TECHNICAL REPORT ON THE INITIAL MINERAL RESOURCE ESTIMATE FOR THE "THUNDER CREEK PROPERTY", BRISTOL TOWNSHIP, WEST OF TIMMINS, ONTARIO, CANADA

NTS: 42-A-05,
Longitude: 81.57° West, Latitude: 48.37° North
UTM (NAD 83, Zone17): 458,050m East, 5,357,923m North

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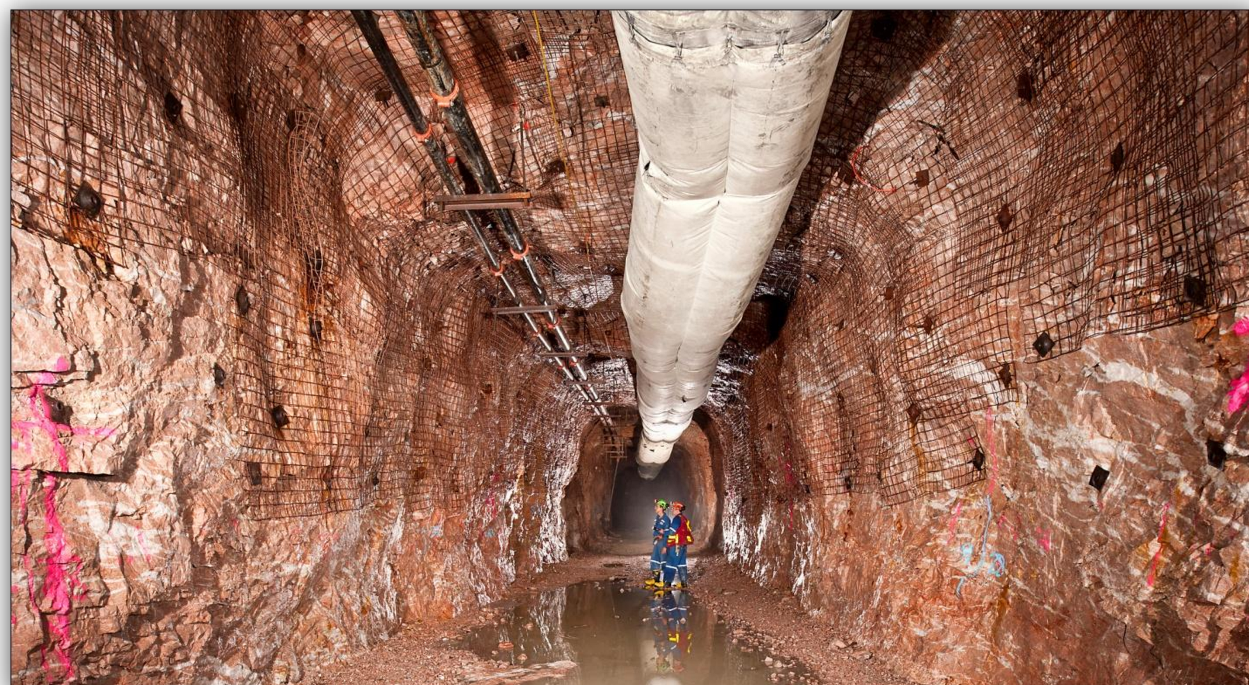

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Date: December 23, 2011 **Effective Date: October 28, 2011**

Front Cover Photo: 730 Stope Drift, looking southward, “Porphyry Zone” by Graeme Oxby (2011)

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1.0 SUMMARY

This Technical Report is co-authored by: Dean Crick P.Geo. Robert Kusins, P.Geo. and David Powers P. Geo. on behalf of Lake Shore Gold Corp. ("Lake Shore Gold", "LSG") and West Timmins Mining Inc. ("WTM") for the Thunder Creek property. The report contains an update of exploration activities completed since the last previous report, submitted to SEDAR, "Amended, A Technical Review and Report of the Thunder Creek Property" dated July 29, 2009 (Powers, 2009) as well as a first time disclosure of resources for the Thunder Creek Deposit.

The purpose of this technical report is to discuss and report on the Advanced Exploration Program "AEP" results from May 10, 2009 up to and including results received October 28th, 2011 and provide documentation to support the first time disclosure of Mineral Resources for Thunder Creek.

Using exploration data carried out by Lake Shore Gold Corp. from underground and surface drilling completed between the years 2003 and 2011 the Mineral Resource estimate is prepared in accordance with National Instrument 43-101, Standards and Disclosure for Mineral Projects.

The Thunder Creek Property (the "Property") consists of sixty (60) claim units, located within Bristol Township (G-3998), Porcupine Mining Division, Ontario. Fifty four claim units are registered 100% to West Timmins Mining Inc., and are subject to underlying NSR agreements. West Timmins Mining Inc. acquired this property and other mineral rights through the amalgamation of Sydney Resources Corporation and Band-Ore Resources Limited ("Band-Ore"). Six claim units are registered 100% to Lake Shore Gold Corp.

The Property is situated approximately 21 kilometres southwest of Timmins city centre, and approximately 552 kilometres north-northwest of the City of Toronto. The Project centre is located at Universal Transverse Mercator ("UTM") co-ordinates North American Datum ("NAD") 83, Zone 17: 460,912 metres east, and 5,355,469 metres north. Easy, all weather road access to the property is provided by provincial Highways 101 and 144, with bush roads, and diamond drill trail side roads on the north side of the Tatachikapika River.

Gold mineralization at Thunder Creek is hosted in a northeast trending, steeply northwest dipping tectonite that straddles the volcanic sedimentary contact and portions of a composite alkalic intrusion. The Rusk Shear Zone flanks a north-west plunging, quartz monzonite intrusion, called the "Porphyry Zone" and a pyroxenite body intruded along the volcanic sedimentary contact in the structural hangingwall. Due to intense alteration the Rusk Shear Zone protolith has been variably interpreted as sheared pyroxenite and/or sediment.

The gold mineralization occurs in two main stages: a) the Rusk Shear Zone adjacent to and footwall to the pyroxenite unit, and b) in the Porphyry Zone, an interpreted off-shoot of the Thunder Creek stock to the south. The overlap of the Rusk Shear Zone and quartz monzonite Porphyry Zone creates a mineralized corridor dominated by the relatively discrete, narrower Rusk Shear Zone from surface to 500 metre level where the broadly mineralized, elliptical shaped, quartz monzonite Porphyry Zone, thickens between the 500 to 1000 level elevation.

Mineralization in the Rusk Shear Zone comprises areas of either a) higher quartz-carbonate-pyrite vein density, and / or b) areas of elevated medium to coarse-grained disseminated pyrite and associated pyrite-quartz veinlets. The gold mineralization exhibits localized sulphide replacement and iron carbonate alteration overprinting intensely foliated, compositionally banded albite-magnetite altered pyroxenite and feldspathic syenite dykelets.

The Porphyry Zone mineralization is associated with sheeted sets of quartz extension veins which occur in abundance of up to several veins per metre within the intrusion. Disseminated pyrite locally occurs in the wall rock to the veins and free visible gold is locally observed in association with pyrite both in veins and wallrock immediately adjacent to veins. There is an apparent association of gold mineralization with "grey sulfides" including a bluish silvery grey mineral – a possible telluride – and by local fine grained base metal sulphides (sphalerite, galena). The occurrence of scheelite in the vein material is another good indicator of increased gold tenor.

Significant new exploration work completed since the last technical report includes underground development, diamond drilling and some limited test mining.

Access to the Thunder Creek deposit was gained by ramps extending from the 200 level and 650 level shaft stations of the Timmins mine. Ramps were driven at 4.5 metres ("m") for horizontal distances of 660m and 890m in a south southwest direction from the shaft to intersect the 300 level and 730 level elevations respectively in the Rusk and Porphyry Zones. The Rusk horizon was intersected in July of 2010 at the 300 level elevation and the Porphyry Zone in November 2010 at the 730 level. Other development work completed near the 300 level has included ramping to the 280 and 350 levels, drifting along mineralization on the 300, 315, and 350 levels as well as development of a drill platform north of the zone near the 280 level. Development work near the 730 level has included drifting along and across the mineralization, ramping to the 690 mL and development of drill platforms near the 680 and 710 level.

Surface and underground exploration drilling since the previous technical report cut-off date of May 10, 2009 has been focused on testing the Rusk Shear and Porphyry Zones over a strike length of 300m from surface to approximately 1000m depth. Detailed, sectional fan drilling approaching a drill spacing of 30 to 50 metre centers along strike and down-dip was achieved using a combination of surface and underground drill collars/platforms. Intermediate step out drilling on 100 to 200 metre centers along the extension of the Rusk Shear Zone southwest to the Highway 144 property has also been initiated. Total underground drilling since the last Technical Report consists of 384 holes 66,809.65 metres, and 27 surface drill holes with 40 wedged splays for a total of 42,968 metres.

Test mining completed to date has been completed within one mining block located between the 300 and 315 level and in progress for a second block between the 730 and the 715 level. The test block between 300 and 315 level was completed in the first quarter of 2011 and extracted mineralization from the Rusk Zone. The test mining on the 730 level was commenced in September 2011 and extracted mineralization which is a combination of Rusk and Porphyry style mineralization. A comparison of production results to date against the new resource estimate indicate a strong correlation of tonnage, grade and ounces.

The first Thunder Creek Mineral Resource was estimated using the inverse distance to the power 2 (ID2) interpolation method with all gold assays capped at 75 gram metres, and an assumed long term gold price of US $1,200 per ounce. The base case estimate at a cut-off grade of 2.0 gpt, which includes 10% dilution at 1.75 gpt is presented in Table 1-1. The effective date of the Mineral Resource estimate is October 28, 2011 which represents the date at which the drill hole database was closed.

The resource estimate was completed using a total of 89 surface holes (77,870 m) and 351 underground holes (53,561 m). The total resources reported are contained in eleven separate domains lying between the 250 m Level and the 900 m Level. Two key zones in the Porphyry Zone mineralization account for approximately 65% of the total ounces in resource.

3-D solids were constructed using strings generated by sectional interpretation on 25 m centers and refined using horizontal level plan contour lines on 30 metre elevations. All recent drilling from surface and underground has been focused on a strike length of 300 metres to a depth of 900 metres vertical. Typical drill density for indicated resource is less than 30 metre and inferred resources is less than 60 metres. The density of drilling is partially a function of the drill platforms available in the 2011 delineation drilling campaign. The 30 m drilling density equivalent to the indicated classification was achieved between the 250-450 mL and the 600-750mL levels.

An independent review by Michel Dagbert, Eng. of SGS Geostat of the QA/QC samples routinely introduced into the AEP drill hole sample stream, has concluded that the quality of the assaying incorporated into the block model is satisfactory demonstrating no significant bias and adequate precision and reproducibility.

Validation of the block model was performed visually through a comparison of drill intercepts and block model results on plans and section between the geologic model and domain block model. Preliminary sill development and test mining results of both the Rusk Shear and Porphyry Zones demonstrate reasonable correlation with the 3D shapes and grades predicted by the Thunder Creek block model.

No significant differences in grade estimation were realized between the nearest neighbor interpolation of the block model using the same parametres and search ellipse as the ID^2 interpolation.

An independent review of the resource estimate was completed by Michel Dagbert, Eng. of SGS Geostat and he is in agreement with the practices employed by Bob Kusins, P.Geo in the Mineral Resource estimate at Thunder Creek.

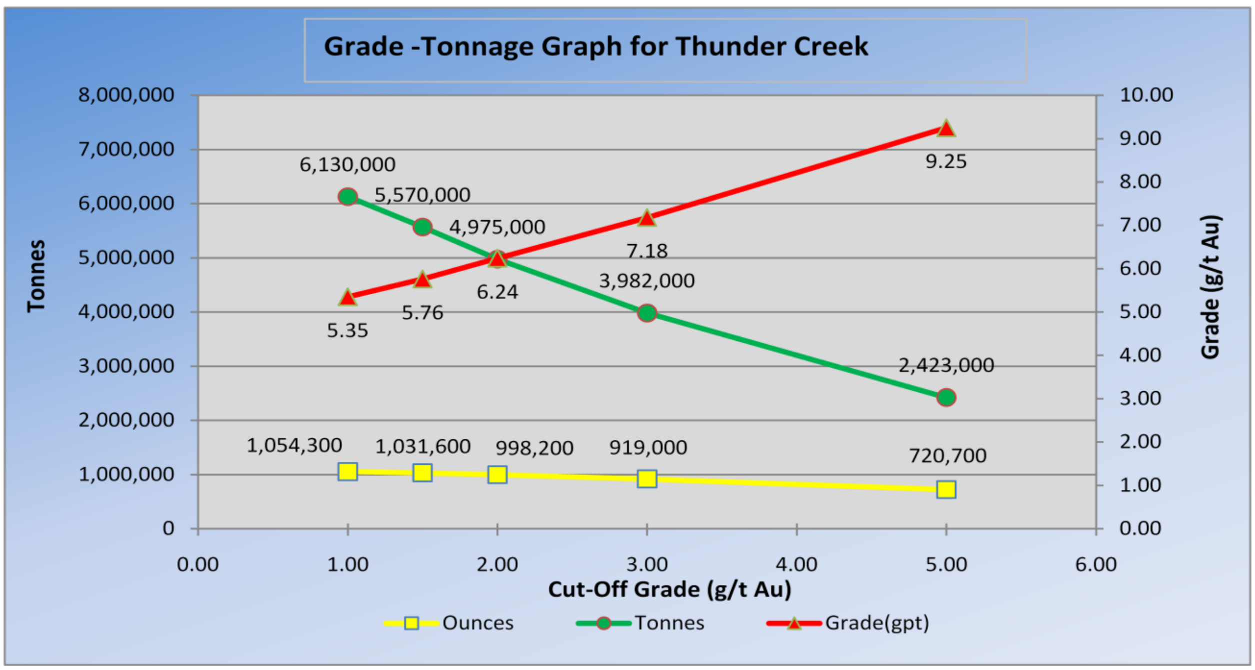
TABLE 1.1: MINERAL RESOURCE ESTIMATE, OCTOBER 2011
Lake Shore Gold Corp. – Thunder Creek deposit

Category	Tonnes	Capped Grade (g/t Au)	Oz Au
Indicated	2,877,000	5.64	521,600
Inferred	2,693,000	5.89	510,000

Notes:
1. CIM definitions were followed for classification of Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.0 g/t Au.
3. Mineral Resources are estimated using an average long-term gold price of US$1,200 per ounce, and a US$/C$ exchange rate of 0.93.
4. A minimum mining width of two metres was used.
5. Capped gold grades of 75 gram-metres is used in estimating the Mineral Resource average grade.
6. Sums may not add due to rounding.
7. Bob Kusins, P.Geo., is the Qualified Person for this resource estimate.

A sensitivity analysis was carried out to examine the impact upon the tonnage, average grade and contained ounces by increasing the cut-off grade up to 5.0 g/t Au. The results are graphically presented in Figure 1-1.

FIGURE 1.1: GRADE-TONNAGE GRAPH AS A FUNCTION OF CUT-OFF GRADE



Although limited internal metallurgical testing was conducted on Thunder Creek mineralization with ambiguous results, the best simulation was achieved through batch milling of stope and sill muck extracted between September 2010 and June 2011, when spare capacity at the Bell Creek mill was available. Rusk Shear Zone and Porphyry Zone bulk samples were largely extracted from the 300 ml and 730 mL elevations respectively during this period (see Table 1-2) and returned greater than 96.5 % recovery. After June 2011 the mill production was increased to capacity and run of mine feed was blended from multiple sources; Timmins Mine, Bell Creek and Thunder Creek projects achieving similar gold recoveries averaging in excess of 96%.

Table 1.2: BATCH MILLING RESULTS FOR THUNDER CREEK MINERALIZATION

		Thunder Creek Batch Mill Processing Results				
Year	**Month**	**Tonnes**	**Grade**	**Recovery**	**Head Ounces**	**Ounces produced**
2010	September	2824.94	5.21	96.87%	473.11	458.3
2011	March	24028.8	3.75	97.32%	2894.11	2816.62
2011	May	13213.3	3.75	97.03%	1593.53	1546.24
2011	June	5631.9	3.984	97.21%	721.43	701.31

Based on the recent surface and underground diamond drilling programs incorporating 440 holes totaling 131,431 metres, the first Mineral Resource at Thunder Creek has identified a significant resource, of which approximately 65% of the contained ounces are located between an elevation roughly 100 m above and below the 730 mL elevation. The concentration of a Mineral Resource at 3,250 ounces per vertical metre for all resource categories containing approximately 650,000 ounces supports an attractive bulk mining scenario. Two of the key zones in the Porphyry Zone style mineralization host approximately 75% of the total contained ounces and possess average horizontal widths of 14.7 metres and 24.4 metres respectively.

However, by increasing the cut-off grade, (see Figure 1.1) the model demonstrates opportunity to optimize target grade by carving out the fringe, lower grade mineralization while maintaining grade and geological continuity and minimal loss of total ounces. The completion of the cross-cuts at the 730 mL sill elevation will be critical in supporting the delineation of a higher grade block model core. Mapping, chip channel sampling and muck samples are required in addition to tighter definition drilling to delineate the higher grade mineralized outlines and 3-D solids.

A budget of $8.375M will be required to complete the recommendations listed below. This estimated budget assumes an all inclusive underground operating definition drilling budget of $95/m and exploration drilling budget of $125/m; and an all inclusive cost of $150 per metre for surface diamond drilling for drill holes bored to a 1,000 metre depth:

1. Detailed sectional drilling of the Rusk and Porphyry Zones from the 600- 800 mL elevations on 15 metre centers comprising approximately 30,000 metres, ($2.85M).
2. The upper level Rusk Shear Zone delineation testing the Rusk and emerging Porphyry Zones from the 370-500 mL elevations at 25 metre centers for a total of 10,000 m, ($0.95M).
3. Definition drilling from scram drifts parallel to the sill development in the hangingwall will include 2500 m in total over the year, ($0.237M).

4. Delineation drilling of the Rusk/Porphyry style mineralization between the 500-600 mL and the 750-850 mL at 15-30 metre centers from the 260 mL and 710 mL drill drifts comprising an additional 7500 metres, ($0.713M).
5. Exploration drilling along strike off the ends of the 260 mL and the 710 mL drill platforms, with step-outs of approximately 100-200m to the northeast and southwest comprise approximately 5000 m, ($0.625M).
6. Surface exploration diamond drilling along strike of the Rusk Shear (20,000m) over ground held by Lake Shore Gold Corp. ($3.0M).

The favorable results of the AEP at Thunder Creek define a significant milestone with the completion of the first Mineral Resource disclosure. Prior to its delivery Lakeshore had initiated a Preliminary Economic Assessment "PEA" with mine design consultants, Stantec in preparation for incorporating the current block model, geologic interpretation and Mineral Resource, with an effective date of October 28, 2011. It is believed that the Thunder Creek PEA report will be delivered to Lakeshore in early 2012 leading into the next stage of economic analyses, a Pre-feasibility study.

2.0 INTRODUCTION

This Thunder Creek property Technical Report is co-authored by: Dean Crick P.Geo.; Robert Kusins, P.Geo. and David Powers P. Geo. on behalf of Lake Shore Gold Corp. ("Lake Shore Gold", "LSG") and West Timmins Mining Inc. ("WTM") and conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Lake Shore Gold Corp. is a publicly traded company listed on the Toronto Stock Exchange and trading under the symbol LSG with a head office at 181 University Avenue, Suite 2000, Toronto, Ontario, Canada M5H 3M7. Lake Shore Gold Corp. was founded in 2002 to explore for precious and base metals hosted within the portions of the Canadian Shield situated in Quebec and Ontario. On November 06, 2009 Lake Shore Gold and West Timmins Mining Inc. ("WTM") signed a complete business combination agreement resulting in WTM becoming a wholly owned subsidiary of LSG. West Timmins Mining Inc. started trading September 18, 2006 after the amalgamation of Sydney Resource Corporation, and Band-Ore Resources Ltd.

The authors have prepared this report using a combination of public available and confidential information. This report is sourced from an amalgamation of several reports listed it the Section 27 labeled References.

David Powers (P.Geo.) of David Powers Geological Services is responsible for Items 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 23, 27 of this report.

Bob Kusins (P. Geo.) and Chief Resource Geologist for Lake Shore Gold Corp. is responsible for Items: 1, 14, 25, 26 contained in this report.

Dean Crick (P. Geo.) and Director of Geology for Lake Shore Gold, Timmins West Mine Complex is responsible for Items: 1, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23 24, 25, 26 contained in this report.

David Powers was on site on May 29, 2009. During this visit GPS measurements of selected diamond drill casings were taken and compared with completed diamond drill logs; trench locations were observed for geology and structure and channel sampling; cut line location were noted and compared with MMI sampling and surface exploration grids. These findings were reported in the revised and restated technical report July 29, 2009 (Powers, 2009). Since then the author was present and observed the geological mapping by Camier (2009, report 2010); and present for summary presentations by Rhys at the Timmins Mine Site and Exploration Offices (2009, 2010, 2011). The most recent visit to the Thunder Creek property occurred on December 08, 2011 at which time the underground workings were observed, the Timmins Mine core shack, and core processing facilities were toured and the cold storage core facility was visited. Core logging and data entry process was observed in detail and the QA/QC and data verification procedures reviewed.

Historical work in the Thunder Creek area was reviewed by referencing assessment reports filed at the Ministry of Northern Development and Mines' ("MNDM") office at the Ontario Government Complex, Highway 101 East, Timmins (Porcupine), Ontario; and Assessment File Research Imaging ("AFRI") at:

www.geologyontario.mndm.gov.on.ca/. Option and legal agreements were reviewed at the Lake Shore Gold Exploration Office.

2.1 UNITS AND CURRENCY

Metric and Imperial units are used throughout this report. Canadian dollars ("C$", "$") is the currency used unless otherwise noted. On December 23, 2011 the exchange rate was approximately $1.00 C dollar to 0.982 US$.

Common conversions used included converting one ounce of gold to grams gold with a factor of 31.104 grams/troy ounce; and one ounce gold per ton with a conversion factor of 34.29 grams gold per tonne.

2.2 LIST OF ABBREVIATIONS

Table 2.1 lists the common abbreviations that may be used in the report.

TABLE 2.1: LIST OF ABBREVIATIONS

Unit or Term	Abbreviation or Symbol
Above mean sea level	amsl
Advanced Exploration Project	AEP
Atomic Absorption	AA
Arsenic	As
Arsenopyrite	aspy
Azimuth	AZ
Billion years ago	Ga
British thermal unit	Btu
Carbon in leach	CIL
Carbon in pulp	CIP
Centimetre	cm
Copper	Cu
Cubic centimetre	cm^3
Cubic feet per second	ft^3/s, cfs
Cubic foot	ft^3
Cubic inch	in^3
Cubic metre	m^3
Cubic yard	yd^3
Day	d
Days per week	d/wk
Days per year (annum)	d/a
Dead weight tonnes	DWT
Degree	°
Degree Celsius	°C
Degrees Fahrenheit	°F
Diamond bore hole	ddh, DDH

Diamond drill hole	ddh, DDH
Dollars Canadian	$C
Dry metric ton	dmt
Foot	ft
Gallon	gal
Gallon per minute	gpm
Gold	Au
Gram	g
Gram metres	m.g/t
Grams per litre	g/l
Grams per tonne	g/t, gpt
Greater than	>
Hectare (10,000m^2)	ha
Hour	h (not hr)
Inch	in, "
Kilo (1,000)	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
Less than	<
Lead	Pb
Litre	L
Litres per minute	L/m
Metre	m
Metres above sea level	masl
Metres per minute	m/min
Metres per second	m/s
Metric ton (tonne) (2,000 kg) (2,204.6 pounds)	t
Micrometre (micron)	µm
Miles per hour	mph
Milligram	mg
Milligrams per litre	mg/L
Milliliter	mL
Millimetre	mm
Million	M
Million grams	M g
Million tonnes	Mt
Million Troy ounces	M oz
Million Years	Ma
Minute (plane angle)	min, '
Minute (time)	min
Month	mo
National Instrument 43-101 (Canadian)	NI 43-101
No Personal Liability	N.P.L.

Ounces	oz
Page	p, pg
Parts per billion	ppb
Parts per million	ppm
Percent	%
Percent moisture (relative humidity)	% RH
Potassium	K
Pound(s)	lb
Pounds per square inch	psi
Preliminary Economic Assessment	PEA
Pyrite	py
Pyrrhotite	po
Quality Assurance/Quality Control	QA/QC
Quart	qt
Revolutions per minute	rpm
Rock Quality Description	RQD
Second (plane angle)	sec, “
Second (time)	s
Short ton (2,000 lb)	st
Short ton (US)	t (US)
Short tons per day (US)	tpd (US)
Short tons per hour (US)	tph (US)
Short tons per year (US)	tpy (US)
Silver	Ag
Sodium	Na
Specific gravity	SG
Square centimetre	cm^2
Square foot	ft^2
Square inch	in^2
Square kilometre	km^2
Square metre	m^2
Thousand tonnes	kt
Tonne (1,000 kg)	t
Tonnes per day	t/d, tpd
Tonnes per hour	t/h
Tonnes per year	t/a
Volt	V
Week	wk
Weight/weight	w/w
Wet metric ton	wmt
Yard	yd
Year (annum)	a
Year (US)	yr

3.0 RELIANCE ON OTHER EXPERTS

The authors have sourced the information for this report from an amalgamation of several reports listed in Section 27 labeled References. These references include: government geological reports; press releases; company annual reports; assessment reports filed with the Ministry of Northern Development and Mines' ("MNDM"), previously SEDAR filed NI 43-101 reports and reports both public and confidential provided by Lake Shore Gold Corp.

The Thunder Creek project has continuously been overseen, and planned by professional geologists and qualified persons. Qualified Person ("QP"), Mr. Jacques Samson, P.Geo. is and has been responsible for overseeing and reporting the exploration programs surveyed at the Thunder Creek project, from 2003 to 2009. Mr. Pat Pope, P.Geo. reporting to Mr. Samson, shared QP responsibilities for a brief period of time during late 2009 to March 2010. Professional geoscientist Mr. Stephen Conquer fulfilled the role of QP during 2010 up to August 2010. In August of 2010, Mr. Dean Crick, P.Geo. took over the responsibility as Director of Geology, responsible for exploration activities for the Timmins West Complex that includes the Timmins Mine and the Thunder Creek Project. Their knowledge, information, and documentation provided to the author is instrumental in the preparation of this report.

From 2008 to the present, contributions to geology by outside consultants include: petrography, ore microscopy and scanning electron microscope investigations by Dr. Miller of Miller and Associates, of Ottawa; mineralization and structural studies comparing Thunder Creek and the Timmins Mine by Mr. David Rhys, of Panterra Geoservices Inc., petrology studies of the Timmins Mine and Thunder Creek area by Katherina Ross, Panterra Geoservices; and geological mapping of a 5 sq km area surrounding the Rusk surface showing by Mr. John Camier, P.Geo. His report includes petrographic analysis thin sections examined by Mr. Camier and Dr. Bob Springer, Professor Emeritus at Brandon University, Manitoba.

Robert (Bob) Kusins, P.Geo. and Qualified Person is the QP responsible for the mineralization modeling, and resource estimate.

Michel Dagvert, P. Eng. of SGS Geostat Limited of 10 boul. De la Seigneurie Est., Suite 203, Blainville, Quebec, provided the technical review of QA/QC data, review of the 3 D modeling, selection of a composite and block size for resource modeling the variography of capped composite grades, and verification of the resource block model with additional recommendations for block resource estimation.

The first technical report for the Thunder Creek Property was completed in 2008 by Mr. D. Wagner, President and CEO of West Timmins Mining Inc. was titled; "Technical Report of the Thunder Creek Gold Property, Bristol township, Timmins, Ontario, Canada, June 27, 2008."

An Amended and Restated Technical Report filed on SEDAR (July 29, 2009)) was authored by Powers (2009) that describes the exploration activities from 2003 to June 24, 2009. Data and information cut off for this report is May 10th, 2009

Mr. Bob Lo, consulting geophysicist, contributed to, and consulted to Lake Shore for the geophysical surveys completed by JVX and Abitibi Geophysics. Mr. Blaine Webster, P.Geo. is responsible for the JVX report titled Borehole Induced Polarization Surveys, Thunder Creek Property (June, 2010); and Mr. Martin Dubois, P.Geo. is the professional responsible in the co-authorship with Mr. C. Brown (G.I.T.) for the Resistivity / Induced Polarization and Ground Magnetic Field Survey, Timmins West Mine Complex – Tailings Condemnation report (December, 2010).

The authors rely on the professional integrity of the designated project Qualified Persons, to maintain and provide true and accurate reporting of the facts, throughout the project's history. Where possible the internal documents have been checked against public record filed for assessment purposes.
The author has reviewed reports, drill logs, and assay certificates issued during the exploration phases and have found them to be consistent and believes the data to be reliable within testable parametres.

Active mining claim abstracts have been reviewed online at:
http://www.mci.mndm.gov.on.ca/claims/clm_mdva.cfm . The ownership on record is in the name of West Timmins Mining Inc., a wholly owned subsidiary of Lake Shore Gold Corp.

Figures in this report have been prepared by Mr. Tom Savage and others in the employ of Lake Shore Gold Corp. and reviewed by the author.

David Powers (P.Geo.) of David Powers Geological Services is responsible for Items 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 23, 27 of this report.

Bob Kusins (P. Geo.) and Chief Resource Geologist for Lake Shore Gold Corp. is responsible for Items: 1, 14, 25, 26 contained in this report.

Dean Crick (P. Geo.) and Director of Geology for Lake Shore Gold, Timmins West Mine Complex is responsible for Items: 1, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23 24, 25, 26 contained in this report.

Mr. Terry J. Ternes, P.Geo. is the Manager, Environmental Affairs Timmins, and a Lake Shore Gold Corp. employee who has provided the permit and environmental information quoted in this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY DESCRIPTION

The Thunder Creek property is comprised of a contiguous block of 37 staked or unpatented mineral claims and three leased mining claims located in Bristol and Carscallen Townships, within the Porcupine Mining Division of Ontario. Covering an area of approximately 981 hectares the area equates to a total of 60 claim units. The majority (96.3%) of the property is situated within Bristol Township, and approximately 36 hectares (3.7%) is located in Carscallen Township. The Mining Land Tenure Map reference for the Thunder Creek project is: Bristol Township; Plan G-3998; Porcupine Mining Division, Land Titles/Registry Division of Cochrane; and Timmins, Ministry of Natural Resources District, Ontario, Canada.

West Timmins Mining Inc. is the registered title holder (100%), on record, resides for the original 54 claim units optioned and staked by Band-Ore Resources Ltd. The 4 claims (6 claim units) staked by Lake Shore Gold Corp. remain registered (100%) to Lake Shore. Table 4.1 lists the Thunder Creek project claims, their recording and due dates, the registered owner, work required to keep the claims in good standing, the amount on credit in reserve and the party or partnership of the original option whom may have a variable royalty interest.

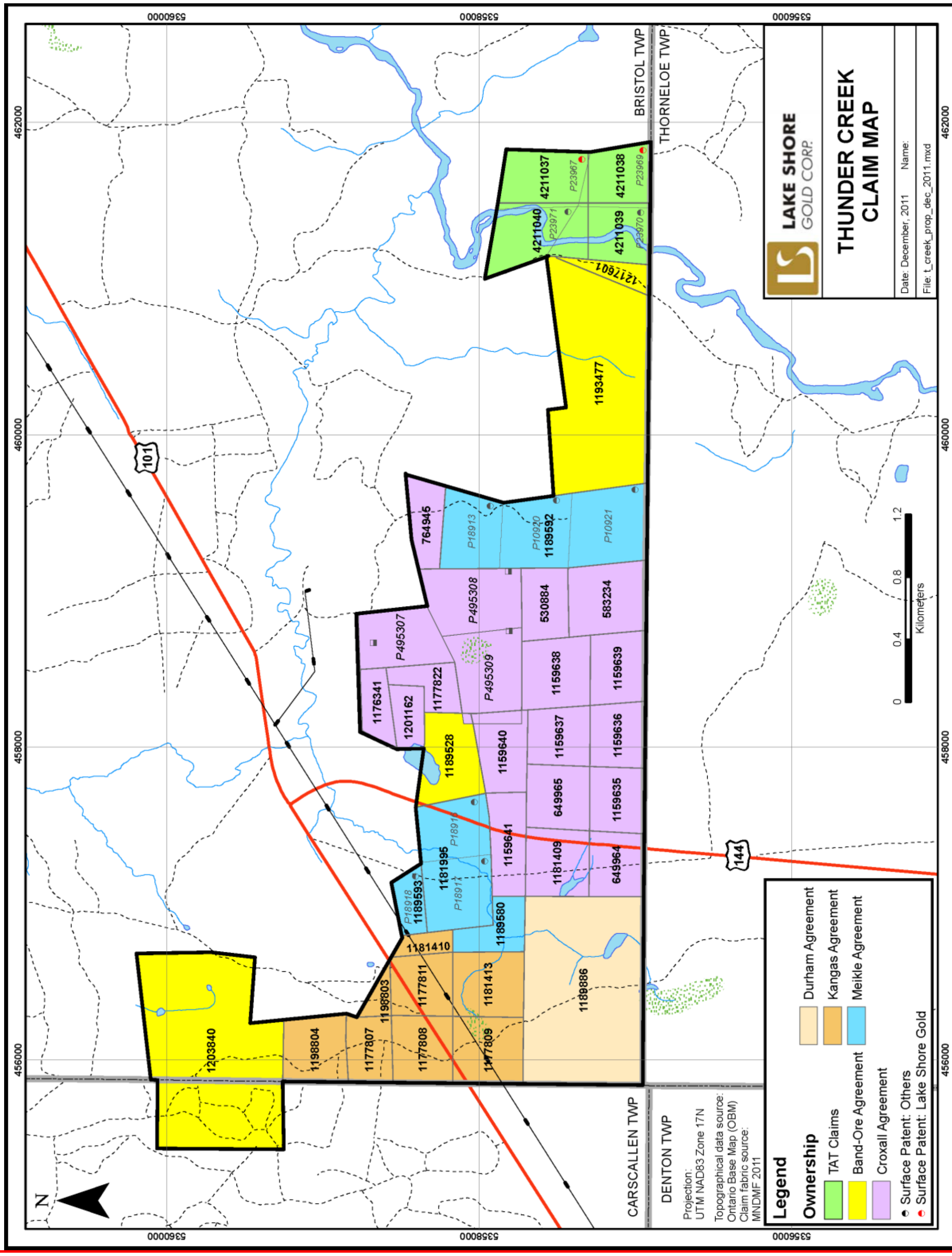
On November 06, 2009 Lake Shore Gold Corp. and West Timmins Mining Inc. completed a business combination agreement resulting in West Timmins Mining Inc. becoming a wholly owned subsidiary of Lake Shore Gold Corp.

Figure 4.1 is a Claim Sketch Map illustrating the claim numbers and boundaries relative to locate topographic and cultural features.

TABLE 4.1: THUNDER CREEK PROJECT LIST OF CLAIMS

Claim Number	Number of Claim Units	Recording Date d/m/y	Claim Due Date d/m/y	Registered Owner	Percent Option	Work Required	Total Reserve	Royalty To
530884	1	10/10/1980	10/10/2016	**WTM**	100%	$400	$7,227	Croxall
583234	1	10/10/1980	10/10/2016	**WTM**	100%	$400	$29,844	Croxall
649964	1	25/03/1983	25/03/2016	**WTM**	100%	$400	$5,069	Croxall
649965	1	25/03/1983	25/03/2016	**WTM**	100%	$400	$34,582	Croxall
764945	1	19/04/1984	19/04/2016	**WTM**	100%	$400	$1,092	Croxall
1159635	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$5,387	Croxall
1159636	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$29,423	Croxall
1159637	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$102,215	Croxall
1159638	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$48,241	Croxall
1159639	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$6,400	Croxall
1159640	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$135,326	Croxall
1159641	1	18/12/1990	18/12/2016	**WTM**	100%	$400	$5,646	Croxall
1176341	1	18/02/1991	18/02/2016	**WTM**	100%	$400	$6,010	Croxall
1177807	1	13/05/1991	13/05/2016	**WTM**	100%	$400	$0	Kangas
1177808	1	13/05/1991	13/05/2016	**WTM**	100%	$400	$312	Kangas
1177809	1	13/05/1991	13/05/2016	**WTM**	100%	$400	$1,637	Kangas
1177811	1	13/05/1991	13/05/2016	**WTM**	100%	$400	$1,403	Kangas
1177822	1	04/10/1991	04/10/2016	**WTM**	100%	$400	$190,560	Croxall
1181409	1	14/02/1994	14/02/2016	**WTM**	100%	$400	$4,997	Croxall
1181410	1	14/02/1994	14/02/2016	**WTM**	100%	$400	$17,851	Kangas
1181413	1	14/02/1994	14/02/2016	**WTM**	100%	$400	$1,793	Kangas
1181995	2	22/06/1992	22/06/2016	**WTM**	100%	$800	$4,054	Meikle
1189528	1	18/06/1993	18/06/2016	**WTM**	100%	$400	$95,032	Band-Ore
1189580	1	08/01/1993	08/01/2016	**WTM**	100%	$400	$1,013	Meikle
1189592	3	19/06/1992	19/06/2016	**WTM**	100%	$1,200	$33,248	Meikle
1189593	1	22/06/1992	22/06/2016	**WTM**	100%	$400	$624	Meikle
1189886	6	07/05/1992	07/05/2016	**WTM**	100%	$2,400	$58,675	Durham
1193477	6	04/05/1994	04/05/2016	**WTM**	100%	$2,400	$1,793	Band-Ore
1198803	1	14/02/1994	14/02/2016	**WTM**	100%	$400	$0	Kangas
1198804	1	14/02/1994	14/02/2016	**WTM**	100%	$400	$0	Kangas
1201162	1	04/07/1994	04/07/2016	**WTM**	100%	$400	$5,621	Band-Ore
1203840	6	21/07/1995	2016-Jul-21	**WTM**	100%	$2,400	$0	Band-Ore
1217601	1	26/11/1996	26/11/2016	**WTM**	100%	$400	$0	Band-Ore
4211037	2	02/06/2006	02/06/2014	**LSG**	100%	$800	$0	LSG
4211038	1	02/06/2006	02/06/2014	**LSG**	100%	$400	$0	LSG
4211039	1	02/06/2006	02/06/2014	**LSG**	100%	$400	$0	LSG
4211040	2	02/06/2006	02/06/2014	**LSG**	100%	$800	$0	LSG
P495307	1	01/06/1990						Croxall
P495308	1	01/06/1990						Croxall
P495309	1	01/06/1990						Croxall
total	60							

FIGURE 4.1: CLAIM SKETCH



4.2 RECENT OWNERHSIP HISTORY AND UNDERLYING AGREEMENTS

The Thunder Creek property is an amalgamation of claim units originally acquired by Band-Ore Resources Limited by means of staking and option agreements. Claims 1189528, 1193477, 1203840 and 1217601 were staked by Band-Ore Resources Ltd. and are not subject to any underling royalty agreements. Lake Shore Gold Corp. optioned the property from Band-Ore Resources Limited in November of 2003. Under the terms of that agreement Lake Shore could earn 60% interest in the project by completing an excess of 1,705,000 C$ expenditures, 370,000 C$ in cash payments and the issuing of 100,000 shares within a four year period. In September of 2006 Band-Ore Resources Limited and Sydney Resources Corporation merged into the new company West Timmins Mining Inc. The terms of the Lake Shore Gold Corp. – Band-Ore Resources Ltd. option agreement succeeded to West Timmins Mining Inc. In May of 2008 Lake Shore Gold Corp. informed West Timmins Mining Inc. that the obligations to earn a 60% interest in the Thunder Creek property had been fulfilled. Brief summaries of the underlying agreements and royalties are stated below.

Mineral claims: 4211037, 4211038, 4211039, and 4211040 were staked by Lake Shore Gold Corp., have no underlying royalties but were subject to the option agreement with West Timmins Mining Inc. dated November 07, 2003. Because the claims were within the area of influence of the agreement they became part of the joint venture. Lake Shore Gold Corp. have applied for and received the surface rights for mineral claims: 4211037 (P23967, PCL23749, PIN 65440-0073); and 4211038 (P23969, PCL 23750, PIN 65440-0072).

Mineral claims optioned from Mr. Jim Croxall (“Croxall”) were subject to a 2% Net Smelter Return (“NSR”) royalty. One percent of this royalty may be purchased for a payment of 1,000,000 $C, plus a consumer price index adjustment. These claims are also subject to an advanced annual royalty payment of 5,000 $C until commercial production begins. Lake Shore Gold Corp. purchased one percent of the NSR in November 2010 in exchange for approximately 1,500,000 $C equivalent in Lakeshore Gold Corp. stock. The surface rights for leased claims P495307, P495308 and P495309 have been acquired by West Timmins Mines Inc. The renewal for the lease was due June 30, 2011. The applications for lease renewal have been submitted and are awaiting confirmation of the new renewal date. As of the effective date this confirmation has not been received. On December 20, 2011 in a letter from the Land Registrar (dated December 09, 2011) confirming the new renewal date for 21 years was received.

The claim with number 1189886 was optioned from Mr. Bruce Durham and partners (“Durham”) and has a 3.0% royalty attached.

Eight claims optioned from the late Mr. Matt Kangas (“Kangas”) (1177807,1177808, 1177809, 1177811, 1181410, 1181413, 1198803, and 1198804) are subject to a 2 percent NSR royalty of which 1 percent may be purchased for 1,000,000 $C. An advanced royalty payment of 5,000 $C is paid annually to the estate of Mr. Kangas. After the signing of the original agreement mineral claims came open and were re-staked: claim 1181410 was former claim 1177813; claim 1181413 was former claim 1177810; claim 1198803 was former claim 1177812; and claim 1198804 was former claim 1177806.

Four claims 1189593, 1181995, 1189580 and 1189592 were purchased by Bruce Durham, Robert Duess, Ken Krug and Henry Hutteri from Ray Meikle (“Meikle”) and Steve Anderson and then optioned to Band-Ore Resources Ltd. A three percent NSR is attached, 1.5 percent from Durham et al., and 1.5 percent from Meikle and Anderson. There is not a buy down of this royalty.

The surface rights for claims P18913, P18916, P18917, P18918, P10920, and P10921 are held by Timmins Forest Products.

Table 4.1, outlines the status of the claims.

The staked mineral claims of the Thunder Creek property are all in good standing with applied assessment credits until 2014 and 2016.

On November 06, 2009 Lake Shore Gold Corp. ("LSG") and West Timmins Mining Inc. ("WTM") completed a business combination agreement resulting in West Timmins Mining Inc. becoming a wholly owned subsidiary of Lake Shore Gold Corp.

An Impact and Benefits Agreement ("IBA") with the Mattagami and Flying Post First Nations have been negotiated and signed (February 17, 2011). The IBA outlines how Lake Shore Gold Corp. and the First Nations communities will work together in the following areas: education and training of First Nation community members, employment, business and contracting opportunities, financial considerations and environmental provisions (Hagar, B.; Samson, J., 2011, personal communication).

4.3 LOCATION

The Thunder Creek property is situated approximately 21 kilometres west of Timmins city centre, and approximately 552 kilometres north-northwest of Toronto. The centre of the Project is located within national topography series ("NTS") map reference 42-A-05; at longitude 81.57° west; 48.37° north latitude. Universal Transverse Mercator ("UTM") co-ordinates for the project centre utilizing projection North American Datum ("NAD") 83, Zone 17 are approximately 458,050 metres east, 5,357,923 metres north. Provincial Highways 101 and 144 provide all weather road access to the property. Bush roads, quad trails, drill trails and foot paths provide access to all areas within the claim boundaries. The junction of Highways 101 and 144 is situated 1.8 kilometres north-west of the property centre. Figure 4.2, Location Map, illustrates the Project area relative to the highways, City of Timmins and the City of Toronto.

4.4 PAST MINING ACTIVITY, ENVIRONMENTAL LIABILITIES AND PERMITTING

To the best of the author's knowledge, there has been no past mining activity in the form of blasting, excavating, and processing bulk material from the Thunder Creek Property prior to Lake Shore Gold Corp.'s ownership of the property. Small, shallow, historical test pits have been dug into the overburden and are now overgrown.

To the best of the author's knowledge there are no environmental issues or liabilities resulting for the exploration activities or timber harvesting within the boundaries of the Thunder Creek Project.

Surface diamond drilling and geological mapping phases of the project did not require permitting. The Thunder Creek project for administration purposes is part of the Timmins Mine Complex, and permits required for the underground exploration, mineral extraction and environmental concerns are covered by the Timmins Mine (Crick, D., 2011; Ternes, T, 2011). A more detailed description of permits is presented in Item 20: "Environmental Studies, Permitting, and Social or Community Impact".

From the Ministry of Natural Resources' Species at Risk in Ontario ("SARO") list, the following species could to range within the Project area.
(http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/246809.html)

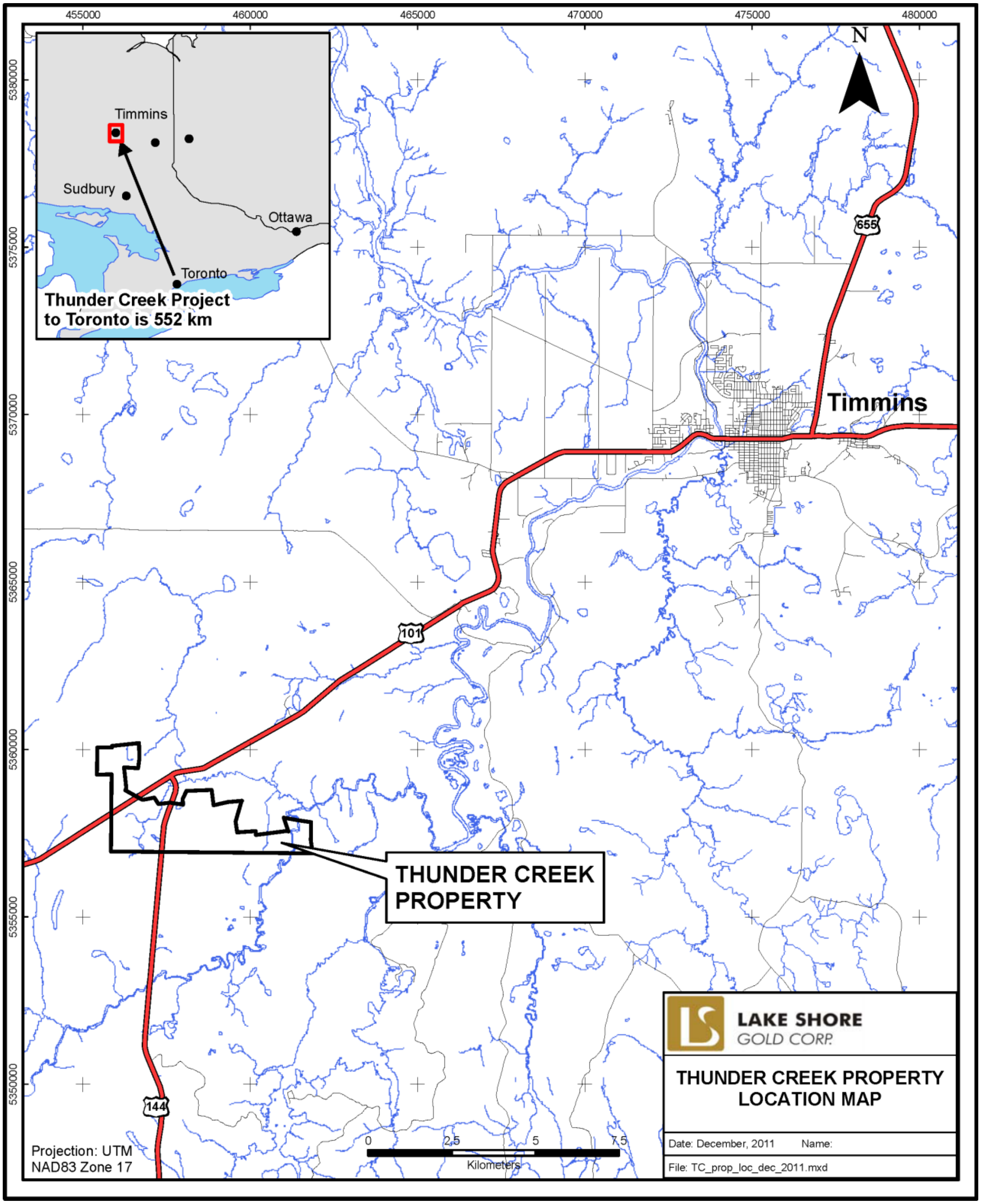
TABLE 4.2.1: SPECIES AT RISK

Common Name	Scientific Name	OMNR Status
Lake Sturgeon	Acipenser fluvescens	special concern
Golden Eagle	Aquila chrysaetos	endangered
Short-eared Owl	Asio flammeus	special concern
Eastern Wolf	Canis lupus lycaon	special concern
Black Tern	Chlidonias niger	special concern
Yellow Rail	Coturnicops noveboracensis	special concern
Monarch Butterfly	Danaus plexippus	special concern
Bald Eagle	Haliaeetus leucocephalus	special concern
Peregrine Falcon	Falco peregrinus	threatened
Eastern Cougar	Puma concolor	endangered

The author is not aware of any of these species being present within the area of the Property.

To the best of the author's knowledge there is no significant factor or risk that may affect access, title, or the right or ability to perform work on the property.

FIGURE 4.2: LOCATION MAP



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The centre of the Property is located within national topography series ("NTS") map reference 42-A-05; at longitude 81.57° west, 48.37° north latitude. UTM co-ordinates for the Property centre projected in NAD 83, Zone 17 are approximately 458,050 metres east, 5,357,923 metres north. The junction of Highways 101 and 144 is located 1.8 kilometres northwest of the Property centre. All weather road access to the property is provided by provincial Highways 101 and 144. Bush roads, diamond drill trail, quad trails, and foot paths provide access to the centre of the property and other locations within the claim boundaries. A major power transmission line traverses the northwest portion of the property. The surface and near surface expression of the Rusk zone mineralization is situated approximately 800 metres south-southwest of the Timmins Mine infrastructure. Figure 4.2, Location Map, illustrates the Project area relative to the highways, City of Timmins and the City of Toronto.

5.2 CLIMATE

The Thunder Creek Property and the City of Timmins experience a Continental Climate with an average mean temperature range of -17.5°C (January) to +17.4° (July) and an annual precipitation of about 831mm. The following table (Table 5.2.1) summaries the average temperatures and precipitation values for the 15 year period taken from the Timmins Airport between 1971 and 2000.
(http://www.climate.weatheroffice.ec.gc.ca/climate_normals/index_e.html)

Table 5.2.1: Average Temperatures, Precipitation and Snow Fall Depths for the Timmins Area.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Temperature													
Daily Average (°C)	-17.5	-14.4	-7.7	1.2	9.6	14.7	17.4	15.7	10.3	4.2	-4	-13.2	1.3
Daily Maximum (°C)	-11	-7.5	-0.9	7.6	16.6	21.7	24.2	22.3	16.1	8.9	0.1	-7.8	7.5
Daily Minimum (°C)	-23.9	-21.3	-14.5	-5.2	2.5	7.5	10.5	9.1	4.4	-0.6	-8.1	-18.7	-4.9
Precipiation													
Rainfall (mm)	2.9	1.6	14.7	26.6	62.7	89.1	91.5	82	86.7	64	29.5	7	558.1
Snowfall (cm)	61.7	40.6	49.9	27.5	6.7	0.4	0	0	1.6	14	45.7	65.4	313.4
Precipitation (mm)	53.9	36.6	59.4	52.8	69.2	89.4	91.5	82	88.3	76.8	69.6	61.9	831.3
Average Snow Depth (cm)	58	66	58	25	1	0	0	0	0	0	7	29	20

Local lakes will start to freeze over approximately mid November, and breakup will take place in early to mid May. Work can be carried out on the Property twelve months a year.

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

The city of Timmins with an area of 3,210 square kilometres and a population of 42,455 (2006 Census) has and economic base dominated by the mining and logging industries. The area is serviced from

Toronto via Highways 400, 69 to Sudbury; and Highway 144 to Timmins; or Hwy 11 from Barrie to Matheson and 101 westward to Timmins. The Timmins, Victor M. Power Airport has scheduled service provided by Air Canada Jazz, Bearskin Airlines and Air Creebec. Porter Airways is to commence air service between Timmins and Toronto Island airport commencing January of 2012. The Timmins District Hospital is a major referral health care centre for northeastern Ontario.

The Property is accessible by Highways 101 and 144 and is in close proximity to the main hydro grid transmission line. An experienced mining labour pool is accessible in the Timmins area.

Lake Shore Gold Corp.'s Timmins Mine infrastructure is contiguous with the north boundary of the Thunder Creek Property. The Mine's shaft is situated approximately 800 metres northeast of the Thunder Creek gold mineralized zone. To the best of the author's knowledge, there are sufficient surface rights, a willing labour pool, and readily available infrastructure to carry on a mining operation.

