Report to:

BRIGUS GOLD CORP.

Technical Report on the 147 and Contact Zones of the Black Fox Complex, Ontario, Canada

Document No. 1188930600-REP-R0002-01

TETRA TECH

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TECHNICAL REPORT ON THE 147 AND CONTACT ZONES OF THE BLACK FOX COMPLEX, ONTARIO, CANADA

EFFECTIVE DATE: OCTOBER 26, 2012

Prepared by Paul J. Daigle, P.Geo.

TETRA TECH

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Prepared by	*"Original document signed by Paul Daigle, P.Geo.* Paul J. Daigle, P.Geo.	Date	*October 26, 2012*
Reviewed by	*"Original document signed by Jeff Wilson, Ph.D., P.Geo."* Jeff Wilson, Ph.D., P.Geo.	Date	*October 26, 2012*
Reviewed by	*"Original document signed by Michael F. O'Brien, M.Sc., Pr.Sci.Nat., FGSSA, FAusIMM, FSAIMM"* Michael F. O.Brien, M.Sc., Pr.Sci.Nat., FGSSA, FAusIMM, FSAIMM	Date	*October 26, 2012*
Authorized by	*"Original document signed by Paul Daigle, P.Geo."* Paul J. Daigle, P.Geo.	Date	*October 26, 2012*

PD/vc

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REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY AND DATE	REVIEWED BY AND DATE	APPROVED BY AND DATE	DESCRIPTION OF REVISION
00	2012/10/09	Paul Daigle	Jeff Wilson Michael F. O’Brien	Paul Daigle	Draft to Client
01	2012/10/30	Paul Daigle	Jeff Wilson Michael F. O’Brien	Paul Daigle	Final Report

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

GLOSSARY

Units of Measure

above mean sea level	amsl
acre	ac
ampere	A
annum (year)	a
billion	B
billion tonnes	Bt
billion years ago	Ga
British thermal unit	BTU
centimetre	cm
cubic centimetre	cm^3
cubic feet per minute	cfm
cubic feet per second	ft^3/s
cubic foot	ft^3
cubic inch	in^3
cubic metre	m^3
cubic yard	yd^3
Coefficients of Variation	CVs
day	d
days per week	d/wk
days per year (annum)	d/a
dead weight tonnes	DWT
decibel adjusted	dBa
decibel	dB
degree	°
degrees Celsius	°C
diameter	ø
dollar (American)	US$
dollar (Canadian)	Cdn$
dry metric ton	dmt
foot	ft
gallon	gal
gallons per minute (US)	gpm
Gigajoule	GJ
gigapascal	GPa
gigawatt	GW
gram	g
grams per litre	g/L
grams per tonne	g/t
greater than	>
hectare (10,000 m^2)	ha
hertz	Hz

horsepower	hp
hour	h
hours per day	h/d
hours per week	h/wk
hours per year	h/a
inch	in
kilo (thousand)	k
kilogram	kg
kilograms per cubic metre	kg/m^3
kilograms per hour	kg/h
kilograms per square metre	kg/m^2
kilometre	km
kilometres per hour	km/h
kilopascal	kPa
kilotonne	kt
kilovolt	kV
kilovolt-ampere	kVA
kilovolts	kV
kilowatt	kW
kilowatt hour	kWh
kilowatt hours per tonne	kWh/t
kilowatt hours per year	kWh/a
less than	<
litre	L
litres per minute	L/m
megabytes per second	Mb/s
megapascal	MPa
megavolt-ampere	MVA
megawatt	MW
metre	m
metres above sea level	masl
metres Baltic sea level	mbsl
metres per minute	m/min
metres per second	m/s
microns	µm
milligram	mg
milligrams per litre	mg/L
millilitre	mL
millimetre	mm
million	M
million bank cubic metres	Mbm^3
million bank cubic metres per annum	Mbm^3/a
million tonnes	Mt
minute (plane angle)	'
minute (time)	min
month	mo
ounce	oz

pascal	Pa
centipoise	mPa·s
parts per million	ppm
parts per billion	ppb
percent	%
pound(s)	lb
pounds per square inch	psi
revolutions per minute	rpm
second (plane angle)	"
second (time)	s
short ton (2,000 lb)	st
short tons per day	st/d
short tons per year	st/y
specific gravity	SG
square centimetre	cm^2
square foot	ft^2
square inch	in^2
square kilometre	km^2
square metre	m^2
three-dimensional	3D
tonne (1,000 kg) (metric ton)	t
tonnes per day	t/d
tonnes per hour	t/h
tonnes per year	t/a
tonnes seconds per hour metre cubed	ts/hm^3
volt	V
week	wk
weight/weight	w/w
wet metric ton	wmt

Abbreviations and Acronyms

all-terrain vehicle	ATV
antimony	Sb
Black Fox Complex	the Project or the Property
Brigus Gold Corp.	Brigus
Canadian Institute of Mining	CIM
copper	Cu
Destor Porcupine Deformation Zone	DPDZ
Gemcom GEMS™ v. 6.4.1	GEMS™
Gibson-Kelore Fault Zone	GKFZ
global positioning system	GPS
gold	Au
Hislop Fault	HF
induced polarization	IP
International Organization for Standardization	ISO

inverse distance squared	ID^2
iron	Fe
lead	Pb
magnesium	Mg
Ministry of Northern Development and Mines	MNDM
National Instrument 43-101	NI 43-101
National Topographic System	NTS
nearest neighbour	NN
net smelter return	NSR
New York Stock Exchange American Stock Exchange	NYSE Amex
North American Datum	NAD
Ontario Geological Survey	OSG
ordinary kriging	OK
osmium	Os
preliminary economic assessment	PEA
qualified person	QP
quality assurance/quality control	QA/QC
rhodium	Rh
rock quality designation	RQD
Ross Mine Fault	RMF
Scott Hogg & Associates Ltd.	Scott Hogg
selective mining unit	SMU
SGS Mineral Services	SGS
silver	Ag
Standard Reference Material	SRM
Toronto Stock Exchange	TSX
Universal Transverse Mercator	UTM
zinc	Zn
carbon-in-pulp	CIP
St. Andrew Goldfields Limited	St. Andrew
Stroud Resources Limited	Stroud

1.0 SUMMARY

Tetra Tech was retained by Brigus Gold Corp. (Brigus) to provide an updated mineral resource estimate in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Best Practices for the Contact and 147 Zones of the Black Fox Complex (the Project or the Property), and disclose the estimate in a technical report, prepared in accordance with National Instrument 43-101 (NI 43-101) and Form 43-101F1.

The following report is an updated technical report and resource estimate on the Contact and 147 Zones of the Black Fox Complex of northeastern Ontario, Canada, situated approximately 75 km east of Timmins, and 12 km east-southeast of Matheson.

1.1 PROPERTY DESCRIPTION

The Property is consists of 40 land parcels and 22 patented mining leases and covers an area of 1,897 ha.

The Contact and 147 Zones are situated within two land parcels in the southeastern part of the Property, Parcels 3852 and 16262, and covers an area of 61.14 ha. Brigus holds both the mineral rights and the surface rights to these parcels. The Project is situated at roughly 48° 30’ 20” north latitude, 80° 18’ 20” west longitude.

1.2 GEOLOGY AND MINERALIZATION

The Project is located within a district-wide, north-northwest trending, down-dropped block located in the north end of the Timiskaming Graben Structure. The down-drop accommodated a thicker accumulation of Proterozoic and Paleozoic sediments, which significantly reduced the Archean strata exposure to erosion. This has resulted in the preservation of an unusually greater vertical extent of an Archean lode gold depositional system than normally encountered in the majority of Shield areas worldwide, and there are very few examples of these high-level gold deposits. The Contact and 147 Zones show characteristics of high-level, brittle-style mineralization, and show similar geological features noted at the past producing Ross Gold Mine nearby.

1.2.1 CONTACT ZONE MINERALIZATION

The gold mineralization of the Contact Zone occurs dominantly in the brecciated zones above the sediment contacts. The higher grade appears as “free gold” in the silica- and albite-altered sections with late-stage reddish-white calcite/ankerite veinlets containing 0.5 mm pyrite stringers (Di Prisco 1996).

Metallic mineralization of the Contact Zone is mainly pyrite. Di Prisco (1996) analyzed seven samples in thin-section and noted that minor amounts of arsenopyrite, chalcopyrite and pyrrhotite were intergrown with the pyrite. He also noted that the pyrite formed as disseminated grains of subhedral to euhedral crystals along hairline fractures.

The brecciated quartz cement and veinlets were noted to be “peppered” with fine grain flakes and “rosettes” of molybdenite. One other note was that molybdenite was normally associated with the pyrite and observed to be locally overgrown by pyrite. Di Prisco (1996) concluded that there was a direct correlation between the gold precipitation and molybdenite occurrence, with or without pyrite.

1.2.2 147 Zone Mineralization

The gold mineralization known as the 147 Zone is located principally in areas of intense fracturing, micro-brecciation, and brecciation, and where the fractures and breccia interstices are filled and cemented by bluish-gray, cherty, zoned, pyrite quartz stringers veinlets.

Veinlet frequency and particularly orientation is difficult to accurately determine in the drill core, however a limited number of oriented drillholes suggest networks or arrays of sub-parallel veinlets in the core area of the 147 Zone with a frequency of approximately two to four of the wider veinlets per true width of one metre of core. The intervening rocks are intensely brecciated, and generally mineralized with finely disseminated and fracture pyrite within an assortment of variably altered fragments.

1.3 Status of Exploration

In 2010, Brigus completed an airborne magnetic gradient geophysical survey and a Titan 24-Deep induced polarization (IP) geophysical survey on the Property.

In 2012, Brigus completed a more detailed airborne three-axis magnetic geophysical survey over the Property.

The majority of the exploration work on the Project area was diamond core drilling and is summarized in Table 1.1.

Table 1.1 Summary of Brigus Drilling by Year and Target

Year	Number of Drillholes	Length (m)	Target
2008	14	3,063.00	Contact Zone
	2	652.00	Hislop North
Subtotal	**16**	**3,715.00**	**-**
2009	53	9,961.00	Contact Zone
Subtotal	**53**	**9,961.00**	**-**
2010	34	12,697.78	Contact Zone
	7	3,139.00	147 Zone
	14	5,123.35	Gibson
	3	1,503.00	Grey Fox South
	11	4,336.36	Hislop North
Subtotal	**69**	**26,799.49**	**-**
2011	145	58,236.48	Contact Zone
	77	27,230.40	147 Zone
	7	2,733.00	Grey Fox South
	35	11,062.55	Gibson
	10	2,681.00	Whiskey Jack
Subtotal	**274**	**101,943.43**	**-**
2012	52	14,969.20	Contact Zone
	132	30,111.00	147 Zone
	27	10,527.00	Grey Fox South
Subtotal	**211**	**55,607.20**	**-**
Total	**623**	**198,026.12**	**-**

Note: Gibson includes Gibson Shear and Gibson South; Contact Zone includes Contact Zone Footwall; Statistics current as of 14 August, 2012

1.4 RESOURCE ESTIMATE

Tetra Tech completed the mineral resource estimation using Gemcom GEMS™ v. 6.4.1 (GEMS™) desktop software for the Project. Paul Daigle, P.Geo. of Tetra Tech is the qualified person (QP) responsible for this updated resource estimate of the 147 and Contact Zone deposits.

The effective date of this resource estimate is August 14, 2012.

The dataset imported into GEMS™ contained information from 687 drillholes totalling 218,274.6 m. The subset of data used for the resource estimates consisted of 488 completed drillholes totalling 151,704.1 m of drilling. A total of 47,107 assay records and 74,008 composited records were used for the resource estimate. The maximum drillhole length within the Contact and 147 Zones is 891.0 m and the average length is 317.7 m.

The Contact and 147 Zones mineralization of the Black Fox Complex is classified as having both Indicated and Inferred Resources. The two zones were estimated using both Inverse Distance Squared (ID^2) and Ordinary Kriging (OK) methods. No recoveries were applied.

The mineral resource is 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. These cut-offs have been developed based on current costs experienced at the Black Fox Mine. The total Indicated Resource is 7,105,378 t at a grade of 2.11 g/t gold. The total Inferred Resource is 1,692,267 t at a grade of 1.67 g/t gold. The classified mineral resources are shown in Table 1.2.

Table 1.2 Resource Estimate, Contact and 147 Zones, Black Fox Complex

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**

1.5 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech recommends that Brigus continue with diamond drilling of the Contact and 147 Zones and proceed with an advanced exploration program.

Brigus is currently undertaking metallurgical test work on composite samples from the Contact and 147 Zones. Tetra Tech believes this test work is appropriate and warranted. Results of this test work are pending.

Brigus also is completing its drill program on the Contact and 147 Zones. As of the effective date of the resource estimate there were 50 drillholes with assays pending. Upon completion of the drill program and drill core sampling analysis, Tetra Tech recommends a further update of the resource estimate.

The estimate cost of the metallurgical test work is approximately $230,000.

2.0 INTRODUCTION

Brigus is a Canadian-based and Canadian-registered resource company, based in Halifax, Nova Scotia, and is publicly listed under the symbol BRD on both the Toronto Stock Exchange (TSX) and the New York Stock Exchange American Stock Exchange (NYSE Amex). Brigus is a mid-tier gold producer with projects in Ontario, Saskatchewan, Mexico, and the Dominican Republic. Brigus was formed in June 2010 from the merger of Apollo Gold Corp. and Linear Gold Corp.

The following report is an updated technical report and resource estimate on the Contact and 147 Zones of the Black Fox Complex in northeastern Ontario, Canada, situated approximately 75 km east of Timmins, and 12 km east-southeast of Matheson.

2.1 TERMS OF REFERENCE AND PURPOSE OF REPORT

Tetra Tech was retained by Brigus to produce an updated resource estimate on the Contact and 147 Zones of the Project in accordance with CIM Best Practices, and to disclose it in a technical report prepared in accordance with NI 43-101 and Form 43-101F1.

The objective of this study is to:

- produce an updated resource estimate and NI 43-101 technical report on the Project, including a summary of land tenures, exploration history, geophysical surveys, and drilling activities
- provide recommendations and a budget for additional work on the Project

The QP responsible for this report is Paul Daigle, P.Geo, who is a Senior Geologist with Tetra Tech. Mr. Daigle conducted a site visit to the Property between July 18 and July 20, 2012, for two days.

2.1.1 UNITS OF MEASUREMENT

All units of measurement used in this technical report and resource estimate are in metric, unless otherwise stated.

2.2 INFORMATION AND DATA SOURCES

All information reviewed for this study were provided by Brigus in the form of reports in .pdf format, .jpg files, Microsoft Excel® spreadsheets and a GEMS™ database. The exploration work completed by Brigus includes several years of historical data, geophysical surveying, and drilling.

The main source of information in preparing this report is:

- Buss, L. 2010. 43-101 Mineral Resource Technical Report on the Grey Fox – Pike River Property of the Black Fox Complex Hislop Township Matheson, Ontario, Canada, for Brigus Gold Corporation. pp. 64.

A complete list of references is provided in Section 19.0.

3.0 RELIANCE ON OTHER EXPERTS

In preparation of this report, Tetra Tech has relied upon Brigus and others for information and for matters relating to property ownership, property titles, and environmental issues. The majority of the information has been sourced from Brigus internal reports, company press releases, and Buss (2010).

Tetra Tech is relying on reports, opinions, and statements from experts who are not QPs for information regarding legal, environmental, political, or other issues and factors relevant to the technical report. Neither Tetra Tech nor the authors are qualified to provide extensive comment on legal issues, including tenure status associated with the Project, and ownership is provided for general purposes only. Brigus has provided a description of the Property, and ownership has been sourced from the Ontario Ministry of Northern Development and Mines (MNDM) website (http://www.mci.mndm.gov.on.ca/Claims/clm_mmen.cfm). This information is disclosed in Section 4.0.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

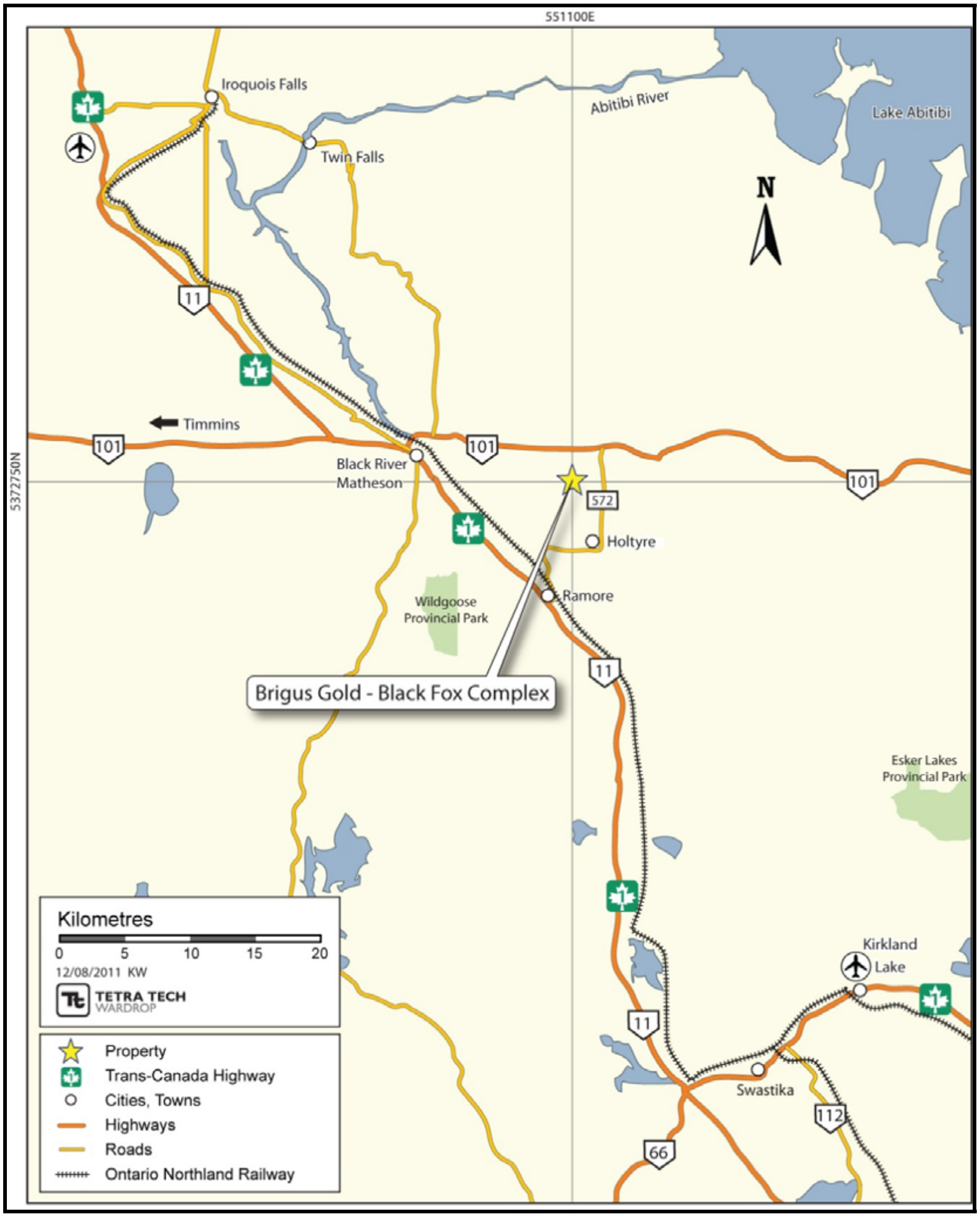
The Project is located:

- at Universal Transverse Mercator (UTM), North American Datum (NAD) 83 (Zone 17 N) location is 551100E and 5372750N at an elevation of approximately 291 masl
- at approximately 48° 30’ 20” north latitude, 80° 18’ 20” west longitude on National Topographic System (NTS) map 42–A-8, G plan G-3660
- at approximately 75 km east of Timmins, in northeast Ontario
- at approximately 45 km north-northwest of Kirkland Lake
- at approximately 12 km east-southeast of Matheson
- at approximately 3.5 km southeast of Brigus’ Black Fox Gold Mine
- in the southeastern portion of the Black Fox Complex.
- at approximately 2 km northwest of the St. Andrews Goldfields’ Hislop Gold Mine
- at approximately 3.5 km northwest of the Ross Gold Mine (closed 1988)
- at approximately 7.4 km northeast of the Trans-Canada Highway
- at approximately 5 km northeast of the Ontario Northland Railroad
- at approximately 3.5 km south of Highway 101
- at approximately 0.4 km east of Tamarack Road (also known as Hislop 2 Road)
- at approximately 0.8 km south of the Pike River
- in the Township of Hislop
- in the District of Cochrane
- in the Larder Lake Mining Division.

The Project is situated as shown in Figure 4.1 and Figure 4.2.

Figure 4.1 General Property Location Map

Figure 4.2 Property Location Map of the Black Fox Complex



4.2 PROPERTY DESCRIPTION

The Property is consists of 40 land parcels and 22 patented mining leases as summarized in Table 4.1 and illustrated in Figure 4.3 and covers a total area of 1,897 ha.

The Contact and 147 Zones are situated within two land parcels in the southeastern part of the Property, Parcels 3852 and 16262 (Figure 4.3), and cover an area of 61.14 ha. Brigus holds both the mineral rights and the surface rights to these parcels.

The mineral rights cover all of the known mineralized area within the Property described within this report, and contain sufficient land for exploration and development purposes.

Table 4.1 Summary of the Black Fox Complex Mineral Claims (as of September 18, 2012)

Township	Pin No.	Concession No.	Lot No.	Parcel	Hectares	Acreage	Status
Surface and Mineral Rights Owned by Brigus							
Beatty	65366-0127	1	6	14572	61.43	151.67	Surface and Mineral owned by Brigus
Beatty	65366-0143	1	8	4150	63.18	156.00	Surface and Mineral owned by Brigus
Hislop	65380-0531	6	4	10706	68.04	168.00	Surface and Mineral owned by Brigus
Hislop	65380-0532	6	6	6413	32.60	80.50	Surface and Mineral owned by Brigus
Hislop	65380-0552	6	8	7745	66.83	165.00	Surface and Mineral owned by Brigus
Hislop	65380-0534	6	7	388	59.33	146.50	Surface and Mineral owned by Brigus
Hislop	65380-0555	6	7	15466	39.95	98.65	Surface and Mineral owned by Brigus
Hislop	65380-0556	6	6	23876	39.89	98.50	Surface and Mineral owned by Brigus
Hislop	65380-0557	6	6	2582	62.95	155.44	Surface and Mineral owned by Brigus
Hislop	65380-0558	6	5	11511	32.62	80.55	Surface and Mineral owned by Brigus
Hislop	65380-0559	6	4	3393	62.87	155.24	Surface and Mineral owned by Brigus
Hislop	65380-0553	6	7	4707	18.63	46.00	Surface and Mineral owned by Brigus
Beatty	65366-0126	1	5	24577	58.75	145.05	Surface and Mineral owned by Brigus
Beatty	65366-0186	1	6	13005	1.94	4.78	Surface and Mineral owned by Brigus
Hislop	65380-0580	6	3	3310	64.60	159.50	Surface and Mineral owned by Brigus
Hislop	65380-0526	5	2	2563	65.81	162.50	Surface and Mineral owned by Brigus
Hislop	65380-0566	4	4	23777	65.00	160.50	Surface and Mineral owned by Brigus
Total Brigus Owned Surface and Mineral Rights					**864.43**	**2134.38**	-
Surface Rights Only Owned by Brigus							
Beatty	65366-0126	1	5	15639	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15653	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15636	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15651	15.92	39.3	Surface Rights owned by Brigus

table continues…

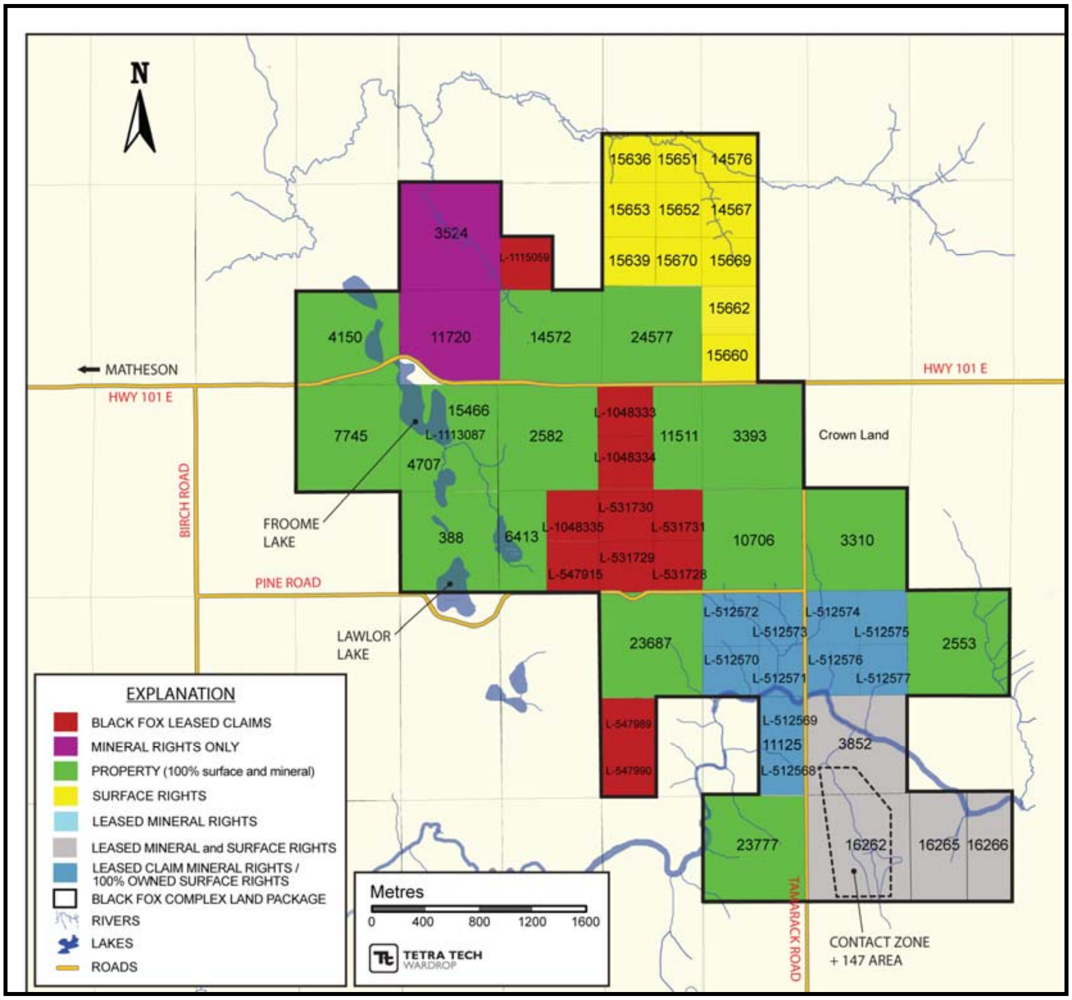
Township	Pin No.	Concession No.	Lot No.	Parcel	Hectares	Acreage	Status
Beatty	65366-0126	1	5	15652	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15670	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	14576	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	14567	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15669	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15662	15.92	39.3	Surface Rights owned by Brigus
Beatty	65366-0126	1	5	15660	15.92	39.3	Surface Rights owned by Brigus
Hislop	65380-0521	5	4	24023	3.15	7.78	Surface Rights owned by Brigus
Hislop	65380-0525	5	3	10255	32.10	79.25	Surface Rights owned by Brigus
Hislop	65380-0499	5	4	11125	32.10	79.25	Surface Rights owned by Brigus
Hislop	65380-0520	5	4	23687	118.25	292.21	Surface Rights owned by Brigus
Total Surface Rights Only Owned By Brigus					**242.43**	**598.58**	-
Mineral Rights Only Owned by Brigus							
Beatty	65366-0129	1	7	23874	123.27	304.37	Mineral Rights owned by Brigus
Total Mineral Rights Only Owned By Brigus					**123.27**	**304.37**	-
Leased Mineral and Surface Rights by Brigus							
Hislop	65380-0498	5	3	3852	58.08	143.41	Leased Mineral and Surface Rights
Hislop	65380-0489	4	3	16262	64.19	158.50	Leased Mineral and Surface Rights
Hislop	65380-0490	4	2	16265	32.50	80.25	Leased Mineral and Surface Rights
Hislop	65380-0491	4	2	16266	32.50	80.25	Leased Mineral and Surface Rights
Total Leased Mineral and Surface Rights By Brigus					**187.28**	**462.41**	-
Leased Mining Claims by Brigus							
Beatty	65366-0199	1	6	L-1115059	16.22	40.10	Leased Mineral Rights/Surface Rights Claims
Hislop	65380-0636	5	4	L-512572	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	4	L-512573	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	4	L-512570	16.20	40.00	Leased Mineral Rights Claim

table continues…

Township	Pin No.	Concession No.	Lot No.	Parcel	Hectares	Acreage	Status
Hislop	65380-0636	5	4	L-512571	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	3	L-512574	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	3	L-512575	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	3	L-512576	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	3	L-512577	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	4	L-512568	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0636	5	4	L-512569	16.20	40.00	Leased Mineral Rights Claim
Hislop	65380-0637	5	5	L-547989	16.88	41.69	Leased Mineral Rights Claim
Hislop	65380-0637	5	5	L-547990	16.88	41.69	Leased Mineral Rights Claim
Hislop	65380-0638	6	6	L-547915	16.88	41.69	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0638	6	5	L-531728	16.88	41.69	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0638	6	5	L-531729	16.88	41.69	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0638	6	5	L-531730	16.88	41.69	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0638	6	5	L-531731	16.88	41.69	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0670	6	5	L-1048334	16.63	41.07	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0670	6	6	L-1048335	16.63	41.07	Leased Mineral Rights/Surface Rights Claim
Hislop	65380-0671	6	7	L-1113087	9.85	24.33	Leased Mineral Rights Claim
Hislop	65380-0676	6	5	L-1048333	16.89	41.71	Leased Mineral Rights/Surface Rights Claim
Total Mining Claims Leased By Brigus					**356.42**	**880.11**	**-**

Note: Location of Contact and 147 Zones are highlighted in grey

Figure 4.3 Black Fox Complex Mineral Rights (as of September 18, 2012)



All leases and claims were summarized in a report by Mr. John Huot, Barrister & Solicitor of Timmins, Ontario (Huot 2007). The summary includes the legal description, royalty holder and the financial obligations of Brigus in regards to the Property. A property index map was also created showing the lots, claim numbers and plan numbers of the area recorded with the Ontario Ministry of Consumer and Business Services in the District of Cochrane – office 06. Within the Project, there are seven privately owned surveyed properties identified as plans 6R-4149, GR-2510 and GR-6577. A compensated working relationship exists between Brigus and the 6R-4149 property owners. The remainder of the Property is surveyed in terms of lots and concessions, as originally laid out by the Government of Ontario in the 1900s.

