance with the terms of an arrangement agreement (the dated June 24, 2002 between International Pursuit Corporation and Nevoro Gold Corporation (Brigus Gold Annual Information Form, 2012 from SEDAR website). The Plan of Arrangement provided for, among other things, the amalgamation of Pursuit and Nevoro to continue as Apollo Gold Corporation. Apollo was continued under the Business Corporations Act (Yukon) pursuant to articles of continuance dated May 28, 2003. Pursuant to articles of amendment dated June 25, 2010, and following an acquisition of Linear Gold Corp., the Corporation changed its name from Apollo Gold Corporation to Brigus Gold Corp. and consolidated its issued and outstanding common shares on the basis of one new common share for each four old common shares. Brigus Gold Corp. was continued under the Canada Business Corporations Act pursuant to articles of continuance dated June 9, 2011.

InnovExplo is an independent mining and exploration consulting firm based in Val-d’Or (Québec). This report was prepared by InnovExplo for the purpose of providing a Mineral Resource Estimate for the Grey Fox Project. InnovExplo has reviewed the data provided by the issuer and/or by its agents. InnovExplo has also consulted other information sources, such as government databases that handle assessment work and mining title status.

The authors, Pierre-Luc Richard, MSc, PGeo (APGO #1714; OGQ #1119), Bruno Turcotte, MSc, PGeo (APGO #2136; OGQ #453), and Carl Pelletier, BSc, PGeo (APGO #1713; OGQ #384), are all Qualified and Independent Persons as defined by Regulation 43-101. Pierre-Luc Richard completed the Mineral Resource Estimate after reviewing the available data, previous surveys, and all other relevant information deemed adequate and reliable. Pierre-Luc Richard and Bruno Turcotte wrote the report. The Mineral Resource Estimate and report were prepared under the supervision of Carl Pelletier. Technical support and collaboration were provided by Vincent Jourdain (PEng), Louise Charbonneau, Daniel Turgeon, all of InnovExplo. Venetia Bodycomb of Vee Geoservices provided the linguistic editing.

Authors Pierre-Luc Richard and Carl Pelletier visited the Grey Fox Project for the first time on March 20, 2013 and a second visit took place on April 29 and 30, 2013**.** All the authors have a good knowledge of the geological setting of the area and its mineral potential. The authors also have a good understanding of mineral deposit exploration models for Archean gold deposits. InnovExplo conducted a review and appraisal of the information used to prepare the report and to formulate its conclusions and recommendations, and believes that such information is valid and appropriate considering the status of the project and the purpose for which the report is prepared. The author has fully researched and documented the conclusions and recommendations made in the report.

3. RELIANCE ON OTHER EXPERTS

The authors, Qualified and Independent Persons as defined by Regulation 43-101, were contracted by the issuer to study technical documentation relevant to the report, to perform a Mineral Resource Estimate on the Grey Fox Project, and to recommend a work program if warranted. The authors have reviewed the mining titles and their statuses, as well as any agreements and technical data supplied by the issuer (or its agents) and any available public sources of relevant technical information.

Some of the geological and/or technical reports for projects in the vicinity of the Grey Fox project were prepared before the implementation of National Instrument 43-101 in 2001 and Regulation 43-101 in 2005. The authors of such reports appear to have been qualified and the information prepared according to standards that were acceptable to the exploration community at the time. In some cases, however, the data are incomplete and do not fully meet the current requirements of Regulation 43-101. The authors have no known reason to believe that any of the information used to prepare this report is invalid or contains misrepresentations.

The authors relied on the following reports and opinions for information that is not within the authors' fields of expertise:

- Information about the mining titles and option agreements was supplied by the issuer. InnovExplo is not qualified to express any legal opinion with respect to the property titles or current ownership and possible litigation.
- The metallurgical study and associated information was taken from an internal report prepared by SGS Canada Inc for Brigus Gold.
- Linguistic editing of the report was performed by Venetia Bodycomb, MSc, of Vee Geoservices.

The authors believe the information used to prepare the report and to formulate its conclusions and recommendations is valid and appropriate considering the status of the project and the purpose for which the report is prepared.

The authors, by virtue of their technical review of the project's exploration potential, affirm that the work program and recommendations presented in the report are in accordance with Regulation 43-101 and CIM technical standards.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Grey Fox property is located in Hislop Township, approximately 12 km east-southeast of the town of Matheson, in the province of Ontario, Canada (Fig. 4.1). The property lies within NTS map sheet 42A/08. The approximate coordinates for the geographic centre of the Grey Fox property are 48°30'20.0"N and 80°18'20.0"N (UTM coordinates: 551100E and 5372750N, NAD 83, Zone 17). The surrounding land has an altitude of about 900 to 950 metres above mean sea level.

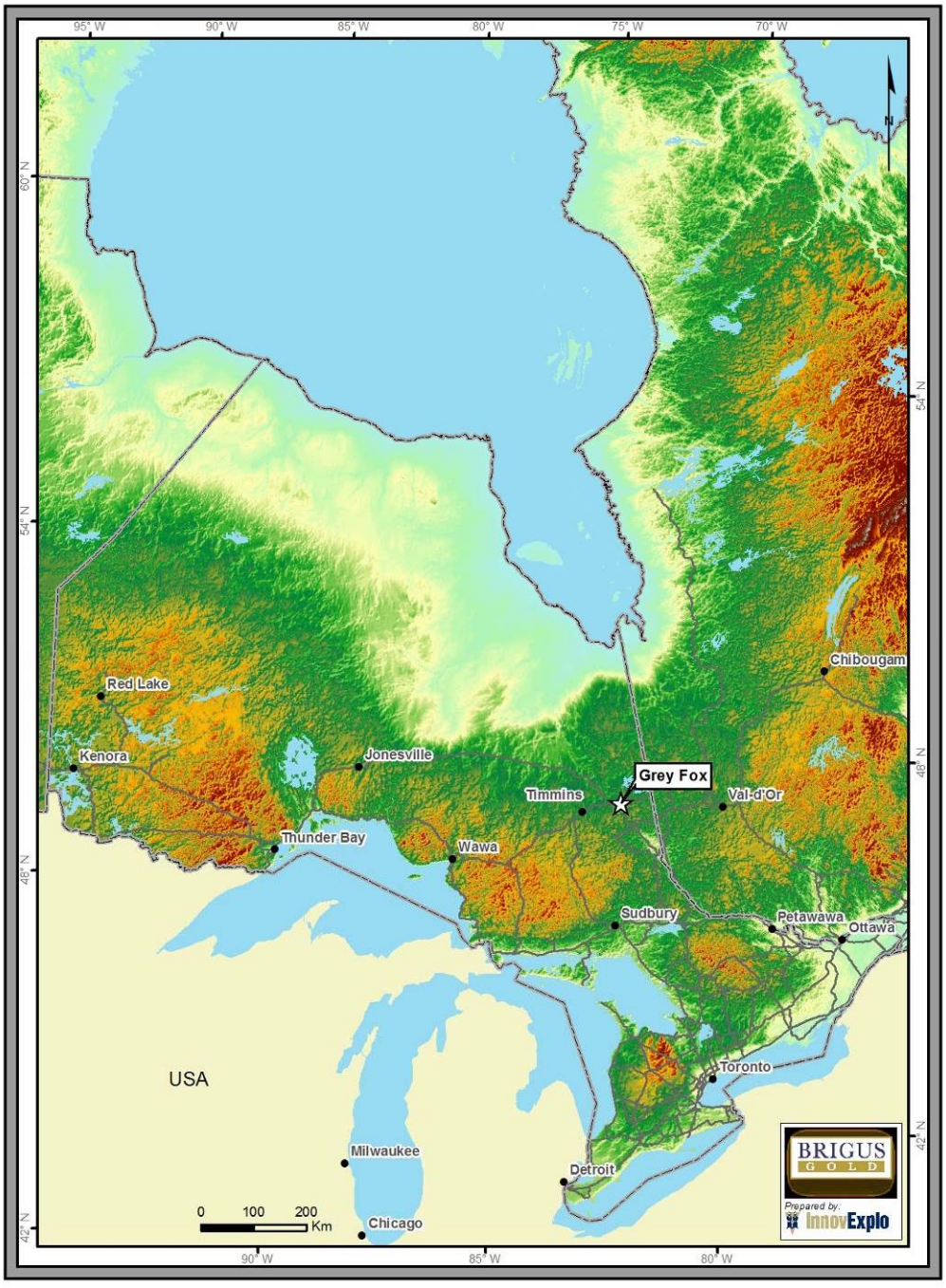

Figure 4.1 – Location map for the Grey Fox Project

4.2 Mining Title and Claim Status

Claim status was supplied by Howard Bird, Senior Vice President of Exploration of Brigus Gold Corp. InnovExplo verified the status for all claims using the Ontario government's online claim management system via the Geo-Claims website at: http://www.geologyontario.mndm.gov.on.ca/website/geoclaims. The Grey Fox property (Fig. 4.2) consists of one (1) block of land comprised of seven (7) parcels for a total of 284,46 ha (Table 4.1).

On November 6, 2007, Apollo Gold, now Brigus Gold, leased the surface and mining rights from the Frederick William Schumacher estate to parcels 16262, 16265 and 16266, all in Hislop Township (Apollo Gold press release of November 27, 2007). The terms of the lease are as follows:

A) Term of twenty (20) years, with twenty-year extensions at the discretion of the Brigus Gold.

B) Exploration expenditures of $1,000,000 due on or before November 6, 2009.

C) Annual rent of $100,000 due on the 6th day of November in each and every year up to and including November 6, 2010.

D) Pre-commercial production subject to Consumer Price Indexing: A minimum annual prepayment production royalty of $100,000 payable in equal quarterly instalments of $25,000 due on the 1st day of the calendar quarter from the date of the fourth anniversary of lease commencement (November 6, 2011). The first quarterly payment is due on February 1, 2012.

E) Commercial production subject to Consumer Price Indexing: A sum equal to the greater of $100,000 or the Production Royalty equivalent to a 3% NSR paid quarterly less the total of all prepaid production royalties paid under (C) above with a minimum annual payment of $100,000 paid quarterly.

On September 9, 2009, Apollo Gold, now Brigus Gold, completed the acquisition of the Pike River property from Newmont Canada Corporation. The Pike River property comprises the surface and mineral rights to approximately 1,145 acres consisting of parcels 1735 LC, 1726 LC, 23687 SEC, 23777 SEC, 3852 SEC and 11125 SEC. Parcels 3852, L-512568 (1735 LC), L-512569 (1735 LC), and 23777 come from this acquisition and are part of the current Grey Fox property.

Pursuant to the terms of the purchase agreement, Apollo Gold paid to Newmont Canada Corporation the sum of $100,000 and granted to Newmont Canada Corporation a perpetual 2.5% net smelter production royalty from the sale or other disposition of all materials produced from the Pike River property. In addition, as further consideration, within thirty (30) days following the earlier of the following, Apollo Gold shall pay to Newmont Canada Corporation the additional sum of $1,000,000: (i) the date that at least 500,000 ounces of gold equivalent minerals sufficient to be reported pursuant to Canadian National Instrument 43-101 ("NI 43-101") as combined reserves (proven and probable) and resources (measured, indicated and inferred) are determined to exist within the Pike River Property; or (ii)

the commencement of commercial production from any portion of the Pike River Property.

Parcels L-512568, L-512569, 23777, and 3852 are also liable to other financial obligations of Brigus Gold with royalty holder Parsons-Ginn. The terms of the financial obligation are as follows:

A) Advance Royalty of $3,000 payable January 1 of each year, divided as follows: Peter Ginn = $1,500, Gail Lackey = $750, Gerry Leckie = $750;

B) 5% Net Proceeds Royalty shared 50/50 between Ginn (Peter Ginn) and Parsons (Gail Lackey and Gerry Leckie); or

C) Sliding Production Royalty based on the price of gold (parties elect annually as to which royalty will apply for that year).

Parcel 3858 is also liable to other financial obligations of Brigus Gold with royalty holders Brent George Gray and Tracy Edwin Gray. The terms of the financial obligation are as follows:

A) Net Smelter Royalty of 0.15% on all material that undergoes commercial production, provided however that the Net Smelter Royalty due to the Royalty Holder is capped at the sum of C$1,000,000.

Table 4.1 – Mineral and surface rights constituting the Grey Fox property

SURFACE AND MINERAL RIGHTS OWNED BY BRIGUS GOLD						
Township	**Pin #**	**Parcel**	**Hectares (Approx)**	**Status**	**Royalty Holder**	**Royalty type**
Hislop	65380-0566	23777	64.95	SR &MR	i)Newmont Canada ii)Parsons/Ginn	i)2.5% NSR ii) Advance royalty $3,000.00 payable each year ii) 5% Net Proceeds Royalty ii) Sliding Production Royalty based on the price gold
LEASED MINERAL AND SURFACE RIGHTS BY BRIGUS GOLD						
Township	**Pin #**	**Parcel**	**Hectares (Approx)**	**Status**	**Royalty Holder**	**Royalty type**
Hislop	65380-0489	16262	64.14	SR &MR	Estate of Frederick William Schumacher c/o The Canada Trust Company	3% NSR
Hislop	65380-0490	16265	32.48	SR &MR		
Hislop	65380-0491	16266	32.48	SR & MR		
LEASED MINERAL RIGHTS BY BRIGUS GOLD						
Township	**Pin #**	**Parcel**	**Hectares (Approx)**	**Status**	**Royalty agreement**	**Royalty type**
Hislop	65380-0498	3852	58.03	MRO	i)Tracy & Brent Gray ii)Newmont Canada iii)Parsons/Ginn	i) 0.15% NSR ii) 2.5% NSR iii) Advance royalty $3,000.00 payable each year iii) 5% Net Proceeds Royalty iii) Sliding Production Royalty based on the price gold
LEASED MINING CLAIMS BY BRIGUS GOLD						
Township	**Pin #**	**Parcel**	**Hectares (Approx)**	**Status**	**Royalty agreement**	**Royalty type**
Hislop	65380-0636	L-512568	16.19	Leased Claims	i)Newmont Canada ii)Parsons/Ginn	i)2.5% NSR ii) Advance royalty $3,000.00 payable each year
Hislop	65380-0636	L-512568	16.19	Leased Claims		ii) 5% Net Proceeds Royalty ii) Sliding Production Royalty based on the price gold

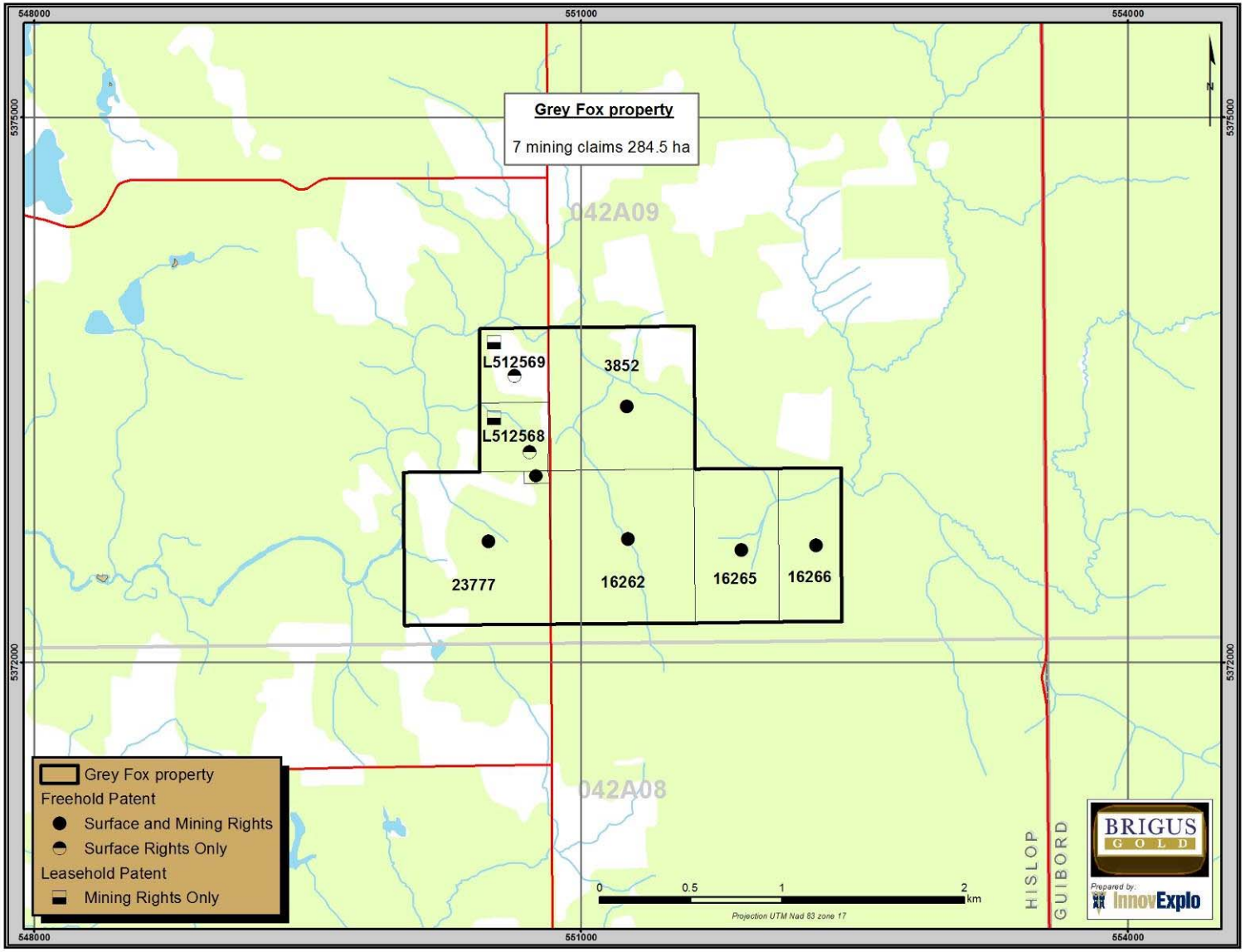

Figure 4.2 – Location map showing mining titles and mineral and surface rights constituting the Grey Fox property

4.3 Environment, Permits and Development Expenditures

The decline entrance on the southeast corner of claim L512568, which accesses the old Gibson West deposit, has been backfilled with muck and the site has been leveled. The main inclined ventilation raise to surface for the Gibson West underground workings, located in the northwest corner of parcel 23777, has been sealed with a cement cap. Both sites were previously inspected and approved by the Ministry of Northern Development and Mines (MNDM) (Garber and Dahn, 1997; Buss, 2010).

InnovExplo is not aware of any environmental or social issues with respect to the property. All exploration activities conducted on the property comply with relevant environmental permitting requirements. To InnovExplo's knowledge, Brigus has obtained the appropriate permits to use the surface rights.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Project is located approximately 10 km east of Matheson, 55 km north of Kirkland Lake (population ~8,200) and 60 km east of Timmins (population ~43,000). Access to the Project area is via Tamarack Road, a gravel road running south from Highway 101. The nearest town is Holtyre, which is 5 km south of the property. The population of the Black River-Matheson Township, which includes the communities of Holtyre, Matheson, Ramore, Shillington, Val Gagne and Wavell, is approximately 2,600. Access within the property itself is achieved by various drill roads and all-terrain vehicle (ATV) trails.

5.2 Climate

The minimum and maximum mean annual temperatures in the region are -4.8°C and +7°C. July and January average temperatures are 17.3°C and -17.3°C, respectively. The mean annual rainfall for the region is 857 mm (www.worldclimate.com).

Rapid melting of accumulated snowfall can produce local flooding on the property for short periods during the spring months. Average monthly wind speeds for the region are 11 to 15 km/h (Dyck, 2007). It is possible to conduct exploration activities year-round.

5.3 Local Resources and Infrastructure

Supplies and services are available in Matheson or Timmins; materials can be delivered with a 12-hour turnaround time. Forestry and mining are the primary industries, and the property is located within a well-established mining camp. Mining and exploration personnel as well as equipment can therefore be locally sourced.

Electrical power is readily available at the exploration site via power lines along Tamarack Road. Electrical services were historically available on the property during production of the Gibson West Mine during the early 1980's.

5.4 Physiography

The property is located in a Boreal Shield ecosystem. The topography is moderate and averages about 280 masl. Secondary-growth forest covers about 75% of the property and rock outcrops are sparse, comprising only 5% of the property physiography. The thick clay-rich overburden found across the property is typically 20 to 30 metres thick (Buss, 2010).

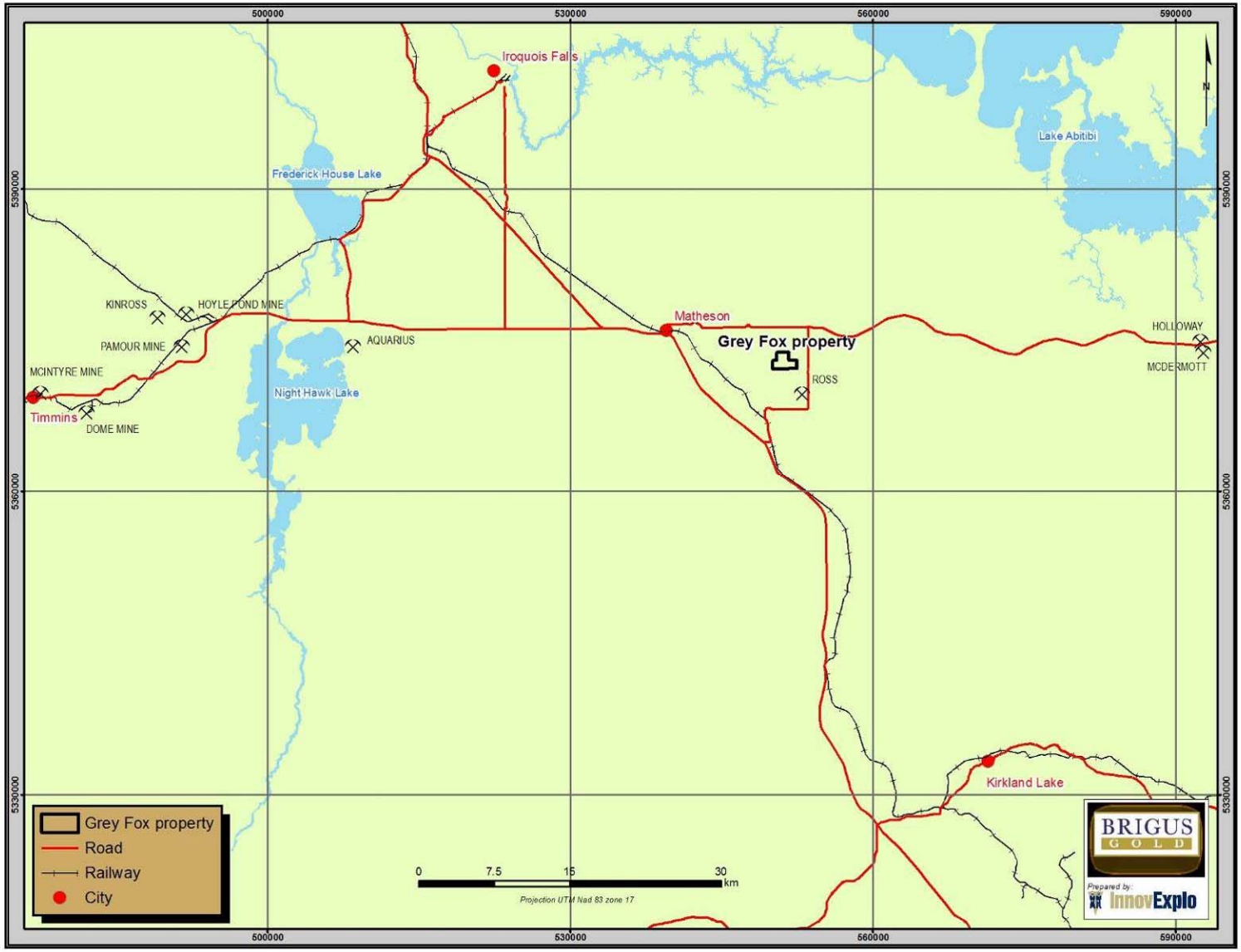

Figure 5.1 – Grey Fox property access

6. HISTORY

This section summarizes previous exploration work in the area of Grey Fox project by period of activity. The Grey Fox project is located in the northeastern part of the Hislop Township. Moore (1937) describes the early work in and around Hislop Township that was carried out by the Ontario Department of Mines and by commercial interests. His report deals with the geology of Hislop Township and four adjoining townships that were mapped during the summer of 1936. Near the southeast corner of Hislop Township, in a farming section, a small outcrop containing quartz and pyrite attracted the attention of prospectors on more than one occasion, but no commercial ore was found until a prospector, Frank Tremblay, sampled another section of the exposure and found good gold values. He staked the claims, which later became known as the Ross mine.

6.1 Lease from the Frederick William Schumacher Estate (before Brigus Gold)

According to Buss (2010), Fredrick Schumacher was the first person to stake the property in the early 1900s. Eventually it was patented land and was worked as farm land until 1992. As a consequence, it is difficult to list the previous exploration work carried out on these parcels. No other ownership sequence was found during this time period. Most geological work in the area was conducted on the adjacent properties.

According to Buss (2010), **Noranda Exploration Company** acquired the property in the early 1990s. Noranda Exploration Company developed a north-south grid along the Contact Zone in 1993. A total of fourteen (14) diamond drill holes spaced 100 metres apart were drilled on the main Contact Zone for a total of 4,870 metres (Garber and Dahn, 1997). In 1994, Noranda Exploration Company re-established the north-south grid and conducted a magnetometer and IP resistivity survey on the property. This was followed up with three (3) exploration holes spaced 200 metres apart along the north end of the Contact Zone for a total of 919 metres. Whole rock geochemistry was also performed on one of the drill holes (Garber & Dahn, 1997).

Noranda Exploration Company optioned the property in 1995 to **Hemlo Gold Mines** (Buss, 2010). Hemlo Gold Mines and Battle Mountain Gold Company developed an east-west grid over the property and drilled seven (7) more holes on the south end of the zone in 1995 totalling 2,323 metres (Buss, 2010). They also calculated an estimated resource on the Contact Zone based on results from the previous year's drilling program.

In July 1996, Hemlo Gold Mines merged with Battle Mountain Gold Company. **Battle Mountain Gold** obtained the lease in 1996. Battle Mountain Gold in conjunction with Cameco Gold drilled 16 holes on the Contact Zone to further delineate the estimated resource calculation. Eleven holes for 4,316 metres were drilled in 1996 on the central portion of the Contact Zone at 200 metre spacing. A further 2,331 metres were drilled in five (5) holes on the south end of the zone in 1997. Another more definitive historic resource calculation was completed in 1997 on the Contact Zone. Seven (7) drill core samples from the 1996 drilling program were also submitted for mineralogical examination (Garber & Dahn, 1997).

The resource estimates done by Battle Mountain in 1997 produced three separate numbers. The initial estimate from the drilling program via a "Boreserve" computerized program produced a resource of 2,186,000 tonnes at 4.8 g/t Au. This included 1,270,000 tonnes at 7.0 g/t Au (Garber and Dahn, 1997). The second estimate, calculated from Gemcom software via polygonal method, was reported as 1,163,897 tonnes @ 6.4 g/t Au (Garber and Dahn, 1997). Another estimate was noted in a 1998 Exall Memorandum which stated there was an indicated resource of 1,541,000 tonnes at 7.0 g/t Au on the Contact Zone (Buss, 2010). Another 347,000 tonnes at an unknown grade was estimated as an inferred resource (Trimble, 1997). *All of the tons/tonnes and grade estimates are historical in nature and were calculated prior to 2001. As such, the reader is cautioned that they do not comply with NI 43-101 and should be treated as general guidelines only.* The property was then transferred back to the Schumacher Estate until 2007.

Apollo Gold acquired the property in November 2007. In 2008, Apollo Gold drilled another sixteen (16) holes for 3,063 metres on the southern extension of the Contact Zone. Four (4) drill core samples were sent out from the drilling program in 2008 for mineralogical analysis. Another 52 holes were drilled in 2009 by Apollo Gold on the main portion of the Contact Zone. Total metres drilled in 2009 amounted to 9,731 metres.

6.2 Gibson Deposit Area (before BRIGUS GOLD)

In 1939-1945, **Abuy Gold Mines Ltd** carried out surface sampling and diamond drilling (16 holes totalling 1,277 m) on the north half of lot 4, concession V of Hislop Township. The property consisted of the patented McBride claims. The drilling was based in part on the discovery of gold in a grab sample from a small exposure of variably sheared and quartz veined carbonatized basalt (Prest, 1957).

Martin-Bird Gold Mines Limited obtained an option in 1949 on the Ladouceur claim, on the north half of lot 4, concession IV (Prest, 1957). In all, eleven (11) short holes were completed totalling 2,972 metres. Values of gold were reported from the Contact Zone between an elongate body of hornblende syenite and a sedimentary-dacite complex.

In 1973-1974, the McBride claims were restaked and diamond drilled (11 holes totalling 610 m) by Nevada Exploration Limited (Salo, 2005). Gold values were reported in holes.

In 1979-1980, **A. P. Ginn and G. E. Parsons** held claims in the area and completed geological and magnetic surveys (Ginn, 1979; Parsons, 1980a) and diamond drilled at least 30 holes (Guindon, 2007; Parsons, 1980b). Many of these holes intersected gold grades. In 1981, H. E. Neal & Associates Limited reported they had intersected high grade gold in diamond drill core from the north half of lot 4, concession IV. A total of 18 holes were diamond drilled for 912 metres (Atherton, 1981).

In 1983, **Geddes Resources Limited** and **Armco Minerals Exploration Limited** diamond drilled a gold zone (Guindon, 2007). Armco Minerals Exploration Limited completed magnetic, IP electromagnetic surveys, trenching, and diamond drilling of 27 holes totalling 2,124 metres (Atherton, 1983) on the Gibson Option (the north half of lot 4, concession IV). The drilling is reported to have established the presence an auriferous zone striking N065°-N070°, and dipping 70° north to nearly vertical. The

zone extends at least 75 metres laterally, and extends to at least a depth of 95 metres. In 1984, Armco Minerals Exploration Limited diamond drilled 1,676 metres in the same area.

In 1986, **Goldpost Resources Inc**. completed a surface diamond drilling program (2,133 m) and initiated an exploration decline ramp to explore anomalous gold tenors associated with the north-northwest striking Gibson Fault (Guindon, 2007). In 1987, Goldpost Resources Inc. performed some underground development (the decline ramp was extended to the vertical 400-ft level) and a major diamond drilling program (56 holes totalling 7,796 m). In 1988, Goldpost Resources Inc. extended by 610 metres the decline ramp and carried out some underground development and performed a major diamond drilling program (7,620 m). In 1989, Goldpost Resources Inc. carried out diamond drilling definition above 400 foot level.

In 1989, **Mining Corporation of Canada Limited** purchased the Hislop West deposit from Goldpost Resources Inc. and announced plans to begin production, which started in October 1989. According to Hemlo Gold, about 8,000 tonnes were mined at a grade of 27.4 g/t Au (Guindon, 2007).

In 1993-1995, **Noranda Exploration Company** followed by Hemlo Gold explored the property and carried out surface diamond drilling totalling nine (9) holes. Gold values were intersected at the mafic volcanic-sedimentary rock contact to the east of the portal.

6.3 Grey Fox Property (Brigus Gold)

In September 2010, Scott Hogg & Associates Ltd. was commissioned by Brigus Gold to perform a helicopter-borne aeromagnetic gradient survey over the Black Fox Mine Block, which included the project area and the Black Fox Mill Block. The survey was performed on September 10 and 11, 2010, using a Wisk Air Bell 206 LR helicopter and a total of 1,074 line-kilometres of data was collected. Of this, 490 kilometres were from the Black Fox Mine Block, and 584 kilometres were from the Black Fox Mill Block (Scott Hogg and Associates Ltd, 2010).

The survey distinctly defined the key gold-bearing Contact Zone and Gibson Shear linear structures, as well as numerous untested linear targets (press release of November 30, 2010).

A Quantec Titan 24-Deep IP ground-based geophysical program was completed over the Black Fox Complex with 22 lines, spaced 200 metres apart, including the Grey Fox property (Martinez Del Pino and Faucher, 2010). The survey, which is designed to detect conductive mineralization, disseminated mineralization, alteration, structure and geology (November 30, 2010 press release), generated 12 high-priority drill targets and 14 secondary targets. As of early December 2011, only one of these had been drilled, and additional drilling of these targets is being planned (press release of November 29, 2011). A total of 38.9 line-kilometres were completed between September 26 and October 22, 2010.

The 2010 drilling program of Brigus Gold followed-up on historical data and also tested new gold occurrences on the project. Three drill rigs were used to explore the Contact Zone and the Gibson, Grey Fox South, Hislop North and 147 Zone targets (Daigle, 2011). Drilling was performed by Norex Drilling and the core was of NQ

diameter. A total of 69 drill holes, amounting to 26,805.49 metres, were drilled on the property in 2010. In April 2010, Talbot Surveys, a certified land survey company called based in Timmins, surveyed all of the 2008, 2009 and historical drill hole collars. Talbot surveys used a Trimble Global Positioning System (GPS) with base station.

During Brigus Gold's 2011 drill program, two drill rigs were used for infill drilling and testing along strike and down-dip on the Contact Zone (Daigle, 2011). Two or three other drill rigs were used to expand the 147 Zone, and one drill rig was used to test other known gold-bearing structures and targets that were identified from the induced polarization and magnetic geophysical survey. Drilling was conducted by Norex Drilling and Laframboise Drilling Inc. All core samples were of NQ diameter.

In October 2012, Tetra Tech published a mineral resource estimation using Gemcom GEMS™ v.6.4.1 (GEMS™) desktop software for the project (Daigle, 2012). The dataset imported into GEMS™ contained information from 687 drill holes totalling 218,274.6 metres. The subset of data used for the resource estimates consisted of 488 completed drill holes totalling 151,704.1 metres of drilling. A total of 47,107 assay records and 74,008 composited records were used for the Resource Estimate.

The mineralization of the Black Fox Complex in the Contact Zone and the 147 Zone was classified as Indicated and Inferred Resources. The two zones were estimated using both Inverse Distance Squared (ID2) and Ordinary Kriging (OK) methods. No recoveries were applied.