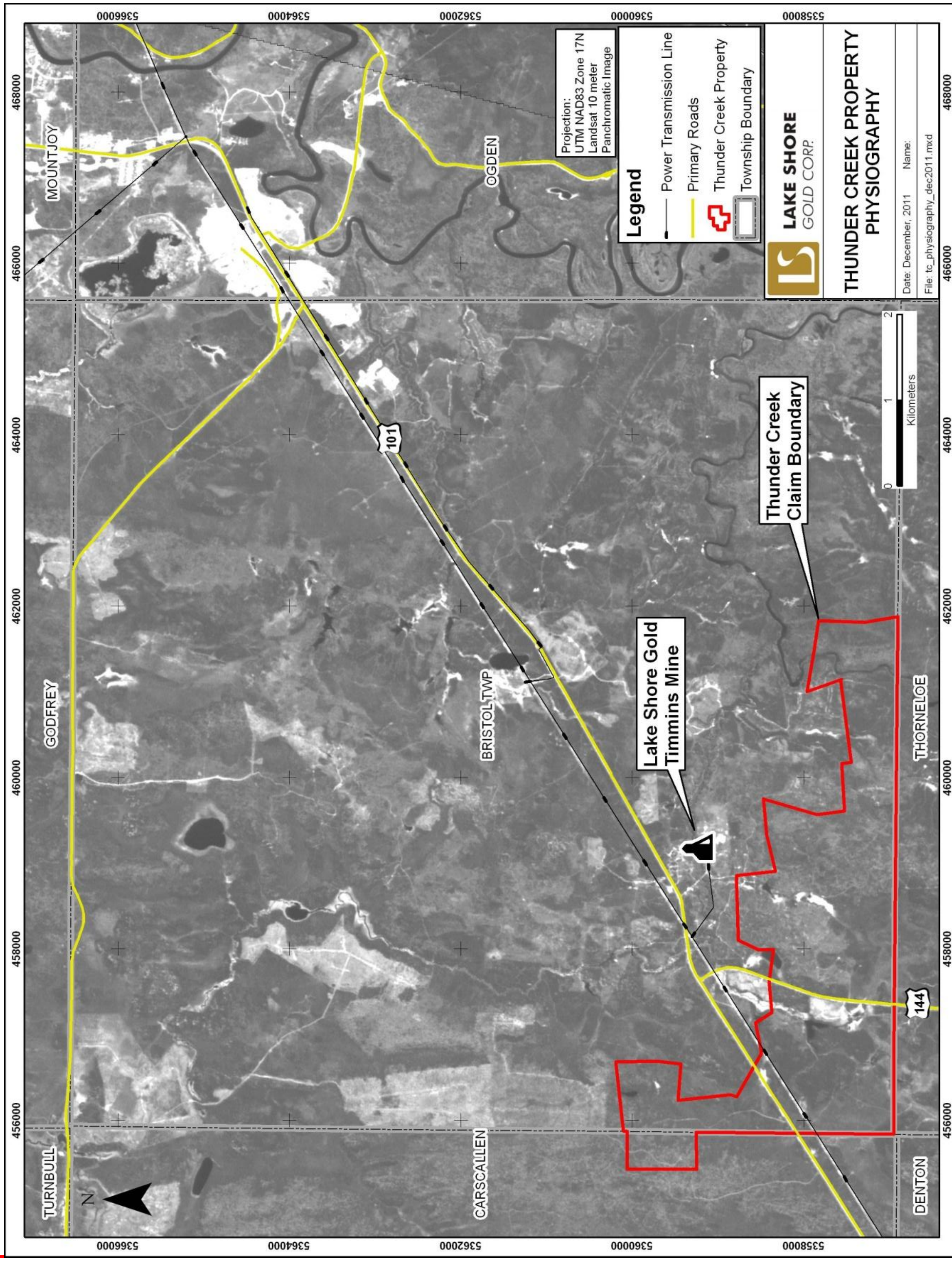
5.4 PHYSIOGRAPHY

The Property generally exhibits low to moderate relief. A base elevation at the junction of Highways 144 and 101 is approximately 312 metres. The peak height of land on the property is 348.5 metres. The elevation of the Tatachikapika River (historically known as the Lost and/or Redsucker River) ranges from 300 to 299m as it flows east-north-east to the northerly flowing Mattagami River. Outcrop exposure is approximately five (5) percent. Figure 5.4.1 illustrates the claim boundary of the Thunder Creek property; Carscallen, Thorneloe and Bristol townships draped over a landsat panchromatic image of the area.

The continental climate and the location on the Canadian Shield give rise to a plant hardiness zone 2a which supports the following boreal forest tree species and a timber, pulp and paper industry. In no particular order of significance local trees species include: American Mountain-Ash (Sorbus Americana), Balsam Fir (Abies Balsamea), Black Spruce (Pincea Mariana), Eastern White Cedar (Thuja Occidentalis), Eastern White Pine (Pinus Strobus), Jack Pine (Pinus Banksiana), Pin Cherry (Prunus Pensylvanica), Red Pine (Pinus Resinosa), Tamarack (Larix Laricina), Trembling Aspen (Populus Tremuloides), White Birch (Betula Papyrifera) and White Spruce (Pincea Glauca).
(http://www.mnr.gov.on.ca/en/Business/ClimateChange/2ColumnSubPage/268124.html)

Hawley, J.E., (1926) points out that a large part of Ogden, Bristol and Carscallen Townships were swept by several forest fires dating back to 1911.

FIGURE 5.4.1: PHYSIOGRAPHY



6.0 - HISTORY

6.1 PRIOR OWNERSHIP

Early in the 1990's Band-Ore Resources Limited assembled through staking and option the majority of group of claims that comprise the present Thunder Creek project. Under option agreements other companies have explored the property with the claims being returned to Band-Ore Resources. On November 12, 2003, Lake Shore Gold Corp. announced that the company has reached an agreement to option the 54 claim unit Thunder Creek property. Under the terms of the agreement Lake Shore Gold Corp. could earn a 60% interest in the property by making cash payments totaling $370,000 and completing exploration expenditures of $1,750,000 over five years, and by issuing 100,000 shares of the Company over four years.

Effective September 13, 2006, Sydney Resources Corporation and Band-Ore Resources Limited amalgamated to form West Timmins Mining Inc. Lake Shore Gold Corp. notified West Timmins Mining Inc in November of 2007 that Lake Shore Gold has completed, and fulfilled the option requirement to earn 60% ownership of the Thunder Creek property, thus forming a 60%-40% joint venture. In November of 2009 Lake Shore Gold Corp. and West Timmins Mining Inc. jointly announce that the companies have completed a business combination agreement and that West Timmins Mines will continue as a wholly owned subsidiary of Lake Shore Gold Corp.

6.2 GENERAL HISTORY

The discovery of gold in Bristol Township on the McAuley-Brydge property (currently Lake Shore's Timmins Mine property) occurred in 1911. The 1912 geology map (ARM-21a) by A.G. Burrows and W.R. Rogers illustrated three claims (TC 612, TC613, TC614) at the McAuley-Brydge occurrence plus four claims west of the Rusk occurrence (HR 1187, HR1188, HR1189 and HR1191). Map ARM-21a illustrates only one patented claim in the Gold River mineralized trend area. Claim HR 1257, straddles Tatachikapika River which divides the Gold River West from the Gold River East mineralized zones on Lake Shore's Gold River Property. At that time, a small cluster of claims surrounded the power dam at Wawaitin Falls flooding the Mattagami River and forming Kenogamissi Lake. Access to the Tatachikapika River was via a couple of portages west from Kenogamissi Lake.

The 1911 fire storms swept large parts of Carscallen, Bristol and Ogden Townships. The surface plants at Hollinger, Dome, West Dome, Vipond, Standard, Preston, East Dome, North Dome, were entirely destroyed. South Porcupine, parts of Pottsville and the north part of Porcupine were also destroyed. (Burrows, A.G., 1915, Hawley, J.E., 1926).

Niven's 1899 baseline forms the northern boundary of Bristol Township with Godfrey Township. Access to the Thunder Creek and Gold River Project areas was limited in the early 1900's to: a winter road from Mattagami Heights (Timmins) north and west of the Mattagami River; river access to Bristol Landing situated on township boundary of Bristol and Ogden; and a wagon road across Bristol Township passing Lake Shore Gold Corp.'s Timmins Mine and Thunder Creek Properties. The Mattagami River provided access to Thorneloe Township and the Wawaitin Falls area. The river at Wawaitin Falls had a 35 metre descent and was dammed giving rise to Kenogamissi Lake and a hydro power generating facility to supply a portion of the Hollinger Mine power requirements. The transmission line and tote road would provide access to Thorneloe and the south-eastern portion of Bristol Townships.

Historical geological reports and mapping completed by the Ontario government geological agencies, in addition with selected co-sponsored Federal initiatives for the Thorneloe – Bristol Townships areas include the following:

1926	J.E. Hawley, ARM35G, The townships of Carscallen, Bristol, Ogden, District of Cochrane, Ontario, Annual Report Map;
1927	J.E. Hawley, ARM35-06.001, Geology of Ogden, Bristol, and Carscallen Townships, Cochrane District, Annual Report Volume;
1957	S.A. Ferguson, M1957-07, Bristol Township, District of Cochrane, Map 1900 Series;
1959	S.A. Ferguson, ARV66-07, Geology of Bristol Township, Annual Report Volume;
1959	S.A. Ferguson, W.D. Harding, P0029, Thorneloe Township, Map P Series;
1980	C.M Tucker, D. Sharpe, P2360, Geological Series, Quaternary geology of the Timmins Area, District of Cochrane, Map P Series;
1982	D.R. Pyke, M2455, Timmins, Precambrian Geology, Map, 2000 Series;
1982	A.G. Choudhry, P2502, Geological Series, Precambrian geology of Thorneloe Township, District of Cochrane, Map P Series;
1989	A.G. Choudhry, OFR5699, The Geology of Keefer, Denton and Thorneloe Townships, District of Cochrane, Open File Report;
1992	T.C. Barrie, OFR5829, Geology of the Kamiskotia Area, Open File Report;
2000	T.C. Barrie, P3396, Geology of the Kamiskotia Area, Map P Series;
2000	T.C. Barrie, S059, Geology of the Kamiskotia Area, Study, Geological Circular;
2001	C.M Tucker, J.A. Richard, Geological Series, Quaternary Geology of the Dana Lake Area, Cochrane, Timiskaming area, Map P Series;
2001	C.M Tucker, J.A. Richard, M2660, Quaternary Geology of Dana Lake Area, Map, 2000 Series;
2001	C.M Tucker, J.A. Richard, M2662 Quaternary Geology of Timmins Area, Map, 2000 Series;
2001	C. Vaillancourt, C.L. Pickett, E.R. Dinel, P3436, Precambrian Geology, Timmins West, Bristol and Ogden Townships, Map P Series;
2002	P.H. Thompson, OFR6101, Toward a New Metamorphic Framework for Gold Exploration in the Timmins Area, Central Abitibi Greenstone Belt, Open File Report;
2005	B. Hathway, G. Hudak, M.A. Hamilton, OFR6155, Geological Setting of Volcanogenic Massive Sulphide Mineralization in the Kamiskotia Area, Discovery Abitibi Initiative;
2005	J. Ayer et al., OFR6154, Overview of Results from the Greenstone Architecture Project, Discover Abitibi Initiative;
2005	Mrd186, Integrated GIS Compilation of Geospatial Data for the Abitibi Greenstone Belt, North-eastern Ontario, Discovery Abitibi Initiative.

Historical "T-Files" assessment reports have been reviewed at the Ministry of Northern Development and Mines' ("MNDM") office at the Ontario Government Complex, Highway 101 East, Timmins (Porcupine), Ontario; and Assessment File Research Imaging ("AFRI") at:

www.geologyontario.mndm.gov.on.ca/. Table 6.1 and Table 6.2 list the report files with information which add to the geological interpretation of the Thunder Creek Property, plus surrounding area. It should be noted that recently submitted assessment files are not in the AFRI system as there is a lag in scanning and posting the submitted assessment reports to the AFRI pdf files to the web site.

Regional airborne geophysical surveys have been completed by Texasgulf Inc., Noranda Exploration Company Limited (N.P.L.), Chevron Minerals Limited, Band-Ore Resources Limited, Explorers Alliance Corporation, INCO, the Porcupine Joint Venture (Placer Dome and Kinross), West Timmins Mining Inc., and Lake Shore Gold Corp. for the Timmins Mine area only. Not all of these surveys are in the public domain.

For the area surrounding the Timmins Mine, Thunder Creek, and Golden River mineralized zones significant historical work has been summarized by: Cavey, G., 2002, 2003, 2004, 2006; Darling, G., et al., 2007 and 2009; Ferguson, S.A., 1957; Hocking, M., and Marsden, H., 2004; Powers, D., 2009; Samson, J., 2005, 2008, 2009; Sullivan J.R., et al., 2007; Wagner, D.W., 2008; and Winter, L.D.S., 2004, 2006.

A few chronological highlights of exploration activities surrounding and including the Thunder Creek Property are:

1941 Rusk Porcupine Mines

- Several pits and trenches across a 150 to 200 metre area;
- Eighteen diamond drill holes (1981m);
- Discovery pit was 1.2m x 1.2m and returned a value of $24.85 over 121.9cm, $15.05 over 76.2 cm and $8.41 over 91.4 cm (T-File 542). (historical gold charts, illustrated on the KITCO website (http://www.kitco.com/scripts/hist_charts/yearly_graphs.plx) indicate that the 1941 London Fix average gold price was 33..85 dollars an ounce US.

1958 Hollinger Mines Ltd.

- 7 diamond drill holes completed in the northern portion of the property;
- No assays were reported.

1980 Falconbridge Nickel Mines Ltd.

- Metallurgical analysis of sample provided by Jim Croxall for the Thunder Creek Property.

1981 Preussag Canada Limited

- Geophysical surveys in Bristol and Thorneloe Townships include magnetometer, VLF-EM, HLEM and Induced Polarization ("IP");
- 10 diamond drill holes (613.9m);
- Adjacent holes, 64 metres apart, intersected 2.57 grams gold per tonne 2.43m, and 4.46 g/tonne gold over 4.6m in an area of the Rusk Showing.

1984 to 85 Noranda Exploration Company Ltd. (N.P.L.)

- Completed a regional airborne geophysical survey with flight lines flown in 2 directions;
- Geological mapping, humus geochemical sampling, outcrop mechanical stripping and trenching;
- Best assays returned in the trenching were 2.86 g/tonne Au and 5.54 g/tonne Au;

- 9 overburden, reverse circulation drilling and 3 diamond drill holes (332.3m) were also completed with no assay results reported.

1987 Highwood Resources Ltd.

- Option property from J. Croxall;
- 4 diamond drill holes (400m) targeting geophysical targets;
- No assay results are reported.

1994 Noranda Exploration Company Ltd. (N.P.L.)

- Line cutting, ground geophysical surveys include magnetometer and IP;
- A single diamond drill hole (302m) with no assay results reported.

1995 Hemlo Gold Mines Inc.

- Hemlo Gold Mines funded project and the work was carried out by Noranda Exploration Company Ltd. (N.P.L.);
- Surveys include line cutting, magnetometer and IP;
- 7 diamond drill holes 95-2 to 95-8 (1581m) with no significant assays reported.

1996 Band-Ore Resources Ltd.

- Make gold discoveries and renew gold exploration in Bristol and Thorneloe townships.

1997 Battle Mountain Canada Limited

- Line cutting and geophysical surveys include magnetometer and IP
- 14 diamond drill holes (“ddh”) (3547m) testing stratigraphy and geophysical targets;
- In ddh MC 97-20 an assay returned the value of 5.9 g/tonne Au over 1.0m. In ddh MC 97-26 there is a 2 metre interval of 1.28 g/tonne Au along with a couple of scattered intervals on a metre and similar 1 gram values.

2003 to May 10, 2009 Lake Shore Gold Corp.

- Option the Thunder Creek Property from Band-Ore Resources Ltd. in 2003;
- Complete a 3 phase, 25 diamond drill holes (8,399m) targeting the Rusk Zone, the ultra mafic complex, and various structures (2004);
- complete a MMI (mobile metal ion) soil geochemical survey (2004);
- complete a reconnaissance bed rock mapping program (2004);
- initiate outcrop mechanical stripping and hydro washing and saw channel sampling program of 2 locations in the area of the Rusk occurrence (2004);
- additional outcrop stripping and power-washing and saw channel sampling at 3 locations (2006);
- Complete a phase 4 diamond drill program of 25 drill holes (13,760m) (2008-2009);
- Lake Shore fulfilled the terms of the option agreement and own 60% of the Thunder Creek Property;
- In 2009 the exploration emphasis of the Thunder Creek project changed from anomaly testing to, systematic, sectional, mineralization definition stage diamond drill project. May 10, 2009 was the data cut-off date for the Technical report submitted and amended July 29, 2009.

TABLE 6.1: LIST OF “T”-FILE ASSESSMENT REPORTS FOR THE THUNDER CREEK PROPERTY, AND SURROUNDING AREA

“T” File	Period of	Company/ Person
12	1941	O’Shea, P.
105	1941-42	Orpit Mines
105	1957	Stanwell Oil and Gas Ltd.
105	1957	Orpit Mines
105	1938	McCauley-Brydge/Orpit Mines
105	1933-34	McCauley-Brydge Claims
105	1938-55	Piccadilly Porcupine
105	1939	Orpit Mines
105	1946, 1955	Piccadilly Porcupine
285	1911, 1957	Milroy-Wilson-Harris-Paul Group
542	1941-1957	Rusk Porcupine Mines Ltd.
556	1958-1959	Hollinger Consolidated Gold Mines Ltd.
620	1949, 1958-60	Haywood Property
760	1938	Porcupine Pioneer Syndicate
770	1941	O’Neill Property
842	1968, 1979-83	Holmer Gold Mines Ltd.
842	1980	Ontario Research Foundation
842	1984	Noranda Exploration Co. Ltd.
1532	1973	Mill Hill Mines
1647	1974-75	Thomas, H.
1654	1974	Campsall, C.R.
1941	1979-85	Texasgulf Canada Ltd./Kidd Creek Mines Ltd.
1950	1979-88	Croxall, J., Croxall, J. and Miller, D.
2378	1981	Preussag Canada Ltd.
2618	1987-89	Chevron Minerals Ltd./ Chevron Resources Canada Ltd.
2645	1984-88	Noranda Exploration Co. Ltd.
2890	1987	ESSO Resources Canada Ltd.
2913	1984-1992	Croxall, J., Noranda Expl. Co. Ltd., Band-Ore Res. Ltd.
2927	1984-86	Utah Mines Ltd.
3246	1994-96	Hemlo Gold Mines Inc.
3317	1987-89	Chevron Minerals Ltd.
3616	1996-97	Band-Ore Resources Ltd.
3718	1995	Hemlo Gold Mines Inc.
3908	1997	Battle Mountain Canada Ltd.
3932	1997	Battle Mountain Canada Ltd.
4440	1999	Prospectors Alliance Corporation
4516	1999	Prospectors Alliance Corporation
4787	2002	Band-Ore Resources Ltd.
5249	2003-05	Band-Ore Resources Ltd.
5371	2004	Lake Shore Gold Corp.
5515	2005	Pelangio Mines Inc.
5684	2006	Lake Shore Gold Corp.

TABLE 6.2: LIST OF "AFRI" REPORTS FOR THE THUNDER CREEK PROPERTY AND SURROUNDING AREA.

AFRI No.	Year	Author	Company
42A05NE8454	1958	Jones, W.A.	Hollinger Mines Ltd.
42A05NE8477	1958	Robinson, G.D.	Hollinger Mines Ltd.
42A05NE8650	1965	Dionna, R.J.	United Buffadison
42A05NE8500	1969		Holmer Gold Mines Ltd.
42A05NE8475	1973	George, P.T.	Holmer Gold Mines Ltd.
42A05NE8495	1973	Bradshaw, R.J.	Holmer Gold Mines Ltd.
42A05SE0024	1973	Bradshaw, R.J.	Mill Hill Ltd.
42A05SE0025	1973	Kilpatrick, J.M.	Mill Hill Ltd.
42A05NE8449	1974	Allan, J.E.	Ducanex Resources
42A05NE8463	1974	Bradshaw, R.J.	Shield Group – Campsall
42A05NE8436	1975	George, P.T.	Geonex Ltd. (Ralph Allerston)
42A05NE8435	1977	Perry, J.	Canadian Nickel Company
42A06NW8471	1977	Webster, B.	Ralph Allerston
42A06NW8431	1977	Webster, B.	Canadian Nickel Company
42A05NE8436	1978	Bradshaw, R.J.	Holmer Gold Mines Ltd.
42A05NE8494	1978	Bradshaw, R.J.	Holmer Gold Mines Ltd.
42A05NE8447	1979	Croxall, J.E.	Croxall-Miller
42A05NE8457	1979	McLeod, C.C.	Texasgulf Inc.
42A05NE8479	1979	Mullen, D.	Texasgulf Inc.
42A05NE8460	1980		Holmer Gold Mines
42A05NE8430	1980	Muir, J.E.	Jim Croxall
42A05NE8478	1981	Chataway, R.T.	Preussag Canada Ltd.
42A06NW8486	1981	Gasteiger, W.A.	Texasgulf Inc.
42A06NW0042	1981	Gasteiger, W.A	Texasgulf Inc.
42A05NE8464	1981	McLeod, C.C.	Texasgulf Inc.
42A06SW0206	1981	Warren, T.E.	Preussag Canada Ltd.
42A05SE0010	1984	LeBaron, P.S.	Noranda Exploration Co. Ltd.
42A05NE8473	1984	Bemam	Rio Algom Exploration Inc.
42A05NE8491	1984	Diorio, P.	Utah Mines Ltd.
42A05NE8489	1985	Barnett, E.S.	Kidd Creek Mines Ltd.
42A05SE0001	1985	LeBaron, P.S.	Noranda Exploration Co. Ltd.
42A05NE8456	1985	Diorio, P.	Utah Mines Ltd.
42A05NE8798	1985	Deevy, A.J.	Westfield Minerals Ltd.
42A06NW8423	1986	Klein, J.	Cominco Ltd.
42A06NW8426	1986	Newsome, J.W.	Utah Mines Ltd.
42A05NE8705	1987	Glenn, W.E.	Chevron Canada Resources Ltd.
42A05NE8428	1987	Bald, R.	Highwood Resources
42A05NW8427	1987	Hendry, K.N.	Cominco Ltd.
42A05NE8432	1987	Hiava, M.	R. Allerston
42A06NW8424	1987	Moore, D.	Cominco Ltd.
42A05NE8492	1988	Roth, J.	Chevron Canada Resources Ltd.
42A05NE8459	1988	Fumerton, S,. et al.	Chevron Minerals Ltd.
42A05NE8490	1988	Fumerton, S., et al.	Chevron Minerals Ltd.
42A06NW0317	1988	MacPherson	ESSO Minerals Canada

TABLE 6.2: LIST OF "AFRI" REPORTS FOR THE THUNDER CREEK PROPERTY AND SURROUNDING AREA. (CONTINUED)

AFRI No.	Year	Author	Company
42A05NE8648	1989	Clark, D.	Chevron Minerals Ltd.
42A05NE8649	1989	Manchuck, B.	Chevron Minerals Ltd.
42A06NW8429	1989	van Hees, E.H.	Chevron Minerals Ltd.
42A05NE8488	1992	Croxall, J.E.	Croxall-Miller
42A05NE0070	1994	Meikle, R.J,	Band-Ore Resources Ltd.
42A05NE2062	1994	Meikle, R.J.	Band-Ore Resources Ltd.
42A05NE8701	1994	Meikle, R.J.	Bans-Ore Resources Ltd.
42A05NE0075	1994	Calhoun, R.	Noranda Exploration Co. Ltd.
42A05NE0081	1994	Daigle, R.J.	Noranda Exploration Co. Ltd.
42A05NE0083	1994	Daigle, R.J.	Noranda Exploration Co. Ltd.
42A05SE0011	1994	Daigle, R.J.	Noranda Exploration Co. Ltd.
42A05NE0079	1994	Anderson, S.D.	R. Poirier
42A05NE0080	1995	Daigle, R.J.	Hemlo Gold Mines Inc.
42A05NE0084	1995	Calhoun, R.	Hemlo Gold Mines Inc.
42A05NE0085	1995	McCann, S.	Hemlo Gold Mines Inc.
42A05NE0057	1995	McCann, S.	Hemlo Gold Mines Inc.
42A05NE0092	1995	Meikle, R.J.	Pelangio Larder Mines Ltd.
42A05NE0077	1995	Mackenzie, C.D.	R. Allerston
42A05NE0078	1995	Anderson, S.D.	R. Poirier
42A05NE0095	1995	Burns, J.	Copper Dome Mines
42A05NE0165	1996	Anderson, S.D.	Marl – Pelangio Larder J.V.
42A05NE0167	1966	Begauskas, J., et al.	Prospectors Alliance Corp.
42A05NE0131	1997	Daigle, R.J.	Band-Ore Resources Ltd.
42A06SW0025	1997	Daigle, R.J.	Band-Ore Resources Ltd.
42A06NW0042	1997	Duess, R.	Sedex Mining Corp./Band-Ore Resources Ltd.
42A05NE0169	1997	Calhoun, R., et al.	Battle Mountain Gold
42A05NE2007	1997	Calhoun, R., et al.	Battle Mountain Gold
42A05NE0104	1997	Grant, J.C.	Copper Dome Mines
42A05NE0158	1997	Grant, J.C.	Pelangio Larder & Copper Dome Mines
42A05NE0168	1997	Filo, J.K.	Pelangio Larder & Copper Dome Mines
42A05NE2018	1997	Legault, J.M.	Prospectors Alliance Corp.
42A06NW8485	1997	Perry, J.	Canadian Nickel Company Ltd.
42A05NE2001	1997	Webster, B.	Prospectors Alliance Corp.
42A05NE2019	1998	Calhoun, R.	Falconbridge Ltd. & Explorers Alliance Corp.
42A05NE2012	1998	Vamos, P.J.	Prospectors Alliance Corp.
42A05NE2034	1999	Calhoun, R.	Prospectors Alliance Corp.
42A05NE2030	2000	Calhoun, R.	Falconbridge Ltd. & Explorers Alliance Corp.
42A05NE2037	2000	Johnston, M.	M. Caron
42A06NW2006	2001	Calhoun, R.	Explorers Alliance Corp.
42A05NE2049	2003	Anderson, S.D.	R. Poirier
42A06NW2046	2004	Grant, J.	Probe Mines Ltd.

6.3 HISTORICAL RESOURCE ESTIMATES

There are no historical Resource Estimates.
No historical gold mineralization production has taken place from this property.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 GENERAL GEOLOGICAL SETTING

The earliest reports of the geology for the Timmins area are from Ontario government geologists: Burrows (1910, 1911, 1912), Hawley (1926), Rose (1924), Berry (1941), Ferguson (1957, 1968) and Pyke (1982), supplemented by contributions from Brisbin (1997), Grey, (1994), Melnik-Proud (1992) and van Hees (2000) for their Doctor of Philosophy degrees. Described in these documents are the contributions made by government and mine geologists which detail the evolution of the stratigraphic understanding for the Porcupine Gold Camp. Highlighted herein is a sequential summary of significant observations and interpretations.

1896, Burwash assigned Precambrian volcanic and sedimentary rocks of the Timmins area to Huronian defined by Logan in 1847.

1911, 1912, 1915, 1925, geological mapping by Burrows, produces the first geological map of the Porcupine Camp and he makes his stratigraphic nomenclature consistent with relationships observed by Lawson (1913) for Lake of the Woods, as well as Miller and Knight (1915) in the Lake Timiskaming area.

1925, Burrows established that younger Timiskaming Series of metasedimentary rocks unconformably overly the Keewatin Series volcanic rocks. He identified porphyry dykes and stocks and granitoid plutons in the surrounding area as being Algoman, and post Timiskaming. The observation that Keweenawan olivine diabase dykes crosscut Matachewan quartz diabase was made at this time.

1933, Graton et al., proposed a subdivision for Keewatin volcanic rocks in Tisdale Township. The subdivision included, from oldest to youngest, the Northern, McIntyre, Central, Vipond, and Gold Centre Series. The name “99 Flow” was applied to a massive flow at the base of the Vipond Series.

1936, 1939, Hurst noted metasedimentary rocks in the Timmins area occur both overlying and underlying an angular unconformity. He places the rocks above the unconformity into the Timiskaming Series and assigns the metasedimentary rocks below the unconformity to the Keewatin Series. Porphyries are interpreted to be subvolcanic stocks emplaced into volcanic vents from which the felsic volcaniclastics were erupted.

1944, Holmes interpreted the porphyries to post date Keewatin volcanic rocks and Timiskaming metasedimentary rocks.

1948, Jones, while working at the Hollinger Mine, presented a more detailed classification modified after Graton (1933). Jones introduced the alphanumeric names to the lithological units (e.g. V8E); gave formation status to the Northern, Central, and

Vipond Series; and renamed the "McIntyre Series" the "95", assigning the flows to the base of the Central Formation.

1948, Buffam adapts Jones' Hollinger Mine terminology at the Moneta Mine and adds the term Krist Fragmental and describes the unconformity at the base of the Krist that separates it from the Tisdale Group mafic volcanic flows.

1948, Dunbar distinguishes two groups of Keewatin volcanic rocks in the Timmins area and names them Deloro Group and Tisdale Group. He discriminates the Krist Formation from the underlying Tisdale Group and places it into the Hoyle Series.

1954, Moore included the Krist Formation with the Timiskaming Group and placed the unconformity between Keewatin and Timiskaming rocks at the base of the Krist. Burrows (1911) was first to presented this interpretation.

1954, Fuse applied Jones' (1948) terminology of the Tisdale Group to rocks exposed at the McIntyre Mine.

1960, Griffis, at the McIntyre Mine, establishes the most detailed subdivision of the Tisdale Group.

1968, Ferguson et al., attempt to correlate the stratigraphy of the Timmins Camp. They assign the Krist Fragmental to the uppermost formation in the Tisdale.

1974, Pyke subdivided the Deloro and Tisdale Groups, based upon major oxide geochemical classification of volcanic rocks as per Jensen's cation plot (Jensen, 1976) His nomenclature divided the two groups into six formations. Numbers I through III are within the Deloro Group and numbers IV through VI are within the Tisdale Group. The Deloro is largely a calc-alkaline sequence approximately 14760 to 16400 feet (4,500 to 5,000 metres) thick and is comprised mainly of flows of andesite and basalt in the lower part, and dacitic flows and rhyolitic pyroclastic rocks toward the top. Iron formation is common at or near the top of the group. Most of the Deloro Group is confined to a large domal structure in the east central part of the area. A major change in volcanism marks the beginning of the Tisdale Group. The base formation consists largely of ultramafic volcanic rocks and basaltic komatiites. This in turn is overlain by a thick sequence of tholeiitic basalt. The uppermost formation is largely volcaniclastic and has a calc-alkaline dacite composition. The total thickness of the Tisdale Group is about 13,120 feet (4,000 metres), (Pyke, 1974).

1975, Lorsong subdivided the Porcupine Group into Whitney, Beatty, Dome and Three Nations Formations.

1976, Pyke renamed the six formations from youngest as Donut Lake, Redstone, Boomerang, Goose Lake, Schumacher and Krist. He assigns all metasedimentary rocks to Formation VII, the sole unit of the Porcupine Group, which he considers to be a time equivalent, or the upper Deloro and the entire Tisdale Groups.

1978, Pyke renamed the Tisdale and Deloro Groups the Upper and Lower subgroups and raised formations I through VI to group status. This terminology did not receive acceptance with subsequent workers (Brisbin, 1997)

1986, (Frarey and Krough), 1987 (Mortensen), 1989 (Corfu et al) post U-Pb zircon age dates for intrusives and selected volcanics in the Timmins area.

1988, Mason et al., suggested that the highly fractured centers that hydrothermal fluids and gold mineralization subsequently accessed where prepared at the time of porphyry emplacement. Fracturing and brittle faulting generated prior to porphyry intrusion during one or more magmatic tumescence. The eruption of Krist Formation pyroclastic rocks and Keewatin folding and faulting, may have initiated ground preparation and localized magmatic and hydrothermal activity.

1991, Jackson and Fyon defined a lithostratigraphic association of rock units in the Western Abitibi Subprovince within the boundaries of 55 tectonic assemblages. An assemblage is defined as stratified volcanic and/or sedimentary rock units built during a discrete interval of time in a common depositional or volcanic setting. They suggest a four stage evolutionary model for the southern Abitibi greenstone belt. 1) Formation of submarine oceanic assemblages in regional complex micro-plate interactions perhaps caught between two larger converging plates located north and south of the micro-plate region. 2) Termination of submarine volcanism by collision of a large continental mass to the south at ~2700 Ma. The collision may have been oblique, involving the 2800 to 3000 million year old Minnesota River Valley gneiss terrane. 3) Tectonic thickening during collision led to emergent sediment source area(s) for post ~2700 Ma turbidite deposits, including both local deposits and a massive sedimentary accretionary wedge. As collision continued, previously formed volcanic and turbidite deposits, including the Pontiac Subprovince were deformed. Terminal subduction, possibly involving complex plate interactions at 2685 to 2675 Ma, generated alkalic volcanic rocks and alluvial–fluvial sediments in proximity to crustal–scale shear zones (Jackson and Fyon, 1991).

1992, Melnik-Proud interprets the gold bearing quartz-carbonate-albite veins to not only be spatially, but temporally and genetically associated with albite dykes in the Hollinger –McIntyre complex.

1997, Brisbin defines the Krist as a formation within the Hoyle Group. He proposes and assigns a new lithostratigraphic unit termed the Hersey Lake Formation. This unit is composed of intercalated ultramafic and mafic flows that comprise the base of the Tisdale Group in the core of the North Tisdale Anticline. Correlative flows are exposed in the south, on the Delnite, Aunor, and Buffalo Ankerite mine properties. The upper contact of the Hersey Lake Formation is defined as the upper contact of the highest ultramafic flow in the Tisdale Group (Brisbin, 1997).

1999. Pressacco, R., OFR5985, is published Ontario Geological Survey special Project: Timmins Ore Deposits Descriptions.

2000, Ayer et al., with the aid of additional re-mapping and geochronological data proposed a reinterpretation of the Tectonic Assemblages, reducing the 55 assemblages to 7 volcanic assemblages and 2 metasedimentary assemblages. Presently the assemblages are interpreted as autochthonous not allochthonous. Geochemistry of the volcanic units indicates an interaction between plume and subduction zone melts. The Porcupine assemblage is interpreted to be the result of submarine turbidite fans which are coeval with batholith emplacement, regional folding and collision with the Opatica Subprovince. The Timiskaming assemblage is believed to be the result of subaerial alluvial fan-fluvial sedimentation associated with continental arc magmatism.

2002, The Discover Abitibi Initiative, Ayer et al., from 2002 to the 2005 has brought the talents of individuals, geologists, prospectors, the mining industry, the Ontario Geological Survey, and the Geological Survey of Canada to the Timmins - Kirkland Lake Gold Camps to assess the fundamental architecture and processes which were responsible for the gold and base metal endowment. The products of this initiative have not been fully realized as the refined, higher resolution airborne geophysical electromagnetic and magnetic surveys, seismic survey, gravity survey, lithogeochemistry and additional age dating is providing tools that will modify historical interpretations.

7.2 REGIONAL GEOLOGY AND STRUCTURE

Supracrustal rocks in the Timmins region are assigned as members of nine (9) tectonic assemblages within the Western Abitibi Subprovince, of the Superior Province. The seven volcanic and two sedimentary assemblages are of Archean age. Intrusions were emplaced during Archean and Proterozoic times. Tectonic Assemblages of the Abitibi Subprovince, east of the Kapuskasing Structural Zone, are illustrated in Figure 7.1 after Ayer J.A., Dubé, B., and Trowell, N.F. (2009). Table 7.1, is modified after Ayer (1999, 2000, 2003, 2005) and summarizes the characteristics of the assemblages, from youngest to oldest.

There is 80 Ma years time span between the volcanic eruption of the lower Pacaud assemblage (2750 Ma) to the sedimentation and volcanism of the upper Timiskaming assemblage (2670 Ma). Each of the assemblages demonstrates a melt evolution from komatiitic or tholeiitic basalt, to felsic or calc-alkaline volcanics. In the Thunder Creek area only the Deloro (2730 - 2724 Ma (6 Ma)), Kidd-Munro (2719 - 2711 Ma (8 Ma)), Tisdale (2710 - 2704 Ma (6 Ma)), Porcupine (2690 - 2685 Ma (5 Ma)), and Timiskaming assemblages (2676 - 2670 Ma (6 Ma)) are present. Revised age dates for the Porcupine assemblage indicate that the felsic volcanism of the Krist Formation is coeval with emplacement of calc-alkalic felsic porphyries in Timmins (2692+/-3 to 2688+/-2 Ma).

Figure 7.2 The Regional Geology locates the property relative to the regional geology.

Rhys (2010, 2011) has modified the regional structural history interpretation by adding an additional deformation period (D2) to the earlier folding preceding the Timiskaming assemblage. The interpretation demonstrates that there are at least two pre-Timiskaming fold events (D1 and D2), followed by two dominant syn-metamorphic, post-Timiskaming foliation forming events (D3 and D4) and a later crenulation cleavage (D5) (Rhys, 2010).

Regionally, deformation in the Timmins area is characterized by a sequence from early, pre metamorphic folds lacking axial planar cleavage (D1 and D2) to a series of syn-metamorphic, fabric – forming events, which overprint the earlier folds (D3 and D4 events). The multi-phase Destor-Porcupine fault system passes approximately 5 km to the south of the property. The fault system is a composite corridor of shear zones and faults that records at least two main stages of displacement: a) syn-Timiskaming (2680-2677 Ma) brittle faulting associated with truncation of early D1 and D2 folds, apparent sinistral displacement, and formation of half grabens that are locally filled with Timiskaming clastic sedimentary rocks; and b) syn-metamorphic D3-D4 formation of high strain zones over a broad corridor generally several hundred metres wide generally corresponding with, or developed south of, the trace of the older faults. These shear zones record variable kinematic increments but are regionally dominated by sinistral with north side up displacements (Rhys, 2010).

TABLE 7.1: TECTONIC ASSEMBLAGES

Timiskaming Assemblage

- Unconformably deposited from **2676- 2670 Ma** **(6 Ma)**
- Conglomerate, sandstone, and alkalic volcanics
- Coeval Gold mineralization occurs near regional fault zones (PDF & CLLF)
  Two end member types
  1) Quartz veins (Timmins & Val d'Or)
  2) Sulphide rich Stockworks (Holloway Twp., Kirkland Lake, Matachewan)
- **Alkali Intrusive Complex (Thunder Creek) 2687+/-3 Ma (Barrie, 1992)**

Porcupine Assemblage

- Age of **2690 - 2685 Ma** **(5 Ma)**
- Turbidites with minor conglomerates & iron formation locally
- **Krist Formation** is coeval with **calc-alkalic felsic porphyries** 2691+/-3 to 2688+/-2 Ma

Blake River Assemblage

Upper and Lower Units

- Age of **2703 - 2696 Ma** **(7 Ma)**
- Tholeiitic & Calc-alkaline mafic to felsic volcanics
- VMS deposits associated with F3 felsic volcanics at Noranda
- Syngenetic gold & base metals (Horne, Thompson Bousquet)

Tisdale Assemblage

- Age of **2710 - 2704 Ma** **(6 Ma)**
- Tholeiitic to komatiite suite
- Calc-alkaline suite
- VMS Deposit: Kamiskotia – tholeiitic volcanics, gabbros & F3 felsics
  Val d'Or – calc-alkaline volcanics & F2 felsics
  Sheraton Township area – intermediate-felsic calc-alkaline volcanics
- Ni-Cu-PGE: Shaw Dome, Texmont, Bannockburn

Kidd-Munro Assemblage

- Age of **2719 - 2711 Ma** **(8 Ma)**
- Tholeiitic to komatiitic
- Calc-alkaline suite
- VMS deposit: F3 felsic volcanics & komatiites (Kidd Creek)
  Tholeiitic-Komatiitic volcanism (Potter)
- Ni-Cu-PGE (Alexo)

Stoughton-Roquemaure Assemblage

- Age of about **2723 - 2720 Ma** **(3 Ma)**
- Magnesium and iron rich tholeiitic basalts
- Localized komatiites and felsic volcanics
- PGE mineralization in mafic-ultramafic intrusions and komatiites
  (Mann & Boston Townships)

Deloro Assemblage

- Age of about **2730 - 2724 Ma** **(6 Ma)**
- Mafic to felsic calc-alkaline volcanics
- Commonly capped by regionally extensive chemical sediments
- Two different types of VMS deposits
  1) F2 felsic volcanics and synvolcanic intrusion (Normetal)
  2) Localized sulfide-rich facies in regional oxide facies iron formations (Shunsby)

Pacaud Assemblage

- Age of **2750 – 2735 Ma** **(15 Ma)**
- Magnesium and iron rich tholeiitic basalt
- Localized komatiites and felsic volcanics

FIGURE 7.1: TECTONIC ASSEMBLAGES OF THE ABITIBI SUBPROVINCE EAST OF THE KAPUSKASING STRUCTURAL ZONE (after Ayer, J.A., Dubé, B., Trowell, N.F.; NE Ontario Mines and Minerals Symposium, April 16, 2009)

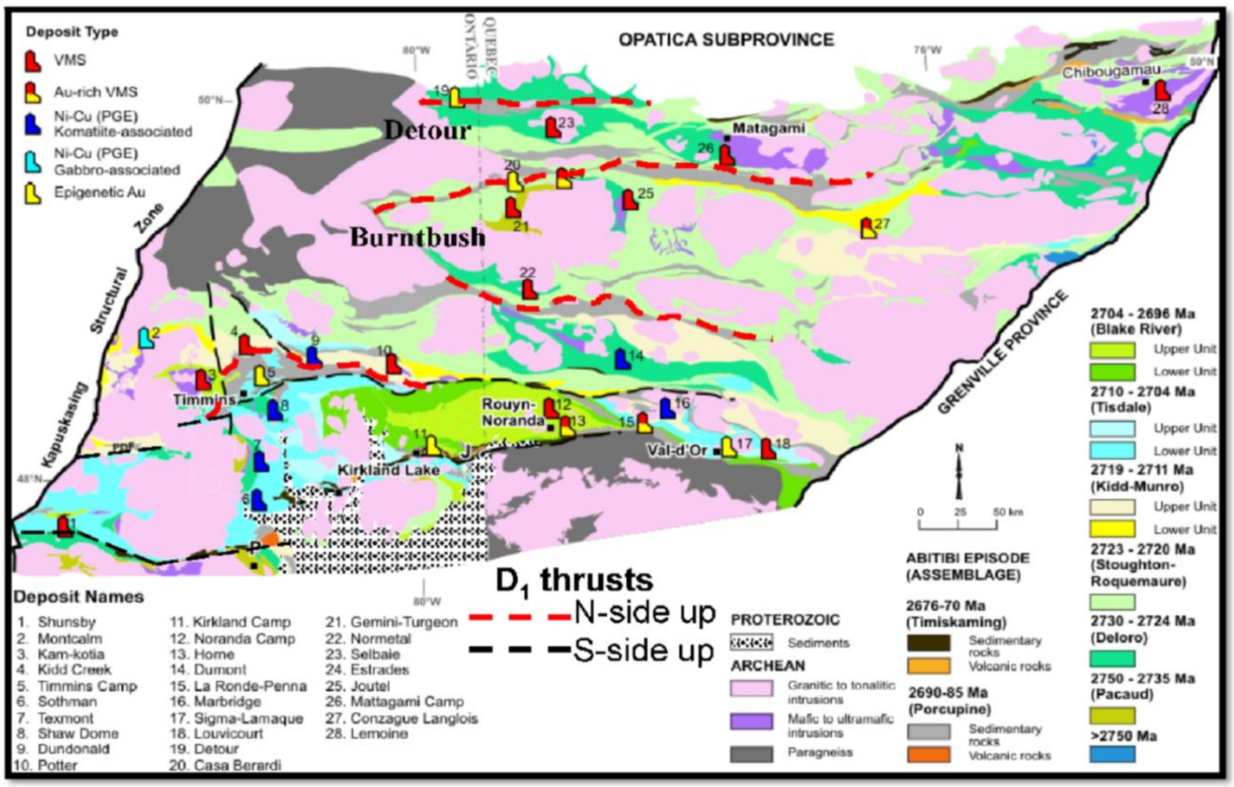
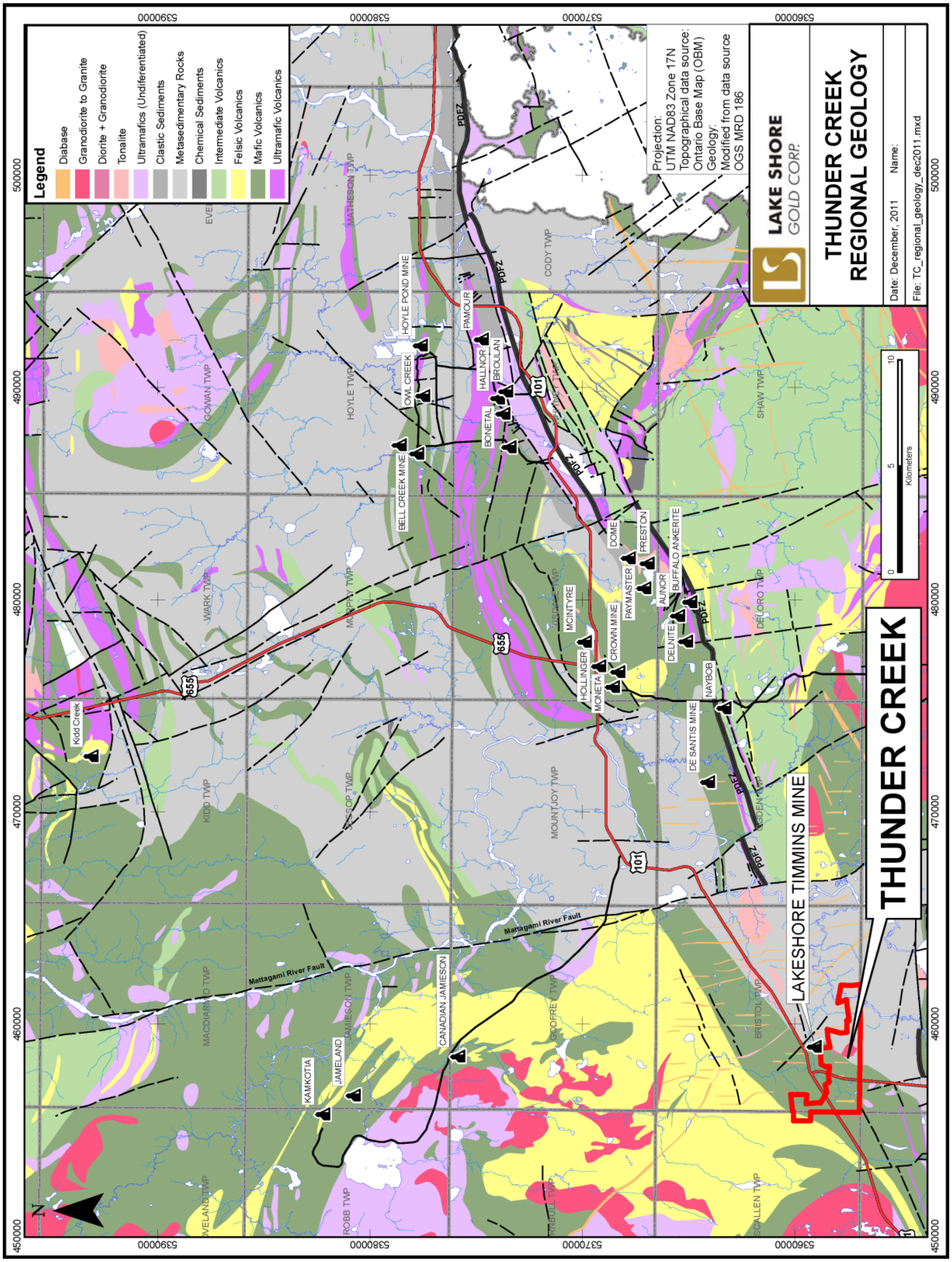


FIGURE7.2: REGIONAL GEOLOGY



7.3 PROPERTY GEOLOGY

Geological surface mapping of the Thunder Creek property by Lake Shore Gold Corp., commenced with a survey by Michael Hocking, and Jacques Samson, under the direction of Henry Marsden, Senior Project Manager in 2004. This program traced the contact of the Rusk Shear, the metamorphosed mafic-pyroxenite-sediment-monzonite contacts with a series of trenches staggered along the projected trace of the Rusk Shear. Coincident with the surface a diamond drill campaign targeting the Rusk Shear Zone and gold mineralization within and proximal to the shear zone, and geophysical magnetic, conductivity and resistivity anomalies was initiated. The results of this program are described and discussed in the technical report prepared by Powers (2009).

During late summer 2009 Mr. John Camier, P.Geo. carried out a surface mapping survey confined to a five (5) kilometre square area surrounding the Rusk Zone. The scope of the program was: to concentrated on the syenite (monzonite) intrusion, and try to understand its relationship to the surrounding host metasedimentary rocks, and the hydrothermally altered pyroxenitic intrusion previously mapped and intersected in drill core. Location control for this survey included the previously cut field grids and a Garmin hand held 76 GPS. The "in-house" technical report prepared by Mr. Camier represents field observations, results of geochemical sampling and a petrographic study by Dr. R. Springer, P.Geo., a retired professor from Brandon University, Manitoba.

From 2003 to October 28th, 2011 a total of 150,466.3 metres of diamond drill core have been drilled by Lake Shore Gold Corp. This includes 102 bore holes with 47 wedge splays and 3 drill hole extensions for a total of 83,656.69 metres of surface diamond drilling. Underground diamond drilling contributes 384 drill holes with 22 restarts for 66,809.65 metres. Underground mapping includes the outlining of major structures as the Rusk Shear; sulphide and quartz vein mineralization; alteration and rock type. Over the course of these programs several samples have been sent for microscopic study to endeavor to determine the rock type, alteration history, accessory minerals, mineralization type, habit, style, and qualifying the geological understanding. Mr. David Rhys, P.Geo and structural geologist consulting to Lake Shore Gold Corp. has been studying the Timmins Mine, the Thunder Creek property and the Gold River property on an individual basis comparing similarities, differences in structure, mineralization styles and placing these observations into the regional context of the geological understanding. His work, to date, is the most inclusive and comprehensive description of the geology, structure, and mineralization.

Table 7.2 highlights the number of microscopic samples and the specialist making observations. Collectively the increase in drill core observations, underground workings and the sample thin/polished section studies have led to a more advanced understanding of the property geology.

TABLE 7.2: MICROSCOPIC STUDIES

Year	Geologist	no. samples	Specialist
2008	Samson	5 ddh 16 sections	Dr. A. Miller
2009	Samson	3 ddh, 1 grab, 6 sections	Dr. A. Miller
2009	Camier	20 sections	Dr. Bob Springer
2010	Rhys	37 sections	K. Ross
		24 Timmins Mine/13 Thunder Cr.	

Table 7.3 illustrate a geological table of lithological units for the Thunder Creek property as described in older reports by Samson (2008) and Powers (2009), and updated to the currently understood of the local geology. The lithological units underlying the Thunder Creek Property are presented in the table as a bold highlight font.

Seven (7) lithological units have been identified underlying the Thunder Creek property. The Lithologies range in age from Neoarchean, Tisdale assemblage mafic metavolcanic (2.710 - 2.703 Ga) to Paleoproterozoic Matachewan diabase dykes with an age of 2.45 Ga. The understanding of the geological environment continues to evolve. Presented in this report is the current understanding and interpretation for surveys completed to date. The reader is cautioned that as additional information becomes available, or known, the interpretation will be modified based upon the merits of information presented.

The stratigraphic basal unit of the Thunder Creek property is a mafic metavolcanic rock unit that is fine-grained, green in colour, and exhibit massive, pillowed and flow breccia textures and structures. Mafic metavolcanic rocks occur in the western portion of the Thunder Creek property. Metamorphism varies from mid-greenschist to lower-amphibolite facies. Epidote and calcite alteration is common and increases to strong hydrothermal alteration as the unit is in closer proximity to the Rusk shear. Fine-grained disseminated magnetite occurs proximal to the "alkali intrusive complex" ("AIC"). At this location the rocks become darker in colour, chloritized and locally exhibit hematite alteration (Camier, 2009). Felsite to feldspathic rich syenite dyklets; the alkali intrusive unit ("AIC"); quartz, +/-carbonate veins with varying amounts of hematite, +/- magnetite, +/- pyrite, +/- pyrrhotite; and diabase dykes intrude the mafic metavolcanic lithology.

In the eastern portion of the Thunder Creek property, and overlying the mafic metavolcanic unit is a discontinuous sequence of biotite rich meta-greywacke, metamorphosed siltstones, metamorphosed argillite, fine grained tuff, clastic tuff, and laminated chemical metasediments containing magnetite (Camier, 2009; Samson, 2008). This succession of metasedimentary rocks belongs to the Porcupine assemblage, ranging in age from 2690 to 2685 Ma. It is not known if the sediments are conformable or unconformable to the mafic metavolcanic contact. These metasedimentary units occur in the footwall to the AIC and along the Rusk shear zone. When incorporated in the shear zone the metasedimentary rocks are tectonized to a quartz-sericite-carbonate +/- hematite schist that display a crenulation fabrics. Sericite, weak hematite and silicification is the common alteration assemblage. Quartz veins, felsites veins and the Matachewan Diabase dyke swarm intrude the metasedimentary lithology. Camier (2009) noted several outcrop for a felsic, dacitic metavolcaniclastic fragmental unit within the central portion of the mapping area. Although age dates have not been acquired for this subunit, it is speculated that the subunit may be related to the Krist formation of the Porcupine assemblage.