4.3 OPTION AGREEMENTS

Battle Mountain Gold Company obtained the lease in 1996 and worked the Property until 1999 in conjunction with Cameco Gold. The Property was then transferred back to the Schumacher Estate until 2007. Brigus acquired the Property in 2007 with a net smelter return (NSR) and yearly payments option for the next 20 years (Buss 2010).

4.4 ENVIRONMENTAL AND SURFACE RIGHTS

The decline entrance on the southeast corner of claim L512568 accessing the old Gibson West deposit has been backfilled with muck and site levelled. The main inclined ventilation raise to surface in the northwest corner of Parcel 23777 for the Gibson West underground workings has been sealed with a cement cap. Both sites were previously inspected and approved by the MNDM (Garber 1997; Buss 2010).

Tetra Tech is not aware of any environmental or social issues regarding the Property. All exploration activities conducted on the Property are in compliance with relevant environmental permitting requirements. To Tetra Tech's knowledge, Brigus has obtained the appropriate permits to use the surface rights.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The Contact and 147 Zones are situated approximately 12 km east of Matheson, and roughly 16 km by road from Black River-Matheson.

From Black River-Matheson the Project site is accessed via:

- Highway 101 north and then east for roughly 12.3 km to join
- Tamarack Road (Hislop 2 Road), a maintained gravel road, south for approximately 2.3 km to join
- an unmarked gravel access road east for approximately 300 m to the Contact Zone and 147 Zone project site.

Access over the Project site is achieved by various drill roads and all-terrain vehicle (ATV) trails.

5.2 CLIMATE AND PHYSIOGRAPHY

The minimum and maximum mean annual temperatures in the region are -4.8°C and 7°C, respectively. 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). Exploration activities may take place throughout the year.

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. There is a thick clay rich overburden material throughout the Property that is typically 20 to 30 m thick (Buss 2010).

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

The Property is located in a well-established mining camp. Most supplies and services are sourced from Timmins, with some basic supplies available in Matheson, and most can be delivered within 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.

The Brigus Black Fox mining facility, situated 3 km north of the Contact and 147 and Zones is also within the Black Fox Complex. It contains the core logging and cutting amenities, offices, power substations and communication networks. The Brigus Black Fox ore is processed at their 100% owned mill in Stock Township located 30 km west of the mine site along Highway 101 towards Timmins (Buss 2010).

Electric power is available with power lines running through the Property along Tamarack Road (Buss 2010). The Twin Falls hydroelectric generating station (22 MW), on the Abitibi River, is situated roughly 6.5 km from Iroquois Falls and 34 km northwest of the Property (Figure 4.2). Electrical services were historically available on the Property during production of the Gibson West Mine during the late 1980s.

The nearest airstrips are in Iroquois Falls and Kirkland Lake respectively. However, most regular scheduled flights fly into the airport in Timmins, approximately 75 km west. The nearest railhead is located in Black River-Matheson, 12 km to the east-northeast.

The only infrastructure in the immediate area of the Contact and 147 and Zones are a few buildings that were used in the past for drill core and sample reject storage.

A sealed underground ramp, with development and a capped ventilation raise are also located on the southwestern edge of the Property. The decline entrance on the southeast corner of claim L512568 accessed the old Gibson West deposit and is now backfilled with muck and levelled. The main inclined ventilation raise to surface in the northwest corner of Parcel # 23777 for the Gibson West underground workings has been sealed with a cement cap. Both sites were previously inspected and approved by the MNDM (Garber 1997; Buss 2010).

6.0 HISTORY

6.1 OWNERSHIP

The Project was first staked by Frederick Schumacher in the early 1900s. It was eventually patented and worked as farm land until 1992. No other ownership during this time is known and the majority of exploration efforts in the area were focused on adjacent properties (Buss 2010). In the early 1990s, Noranda Exploration Company acquired the Property and subsequently, in 1995, optioned it to Hemlo Gold Mines Inc. (Kuehnbaum 2010).

Battle Mountain Gold Company acquired the lease in 1996 and worked on the Property until 1999, in conjunction with Cameco Gold. The Project claims were then transferred back to the Schumacher Estate until 2007, when it was acquired by Apollo Gold Corp. with an NSR and yearly payment options for the following 20 years (Buss 2010).

In June 2010, Apollo Gold Corp. merged with Linear Metals Corp. to form Brigus.

6.2 SUMMARY OF HISTORIC EXPLORATION ON THE BLACK FOX COMPLEX

The exploration history of the region dates back to the early 1900s, with the majority of the known work commencing in earnest in 1989. Table 6.1 summarizes the history of the Property.

Table 6.1 discloses historical estimates using their original terminology. In each case, the source and date of the historical estimate is identified. These historical resources are considered relevant, but no comment is offered on their reliability. A QP has not completed sufficient work to classify the historical estimates as current mineral resources and the issuer is not treating the historical estimates as current mineral resources. The historical estimates should not be relied upon

No known development and/or production have been conducted on the Contact or 147 Zones.

Table 6.1 Summary of Black Fox Complex History

Year	Company	Activity	Comments	Historical Resource Estimate*	Source of Information
Early 1900s	Frederick Schumacher	• staking	• property first staked by Frederick Schumacher	-	Buss 2010
1936	E.S. Moore, Ontario Department of Mines	• mapping	• first time Hislop Township area was mapped	-	Buss 2010
1937-1989	Schumacher Estate	• n/a	• property held privately by Schumacher Estate, no known exploration activities • companies in area were generally focused on Gibson zone, Hislop gold zone, Exall-Glimmer Mine and the Ross Mine	-	Buss 2010
1989	Goldpost Resources Inc.	• drilling, resource estimate	• unknown amount of holes drilled into contact/breccia zone with unspecified results, estimated tonnage eventually calculated	• first historical resource estimate on the Grey Fox Contact Zone: 109,000 st at 0.18 oz/st	Atherton 1989
1993	Noranda Exploration Company	• drilling	• north-south grid established, 14 diamond drillholes spaced 100 m apart, 4,870 m	-	Garber and Dahn 1997
1994	Noranda Exploration Company	• magnetometer and IP resistivity survey	• re-established north-south grid	-	Garber and Dahn 1997
1994	Noranda Exploration Company	• drilling	• three drillholes, 200 m spacing, north end of Contact Zone, 919 m, whole rock geochemistry	-	Garber and Dahn 1997

table continues…

Year	Company	Activity	Comments	Historical Resource Estimate*	Source of Information
1995	Battle Mountain Gold Company	• drilling	• east-west grid established, seven drillholes on south end of Contact Zone, 2,323 m, calculated estimated resource from previous drilling results	-	Buss 2010
1996	Battle Mountain Gold Company and Cameco Gold	• drilling	• Sixteen drillholes on Contact Zone	-	Buss 2010
1997	Battle Mountain Gold Company and Cameco Gold	• drilling, resource estimate	• five drillholes, 2,331 m, south end of Contact Zone, updated resource estimate	• Three separate estimations: • initial estimate via a "Boreserve" computerized program produced a resource of 2.18 Mt at 4.8 g/t gold, including 1.27 Mt at 7.0 g/t gold (Garber 1997) • the second estimate, calculated from Gemcom software via polygonal method, 1,163,897 t at 6.4 g/t gold (Garber 1997). • another estimate was noted in a 1998 Exall memorandum which stated there was an Indicated Resource of 1,541,000 t at 7.0 g/t gold, another 347,000 t at an unknown grade was estimated as an Inferred Resource (Trimble 1997).	Buss 2010
1997	Battle Mountain Gold Company and Cameco Gold	• mineralogical examination	• seven drill core samples from 1996 program examined	-	Garber and Dahn 1997
2002	Unknown	• resource estimate	• written in a Newmont Prospectus	• 2.2 Mt at 4.8 g/t gold which included 1.16 Mt at 6.4 g/t gold	Buss 2010

Note: *In 2010, Linear Metals Corp. purchased Apollo Gold Corp. and formed Brigus.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

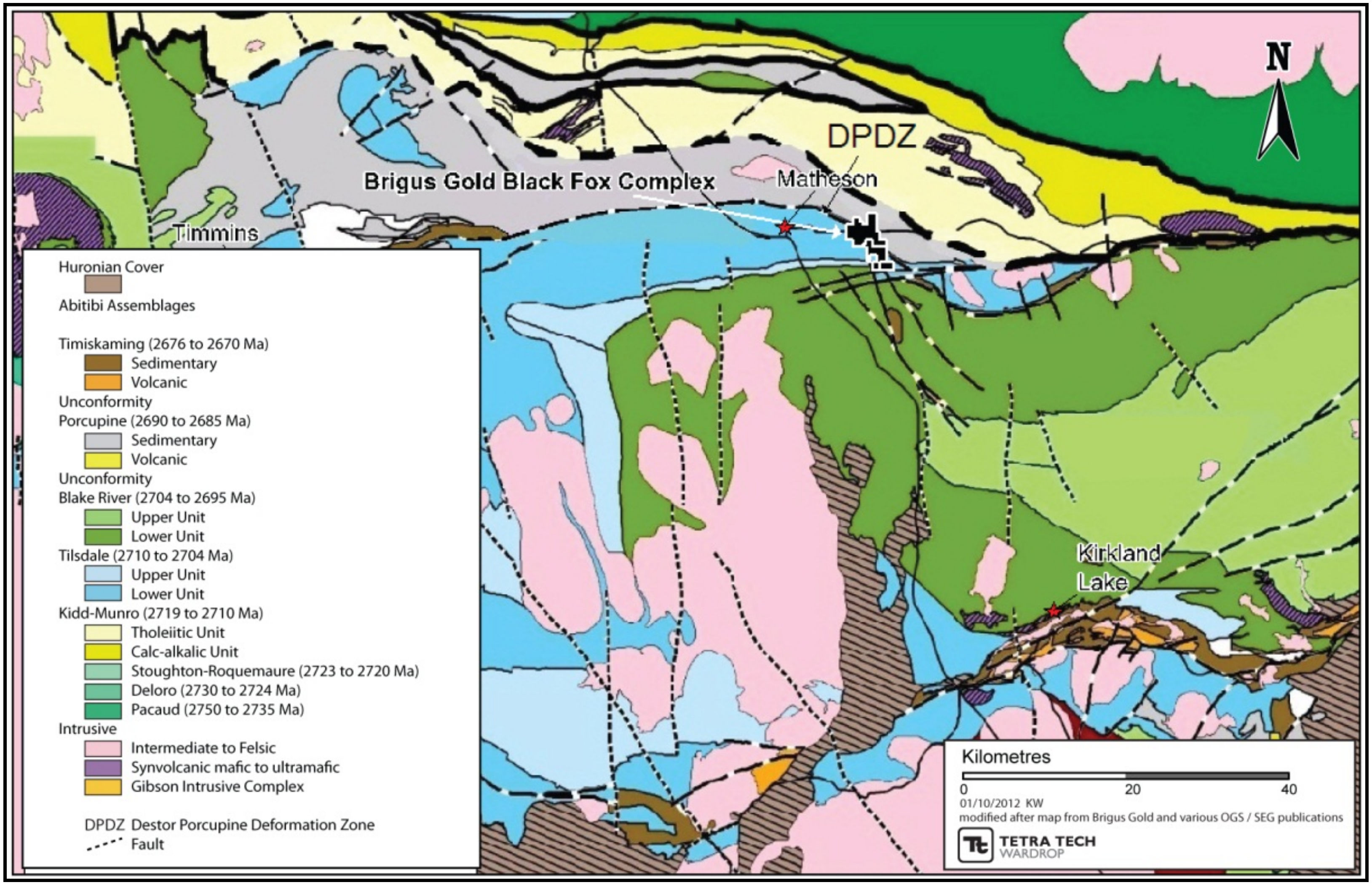
The 147 Zone occurs in altered variolitic mafic volcanic rocks of the Tisdale assemblage and the Contact Zone occurs at the contact between mafic volcanics (Tisdale Assemblage) and sediments (Timiskaming Assemblage) in brittle-style structures associated with the Matheson portion of the Destor Porcupine Deformation Zone (DPDZ).

During the past decade, the Abitibi Subprovince has been the focus of an extensive geoscience program, and the subsection on regional geology that follows draws extensively from the numerous publications that resulted from the Discover Abitibi Initiative.

The Abitibi Subprovince consists of the following seven major litho-tectonic volcanic assemblages (Figure 7.1):

- pre-2750 Ma
- 2750 to 2735 Ma (Pacaud)
- 2734 to 2724 Ma (Deloro)
- 2723 to 2720 Ma (Stoughton-Roquemaure)
- 2719 to 2711 Ma (Kidd-Munro)
- 2710 to 2704 Ma (Tisdale)
- 2704 to 2695 Ma (Blake River).

Figure 7.1 Regional Geology Map of the Abitibi Subprovince



The volcanic assemblages are unconformably overlain by two dominantly sedimentary assemblages representing detritus derived from the volcanics in the form of turbidites, conglomerates and sandstones that overall, are generally more felsic than the volcanic assemblages. These basin forming assemblages are:

- 2690 to 2685 Ma (Porcupine)
- 2676 to 2670 Ma (Timiskaming).

Plutonic rocks form three distinct groups:

- 2745 to 2696 Ma (Synvolcanic) that are coeval with the main volcanic sequences and predate significant compressional strain
- 2695 to 2672 Ma (Syntectonic) that are coeval with the Porcupine or Timiskaming Assemblage and some of the deformational episodes in the region
- 2670 to 2660 Ma (Late Tectonic) that are typically massive batholiths.

An early episode of regional D1 deformation occurred during the early phases of syntectonic plutonism, and included the uplift and excision of upper Tisdale stratigraphy with formation of an angular unconformity pre-dating deposition of Porcupine assemblage at 2690 Ma.

The D2 event postdates the Porcupine Assemblage as it is deformed by it, but D2 structures are unconformably truncated by, and thus predate, the Timiskaming Assemblage. D2 resulted in localized folding and thrusting and early south side up, dip-slip, ductile deformation on regional deformation zones. The DPDZ is characterized by a fault trace over 400 km long with generally steep structures.

The Timiskaming Assemblage consists of conglomerate and sandstone, locally with volcanic rocks. It was deposited with angular unconformity on the older volcanic and sedimentary assemblages, typically in long linear basins with unconformable contacts along the north margin and in faulted contact with the DPDZ. Facies studies indicate the basal portions were deposited subaerially and include alluvial–fluvial environments, whereas the upper portions are more typically deeper water sediments that include turbidites and iron-poor iron formation.

The supracrustal rocks are broadly coeval with small syntectonic alkalic intrusions, ranging from 2680 to 2672 Ma, also found in close proximity to the major deformation zones. The period during which the Timiskaming Assemblage formed is thought to represent extensional to transpressional tectonism associated with continental island arc magmatism and sedimentation in which the supracrustal units were unconformably deposited in subaerial alluvial fan and fluvial environments closely associated to regional scale faults.

Broadly synchronous with the syntectonic opening of Timiskaming basins in dilatational jogs, was D3 folding, only the late stages of which affected the assemblage. Left-lateral strike-slip movement along the DPDZ accompanied D3 and is interpreted to be associated with up to 13 km of sinistral offset of markers across the DPDZ in the Timmins area.

The D4 folding created synclines within the Timiskaming Assemblage rocks and right-lateral strike slip displacement along the DPDZ. A late tectonic magmatic event consists of granitic plutons, ranging in age from 2670 to 2660 Ma, postdates the Timiskaming Assemblage. These plutons occur both within the batholiths and the supracrustal rocks. They appear to be temporally associated with D4 folding.

The D4 to D5 events represents the final stage in transpressional deformation along the DPDZ in Timmins. These deformation events are associated with the generation of crenulation cleavages, minor folds and brittle faulting, but do not appear to be associated with regional scale folding.

The bulk of the gold mineralization in the Porcupine-Timmins Gold Camp is contained within mafic metavolcanic rocks primarily within the Tisdale Assemblage, an approximately 3 km thick tholeiitic suite of 2710 to 2704 Ma rocks consisting predominantly of metabasalts intercalated metakomatiites towards its base and intermediate and/or felsic rocks towards its top. Tisdale-age ultramafic and mafic sills have also been locally emplaced into the underlying and somewhat older, Kidd-Munro Assemblage 2719 to 2711 Ma.

Gold mineralizing episodes included an early, lower-grade gold event predating the Timiskaming unconformity that was probably synchronous with D2 thrusting and folding and early south over- north dip-slip movement on the DPDZ.

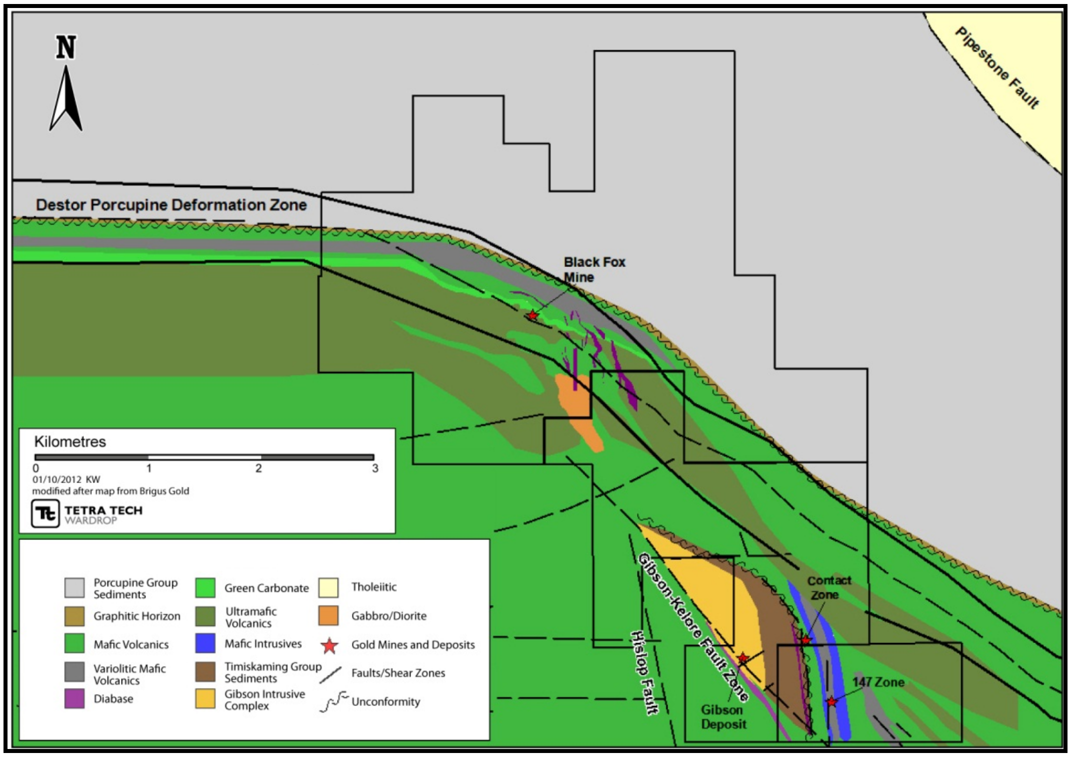
The main stage gold mineralization was associated with a protracted D3 event which coincided with the opening of the Timiskaming basin, but also overprinted the Timiskaming sediments. Rhodium-osmium geochronology on molybdenite associated with main-stage gold mineralization provides an age of 2672±7 Ma at the McIntyre Mine, and 2670±10 Ma at the Dome Mine.

The D4 folding and faulting that preserved Timiskaming Assemblages in synclines along the DPDZ is associated with a late-stage gold event along the Pamour Mine trend.

There is an important structural control on the gold mineralization and much of the Porcupine-Timmins ores are hosted in quartz-carbonate shear and extension veins in close proximity and structurally related to the DPDZ and its second order parallel shear zones. Within the framework of an Archean lode gold model, the vertical, (depth) extent of the Porcupine-Timmins ores span the middle to lower levels of the depositional system (i.e. from within the brittle-ductile transition and well into the ductile regime).

While the 147 and Contact Zones share similarities with the Porcupine-Timmins Gold Camp with a Tisdale assemblage and proximity to DPDZ related structures, they differ from the latter in that they are a high-level, brittle-style gold deposit with an apparent absence of well-defined ductile shear zones.

Figure 7.2 District Geology and Gold Mines and Deposits



7.2 PROPERTY GEOLOGY

7.2.1 INTRODUCTION

The 147 and Contact Zones are located in the southeastern portion of the Black Fox Complex which essentially forms the southeast half of the greater Black Fox Mine Property. The geology of the Black Fox Mine located in the northwest half of the Property has been described in detail in a report already on file with SEDAR:

- Apollo Gold - Black Fox Mine Geological Staff, 2007. Black Fox Project: Update on the Local Geology of the Black Fox Project, May 2007, 45 p.

The focus of this report is the 147 and Contact Zones located approximately 3.0 to 4.0 km to the southeast of the mining operations. As no formal geological studies have been completed on this portion of the Property, all of the descriptive geological data herein are derived from visual notations made during the course of routine core logging, and should be regarded as preliminary.

The 147 and Contact Zones occurs approximately 1,200 to 1,400 m southwest of the DPDZ, 5 km north-northwest of the former Ross Gold Mine at the village of Holtyre, and approximately 12 km east-southeast of the town of Matheson.

Regional studies have indicated that the Property is located within a district-wide, north-northwest trending, down-dropped crustal block located in the far northward extremities of the Timiskaming Graben Structure. The down dropping accommodated thicker accumulations of Proterozoic and Paleozoic sediments thereby significantly reducing the exposure of Archean strata to erosion. This has resulted in the preservation of an unusually greater vertical extent of an Archean lode gold depositional system than normally encountered in the majority of Shield areas worldwide, and there are very few examples of these high-level gold deposits. The 147 and Contact Zones have the characteristics of high-level, brittle-style mineralization, and similar geological features have also been noted at the former Ross Gold Mine nearby. The best documentation of mineralization classified as high-level, brittle-style elsewhere in an Archean Shield area, are the Wiluna deposits in the Norseman-Wiluna belt, Yilgarn block of Western Australia.

7.2.2 LITHOLOGIES

The Property is largely underlain by the Lower Unit of the Tisdale assemblage, a south-west to west topping assemblage of basal ultramafic-mafic volcanics, grading upward into a dominantly iron-and magnesium-tholeiitic sequence of pillowed, massive and variolitic mafic volcanics. Both magnetite-bearing and non-magnetic units have been noted. Some of the more distinctly massive, fine to medium-grained mafic units appear to have been emplaced as sills, and tentatively have been designated as gabbros. Flow episodes in the dominantly mafic portion of the assemblage may be marked by the development of flow breccias, and/or thin, but mappable, units of pyritic, argillaceous and/or cherty interflow sediments. All units are extensively altered to a lower greenschist assemblage as described in the subsection on regional metamorphism.

Remnants of pre-glacial, deep weathering (oxidation) were frequently encountered in the drilling. Patches and intervals of reddish-brown oxidized iron appear to have developed primarily in the upper 10 to 20 m, within and marginal to breccias, and networks of joint and fractures. Several pockets of oxidation were occasionally encountered as far down as 30 to 40 m.

From east to west in the immediate vicinity of the 147 and Contact Zones, the 300 to 400 m thick sequence of north trending and steeply east-dipping, thus slightly overturned, Tisdale rocks, consist of massive flows marked by brecciated flow tops, gabbro, the 147 Zone variolitic host unit, gabbro, pyritic, interflow sediments, and pillowed and amygdaloidal basalt. Further to the west at the Contact Zone, this sequence of Tisdale rocks is in major fault contact with a north-south trending wedge of Timiskaming Assemblage siliceous, pyritic, metasediments. To the east, this dominantly mafic sequence descends lower into the Tisdale stratigraphy and includes ultramafic units.

The massive mafic flows are generally aphanitic and dark to medium green. Both magnetite-bearing and non-magnetic units have been mapped. Flow breccias fragments often appear paler grey green than the massive intervals, but is likely the result of pervasive carbonate alteration penetrating inward from the breccia interstices rather than primary compositional differences. Minor pyrite has occasionally been noted in matrix and as fragments.

Well-preserved pillow lavas were extensively observed in drill core and are characterized by 1 to 2 cm wide, dark green chloritic selvages that are commonly calcitic and extensively epidotized. They are commonly amygdaloidal towards the pillows margins with small (2 to 3 mm) calcite- or chlorite-filled amygdales. Amygdaloidal areas in non- pillowed intervals do not appear to be extensive, however when present tend to be larger, up to a centimetre in diameter of either calcite or milky quartz, and appear more spherical.

The gabbro units are generally massive, fine to medium grained, sparsely jointed, are commonly leucoxene-bearing, and locally may be extensively epidotized. Both magnetite-bearing and non-magnetic units have been mapped.

While foliation fabric is rarely observed, brittle deformation is widespread. Fracturing and zones of brecciation are particularly well developed in the siliceous metasediments and in variolitic and massive volcanic units, and to a much lesser extent in the gabbros. Excluding the areas of mineralization, the most common form of brittle deformation in lavas is widespread, irregular to regular fracturing in many directions, that is marked by less than 1 to 5 mm wide calcite and white quartz/calcite veinlets that locally may impart a pseudo-marbled look to the core.

The basal Tisdale assemblage is shown on government maps to be unconformably bounded to the north by the metasedimentary Porcupine Assemblage.

As mentioned previously, a north-south trending wedge of Timiskaming Assemblage siliceous metasediments, dominantly sandstones with subordinate greywacke and thinly bedded chert, marks the upper extent of the Tisdale Assemblage (Contact Zone) to the west in this area of the Property. In turn, the west contact of the metasedimentary wedge is marked by the northwest trending Gibson-Kelore Fault Zone in the south, and the Gibson Intrusive Complex in the north.

The Gibson Intrusive Complex was emplaced along a portion of the eastern margin of the Gibson-Kelore Fault Zone. Despite being pervasively altered (hematized, sausseritized, silicified, pyritized), and locally subjected to intense brittle deformation, two distinct phases, a medium grained (hornblende) diorite, and a plagioclase feldspar porphyry, have been recognized.

Narrow, subordinate, feldspar porphyry, lamprophyre, aplite and felsite dykes were also noted in recent drilling.

A cluster of younger diabase (Matachewan) dykes trend northward through the central part of the property and were observed in drill core to cut through both the Tisdale and Timiskaming assemblages.

7.2.3 REGIONAL METAMORPHISM

Regional metamorphism is lower greenschist (or perhaps even prehnite-pumpellyite as per D.G. Troop 1988), that in the mafic volcanic and intrusive rocks, has resulted in an assemblage of epidote-albite-calcite-hornblende-chlorite (+leucoxene).

Wide-spread sausseritization of the plagioclase feldspars is readily evident with the sodic component forming albite, and the calcic component giving rise to an assemblage of epidote, calcite and zoisite. Simultaneous with this process is the formation of hornblende after augite, and the subsequent chloritization of hornblende.

The ultramafic rocks are generally dark waxy green where serpentinized, or buff-coloured where carbonatized, and also commonly magnetic.

7.2.4 PRINCIPAL STRUCTURES

The Property is somewhat unique with respect to the DPDZ in that the DPDZ segment located across the northeastern portion of the Property ceases following its predominantly east-west trend along the Tisdale-Porcupine assemblages contact. The DPDZ segment on the Property trends southeastward, and somewhat obliquely up-section through the Tisdale stratigraphy. A few kilometres southeast and off-property in Guibord Township, the DPDZ reaches the lower contact of the Blake River assemblage and returns to its normal eastward trend following along the Tisdale-Blake River assemblage contact.