The mineral resource was reported at a 0.65 g/t gold cut-off grade for potential open-pit material and at 2.63 g/t gold cut-off grade for the potential underground material. The limit between open-pit and underground potential was established by an arbitrary limit 200 metres below surface; no optimized pit shell was created. The total Indicated Resource is 7,105,378 t at a grade of 2.11 g/t Au. The total Inferred Resource is 1,692,267 t at a grade of 1.67 g/t Au. The classified mineral resources are shown in Table 6.1.

Table 6.1 – 2012 Resource Estimate for the Contact and 147 zones, Black Fox Complex (Daigle, 2012)

Resource Class	Cut-off Grade (g/t Au)	Potential Material	Tonnes (t)	Capped Au (g/t)	Contained Au (oz)
Indicated	2.63	Underground	231,478	5.44	40,506
	0.65	Open Pit	6,873,900	1.99	440,342
		Total Indicated	**7,105,378**	**2.11**	**480,849**
Inferred	2.63	Underground	143,852	3.72	17,219
	0.65	Open Pit	1,548,415	1.48	73,843
		Total Inferred	**1,692,267**	**1.67**	**91,061**

Table 6.2 – Historical work conducted the lease from the Frederick William Schumacher estate

Year	Company	Activity	Comments	Reference
1900-1992	Frederick William Schumacher	Unknown	Difficulty to list the exploration work due to the presence of patented land	Buss, 2010
1993	Noranda Exploration	Diamond drilling	14 diamond drill holes spaced 100 metres apart and totalling 4,870 metres	Buss, 2010
1994	Noranda Exploration	Line cutting Ground magnetometer and I. P. surveys Diamond drilling	3 diamond drill holes spaced 200 metres apart and totalling 919 metres	Buss, 2010
1995	Battle Mountain Gold Hemlo Gold	Diamond drilling Mineral Resource Estimate	7 diamond drill holes spaced 200 metres apart and totalling 919 metres	Buss, 2010
1996	Battle Mountain Gold Cameco Gold	Diamond drilling	11 diamond drill holes spaced 200 metres apart and totalling 4,316 metres	Buss 2010
1997	Battle Mountain Gold Cameco Gold	Diamond drilling Mineral Resource Estimate Mineralogical Examination	5 diamond drill holes totalling 2,331 metres Seven drill core samples from 1996 program examined	Buss, 2010 Garber and Dahn, 1997
2008	Apollo Gold	Diamond drilling	16 diamond drill holes totalling 3,063 metres	Buss, 2010
2009	Apollo Gold	Diamond drilling	52 diamond drill holes totalling 9,731 metres	Buss, 2010

Table 6.3 – Historical work conducted in the Gibson deposit area

Year	Company	Activity	Comments	Reference
1939-1945	Abuy Gold Mines Ltd	Surface sampling diamond drilling	16 diamond drill holes totalling 1,277 metres	Prest, 1957
1949	Martin-Bird Gold Mines Ltd	Diamond drilling	11 diamond drill holes totalling 2,972 metres	Prest, 1957
1973-1974	Nevada Exploration Limited	Diamond drilling	11 diamond drill holes totalling 610 metres	Salo, 2005
1979-1980	A. P. Ginn G. E. Pearsons	Geological and magnetic surveys diamond drilling	30 diamond drill holes	Guindon, 2007 Parsons, 1980b Parsons, 1980a Ginn, 1979
1981	H. E. Neal & Associates	Diamond drilling	18 diamond drill holes totalling 912 metres	Guindon, 2007 Atherton, 1981
1983	Geddes Resources Ltd Armco Minerals Exploration Ltd	Line cutting I.P. and magnetic surveys diamond drilling trenching	27 diamond drill holes totalling 2,124 metres	Guindon, 2007 Atherton, 1983
1984	Armco Minerals Exploration Ltd	Diamond drilling	1,676 metres of diamond drilling	Guindon, 2007
1986-1989	Goldpost Resources Inc.	Diamond drilling Decline ramp underground development	17,549 metres of diamond drlling	Guindon, 2007
1989	Mining Corporation of Canada Ltd	Mining operation	8,000 tons were mined at a grade of 27.4 g/t Au	Guindon, 2007
1993-1995	Noranda Exploration	Diamond drilling	9 diamond drill holes	Guindon, 2007

Table 6.4 – Historical work conducted on the Grey Fox property

Year	Company	Activity	Comments	Reference
2010	Brigus Gold	Helicopter-towed aeromagnetic gradient survey diamond drilling	69 diamond drill holes totalling 26,805.5 metres	Daigle, 2012
2011	Brigus Gold	Diamond drilling	245 diamond drill holes totalling 91,390.6 metres	Daigle, 2012
2012 *	Brigus Gold	Mineral Resource Estimate	211 diamond drill holes totalling 65,607.2 metres	Daigle, 2012
2012	Brigus Gold	Mineral Resource Estimate	Resource estimate of the 147 and Contact Zone deposits.	Daigle, 2012

* Drill holes from January 1, 2012 to August 14, 2012

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geological Setting

7.1.1 Archean Superior Province

The Archean Superior Province (Fig. 7.1) forms the core of the North American continent and is surrounded by provinces of Paleoproterozoic age to the west, north and east, and the Grenville Province of Mesoproterozoic age to the southeast. Tectonic stability has prevailed since approximately 2.6 Ga in large parts of the Superior Province. Proterozoic and younger activity is limited to rifting of the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional reactivation, large-scale rotation at approximately 1.9 Ga, and failed rifting at approximately 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton has escaped ductile deformation.

A first-order feature of the Superior Province is its linear subprovinces, or “terranes”, of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends are generally east-west in the south, west-northwest in the northwest, and northwest in the northeast. In Figure 7.1, the term “terrane” is used in the sense of a geological domain with a distinct geological history prior to its amalgamation into the Superior Province during the 2.72 Ga to 2.68 Ga assembly events, and a “superterrane” shows evidence for internal amalgamation of terranes prior to the Neoarchean assembly. “Domains” are defined as distinct regions within a terrane or superterrane.

The Grey Fox property is located within the Abitibi terrane. The Abitibi terrane hosts some of the richest mineral deposits of the Superior Province (Fig. 7.1), including the giant Kidd Creek massive sulphide deposit (Hannington et al., 1999) and the large gold camps of Ontario and Québec (Robert and Poulsen, 1997; Poulsen et al., 2000).

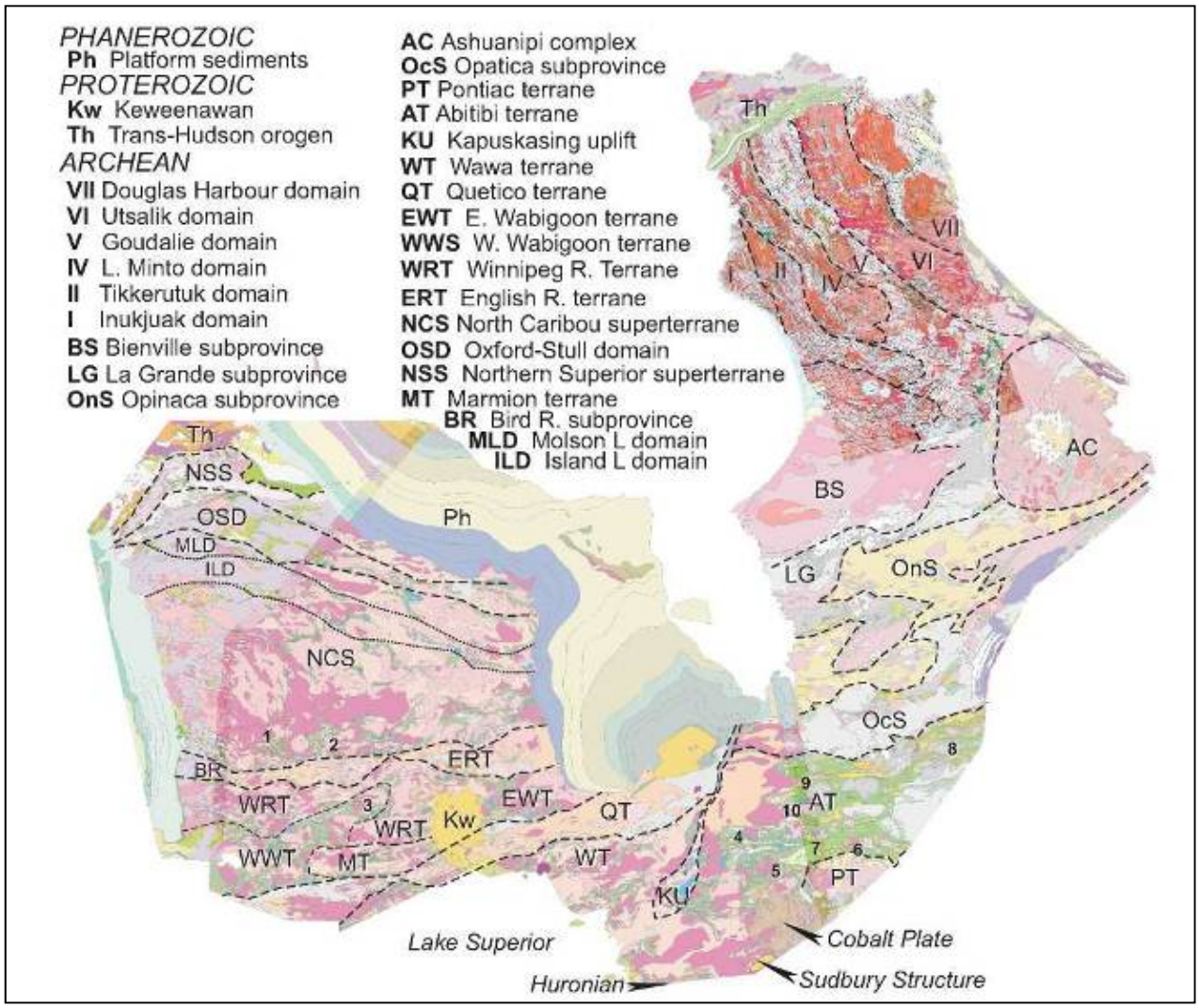

Figure 7.1 – Mosaic map of the Superior Province showing major tectonic elements, from Percival (2007). Data sources: Manitoba (1965), Ontario (1992), Thériault (2002), Leclair (2005). Major mineral districts: 1 = Red Lake; 2 = Confederation Lake; 3 = Sturgeon Lake; 4 = Timmins; 5 = Kirkland Lake; 6 = Cadillac; 7 = Noranda; 8 = Chibougamau; 9 = Casa Berardi; 10 = Normétal.

7.1.2 The Abitibi Terrane (Abitibi subprovince)

The Grey Fox property lies within the Abitibi subprovince (Abitibi Greenstone Belt) of the Archean Superior craton, in eastern Canada (Fig. 7.1), along the northern margin of the Porcupine-Destor-Manneville deformation zone. This and the Larder Lake-Cadillac deformation zones are the most important deformation zones within the Abitibi subprovince in terms of both structural effects and gold production.

The Abitibi subprovince is divided into the Southern and Northern volcanic zones (**SVZ** and **NVZ**; Chown et al. 1992) representing a collage of two (2) arcs delineated by the Destor-Porcupine-Manneville Fault Zone (**DPMFZ**; Mueller et al. 1996). The SVZ is separated from the Pontiac Terrane sedimentary rocks, an accretionary prism (Calvert and Ludden 1999) to the south, by the Cadillac–Larder Lake Fault Zone (**CLLFZ**). The fault zones are terrane “zippers” that display the change from thrusting

to transcurrent motion as documented in the turbiditic flysch basins unconformably overlain by, or in structural contact with, coarse clastic deposits in strike-slip basins (Mueller et al. 1991, 1994, 1996; Daigneault et al. 2002). A further subdivision of the NVZ into external and internal segments is warranted, based on distinct structural patterns with the intra-arc Chicobi sedimentary sequence representing the line of demarcation. Dimroth et al. (1982, 1983a) recognized this difference and used it to define internal and external zones (Fig, 7.2) of the Abitibi greenstone belt. Subsequently, numerous alternative Abitibi divisions were proposed (see Chown et al., 1992), but all models revolved around a plate tectonic theme. The identification of a remnant Archean north-dipping subduction zone by Calvert et al. (1999) corroborated these early studies.

The 2735-2705 Ma NVZ is ten (10) times larger than the 2715-2697 Ma SVZ, and both granitoid bodies and layered complexes are abundant in the former. In contrast, plume-generated komatiites, a distinct feature of the SVZ, are only a minor component of the NVZ, observed only in the Cartwright Hills and Lake Abitibi area (Daigneault et al. 2004). Komatiites rarely constitute more than 5% of greenstone sequences and the Abitibi is no exception (Sproule et al. 2002). The linear sedimentary basins are significant in the history because they link arcs and best chronicle the structural evolution and tempo of Archean accretionary processes. The NVZ is composed of volcanics cycles 1 and 2, which are synchronous with sedimentary cycles 1 and 2, whereas the SVZ exhibits volcanic cycles 2 and 3, with sedimentary cycles 3 and 4 (Mueller et al. 1989; Chown et al. 1992; Mueller and Donaldson 1992; Mueller et al. 1996).

The southern Abitibi, in Ontario, is now interpreted to consist of nine autochthonous volcanic or sedimentary supracrustal assemblages (Ayer et al., 2002), previously interpreted as an amalgamation of numerous allochthonous terranes (Dimroth et al., 1983a; Jackson, 1994; Daigneault et al., 2002). In this autochthonous model, volcano-sedimentary successions throughout the Abitibi span 75 m.y. (2750-2675 Ma) and have conformable, unconformable, or disconformable contacts, which may be structurally modified.

The Abitibi subprovince displays a prominent E-W structural trend resulting from regional E-trending folds with an axial-planar schistosity that is characteristic of the Abitibi belt (Daigneault et al. 2002). The schistosity displays local variations in strike and dip, which are attributed to either oblique faults cross-cutting the regional trend, or deformation aureoles around resistant plutonic suites. Although dominant steeply-dipping fabrics are prevalent in Abitibi subprovince, shallow-dipping fabrics are recorded in the Pontiac subprovince and at the SVZ-NVZ interface in the Preissac-Lacorne area.

The Porcupine-Destor deformation zone (Hurst, 1936; Pyke, 1982) is the principal structure in the area of the Grey Fox property. It is a poorly exposed, regionally extensive fault zone that is characterized by steeply clipping penetrative foliations and serpentinite and talc-chlorite schists (Pyke, 1982). The Porcupine-Destor deformation zone is interpreted as a steeply dipping, long-lived strike-slip structure, more than 450 km long, which was active between ca. 2680 and 2600 Ma. There is no significant difference in crustal level on either side (hence there is negligible net dip-slip component) but with a minimum lateral offset of several kilometres (Bleeker, 1997). Diamond drilling indicates that the ductile component of the Porcupine-Destor

deformation zone is a zone some hundreds of metres across, consisting of high-strain zones principally in ultramafic rocks, anastomosing around lower strain lozenges.

The metamorphic grade in the Abitibi subprovince displays greenschist to sub-greenschist facies (Joly, 1978; Powell et al., 1993; Dimroth et al., 1983b; Benn et al., 1994) except around plutons where amphibolite grade prevails (Joly, 1978). In contrast, two (2) extensive high-grade zones coincide with areas of shallow-dipping fabrics. They are: (1) the turbiditic sandstone and mudstone of the Pontiac subprovince at the SVZ contact which exhibit a staurolite-garnet-hornblende-biotite assemblage (Joly, 1978; Benn et al., 1994); and (2) the Lac Caste Formation turbidites at the SVZ-NVZ interface (Malartic segment) with sandstone and mudstone metamorphosed to biotite schist with garnet and staurolite. Feng and Kerrich (1992) suggested that the juxtaposition of greenschist and amphibolite grade domains indicates uplift occurred during the compressional stage of collisional tectonics. According to Berger (2002), most of the rocks of southern Abitibi, in the region of the Grey Fox property, contain metamorphic mineral assemblages indicative of regional greenschist-facies metamorphism. Primary plagioclase, amphibole and, less commonly, pyroxene are largely replaced by metamorphic chlorite and epidote in mafic metavolcanic rocks. Epidote and quartz knots and stringers are locally abundant in pillow selvages and occur as amygdules. Leucoxene commonly replaces magneto-ilmenite and secondary quartz occurs in narrow stringers in many places. Secondary amphibole occurs only adjacent to the alkalic plutons and is considered part of a contact metamorphic aureole. Low-grade metamorphism is not apparently preserved in the mafic metavolcanic rocks, since zeolite minerals were not identified in the field or in thin section. Greenschist-facies metamorphic minerals in pelitic metasedimentary rocks are characteristically iron-rich chlorite and, less commonly, white mica. Primary detrital grains are well preserved in all metasedimentary rocks that have not undergone extensive hydrothermal alteration. In most places, biotite is absent indicating that metamorphism at low greenschist facies affected much of the area. Biotite does occur in metasedimentary rocks adjacent to some of the alkalic plutons, which is interpreted to result as a product of contact metamorphism.

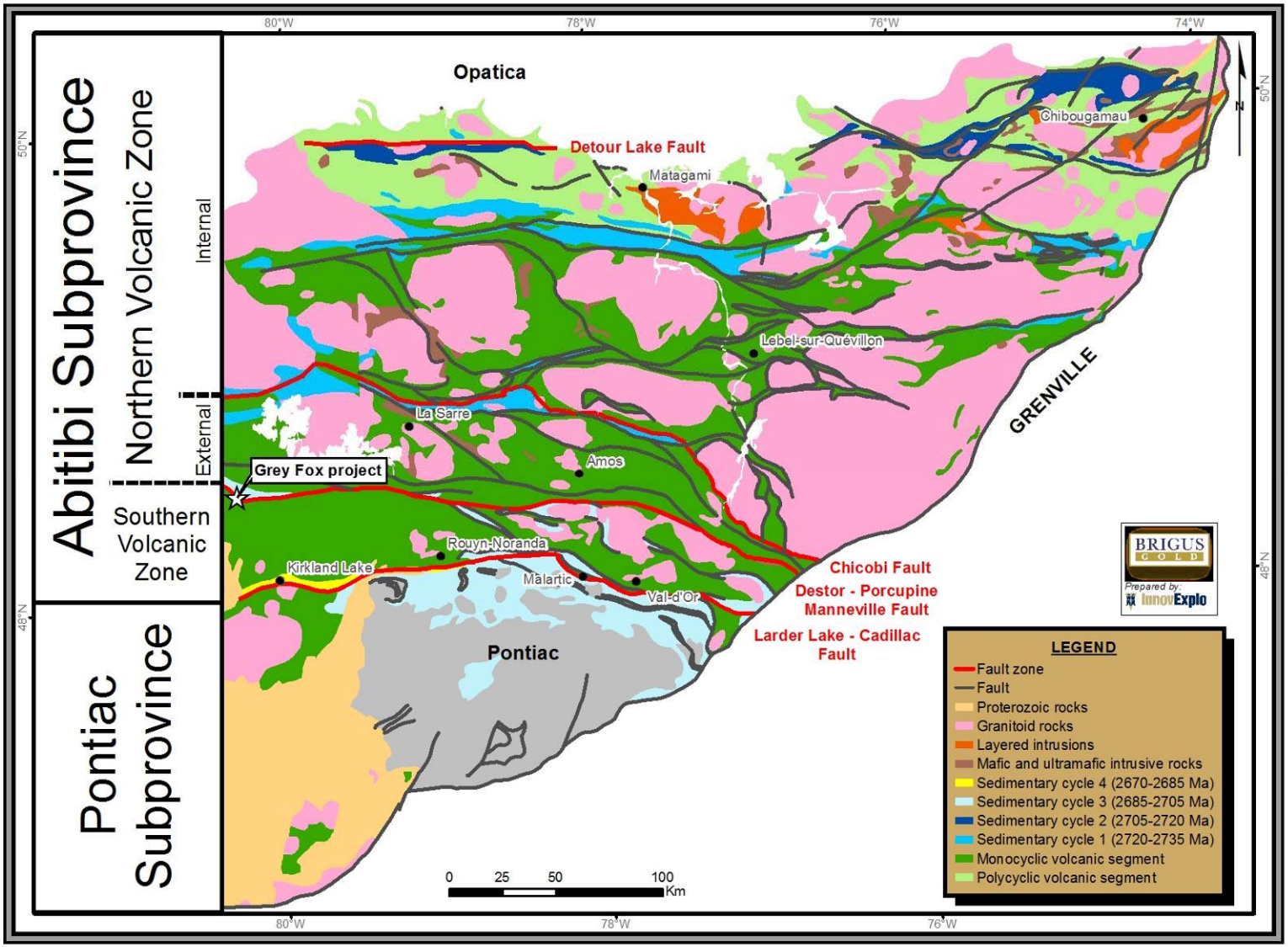

Figure 7.2 – Location of the Grey Fox Property on divisions of the Abitibi greenstone belt into southern (SVZ) and northern volcanic zones (NVZ) with external and internal segments in the NVZ. Modified from Chown et al. (1992), Daigneault et al. (2002, 2004), and Mueller et al. (2009).

7.2 Local Geological Setting

The local geological setting is represented by Neoarchean supracrustal rocks, which are intruded by Paleoproterozoic and Keweenawan-age diabase and Mesozoic kimberlite dikes and pipes, underlie the Highway 101 area. The supracrustal rocks are composed of ultramafic, mafic, intermediate and felsic metavolcanic rocks, related intrusive rocks, clastic and chemical metasedimentary rocks, and a suite of ultramafic to felsic alkalic plutonic and metavolcanic rocks (Berger, 2002). These rocks are divisible into five (5) distinct packages based on morphology, petrography, geochemistry and geochronology (Fig, 7.3). These packages or assemblages (cf. Thurston 1991) in the Highway 101 area are correlated with regional assemblages proposed by Jackson and Fyon (1991) and modified by Ayer et al., (1999b). The five (5) assemblages, from oldest to youngest, are the Kidd-Munro, Tisdale, Kinojevis, Porcupine and Timiskaming assemblages. The first three (3) are predominantly composed of metavolcanic rocks; the latter two (2) are predominantly composed of metasedimentary rocks, although alkaline metavolcanic rocks and related intrusions occur within the Timiskaming Assemblage. The Grey Fox property is essentially covered by the Tisdale, and Timiskaming assemblages, but also by tiny part of the Kinojevis Assemblage.

7.2.1 Tisdale Assemblage

The Tisdale Assemblage underlies that part of Hislop Township that is north of the Arrow Fault (local name) and south of the Porcupine-Destor Deformation Zone (PDDZ). Rocks south the Arrow fault and north of the PDDZ, in Guibord and Michaud townships, are correlated with the Tisdale Assemblage based on rock type morphology, geochemistry and structures. The Tisdale Assemblage is predominantly tholeiitic mafic and komatiitic metavolcanic rocks with subordinate calc-alkaline intermediate and felsic flows, pyroclastic and epiclastic deposits. Jackson and Fyon (1991) referred to these rocks as the Bowman Assemblage, although Ayer et al., (1999a) and Ayer et al. (1999b) included these rocks with the Tisdale Assemblage based on U/Pb ages (ca. 2704 Ma) that are similar to those in the type area at Timmins.

Ultramafic metavolcanic rocks of the Tisdale assemblage are restricted to the PDDZ in Hislop Township. Talc-chlorite schist is most common, and green mica, iron carbonate and quartz veins occur in hydrothermally altered zones. Altered schist is dark green to black to orange-brown. It is generally fissile, but is locally indurated where silica and albite are present. Relict spinifex-textured flows occur at the Royal Oak open pit in Hislop Township and are reported in diamond-drill logs near the Glimmer mine (Berger, 2002). Massive, spinifex-textured and brecciated flows are common in less deformed areas. Elsewhere, ultramafic metavolcanic rocks are poorly exposed and their distribution is derived from diamond-drill data and airborne geophysical magnetic surveys.

Mafic metavolcanic rocks comprise approximately 50% of the Tisdale Assemblage and are predominantly composed of massive, pillowed and pillow breccia flows (Berger, 2002). Chlorite schist is common in faults and shear zones, and iron carbonate, albite, sericite and quartz occur in hydrothermally altered zones. Variolitic flows, flow breccia and hyaloclastite are common whereas tuff is rare. Massive flows are exposed in several areas and are generally green, fine- to medium-grained, equigranular rocks with no distinguishing features.

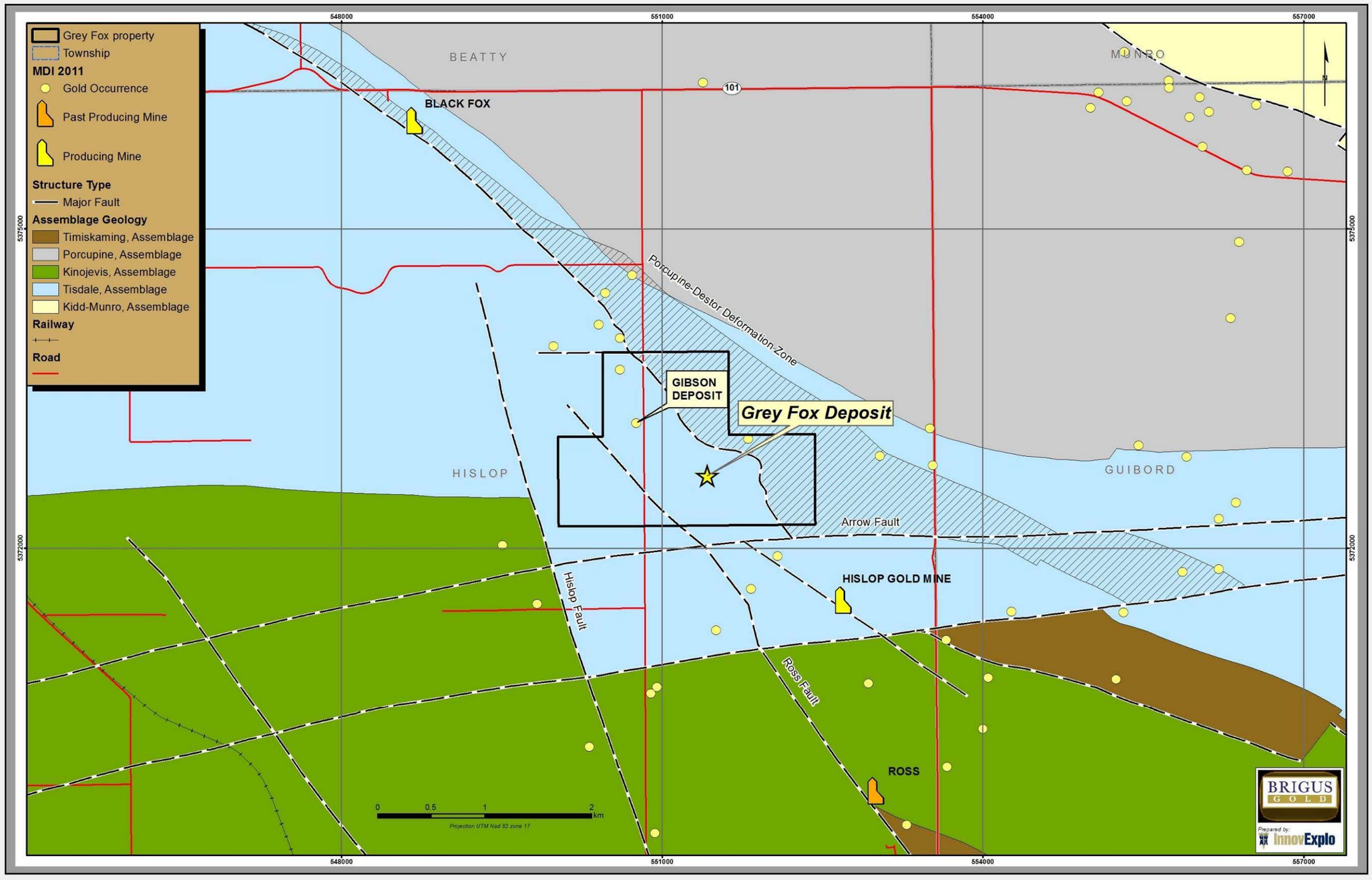

Figure 7.3 – Regional geological setting of Grey Fox property geology (Adapted and modified from Ayer et al., 2005)

Pillowed flows are common with pillows 60 to 70 cm long by 30 to 40 cm wide and with rims up to 2 cm thick (Berger, 2002). Pillows are generally well formed and may be either closely packed with little interpillow material or may have up to 15% interpillow chert and hyaloclastite. Flows are generally a few metres thick and are commonly capped by flow breccia and hyaloclastite.

Fragmental rocks are interpreted as mafic intrusion breccia, younger than the Porcupine Assemblage metasedimentary rock (Berger, 2002). These deposits are heterolithic with aphanitic and phaneritic mafic metavolcanic clasts, wacke, argillite, framboidal pyrite clasts and rare felsic porphyry clasts that are up to 30 cm in size, but average 2 to 8 cm. The clasts are angular to round; some have reaction rims, some chilled margins, a few have very angular boundaries, most are subangular massive mafic metavolcanic clasts. The deposits are generally clast supported with a matrix composed of fine-grained mafic tuff or rarely highly indurated, very fine-grained hyaloclastite. The deposits are poorly sorted; clast gradation and bedding planes are absent. Pyrite is common throughout the deposits both as clasts and as disseminations in the matrix.

Mafic schist occurs in faults and shear zones throughout the Tisdale Assemblage and is characterized by light to dark green fissile rock that retain few, if any, primary features (Berger, 2002). Chlorite and secondary amphibole are common minerals in unaltered schist. Iron carbonate, white mica and quartz are common minerals in hydrothermally altered schist.

Variolitic flows occur throughout the Tisdale Assemblage, but are less abundant than in the Kidd-Munro Assemblage (Berger, 2002). Variolitic flows, which occur north of the New Kelore mine shaft and northeast of the St Andrew Goldfields Limited Hislop Mine, contain between 30 to 85% varioles that are commonly coalesced. Some outcrops that appear massive and green-grey weathering contain microscopic variole structures. Variolitic flows were also observed at the Royal Oak open pit. The strong spatial association of variolitic flows with gold mineralization in the Abitibi subprovince appears to be a function of the ratio of Fe to Mg (Fe/Mg) and brittle failure of the altered flows in response to stress (Fowler et al. 2002; Ropchan, 2000; Jones, 1992).

7.2.2 The Kinojevis Assemblage

The Kinojevis Assemblage includes all mafic, intermediate and felsic metavolcanic rocks south of the Porcupine-Destor deformation zone and south of the Arrow fault (local name) in Hislop Township (Berger, 2002). Wacke and argillite interbedded with the metavolcanic rocks are also included in the assemblage. Ultramafic metavolcanic rocks are unknown in the Kinojevis Assemblage, unlike the Kidd-Munro and Tisdale assemblages. Ayer et al., (1999) inferred that the Kinojevis Assemblage is conformable on top of the Tisdale Assemblage primarily due to the short time interval recorded between the two (2) assemblages. The Kinojevis Assemblage is dominantly tholeiitic with minor calc-alkaline intermediate metavolcanic rocks in the west part of the assemblage.

Mafic metavolcanic rocks comprise greater than 90% of the Kinojevis Assemblage and are composed of massive, pillowed, flow brecciated and variolitic flows (Berger, 2002). Massive flows are green to dark green weathering and are commonly fine to medium grained. Rare coarse-grained flows are local.

Pillowed flows are almost as common as massive flows (Berger, 2002). Pillows are typically between 50 to 100 cm long by 50 to 80 cm wide, well to poorly formed, close packed with selvages between 2 and 3 cm thick. The pillowed flows provide reliable indicators of stratigraphic "tops" throughout the assemblage. Amygdaloidal and variolitic pillows are common. Some pillowed flows contain up to 15% interpillow material composed of hyaloclastite and less commonly chert. Pillowed flows commonly overlie massive flows and may be intercalated with pillow breccia.

Variolitic flows similar to those described in the Tisdale Assemblage occur throughout the Kinojevis Assemblages (Berger, 2002). Massive and pillowed flows occur with individual varioles varying between 1 to 15 mm in diameter and vary in abundance between 10 and 95% of the rock. Most flows are less than 10 metres thick, although some flows are up to 30 metres thick as exposed in diamond-drill core. Massive variolitic flows commonly display flow banding and are light grey weathering and pale green on fresh surface. Varioles are 2 to 7 mm in diameter and locally comprise up to 80% of the rock. The flows are capped by hyaloclastite units with delicate primary structures preserved and local imbrications.

Felsic metavolcanic rocks comprise less than 2% of the Kinojevis Assemblage and occur as narrow units (30 to 50 m thick) that are continuous for up to 7 km along strike (Berger, 2002). The felsic rocks weather chalky white and have an aphanitic to glassy black fresh surface. Quartz-filled gas cavities and millimetre-sized amygdules are abundant, which suggests that the original magma was highly gaseous. The lower stratigraphic contact is irregular and conforms to the underlying mafic flow breccia. There appears to have been some local mechanical mixing of material as angular felsic fragments up to 2 cm in size occur within the mafic flow. The upper stratigraphic contact is abrupt and well defined with the overlying massive mafic flows. This type of contact would not be expected if the felsic rocks were silicified basalts, which has been suggested by some explorationists. In thin section, these rocks are composed of essential and secondary quartz, plagioclase and rare opaque minerals. White mica, epidote and chlorite occur in the groundmass.

Calc-alkalic metavolcanic rocks occur as narrow, discontinuous units (Berger, 2002). These rocks weather beige to light green in contrast to the dark green to black weathering tholeiitic rocks of the Kinojevis Assemblage. The Hislop Township unit is up to 250 metres wide by 6 km long and is restricted to east of the Hislop fault. Prest (1957) described the unit as crystal ash tuff with rare chert fragments. Beds vary between a few centimetres to greater than 2 metres thick and the author observed rare grain gradation. These rocks occur high in the stratigraphy of the Kinojevis Assemblage and indicate that the contact with the overlying calc-alkalic Blake River Assemblage is possibly transitional.

Metasedimentary rocks composed of wacke, argillite and graphitic argillite are interlayered with mafic metavolcanic flows near the base of the Kinojevis Assemblage (Berger, 2002). Massive to poorly bedded wacke is the most common rock type and contains beds that vary in thickness from a few centimetres to approximately 60 cm. Grain gradation is locally developed and provides reliable stratigraphic "top" determinations. Argillite is pale green to dark grey, very fine grained and well indurated. Graphitic argillite is black and is well indurated to fissile depending upon the graphite content. Argillite beds are commonly laminated to 5 cm thick and rarely form units thicker than 30 cm.