The alkali intrusive complex ("AIC") is poorly exposed on surface. It has a very strong magnetic signature that the geophysical interpretation indicates that it extends northeasterly for at least 2 kilometres across the central portion of the Thunder Creek Property, and onto the Timmins Mine property to the north. The AIC intrudes along the contact between the volcanic and the sediments. The magnetic trend becomes distorted and exhibits an offset or folded character when intersected by several interpreted structures. The AIC is a poly-phase and vari-textured intrusion, of contemporaneous age with the Timmins Porphyry suite (Pearl Lake 2689 Ma, Millerton 2691 Ma, Crown 2688 Ma, and Paymaster 2690 Ma; – Barrie 1992), and is also of similar age as the Bristol Lake Quartz-Feldspar Porphyry in the eastern portion of Bristol Township (2687 +/- 1.4 Ma; Ayer 2003). The intrusive shows at least three texturally and mineralogically distinct phases: i) a fine- to coarse-grained pyroxenite; ii) a biotite-pyroxenite; and iii) a porphyritic garnet syenite. The fine to coarse grained pyroxenite is strongly magnetic, and consists of greater than 85% pyroxene (diopside), with variable amounts of accessory biotite + magnetite + rutile + apatite, and interstitial calcite (Miller, 2004). The intrusive is partially exposed at the Rusk Showing, and displays pegmatitic primary layering as well as cumulate-like textures. The pyroxenite locally grades into a biotite-rich phase (possible lamprophyric affinity), characterized by the presence of large biotite "clots" and books (poikilitic biotite) up to several centimetres across. In places, "sweats" and dykes containing 40 to over 75% dark brown to black melanite garnets (up to 1cm across) are noted, contained within a fine-grained and leucocratic matrix consisting of plagioclase + orthoclase + biotite + carbonate + apatite + titanite (Miller 2004). The different phases sometimes exhibit clear yet irregular contacts, and sometimes appear to be transitional. Numerous "monzonitic" to "syenitic" dykes are noted throughout the main body of the pyroxenite and also within the volcanic rocks. It is not clear if these phases are genetically related to the AIC or to the monzonite stock located in the southern portion of the property.

A quartz-feldspar porphyritic monzonite occurs as a nearly circular intrusion greater than 500 metres in diameter. This intrusion presents a high topographic relief in the central portion of the property. The composition of the intrusion varies with 10-40% quartz eyes and 10-20% tabular feldspars (commonly zoned and occasionally up to 3cm across), contained within fine-grained pinkish-grey groundmass. The variation in quartz and feldspar content presents this unit with multiple names: a quartz monzonite, monzoninte, syenite, peralkaline syenite. Pink to brick-red, interpreted as being hematized, and generally fine-grained felsic dykes are observed within shear zones hosted by the sediments. These dykes are possibly related to the monzonite stock. Camier (2009) noted the presence of riebeckite in the eastern half of the intrusive and thus argues the intrusive to be a peralkaline syenite. Although there is no age dating completed from this unit, it is speculated that the intrusive may be part of the Timiskaming assemblage (2676-2670 Ma).

Intruding the fore mentioned units are diabase dykes belonging to the Paleoproterozoic age, Matachewan dyke swarm (2.45 Ga). This unit is fine to medium grained, exhibiting a massive gabbroic texture of plagioclase, pyroxene and biotite with accessory magnetite.

TABLE 7.3: LITHOLOGICAL UNITS

PHANEROZOIC (0.540 Ga-Present)
Cenozoic – Quaternary: Recent - Humus, swamp and stream deposits
Pleistocene - Clay, sand, gravel, till
UNCONFORMITY

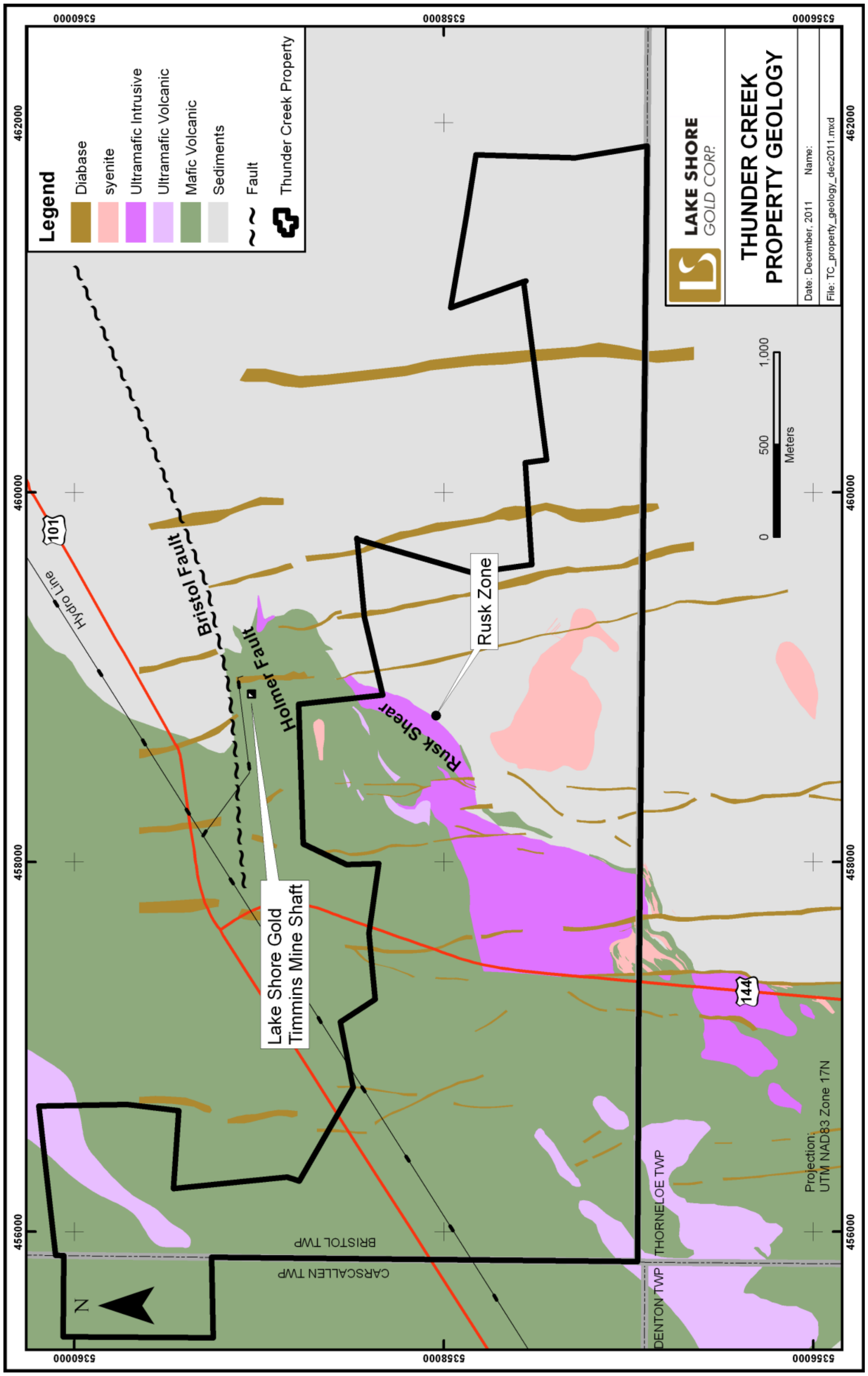
NEOPROTEROZOIC ERA (1.0-0.54 Ga)
Grenville Orogeny - Assembly of the continent of "Rodinia" 1.3-1.0 Ga

MESOPROTEROZOIC ERA (1.6-1.0 Ga)
Mafic Intrusive Rocks INTRUSIVE CONTACT
Abitibi Diabase Dyke 1.14 Ga
INTRUSIVE CONTACT
Sudbury Diabase Dyke Swarm 1.238 Ga
INTRUSIVE CONTACT
MacKenzie Diabase Dyke Swarm 1.27 Ga
INTRUSIVE CONTACT

PALEOPROTEROZOIC ERA (2.5-1.6 Ga)
Penokean Orogeny - Wisconsin, Minnesota, Michigan Ontario, 1.8-1.8 Ga
Hudsonian / Trans-Hudsonian Orogeny - Collision of Superior - Hearne Cratons 2.0-1.8 Ga Formation of the continent of "Nena"
Mafic Intrusive Rocks INTRUSIVE CONTACT
Presissac (Biscotasing) Dyke Swarm 2.1 Ga
INTRUSIVE CONTACT
Wopmay Orogeny - Western edge of Canadian Shield 2.1-1.9 Ga
Mafic Intrusive Rocks INTRUSIVE CONTACT
Nipissing Gabbro Suite 2.22 Ga
East Bull Lake Intrusive Suite 2.49-2.47 Ga
Matachewan Dyke Swarm 2.45 Ga
INTRUSIVE CONTACT

NEOARCHEAN ERA (2.8-2.5 Ga)
Kenoran Orogeny Collision of Slave and Superior Cratons 2.72-2.68 Ga - Formation of the continent of "Arctica"
UNCONFORMITY & SHEAR CONTACT
Timiskaming Assemblage (2676 -2670 Ma)
Quartz +/- tourmaline +/- ankerite +/- pyrite +/- native gold
Felsic Intrusive Rocks INTRUSIVE CONTACT
Syenite - Quartz Monzonite - Perialkaline Syenite
(an interpretation, an age date is required)
INTRUSIVE CONTACT & SHEAR CONTACT
Porcupine Assemblage (2690-2685 Ma)
Mafic Intrusive Rocks INTRUSIVE CONTACT
Alkaline Intrusive Complex (AIC) – garnetite dyke 2687 Ma+/-3Ma
INTRUSIVE CONTACT
Meta-sedimentary Rocks
Greywacke, siltstone, clastic tuff, chemical metasediments (magnetite-chert)
CONTACT IS NOT OBSERVED
Felsic Epiclastic Metamorphosed Tuff (possible Krist Formation)
CONTACT NOT OBSERVED
Tisdale Assemblage (2710-2704 Ma)
Mafic Metavolcanic rocks
Mafic metavolcanic flows, massive and pillowed, flow breccias
UNCONFORMITY
Kidd-Munro Assemblage (2719-2711 Ma)

FIGURE7.3: PROPERTY GEOLOGY



7.4 STRUCURAL GEOLOGY

Rhys (2010, 2011) has modified the regional structural history interpretation by adding an additional deformation period (D2) to the earlier folding preceding the Timiskaming assemblage. The interpretation demonstrates that there are at least two pre-Timiskaming fold events (D1 and D2), followed by two dominant syn-metamorphic, post-Timiskaming foliation forming events (D3 and D4) and a later crenulation cleavage (D5) (Rhys, 2010).

Regionally, deformation in the Timmins area is characterized by a sequence from early, pre metamorphic folds lacking axial planar cleavage (D1, D2) to a series of syn-metamorphic, fabric –forming events, which overprint the earlier folds (D3, D4 events). The multi-phase Destor-Porcupine fault system passes approximately 5 km to the south of the property. The fault system is a composite corridor of shear zones and faults that records at least two main stages of displacement: a) syn-Timiskaming (2680-2677 Ma) brittle faulting associated with truncation of early D1 and D2 folds, apparent sinistral displacement, and formation of half grabens that are locally filled with Timiskaming clastic sedimentary rocks; and b) syn-metamorphic D3-D4 formation of high strain zones over a broad corridor generally several hundred metres wide generally corresponding with, or developed south of, the trace of the older faults. These shear zones record variable kinematic increments but are regionally dominated by sinistral, north side up displacements (Rhys, 2010).

At least two areas of high strain reflect probable intense S3 shear zones have been recognized in the Thunder Creek and Timmins Mine areas: the west-northwest trending, but significantly folded Holmer Shear Zone; and the northeast trending Rusk Shear Zone. Shear zones may also be significantly folded, as occurs in the Main Zone in upper proportions of the Timmins Mine. These closures have localized gold mineralization which plunge parallel to them, suggesting the definition of additional F4 fold closures (Rhys, 2010).

The oblique (clockwise) nature of the S3 foliation in the Rusk Shear Zone to the shear zone margins, and shear sense indicators in the Holmer Shear Zone surface outcrops suggest that both structures accommodated sinistral displacement during D3. Subsequent D4 shear zone development in narrower , generally east-west trending and steeply dipping structures with dominantly reverse kinematic indicators in the Timmins Mine would imply then the change in kinematics later in the deformation history to a more contractional setting associated with development of the stretching lineations. Such variations in kinematics are also suggested in other deposits in the Timmins area and imply changing patterns of far field stress and regional transpression between D3 and D4 (Rhys, 2010).

7.5 MINERALIZATION

Gold mineralization in the Timmins Mine and Thunder Creek deposits occurs in steep north-northwest plunging mineralized zones which plunge parallel to the local orientations of the L4 lineation features which also plunge parallel to the lineation, including folds and elongate lithologies. Mineralization occurs within, or in favourable lithostructural settings within 100m of the Holmer and Rusk Shear Zones. Mineralization comprises multiple generations of quartz-carbonate-tourmaline+/- albite veins, associated pyrite alteration envelopes and disseminated pyrite mineralization. Textural evidence suggests that veining formed progressively through D3 and D4 deformation. All phases of gold-bearing veins cut and postdate alkali intrusive complex (AIC) and syenitic to monzonitic intrusion, although mineralization is often spatially associated with ore preferentially developed within theses intrusions. (Rhys, 2010).

Mineralization here occurs in two main stages: a) the Rusk Shear Zone adjacent to and in footwall or the pyroxenite unit, and b) in the Porphyry Zone which is hosted by the quartz monzonite intrusion which is present southeast of and in the immediate footwall to the Rusk Shear Zone below approximately 500m below surface. Both of these zones occur spatially related in the same steep north-northwest plunging mineralization area which has been traced over a vertical dip length to date (Rhys, 2010-03-12) of more than 1 km, and within which better intercepts occur along a strike length of 100 to 600m (Rhys, 2010).

Mineralization in the Rusk Shear Zone comprises areas of either a) higher quartz-carbonate-pyrite vein density, and or b) areas of elevated medium to coarse-grained disseminated pyrite and associated pyrite-quartz veinlets. Both of these styles were observed to occur in the intensely foliated, often compositionally laminated carbonate-albite-quartz-magnetite portions of the shear zone. Mineralization also locally preferentially overprints pink, K-feldspar-rich syenite dykes and local plagioclase-dominant probable diorite dykes in the shear zone, with clots and aggregates of coarse pyrite, often associated with which quartz-albite-carbonate veinlets. Areas of gold mineralization occur in portions of the Rusk Shear Zone in which the shear zone matrix is variably Fe-carbonate altered.
Most common styles of veining comprises deformed quartz-pink carbonate/albite veins with varying pyrite content and coarse-grained pyrite envelopes/selvages, which correspond generally with higher and more continuous grades. These early deformed veins are very similar in style and texture to the earliest phases of veining seen underground in the 650 level Ultramafic Zone which are also deformed and could be coeval with the set (Rhys, 2010).

Veins in the Rusk Shear Zone also include a younger phase of quartz-pyrite veins which have pyrite envelopes, which cut the deformed veins and which have carbonate-pyrite envelopes that over print the shear zone matrix and sulphidized magnetite, overprinting the shear zone foliation. The coarse pyrite in vein envelopes also overgrows the dominant shear zone foliation, which is preserved textually as inclusion trails in the pyrite (Ross, 2010). This younger set of veinlets is likely coeval with the main stage extension vein sets on the 650 level (Rhys, 2010).

Both of these veining phases are auriferous and can contain high gold grades. Gold in both phases was observed in the Petrographic study occurring in association with pyrite, including as inclusions often in association with chalcopyrite and galena, on fractures in pyrite, and free in gangue adjacent to pyrite grains (Ross, 2010). The relationship of the disseminated pyrite variety here could not be determined, but the overall style of the pyrite and local occurrence in diffuse veinlets has similarities to the second veining phase (Rhys, 2010).

"Porphyry Zone" mineralization is developed in the quartz monzonite intrusion that occurs at depth in the footwall of the Rusk Shear Zone immediately adjacent to areas of mineralization in the adjacent Rusk Shear Zone. Mineralization is associated with sheeted sets of quartz extension veins which occur in abundance of up to several veins per metre within the intrusion. Most veins are less than 3 cm thick and comprise white quartz with occasional pyrite grains. Disseminated pyrite locally occurs in the wall rock to the veins and free visible gold was locally observed in association with pyrite both in veins and wallrock immediately adjacent to veins, accompanied rarely by a bluish silvery grey mineral – a possible telluride – and by local fine grained base metal sulphides (sphalerite, galena). The intrusion is generally massive and unfoliated in areas of veining. Veins have variable core axis angles, but angles are most commonly high (>70 degrees to core axis) consistent with a shallow dip to extension veinlets, based on known drill hole orientations. Local irregularity in vein shapes and orientations –particularly in areas of the highest vein abundance – suggest some deformation, possibly in the cores of sigmoidal vein arrays such as is seen in the Ultramafic Zones on 650 level. These veins are of compatible style and probable orientation as the main stage Ultramafic Zone veins in the Timmins Mine which they may be coeval with, and consequently they may also form areas of higher grade continuity which are dictated by the morphology of the extension vein arrays. These veins may have formed preferentially in the upper, thinner portions of the intrusion where it is less than 100m thick, in response to brittle behavior of the intrusive body during ductile activity of the Rusk Shear. More isolated narrower intercepts deeper in the intrusion where it is thicker may reflect the more rigid behavior of the unit as its width strengthens it, as is seen in many other Timmins area deposits, where an optimal thickness of the host unit is common for most abundant vein development. Modeling of the morphology and thickness of the host intrusion may as a result aid in definition of the distribution of best developed mineralization (Rhys, 2010).

Areas of veining frequently are associated with more intense pink-red coloured and homogeneous appearance of the intrusion, obscuring the primary igneous textures. A systematic series of samples from drill hole TC09-69a across the hosting monzonite intrusion was stained using Na-cobaltinitrate to assess whether this vein associated alteration is K-feldspar; intense yellow stain in these altered areas confirms that the reddish-orange alteration with quartz veining is secondary K-feldspar (Rhys, 2010).

Within the Porphyry zone, although at a local scale, no correlation between gold grade and vein density is apparent in review of assays and representative drill core. In general areas lacking veining also lack gold grade. (Rhys, 2010).

The observations and conclusions made by Camier (2009) and Rhys (2010, 2011) provide a valid argument for their interpretations, and the interpretation has been accepted and adopted by Lake Shore Gold Corp. The most recent interpretations are illustrated in the accompanying figures: Figure 7.3: Property Geology; Figure 7.4: Underground Geology 300 Level (Upper Level); 7.5: Underground Geology 730 Level (Lower Level); Figure 7.6: Generalized Cross-Section 9550N (Thunder Creek Grid); Figure 7.7: Generalized Long-Section Illustrating Timmins Mine Shaft Ramps, Levels, and the Thunder Creek Mineralization Envelope (looking eastward); and Figure 7.8: Structural Plan 300 Level (Rhys, 2010).

FIGURE 7.4: UNDERGROUND GEOLOGY 300 LEVEL (UPPER LEVEL)

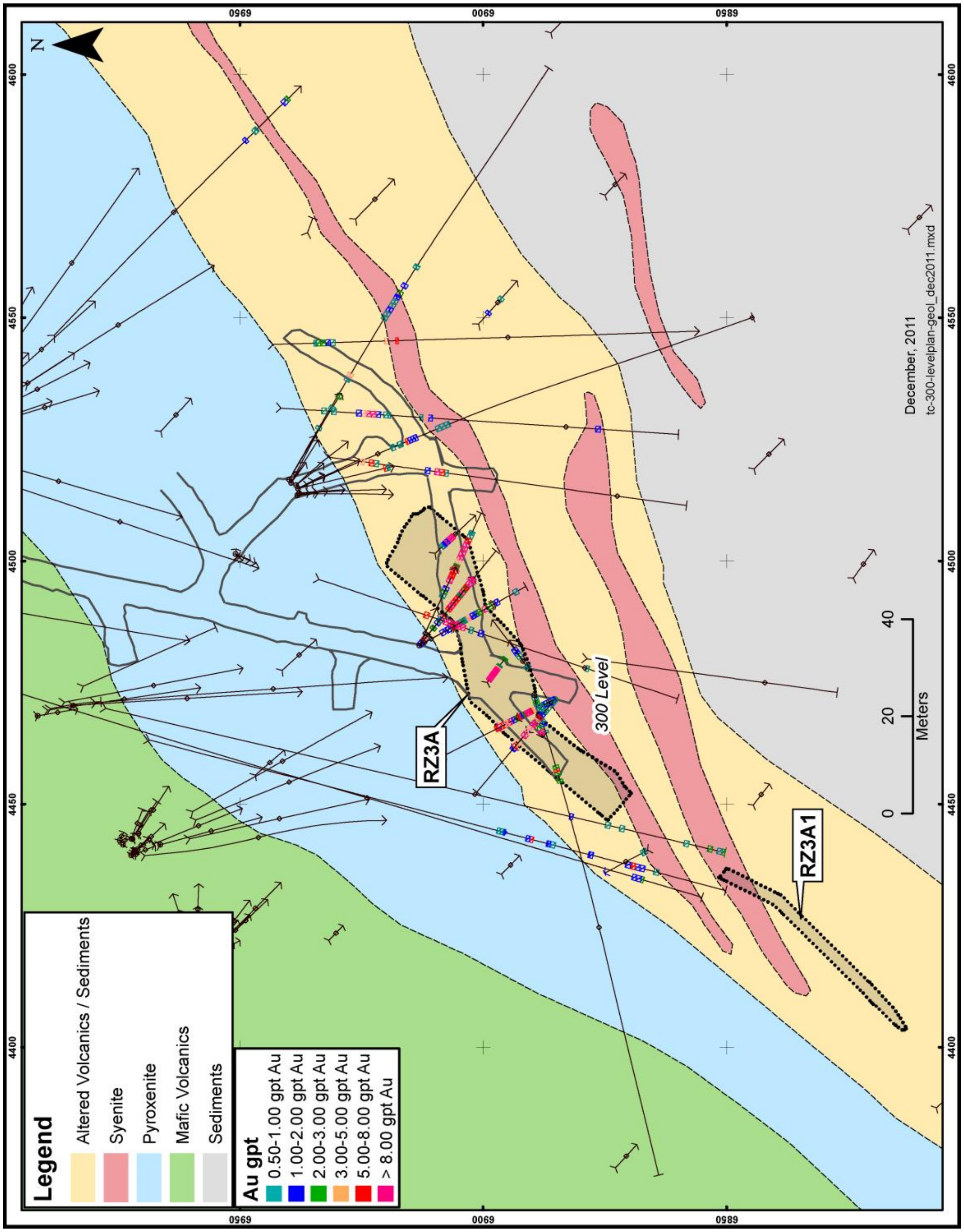


FIGURE 7.5: UNDERGROUND GEOLOGY 730 LEVEL (LOWER LEVEL)

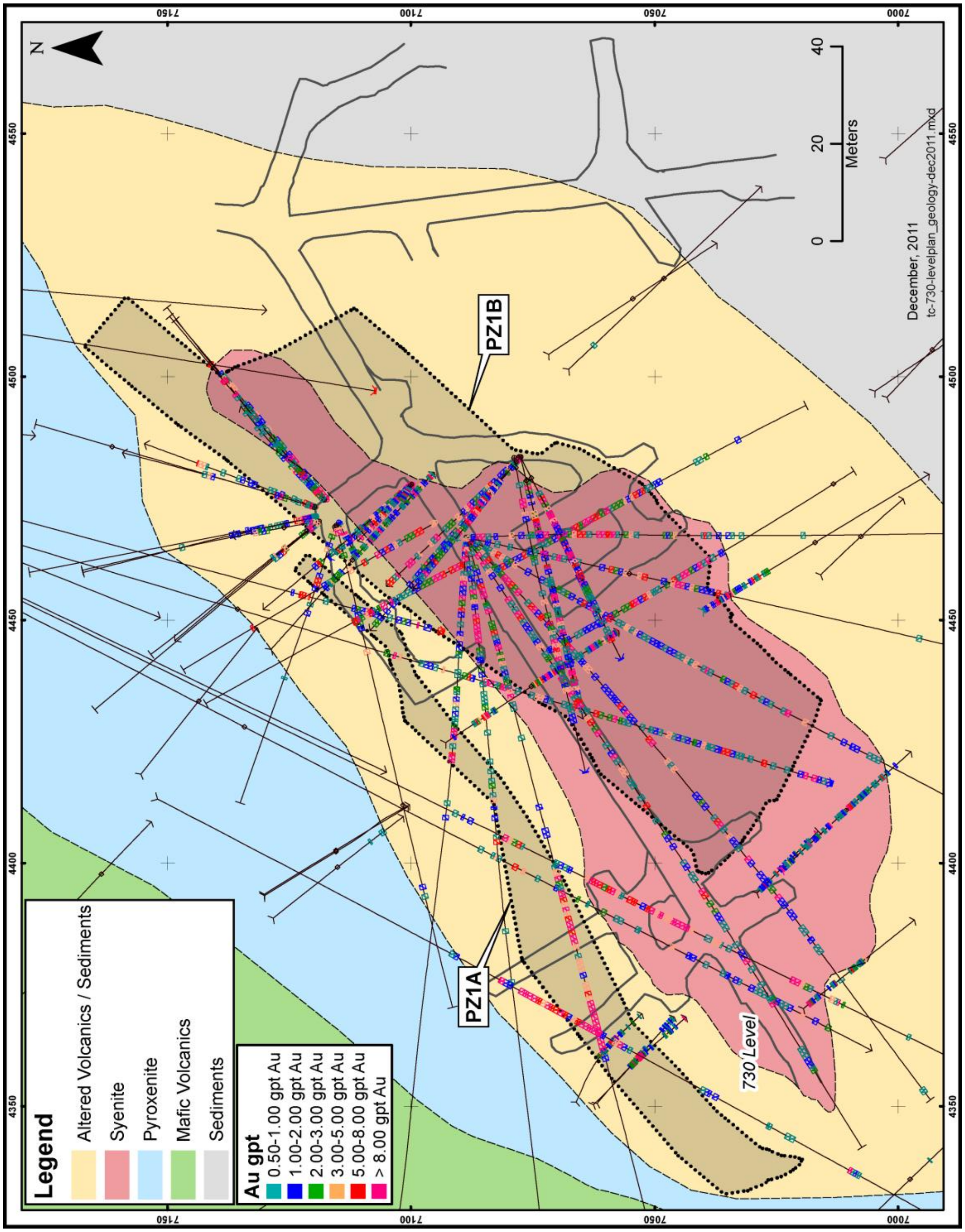


FIGURE 7.6: GENERALIZED CROSS-SECTION, 9550N (THUNDER CREEK GRID)

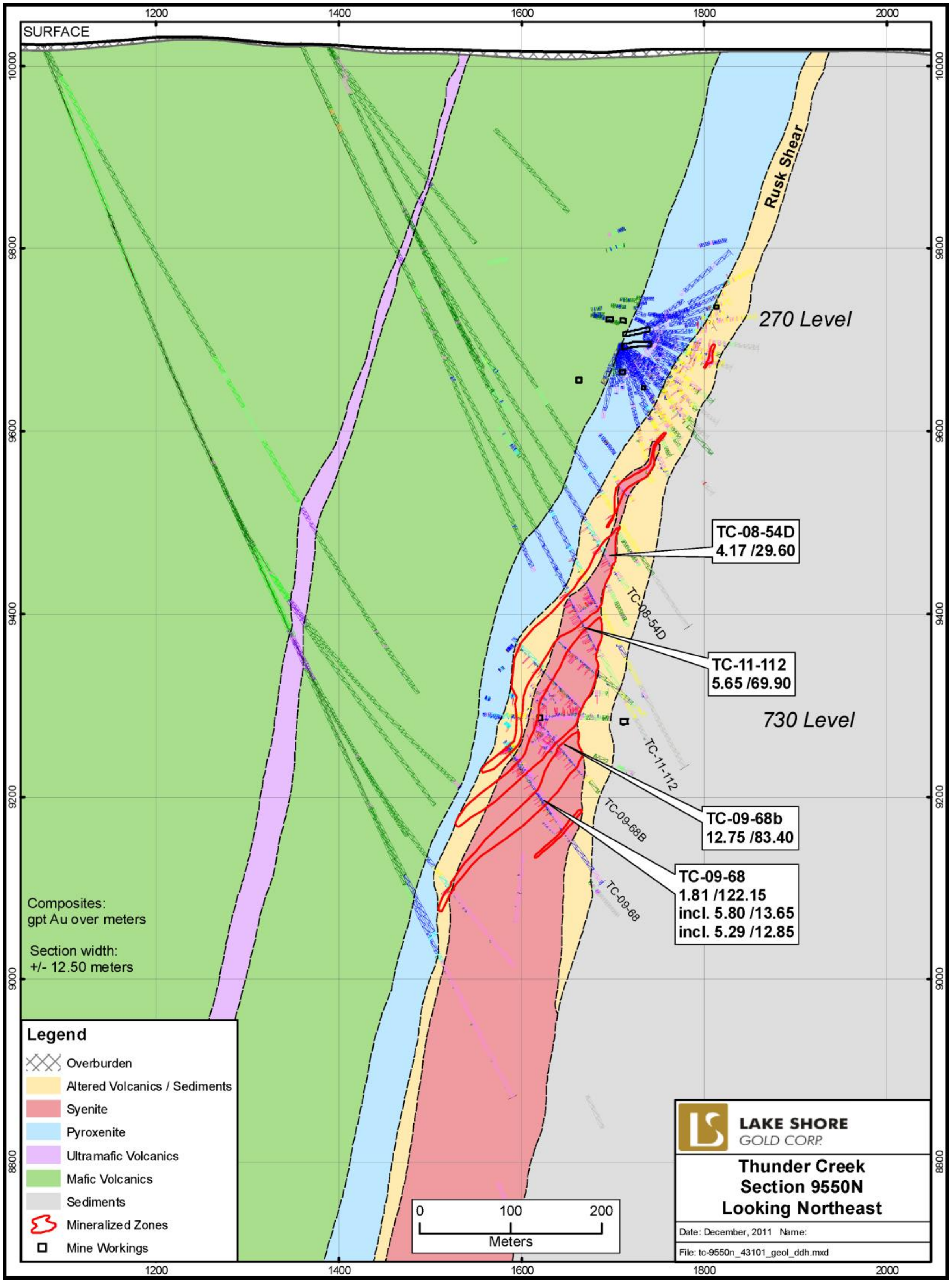


FIGURE 7.7: GENERALIZED LONG-SECTION, ILLUSTRATING TIMMINS MINE SHAFT, RAMPS, LEVELS, AND THUNDER CREEK MINERALIZATION ENVELOPE (LOOKING EASTWARD)

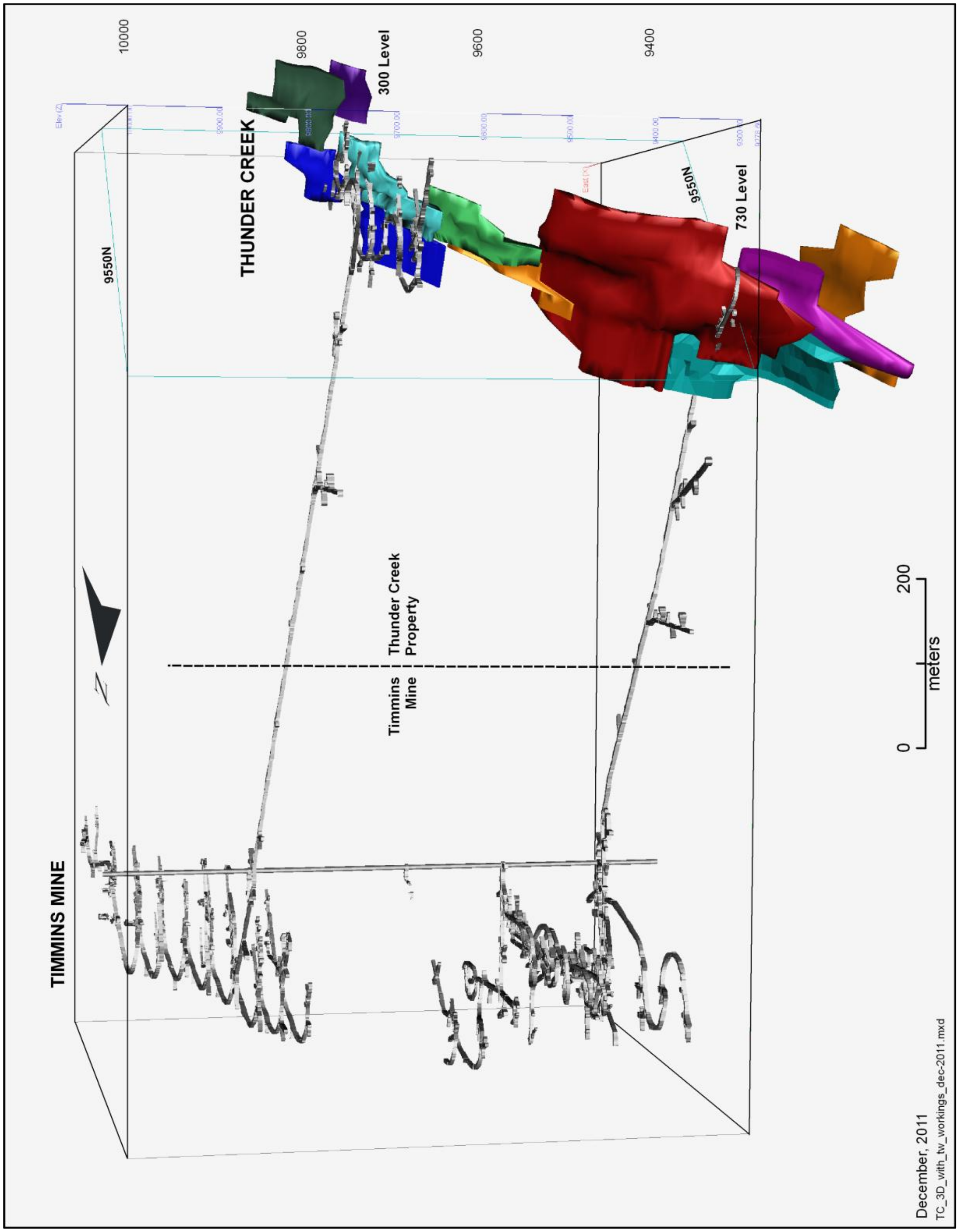
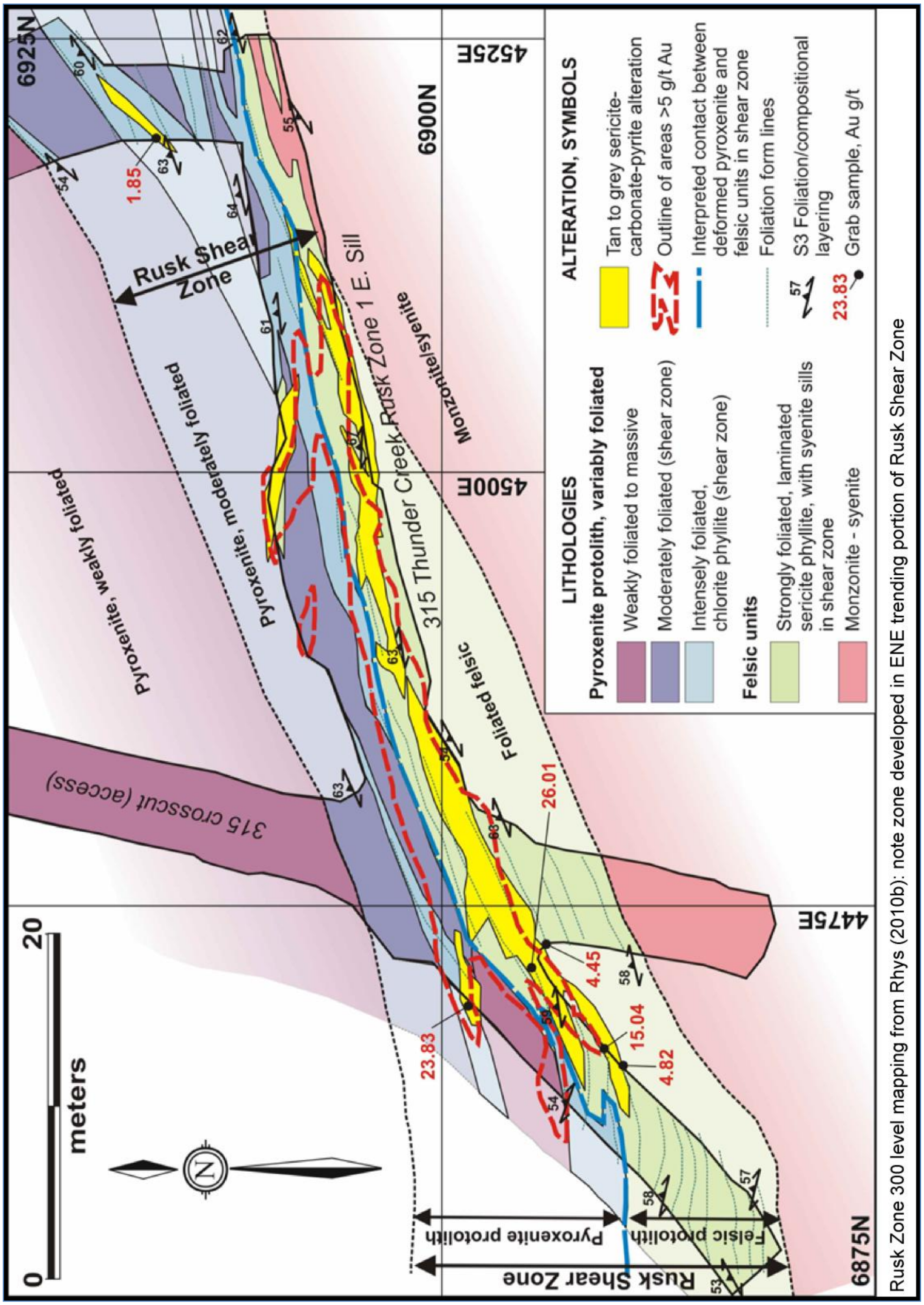


FIGURE 7.8: STRUCTURAL PLAN, 300 LEVEL (RHYS, 2010)



Rusk Zone 300 level mapping from Rhys (2010b): note zone developed in ENE trending portion of Rusk Shear Zone

8.0 DEPOSIT TYPES

The Porcupine area is well known for hosting two mineral deposit types: 1) Xstrata's Kidd Creek mine, which is a volcanogenic massive sulphide deposit; and 2) several mesothermal Archean shear-hosted gold deposits. Gold production to the end of 2006, from some 50 operational sites is reported to be 2,028,140 kilograms of gold (65,206,222 ounces of gold). Table 8.1 highlights the twenty-one locations that exceeded production of 3,110 kilograms of gold (100,000 ounces of gold).

The deposit types the Thunder Creek, Golden River occurrence, and Timmins Mine are being compared to have been characterized by the mesothermal Archean shear-hosted gold deposits typical of the Timmins and Kirkland Lake gold camps. There are detailed differences with each deposit with respect to individual: structural controls, vein density, gold tenor, gold – silver ratio, and size with deposit sited in Table 8.1, but they do have a commonality. In his 1997 PhD thesis titled "Geological Setting of Gold Deposits in the Porcupine Gold Camp, Timmins, Ontario", Brisbin, generalizes the ore bodies are typified by single or multiple quartz-carbonate veins with or without albite, tourmaline, sericite, pyrite, and other sulphides, and native gold hosted in carbonatized, sericitized, albitized and pyritized wallrock. Gold occurs both in the veins and the wallrock. The most significant gold deposits are spatially associated with quartz-feldspar porphyry stocks and dykes, and with albitite dykes both of which intrude the folded Archean supracrustal rocks. The supracrustal rocks, porphyry intrusions, albatite dykes and gold mineralization were affected by metamorphism, and penetrative deformation during the Kenoran Orogeny (Brisbin, 1997). He further compares the gold productivity at the time of his research with lithology. Over seventy-five (75) percent of the gold production in the Porcupine Camp (1997) was mined from ore bodies in the Tisdale Group rocks which are thus the most important rocks in the camp. Approximately fifteen (15) percent of the gold in the Porcupine Camp has been hosted by Timiskaming Group rocks making them the second most important host. Porphyritic intrusions, hetrolithic breccia bodies and albitite dykes host nearly ten (10) percent of the gold produced in the camp. There is little change in the proportional production distribution of gold today.

Gold mineralization at the Thunder Creek property occurs along the same volcanic-sedimentary rock contact and similar alkalic mafic complex as the Timmins West Gold property. The mafic volcanic rocks are of the Tisdale assemblage, but a flow unit correlation with the detailed volcanic stratigraphy of the Timmins' deposits has not been determined. SRK (2007) estimate a Probable Mineral Reserve at 3387,000 tonnes grading an average 7.59 gram per tonne gold (cut grade) containing 826,000 ounces of gold (25.7 M g) for the West Timmins Gold property.

TABLE 8.1: OPERATIONS OF GREATER THAN 100,000 OUNCES OF GOLD PRODUCTION IN THE PORCUPINE GOLD CAMP

Mine	Kilograms Gold Produced	Ounces Gold Produced
Hollinger	601,158	19,327,691
Dome	487,558	15,675,367
McIntyre Pamour Schumacher	334,423	10,751,941
Pamour # 1 (pits 3, 4, 7,Hoyle)	131,393	4,224,377
Aunor Pamour (#3)	77,828	2,502,214
Hoyle Pond	72,046	2,316,346
Hallnor (Pamour #2)	52,582	1,690,560
Preston	47,879	1,539,355
Paymaster	37,082	1,192,206
Coniarum/Carium	34,512	1,109,574
Buffalo Ankerite	29,775	957,292
Delnite (open pit)	28,740	924,006
Pamour (other sources)	21,046	676,645
Broulan Reef Mine	15,519	498,932
Broulan Porcupine	7,485	240,660
Owl Creek	7,368	236,880
Hollinger Pamour Timmins	5,663	182,058
Nighthawk	5,468	175,803
Moneta	4,642	149,250
Crown	4,303	138,330
Bell Creek	3,507	112,739
21 site Totals	**2,009,976**	**64,622,226**
The Porcupine Camp Total (50 sites)	**2,028,140**	**65,206,222**

(source: http://www.mndm.gov.on.ca/mines/ogs/resgeol/office)

9.0 EXPLORATION

9.1 GENERAL OVERVIEW

Exploration programs completed by Lake Shore Gold Corp. prior to May 10, 2009 are described and discussed in the restated amended technical report submitted July 29, 2009 " A Technical Review and Report of the Thunder Creek Property, Bristol and Carscallen Townships, Porcupine Mining Division, Ontario, Canada" (Powers, 2009). Since that time exploration efforts have focused on defining the geometry and the economic potential of the Rusk and Porphyry gold mineralized zone. The exploration campaign is multi focused with a surface and underground exploration diamond drill programs defining the overall, or large scale geometry by deep surface drilling and wedging; and refining the details with an underground exploration program with ramp access to the mineralization from the Timmins Mine. Table 9.1 summarizes the details of this phase of the exploration program.

In 2010, an AEP was initiated to open up and cross cut mineralization at Thunder Creek utilizing access from the Timmins Mine shaft on two elevations targeting the best surface drill intercepts. Two horizons were selected for access to the Rusk Shear Zone and Porphyry Zone from the 200 mL and 650 mL shaft stations at Timmins Mine (refer to fig. 7.7). Ramp development driven at 4.5 metres ("m") x 4.5 m was excavated for roughly 660 m and 890 m horizontal distance south southwest of the shaft to intersect the 300 mL and 730 mL elevations respectively in the Rusk and Porphyry Zones. The Rusk horizon was intersected in July 2010 at the 300 mL elevation and the Porphyry Zone in November 2010 at the 730 mL elevation. Along the ramp development on both levels drill cut-outs were excavated for advanced exploration drilling completed in 2010. A bulk sample and test mining program was planned initially for the Rusk horizon on the 300 mL elevation for the third and fourth quarter of 2010 and first quarter 2011.

On the 300 mL Rusk horizon, sill development grade control was monitored using standard geologic mapping and face and wall chip channel sampling practices, supported by muck samples collected by the miners routinely on a scoop bucket frequency. A sub-level longhole mining method on a 15 m high sub-level height was employed. The 315 mL sill development was driven off the down ramp, with a four metre bench excavated prior to the longhole mining, using waste backfill to re-establish the benched out floor.

Prior to mining the 315 Longhole stope, blind uppers for a ten metre height above the back height elevation on the 300 mL were blasted down and mucked from the sill development access remotely. After mining the 315 Longhole stope, the down ramp was driven with sill development horizons at 20 metre increments at the 350 mL, 370 mL and planned for the 330 mL completed throughtout 2011.

On the 730 mL Porphyry horizon, a sill development drift along the strike of the outlined, mineralized, quartz monzonite intrusion with planned cross-cuts on 15 to 30 metre centers orthogonal to the strike drift was planned to refine the ore outline and geometry by transecting the hangingwall and footwall contacts. A flat fan of drilling out of the drift face at the northeast entry to the Porphyry Zone was initiated in December 2010. Additional drilling from inside the Porphyry Zone was afforded during the 2011 year testing a block roughly 100 m above and below the 730 mL elevation.

In 2011, as many as six surface drill rigs and eight underground diamond drills were simultaneously testing the down plunge extensions of the mineralization and refining the strike extension contacts of the mineralization in preparation for a preliminary block model and Mineral Resource Estimation.

The drilling strategy was focused on testing the Rusk Shear and Porphyry Zones over a strike length of 300 m from surface to approximately 1000 m depth. Detailed, sectional fan drilling approaching a drill spacing of 30 to 50 metre centers along strike and down-dip was achieved using a combination of surface and underground drill collars/platforms. Intermediate step out drilling on 100 to 200 metre centers along the extension of the Rusk Shear Zone southwest to the Highway 144 property has also been initiated. Tighter spaced drilling was achieved in the upper levels to a minimum of 15 metre centers down to approximately the 400 mL elevation.

In the first quarter of 2011, underground drill platform development was established at three separate locations to facilitate the completion of the sectional delineation drilling campaign designed to produce the first Mineral Resource. Approximately 450 m of linear development was excavated on the 680 mL and 710 mL for drill platforms off the 650 mL Ramp. Approximately 260 m of linear development was completed on the 260 mL drill platform off the 200 mL Ramp.

In May 2011, deep underground drilling collared from the 680 mL drill platform comprising two rigs was started targeting the down plunge extension between the 1000 to 1500 m elevations. Although only widely spaced drilling has been completed to date predominantly on the northeast contact of the Porphyry Zone, the alteration, veining, and quartz monzonite has demonstrated continuity to depth despite weaker than expected gold mineralization.

In July 2011, a test mining scenario was advanced for the Rusk shear horizon on the northwest contact with the Porphyry Zone. Two cross-cuts on the 730 mL sill elevation were excavated to the northwest on fifteen metre centers for draw points, and the strike drift was ramped up from the western exit point to the 715 ml sill elevation for overcut development, cable bolting in the hangingwall and production downholes. The longhole stope was blasted and being mucked at press-time.

The underground recommended work program for the Thunder Creek project in 2012 includes detailed sectional drilling of the Rusk and Porphyry Zones from the 600 to 800 mL elevations on 15 metre centers comprising approximately 30,000 metres, orientated roughly along the centerline for sill development cross-cuts designed for transverse longhole stope design. The upper level Rusk Shear Zone delineation is planned from a drill platform at the 370 mL ramp location, testing the Rusk and emerging Porphyry Zones from the 370-500 mL elevations at 25 metre centers for a total of 10,000 m. Definition drilling from scram drifts parallel to the sill development in the hangingwall will include 2,500 m in total over the year.

There are two elevation ranges of poorly drilled Rusk/Porphyry style mineralization between the 500-600 mL and the 750-850 mL elevations due to drill coverage challenges. Delineation drilling planned to reduce the drill spacing to a maximum of 15-30 metre centers from the 260mL and 710 mL drill drifts comprising an additional 7500 metres is planned. Exploration drilling along strike with step-outs of approximately 100-200 m to the northeast and southwest comprise approximately 5000 m off the ends of the 260 mL and the 680 mL drill platforms.

TABLE 9.1: SUMMARY OF EXPLORATION ACTIVITIES (MAY 10, 2009 TO OCTOBER 28, 2011)

Geological Mapping

Surface Geology

Camier, 2009:	~5 km square surrounding the Rusk surface showing
Rhys, 2009, 2010, 2011:	Structural studies, underground review mapping, re-logging of drill core from the West Timmins Mine Complex (Timmins Mine, Thunder Creek and Golden River projects)
K. Ross:	Microscope Petrographic Studies
Dr. A. Miller:	Microscope Petrographic Studies
Dr. B. Springer:	Microscope Petrographic Studies

Underground Geology:

Lake Shore Gold Staff:	Underground mapping
Lake Shore Gold Staff:	Underground face sampling
Lake Shore Gold Employees:	Underground muck sampling
Rhys, 2009, 2010, 2011:	Structural studies, underground review mapping, re-logging of drill core from the West Timmins Mine Complex
K. Ross:	Microscope Petrographic Studies
Dr. A. Miller:	Microscope Petrographic Studies

Geophysics

Borehole Gradient Array IP:	9 holes,	5370m
Borehole Dipole Array IP:	5 holes	2075m

Ground “tailings” IP (pole-dipole):	45 line kilometres
Ground Proton Precession Magnetometer (GSM-19):	82 kilometres

Diamond Drill Exploration

Diamond drilling UG:	66,809.65 metres from 384 diamond drill holes, and 22 re-collared/re-started holes due to unacceptable deviation; and 42 drill hole in various stages of completion
Diamond Drilling Surface:	83,656.69 metres from 102 surface diamond drill holes, 47 wedge splays, and 3 drill hole extensions, and 1 hole that was not completely logged and sampled at the time of the effective date.

Total Metres Drilled Between 2003 to October 28, 2011 is 150,466.34m

Number of samples:	63,697
Number of FA aa analysis (Au):	58,624
Number of Fa g analysis (Au):	808
Number of metallic Au:	2,326
Number of As aa analysis:	9,283
Number of Diamond Drill Holes:	478 with 62 drill holes still being processed and not finalized

Number of analysis of blanks:	3711	
Number of analysis of standards:	2899	
Number of analysis of duplicates:	1721	
Number of pulps submitted or re-assay:	2900	
Number of face chip samples:	4091	
Number of muck samples:	2752	
Number of MMI samples:	160	

Development

Ramp access to Rusk Zone		
Ramp access and drill station development:	280m level	515 metres
Ramp access to:	300m level	894 metres
	320m level	193 metres
	330m level	194 metres
Drifting from shaft infrastructure:	710m level	423 metres
	730m level	639 metres
Cross-cutting:	300m level	11.6 metres
	315m level	12.2 metres
Drifting on mineralization:	300m level	77.8 metres
	315m level	71.4 metres
	730m level	127.5 metres

Bulk sample: TC730-715 28,931 tonnes estimated at 6.00 g/t from muck samples

The observations and results of the geological mapping programs are discussed in Item 7 Regional and Property Geology. Figure 7.3 illustrates the area of geological mapping completed by Camier (2009) and modified by Samson (2010, 2011).

9.2 ABITIBI GEOPHYSICS LIMITED MAGNETIC RESPONSE AND INDUCED POLARIZATION SURVEYS

Abitibi Geophysics Limited of 1746 Chemin Sullivan, Val-d'Or, Quebec, carried out geophysical surveys of magnetics and induced polarization over portions of the Timmins West Complex as part of a tailing condemnation program. Sixty-eight percent of the survey area is situated on the Thunder Creek property. The surveys utilized the older field grid with grid co-ordinate 88+48 north, 64+30 east corresponds to the centre of the Thunder creek property. The grid is comprised of 5 tie-lines trending an azimuth of 040 degrees and 37 wing-lines trending 310 degrees. The spacing between wing-lines varies from 100 metre to 50 metre spacing in the area of the Rusk Shear and mineralized zone. This box grid extends from the Timmins Mine south boundary through the Thunder Creek property and into Thorneloe Township and the Gold River property. One percent of the grid is situated within the Timmins Mine claims and 31 percent of the grid is situated in the Golden River property.

A total of 85 kilometres of proton precession magnetometer survey (Figure 9.1) utilizing a GEM Systems GSM-19 magnetometer was completed in November of 2010. The induced polarization survey was carried out over 45.3 kilometres utilizing a pole-dipole array with “a”=25m, and “n” = 1 to 10. The equipment used was a GDD Instruments Tx III, a Honda 2 kVA power supply and IRIS Elrec-Pro, with 10 input channel models receiver. The Abitibi report authored by Mr. Martin Dubois, P. Geo. and Mr. C. Brown (G.I.T.) outlined 23 interpreted anomalies for prospecting follow up. Table 9.2 summarizes the priority and locations of the anomalies picked by Abitibi Geophysics for additional exploration follow-up. Mr. Lo’s (2011) conclusion states that most of the anomalies were very weak to weak in strength and that there are only two medium strength IP anomalies detected TC-32 and TC-02 and these should be diamond drill tested. Figure 9.2 illustrates the Interpretation for the IP survey.