Southwest of the DPDZ, and likely connected at depth, is a 2nd-order structure, the Gibson-Kelore Fault Zone (GKFZ), which sub-parallels the former approximately 800 to 1,600 m south-west. The north-northwest-trending Hislop Fault (HF) that, for the most part, lies immediately outside the west boundary, is another second order structure that appears to merge with the GKFZ in the central part of the Property. Both the GKFZ and HF are known to be associated either directly or indirectly with gold mineralization along their extents either on- or off-property.

An east-west trending, but off-property, structure, the Arrow Fault, cuts across both the HF and GKFZ at locations approximately 100 to 200 m south of the south property boundary, thereby forming a triangular wedge with the aforementioned second order structures.

Another seemingly related second order structure, but also off-property and to the southeast, is the north trending and west dipping Ross Mine Fault (RMF) that appears to merge with the GKFZ at its north-end.

Carbonatization appears to be the dominant alteration type associated with these structures, with ankerite dominating the core area of zones, and calcite-dolomite towards the margins. Hematization is also quite common, particularly in association with quartz-poor intrusive rocks which may have an alkaline affinity, but this remains unconfirmed. As a result of the brittle nature of the deformation, hematization occurs both as fracture-controlled specularite coatings and pervasively as hematite dust (inclusions) in feldspars.

The 147 and Contact Zones appear to be located approximately on north to northwest trending splays (third order structure?) off the GKFZ, and all of the more significant gold mineralization in this portion of the Matheson district have at least a spatial, and most likely a structural link, with one of the principal strike-slip faults.

7.2.5 ALTERATION OVERPRINTS

In addition, to the assemblage of alteration minerals considered as part of greenschist grade of regional metamorphism, many of the rocks encountered in the drilling were noted to be partially, or intensely overprinted by one, or a combination of the following alteration types:

HEMATIZATION

In the past, a variety of lithologies in the district and elsewhere on the property that appeared with a pervasive pinkish to rosy cast were mistakenly identified as “syenite”, “hornblende syenite” or “syenitized” volcanics. For the most part, the reddish colour was the effects of hematization, and to a much lesser extent, anhydritization. Often, intrusive features such as chilled margins or contact aureoles were not evident. In many cases, the “syenitization colour effect” was gradational, but sharper contacts have been noted.

With the possible exception of the ultramafic units, hematization derived from the alteration of the ferromagnesian minerals, is fairly common in the region, and to some degree affects all Tisdale, Timiskaming and Gibson Intrusive Complex lithologies on the property. Depending on the composition of the protolith and the intensity level of the overprint, the result can range from a slight pinkish tinge, through bright brick red, to deep burgundy, to a mauve-purple hue. In some cases, as for example for the Gibson Intrusive Complex, the degree of overprint can be visually separated and alteration subdivided into domains based on colour.

It can also be quite pervasive and extensive over several hundred meters such in contacts areas within the Gibson Intrusive Complex, or more patchy and fracture controlled as noted in throughout Tisdale and Timiskaming Assemblage lithologies. While quite dominant in portions of the variolitic basalt unit, it occurs in smaller, isolated portions of the gabbros, and in generally proximal to the contacts with the flows. Microscopically, the hematite has been reported to occur as minute red flakes disseminated through the altered groundmass, or as powdery coatings on other minerals. In intense, pervasively hematized areas, specular hematite fracture-fillings, and even semi-massive, centimetre -wide bands, are common.

If hematization is accompanied by some form of an overlapping carbonate alteration, (siderite, ankerite, dolomite), the reddish colour in these areas drops in intensity to a more pinky-creamy-beige colour, and the unit takes on a "patchy" or "mottled" appearance.

On a property scale, hematization appears patchy and discontinuous, however it is regularly noted to occur outward and marginal to the principal (second order) structures, and often dominates minor structures. Examples of these are the Gibson Intrusive Complex which lies along marginal to the GKFZ, and the major zone of faulting and brecciation that marks the contact area between in the Timiskaming and Tisdale Assemblages.

ANHYDRITIZATION

While the occurrence of anhydritization has not been positively identified in the logging to date, based on descriptions of anhydrite at the nearby past producing Ross Mine, some of the massive pink veinlets logged as pink calcite, and patches of a purple mineral resembling amethyst, could be anhydrite.

CARBONATIZATION (BLEACHING)

While some form of carbonate, most commonly calcite, occurs throughout all of the rock units and most structures, the focus in this subsection is on the types (ankerite, dolomite), and forms (pervasive and fracture-filling veinlet) that are regarded of more economic significance.

Pervasive carbonate alteration as fine disseminations is often accompanied by fracture filling veinlet carbonate, and is most readily recognized in the drill core as ranging from a faint creamy-brown tinge to more pronounced, irregular, brownish patches. With increased alteration intensity, primary textures particularly in the mafic volcanics become progressively less recognizable to nearly obliterated within patches of intense bleaching. Patchy and mottled creamy-reddish-grey-green rocks result when there is a partial or incomplete overprint of carbonate alteration within previously hematite or hematite-chlorite, or chlorite altered domains.

Owing to the extensively fractured nature of many of the mafic volcanic rocks on the Property, carbonate occurs as a dominant fracture-fill constituent in these brittle deformation systems. However, there has been no systematic division or correlation of carbonate types to fracture veinlet systems in the core logging carried out to date.

Brittle deformation (i.e. brecciation) has resulted in carbonatized ultramafic units, whereas ductile (i.e. intense schistosity) is well-developed in areas where hydrous assemblages are dominant.

Carbonatization effects on Gibson Intrusive Complex rocks, particularly where they are hematized, is readily apparent as a pronounced loss of red colour that results in patchy bleaching of fractured intervals, brecciated contact areas, and the development of narrow bands of bleaching marginally outward along joint sets.

While carbonate alteration is also extensively developed in the Timiskaming Assemblage metasedimentary rocks, owing to their more siliceous and brittle nature, the visual effect is less pronounced.

Silicification (Bleaching)

Silicification, either as pervasive or more commonly as fracture-filling veinlet, is less widespread than carbonatization, however when present, is generally closely allied with the latter, most notably in the mineralized areas.

Pervasively bleached areas appear patchy light grey-white with a slight creamy carbonate tinge, and are generally extensively fractured or brecciated, with numerous quartz veinlets. Although several generations of quartz veinlets have been recognized in the core, excluding the bluish-gray, cherty, pyritic variety, there has been no systematic division or correlation of the other quartz types to specific veinlet systems at this time.

It is important to note that in some cases, the quartz veinlet networks within pervasively bleached areas, including those of the bluish-gray, cherty, zoned, pyritic variety, are not always restricted to the core alteration area, but may also extend uninterrupted into the adjoining carbonate-chlorite altered domains where primary textures generally remain preserved.

Bluish-Gray Cherty, Zoned, Pyritic Quartz Veinlets

Quartz veinlets of this type are of economic significance in the 147 Zone. They generally range in width from less than 1 mm to 5 to 10 mm, but occasionally can reach a maximum of 5 cm. They can range in colour from a bluish-gray, through varying shades of light to dark gray, to creamy and black, but are commonly a cherty light gray.

Except for the very narrowest veinlets which appear singly layered, most are very thinly, rhythmically banded, or zoned. While dominantly composed of silica, some veinlets also include creamy bands, patches or streaks of carbonate. Some of the silica layers may have a chalcedonic appearance, and upwards of 8 to 10 individual layers including those of very fine pyrite were noted. Chalcedonic brecciated layers in some of the wider, 2 to 5 cm, veinlets are characterized by a variety of sizes of angular silica fragments ranging up to 6 to 7 mm in longest dimension. The rhythmic layering/zoning suggests multiple pulses of silica into slightly open fractures.

Most veinlets are variably pyritic, containing several percent commonly as very fine disseminations, hair-thin fracture fillings and along veinlet margins.

Visible gold in the 147 Zone is generally restricted to the bluish-gray cherty, zoned pyritic veinlets where it can occur ranging from single, tiny flecks, to clusters of fine grains, to coarse streaks, and clusters of streaks, preferentially along the veinlet contacts, or in micro-fractures.

SULPHIDATION (PYRITIZATION)

Pyrite is by far the dominant metallic mineral. It most commonly occurs as less than 1 to 3 mm granular or cubic disseminations, as trails of disseminations along fractures and micro-fractures, as aggregates of fine disseminations or as thin, irregular, fracture and micro-fracture-filling veinlets. While rarely exceeding a few percent, semi-massive bands or aggregates have been observed to occur locally over several centimetres.

Chalcopyrite is generally rare, but has been noted to be hosted in thin white or pinkish vuggy calcite veinlets. It appears to be more frequent in the Gibson Intrusive Complex than in the other lithologies, and while commonly found as fine and medium blebs, occurrences of semi-massive chalcopyrite veinlets have also been noted.

7.3 MINERALIZATION

Mineralization within the Contact Zone occurs at or near the contact of Tisdale Assemblage mafic volcanic rocks and adjacent Timiskaming Assemblage clastic sedimentary rocks. The gold mineralization of the Contact Zone occurs dominantly in the brecciated zones above the sediment contacts. The higher grade appears to "free gold" in the silica and albite altered sections with late stage reddish-white calcite/ankerite veinlets containing 0.5 mm pyrite stringers.

Mineralization within the 147 Zone occurs preferentially within and in association with a variolitic mafic volcanic horizon located approximately 150 to 300 m east of the Timiskaming/Tisdale Assemblage contact (Contact Zone). Mineralization occurs in association with quartz-carbonate veins, which are often sheeted. Veins often have thin margins of crustiform banded quartz, then crustiform quartz matrix breccia overgrowing these, and later cores of fine-grained, matrix supported quartz-carbonate matrix lithified vein breccia, which contains fragments of earlier quartz phases. These veins also often have dark green-grey, thin breccia selvages with abundant disseminated pyrite and which petrography indicates are carbon-bearing. Visible gold is commonly-observed in these dark pyritic rims.

7.4 147 ZONE

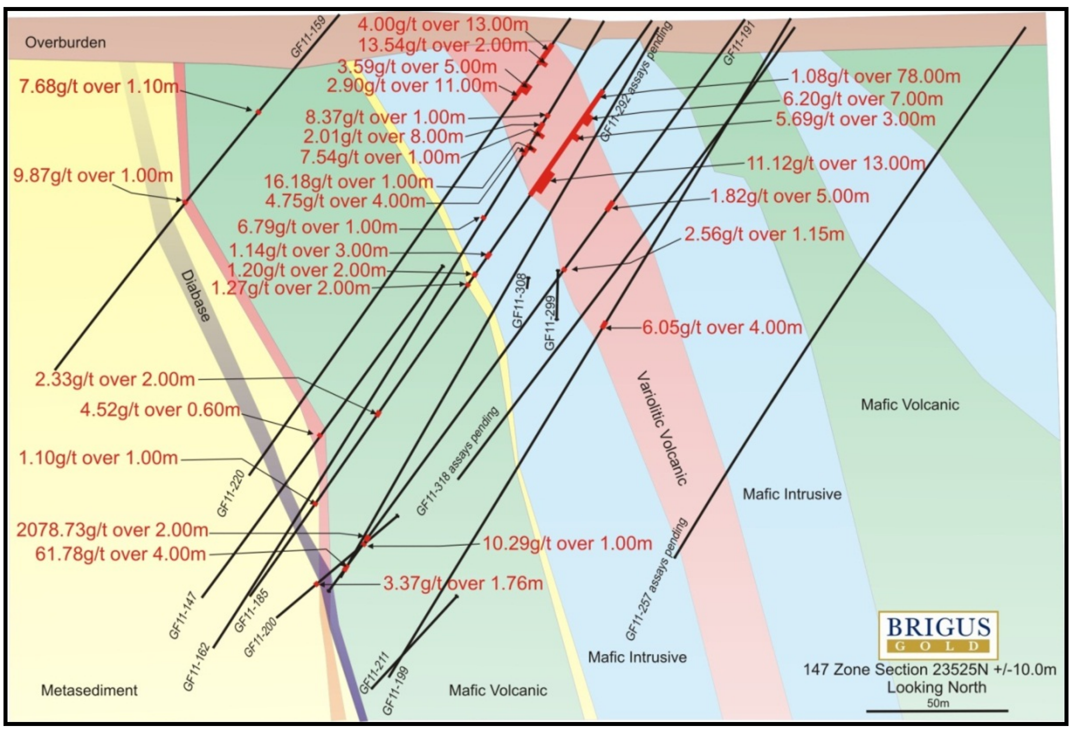
7.4.1 INTRODUCTION

The 147 Zone (Figure 7.2) is hosted by a north-trending, steeply east-dipping variolitic basalt (Tisdale Assemblage). The core zone of gold mineralization occurs over an approximate 275 m north-south direction strike length and dips at approximately 75° to the east. The mineralized zone has been traced from the top of the bedrock to a drilled vertical depth of at least 400 m. The overburden cover in the area varies from approximately 5 to 15 m thick. The 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.

7.4.2 Host Lithology

The principal host lithology for the 147 Zone is a north trending, steeply east dipping variolitic basalt unit (Figure 7.3). While dominantly characterized by tightly packed, oval to spherical varioles, subordinate bands of massive lava, several decimeters to meters in core width, occur particularly toward the stratigraphic top of the unit. With progressive alteration, variolite boundaries become increasingly obliterated resulting in moderately to strongly bleached intervals or patches.

Figure 7.3 147 Zone Typical Cross Section



The variolitic basalt unit is bounded on both the footwall and hanging wall by massive, medium to fine grained, generally, leucoxene-bearing, mafic units, that in the absence of flow features, have been tentatively interpreted as gabbroic sills. The eastern, or hanging wall gabbro unit tends to be more magnetic than the western, or footwall unit.

While a discrete zoning pattern of hematization with respect to the 147 Zone has not been determined at this time, it is important to note that the portions of the host variolitic basalt unit are intensely hematized to deep brick red and mauve-purple hues. Hematization in the adjoining gabbros has been relatively minor with only small portions affected, and generally proximal to the contact areas.

7.4.3 *STRUCTURE, ALTERATION AND MINERALIZATION*

During deformation, a structurally favourable environment, or corridor, for subsequent hydrothermal alteration and gold deposition was developed within the variolitic unit, mainly as a result of the competency contrast between it and the enclosing massive gabbro units.

Deformation within the structural corridor is dominated by a range of brittle structures including wider zones of intense fracturing and micro-brecciation, and narrower intervals of non-cohesive fault breccia and gouge, along with the occasional centimetre-wide band of mylonite.

Hydrothermal alteration within the structural corridor is dominated by an inner bleached zone of carbonatization with variably pyritic pervasive and fracture silicification, and an outer zone of patchy, intermittent hematization overprinting portions of variably chloritized variolitic basalt.

The gold mineralization within this “alteration and structural corridor” is located principally in areas of intense fracturing, microbrecciation, and brecciation, and where the fractures and breccia interstices are filled and cemented by bluish-gray, cherty, zoned, pyrite quartz stringers veinlets, as previously described.

Veinlet frequency and particularly orientation is difficult to accurately determine in the drill core, however a limited number of oriented drillholes suggest networks or arrays of sub-parallel veinlets in the core area of the 147 Zone with a frequency of approximately two to four of the wider veinlets per true width of one metre of core. The intervening rocks are intensely brecciated, and generally mineralized with finely disseminated and fracture pyrite within an assortment of variably altered fragments.

While the geometry and controls for the wider distribution of the veinlets has not been fully established at this time, the geometry of the 147 Zone based on the veinlet network, mineralization and enclosing wallrocks suggests a series of steeply northerly plunging shoots.

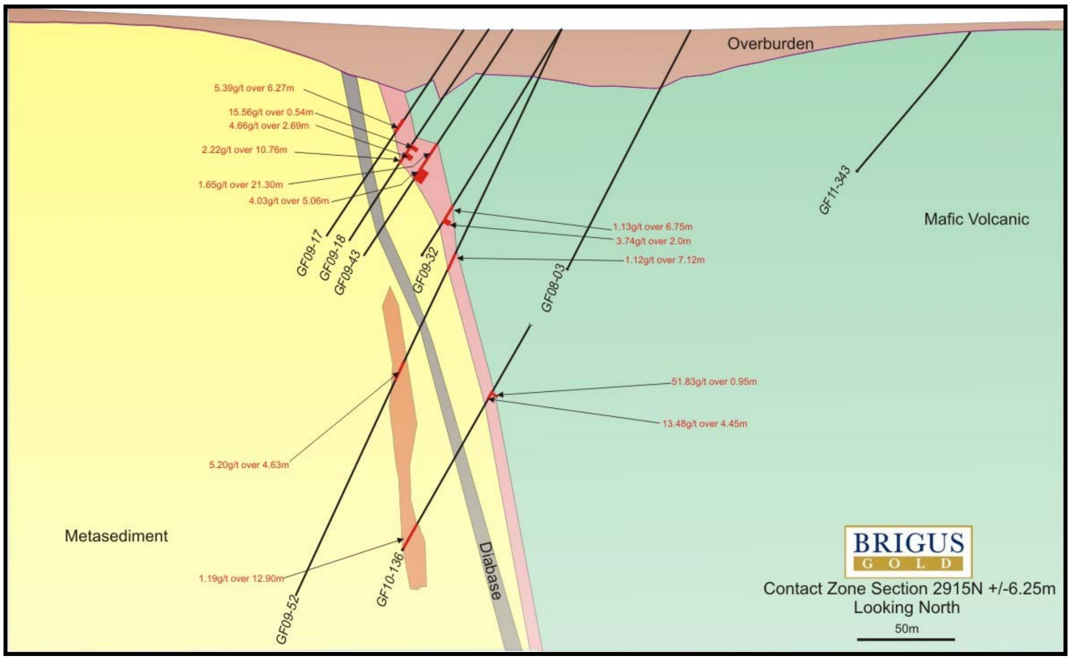
7.5 CONTACT ZONE

7.5.1 *INTRODUCTION*

The Contact Zone (Figure 7.4) area is a steeply dipping fault contact zone located between the north-south trending argillaceous sediments and tuffs (Timiskaming Assemblage), in contact with mafic volcanics (Tisdale Assemblage). The Contact

Zone extends from the southern Grey Fox claim boundary northwards for at least 1,200 m with an average strike of 350° azimuth. However, the core of gold mineralization is approximately 450 m in strike length and remains open to the north. The general dip of the feature is 78° to the east with horizontal widths varying from 3.5 to 35 m (Figure 7.4). The overburden cover in the area varies from 25 to 35 m thick. The mineralized lens has been traced from the top of the bedrock to a drilled vertical depth of at least 300 m.

Figure 7.4 Contact Zone Typical Cross Section



7.5.2 *Stratigraphy*

The lithology within the Contact Zone area primarily consists of mafic volcanics (Tisdale Assemblage) in major fault contact with a north-south trending wedge of Timiskaming Assemblage siliceous, pyritic, metasediments (Figure 7.4). The hanging wall mafic volcanic unit is mostly massive and rarely pillowed. When mineralized, the mafic is a breccia with semi-rounded fragments from 0.5 to 2.5 cm in diameter. The extreme hanging wall lithology of the zone is an ultramafic unit while the extreme footwall unit is a syenitic intrusive. Minor diabase occurs on the footwall side in the sediments.

7.5.3 *Alteration Types*

There are abundant types and degrees of alteration throughout the Contact Zone. The most dominate type is a hematite alteration which appears to be pervasive throughout the zone, especially in the upper reaches. Other major pervasive types of alterations scattered throughout the Contact Zone are chlorite and carbonate. They vary from weak to strong intensity in more localized areas. All the above alteration types appear to straddle the lithological units.

Epidote alteration, with or without sericite, is dominate in the mafic and tuff units. Albite and ankerite alteration is concentrated around the quartz-carbonate veining within the breccia zones. Silicification is localized and appears to be associated with the various intensities of faulting.

The footwall sedimentary unit was logged mainly as an argillite unit that is sometimes layered, but generally foliated in appearance. A thin section analysis by Dr. Scott in 2009 observed that the footwall argillites were, in fact, completely albitized tuff beds which had been sericitized and weakly chloritized after albite alteration.

7.5.4 GOLD MINERALIZATION

The gold mineralization of the Contact Zone occurs dominantly in the brecciated zones above the sediment contacts. The higher grade appears to "free gold" in the silica and albite altered sections with late stage reddish-white calcite/ankerite veinlets containing 0.5 mm pyrite stringers (Di Prisco 1996). The reddish tinge is from ragged grains of hematite in a groundmass of ankerite. From thin section analysis of the veinlets, the groundmass is mostly composed of fine grain ankerite and quartz. The ankerite minerals are crosscut by abundant chlorite veinlets (Christman 2010). Hematite and magnetite were found to be commonly associated with the sulphides.

Metallic mineralization of the Contact Zone is mainly pyrite. Di Prisco (1996) analyzed seven samples as thin sections and noted that minor amounts of arsenopyrite, chalcopyrite and pyrrhotite were intergrown with the pyrite. He also noted the pyrite formed as disseminated grains of subhedral to euhedral crystals along hairline fractures.

The brecciated quartz cement and veinlets were noted to be "peppered" with fine grain flakes and "rosettes" of molybdenite. One other note was that molybdenite was normally associated with the pyrite and observed to be locally overgrown by pyrite. Di Prisco concluded that there was a direct correlation between the gold precipitation and molybdenite occurrence, with or without pyrite. Dr. Douglas Scott analyzed four samples from hole GF08-10 in 2009 as thin/polished sections and also concluded that "the majority of gold may not in fact be more than coincidently associated with the pyrite in the ore zone".

8.0 DEPOSIT TYPES

Figure 8.1, is a vertical section of an idealized composite of an Archean lode gold system that is taken directly from Ontario Geological Survey (OGS) publication MP 139, Archean Lode Gold Deposits in Ontario.

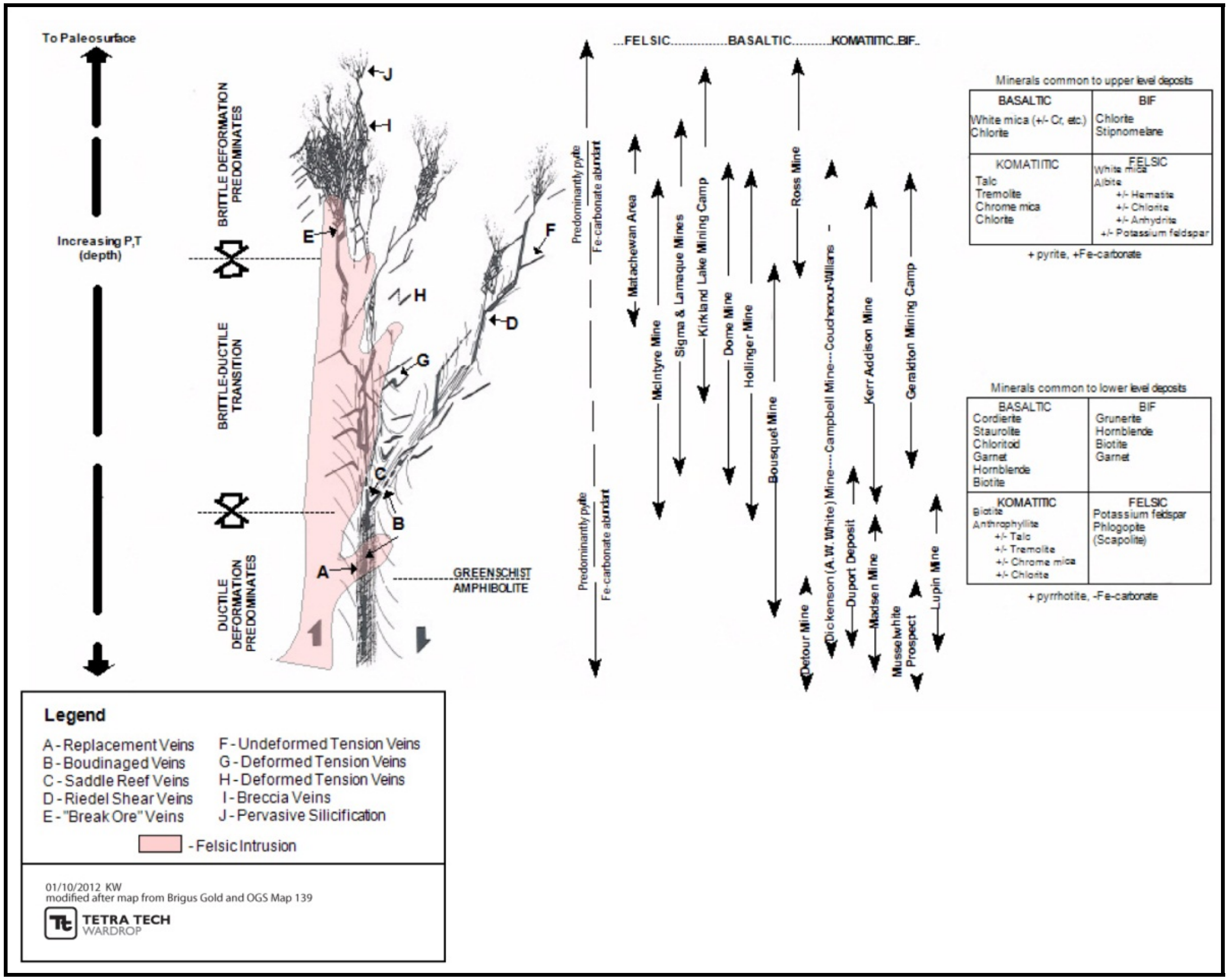
As depicted by Figure 8.1, these gold deposits represent a continuum in terms of deformation style (brittle to ductile) and metamorphic grade of the host rocks (greenschist to amphibolite). Although vertical scale is not defined, it can be inferred from the vertical range shown for the individual deposits. A composite vertical range of greater than 5 km but less than 10 km is implied, depending on the thermal gradient during mineralization. The depth of the deposits beneath the palaeosurface cannot be defined, however, evidence for lower confining pressures in the deposits interpreted to represent the highest exposed level of the system, indicates that it was influenced by approaching to surface. A minimum burial depth of 2 to 4 km is consistent with geobarometric fluid inclusion data. Present day erosional surfaces expose all levels of the system as indicated by the upper depth range of individual deposits.

The ambient pressure and temperature during mineralization exert the strongest overall control on the mineralizing process. This is manifested in the variable styles of mineralization and alteration that are indicated on Figure 8.1. At progressively higher levels, mineralization changes from shear-parallel without prominent veining, through systematic dilatant vein arrays, to pervasive breccia-style mineralization.

The breccia zones depicted on Figure 8.1 represent the highest identified level of the gold system within deposits in the Superior Province in Canada. These least-eroded areas are characterized by sub-greenschist facies which indicate original burial depths of approximately 2 km. Intuitively, breccia zones might be expected to change progressively into broader and pervasive mineralized and altered zones with decreasing confining pressures; boiling of fluids may also have occurred as the palaeosurface during mineralization is interpreted to have been subaerial.

While not included on Figure 8.1, studies of the Wiluna gold deposits in the northern part of the Norseman-Wiluna belt, Western Australia, have extended this range of metamorphic setting into the upper crustal-level prehnite-pumpellyite facies, and as such, are considered to be the highest crustal-level end-members of the crustal continuum model for Late Archean lode gold deposits. Mineralization in the high-level, brittle-style Wiluna deposits is hosted in mafic and ultramafic lavas, and occurs in hydrothermal breccias, shear veins, and veins with comb-and cockade-textured quartz.

Figure 8.1 Vertical Section of an Idealized Composite of an Archean Lode Gold System



At district and local scales, the deposit characteristics tend to be strongly affected by a host rock control rather than overall depth zonation. More competent lithologies will host discrete vein arrays which may pinch out in adjacent less competent units. Competent units such as iron-rich differentiated tholeiitic gabbroic sills and granitoid intrusions are common hosts, however, there are generally district-specific lithological associations acting as chemical and/or structural traps for the mineralizing fluids as illustrated by tholeiitic basalts and flow contacts within the Tisdale Assemblage in Timmins.

Competent units such as felsic intrusions are continuous over a large vertical range, retain a brittle response to deformation to deeper levels in the system and as such may represent the most favourable conduit for hydrothermal fluid ascent form depth. In contrast, less competent units such as altered ultramafic rocks, display a ductile response even at higher levels. Pre-existing, oxidized mineral species, such as hematite and sulphate, could react with later auriferous hydrothermal fluids, resulting in the precipitation of gold.

9.0 EXPLORATION

Brigus has performed several geophysical surveys on the Property, and each is discussed in this section. The majority of the work performed is in the form of diamond drilling, which is addressed in Section 10.0.