7.2.3 The Timiskaming Assemblage

The Timiskaming Assemblage is separated into two (2) subdivisions: 1) clastic and chemical metasedimentary rocks spatially associated with the Porcupine-Destor deformation zone and related faults; and 2) alkalic intrusive and extrusive rocks that are broadly coeval with the metasedimentary rocks (Berger, 2002). The Timiskaming Assemblage spans approximately 15 million years in the Grey Fox property area.

Timiskaming Assemblage clastic metasedimentary rocks, composed of conglomerate, wacke-sandstone, siltstone, argillite and schist, are closely associated with the Porcupine-Destor deformation zone from the Quebec border to Hislop Township (Berger, 2002). Metasedimentary and alkalic metavolcanic rocks that are correlated with the Timiskaming Assemblage underlie the southeast part of Hislop Township, south of the Porcupine-Destor deformation zone, and display a close spatial relationship with the Hislop and Ross faults. Banded magnetite-hematite iron formation is complexly interbedded and structurally interleaved with clastic metasedimentary rocks.

Conglomerate occurs adjacent to the east side of the Hislop fault in south Hislop Township. This conglomerate unit contains large boulders, up to 50 cm in size, composed mainly of mafic scoria, syenite, feldspar porphyry and diorite with lesser quantities of vein quartz, sulphide clasts, jasper and felsic metavolcanic rocks. The clasts are unsorted, ungraded and intercalated with hematized alkalic flows and flow breccia. The conglomerate deposits are clast supported in a sandy matrix that contains abundant chlorite. The spatial restriction adjacent to the Hislop fault; the organization of the deposits; and the association with alkalic flows indicates that the conglomerate is likely a fault scarp deposit developed in rifted shallow water to subaerial tectonic environments.

Sandstone and siltstone underlie parts of Hislop Township (Berger, 2002). These metasedimentary rocks are fine to very fine grained, laminated to thinly bedded and massive. Light grey to green argillite is interbedded with the siltstone and locally comprises greater than 50% of the unit. These units are massive and display no grain gradation or load casts. They are strongly fractured and commonly featureless in outcrop and diamond-drill core. Quartz and plagioclase are the major detrital grains; rare argillite clasts are less than 5 mm in size and detrital microcline grains occur locally. White mica, carbonate, biotite and minor chlorite are the main matrix minerals. Apatite and zircon are common accessory minerals.

Magnetite-hematite iron formation is closely associated with clastic metasedimentary rocks correlated with the Timiskaming Assemblage (Berger, 2002).

The implications are that Timiskaming sedimentation involved early alluvial-fluvial coarse clastic sedimentation followed by finer grained basin-fill clastic and chemical sedimentation. Coarser grained units that eroded underlying strata periodically punctuated the finer grained portions of the sequence and resulted in iron formation fragments throughout the upper part of the Timiskaming Assemblage. Uplift in response to active tectonism is inferred to control this style of sedimentation and is similar to conclusions reached for other Timiskaming-age basins in the Abitibi and Wabigoon subprovinces (Mueller and Corcoran 1998).

Alkaline extrusive rocks are very rare in Grey Fox property area. Intermediate flows and flow breccia are interlayered with Timiskaming Assemblage metasedimentary

rocks (Berger, 2002). These rocks weather earthy red to light grey and are deep red on fresh surface due to extensive hematization. Monolithic fragments, up to 3 cm in size, appear to be the same composition as the fine-grained groundmass. The flows are up to 200 metres thick and are exposed for less than 300 metres along strike. In thin section, most of the primary textures are masked by very fine-grained disseminated hematite, however, fragments and rare trachyte texture is locally preserved. Feldspar phenocrysts (up to 2 mm) are most common, mafic phenocrysts are altered to calcite and chlorite, and apatite phenocrysts occur throughout the rock. Geochemistry indicates that these rocks are shoshonitic trachyandesites.

Alkaline intrusive rocks are common throughout Grey Fox property area and vary in composition from lamprophyre, "pyroxenite and/or hornblendite", monzonite, syenite and alkaline granite. These rocks may occur as isolated dikes, small dike swarms, and single-phase or multiphase intrusions up to 25 km^2 in extent. Lamprophyre occurs as isolated dikes and part of intrusions and is divided into two groups based on composition and relative age relationships. Amphibole- and biotite- and/or phlogopite-bearing lamprophyre occurs as relatively early phases of alkaline intrusions and is most commonly spatially restricted to the periphery of larger intrusions.

7.2.4 Faults

7.2.4.1 Porcupine-Destor Deformation Zone

The Porcupine-Destor deformation zone (PDDZ) extends across Highway 101 area, and is traced west to the Kapuskasing Structural Zone (Ayer et al., 1999) and east through Quebec to the area of the Grenville Front (Mueller et al. 1996) for a total distance of more than 600 km. The PDDZ strikes southeast in Hislop Township and generally becomes more east striking along the rest of Highway 101 (Gerber, 2002). The deformation zone is complex, with different structural styles restricted to specific segments. Each segment is bounded, to a first-order approximation by prominent north-northwest-striking faults that transect the PDDZ. For example, distinct differences in structural style occur across the Hislop and Garrison faults.

West of the Hislop Fault, the PDDZ is southeast- to east-striking and moderately (45 to 65°) south dipping. The PDDZ marks the contact between the Porcupine and Tisdale assemblages and is characterized by mafic and ultramafic schist in zones from 250 to 800 metres wide; numerous foliation parallel and crosscutting brittle faults; and albitite, lamprophyre and quartz-feldspar porphyritic sills and dikes that intruded the zone. Basalt and some clastic metasedimentary rocks occur as relatively undeformed wedges within the deformation zone and provide competent hosts for gold mineralization. Kinematics are poorly understood along this portion of the PDDZ, however a reverse vertical movement (south-over-north) is interpreted at the Glimmer Mine and south-over-north thrusting is interpreted on the fault zone in the Monteith area.

The main trace of the PDDZ is accurate between the Hislop and Garrison faults (Berger, 2002). Timiskaming Assemblage clastic and chemical metasedimentary rocks occur within the deformation zone that varies between 100 and 1500 metres wide. Talc-chlorite schist occurs along the north margin of the deformation zone in the Tisdale Assemblage and is indicative of ductile strain. The southern limit of the deformation zone is marked by brittle-ductile faulting accompanied by diabase dike

intrusions and abrupt contacts between the Kinojevis and Timiskaming assemblages. The deformation zone is near vertical, and kinematics are poorly constrained. North-northeast and north-northwest brittle and brittle-ductile faults transect and offset the PDDZ. Several poorly exposed shear zones occur parallel to and splay off of the main PDDZ to the north. The map pattern suggests that high strain and clockwise rotation affected the entire area between the PDDZ and Arrow fault.

7.2.4.2 Arrow Fault

The Arrow fault (Fig. 7.4) is a local name applied to a shear zone striking 085° located near of the south limit of the Grey Fox property. The fault is defined by a prominent linear disruption in airborne magnetic patterns and corresponds to sheared rock on the ground (Berger, 2002). The Arrow fault transects strongly sericitized and carbonatized basalt near the Pike River bridge in Hislop Township. The Arrow fault appears to transect the PDDZ, but its relationship to the regional structures is poorly understood due to lack of exposure and study.

7.2.4.3 Hislop Fault

The Hislop Fault (Fig. 7.4) is located near of the west limit of the Grey Fox property. This fault strikes approximately 345° and extends from south of the Grey Fox property area through east-central Hislop Township. The Hislop Fault corresponds with a pronounced lineament across which there is a 40° clockwise rotation of the airborne magnetic pattern, which corresponds with a change in the strike of stratigraphy (Berger, 2002). The fault is described from diamond-drill data as a brittle-ductile structure that contains schist, fault gouge and extensive fracturing. Feldspar porphyry and syenite dikes are reported to intrude along the fault. Drost (1987) suggested that the Hislop fault represented a "mega-kink" structure that reflected a phase of development along the PDDZ, based on airborne geophysical magnetic patterns. However, the fault appears to have a fundamental control on geology and gold mineralization beyond that associated with kink-folding in the study area. West of the fault, the stratigraphy is an east-striking, south-facing homoclinal sequence. Structural fabrics are commonly nonpenetrative fracture cleavage.

Gold mineralization is largely confined to the vicinity of alkaline plutons, such as the Canadian Arrow deposit. East of the Hislop fault, stratigraphy is folded about southeast-trending axes in the Tisdale Assemblage and is a homoclinal south-facing sequence in the Kinojevis Assemblage. Ductile structures associated with folding are overprinted by brittle-ductile faults. Hydrothermal alteration and associated gold mineralization occur in a variety of structural and geological settings. Timiskaming Assemblage metasedimentary and alkaline metavolcanic rocks are most common adjacent to the east side of the Hislop fault. These data indicate that the Hislop Fault most likely controlled deposition of the Timiskaming Assemblage metasedimentary rocks that it is characterized by east-side-down vertical movement, and that it separates different structural blocks in the study area. As explained below, the Hislop Fault is 1 of 5 regional bounding cross faults that separate different segments along the PDDZ from Timmins to Quebec. The structural style and setting of gold mineralization in each segment is different and knowledge of these differences can be used to tailor exploration programs specific to each segment (Berger 2001).

7.2.4.4 Ross Fault

Jensen (1985) identified a northwest-striking lineament immediately east of the Ross Mine as the Ross Fault (Fig. 7.4). Berger (2002) has modified the extent and strike of the fault based on detailed airborne geophysical data. The fault is located near or on the inferred axis of an anticline that closes in the vicinity of the Ross Mine. The fault is a brittle-ductile structure characterized by schist in the vicinity of the mine and by extensive fracturing and veining to the southeast. Berger (2002) believes that the Ross Fault is one of the important structural features responsible for localization of gold mineralization at the Ross Mine.

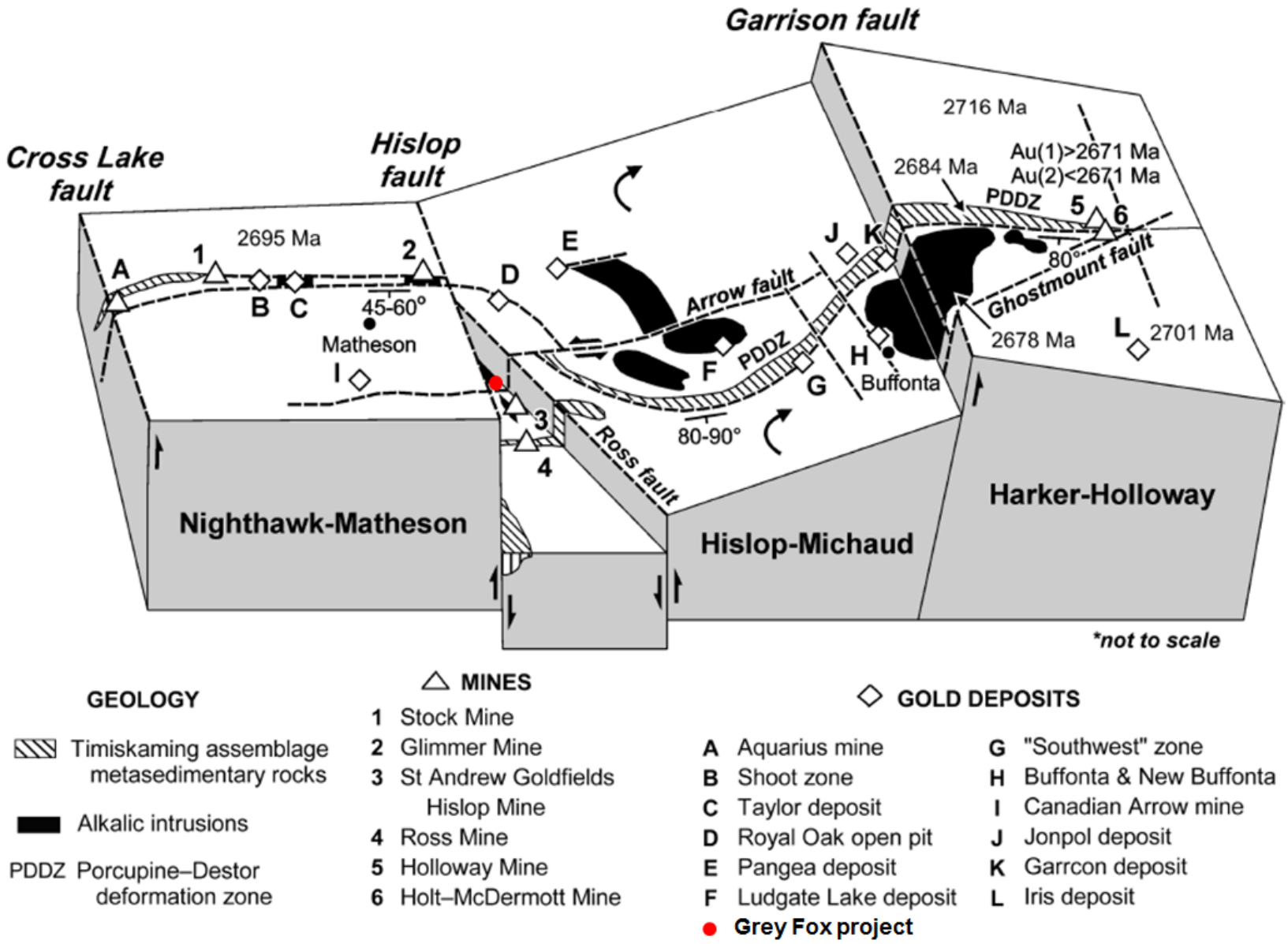

Figure 7.4 – Inferred movement on segments in the Highway 101 area (Adapted and modified from Berger, 2002)

7.3 Grey Fox Property Geology

The Grey Fox property geology essentially consists of Tisdale Assemblage mafic volcanic rocks and adjacent Timiskaming clastic sedimentary rocks (Ross and Rhys, 2011). The Timiskaming sediments here form a northwest-trending lens that is approximately 4 km long and several hundred metres wide, spatially associated on its southwest side with an alkaline intrusion of probable syenitic composition. Texture, composition and the spatial association of the intrusion with Timiskaming sedimentary rocks suggest that the intrusion may be part of the regional syn-Timiskaming magmatic suite. This magmatic suite is spatially associated with fault-related basins, associated Timiskaming clastic sedimentary rocks, and locally coeval alkaline volcanic rocks which are interbedded with the Timiskaming sediments in basins along, and spatially associated with, the Destor-Porcupine and Cadillac-Larder Lake fault systems throughout the region.

Like similar basins elsewhere in the region, the northwest-trending syenite-Timiskaming sediment band associated with the mineralized zones area may represent a subsidiary fault bounded basin to the Destor-Porcupine Fault, extending as a second-order feature southeastward from the main fault system, as is interpreted for the Gibson Shear which is interpreted to form the structural contact of the southwestern margin of the syenite-sediment band. Such faults, which are analogous to the Dome Fault in the Timmins area, may represent what were initially major brittle structures that formed prior to regional metamorphism, and which have been subsequently remobilized to varying degrees by regional ductile shear zones during the post-Timiskaming greenschist grade metamorphism and syn-metamorphic deformation that affected the region (Ross and Rhys, 2011). At the local scale, where remobilized, individual syn-Timiskaming fault strands form favourable sites for mineralization within them or in adjacent rheologically competent lithologic units that can focus vein formation.

7.4 Mineralization

Mineralized zones occur along and adjacent to the eastern end of the Timiskaming lens, which in the area of the mineralized zones trends northerly and dips steeply to the east. Drilling suggests that east of the mafic-sedimentary contact, the stratigraphy in the mafic volcanic sequence also trends north and dips steeply east. The sequence comprises alternating massive, pillowed and variolitic mafic units, and local thin volcanosedimentary horizons. Drill core observations suggest that the sequence is generally weakly foliated, despite proximity to the intense ductile strands of the Destor-Porcupine Fault system to the north, although some lithologies including sedimentary horizons and contacts may have localized displacement, as suggested by cataclastic breccias and narrow semi-brittle shear zones associated with mineralization (Ross and Rhys, 2011).

7.4.1 Alteration Associated with Mineralization (Ross and Rhys, 2011)

Mineralization is associated with hematization which occurs in albite-carbonate-dominant alteration assemblages (Fig. 7.5) often peripheral to mineralized zones, and also as outer envelopes to some veins. Pyritic carbonate-albite-sericite alteration generally overprints the hematite, suggesting that much of the pervasive hematite is early, although later structurally controlled hematite is suggested in vein envelopes as well. The hematite association, with associated albite-carbonate is common as an early alteration phase in several deposits along the Destor-Porcupine corridor,

particularly where associated with syenitic intrusions that are syn-Timiskaming in age. This may suggest a magmatic contribution to mineralizing fluids, as has been interpreted also in several Archean Western Australian orogenic gold systems (e.g. Kalgoorlie, Wallaby) and may also be common in west African Proterozoic aged deposits which show similar alteration assemblages, paragenesis and association with late alkaline to subalkaline intrusions. The presence of hydrothermal hematite and carbon in vein envelopes suggest that alternating redox states, potentially in response to fluid mixing or evolution, may have contributed to gold deposition.

Figure 7.5 – Altered variolitic host unit to the 147 Zone, from the mineralized interval (32 to 36 m) in GF11-244 (32 to 36 m). Note the variolitic, elliptical relict textures in the core, which also shows the typical pale green-grey colour of the dominantly albite-carbonate-quartz-chlorite alteration. (Photo from Ross and Rhys, 2011)

7.4.2 Style of Gold Mineralization (Ross and Rhys, 2011)

The mineralization observed on the Grey Fox property occurs in association with quartz-carbonate veins which are often sheeted and occur at shallow to moderate core axis angles in drill holes which are drilled with from east to west with westerly azimuths, which is the dominant drilling direction. The veins in examined drill intersections form closely spaced sets 0.2 to 10 cm thick. Veins often have a complex, polygenerational history. In the 147 Zone, veins often have thin margins of crustiform banded quartz, overgrown by crustiform a quartz matrix breccia over, and later development of cores of fine-grained, matrix-supported quartz-carbonate matrix lithified vein breccia containing fragments of earlier quartz phases (Photo 2). These veins also often have thin, dark green-grey breccia selvages with abundant disseminated pyrite; petrography indicates they are carbon-bearing.

Visible gold was most commonly observed in these dark pyritic rims. Outer reddish selvages beyond the greenish-grey pyritic rims are locally present, and also occur surrounding some veinlets (Fig. 7.6A), suggesting redox changes during vein evolution which likely contributed to gold deposition. In other areas, veins form brittle

networks that may anastomose but are generally subparallel and sheeted, with earlier vein generations containing grey quartz and later crosscutting carbonate dominant phases.

Figure 7.6 – Samples illustrating vein textures from the mineralized interval between 31 and 36 m in drill hole GF11-244 (Ross and Rhys, 2011).

The veins are from a high-grade interval grading 20.11 g/t Au over 16.0 m. Veins occur at shallow core axis angles and would therefore cut across the steeply east-dipping sequence in this drill hole which was drilled along a moderate west dip. The veins are complex and polygenerational, with thin crustiform quartz-carbonate bands along their margins. An early breccia phase around which additional crustiform quartz has overgrown the earlier fragments is illustrated in the lower part of the vein in photo C. The central parts of the veins in A and B are filled with cream to pale grey fine-grained quartz-carbonate matrix vein breccia which incorporates fragments of the earlier crustiform quartz. A late pale grey breccia phase, evident in photo A, affects upper parts of the vein and extends into the wallrock. In all photos, the veins have dark green-grey pyrite-rich envelopes; petrography indicates they are carbon-bearing. These dark envelopes probably form the earliest phase of the fine-grained breccia, which overprints the green-grey albite-chlorite-carbonate altered wallrock and early foliation. Late greenish fill in the central parts of the vein in photo C is likely epidote. In photo A, note the reddish hematite in the vein envelope below the vein (Photo from Ross and Rhys, 2011).

Minor brittle (cataclasite breccia) and semi-brittle shear zones with moderate to shallow core axis angles were also observed in association with veins in the 147 zone. This likely forms networks that both occur parallel to and cut across the mafic sequence, and which may have aided in vein localization, forming a permeable fracture network which likely controlled the distribution of mineralization. The deformation style is brittle-ductile suggesting alternation between these structural styles, likely due to changes in fluid pressure, temperature and fault displacement increments (strain rate) episodically occurring during vein formation.

In the Contact Zone, mineralization occurs on both sides of the mafic-sedimentary contact. The contact itself is not faulted in the examined drill hole intersection, but a broad zone of structural disruption which includes semi-brittle contact parallel minor shear zones (Fig. 7.7A) and slip surfaces is host to the mineralization. As with the 147 Zone, core axis angles of veins are shallow to moderate. The complex multigenerational crustiform veining observed in the 147 intercepts is not as well developed in the Contact Zone intercept, but veins do display compatible textures and style. Where developed in the Timiskaming sequence, the veins are oblique to and cut across bedding, often offsetting bedding planes, suggesting that they accommodate some shear displacement (Figs. 7.7B and 7.7C). As with the 147 veins, the crosscutting nature of the individual veins with respect to the steeply dipping stratigraphy suggest that the veins are stacked en echelon along the contact, in association with a network of contact-parallel minor faults and shear zones.

7.4.3 Control on mineralization (Ross and Rhys, 2011)

A significant control on mineralization in the 147 and Contact zones is lithology, since veins are developed in brittle lithologies or at lithologic contacts. In the 147 Zone, the mineralization is preferentially developed in a variolitic unit which has common quenched fine-grained hyaloclastic texture, suggesting that originally would have been a glassy unit that was susceptible to later hydrothermal albite-carbonate-quartz-chlorite alteration. Similar textures are developed at the Holloway deposit to the east, where variolitic flows with hyaloclastic breccia textures are host to much of the mineralization.

The 147 and Contact zone mineralization occurs in association with breccia veins, crustiform veining and thin quartz-carbonate matrix cataclastic-hydrothermal breccias. Overall mineralization style is brittle compared to other deposits in the region, and the crustiform textures are reminiscent of high level epithermal mineralization, although such textures can also be developed in shallow orogenic gold systems. The latter is suggested by the association with ductile carbonate-quartz-sericite shear zones that form narrow networks in association with, and on the margins of mineralized veins and vein networks in several intercepts, which are typical orogenic style. The more brittle nature of the mineralization than that in many other deposits may also reflect the albite-rich alteration style, albite deforms in a brittle style up to high temperatures. Brittle styles of mineralization in feldspar altered wallrock are common at Kirkland Lake (K-feldspar dominant there), where early hematization is also prevalent.

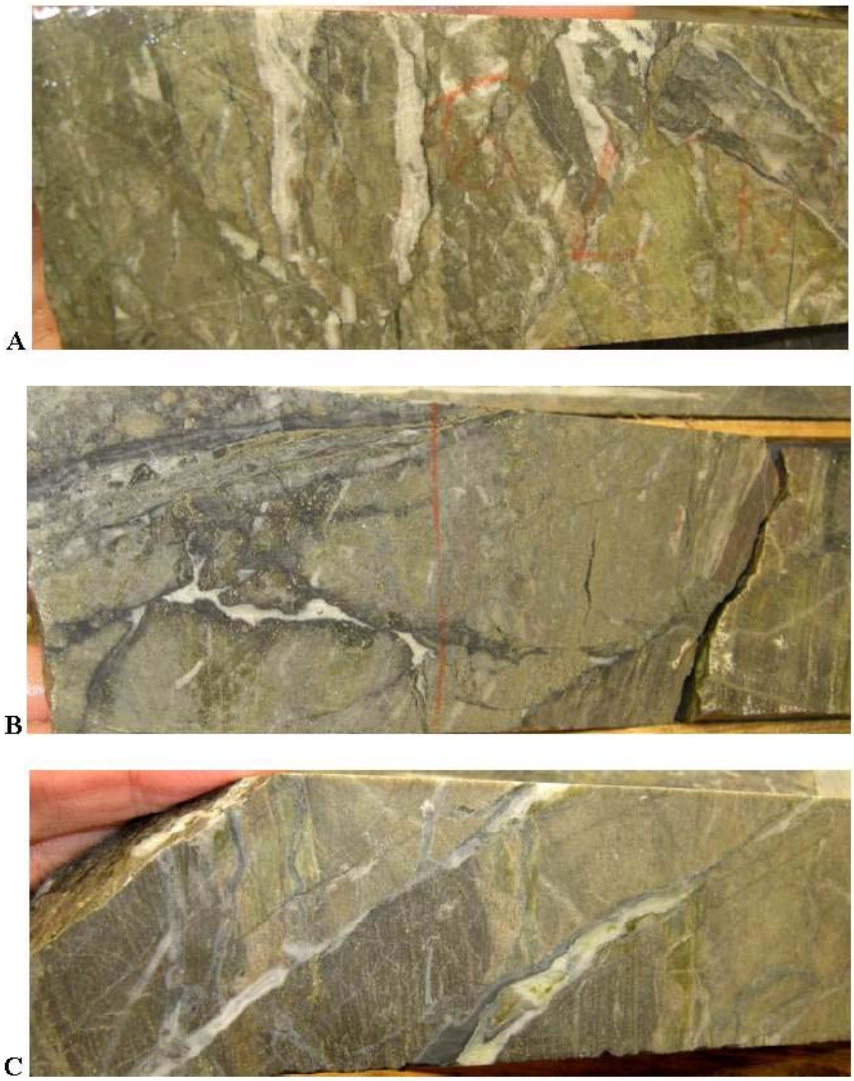

Figure 7.7 – Samples from the Timiskaming clastic sediments adjacent to the contact with the mafic volcanic sequence illustrating structural styles associated with mineralization (Ross and Rhys, 2011).

The samples are from between 130.7 and 134 m in drill hole GF10-125; contact with the mafic volcanic sequence is at 130.7 m. A: Semi-brittle shear zone parallel to bedding in the sedimentary sequence, suggesting a steep easterly dip. This structure is narrow and sericite-rich (pale green) with carbonaceous stylolites, discontinuous deformed quartz-carbonate veinlets and diffuse bands of grey, siliceous cataclastic breccia. Such structures may exert local control on the vein systems, as a discontinuous network along and adjacent to the contact. B and C: Photos of veining and vein breccia styles, illustrating their orientation and structural style. In both photos veining occurs at shallow to moderate core axis angles, and cuts across bedding which is at a high core axis angle (brown banding at right in B and at left in C). In B, note the quartz breccia vein in the upper left which is at shallow core axis angle and is surrounded by additional breccia that extends into the wallrock. Also in B at lower right, a thin veinlet offsets bedding. Bedding offsets are clearly apparent in photo C and indicate that these veins are shear veins, and are likely stacked echelon upward along the contact area. Displacement direction is unclear as the core could not be re-oriented (Photo from Ross and Rhys, 2011).

8. DEPOSIT TYPES

Much has been published on gold deposits in the last decade leading to: (1) significant improvement in the understanding of some models; (2) the definition of new types or sub-types of deposits; and (3) the introduction of new terms (Robert et al., 2007). However, significant uncertainty remains regarding the specific distinction between some types of deposits. Consequently, specific giant deposits are ascribed to different deposit types by different authors.

As represented in Figure 8.1, thirteen globally significant types of gold deposits are presently recognized, each with its own well-defined characteristics and environments of formation. Minor types of gold deposits are not discussed in this paper. As proposed by Robert et al. (1997) and Poulsen et al. (2000), many of these gold deposit types can be grouped into clans; i.e., families of deposits that either formed by related processes or that are distinct products of large scale hydrothermal systems. These clans effectively correspond to the main classes of gold models, such as the orogenic, reduced intrusion-related, and oxidized intrusion-related ones (Hagemann and Brown, 2000). Deposit types such as Carlin, Au-rich VMS, and low-sulphidation are viewed by different authors either as stand-alone models or as members of the broader oxidized intrusion-related clan. They are treated here as stand-alone deposit types, whereas high- and intermediate-sulphidation and alkaline epithermal deposits are considered as part of the oxidized intrusion-related clan.

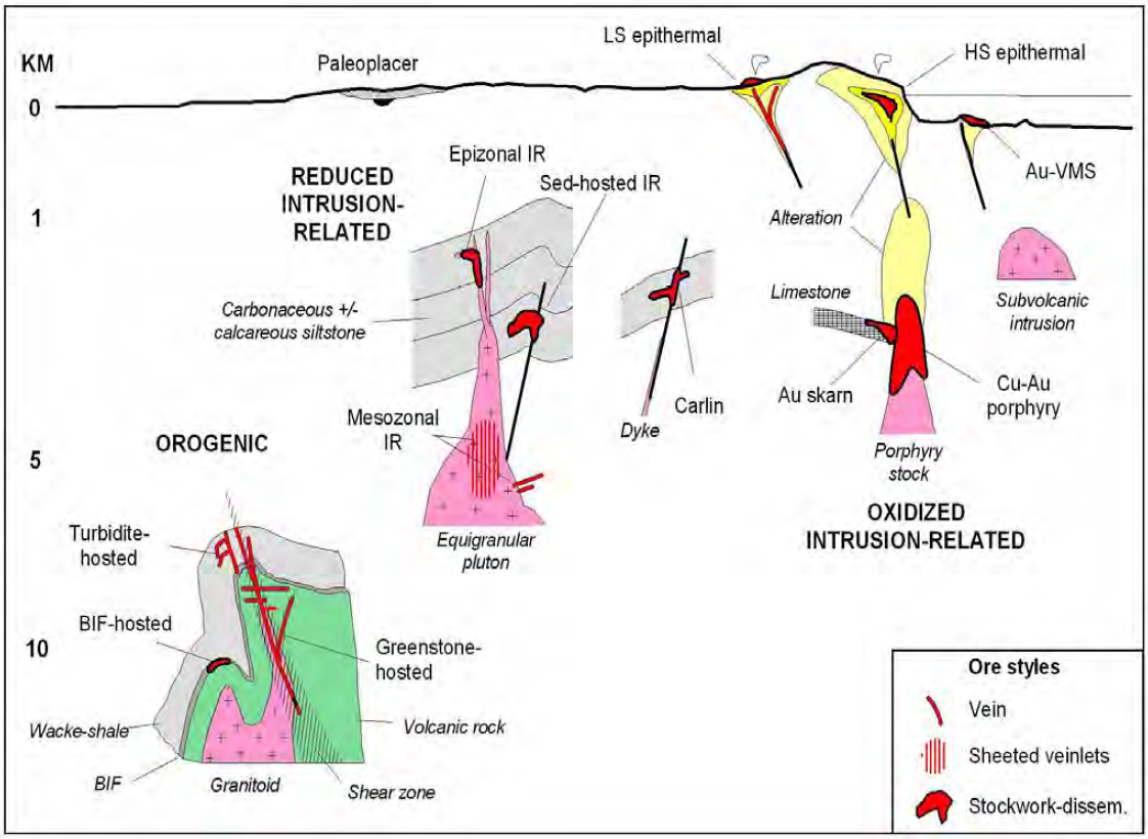

Figure 8.1 – Schematic cross section showing the key geologic elements of the main gold systems and their crustal depths of emplacement. Note the logarithmic depth scale. Modified from Poulsen et al. (2000), and Robert (2004).

The auriferous zones of the Grey Fox project seem to be associated with an orogenic gold occurrence related to longitudinal shear zones (greenstone-hosted quartz-carbonate vein deposit). Greenstone-hosted quartz-carbonate vein deposits are a subtype of lode-gold deposits (Poulsen et al., 2000). They correspond to structurally controlled, complex epigenetic deposits hosted in deformed metamorphosed terranes (Dubé and Gosselin, 2007).

The Grey Fox project is located with other gold deposits near the Porcupine-Destor Deformation Zone. Many of gold deposits are distributed along major compressional to transtensional crustal-scale fault zones (Ex. Porcupine-Destor and Larder Lake-Cadillac Deformation Zones) in deformed Abitibi greenstone terranes (Fig. 8.2). Greenstone-hosted quartz-carbonate veins are thought to represent a major component of the greenstone deposit clan (Fig. 8.1) (Dubé and Gosselin, 2007).

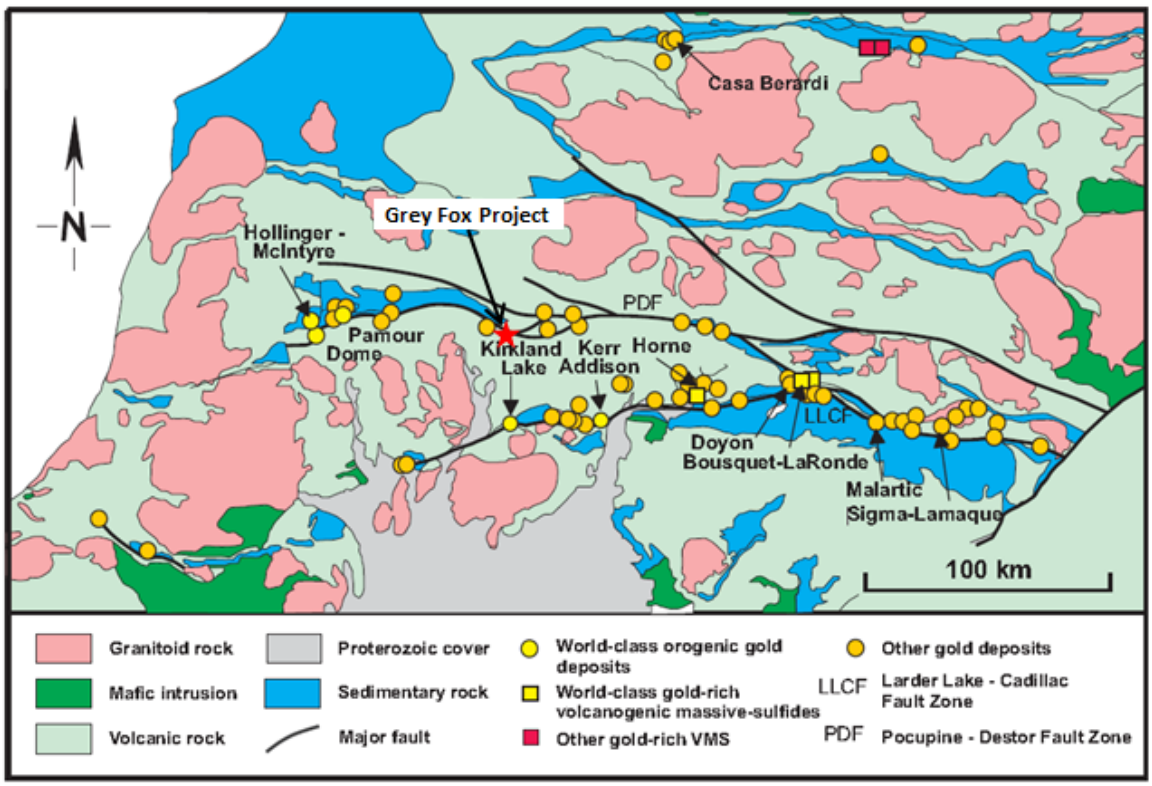

Figure 8.2 – Simplified geological map of the Abitibi greenstone belt showing the distribution of major fault zones and of gold deposits.
Modified from Poulsen et al. (2000).