TABLE 9.2: ABITIBI GEOPHYSICS RECOMMENDED FOLLOW-UP SUMMARY

Priority	Anomaly	Line (north)	Station (east)
1	TC-01	72+00	63+63
1	TC-02	76+00	64+13
1	TC-04	74+00	65+63
1	TC-10	82+00	66+94
1	TC-20	86+00	75+75
1	TC-24	91+00	66+88
1	TC-26	89+00	77+63
1	TC-27	95+00	72+63
1	TC-32	94+00	68+63
1	TC-35	97+00	75+63
1	TC-37	97+00	73+00
2	TC-13	84+00	61+75
2	TC-16	84+00	62+75
2	TC-17	86+00	66+00
2	TC-18	85+00	75+13
2	TC-21	87+00	76+75
2	TC-25	89+00	71+88
2	TC-28	90+00	70+38
2	TC-31	92+00	72+38
2	TC-33	96+00	70+88
2	TC-34	96+00	68+75
3	TC-29	91+00	67+38
3	TC-30	91+00	67+88

9.3 JVX LIMITED BOREHOLE INDUCED POLARIZATION SURVEY

JVX Limited, of 60 West Wilmont Street, Unit 22, Richmond Hill, Ontario was contracted to complete a borehole detection array (pole-dipole) and borehole direction array (gradient) induced polarization survey on selected diamond drill holes at the Thunder Creek property. The purpose of this survey was to investigate the possibilities of borehole IP enhancing the geological interpretation with geophysical response of chargeability and resistivity. A gradient array survey of nine (9) drill holes and a pole-dipole survey of five (5) drill holes, are illustrated in Figure 9.3. The results of the survey are inconclusive with one drill hole target recommended. Table 9.3 summarizes the results of the survey. A recommended drill target is situated west of TC09-75, and north, northwest and south of TC09-73C at a vertical depth of approximately 675 metres (Webster, 2010).

TABLE 9.3: SUMMARY OF BOREHOLE IP RESULTS

hole number	gradient array from - to spacing 20m directional data	diapole array from - to spacing 10m	from (m)	to (m)	apparent resistivity direction	in-hole chargeability	apparent resistivity
TC08-63	20m - 560m	20m-560m	210	250	decreases to north	12-15mV/V (weak)	relatively high (<50,000 ohm.m.)
			410	430	decreases in all drections		38 ohm m. @ 410m
			420	440			1249 ohm m.
	comment: resistivity decreases at 410m and 250m depths appear closer adn more prominent towards the north than in other directions.						
TC08-66	540-920m	20-920m	480	550		near hole chargeability zone	
			570	590	increase in all drections		
			610	650		strong chargeability in all directions	decrease in apparent resistivity
				690	decrease in all drections	strong (>50 mV/V)	
				960b		near hole chargeable (17mV/V)	decrease in apparent resistivity
			720	740		near hole chargeable (17mV/V)	
			730	750	decrease to south		
			850	870	decrease to south		
	Comment: examine ddh logs to deteremin if zone at 690m is an appropriate target. This zone is more pronounced in chargeability amplitude and resistivity decrease off-hole.						
TC08-70	600-1040	na		810	decrease in all directions	strong (>150mV/V)	as low as 180 ohm.m.
			990	1010		increase in all directions	associated decrease
TC09-71a	620-1100	na	750	780		moderate (~20mV/V) in all directions	slight increase in apparent resistivity
			950	1050	decrease in all directions		most prominent towards north
			940	970			~700 ohm.m.
TC09-74	20-1040	10-1025	60	100		strong chargeability	increase in apparent resisitivity
			220	320	decrease in all directions		most prominent towards south
			220	320			as low as ~900 ohm.m.
			310	360		strong (~25mV/V)	increase in apparent resisitivity
			310	360b		strong >50mV/V	not associated with change
			620	720	strong increase in all directions	strong towards east	
			760	850	slight decrease to north & west	not associated with chargeability	
			760	850b	increast to south and east	with increase to south ~25mV/V	
TC09-75	880-1280	880-1330	900	920		strong near hole	
			990	1070		chargeability anlomaly toward south	not associated with apparent resistivity
			990	1070b		near hole anamaly	apparent resistivity decrease
			1230	1270		moderate chargeability (~15mV/V)	strong increase (>5000 ohm.m.
TC09-76	60-1095	na	290	340	strong to the south	strong to the south	
			580	600	strong in all directions	strong to the north & west (<50 mV/V)	
	Comment: zone does not continue tin the east and it is unknown if it continues in the north-west direction						
			890	920		strong in all directions	decrease in resistivity
			890	920b		most predominant in westerly direction	
TC09-79b	760-1260	na	780	870		strong (50mV/V in north & northwest	associated with high resistivity
			1000	1240		strong in north direction	
			1160	1190		increase in noth and west direction	
			1200	1250		strong chargeability (50 mV/V)	decrease in north and west
TG08-178g	1040-1495m	1110-1600m	1070	1090		strong (60mV/V) north & west direction	associated with increase in resistivity
	Comment: It is unknown if extends to the south and east direction.						
			1210	1230		strong in all directions	high resistivity >5000 ohm.m.
			1210	1230b		predominant to north and west	
			1370	1430		strong (20 to 80 mV/V	associated with high resistivity
						appears most chargable to south	

9.4 MOBILE METAL ION SOIL GEOCHEMICAL ORIENTATION SURVEY

A Mobile Metal Ion soil geochemical orientation survey was completed in July 2011 on two target areas, one of which was lines 94+00N of the Thunder Creek grid. The survey was carried out under the direction of Mount Morgan Resources Ltd. with the main purpose of the survey to examine whether there is a preferred depth of sampling to detect Au mineralization by reviewing data from vertical profiling hand-dug pits. In this approach four individual samples are collected from depths of 0-10 cm, 10-20 cm, 20-30 cm, and 30-40 cm below the zero datum or the point at which soil formation is initiated in this environment (Fedikow, M., 2011). A preliminary report has been received with no detailed tables of results shown. From the forty sample sites along the test line, Mr. Fedikow concludes, "the optimum sample depth for this survey is 30-40 cm and the results indicate a multi-sample high contrast Au anomaly centered more or less on UTM easting 458,700m (NAD83) and a modest single sample response occurs just east of UTM easting 458600m" (Fedikow, 2011). The results of this survey are illustrated in Figure 9.4. The high contrast response is in close proximity to outcrop stripped area number two (2) (Powers, 2009) underlain by AIC, where as the modest response is underlain by metamorphosed mafic volcanics west and north of the AIC complex. These anomalies are in the same general area as is indicated on the ppb gold MMI response Figure 10.4.01 (Powers, 2009).

FIGURE 9.1: ABITIBI GEOPHYSICS, MAGNETOMETER FIELD STUDY (82 KILOMETRES OF SURVEY)

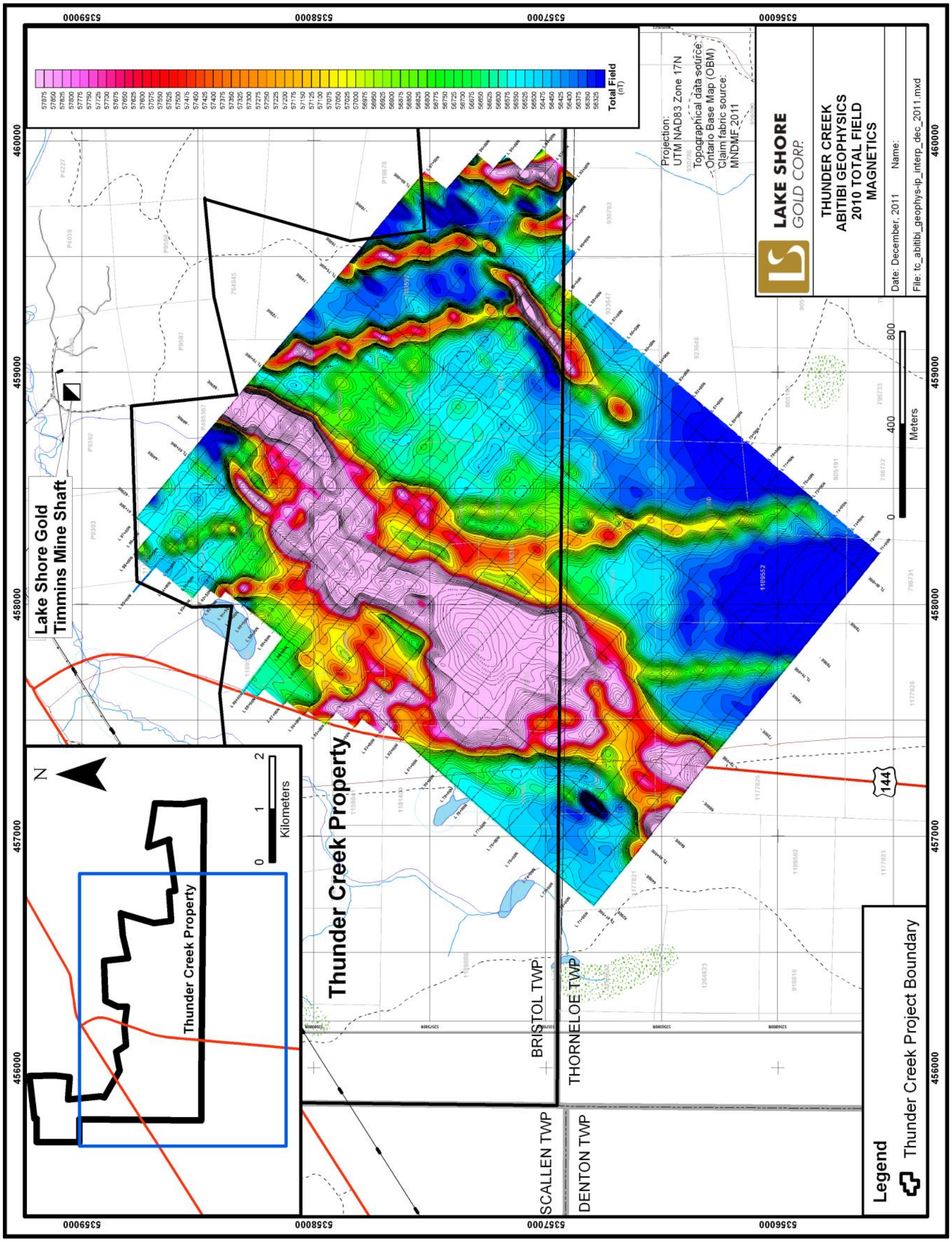


FIGURE 9.2: ABITIBI GEOPHYSICS, IP SURVEY INTERPRETATION (45 KILOMETRES OF SURVEY)

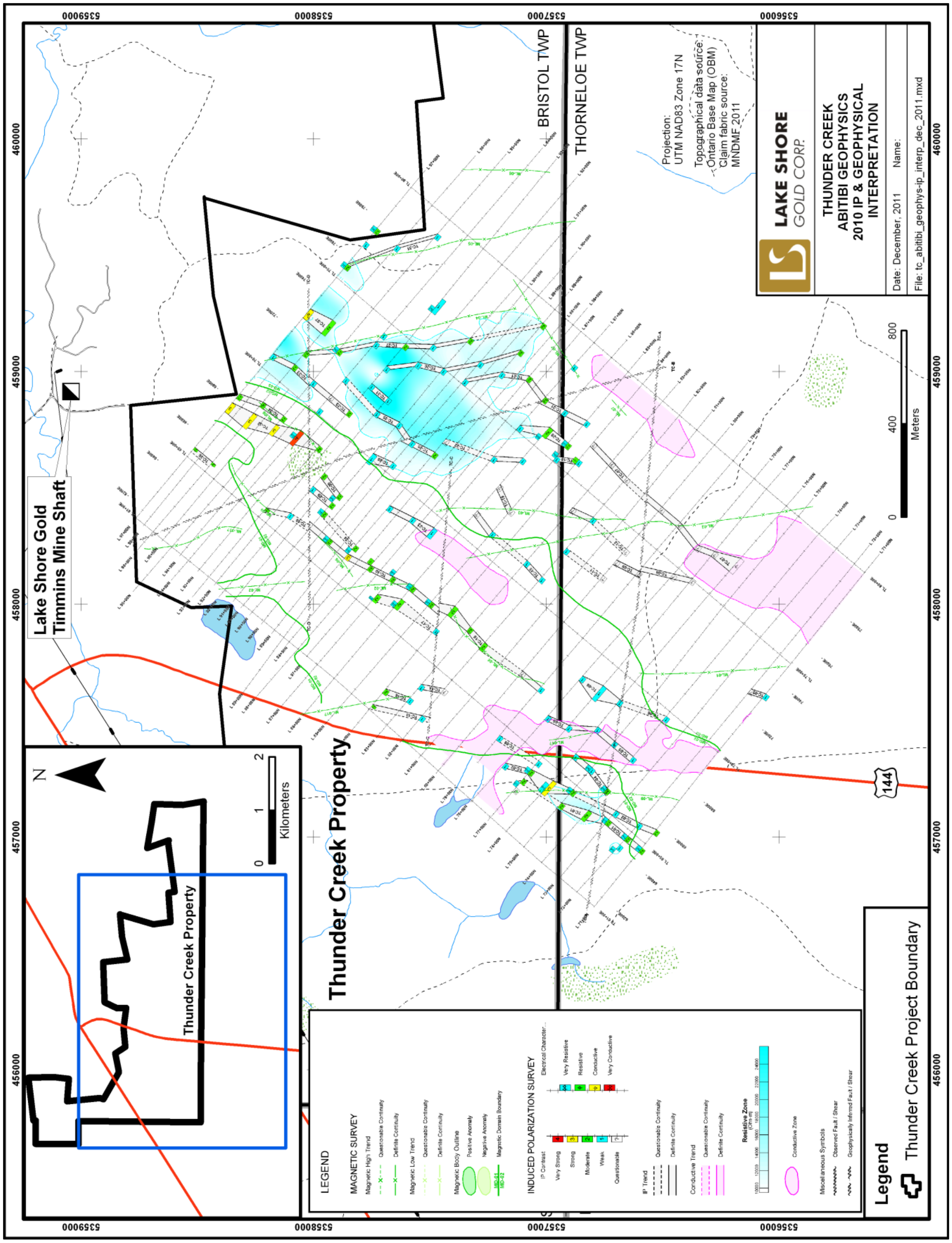


FIGURE 9.3: JVX LTD. GEOPHYSICS, LOCATIONS OF DIAMOND DRILL HOLES FOR BOREHOLE IP (9 DDH GRADIENT ARRAY, 5 DDH DIPOLE ARRAY)

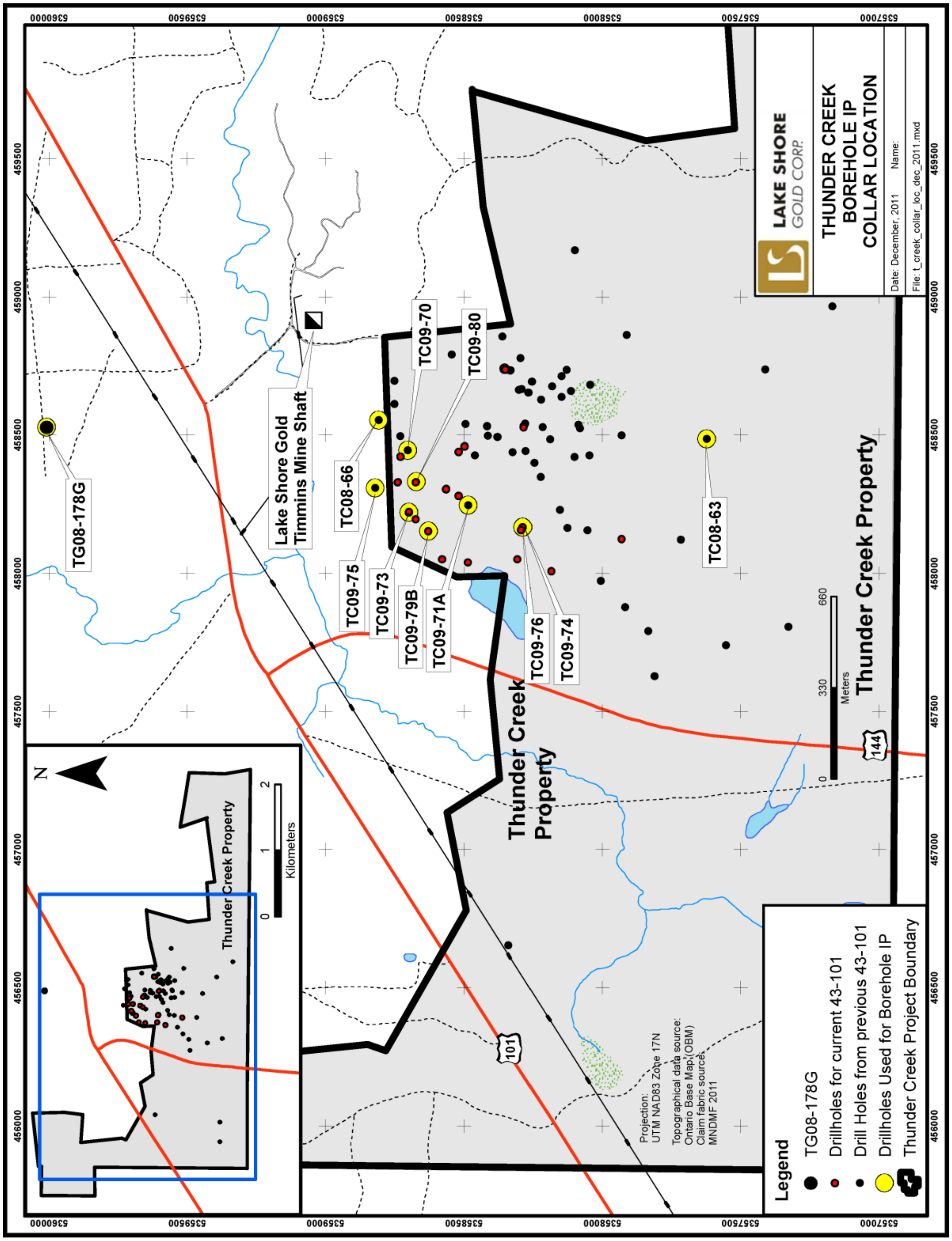
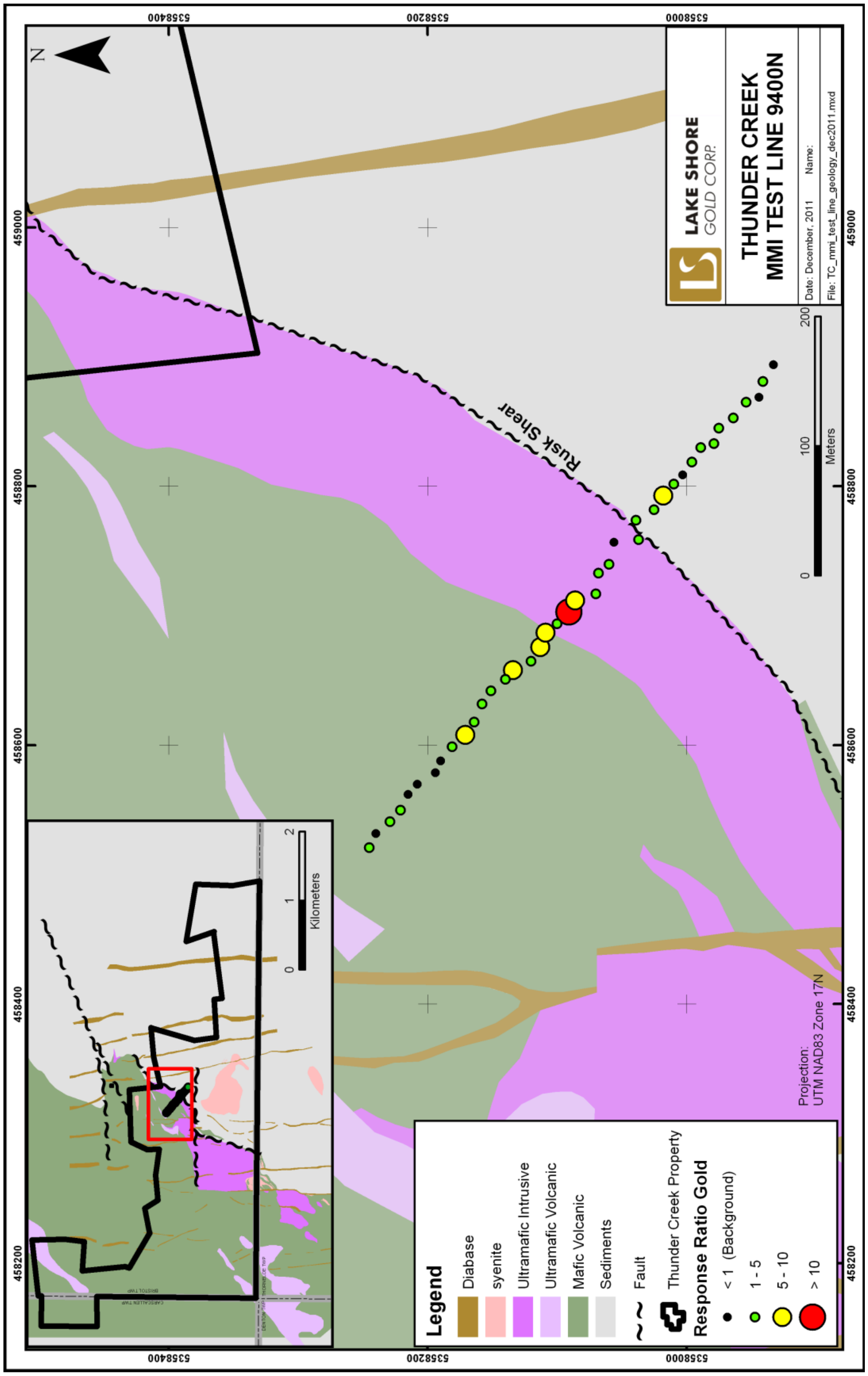


Figure 9.4: MMI Test Line Over the Thunder Creek Property



10.0 DRILLING

10.1 LAKE SHORE GOLD CORP. HISTORICAL DRILLING

Historical work including past diamond drilling is highlighted in Item 6. For the purposed of this report and the resource estimation only diamond drill holes initiated and completed by Lake Shore Gold Corp. are relevant and used in the block model and resource calculation. Between the period of 2003 and June 24, 2009 approximately seventy five (75) drill hole and seven wedge splays were in various stages of completion for a total of 40,689 metres of diamond drilling. This diamond drilling and the other surface exploration programs completed during this period are the subject of the second technical report for the Thunder Creek property (Powers, 2009). The objectives of the early Lake Shore Gold Corp. diamond drill campaigns was to test: a) the historical showings by twinning the Preussag 1981 hole; b) test MMI soil geochemistry anomalies; c) test geophysical interpreted structure; d) test lithologies and stratigraphy; and definition drilling of mineralization intersected. The emphasis and targeting of the diamond drill programs evolved to the definition drilling of gold mineralization associated with gold zones hosted in the Rusk and Porphyry Zones.

To date Lakeshore Gold Corp. has bored one-hundred-two (102) surface diamond drill holes, forty-seven (47) wedged splays, and three (3) drill hole extensions for a total of 83,656.69 cumulative metres. Table 10.1 located in Appendix 1, provides collar locations relative to mine grid locations, azimuth and inclination of the collar, as well as the number of metres drilled per hole. The alpha name, after the numerical number of the hole indicates a wedge cut. Drill hole TC11-87 is highlighted in blued because at the time of writing the logging and returned assays were incomplete. This drill hole is not relevant to the block modeling presented in this report.

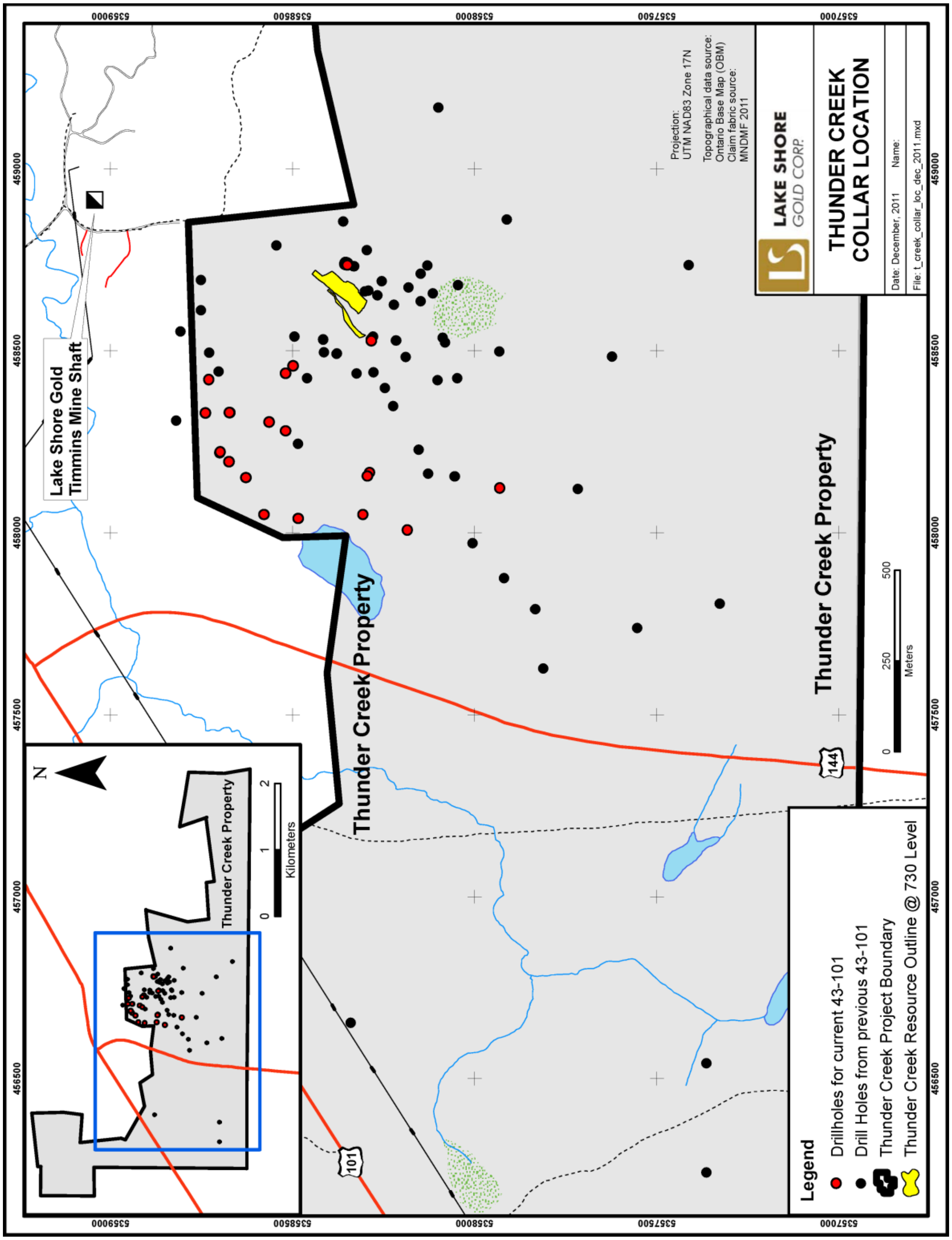
Three-hundred-eighty-four (384) underground diamond drill holes totaling 66,809.65 metres have been drilled, of which twenty-two (22) were re-collared due unacceptable deviation. Forty-two (42) drill holes remain in various stages of completeness with respect to core logging or pending assay results. These holes are blue highlighted in Table 10.2. For underground diamond drilling, the alpha name attached to the hole number indicates a re-collared or re-started. Table 10.2 (Appendix 2) lists the locations of the drill holes by level, mine grid co-ordinate, azimuth, dip and metreage.

A total of 67,949 core sample intervals have been submitted for assay analysis. Table 10.3 (Appendix 3) summarizes the diamond drill hole number, the number of samples taken per hole, the number of returned assay results greater than or equal to one (1.0) grams per tonne, the number of returned assay results greater than thirty-four point two nine (34.29) grams per tonnes, as well as the number of fire assays with atomic absorption or gravimetric finishes, the number of metallic assay for gold and the number of assays and hole numbers that have arsenic assay results. The numbers reflected in this table do not include the samples submitted for QA/QC purposes.

The drill hole database for the Thunder Creek project was locked down on October 28th, 2011. Drill holes that were not completely logged and sampled or assay results were pending are not used in the block modeling. Diamond drill holes not used in the block model are tabulated in Table 10.4 (Appendix 4).

Since the effective date of October 28, 2011 and the locking down of the diamond drill hole database a total of 6 diamond drill holes have been logged and sampled. Complete assay results have not been received. These underground holes are TC260-017, 019; TC280-117,119, 120; and TC680-006.

FIGURE 10.1: SURFACE DIAMOND DRILL HOLE COLLAR LOCATIONS AND VERTICAL PROJECTION TO SURFACE OF THE OUTER PERIMETER OF THE RESOURCE ESTIMATION



11.0 SAMPLING PREPARATION, ANALYSIS AND SECURITY

11.1.0 LAKE SHORE GOLD CORP. SAMPLING METHOD AND APPROACH

11.1.1 SURFACE DIAMOND DRILL PROGRAM

The sampling preparation, analysis and security for the period of 2003 to 2009 are described in the technical report by Powers (2009). Described herein is the protocols used for both the surface and underground exploration programs during the period post the last technical report to the current effective date.

11.1.2 CORE HANDLING AND LOGGING PROTOCOLS

The diamond drill company employees secure the drill core boxes, at the drill site, for shipment from the field to the core logging facilities located at Lake Shore Gold's exploration office complex at 1515 Government Road South, Timmins, Ontario and a second facility at 216 Jaguar Drive Timmins Ontario. The drill core is delivered to the core shacks by the Bradley Bros. Ltd., and Norex Diamond Drilling Limited ("Norex") drill foremen. Under the direct supervision of qualified persons Mr. Dean Crick, P. Geo, and Mr. Jacques Samson, P.Geo., Lake Shore personnel open the boxes; check the metre markers for accuracy; label the boxes for hole number, box number and footage; prepare a quick log; take rock quality designation ("RQD") measurements; photograph and log the core. Geological logging, sample number and location are entered directly into a computer using GEMCOM GEMS custom Drill Logger software. Diamond drill logs are then printed, reviewed and edited where required. The logs are detailed, and describe geology, structure, alteration, mineralization and do address lithological transition problem areas where naming nomenclature presents difficulties. After geological logging and photography is complete the core is given to a trained and supervised core sawing technician. The technician saws the core along the designated lines and sample intervals prescribed by the Lake Shore geologist. The core sample length is determined by the geologist based upon lithology, alteration, percent sulphides, the presence of visible gold, and geological contacts. Core to be sent for analysis is cut in half using a diamond blade core saw. The core half not bagged and tagged for assay is returned to the core box with a sample tag number stapled into the core box. All diamond drill core is stored in racks or square piled in a secure compound at the core logging facilities or at the Timmins Mine compound. Drill core from the Thunder Creek project is easily accessible for inspection, or re-logging.

11.1.3 HOLE COLLAR AND DOWN-HOLE ATTITUDE SURVEYS

The proposed drill hole locations are pegged on the ground referenced to a 63 kilometre control grid established by Vision Exploration in 2008. Chainsaw cut lines are on 50 to 100 metres spacing with labeled pickets every 25 metres provide adequate field control for exploration anomaly drill testing. The "false origin" of the grid is coincident with the number three (3) post of patented claim P4040 (458,854.168m East, 5,358,786.3m North, NAD 83, Zone 17). The surveyed post is the departure point for the baseline co-ordinate 65+00E / 100+25N and corresponds to Timmins Mine co-ordinate 4645.777 East by 7508.233 North. The azimuth of the base line is 40 degrees from true north. Grid line designation decreases southward. All drill holes are spotted on the field grid co-ordinate system, initially using a hand held GPS. On a regular basis or as required the collars are surveyed by L. Labelle Surveys of Timmins for a final collar location. Table 10.1 (Appendix 1) lists the collar location, drill azimuth, hole inclination (drill dip) end of hole and the number of samples per hole. The underground and surface grid for the Timmins Mine is different than the exploration surface grid at Thunder Creek. The origin of the Timmins Mine grid is the number one (1) claim post of claim P4040, a surveyed claim, that was assigned an arbitrary co-ordinate of 5000 East by 8000 North with an elevation of 1,000 metres elevation. This point is actually 300.25 metres above mean sea level and has been re-assigned an elevation of 10,000 metres to insure that underground elevations are not reported as negative numbers. An in-house grid transformation equation allows for the conversion of from one grid to the other grid in local grid co-ordinates or in UTM co-ordinates.

As the holes are being drilled changes in azimuth and inclination are monitored at 30 to 50 metres intervals using an EZ-shot Reflex instrument. Upon completion of a hole it is normal practice to have the holes resurveyed using a north-seeking gyro by Halliburton/Sperry Drilling Services of North Bay, Ontario. If the north-seeking gyro is not available for surveying, a Maxibor instrument from Reflex Instruments of Timmins is used for the final direction and dip orientation survey.

11.1.4 SECURITY

The Thunder Creek Project secure chain of custody for diamond drill core and samples starts at the drill and is completed with the safe return and storage of sample pulp and sample rejects locked garage storage facility. Unscheduled visits to the diamond drill sites are made to insure safety, good working practices and drill core security. The core is transported from the field to the core logging facility by the drill foreman. Lake Shore Gold Corp.'s personnel receive the core and carry out the logging and sample preparation procedures as previously described. The samples are enclosed within sealed shipping bags are delivered to the ALS Canada Ltd. ("ALS") preparation laboratory facility located at 2090 Riverside Drive in Timmins by Lake Shore Gold Corp employees. The ALS employee that receives the sample shipment signs a chain of custody document that is returned to Lake Shore's office for reference and filing. The return assay results are reviewed by Mr. Dean Crick, P. Geo. and/or Mr. Jacques Samson, P.Geo., Ms. Christina Riddell, the data base manager, and selected members of the Lake Shore management group, on a need to know basis.

11.1.5 SURFACE DIAMOND DRILL CORE SAMPLE PREPARATION, ANALYSIS AND ANALYTICAL PROCEDURES

The following description outlines the method of treatment and procedures utilized by ALS Canada Ltd., to process and analysis surface diamond drill core from Lake Shore Gold Corp.'s Thunder Creek property. Lake Shore Gold Corp. employees are not involved in the sample preparation or analysis of samples once they have been delivered to the assay preparation laboratory in Timmins. Each project analysis sample program submitted to ALS Canada Ltd. ("ALS Canada", "ALS") is given a separate client number. The laboratory is instructed to maintain the sample stream, the processing and analysis by keeping the samples in sequential order as they are shipped to the lab. Samples are entirely crushed to 70 % passing 2 millimetres mesh. The crushed samples were split and 250 grams sub-sample are pulverized to 85% passing less than 75 microns using a ring and puck pulverize (PREP-31). During the period of 2004 to 2007, a 50 grams aliquot was taken from the pulp and analyzed by fire assay and atomic absorption methods (Au-AA24). For samples that returned an assay value greater than three grams per tonne gold, another pulp sample was taken and analyzed using a gravimetric finish (Au-GRAV22). In October of

2007, the fusion weights were reduced from 50 grams to 30 grams (Au-AA23 and Au-GRAV21), in order to avoid delays with occasional "incomplete fusions" reported by the lab. If visible gold was noted in the core sample, the samples may be analyzed by the Pulp and Metallic method (Au-SCR21). The entire samples were crushed to 70 % passing 6 millimetres mesh, and the entire sample was then pulverized to 85 % passing 75 microns (PREP-32). The pulp is passed through a 100 microns stainless steel screen and the entire (+) fraction is analyzed by fire assay and gravimetric finish. The (-) fraction is homogenized and two 30 grams aliquots are analyzed by fire assay and atomic absorption finish (Au-AA25 and Au-AA25D). The total gold content is then calculated by combining the weighted averages of the two fine fractions with the grade of the coarse fraction.

Drill core from the first 50 holes (10,713 samples) were analyzed for arsenic (As) by Aqua Regia digestion and atomic absorption scanning (AA-45). In late 2007, No significant levels were reported and there does not seem to be a correlation with returned value and gold mineralization for the Thunder Creek Property

As part of ALS Canada Limited's internal QA/QC program a duplicate reject sample it prepared every 50th sample. The number of internal blanks, standards and duplicate control samples inserted into the sample stream depends upon rack size. For regular AAS, ICP-AES and ICP MS methods the rack holds 40 positions, of which, there are two laboratory standards, one laboratory duplicate and one laboratory blank. For regular fire assay methods the rack contains 84 positions, for which there are two laboratory standards, three laboratory duplicates and one blank sample.

Lake Shore Gold Corp. blank samples are prepared from a 0.5 metre, known gold barren diamond drill core samples of diabase. These blank samples are blindly packaged as regular core samples with sequential to the sample stream assay tags and inserted into the sample stream at a random frequency of one every 1 to 20 samples. Blank samples, are used to check for possible contamination in the crushing circuit and are not placed after a standard sample.

Certified gold standards individually wrapped in 60 grams sealed envelopes were prepared by Ore Research and Exploration Pty. Ltd. of 6-8 Gatwick Road, Bayswater North, Victoria, Australia ("OREA") and provided by Analytical Solutions Ltd. Several standards are used in order to vary the expected value and depending on availability of the standard. These Certified Standards are purchased from Ms. Lynda Bloom, Analytical Solutions Ltd., at 1214-3266 Yonge Street, Toronto, Ontario. Standard samples are inserted into the sample stream at a frequency of one per 20 samples and are used to check the precision of the analytical process. Table 11.1 lists the standards utilized by Lake Shore for the Thunder Creek project.

TABLE 11.1: OREAS STANDARDS USED BY LAKE SHORE GOLD CORP.

Standard	Mean Au (g/t)	Std. Dev	1 Std. Dev.		2 Std. Dev.		3 Std. Dev.	
			Min	Max	Min	Max	Min	Max
O-2Pd	**0.885**		0.855	0.914	0.826	0.943	**0.797**	**0.973**
O-4Pb	**0.049**		0.047	0.051	0.044	0.054	**0.042**	**0.056**
O-6Pc	**1.520**		1.460	1.590	1.390	1.660	**1.320**	**1.720**
O-7Pb	**2.770**	0.050	2.720	2.820	2.660	2.880	**2.610**	**2.930**
O-10c	**6.660**				6.270	6.920	**6.110**	**7.080**
O-10Pb	**7.150**	0.190	6.960	7.340	6.770	7.530	**6.570**	**7.730**
O-15h	**1.019**	0.025			0.970	1.068	**0.945**	**1.093**
O-15Pa	**1.020**	0.030	0.990	1.050	0.960	1.080	**0.940**	**1.100**
O-15Pb	**1.060**		1.030	1.090	1.000	1.120	**0.970**	**1.140**
O-17c	**3.04**	**0.08**			2.870	3.210	**2.790**	**3.290**
O-18c	**3.52**				3.310	3.730	**3.200**	**3.840**
O-18Pb	**3.630**	0.070	3.560	3.700	3.490	3.770	**3.420**	**3.840**
O-50Pb	**0.841**	0.031	0.810	0.872	0.778	0.904	**0.746**	**0.936**
O-52Pb	**0.307**		0.290	0.324	0.272	0.342	**0.255**	**0.359**
O-53Pb	**0.623**		0.602	0.644	0.581	0.666	**0.559**	**0.687**
O-54Pa	**2.900**		2.790	3.010	2.680	3.120	**2.570**	**3.230**
O-60b	**2.570**		2.460	2.680	2.350	2.780	**2.250**	**2.890**
O-61d	**4.760**	0.140			4.470	5.040	**4.330**	**5.190**
O-62c	**8.790**	0.210			8.360	9.210	**8.150**	**9.420**
O-62d	**10.500**	0.330			9.840	11.160	**9.510**	**11.490**
O-65a	**0.520**	0.017			0.486	0.554	**0.469**	**0.571**
O-66a	**1.237**	0.054			1.129	1.345	**1.075**	**1.399**
O-67a	**2.238**	0.096			2.046	2.430	**1.950**	**2.526**
O-68a	**3.890**	0.150			3.600	4.180	**3.450**	**4.330**

Prior to May, 2010, ALS had been instructed to take one reject duplicate Lake Shore Gold sample for every 25 samples processed. This procedure was revised to take the duplicate sample immediately preceding the 25th sample and crush it to -6 mesh, run it through a riffle splitter to create two samples of approximately equal proportions. One of the halves is then assigned the sample number and the other duplicate sample is placed in a separate plastic bag and labeled with the same sample number and the suffix “dup”. The two samples are then treated as two entirely separate samples through the rest of the sample preparation and assaying process. The method of selecting reject duplicates was further modified starting May, 2010 in order to make a blind duplicate sample. Currently 1 reject duplicate is selected every 20 samples by the geologist logging the drill core. The geologist gives the duplicate sample a sample number and places it in an empty bag; sequentially behind the sample from which it will be cut. When received by the lab, the preceding sample to the duplicate is crushed to -6 mesh, then run through a riffle splitter to create two samples of approximately equal proportions. One half is returned back into the original sample bag and the other half is placed into the empty bag, now as a separate sample with a different sample number. From this point on, the sample is blind to the analytical process. The insertion of a duplicate sample is to monitor the integrity of the assay results.

11.1.6 DATA MANAGEMENT

Copies of assay certificates are either downloaded from the external lab LIMS system and/or sent via mail to the LSG database manager, and to the project's Qualified Person. The digital assay data, in the form of "csv" files are checked manually against the final paper assay certificates for clerical errors, and the results interrogated by a Lab Logger Version 2.0 program created by Gemcom. The use of the software program ensures that the results from the QA/QC samples fall within the approved limits of the standard before this data is imported into the database.

11.1.7 ACCURACY ANALYSIS - STANDARDS AND BLANKS

Beginning in March 2009, samples results were entered into an Excel spreadsheet to determine if the assay value for the standards falls outside the control limits, if this occurred then these samples would be highlighted for check analysis. Since April 2010 this process has been handled using an ACCESS application developed by Gemcom Software International Inc. called Lab Logger (V.2.0). Sample assay results, internal QC information, shipping data, standards, and duplicate samples were each stored in separate QC database tables, and data can be merged into relevant plot files as needed.

The QC samples in each group were subjected to specific pass or failure criteria, which determined whether a re-assay of the batch was required. A sample group failure was identified whenever the analytical result for any certified standard in the group of 20 was greater than three standard deviations (the control limit) from the certified mean value for the standard and for any blank material, a value greater than 0.100 ppm. All failed groups of samples were investigated to attempt to determine the cause of the erroneous result (analytical or clerical). Potential clerical errors are sometimes reconciled by checking against original drill log records or original laboratory data sheets. After the batch pass/failure criteria was applied, a geological override may be applied by the project QP on batches for which re-assay would be of no benefit (i.e. completely barren of gold assay values and mineralization indicators). Sample groups given a geological override were not re-assayed.

Sample groups in which the QC samples were outside the established control limits that did not receive a geological override are not imported into the database. Instead, these samples were requested to be re-run at the analytical lab. In the case that the standard failed, all samples back to either: a) the last blank or standard that passed; or b) the first sample for the project in the sequence of samples being analyzed, were re-run from the pulp. In the case that the blank failed, all samples back to either: a) the last blank or standard that passed; or b) the first sample for the project in the sequence of samples being analyzed, were re-run from the reject material as this indicates contamination in the sample preparation stage. If a request is made for re-analysis due to a standard failure then a new standard is sent to the lab to be analyzed with the samples in question.

11.1.8 PRECISION ANALYSIS – DUPLICATES

Prior to April 2010 internal laboratory pulp duplicate data and reject duplicate data were statistically followed and analyzed using EXCEL and after April 2010 using the Lab Logger software and were used for comparative statistical analysis. Comparison was made using descriptive statistics and scatter plots. These plots were used primarily to identify project specific problems in assay reproducibility (precision), and individual erratic results, indicating potential sampling problems or clerical errors in the sample order within the batch. When problems were identified in the data precision, the labs were notified and asked to investigate and report back their findings. Erratic sampling results are then noted in monthly reports so that the geologist would be aware of the uncertainty in the sample value and be able to check for potential clerical errors within the samples then as per standard procedures, the first assay result from the pair was accepted into the database.

11.1.9 REPORTING AND PLOTTING

Brief monthly reports are completed during the year to include the number of samples sent to each lab for each project, the number of QC samples that failed, together with the reason why. As well, on a monthly basis, graphs are generated of each individual blind standard and blank, as well as the non-blind reject pairs and pulp duplicate pairs to check for sample bias at the assay lab. All major projects are summarized individually, either at year end or at the end of the program, as soon as reasonably possible.

11.2.0 CHECK ASSAY PROGRAM

11.2.1 GENERAL STATEMENT

For major programs, or programs leading to resource or reserve calculations, a check assay program is be implemented either during or following completion of drilling. In this program, approximately 5% of the pulps form previously analyzed samples will be selected for re-assay at a neutral assay facility. In order to select these check assays, groups of samples that passed QC but excluding QC samples are picked randomly from samples from a specific program.

The pulps were selected randomly by hole ensuring that a wide range of original assay values, from trace to high grade were represented. The samples selected for check analysis were sent to SGS Mineral Services of Toronto for analysis. The pulps were initially analyzed using the fire assay with an AA finish (SGS analysis code FAA313) method and for results greater than 5 grams per tonne a re-assay was conducted by fire assay using a gravimetric finish.

11.2.2 PROCEDURES

Pulps will be selected by LSG project personnel and an electronic list of selected sample numbers will be prepared for the samplers. The samples will be submitted to the analytical facility in groups of 20, with the blind QC consisting of one standard and one previously analyzed blank pulp. The laboratory will report their internal pulp duplicate results as part of the assay report. The old and new sample numbers and the positions of the standard and blank pulps will be recorded on the Check Assay excel table as the samples are packed and shipped to the lab for analysis. Once analysis has been completed, the assay lab will report their findings in the standard LSG assay file format, including all of their internal QC data as part of the electronic assay file and will also provide a complete documentation of the means and standard deviation values for all internal reference materials used for the analyses.

When the check assay results are returned, the QC inserted in the check assay batches will be analyzed and comparative statistical analysis will be completed on all possible pairs of data, including, internal non-blind pulp duplicates and original assay versus check assay.

Reporting will be completed, after all assays are received, and have passed quality control checks. A master report for each project will be issued documenting the procedures implemented and the QC results for all of the analyses. The check assay results will be reported under separate cover for each individual project.

11.3.0 UNDERGROUND DIAMOND DRILL PROGRAM

11.3.1 GENERAL DESCRIPTION

Boart Longyear from Hailebury, Ontario is the contractor for the underground drilling at the Thunder Creek project. Three different core diameter size holes are bored underground at Thunder Creek: NQ with a core diameter of 47.6mm; AQTK with a core diameter of 30.5mm; and BQTK which has a 40.7mm core diameter. The diameter of hole bored depended on the distance to target, the detail of sectional drilling, and the availability of diamond drill equipment. The more distant underground exploration targets will be tested with the 47.6 mm diameter core, some holes were bored using the 40.7mm core size. Mineralization definition and delineation drilling utilizes both the 30.5mm, and 40.7mm core sizes. Core is placed in core boxes with metreage tags at the drill site and secured for transportation to the shaft station by the diamond drillers. The core boxes are hoisted to surface at the Timmins Mine and delivered to the onsite core logging facility by the Timmins Mine's Senior Core Technician. Depending on the location of the drill collar the core may be transported via the ramp system to the Timmins Mine core logging facility by the diamond drillers. Once the core is received at the logging facility the boxes are open and the core placed into core racks according to drill hole number, box number and metreage in preparation for logging.

Under the direction of the project qualified person (Mr. Stephen Conquer, P. Geo. from April 2010 to August 2010 and Mr. Dean Crick, P. Geo., September 2010 to present) underground diamond drill core is processed by geologist and geological technicians that are employees of Lake Shore Gold Corp. The drill logs are recorded directly into a computer database with the logger recording: rock type, alteration, veining, and amount of mineralization. Sample location and widths are based upon the distribution of sulphides, visible gold, lithology and alteration. Sample lengths will vary from 0.3 to 1.5 metres with samples not crossing a lithological, alteration or mineralization boundary. Samples are identified by marking both the start and finish ends with a "china" marker and placing a sample tag under the core at the end of the sample. Three part tags are used in the sampling process. Each part of these tags come pre labeled with a sample number that is sequential for each tag. The geologist adds the date, hole number, the from and to intervals on the first part of each tag, which will stay in the book and the from/to intervals on the second part of the tag, which will be stapled into the core box at the end of the sample. The third portion of the tag will be placed in the sample bag with the core. After logging and sampling is complete the core is stored in racks or on cross piles onsite at the Timmins Mine.

After logging and sample selection the core is moved back to a core rack to be sampled. Three different processes are used to sample core at the mine site, core is split, saw cut and "whole cored". Splitting and cutting is completed by trained and supervised core technicians along pre-marked lines. "Whole core" sampling is applied to drill core considered to be production definition drilling. The whole core sampling is completed by trained and supervised core technicians who sample the entire length of core sample instead of the core being cut or split. Cut core is sawn using a diamond impregnated core cutting saw blade and saw. Each sample is cut independently of the following sample and placed with the sample tag in a pre-numbered (to match the tag) sample bag. Sample bags are stapled shut and placed in a "rice" bag, "rice" bags are filled with ten cut or split samples or 5 whole cored samples. Attached to one of the bags is one copy of the "Chain of Custody" document on which the security tag and sample numbers included in the order have been entered.

Four (4) analytical laboratories have been used for the gold analysis of underground diamond drill core: ALS Canada Ltd. between the period of April 2010 to August 2011; Accurassay Laboratories. (150A Jaguar Drive Timmins and 1046 Gorham Street, Thunder Bay) between June 2011 to the present for all diamond drilling considered to be "exploration drilling". Cattarello Assayers Inc. located at 475 Railway Street, Timmins and Lake Shore Gold Corp.'s Bell Creek Complex mill laboratory are used for assaying samples considered to be production oriented drilling.

"The Messenger Service" located at 108 Polaris Road, Timmins is contracted by Lake Shore Gold Corp. to transport the secured, sealed samples from the Timmins Mine to ALS (Timmins), Cattarello and Bell Creek laboratories. Secure, sealed samples are picked up and delivered by Barry's Freight contracted to Accurassay's Timmins preparation laboratory.

11.3.2.0 UNDERGROUND SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

A total of 27,737 diamond drill core samples for gold assay have been taken up to the effective date. The laboratory distribution of the samples is 71.4% to ALS Canada Ltd, 13.4% to Accurassay Laboratories Limited, 4.9 % to Cattarello Assayers Inc. and 3.8% to the Bell Creek Laboratories. Assay results for 1,935 samples remained outstanding on the effective date of October 28th, 2011.

11.3.2.1 ALS CANADA LTD.

The protocols and procedures for the preparation and analysis of Lake Shore Gold Corp.'s underground diamond drill core samples by ALS Canada Ltd. is the same procedures as for surface diamond drill core samples described above with the exception that the aliquot sample size is 50 grams rather than 30 grams. In August 2011 the aliquot sized was changed to a 30 gram aliquot.

The ALS procedures, and the Lake Shore Gold practice of insertion of blanks, standards and duplicates is the same for the underground drilling program as it is for the surface exploration diamond drill program

11.3.2.2 ACCURASSAY LABORATORIES LTD.

Accurassay Laboratories Limited, operate a preparation laboratory at 150A Jaguar Drive Timmins, Ontario. Lake Shore Gold Corp.'s samples are crushed to greater than 70% passing through a -8 mesh (2mm). A 500 grams split is taken and pulverized so 90% passing through a -150 mesh (106µm). Silica abrasive clean is routinely completed between each sample preparation. The samples are analyzed using by fire assay for gold from a 30 grams aliquot using an atomic absorption finish (code ALFA1). The detection limit is between 0.005 grams and 30 grams. Sample assay results greater than 10 grams per tonne gold are fire assayed again using a 30 grams aliquot from the original pulp portion of the sample and a gravimetric finish. The internal laboratory QA/QC program places a duplicate sample every ten (10) samples of an assay batch. The assay trays consist of 25 to 27 positions for samples. A standard and blank control sample positioned at random by computer for a position within the 25-27 sequence.

11.3.2.3 BELL CREEK COMPLEX MILL LABORATORY

The diamond drill core samples sent to the Bell Creek mill laboratory are sorted, dried then are individually crushed to greater than 85% passing 10 mesh ((Tyler) 1.68mm). A 150 grams to 200 grams sample split is pulverized to greater than 95% passing 200 mesh ((Tyler) 0.075mm). All equipment is cleaned between samples using compressed air. A 30 grams aliquot is prepared and fire assayed with an AA finish. Assay results that exceed 10.0 grams per tonne are automatically re-run using a sample from the pulverized portion of the sample and a gravimetric finish.

11.3.2.4 CATTARELLO ASSAYERS INC.

Diamond Drill Core Samples are sorted into numerical order and dried. Samples are then crushed using two terminator jaw crushers. A 200g sample is split out of the crushed fraction and pulverized using two vibrator ring pulverizers. A 30g aliquot is weighed out for Fire Assay with an AA finish. Sample results greater than 10 grams per tonne are re-fire assayed using a gravimetric finish from a sample of the pulverized sample portion. The sample rack holds 24 positions of which a laboratory standard is inserted on every 24 samples and one duplicate sample every 24 samples. Laboratory blank samples are inserted less frequently.

11.4.0 Data Management

The procedures for handling and managing the assay data for underground diamond drill core assay samples is the same as described above for surface exploration diamond drill core.