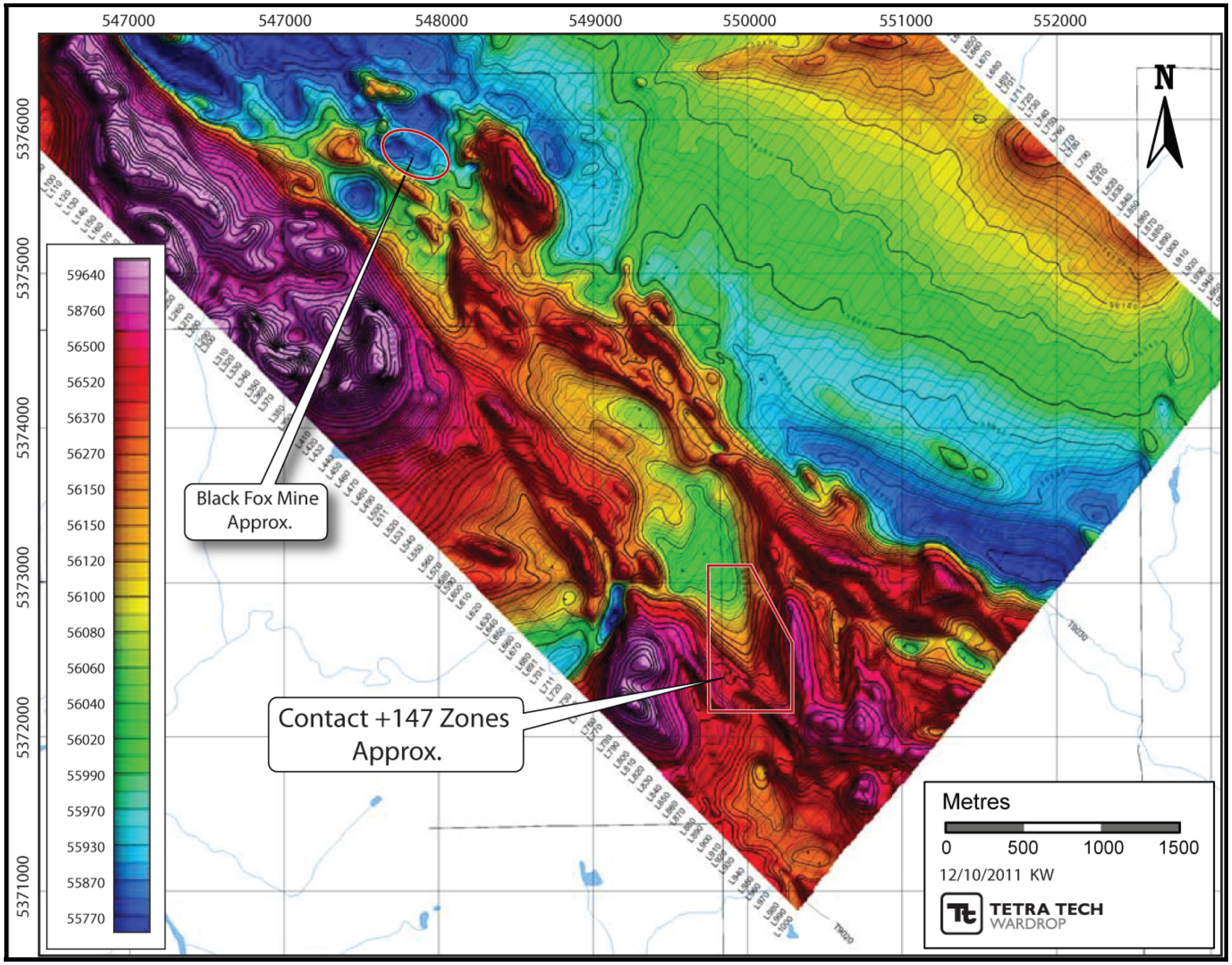
9.1 2010 EXPLORATION

9.1.1 AIRBORNE MAGNETIC GRADIENT SURVEY

In September 2010, Scott Hogg & Associates Ltd. (Scott Hogg) was commissioned to perform a helicopter-towed 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, utilizing a Wisk Air Bell 206 LR helicopter and a total of 1,074-line km of data was collected. Of this, 490-line km were from the Black Fox Mine Block, and 584 line km were from the Black Fox Mill Block (Scott Hogg 2010).

For the Black Fox Mine Block, the traverse line direction was UTM 40˚ to 220˚, traverse line spacing was 75 m, control line direction was UTM 130˚ to 310˚, control ling spacing was 2,000 m, and the terrain clearance for the sensors was 30 m (Scott Hogg 2010). The survey appears to have defined the key gold-bearing Contact Zone and Gibson Shear linear structures.

Figure 9.1 Total Field Magnetic Survey



Source: modified from Scott Hogg (2010)

9.1.2 TITAN 24-DEEP IP SURVEY

In the fall of 2010, a Quantec Titan 24-Deep IP ground based geophysical program was completed over the Property with 22 lines, spaced 200 m apart. The survey, which is designed to detect conductive mineralization, disseminated mineralization, alteration, structure and geology, generated 12 high-priority drill targets and 14 secondary targets. A total of 38.9 line km were completed between September 26 and October 22, 2010.

9.2 2011 EXPLORATION

No exploration activities other than diamond drilling were conducted in 2011.

9.3 2012 EXPLORATION

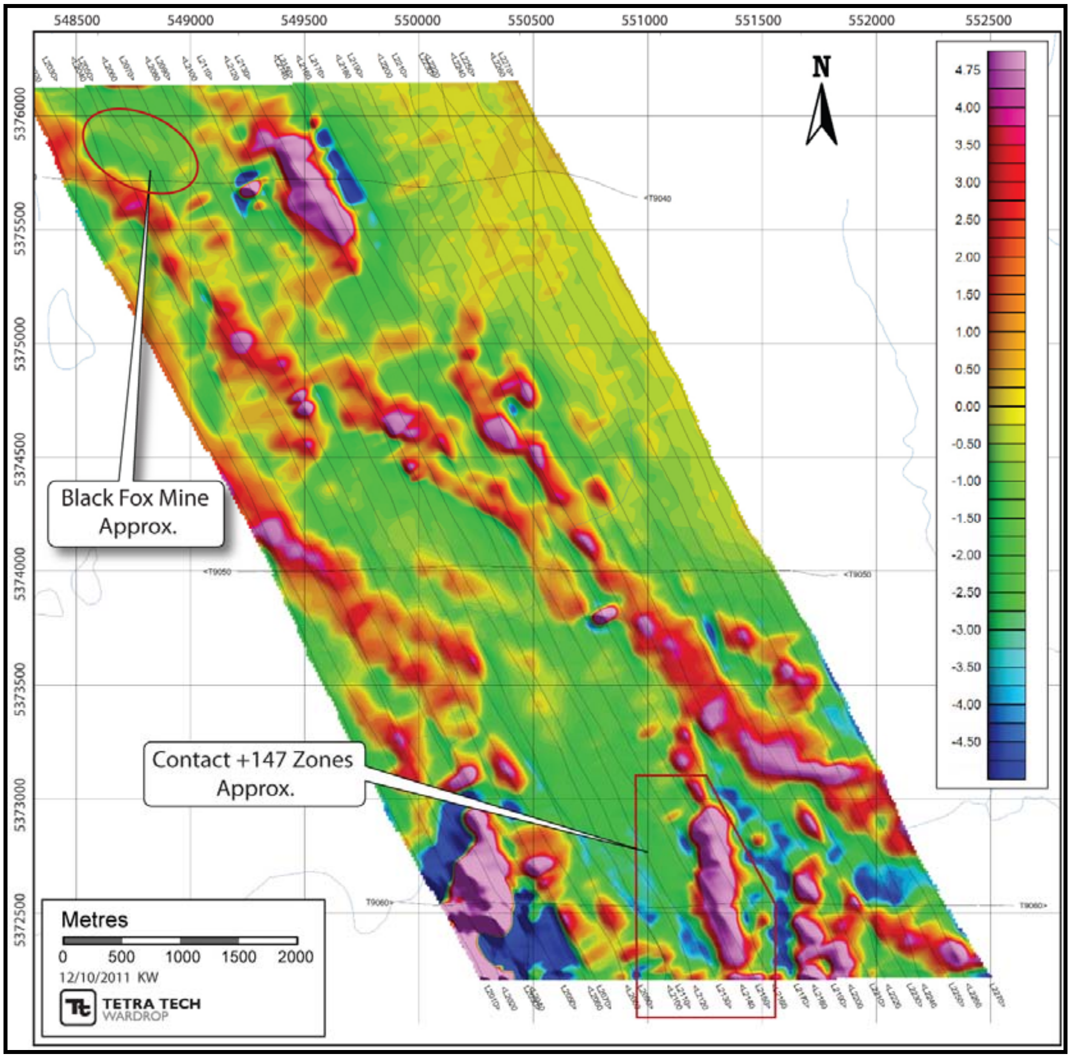
In 2012, Brigus continued the diamond drilling programs on the Contact and 147 Zones. As of the end of September, 2012, diamond drilling on the 147 and the Grey Fox South Zones was still ongoing.

9.3.1 AIRBORNE MAGNETIC GRADIENT SURVEY

In June 2012, Brigus retained Scott Hogg to carry out a three-axis magnetic gradient airborne geophysical survey over the Property. The survey was flown by helicopter (Astar B350D) and covered 127.5 line km. The survey lines were spaced at a nominal 75 m along a 153°/333° azimuth direction. Terrain clearance was at 30 m.

The survey focused on a more specific area, compared to the larger area coverage in 2010 that extends from the Black Fox Mine southeast to the 147 Zone at the south end of the Property. The resulting geophysical survey shows the roughly north/south trending structure that parallels the Contact and 147 Zones (Figure 9.2).

Figure 9.2 Pole Reduced Calculated Vertical Derivative Map



Source: modified from Scott Hogg (2012)

10.0 DRILLING

Since 2008, Brigus has performed drilling on the Contact Zone, Gibson, Grey Fox South, Hislop North, and 147 Zone targets of the Project. Drilling prior to 2008, was performed by Apollo Gold Corp., and is included in Section 6.0.

Table 10.1 below summarizes the exploration drilling activities by year and target from 2008 to August 2012. Figure 10.1 illustrates the collars of the drillholes included in the resource estimate along with the target areas.

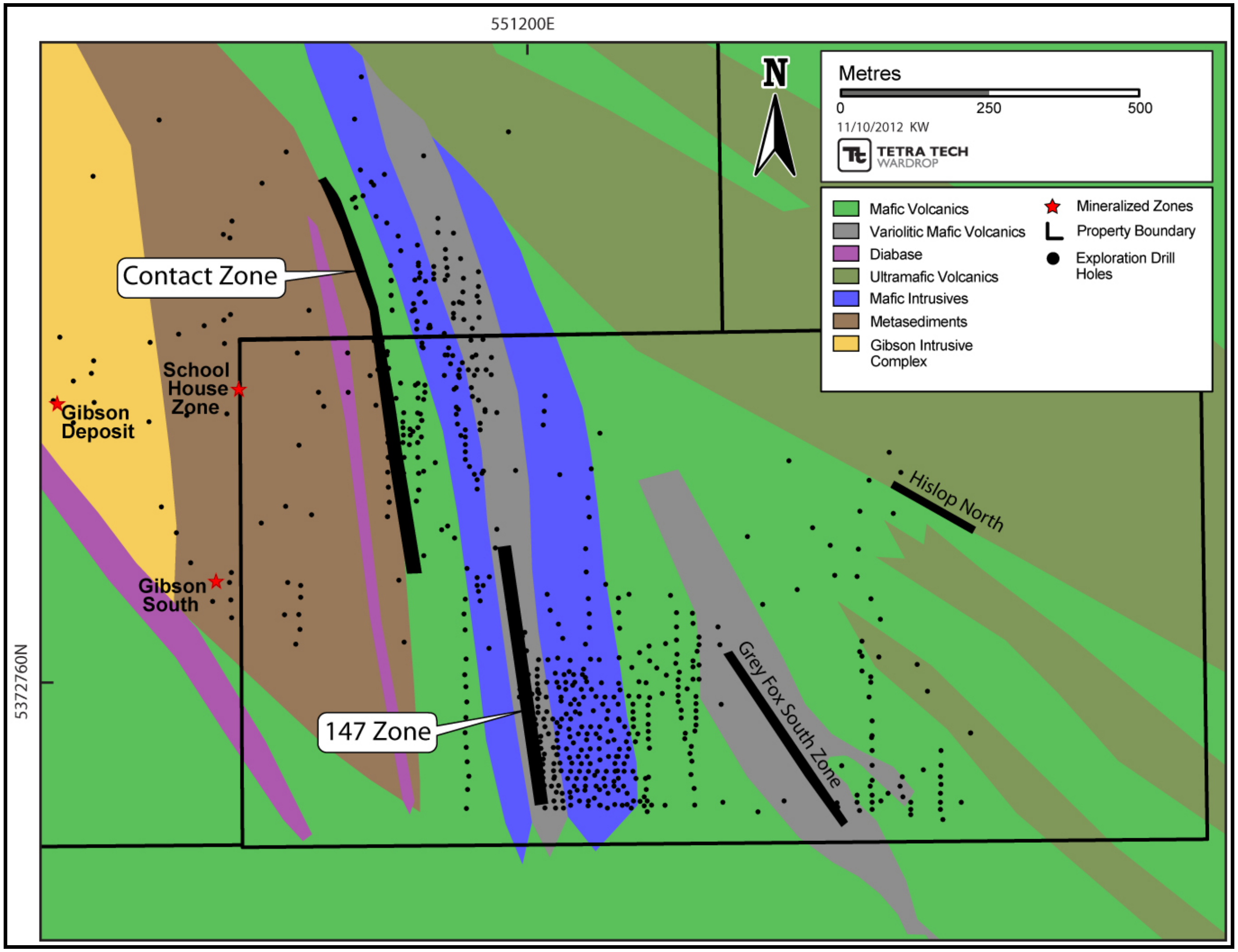
Table 10.1 Summary of Brigus Drilling by Year and Target

Year	Number of Drillholes	Length (m)	Target
2008	14	3,063.00	Contact Zone
	2	652.00	Hislop North
Subtotal	**16**	**3,715.00**	**-**
2009	53	9,961.00	Contact Zone
Subtotal	**53**	**9,961.00**	**-**
2010	34	12,697.78	Contact Zone
	7	3,139.00	147 Zone
	14	5,123.35	Gibson
	3	1,503.00	Grey Fox South
	11	4,336.36	Hislop North
Subtotal	**69**	**26,799.49**	**-**
2011	145	58,236.48	Contact Zone
	77	27,230.40	147 Zone
	7	2,733.00	Grey Fox South
	35	11,062.55	Gibson
	10	2,681.00	Whiskey Jack
Subtotal	**274**	**101,943.43**	**-**
2012	52	14,969.20	Contact Zone
	132	30,111.00	147 Zone
	27	10,527.00	Grey Fox South
Subtotal	**211**	**55,607.20**	**-**
Total	**623**	**198,026.12**	**-**

Note: Gibson includes Gibson Shear and Gibson South; Contact Zone includes Contact Zone Footwall; Statistics current as of August 14, 2012.

As of August 14, 2012, there were 50 drillholes completed (14,769 m) in the 147 (46) and Contact (4) Zone with assay results pending.

Figure 10.1 Drillhole Location Map



10.1 2010 Drilling

The 2010 drilling program followed-up on historical data and also tested new gold occurrences with the Project. Three drill rigs were used to explore the Contact Zone, Gibson, Grey Fox South, Hislop North, and 147 Zone targets. Drilling was performed by Norex Drilling and the core was of NQ diameter. A total of 69 drillholes, amounting to 26,799.49 m was completed on the Project property in 2010. During April 2010, a certified land survey company called Talbot Surveys based in Timmins, surveyed all of the 2008, 2009 and historic drillhole collars. Talbot surveys used a Trimble global positioning system (GPS) with base station.

10.1.1 Contact Zone

In 2010, the Contact Zone program concentrated on testing the continuity of the gold mineralization down-dip and along strike of the 2008 and 2009 drillholes (November 30, 2010 press release). Thirty-four drillholes, totalling 12,697.78 m were completed and were generally orientated 270°/-50°. Table 10.2 highlights select mineralized intervals from the Contact Zone.

Table 10.2 Summary of 2010 Drilling Highlights on Contact Zone

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
GF10-90	2.41	14.92	November 30, 2010
and	3.58	14.88	November 30, 2010
GF10-94	6.34	7.05	November 30, 2010
including	3.62	10.22	November 30, 2010
and	1.13	25.78	November 30, 2010
and	2.11	10.47	November 30, 2010
GF10-98	4.26	2.03	November 30, 2010
and	8.89	3.68	November 30, 2010
including	3.17	6.67	November 30, 2010
GF10-106	3.99	8.40	January 12, 2011
including	4.23	3.08	January 12, 2011
GF10-114	12.27	12.10	January 12, 2011
including	0.81	168.65	January 12, 2011
GF10-116	4.30	4.40	February 28, 2011
GF10-125	15.21	3.26	January 12, 2011
including	3.03	5.28	January 12, 2011
including	3.75	7.19	January 12, 2011
GF10-131	7.40	2.97	February 28, 2011
including	2.23	6.45	February 28, 2011
GF10-133	9.75	12.60	February 28, 2011
including	3.43	20.43	February 28, 2011

table continues…

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
GF10-136	5.52	11.80	February 28, 2011
including	2.57	24.16	February 28, 2011

Note: Drill intercepts do not represent true widths, true widths will be shorter intervals dependent upon the dip of the drillhole.

10.1.2 147 Zone

Seven holes, totalling 3,139.00 m were drilled into the 147 Zone in 2010. Holes were generally drilled with orientations of 270°/-55. The 147 Zone was previously referred to as the “Hanging Wall” of the Contact Zone, and was subsequently re-named in 2011 as the “147 Zone”, in reference to the first drillhole confirming the potential of the discovery (April 27, 2011 press release).

10.1.3 Gibson

In 2010, 14 drillholes, totalling 5,123.35 m were completed on the Gibson target. Holes were generally drilled with orientations of 270°/-50°. Drilling results from the Gibson Shear were encouraging and the best intersections were in GF10-92, which was drilled into the southern portion of the Gibson Shear (Gibson South) (November, 30 2010 press release). Table 10.3 highlights select mineralized intervals from the Gibson target.

Table 10.3 Summary of 2010 Drilling Highlights on Gibson Shear

Hole ID	Interval (m)	Gold (g/t)	Source
GF10-88	3.00	5.45	November 30, 2010
GF10-92	41.80	2.02	November 30, 2010
including	12.00	4.04	November 30, 2010

Note: Drill intercepts do not represent true widths, true widths will be shorter intervals dependent upon the dip of the drillhole.

10.1.4 Grey Fox South and Hislop North

In 2010, three drillholes, totalling 1,503.00 m were completed on the newly discovered Grey Fox South target. Holes were drilled with an orientation of either 055°/-55° or 090°/-60°. Table 10.4 highlights select mineralized intervals from the Grey Fox South target.

Table 10.4 Summary of 2010 Drilling Highlights on Grey Fox South

Hole ID	Interval (m)	Gold (g/t)	Source
GF10-115	6	10.65	January 12, 2011
including	1	23.32	January 12, 2011
including	1	16.12	January 12, 2011
including	1	18.84	January 12, 2011

Note: Drill intercepts do not represent true widths, true widths will be shorter intervals dependent upon the dip of the drillhole.

In 2010, 11 drillholes, totalling 4,336.36 m were completed on the Hislop North target. Holes were generally drilled with orientations of 40°/-55°.

10.2 2011 Drilling

During the 2011 drill program, two drill rigs were used for infill drilling and testing along strike and down-dip on the Contact Zone. 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 (November 29, 2011 press release, September 7, 2011 press release). Drilling was conducted by Norex Drilling and Laframboise Drilling Inc. All work was supervised by the Brigus exploration team. All diamond drill core was of NQ diameter.

10.2.1 Contact Zone

In 2011, 79 drillholes, totalling 27,881.40 m were completed and were generally orientated 270°/-50°. Highlights from 2011 drilling of the Contact Zone are provided in Table 10.5.

Table 10.5 Summary of 2011 Drilling Highlights on Contact Zone

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
GF11-140	10.84	3.14	February 28, 2011
including	3.99	7.36	February 28, 2011
GF11-147	18.00	9.04	February 28, 2011
including	7.00	19.27	February 28, 2011
and	9.70	3.10	February 28, 2011
including	3.00	5.32	February 28, 2011
GF11-154	3.03	6.09	September 7, 2011
and	4.04	3.32	September 7, 2011
and	12.94	2.19	September 7, 2011
GF11-234	4.11	6.95	September 7, 2011

table continues…

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
including	1.46	11.75	September 7, 2011
GF11-236	3.51	3.89	September 7, 2011
and	1.76	7.75	September 7, 2011
GF11-238	11.32	3.54	November 29, 2011
including	3.00	7.15	November 29, 2011
and	1.00	7.75	November 29, 2011
GF11-241	4.55	2.91	November 29, 2011
and	3.20	10.65	November 29, 2011
and	1.80	18.29	November 29, 2011
and	7.50	7.19	November 29, 2011
GF11-243	6.00	2.95	November 29, 2011
including	3.00	5.23	November 29, 2011
GF11-245	4.50	16.18	September 7, 2011
including	0.75	83.04	September 7, 2011
and	11.70	1.30	September 7, 2011
including	3.00	2.57	September 7, 2011
GF11-259	12.00	3.31	November 29, 2011
including	4.00	5.85	November 29, 2011
and	3.00	4.02	November 29, 2011
GF11-261	2.30	20.55	November 29, 2011
GF11-264	0.50	46.36	November 29, 2011
and	8.20	4.53	November 29, 2011
including	3.00	8.60	November 29, 2011
GF11-265	2.00	36.45	November 29, 2011
including	1.00	69.19	November 29, 2011
and	16.00	4.25	November 29, 2011
including	3.00	12.21	November 29, 2011
GF11-316	14.00	1.87	November 29, 2011
and	72.90	1.77	November 29, 2011
including	18.00	3.54	November 29, 2011

Note: Drill intercepts do not represent true widths. True widths will be shorter intervals dependent upon the dip of the drillhole.

To date, Brigus has outlined an area of mineralization that is 400 m long in strike at the Contact Zone. It remains open along strike to the north and open at depth (November 29, 2011 press release).

10.2.2 Gibson and Grey Fox South

In 2011, 28 drillholes, totalling 8,798.55 m were completed on the Gibson target. Azimuths were variable (typically between 133 and 270°) and dips were generally between -50 and -60°. Two drillholes, totalling 883.00 m were completed on the Grey Fox South target and had orientation of 065°/-55° and 061°/-55°.

10.2.3 147 Zone

The name, “147 Zone”, is in reference to the first drillhole confirming the potential of the discovery (April 27, 2011 press release). Prior to intersecting the mineralization encountered in drillhole GF11-147, the 147 Zone was previously referred to as the “Hanging Wall” of the Contact Zone. In 2011, 138 drillholes, totalling 54,710.68 m were completed on the zone and were generally orientated 270°/-55°. Highlights from 2011 drilling of the 147 Zone are provided in Table 10.6 and a plan map is shown in Figure 10.1.

Table 10.6 Summary of 2011 Drilling Highlights on 147 Zone

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
GF10-165	20.00	1.46	May 16, 2011
and	14.00	1.24	-
GF11-173	50.95	1.01	June 1, 2011
including	3.25	8.29	-
GF11-174	16.00	1.32	May 16, 2011
and	20.40	10.82	-
and	9.75	1.11	-
GF11-177	29.40	4.40	June 1, 2011
including	16.30	6.80	-
GF11-179	26.50	3.26	May 16, 2011
including	5.00	11.51	-
and	4.60	5.54	-
GF11-181	41.00	2.68	June 1, 2011
including	24.00	3.53	-
including	10.00	4.46	-
GF11-182	46.20	0.92	June 20, 2011
including	15.00	2.23	-
GF11-184	78.00	1.08	June 1, 2011
including	9.50	2.65	-
GF11-185	73.58	3.36	June 1, 2011
including	7.00	6.20	-
including	3.00	5.69	-
including	13.00	11.12	-
GF11-191	2.00	2078.73	June 20, 2011
including	1.00	4165.15	-
and	4.00	61.78	-
including	1.00	243.43	-
GF11-192	17.00	3.59	June 20, 2011
including	7.00	5.42	-
and	11.00	3.34	-

table continues…

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
including	6.00	5.60	-
GF11-194	50.00	3.96	June 20, 2011
including	20.00	6.82	-
GF11-195	21.78	1.72	July 6, 2011
including	8.00	3.34	-
GF11-198	6.00	6.31	July 6, 2011
including	3.00	10.00	-
GF11-199	4.00	6.05	July 28, 2011
GF11-201	4.00	8.81	July 28, 2011
and	14.00	2.99	-
including	12.00	5.37	-
GF11-206	24.20	3.94	July 6, 2011
including	11.77	6.86	-
GF11-207	9.95	2.51	July 28, 2011
and	25.50	3.84	-
including	5.00	14.38	-
GF11-213	7.00	7.90	November 7, 2011
including	4.00	13.50	-
GF11-220	13.00	4.00	July 6, 2011
including	2.00	13.54	-
and	11.00	2.90	-
including	5.00	3.95	-
GF11-229	7.00	5.39	November 7, 2011
GF11-230	13.23	6.02	November 7, 2011
including	1.00	21.63	-
including	6.00	8.87	-
and	6.00	6.14	-
GF11-235	11.00	6.64	November 7, 2011
including	6.00	10.30	-
GF11-244	16.00	20.11	November 7, 2011
and	5.00	16.02	-
including	2.00	39.26	-
GF11-270	6.00	3.36	November 7, 2011
and	3.37	13.25	-
and	8.00	4.31	-
including	2.00	14.33	-
GF11-284	5.75	9.49	November 7, 2011
including	2.00	20.35	-
and	22.10	7.78	-
including	7.10	21.40	-

Note: Drill intercepts do not represent true widths. True widths will be shorter intervals dependent upon the dip of the drillhole.

The 147 Zone now extends to a vertical depth of 280 m below surface and remains open at depth (November 7, 2011 press release).

10.2.4 WHISKEY JACK ZONE

The Whiskey Jack Zone is located at the northern end of the Contact Zone where the discovery was made by the drilling of GF11-337 as shown in Table 10.7. The gold mineralization discovered in this drillhole was the result of testing underneath a distinct linear topographic low structure. The mineralized intercept is highly brecciated with abundant quartz veins and fine grained pyrite hosted in mafic volcanics.

Table 10.7 Summary of 2011 Drilling Highlights on the Whiskey Jack Zone

Hole ID	Interval (m)	Gold (g/t)	Source (Press Release)
GF11-337	9.00	3.59	November 29, 2011
including	1.00	10.63	-
and	1.00	6.86	-

At the time of writing this report, a total of 10 drillholes were completed on this zone, totalling 2,681 m. The drillholes in this zone were used in the resource estimate of the Contact Zone.

10.2.5 SURVEY METHODS

From October 2010 to August 2011, drillhole collar locations were surveyed by the Black Fox Mine survey crew using a Trimble GPS unit with base station. Since August 2011, drill collar locations were surveyed using a Leica GPS unit with base station.

Downhole surveys are based on a Reflex Single Shot. Readings are taken every 50 m downhole.

10.3 2012 DRILLING

The 2012 drilling program is a continuation of the infill drill program on the Contact and 147 Zones. Three drill rigs were used in continuation of the 2011 drill program on the Contact Zone, 147 Zone and Grey Fox South, targets. Drilling was performed by Norex Drilling and drilled using NQ size drill core.

A total of 211 drillholes, amounting to 65,607.20 m was completed over Contact and 147 Zones, as of August 14, 2012. As of September 18, 2012, drilling over the Contact Zone was complete and drilling over the 147 Zone was ongoing but nearing completion.

As in the previous year, drillhole collars were surveyed by the mine survey crew using a Leica GPS with base station. It was noted in the 147 Zone that several of the latter drillholes were not yet surveyed by the Leica unit. In the interim, the northing and easting coordinates from a handheld GPS unit were used and a default elevation of 292 masl was recorded. Approximately 10 drillholes were checked by Tetra Tech using a handheld GPS unit and were found to be within an average tolerance of ±4 m on the easting and northing coordinates and deemed suitable for this resource estimate. The default value of 292 masl was also deemed suitable for purposes of this resource estimate as the surface area in the 147 Zone is very flat (see Figure 12.2).

Downhole surveys were conducted by Brigus on all 2012 drill holes using a Reflex EZ Shot downhole instrument. Brigus personnel collected readings at roughly every 50 m interval down the hole.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 2008 AND 2009

All holes drilled by Apollo Gold on the Contact Zone were logged and samples in 0.5 to 1.5 m intervals over the length of the hole. The entire hole was labelled and digitally photographed prior to logging. Two electric core saws were used to half cut the core and sample lengths were typically 0.9 to 1.5 m long. All boxes were tagged with the hole number, box number, metreage, and then stored in core racks at the Black Fox Mine site. Many samples cross lithological boundaries, and sample intervals were often rounded to the nearest decimetre, rather than the nearest centimetre. Midway through the program, all samples greater than 1.0 g/t Au were re-assayed and averaged as a final assay value. Where recognized, sulphides and veining was documented in the logs. Re-logging of some holes noted that varying degrees of alteration extended over greater than 1.0 m length. Similarly, breccia zones were observed to be recorded as both a breccia tuff and a brecciated mafic. The tuff unit was not entered into the logs at all (Buss 2010).

Previously released Brigus drill results were released as uncut, with true widths and a weighted average grade. The true width values were based upon a dip of -75°, and calculated via an Microsoft Excel® spreadsheet formula. The intercepts were not defined as to representing the hanging wall, main or footwall lens of the zone (Buss 2010).