The gold zones of the Grey Fox project could also be associated with a low sulphidation epithermal gold deposits. The tectonic setting of epithermal Au deposits is characterized by extension, at least at the district scale or larger, localizing and facilitating emplacement of magma and, at higher levels, hydrothermal fluids (Taylor, 2007). Regionally extensive rift zones can also provide the extensional framework. Extensional, pull-apart basins formed between regional strike-slip faults, or at transitions between these faults, provide favourable sites for intrusions and epithermal deposits. Synchronous tectonic and hydrothermal activity is indicated in some deposits by the fact that many of the vein-bearing faults were active during and

after vein filling; tectonic vein breccias and displaced mineralized and altered mineralized and altered rocks resulted.

Low-sulphidation epithermal Au deposits are harder to recognize in ancient terranes, owing to the facts that their commonly found alteration mineral assemblages are not unique, especially in regional metamorphic terranes, or may no longer be present, depending on the grade of subsequent metamorphism, and that these deposits are often not as intimately associated with igneous rocks (Taylor, 2007).

8.1 Greenstone-hosted quartz-carbonate vein deposits

Greenstone-hosted quartz-carbonate-vein deposits typically occur in deformed greenstone terranes of all ages (Dubé and Gosselin, 2007), especially those with commonly variolitic tholeiitic basalts and ultramafic komatiitic flows intruded by intermediate to felsic porphyry intrusions, and sometimes swarms of albitite or lamprophyre dykes (ex: Timmins and Red Lake districts). The deposits are associated with collisional or accretionary orogenic events. They are typically distributed along reverse-oblique crustal-scale major fault zones, commonly marking the convergent margins between major lithological boundaries such as volcano-plutonic and sedimentary domains (ex: Cadillac-Larder Lake fault) These major structures are characterized by different increments of strain, and consequently several generations of steeply dipping foliations and folds resulting in a fairly complex geological collisional setting.

The crustal scale faults are thought to represent the main hydrothermal pathways towards higher crustal level. However, the deposits are spatially and genetically associated with higher order compressional reverse-oblique to oblique brittle-ductile high-angle shear zones commonly located less than 5 km away and best developed in the hanging wall of the major fault (Robert, 1990). Brittle faults may also be the main host to mineralization as illustrated by the Kirkland Lake Main Break; a brittle structure hosting the 25 M oz Au Kirkland Lake deposit. The deposits formed typically late in the tectonic-metamorphic history of the greenstone belts (Groves et al., 2000) and the mineralization is syn- to late-deformation and typically post-peak greenschist facies and syn-peak amphibolite facies metamorphism (cf. Kerrich and Cassidy, 1994; Hagemann and Cassidy, 2000).

The greenstone-hosted quartz-carbonate vein deposits are also commonly spatially associated with Timiskaming-like regional unconformities. Several deposits are hosted by (e.g. Pamour and Dome deposit in Timmins) or located next to such a Timiskaming-like regional unconformity (Campbell-Red Lake deposit in Red Lake) (Dubé et al., 2003, in press), suggesting an empirical time and space relationship between large-scale greenstone quartz-carbonate gold deposits and regional unconformities (Hodgson, 1993; Robert, 2000; Dubé et al., 2003).

Stockworks and hydrothermal breccias may represent the main host to the mineralization when developed in competent units such as granophyric facies of gabbroic sills. Due to the complexity of the geological and structural setting and the influence of strength anisotropy and competency contrasts, the geometry of the vein network varies from simple such as the Silidor deposit, Canada, to more commonly fairly complex with multiple orientations of anastomosing and/or conjugate sets of veins, breccias, stockworks and associated structures (Dubé et al., 1989; Hodgson, 1989, Robert et al., 1994, Robert and Poulsen, 2001).

Ore-grade mineralization also occurs as disseminated sulphides in altered (carbonatized) rocks along vein selvages. Ore shoots are commonly controlled by: 1) the intersections between different veins or host structures, or between an auriferous structures and an especially reactive and/or competent rock type such as iron-rich gabbro (geometric ore shoot); or 2) the slip vector of the controlling structure(s) (kinematic ore shoot). For laminated fault-fill veins, the kinematic ore shoot will be oriented at a high angle to the slip vector (Robert et al., 1994; Robert and Poulsen, 2001).

At the district scale, the greenstone-hosted quartz-carbonate-vein deposits are associated with large-scale carbonate alteration commonly distributed along major fault zones and associated subsidiary structures (Dubé and Gosselin, 2007). At the deposit scale, the nature, distribution and intensity of the wall-rock alteration is largely controlled by the composition and competence of the host rocks and their metamorphic grade. Typically, the alteration haloes are zoned and characterized - at greenschist facies - by iron-carbonatization and sericitization, with sulphidation of the immediate vein selvages (mainly pyrite, less commonly arsenopyrite).

The main gangue minerals are quartz and carbonate with variable amounts of white micas, chlorite, scheelite and tourmaline. The sulphide minerals typically constitute less than 10% of the ore. The main ore minerals are native gold with pyrite, pyrrhotite and chalcopyrite without significant vertical zoning (Dubé and Gosselin, 2007).

8.2 Low-sulphidation epithermal Au deposits

Low-sulphidation epithermal Au deposits are distinguished from high-sulphidation deposits primarily by the different sulphide mineralogy (pyrite, sphalerite, galena, chalcopyrite) typically within quartz veins with local carbonate, and associated near neutral wall rock alteration (illite clays), deposited from dilute hydrothermal fluids (Corbett and Leach, 1998).

Nearly any rock type, even metamorphic rocks, may host epithermal Au deposits, although volcanic, volcaniclastic, and sedimentary rocks tend to be more common (Taylor, 2007). Typically, epithermal deposits are younger than their enclosing rocks, except in the cases where deposits form in active volcanic settings and hot springs. Here, the host rocks and epithermal deposits can be essentially synchronous with spatially associated intrusive or extrusive rocks, within the uncertainty of the determined ages in some cases. Lithological control occurs mainly as competent or brittle host rocks which develop through going fractures as vein hosts, although permeability is locally important. In interlayered volcanic sequences epithermal veins may be confined to only the competent rocks while the intervening less competent sequences host only fault structures (Corbet, 2007).

Low-sulphidation Au deposits that occur further removed from active magmatic vents may be more apparently controlled by structural components, zones of fluid mixing, and emplacement of smaller magmatic bodies (e.g. dykes) (Taylor, 2007). Meteoric waters dominate the hydrothermal systems, which are more nearly pH neutral in character. Low-sulphidation Au deposits related geothermal systems are more closely linked to passive rather than to active magmatic degassing (if at all), and

sustained by the energy provided by cooling, subvolcanic intrusions or deeper subvolcanic magma chambers.

The morphology of epithermal vein-style deposits can be quite variable. Deposits may consist of roughly tabular lodes controlled by the geometry of the principal faults they occupy, or comprise a host of interrelated fracture fillings in stockwork, breccia, lesser fractures, or, when formed by replacement of rock or void space, they may take on the morphology of the lithologic unit or body of porous rock (e.g. irregular breccia pipes and lenses) replaced. Volumes of rock mineralized by replacement may be discordant and irregular, or concordant and tabular, depending on the nature of porosity, permeability, and water-rock interaction. In deposits of very near-surface origin (e.g. Cinola), an upward enlargement of the volume of altered and mineralized rocks may be found centred about the hydrothermal conduits. Brecciation of previously emplaced veins can form permeable zones along irregularities in fault planes: vertically plunging ore zones in faults with strike-slip motion and horizontal ore zones in dip-slip faults.

Structures act as fluid channelways and more dilational portions of the host structures may represent sites of enhanced fluid flow and so promote the development of ore shoots which host most mineralisation in many low-sulphidation vein systems (Corbett 2002). Elsewhere fault intersections host ore shoots at sites of fluid mixing. Several structural settings provide ore shoots of varying orientations (Fig. 8.3). Steep dipping strike-slip structures provide vertical ore shoots in flexures and fault jogs. Tension veins and dilatant sheeted veins dominate in the latter setting. Normal, and in particular listric faults, in extensional settings host wider and higher grade veins as flat ore shoots in steep dipping vein portions. In compressional settings reverse faults host flat plunging ore shoots in reverse faults.

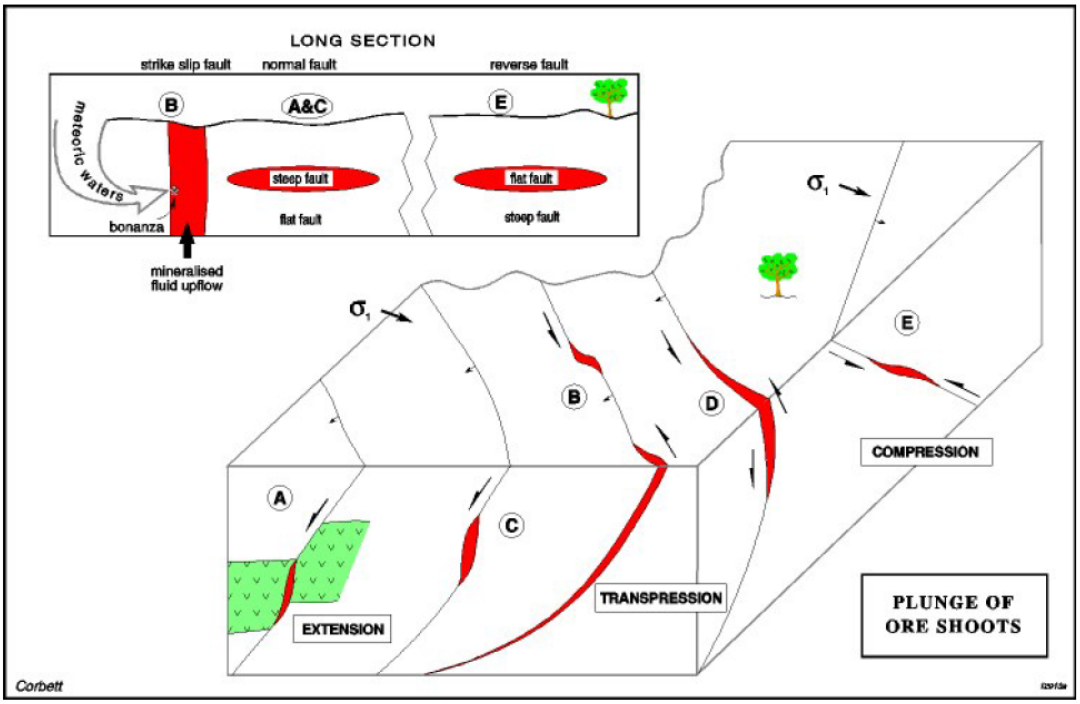

Figure 8.3 – Illustration of the structural control to ore shoot formation in different structural environments and associated ore shoot orientations (from Corbet, 2007)

Epithermal quartz Au deposits are characterised as Ag-poor often bonanza Au grades, developed greatest distances from magmatic source rocks (Fig. 8.4), in association with only minor quartz, illite, chlorite and local pyrite gangue, and so can be difficult to identify (Corbet, 2007). Typically, Ag:Au ratios for epithermal deposits, though variable, tend to be higher in low-sulphidation Au deposits than in high-sulphidation Au deposits (Taylor, 2007).

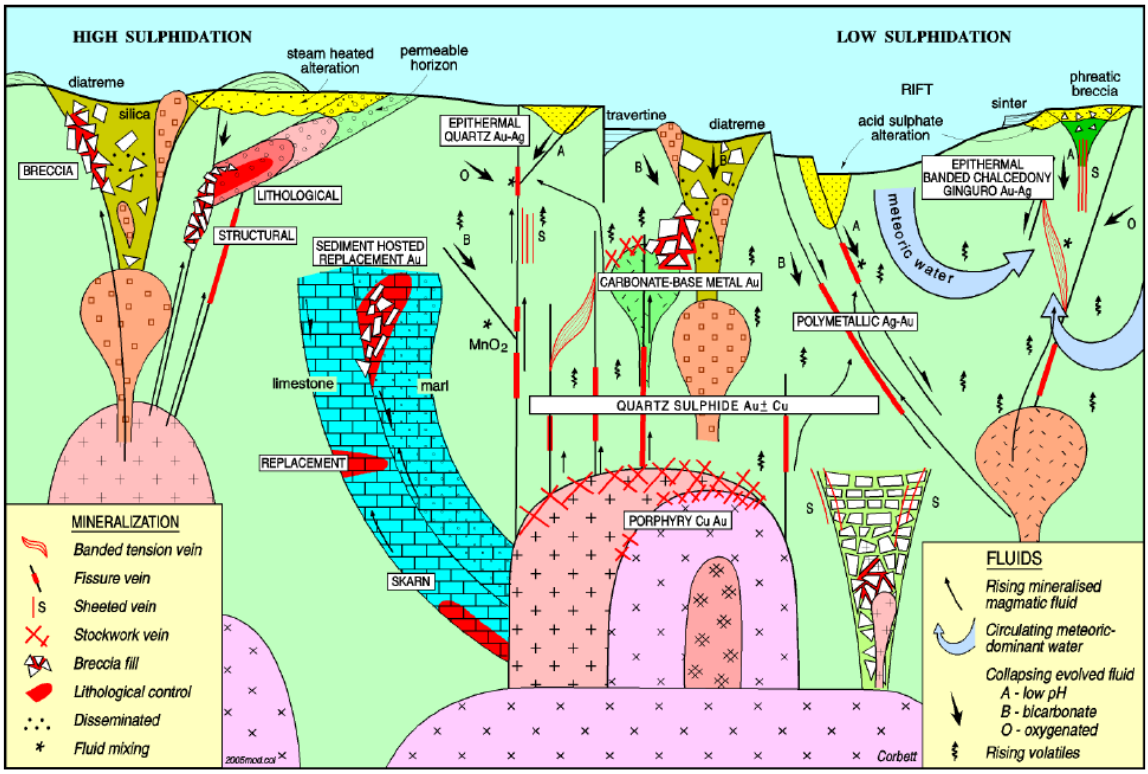

Figure 8.4 – Conceptual model illustrating styles of magmatic arc porphyry Cu-Au and epithermal Au-Ag mineralisation (Corbet, 2007)

9. EXPLORATION

The most recent work on the property consisted exclusively of diamond drilling (see Section 10). The reader is referred to Item 6 for historical exploration work.

10. DRILLING

Information in this section was obtained from the Brigus exploration team and combined with InnovExplo's database verification work.

Brigus started drilling the Grey Fox property in 2008. This report, using the established cut-off date of June 10, 2013, considers 725 holes drilled, logged and sampled by the company totalling 245,793.07 metres. Out of those 725 holes, 689 holes (totalling 233,482.17 m) were included in the current Resource Estimate. The discarded 36 holes were located outside the Grey Fox deposit.

The original objective of the program was to investigate historical gold intervals that a limited number of drill holes had encountered between 1993 and 1997. This objective was quickly upgraded to systematic drilling of the mineralized zones when significant gold intervals were encountered.

All holes were supervised, logged and sampled by Brigus personnel. The program produced 88,264 samples averaging 0.99 metre.

Table 10.1 lists collar information for all 689 drill holes drilled by Brigus from 2008 to June 10, 2013 and considered for the Resource Estimate. Figure 10.1 shows the location of all drill holes.

Table 10.1 – Brigus drill holes on the Grey Fox deposit

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF08-01	551127	5372925	291.12	221.00	270.60	-47.80
GF08-02	551185	5372919	290.94	302.00	270.00	-65.00
GF08-03	551228	5372840	290.95	296.00	270.00	-62.00
GF08-04	551229	5372840	290.74	326.00	270.00	-45.00
GF08-05	551231	5372840	291.08	335.00	270.00	-60.00
GF08-06	551188	5373001	291.09	269.00	270.00	-56.00
GF08-07	551189	5373001	290.99	362.00	280.00	-70.00
GF08-08	551040	5373000	291.01	137.00	270.00	-45.00
GF08-09	551050	5372950	291.83	101.00	270.00	-52.00
GF08-10	551070	5372900	291.89	122.00	270.00	-55.00
GF08-11	551100	5372748	291.85	109.00	270.00	-52.00
GF08-12	551088	5372656	293.13	101.00	270.00	-52.00
GF08-13	551097	5372552	294.01	101.00	270.00	-61.00
GF08-14	551220	5372647	291.99	281.00	270.00	-55.00
GF08-15	551932	5372837	290.08	452.00	36.00	-53.00
GF08-16	551920	5372768	290.09	200.00	40.00	-51.00
GF09-17	551070	5372912	291.17	128.00	270.00	-56.50
GF09-18	551083	5372913	291.46	131.00	270.00	-56.00
GF09-19	551082	5372900	291.74	152.00	270.00	-58.00
GF09-20	551070	5372887	292.18	131.00	270.00	-58.00
GF09-21	551082	5372887	291.89	152.00	270.00	-56.00
GF09-22	551070	5372937	290.03	116.00	270.00	-58.00
GF09-23	551096	5372900	291.72	162.00	270.00	-57.00
GF09-24	551071	5373012	290.11	122.00	270.00	-58.50
GF09-25	551120	5372963	290.87	275.00	270.60	-60.00
GF09-26	551120	5372862	290.77	248.00	270.00	-57.50
GF09-27	551120	5372887	291.22	146.00	270.00	-58.00
GF09-28	551096	5372937	291.11	128.00	270.00	-58.00
GF09-29	551070	5372963	290.84	134.00	270.00	-56.00
GF09-30	551068	5372988	290.39	122.00	278.00	-58.00
GF09-31	551091	5372987	290.30	131.00	270.00	-61.00
GF09-32	551118	5372913	291.11	251.00	270.00	-58.50
GF09-33	551084	5372962	289.95	152.00	270.00	-64.00
GF09-34	551070	5372862	291.95	131.00	270.00	-58.00
GF09-35	551070	5372838	291.97	122.00	270.00	-58.00
GF09-36	551071	5372812	292.40	122.00	270.00	-58.00
GF09-37	551072	5372787	291.84	122.00	270.00	-58.00
GF09-38	551096	5372788	291.32	140.00	270.00	-58.00
GF09-39	551097	5372812	291.66	153.00	270.00	-57.00
GF09-40	551097	5372862	291.67	140.00	270.00	-58.00
GF09-41	551097	5372836	291.73	139.00	270.00	-59.00
GF09-42	551095	5372888	292.05	140.00	270.00	-57.00
GF09-43	551095	5372913	291.48	140.00	270.00	-57.00
GF09-44	551106	5372900	291.30	140.00	270.00	-58.00
GF09-45	551120	5372937	291.11	251.00	270.00	-57.00
GF09-46	551120	5372836	291.31	251.00	270.00	-57.00
GF09-47	551120	5372836	291.04	314.00	270.00	-64.00
GF09-48	551121	5372808	290.89	272.00	270.00	-60.00
GF09-49	551122	5372808	290.86	329.00	270.00	-64.00
GF09-50	551118	5372789	291.59	314.00	270.00	-58.50
GF09-51	551118	5372789	291.67	335.00	270.00	-67.00
GF09-52	551118	5372913	291.10	323.00	270.00	-65.00
GF09-53	551121	5372987	290.13	305.00	270.00	-59.00
GF09-54	551071	5373013	289.86	158.00	270.00	-72.50
GF09-55	551069	5373040	289.44	155.00	270.00	-56.00
GF09-56	551069	5373040	289.42	158.00	270.00	-72.00
GF09-57	551120	5372887	291.24	317.00	270.00	-65.00
GF09-58	551213	5373001	291.30	302.00	270.00	-71.00
GF09-59	551162	5373001	290.09	251.00	270.00	-54.00
GF09-60	551069	5372763	292.43	152.00	270.00	-58.00
GF09-61	551069	5372763	292.38	152.00	270.00	-73.00
GF09-62	551046	5373059	290.85	110.00	270.00	-61.00
GF09-63	551048	5373058	291.00	164.00	270.00	-85.50
GF09-64	551075	5373111	289.50	140.00	270.00	-54.00
GF09-65	551073	5373136	290.56	140.00	270.00	-55.00
GF09-66	551076	5373160	290.72	152.00	270.00	-55.00
GF09-67	551073	5373186	289.83	236.00	270.00	-57.00
GF09-68	551119	5373210	290.78	293.00	270.00	-53.00
GF09-69	551085	5373236	290.51	230.00	270.00	-53.00
GF10-70	551150	5372854	291.16	320.00	271.00	-53.00
GF10-71	550951	5372972	293.63	314.00	270.00	-49.50
GF10-73	550896	5372598	299.72	389.00	268.00	-59.00
GF10-74	551882	5372624	291.38	485.00	46.50	-53.00
GF10-75	551862	5372536	292.76	389.00	88.50	-50.00
GF10-76	551833	5372343	297.02	500.00	90.00	-60.00
GF10-77	551250	5372710	291.30	419.00	273.00	-68.00
GF10-78	551240	5372661	290.56	404.00	270.00	-70.00
GF10-79	551203	5372675	291.19	296.00	270.00	-52.80
GF10-80	551130	5372697	291.87	302.06	275.00	-66.00
GF10-81	551182	5372727	291.23	338.00	270.00	-50.00
GF10-82	551025	5373503	289.04	757.22	270.00	-50.00
GF10-83b	551170	5372747	290.70	344.00	270.00	-52.00
GF10-84	550948	5372883	293.83	443.00	270.00	-50.00
GF10-85	550942	5372766	295.63	594.50	270.00	-55.00
GF10-86	551014	5373432	286.53	386.00	270.00	-50.00
GF10-87	551068	5373257	290.27	314.00	270.00	-65.00
GF10-88	550915	5372548	289.86	323.00	270.00	-50.00
GF10-89	551042	5373326	289.14	302.00	270.00	-50.00
GF10-90	551123	5373165	290.97	239.00	270.00	-54.00
GF10-92	550901	5372652	297.04	380.00	270.00	-50.00
GF10-94	551183	5372980	290.07	497.00	270.00	-65.00
GF10-98	551131	5373125	290.51	362.00	270.00	-58.00
GF10-99	551132	5373124	290.46	530.00	270.00	-75.00
GF10-100	551179	5373034	291.04	479.00	270.00	-65.00
GF10-101	551118	5373221	291.00	507.00	270.00	-65.00
GF10-102	551864	5372772	291.86	176.00	40.00	-55.00
GF10-103	551165	5373071	290.93	500.00	270.00	-65.00
GF10-104	551814	5372714	292.17	329.00	40.00	-55.00
GF10-105	551821	5372664	292.39	401.00	40.00	-55.00
GF10-106	551187	5372944	290.51	401.00	270.00	-57.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF10-107	551784	5372746	293.04	377.00	40.00	-55.00
GF10-108	551744	5372857	292.29	396.00	45.00	-55.00
GF10-109	551338	5372632	292.29	452.00	270.00	-55.00
GF10-110	551879	5372824	289.00	186.00	40.00	-55.00
GF10-111	551859	5372662	292.57	500.00	45.00	-55.00
GF10-112	551357	5372582	293.07	466.00	270.00	-55.00
GF10-113	551895	5372581	292.07	566.00	45.00	-55.00
GF10-114	551355	5372525	292.36	470.00	270.00	-55.00
GF10-115	551826	5372274	297.33	536.00	55.00	-55.00
GF10-116	551357	5372475	293.18	503.00	270.00	-55.00
GF10-117	552000	5372259	298.95	467.00	55.00	-55.00
GF10-118	551960	5372514	290.00	531.36	45.00	-55.00
GF10-119	551370	5372431	292.79	467.00	270.00	-55.00
GF10-121	551630	5372447	296.62	452.00	270.00	-55.00
GF10-125	551118	5373079	290.07	350.00	270.00	-50.00
GF10-127	551002	5372969	291.91	392.00	270.00	-50.00
GF10-128	551426	5372903	294.14	329.00	270.00	-65.00
GF10-129	551139	5373081	290.42	350.00	270.00	-51.70
GF10-130	550951	5372972	293.63	452.00	270.00	-60.00
GF10-131	551243	5373002	291.62	400.00	270.00	-70.00
GF10-132	551002	5372969	291.74	400.00	270.00	-70.00
GF10-133	551140	5373085	292.00	245.00	270.00	-60.00
GF10-134	551117	5372986	289.88	293.00	270.00	-67.00
GF10-135	551170	5373034	290.81	302.00	270.00	-55.00
GF10-136	551192	5372899	291.14	341.00	270.00	-60.00
GF11-137	551831	5372259	297.43	440.00	65.00	-55.00
GF11-138	551170	5373034	290.78	326.00	270.00	-46.00
GF11-139	551200	5372624	291.55	275.00	270.00	-50.00
GF11-140	551212	5373031	291.67	551.00	270.00	-64.00
GF11-141	551196	5372599	292.33	275.00	270.00	-50.00
GF11-142	551200	5372572	291.58	275.00	270.00	-50.00
GF11-143	551817	5372281	297.26	443.00	61.00	-55.00
GF11-144	551201	5372523	292.52	275.00	270.00	-50.00
GF11-145	551201	5372476	293.14	275.00	270.00	-50.00
GF11-146	551201	5372425	293.24	215.00	270.00	-50.00
GF11-147	551356	5372374	293.63	392.00	265.00	-55.00
GF11-148	551122	5373138	290.84	266.00	270.00	-50.00
GF11-149	551201	5372375	293.61	269.00	270.00	-50.00
GF11-151	551120	5373138	290.79	287.00	270.00	-60.00
GF11-152	551348	5372323	293.02	410.00	270.00	-60.00
GF11-153	551206	5372326	293.63	275.00	270.00	-50.00
GF11-154	551240	5372942	291.34	497.00	270.00	-51.00
GF11-155	551350	5372272	293.68	410.00	270.00	-55.00
GF11-156	551201	5372272	293.76	290.00	270.00	-50.00
GF11-157	551204	5372304	298.60	254.00	270.00	-50.00
GF11-158	551353	5372299	293.48	456.00	270.00	-55.00
GF11-159	551203	5372350	297.00	251.00	270.00	-50.00
GF11-160	551240	5372942	291.34	536.00	270.00	-60.00
GF11-161	551200	5372399	297.30	251.00	270.00	-50.00
GF11-162	551347	5372348	292.98	407.00	270.00	-60.00