11.4.1 ACCURACY ANALYSIS - STANDARDS AND BLANKS

Underground and surface ALS procedures are the same. For all laboratories the underground operation utilizes an Excel spreadsheet to check whether or not QA/QC samples pass. The Lab Logger program is not used to import the assays, instead two separate ".csv" files are created; one for assays and one for QC samples, and then the results are imported into the database through Gemcom.

11.4.2 PRECISION ANALYSIS – DUPLICATES

The underground project has used the Lab Logger program in the past but now does all statistical analysis with Excel.

11.4.3 REPORTING AND PLOTTING

The reporting and plotting procedures are the same as stated above for surface exploration samples.

11.4.4 CHECK ASSAY PROGRAM

Check assays, for the underground project, for 2010 and the first 6 months of 2011 were sent to Accurassay and run through the same process as mentioned above (ALFA1, ALFA5). As well at the time it was decided to change from a 50g aliquot to a 30g aliquot check assays were sent back to the original lab (ALS) to determine if there was any significant change in assay value.

11.4.5 PROCEDURES

The procedures for sample submission have been described above.

11.5.0 UNDERGROUND FACE CHIP PANEL AND MUCK SAMPLES

11.5.1 PROCEDURE FOR TAKING FACE CHIP PANEL SAMPLES

Channel samples are taken across the face honoring changes in rock type, alteration, vein style, vein intensity, amounts ant types of sulphides. The chip sample is designed to cross-cut a subvertical vein, sulphide mineralized envelope or mineralized structures situated in the central portion of the 4 metre by 4 metre development heading at the approximately 1.3 to 1.5 metres above the floor. Samples are taken from left to right of the left wall-face bracket, across the face, and ending with the right face-wall bracket. The maximum length of the wall rock (waste bracket) is 0.5 metre, another waste sample taken after the initial waste sample may have a length of 1.0 metres. Samples of mineralization have a maximum length of 0.5 metre. Each channel sample extends 50 cm above and 50 cm below the designated sample height resulting in a 100 cm wide panel. The resultant sample should weigh approximately 2 kilograms.

Descriptions of the sample are recorded and a photo is taken of the face illustrating the geology, mineralization, and sample panels.

Samples are submitted for assay as described in the diamond drill core protocols section of this report.

11.5.2 PROCEDURE FOR TAKING MUCK SAMPLES

Underground miners and muckers are charged with taking muck samples at the request of Lake Shore Gold's Geology Department staff. Samples may be taken from either "ore" or "waste" headings. Six muck sample is representative of one jumbo round, taken "from the ground after dumping the bucket" at three time intervals during the mucking cycle. Two samples are taken at the beginning of the cycle, two sample taken in the middle of the cycle and two samples taken at the end of the mucking cycle. The muck samples taken during a shift along with the appropriately filled out sample description tags are brought up from underground and deposited in designated locations. The sample number, date, shift, work place, employee and comments are recorded and the information given to the geology department.

Samples are submitted for assay as described in the diamond drill chore protocols section of this report.

11.6.0 DISCUSSION

Table 11.6.1 summarizes the diamond drill core QA/QC sampling program. Graphs of the QA/QC results for Standards and Blanks are located in Appendix 6. Michel Dagbert, P. Eng of SGS Geostat reviewed the QA/QC results, his observations, discussion of results and recommendations are contained in the SGS report located in Appendix 7.

TABLE 11.6.1: THUNDER CREEK QA/QC DIAMOND DRILL CORE SAMPLING PROGRAM

Sample Type	Surface Diamond Drilling	Underground Diamond Drilling
Number of blank samples	2244	1467
Number of duplicate samples	454	1267
Number of Standard samples	1564	1335
Total QA/QC Samples	4262	4069
Number of QA/QC failures	159	198
Number of QA/QC failures overridden	58	157
Number of QA/QC failures sent for re-assay	101	41

Reasons for a geological override include:

1) if a standard or a blank fails by less than 0.05 grams per tonne as this is very close to the cut-off for a pass.
2) If a standard or a blank fails by more than 0.05 grams per tonne and there are no ore grade samples, and no ore grade sample was anticipate within the area of the QC failure the sample is overridden as it is believed that no significant assay is affected.
3) Occasionally a failure is due to the wrong standard being recorded as sent or two QC samples being switched at some point in the shipping process. If this occurs and the error can be absolutely proven but corrections cannot be made the failure is overridden
4) In the situation of a standard or blank failing but the drill hole is in an area that is actively being mined or developed before a re-assay can be returned the failure is overridden.
5) Any time there is a failure of a blank ore standard that does not fall into one of the criteria it can still be overridden if the qualified person believes the error is forgivable. In this case a comment stating the override is added to the database. An example of this is the QP noted that one standard was consistently failing by the same extent of an error. The error was overridden and the standard replaced in future sample shipments.
6) All other failures are pulp re-assayed by the laboratory they were initially assayed.

12.0 DATA VERIFICATION

12.1 GENERAL

Historical assay data from assessment T-Files or AFRI files has been accepted at face value. In some cases, but not all copies of assay certificates have been submitted with the historical reports. Lake Shore has twinned historical holes and re-sampled showings for qualitative controlled assay results. All diamond drill core is archived in core racks or cross piled in a secure systematic indexed core farm. The sawn core half not sent for assay is available for check assay results. Drill core from the Thunder Creek project is easily accessible for inspection, or re-logging. Table 10.3 (Appendix 3) summarizes the diamond drill holes sample statistics, illustrating the number of samples, the number of returned assay results per drill hole equal or greater than 1 gram per tonne gold, the number of sample analysis equal to or greater than 34.29 grams per tonne gold (one ounce per ton gold) plus the number of assay samples taken and the method of analysis.

Lake Shore Gold Corp. have provided detailed information of the exploration programs in the form of: GIS data base, diamond drill logs, assay results spreadsheets, assay certificates, MMI sample sites and lab analysis results, and maps. From the public domain, SEDAR filings of press releases, and technical reports for Band-Ore Resources, West Timmins Mining Inc and Lake Shore. Historical assessment report files have been reviewed by the author both at the MNDM office in Porcupine and the AFRI files on line.

Co-author (Powers, D.) has checked the MNDM claim registry for the Thunder Creek Claim ownership and found it to be as described by Lake Shore and West Timmins Mining.

For the 2009 technical report (Powers, D.) author has reviewed, and compared, finalized ALS Chemex Webtrieve analysis worksheets with Lake Shore's surface diamond drill database for the mineralized zones. This comparison totaled 979 samples from 43 drill holes. The database is true to the assay certificates reviewed. Lake Shore Gold Corp.'s data base managers at the Timmins Mine and Lake Shore Gold exploration office have reviewed the diamond drill assay input against assay certificates from August 2011 to the effective date of this report and have verified that the input of assay values within the database is correct. A review of ten percent of the (10%) the diamond drill logs took place between September 2011 and the effective date. No critical errors were found that would affect the geological or mineralization model. The most common errors are related to the completeness of the descriptive header data, such as township, start and finish dates of drilling, notes of the hole was making water, and surveyor for the drill hole. More time spent editing printed diamond drill logs and having the logger sign off of the log will eliminate these non critical input errors. Six surface diamond drill holes were re-surveyed to verify the survey accuracy. The results of the survey made no changes to the drill collar locations.

A site visit confirming field work discussed in this report took place May 29, 2009. A review of the core shack, drill core geology, core logging and assay sampling procedures, core, pulp and reject storage facilities took place on May 5th, June 1st, and June 29th, 2009 (Powers, D). An additional site visit took place December 08, 2011 with Mark Ross (P.Geo. and Lake Shore Gold's Mine Geologist) and David Powers (P.Geo.) reviewing underground development, workings, plans, sections, logging facilities and core storage.

Michel Dagbert, P. Eng of SGS Geostat reviewed the QA/QC results and concluded: “Despite the high variability of gold grades from Thunder Creek samples, the QA/QC data available tend to indicate that the quality of the sample grade values used in the resource estimation is satisfactory. Although we have significant differences between mean results and target values for some standards as well as a rather high proportion of results beyond the quoted gates of standards, we do not see any overall bias from the results of standards. Blanks show a few cases of likely contamination but the proportion of real failures keeps reasonably low (0.8%) at the main ALS lab. Lab and coarse duplicates show expected sample errors i.e. about 10% relative difference for pulp duplicates and 40% relative difference for coarse duplicates” (Dagbert, M., 2011). His complete report of Statistical Analysis of QAQC assay data is appended in Appendix 7.

12.2 Historical Treatment

Historical treatment of diamond drill data not drilled by Lake Shore Gold Corp. is not relevant to this report. No historical diamond drill holes are used in the modeling or resource calculated.

13.0 MINERAL PROCESSING AND METALLUGICAL TESTING

Lake Shore Gold Corp has not submitted samples from the Thunder Creek Property for metallurgical testing. One historical sample of the alkalic intrusive complex was submitted to Texasgulf Inc by Mr. Jim Croxall (AFRI No. 42A05NE8430). At this time the sample results are not considered to be relevant to Lake Shore's exploration programs.

Petrology, ore microscopy and scanning electron microscope investigations have been carried out on selected diamond drill core samples from drill holes TC04-13, TC07-27, TC07-30 and TC07-37 (2008) and TC08-51, TC08-52, TC08-54(663), TC08-54(668) and sample TC1891 (2009) by Miller and Associates of Ottawa.

The Bell Creek Mill was established as a conventional gold processing plant utilizing cyanidation with gravity and CIP recovery. Between 1987 and 1994 the mill processed 576,017 short tons of Bell Creek ore grading 0.196 oz/st Au (112,739 recovered ounces). The historical gold recovery was approximately 93%. Additional tonnages from the Marlhill Mine, Owl Creek open pit, and Hoyle Pond Mine were processed prior to the mill being placed on care and maintenance in 2002. During this period several improvements and additions were implemented to increase tonnage throughput from the original 350 tpd to 1,500 tpd. The present mill configuration includes upgrades completed in October 2010 to increase throughput to 2,000 tpd.

Mineralized muck is fed by loader or truck into a Grizzly. A rock breaker is used to reduce oversize. The Mineralized material is fed with a track feeder to a 30 in. by 40 in. Nordberg Jaw Crusher (c100B). The discharge from the jaw is conveyed to the sizing screen. Undersize (-1/2 in.) material reports to the Fine Ore Bin (FOB). The oversize material reports to the Coarse Ore Bin (COB), which feeds a HP 300 Nordberg cone crusher. Material will circulate until it passes through the ½ in. screen and reports to the FOB.

The grinding circuit consists of one 3.66m by 4.87m primary mill which is fed from the FOB and an in-series 3.81m by 4.4m secondary mill. The primary mill is single pass, and the primary cyclone overflow reports to a thickener feed box; underflow goes to the secondary mill (there is a 30 in Knelson that will take a bleed from this material, for gravity gold collection). The secondary mill is in a closed circuit with the secondary cyclones. Secondary overflow reports to the thickener feed box and underflow reports back to the secondary mill. (There is a 20 in Knelson that will take bleed from this material, for gravity gold collection.) The gravity gold reports to the gravity gold hopper while the Knelson discharge reports to the feed of the secondary mill. Both primary and secondary cyclone packs are made up of high efficiency Cavex cyclones, 80% -200 mesh being achieved. Lime is added to this circuit to maintain a pH of 11.2, which creates a stable alkaline environment for the addition of sodium cyanide.

Flocculent is added to the combined cyclone overflow from both circuits, and the slurry is pumped to the 20 m diameter thickener. The slurry from the cyclones is 32% solids by weight and the thickener underflow will be approximately 54% solids by weight. The excess water is recovered and used in the process. If cyanide is added to the grinding circuit, this solution will be gold-bearing and will be pumped through carbon columns to recover the gold before returning to the process. The thickened slurry is pumped to the leach circuit. The circuit consists of five agitated tanks in series with a total volume 1,940

m^3. All five leach tanks have pure oxygen pumped into them through an inverted cone located under the agitator. This maintains a high dissolved oxygen level as is needed for the cyanide to dissolve the gold. Cyanide is added in #3 leach, #1 and #2 leach are strictly aeration tanks to oxidize the sulphides before cyanide addition.

The CIL tank is approximately 1,900 m^3 and contains 15g of carbon per litre of slurry. There is the ability to add oxygen to the slurry of this tank. Retention time is 19 hrs. The circuit will reach equilibrium for loading of the carbon. Usually the loaded carbon has a gold grade of 4,500 g/t or higher. Loaded carbon is pumped out of #1 CIL tank, screened, and washed. It is then transferred to the loaded carbon tank. A portion of carbon from #1 CIL tank is advanced forward. The strip vessel is located in the CIP circuit.
The slurry from the CIL tank reports to the CIP circuit which consists of six tanks with approximately 4 t of activated carbon in each tank. The retention time is four hours based on 2,000 t. The carbon columns hold 1.3 t of carbon and these are utilized if the practice of grinding in cyanide is used. The carbon from the carbon columns is also pumped across the loaded carbon screen and columns are advanced forward. Recovery of the gold from the carbon is a batch process stripping 3 t per batch. The turnaround time between batches is 24 hrs. Carbon is cleaned with acid and reactivated with the kiln and reused in the circuit.

The loaded solution from the strip circuit is passed through the electrowinning cell in the refinery. The gold collects on the cathodes in a sludge form. The cell is washed weekly and the sludge collected in filter bags and dried. The dried sludge is mixed with reagents and melted in the induction furnace. Gold bullion bars are poured when the melt is completed.

The gravity gold material collected from the Knelson is transferred into the refinery where a shaker table is used to upgrade the gold content. The concentrate is dried, reagents are added, and the material is melted in the induction furnace. The gravity concentrate and the CIP gold sludge are melted separately due to different amounts of reagents used and also to establish a proper gravity gold recovery.

From the CIP circuit the slurry goes to the cyanide destruction plant. Cyanide level in the slurry is dropped to 2 ppm total cyanide or lower, using the SO_2 air process. The slurry then reports to the outside Bell Creek tailings facility.

Mineral processing is outlined in Figure 13.1, with recent upgrades highlighted in green.

Between September 2010 and June 2011 the test mining and sill development conducted on the Rusk Shear Zone mineralization accessed on the 300 mL and sill development on the Porphyry Zone accessed from the 730 mL between June 2010 and February 2011, was processed at Lakeshore's Bell Creek mill facility in batches to determine the metallurgical characteristics and gold recovery of the mineralization using the Bell Creek milling process (see Table 13.1). The overall reconciliation between the drill indicated block model, the chip and muck sampling program and the mill processed results was reasonable over the total reconciled tonnes. The sill development tonnes averaged slightly lower grades than the drill indicated block model, likely due to a higher level of internal dilution, and a lower cut-off grade when directing grade control calls on the eastern extension of the Rusk Shear Zone mineralization, i.e. outside the original drill indicated mineralized outline.

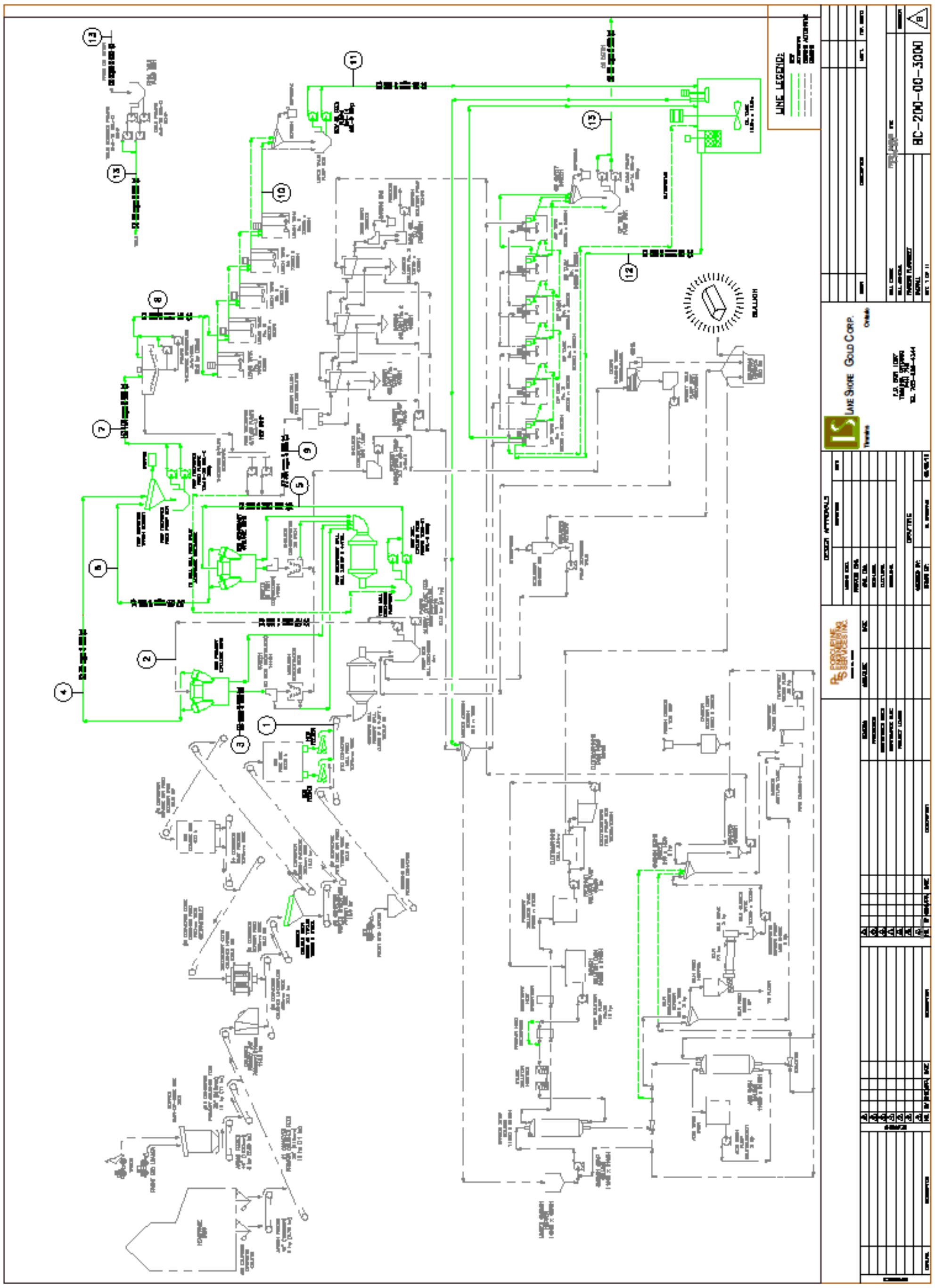
TABLE 13.1: BATCH MILLING RESULTS FOR THUNDER CREEK

Thunder Creek Batch Mill Processing Results

Year	Month	Tonnes	Grade	Recovery	Head Ounces	Ounces produced
2010	September	2824.94	5.21	96.87	473.11	458.3
2011	March	24028.8	3.75	97.32	2894.11	2816.62
2011	May	13213.3	3.75	97.03	1593.53	1546.24
2011	June	5631.9	3.984	97.21	721.43	701.31

For the remainder of 2011 (i.e. after June 2011) , the milling of Thunder Creek mineralization has been blended with mine feed from the Timmins Mine and from the Bell Creek Mine to optimize the mill processing facility, making it more challenging to reconcile back to the specific sill development and stoping tonnes. However, standard reconciliation practices at month-end using the daily muck and chip sampling procedures reconciled to the month-end metallurgical report employing an evenly distributed adjustment either positive or negatively is applied to all the contributing sources of mineralization.

FIGURE 13.1: BELL CREEK MILL MINERAL PROCESSING FLOW CHART



14.0 MINERAL RESOURCE ESTIMATES

14.1 Summary

Lake Shore Gold has prepared an Initial Mineral Resource estimate for the Thunder Creek property based on historical diamond drilling and drilling completed by LSG between November 2003 and October 28th 2011. Detailed, sectional fan drilling approaching a drill spacing of 30 to 50m centers along strike and down-dip was achieved using a combination of surface and underground drilling. A total of 89 surface holes (77,870m) and 351 underground holes (53,561m) were used in the Resource Estimate.

The resources are roughly centered on 9550N section and extend from 9850 to 9060 elevation (165 to 955m below surface). The Mineral Resource has been modeled into eleven sub-zones which split the broader mineralized Rusk and Porphyry Zones into higher grade zones more suitable for underground mining. The Mineral Resource estimate by category is tabulated in Table 14.1

The Thunder Creek Resource totals 2.88Mt at 5.64 g/t Au amounting to 521,600 ounces of gold in the Indicated category and 2.69Mt at 5.89g/t Au amounting to 510 ounces of gold in the Inferred category. The Resources was estimated using Inverse Distance to the power 2 (ID^2) interpolation method with all gold assays capped to 75 gram metres, and an assumed long-term gold price of US$1,200 per ounce. The base case estimate assumes a cut-off grade of 2.0gpt Au which includes a 10% internal dilution at 1.75gpt Au. This base case is equivalent to the 1.5gpt Au Cut-off, which takes into account mining of 299,000 tonnes of incremental material between the 1.5 and 2.0gpt cut-off. This internal dilution is included in the total, as it is not known if mining of the zone can be accomplished without mining this material.

TABLE 14.1: THUNDER CREEK MINERAL RESOURCE ESTIMATES
(Prepared by Lake Shore – October 2011)

Resource Classification	Tonnes	Capped Grade g/t Au	Contained Gold (ounces)
Indicated Mineral Resources			
PZ1A	1,514,000	6.06	294,900
PZ1B	958,000	5.26	162,100
PZ1C	----------	------	---------
PZ3	----------	------	---------
RZ2	32,000	4.89	5,000
RZ2A	46,000	5.02	7,400
RZ3	140,000	4.90	22,000
RZ3A	147,000	5.26	24,800
RZ3A1	---------	------	---------
RZ3B	---------	------	---------
RZ5	41,000	4.15	125,000
Total Indicated	2,877,000	5.64	521,600

Resource Classification	Tonnes	Capped Grade g/t Au	Contained Gold (ounces)
Inferred Mineral Resources			
PZ1A	875,000	7.38	207,500
PZ1B	798,000	5.40	138,700
PZ1C	634,000	4.77	97,200
PZ3	123,000	3.58	14,200
RZ2	43,000	9.30	12,900
RZ2A	---------	------	---------
RZ3	69,000	6.18	13,700
RZ3A	---------	------	---------
RZ3A1	24,000	5.44	4,200
RZ3B	57,000	5.18	9,600
RZ5	70,000	5.41	12,100
Total Inferred	2,693,000	5.89	168,800

Notes:

1. CIM definitions were followed for classification of Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.0 g/t Au.
3. Mineral Resources are estimated using an average long-term gold price of US$1,190 per ounce and a US$/C$ exchange rate of 0.93.
4. A minimum mining width of two metres was used.
5. Capped gold grades are used in estimating the Mineral Resource average grade.
6. Sums may not add due to rounding.
7. There are no Mineral Reserves estimated for the Thunder Creek Property.
8. Metallurgical recoveries are assumed to average 96.5%.
9. Mining costs are assumed to average $82.00/tonne.
10. Mr. Robert Kusins, B.Sc., P.Geo. is the Qualified Person for this resource estimate.

There are no Mineral Reserves present on the property as of the date of this Technical Report.

14.2 Estimation Method

14.2.1 Estimation Method and Parameters

The following general procedure was used in developing of the block model Mineral Resource estimate for the Thunder Creek Deposit and includes:

- Database compilation and verification in Gemcom GEMS (“GEMS”).

- Interpretation of the zones on 25m spaced sections taking into account continuity of lithology, alteration and mineralization. Limits of the zone were defined by a lower cut-off of about 2.0gpt Au to provide continuity of zones. Mineralization often extends across lithological contacts. A minimum mining width of approximately 2.0m. Closed 3D rings were constructed and assigned an appropriate rock type and stored with its section definition in the GEMS polyline workspace

- Zones are defined by 3 or more intersections that form a continuous band of mineralization.

- The sectional interpretations are then strung together by tie lines and 3-D solids or wireframes are generated that represent the mineralized zones that are used for estimation of tonnes and grade. Outside edges of the 3-D model are extruded half the distance to the next section in areas with drilling, or 50.0m in areas with no drilling. Eleven 3-D solids were constructed to enable individual volumes, tonnages and grades to be reported. All solids were validated using GEMS validation tools to insure valid solids had been generated. A 3-D view of the interpreted zones is shown in Figure 14.2.1.

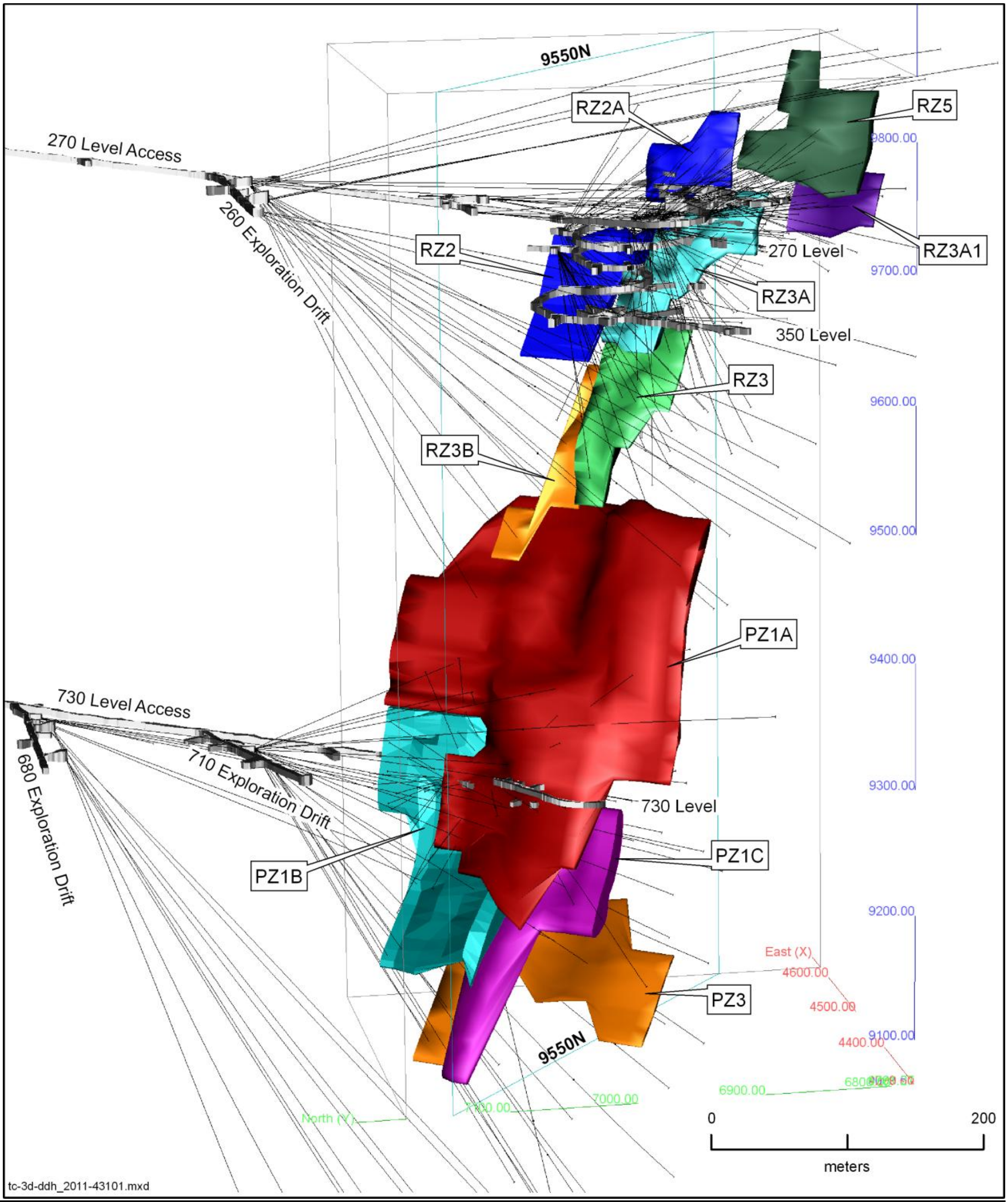
- Solid intersection composites are generated from all drill holes intersecting the 3-D Mineral Resource Solids. Corresponding entry and exit points are saved to the drill hole workspace and back coded with a zone identifier.

- Individual 1m composites are generated from the assay table based on down-the-hole averaging within the limits of the solid intersection composites. Composites whose widths are less than 0.5m are removed from the composite table. The composites are stored in a GEMS point area table along with a corresponding rock code for each composite.

- The 1m composites are then used to generate a block model grade based on an Inverse Distance Squared (“ID^2”) interpolation that encompasses the 3-D wireframes that were assigned a unique rock code (PZ1A, PZ1B, PZ1C, PZ3, RZ2, RZ2A, RZ3, RZ3A, RZ3A1, RZ3B and RZ5). Blocks were interpolated utilizing 4 passes. The first pass populated blocks within a 15m search radius requiring 3 holes within the search radius with a maximum of 2 composites from any one hole and a maximum of 10 composites. The second pass populated blocks within a 30m search radius requiring 3 holes within the search radius with a maximum of 2 composites per hole and a maximum of 10 composites. The third pass populated blocks within a 60m search radius requiring 3 holes within the search radius with a maximum of 2 composites per hole and a maximum of 10 composites. The final pass was populated within a 130m search radius requiring a minimum of 3 holes, a maximum of 2 composites per hole and a maximum of 10 composites.

- The Resources were categorized on longitudinal section by grouping of areas of predominately pass 1 and 2 as Indicated and the remaining areas of largely pass 3 and 4 as Inferred Resources. A final category field was added to the block model to track this categorization.

FIGURE 14.2.1: 3-D VIEW OF RESOURCE SOLIDS, LOOKING EAST



14.2.2 Database

The database used for the current resource estimate is comprised of a Gemcom GEMS (Microsoft SQL) database which was compiled from data received from West Timmins Mining Inc. and work completed by LSG since acquisition of the properties. The GEMS database was used for the Mineral Resource estimation process and consists of tables including header, survey, lithology, and assay data with pertinent fields summarized in Table 14.2.2.1. Other tables and additional fields within the above tables are currently being utilized by Lake Shore in logging of the drill core and final resource estimation.

The following validation steps were taken to insure the integrity of the database:

1) Plotting of plans and sections to check for location, elevation and downhole survey errors.

2) Checking for any gaps, overlaps and out of sequence intervals for assay and lithology data using the GEMS validation tools.

3) Thorough review of all historical data available to insure assay and survey (collar and down hole) information were properly presented in the database.

4) Random validation of assay and lithology data against the drill logs and assay certificates.

Only minor discrepancies were noted and corrected prior to the estimation of the resources. None of the errors detected would have a significant impact on the Mineral Resource estimate. The database, in the writer's opinion, is appropriate for reporting of the Thunder Creek Resource.

In addition to the drill hole data, other data such as cross-sectional geological interpretation strings, section and level plan definitions, 3-D geological solids, point area data of assays and composites, as well as the block model, are stored within the GEMS database.

TABLE 14.2.2.1: SUMMARY OF GEMS SQL DRILL HOLE DATABASE

Table Name	Table Description	Fields
Header	Drill hole collar location data in local grid co-ordinates	Hole-ID Location X Location Y Location Z Length Collar_Az Collar_ Dip
Survey	Down hole survey data of direction measurements at down hole distances	Hole-ID Distance Azimuth Dip
Assays	Sample interval assay data with Au units grams per tonne	Hole-ID From To Sample_NO Au_GPT_FIN Au_GPT_AA Au_GPT_GRA Au_GPT PM
Lithomaj	Major logged rock type intervals down hole	Hole-ID From To Rocktype
Lithomin	Minor logged rock type intervals down hole	Hole-ID From To Rocktype

14.2.3 Grade Capping

Lake Shore Gold has utilized grade capping in its estimation of the Mineral Resources for the Thunder Creek Deposit. To evaluate potential cutting factors, assay values were extracted from the database into a GEMS point area cloud and only those assays within the limits of the solid were used in plotting of cumulative distribution plots and log distribution plots. Individual statistical reports based on the raw gold assays were generated for each of the eleven solids and are tabulated in Table 14.2.3.1. Due to a number of zones having a limited number of samples, the zones were grouped into those displaying characteristics of Rusk style of mineralization and those that were predominately Porphyry style of mineralization, to evaluate potential grade caps.

A review of the Rusk data shows a number of zones with a coefficient of variation of less than 2.00, which would suggest that no grade capping would be required for these zones. The combined totals for the Rusk of 2.25 would suggest some modest level of capping is required. The Porphyry data shows a higher degree of variation in the coefficient of variation with a combined total of 6.90, which indicates capping of the gold grade is required.

TABLE 14.2.3.1: BASIC STATISTICS OF RAW AU ASSAYS RESOURCE SOLIDS

Zone	Total # Samples	Minimum (gpt Au)	Maximum (gpt Au)	Mean (gpt Au)	99th Percentile	Coefficient of Variation
PZ1A	1,733	0.0025	140.50	5.61	55.72	1.98
RZ2	61	0.0080	91.10	5.98	67.09	2.22
RZ2A	129	0.0025	273.00	5.80	190.00	4.55
RZ3	265	0.0025	87.20	4.31	46.10	2.16
RZ3A	1,051	0.0025	112.00	3.82	33.57	2.04
RZ3A1	32	0.0025	29.70	3.61	29.70	1.74
RZ3B	37	0.0025	35.77	5.60	35.77	1.67
RZ5	101	0.0025	38.90	3.61	31.35	1.79
Total Rusk	3,409	0.0025	273.00	4.89	49.10	2.25
PZ1B	2,882	0.0025	1,600.00	5.30	68.10	6.84
PZ1C	358	0.0025	725.00	4.88	38.30	7.93
PZ3	55	0.0350	147.50	5.53	85.00	3.58
Total Porphyry	3,295	0.0025	1,600.00	5.26	66.60	6.90
Total All Zones	6,704	0.0025	1,600.00	5.07	56.20	5.25

The zones were grouped into Rusk and Porphyry styles of mineralization and cumulative frequency plots were generated to determine discrete breaks in the population at the upper level of the assay data, to determine appropriate cutting levels for the zones. The GEMS statistical reports were as well examined to determine breaks in the populations. Gram metre values were used in the capping exercise to better represent the higher grade samples which are often taken over narrow intervals. Individual plots were created for each of the 2 mineralization styles, as well as a combined plot for gram metre gold values above a 0.1g/t Au lower cut-off and are shown in Figures 14.2.3.1 to 14.2.3.6.

Figure 14.2.3.1: CUMULATIVE FREQUENCY RUSK ZONE

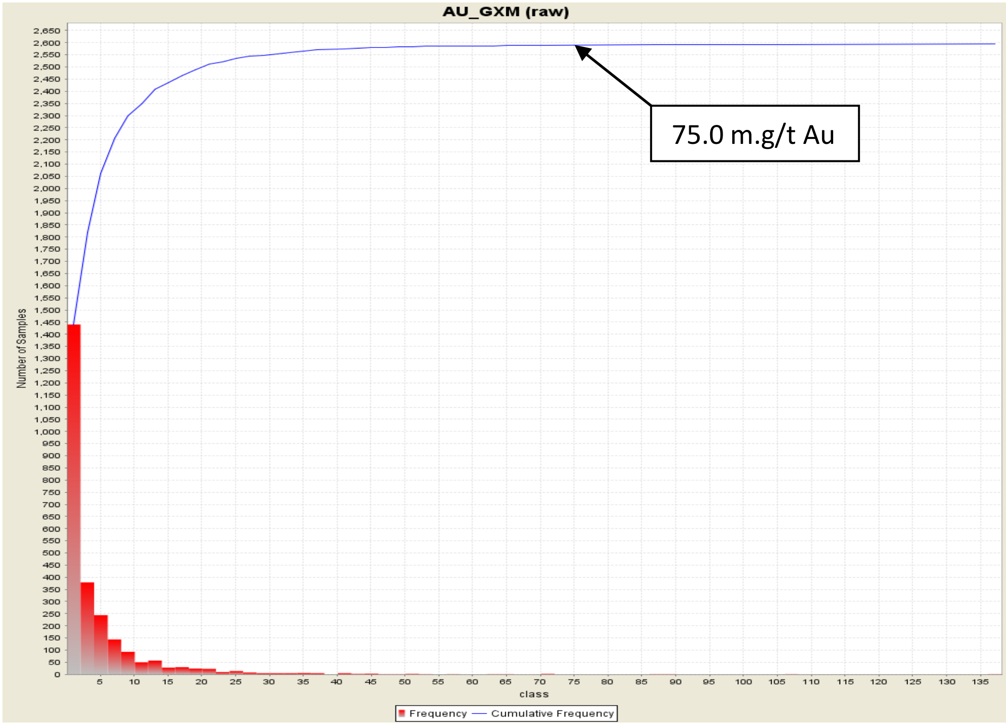


FIGURE 14.2.3.2: LOG CUMULATIVE FREQUENCY RUSK ZONE

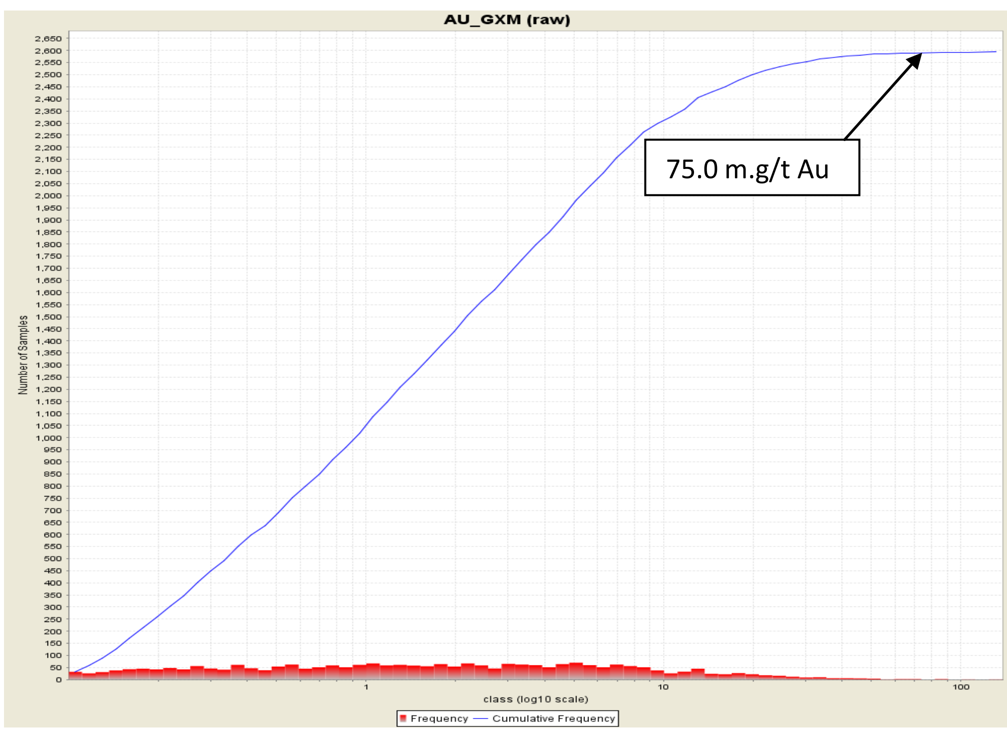


FIGURE 14.2.3.3: CUMULATIVE FREQUENCY PORPHYRY ZONE

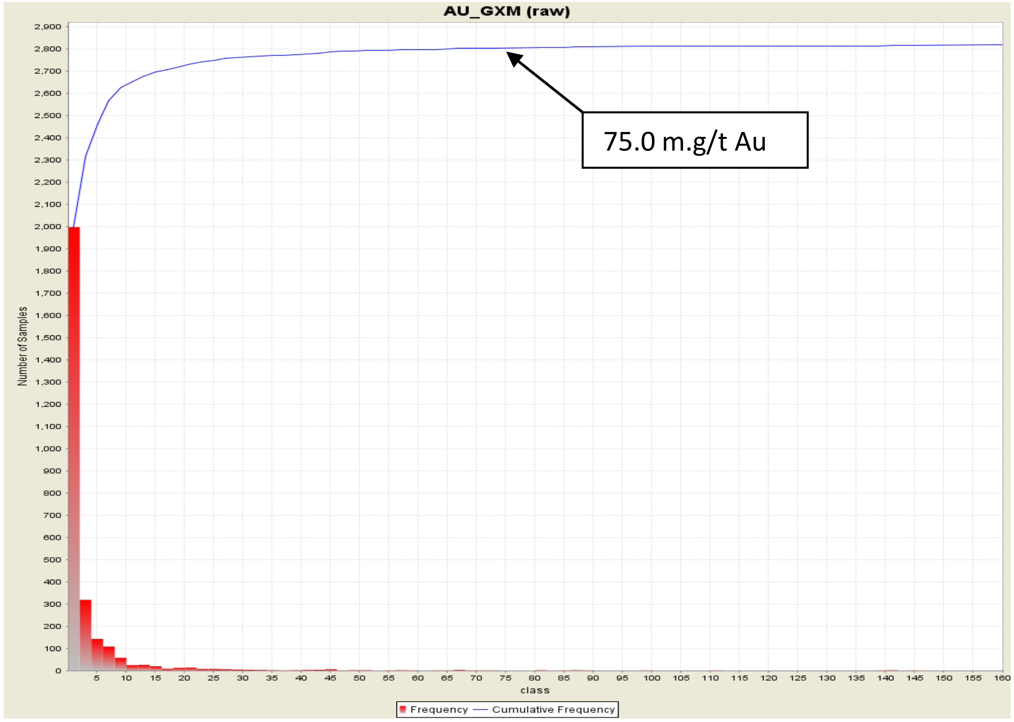


FIGURE 14.2.3.4: LOG CUMULATIVE FREQUENCY PORPHYRY ZONE

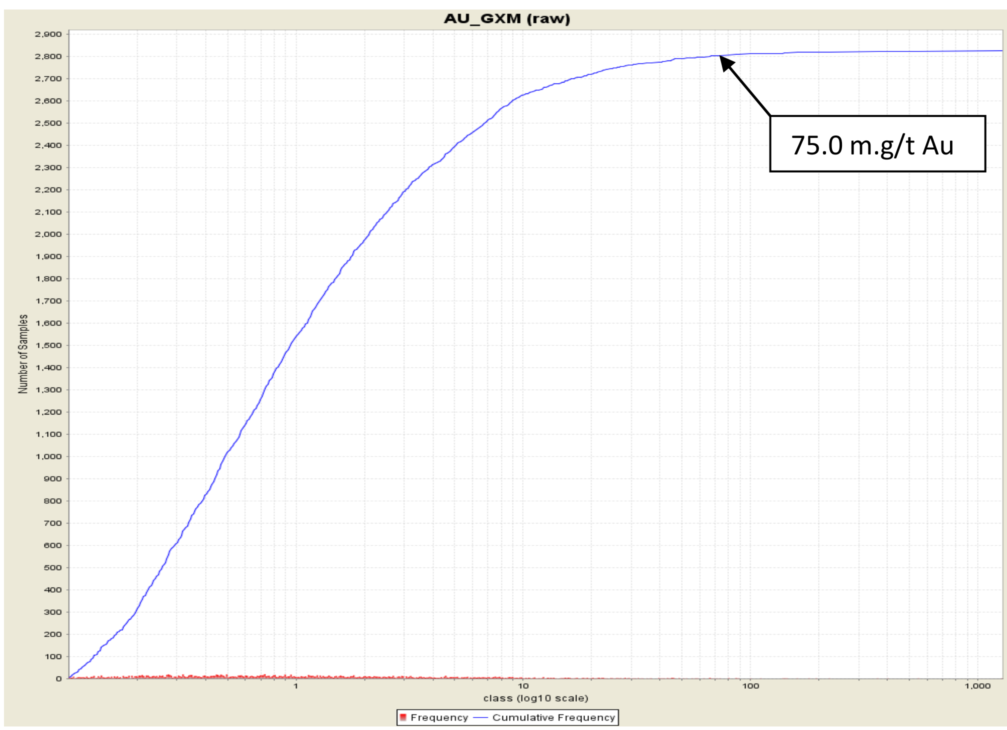


FIGURE 14.2.3.5: CUMULATIVE FREQUENCY ALL ZONES

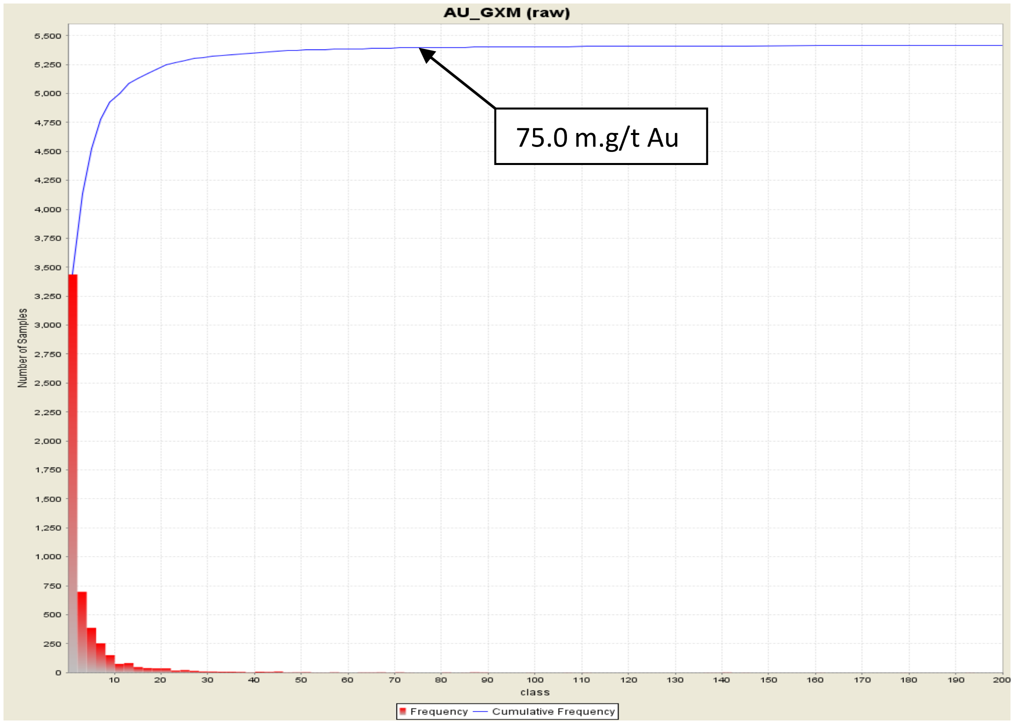
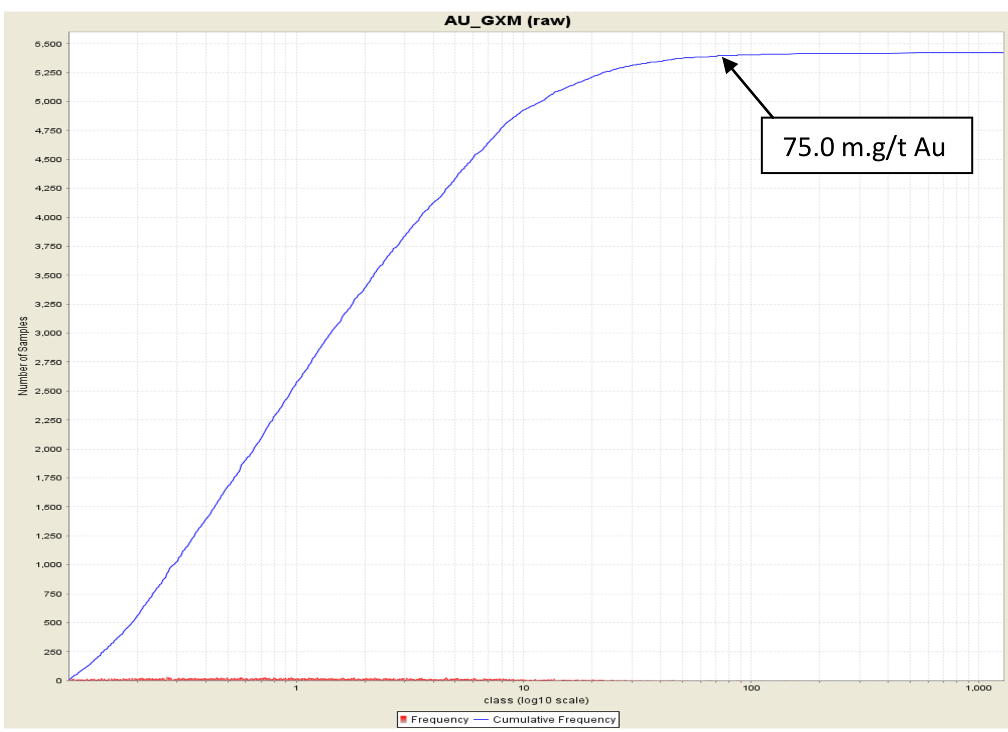


FIGURE 14.2.3.6: LOG CUMULATIVE FREQUENCY ALL ZONES



It was determined from the data that a gram metre value of 75m.g/t Au was appropriate for both the Rusk and the Porphyry Zones. This capping level results in 24 assay values being capped out of a total of 6,704 assays occurring within the limits of the resource solids. This represents 0.36% of the total population. Table 14.2.3.2 summarizes the values for each of the individual zones above the 75m.g/t Au cap.

TABLE 14.2.3.2: SAMPLES ABOVE GRADE CAP BY ZONE

Zone	Capped Grade (m. g/t Au)	# of Samples Above Cap	Total # of Samples
Rusk	75	20	3,409
Porphyry	75	4	3,295
All Zones	75	24	6,704

14.2.4 Block Model Assay Compositing

Each 3-D solid was assigned a unique numeric rock code and name which were used to back code a name and rock code into all drill hole solid intersections. A total of 335 solid intersections were used in the Resources estimate from 255 unique holes and are summarized in Appendix 5, Thunder Creek Solid Intersections. This solid intersection table was used to generate a set of equal length composites of 1m length within the limits of the 3-D solid. The 1m composites are stored in a GEMS table and extracted out into a point area cloud for interpolation purposes. Both capped and uncapped composite grades are stored in the point area file.

A total of 5,158 1m composites from 255 holes were used in the estimating of the Resource. Basic statistics of the 1m composites were compiled for the eleven solids used in the Resource estimate and are tabulated in Tables 14.2.4.1.

TABLE 14.2.4.1: SAMPLE COMPOSITE STATISTICS

	PZ1A		PZ1B		PZ1C		PZ3	
Statistic	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)
# Samples	1,183	1,183	2,362	2,362	230	230	37	37
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
Maximum	101.71	101.71	1,120.80	134.90	363.13	75.63	96.80	96.80
Mean	5.36	5.36	5.15	3.95	4.20	2.95	6.00	6.00
Median	2.34	2.34	1.11	1.11	0.86	0.86	1.55	1.55
Variance	69.98	69.98	882.16	87.76	591.04	51.53	249.82	249.82
Std Dev	8.37	8.37	29.70	9.37	24.31	7.18	15.81	15.81
CV	1.56	1.56	5.75	2.37	5.78	2.43	2.82	2.82

	RZ2		RZ2A		RZ3		RZ3A	
Statistic	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)
# Samples	51	51	103	103	204	204	840	840
Minimum	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	45.73	45.73	106.94	74.96	82.84	71.81	67.25	56.30
Mean	5.15	5.15	5.51	4.60	4.17	4.11	3.63	3.61
Median	1.74	1.74	1.21	1.21	1.36	1.36	1.02	1.02
Variance	81.68	81.68	254.90	129.52	74.88	66.74	41.43	39.62
Std Dev	9.04	9.04	15.97	11.38	8.65	8.17	6.44	6.29
CV	1.76	1.76	2.89	2.47	2.07	1.99	1.77	1.74

	RZ3A1		RZ3B		RZ5		All Zones	
Statistic	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)	Au g/t	Au g/t Cap (75m.g/t)
# Samples	29	29	32	32	87	87	5,158	5,158
Minimum	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Maximum	29.54	29.54	34.61	34.61	23.77	23.77	1,120.80	134.90
Mean	3.32	3.32	5.11	5.11	3.41	3.41	4.84	4.21
Median	1.16	1.16	1.86	1.86	0.81	0.81	1.27	1.27
Variance	33.29	33.29	64.46	64.46	29.56	29.56	465.30	74.41
Std Dev	5.77	5.77	8.03	8.03	5.44	5.44	21.57	8.63
CV	1.74	1.74	1.57	1.57	1.59	1.59	4.46	2.05

14.3 Specific Gravity

Specific gravity ("SG") was determined on 805 samples from 117 holes of Rusk and Porphyry style mineralization at the Lake Shore exploration office using the conventional approach of weighing the samples dry and immersed in water. The results were grouped into the two styles of mineralization which represent the eleven resource solids. The Porphyry zone was represented by 521 samples with an average value of 2.66. The Rusk zone was represented by 284 samples with an average value of 2.92. The eleven resource solids were grouped into Rusk or Porphyry style mineralization based on the dominant mineralization style within the solid. Table 14.3.1 summarizes the grouping that were used and the specific gravity values.