The core was logged by geologist into spreadsheets, and the sample intervals were marked on the rocks. Core samplers sawed the core, stapled the sample bags and sorted the samples for shipping, under the supervision of a geologist. All sample pulps and rejects were returned to Brigus and stored in a locked warehouse building in the town of Matheson, Ontario.

The general recovery of the drillhole data is considered to be favourable with a recovery averaging in the 85 to 95% range. As the rock units are fairly competent, the rock quality designation (RQD) of the core is moderate to high. The weaker zones of the hematite altered breccia zones still had an excellent recovery rate. However, faulting is prevalent within the Contact Zone and was mostly confined to the lithological contacts. The faults were rarely greater than 0.25 m in thickness and appear to have near vertical core angles. Basic logging and sampling procedures for diamond drillholes appeared to be followed by most of the previous site geologists. The lithological distances on the logs appeared to be rounded off to the nearest decimeter rather than the characteristic centimeter. A few sample intervals were noted to cross lithological boundaries. From the drill logs it was noted that a majority of the sample intervals were 0.90 and 1.5 m in length. Apparently, the larger sample intervals were for waste samples, while the smaller intervals were mostly in the mineralized zones. The results of the sample analysis are considered to be accurate. The data is considered to be accurate in terms of sample values and being representative. In 2009, all samples greater than 1.0 g/t were re-assayed by the assay laboratory and averaged as a final assay value. Prior to this time period, no re-assays were conducted on the samples (Buss 2010).

The samples collected during the initial phase of the 2008 program were transported by the site Geologist to Swastika Laboratories in Swastika, Ontario. The first half of 2009 drill program had core samples shipped by Manitoulin Transport to SPJ Laboratories in Sudbury, Ontario. In the latter half of the drilling program, personnel from Polymet Laboratories in Cobalt, Ontario picked up the samples on site with chain of custody sheets. All samples were analyzed by fire assay analysis for gold and reported in grams per tonne (Buss 2010).

Only three of the 348 blank samples were over 0.03 g/t gold for 0.86% failure rate. This is considered to be well within the allowable limits of statistics for accuracy of analysis. The two types of standards used in the sampling program also showed little variation within the samples and the laboratories. Only two samples out of the 360 total samples had a variance of over 0.70 g/t gold (Buss 2010).

As mentioned above, no duplicate samples of core (i.e. quartered) were done during the drilling program. As such, no comparison was possible between the values of two different laboratories. However, the assay laboratory in house quality assurance and quality control analysis as well as their accreditation suggested that all laboratories used in the drilling program produced credible results (Buss 2010).

11.2 2010, 2011, AND 2012

Brigus used two laboratories for assaying during 2010, 2011 and 2012: PolyMet Laboratories and SGS Mineral Services (SGS), both of which are International Organization for Standardization (ISO) accredited facilities. PolyMet Laboratoriess of Cobalt, Ontario comes to site to pick up the samples. Samples are shrink-wrapped on a pallet and shipped to SGS via Manitoulin Transport to the preparation facility in Sudbury and forwarded by them to their assay laboratory in Toronto. Chain of custody is maintained by assay requisition sheets along with subsequent return of pulps and rejects identified by sample number and certificate of analysis.

Samples are taken within portions of the core that show signs of mineralization, normally 1 m intervals are taken but samples can be as short as 30 cm and as long as 1.5 m. Samples are not collected across lithological boundaries. A numbered sample tag is placed at the start of each sample interval and once logging is completed the core is taken to the cutting room. Samples are sawn using a Vancon core saw. The sample tag is stapled into the core box at the start of the sample interval and a second piece of the same tag is placed in a plastic sample bag bearing the same number written in permanent marker. Half of the sawn core is placed in the core box such that a continuous length of core is present. The plastic sample bag containing the sample is stapled shut and placed in a larger rice bag for shipping. A total of ten samples are placed in each rice bag and the rice bag is numbered and labelled for shipment to the analytical laboratory.

Within each set of twenty samples there is 1 blank, 1 standard and 1 duplicate randomly placed within the sequence. The blank material BL116 (Table 11.1) is purchased from WCM Minerals in Burnaby, BC. The reference material is Rocklabs Reference Material Si54 with a reported grade of 1.780 ppm. The duplicate is made by quartering the remaining split core.

Table 11.1 Blank Material (BL116)

Metal	Grade
Pb	<0.001%
Zn	<0.01%
Cu	<0.005%
Ag	<0.3 g/t
Au	<0.01 g/t

The standard reference materials (SRM) used during the 2010 to 2012 sampling program are summarized in Table 11.2.

Table 11.2 Standard Reference Material

Description	Reference Code	Recommended Value (g/t Au)
Ore Research & Exploration Pty Ltd.	OREAS 10Pb	7.15
Rocklabs	Si42	1.761
Rocklabs	Si54	1.780
Rocklabs	Sk62*	4.075
Rocklabs	Sn50	8.685

* included as of April, 2012

11.3 Review of Quality Assurance/Quality Control

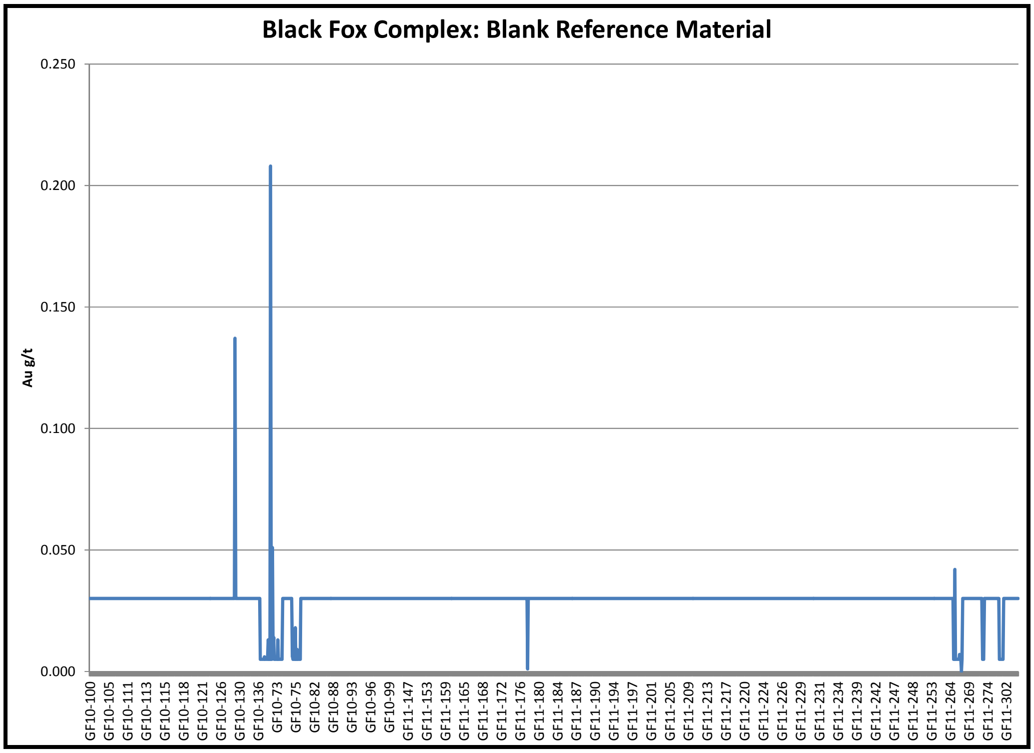
Quality assurance/quality control (QA/QC) data was reviewed for 2010, 2011 and 2012 diamond drill programs. A total of 4,617 quality control samples were inserted in a total of 30,164 assays. The insertion rate during those years is summarized in Table 11.3. A 5% rate approximates inserting 1 in 20 control samples.

Table 11.3 QA/QC Insertion Rate

Material	Rate (%)
Blank Material	5.1
Duplicates	5.0
SRM	5.2

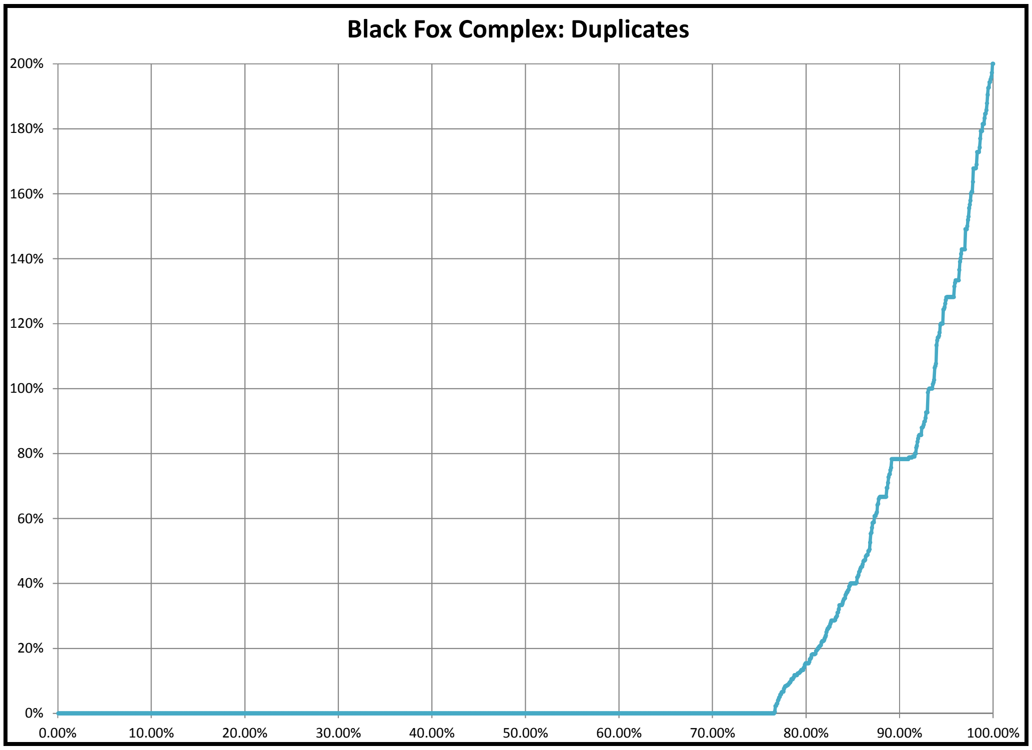
Blank material control samples contained only four over limit values (0.26%). Checks are recommended to ensure that samples were correctly inserted. Figure 11.1 illustrates the performance of the blank reference material.

Figure 11.1 Blank Reference Material



Duplicate samples showed that approximately 82% were less than 20% relative difference between samples. The majority of the samples were at the lower detection limit. The duplicates were up to 200% different which illustrates the nuggety nature of the deposit. Figure 11.2 is a graph of the duplicates.

Figure 11.2 Duplicates



The SRM performed well within two standard deviations of the assayed samples. The SRM did not meet the 95% confidence limit included in the Certificate of Analysis for each SRM. The Brigus assay mean was lower than the recommended value for all four standards. No trends or systematic bias was detected in the control charts. Four samples were identified which could be errors due to sample mix up. The fail rate within two standard deviations was less than 5%. Control charts for OREAS 10 Pb, Si42, Si54 and Sn50 are shown in Figure 11.3, Figure 11.4, Figure 11.5, and Figure 11.6, respectively.

Figure 11.3 Standard Reference Material OREAS 10Pb

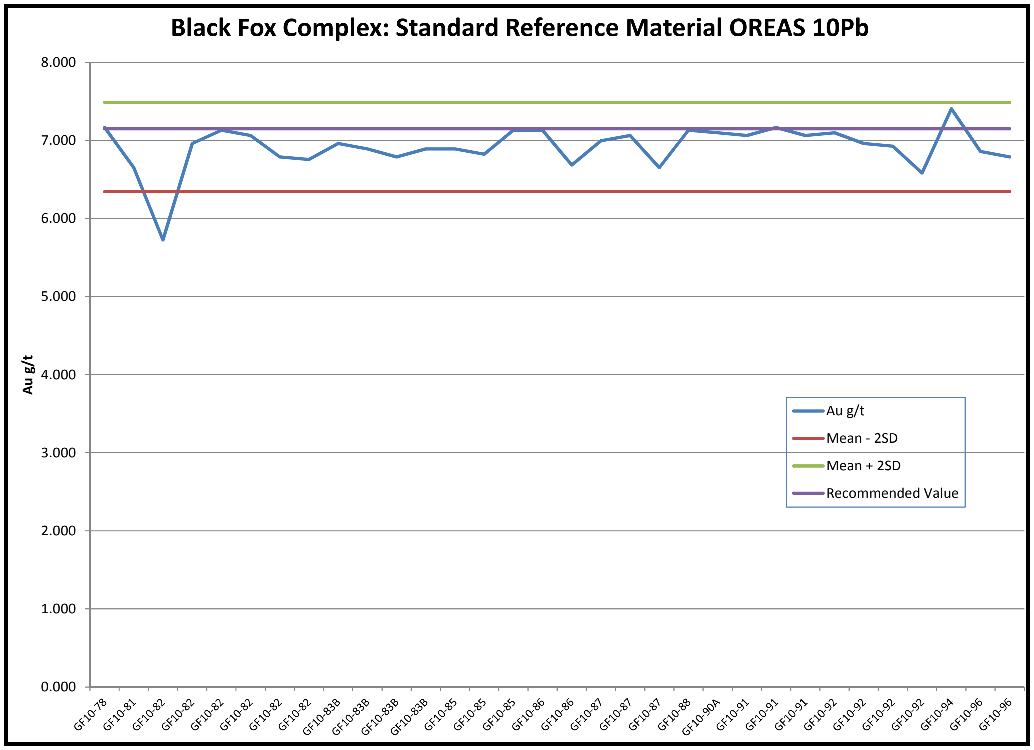


Figure 11.4 Standard Reference Material Si42

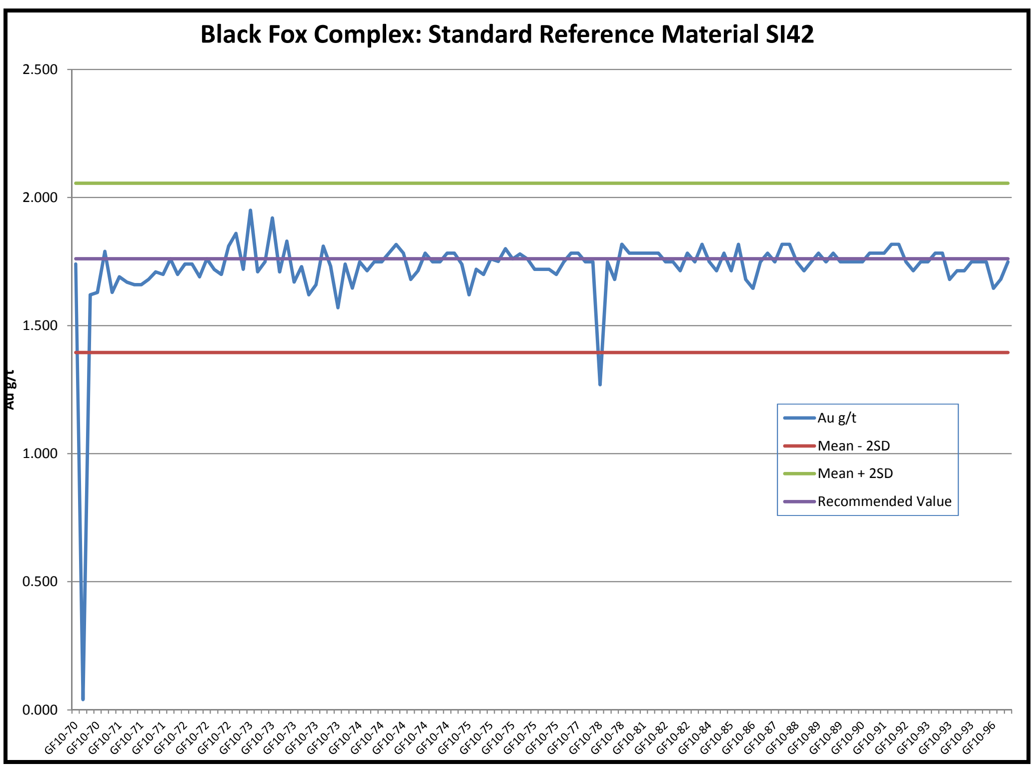


Figure 11.5 Standard Reference Material Si54

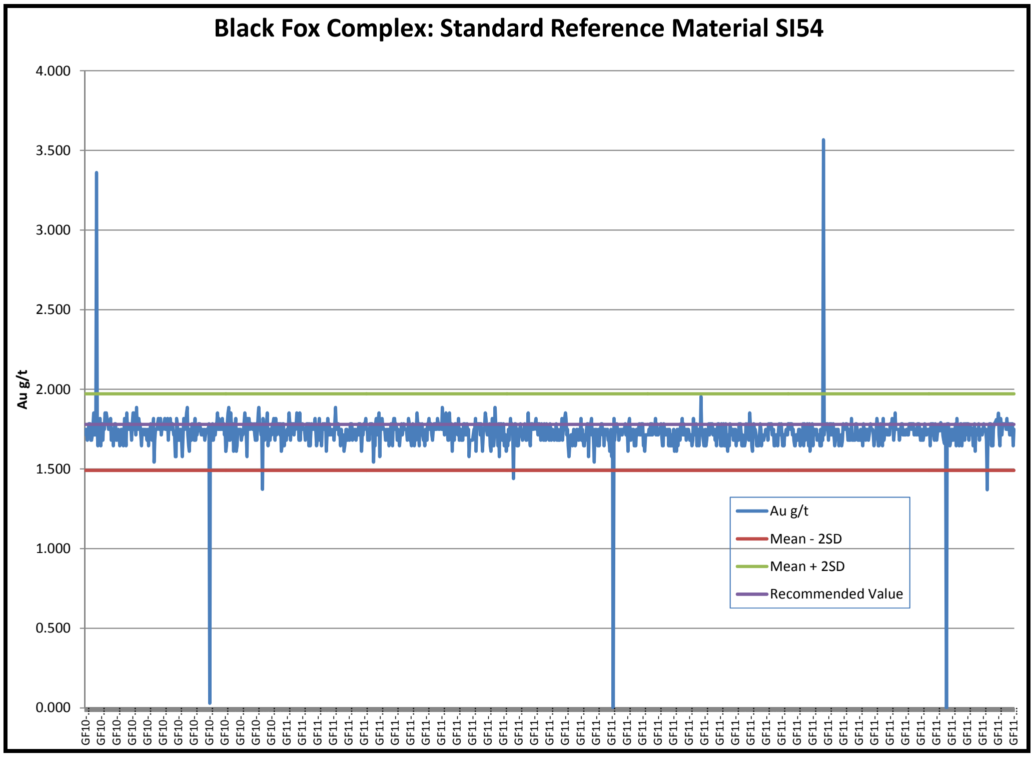
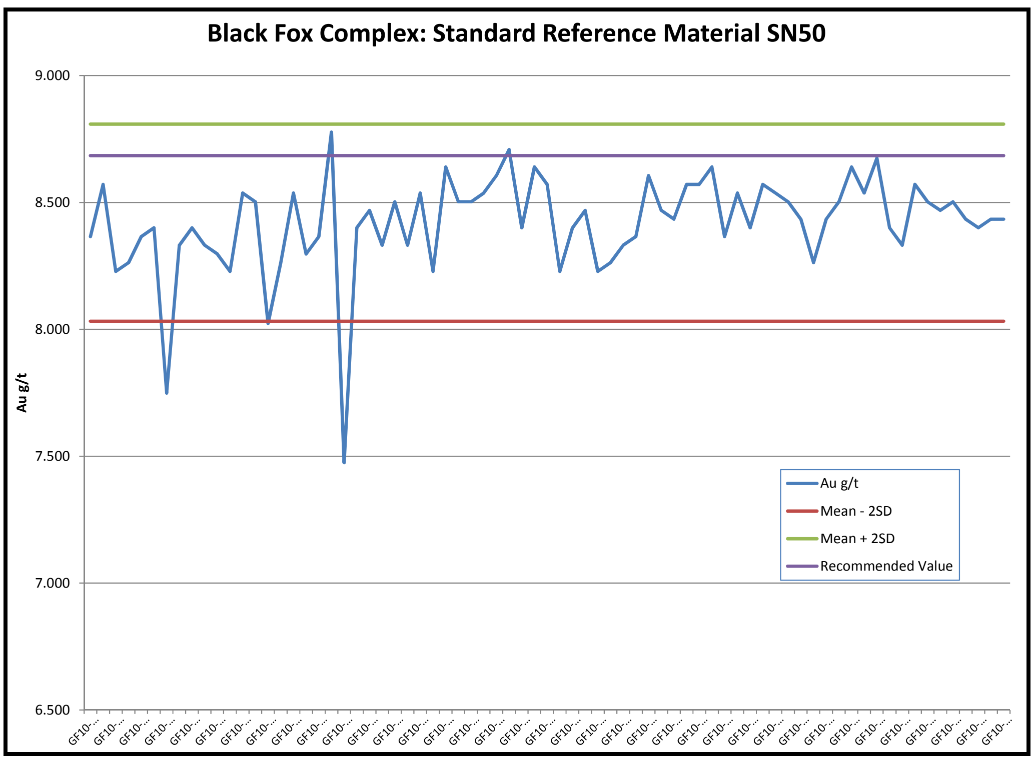


Figure 11.6 Standard Reference Material Sn50



11.4 TETRA TECH OPINION

Tetra Tech is of the opinion that the sampling practices of Brigus meet industry guidelines. The following recommendations are provided to potentially improve the QA/QC program and make it more effective:

- timely monitoring of control samples
- review of assay methodologies.

12.0 DATA VERIFICATION

12.1 TETRA TECH DATABASE VERIFICATION

12.1.1 2011 DATABASE VERIFICATION

Tetra Tech performed an internal verification process of the Project database against the original logs and laboratory-issued assay certificates. The validation of the data was completed on 23 of the 449 drillholes, accounting for approximately 5% of the overall dataset.

The data verification process examined the collars (easting, northing, elevation, length), lithologies (intervals, rock type), survey (depth, azimuth, dip) and assays (sample number, gold grade). Drillholes included in the verification process are as follows: GF-08-01, GF-08-04, GF08-06, GF08-09, GF08-12, GF09-25, GF09-27, GF09-34, GF09-46, GF09-56, GF09-60, GF09-65, GF10-116, GF10-119, GF10-129, GF10-131, GF10-70, GF11-147, GF11-165, GF11-173, GF11-194, GF11-207, and GF11-223.

COLLARS

For the collars, discrepancies between the database and original logs varied by up to 1.12 m for the easting, 0.18 m for the northing, and 8.54 m for the elevation. Since these discrepancies were due to later re-surveying of the collars with a more accurate GPS unit, they were not considered to be errors in the database. The collar locations for 2011 drillholes and for GF09-65 were not recorded in the original logs and a comparison therefore could not be performed. While the northing in the log for GF10-119 was incorrect by 30 m, it was correct in the database. No collar location errors were discovered in the database.

Within the original drill logs themselves, there are occasional discrepancies regarding the final length of the hole. The length noted on the header page of the log does not always match the ending depth of the final lithology or the “end of hole” noted depth at the end of the log. For example, the last lithology for GF10-129 ends at 347.4 m, whereas the “end of hole” note states it should be 350 m. Similarly, the last lithology for GF11-147 ends at 391.75, whereas the “end of hole” note states it should be 392 m. These occurrences are rare, are typically less than 1 m, and since the database matched at least one of the entries in the logs, they were not counted as errors within the database.

There was only one minor discrepancy in hole length that was counted as an error in the collar table of the database, and it is summarized in Table 12.1. This accounted for approximately 0.2% of the collar dataset.

Table 12.1 Correction made to collar table in database.

Hole ID	Database Length (m)	Original Log Length (m)	Comment
GF11-223	555	554	Correct end-of-hole of 554 m

LITHOLOGIES

For the lithologies, the intervals and rock types were verified. It was observed that some lithologies in the logs were often recorded under a different rock name than that which was entered into the database. This typically occurred for rocks that are similar in nature and/or appearance. For example, the rock type entered in the log was frequently 'mafic volcanic' and input into the database as "diabase". Similarly, "argillite" and "tuff" in the logs were frequently entered as "sediment" in the database. On occasion, a brecciated mafic volcanic, which was not noted in the log, was extracted from a mafic volcanic unit in the database. There are also occasional additional entries in the database which are not recorded in the logs. As an example, the quartz vein from 117.00 to 117.50 m in GF09-56 in the database is not recorded in the log. These discrepancies are attributed to later re-interpretation of the geology, and are not counted as errors in the database. Due to the various very gradational contacts, any intervals discrepancies less than 5 cm were not counted as errors either.

There were, however, six entries, accounting for approximately 0.05% of the lithological dataset that contained errors in the database. Table 12.2 summarizes these items, which were addressed in the database.

Table 12.2 Corrections Made to Lithology Table in Database

Hole ID	Database			Original Logs			Comments
	From (m)	To (m)	Rock Type	From (m)	To (m)	Rock Type	
GF08-09	33.80	36.00	SHTF	33.80	36.00	FI	Discrepancy in lithology
GF09-27	89.00	101.10	MV	89.00	101.00	MV	Discrepancy in "to" value
GF09-27	101.10	113.00	BXMV	101.00	113.00	BXMV	Discrepancy in "from" value
GF09-60	39.00	39.70	SED	39.00	39.70	FI	Discrepancy in lithology
GF11-207	271.20	280.00	BXMV	271.20	281.00	BXMV	Discrepancy in "to" value
GF11-207	280.00	287.00	MV	281.00	287.00	MV	Discrepancy in "from" value

SURVEYS

For the downhole directional surveys, the depth, azimuth and dip were verified. Directional downhole survey results were not entered into the 2010 and 2011 logs, and the original records are in the form of individual sheets for each station reading. A check on the surveys for those holes was therefore not performed.

A total of five errors, accounting for approximately 0.2% of the dataset were found to contain discrepancies. Where possible, these were verified against the original downhole survey documentation, and the corrections were made to the database. Corrections are shown in Table 12.3.

Table 12.3 Corrections Made to Survey Table in Database

Hole ID	Database			Original Logs		
	Distance (m)	Azimuth (°)	Dip (°)	Distance (m)	Azimuth (°)	Dip (°)
GF08-06	50.00	273.5	-56.0	50	273.5	-56.5
GF08-12	0.00	270.0	-51.5	0	270	-52
GF09-25	0.00	270.0	-59.5	0	270	-61
GF09-25	275.00	275.6	-61.0	275	275.6	-61.2
GF09-56	0.00	270.0	-71.0	0	270	-72

ASSAYS

The sample numbers and gold grades were verified against the assay certificates. Assay certificates are stored in binders in the exploration office and contain certificates from various laboratories such Accurassay Laboratories, PolyMet Labs, Swastika Laboratories Ltd., and SGS. They span a time period from at least 2008 to present. Digital copies of these certificates are available in the form of Microsoft Excel® files, for all holes drilled since 2009. Assay certificates from historic holes drilled in the 1990s were not available.

The verification process on the assays using the digital files was performed on drillholes GF09-25, GF09-27, GF09-34, GF09-46, GF09-56, GF09-60, GF09-65, GF10-116, GF10-119, GF10-129, GF10-131, GF10-70, GF11-147, GF11-165, GF11-173, GF11-194, GF11-207, and GF11-223. No errors in sample numbers were discovered, however rare assay grade entry errors were found. Table 12.4 outlines all corrections pertaining to the assays that were made to the database. These represent only 0.01% of the entire assay dataset.

Table 12.4 Corrections Made to Assay Table in Database

Hole ID	From (m)	To (m)	Length (m)	Sample Number	Certificate Number	Database Au (g/t)	Assay Certificate Au (g/t)
GF09-56	131.50	133.00	1.50	1552	PolyMet 6769	0.14	<.03
GF10-131	148.50	149.00	0.50	16125	PolyMet 9538	0.03	1.029
GF10-131	149.00	149.64	0.64	16126	PolyMet 9538	1.03	<.03

Supplementary to the assay verification against the Microsoft Excel® files, assays for drillhole GF10-83b and additional spot checks on randomly chosen sample numbers that were taken prior to 2009 were performed on the paper copies of the assay certificates during the site visit. All of these values matched the database.

Over the years, various assaying laboratories, which each have a different lower detection limit for gold, have been used for analyzing the Project samples. When an assay result was below the lower detection limit value, the majority of such samples prior to 2009 were entered into the database as the absolute value of the corresponding detection limit. For samples analyzed at Swastika Labs, the value entered was '0' since the assay certificate stated 'NIL'. Common practice later became to enter a default value of 0.03 g/t, which is the lower detection limit for gold at PolyMet Labs, into the database when the assay is below detection limit. Currently, this continues to be the practice even when results are from SGS which has a much lower detection limit value of 0.005 g/t. This results in a value of 0.03 g/t being entered into the database when the known value is less than 0.005 g/t. This is not considered to be conforming to the CIM exploration best practice guidelines, and it is recommended that half of the value of the lower detection limit specific to each lab be entered into the database when the grade is less than detection limit. Nonetheless, these occurrences were not considered to be errors in the database, and due to the cut-off grade, did not affect the accompanying resource estimate calculations.

OTHER

The database is maintained within GEMS™ software, which has a validation routine that checks for duplicate intervals, overlapping intervals, and intervals beyond the length of the hole. No errors were identified within the routine.