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF11-163	551202	5372451	296.10	266.00	270.00	-50.00
GF11-164	551199	5372497	295.90	251.00	270.00	-50.00
GF11-165	551353	5372399	292.88	401.00	270.00	-55.00
GF11-166	551243	5373030	291.77	551.00	270.00	-64.00
GF11-167	551364	5372558	292.94	442.00	270.00	-55.00
GF11-168	551380	5372383	293.32	401.00	270.00	-55.00
GF11-169	551349	5372499	292.31	317.00	270.00	-55.00
GF11-170	551343	5372605	294.40	383.00	270.00	-55.00
GF11-171	551353	5372387	292.97	362.00	270.00	-55.00
GF11-172	551376	5372521	292.60	380.00	270.00	-55.00
GF11-173	551361	5372452	292.53	416.00	270.00	-55.00
GF11-174	551353	5372362	292.60	401.00	270.00	-55.00
GF11-175	551379	5372479	292.71	383.00	270.00	-55.00
GF11-176	551372	5372405	292.95	361.00	270.00	-55.00
GF11-177	551347	5372335	293.03	386.00	270.00	-55.00
GF11-178	551373	5372503	292.45	381.00	270.00	-55.00
GF11-179	551391	5372431	293.20	401.00	270.00	-55.00
GF11-180	551402	5372388	293.42	401.00	270.00	-55.00
GF11-181	551352	5372363	292.78	281.00	270.00	-55.00
GF11-182	551382	5372456	292.90	399.00	270.00	-55.00
GF11-183	551414	5372436	293.48	419.00	270.00	-55.00
GF11-184	551374	5372392	293.11	392.00	270.00	-55.00
GF11-185	551374	5372357	293.32	389.00	270.00	-55.00
GF11-186	551405	5372276	294.43	399.00	270.00	-55.00
GF11-187	551374	5372300	293.66	389.00	270.00	-55.00
GF11-188	551424	5372391	293.97	425.00	270.00	-55.00
GF11-189	551370	5372323	293.48	401.00	270.00	-55.00
GF11-190	551426	5372303	294.57	428.00	270.00	-55.00
GF11-191	551426	5372353	294.29	425.00	270.00	-55.00
GF11-192	551451	5372278	294.87	423.00	270.00	-55.00
GF11-193	551418	5372327	294.49	425.00	270.00	-55.00
GF11-194	551494	5372283	295.15	488.28	270.00	-55.00
GF11-195	551457	5372322	294.92	425.00	270.00	-57.20
GF11-196	551459	5372371	294.27	425.00	270.00	-55.00
GF11-197	551459	5372420	294.22	425.00	270.00	-55.00
GF11-198	551458	5372481	293.70	461.00	270.00	-55.00
GF11-199	551452	5372347	294.83	425.00	270.00	-58.00
GF11-200	551508	5372324	294.83	478.00	270.00	-55.00
GF11-201	551396	5372409	293.48	401.00	270.00	-55.00
GF11-202	551418	5372460	293.42	428.00	270.00	-55.00
GF11-203	551513	5372277	295.08	483.00	270.00	-55.00
GF11-204	551510	5372373	294.90	452.00	270.00	-55.00
GF11-205	551458	5372524	293.48	482.00	270.00	-55.00
GF11-206	551508	5372427	294.73	479.00	270.00	-55.00
GF11-207	551411	5372524	292.95	434.00	270.00	-55.00
GF11-208	551460	5372575	295.20	482.00	270.00	-55.00
GF11-209	551409	5372576	294.30	434.50	270.00	-55.00
GF11-210	551508	5372447	294.61	500.00	270.00	-55.00
GF11-211	551536	5372276	294.99	552.00	270.00	-55.00
GF11-212	551425	5372277	294.66	132.40	270.00	-55.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF11-213	551332	5372361	293.06	332.00	270.00	-55.00
GF11-214	551406	5372599	293.20	461.00	270.00	-55.00
GF11-215	551458	5372601	293.61	540.00	270.00	-55.00
GF11-216	551508	5372413	294.85	553.00	270.00	-57.90
GF11-217	551406	5372624	293.13	452.00	270.00	-55.00
GF11-218	551458	5372626	293.77	518.00	270.00	-55.00
GF11-219	551427	5372277	296.50	423.00	270.00	-55.00
GF11-220	551330	5372347	293.28	308.00	270.00	-55.00
GF11-221	551330	5372334	293.32	308.00	270.00	-55.00
GF11-222	550795	5373054	290.00	807.00	44.00	-65.00
GF11-223	551508	5372400	294.83	555.00	270.00	-55.00
GF11-224	551403	5372668	293.41	458.00	270.00	-55.00
GF11-225	551330	5372323	293.23	284.00	270.00	-55.00
GF11-226	551210	5373060	293.70	602.00	270.00	-65.00
GF11-227	551508	5372387	294.98	551.00	270.00	-55.00
GF11-228	551401	5372709	293.33	527.00	270.00	-55.00
GF11-229	551330	5372309	293.43	281.00	270.00	-55.00
GF11-230	551330	5372296	295.40	341.00	270.00	-60.00
GF11-231	551230	5373061	293.10	774.00	270.00	-60.00
GF11-232	551408	5372763	293.94	503.00	270.00	-55.00
GF11-233	551585	5372277	295.14	614.00	270.00	-55.00
GF11-234	551073	5373136	290.56	227.00	270.00	-45.00
GF11-235	551333	5372285	293.93	320.00	270.00	-53.00
GF11-236	551075	5373111	289.51	206.00	270.00	-45.00
GF11-237	551075	5373111	289.51	188.00	270.00	-67.00
GF11-238	551073	5373161	290.53	176.00	270.00	-45.00
GF11-239	551332	5372273	293.91	347.00	270.00	-55.00
GF11-240	551584	5372304	295.15	590.00	270.00	-55.00
GF11-241	551074	5373161	290.61	224.00	270.00	-65.00
GF11-242	551406	5372795	294.37	536.00	270.00	-55.00
GF11-243	551075	5372925	290.99	184.00	270.00	-59.00
GF11-244	551328	5372373	292.86	332.00	270.00	-55.00
GF11-245	551124	5372935	290.67	302.00	270.00	-57.00
GF11-246	551127	5373049	289.98	182.00	270.00	-45.00
GF11-247	551211	5373080	291.63	891.00	270.00	-64.00
GF11-248	551411	5372843	294.43	521.00	270.00	-55.00
GF11-249	551327	5372394	292.73	326.00	270.00	-55.00
GF11-250	551321	5372433	292.56	338.00	270.00	-60.00
GF11-251	551126	5373049	289.92	248.00	270.00	-67.00
GF11-252	551125	5373062	289.43	284.00	270.00	-64.00
GF11-253	551504	5372303	294.98	425.00	270.00	-55.00
GF11-254	551580	5372329	295.42	395.00	270.00	-55.00
GF11-255	551118	5373091	289.92	323.00	270.00	-45.00
GF11-256	551321	5372443	292.54	303.00	270.00	-60.00
GF11-257	551579	5372352	295.31	422.00	270.00	-55.00
GF11-258	551320	5372456	292.24	329.00	270.00	-60.00
GF11-259	551119	5373091	289.91	326.00	270.00	-52.00
GF11-260	551223	5373171	291.40	495.00	270.00	-64.00
GF11-261	551118	5373091	289.85	326.00	270.00	-64.00
GF11-262	551576	5372375	295.24	401.00	270.00	-55.00
GF11-263	551321	5372468	292.51	329.00	270.00	-60.00
GF11-264	551115	5373112	293.80	302.00	270.00	-60.00
GF11-265	551197	5373095	291.27	825.40	270.00	-65.00
GF11-266	551504	5372293	295.12	401.00	270.00	-55.00
GF11-267	551577	5372364	295.28	401.00	270.00	-60.00
GF11-269	551114	5373112	289.76	302.00	270.00	-70.00
GF11-270	551322	5372468	292.64	302.00	270.00	-70.00
GF11-271	551574	5372392	295.26	419.00	270.00	-55.00
GF11-272	551145	5373163	291.14	338.00	270.00	-58.00
GF11-274	551503	5372277	295.11	401.00	270.00	-55.00
GF11-275	551319	5372482	292.41	350.00	270.00	-55.00
GF11-276	551112	5373121	290.66	329.00	270.00	-58.00
GF11-277	551571	5372402	295.18	401.00	270.00	-55.00
GF11-279	551331	5372355	290.00	296.00	0.50	-54.00
GF11-280	551396	5372369	293.62	485.00	270.00	-55.00
GF11-282	551178	5373023	290.91	389.00	270.00	-65.00
GF11-284	551506	5372522	293.90	455.00	270.00	-55.00
GF11-286	551376	5372334	293.42	350.00	270.00	-60.00
GF11-287	551455	5372303	294.85	302.00	270.00	-54.00
GF11-289	551121	5373185	290.97	362.00	270.00	-51.70
GF11-292	551375	5372348	293.33	350.00	270.00	-60.00
GF11-293	551222	5373171	291.25	534.00	270.00	-55.00
GF11-294	551453	5372315	294.71	299.00	270.00	-55.00
GF11-295	550718	5373070	290.00	227.00	157.00	-50.00
GF11-296	551120	5373198	290.85	311.00	270.00	-54.00
GF11-297	551470	5372276	294.86	338.00	275.00	-50.00
GF11-298	551552	5372526	294.29	539.00	270.00	-55.00
GF11-299	551321	5372468	292.43	293.00	180.00	-53.00
GF11-300	550761	5373084	297.00	173.00	157.00	-50.00
GF11-301	551224	5373150	291.45	399.00	270.00	-55.00
GF11-302	551122	5373176	290.89	326.00	270.00	-50.00
GF11-303	551503	5372267	295.08	302.00	275.00	-55.00
GF11-304	550805	5373103	290.00	197.00	157.00	-50.00
GF11-305	551553	5372513	294.11	398.00	270.00	-55.00
GF11-307	551112	5373159	290.92	239.00	270.00	-55.00
GF11-308	551312	5372462	292.56	179.00	180.00	-53.00
GF11-309	551319	5372413	290.00	251.00	270.00	-60.00
GF11-311	551167	5373156	291.29	302.00	270.00	-55.00
GF11-312	551217	5373128	291.39	519.00	270.00	-55.00
GF11-313	551554	5372496	294.09	398.00	270.00	-55.00
GF11-314	551451	5372335	294.65	199.00	270.00	-55.00
GF11-316	551166	5373170	291.23	278.00	270.00	-55.00
GF11-317	551324	5372384	292.92	321.00	270.00	-60.00
GF11-318	551452	5372359	294.32	311.00	270.00	-55.00
GF11-319	551166	5373185	291.40	302.00	270.00	-55.00
GF11-320	551317	5372495	292.07	332.00	270.00	-60.00
GF11-321	551222	5373099	291.54	342.00	270.00	-55.00
GF11-322	551447	5372386	294.27	317.00	270.00	-55.00
GF11-323	551556	5372484	294.35	419.00	270.00	-55.00
GF11-324	551166	5373200	291.40	302.00	270.00	-55.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF11-325	551016	5373283	289.12	203.00	250.00	-45.00
GF11-326	551189	5373128	291.06	387.00	270.00	-51.00
GF11-328	551445	5372403	294.14	278.00	270.00	-54.00
GF11-329	551561	5372463	294.61	431.00	270.00	-57.00
GF11-330	551312	5372513	291.94	275.00	270.00	-55.00
GF11-331	551047	5373272	289.68	167.00	235.00	-45.00
GF11-332	551015	5373282	289.09	179.00	250.00	-63.00
GF11-334	551440	5372435	293.78	302.00	270.00	-57.00
GF11-335	551335	5372968	292.61	420.00	270.00	-65.00
GF11-336	551301	5372537	291.85	437.00	270.00	-55.00
GF11-337	551061	5373340	288.80	332.00	320.00	-45.00
GF11-338	551474	5372462	294.04	332.00	270.00	-56.00
GF11-339	551295	5372560	291.98	308.00	270.00	-55.00
GF11-340	551180	5373236	291.95	386.00	270.00	-55.00
GF11-342	551562	5372440	294.62	440.00	270.00	-55.00
GF11-343	551328	5372918	293.20	453.00	270.00	-55.00
GF11-344	551153	5373237	291.20	350.00	270.00	-50.00
GF11-345	551404	5372478	293.07	314.00	270.00	-57.00
GF11-346	551212	5372963	290.46	500.00	270.00	-65.00
GF11-347	551402	5372493	292.89	326.00	270.00	-55.00
GF11-348	551511	5372546	293.91	401.00	270.00	-55.00
GF11-349	551289	5372585	292.06	311.00	270.00	-55.00
GF11-350	551154	5373261	291.16	335.00	270.00	-55.00
GF11-352	550898	5372780	290.00	116.00	312.00	-72.00
GF11-353	551271	5372605	291.91	317.00	270.00	-55.00
GF11-354	551224	5372623	291.95	334.00	270.00	-55.00
GF11-355	551256	5372941	291.36	594.00	270.00	-63.00
GF11-356	551532	5372548	293.96	464.00	270.00	-55.00
GF11-358	551399	5372505	292.64	281.00	270.00	-55.00
GF11-359	551402	5372548	290.00	326.00	270.00	-55.00
GF11-361	550857	5372752	290.00	206.00	133.00	-50.00
GF11-362	551594	5372485	296.06	51.60	270.00	-55.00
GF11-363	551430	5372481	293.37	290.50	270.00	-55.00
GF11-364	551229	5372648	291.87	245.00	270.00	-55.00
GF11-365	551182	5372981	290.11	243.00	270.00	-45.00
GF11-366	551549	5372560	294.19	425.00	270.00	-55.00
GF11-369	551216	5372660	291.53	260.00	270.00	-55.00
GF11-371	551552	5372577	294.48	476.00	270.00	-55.00
GF11-372	551594	5372485	296.33	488.00	270.00	-55.00
GF11-373	551193	5373198	291.62	470.00	270.00	-55.00
GF11-374	551549	5372601	294.59	490.10	270.00	-55.00
GF11-375	551221	5372637	291.91	227.00	270.00	-55.00
GF11-376	551206	5372981	290.17	707.00	270.00	-63.00
GF11-377	551196	5373170	291.46	470.00	270.00	-55.00
GF11-378	551587	5372512	295.36	470.40	270.00	-55.00
GF11-379	550920	5372598	290.00	521.00	270.00	-55.00
GF11-380	551756	5372630	293.85	632.30	270.00	-55.00
GF11-381	550923	5372627	290.00	512.00	270.00	-55.00
GF11-382	551587	5372534	294.57	485.00	270.00	-55.00
GF11-383	551544	5372625	294.61	467.00	270.00	-55.00
GF11-384	551197	5373145	291.01	431.00	270.00	-55.00
GF11-385	550923	5372647	290.00	485.00	270.00	-55.00
GF11-386	551583	5372560	295.08	491.00	270.00	-55.00
GF11-387	551045	5373324	289.24	266.00	320.00	-50.00
GF11-388	551881	5372283	297.47	401.00	270.00	-50.00
GF11-389	551860	5372706	291.49	690.00	270.00	-58.00
GF11-391	551045	5373325	289.23	248.00	320.00	-60.00
GF11-392	551062	5373338	288.94	242.00	320.00	-60.00
GF11-393	551881	5372283	297.46	352.00	270.00	-60.00
GF11-395	551027	5373306	289.39	242.00	320.00	-50.00
GF11-396	551584	5372584	295.04	497.00	270.00	-56.00
GF11-398	551013	5373302	289.23	251.00	330.00	-50.00
GF11-400	551027	5373307	289.35	302.00	320.00	-60.00
GF11-401	551938	5372288	297.50	385.00	270.00	-55.00
GF11-402	551704	5372617	295.38	723.00	270.00	-55.00
GF11-403	551582	5372604	295.32	487.00	270.00	-55.00
GF11-405	551139	5373368	289.29	200.00	330.00	-50.00
GF11-406	551013	5373302	289.12	332.00	330.00	-60.00
GF11-408	551938	5372288	297.45	374.00	270.00	-65.00
GF11-409	551933	5372325	297.43	338.00	270.00	-55.00
GF11-411	551138	5373368	289.31	266.00	330.00	-60.00
GF12-412	551359	5372348	292.98	281.00	270.00	-56.00
GF12-413	551373	5372275	293.70	233.00	270.00	-55.00
GF12-414	551412	5372290	294.51	239.00	270.00	-55.00
GF12-415	551360	5372337	293.06	189.00	270.00	-60.00
GF12-416	551933	5372325	297.41	377.00	270.00	-65.00
GF12-417	551374	5372291	293.63	167.00	270.00	-55.00
GF12-418	551400	5372302	294.35	251.00	270.00	-60.00
GF12-419	551386	5372302	293.82	200.00	270.00	-60.00
GF12-420	551420	5372309	290.00	212.00	270.00	-56.00
GF12-421	551354	5372309	293.38	158.00	270.00	-60.00
GF12-422	551460	5372276	295.09	59.00	270.00	-55.00
GF12-423	551380	5372310	293.52	185.00	270.00	-55.00
GF12-424	551460	5372276	295.09	269.00	270.00	-51.00
GF12-425	551360	5372297	293.48	110.00	270.00	-58.00
GF12-426	551385	5372322	293.55	182.00	270.00	-54.00
GF12-427	551437	5372269	294.72	197.00	270.00	-53.00
GF12-428	551362	5372284	293.50	125.00	270.00	-55.00
GF12-429	551484	5372284	295.03	242.00	270.00	-49.00
GF12-430	551361	5372270	293.63	131.00	270.00	-54.00
GF12-431	551389	5372332	293.74	176.00	270.00	-60.00
GF12-432	551436	5372297	294.65	200.00	270.00	-54.00
GF12-433	551466	5372297	294.95	239.00	270.00	-55.00
GF12-434	551345	5372282	293.63	110.00	270.00	-55.00
GF12-435	551387	5372359	293.55	176.00	270.00	-55.00
GF12-436	551433	5372310	294.57	200.00	270.00	-55.00
GF12-437	551463	5372313	294.74	35.00	270.00	-55.00
GF12-438	551343	5372307	293.41	122.00	270.00	-55.00
GF12-439	551341	5372400	292.63	101.00	270.00	-55.00
GF12-440	551401	5372322	293.96	200.00	270.00	-56.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF12-441	551465	5372334	294.67	549.05	270.00	-60.00
GF12-442	551105	5372886	291.43	137.00	270.00	-56.00
GF12-443	551124	5372896	291.10	167.00	270.00	-56.00
GF12-444	551107	5372909	291.29	200.00	270.00	-63.00
GF12-445	551332	5372411	292.44	101.00	270.00	-55.00
GF12-446	551404	5372333	294.12	191.00	270.00	-60.00
GF12-447	551465	5372349	294.59	236.00	270.00	-58.00
GF12-448	551107	5372909	291.21	146.00	270.00	-55.00
GF12-449	551312	5372421	292.89	101.00	270.00	-55.00
GF12-450	551466	5372309	290.00	242.00	270.00	-55.00
GF12-451	551304	5372433	292.93	101.00	270.00	-55.00
GF12-452	551288	5372459	292.68	101.00	270.00	-55.00
GF12-453	551466	5372363	294.59	230.00	270.00	-55.00
GF12-454	551394	5372349	293.51	176.00	270.00	-60.00
GF12-455	551095	5372920	291.16	116.00	270.00	-54.00
GF12-456	551469	5372372	294.36	251.00	270.00	-55.00
GF12-457	551401	5372363	293.59	191.00	270.00	-55.00
GF12-458	551291	5372472	292.76	101.00	270.00	-55.00
GF12-459	551077	5372936	290.18	125.00	270.00	-58.00
GF12-460	551469	5372382	294.35	230.00	270.00	-55.00
GF12-461	551409	5372372	293.65	200.00	270.00	-55.00
GF12-462	551304	5372500	292.32	195.00	270.00	-55.00
GF12-463	551321	5372523	291.54	251.00	270.00	-55.00
GF12-464	551132	5372960	290.67	215.00	270.00	-68.00
GF12-465	551127	5372968	290.14	251.00	270.00	-71.00
GF12-466	551120	5372982	290.01	251.00	270.00	-71.00
GF12-467	551387	5372395	293.24	152.00	270.00	-55.00
GF12-468	551473	5372393	294.35	251.00	270.00	-55.00
GF12-469	551336	5372521	292.20	152.00	270.00	-55.00
GF12-470	551336	5372481	291.97	116.00	270.00	-55.00
GF12-471	551477	5372408	294.29	275.00	270.00	-55.00
GF12-472	551404	5372407	293.58	200.00	270.00	-55.00
GF12-473	551319	5372470	292.38	131.00	270.00	-62.00
GF12-474	551303	5372458	292.54	101.00	270.00	-55.00
GF12-475	551490	5372396	294.37	275.00	270.00	-55.00
GF12-476	551405	5372396	293.48	176.00	270.00	-55.00
GF12-477	551055	5373011	290.69	101.00	270.00	-66.00
GF12-478	551336	5372460	292.10	125.00	270.00	-58.00
GF12-479	551483	5372383	294.57	245.00	270.00	-55.10
GF12-480	551424	5372374	294.13	200.00	270.00	-55.00
GF12-481	551069	5373035	288.83	101.00	270.00	-57.00
GF12-482	551336	5372431	292.27	122.00	270.00	-60.00
GF12-483	551480	5372347	294.85	251.00	270.00	-58.00
GF12-484	551328	5372423	292.60	119.00	270.00	-55.00
GF12-485	551479	5372334	294.72	281.00	270.00	-60.00
GF12-486	551408	5372346	293.95	200.00	270.00	-60.00
GF12-487	551049	5373048	290.82	101.00	270.00	-50.00
GF12-488	551345	5372420	292.59	131.00	270.00	-55.00
GF12-489	551373	5372444	292.88	251.00	270.00	-55.00
GF12-490	551423	5372334	294.44	200.00	270.00	-60.00
GF12-491	551486	5372323	294.72	275.00	270.00	-56.00
GF12-492	551061	5373061	289.98	152.00	270.00	-70.00
GF12-493	551049	5373059	290.86	134.00	270.00	-70.00
GF12-494	551383	5372483	292.58	167.00	270.00	-55.00
GF12-495	551381	5372497	292.60	185.00	270.00	-55.00
GF12-496	551183	5372948	290.49	251.00	270.00	-52.00
GF12-497	551396	5372495	293.01	200.00	270.00	-55.00
GF12-498	551194	5372998	290.94	302.00	270.00	-63.00
GF12-499	551187	5373009	290.93	311.00	270.00	-60.90
GF12-500	551396	5372473	292.87	200.00	270.00	-55.00
GF12-501	551435	5372321	294.49	206.00	270.00	-55.00
GF12-502	551498	5372322	295.43	290.00	270.00	-55.00
GF12-503	551398	5372457	293.01	182.00	270.00	-53.00
GF12-504	551401	5372310	294.18	164.00	270.00	-55.00
GF12-505	551503	5372285	294.88	260.00	270.00	-51.00
GF12-506	551478	5372273	294.98	236.00	270.00	-52.00
GF12-507	551389	5372283	293.97	161.00	270.00	-55.00
GF12-508	551411	5372472	293.20	221.00	270.00	-55.00
GF12-509	551193	5373021	291.05	476.00	270.00	-65.00
GF12-510	551432	5372447	293.59	299.00	270.00	-55.00
GF12-511	551409	5372283	294.48	161.00	270.00	-55.00
GF12-512	551439	5372459	293.87	278.00	270.00	-55.00
GF12-513	551368	5372371	293.32	125.00	270.00	-55.00
GF12-514	551454	5372447	294.01	350.00	270.00	-55.00
GF12-515	551204	5373007	291.27	635.20	270.00	-64.00
GF12-516	551448	5372460	293.84	242.00	270.00	-56.00
GF12-517	551349	5372374	292.86	125.00	270.00	-50.00
GF12-518	551449	5372310	294.72	218.00	270.00	-55.00
GF12-519	551437	5372421	293.79	236.00	270.00	-55.00
GF12-520	551457	5372421	294.09	302.00	270.00	-55.00
GF12-521	551359	5372407	292.82	125.00	270.00	-55.00
GF12-522	551218	5373008	291.49	674.00	270.00	-65.00
GF12-523	551482	5372446	294.33	377.00	270.00	-55.00
GF12-524	551481	5372423	294.36	302.00	270.00	-55.00
GF12-525	551361	5372420	292.72	149.00	270.00	-55.00
GF12-526	551234	5373009	291.55	374.00	270.00	-66.00
GF12-527	551366	5372496	292.65	164.00	270.00	-55.00
GF12-528	551422	5372407	293.80	221.00	270.00	-55.00
GF12-529	551350	5372482	292.40	125.00	270.00	-55.00
GF12-530	551418	5372396	293.65	200.00	270.00	-55.00
GF12-531	551366	5372485	292.74	146.00	270.00	-55.00
GF12-532	551440	5372384	294.10	227.00	270.00	-55.00
GF12-533	551465	5372409	294.27	248.00	270.00	-55.00
GF12-534	551171	5373082	291.14	344.00	270.00	-60.00
GF12-535	551368	5372471	292.79	149.00	270.00	-55.00
GF12-536	551358	5372459	292.73	140.00	270.00	-55.00
GF12-537	551437	5372360	294.06	225.00	270.00	-55.00
GF12-538	551477	5372507	294.03	350.00	270.00	-56.00
GF12-539	551481	5372434	294.30	330.00	270.00	-55.00
GF12-540	551456	5372360	294.34	215.00	270.00	-55.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF12-541	551451	5372334	294.65	251.00	270.00	-55.00
GF12-542	551437	5372334	294.40	221.00	270.00	-60.00
GF12-543	551167	5373037	290.64	344.00	270.00	-60.00
GF12-544	551225	5372923	291.34	391.85	270.00	-60.00
GF12-545	551171	5373047	290.82	302.00	270.00	-60.00
GF12-546	551223	5372906	291.64	302.00	270.00	-60.00
GF12-547	551197	5372907	291.25	275.00	270.00	-52.00
GF12-548	551129	5373047	290.00	200.00	270.00	-50.00
GF12-549	551376	5372424	292.94	161.00	270.00	-55.00
GF12-550	551880	5372296	297.38	401.00	270.00	-50.00
GF12-551	551385	5372436	292.96	200.00	270.00	-55.00
GF12-552	551393	5372448	293.10	272.00	270.00	-55.00
GF12-553	551422	5372522	293.09	332.00	270.00	-55.00
GF12-554	551200	5372895	291.45	332.00	270.00	-50.00
GF12-555	551884	5372319	297.00	401.00	270.00	-50.00
GF12-556	551176	5373095	291.26	332.00	270.00	-55.00
GF12-557	551175	5373095	291.26	350.00	270.00	-55.00
GF12-558	551491	5372535	293.78	428.00	270.00	-50.00
GF12-559	551882	5372344	297.77	401.00	270.00	-55.00
GF12-560	551200	5372884	291.28	260.00	270.00	-47.00
GF12-561	551580	5372521	294.86	479.00	270.00	-55.00
GF12-562	551200	5372884	291.22	302.00	270.00	-59.00
GF12-563	551883	5372369	297.48	401.00	270.00	-55.00
GF12-564	551201	5372871	291.33	302.00	270.00	-47.00
GF12-565	551202	5372871	291.23	302.00	270.00	-60.00
GF12-566	551570	5372472	294.87	431.00	270.00	-60.00
GF12-567	551882	5372392	296.87	283.00	270.00	-55.00
GF12-568	551201	5372860	291.15	302.00	270.00	-47.00
GF12-569	551201	5372860	291.20	320.00	270.00	-60.00
GF12-570	551184	5372936	290.60	500.00	320.00	-50.00
GF12-571	551881	5372419	296.65	404.00	270.00	-50.00
GF12-572	551554	5372475	294.44	452.00	270.00	-54.00
GF12-573	551882	5372387	296.99	401.00	270.00	-55.00
GF12-574	551531	5372460	294.41	425.00	270.00	-55.00
GF12-575	551522	5372508	290.00	422.00	270.00	-55.00
GF12-576	551878	5372441	295.17	401.00	270.00	-55.00
GF12-577	551587	5372438	295.13	476.00	270.00	-55.00
GF12-578	551206	5372846	290.95	350.00	270.00	-46.00
GF12-579	551141	5373079	290.35	350.00	310.00	-45.00
GF12-580	551881	5372469	294.31	398.00	270.00	-55.00
GF12-582	551175	5373123	290.57	320.00	270.00	-55.00
GF12-584	551508	5372458	294.86	410.00	270.00	-50.00
GF12-585	551177	5373109	290.62	320.00	270.00	-54.00
GF12-586	551195	5373124	291.11	350.00	270.00	-55.00
GF12-587	551502	5372481	294.38	452.00	270.00	-55.00
GF12-588	551877	5372490	293.83	500.00	250.00	-55.00
GF12-589	551225	5373136	291.39	374.00	270.00	-53.00
GF12-590	551134	5373162	291.11	374.00	270.00	-54.00
GF12-591	551559	5372454	294.62	431.00	270.00	-55.00
GF12-592	551872	5372514	293.40	493.50	250.00	-55.00
GF12-593	551150	5373180	291.26	257.00	270.00	-53.00
GF12-594	551567	5372427	294.79	452.00	270.00	-55.00
GF12-595	551150	5373200	291.25	275.00	270.00	-53.00
GF12-596	551867	5372528	292.98	452.00	250.00	-55.00
GF12-597	551590	5372428	295.02	476.00	270.00	-55.00
GF12-598	551010	5373298	289.25	350.00	284.00	-50.00
GF12-599	551211	5372833	290.84	305.00	270.00	-47.00
GF12-600	551864	5372559	292.36	449.00	250.00	-55.00
GF12-601	551583	5372451	295.20	470.00	270.00	-55.00
GF12-602	551218	5372824	290.17	302.00	270.00	-47.00
GF12-603	551215	5372807	291.05	302.00	270.00	-47.00
GF12-604	552030	5372281	298.45	572.00	270.00	-50.00
GF12-605	551899	5372284	297.34	398.00	270.00	-50.00
GF12-606	551900	5372285	297.31	452.00	270.00	-60.00
GF12-607	551583	5372463	295.55	444.00	270.00	-55.00
GF12-608	551740	5372282	296.51	401.00	90.00	-85.00
GF12-609	551636	5372280	295.53	404.00	90.00	-58.00
GF12-610	551458	5372468	294.14	360.00	270.00	-55.00
GF12-611	551493	5372459	294.38	356.00	270.00	-55.00
GF12-612	551908	5372296	297.17	401.00	270.00	-50.00
GF12-613	551993	5372298	298.23	401.00	270.00	-58.00
GF12-614	551930	5372313	297.41	401.00	270.00	-58.00
GF12-615	551880	5372311	297.51	371.00	270.00	-58.00
GF12-616	551538	5372495	294.14	452.00	270.00	-50.00
GF12-617	551880	5372312	297.68	140.00	290.00	-45.00
GF12-618	551490	5372487	294.15	356.00	270.00	-55.00
GF12-619	551880	5372312	297.70	128.00	310.00	-45.00
GF12-620	551881	5372309	297.00	186.00	257.00	-58.00
GF12-621	551882	5372270	297.71	401.00	270.00	-60.00
GF12-622	551882	5372270	297.81	410.00	270.00	-50.00
GF12-623	552000	5372314	297.94	446.00	270.00	-55.00
GF12-624	552000	5372344	297.00	467.00	270.00	-45.00
GF12-625	551858	5372284	297.69	362.00	270.00	-60.00
GF12-626	551581	5372511	294.82	459.00	270.00	-55.00
GF12-627	552001	5372284	298.37	452.00	270.00	-45.00
GF12-628	552002	5372269	298.70	401.00	270.00	-50.00
GF12-629	551585	5372413	295.16	475.00	270.00	-55.00
GF12-630	551999	5372261	297.00	500.00	275.00	-50.00
GF12-631	551949	5372270	297.00	448.30	270.00	-50.00
GF12-632	551999	5372325	297.00	464.00	270.00	-45.00
GF12-633	551949	5372261	297.00	452.00	270.00	-50.00
GF12-634	551949	5372282	297.00	443.00	270.00	-53.00
GF12-635	551585	5372402	295.17	476.00	270.00	-55.00
GF12-636	551857	5372269	297.55	359.00	270.00	-60.00
GF12-637	551859	5372261	297.00	358.00	270.00	-55.00
GF12-638	551859	5372294	297.00	365.00	270.00	-50.00
GF12-639	551626	5372548	295.57	500.00	270.00	-55.00
GF12-640	551825	5372281	297.00	200.00	90.00	-45.00
GF12-641	552000	5372369	297.00	497.00	270.00	-45.00
GF12-642	551950	5372369	297.00	464.00	270.00	-45.00

Table 10.1 – Brigus drill holes on the Grey Fox deposit (cont'd)

Hole	Easting	Northing	Elevation	Length	Azimut	Dip
GF12-643	551950	5372391	297.00	465.00	270.00	-45.00
GF12-644	551950	5372344	297.00	464.00	270.00	-45.00
GF12-646	551593	5372547	290.00	476.00	265.00	-56.00
GF12-647	551594	5372504	295.96	476.00	270.00	-57.00
GF12-648	551625	5372571	295.89	476.00	260.00	-55.00
GF12-652	551183	5373169	291.07	302.00	270.00	-55.00
GF12-653	551825	5372281	297.00	110.00	90.00	-56.00
GF12-654	552000	5372419	297.00	500.00	270.00	-45.00
GF12-655	551167	5373132	290.51	272.00	270.00	-52.00
GF12-656	551140	5373137	290.67	272.00	270.00	-53.00
GF12-657	551150	5373180	291.14	300.00	270.00	-55.00
GF12-658	551198	5373169	290.00	341.00	270.00	-55.00
GF12-659	551238	5373124	290.00	598.75	270.00	-57.00
GF12-660	551232	5373033	291.83	662.00	270.00	-64.00
GF12-662	551268	5372964	291.26	700.00	270.00	-64.00
GF12-663	551236	5372963	290.69	620.00	270.00	-64.00
GF12-665	551307	5373002	291.92	287.00	270.00	-63.00
GF12-666	551859	5372261	297.00	131.00	327.00	-50.00
GF12-673	551159	5373184	291.15	500.00	270.00	-53.00
GF12-677	551653	5372568	297.35	554.00	260.00	-58.00
GF12-678	551612	5372300	295.28	447.00	270.00	-55.00
GF12-679	551659	5372527	296.80	500.00	260.00	-56.00
GF12-680	551609	5372316	295.37	468.00	270.00	-58.00
GF12-681	551599	5372626	295.82	541.97	270.00	-58.00
GF13-682	551491	5372518	294.05	399.00	270.00	-55.00
GF13-683	551590	5372330	295.39	462.06	270.00	-60.00
GF13-684	551643	5372505	296.92	552.00	270.00	-55.00
GF13-685	551598	5372655	297.57	600.00	270.00	-60.00
GF13-686	551480	5372530	294.02	402.00	270.00	-54.00
GF13-687	551519	5372375	295.01	384.00	270.00	-57.00
GF13-688	551599	5372509	296.04	501.00	270.00	-55.00
GF13-689	551596	5372683	298.47	595.50	270.00	-57.00
GF13-690	551470	5372478	293.77	368.00	270.00	-55.00
GF13-691	551458	5372493	294.04	380.00	270.00	-56.00
GF13-692	551597	5372706	298.33	522.00	270.00	-58.00
GF13-693	551453	5372510	293.60	377.00	270.00	-56.00
GF13-694	551511	5372356	295.01	401.00	270.00	-56.00
GF13-695	551602	5372526	295.20	530.00	270.00	-56.00
GF13-696	551472	5372470	294.11	401.00	270.00	-55.00
GF13-697	551594	5372315	295.22	441.00	270.00	-59.00
GF13-698	551493	5372334	295.33	308.00	270.00	-60.00
GF13-699	551430	5372472	293.48	347.00	270.00	-56.00
GF13-700	551628	5372596	298.18	552.90	270.00	-58.00
GF13-701	551510	5372345	294.91	341.14	270.00	-57.00
GF13-702	551443	5372461	293.71	380.00	270.00	-55.00
GF13-703	551579	5372684	299.67	518.90	270.00	-58.00
GF13-704	551612	5372598	295.97	530.00	270.00	-58.00
GF13-705	551512	5372326	295.04	431.00	270.00	-60.00
GF13-706	551425	5372493	292.92	350.00	270.00	-56.00
GF13-707	551535	5372403	292.26	420.00	270.00	-57.00
GF13-708	551512	5372312	292.40	450.00	270.00	-57.00
GF13-709	551517	5372480	291.13	456.00	270.00	-57.00
GF13-710	551550	5372389	292.39	423.00	270.00	-57.00
GF13-711	551506	5372504	291.32	402.00	270.00	-55.00
GF13-712	551543	5372317	295.08	450.00	270.00	-57.00
GF13-713	551600	5372569	294.91	552.00	263.00	-58.00
GF13-714	551544	5372360	294.95	450.00	270.00	-56.00
GF13-715	551528	5372526	293.76	450.00	270.00	-54.00
GF13-716	551532	5372300	292.44	452.00	270.00	-55.00
GF13-717	551652	5372588	297.58	566.00	263.00	-58.00
GF13-718	551559	5372342	295.22	452.00	270.00	-57.00
GF13-719	551534	5372435	291.92	450.00	270.00	-57.00
GF13-720	551550	5372285	292.55	450.93	270.00	-54.00
GF13-721	551660	5372547	297.01	552.00	265.00	-56.00
GF13-722	551541	5372334	292.46	400.00	270.00	-60.00
GF13-723	551604	5372448	293.35	561.00	270.00	-58.00
GF13-724	551559	5372263	292.48	450.00	270.00	-55.00
GF13-725	551634	5372521	296.23	550.00	265.00	-56.00
GF13-727	551492	5372358	294.64	402.00	270.00	-56.00
GF13-728	551535	5372442	291.75	450.00	270.00	-56.00
GF13-729	551480	5372255	294.62	401.00	270.00	-55.00
GF13-730	551662	5372502	297.13	555.00	267.00	-55.00
GF13-731	551558	5372372	294.87	431.00	270.00	-58.00
GF13-732	551531	5372483	291.45	441.00	270.00	-56.00
GF13-733	551507	5372334	294.84	350.00	270.00	-57.00
GF13-734	551474	5372498	290.71	402.00	270.00	-56.00
GF13-735	551467	5372267	295.11	344.00	270.00	-55.00
GF13-736	551534	5372476	291.48	450.00	270.00	-54.00
GF13-737	551528	5372324	292.43	332.00	270.00	-56.00
GF13-738	551524	5372437	291.66	417.00	270.00	-57.00
GF13-739	551488	5372273	295.09	350.00	270.00	-53.00
GF13-741	551524	5372276	294.87	401.00	270.00	-55.00
GF13-742	551512	5372494	294.02	420.00	270.00	-56.00
GF13-743	551532	5372309	295.08	402.00	270.00	-54.00
GF13-744	551569	5372558	294.39	410.00	270.00	-56.00
GF13-745	551568	5372269	295.25	417.00	270.00	-56.00
GF13-746	551466	5372555	290.00	349.50	267.00	-56.00
GF13-747	551496	5372585	290.00	431.00	267.00	-56.00
GF13-751	551645	5372491	296.49	515.00	265.00	-55.00

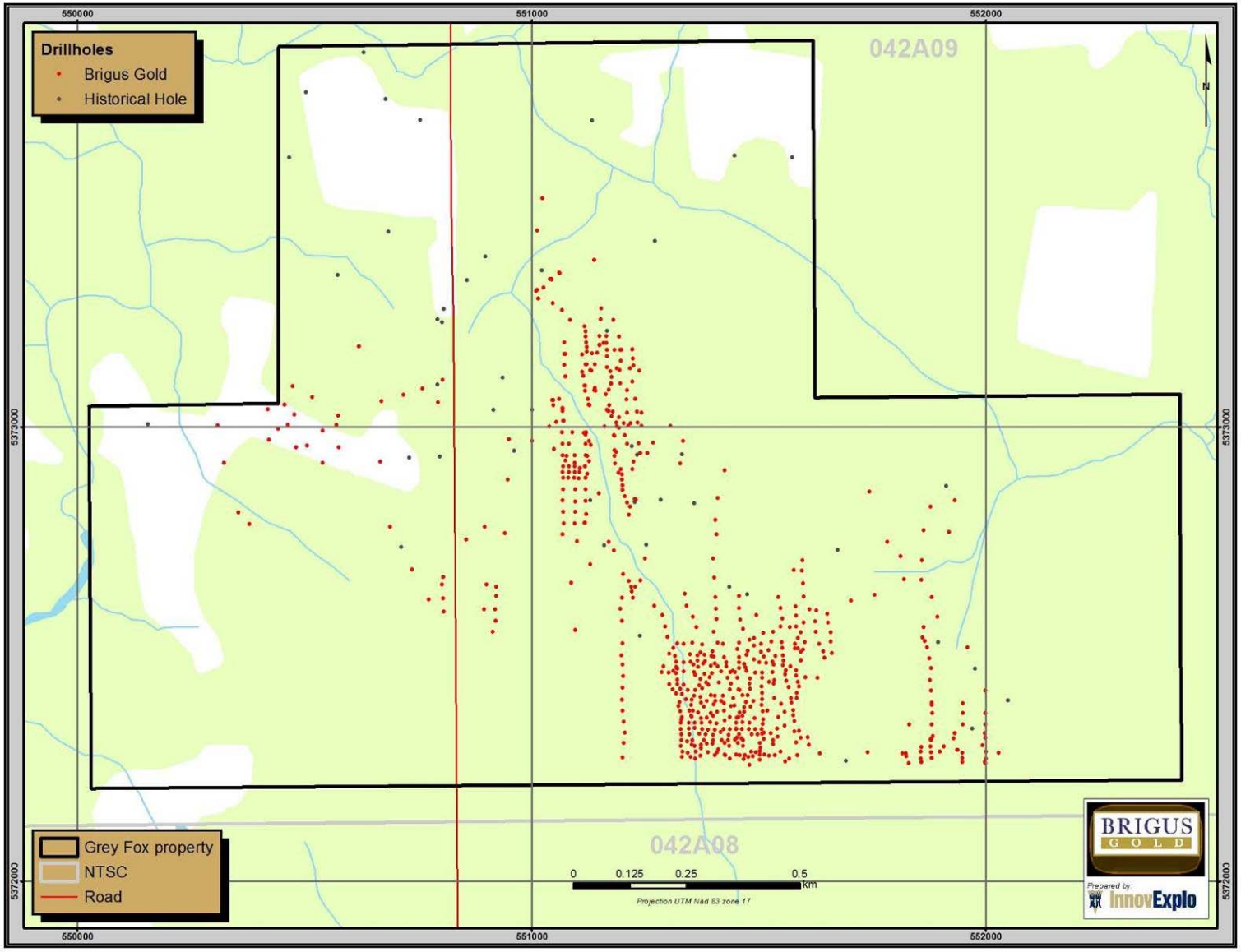

Figure 10.1 – Drill hole collar location on the Grey Fox property

11. SAMPLE PREPARATION, ANALYSES, AND SECURITY

This section provides a description of sample preparation, analyses, and security procedures for the latest drilling program (2012-2013) on the Grey Fox Project. The information is based on previous reports, discussions with Brigus Gold representatives during the on-site visits, a review of the drill hole database received from Brigus Gold, and all available laboratories' protocols made available to the authors.