TABLE 14.3.1: SPECIFIC GRAVITY BY DOMAIN

Zone	Domain	Specific Gravity
Rusk	PZ1A	2.92
Rusk	RZ2	2.92
Rusk	RZ2A	2.92
Rusk	RZ3	2.92
Rusk	RZ3A	2.92
Rusk	RZ3A1	2.92
Rusk	RZ3B	2.92
Rusk	RZ5	2.92
Porphyry	PZ1B	2.66
Porphyry	PZ1C	2.66
Porphyry	PZ3	2.66

14.4 Variography

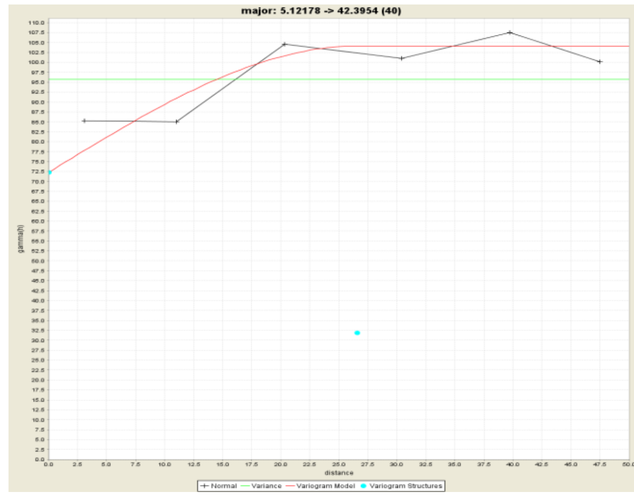
Semi-variograms were created for the Resource solids using the 1m composites with the assay intervals capped at 75m.g/t Au for the Rusk and Porphyry zones. The variograms for the Rusk and Porphyry zones are shown in Figure 14.4.1 along with a combined variogram.

In general the variography confirmed the general orientation of the models with the primary direction along the strike of the zones between 30 and 50 degrees azimuth. The models typically produced a range for the primary structure from 20 to 40m with sill values from 20 to 60 gammas and high nugget values.

FIGURE 14.4.1 VARIOGRAMS

Rusk

Porphyry



Combined

14.5 Block Model Mineral Resource Modeling

14.5.1 General

The grade of the Mineral Resources is estimated by using the ID² interpolation method. This method interpolates the grade of a block from several composites within a defined distance range from the block. The estimation uses the inverse of the distance between a composite and the block as the weighting factor to determine the grade.

14.5.2 Block Model Parameters

The Mineral Resources have been estimated using a single block model for the eleven solids which form the Resource. A summary of the block model grid parameters are shown in Table 14.5.2.1.

TABLE 14.5.2.1: BLOCK MODEL GRID PARAMETERS

Model Origin	Grid	Model Dimension		Block Dimension	
X	4250 E	Columns	210	Column width	2.0 m
Y	6730 N	Rows	275	Row width	2.0 m
Z	9960 el	Levels	490	Level height	2.0 m
		Orientation	No rotation		

14.5.3 Grade Interpolation

Blocks within the block models were interpolated by a four pass system with the first pass requiring that composites from at least three holes be used in determining the block grade. The primary search distance for this pass was set to 15m which is equivalent to the ½ the range as determined from the variography. This pass resulted in the interpolation of 38,195 blocks or 10.4% of the total. The second pass was based again on three holes required within the search distance and the distance was expanded to 30m, or equivalent to the range as determined from the variography. This pass resulted in 144,770 blocks estimated or 39.5% of the total.

The final two passes both required a minimum of three holes within the search radius of 60m and 130m to fill in the resource solids. The third pass interpolated 163,151 blocks or 44.5% of the total, while the final pass estimated 20,555 blocks or 5.6% of the total.

The variography as well as the general geometry of zones, alteration and mineralization were used to establish the search ellipse parameters. The similar nature of the variography and attitude of the mineralization between the Rusk and Porphyry style mineralization allowed a single orientation of the search ellipse to be used and is summarized in Table 14.5.3.1.

TABLE 14.5.3.1: SEARCH ELLIPSE PARAMETERS

		Search Ellipse Orientation (ZXZ)			Search Ellipse Range			Number of Samples		
Zone	**Pass**	**z**	**x**	**z**	**x**	**y**	**z**	**min**	**max**	**Max/hole**
All	1	40	-61	0	15	15	8	5	10	5
	2	40	-61	0	30	30	20	5	10	5
	3	40	-61	0	60	60	45	5	10	5
	4	40	-61	0	130	130	65	5	10	5

14.6 Block Model Validation

Plans and sections were cut through the block model and Resource solids to visually compare the block grades to the drill hole grades. The grade and distribution of the block grade is consistent with drill hole assay data and the interpolation parameters that were used. A typical section through the Resource solids is illustrated in Figure 14.6.1. Plan views of models cut at the 730 Level and the 300 Level are shown in Figures 14.6.2 and 14.6.3.

Volumes of the individual solids were compared to volumes of the individual solids from the block model to insure proper coding of the solid.

A nearest neighbor interpolation of the block model using the same parameters and search ellipse as the ID^2 interpolation was completed and compared. Results showed no significant differences between the two interpolation methods and are tabulated in Table 14.6.1.

An independent review of the resource estimate was completed by Michel Dagbert, P. Eng of SGS Geostate. A copy of the review titled "Resource Modeling and Estimation of the Thunder Creek Gold Deposit" is attached in Appendix 7.

FIGURE 14.6.1: SECTION 9550N, RESOURCE BLOCK MODEL

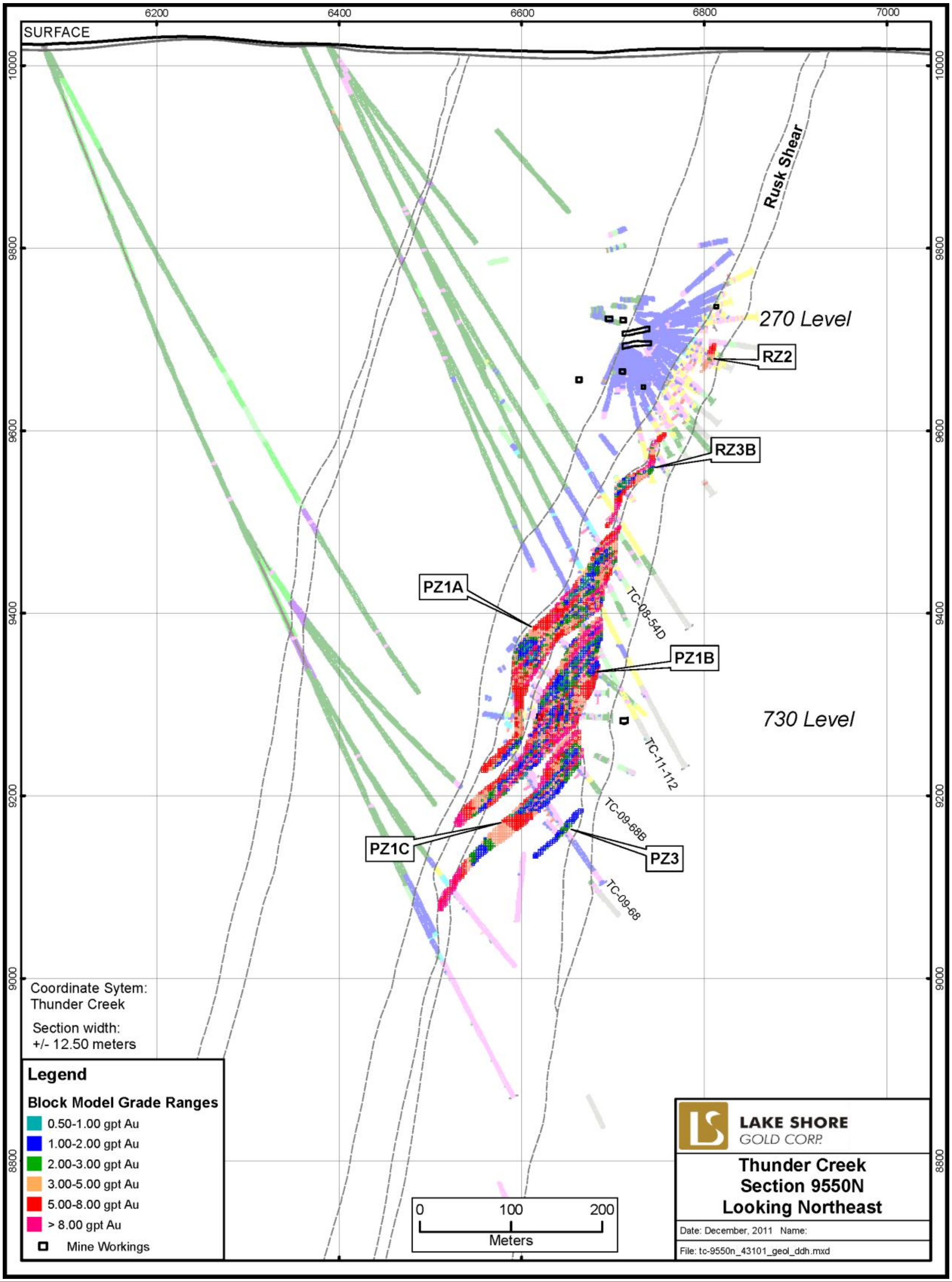


FIGURE 14.6.2: 300 LEVEL PLAN, BLOCK AND DRILL HOLE GRADES

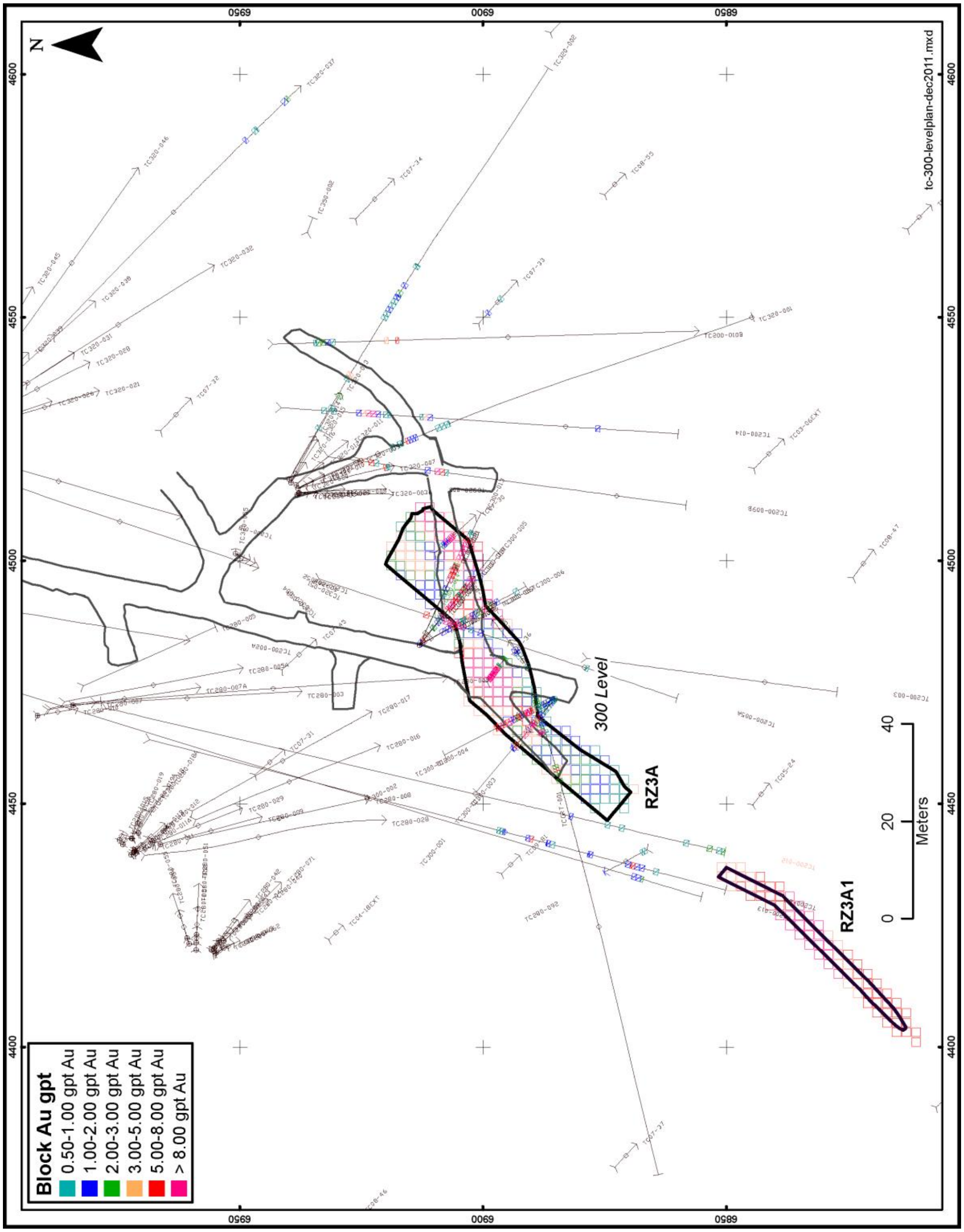


FIGURE 14.6.3: 730 LEVEL PLAN, BLOCK AND DRILL HOLE GRADES

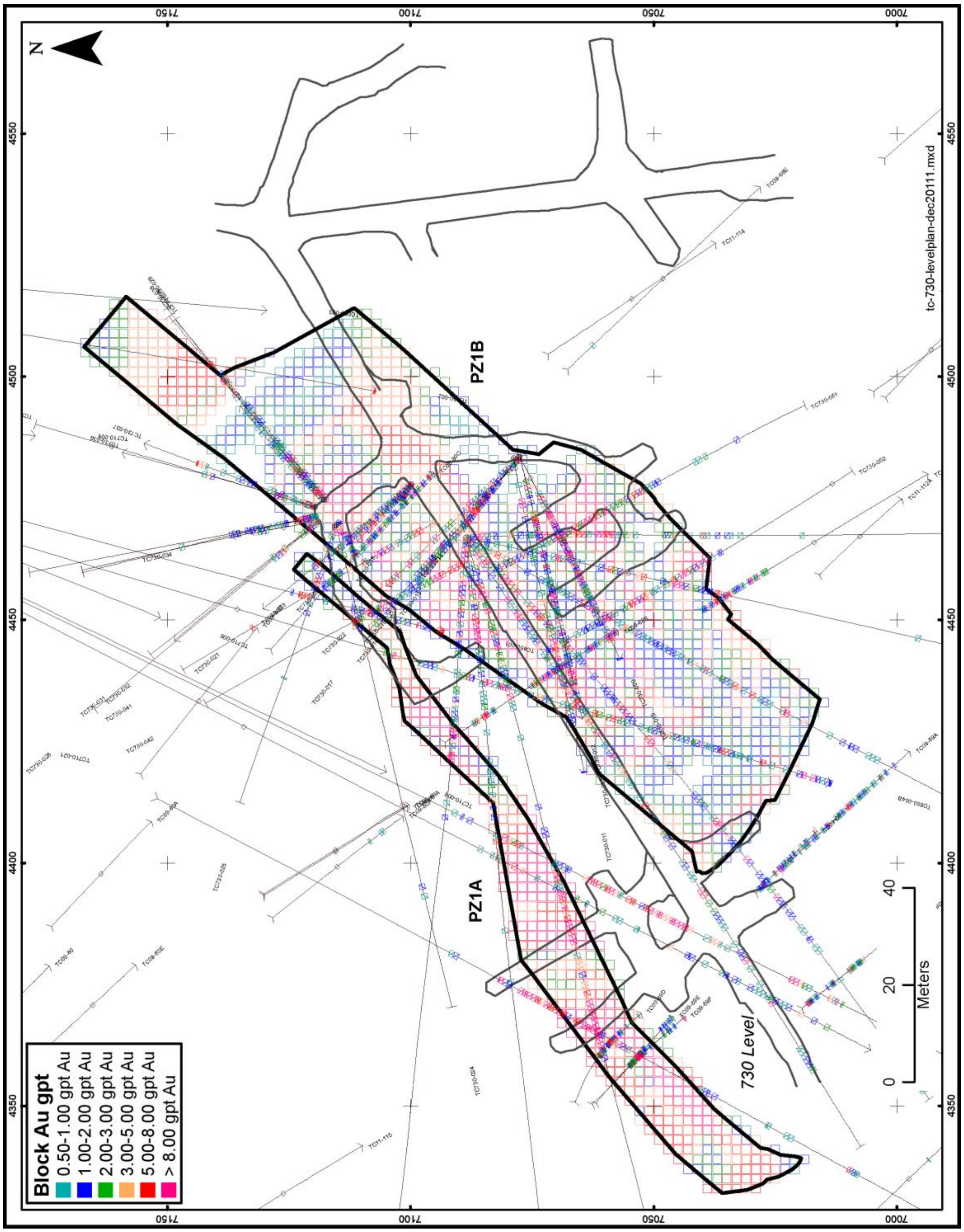


TABLE 14.6.1: COMPARISON OF ID² AND NEAREST NEIGHBOUR INTERPOLATIONS, BLOCKS ABOVE 1.5 GPT Au

Interpolation Method	Resource Category	Tonnage* (t)	Grade (g/t Au)	Ounces** (oz Au)
ID²	Indicated	2,877,000	5.64	521,600
NN	Indicated	3,032,000	5.42	528,600
	Relative difference	5%	-4%	1%

Interpolation Method	Resource Category	Tonnage* (t)	Grade (g/t Au)	Ounces** (oz Au)
ID²	Inferred	2,693,000	5.89	510,000
NN	Inferred	2,816,000	5.55	502,100
	Relative difference	5%	-6%	2%

*Rounded to nearest thousand - ** Rounded to nearest hundred

Initial development work on the Thunder Creek Property has intersected portions of the Resource Solids on six levels as part of the advanced exploration program on the property. Two of the levels are shown with the chip sample data in Figure 14.6.4 and 14.6.5. Chip sampling results from this development work was compared to the block model grades as interpolated from the diamond drilling and are summarized in Table 14.6.2. Only chip samples falling within the limits of the Resource Solids were used in the estimation of grade. Individual level comparisons show quite a large relative difference both positive and negative due to the limited amount of samples involved. The total grades show a good correlation of grades between the chips and the block grades with a relative difference of 9%.

TABLE 14.6.2: COMPARISON OF CHIP SAMPLE DEVELOPMENT GRADES AGAINST BLOCK MODEL GRADES

Level	Zone	Chip Grade (g/t)	Block Grade (g/t)	Tonnes (t)	Relative Difference
280 Level	RZ2A	3.38	4.87	2,600	-31%
	RZ3A	0.95	2.21	811	-57%
300 Level	RZ3A	4.29	6.24	3,278	-31%
315 Level	RZ3A	4.01	4.33	1,666	-7%
350 Level	RZ3A	3.05	2.35	3,864	30%
715 Level	PZ1A	12.01	7.30	4,034	64%
730 Level	PZ1A	5.43	7.15	1,824	-23%
	PZ1B	4.65	4.17	13,863	12%
Total		5.17	4.74	31,940	9%

FIGURE 14.6.4: 300 LEVEL PLAN, CHIP SAMPLE GRADES

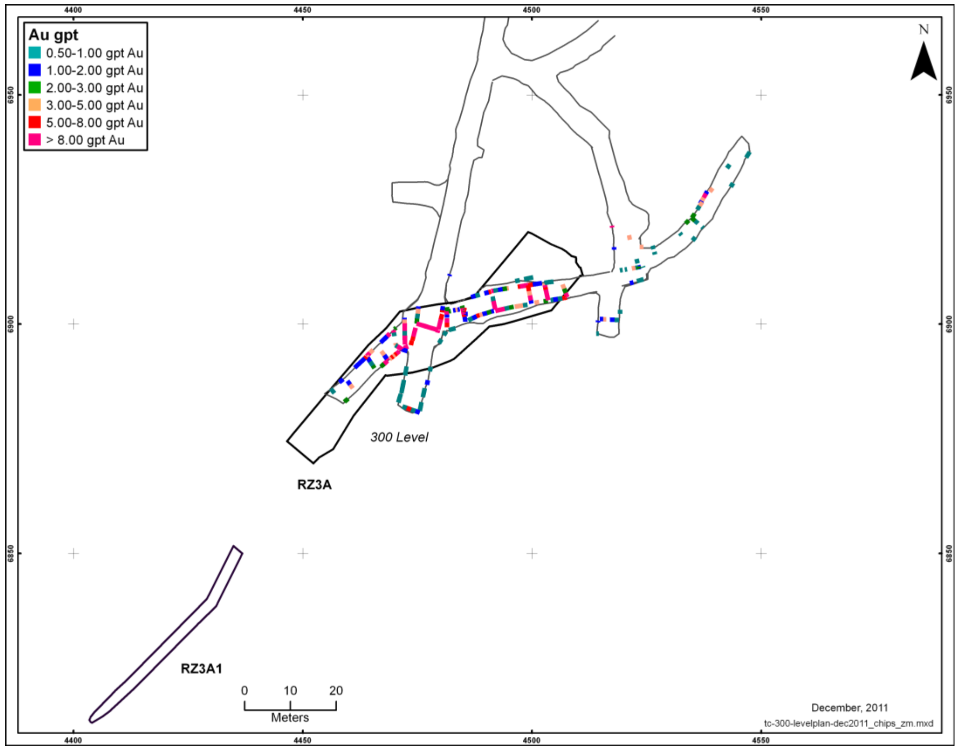
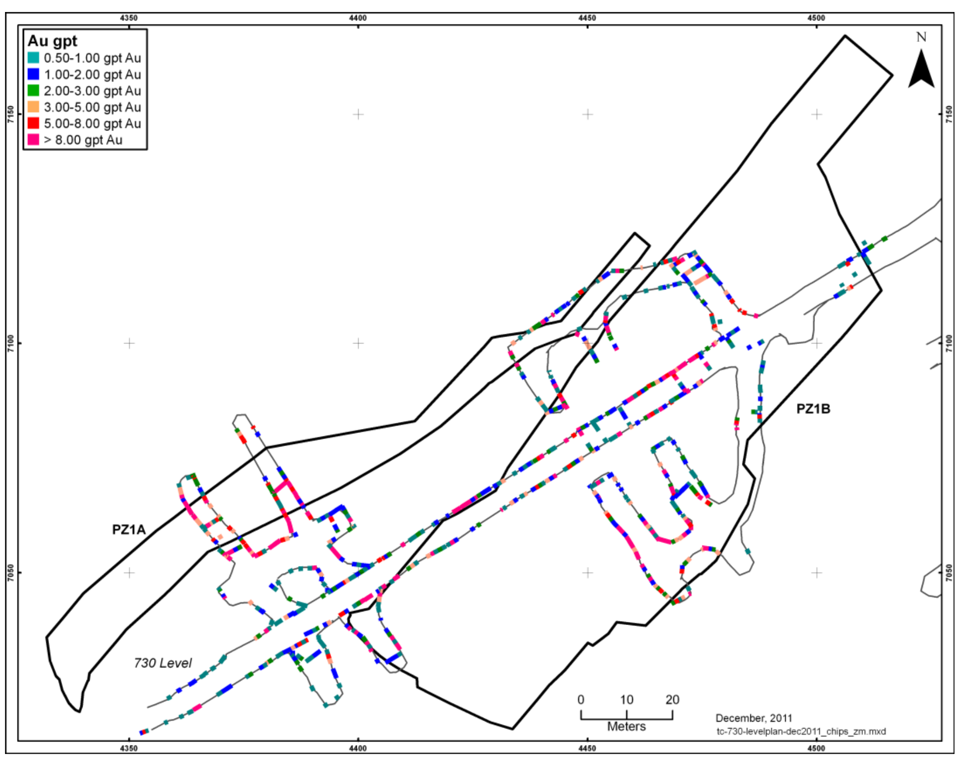


FIGURE 14.6.5: 730 LEVEL PLAN, CHIP SAMPLE GRADES



Test longhole stoping was initiated on three levels on the Thunder Creek Property. At the time of the report, mucking out of the stopes was incomplete and final reconciliation of the stopes was not possible. Table 14.6.3 summarizes the status of the stopes as of November 30th and compares the muck sample grades from the stoping blocks to the block model grade. Grades were in line with expected grades, but it is premature to draw any meaningful conclusions from the data.

TABLE 14.6.3 COMPARISON OF MUCK SAMPLE STOPE GRADES AGAINST BLOCK MODEL GRADES

Stope	Zone	Muck Grade (g/t)	Tonnes (t)	Block Grade (g/t)	Tonnes (t)	Relative Difference
280 LH*	RZ2A	3.86	5,075	4.62	14,479	-16%
315 LH*	RZ3A	4.47	8,973	6.07	8,455	-26%
730 LH*	PZ1A	6.00	28,931	6.42	39,296	-7%
Total		5.43	42,979	5.95	62,230	-8%

*Stopes have not been completely mucked out

14.7 Mineral Resources and Classification

14.7.1 General

Lake Shore has separated the resources into eleven Resource solids between 9325N and 9675N (Thunder Creek grid), a horizontal distance of 350m. Vertically, the zones have been defined from 9850m elevation (165m below surface) to 9075m elevation (940m below surface). Details of the Resources by type are summarized in the following sections and views of the block models are illustrated in Figure 14.7.2.1 and 14.7.2.2.

14.7.2 Mineral Resources

The Mineral Resources for the Thunder Creek Deposit totals 2.9 million tonnes at 5.64g/t Au amounting to 521,600 ounces of gold. Table 14.7.2.1 summarizes the Resources at the 2.0g/t Au cut-off which includes a 10% internal dilution at 1.75gpt Au. This base case is equivalent to the 1.5 g/t Au cut-off, which takes into account mining of 299,000 tonnes of incremental material between the 1.5 and 2.0g/t cut-off. This internal dilution is included in the total, as it is not known if mining of the zone can be accomplished without extracting this material. The effective date of this resource is October 28, 2011.

Inferred Resources are as well summarized in Table 14.7.2.1 and amount to 2.7 million tonnes at 5.89 g/t Au totaling 510,000 ounces of gold. The base case includes an 11% internal dilution at 1.75gpt Au. This base case is equivalent to the 1.5gpt Au Cut-off and takes into account potential mining of 295,000 tonnes of incremental material between the 1.5 and 2.0gpt cut-off. This internal dilution is included in the total, as it is not known if mining of the zone can be accomplished without extracting this material.

The totals have not been adjusted for development and test stoping that has been carried out to date, which would amount to 31,940 tonnes of development at 5.14g/t Au as summarized in Table 14.10 and 42,979 tonnes of test stoping at 5.43g/t Au as summarized in Table 14.11.

FIGURE 14.7.2.1: 3-D VIEW OF RESOURCES ABOVE 500 LEVEL

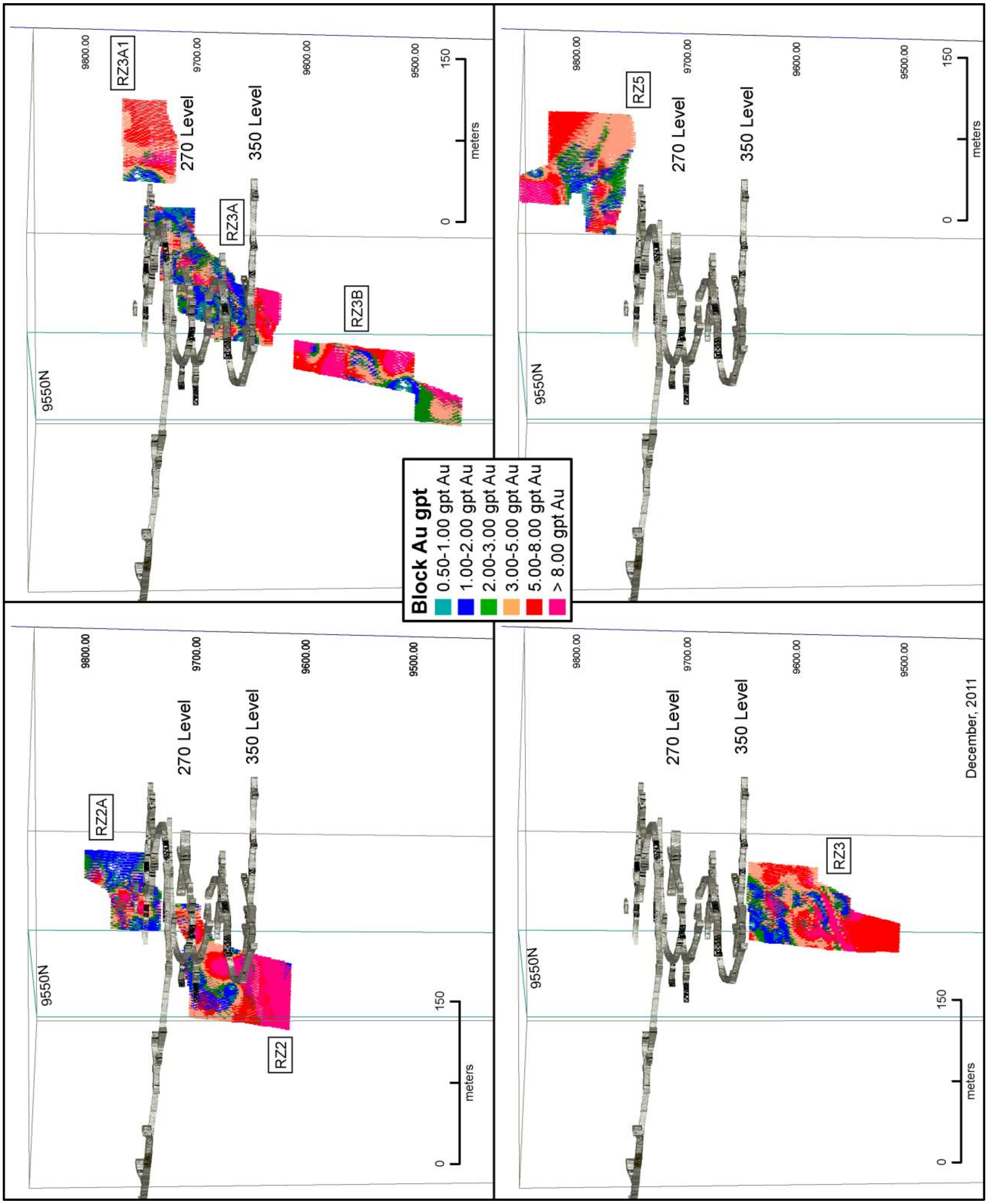


FIGURE 14.7.2.2: 3-D VIEW OF RESOURCES BELOW 500 LEVEL

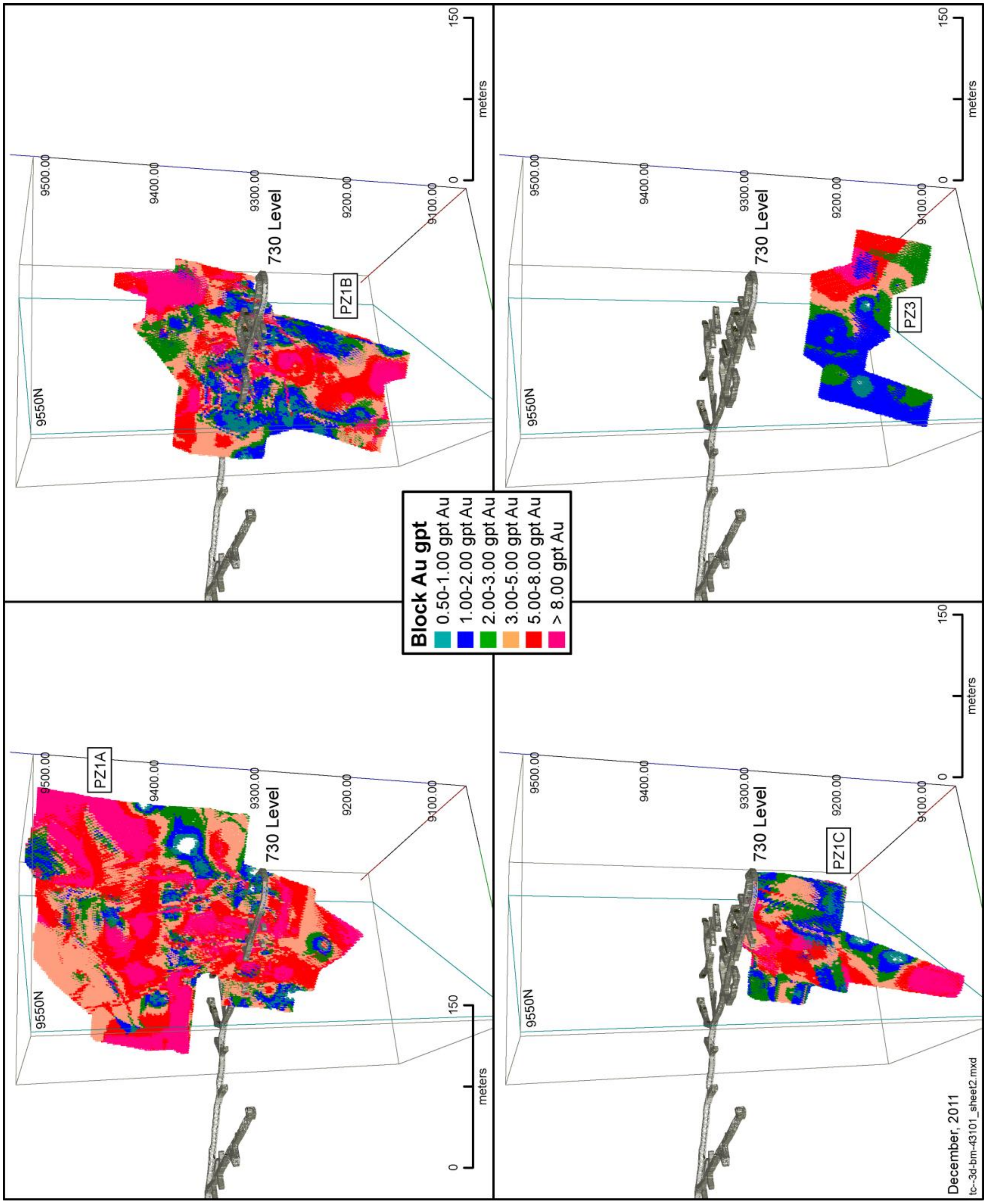


TABLE 14.7.2.1: THUNDER CREEK RESOURCES

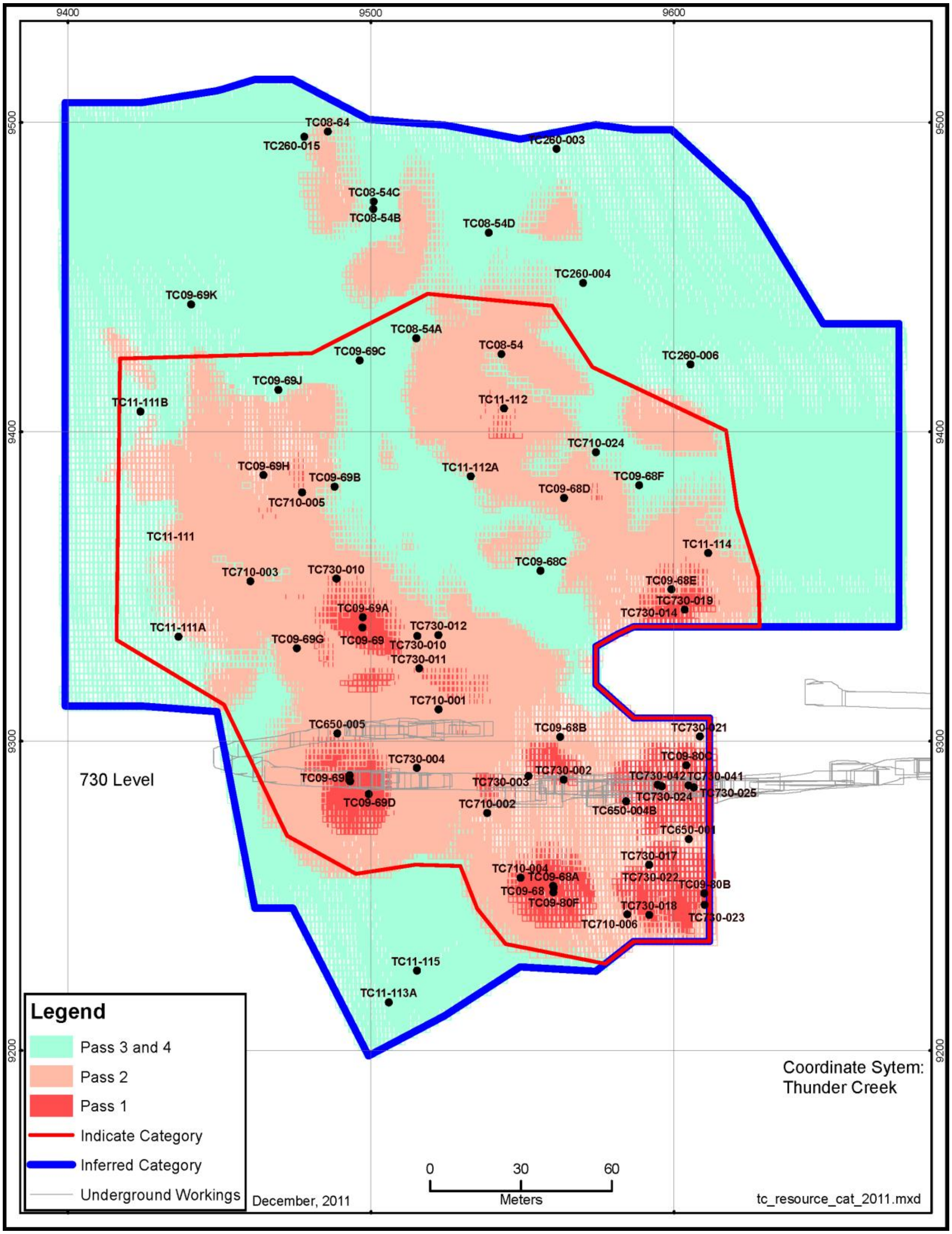
Category	Tonnes	Capped Grade (g/t Au)	Capped Ounces Au
Measured	-	-	-
Indicated	2,877,000	5.64	521,600
Measured and Indicated	**2,877,000**	**5.64**	**521,600**
Inferred	2,693,000	5.89	510,000

Notes

1. CIM definitions were followed for classification of Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.0/t Au.
3. Mineral Resources are estimated using an average long-term gold price of US$1,190 per ounce and a US$/C$ exchange rate of 0.93.
4. A minimum mining width of two metres was used.
5. Capped gold grades are used in estimating the Mineral Resource average grade.
6. Sums may not add due to rounding.
7. There are no Mineral Reserves estimated for the Thunder Creek Property.
8. Metallurgical recoveries are assumed to average 96.5%.
9. Mining costs are assumed to average $82.00/tonne.
10. Mr. Robert Kusins, B.Sc., P.Geo., is the Qualified Person for this resource estimate.

Indicated Resources were those blocks that formed a continuous zone on longitudinal section within the limits of the Resource solids PZ1A, PZ1B, RZ2, RZ2a, RZ3, RZ3A and RZ5 above the 1.5 g/t Au cut-off. The bulk of these Indicated Resource blocks would have been interpolated by the first two passes of the interpolation. Longitudinal views of the individual zones were generated and areas of Indicated Resources were clipped out of the Resource Solid to facilitate re-coding of the resource category as illustrated in Figure 14.7.2.3. Solids RZ2A and RZ3A which were dominantly interpolated with the first two passes were coded as Indicated Resources.

FIGURE 14.7.2.3: RESOURCE CLASSIFICATION, LONGITUDINAL VIEW OF INTERPOLATION PASSES FOR PZ1A



The Inferred Resources were defined largely by pass 3 and pass 4 of the interpolation or by isolated portions of the first two passes. Zones PZ1C, PZ3, RZ3A1 and RZ3B which were largely interpolated by the last two passes were classified as Inferred Resources. The extremities of zones PZ1A, PZ1B, RZ2, RZ3 and RZ5 were as well classified as Inferred Resources.

Uncut gold values were carried for the Resource to determine the effect of the capped grade and are tabulated in Table 14.7.2.2. The uncut gold grade for the Indicated Resource at the 1.5g/t Au lower cut-off is 6.20g/t Au amounting to 573,500 ounces. The grade capping for the Indicated Resource has reduced the total by 51,900 ounces or 10% of the total resource. Similarly, the uncut gold grade for the Inferred Resource at the 1.5g/t Au lower cut-off is 6.29g/t amounting to 544,700 ounces or 7% of the total resource.

TABLE 14.7.2.2: THUNDER CREEK MINERAL RESOURCE ESTIMATES

(Prepared by Lake Shore – October 2011)

Category	Zone	Tonnes (t)	Uncapped Grade (g/t Au)	Uncapped Ounces (oz)	Capped Grade (g/t Au)	Capped Ounces (oz)
Indicated	PZ1A	1,514,000	6.06	294,900	6.06	294,900
	PZ1B	958,000	6.88	212,000	5.26	162,100
	PZ1C	----------	------	----------	------	---------
	PZ3	----------	------	----------	------	---------
	RZ2	32,000	4.89	5,000	4.89	5,000
	RZ2A	46,000	6.01	8,800	5.02	7,400
	RZ3	140,000	4.96	22,200	4.90	22,000
	RZ3A	147,000	5.32	25,100	5.26	24,800
	RZ3A1	---------	------	----------	------	---------
	RZ3B	---------	------	----------	------	---------
	RZ5	41,000	4.15	5,500	4.15	125,000
	Total	2,877,000	6.20	573,500	5.64	521,600

Category	Zone	Tonnes (t)	Uncapped Grade (g/t Au)	Uncapped Ounces (oz)	Capped Grade (g/t Au)	Capped Ounces (oz)
Inferred	PZ1A	875,000	7.38	207,500	7.38	207,500
	PZ1B	798,000	6.02	154,700	5.40	138,700
	PZ1C	634,000	5.69	115,900	4.77	97,200
	PZ3	123,000	3.58	14,200	3.58	14,200
	RZ2	43,000	9.30	12,900	9.30	12,900
	RZ2A	---------	------	---------	------	---------
	RZ3	69,000	6.20	13,700	6.18	13,700
	RZ3A	---------	------	---------	------	---------
	RZ3A1	24,000	5.44	4,200	5.44	4,200
	RZ3B	57,000	5.18	9,600	5.18	9,600
	RZ5	70,000	5.41	12,100	5.41	12,100
	Total Inferred	2,693,000	6.29	544,700	5.89	510,000

Notes

1. CIM definitions were followed for classification of Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.0 g/t Au.
3. Mineral Resources are estimated using an average long-term gold price of US$1,190 per ounce and a US$/C$ exchange rate of 0.93.
4. A minimum mining width of two metres was used.
5. Capped gold grades are used in estimating the Mineral Resource average grade.
6. Sums may not add due to rounding.
7. There are no Mineral Reserves estimated for the Thunder Creek Property.
8. Metallurgical recoveries are assumed to average 96.5%.
9. Mining costs are assumed to average $82.00/tonne.
10. Mr. Robert Kusins, B.Sc., P.Geo., is the Qualified Person for this resource estimate.

Sensitivities by lower cut-off were run at 0.50g/t Au increments from 0.00g/t Au to 3.00g/t Au and are summarized in Table 14.7.2.3 for the Indicated and Inferred Resources. The higher cut-off grades result in only a slight decrease in total ounces. At the higher cut-offs, the zones become patchier and less continuous and it has not been demonstrated that these higher grades would be achievable in a more selected mining approach. The base case of 1.5 gpt attempts to introduce some level of selectivity to the mining of the resource, but yet maintain continuity of the zone. At lower cut-offs, the zones become more continuous, but it becomes apparent that there would be opportunities to not mine portions of the resource.

TABLE 14.7.2.3: THUNDER CREEK RESOURCE SENSITIVITIES

	Indicated Mineral Resources			Inferred Mineral Resources		
Cut-off Grade (gpt Au)	Tonnes* (t)	Grade (g/t Au)	Ounces** Au	Tonnes* (t)	Grade (g/t Au)	Ounces** Au
0.00	3,576,000	4.71	541,900	3,134,000	5.20	524,300
0.50	3,451,000	4.87	540,800	3,093,000	5.27	523,800
1.00	3,196,000	5.20	534,400	2,934,000	5.51	519,900
1.50	**2,877,000**	**5.64**	**521,600**	**2,693,000**	**5.89**	**510,000**
2.00	2,578,000	6.09	504,800	2,398,000	6.40	493,400
2.50	2,297,000	6.56	484,600	2,150,000	6.88	475,600
3.00	2,053,000	7.02	463,000	1,929,000	7.35	456,000

*****Rounded to nearest thousand - ** Rounded to nearest hundred

14.8 Additional Drill Hole Information Evaluation

Subsequent to the closing of the database on October 28, 2011, additional assays were received for eleven additional holes. Five of these holes were from the lower portion of the Resource below the 500m Level. Three of these holes did not intersect any of the Resource solids, with the remaining two intersecting PZ1A, PZ1B and PZ1C. These holes would have minimal impact on the Resource in this area.

An additional 6 holes were completed in the upper portion of the Resource above the 500m Level. Two of these holes did not intersect the Resource solids in this area. The remaining four holes intersected the

RZ3 and RZ3A models with comparable results to the adjacent drilling. These holes would have no material impact on the Resource in this area.

14.9 Recommendations

The following items are recommended for further study and evaluation:

1) Evaluate the replacing of the ID^2 interpolation method by ordinary kriging

2) Continue monitoring of specific gravity and grade capping, as addition drill hole information is added to the database, to insure appropriate values are being used.

3) Continue stope reconciliations to monitor the grade predictability of the block model.

4) Additional drilling, particularly in areas of the Inferred Resources, to better delineate the extent of the Resource and increase it's confidence level.

5) Reduce the amount of off azimuth and oblique drilling which become problematic in modeling and grade estimation.

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable to the current report.

16.0 MINING METHODS

The preferred plan for mining Thunder Creek is a bulk, blast hole extraction. The planned stopes are 15m wide, 30m high and average 50m long – hangingwall to footwall ("HW to FW"). Each level (30m vertical) typically has a foot wall scram or access driven along strike, with 15m spaced cross-cuts developed through the mineralized material. Production blast holes are drilled to the stope below, with a HW to FW blast retreat. After blasting, the muck will be removed longitudinally with an 8 or 10 yard scoop tram. The mineralized material will be loaded into trucks, and transferred to the shaft and skipped to surface. The expected mining rates for Thunder Creek are expected to be 2000 tonnes per day, once the appropriate infrastructure and capitol developments are in place.

17.0 RECOVERY METHODS

This section is not applicable to the current report.

18.0 PROJECT INFRASTRUCTURE

The underground exploration program of the Thunder Creek project is directly tied into the infrastructure of the Timmins Mine. Thunder Creek is accessed by two 800 m long drifts at the 200 and 650 level striking south of the Timmins Mine shaft. Power is brought down the shaft and split at the 200 and 650 stations. Ventilation for all of Thunder Creek is pushed by a series of raises from surface. The air is forced to the 300 level, and picked up by a secondary fan and pushed to 710 level, and ducted throughout the workings. The contaminated air is exhausted through the Timmins Mine shaft.

A series of ramp take off from the 300 level and 730 level to access the mineralized body. There is a 30 metre planned level separation. Three exploration drill drifts (280, 680, and 710 level) developed in the hangingwall along strike of the mineralized body were developed prior to the level development and mineralization sampling.

All blasted rock is hauled back the shaft ore/waste pass and skipped to surface and mineralized material is trucked to the Bell Creek mill for processing.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to the current report.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The Manager Environmental Affairs, Timmins, Mr. T. Ternes, P. Geo. informs the authors that: at the present time there are no permits specifically for Thunder Creek. The project is accessed via a ramp from the Timmins Mine and as such the project lies within the Operating Envelope of the Timmins Mine.

20.1 PERMITS

The water generated underground from Thunder Creek is pumped to the Timmins Mine and is discharged via the shaft and/or ramp. The Permit to Take Water (PTTW # 6841-82UQ75) dated February 2010 allows Lake Shore Gold Corp. to discharge 4,100m^3 per day of water to surface at a maximum rate of 2.8 m^3 per minute. Once the water is brought to surface it is treated and discharged according to the Certificate of Approval (C of A # 5028-89PJTR) approved on September 30, 2010. Lake Shore has made minor changed and are on a Notice 4, dated August 24, 2011 (WESA Pilot Plant) and are trying to get an amendment from 480 to 960 m^3 per day (Ternes, T., 2011).

Air emissions from the Timmins Mine site are governed under a Certificate of Approval (C of A # 9365-7ZTMES dated February 2010. This permit is specific to Timmins Mine and not Thunder Creek. It is related to Thunder Creek as the site infrastructure is at Timmins Mine but a portion of the “mineralized material” and water does come from the Thunder Creek project (Ternes, T., 2011)

Another Permit that is associated with the Thunder Creek project is the Timmins West Complex Closure Plan for Mine Production. This Closure Plan encompasses the waste rock and underground workings from Thunder Creek and is in the process of being updated (Ternes, T., 2011).

20.2 STUDIES

The following studies are current for the Timmins Mine Complex:

1) An Acid Rock Drainage Study (“ARD”) is anticipated to be complete in January 2012. The study included the geochemical properties of mineralized material and waste rock from Timmins Mine and Thunder Creek. The study will look at the acid base accounting (“ABA”), leachate generation and whole rock analysis. This information will support permitting for the proposed tailings facility at Timmins Mine and the expansion of the Bell Creek Tailings Facility. The information generated will be used to determine if waste rock from the Timmins West Complex is suitable as construction material and if the mineralized material and waste rock have any potential for generation of acid rock drainage. This information will be critical in the design of a tailings facility and if the effluent generated from waste rock or mineralized material will be required to be treated.

2) In order to determine if there are any archeological sites in the area of the Timmins Mine and Thunder Creek, a “Stage 1 Archeological Study” is underway. This study will be used for planning purposes and will assist the mine and exploration in their future areas of development. The draft has been completed with LSG comments submitted.

3) A series of studies in support of the Proposed Tailings Facility for the Timmins West Complex have been initiated. Some studies are presently ongoing and studies have been placed on hold pending the results of the progress on an expansion of the Bell Creek Tailings Facility. On going studied include:
   a. A terrestrial study looking at the Ecosystem of selected tailings locations.
   b. An aquatic study of a pond within the planned proposed tailings pond area
   c. A geotechnical program for the proposed tailings area

4) Lake Shore Gold Corp is in the process of completing a Storm Water Plan for the Timmins West Complex. This study is to determine how surface water will be managed on site.

5) Preparations are being made to design an Environmental Effects Monitoring for Aquatic Study to be conducted on the Tatachikapika River for 2012 (Ternes, T., 2011)

20.3 CONSULTATION

An Impact and Benefits Agreement ("IBA") with the Mattagami and Flying Post First Nations have been negotiated and signed (February 17, 2011). The IBA outlines how Lake Shore Gold Corp. and the First Nations communities will work together in the following areas: education and training of First Nation community members, employment, business and contracting opportunities, financial considerations and environmental provisions (Hagar, B.; Samson, J., 2011, personal communication).

21.0 CAPITAL AND OPERATING COSTS

As of November 2011, Exploration, Infrastructure and mine development costs have totaled over 21 million dollars. The expected operating costs for Thunder Creek are $82.00 per tonne. Assumptions made for this study include a cut off grade of 2.0gpt which includes 10% internal dilution at 1.75gpt, a long-term gold price of US$1,200 per ounce, US$/C$ exchange rate of 0.93, and recoveries at 96.5%.

22.0 ECONOMIC ANALYSIS

Lakeshore Gold had initiated a Preliminary Economic Assessment ("PEA") running in parallel with the completion of the first Mineral Resource estimate at Thunder Creek. Lakeshore had secured the services of Stantec, a mine design consulting firm to undertake an independent review of the Thunder Creek project working with the current block model and Resource estimate. The report in progress, is comprised of various engineering trade-off studies and scheduled for completion in the first quarter of 2012, to be followed shortly thereafter by a pre-Feasibility study.

23.0 ADJACENT PROPERTIES

23.1 GENERAL STATEMENT ABOUT ADJACENT PROPERTIES

The Thunder Creek property is surrounded and contiguous with other Lake Shore Gold properties. To the north is the Timmins Mine, to the west is the Highway 144 project, south and east the project shares boundaries with Lake Shore Gold Corp.'s Gold River property. In the immediate area of the Thunder Creek property there is no advanced project reporting a resource or reserve that is not optioned to or owned directly by West Timmins Mining Inc., or Lake Shore Gold Corp. Figure 23.1 illustrates active projects owned by other companies in the immediate area of The Thunder Creek property.

The Thunder Creek mineralized zones, within Bristol township are situated between 20 to 38 kilometres south west of the historical producing and past producing gold mines of the Porcupine Gold Camp. Table 23.1 states the distance from the centre of the property to a selected list of mines within the Timmins area.