There were however, supplementary errors that were discovered within the database regarding azimuth, sample widths, rock codes and a missing assay value. In the survey tab at 0 m distance for drillhole PR93-7, the azimuth was entered as 400°. This was corrected to 40°. Various samples had incorrect widths and/or interval values and were corrected in the database (Table 12.5). Additionally, two intervals were missing rock codes (Table 12.6), and a sample number was missing a known assay value (Table 12.7).

Table 12.5 Corrected Sample Widths in Database

Hole ID	From (m)	To (m)	Au (g/t)	Width (m)	Corrected Width (m)	Comment
GF11-211	349.60	350.70	0.03	101.10	1.10	Width re-calculated
GF11-207	267.45	268.50	7.75	101.05	1.05	Width re-calculated
GF10-76	65.00	66.50	0.03	66.50	1.50	Width re-calculated
GF11-218	446.00	479.56	0.03	33.56	33.56	Width re-calculated and "to" value corrected to 447.00 m
GF10-130	284.85	285.45	0.34	31.00	0.60	Width re-calculated
GF11-207	391.00	392.00	0.03	31.00	1.00	Width re-calculated
GF11-310	144.35	145.35	0.03	21.00	1.00	Width re-calculated
GF10-78	113.65	113.99	1.03	20.34	0.34	Width re-calculated

Table 12.6 Missing Rock Codes

Hole ID	From (m)	To (m)	Rock Type
GF11-210	398.00	401.28	BXMV
GF11-137	154.30	166.80	VIV

Table 12.7 Missing Assay Value

Hole ID	From (m)	To (m)	Missing Assay Value (g/t)
GF10-94	272	273	0.03

All of the above corrections were made to the database prior to the calculation of the resource estimate.

12.1.2 2012 Database Verification

Tetra Tech validated the new drill holes from the 2012 drilling program over the Contact and 147 Zones. No errors were encountered.

12.2 Tetra Tech Site Visit, 2012

The Tetra Tech site visit was conducted by Paul J. Daigle, P.Geo., Senior Geologist for Tetra Tech, from July 18 and July 20, 2012, for two days. The site visit included an inspection of the Project site, and the core logging and sampling facility and core storage area. Mr. Daigle was accompanied on the site visit by Mr. Howard Bird, Vice

President Exploration and Mr. John Dixon, Senior Geologist, both employees of Brigus.

12.2.1 PROJECT SITE AND DRILLHOLE LOCATIONS

The Project site for the Contact and 147 Zones was visited on the July 17, 2012. Several collar locations were checked in the field and compared to the database records. No rock outcrops were observed by Tetra Tech on this site visit. The Project site was clean of drilling debris.

Collars for 23 diamond drillholes over the Contact and 147 Zones were checked. Collar locations were verified using a hand-held Garmin GPSMap 60CSx (Figure 12.1) and were found to be within an acceptable tolerance of GPS unit accuracy (average of ± 4 m). All checked collar locations were found to be consistent with the database. The summary of the verified drill collars are shown in Table 12.8.

Figure 12.1 Drill Collar GF12-583MET

Table 12.8 2012, Verified Collar Coordinates

Diamond Drillhole	Brigus		Tetra Tech		Δ Easting (m)	Δ Northing (m)
	Easting (m)	Northing (m)	Easting (m)	Northing (m)		
Contact Zone						
GF12-583MET	551112	5372906	551112	5372904	0	2
GF12-448	551107	5372910	551110	5372906	-3	4
GF12-443	551126	5372897	551126	5372891	0	6
GF12-442	551106	5372884	551106	5372882	0	2
GF12-570	551185	5372935	551187	5372935	-2	0
GF12-496	551185	5372947	551185	5372946	0	1
GF12-560	551200	5372884	551203	5372891	-3	-7
GF12-568&569	551200	5372859	551203	5372856	-3	3
GF12-578	551207	5372847	551210	5372842	-3	5
GF12-599	551215	5372834	551215	5372827	0	7
GF12-602	551220	5372825	551221	5372819	-1	6
147 Zone						
GF12-495	551382	5372497	551383	5372496	-1	1
GF12-500	551395	5372472	551397	5372472	-2	0
GF12-510	551431	5372447	551434	5372444	-3	3
GF12-519	551438	5372422	551439	5372418	-1	4
GF12-533	551468	5372409	551467	5372405	1	4
GF12-540	551457	5372359	551456	5372357	1	2
GF12-447	551467	5372347	551467	5372348	0	-1
GF12-441	551467	5372334	551465	5372331	2	3
GF12-518	551450	5372309	551448	5372309	2	0
GF12-437	551466	5372309	551466	5372312	0	-3
GF12-436	551435	5372309	551433	5372308	2	1
GF12-462	551306	5372497	551304	5372501	2	-4

A previous site visit was conducted by Tetra Tech in November 2011, which reviewed collar locations for 29 drillholes. An average tolerance of ±4 m was noted and considered an acceptable tolerance given the accuracy of handheld GPS units.

Drillhole collar locations, on the Contact and 147 Zones, were marked by a wooden picket with spray paint or flagging tape (Figure 12.2 and Figure 12.3). Most pickets also have an aluminum tag stapled to the picket noting the drillhole name and orientation although, at the time of the visit, many of the 2012 drillholes had not yet been labelled with the aluminum tag. The casings of all verified collars were capped with a steel threaded cap.

Figure 12.2 Contact Zone Surface Area; looking south (GF12-568 & 569)

Figure 12.3 147 Zone Surface Area; Looking North (Drill Rig at GF12-533)

12.2.2 CORE LOGGING AND SAMPLING FACILITY

The core logging and sampling facility was inspected on this site visit (Figure 12.4 and Figure 12.5) and is located outside of the exploration offices on the Black Fox mine site. The core logging and sampling facility is clean and kept orderly. There is sufficient lighting for the drill core logging and storage within the facility.

As these facilities are located on an operating mine site, all personal protective equipment is worn at all times.

Figure 12.4 Core-logging Facility

Figure 12.5 Core-cutting Saws

CORE STORAGE

The core storage at the Black Fox Mine was also inspected on this site visit (Figure 12.6). The drill core is kept in sheltered core racks outside of the core logging facility at the Black Fox Mine. The area is kept clean and orderly. Once the drill boxes are stored their locations are recorded by exploration personnel for ease of tracking.

Figure 12.6 Core Racks and Cross Piled Core Boxes

12.2.3 CHECK SAMPLES, 2012 DRILL PROGRAM

Independent check samples of the 2012 drill core were collected during the site visit by Tetra Tech. Eight samples were collected from the available drill core at the core logging and storage site at the exploration offices at the Black Fox Mine site.

The check sample intervals were selected randomly within the mineralized lithologies and spatially within the Contact and 147 Zones. The samples were collected from the equivalent sample intervals as Brigus' samples. The samples were taken by splitting the half core into quarters, by rock saw, where one quarter was returned to the core box and the second quarter placed in a sample bag. The core splitting was supervised by Tetra Tech, placed in sample bags with a sample tag, labelled and sealed on site by Tetra Tech. The samples were kept with the author at all times for the duration of the site visit and return to Toronto. Upon returning to Toronto, the check samples were sent to ALS Minerals in Sudbury, Ontario for analysis.

At ALS Minerals, the sample were prepared and analyzed in the same manner as Rare Earth Metals' analyses. Sample preparation was by crushing the sample to up to 70% of the sample passing a 2 mm screen, was split by riffle splitter to 250 g and was pulverized where 85% passed 75 µm screen (ALS Minerals Codes CRU-31, SPL-21, PUL-31). Analysis of the samples was by fire assay with a gravity finish. method (ALS Minerals Code Au-GRA21).

Tetra Tech is of the opinion that the sample analysis used for the Brigus' drill core samples is adequate for purposes of this technical report.

The purpose of the check sample assays is to confirm indications of mineralization and is not intended as duplicate or QA/QC samples, particularly when free gold is visible in the sample intervals and neighbouring sample intervals. The results of Tetra Tech's check sample analysis correlates well with Brigus' assay results, for the same sample intervals. Variation between the check samples and original samples are due to the "nugget" nature of the gold within the zones and the sampled drill core.

A summary of the results are shown in Table 12.9 and Table 12.10.

Table 12.9 List of 2012 Check Samples

Drillhole	Tetra Tech Sample No.	Brigus Sample No.	Sample Interval (m)	Core Box	Zone	Lithology
GF12-441	626467	62168	211.00 to 212.00	45, 46	147	-
GF12-463	626468	63833	168.00 to 169.00	33	147	-
GF12-442	626469	58096	62.00 to 63.00	9	Contact	-
GF12-448	626470	58360	123.00 to 124.00	24, 25	Contact	-
GF12-520	626471	66269	188.20 to 189.00	39	147	-
GF12-542	626472	62017	150.00 to 151.00	30, 31	147	-
GF12-548	626473	67084	193.00 to 194.00	37	Contact	-
GF12-560	626474	62947	236.00 to 237.00	51	Contact	-

Table 12.10 2012 Check Sample Results and Comparison

Drillhole	Tetra Tech Sample No.	Au (ppm)	Brigus Sample No.	Au (ppm)	Difference Au (ppm)	Difference (%)
GF12-441	626467	6.49	62168	3.57	2.92	45
GF12-463	626468	0.97	63833	0.55	0.42	43
GF12-442	626469	3.47	58096	2.54	0.93	27
GF12-448	626470	4.08	58360	5.07	-0.99	-24
GF12-520	626471	52.00	66269	27.15	24.85	48
GF12-542	626472	4.74	62017	1.92	2.82	59
GF12-548	626473	1.33	67084	3.77	-2.44	-184
GF12-560	626474	1.90	62947	1.69	0.21	11

12.3 TETRA TECH OPINION

It is Tetra Tech’s opinion that the assay analyses and results are adequate for purposes of this technical report and resource estimate.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

In April 2012, Brigus retained SGS, based in Lakefield, ON, to undertake metallurgical test work on sample ore from the Contact and 147 Zones.

The test program consists of:

- head assays
- grindability testing
- gravity concentration
- cyanidation testing
- carbon-in-pulp (CIP) testing
- solid/liquid separation
- cyanide destruction and tailings

In July 2012, Brigus collected two composite samples as representing ore from both the Contact Zone and the 147 Zone. A summary of the sample intervals from each zone are listed in Table 13.1 and Table 13.2.

Results from the above metallurgical test work are pending and are expected in Q4 2012.

Table 13.1 Composite Sample from 147 Zone

Drillhole	From (m)	To (m)	Interval (m)
GF11-299	153.30	154.20	0.90
	181.00	191.00	10.00
GF11-322	182.00	186.00	4.00
GF11-330	27.60	34.00	5.40
GF11-338	208.40	224.11	15.71
	224.65	228.08	3.43
GF11-366	355.55	361.25	5.70
GF11-377	98.50	104.00	5.50
GF11-382	180.50	183.50	3.00
GF12-414	94.00	100.00	6.00
Total	**-**	**-**	**59.64**

Table 13.2 Composite Sample from Contact Zone

Drillhole	From (m)	To (m)	Interval (m)
GF11-289	179.00	184.00	5.00
GF11-302	180.60	182.60	2.00
GF11-311	131.00	133.35	2.35
GF11-312	311.00	317.00	6.00
GF11-319	139.15	148.00	8.85
	172.00	175.10	3.10
GF11-326	129.50	146.00	13.15
	197.8	201.00	3.20
	239.35	241.00	1.65
GF11-343	98.50	103.80	5.30
	294.10	297.00	2.90
GF11-346	427.30	429.80	2.50
	444.00	445.70	1.70
GF11-358	238.00	243.30	5.30
GF11-364	222.20	223.20	1.00
GF11-373	274.57	276.57	2.00
Total	**-**	**-**	**66.00**

14.0 MINERAL RESOURCE ESTIMATES

Tetra Tech completed the mineral resource estimation using GEMS™ v. 6.4.1 desktop software for the Project. Paul Daigle, P.Geo. of Tetra Tech is the QP responsible for this updated resource estimation of the 147 and Contact Zone deposits in the Black Fox Complex.

The effective date of this resource estimate is August 14, 2012.

14.1 DRILLHOLE DATABASE

The drillhole sample database was compiled by Brigus and reviewed by Tetra Tech, as described in Section 12.0. Tetra Tech reports the database is acceptable for use in the resource estimation.

The Microsoft Access® database contains collar locations, drillhole orientations with down hole deviation surveys, assay intervals with results, geologic logs and geotechnical logs.

The dataset imported into GEMS™ contained information from 687 drillholes totalling 218,274.6 m. The subset of data used for the resource estimates consisted of 488 completed drillholes totalling 151,704.1 m of drilling. A total of 47,107 assay records and 74,008 composited records were used for the resource estimate. The maximum drillhole length within the Contact and 147 Zones is 891.0 m and the average length is 317.7 m.

14.2 MODEL LIMITS

The Contact and 147 Zones were modelled only for gold content. The block model was developed based on the selective mining unit (SMU) for an underground operation using a block size 3 m wide by 3 m long using a bench height of 3 m. The block model origins are summarized in Table 14.1.

Table 14.1 Black Fox Complex Model Limits

Block Model	Direction	Minimum (m)	Maximum (m)	Number of Blocks
147+Con_2012	Easting	550,420	551,620	400 columns
	Northing	5,372,230	5,373,580	450 rows
	Elevation	-355	320	225 levels

14.3 GEOLOGIC MODEL

Interpretations were developed by Brigus on east-west sections as 3D rings honouring the drillhole lithologies. Solids were created using these sectional interpretations which were joined using tie lines in GEMS™. The geological domains along with their associated block model code are listed in Table 14.2.

Table 14.2 Geological Domains

Rock Code	Block Model Code	Description
CONTACT	100	Contact Zone – Brecciated Mafic Volcanic
DIA	101	Diabase
SED	102	Silicified Cherty Tuff/Metasediment
MIFW	103	Mafic Intrusive – Footwall
MV	104	Mafic Volcanic
VIV	105	147 Zone – Variolitic Intrusive Volcanic
MIHW	106	Mafic Intrusive – Hanging-wall
OB	201	Overburden

Figure 14.1 illustrates a typical Contact Zone geological section with accompanying assay intersections. Figure 14.2 shows a similar figure for the 147 Zone.

Figure 14.1 Geological Section, Contact Zone

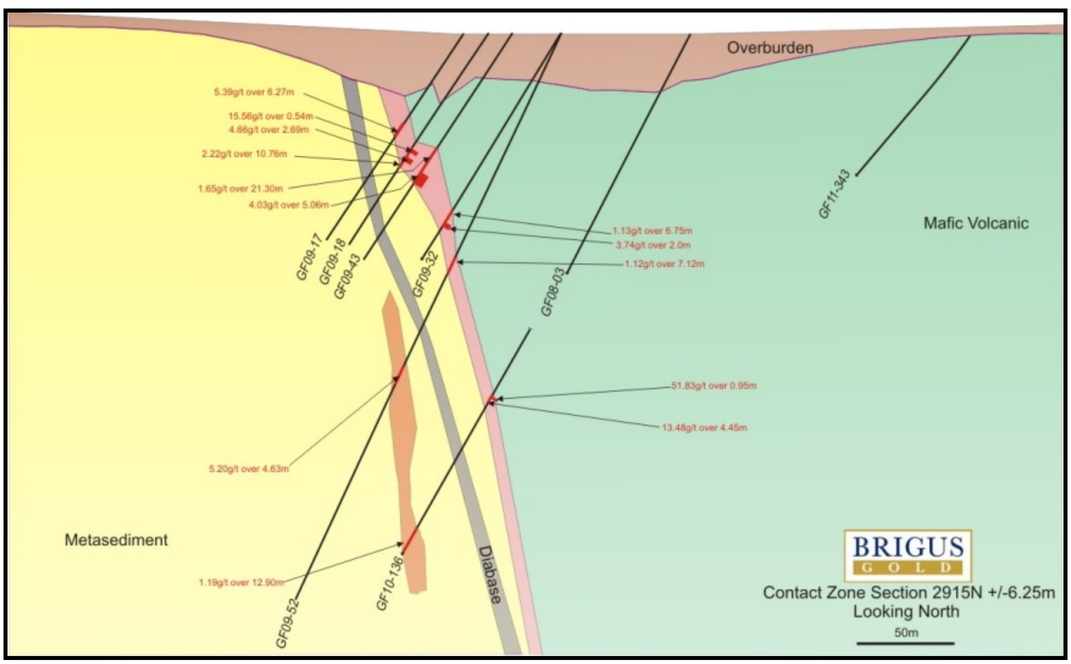
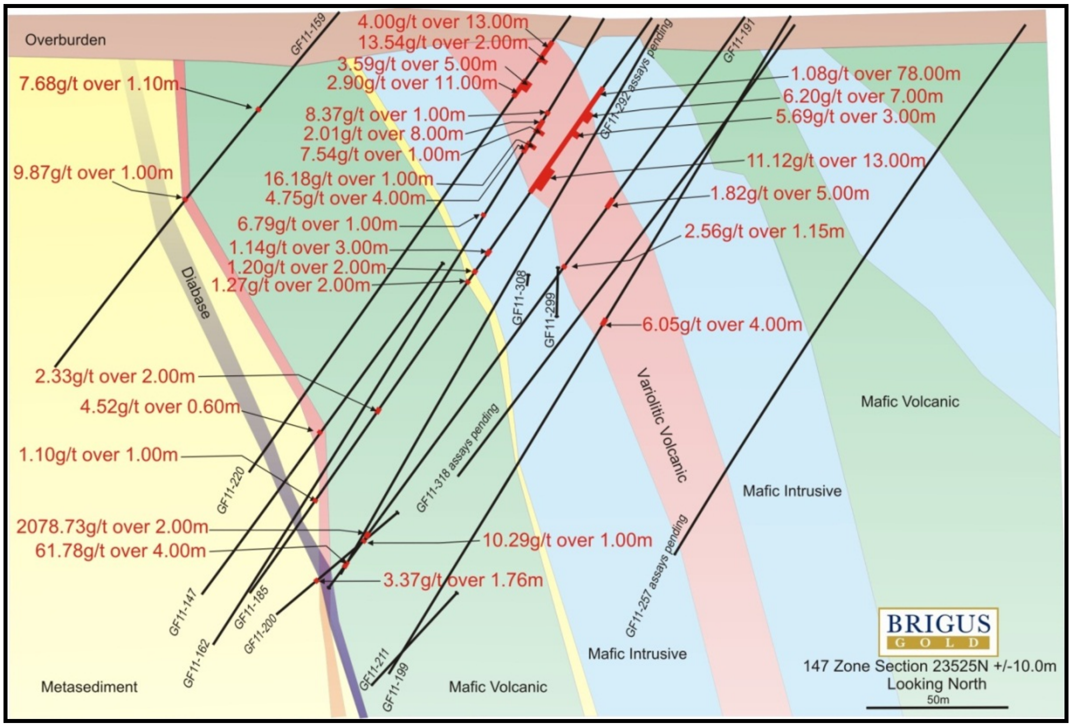


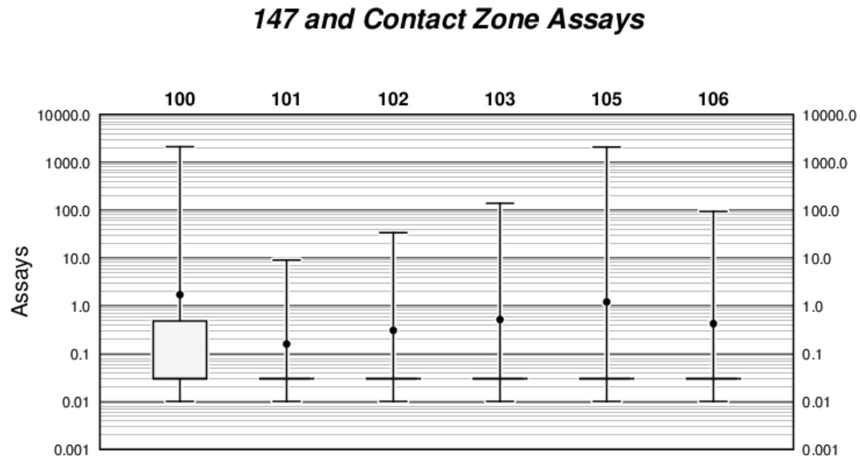
Figure 14.2 Geological Section, 147 Zone



14.4 ASSAY STATISTICS

The assay data was first evaluated based on the geological domains (as defined in Table 14.2) using boxplots. Figure 14.3 illustrates the grade distribution by block model code as originally logged by the geologist. The CONTACT and 147 (VIV) units, codes 100 and 105 respectively, are the primary units containing gold mineralization.

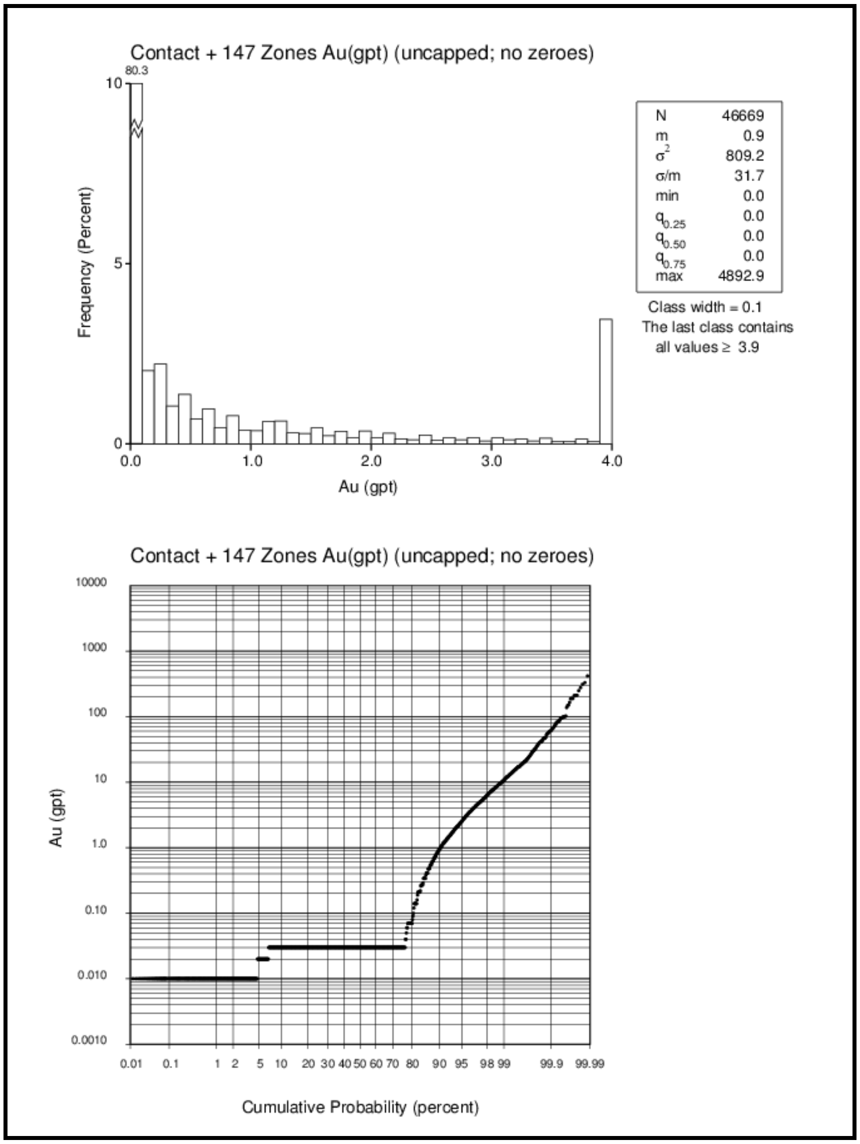
Figure 14.3 Assay Grade Boxplot by Block Model Code



	100	101	102	103	105	106	
Number of data	5099	219	3649	2073	12892	4668	Number of data
Mean	1.709	0.159	0.307	0.516	1.207	0.423	Mean
Maximum	2097.24	9.05	33.5	137.69	2079.51	94.01	Maximum
Upper quartile	0.48	0.03	0.03	0.03	0.03	0.03	Upper quartile
Median	0.03	0.03	0.03	0.03	0.03	0.03	Median
Lower quartile	0.03	0.03	0.03	0.03	0.03	0.03	Lower quartile
Minimum	0.01	0.01	0.01	0.01	0.01	0.01	Minimum
Variance	999.955	0.4823	1.77	14.0726	641.719	5.35	Variance
CV	18.5	4.355	4.338	7.266	20.985	5.469	CV
Skewness	58.852	10.153	12.596	26.247	74.112	21.231	Skewness

The gold assay data was also plotted on histogram and probability graphs (Figure 14.4) to understand the basic statistical distribution of the raw data. The histogram plots show a strong positive skewness and the probability plot illustrates a continuous population set with no major changes in slope within the main data population. The probability plot does show outlier data values at the upper end of the grade distribution (above 100 g/t gold) with a break in the distribution.

Figure 14.4 All Zones, Gold Assays (No Zeroes)



14.5 CAPPING

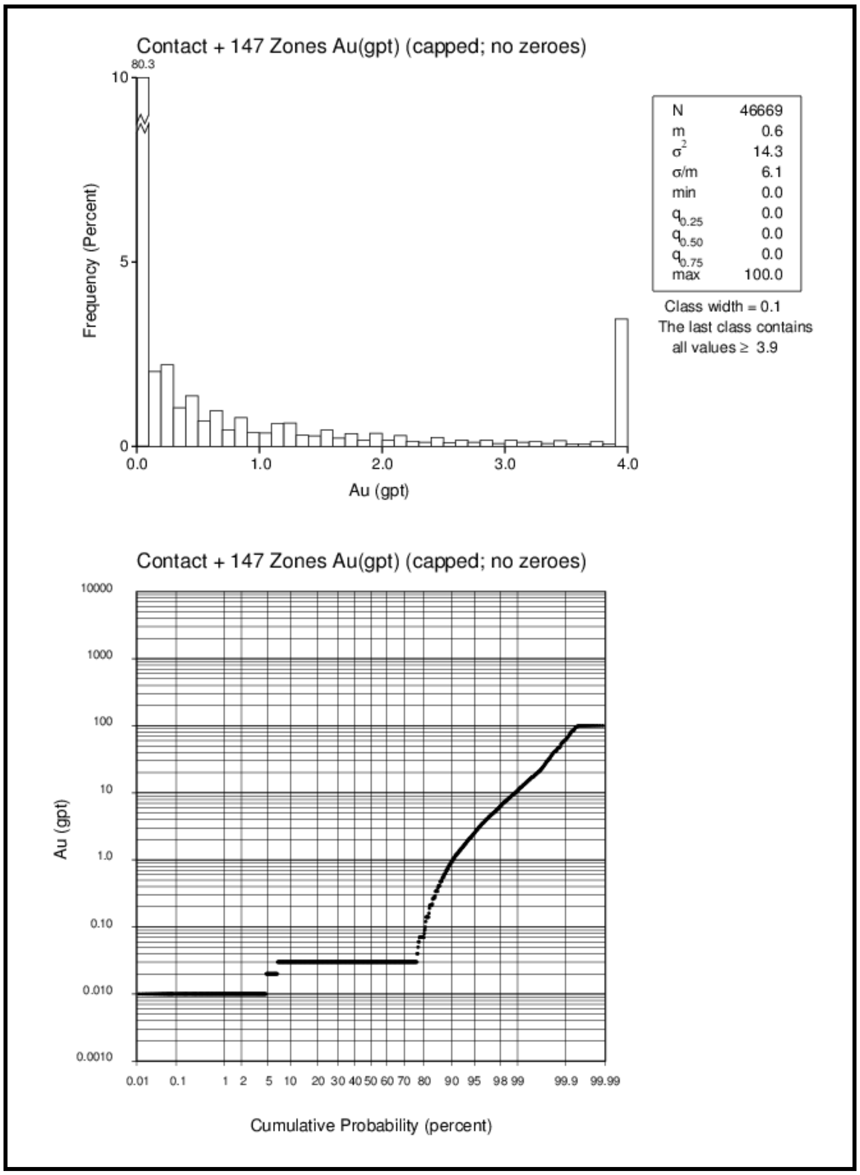
In mineral deposits having skewed distributions (typically with coefficient of variation greater than 1.0), a few high-grade assays can represent a large portion of the metal content. Often there is little continuity demonstrated by these assays. In other words, it can be assumed they occur at random within the deposit[1].

[1]Detailed sampling will undoubtedly show short-scale geological controls which are responsible for the high grades observed and therefore the non-randomness of the high-grade occurrence. At the exploration stage, this short-scale information is not available and there is no apparent pattern to the occurrence of high-grade samples. Hence follows the assumption of a random spatial distribution.

Review of the probability plot gold assays (Figure 14.4) showed a fairly continuous distribution of gold values up to about the 100 g/t gold level. Based on this outlier nature of the composites, the gold values were capped at 100 g/t gold before compositing. This resulted in 21 assay values being capped, 6 in the Contact Zone, and 15 in the 147 Zone.

Figure 14.5 presents the histogram and probability plot to show the behaviour of the capped statistics for all data in the resource database.

Figure 14.5 Histogram and Probability Plot



14.6 COMPOSITING

The raw drill data was composited into 1.5 m intervals starting at the collar and continuing to the bottom of the hole. The appropriate codes for missing samples and no recovery were used during the compositing procedures.