11.1 Sample Preparation

The drill core was boxed, covered and sealed at the drill rigs, and transported by drilling employees to the logging facility where Brigus personnel would take over the core handling. The core was logged and sampled by or under the supervision of Brigus geologists. Each sample was tagged with a unique number.

Drill core samples were cut by technicians and then bagged and sealed before being grouped in batches. The sample batches were shipped to Polymet Labs ("Polymet") in Cobalt, SGS Laboratories ("SGS") in Cochrane, or Agat Laboratories ("Agat") in Mississauga where they were prepared according to the laboratories' sample preparation protocol for the given analytical procedure. The decision to send a batch to either one lab or the other was based on pickup schedules and turnaround time.

The sampling and assay QA/QC protocol consisted of an in-field component managed by Brigus logging and sampling personnel and an in-laboratory component managed by Polymet, SGS and Agat. The in-field QA/QC consisted of inserting blanks, certified reference standards, and field duplicates consisting of the second half of core samples.

At SGS, sample preparation included various steps taken in the lab to reduce the sample into a form suitable for chemical analysis. These preparation procedures ensure sample homogeneity, representative subsamples and prevent cross contamination. The stepwise procedure may involve all steps or some of the steps depending upon the state of the sample as received. The sample is dried at 100°C +/- 10°C for 24 hours, if received wet. The next step involves crushing to reduce the sample size to 2mm 10 mesh Tyler by crushing using a Boyd Crusher. The sample is then split via a riffle splitter or Stand Alone Rotating Sample Divider (SRSD) in order to divide the sample into a 250g sub-sample for analysis and the remainder is stored as a reject. Pulverizing is done using pots made of hardened chrome steel or agate ceramic (mortar and pestle). Crushed material is transferred into a clean pot and the pot is placed into a vibratory mill. Samples are pulverized to 85% passing 75 micron (200 mesh). Crushed and pulverized rock sample are weighed and mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button (Dore bead). The bead is transferred into porcelain crucibles; silver is removed by using dilute Nitric acid, heated to 650°C, and then cooled.

At Polymet, samples are crushed, pulverized and the rejects placed into the reject shipment bag. The entire crushed sample is riffled until there is approximately 150 - 200 grams of crushed sample left. Crushed samples are then pulverized for a variable length of time.

11.2 Gold Analysis

At SGS, gold was analyzed by lead fire assay with ICP-OES (optical emission spectrometer) finish using a 30-gram nominal sample weight. For grades over 3.0 g/t Au, samples were re-assayed with a gravimetric finish.

At Polymet, gold was analyzed by lead fire assay with gravimetric finish.

At Agat, gold was analyzed by lead fire assay with ICP-OES (optical emission spectrometer) finish. For grades over 10.0 g/t Au, samples were re-assayed with a gravimetric finish.

11.3 Quality Control

QA/QC materials were inserted during the Brigus drilling program. A total of 481 blanks, 498 standards, and 1789 field duplicates were inserted for a total of 2,768 in-field QA/QC materials.

In addition to Brigus QA/QC procedures, each laboratory used an internal QA/QC system including tracking certified reference materials and in-house quality assurance standards.

11.3.1 Blanks

The field blank used for the 2012-2013 drilling program was from unmineralized segments of drill core and from sterile quarry material. Each was placed into a plastic sample bag and given a routine sample identification number.

InnovExplo's recommended quality control protocol stipulates that if any core or quarry blank that yields a gold value above 0.1 g/t Au, the entire batch should be re-analyzed. For the 2012-2013 drilling program, two blanks exceeded this recommended threshold (Fig. 11.1).

Overall, 99.6% of the blanks returned values below detection limit. Only two samples (83879 and 95088) returned anomalous values of 0.55 g/t Au and 0.27 g/t Au respectively that may represent either minor carry-over contamination or inherent mineralization.

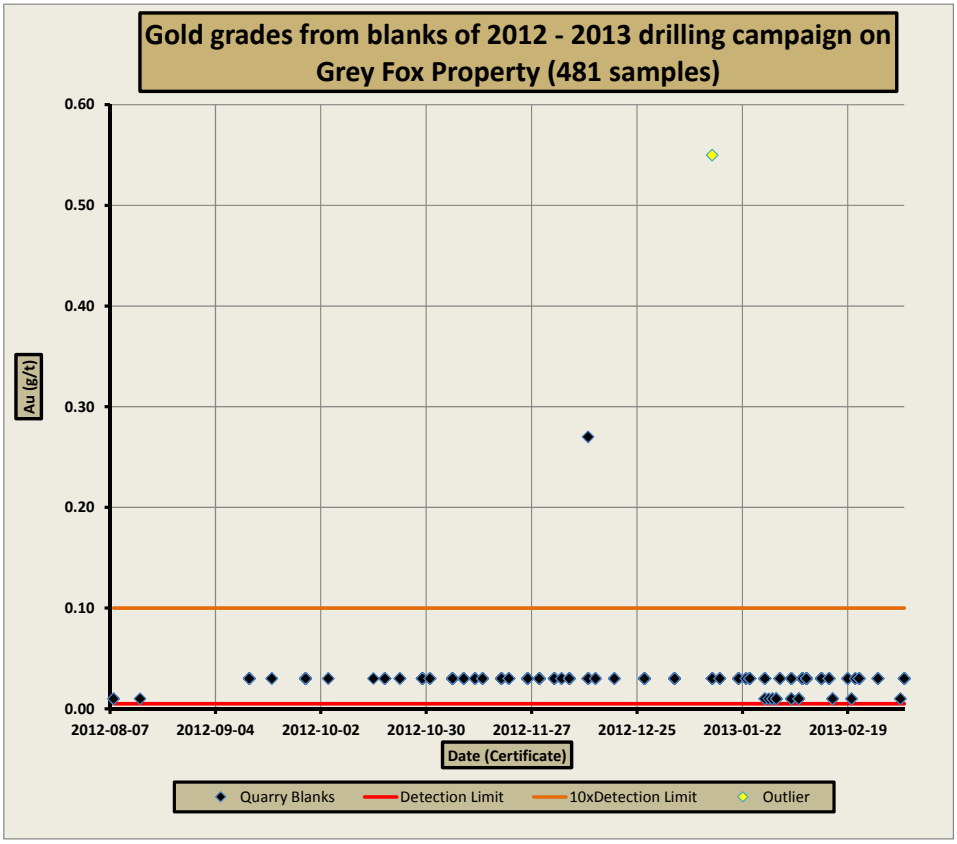

Figure 11.1 – Distribution graph showing results from assayed blank samples from the latest drilling programs on the Grey Fox Project

11.3.2 Certified Reference Materials (standards)

The standards consisted of Certified Reference Materials (CRMs) provided by RockLabs. The standard used was standard SK62. A total of 498 field standards were inserted during the latest drilling program.

Figure 11.2 summarizes the results for the in-field standards, including the recommended values provided by RockLabs certification process and assay averages achieved by the Brigus program.

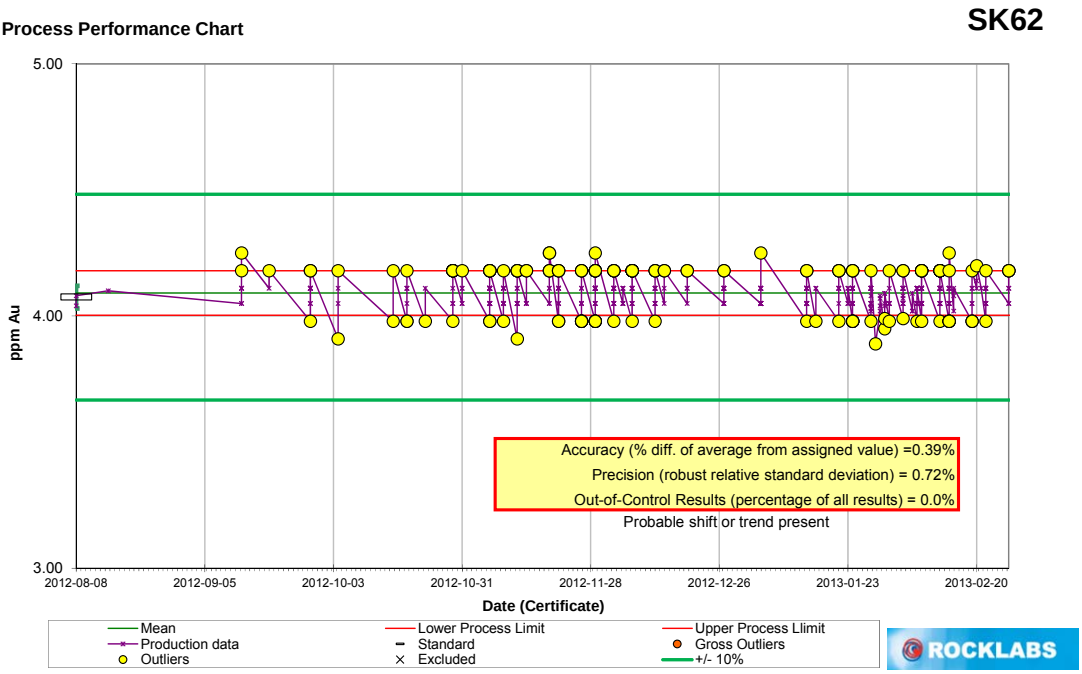

Figure 11.2 – Distribution graph showing results from assayed standard samples from the latest drilling programs on the Grey Fox Project

InnovExplo's recommended quality control protocol stipulates that if any standard yields a gold value above or below 10% of the standard grade (i.e., an outlier), then the entire batch should be re-analyzed. According to such criteria, no re-assay would be warranted for the latest drilling program. However, the choice of standards should have provided a greater range of gold content. Ideally, four certified standards is recommended for the Grey Fox deposit, one being approximately at low grade, one being at the open-pit cut-off grade, one being at the underground cut-off grade, and one being at high grade.

11.3.3 Duplicates

A series of duplicate samples taken at each stage of the sampling and sample preparation process enables the precision to be monitored incrementally through the stages. The number of duplicate types depends on the number of process steps, but typically includes three: a field duplicate, a coarse crush duplicate, and a pulp duplicate. Duplicates are used to check the representativeness of the results obtained for a given population. Although coarse crush duplicates and pulp duplicates were performed by the laboratory, only field duplicates were made available to InnovExplo and the authors were therefore unable to completely assess in-lab duplicates. It is however assumed that in-lab protocols were followed.

Field duplicates were prepared by Brigus personnel from core samples. The samples to be analyzed were provided from half of the half-split core; that is, from a quarter-split of the original whole core.

The results for field duplicates can be used to determine random error (i.e., reproducibility) of the sample analysis process, from sampling through to sample preparation. When used in conjunction with other sample preparation duplicates, the

incremental loss of precision can be determined for each of the various stages of the sampling, preparation and assaying process. For the field duplicate increment, this can indicate whether loss of precision can be attributed to initial sample size or to the homogeneity of mineralization using the original-duplicate pair.

A total of 1,789 original–duplicate field sample pairs were identified in the database. Figure 11.3 plots the pairs and shows a correlation coefficient of 98.65%. The correlation coefficient (%) is given by the square root of R^2 and represents the degree scatter of data around the linear regression slope. Results are well correlated.

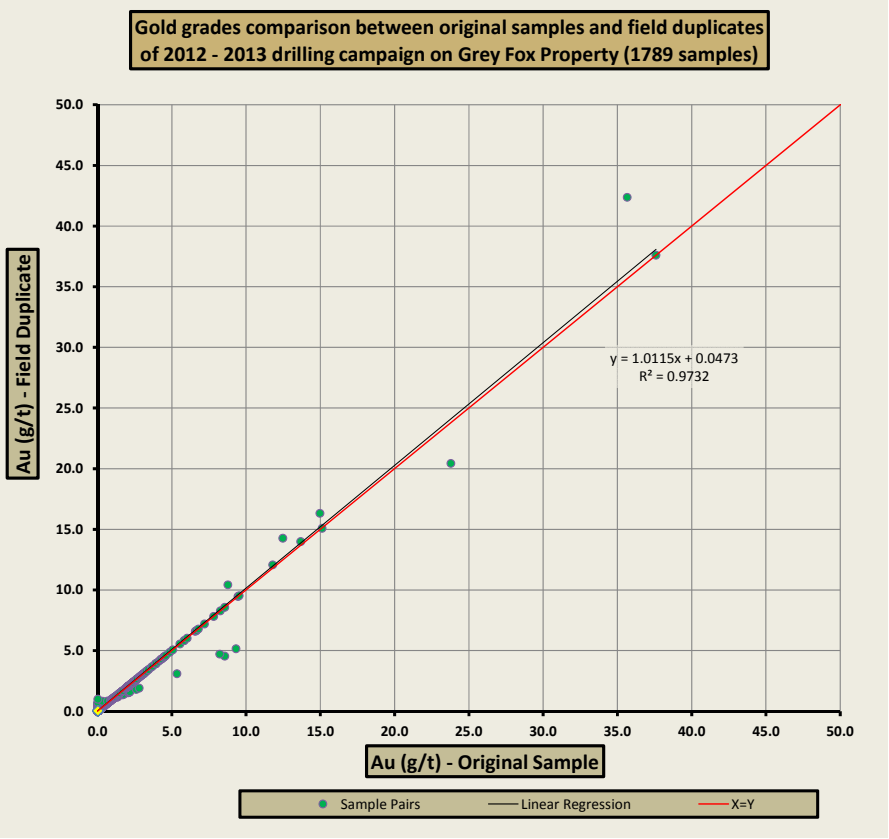

Figure 11.3 – Linear graph comparing original field samples versus field duplicates (quarter-split core) from the 2012-2013 Grey Fox drilling program

11.4 Conclusions

A statistical analysis of the QA/QC data provided by Brigus did not highlight any significant analytical issues, although it is recommended that two batches that failed to return values below detection limit for blanks be reanalyzed. Overall, InnovExplo is in the opinion that the sample preparation, analysis, QA/QC and security protocols used by Brigus for the Grey Fox project follow generally accepted industry standards and that the data is valid and of sufficient quality to be used for mineral resource estimation.

12. DATA VERIFICATION

The diamond drill hole database used for the Resource Estimate presented herein was provided by Brigus and is referred to as the Brigus database in this item. A drilling program was underway at the time that this Report was written. Therefore, a cut-off date of June 10, 2013 was established for the current resource estimate.

InnovExplo's data verification included field visits, a review of core, a review of the drill hole collar locations, a review of the assays, a review of lithologies, alterations, and structural descriptions, and a review of downhole surveys.

12.1 Historical Work

The historical information used in this report was taken mainly from reports produced before the implementation of the 43-101 Regulation. In some cases, little information is available about sample preparation, analytical and security procedures for the historical work in the reviewed documents. However, InnovExplo assumes that the exploration activities conducted by earlier companies were in accordance with prevailing industry standards at the time.

12.1.1 Brigus Database

The authors were granted access to the certificate of assays for most of the holes discussed in this report. Errors were noted in the original database, but these were considered minor and of the type normally encountered in a project database. However, none of the observed errors in the original database are present in the database used for the Resource Estimate. The final database is considered to be of good overall quality. InnovExplo considers the database for the Grey Fox project to be valid and reliable.

12.1.2 Brigus Diamond Drilling

Every drill hole collar on the Grey Fox deposit was either professionally surveyed or surveyed using a hand held GPS. The surveys conducted on the Grey Fox deposit are considered adequate for the purpose of a Resource Estimate, although a professional survey campaign is recommended for any collar that was only surveyed using a hand held GPS. The majority of the holes were also surveyed by a downhole instrument. During the site visit, the authors were able to access drill sites via well maintained roads (Fig. 12.1). Four drill rigs were operating (Fig. 12.2) and the authors identified numerous casings on drill sites (Fig. 12.3).

Figure 12.1 – Well-maintained road access to the drilling sites

Figure 12.2 – Four drill rigs in operation during the authors' site visits

Figure 12.3 – Some of the drill sites observed during the site visit

12.1.3 Brigus sampling and assaying procedures

InnovExplo reviewed several mineralized core sections during both site visits. Figures 12.4 and 12.5 show some of the core reviewed. Sample tags were still present in the boxes. It was possible to validate sample numbers and confirm the presence of mineralization for each of the samples in the mineralized zones.

Drilling was underway during both site visits and the authors were able to follow the entire path taken by the drill core, from the drill rig to the logging and sampling facility (Figs. 12.6 and 12.7).

All core boxes were labelled and properly stored outside (Fig. 12.8).

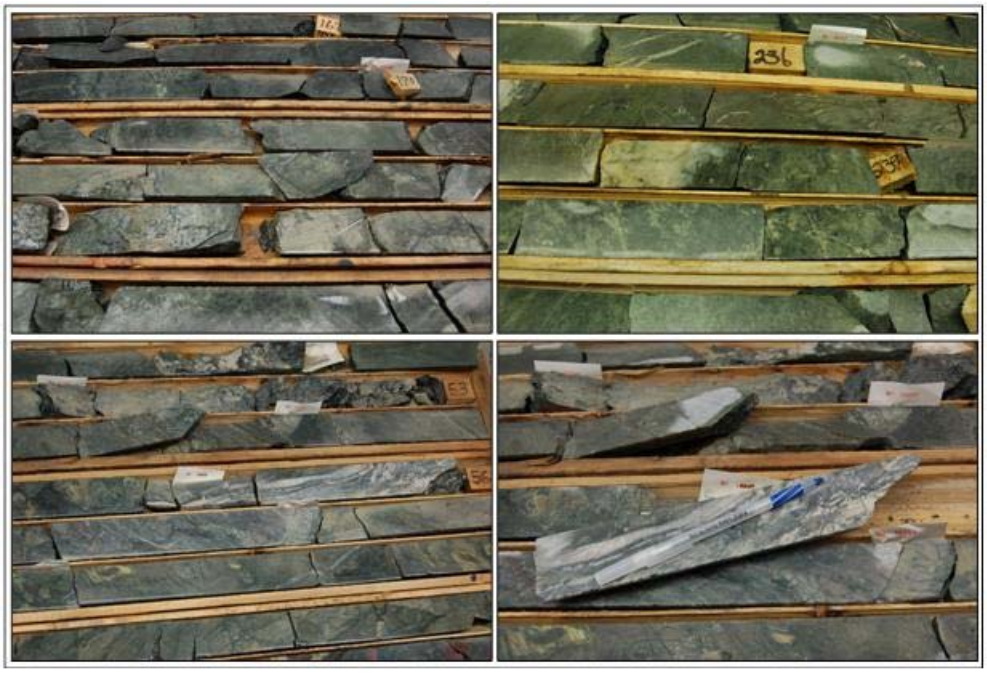

Figure 12.4 – General views of some of the core reviewed during the site visit. The pen points to a VG occurrence.

Figure 12.5 – General views of some of the core reviewed during the site visit. Epithermal textures observed throughout the deposit are well represented in those particular intervals.

Figure 12.6 – Photos of the logging and sampling facility: General views of the area dedicated for logging; Sawing facility; and Bags of samples ready to be sent to the lab.

Figure 12.7 – Photos of the Location of the Standards and Blanks used in the QA/QC program

Figure 12.8 – Outdoor core storage next to the core shed

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The latest metallurgical study was performed in March 2013 by SGS on the 147 and Contact areas. This section is largely borrowed from Legault and Geldart (2013).

As reported in Legault and Geldart (2013), metallurgical testwork was conducted on the 147 and Contact Master Composites and on 16 Variability Composites. The Variability Composites represent 16 grid zones, 8 from the 147 area and 8 from the Contact area. The 147 and Contact Master Composites were submitted for gravity separation followed by carbonin-leach cyanidation (CIL) of the gravity tailing. The Variability Composites were submitted for whole ore carbon-in leach.

The gold head analysis of the 147 and Contact Master Composites and Variability Composites are summarised in Table 13.1. The Variability Composite direct head grade was calculated from the average of 2 x 30 gram gold fire assays and the calculated head grade was determined from 1 kg whole ore cyanidation. In comparison, the head grade determined from the whole ore cyanidation is likely to be more representative of the Variability Composite than the duplicate fire assay samples, as the leach test is conducted with more material.

Table 13.1 – Head Analysis for the March 2013 SGS Metallurgical tests on the Grey Fox project

Composite	Au g/t (Average)	Composite	Au g/t (Average)
147 Zone 1 Comp	**2.68**	Contact Zone 1 Comp	**1.73**
147 Zone 2 Comp	**2.82**	Contact Zone 2 Comp	**3.33**
147 Zone 3 Comp	**1.50**	Contact Zone 3 Comp	**4.78**
147 Zone 4 Comp	**4.20**	Contact Zone 4 Comp	**2.12**
147 Zone 5 Comp	**4.5**	Contact Zone 5 Comp	**11.1**
147 Zone 6 Comp	**1.66**	Contact Zone 6 Comp	**4.98**
147 Zone 7 Comp	**0.65**	Contact Zone 7 Comp	**9.24**
147 Zone 8 Comp	**2.29**	Contact Zone 8 Comp	**2.88**
147 Zone Master Comp	**2.55**	Contact Zone Master Comp	**4.37**

The recovery of gold from the 147 Master Composite by gravity separation ranged from 33% to 38%. The gold recovery from the Contact Zone Master Composite ranged from 9% to 18%. The gold recovery of the Variability Composites (whole ore carbon in leach test) ranged from 63% for 147 Zone 8 (test CN-8) at 93 µm to 94% for both the 147 Zone 3 (Test CN-3) at 71 µm and Contact Zone 5 (test CN-13) at 46 µm.

The duplicate gold assays of the cyanidation residues from both whole ore and gravity tailing cyanidations indicate there is a significant amount of gold which was not leached. Legault and Geldart (2013) report that extraction of gold may be improved by increasing the retention time and leaching the whole ore or gravity tailing at a finer grind size.

The company is currently evaluating optimization studies that could lead to better recoveries.

14. MINERAL RESOURCE ESTIMATES

The 2013 Mineral Resource Estimate herein was performed by Pierre-Luc Richard, MSc, PGeo, under the supervision of Carl Pelletier, BSc, PGeo, using all available results. The main objectives of InnovExplo's work were to: 1) update the interpretation; and 2) publish the results of an updated Mineral Resource Estimate for the Grey Fox project. The mineral resources presented herein are not mineral reserves since they have no demonstrable economic viability. The result of the study is a single Mineral Resource Estimate for all mineralized zones (see below for details), with Indicated and Inferred Resources, for both a Whittle-optimized in-pit volume and a complementary underground volume. The effective date of this Mineral Resource Estimate is June 21, 2013.

14.1 Methodology

The Mineral Resource Estimate detailed in this report was made using 3D block modelling. Kriging and the inverse distance square interpolation (ID2) methods were used for an area of the Grey Fox project with a strike-length of 1.3 kilometres and a width of up to approximately 1.0 kilometre, down to a vertical depth of 600 metres below surface. Fifteen geological zones have been interpreted in transverse sections spaced 12.5 metres apart, thirteen of which host mineralization and two are sterile.

14.1.1 Drill hole database

InnovExplo received a Gems / MS Access diamond drill hole database for the Grey Fox project. Following adequate verifications and updates, the database used for the Resource Estimate contains 789 surface diamond drill holes with conventional analytical gold assay results, as well as coded lithologies from the drill core logs descriptions. A total of 65 drill holes are outside the resource area and therefore the remaining 725 drill holes cover the strike-length of the project at a drill spacing mostly varying from 15m to 25m. The database discussed in this chapter will refer to the 725 drill holes subset.

In addition to the basic tables of raw data, the updated Gemcom database contains several tables with the various drill hole and wireframe solid intersection composite calculations required for statistical evaluation and resource block modeling. The database contains a total of 86,714 analyses taken from 246,191 metres of drilled core.

14.1.2 Interpretation of mineralized zones

In order to conduct accurate resource modeling of the Grey Fox project, InnovExplo, in close collaboration with Brigus geologists, updated a geological-zone solid model delimiting the geologically defined extent of the mineralized zones using a 1.3 kilometres strike-length corridor measuring 1.0 kilometre wide and extending down to 600 metres below surface.

The geological-zone model was constructed to outline zones of geological continuity. Overall, fifteen geological zones have been interpreted along a steep, roughly north-northwest trend (Fig. 14.1; Table 14.1).

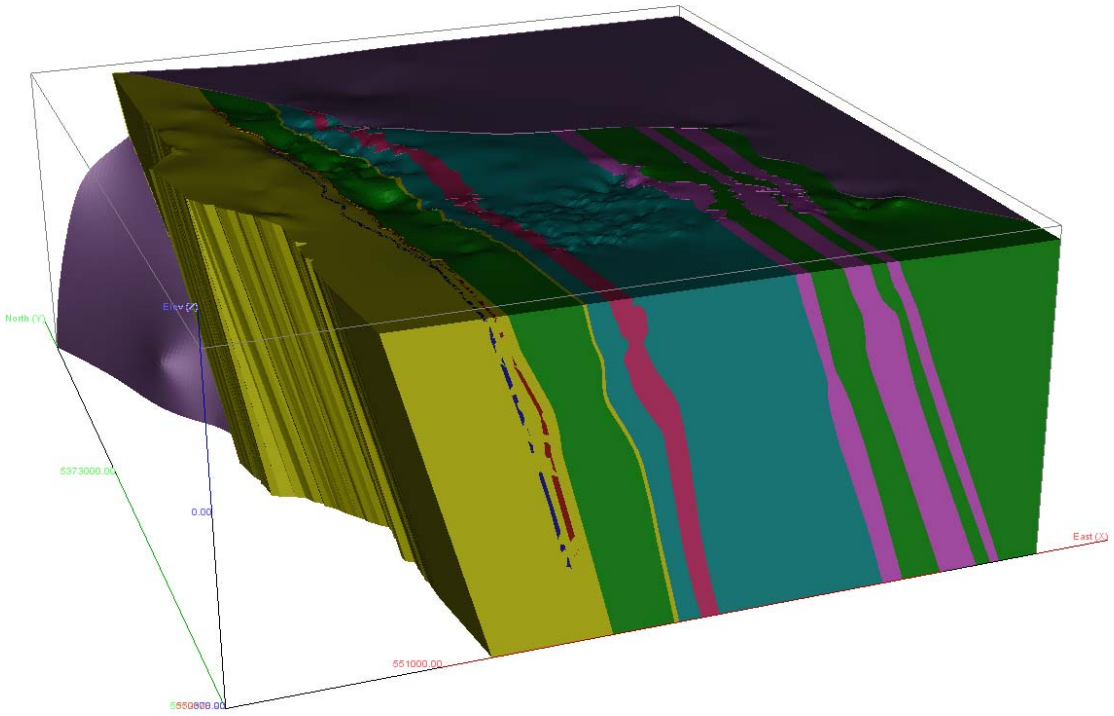

Figure 14.1 – General view showing the fifteen (15) interpreted geological zones looking north-northeast

The wireframe solids of the geological zone model were created by digitizing an interpretation onto sections spaced 12.5 metres apart, and then using tie-lines between sections to complete the wireframes for each solid.

The Ultramafic geological zone was defined as all material in the footwall of the Destor-Porcupine Fault Zone. The remaining part of the rectangular volume delimiting the block model once the geological zone solids were removed was defined as the Country Rock.

As referred to in previous reports, three areas were named as the following: “147 Zone”, “Contact Zone”, and “Grey Fox South Zone”. In this report, these will be referred to as “147 Area”, “Contact Area” and “Grey Fox South Area” to avoid confusion with geological zones that have the same name but are not constraint to such areas. Areas are arbitrary and were initially defined by predecessors. Figure 14.2 shows the locations of the geological zones versus the areas.

Table 14.1 – List of the fifteen (15) interpreted geological zones on the Grey Fox project

Geological Zone	Blockcode	Rockcode
Contact	100	CONTACT
DIA	101	DIA
SED	102	SED
MIFW	103	MIFW
MV	104	MV
VIV	105	VIV
MIHW	106	MIHW
SED2	107	SED2
VIV1	121	VIV1
VIV2	122	VIV2
VIV3	123	VIV3
MV1	132	MV1
MV2	133	MV2
MV3	134	MV3
UM	150	UM

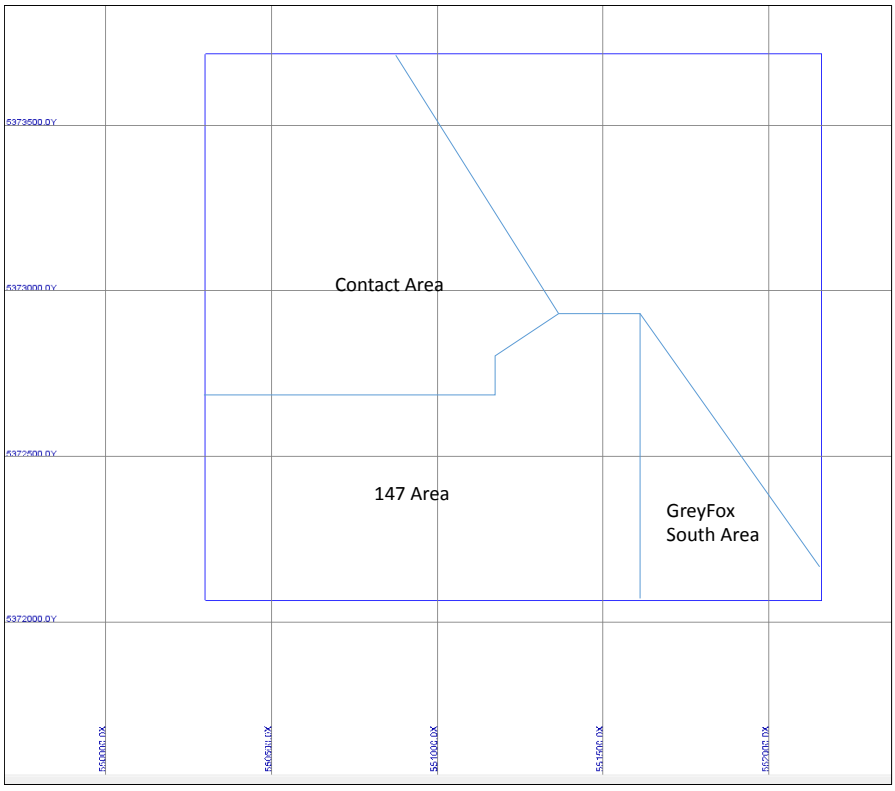

Figure 14.2 – Plan view. Sketch illustrating the location of all three different areas referred to as the Contact Area, the 147 Area, and the Grey Fox South Area. Blue contour is the limits of the Block model

14.1.3 High grade capping

Drill hole assay intersecting interpreted mineralized zones were automatically coded in the database from 3D solids and were used to determine high grade capping.

Statistics on the overall assay data and on datasets grouped by zones were performed using raw analytical assay data for a total of 80,350 diamond drill hole samples. High grade capping was established at 100 g/t Au for geological zones Contact and VIV while it was established at 50 g/t Au for geological zones SED, MIFW, MV, MIHW, SED2, VIV1, VIV2, VIV3, MV1, MV2, and MV3.

Table 14.2 presents the metal factor distribution per decile and per zone. Figures 14.3 to 14.5 present probability plots, figures 14.6 to 14.8 present the histogram distributions, and finally, figures 14.9 to 14.11 present the percentage of metal versus the percentage of samples. Based on this study, a capping of 100g/t Au was used for the Contact and VIV zones and 50g/t Au for all other zones. This results in 20.4% of the metal being cut for the Contact Zone, 20.6% for the VIV Zone, and 26.0% for the remaining zones.

Table 14.2 – Metal factor distribution per decile and per zone

Contact		
Decile	Count	Metal Factor
0-10	698	0.19%
10-20	698	0.22%
20-30	698	0.23%
30-40	698	0.23%
40-50	698	0.23%
50-60	698	0.31%
60-70	698	1.28%
70-80	698	4.09%
80-90	698	10.56%
90-100	697	82.65%

VIV		
Decile	Count	Metal Factor
0-10	2121	0.14%
10-20	2121	0.29%
20-30	2121	0.29%
30-40	2121	0.29%
40-50	2121	0.29%
50-60	2121	0.29%
60-70	2121	0.29%
70-80	2121	0.29%
80-90	2121	3.96%
90-100	2115	93.86%

Others		
Decile	Count	Metal Factor
0-10	5302	0.23%
10-20	5302	0.63%
20-30	5302	0.63%
30-40	5302	0.60%
40-50	5302	0.61%
50-60	5302	0.59%
60-70	5302	0.59%
70-80	5302	0.59%
80-90	5302	3.91%
90-100	5300	91.61%

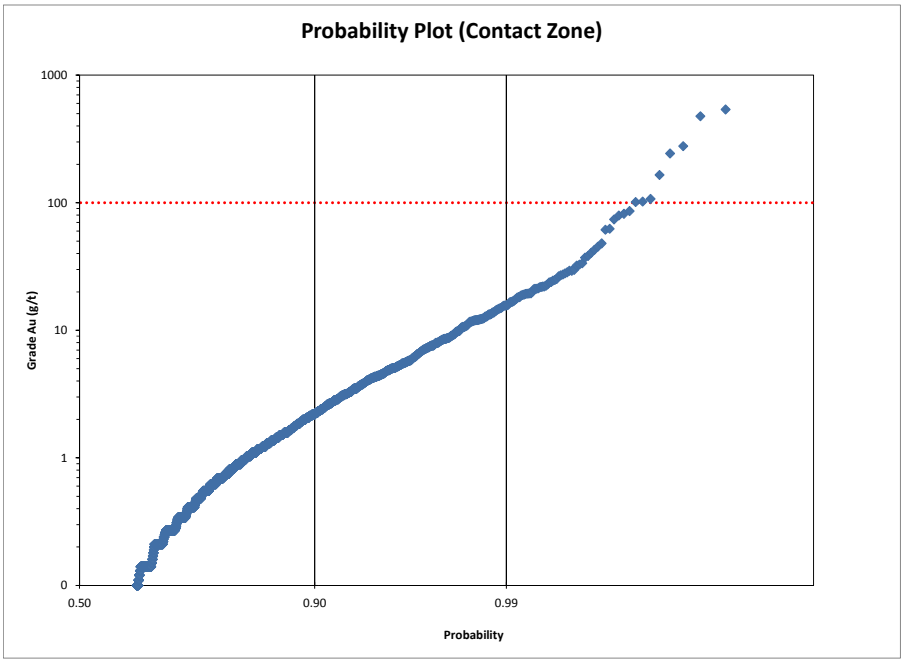

Figure 14.3 – Probability plot for the Contact Zone. The red line represents the established capping.