TABLE 23.1: DISTANCE FROM CENTER OF THUNDER CREEK PROJECT TO SIGNIFICANT TIMMINS AREA MINING LANDMARKS

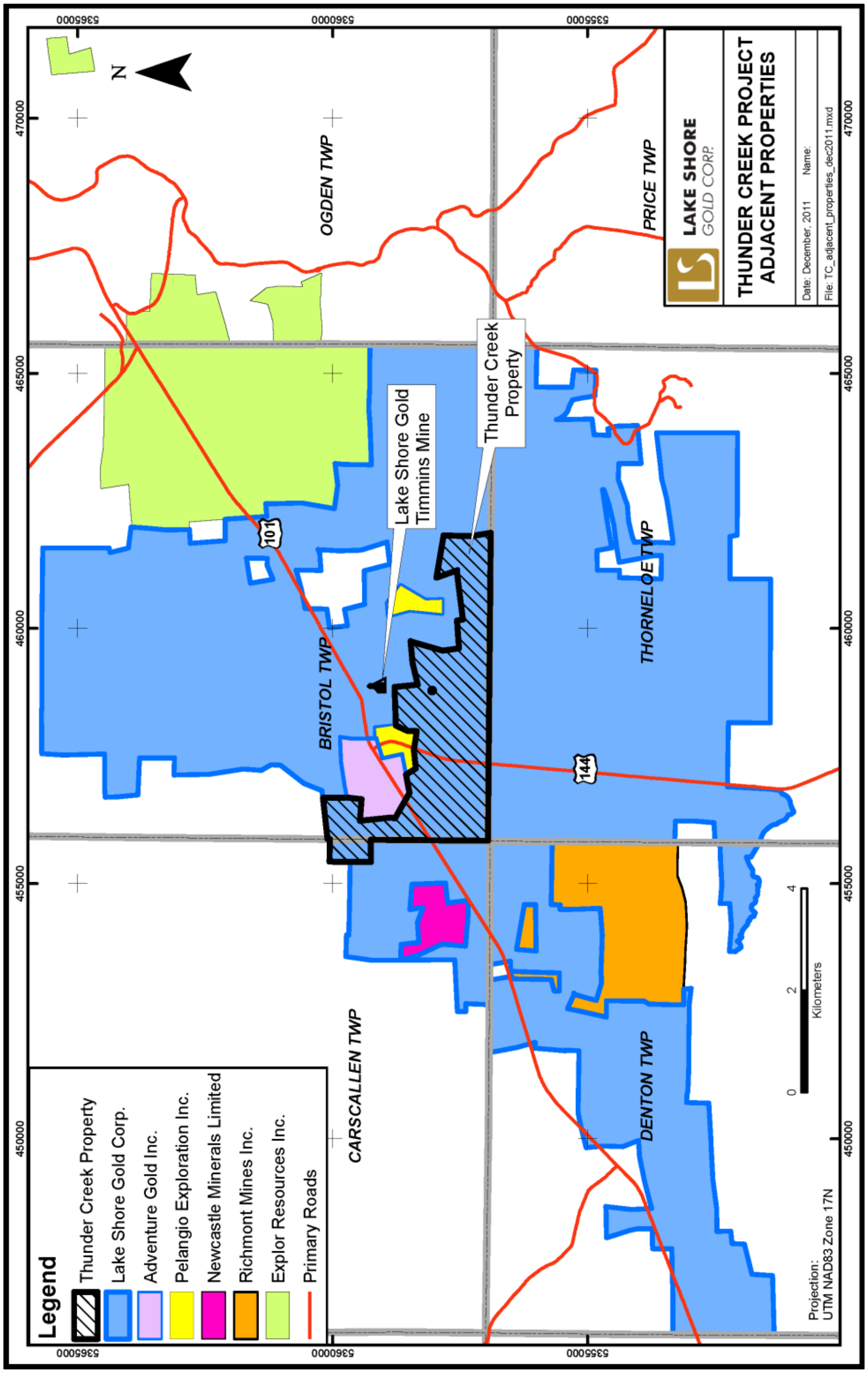
Mine	Distance (kilometres)	General Direction
Kidd Creek Mine	38	north-northeast
Hoyle Pond Mine	39	north-northeast
Dome Mine	26	northeast
McIntyre Mine	24	north northeast
Hollinger Mine	22	north-northeast
Bell Creek Mine Complex	35	north-northeast
Timmins Mine	1.5	north northeast
Gold River Project	4	south southeast

The closest and most significant property with reported and published resources is Lake Shore Gold Corp.'s Timmins Mine in Bristol township. The headframe of the mine is approximately 1 kilometres north northeast of the Rusk Zone surface exposure. SRK Consulting (Canada) Inc. (SRK) present a NI 43-101 compliant resource estimate for the Timmins Mine that includes: 3,268,000 tonnes at 8.62 grams per tonne gold, cut (905,000 contained ounces gold) or 12.29 grams per tonne gold (uncut) (1,291,000 contained ounces gold) in the indicated resource category; and an additional 968,000 tonnes with an average grade of 5.62 grams per tonne gold in the inferred resources category.

23.2 Adventure Gold Inc. – Meunier 144 Gold Property – Bristol Township

RT Minerals Corp. and Lake Shore Gold Corp. have optioned the Meunier 144 Gold Property from Adventures Gold Inc. The property consists of ten (10) freehold patent claims with an approximate area of 160 hectares. The south-east claim, P26393 straddles the junction of highways 101 and 144 with a common boundary to the west boundary of Lake Shore Gold Corp.'s Timmins Mine. The west and south-west boundaries are contiguous with the western portion of the Thunder Creek property. The claims are underlain by metamorphosed mafic volcanics of the Tisdale assemblage that are intruded by

FIGURE 23.1: LOCATION OF ADJACENT PROPERTIES



diabase dykes belonging to the Matachewan dyke swarm. The property is being drill tested for the possible deep, (2,000 metres) down dip, down plunge extension of Timmins Mine, and the Rusk horizon. The 2010 mineral deposits inventory ("MDI") lists MDI42A05NE00004 as a discretionary gold occurrence located in the central east section of claim P26392. The MDI reports the showing as "a 12 inch quartz vein reportedly returned 0.17oz/t gold from a 1946 diamond drill hole".

23.3 Pelangio Exploration Inc. – Poirier Option – Bristol Township

Two staked mineral claims with an area of 64 hectares are situated between the Meunier 144 property – Timmins Mine property and to the north of the Thunder Creek Property. The claims are underlain by mafic metavolcanic rocks belonging to the Tisdale assemblage. The MDI does not describe or locate a mineral occurrence on this property. On their website Pelangio report completing prospecting, and an MMI soil geochemical survey. They state quartz veining and sulphides where noted on the property during the surveys. The location of the quartz veins and sample results are not available.

23.4 Newcastle Minerals Limited – West Timmins Gold Project – Carscallen Township

The property consist of nine (9) freehold patent claims covering an area of approximately 118 hectares in Carscallen township. Newcastle Minerals Limited optioned the patents which have both mineral and surface rights from Timmins Forest Products Limited in 2009. In May of 2010, SGX Exploration entered into an agreement with Newcastle Minerals Limited to acquire an option to earn 75% interest in the nine patents. The east boundary of the Newcastle claims is situated three (3) kilometres west of the center of the Thunder Creek property.

The western portion of the claim group is underlain by mafic to intermediate metavolcanics belonging to the Deloro assemblage rocks. The central portion of the claims are underlain by felsic to intermediate metavolcanic rocks belonging to the Kidd-Munro Upper assemblage, and the south-eastern portion of the claim group contains Tisdale assemblage mafic metavolcanic rocks.
The MDI does not locate a mineral occurrence on this property.

Work completed by Newcastle Minerals Inc. is summarized in Table 23.2. Diamond drilling targeted an explanation for geophysical anomalies. No assays greater than 1 gram were reported in the NI 43-101 report "Technical report on the West Timmins Gold Project Carscallen Township, Porcupine Mining District, Ontario" authored by D.C. Leroux P.Geo. A.C.A. Howe International Ltd., September 26, 2011.

TABLE 23.2 SUMMARY OF WORK NEW CASTLE MINERALS LIMITED

Year	Survey Type	Comments
2010	Total field magnetic response	13.7 kilometres
	Induced Polarization and Resistivity	13.7 kilometres
	MMI soil geochemistry	72 samples, from 7 lines
	7 BQ (35mm diameter) diamond drill holes	1,516 metres
	Core samples for gold analysis	420 samples
2011-09-30	9 BQ diamond drill holes	2032 metres
	Core samples for gold analysis	817 samples

23.5 Richmont Mines Inc. – Cripple Creek Property – Denton Township

The north-east corner of the Cripple Creek property is approximately 3 kilometres south west of the centre of the Thunder Creek property. Richmont acquired the project in 2002 and explored the property until 2005. Exploration activities resumed in 2010 over the project that consists of 26 staked claims, 43 claim units (688 hectares). Ontario's Mineral Deposits Inventory indicates four (4) occurrences are located within the property. Gold was first discovered in the 1950s by R.E. Halpenny and the showing that bears his name (also known as Mahony Creek-1984, MDI42A05SE00005). The local stratigraphic, as it is currently understood, is composed of a series of intercalated mafic and ultramafic and mafic metavolcanic flow units belonging to the Tisdale assemblage. Gold bearing quartz-carbonate veins occur within alteration zones at the mafic –ultramafic metavolcanic contact as well as in strained section of the mafic metavolcanics. Since the discovery of gold on the property the following companies have tested the property by means of diamond drilling, stripping, trenching overburden sampling, geophysical and geochemical surveys: Hollinger Consolidated Gold Mines Limited, Gambit Exploration, Gowest Amalgamated Resources Limited, Noranda Exploration Company Limited, Hemlo Gold Mines Inc. and Battle Mountain Gold. Three gold bearing area have been identified: MDI42A05SE00056, the Cripple Creek Zone 16 referenced to Battle Mountain's drill collar cc96-16; MDI42A05SE00057, the Cripple Creek Zone 17 also referenced to a Battle Mountain drill collar cc96-17; MDI42A05SE00058, the Mahoney Creek Zone reference with Hemlo Gold drill collar cc93-1.

Richmont Mines Inc., report that they have completed a two phase diamond drill program for a total of 8032 metres of drilling. No resource estimate is reported for this property.

23.6 Explor Resources Inc. – Timmins Porcupine West (Ontario) Property – Bristol and Ogden Townships

Explor Resources Inc. have 121 claims (200 claim units) totaling 3,200 hectares registered to their name in the area of the Timmins Porcupine West Project located in Bristol and Ogden townships. The southwest corner of the claim group is situated approximately five (5) kilometres from the centre of the Thunder Creek Property. The 2010 provincial mineral deposits inventory locates 9 mineral occurrences adjacent to the claim line or within the property boundary. These gold mineral occurrences are: 1) MDI42A06NW00055 – Mineral Estates Ltd (Waterhen Group) – 1930 (also known as: Torburn ddh no 2 – 1931; P. Hubert Claim P8504 – 1911; Hulcano Porcupine -1946); 2) MDI42A06NW00195- Cominco DDH BR-87-1 – 1987; 3) MDI42A06NW00196 - Placer Dome DDH 246-10 -1985; (also known as: Cameco South Zone – 2002 and Cameco DDH BRS02-19-2002); 4) MDI42A06NW00197 - Cameco DDH BRS02-12 – 2002; (also known as: Cameco SW Zone – 2002); 5) Mdi42a06nw00198 - Hoyle Mining DDH No. 1 – 1945; (also known as: Cameco DDH BRS02-14 – 2002); 6) MDI42A06NW00199- Cameco Main Zone – 2002; (also known as: Bristol Project – 1998, and Placer Dome Project 246 – 1985); 7) MDI42A06NW00200 - Cameco DDH BRS02- 16 – 2002, or Cameco East Zone – 2002; 8) MDI42A06NW00208 - Hollinger DDH B.O. # 3 – 1959; and 9) MDI42A05NE00024 - Foley-Obrien Claim 15462 – 1928 or the Wright Ventures Group – 1939.

Cameco Gold Inc. geologists Babin, Samson, and Koziol (2002) describe the property geology and gold mineralization as follows: "The property geology is marked by a southwest striking package of sediments which are bounded to the north by mafic volcanics and intruded in the central part of the property by a variably altered quartz-feldspar- porphyritic intrusion. The margins of the main porphyry body consist of porphyry dyke swarms of similar composition intruding the sediments. Recent age dating suggests that the mafic volcanic rocks on the north side of the property belong to the Tisdale Group (Ayers et al, 1999). The sediments consist of moderately chloritic interbedded sandstones and +/- argillaceous mudstones, exhibiting well defined Bouma sequences away from the porphyry. Close to the main porphyry intrusion, the sediments are coarser grained with only minor mudstone horizons. The sand stone beds are more massive, crudely bedded and contain an appreciable percentage of quartz grains and granule size siliceous clasts (chilled porphyry clasts?). Some sediment horizons close or in contact with the porphyry contain up to 70% variably altered and deformed, granule to cobble size porphyry clasts similar to the main porphyry intrusion, surrounded by a sandstone matrix. These horizons probably represent brecciated contact zones of the porphyry intruding the sediments. Where porphyry dykes are not observed in contact with the conglomerate-like horizons they are alternatively be explained as debris flow horizons eroded from the main porphyry. The mafic volcanic/sediment contact is marked by graphitic argillite and interpreted to dip north based on limited drill hole information in that area of the property. Because of its generally coarse nature and its composition (rich in quartz grains and siliceous clasts), the sediment package is interpreted to be transitional between the Krist formation and the Porcupine Group sediments described in the Timmins area stratigraphy. Over the central and south parts of the property, stratigraphic facing is to the south based upon graded bedding and flame structures in the sediments. Numerous late north-northwest trending diabase dykes of variable with crosscut all units.

Structurally, the property is marked by a southwest striking series of steep north dipping faults or shears, which impart a moderate to strong foliation to all rock types except the diabase dykes. These strong shear zones are best developed in the quartz feldspar porphyries which are locally strongly altered by sericite, chlorite, carbonate, local hematite +/- K-feldspar (?) alteration and local silicification. Albite phenocrysts are less common in these areas of intense alteration. Variably coloured anhydrite occurs locally as a lat in-filling of quartz-carbonate (iron carbonate) veins which can occur as tensional and strike type veins. Black tourmaline can occur within the quartz-carbonate veins or as minute black-green needles within the matrix areas of altered sediments and porphyries.

Gold values are spatially associated with disseminated fine to coarse grained subhedral pyrite with locally forms crude bands in the strongly foliated quartz porphyry. The chloritized bands of pyrite and local chalcopyrite and /or red sphalerite may be cored by quartz-carbonate veins which have been subsequently boudinaged. Not all pyrite is associated with gold mineralization. Visible gold has been recognized occurring as free grains in chlorite and /or quartz carbonate veins or as inclusions in pyrite or chalcopyrite (but not with sphalerite).

The chlorite-calcite-silica-sulphide stringers and wisps appear to have been emplaced late in the deformation event because they are only weakly deformed compared with the host rock. In addition , the associated chlorite alteration overprints the early sericite alteration. Late quartz–carbonate-chlorite +/- hematite +/- tourmaline veinlet stockworks crosscut locally the QFP but there is no apparent correlation between the veinlets and the gold. Where the QFP is less deformed and sericitized, the feldspar phenocrysts are preferentially epidotized and the rock is generally more siliceous, highly fractured and blocky.

Several interpreted late brittle fault oriented sub-parallel to the diabase dykes and the Mattagami River Fault, probably offset the stratigraphy and the mineralization. These structures could be associated with the numerous post foliation kink bands observed in drill core (low core angle between 15-45 degrees)" (Babin, D., Samson, J., Koziol M., 2002)

Since 1911 portions of the ground hosting the MDI occurrences have been surveyed and worked by several companies, including: Hoyle Mining Company, Foley-O-Brien Limited, Wright Ventures Limited, Bristol Porcupine Mines Ltd., Hollinger Mining Ltd., Hollinger Consolidated Gold Mines Ltd., Torburn Gold Mines Ltd., R. Allerston, Canadian Nickel Company, Teck Corporation, the Placer Dome group of Companies, Cameco Gold Inc., and Tom Exploration Inc. Surveys include airborne geophysics; line cutting; ground horizontal loop EM, VLF-EM, magnetic response; Induced Polarization and real section Induced Polarization; and diamond drilling.

During the period 1984 to 2002 a total of 113 diamond drill holes and two extension bore holes were completed for an approximate total of 30,234 metres. Summarized in press releases and the MD&A statements exploration completed by Tom Exploration, between May of 2003 and the fiscal year end of April 30, 2006 includes: 361 kilometres of line-cutting, geophysical surveys (magnetic response and VLF-EM. Metres of diamond drilling reported to be completed varies between 10,000 metres (April 3, 2006) and 2,280m (December 22, 2006) On December 11, 2006 Tom Exploration Inc. transferred the property to Mr. R.D. Moran. Mr. Moran transferred the claims to Explor Resources Inc. Explor Resources Inc. report in their April 30, 2011 MD&A (August 29, 2011) completing 36 diamond drill holes and modeling five mineralized zones designated A to E.. The company also reports they have engaged MRB and Associates of Val-d'Or to complete a NI 43-101 compliant resource report by the end of the 4th quarter 2011. To date no resource calculation has been made public for this property. The exploration model presented for the exploration of this property is the Hollinger-McIntyre-Coniaurm, mesothermal, structural quartz-feldspar porphyry associated gold model.

24.0 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The Thunder Creek AEP included surface and underground delineation diamond drilling of 440 holes totaling 131,431 metres, ramp access development off the 200 and 650 mL shaft stations at Timmins Mine providing underground access for test mining and sill development along gold mineralization at the Rusk Shear Zone and Porphyry Zone discoveries; previously documented in the July 29, 2009 technical report. The advanced exploration program has culminated in the completion of the first Mineral Resource at Thunder Creek. The drilling and development has demonstrated continuity of grade, mineralization and geologic structure to support the definition of a reasonable prospect of economic extraction defined by CIMM standards for indicated and inferred resource classifications.

The Mineral Resource block model summarized in Table 25.1 delineated a concentration of approximately 650,000 ounces between the 600 and 800 mL elevations of Rusk Shear and Porphyry Zones at 3250 ounces per vertical metre for all resource categories. This vertical interval contains some of the widest mineralized Porphyry Zones over the entire vertical expression of the Thunder Creek resource with two key domains host to approximately 75% of the total contained ounces and average horizontal widths of 14.7 metres and 24.4 metres respectively (i.e. PZ-1a, PZ-1b).

A sensitivity analysis was carried out to examine the impact upon the tonnage, average grade and contained ounces by increasing the cut-off grade up to 5.0 g/t Au. The results are graphically presented in Figure 25.1. By increasing the cut-off grade, the model demonstrates opportunity to optimize target grade by carving out the fringe, lower grade mineralization while maintaining grade and geological continuity and minimal loss of ounces.

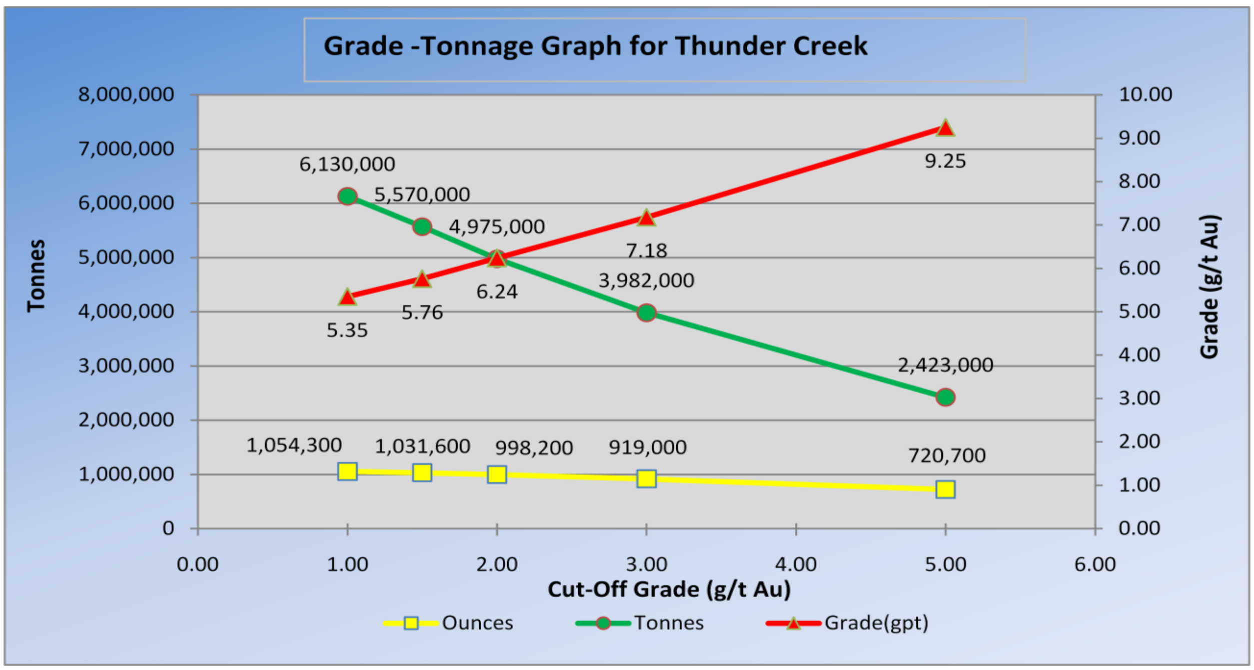
Michel Dagbert, Eng., senior geostatistician, SGS Geostat recommended a 75 gram metre capping of the Thunder Creek Rusk Shear Zone and Porphyry Zone assays.

TABLE 25.1: MINERAL RESOURCE ESTIMATE - OCTOBER 2011
Lake Shore Gold Corp. – Thunder Creek deposit

Category	Tonnes	Capped Grade (g/t Au)	Oz Au
Indicated	2,877,000	5.64	521,600
Inferred	2,693,000	5.89	510,000

Notes:
1. CIM definitions were followed for classification of Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 2.0 g/t Au.
3. Mineral Resources are estimated using an average long-term gold price of US$1,200 per ounce, and a US$/C$ exchange rate of 0.93.
4. A minimum mining width of two metres was used.
5. Capped gold grades of 75 gram-metres is used in estimating the Mineral Resource average grade.
6. Sums may not add due to rounding.
7. Bob Kusins, P.Geo., is the Qualified Person for this resource estimate.

FIGURE 25.1: GRADE-TONNAGE GRAPH AS A FUNCTION OF CUT-OFF GRADE



Between September 2010 and June 2011 the test mining and sill development muck excavated on Rusk Shear Zone mineralization accessed on the 300mL and the Porphyry Zone accessed from the 730 mL between June 2010 and February 2011, was processed at Lakeshore's Bell Creek mill facility in batches to determine the metallurgical characteristics and gold recovery of the mineralization using the Bell Creek milling process (see Table 25-2). The overall reconciliation between the drill indicated block model, the chip and muck sampling program and the mill processed results was reasonable over the total reconciled tonnes.

Table 25.2: BATCH MILLING RESULTS FOR THUNDER CREEK MINERALIZATION

		Thunder Creek Batch Mill Processing Results				
Year	Month	Tonnes	Grade	Recovery	Head Ounces	Ounces produced
2010	September	2824.94	5.21	96.87%	473.11	458.3
2011	March	24028.8	3.75	97.32%	2894.11	2816.62
2011	May	13213.3	3.75	97.03%	1593.53	1546.24
2011	June	5631.9	3.984	97.21%	721.43	701.31

An independent review by Michel Dagbert, Eng. of SGS Geostat of the QA/QC samples routinely introduced into the AEP drill hole sample stream, has concluded that the quality of the assaying incorporated into the block model is satisfactory demonstrating no significant bias and adequate precision and reproducibility.

Validation of the block model was performed visually through a comparison of drill intercepts and block model results on plans and section between the geologic model and domain block model. Preliminary sill development and test mining results of both the Rusk Shear and Porphyry Zones demonstrate reasonable correlation with the 3D shapes and grades predicted by the Thunder Creek block model.

No significant differences in grade estimation were realized between the nearest neighbor interpolation of the block model using the same parameters and search ellipse as the ID^2 interpolation.

An independent review of the resource estimate was completed by Michel Dagbert, Eng. of SGS Geostat and he is in agreement with the practices employed by Bob Kusins, P.Geo in the Mineral Resource estimate at Thunder Creek.

26.0 RECOMMENDATIONS

An internal validation of the Gemcom GEMS (Microsoft SQL) database used in the current Thunder Creek resource estimate identified only minor discrepancies that were documented and corrected prior to the estimation of the resources.

As a result, the logging geologists will be required to inspect and sign-off that their completed drill logs and assay certificates have been inspected for completeness and accuracy on a quarterly basis as part of an ongoing validation protocol.

Michel Dagbert, Eng., senior geostatistician, SGS Geostat reviewed the Thunder Creek QA/QC spreasdsheet, *Master_List_QAQC_Thunder_Creek_43-101.xls* a compilation of blanks, duplicates standards and check assays assembled for consideration of the quality of surface and underground drilling assay results included in the Mineral Resource calculation reported in this technical report.
Mr. Dagbert stated in his report that there exists no sign of an overall bias in the results for standards.
Mr. Dagbert has concluded that despite there being high variability in the gold grades at Thunder Creek, the QA/QC data reviewed indicates that the quality of the assay grades used in the resource estimation are satisfactory.

The findings of the report will be communicated to the internal and commercial labs used during the AEP and monitored monthly for compliance on performance of QA/QC samples against the target grades and accepted variance thresholds. Any significant bias in standards and/or non compliance to threshold variance in standards, duplicates and/or blanks may result in termination of services.

The first Mineral Resource at Thunder Creek has identified a significant resource, of which approximately 65% of the contained ounces are located between an elevation roughly 100 m above and below the 730 mL elevation. Although the base case at a 2.0 g/t cut-off grade provides a more global resource, the target grades generated at a higher cut-off grade are likely more inline with the economic margins preferred for mining at Thunder Creek. The density of drilling that currently exists within the resource estimate was designed to optimize a larger bulk mining approach with more simplistic mineralization outlines distributed within the monzonite intrusion. It is believed that mineralization outlines for a higher grade cut-off will dictate sectional ring drilling on tighter patterns.

A budget of $8.375M will be required to complete the recommendations listed below. This estimated budget assumes an all inclusive underground operating definition drilling budget of $95/m and exploration drilling budget of $125/m; and an all inclusive cost of $150 per metre for surface diamond drilling for drill holes bored to a 1,000 metre depth:

1. Detailed sectional drilling of the Rusk and Porphyry Zones from the 600- 800 mL elevations on 15 metre centers comprising approximately 30,000 metres, ($2.85M).
2. The upper level Rusk Shear Zone delineation testing the Rusk and emerging Porphyry Zones from the 370-500 mL elevations at 25 metre centers for a total of 10,000 m, ($0.95M).
3. Definition drilling from scram drifts parallel to the sill development in the hangingwall will include 2500 m in total over the year, ($0.237M).

4. Delineation drilling of the Rusk/Porphyry style mineralization between the 500-600 mL and the 750-850 mL at 15-30 metre centers from the 260mL and 710 mL drill drifts comprising an additional 7500 metres, ($0.713M).
5. Exploration drilling along strike off the ends of the 260 mL and the 710 mL drill platforms, with step-outs of approximately 100-200 m to the northeast and southwest comprise approximately 5000 m, ($0.625M).
6. Surface exploration diamond drilling along strike of the Rusk Shear (20,000m) over ground held by Lake Shore Gold Corp. ($3.0M)

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27.3 PRESS RELEASES

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O'Connor, W.J., Lake Shore and Band-Ore Ink Timmins, Ontario Deal.

2003-11-12;

Innes, D.G., Lake Shore Options Thunder Creek Property Adjoining The Timmins Gold Project, Ontario.

2003-12-03;

Innes, D.G., Lake Shore Gold Reports More Timmins Gold Property Results and Updates From the Thunder Creek-Bazooka-Highway Projects Ontario- Quebec.

2004-03-24;

Innes, D.G., Lake Shore Confirms Gold Mineralization on Thunder Creek Property Timmins, Ontario.

O'Connor, W.J., Gold Mineralization Confirmed on Thunder Creek Property. Band-Ore Resources Ltd.

2004-08-25;

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O'Connor, W.J., Lake Shore Gold Corp., Initiates Second Phase 3,000 Metre Drill Program Thunder Creek Gold Property, Band-Ore Resources Ltd., Timmins, Ontario.

2005-02-14;

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O'Connor, W.J., Thunder Creek Project Update, Band-Ore Resources Ltd., Timmins, Ontario.

2006-06-21;

O'Connor, W.J., Exploration Update, Thunder Creek Property, Band-Ore Resources Ltd., Timmins, Ontario.

2006-08-11;

Booth, B.R., Lake Shore Gold Quarterly Project Update.

2006-09-14;

Wagner, D.W., West Timmins Mining Inc. To Begin Trading Sept. 18, Amalgamation of Sydney And Band-Ore Receives Final Approvals.

2006-09-26;

Notice of Change in Corporate Structure, Report Date: 2006-09-26; Amalgamation became effective on September 13, 2006. (Sydney Resources Corporation and Band-Ore Resources

Limited) - new West Timmins Mining Inc.
2006-09-18;
Wagner, D.W., Canadian Gold Company Launched On Toronto Stock Exchange. – West Timmins Mining Inc. to Focus on Large Projects in West Timmins Camp and Sierra Madres of Mexico.

2006-10-30;
Wagner, D.W., West Timmins Commences 12,000 Metre Drill Program on West Timmins Gold Project.

2006-11-09;
Booth, B.R., Lake Shore Third Quarter Project Update.

2007-04-11;
Wagner, D.W., West Timmins Mining Exploration Update: 5 Drills Turning on WTM Gold Projects; 8,000 metres, 10-12 holes, Thunder Creek Property, Timmins, funded by Lake Shore Gold.

2007-05-10;
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2007-07-09;
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2007-07-11;
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2007-08-01;
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Wagner, D.W., High Grade Gold Intersected on West Timmins' Thunder Creek Property, Ontario.

2007-08-15;
Booth, B.R., Lake Shore Second Quarter Project Update.

2007-09-05;
Booth, B.R., Lake Shore Reports Additional High-Grade Gold Intersection at Thunder Creek.

2007-09-06;
Wagner, D.W., West Timmins Reports New High Grade Gold Discovery at Thunder Creek Property, Timmins, Ontario.

2007-11-13;
Booth, B.R., Lake Shore Reports Third Quarter Results.

2007-11-17;
Wagner, D.W., West Timmins to Initiate Drilling on Highway 144 Gold Property, Timmins, Ontario

2007-12-04;
Booth, B.R., Lake Shore Intersects 24.61 Grams Gold Per Tonne over 7.0 Metres at Thunder Creek Property in Ontario.

Wagner, D.W. 24.61 Grams Gold Per Tonne Intersected over 7.0 Metres On West Timmins' Thunder Creek Property, Timmins, Ontario.

2008-02-07;
Wagner, D.W., Drilling extends Pond and West Gold Zones, West Timmins Gold Project, Ontario.

2008-03-31;
Makuch, T., Lake Shore Intersects 8.57 g/t Gold over 9.0 Metres at Thunder Creek Property in Ontario.

Wagner, D.W., WTM Reports 8.57 g/t Gold over 9.0 Metres for Follow-Up Drilling at Thunder Creek.

2008-04-21;
Wagner, D.W., WTM To Test Northern Extension of Thunder Creek – Timmins West Trend.

2008-05-15;
Makuch, T., Lake Shore Gold Announces First Quarter 2008 Results.

2008-07-10;
Wagner, D.W., West Timmins Mining Inc. Annual Report 2008.

2008-07-18;
Makuch, T., Lake Shore Gold Corp Announces Timmins West Exploration Agreement with Flying Post and Mattagami First Nations.

2008-08-05;
Makuch, T., Lake Shore Gold Provides Update on Thunder Creek Exploration.

Wagner, D.W., 22,000 Metre Diamond Drill Program Commences on WTM's Thunder Creek Property In Timmins, Ontario.

2008-08-12;
Makuch, T., Lake Shore Gold on Track to Achieve 2008 Targets.

2008-08-13;

Wagner, D.W., WTM Completes $1,950,000 Non Brokered, Flow Through Private Placement, - proceeds to fund the announced 22,000 metre diamond drill program on the Thunder Creek Property.

2008-11-10;

Makuch, T., Lake Shore Gold Reports Timmins West on Schedule for Production in First Quarter 2009.

2008-12-02;

Wagner, D.W., WTM Reports New High Grade intercepts from the Golden River West Zone.

2008-12-16;

Makuch, T., Lake Shore Gold Significantly Extends Rusk Zone and Announces New High-Grade Gold Intercepts at Thunder Creek.

Wagner, D.W., WTM Reports 11.20 g/t Gold over 10.4 metres at Thunder Creek, Timmins, Ontario.

2009-01-21;

Wagner, D.W., Drilling Program Accelerated on WTM's Thunder Creek Gold Property, Timmins, Ontario.

2009-02-18;

Wagner, D.W., WTM Discovers Large New Gold System on HWY 144, Property, Timmins, Ontario.

2009-02-23;

Makuch, T., Lake Shore Gold Provides Corporate Update.

2009-03-31;

Makuch, T., Lake Shore Gold Announces 19.55 g/t over 6.0 Metres And Discovery of Second Mineralized Horizon in Porphyry at Thunder Creek.

Wagner, D.W., WTM Reports 8.86 g/t (0.26 oz/t) Gold over 24.85 Metres (81.58 feet) from Rusk Zone – Is History Being Repeated in Timmins, Ontario?

2009-04-16;

Wagner, D.W., WTM Reports High-Grade Results from 100% Owned Thorne Property: District Scale Potential of the West Timmins Gold Project Continues to Expand.

2009-05-05;

Makuch, T., Lake Shore Gold Continues To Advance Projects on Schedule and Budget and To Achieve Exploration Success In First Quarter of 2009.

2009-05-05;

Makuch, T., Lake Shore Gold Reports Additional High-Grade Intercepts at Thunder Creek, Confirms 175 Metre minimum Strike Length for Rusk and Porphyry Zones and Identifies New Sub-Zone at Depth.

Wagner, D.W., WTM Reports 7.95 g/t (0.23 oz/t) Gold over 19.45 Metres (63.80 feet) As Thunder Creek Gold System Continues to Expand.

2009-06-08;

Wagner, D.W., Third and Fourth Drill Added on TWM's Thunder Creek Property, Timmins, Ontario.

2009-06-24;

Makuch, T., Lake Shore Gold Reports 12.75 Grams Per Tonne Over 83.40 Metres at Thunder Creek.

Wagner, D.W., WTM Intersects 83.40 Metres (273.55 feet) Grading 12.75 g/t (0.37 oz/ton) Gold on Thunder Creek Property, Timmins, Ontario.

2009-07-13;

Wagner, D.W., West Timmins Mining Inc. Annual Report 2009.

2009-08-24;

Wagner, D.W., West Timmins Gold Project Update.

2009-08-25;

Wagner, D.W., WTM Acquires 10 Additional Properties in The West Timmins Gold District.

Wagner, D.W., Thunder Creek Drilling Intersects 12.17 g/t Gold over 9.00 Metres, Extends Porphyry System to 1,125 Vertical Metres Depth.

2009-08-27;

Makuch, T., Lake Shore Gold and West Timmins Agree to Business Combination.

2009-10-07;

Makuch, T., Lake Shore Gold Releases Updated National Instrument 43-101 Report for Timmns Mine.

2009-10-29;

Makuch, T., Lake Shore Gold Reports Results of Underground Drilling and Development at Timmins Mine, Results Confirm Previous Drilling and Expand Resource Potential.

2009-11-04;

Makuch, T., West Timmins Mining Shareholders Approve Business Combination Agreement With Lake Shore Gold.

2009-11-06;
Makuch, T., Lake Shore Gold and West Timmins Mining Complete Business Combination.

2009-11-11;
Makuch, T., Lake Shore Gold Continues to Achieve Development and Exploration Success and to Grow Property Position, Plans to Commence Accelerated Thunder Creek Advanced Exploration Program.

2010-01-26;
Makuch, T., Lake Shore Gold Extends Thunder Creek to Depth, Confirms High-Grade Core And Discovers New Zone.

2010-02-12;
Makuch, T., Lake Shore Gold Commences Drill Program on Gold River Trend, The Company's Third Major Timmins West Target.

2010-02-17;
Makuch, T., Lake Shore Gold Reports Results of Underground Exploration at Timmins Mine 650-Level Test Block.

2010-02-18;
Makuch, T., Lake Shore Gold Announces Major Extension to Timmins Mine Mineralization, Thunder Creek Rusk Horizon.

2010-03-10;
Makuch, T., Lake Shore Gold Announces 2009 Year End Results, Continued Exploration and Development Success, Timmins Mine to Achieve Commercial Production in 2010.

2010-04-12;
Makuch, T., Annual Report 2009.

2010-05-04;
Makuch, T., Lake Shore Gold Advances Third Major Target in Timmins West Complex, Confirms Presence of Large Gold-Bearing System Along Gold River Trend Extending to Depth.

2010-05-05;
Makuch, T., Lake Shore Gold Announces Continued Progress at Three Timmins Mining Projects During First Quarter 2010.

2010-06-23;
Makuch, T., Lake Shore Gold Intersects High-Grade Mineralization at Thorne Property, Expands Resource Potential Near Surface and at Depth.

2010-06-29;
Makuch, T., Lake Shore Gold Ramp Reaches Thunder Creek Deposit, Intersects High-Grade Gold Mineralization.

2010-08-10;
Makuch, T., Lake Shore Gold Announces Continued Progress During Second Quarter 2010.

2010-08-10;
Makuch, T., Lake Shore Gold Reports Wide, High-Grade Intercepts at Timmins Mine Including 13.55 GPT over 50.80 Metres and 61.35 GPT over 15.00 Metres.

2010-08-30;
Makuch, T., Lake Shore Gold Expands Thunder Creek Rusk Zone, Announces Additional Wide, High-Grade Intercepts.

2010-11-01;
Makuch, T., Lake Shore Gold Continues to Confirm and Expand Thunder Creek Rusk Horizon, Initial Drilling on 650 Level Intersects Rusk Zone and 100 Metres of Porphyry.

2010-11-10;
Makuch, T., Lake Shore Gold Achieves Key Production, Development and Exploration Milestones Following Successful Third Quarter.

2010-11-11;
Makuch, T., Lake Shore Gold Announces New High-Grade Intercepts, Major Extension of Main Zone and Expansion of Resource Blocks at Timmins Mine.

2010-11-24;
Makuch, T., Lake Shore Gold Confirms and Expands Large Gold System In Thunder Creek Porphyry, Intersects 99.60 Metres Grading 4.91 GPT Including 6.92 GPT over 61.4 Metres.

2010-12-01;
Makuch, T., Lake Shore Gold Achieves 12,000 Ounces of Gold in November, Files Closure Plan For Commercial Production.

2011-01-06;
Makuch, T., Lake Shore Gold Declares Commercial Production At Timmins Mine, 12,300 Ounces of Gold Produced in December of 2010.

2011-01-25;
Makuch, T., Lake Shore Gold To Nearly Triple Gold Production in 2011, Significantly Grow Resources and Increase Exploration Spending.

2011-01-25;
Makuch, T., Lake Shore Gold Confirms Broad Mineralized Envelope With High-Grade Sections Around 730 Level at Thunder Creek.

2011-02-24;
Makuch, T., Lake Shore Gold Intersects Wide, High-Grade Mineralization At Timmins Mine, Confirms and Expands Ultramafic and Main Zones.

2011-03-04;
Makuch, T., Lake Shore Gold Reports Wide Intersections With High-Grade Sections Within Porphyry Zone at Thunder Creek, Underground and Surface Drilling Highlight Potential to Expand Mineralized System.
2011-03-09;
Makuch, T., Lake Shore Gold Achieves Major Milestones in n2010, On Track to Nearly Triple Production and Significantly Grow Resources in 2011.

2011-05-15;
Makuch, T., Annual Report 2010.

2011-05-02;
Makuch, T., Lake Shore Gold Intersects Wide, High-Grade Mineralization at Timmins Mine, Highlights Significant Potential For Resource Expansion and Discovery of New Zones.

2011-07-26;
Makuch, T., Lake Shore Gold Continues To Define and Extend Mineralization at Thunder Creek, Potential New Zone Discovered 500 Metres Along TC-144 Trend.

2011-11-10;
Makuch, T., Lake Shore Gold discovers Potential 1.9 Kilometre Down Plunge Extension of Timmins Gold Mineralization.

2011-11-16;
Makuch, T., Lake Shore Gold Announces Large, High-Grade Initial Resource at Thunder Creek.

28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada" having an effective date of October 28, 2011 was prepared and signed by the following authors:

(Signed & Sealed) "Dean Crick"

Dated at Timmins, Ontario
December 23, 2011

Dean Crick, P.Geo.
Director of Geology,
Lake Shore Gold Corp.

(Signed & Sealed) "Robert Kusins"

Dated at Timmins, Ontario
December 23, 2011

Robert Kusins, P.Geo.
Chief Mineral Resource Geologist,
Lake Shore Gold Corp.

(Signed & Sealed) "David Powers"

Dated at Timmins, Ontario
December 23, 2011

David Powers, P.Geo.
David Powers Geological Services

29 CERTIFICATES OF QUALIFIED PERSONS

CERTIFICATE

To Accompany the Report titled "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada", for Lake Shore Gold Corp. and West Timmins Mines with an effective date of October 28, 2011.

I, Dean Brian Crick, do here by certify that:

1. I reside at 833 Reg Pope Blvd., Timmins, Ontario, Canada, P4N 8K7.

2. I am a graduate from Laurentian University, Sudbury, Ontario with an M.Sc. in Economic Geology degree (1991), and a Honours B.Sc. in Geology (1986) from Brock University, St. Catharines, Ontario. I have practiced my profession continuously since 1989.

3. I am a member of the Association of Professional Geoscientists of Ontario (Membership Number 1071).

4. I have practiced my profession as a geologist for 22 years being employed by Falconbridge Exploration, VMS Group, Falconbridge Ltd, Kidd Creek Mine, Pentland Firth Ventures- Marlhill Mine, Boliden Westmin, Myra Falls Mine, Wallbridge Mining, Placer Dome Canada Ltd. Campbell Mine, Golcorp Inc., Red Lake Gold Mines, and Lakeshore Gold. I have actively explored for Archean hosted gold deposits since 1991.

5. I have experience with various mineral deposit types, Mineral Resource estimation techniques, and the preparation of technical reports.

6. I have read the definition of "qualified person" set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purpose of NI 43-101.

7 I am currently employed by Lakeshore Gold Corp, (since August 2010), as the Director of Geology. I have been directly involved in the design and supervision of the surface and underground diamond drilling Advanced Exploration Program at the Thunder Creek project. I have also provided technical support to the production geology team at the Thunder Creek project for grade control and resource estimation of tonnes and grade for sill development and test mining stopes in the Rusk Shear and Porphyry Zones.

8. I am responsible for the preparation of Items 1, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23 24, 25, 26 of the Technical Report titled: "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada", having an effective date of October 28, 2011.

9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report.

10. I have read National Instrument 43-101 and form 43-101F1, as well as the Repeal and Replacement of National Instrument 43-101 Standards of Disclosure for Mineral Projects, Form 43-101F1 Technical Reports, and Companion Policy 43-101CP (April 08, 2011) and this Technical Report has been prepared in compliance with these instruments and that forms.

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

Dated in Timmins, Ontario, this the 23rd day of December, 2011

"Dean Crick"

(Signed & Sealed)
Dean Crick, P.Geo. (APGO 1071)

Robert Kusins P. Geo.
126 Forest Place
Timmins ON P4N 8K1

Tel.: 705-269-4344
Fax: 705-268-1794
e-mail: bkusins@lsgold.com

CERTIFICATE of AUTHOR

To accompany the Report titled "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada", for Lake Shore Gold Corp. and West Timmins Mining Inc. with an effective date of October 28, 2011.

I, Robert Kusins, P. Geo., do hereby certify that:

1. I reside at 126 Forest Place, Timmins, Ontario. P4N
2. I graduated with a B Sc degree in Geology from McMaster University in 1978.
3. I am a member of the Association of Professional Geoscientists of Ontario (Registration Number 0196).
4. I have worked continuously as a geologist for a total of 33 years since my graduation from university.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for sections 1, 14, 25 and 26 contained in this report.
7. I have worked on interpretation and resource estimates on the Thunder Creek property since February 2010. A site visit was completed on September 8, 2011.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am currently employed by Lake Shore Gold as Chief Resource Geologist. I currently hold 1,000 shares of Lake Shore Gold and options under the Lake Shore Gold's employee stock option plan.
10. I have read National Instrument 43-101 and Form 43-101F1, as well as the Repeal and Replacement of National Instrument 43-101 Standards of Disclosure for Mineral Projects,

Form 43-101F1 Technical Reports, and Companion Policy 43-101CP (April 08, 2011) and this Technical Report has been prepared in compliance with these instruments and forms.

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

Dated this 23rd Day of December, 2011

"R. Kusins"

(Signed and Sealed)
R. Kusins, P. Geo.

CERTIFICATE

To Accompany the Report titled "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada", for Lake Shore Gold Corp. and West Timmins Mining Inc. with an effective date of October 28, 2011.

I, David H. R. Powers, do here by certify that:

1. I reside at 385 Sony Street, South Porcupine, Ontario, Canada, P0N 1H0.

2. I am a graduate from Lakehead University, Thunder Bay, Ontario with an Honours B.Sc. Geology degree (1974), and I have practiced my profession continuously since that time.

3. I am a member of the Association of Professional Geoscientists of Ontario (Membership Number 0114).

4. I have practiced my profession as a geologist for 36 years being employed by Noranda Exploration Company Limited (N.P.L.), Noranda Mines Limited, Placer Dome C.L.A. Limited, Placer Dome North America Limited, Dome Mine, Placer Dome (C.L.A.) Limited – Porcupine Joint Venture, and Placer Dome Canada. As an independent geological consultant my services have provided to Central Crude Limited, Dome Mine, CanAlaska Uranium Limited and Pacific North West Capital Corp. I have actively explored for Archean hosted gold deposits since 1985.

5. I have experience with various mineral deposit types, Mineral Resource estimation techniques, and the preparation of technical reports.

6. I have read the definition of "qualified person" set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purpose of NI 43-101.

7 I have visited the Thunder Creek Property on May 29th, 2009, and December 08, 2011 examined core from the property as well as the core logging and core storage areas.

8. I am responsible for the preparation of Items 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 23, and 27 of the Technical Report titled: "Technical Report on the Initial Mineral Resource Estimate for the Thunder Creek Property, Bristol Township, West of Timmins, Ontario, Canada", having an effective date of October 28, 2011.

9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report.

10. I am independent of the issuer (Lake Shore Gold Corp.) applying tests in section 1.4 of National Instrument 43-101, and there were no circumstances that were or could be seen to interfere with my judgment in preparing the Technical Report.

11. I have read National Instrument 43-101 and form 43-101F1, as well as the Repeal and Replacement of National Instrument 43-101 Standards of Disclosure for Mineral Projects, Form 43-

101F1 Technical Reports, and Companion Policy 43-101CP (April 08, 2011) and this Technical Report has been prepared in compliance with these instruments and that forms.