The composites were plotted on histogram and probability plots for comparison to the raw assay data. Figure 14.6, Figure 14.7 and Figure 14.8 illustrate the capped statistics for the 1.5 m composites.

Figure 14.6 Capped Gold 1.5 m Composites; Contact and 147 Zones

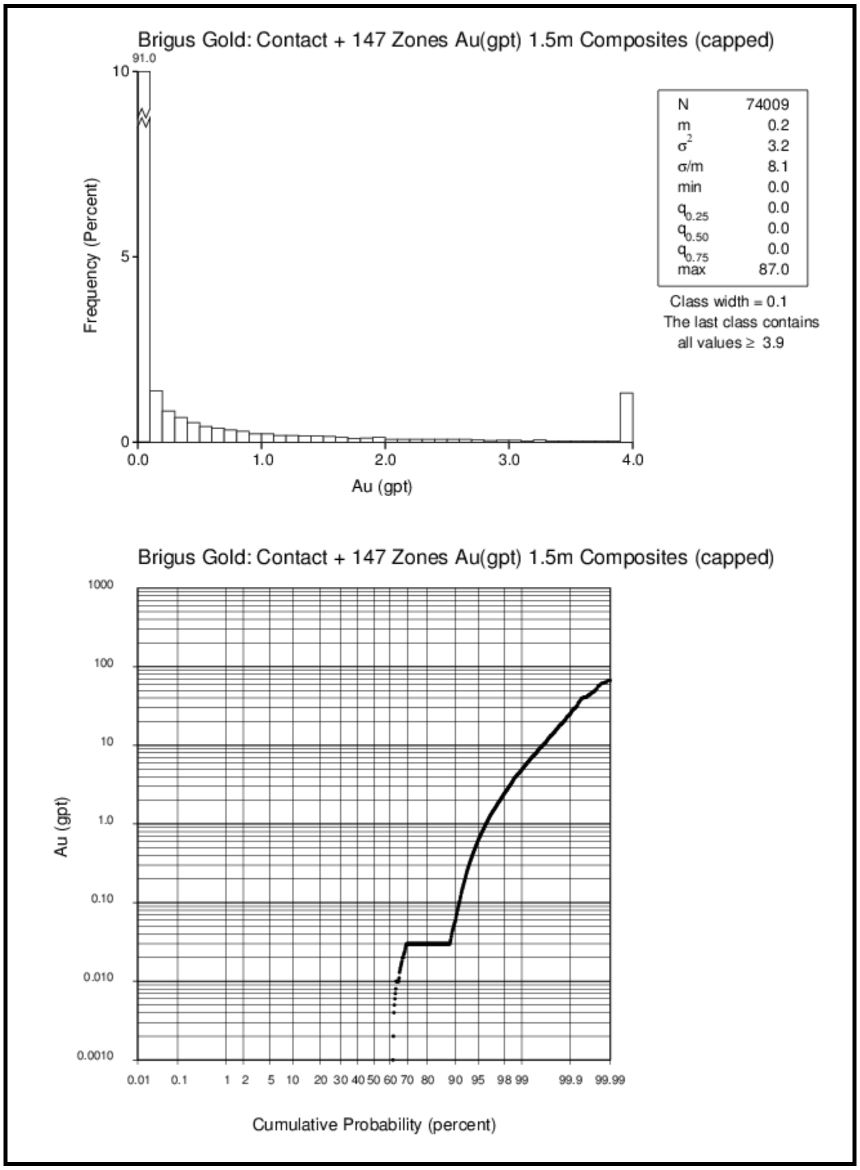


Figure 14.7 Capped Gold 1.5 m Composites; Contact Zone

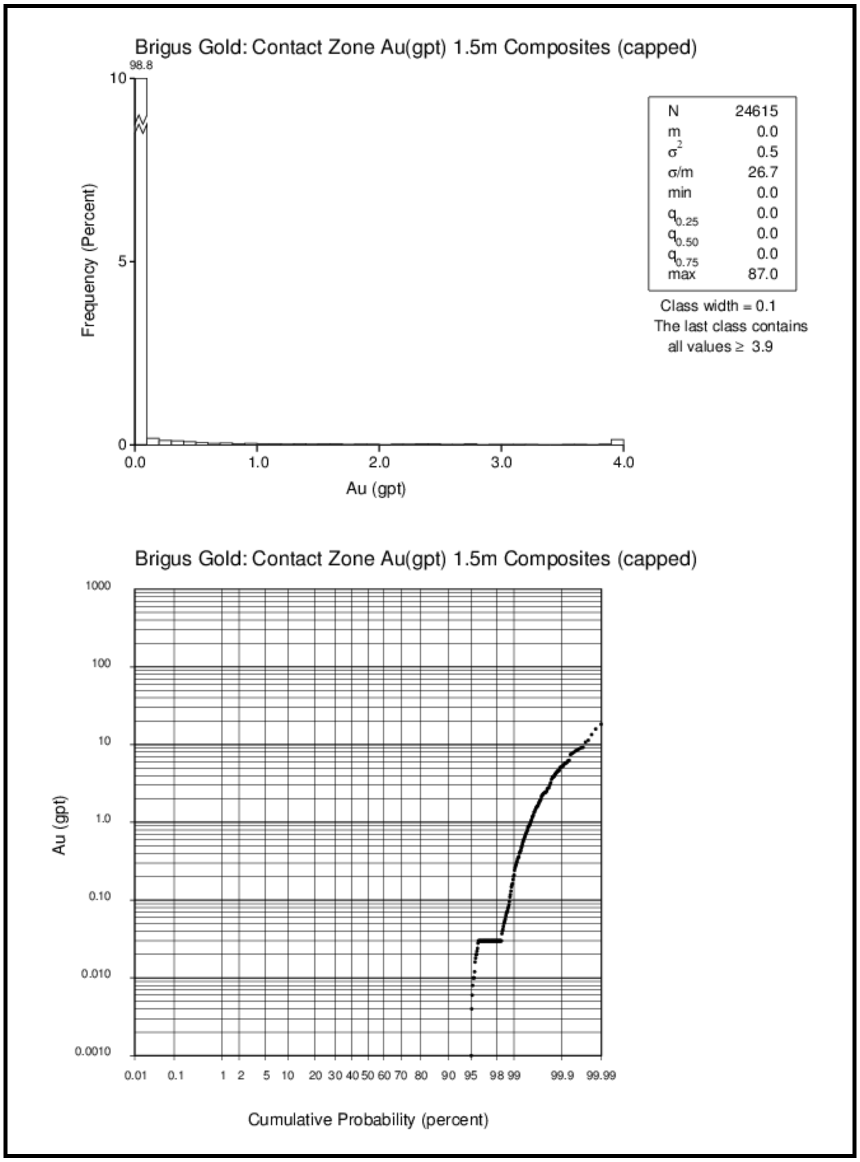
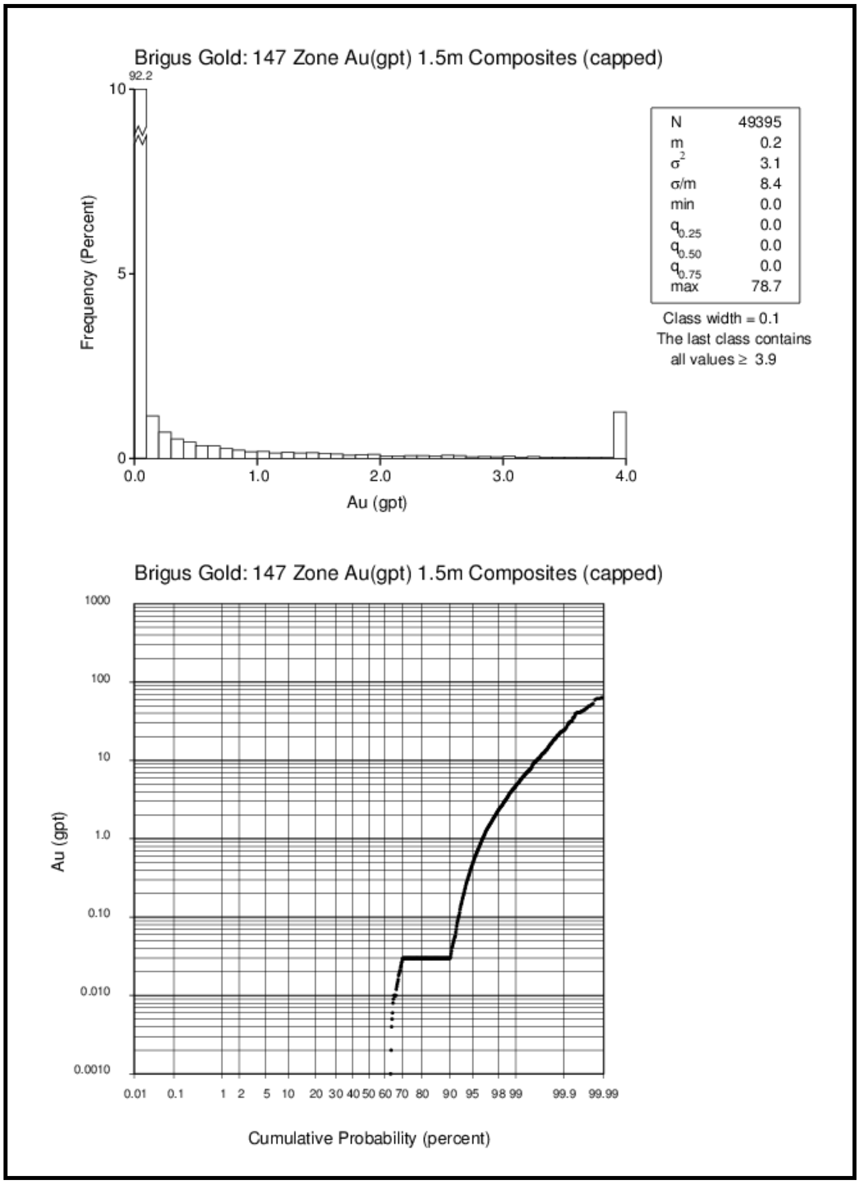


Figure 14.8 Capped Gold 1.5 m Composites; 147 Zone



14.7 SPECIFIC GRAVITY

During 2012, specific gravity measurements were collected by Brigus. Swastika Laboratories processed 1,162 samples of drill core, which yielded an average density of 2.88 g/cm^3 and a range from 2.56 to 3.24 g/cm^3. The overall average of 2.88 g/cm^3 was assigned to the host country rock and a value of 2.00 g/cm^3 was assigned to the overburden. Table 14.3 summarizes the average densities by lithology.

Table 14.3 Specific Gravity Summary by Lithology

Rock Code	Block Model Code	Specific Gravity	Description
CONTACT	100	2.89	Contact Zone – Brecciated Mafic Volcanic
DIA	101	2.88	Diabase
SED	102	2.76	Silicified Cherty Tuff / Metasediment
MIFW	103	2.92	Mafic Intrusive – Footwall
MV	104	2.87	Mafic Volcanic
VIV	105	2.87	147 Zone – Variolitic Intrusive Volcanic
MIHW	106	2.88	Mafic Intrusive – Hanging-wall
Assigned Values			
OB	201	2.00	Overburden
CR	99	2.88	Country Rock

14.8 VARIOGRAM ANALYSIS

Geostatisticians use a variety of tools to describe the pattern of spatial continuity or strength of the spatial similarity of a variable with separation distance and direction. One of these is the correlogram, which measures the correlation between data values as a function of their separation distance and direction. If we compare samples that are close together, it is common to observe that their values are quite similar and the correlation coefficient for closely spaced samples is near 1.0. As the separation between samples increases, there is likely to be less similarity in the values and the correlogram tends to decrease toward 0.0. The distance at which the correlogram reaches zero is called the “range of correlation” or simply the range. The range of the correlogram corresponds roughly to the more qualitative notion of the “range of influence” of a sample; it is the distance over which sample values show some persistence or correlation. The shape of the correlogram describes the pattern of spatial continuity. A very rapid decrease near the origin is indicative of short scale variability. A more gradual decrease moving away from the origin suggests more short scale continuity. A plot of 1-correlation is made so the result looks like the more familiar variogram plot.

Another tool for describing spatial correlation is the indicator variogram. Correlograms show the decrease in the strength of the relationship between grades by distance and direction. Conversely, variograms show the increase in dissimilarity with distance and direction. In the same way that correlograms tend to decrease toward zero, the variogram tends to increase toward a sill or the overall variance of the variable of interest. The indicator is simply a value of 0 or 1 that is assigned to a data location according to whether the grade exceeds some threshold value. The indicator variogram is the variogram calculated using the indicator data. Indicator variograms are useful in describing the spatial continuity of different segments of the grade distribution. They are most useful in examining properties of spatial continuity in the higher-grade samples. Tetra Tech employed this method to define the high-grade indicator zone.

The approach to develop the variogram models used Sage™ software. Directional sample correlograms were calculated along horizontal azimuths of 0, 30, 60, 120, 150, 180, 210, 240, 270, 300, and 330°. For each azimuth, sample correlograms were also calculated at dips of 30 and 60° in addition to horizontally. Lastly, a correlogram was calculated in the vertical direction. Using the 37 sample correlograms an algorithm determined the best-fit model nugget effect and two-nested structure variance contributions. After fitting the variance parameters the algorithm then fitted an ellipsoid to the 37 ranges from the directional models for each structure. The anisotropy of the correlation was given by the range along the major, semi-major, and minor axes of the ellipsoids and the orientations of these axes for each structure.

14.8.1 GOLD GRADE CORRELOGRAM

Variogram analysis for the gold grade was conducted using 2 and 3 m composites. Variograms were constructed using Sage™ software as discussed in Section 14.8. Table 14.4 summarizes the variogram structures, rotations and ranges for the 1.5 m composites by mineralization domain. The models were all exponential models and used the ZYZ-RRR GEMS™ rotation convention.

Table 14.4 1.5 m Composite Gold Grade Variogram Models

Domains	Nugget	Sill	Rot. Z	Rot. Y	Rot. Z	Range X	Range Y	Range Z
100	0.300	0.591	49	26	-51	4.1	15.4	5.1
		0.109	21	16	-9	22.3	285.5	28.7
105+106	0.200	0.768	20	84	-3	7.0	10.6	8.2
		0.032	69	-48	-77	59.8	460.6	710.2

14.9 GRADE INTERPOLATION

Geologic wireframes were used to code the geological model using the domains defined in Table 14.2. Figure 14.9 illustrates a typical block model section. The brown blocks are the Contact Zone and the blue blocks are 147 Zone, the colors and corresponding geological domains are listed in Table 14.5.

Modelling consisted of grade interpolation by OK, nearest neighbour (NN) and ID^2 grades were also determined for validation purposes. The grade interpolation used search ellipses as defined in Table 14.6. These parameters were based on the geological interpretation and variogram analysis. A two-pass strategy was used to estimate grades in the block model workspace “147+Con_2012”.

Figure 14.9 Block Model Section Northing 5372360; looking north, showing Rock Types; (100 m x 100 m squares)

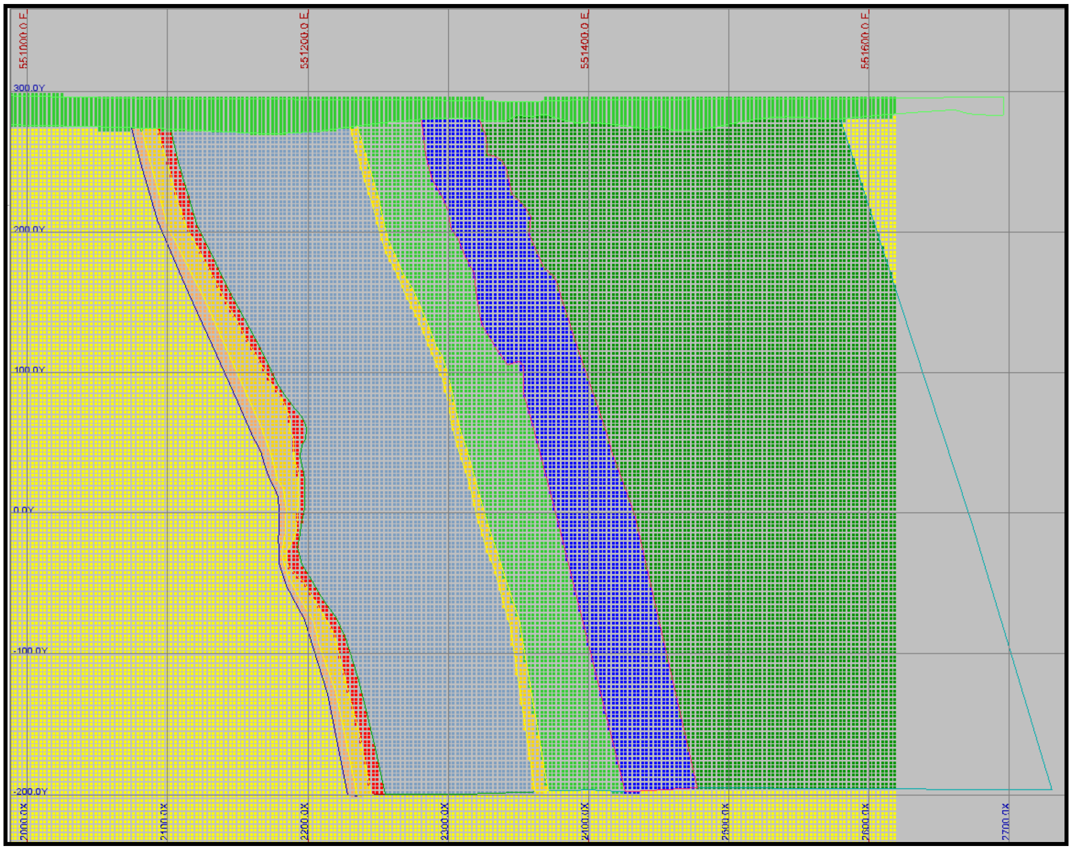


Table 14.5 Geological Domains (Rock Types)

Rock Code	Block Model Code	Color
CONTACT	100	Red
DIA	101	Light Orange
SED	102	Gold
MIFW	103	Lime
MV	104	Light Blue
VIV	105	Blue
MIHW	106	Green
OB	201	Brown
CR	99	Yellow

The number of composites used in estimating a model block grade followed a strategy that matched composite values and model blocks sharing the same rock code or domain during all passes for rock codes 100 (Contact Zone) , 101, 102, 103 and 104. Model blocks 105 (147 Zone) and 106 were considered as a single domain for estimation purposes due to the soft boundary between these two domains. For the first pass, composites from at least three drillholes were used, for the second pass at least two drillholes and for the third pass a minimum of one drillholes was allowed (increasing longer search distances). Further details are found in Table 14.6.

Table 14.6 Interpolation Parameters for Open Pit Model

Block Model	Point Area	Grade Field	Interpolation Profile	Maximum No. of Composites/ Drillholes	Minimum No. of Composites	Maximum No. of Composites
147+Con_2012	1.5mComps	auokc	1AUCKP11/2AUCIDP1	2	5	16
-	-	auidc	1AUCKP2/2AUCIDP2	2	3	16
		aunnc	3AUCNNP1	1	1	1
		auok	1AUKP11/2AUIDP1	2	5	16
		auid	1AUKP2/2AUIDP2	2	3	16
		aunn	3AUNNP1	1	1	1

Note: only the Contact (100) and 147 Zones (105+106) were interpolated by OK.

The two-pass ellipsoidal search strategy was based on ZYZ rotation. The search ellipses are summarized in Table 14.7.

Table 14.7 Search Ellipses

Domains	Profile	Rotation about Z	Rotation about Y	Rotation about Z	Anisotropy X	Anisotropy Y	Anisotropy Z
100	TTCZP1	0	70	0	20	30	10
	TTCZP2	0	70	0	40	80	10
101-104	TTP1	0	70	0	20	30	10
	TTP2	0	70	0	60	80	20
105-106	TT147P1	0	70	0	20	30	10
	TT147P2	69	-48	-77	30	60	110

Upon completion of the interpolations, the block model was finalized by combining the OK interpolations of the Contact and 147 Zones and the ID^2 interpolations of the remaining zones.

14.10 Block Model Validation

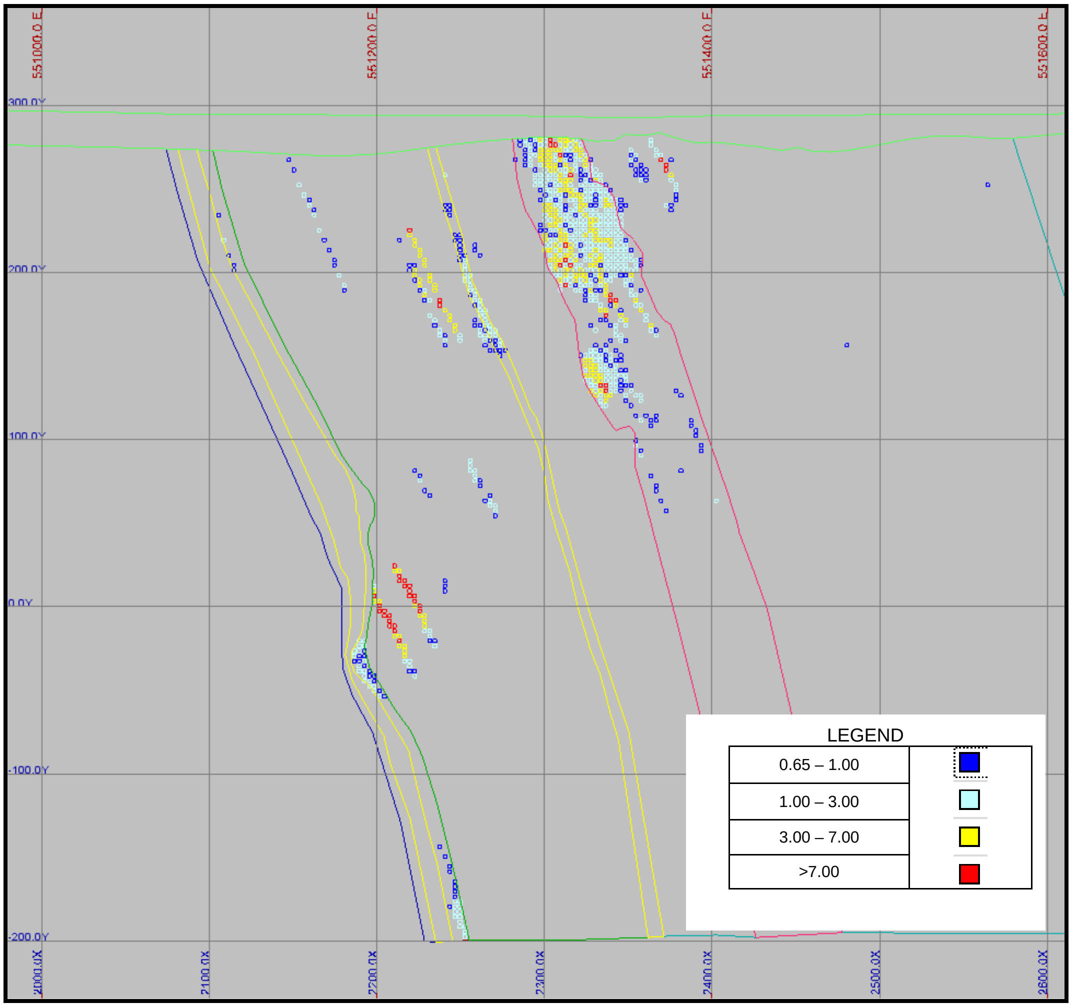
Tetra Tech distinguishes between verification from validation as follows:

- Verification is a manual (e.g. visual inspection) or quasi-manual (e.g. spreadsheet) check of the actual procedure used.
- Validation is a test for reasonableness using a parallel procedure, which may be either manual or (but is usually) a computer-based procedure.

14.10.1 VISUAL CHECKS

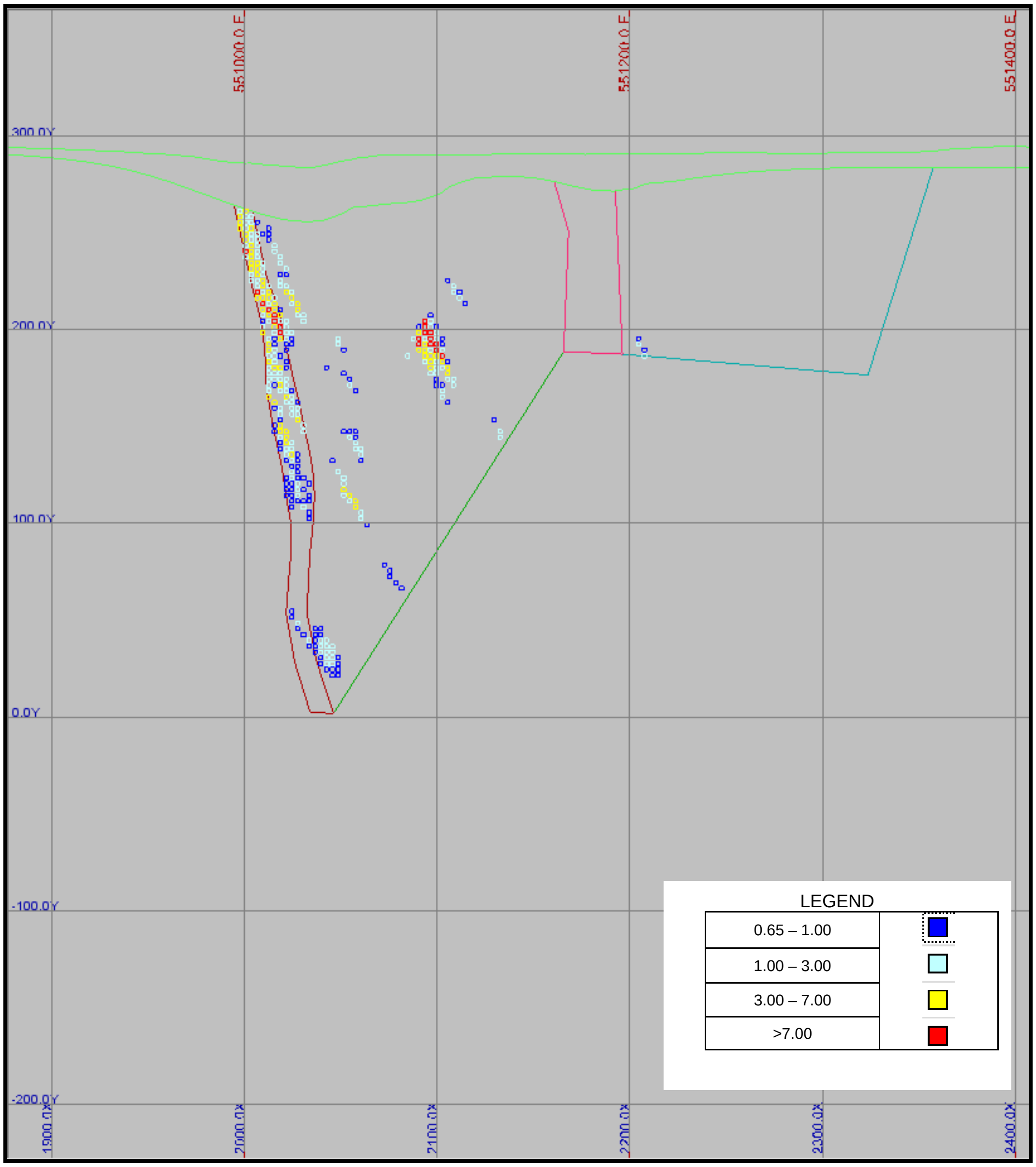
Interpolated block grades, resource classification, geological interpretation outlines and drillhole composite intersections were verified on screen for plan and section. Based on visual inspection by Tetra Tech, the block model grades appeared to honour the data well. The estimated grades exhibit a satisfactory consistency with the drillhole composites.

Figure 14.10 147 Zone; Section at UTM 5372360 mN (looking north)



Note: 100 m x 100 m squares

Figure 14.11 Contact Zone; Section at UTM Northing 5373135 mN (looking north)



Note: 100 m x 100 m squares

14.10.2 GLOBAL COMPARISON

Tetra Tech verified the block model estimates for global bias by comparing the average gold grades of the OK, ID^2 and NN estimates for the Contact and 147 Zones. The results (Table 14.8) show no evidence of bias from the OK and ID estimates. However, the NN estimate has a higher grade than that of the 1.5 m composites used for the estimate. This may be due to the NN populating blocks with higher grades that were not estimated by OK or ID^2 methods.

Table 14.8 Grade Comparison of Block Model Estimates for the Contact and 147 Zones (Domains 100, 105, 106 only); no zeroes

Block Model	Grade Item	Mean Grade (g/t Au)
147+Con_2012	auokc	0.342
	auidc	0.363
	aunnc	0.411
	1.5m Comps AUC	0.371

Table 14.9 summarizes the composite versus the final block model statistics for the Contact Zone and the 147 Zone.