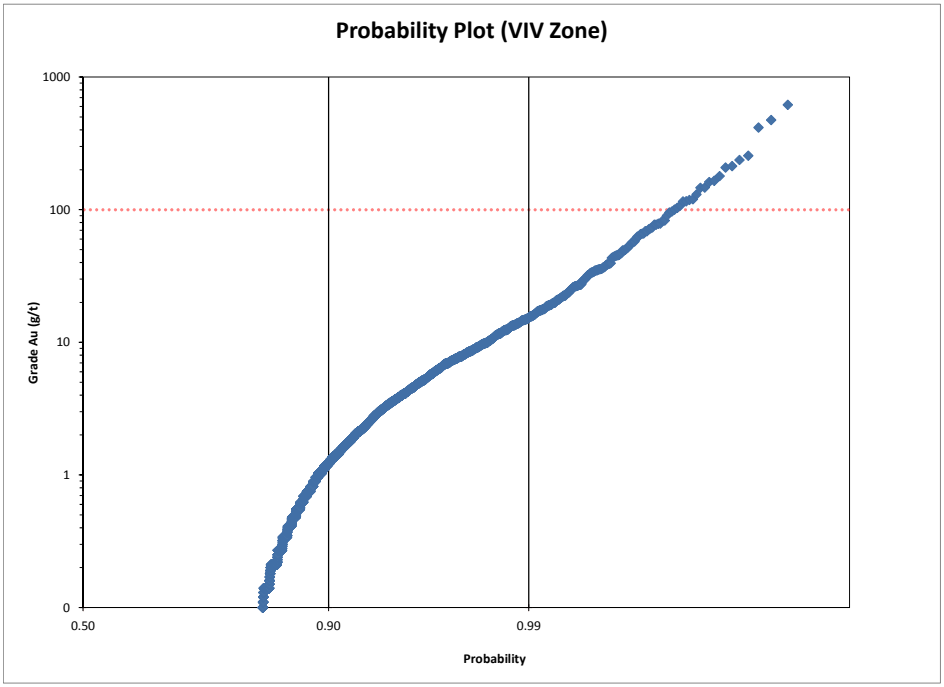

Figure 14.4 – Probability plot for the VIV Zone. The red line represents the established capping.

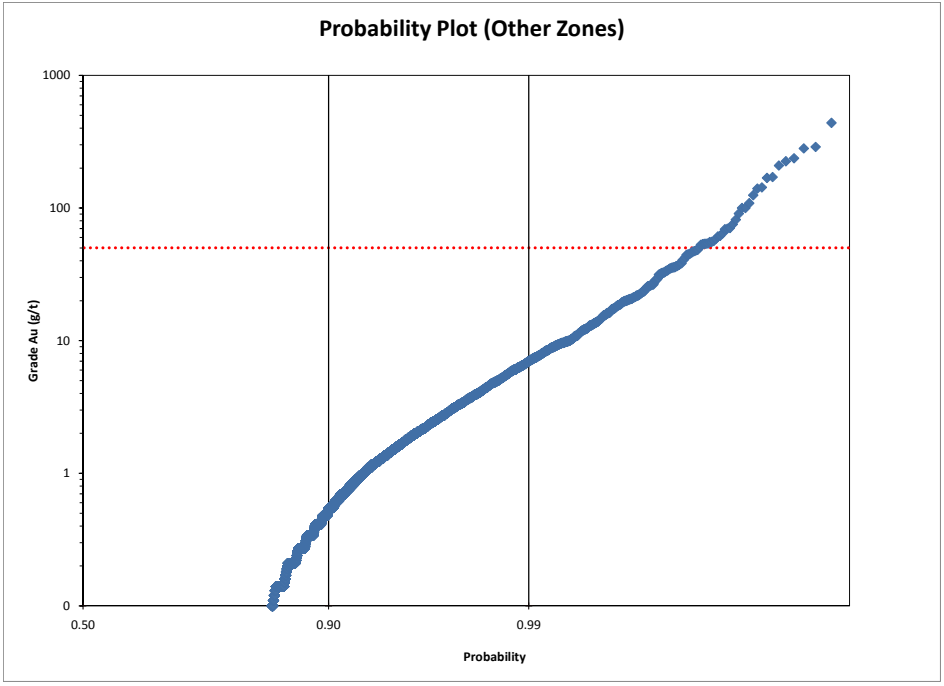

Figure 14.5 – Probability plot for all zones combined excluding Contact and VIV. The red line represents the established capping.

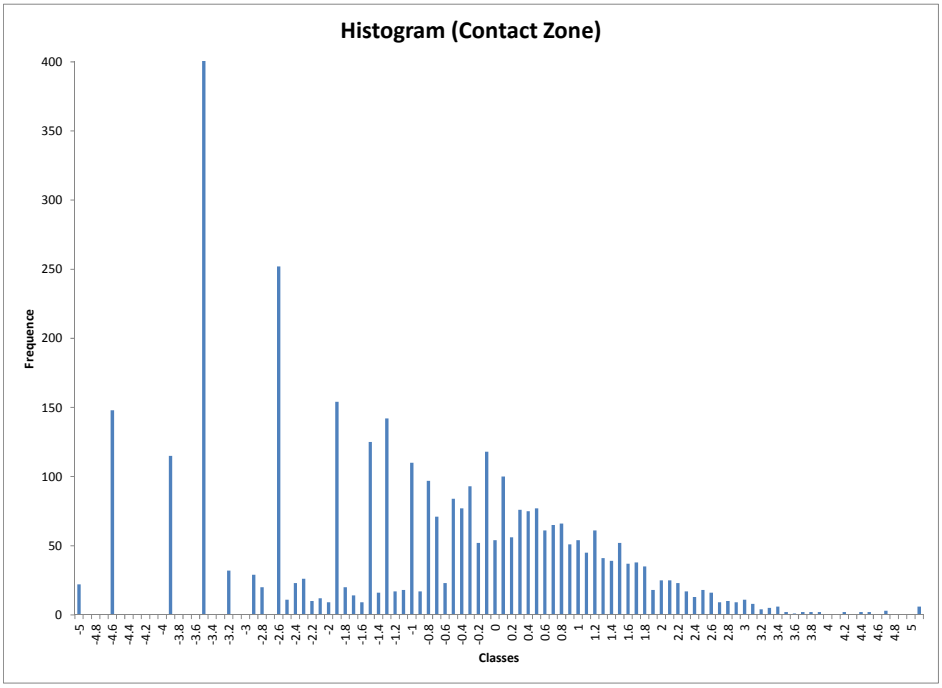

Figure 14.6 – Normal histogram of gold grade distribution for all DDH samples from the Contact Zone

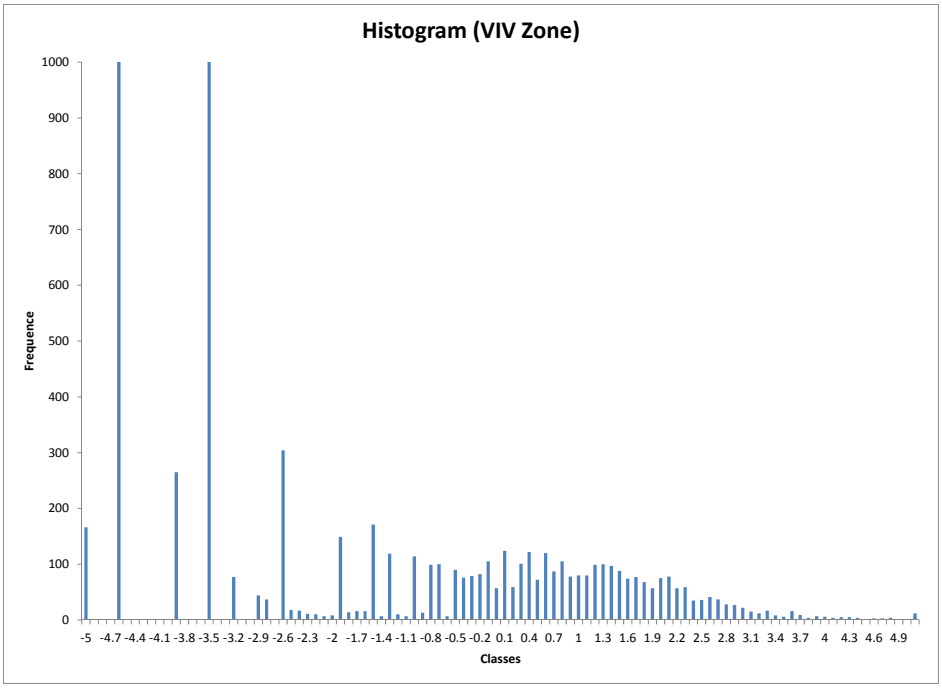

Figure 14.7 – Normal histogram of gold grade distribution for all DDH samples from the VIV Zone

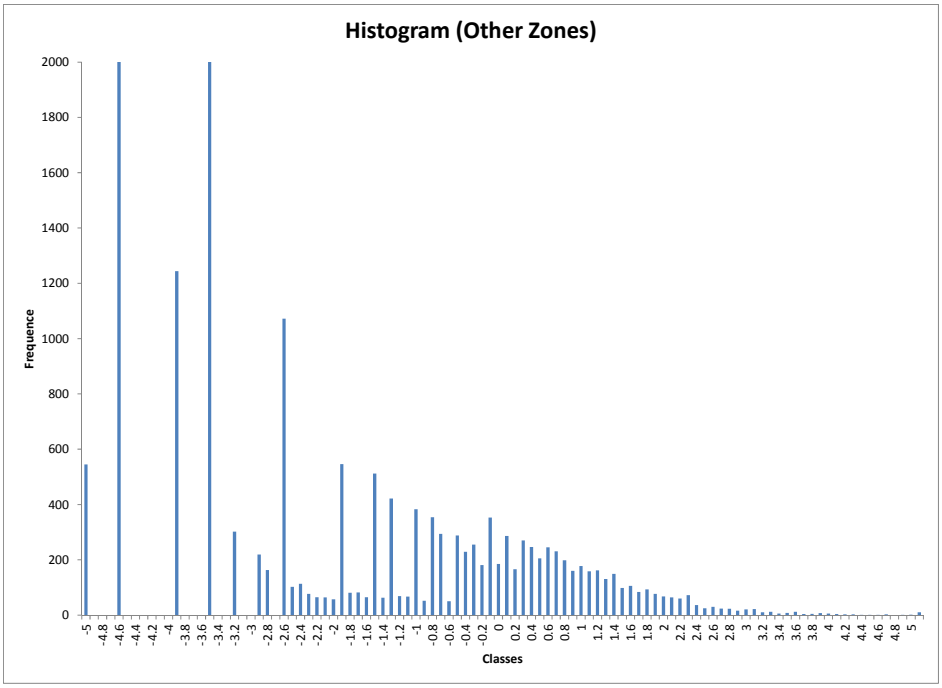

Figure 14.8 – Normal histogram of gold grade distribution for all DDH samples from all zones combined, excluding Contact and VIV

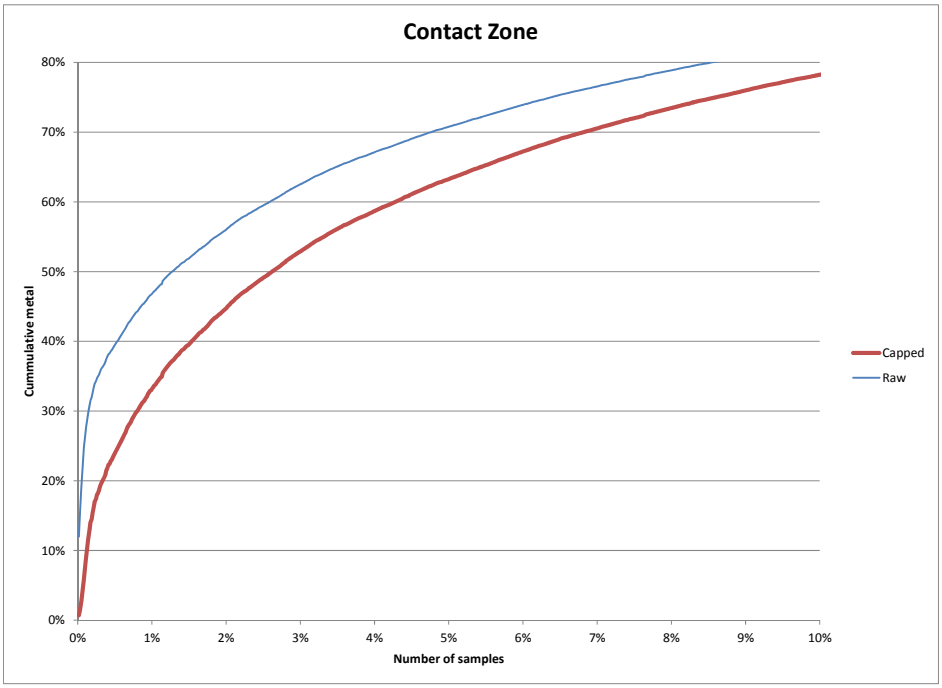

Figure 14.9 – Graph showing the percentage of metal versus the percentage of samples for the Contact Zone

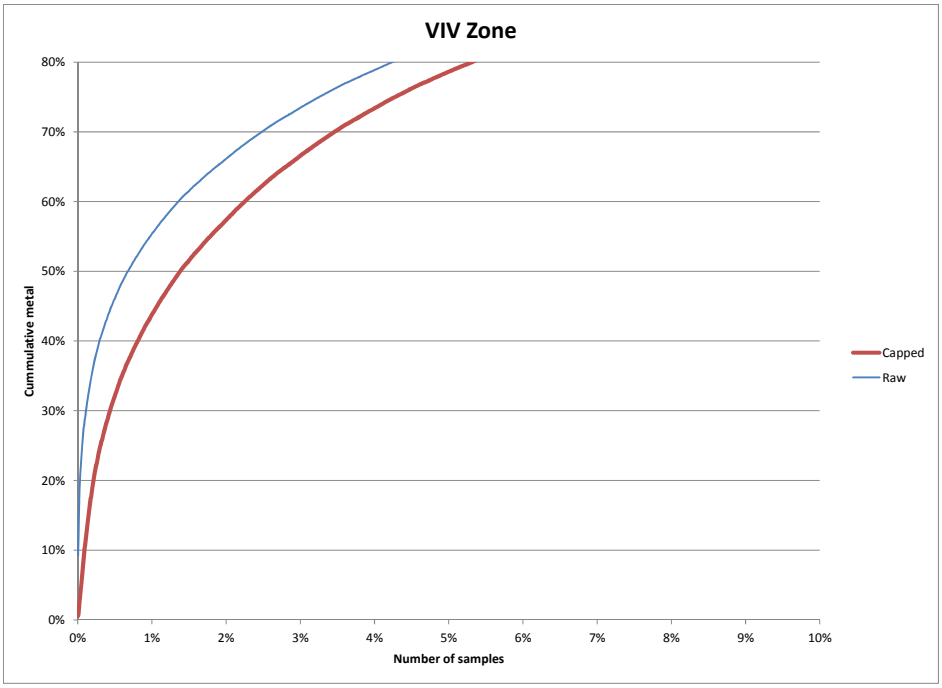

Figure 14.10 – Graph showing the percentage of metal versus the percentage of samples for the VIV Zone

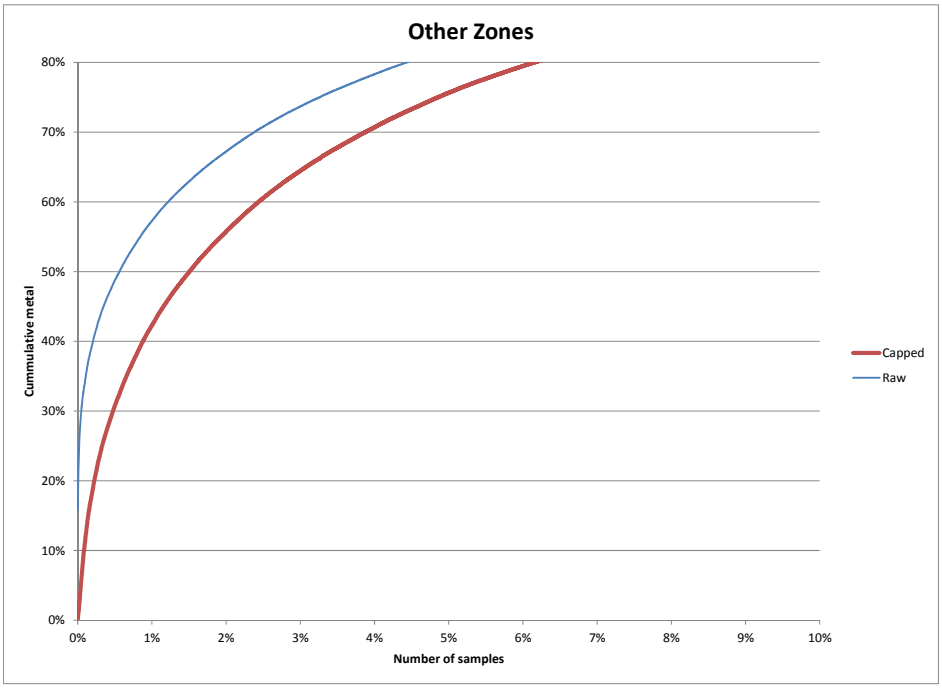

Figure 14.11 – Graph showing the percentage of metal versus the percentage of samples for all zones combined excluding Contact and VIV

Within the DDH database, a total of 66 samples were capped at the determined capping limit. The capping of high assays affected 0.08% of all samples for the DDH population (Table 14.3). Table 14.4 summarizes statistics by zone.

Table 14.3 – List of capped samples within the DDH database

Zone	Hole	From	To	Length	Au (g/t)	Au (g/t Capped)	Zone	Hole	From	To	Length	Au (g/t)	Au (g/t Capped)
VIV3	GF12-563	296.00	297.00	1.00	108.72	50.00	SED	GF10-114	187.20	188.20	1.00	168.65	50.00
VIV2	GF11-380	41.70	42.70	1.00	53.42	50.00		GF10-133	55.10	55.57	0.47	55.34	50.00
	GF11-408	269.00	270.00	1.00	61.70	50.00		GF10-133	61.87	62.70	0.83	53.90	50.00
	GF12-571	146.00	146.50	0.50	140.26	50.00		GF11-249	160.00	161.00	1.00	171.26	50.00
	GF12-631	253.00	254.00	1.00	289.03	50.00		GF11-258	172.00	172.85	0.85	64.00	50.00
VIV	GF11-174	80.70	81.00	0.30	103.17	100.00		GF11-258	172.85	173.35	0.50	208.96	50.00
	GF11-176	74.00	75.00	1.00	213.40	100.00		GF11-265	156.00	157.00	1.00	69.19	50.00
	GF11-178	146.00	146.30	0.30	1990.61	100.00		GF11-326	135.00	136.00	1.00	100.00	50.00
	GF11-299	89.65	90.15	0.50	115.72	100.00		GF11-326	136.00	136.60	0.60	100.00	50.00
	GF12-412	100.00	101.00	1.00	146.58	100.00		GF12-489	192.00	193.00	1.00	53.66	50.00
	GF12-469	73.00	74.00	1.00	165.00	100.00		GF13-741	346.60	347.30	0.70	81.77	50.00
	GF12-474	58.00	59.00	1.00	2008.75	100.00	MV2	GF11-401	155.00	156.00	1.00	70.70	50.00
	GF12-489	142.00	142.60	0.60	179.25	100.00	MV	GF11-152	165.40	166.00	0.60	237.02	50.00
	GF12-491	197.00	198.00	1.00	207.74	100.00		GF11-191	352.00	353.00	1.00	4156.15	50.00
	GF12-532	185.00	186.00	1.00	415.99	100.00		GF11-244	146.00	147.00	1.00	58.42	50.00
	GF12-532	188.25	189.05	0.80	236.95	100.00		GF12-526	249.80	250.40	0.60	69.90	50.00
	GF12-551	121.00	122.00	1.00	107.11	100.00		GF13-713	477.00	478.00	1.00	53.97	50.00
	GF12-553	204.00	204.80	0.80	255.50	100.00		GF13-719	399.00	399.50	0.50	1530.22	50.00
	GF12-611	244.00	245.00	1.00	100.09	100.00	MIFW	GF08-07	46.30	47.80	1.50	90.69	50.00
	GF12-646	367.00	368.00	1.00	161.69	100.00		GF12-509	59.80	60.80	1.00	56.58	50.00
	GF12-646	373.00	374.00	1.00	115.55	100.00		GF13-706	245.00	246.00	1.00	124.94	50.00
	GF13-713	383.00	384.00	1.00	118.56	100.00		GF13-709	319.00	320.00	1.00	55.61	50.00
	GF13-713	385.00	386.00	1.00	474.18	100.00	CONTACT	GF08-10	52.50	53.00	0.50	538.20	100.00
	GF13-713	398.00	398.96	0.96	617.11	100.00		GF08-10	53.00	53.50	0.50	2142.87	100.00
	GF13-713	398.96	400.00	1.04	130.60	100.00		GF08-10	53.50	54.00	0.50	476.78	100.00
	GF13-728	264.00	265.00	1.00	146.37	100.00		GF09-20	48.00	49.00	1.00	277.13	100.00
	GF13-728	268.00	269.00	1.00	119.86	100.00		GF09-55	67.00	68.00	1.00	164.98	100.00
MIHW	GF12-435	31.00	32.00	1.00	61.00	50.00		GF11-191	373.00	374.00	1.00	243.43	100.00
	GF12-523	174.00	175.00	1.00	75.33	50.00		GF11-245	91.00	92.00	1.00	107.08	100.00
	GF13-690	153.00	154.00	1.00	143.18	50.00		GF12-493	62.00	63.00	1.00	102.00	100.00
	GF13-698	160.00	161.00	1.00	437.88	50.00		GF12-652	271.00	272.00	1.00	101.11	100.00
	GF13-743	242.30	243.00	0.70	225.50	50.00	SED2	GF12-548	184.90	185.75	0.85	281.77	50.00
	GF13-743	243.00	244.00	1.00	50.33	50.00		PR93-19	86.40	87.70	1.30	52.95	50.00

Table 14.4 – Summary statistics for the assays by zone for the DDH population

Zone	Blockcode	Number of samples	Max (g/t)	Uncut mean (g/t)	High grade capping	Cut mean (g/t)	# Samples cut	% Samples cut
CONTACT	100	6 977	2 142.87	1.55	100	1.09	9	0.13%
MIFW	103	4 641	124.94	0.52	50	0.49	4	0.09%
MIHW	106	11 411	437.88	0.47	50	0.41	6	0.05%
MV	104	9 291	4 156.15	0.93	50	0.31	6	0.06%
MV1	132	1 943	23.31	0.14	50	0.14	0	0.00%
MV2	133	1 098	70.70	0.33	50	0.31	1	0.09%
MV3	134	1 623	25.80	0.41	50	0.41	0	0.00%
SED	102	2 592	208.96	0.97	50	0.75	11	0.42%
SED2	107	9 879	281.77	0.34	50	0.32	2	0.02%
VIV	105	20 913	2 008.75	1.15	100	0.87	22	0.11%
VIV1	121	3 597	33.84	0.29	50	0.29	0	0.00%
VIV2	122	4 135	289.03	0.55	50	0.47	4	0.10%
VIV3	123	1 991	108.72	0.32	50	0.29	1	0.05%
Total		**80 091**	**4 156.15**	**0.78**		**0.57**	**66**	**0.08%**

14.1.4 Compositing

Drill hole assay intersecting interpreted geological zones were used to generate composites.

In order to minimize any bias introduced by the variable sample lengths, the capped gold assays were composited to 1.5-metre equal lengths (1.5m composites) within all intervals that define each of the geological zones. The composite's length was determined based on raw assays length and mineralized zone thickness. From all the composites generated within the assayed interval of the DDH population (144,904 composites), 1,174 (0.81%) were less than 0.50 metre long and therefore removed from the block model interpolation. A grade of 0.00 g/t Au was assigned to missing sample intervals. Table 14.5 summarizes the basic statistics for the DDH 1.5m composites.

Table 14.5 – Summary statistics for DDH composites

Zone	Blockcode	Number of composites	Max (g/t)	Mean (g/t)	Standard deviation	Coefficient of variation
CONTACT	100	5 324	73.80	0.90	3.35	3.72
DIA	101	1 234	12.92	0.04	0.52	13.44
MIFW	103	16 646	37.20	0.09	0.95	10.57
MIHW	106	38 261	44.77	0.08	0.76	9.66
MV	104	29 705	35.19	0.06	0.69	10.67
MV1	132	2 733	15.90	0.07	0.53	7.49
MV2	133	914	18.68	0.23	1.25	5.32
MV3	134	2 680	13.30	0.16	0.81	4.97
SED	102	2 228	39.93	0.58	2.65	4.57
SED2	107	21 894	37.97	0.10	0.69	7.12
VIV	105	14 988	100.00	0.78	3.77	4.84
VIV1	121	2 829	22.46	0.24	0.97	4.03
VIV2	122	2 996	40.00	0.42	1.84	4.43
VIV3	123	2 472	44.61	0.16	1.52	9.27
Total		**144 904**	**100.00**	**0.20**	**1.62**	**7.97**

14.1.5 Variography and ellipsoids

Composites within interpreted geological zones were used to generate variography and ultimately determine ellipsoids.

A 3D directional-specific variography was completed using the 1.5m DDH composites of the capped gold assay data for all geological zones. The investigation involved 10º incremental searches in the horizontal plane, followed by 10º incremental searches in the vertical planes of the indicated preferred azimuths, as well as planes normal to the preferred azimuth. The best-fit major variograms for each of the zones (Contact, VIV, and the remaining zones taken as a group) are shown as figures 14.12 to 14.14.

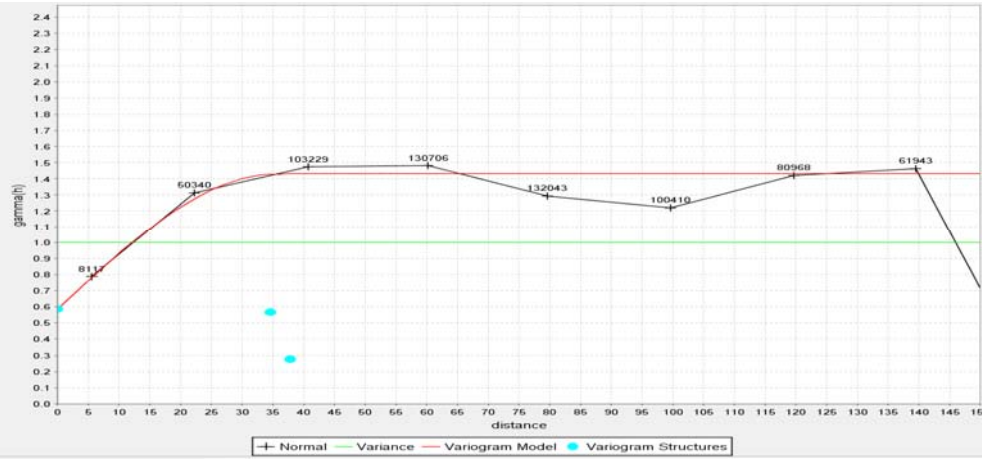

Figure 14.12 – 3D variogram along the major axis of the Contact geological zone

Figure 14.13 – 3D variogram along the major axis of the VIV geological zone

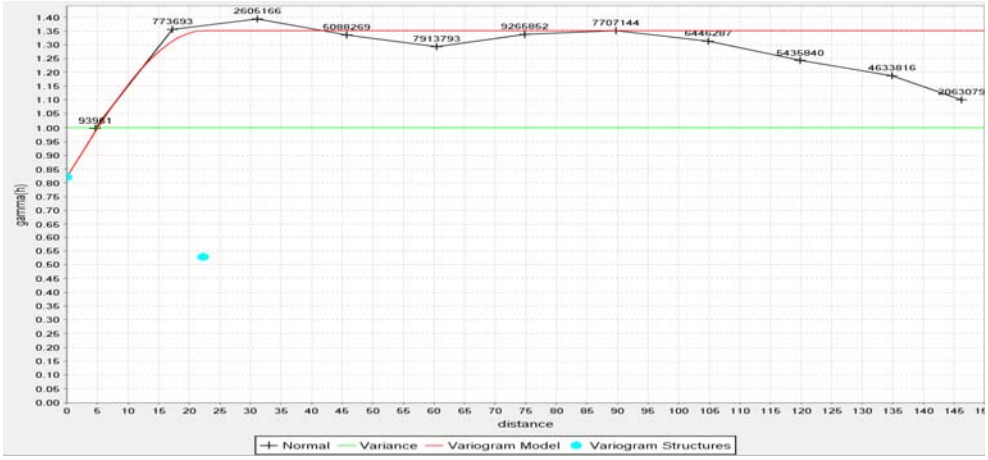

Figure 14.14 – 3D variogram along the major axis of the remaining geological zones

The results of the linear and 3D variographic investigations for the DDH composites are consistent with the geological features of the deposit (Figs. 14.15 to 14.17). The 3D directional-specific investigations yielded the best-fit model along an orientation that roughly corresponds to the strike and dip of the mineralized zones.

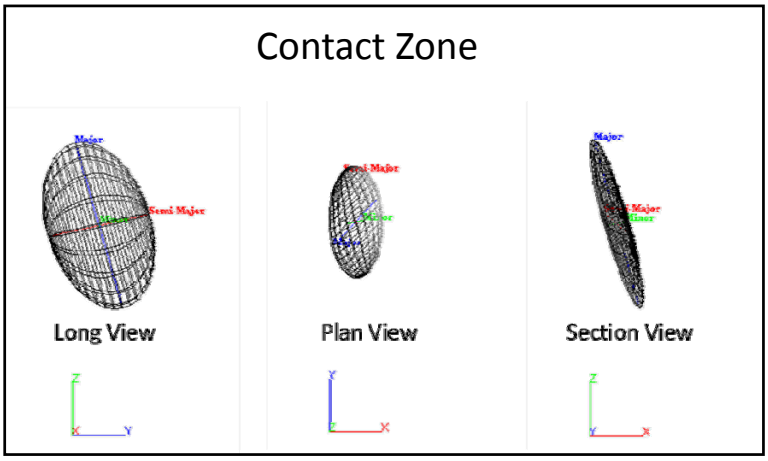

Figure 14.15 – Different views of the ellipse determined by geostatistics for the Contact Zone

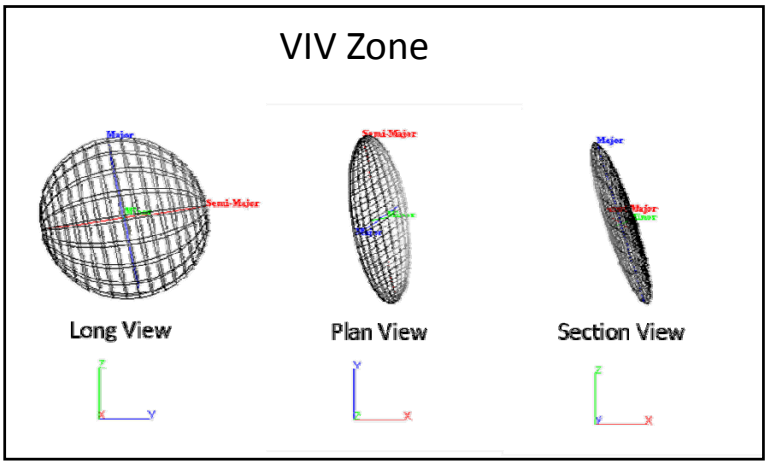

Figure 14.16 – Different views of the ellipse determined by geostatistics for the VIV Zone

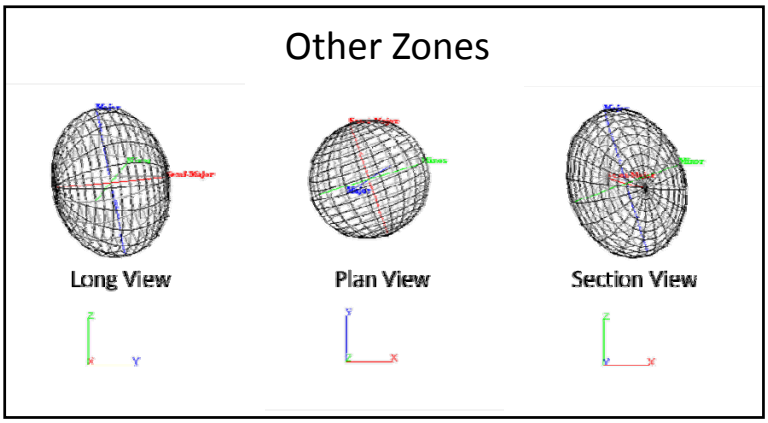

Figure 14.17 – Different views of the ellipse determined by geostatistics for the remaining Zones

Some minor changes were introduced to the best-fit models in accordance with the geological model. Ellipsoid radiuses were established using a combination of the ranges determined from the 3D variography, the drill hole distribution, and the geological model comprehension. The search radii were determined as follows:

Contact Zone:
- Pass 1: 38m X 21m X 5m
- Pass 2: 76m X 42m X 10m

VIV Zone:
- Pass 1: 51m X 19m X 5m
- Pass 2: 102m X 38m X 10m

Other Zones:
- Pass 1: 30m X 15m X 5m
- Pass 2: 60m X 30m X 10m

14.1.6 Specific gravity

For the current 2013 Mineral Resource Estimate, a density was calculated for each of the geological zones independently. InnovExplo received a database containing 2,514 measures taken within the deposit area, of which 2,436 fall within the interpreted geological zones. The data and established the densities as presented in Table 14.6.