Table 14.9 Composite versus Block Model Statistics; no zeroes

Domain		Grade Item	Mean Grade (g/t Au)	Standard Deviation	Coefficient of Variation
Contact Zone [100]	1.5 m Composite	AUC	1.016	3.827	3.767
	Block Model	AUCAP	0.617	1.294	2.097
147 Zone [105 +106]	1.5 m Composite	AUC	0.671	3.071	4.576
	Block Model	AUCAP	0.276	0.758	2.749

14.10.3 ADEQUACY OF RESOURCE ESTIMATION METHODS

The Contact Zone and 147 Zone of the Project have been estimated using GEMS™. This estimate was completed using proper geologic input, appropriate block model cell sizes, grade capping, assay compositing and reasonable interpolation parameters. The results have been verified by visual review and statistical comparisons between the estimated block grades and the composites used to assign them. No biases have been identified in the model.

14.11 MINERAL RESOURCE CLASSIFICATION AND RESOURCE STATEMENT

14.11.1 RESOURCE CLASSIFICATION

The mineral resources are classified under the categories of Measured, Indicated and Inferred Mineral Resources, in accordance with CIM Definition Standards. Classification of the resources reflects confidence of grade continuity, as a function of many factors including primarily; assay data quality, QA/QC procedures, quality of density data, and sample spacing relative to geological and geo-statistical observations regarding the continuity of mineralization.

Tetra Tech is not aware of any environmental, permitting, legal, title, taxation, socioeconomic, marketing or other relevant issues are known to that may affect the estimate of mineral resources at this time.

The resource model blocks were classified into Indicated and Inferred categories based on the level of confidence in the grade estimate for each block. This was accomplished with a combination of two main criteria: the number of drillholes (which in part reflects the number of samples used) and the distance to the nearest of the sample points.

Indicated Resources were categorized based on a minimum of three drillholes when the nearest sample point was less than 20 m. The Inferred Resources were categorized based on a minimum of two drillholes where the nearest sample point was less than or 40 m. No blocks were categorized as Measured.

14.11.2 MINERAL RESOURCE STATEMENT

The Contact Zone and 147 Zone mineralization of the Project is classified as having both Indicated and Inferred Resources. The two zones were estimated using both ID^2 and OK methods. No recoveries were applied.

The mineral resource is 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. These cut-offs have been developed based on current costs experienced at the Black Fox Mine. The total Indicated Resource is 7,105,378 t at a capped grade of 2.11 g/t gold. The total Inferred Resource is 1,692,267 t at a capped grade of 1.67 g/t gold. The classified mineral resources are shown in Table 14.10.

Table 14.10 Resource Estimate, Contact and 147 Zones, Black Fox Complex

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 14.11 to Table 14.14 show a breakdown of the open pit and underground resources for the Contact and 147 Zones.

14.11.3 Resource Estimate

Table 14.11 Open Pit Indicated Resource Estimate Contact and 147 Zones of the Black Fox Complex

	Cut-off Grade (g/t Au)	Density (g/cm^3)	Tonnes (kt)	Capped Au (g/t)
Open Pit Indicated	3.00	2.87	1,105	5.52
	2.63	2.87	1,361	5.01
	2.20	2.87	1,760	4.42
	1.80	2.87	2,298	3.85
	1.40	2.87	3,127	3.25
	1.00	2.87	4,539	2.60
	0.65	**2.87**	**6,874**	**2.53**

Table 14.12 Underground Indicated Resource Estimate Contact and 147 Zones of the Black Fox Complex

	Cut-off Grade (g/t Au)	Density (g/cm^3)	Tonnes (kt)	Capped Au (g/t)
Underground Indicated	3.00	2.87	186	6.09
	2.63	**2.87**	**231**	**5.44**
	2.20	2.87	319	4.60
	1.80	2.87	446	3.86
	1.40	2.87	680	3.07
	1.00	2.87	1,006	2.46
	0.65	2.87	1,697	5.37

Table 14.13 Open Pit Inferred Resource Estimate for the Contact and 147 Zones of the Black Fox Complex

	Cut-off Grade (g/t Au)	Density (g/cm^3)	Tonnes (kt)	Capped Au (g/t)
Open Pit Inferred	3.00	2.88	112	4.98
	2.63	2.87	143	4.50
	2.20	2.87	202	3.89
	1.80	2.87	322	3.18
	1.40	2.87	531	2.55
	1.00	2.87	905	1.97
	0.65	**2.87**	**1,548**	**1.59**

Table 14.14 Underground Inferred Resource Estimate for the Contact and 147 Zones of the Black Fox Complex

	Cut-off Grade (g/t Au)	Density (g/cm^3)	Tonnes (x 000 t)	Capped Au (g/t)
Underground Inferred	3.00	2.88	65	4.88
	2.63	**2.88**	**144**	**3.72**
	2.20	2.88	181	3.45
	1.80	2.88	238	3.10
	1.40	2.87	343	2.63
	1.00	2.88	550	2.07
	0.65	2.87	1,087	2.39

14.12 PREVIOUS RESOURCE ESTIMATES

14.12.1 BUSS (2010)

In 2010, Brigus retained Lawrence Buss to complete an NI 43-101 compliant technical report on the Contact Zone, referred to as the “main” Contact Zone.

The mineral resource was completed using a 1.0 g/t gold indicator probability model and reported on a 1.0 g/t gold and a 3.0 g/t gold cut-off grade (Buss 2010). The mineral resources are presented in Table 14.15 to Table 14.17.

Table 14.15 Main Contact Lens – Measured and Indicated Mineral Resource

Cut-off Grade (g/t Au)	Potential Material	Tonnes (t)	Au (g/t)
1.0	Measured	136,000	4.74
	Indicated)	301,700	4.98
	Total Measured + Indicated	**438,300**	**4.91**
3.0	Measured	73,200	7.39
	Indicated	179,000	7.25
	Total Measured + Indicated	**252,200**	**7.29**

Source: Buss (2010)

Table 14.16 Other Lenses – Indicated Mineral Resource

Cut-off Grade (g/t Au)	Potential Material	Tonnes (t)	Au (g/t)
1.0	Hanging Wall	19,900	3.17
	Footwall	117,100	1.93
	Total Indicated	**137,000**	**2.11**
3.0	Hanging Wall	4,600	8.33
	Footwall	12,400	4.05
	Total Indicated	**17,000**	**5.21**

Source: Buss (2010)

Table 14.17 All Lenses – Inferred Mineral Resource

Cut-off Grade (g/t Au)	Potential Material	Tonnes (t)	Au (g/t)
1.0	Main	273,300	4.14
	Hanging Wall	403,600	2.67
	Footwall	647,200	1.95
	Total Inferred	**1,324,100**	**2.62**
3.0	Main	149,700	6.09
	Hanging Wall	101,622	5.42
	Footwall	82,200	4.42
	Total Inferred	**333,500**	**5.47**

Source: Buss (2010)

14.12.2 Tetra Tech, 2011

At the end of 2011, Brigus retained Tetra Tech to complete the first update of the NI 43-101 compliant resource estimate on the Contact and 147 Zones, then known as the Grey Fox deposit.

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 (Figure 14.8). The cut-offs were developed based on current costs at the Black Fox Mine. The near surface mineralization along with the width of mineralization at the 147 Zone presents an opportunity for open pit extraction, so this material has been reported based upon the open pit cut-offs. The narrower width of mineralization along with the depths extent make the Contact Zone more conducive to underground mine extraction and therefore this material has been reported using the higher cut-off grades (Tetra Tech 2011).

Table 14.18 Resource Estimate Statement of the Grey Fox Deposit (effective November 30, 2011)

Resource Class	Cut-off Grade (g/t Au)	Potential Material	Tonnes	Capped Au (g/t)	Contained Au (oz)
Indicated	2.63	Underground	323,800	6.991	72,890
	0.65	Open Pit	543,300	2.505	43,820
		Total Indicated	**867,100**	**4.180**	**116,710**
Inferred	2.63	Underground	565,700	5.902	107,510
	0.65	Open Pit	4,898,800	2.231	351,910
		Total Inferred	**5,464,500**	**2.611**	**459,429**

15.0 ADJACENT PROPERTIES

15.1 INTRODUCTION

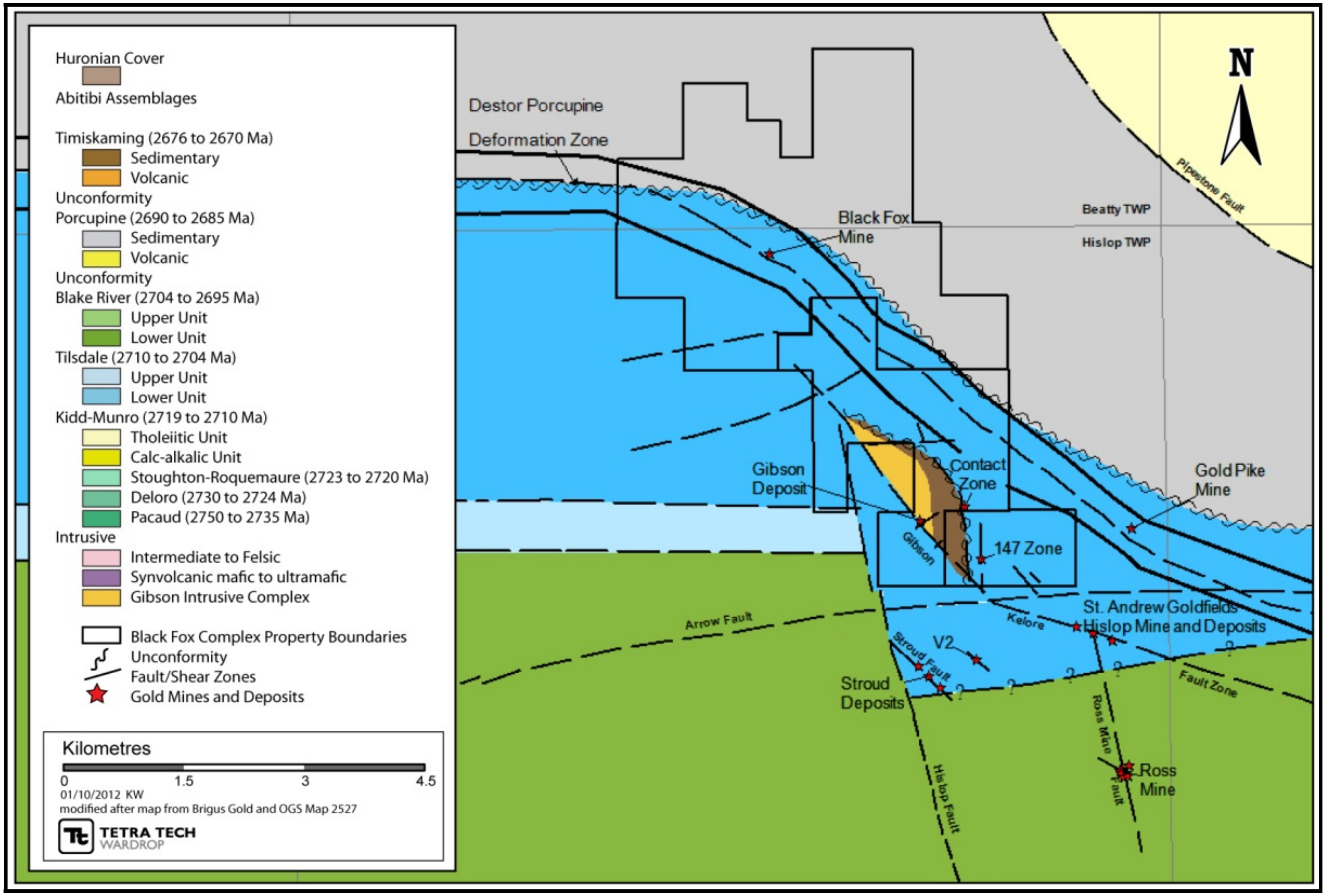
Figure 15.1 is a map showing the distribution of gold mines and deposits located mainly to the south or southeast along trend from the Project, which collectively form a semi-oval area of approximately 3 km in longest dimension. The gold mineralization is either directly with the DPDZ as is the case for the former Gold Pike Mine, or spatially related to principal structures associated with the DPDZ as listed below:

- Ross Mine Fault:
  - the former Ross gold-silver-copper Mine
- Gibson-Kelore Fault Zone:
  - St. Andrew Goldfields Limited (St. Andrew) Hislop Mine and other deposits
- Stroud Fault:
  - Stroud Resources Limited (Stroud) Creek, Creek Extension and Main deposits.

The St. Andrew Hislop Mine and deposits are located nearest the Project, and share similar Tisdale Assemblage stratigraphy and principal structures.

The following information has been publicly disclosed by the owner or operator of the adjacent properties. In each case the source of the information is identified. Tetra Tech has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the Property that is the subject of the technical report.

Figure 15.1 Adjacent Properties Map



Source: modified from Brigus and Ontario Geological Survey Map 2527

15.2 ROSS MINE

15.2.1 SUMMARY

The Ross Mine is a past producer (1936 to 1989) of greater than 1 Moz gold and 1.6 Moz of silver (Berger 2002). The mine is located some 3 km southeast along trend from the Brigus 147 Zone and 3 km southwest of the DPDZ in south central Hislop Township.

It is hosted in a down-dropped block east of the Hislop Fault and is the type example of a high-level, brittle-style gold deposit in the Superior Province within the crustal continuum model for Late Archean Lode Gold Deposits. Production data for its continuous 53-year mine life are summarized in Table 15.1.

Table 15.1 Summary of Ross Mine Production (1936 to 1989)

Ross Min (1936-1989)	Tonnage	Recovered Grades
Tons Milled	7,249,377 st	-
Gold Recovered	1,027,224 oz	0.145 oz/st Au
Silver Recovered	1,639,122 oz	0.242 oz/st Ag
Copper Recovered	2,537 st	0.108%

The mine was operated by Hollinger Consolidated Gold Mines Limited and Hollinger Mines Limited until June 1976, by Pamour Porcupine Mines Limited and Pamour Inc. until March 1987, and by Giant Yellowknife Mines Limited until November 15, 1989. Shortly thereafter, the mine was purchased by the Preston Electrical and Mechanical Limited of Timmins, Ontario.

Mining was by a three compartment No. 1 Shaft (-90) to a vertical depth of 3,300 ft., and two internal shafts, the two compartment No. 2 Winze (-90) from 291 ft to 1,580 ft. There were 22 levels at 150 ft spacing from the 150 ft level to the 3,150 ft level. A ramp extends from the bottom of the No. 1 Shaft to the 3,375 ft level. In addition, the No. 1 Orebody was mined to surface with an open stope and the crown pillar of the No. 2 Orebody was removed in a small open pit.

The milling rate progressively increased from 80 t/d at start-up to 650 t/d by mine end.

The deepest mining level was the 3,150 ft level, and resources are indicated to continue to at least a depth of 5,175 ft. As of December 31, 1988 “reserves” were estimated at 1,005,000 st of material averaging 0.125 oz/st gold, or 131,875 oz gold in-situ (CMH 1989 to 1990). The reliability of this estimate is somewhat uncertain as some amount of this material would have been mined during the 10.5 months between December 31, 1988 and closure on November 15, 1989.

Mineralization consisted of approximately 20 ore zones, or systems, distributed over a roughly circular area with a surface diameter of approximately 500 to 600 m. The 20 ore zones (or systems), occur primarily in three distinct configurations:

- Stringer Quartz (gold-copper) Ores contained in steeply west plunging pipe-like zones
- Breccia and Breccia Vein Ores hosted in north trending brittle structures
- Narrow Vein (silver-gold-lead-zinc-copper-antimony) Ores hosted in north and northwest trending brittle structures.

15.3 St. Andrew Goldfields Ltd. Hislop Mine and Deposits

15.3.1 Summary

The St. Andrew property is situated adjacent to the south of the Property. Segments of the DPDZ and the GKFZ trend southeast diagonally across the St. Andrew property.

The principal gold mineralization (West, Shaft, South deposits) is stretched out along, or marginal to, a 1,300 m strike length of the GKFZ, and there may be more than one zone of mineralization in some localities.

Exploration on the Hislop Mine property dates from 1934 with initial underground production from some deposits beginning in 1939. The property has changed ownership several times and there have been numerous diamond drilling campaigns conducted. In 1990 and 1991, the property was operated as a joint venture with Goldpost Resources Inc. and St. Andrew during which underground drilling was followed by some underground mining.

In 1993, St Andrew 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.

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. A small amount of mining was also carried out in 2006 to 2007, and open pit mining resumed in mid-2010. During the first nine months of 2011, a total of 15,381 oz gold were recovered from 339,293 t and the mine is expected to produce between 18,000 to 21,000 oz of gold in 2011.

Table 15.2 Summary of Reported Production (1990 to 2011) – Hislop Mine Property

Years	Type and Zones Mined	Tonnes Milled (t)	Ounces Recovered (oz)	Recovered Grade
1990 to 1991 1993 to 1995	Underground in Shaft & South Area	245,099	39,367	4.99 g/t/0.145 oz/st
1999 to 2000 2006 to 2007	West Zone Open Pit	201,937	19,334.45	2.98 g/t/0.0868 oz/st
2010	East Open Pit -Shaft and South	264,850	10,952	1.29 g.t/0.0375 oz/st
2011 (9 months)	East Open Pit -Shaft and South	339,293	15,381	-
Totals	**-**	**1,051,179**	**85,034**	**-**

15.3.2 Geology and Ore Zones

Much, but not all, of the following data are taken from the following two NI 43-101 reports prepared for St. Andrew:

- Valiant, W.W. and R.D. Bergen, 2009. Technical Report on the Hislop Project, Ontario, Canada, Scott Wilson Roscoe Postle Assoc. Inc., Aug. 6, 2009 Scott Wilson Roscoe Postle Assoc. Inc.
- R.D. Bergen and W.W. Valiant, 2009. Technical Report on a Preliminary Feasibility Study of the Hislop Project, Ontario, Canada, Sept. 28, 2009, Scott Wilson Roscoe Postle Assoc. Inc.

Several mineralized zones occur on the St. Andrew's Hislop Mine property. The mineralized zones occur along a strike length of approximately 1,200 m, following the fault contact (GKFZ) between mafic flows to the north and ultramafic rocks to the south. Gold is associated with the margins of feldspar porphyritic syenite dikes that have intruded the mafic and ultramafic rocks. The dikes are generally conformable to the contact between the mafic and ultramafic rocks striking west to northwest and dipping steeply to the north. From west to east, the three principal mineralized areas have been named, the West Zone, Shaft Zone and the South Area.

15.3.3 Mineralization

Two settings and styles of gold mineralization are present at the Hislop Mine property.

Gold occurs on the south side of the syenite dike complex in the carbonate and carbonate breccia rock which separates the syenite dikes from the less altered ultramafic volcanic rocks to the south side. Gold also occurs on the north contact of the syenite dike complex in quartz veinlets, stockworks, and fractures in hematite altered and syenitized mafic metavolcanic rocks.

The rocks and the associated mineralization strike northwest-southeast and dip steeply north to vertically. Later cross faults trend both east-west and northeast to southwest, and are steeply to vertically dipping. Gold mineralization occurs along the length of the syenite dike complex, but the gold-bearing zones tend to be wider and higher in grade where associated with these cross faults. The minor off setting along these faults causes the mineralized zones to have an irregular appearance in detail.

Previous reports have described several zones of gold mineralization occurring in three main mineralized areas along a strike length of 1,100 m, centred on the original shaft. These include the Shaft Area, the South Area, and the West Area.

Table 15.3 St. Andrew Hislop Mine Internal Resource and Reserve Data as of December 31, 2010

	Tonnes (t)	Au (g/t)	In Situ (oz Au)
Measured and Indicated Resources	6,230,000	1.98	395,000
Inferred Resources	5,338,000	1.80	309,000
Proven and Probable Reserves (within the Measured + Indicated Resources stated above)	2,108,000	2.05	139,000

It should be noted that the estimates are as of year-end 2010, and need to be revised to reflect mining and exploration during 2011.

15.4 STROUD RESOURCES LTD.

The Stroud group of deposits are located approximately 2 km south of the 147 Zone, and 2 km west of the former Ross Gold Mine. Much, but not all, of the following data are taken from a NI 43-101 technical report by Wetmore (2004).

Exploration since the 1940s has included over 52,000 m 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 m strike extent of a structural/alteration corridor known as the Stroud Fault. Drillhole intersections extended to a vertical depth of 400 m. The V2 Zone is a separate zone of mineralization in a sub-parallel structure located 600 m 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 the Stroud's property and has been interpreted to pass just west of the Gibson claim boundary that is part of the Brigus' Black Fox Complex, but further north, appears to merge with the Gibson-Kelore Fault Zone in the central part of the Property.

The dominant lithologies consist of a sequence of massive tholeiites and pillow lavas cut by an ultramafic body which in turn, is possibly cut by feldspar porphyry. The lithologies trend approximately 315° and dip some 45° to 70° grid south.

Alteration assemblages include pyrite, hematite, silica, carbonate (dolomite) and sericite. Various groupings of these minerals constitute readily recognizable alteration haloes associated with gold mineralization. Structural elements such as shearing and fracturing define the broad structural corridor (Stroud Fault) some 50 m thick (true thickness) within which mineralized sequences are located. Within the Stroud Fault, shear intensities vary from weakly sheared rocks which show strain but little penetrative fabric, to schistose shear zones with intense penetrative fabric developed commonly in sericitic-carbonate slip planes. Both in plan and section, shear zones are thought to form an anastomosing structural network containing mineralized lenses.

The structural/alteration corridor (i.e. Stroud Fault) some 50 m true thickness, between the ultramafic and the footwall shear, hosts most of the significant mineralized shoots and lenses identified to date within the Creek Zone. Occasional gold values have been noted in the hanging wall above the ultramafic and below the Footwall Shear. The "Footwall" Shear, a sericite schist zone within the Creek Zone, is thought to have been active post mineralization and appears to dip slightly flatter than the mineralized zone.

This mineralized system primarily consists of a bi-furcating system of quartz veins, trending northwest with a central vein system dipping approximately 70° south. Specifically, the auriferous mineralization is closely associated with "grey veins", which in turn are associated with multiple silica events carrying fine grained pyrite and cutting previous or closely coincident quartz veins, silicified feldspar porphyry or silicified volcanics. Feldspar porphyry and quartz veins show a broad anastomosing pattern in both plan and section but with reasonable continuity.

In plan and section, mineralized veins occur as discrete silicified lenses and shoots. The mineralized shoots appear to be similar to the geometry of the Ross Mine ore shoots; however, mineralized zones on the Stroud property appear more tabular than the Ross Mine Stringer Ores. On these sections, individual "shoots" or "lenses" are observed to narrow to 0.1 m or less, and then thicken to more than 5 m. The company concluded that because of this style of occurrence, any portion of the vein system encountered within the Creek Zone has the potential for thickening.

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

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

In 2006 to 2007, Stroud completed an 8,000 m drill program of 25 drillholes, but did not revise the 2004 resource estimate.

On April 29, 2011, St. Andrew entered into an option agreement with Stroud where St. Andrew could earn up to a 60% interest in Stroud's Hislop property. In June 2011, St. Andrew conducted a 10,000 m 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.

15.5 Gold Pike Mine Property

Gold Pike Mine property (Figure 4.2), of Matachewan Consolidated Mines Limited (Matachewan), is located adjacent to the southeast of the Property, along the same southwest-trending geology as Black Fox Mine. The Gold Pike property straddles the northern flank of the Porcupine Destor Fault Zone trending through the Lower Unit of the Tisdale Assemblage, and extends northward to the contact with the metasediments of the Porcupine Assemblage.

During the mid and late 1930s, the property was explored by Hislop Gold Mines Ltd., Ventures Limited, and Mining Corporation of Canada. Surface drilling was followed-up with limited amount of underground development involving two shallow shafts, underground drilling and some lateral development. The results were inconclusive and there is no record of any gold production.

Noranda Exploration Limited with Alban Exploration Limited optioned the property from Matachewan during 1988 to 1990 and explored the property with approximately 40 drillholes. Several gold-bearing intersections were reported including 0.112 oz/st gold/54.4 core ft. and 0.248 oz/st gold/7.9 core ft near the old No. 2 shaft (Western Area). The mineralization is primarily hosted in a narrow band or slice of mafic volcanics wedged between altered ultramafic units. In 1992, the OGS reported a small resource of 93,000 st at 0.11 oz/st gold (in situ: 10,230 oz gold) for the Matachewan property.

During 1993 and 1994, Royal Oak Mines Inc. extracted a 25,000 st bulk sample, from near the old No. 2 shaft (Western Area), and in 1995 mined a total of 43,308 st of ore via an open pit. The ore yielded 4,171 oz of gold, or equivalent of a recovered grade of 0.096 oz/st gold.

On 21, 2011, Matachewan and Victory Gold executed their Option and Venture agreement on the Hislop Guibord Ontario property.

Victory Gold will earn a 50% interest in the Property by making cash payments of $60,000, incurring $450,000 in exploration expenditures and issuing 500,000 common shares of Victory Gold to the Company. A further 10% will be earned by completing a feasibility study or spending an additional $1,000,000 in exploration expenditures on the Property, a final 10% will be earned by obtaining financing to construct a mining operation on the Property or spending an additional $2,000,000 in exploration expenditures on the Property. The Company will retain a 30% assessable interest in the Property together with a 2% net smelter royalty of which 1% can be repurchased for $1,000,000. A $25,000 annual advance royalty is effective with Victory Gold earning a 50% interest in the Property.

Should Victory Gold provide 100% of mine financing, it will receive 90% of joint venture operating profits until recovery of 200% of expenditures, and thereafter operating profits are divided 70/30 in favour of Victory Gold. (Matachewan MD&A 2012)

16.0 OTHER RELEVANT DATA AND INFORMATION

Tetra Tech has been retained by Brigus to complete a PEA study of the Contact and 147 Zones based on this current technical report and resource estimate. Results of this study are expected in Q4 2012.

17.0 INTERPRETATION AND CONCLUSIONS

Detailed infill drilling by Brigus has confirmed the continuity and extents of the gold mineralization in the Contact and 147 Zones. The current drilling program has also increased the confidence in the grade continuity of both these zones and has allowed the resource classification to be updated. Other targets, such as the Grey Fox South, are currently being drilled and may be included in future resource models.

17.1 RESOURCE ESTIMATE

The Contact Zone and 147 Zone mineralization of the Black Fox Complex is classified as having both Indicated and Inferred Resources. The two zones were estimated using both ID^2 and OK methods. No recoveries were applied.

The mineral resource is 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. These cut-offs have been developed based on current costs experienced at the Black Fox Mine. The total Indicated Resource is 7,105,378 t at a capped grade of 2.11 g/t gold. The total Inferred Resource is 1,692,267 t at a capped grade of 1.67 g/t gold. The classified mineral resources are shown in Table 17.1.

Table 17.1 Resource Estimate, Contact and 147 Zones, Black Fox Complex

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**

18.0 RECOMMENDATIONS

Tetra Tech recommends that Brigus continue with current diamond drill program of the Contact and 147 Zones; metallurgical test work. Tetra Tech also recommends that Brigus follow through with the PEA as proposed in the Phase II program in the previous technical report (Tetra Tech 2012).

Brigus also is completing its drill program on the Contact and 147 Zones. As of the effective date of the resource estimate there were 50 drillholes with assays pending. As of the date of this report drilling on the Contact Zone was complete and drilling on the 147 Zone was nearing completion. Once the drill program and drill core sampling analysis is complete, Tetra Tech recommends a further update of the resource estimate.

Brigus is currently undertaking metallurgical test work on composite samples from the Contact and 147 Zones. Tetra Tech believes this test work is appropriate and warranted. Results of this test work are pending.

Brigus has retained Tetra Tech to complete a PEA of the Contact and 147 Zones. This PEA will use the current resource estimate from this report for the study. Results are expected in Q4 2012.

The estimate cost of the metallurgical test work is approximately Cdn$230,000.

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WEBSITES

www.worldclimate.com

www.brigusgold.com

20.0 CERTIFICATE OF QUALIFIED PERSON

I, Paul Daigle, P.Geo., of Toronto, Ontario, do hereby certify:

- I am a Senior Geologist with Tetra Tech WEI Inc. with a business address at 900-330 Bay Street, Toronto, Ontario, M5H 2S8.
- This certificate applies to the technical report entitled "Technical Report on the 147 and Contact Zones of the Black Fox Complex, Ontario, Canada, dated October 26, 2012 (the "Technical Report").
- I am a graduate of Concordia University, (B.Sc. Geology, 1989). I am a member in good standing of the Association of Professional Geoscientists of Ontario (Registration #1592). My relevant experience includes over 23 years of experience in a wide variety of geological settings and, most recently, the completion of a NI 43-101 compliant resource estimate and technical report on the Box Mine gold deposit, Uranium City, Saskatchewan, and the resource estimate update on the Black Fox Mine, Matheson, Ontario. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- My most recent personal inspection of the Property was July 18 and July 20, 2012 for two days.
- I am responsible for Sections 1 to 20 of the Technical Report.
- I am independent of Brigus Gold Corp. as defined by Section 1.5 of the Instrument.
- I have no prior involvement with the Property that is the subject of the Technical Report.
- I have read the Instrument and the Technical Report has been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information and belief, the technical contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 26th day of October, 2012 at Toronto, Ontario

"Original document signed and sealed by Paul Daigle, P.Geo."

Paul Daigle, P.Geo.
Senior Geologist
Tetra Tech WEI Inc.