Table 14.6 – Specific Gravity determination

Zone	Blockcode	Number of measures	Min (g/cm3)	Max (g/cm3)	Mean (g/cm3)
CONTACT	100	127	2.56	3.37	2.83
DIA	101	16	2.71	3.04	2.90
MIFW	103	244	2.58	3.30	2.91
MIHW	106	561	2.58	3.31	2.92
MV	104	308	2.28	3.33	2.87
MV1	132	82	2.58	2.94	2.81
MV2	133	54	2.72	3.01	2.82
MV3	134	145	2.69	3.08	2.89
SED	102	32	2.57	3.06	2.78
SED2	107	169	2.68	3.01	2.77
VIV	105	262	2.66	3.23	2.89
VIV1	121	135	2.69	3.13	2.81
VIV2	122	184	2.70	3.12	2.77
VIV3	123	117	2.76	3.27	2.91
Total		**2436**	**2.28**	**3.37**	**2.87**

Also, a density of 2.00 g/cm^3 has been assigned to the overburden (OB), a density of 2.87 g/cm^3 was assigned to country rock to the west of the deposit (weighted average of all measures available; believed to be similar material), and 3.00 to the country rock within the fault zone (believed to be ultramafic units).

Bulk densities were used to calculate tonnages from the volume estimates in the resource-grade block model.

14.1.7 Block model

A block model was established extending sufficiently away from the mineralized zones to cover an area of sufficient size to host open pits. The model has been pushed down to a depth of 630 metres below surface. The limits of the block model are as follows:

Easting:	550,300 to 552,160	(620 columns x 3m each)
Northing:	5,372,065 to 5,373,715	(550 rows x 3m each)
Elevation:	-355 to 320	(225 levels x 3m each)

The block model has parallel orientation, with the Y-axis oriented along a N000 azimuth. The individual block cells have dimensions of 3 metres long (X-axis) by 3 metres wide (Y) by 3 metres vertical (Z). The block dimensions reflect the dimension of the mineralized zones and plausible mining methods.

Table 14.7 provides details about the corresponding GEMS solids and surfaces naming convention, the rock codes, and block codes assigned to each individual solid. A one-folder block model thus generated was used in the mineral resource estimation.

Table 14.7 – Grey Fox block model

FOLDER	GEMS TRIANGULATION NAME			ROCK CODE	BLOCK CODE	PRECEDENCE
	NAME1	NAME2	NAME3			
Standard	Surface	Topography	F130617	-	-	-
	Surface	Bedrock	F130617	-	-	-
	Fault	Clip	F130617	-	-	-
	DIA		CLIP130617	DIA	101	3
	Contact		CLIP130617	CONTACT	100	4
	VIV		CLIP130617	VIV	105	5
	MIFW		CLIP130617	MIFW	103	6
	MIHW		CLIP130617	MIHW	106	6
	MV		CLIP130617	MV	104	6
	MV1		CLIP130617	MV1	132	6
	MV2		CLIP130617	MV2	133	6
	MV3		CLIP130617	MV3	134	6
	SED		CLIP130617	SED	102	6
	SED2		CLIP130617	SED2	107	6
	VIV1		CLIP130617	VIV1	121	6
	VIV2		CLIP130617	VIV2	122	6
	VIV3		CLIP130617	VIV3	123	6
	UM		CLIP130617	UM	150	7

14.1.8 Grade block model

As per the geostatistical results summarized in this report, a grade model was interpolated using the 1.5m composite derivates from the conventional capped assay grade data to produce the best possible grade estimate for the defined resources in the Grey Fox project. The interpolation has been done on a point area extracted from the DDH dataset.

The interpolation profiles were customized to estimate grades separately within individual geological zones for the DDH composite population. The method retained for the final resource estimation was Ordinary Kriging (OK) for the Contact and 147 zones and inverse distance square (ID2) for the remaining zones.

The composite points were assigned rock codes and block codes corresponding to the geological zone in which they occur. The interpolation profiles specify a single target and sample rock code for each geological-zone solid, thus establishing hard boundaries between the geological zones and preventing block grades from being estimated using sample points with different block codes than the block being estimated. The search/interpolation ellipse orientations and ranges defined in the interpolation profiles used for grade estimation correspond to those developed in the geostatistics studies for this report.

Other specifications to control grade estimation are as follows:

- minimum of three (3) and maximum of sixteen (16) sample points in the search ellipse for interpolation;
- maximum of two (2) sample points from any one DDH;
- minimum of two (2) drillholes for interpolation.

14.1.9 Mineral Resource Classification, Category and Definition

The resource classification definitions used for this report are those published by the Canadian Institute of Mining, Metallurgy and Petroleum in their document "CIM Definition Standards for Mineral Resources and Reserves".

Measured Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Indicated Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Inferred Mineral Resource: that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

By default, interpolated blocks have been assigned to the Inferred category during the creation of the grade block model. The reclassification to an Indicated category was done for blocks meeting all of the conditions below:

- Blocks interpolated with a minimum of three (3) drill holes;
- Blocks for which the average distance to composites is less than 25 metres;
- Blocks for which the distance to the closest composite is less than 15 metres.

An interpretation on section views was generated using the criteria described above and the blocks were recoded accordingly. Within this clipping boundary, some inferred blocks have been upgraded to the Indicated category, whereas outside the boundary, some Indicated blocks have been downgraded to the Inferred category. InnovExplo is of the opinion that this was a necessary step to homogenize (smooth out) the resource volumes in each category**.**

14.2 Mineral Resource Estimation

InnovExplo produced a Mineral Resource Estimate for the Grey Fox project. The Mineral Resource Estimate presented herein includes:

- An in-pit Resource Estimate, within Whittle-optimized pit shells;
- An underground Resource Estimate, outside the Whittle-optimized pit-shells.

Given the density of the processed data, the search ellipse criteria, and the specific interpolation parameters, InnovExplo is of the opinion that the current Mineral Resource Estimate can be classified as Indicated and Inferred resources. The estimate is compliant with CIM standards and guidelines for reporting mineral resources and reserves.

Table 14.8 presents the combined resources by category for the overall Grey Fox project. Tables 14.9 and 14.10 show sensibility to different cut-offs for the indicated and inferred categories respectively.

Table 14.8 – Mineral Resource Estimate results for the Grey Fox project

Grey Fox - 2013 MINERAL RESOURCE ESTIMATE					
Resource Class	**Cut-off Grade (g/t Au)**	**Potential Material**	**Tonnes**	**Capped Au (g/t)**	**Contained Au (oz)**
Indicated	>2.84	Underground	1 275 000	6.2	255 000
	>0.72	Open Pit	3 041 500	2.6	252 400
		Total Indicated	**4 316 500**	**3.7**	**507 400**
Inferred	>2.84	Underground	1 025 100	5.6	184 800
	>0.72	Open Pit	488 900	2.8	43 800
		Total Inferred	**1 514 000**	**4.7**	**228 600**

- The Independent and Qualified Persons for the Mineral Resource Estimate, as defined by Regulation 43-101, are Pierre-Luc Richard, MSc, PGeo (InnovExplo Inc), and Carl Pelletier, BSc, PGeo (InnovExplo Inc), and the effective date of the estimate is June 21, 2013.
- The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
- While the results are presented undiluted and in situ, the reported mineral resources are considered to have reasonable prospects for economic extraction.
- CIM definitions and guidelines were followed for Mineral Resources.
- The resource was estimated using Gemcom GEMS 6.5. The database used for the estimate contained diamond drill core composites and assays. All samples were collected by Brigus personnel. The estimate is based on 724 diamond drill holes (246,191m) drilled from 1993 to 2013, of which the vast majority (>95%) were drilled between 2008 and 2013. A minimum true thickness of 5.0 m was applied, using the grade of the adjacent material when assayed or a value of zero when not assayed.
- Supported by statistical analysis and the high grade distribution within the deposit, a top cut varying from 50 g/t and 100 g/t was applied to assay grades prior to compositing grades for interpolation into model blocks using Ordinary Kriging and Inverse Distance Weighting Squared methods, and was based on 1.5 m composites within a 3m long x 3m wide x 3m high block model. The ordinary kriged grade model for part of the 147 and Contact zones and ID2 for the rest of the deposit was felt to best represent the continuity and distribution of the gold grade based on the current geological models.
- Two passes for each of the geological zones were used for interpolation. Based on geostatistics, the ellipse maximum ranges for interpolation were 102m x 38m x 10m for the 147 Main geological zone, 76m x 42m x 10m for the Contact Main geological zone and 60m x 30m x 10m for remaining zones.
- Bulk densities were calculated for individual interpreted lithological domains based on 638 density measurements. The calculated bulk densities vary from 2.76 g/cm3 to 2.96 g/cm3.

- A Whittle optimized constraining shell was generated to constrain the potential open pit material for the 147 and Contact Zone. The potential underground material for the 147 and Contact zones is based on the remaining resource outside of the pit shells. No open pit constraining shell was run for the Grey Fox South zone and all of the resource is classified as underground potential material. In-Pit and Underground resources were compiled at cut-off grades from 0.40 to 5.00 g/t Au (for sensitivity characterization). A cut-off grade of 0.72 g/t Au was selected as the official in-pit cut-off grade and a cut-off grade of 2.84 g/t Au was selected as the official underground cut-off grade. Cut-off grades must be re-evaluated in light of prevailing market conditions (gold price, exchange rate and mining cost).
- A gold price of US$1,400/oz and an exchange rate of US$1.00=C$1.01 was used in the gold cut-off grade calculations of 2.84 g/t for potential underground and 0.72 g/t for potential open-pit Mineral Resources. Underground and open-pit mining costs, process costs and G&A costs were estimated using experience gained from Brigus' Black Fox mine.
- The Indicated category is defined by combining various statistical criteria, such as a minimum of three drill holes within the search area, a maximum distance of 15m to the closest composite, and a maximum average distance of 25m to composites. Finally, a clipping boundary was interpreted to either upgrade or downgrade some of the resource based on confidence and geological continuity.
- The pit shell used for the resource estimate extends slightly beyond the property limits in its southern portion of the 147 Zone. Although the entire resource lies within the property limits, some material outside the property limits will need to be removed to access some of the resource. Consequently, this portion of the pit may need to be re-considered in a future economic study. For the purpose of this study, such material outside the property limits was attributed a grade of 0 g/t Au.
- Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes and g/t).
- The number of metric tons was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations in Regulation 43-101.
- InnovExplo is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue that could materially affect the Mineral Resource Estimate.

Table 14.9 – Mineral Resource Estimate results for the indicated category at different cut-off grades

Indicated Category (Open Pit Potential)					Indicated Category (Underground Potential)				
Cut-off	Density	Tonnage	Au (g/t)	Ounces	Cut-off	Density	Tonnage	Au (g/t)	Ounces
0.50	2.88	3 690 400	2.2	265 000	0.50	2.85	10 021 700	1.8	567 400
0.55	2.88	3 522 400	2.3	262 100	0.55	2.85	9 264 700	1.9	554 700
0.60	2.88	3 365 100	2.4	259 200	0.60	2.85	8 604 900	2.0	542 500
0.65	2.88	3 221 300	2.5	256 300	0.65	2.85	8 004 000	2.1	530 400
0.72	2.88	3 041 500	2.6	252 400	0.72	2.85	7 274 800	2.2	514 400
0.75	2.88	2 970 200	2.6	250 700	0.75	2.85	6 997 000	2.3	507 800
1.00	2.88	2 462 100	3.0	236 500	1.00	2.85	5 192 800	2.7	457 600
1.40	2.88	1 874 100	3.6	214 000	1.40	2.86	3 474 200	3.5	392 400
1.80	2.88	1 465 400	4.1	193 100	1.80	2.86	2 490 900	4.3	342 300
2.20	2.88	1 157 300	4.7	173 400	2.20	2.86	1 877 500	5.0	303 200
2.40	2.88	1 038 300	4.9	164 600	2.40	2.86	1 641 900	5.4	285 800
2.63	2.87	918 700	5.2	155 000	2.63	2.86	1 434 200	5.8	269 000
2.72	2.87	880 400	5.4	151 700	2.72	2.86	1 365 100	6.0	263 100
2.84	2.87	828 500	5.5	147 100	2.84	2.86	1 275 000	6.2	255 000
3.00	2.87	763 600	5.7	141 000	3.00	2.86	1 178 300	6.5	245 900
4.00	2.87	483 200	7.1	109 800	4.00	2.86	763 500	8.1	200 000
5.00	2.87	327 300	8.3	87 500	5.00	2.86	530 100	9.8	166 600

Table 14.10 – Mineral Resource Estimate results for the Inferred category at different cut-off grades

Inferred Category (Open Pit Potential)					Inferred Category (Underground Potential)				
Cut-off	Density	Tonnage	Au (g/t)	Ounces	Cut-off	Density	Tonnage	Au (g/t)	Ounces
0.50	2.85	609 400	2.4	46 100	0.50	2.84	9 647 500	1.5	477 400
0.55	2.85	579 500	2.4	45 600	0.55	2.84	8 799 300	1.6	463 100
0.60	2.85	552 400	2.5	45 100	0.60	2.84	8 074 500	1.7	449 700
0.65	2.85	525 200	2.6	44 600	0.65	2.84	7 440 200	1.8	436 900
0.72	2.85	488 900	2.8	43 800	0.72	2.84	6 682 400	2.0	420 300
0.75	2.85	473 700	2.9	43 400	0.75	2.84	6 395 000	2.0	413 500
1.00	2.85	387 300	3.3	41 000	1.00	2.84	4 543 400	2.5	362 000
1.40	2.85	295 200	3.9	37 500	1.40	2.84	2 888 200	3.2	299 500
1.80	2.84	233 500	4.6	34 300	1.80	2.84	2 002 200	4.0	254 400
2.20	2.84	190 200	5.2	31 600	2.20	2.84	1 480 600	4.6	221 200
2.40	2.84	174 400	5.4	30 400	2.40	2.84	1 305 200	5.0	208 200
2.63	2.84	158 400	5.7	29 100	2.63	2.84	1 145 700	5.3	195 400
2.72	2.83	152 800	5.8	28 600	2.72	2.84	1 090 100	5.4	190 600
2.84	2.83	146 700	6.0	28 100	2.84	2.84	1 025 100	5.6	184 800
3.00	2.83	138 500	6.1	27 300	3.00	2.84	935 500	5.9	176 400
4.00	2.83	91 900	7.5	22 100	4.00	2.84	583 400	7.3	137 200
5.00	2.83	60 800	9.0	17 600	5.00	2.84	401 800	8.6	111 200

15. MINERAL RESERVE ESTIMATES

No Mineral Reserve Estimate has been prepared for this report.

16. MINING METHODS

Not applicable at this current stage.

17. RECOVERY METHODS

Not applicable at this current stage.

18. PROJECT INFRASTRUCTURE

Not applicable at this current stage.

19. MARKET STUDIES AND CONTRACTS

Not applicable at this current stage.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

InnovExplo is not aware of any environmental studies, nor permitting on the Grey Fox property, and is therefore not in a position to provide an opinion on the subject.

21. CAPITAL AND OPERATING COSTS

Not applicable at this current stage.

22. ECONOMIC ANALYSIS

Not applicable at this current stage.

23. ADJACENT PROPERTIES

There are four main mining deposits adjacent to the Grey Fox property. The producing Black Fox underground and open pit mine is 3 kilometres northwest of the Contact Zone. This mining deposit is presently 100% owned by Brigus Gold Corp. Other deposits not owned by Brigus Gold Corp include the Hislop Gold Zone Open Pit, New Kelore Mine and the Ross Mine.

The Hislop Gold Zone deposit formerly owned by Royal Oak and Pamour Mines is about 2.0 km east of the property. The New Kelore Mine owned by St. Andrew Goldfields is 2000 metres southeast of the Contact Zone along the Ross Fault. Two kilometres southeast of the New Kelore Mine, along the same fault structure, is the Ross Mine (Fig. 23.1).

23.1 The Black Fox Mine

The Black Fox Mine, formerly the Exall-Glimmer underground mine, was in production from 1997 to 2001 and produced 1,099,000 tonnes at 5.97 g/t Au (Stryhas et al., 2008). The open pit portion of the Black Fox commenced production in 2009 at 2,000 tonnes per day based upon a reserve of 4,350,000 tonnes at 5.20 g/t Au (Stryhas et al., 2008).

For the year ended December 31, 2011, a total of 10,220,532 tonnes were mined from Phase 1 and 2, of which 433,267 tonnes were ore, 4,849,506 tonnes were waste rock, 4,644,079 tonnes were related to production stripping, and 293,680 tonnes were related to Phase 2 overburden removal, resulting in a strip ratio of 10.4:1. In 2012, $7.3 million of production stripping costs were capitalized, compared to $13.5 million in 2011 (see 2012 Annual information form of Brigus Gold Corp).

During the year ended December 31, 2012, a total of 9,402,994 tonnes of material were mined from the open pit, of which 907,077 tonnes were ore, 5,008,332 tonnes were waste rock, 2,300,545 tonnes were related to production stripping, and 1,187,040 tonnes were related to Phase 3 overburden removal. This resulted in an operating strip ratio of 5.5:1 (see 2012 Annual information form of Brigus Gold Corp).

Open pit mining of ore and waste at Black Fox is conducted 24 hours a day, 7 days a week, subject to weather conditions and scheduled maintenance. The mining fleet averages approximately 30,000 tonnes per day ("tpd") ore and waste. The mining of ore is only done during daylight hours. Phase 3 of overburden removal will be completed during the first half of 2013. Mining of Phase 2 and 3 of the open pit will continue up until the end of 2016 (see 2012 Annual Information Form of Brigus Gold Corp.).

Gold mineralization at Black Fox occurs mainly in an ankerite alteration zone that is roughly 1.0 kilometre along strike and 20 to 100 metres in width (Christman, 2010). The alteration envelope occurs mostly within komatiitic ultramafics and to a lesser extent in the mafic volcanics, along the perimeter of the Destor-Porcupine Fault Zone (DPFZ).

Three main styles of mineralization occur at the Black Fox mine (Christman, 2010). The prominent style is a low-sulphide gold mineralization associated with abundant quartz veining and stockworks in a strongly altered ankerite-fuchsite ultramafic unit

("green carb"). The second next common mineralization occurs in the mafic volcanic units and is associated with greater than 5% pyrite and moderate quartz veining. This style is commonly referred to as the "Flow Zone" and occurs on the footwall of the DPFZ. The final minor type of mineralization occurs with sulphides in silicified syenitic sills, with minor quartz veining.

23.2 Hislop Mine (New Kelore)

The Hislop mine is owned by St Andrew Goldfields Ltd. Their mining property is situated adjacent to the south of the Grey Fox property. The principal gold mineralization (West, Shaft and South deposits) is stretched out along, or marginal to, a 1,300 metres strike length of the Gibson-Kelore Fault Zone, and there may be more than one zone of mineralization in some localities.

A majority of the gold mineralized zones on this property occurred along a fault contact between mafic volcanic flows and ultramafic rocks (Roscoe and Gow, 2006). This contact strikes west-northwest and dips steeply to the north. Gold mineralization at this site is associated with the margins of porphyritic dikes intruding both of the above rock units.

In 1990 and 1991, the property was operated as a joint venture with Goldpost Resources Inc. and St. Andrew Goldfields Ltd during which underground drilling was followed by some underground mining. In 1993, St Andrew Goldfields Ltd purchased the remaining interest in the property, and subsequent underground mining was conducted from 1993 to the end of 1994 with milling continuing until early 1995 (Valliant and Bergen, 2009).

St. Andrew began open-pit mining of the West Zone in 1999, but operations were placed on care and maintenance in late 2000 because of low gold prices (Valliant and Bergen, 2009). A small amount of mining was also carried out in 2006 to 2007, and open pit mining resumed in mid-2010. A total of 10,952 ounces, 20,184 ounces and 23,530 ounces were produced in 2010, 2011, and 2012 respectively (see 2012 Annual Report of St Andrew Goldfields Ltd). During 2012, the East Pit continued to perform well, especially on grade reconciliation. St Andrew Goldfields Ltd has started to de-water the West Pit to bring it into production later in 2012.

23.3 Gold Pike Mine Property

The 1,163-acre Gold Pike mine property is located adjacent to the producing Black Fox Mine Complex operated by Brigus Gold Mines. The Gold Pike Mine property is also adjacent to the producing Hislop Mine operated by St Andrew Goldfields. Victory Gold Mines Inc. is earning up to a 70% interest in the Gold Pike mine property from Matachewan Consolidated Mines Limited. Victory Gold Mines Inc. has met expenditures for an initial 50% interest in the claims and is transferring ownership (see Victory Gold website).

Gold mineralization on the Gold Pike mine property was established by Noranda in the 1980s with some production by Royal Oak Mines in the early 1990s shipping 100,000 tonnes with a recovered grade of 3.4 g/t Au when the gold price averaged $366 per oz (see Victory Gold website).

23.4 Hislop Township gold project

The Hislop Township gold project is owned by the Stroud Resources Ltd. The project is located approximately 2 kilometres south of the 147 Zone. Much of the following data are taken from a NI 43-101 technical published by Wetmore (2004).

Exploration since the 1940s has included over 52,000 metres of core drilling with the most comprehensive and meaningful exploration completed by Chevron in the late 1980s. This work resulted in the partial delineation of three zones of gold mineralization known as the Creek, Creek Extension and Stroud Main zones along a 650-metre strike extent of a structural/alteration corridor known as the Stroud Fault. Drill hole intersections extended to a vertical depth of 400 metres. The V2 Zone is a separate zone of mineralization in a sub-parallel structure located 600 metres to the northeast. The Stroud Fault appears to be a splay, southeastward from the north-northwest trending Hislop Fault, or else is simply cut off by the latter. The Hislop Fault is a prominent principal structure that continues northward from Stroud's property.

Based on the Chevron drill core analytical database, Behre-Dolbear & Co., on behalf of Stroud, released a NI 43-101 compliant Resource Estimate in 2004 of Indicated Resources for the Creek and Main zones, and additional Inferred Resources for all three zones over a total strike extent of 600 metres and to a vertical depth of 225 metres, as follows:

- Indicated Resources: 483,500 t at 6.61 g/t Au (102,750 oz Au in situ);
- Inferred Resources: 367,700 t at 5.90 g/t Au (69,700 oz Au in situ).

In 2006 to 2007, Stroud completed an 8,000-metre drill program of 25 drill holes, but did not revise the 2004 Resource Estimate (Daigle, 2012). On April 29, 2011, St. Andrew entered into an option agreement with Stroud where St Andrew Goldfields Ltd could earn up to a 60% interest in Stroud's Hislop property.

In June 2011, St Andrew Goldfields Ltd conducted a 10,000-metre drill program in approximately 25 boreholes.

As of June 30, 2012, Stroud and St. Andrew terminated the option agreement and the Hislop property remains 100% held by Stroud.

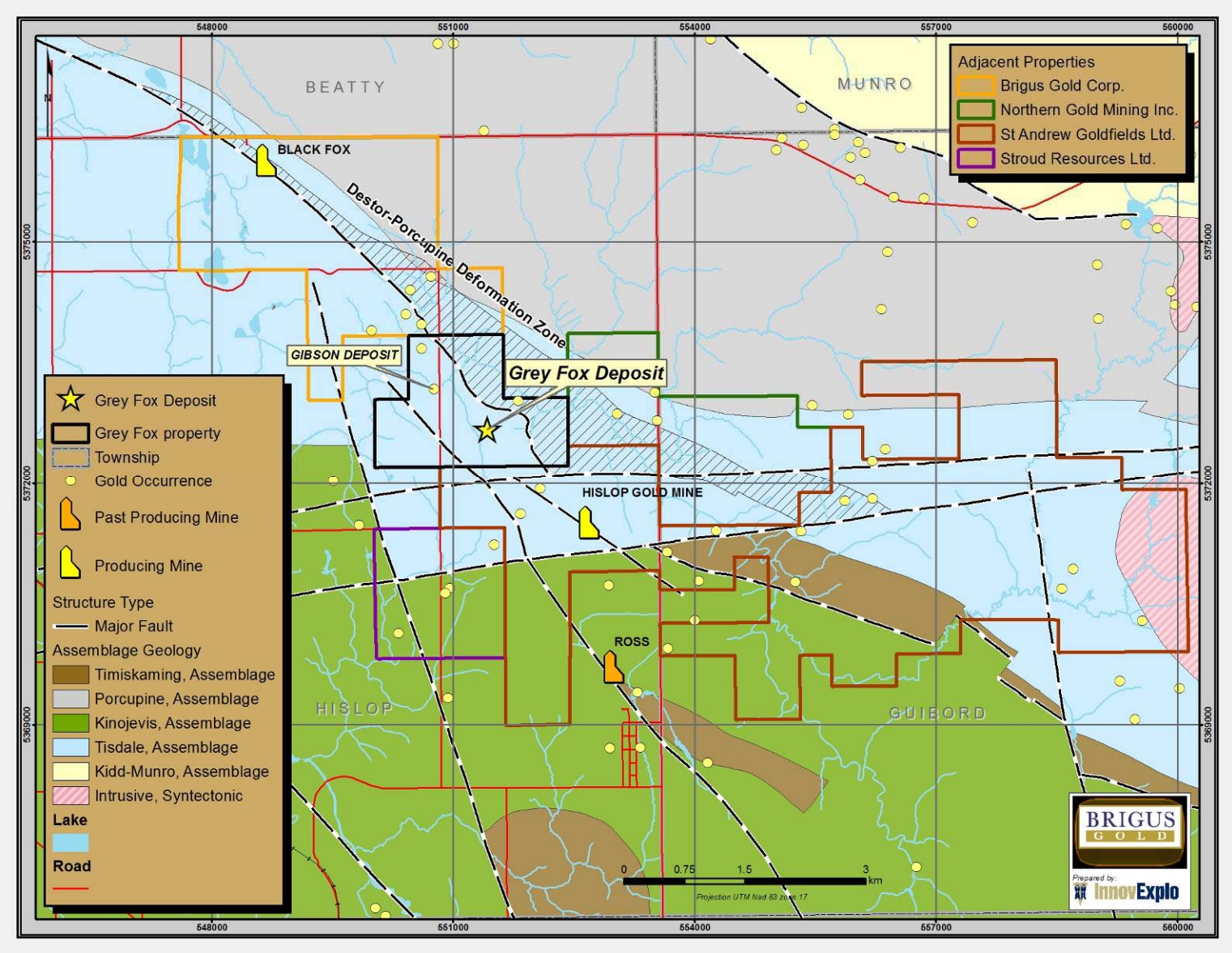

Figure 23.1 – Adjacent properties to the Grey Fox project

24. OTHER RELEVANT DATA AND INFORMATION

To the authors' best knowledge and that of InnovExplo, there are no other relevant data or information for the Grey Fox project.

25. INTERPRETATION AND CONCLUSIONS

The objective of InnovExplo's assignment was to provide an update of the Mineral Resource Estimate for the Grey Fox project. The Mineral Resource Estimate presented herein meets this objective. In addition, observations made during the completion of this assignment have led InnovExplo to believe that the mineral potential of the Grey Fox project could be improved by additional diamond drilling.

The Grey Fox deposit is at an advanced stage of exploration and hosts significant gold mineralization. Based on the density of the processed data, the search ellipse criteria, and the specific interpolation parameters, the authors are of the opinion that the current Mineral Resource Estimate can be classified as Indicated and Inferred Resources. The estimate follows CIM standards and guidelines for reporting mineral resources and reserves. A minimum mining width of 5 metres (true width) and a cut-off grade of 0.72g/t Au (Open pit potential) and 2.84g/t Au (Underground potential) were used for the Mineral Resource Estimate. InnovExplo estimates that the Grey Fox deposit has Indicated Resources of 4,316,500 tonnes grading 3.7 g/t Au (507,400 ounces of gold) and Inferred Resources of 1,514,000 tonnes grading 4.7 g/t Au (228,600 ounces of gold).

InnovExplo, in close collaboration with Brigus geologists, updated the Grey Fox deposit using section views leading to fifteen (15) lithological zones, of which thirteen (13) are mineralized.

After conducting a detailed review of all pertinent information and completing the present Mineral Resource Estimate, InnovExplo concludes the following:

- The Grey Fox project contains at least thirteen (13) continuous mineralized lithological zones;
- The geological and grade continuities of the gold mineralized zones of the Grey Fox project were demonstrated;
- Grade continuity is better defined within oreshoots throughout the deposit;
- The mineralized zones have strike lengths ranging up to 1.3 kilometres;
- In spite of the current drill spacing, the geological continuity seems steady throughout the mineralized zones;
- The mineralized zones encountered at the Grey Fox deposit have the possibility to expand at depth and to the south although the deposit currently reaches the property boundary in that direction;
- The potential is high for adding new resources within oreshoots with additional diamond drilling;
- The potential is high for upgrading Inferred Resources to Indicated Resources with more diamond drilling in all of the zones;
- There is a possibility for identifying new parallel zones with additional diamond drilling.

The property is strategically positioned in an area known to be associated with gold mineralization. InnovExplo considers the present Mineral Resource Estimate to be reliable, thorough, based on quality data, reasonable hypotheses, and parameters compliant with Regulation 43-101 and CIM standards regarding mineral resource estimations. InnovExplo believes that the Grey Fox project mineral resources are sufficiently advanced for a prefeasibility study.

26. RECOMMENDATIONS

InnovExplo recommends additional work to confirm the economic potential of the Grey Fox deposit and the rest of the Grey Fox property.

The potential being high for upgrading Inferred Resources to Indicated Resources with more diamond drilling, the authors recommend additional in-fill drilling.

Also, the mineralized zones encountered at the Grey Fox deposit have significant possibility to expand at depth and the potential is high for adding new underground resources within oreshoots of the Contact and 147 areas and both underground and open pit potential in the Grey Fox South area. Additional drilling is therefore warranted.

Following in-fill and at depth drilling program, InnovExplo recommends a feasibility study to determine the potential economic viability of the mineral resources. Both open pit and underground scenarios should be evaluated under the same model for the Grey Fox deposit.

Based on the current interpretation of the Grey Fox deposit, the authors believe that, based on the geological setting of the property, there is reasonable potential for identifying new zones parallel to the ones already identified. A comprehensive compilation of historical work over the entire property is recommended to fully understand the relationship between faults, shear zones and gold mineralization. A property-scale drilling program should be performed at Grey Fox to assess its full economic potential.

InnovExplo is of the opinion that the character of the Grey Fox property is of sufficient merit to justify the recommended exploration program described below. The program is divided into two (2) phases. Expenditures for Phase I of the work program are estimated at C$5,807,500 (including 15% for contingencies). Expenditures for Phase II of the work program are estimated at C$4,945,000 (including 15% for contingencies). The grand total is C$10,752,500 (including 15% for contingencies). Phase II of the program is contingent upon the success of Phase I.

Phase I – Drilling program on the Grey Fox deposit and property-scale compilation

Phase 1a) In-fill Drilling on the Grey Fox Deposit

InnovExplo recommends further definition drilling to upgrade Inferred resources to an Indicated category, in particular within the oreshoots already defined.

Phase 1b) Drilling Extensions of the Mineralized Zones

InnovExplo recommends further exploration drilling on the Grey Fox deposit to increase Inferred resources. More specifically, the program should target the already identified oreshoots at depth and gaps within those close to surface. Lack of drilling close to surface in the Grey Fox South area should be prioritized in order to add open pit potential material.

Phase 1c) Compilation, Surface Mapping and Structural Study

A comprehensive compilation of all historical work should be undertaken in order to potentially provide new insights and targets on the property. Based on such a compilation, property-scale exploration programs, such as geophysics surveys, could be recommended. The main objectives of such studies should be to: 1) better understand the gold distribution of already known showings; and 2) establish new targets on the property.

Phase 1d) Metallurgical Testing and Rock Mechanic Studies

Additional metallurgical testing is warranted to better understand recovery throughout the deposit and in the Grey Fox South area where no metallurgical testing was ever conducted. A lithology approach should be considered and treated independently. Rock mechanics studies should also be initiated in order to provide adequate data for future economic studies.

Phase II – Prefeasibility and property-scale drilling program

Phase 2a) Resource Estimate Update and Prefeasibility Study on the Grey Fox Deposit

InnovExplo recommends producing a Resource Estimate update following Phase 1 and initiating a prefeasibility study to determine the potential economic viability of the Mineral Resource. Both open pit and underground scenarios should be evaluated within the same model for the Grey Fox deposit.

Phase 2b) Property-scale Drilling Program

InnovExplo recommends further exploration drilling on the Grey Fox property. Such targets will need to be determined after completing Phase 1. A provision has been included in this budget, but will need to be adjusted based on the results of Phase 1.

Table 26.1 – Budget estimate for the Phase I and II work programs

	Phase 1 - Work Program Drilling program on the Grey Fox deposit and property-scale compilation	Budget	
		Description	Cost
1a	In-fill drilling on the Grey Fox deposit	20,000 m	$ 2,000,000
1b	Drilling along the extensions of the mineralized zones	20,000 m	$ 2,000,000
1c	Compilation, surface mapping and structural study		$ 250,000
1d	Metallurgical testing and rock mechanics studies		$ 650,000
	Contingencies (~ 15%)		$ 735,000
	Phase 1 subtotal		**C$ 5,635,000**

	Phase 2 - Work Program Prefeasibility and property-scale drilling program	Budget	
		Description	Cost
2a	Mineral Resource Estimate update and prefeasibility study		$ 300,000
2b	Property-scale exploration drilling	10,000 m	$ 1,100,000
	Contingencies (~ 15%)		$ 210,000
	Phase 2 subtotal		**C$ 1,610,000**

TOTAL (Phase 1 and Phase 2) **C$ 7,245,000**

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