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

Dated in South Porcupine, Ontario, this the 23rd day of December, 2011

"David H. R. Powers"

(Signed and Sealed)
David H. R. Powers, P.Geo. (APGO No. 0114)

APPENDIX 1

TABLE 10.1: DIAMOND DRILL HOLE COLLAR LOCATIONS, AZIMUTH, INCLINATION, AND METRES DRILLED

Table 10.1: Surface Diamond Drilling Collar and Metreage Information

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC03-01	4455.82	6834.80	10017.12	125.0	-45.0	3.00	0.00	232.30	232.30
TC03-02	4462.77	7011.98	10016.23	175.0	-45.0	13.00	0.00	290.00	290.00
TC03-03	4770.37	5890.98	10043.05	125.0	-45.0	4.00	0.00	332.00	332.00
TC03-04	4488.42	7471.82	10009.44	180.0	-45.0	16.00	0.00	191.00	191.00
TC03-05	4223.86	6766.41	10018.26	170.0	-45.0	5.00	0.00	284.00	284.00
TC03-06	4336.75	6998.43	10014.82	125.9	-50.8	22.00	0.00	338.00	338.00
TC03-06EXT	4336.75	6998.43	10014.82	125.9	-50.8	0.00	338.00	480.00	142.00
TC03-07	4405.22	7471.66	10013.88	180.0	-60.0	4.00	0.00	278.00	278.00
TC04-08	3608.73	6041.97	10019.12	130.0	-45.0	28.00	0.00	425.00	425.00
TC04-09	3540.45	6267.61	10019.09	130.0	-45.0	15.00	0.00	296.00	296.00
TC04-10	3426.89	6524.86	10021.80	130.0	-45.0	2.00	0.00	329.00	329.00
TC04-11	3589.82	6547.76	10021.09	130.0	-45.0	3.00	0.00	269.00	269.00
TC04-12	4334.08	6807.01	10016.94	180.0	-45.0	13.50	0.00	350.00	350.00
TC04-13	4297.93	6650.67	10019.33	165.0	-46.0	2.20	0.00	296.00	296.00
TC04-14	4459.92	7021.98	10016.89	130.0	-55.0	13.00	0.00	422.00	422.00
TC04-15	4321.73	6800.77	10017.27	130.0	-50.0	12.00	0.00	250.00	250.00
TC04-16	2044.92	6066.97	10000.00	130.0	-45.0	10.00	0.00	297.00	297.00
TC04-17	2448.96	7045.87	10000.00	130.0	-45.0	13.00	0.00	305.00	305.00
TC04-18	4335.10	6999.61	10014.72	124.5	-69.7	16.00	0.00	452.00	452.00
TC04-18EXT	4335.10	6999.61	10014.72	124.5	-69.7	0.00	452.00	551.00	99.00
TC04-19	4281.16	6907.68	10016.84	125.0	-67.0	11.00	0.00	401.00	401.00
TC04-50EXT	4654.24	7997.54	10009.76	187.5	-61.9	0.00	1260.00	1451.00	191.00
TC05-20	2344.91	6069.11	10000.00	130.0	-45.0	25.00	0.00	389.01	389.01
TC05-21	4661.04	6633.69	10019.36	170.0	-45.0	4.00	0.00	374.01	374.01
TC05-22	4966.61	6823.79	10000.00	130.0	-45.0	3.00	0.00	314.01	314.01
TC05-23	3770.41	6721.27	10039.23	130.0	-45.0	4.00	0.00	476.01	476.01
TC05-24	4325.38	6935.01	10014.84	125.6	-62.3	13.00	0.00	405.01	405.01
TC05-25	4217.85	6819.92	10018.52	125.0	-64.0	7.00	0.00	401.01	401.01
TC07-26	4529.55	7051.65	10021.71	130.0	-46.2	4.00	0.00	348.01	348.01
TC07-27	4529.16	7053.37	10021.29	130.0	-61.8	3.00	0.00	381.01	381.01
TC07-28	4488.95	6975.28	10017.80	134.6	-47.0	16.00	0.00	344.01	344.01
TC07-29	4573.61	7017.31	10023.18	129.6	-46.0	4.00	0.00	236.01	236.01
TC07-30	4288.26	7097.80	10016.99	125.6	-48.8	16.00	0.00	560.51	560.51
TC07-31	4288.28	7097.79	10016.93	126.2	-54.6	23.00	0.00	612.01	612.01
TC07-32	4327.11	7135.31	10018.26	127.9	-50.0	7.00	0.00	588.01	588.01
TC07-33	4288.79	7097.37	10016.99	124.6	-43.9	22.00	0.00	482.01	482.01
TC07-34	4327.29	7135.16	10018.28	128.9	-44.5	7.00	0.00	561.01	561.01
TC07-35	4327.04	7135.37	10018.26	128.4	-58.5	7.00	0.00	693.01	693.01
TC07-36	4328.83	7004.29	10015.10	125.3	-59.0	16.00	0.00	429.01	429.01
TC07-37	4238.15	6996.36	10016.02	131.3	-58.1	7.00	0.00	624.01	624.01
TC07-38	4195.15	6964.92	10017.65	132.6	-63.6	7.00	0.00	536.01	536.01
TC07-39	4145.23	6941.57	10019.88	130.0	-50.0	8.00	0.00	531.01	531.01
TC07-40	4026.60	6870.75	10023.21	136.4	-48.7	7.00	0.00	539.11	539.11
TC07-41	4292.27	7132.79	10019.16	132.5	-66.4	10.00	0.00	711.01	711.01
TC07-42	3953.36	6771.07	10028.12	130.3	-49.6	3.00	0.00	566.01	566.01
TC07-43	4292.36	7132.73	10019.19	131.2	-58.2	13.00	0.00	708.01	708.01
TC07-44	3953.03	6771.33	10028.09	132.4	-62.4	3.00	0.00	449.01	449.01
TC07-45	4292.57	7132.55	10019.03	134.3	-50.3	13.00	0.00	510.01	510.01

Hole Number	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
	Nad 83 Zone 17								
TC08-50	3675.23	6633.26	10024.74	130.3	-47.0	13.00	0.00	702.01	702.01
TC08-51	4584.62	7265.15	10013.21	131.2	-49.0	16.00	0.00	544.01	544.01
TC08-52	4472.29	6901.81	10016.84	130.4	-56.4	7.00	0.00	305.01	305.01
TC08-53	4652.49	7082.53	10021.67	130.5	-46.5	4.00	0.00	260.01	260.01
TC08-54	4254.12	7216.24	10022.88	129.0	-65.5	2.00	0.00	882.01	882.01
TC08-54A	4254.12	7216.24	10022.88	129.0	-65.5	0.00	202.00	803.00	601.00
TC08-54B	4254.12	7216.24	10022.88	129.0	-65.5	0.00	295.00	765.00	470.00
TC08-54C	4254.12	7216.24	10022.88	129.0	-65.5	0.00	544.00	729.00	185.00
TC08-54D	4254.12	7216.24	10022.88	128.8	-65.5	0.00	196.00	807.00	611.00
TC08-55	4449.96	6987.05	10015.29	130.2	-60.3	10.00	0.00	368.01	368.01
TC08-56	4424.47	6941.78	10014.16	130.8	-57.7	4.00	0.00	419.01	419.01
TC08-57	4254.12	7216.24	10023.18	128.5	-59.6	4.00	0.00	750.01	750.01
TC08-58	4510.11	6869.01	10017.37	130.1	-56.2	4.00	0.00	254.01	254.01
TC08-59	4532.31	6851.00	10018.37	125.5	-43.4	4.00	0.00	218.01	218.01
TC08-60	4254.21	7216.17	10023.11	133.6	-54.9	4.00	0.00	687.01	687.01
TC08-61	4434.88	6868.49	10015.32	129.1	-54.5	4.00	0.00	314.01	314.01
TC08-62	4479.22	6765.44	10016.79	139.0	-47.2	4.00	0.00	272.01	272.01
TC08-63	4286.16	6342.63	10017.15	134.4	-44.4	7.00	0.00	563.01	563.01
TC08-64	4220.96	7178.99	10022.08	130.0	-65.0	13.00	0.00	794.01	794.01
TC08-65	4538.99	6132.97	10047.86	129.1	-65.8	2.50	0.00	473.01	473.01
TC08-66	4346.06	7526.82	10011.39	132.9	-65.1	10.10	0.00	933.01	933.01
TC09-67	4288.43	7448.33	10014.43	129.1	-65.8	3.00	0.00	933.01	933.01
TC09-68	4122.14	7456.53	10018.52	133.9	-62.7	4.00	0.00	1172.01	1172.01
TC09-68A	4122.14	7456.53	10018.52	133.9	-62.7	0.00	864.00	941.00	77.00
TC09-68B	4122.14	7456.53	10018.52	133.9	-62.7	0.00	396.00	1072.00	676.00
TC09-68C	4122.14	7456.53	10018.52	134.3	-62.7	0.00	432.00	1045.00	613.00
TC09-68D	4122.14	7456.53	10018.52	134.3	-62.7	0.00	454.00	1028.00	574.00
TC09-68E	4122.14	7456.53	10018.52	134.0	-62.3	0.00	472.00	1005.00	533.00
TC09-68F	4122.14	7456.53	10018.52	134.4	-62.4	0.00	518.00	1028.00	510.00
TC09-69	4098.92	7281.39	10034.21	128.9	-64.9	4.00	0.00	855.00	855.00
TC09-69A	4098.92	7281.39	10034.21	130.0	-66.0	0.00	703.00	1023.00	320.00
TC09-69B	4098.92	7281.39	10034.21	128.7	-65.1	0.00	357.00	1016.00	659.00
TC09-69C	4098.92	7281.39	10034.21	128.0	-65.0	0.00	435.00	998.00	563.00
TC09-69D	4098.92	7281.39	10034.21	124.0	-64.0	0.00	342.00	883.00	541.00
TC09-69E	4098.92	7281.39	10034.21	128.7	-65.1	0.00	732.00	899.00	167.00
TC09-69F	4098.92	7281.39	10034.21	128.7	-65.1	0.00	711.00	1057.00	346.00
TC09-69G	4098.92	7281.39	10034.21	127.6	-67.9	0.00	331.00	993.00	662.00
TC09-69H	4098.92	7281.39	10034.21	127.6	-64.9	0.00	361.00	1035.00	674.00
TC09-69J	4098.92	7281.34	10034.21	127.6	-65.1	0.00	391.00	940.00	549.00
TC09-69K	4098.92	7281.39	10034.21	128.7	-65.2	0.00	379.00	867.00	488.00
TC09-70	4237.40	7421.34	10020.35	133.4	-67.5	3.00	0.00	1043.00	1043.00
TC09-71	4040.16	7201.74	10034.80	130.6	-64.8	4.00	0.00	1221.00	1221.00
TC09-71A	4040.16	7201.74	10034.80	130.6	-64.7	0.00	296.00	1105.00	809.00
TC09-72	4334.69	7214.13	10017.28	131.8	-58.1	3.00	0.00	605.00	605.00
TC09-73	4013.80	7415.87	10021.48	126.6	-67.8	7.00	0.00	1262.00	1262.00
TC09-73A	4013.80	7415.87	10021.48	126.6	-68.3	0.00	905.00	1488.00	583.00
TC09-73B	4013.80	7415.87	10021.48	126.6	-68.3	0.00	703.00	976.00	273.00
TC09-73C	4013.80	7415.87	10021.48	126.2	-68.4	0.00	850.00	1328.00	478.00

Hole Number	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
	Nad 83 Zone 17								
TC09-73D	4013.80	7415.87	10021.48	126.1	-68.4	0.00	535.00	1290.00	755.00
TC09-73E	4013.80	7415.87	10021.48	126.6	-67.8	0.00	628.00	1218.00	590.00
TC09-73F	4013.80	7415.87	10021.48	126.6	-67.8	0.00	492.00	1440.00	948.00
TC09-74	3962.94	7004.23	10033.22	162.8	-58.8	4.00	0.00	1043.00	1043.00
TC09-75	4101.39	7537.99	10015.67	126.6	-68.5	4.00	0.00	1308.00	1308.00
TC09-76	3962.82	7004.33	10033.22	128.5	-65.4	4.00	0.00	1117.00	1117.00
TC09-77	3946.31	7343.72	10023.65	128.6	-64.7	3.00	0.00	1269.00	1269.00
TC09-77A	3946.31	7343.72	10023.65	128.6	-64.7	0.00	929.00	961.00	32.00
TC09-78	3946.31	7343.72	10023.65	126.0	-65.0	3.00	0.00	282.00	282.00
TC09-79	3946.31	7343.72	10023.65	123.3	-64.8	3.00	0.00	1215.00	1215.00
TC09-79A	3946.31	7343.72	10023.65	124.0	-65.0	0.00	458.00	1212.00	754.00
TC09-79B	3946.31	7343.72	10023.65	123.3	-64.9	0.00	508.00	1332.00	824.00
TC09-79C	3946.31	7343.72	10023.65	123.4	-64.6	0.00	483.00	1128.00	645.00
TC09-80	4123.75	7391.17	10024.00	127.6	-67.9	4.00	0.00	1202.00	1202.00
TC09-80A	4123.75	7391.17	10024.00	127.7	-67.9	0.00	407.00	1256.00	849.00
TC09-80B	4123.96	7389.32	10024.52	127.7	-67.9	0.00	525.10	1108.00	582.90
TC09-80C	4123.96	7389.32	10024.52	127.6	-67.9	0.00	580.00	1104.00	524.00
TC09-80D	4123.75	7391.17	10024.00	127.6	-67.9	0.00	390.00	624.00	234.00
TC09-80E	4123.75	7391.17	10024.00	127.2	-67.8	0.00	199.00	1176.00	977.00
TC09-80F	4123.75	7391.17	10024.00	126.9	-68.1	0.00	428.00	1059.00	631.00
TC09-81	4324.76	7002.17	10015.54	130.0	-59.0	17.00	0.00	627.00	627.00
TC10-82	3953.00	7010.00	10033.00	127.0	-68.0		0.00	6.60	6.60
TC10-83	3845.27	7293.32	10022.11	124.5	-66.5	3.00	0.00	453.00	453.00
TC10-83A	3848.14	7296.07	10023.00	124.5	-66.5	0.00	438.00	1407.00	969.00
TC10-84	3834.90	7200.00	10020.38	137.4	-70.3	6.30	0.00	1472.00	1472.00
TC10-85	3805.00	6899.50	10030.00	128.3	-64.1	4.50	0.00	692.00	692.00
TC10-85A	3805.00	6899.50	10030.00	128.3	-64.1	0.00	657.00	1582.00	925.00
TC10-85B	3805.00	6899.50	10030.00	128.3	-64.1	0.00	527.00	776.00	249.00
TC10-85C	3805.00	6899.50	10030.00	128.3	-64.1	0.00	521.70	797.00	275.30
TC11-101	4077.10	7234.50	10030.00	132.0	-65.4	3.00	0.00	1088.00	1088.00
TC11-102	4538.10	7069.67	10019.37	0.0	-90.0	0.60	0.00	102.00	102.00
TC11-103	4538.79	7071.34	10019.37	0.0	-90.0	0.70	0.00	102.00	102.00
TC11-104	4539.28	7073.94	10019.29	0.0	-90.0	1.00	0.00	102.00	102.00
TC11-105	4538.25	7075.43	10019.29	0.0	-90.0	1.40	0.00	87.00	87.00
TC11-106	4536.47	7075.98	10019.27	0.0	-90.0	1.60	0.00	102.00	102.00
TC11-107	4534.19	7076.08	10019.24	0.0	-90.0	1.50	0.00	102.00	102.00
TC11-108	4533.21	7074.31	10019.25	0.0	-90.0	1.30	0.00	100.00	100.00
TC11-109	4532.91	7072.37	10019.26	0.0	-90.0	1.00	0.00	100.50	100.50
TC11-110	4532.73	7069.74	10019.27	0.0	-90.0	1.70	0.00	102.00	102.00
TC11-111	4077.12	7234.50	10030.00	129.4	-64.0	4.00	0.00	1009.00	1009.00
TC11-111A	4077.12	7234.50	10030.00	129.2	-63.0	0.00	414.00	1004.00	590.00
TC11-111B	4077.10	7234.50	10030.00	129.4	-64.0	0.00	384.00	877.00	493.00
TC11-111C	4077.12	7234.50	10030.00	129.1	-63.8	0.00	408.00	848.00	440.00
TC11-111D	4077.12	7234.50	10030.00	129.2	-63.5	0.00	318.00	887.00	569.00
TC11-112	4230.00	7235.00	10022.00	130.2	-65.8	4.00	0.00	860.00	860.00
TC11-112A	4230.00	7235.00	10022.00	130.4	-65.8	0.00	318.00	851.00	533.00

Hole Number	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
	Nad 83 Zone 17								
TC11-113	3985.00	7390.00	10022.00	125.9	-64.2	4.00	0.00	1199.00	1199.00
TC11-113A	3985.00	7390.00	10022.00	125.6	-64.2	0.00	395.00	1094.00	699.00
TC11-114	4208.00	7445.00	10030.00	142.0	-62.4	4.00	0.00	936.00	936.00
TC11-115	4013.80	7415.90	10021.50	126.0	-63.0	5.00	0.00	1144.00	1144.00
TC11-86	3922.00	6646.00	10015.00	131.5	-51.7	14.00	0.00	1001.00	1001.00
TC11-87	3847.00	7022.00	10030.00	132.0	-70.0	2.00	0.00	1499.00	1499.00

Total Number of Surface Diamond Drill Holes	102
Total Number of Surface Diamond Drill Wedge Splays	47
Total Number of Metres Drilled	83,656.69

3 Diamond Drill Hole Extensions

One SurfaceDiamond Drill Hole Remains In Incomplete, TC11-87 (in progress)

APPENDIX 2

TABLE 10.2: UNDERGROUND DIAMOND DRILL HOLE COLLAR AND METREAGE INFORMATION

Table 10.2: Underground Diamond Drill Hole Collar and Metreage Information

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC200-001	4536.59	7275.95	9756.59	183.0	-3.0	0	0	15	15
TC200-001A	4536.59	7275.95	9756.59	183.0	-3.0	0	0	15	15
TC200-001B	4536.59	7275.95	9756.59	197.5	-4.0	0	31.5	519	487.5
TC200-002	4536.33	7275.97	9756.60	189.5	-8.0	0	0	15	15
TC200-002A	4536.33	7275.91	9756.60	189.5	-3.0	0	34.65	436	401.35
TC200-003	4535.95	7275.85	9756.49	189.5	-3.0	0	0	455	455
TC200-004	4535.95	7275.89	9756.56	197.5	5.0	0	0	451	451
TC200-005	4539.20	7068.70	9734.00	197.5	-4.0	0	0	15	15
TC200-005A	4539.20	7068.70	9734.00	197.5	1.0	0	0	220	220
TC200-006	4539.20	7068.70	9734.00	197.5	1.0	0	0	216	216
TC200-007	4539.20	7068.70	9734.00	196.8	4.6	0	0	197	197
TC200-008	4539.20	7068.70	9734.00	197.5	-9.0	0	0	213	213
TC200-009	4539.20	7068.70	9734.00	195.0	-3.0	0	0	15	15
TC200-009A	4539.20	7068.70	9734.00	187.0	-5.0	0	0	12	12
TC200-009B	4539.20	7068.70	9734.00	190.0	5.0	0	0	213	213
TC200-010	4539.20	7068.70	9734.00	177.0	-5.0	0	0	12	12
TC200-010A	4539.20	7068.70	9734.00	177.0	-5.0	0	0	30	30
TC200-010B	4539.20	7068.70	9734.00	195.0	-5.0	0	0	243.8	243.8
TC200-011	4494.10	7083.60	9730.00	195.0	-5.0	0	0	242	242
TC200-012	4494.10	7083.60	9730.00	190.0	-5.0	0	0	240	240
TC200-013	4494.10	7083.60	9730.00	190.0	-5.0	0	0	238	238
TC200-014	4539.20	7068.70	9734.00	119.0	-57.0	0	0	210	210
TC200-016	4494.10	7083.60	9730.00	193.0	-10.0	0	0	240	240
TC200-017	4494.10	7083.60	9730.00	193.0	5.0	0	0	240	240
TC200-018	4539.20	7068.70	9734.00	193.0	-10.0	0	0	240	240
TC200-019	4468.13	6992.65	9724.80	190.0	5.0	0	0	15	15
TC200-019A	4468.13	6992.65	9724.80	190.0	5.0	0	0	210	210
TC200-020	4469.75	6992.70	9724.00	190.0	12.0	0	0	30	30
TC260-001	4497.63	7258.33	9756.48	179.4	-36.4	0	0	420	420
TC260-002	4497.63	7258.38	9756.25	177.5	-42.4	0	0	420	420
TC260-003	4497.63	7258.54	9756.10	179.9	-49.5	0	0	450	450
TC260-004	4497.65	7258.64	9755.18	180.1	-54.6	0	0	462	462
TC260-005	4497.64	7258.68	9755.10	179.5	11.0	0	0	548	548
TC260-006	4497.66	7259.20	9756.31	181.2	-62.0	0	0	450	450
TC260-007	4499.64	7257.98	9756.04	141.1	-44.6	0	0	465	465
TC260-008	4499.78	7257.84	9756.45	137.7	-26.5	0	0	471	471
TC260-009	4498.75	7258.20	9756.02	166.3	-50.4	0	0	421	421
TC260-010	4498.62	7258.55	9756.24	163.5	-56.7	0	0	464	464
TC260-011	4498.59	7258.63	9756.19	162.6	-66.2	0	0	471	471
TC260-012	4497.48	7258.11	9758.22	175.7	13.6	0	0	470	470
TC260-013	4395.50	7257.58	9759.08	180.3	-30.5	0	0	444	444
TC260-014	4395.80	7257.68	9758.73	178.7	-38.0	0	0	447	447
TC260-015	4395.51	7257.84	9758.81	176.3	-47.8	0	0	480	480

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC260-016	4350.00	7275.75	9759.80	180.0	-40.0	0	0	480	480
TC260-017	4350.00	7275.75	9759.80	180.0	-32.0	0	0	480	480
TC260-018	4350.00	7275.75	9759.80	180.0	-24.0	0	0	460	460
TC260-019	4350.00	7275.75	9759.80	180.0	-16.0	0	0	460	460
TC260-020	4500.00	7260.00	9759.40	163.0	10.0	0	0	540	540
TC260-021	4395.84	7258.95	9736.80	180.0	10.0	0	0	550	550
TC260-022	4395.84	7258.95	9763.80	173.0	8.0	0	0	510	510
TC260-023	4395.84	7258.95	9763.80	173.0	11.0	0	0	520	520
TC280-001	4469.70	6992.70	9724.80	181.0	3.0	0	0	15	15
TC280-001A	4469.70	6992.70	9724.50	175.0	1.0	0	0	130	130
TC280-002	4469.70	6992.70	9724.80	175.0	-8.0	0	0	160	160
TC280-003	4469.70	6992.70	9724.80	176.0	-12.0	0	0	132.6	132.6
TC280-004	4469.70	6992.70	9724.80	157.0	1.3	0	0	130.8	130.8
TC280-005	4469.70	6992.70	9724.80	157.0	-9.0	0	0	41.7	41.7
TC280-005A	4469.70	6992.70	9724.80	169.0	-15.0	0	0	130.5	130.5
TC280-006	4468.03	6992.73	9724.61	181.0	3.0	0	0	141	141
TC280-007	4468.68	6992.73	9724.01	165.0	-14.0	0	0	15	15
TC280-007A	4468.68	6992.73	9724.01	169.0	-17.0	0	0	141.7	141.7
TC280-008	4439.76	6973.40	9726.50	181.0	1.5	0	0	141	141
TC280-009	4439.76	6973.50	9726.40	165.2	-24.8	0	0	163.2	163.2
TC280-010	4467.95	6992.75	9724.38	170.4	-50.0	0	0	48	48
TC280-011	4439.20	6972.70	9726.00	157.2	-66.3	0	0	15	15
TC280-011A	4439.73	6972.70	9726.00	146.8	-67.0	0	0	15	15
TC280-011B	4439.20	6972.70	9726.00	135.0	-67.0	0	0	150	150
TC280-012	4439.20	6972.70	9726.00	137.5	-52.8	0	0	125.8	125.8
TC280-013	4417.34	6956.03	9729.62	142.0	15.0	0	0	15	15
TC280-013A	4417.34	6956.03	9729.62	142.0	15.0	0	0	150	150
TC280-014	4439.20	6972.70	9726.00	139.0	-82.0	0	0	12	12
TC280-014A	4439.20	6972.70	9726.00	139.0	-82.0	0	0	15	15
TC280-014B	4439.20	6972.70	9726.00	138.4	-81.2	0	0	153	153
TC280-015	4442.00	6975.00	9726.24	115.0	-79.0	0	0	15	15
TC280-015A	4441.04	6974.30	9726.24	115.0	-79.0	0	0	180.3	180.3
TC280-016	4440.73	6973.58	9726.72	157.8	-14.0	0	0	141	141
TC280-017	4440.85	6973.00	9726.62	150.1	-13.0	0	0	141	141
TC280-018	4441.04	6973.00	9726.00	120.0	-40.0	0	0	15	15
TC280-018A	4441.04	6972.70	9726.00	122.3	-41.1	0	0	141	141
TC280-019	4441.04	6973.00	9726.00	110.8	-57.0	0	0	15	15
TC280-019A	4441.04	6973.10	9726.00	119.5	-56.4	0	0	140.5	140.5
TC280-020	4441.04	6973.58	9727.20	165.4	14.6	0	0	141	141
TC280-021	4440.85	6973.58	9727.20	156.4	20.9	0	0	140	140
TC280-022	4438.83	6972.70	9727.20	177.3	17.9	0	0	159.2	159.2
TC280-023	4439.03	6972.70	9727.80	164.5	20.0	0	0	171	171
TC280-024	4438.83	6972.70	9726.87	177.6	4.3	0	0	119.5	119.5
TC280-025	4438.83	6972.70	9727.47	173.0	14.5	0	0	172	172
TC280-026	4441.00	6972.75	9726.50	185.7	1.8	0	0	130	130

Hole Number	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
	Nad 83 Zone 17								
TC280-027	4439.93	6972.70	9726.87	170.5	4.5	0	0	141	141
TC280-028	4438.83	6972.70	9726.39	166.5	-60.0	0	0	150	150
TC280-029	4439.73	6972.70	9725.80	157.0	-26.0	0	0	150	150
TC280-030	4438.93	6972.70	9727.00	168.0	12.5	0	0	161.1	161.1
TC280-031	4438.93	6972.70	9727.00	167.9	8.7	0	0	155	155
TC280-032	4439.73	6972.70	9726.50	154.7	17.7	0	0	171	171
TC280-033	4439.73	6972.70	9726.50	129.0	-22.0	0	0	150	150
TC280-034	4439.73	6972.70	9726.80	123.3	13.2	0	0	150	150
TC280-035	4441.73	6973.35	9727.00	124.4	16.8	0	0	162	162
TC280-036	4441.73	6973.35	9727.20	126.3	15.2	0	0	129	129
TC280-037	4441.73	6972.90	9727.80	129.4	24.0	0	0	201	201
TC280-038	4441.73	6972.90	9727.20	147.8	17.9	0	0	201	201
TC280-040	4418.20	6957.10	9727.20	136.6	-38.9	0	0	132	132
TC280-041	4418.20	6956.60	9727.40	134.0	-49.0	0	0	132	132
TC280-042	4418.20	6957.10	9727.30	127.0	-43.5	0	0	132	132
TC280-043	4418.20	6957.10	9727.00	130.2	-53.5	0	0	132	132
TC280-044	4417.00	6956.10	9729.50	156.2	12.1	0	0	177	177
TC280-045	4417.00	6956.10	9729.70	155.0	19.2	0	0	177	177
TC280-046	4418.30	6958.30	9729.40	130.0	11.8	0	0	180	180
TC280-047	4418.30	6958.30	9729.30	124.7	11.1	0	0	180	180
TC280-048	4418.30	6958.50	9729.30	114.2	11.9	0	0	180	180
TC280-049	4418.30	6958.30	9729.70	128.0	17.3	0	0	200	200
TC280-050	4418.30	6958.10	9729.60	125.8	16.5	0	0	202	202
TC280-051	4418.35	6959.10	9727.50	92.5	-43.7	0	0	251.3	251.3
TC280-052	4418.35	6959.10	9727.20	92.5	-53.3	0	0	250	250
TC280-053	4418.00	6959.10	9727.00	92.5	-64.6	0	0	252	252
TC280-054	4418.38	6959.55	9727.10	72.4	-54.1	0	0	324	324
TC280-055	4418.38	6959.55	9727.30	72.2	-45.9	0	0	255	255
TC280-056	4411.90	6921.00	9732.50	135.5	3.3	0	0	111	111
TC280-057	4411.90	6921.00	9732.50	127.3	2.9	0	0	111	111
TC280-058	4411.90	6921.00	9732.50	111.9	3.1	0	0	120	120
TC280-059	4411.90	6921.00	9732.50	109.4	3.6	0	0	120	120
TC280-060	4411.90	6921.00	9732.50	160.0	4.0	0	0	121	121
TC280-061	4411.90	6921.00	9732.50	171.0	3.9	0	0	121	121
TC280-062	4418.20	6957.10	9727.80	152.5	-61.6	0	0	177	177
TC280-063	4418.20	6957.10	9728.10	151.5	-66.2	0	0	201	201
TC280-064	4418.20	6957.10	9728.10	151.4	-70.8	0	0	201	201
TC280-065	4418.20	6957.10	9727.80	130.9	-61.1	0	0	150	150
TC280-066	4418.60	6957.10	9728.10	132.5	-70.5	0	0	150	150
TC280-067	4411.90	6921.00	9732.50	177.4	2.8	0	0	132	132
TC280-068	4411.90	6921.00	9732.50	184.9	3.7	0	0	132	132

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC280-069	4411.20	6921.00	9732.50	145.9	12.3	0	0	132	132
TC280-070	4411.80	6921.00	9732.50	150.2	30.7	0	0	156	156
TC280-071	4418.20	6957.10	9727.80	134.7	-33.9	0	0	150	150
TC280-072	4417.30	6956.00	9729.60	149.0	31.1	0	0	186	186
TC280-073	4417.30	6956.00	9729.60	148.6	11.3	0	0	150	150
TC280-074	4411.90	6921.00	9732.50	163.3	14.6	0	0	126	126
TC280-075	4411.90	6921.00	9732.50	163.3	28.4	0	0	171	171
TC280-076	4411.90	6921.00	9732.50	167.9	32.0	0	0	180	180
TC280-077	4417.30	6956.00	9729.60	150.3	24.7	0	0	180	180
TC280-078	4417.30	6956.00	9729.60	150.0	27.0	0	0	186	186
TC280-080	4411.90	6921.00	9732.50	168.2	20.0	0	0	132	132
TC280-081	4493.60	6918.50	9733.40	180.0	0.0	0	0	21	21
TC280-082	4498.60	6923.60	9377.40	180.0	0.0	0	0	25	25
TC280-083	4503.70	6924.50	9733.40	180.0	0.0	0	0	25.7	25.7
TC280-084	4510.00	6922.50	9734.70	180.0	0.0	0	0	25	25
TC280-085	4515.00	6919.40	9734.70	180.0	0.0	0	0	25	25
TC280-086	4495.00	6927.00	9734.70	0.0	0.0	0	0	25	25
TC280-087	4500.00	6929.00	9734.70	0.0	0.0	0	0	25	25
TC280-088	4505.00	6929.50	9734.70	0.0	0.0	0	0	25	25
TC280-089	4510.00	6931.50	9734.70	0.0	0.0	0	0	25	25
TC280-090	4446.70	6854.60	9736.20	332.0	45.0	0	0	35	35
TC280-091	4446.70	6854.60	9736.20	332.0	25.0	0	0	36	36
TC280-092	4446.70	6854.60	9736.20	332.0	-45.0	0	0	70	70
TC280-093	4446.70	6854.60	9736.20	346.0	45.0	0	0	36	36
TC280-094	4446.70	6854.60	9736.20	346.0	25.0	0	0	35	35
TC280-100	4450.30	6850.50	9732.50	208.0	0.0	0	0	42	42
TC280-101	4450.30	6850.50	9732.50	208.0	20.0	0	0	41.5	41.5
TC280-102	4453.40	6851.00	9732.50	196.0	0.0	0	0	40	40
TC280-103	4453.40	6851.00	9732.50	196.0	20.0	0	0	40	40
TC280-104	4453.40	6851.00	9732.50	171.0	0.0	0	0	42	42
TC280-105	4453.40	6851.00	9732.50	171.0	20.0	0	0	40	40
TC280-106	4453.40	6851.00	9732.50	149.0	0.0	0	0	40	40
TC280-107	4450.30	6850.50	9732.50	208.0	0.0	0	0	40	40
TC280-108	4450.30	6851.00	9732.50	196.0	0.0	0	0	60	60
TC280-109	4450.30	6851.00	9732.50	171.0	0.0	0	0	60	60
TC280-110	4450.30	6851.00	9732.50	149.0	0.0	0	0	60	60
TC280-111	4453.40	6851.00	9732.00	149.0	40.0	0	0	44	44
TC300-001	4471.60	6885.20	9719.70	310.0	0.0	0	0	25	25
TC300-002	4471.60	6885.20	9719.70	333.0	0.0	0	0	25.5	25.5
TC300-003	4471.60	6885.20	9719.70	310.0	20.0	0	0	27	27
TC300-004	4471.60	6885.20	9719.70	333.0	20.0	0	0	27	27

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC300-005	4482.60	6913.10	9718.90	129.0	0.0	0	0	25	25
TC300-006	4482.60	6913.10	9718.90	151.0	0.0	0	0	25	25
TC300-007	4482.60	6913.10	9718.90	129.0	26.0	0	0	36	36
TC300-008	4482.60	6913.10	9718.90	129.0	-37.0	0	0	45	45
TC300-009	4482.60	6913.10	9718.90	151.0	26.0	0	0	36	36
TC300-010	4482.60	6913.10	9718.90	151.0	-37.0	0	0	21	21
TC300-011	4471.60	6885.20	9719.70	310.0	-26.0	0	0	25	25
TC300-012	4471.60	6885.20	9719.70	333.0	-26.0	0	0	25.5	25.5
TC300-013	4482.60	6913.10	9718.90	115.0	0.0	0	0	30	30
TC300-014	4482.60	6913.10	9718.90	115.0	26.0	0	0	55	55
TC300-015	4482.60	6913.10	9718.90	115.0	-37.0	0	0	70.1	70.1
TC300-016	4482.60	6913.10	9718.90	151.0	13.0	0	0	30	30
TC300-017	4482.60	6913.10	9718.90	151.0	-18.0	0	0	30.5	30.5
TC300-018	4482.60	6913.10	9718.90	129.0	13.0	0	0	30.4	30.4
TC300-019	4482.60	6913.10	9718.90	129.0	-18.0	0	0	27	27
TC300-020	4482.60	6913.10	9718.90	115.0	13.0	0	0	30	30
TC300-021	4482.60	6913.10	9718.90	115.0	-18.0	0	0	30.3	30.3
TC320-001	4514.88	6938.05	9717.40	119.0	15.0	0	0	100	100
TC320-002	4516.73	6939.84	9717.30	119.0	1.0	0	0	100	100
TC320-003	4513.83	6937.87	9718.20	180.0	13.9	0	0	33	33
TC320-003A	4513.83	6937.87	9718.20	175.0	15.0	0	0	90	90
TC320-004	4513.49	6938.22	9719.40	175.0	40.0	0	0	48	48
TC320-005	4513.83	6937.87	9716.90	175.0	-30.0	0	0	79.6	79.6
TC320-006	4513.83	6937.87	9716.50	175.0	-30.0	0	0	79.6	79.6
TC320-007	4514.88	6938.05	9718.00	167.0	14.0	0	0	81	81
TC320-008	4514.88	6938.05	9719.30	152.5	31.1	0	0	81	81
TC320-009	4514.88	6938.05	9717.00	155.0	-15.9	0	0	72	72
TC320-010	4514.88	6938.05	9716.60	155.8	-30.4	0	0	72	72
TC320-011	4515.57	6938.45	9716.50	136.0	-13.0	0	0	72	72
TC320-012	4515.57	6938.45	9716.90	142.0	-28.0	0	0	72	72
TC320-013	4516.73	6939.84	9718.20	120.6	13.1	0	0	60	60
TC320-014	4516.02	6939.50	9716.80	117.0	29.7	0	0	90	90
TC320-015	4516.02	6939.50	9716.08	122.0	-16.4	0	0	60	60
TC320-016	4516.02	6939.50	9716.08	125.9	-30.6	0	0	60	60
TC320-017	4513.90	6937.80	9716.50	173.9	-45.5	0	0	72	72
TC320-018	4513.80	6937.90	9716.50	174.0	-59.5	0	0	72	72
TC320-019	4514.90	6938.10	9716.60	154.2	-45.2	0	0	70.6	70.6
TC320-020	4514.90	6938.10	9716.60	160.3	-60.0	0	0	72	72
TC320-021	4525.45	7009.99	9709.00	163.0	23.6	0	0	131	131
TC320-022	4525.45	7009.45	9708.00	165.0	1.5	0	0	130.6	130.6
TC320-023	4526.05	7009.99	9707.90	151.9	-6.4	0	0	120	120
TC320-024	4525.75	7009.99	9708.00	151.2	2.0	0	0	132	132

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC320-025	4526.14	7010.10	9707.97	134.4	-6.7	0	0	132	132
TC320-026	4525.45	7009.99	9709.40	161.0	31.1	0	0	130	130
TC320-027	4525.25	7009.99	9707.40	166.0	-31.7	0	0	131	131
TC320-028	4525.75	7009.99	9709.40	152.5	22.7	0	0	130.5	130.5
TC320-029	4525.75	7009.99	9707.15	158.2	-31.2	0	0	130	130
TC320-030	4525.75	7009.99	9706.80	154.0	-51.5	0	0	132	132
TC320-031	4525.85	7010.10	9709.30	147.0	24.1	0	0	132	132
TC320-032	4525.85	7010.10	9708.60	147.0	12.7	0	0	130.9	130.9
TC320-033	4525.85	7010.10	9707.70	147.2	-15.1	0	0	132	132
TC320-034	4525.85	7010.10	9707.50	148.5	-22.0	0	0	132	132
TC320-035	4525.45	7009.99	9707.70	165.0	-8.9	0	0	132	132
TC320-036	4525.45	7009.99	9707.55	167.5	-17.1	0	0	120	120
TC320-037	4526.14	7010.10	9708.70	138.7	8.2	0	0	130	130
TC320-038	4526.14	7010.10	9709.20	138.0	18.8	0	0	106.5	106.5
TC320-039	4526.14	7010.10	9709.75	135.0	29.6	0	0	141	141
TC320-040	4526.14	7010.10	9707.60	144.8	-20.3	0	0	110	110
TC320-041	4526.14	7010.10	9707.10	143.0	-42.7	0	0	111	111
TC320-042	4525.45	7009.99	9707.15	164.6	-39.9	0	0	111	111
TC320-043	4525.45	7009.99	9706.20	163.5	-61.2	0	0	102	102
TC320-044	4526.98	7010.33	9710.50	137.0	41.2	0	0	132.2	132.2
TC320-045	4526.98	7010.33	9709.25	121.5	21.8	0	0	133.4	133.4
TC320-046	4526.98	7010.33	9708.69	128.7	12.5	0	0	119	119
TC320-047	4526.98	7012.33	9708.09	128.7	0.9	0	0	111	111
TC320-048	4526.98	7010.33	9707.79	125.0	-10.1	0	0	102	102
TC320-049	4526.98	7010.33	9707.24	125.0	-30.7	0	0	102	102
TC320-050	4527.13	7010.33	9706.49	126.7	-49.7	0	0	150	150
TC320-051	4501.40	6950.90	9717.20	205.6	-43.0	0	0	101	101
TC320-052	4501.40	6950.90	9717.20	199.0	-52.0	0	0	108	108
TC320-053	4501.40	6950.90	9717.20	217.0	-65.0	0	0	105	105
TC320-054	4501.40	6950.90	9717.20	219.9	-80.7	0	0	102	102
TC320-055	4501.40	6950.90	9717.20	96.1	-76.0	0	0	120	120
TC320-056	4501.40	6950.90	9717.20	79.0	-67.0	0	0	120	120
TC320-057	4532.80	7012.80	9707.50	119.0	-5.0	0	0	120	120
TC320-058	4532.80	7012.80	9707.50	119.0	-17.0	0	0	138	138
TC320-059	4532.80	7012.80	9707.50	119.0	-25.0	0	0	123	123
TC320-060	4532.80	7012.80	9707.50	110.0	0.0	0	0	150	150
TC320-061	4532.80	7012.80	9707.50	110.0	-22.0	0	0	120	120
TC320-062	4532.80	7012.80	9707.50	110.0	-41.0	0	0	126	126
TC330-001	4501.60	6958.30	9697.30	178.6	-23.6	0	0	81	81
TC330-002	4501.60	6958.30	9696.80	180.6	-39.7	0	0	81	81
TC330-003	4501.60	6958.30	9696.20	182.7	61.7	0	0	81	81
TC330-004	4501.60	6958.80	9696.20	180.0	-74.3	0	0	84	84

Hole Number	Easting (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
	Nad 83 Zone 17								
TC330-005	4502.30	6958.30	9697.60	160.0	-15.8	0	0	81	81
TC330-006	4501.40	6961.40	9698.00	161.0	-36.0	0	0	81	81
TC330-007	4501.40	6961.40	9698.00	163.0	-55.1	0	0	93	93
TC330-008	4501.40	6961.40	9698.00	162.6	-66.8	0	0	81	81
TC330-009	4501.40	6961.40	9698.00	140.0	-11.9	0	0	81	81
TC330-010	4501.40	6961.40	9698.00	139.0	-21.8	0	0	81	81
TC330-011	4501.40	6961.40	9698.00	136.0	-30.4	0	0	81	81
TC330-012	4501.40	6961.40	9698.00	136.0	-40.5	0	0	81	81
TC330-013	4507.30	7018.90	9696.00	148.3	-32.0	0	0	126	126
TC330-014	4507.30	7018.90	9696.00	151.9	-58.0	0	0	126	126
TC330-015	4507.30	7018.90	9696.00	157.5	-27.0	0	0	141	141
TC330-016	4507.30	7018.90	9696.00	157.5	-37.0	0	0	141	141
TC330-017	4507.30	7018.90	9696.00	151.3	-58.0	0	0	120	120
TC330-018	4507.30	7018.90	9696.00	169.5	-31.0	0	0	132	132
TC330-019	4507.30	7018.90	9696.00	169.5	-48.0	0	0	132	132
TC330-020	4507.30	7018.90	9696.00	129.2	-48.0	0	0	132	132
TC330-021	4507.30	7018.90	9696.00	131.7	-61.0	0	0	134.95	134.95
TC330-025	4507.30	7018.90	9696.00	186.4	-48.0	0	0	111	111
TC330-026	4507.30	7018.90	9696.00	183.0	-61.0	0	0	111	111
TC330-027	4507.30	7018.90	9696.00	191.0	-52.0	0	0	144	144
TC330-028	4507.30	7018.90	9696.00	216.0	-43.0	0	0	171	171
TC330-029	4507.30	7018.90	9696.00	216.0	-64.0	0	0	171	171
TC330-030	4507.30	7018.90	9696.00	136.0	-80.0	0	0	155	155
TC330-031	4507.30	7018.90	9696.00	145.6	-67.0	0	0	135	135
TC330-032	4507.30	7018.90	9696.00	136.0	-59.0	0	0	144	144
TC330-033	4507.30	7018.90	9696.00	136.0	-48.0	0	0	141	141
TC330-034	4507.30	7018.90	9696.00	136.0	-39.0	0	0	138	138
TC330-035	4507.30	7018.90	9696.00	239.0	-61.0	0	0	210	210
TC330-036	4507.30	7018.90	9696.00	239.0	-43.0	0	0	183	183
TC330-037	4507.30	7018.90	9696.00	259.0	-54.0	0	0	180	180
TC330-038	4507.30	7018.90	9696.00	259.0	-68.0	0	0	181.45	181.45
TC330-039	4507.30	7018.90	9696.00	227.0	-65.0	0	0	189	189
TC330-040	4507.30	7018.90	9696.00	227.0	-59.0	0	0	192	192
TC330-041	4507.30	7018.90	9696.00	227.0	-53.0	0	0	183	183
TC330-042	4507.30	7018.90	9696.00	227.0	-46.0	0	0	183	183
TC330-043	4507.30	7018.90	9696.00	227.0	-38.0	0	0	183	183
TC350-001	4476.80	6969.10	9668.00	110.0	4.0	0	0	112	112
TC350-002	4476.80	6969.10	9668.00	110.0	25.0	0	0	110	110
TC350-003	4476.80	6969.10	9668.00	119.0	4.0	0	0	66	66
TC350-004	4476.80	6969.10	9668.00	134.0	-3.0	0	0	63	63
TC650-001	4548.25	7438.76	9334.55	200.4	-10.8	0	0	560	560

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC650-002	4549.09	7439.79	9334.92	187.0	-11.0	0	0	546	546
TC650-003	4549.28	7439.81	9334.92	187.0	-12.3	0	0	492.7	492.7
TC650-004	4548.96	7440.49	9334.92	206.0	-7.2	0	0	108	108
TC650-004B	4548.96	7440.49	9334.92	199.0	-7.0	0	0	510	510
TC650-005	4548.96	7440.49	9334.92	202.8	-4.4	0	0	544	544
TC650-006	4548.30	7438.80	9334.60	200.0	-18.0	0	0	325.5	325.5
TC650-007	4548.30	7438.80	9334.60	199.0	-22.7	0	0	457	457
TC680-001	4499.90	7426.90	9334.80	182.6	-52.1	0	0	657	657
TC680-002	4499.90	7426.90	9334.80	199.0	-67.2	0	0	711	711
TC680-003	4396.80	7422.00	9336.20	182.0	-61.7	0	0	762	762
TC680-004	4396.80	7422.00	9336.20	176.7	-70.9	0	0	750	750
TC680-005	4499.90	7426.90	9334.80	198.6	-55.2	0	0	825	825
TC680-006	4499.90	7426.90	9334.80	197.8	-50.4	0	0	651	651
TC680-007	4394.10	7422.00	9340.00	189.5	-55.1	0	0	552	552
TC680-008	4394.10	7422.00	9340.00	188.0	-59.0	0	0	600	600
TC680-009	4499.90	7426.90	9334.80	197.0	-60.0	0	0	500	500
TC710-001	4497.80	7269.40	9311.00	205.3	1.1	0	0	351	351
TC710-002	4497.80	7269.40	9311.00	203.8	-8.9	0	0	351	351
TC710-003	4497.80	7269.40	9311.00	207.4	8.2	0	0	432	432
TC710-004	4497.80	7269.40	9311.00	204.0	-14.9	0	0	351.3	351.3
TC710-005	4498.70	7269.40	9311.00	207.0	15.0	0	0	351	351
TC710-006	4497.80	7269.40	9311.00	206.0	-21.0	0	0	357	357
TC710-007	4497.80	7269.40	9311.00	183.0	14.8	0	0	351	351
TC710-008	4497.80	7269.40	9311.00	184.8	-29.7	0	0	402	402
TC710-009	4497.80	7269.20	9311.00	184.3	-60.1	0	0	330	330
TC710-010	4497.80	7269.40	9311.00	194.3	-48.1	0	0	480	480
TC710-011	4497.80	7269.40	9311.00	196.1	-63.0	0	0	510	510
TC710-012	4452.50	7264.20	9311.00	171.9	-43.2	0	0	450	450
TC710-013	4440.00	7260.00	9311.00	175.0	-55.0	0	0	504	504
TC710-014	4440.00	7260.00	9311.00	175.0	-60.0	0	0	550	550
TC710-015	4498.70	7269.40	9311.00	184.5	-37.8	0	0	402	402
TC710-016	4497.80	7269.40	9311.00	185.0	-56.0	0	0	402	402
TC710-017	4497.80	7269.40	9311.00	201.0	-60.0	0	0	400	400
TC710-018	4440.00	7269.00	9311.00	190.4	56.8	0	0	459	459
TC710-019	4440.00	7269.00	9311.00	189.1	-60.3	0	0	516	516
TC710-021	4497.80	7269.40	9311.00	191.3	-32.7	0	0	402	402
TC710-022	4497.80	7269.40	9311.00	180.0	3.0	0	0	252	252
TC710-023	4497.80	7269.40	9311.00	180.1	13.3	0	0	300	300
TC710-024	4497.80	7269.40	9311.00	177.4	22.6	0	0	298.15	298.15
TC730-001	4466.90	7088.60	9285.60	235.9	3.2	0	0	150	150
TC730-002	4466.90	7088.60	9285.60	273.9	2.5	0	0	150	150
TC730-003	4466.90	7088.60	9285.60	263.1	3.0	0	0	150	150

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TC730-004	4466.90	7088.60	9285.60	253.3	3.5	0	0	150	150
TC730-005	4466.90	7088.60	9285.60	226.0	3.0	0	0	150	150
TC730-006	4466.90	7088.60	9285.60	208.0	3.0	0	0	150	150
TC730-007	4466.90	7088.60	9285.60	192.0	3.0	0	0	150	150
TC730-008	4466.90	7088.60	9285.60	177.6	2.8	0	0	150	150
TC730-009	4483.50	7077.50	9284.10	242.8	-30.1	0	0	250.4	250.4
TC730-010	4483.50	7077.50	9284.10	242.8	30.9	0	0	225	225
TC730-011	4483.50	7077.50	9284.10	259.1	21.0	0	0	150	150
TC730-012	4483.50	7077.50	9284.10	256.0	30.0	0	0	150	150
TC730-013	4483.50	7077.50	9284.10	256.0	-21.0	0	0	177	177
TC730-014	4483.50	7077.50	9284.10	310.0	65.0	0	0	79.6	79.6
TC730-015	4483.50	7077.50	9284.10	310.0	52.0	0	0	76	76
TC730-016	4483.50	7077.50	9284.10	310.0	39.0	0	0	75	75
TC730-017	4483.50	7077.75	9284.10	310.0	-25.2	0	0	111	111
TC730-018	4483.50	7077.50	9284.10	310.8	-35.6	0	0	120	120
TC730-019	4477.82	7099.97	9285.00	300.0	81.9	0	0	100	100
TC730-020	4477.82	7099.97	9285.00	313.0	59.3	0	0	111	111
TC730-021	4477.82	7099.97	9285.00	318.8	34.1	0	0	111	111
TC730-022	4483.50	7077.50	9284.10	316.0	-30.0	0	0	129	129
TC730-023	4477.82	7099.70	9285.00	316.0	-45.0	0	0	130	130
TC730-024	4469.43	7115.28	9284.98	256.4	1.3	0	0	102	102
TC730-025	4469.09	7115.59	9284.98	287.6	0.4	0	0	60	60
TC730-026	4470.08	7118.97	9284.97	320.0	1.0	0	0	60	60
TC730-027	4471.06	7119.49	9284.99	349.1	1.4	0	0	60	60
TC730-028	4473.22	7119.68	9285.00	16.8	2.4	0	0	60	60
TC730-029	4474.71	7117.84	9284.91	0.2	50.0	0	0	51	51
TC730-030	4470.04	7114.81	9283.34	244.0	-70.2	0	0	591	591
TC730-031	4470.14	7118.93	9285.21	320.6	30.6	0	0	51	51
TC730-032	4470.22	7118.90	9284.47	321.3	-30.3	0	0	50	50
TC730-033	4470.22	7118.90	9285.30	350.1	13.1	0	0	51	51
TC730-034	4471.18	7119.46	9284.50	347.2	-51.8	0	0	51	51
TC730-035	4471.28	7119.43	9283.98	347.7	-16.0	0	0	51	51
TC730-036	4473.19	7119.85	9287.00	17.3	31.3	0	0	51	51
TC730-037	4473.18	7119.60	9284.10	20.4	-30.4	0	0	51	51
TC730-038	4474.63	7117.89	9284.86	50.0	15.0	0	0	51	51
TC730-039	4474.71	7117.30	9284.00	50.0	-15.0	0	0	50	50
TC730-040	4474.71	7117.91	9284.10	46.1	-40.5	0	0	51	51
TC730-041	4470.00	7095.00	9285.40	330.7	0.5	0	0	60	60
TC730-042	4461.40	7089.40	9285.50	332.3	1.0	0	0	60	60
TC730-051	4460.30	7082.30	9285.50	151.9	1.0	0	0	71.85	71.85
TC730-052	4443.70	7071.70	9285.50	151.1	1.2	0	0	72.7	72.7
TCGRT-001	4472.40	6889.50	9718.90	260.0	25.0	0	0	75	75

Hole Number	Easting Nad 83 Zone 17 (m)	Northing (m)	Elevation (m)	Azimuth (°)	Dip (°)	Casing Depth (m)	Start Depth (m)	Final Depth (m)	Total Drilled (m)
TCGRT-002	4472.40	6889.50	9718.50	260.0	-25.0	0	0	75	75
TCGRT-003	4472.40	6889.50	9718.90	253.0	0.0	0	0	102	102
TCGRT-004	4477.80	6890.70	9718.90	55.0	30.0	0	0	102	102
TCGRT-005	4477.80	6890.70	9718.90	55.0	-25.0	0	0	102	102
TCGRT-006	4477.80	6890.70	9718.90	55.0	-35.0	0	0	102	102

Total Number of Underground Diamond Drill Holes	384
Number of Underground Diamond Drill Holes Recollared	22
Number of Underground Diamond Drill Holes In Progress Or Incomplete	42
Total Metres Drilled	66,809.65

Highlighted in blue are diamond drill holes that are not used in the modeling.

Appendix 3

TABLE 10.3 DIAMOND DRILL CORE SAMPLING SUMMARY

TABLE 10.3: DIAMOND DRILL CORE SAMPLING SUMMARY

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC03-01	167	3	0	167			167
TC03-02	170	1	0	170			170
TC03-03	105	0	0	105			105
TC03-04	74	0	0	74			74
TC03-05	138	2	0	138			138
TC03-06	128	5	0	128			128
TC03-06EXT	184	0	0	184			184
TC03-07	83	0	0	83			83
TC04-08	98	0	0	98			98
TC04-09	11	0	0	11			11
TC04-10	88	1	0	88			88
TC04-11	77	0	0	77			77
TC04-12	140	1	0	140	1		140
TC04-13	132	0	0	132			132
TC04-14	145	0	0	145			145
TC04-15	135	0	0	135			135
TC04-16	12	0	0	12			12
TC04-17	11	0	0	11			11
TC04-18	226	2	0	226			226
TC04-18EXT	111	0	0	111			111
TC04-19	267	7	0	267	1		267
TC04-50EXT	53	0	0	53			53
TC05-20	81	0	0	81			81
TC05-21	210	0	0	210			210
TC05-22	29	0	0	29			29
TC05-23	51	0	0	51			51
TC05-24	173	11	0	173	3		173
TC05-25	180	0	0	180			180
TC07-26	298	0	0	298			298
TC07-27	217	0	0	217			217
TC07-28	249	2	0	249			249
TC07-29	72	0	0	72			72
TC07-30	285	19	1	275	14	36	285
TC07-31	362	14	0	362	6		362
TC07-32	288	3	0	288	1		288
TC07-33	183	9	0	183	2		183
TC07-34	266	5	0	266	2		266
TC07-35	212	9	0	212	8		212
TC07-36	217	16	3	217	14	17	217
TC07-37	359	1	0	359			359
TC07-38	306	3	0	306	2		306

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC07-39	227	2	0	227	1		227
TC07-40	252	0	0	252			252
TC07-41	306	12	0	306	7		306
TC07-42	163	1	0	163		42	163
TC07-43	247	16	3	247	10		247
TC07-44	160	0	0	160			47
TC07-45	238	6	0	238	3		238
TC08-46	393	3	0	393	1		157
TC08-47	309	6	1	309	3		309
TC08-48	475	0	0	475			
TC08-49	369	1	0	369			
TC08-50	244	1	0	244			
TC08-51	246	0	0	246			
TC08-52	325	6	0	325	4		
TC08-53	96	0	0	96			
TC08-54	584	54	2	523	4	61	56
TC08-54A	207	28	0	166	7	41	
TC08-54B	255	14	0	255		27	
TC08-54C	186	16	0	136		50	
TC08-54D	326	46	1	326	4	78	
TC08-55	264	6	0	264	1		
TC08-56	356	11	0	356	2		
TC08-57	418	6	0	418	4		
TC08-58	246	7	0	246	5		
TC08-59	180	0	0	180			
TC08-60	386	28	0	355	4	44	31
TC08-61	354	4	0	354	1		
TC08-62	356	0	0	356			
TC08-63	467	1	0	467			
TC08-64	603	19	0	576		27	
TC08-65	492	1	0	492			
TC08-66	329	0	0	329			
TC09-67	282	0	0	282			
TC09-68	670	77	2	670	16	74	
TC09-68A	130	27	2	130		68	
TC09-68B	582	102	7	482	3	179	
TC09-68C	460	88	0	315	9	145	
TC09-68D	407	89	2	388	4	146	
TC09-68E	204	33	2	157	4	47	
TC09-68F	186	42	2	135	1	51	
TC09-69	443	60	4	442	8	48	

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC09-69A	381	72	4	326	9	127	
TC09-69B	414	37	5	348		66	
TC09-69C	405	39	1	405	4	34	
TC09-69D	231	37	0	227	17		
TC09-69E	197	42	1	197	15		
TC09-69F	542	93	2	519	34	23	
TC09-69G	287	42	4	287	21		
TC09-69H	364	17	0	364	11		
TC09-69J	100	13	0	100	8		
TC09-69K	173	10	1	173	3		
TC09-70	520	9	0	520		29	
TC09-71	768	2	0	768			
TC09-71A	617	0	0	617			
TC09-72	288	1	0	288	1		
TC09-73	594	4	0	594	1		
TC09-73A	797	2	0	797			
TC09-73B	127	0	0	127			
TC09-73C	607	20	0	603	7	4	
TC09-73D	623	15	1	623	4	8	
TC09-73E	502	30	0	501	9	22	
TC09-73F	565	3	0	565	1		
TC09-74	757	3	0	757			
TC09-75	717	5	0	717		36	
TC09-76	600	0	0	600			
TC09-77	619	2	0	619	1		
TC09-77A	28	0	0	28			
TC09-78	0						
TC09-79	524	19	0	524	2	20	
TC09-79A	454	14	0	451	1		
TC09-79B	681	1	0	680	30		
TC09-79C	283	20		283	2		
TC09-80	586	35	1	584	9	53	
TC09-80A	496	37	0	464	7	32	
TC09-80B	329	35	0	297	11	32	
TC09-80C	302	45	2	219	5	83	
TC09-80D	9	0	0	9			
TC09-80E	357	20	0	357	2		
TC09-80F	332	63	0	332	5		
TC09-81	348	7	0	345	2		
TC10-82	4	0	0	4			
TC10-83	1	0	0	1			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC10-83A	501	3	0	501	1	12	
TC10-84	219	0	0	219			
TC10-85	47	1	0	47			42
TC10-85A	504	7	0	492			313
TC10-85B	122	1	0	122			122
TC10-85C	180	2	0	180			180
TC11-101	151	0	0	151			
TC11-102	0						
TC11-103	0						
TC11-104	0						
TC11-105	0						
TC11-106	0						
TC11-107	0						
TC11-108	0						
TC11-109	0						
TC11-110	0						
TC11-111	192	2	0	144		48	
TC11-111A	101	4	0	101	2		
TC11-111B	150	12	1	150	2		
TC11-111C	46	0	0	46			
TC11-111D	149	0	0	149			
TC11-112	287	86	6	184	4	141	
TC11-112A	210	66	1	11		145	
TC11-113	290	3	0	290	1		
TC11-113A	227	24	4	227	6		
TC11-114	216	34	1	216	8		
TC11-115	277	28	0	228	5	49	
TC11-86	405	0	0	405			
TC11-87	0						
TC200-001	0						
TC200-001A	0						
TC200-001B	302	3	0	302			
TC200-002	0						
TC200-002A	211	15	1	211	10		
TC200-003	148	1	0	148			
TC200-004	174	20	3	174	6		
TC200-005	0						
TC200-005A	106	7	0	106	3		
TC200-006	108	6	0	108	4		
TC200-007	79	3	0	79			
TC200-008	104	9	1	104	4		

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC200-009	0						
TC200-009A	0						
TC200-009B	73	5	0	73	1	13	
TC200-010	0						
TC200-010A	0						
TC200-010B	79	5	0	79			
TC200-011	48	9	0	48			
TC200-012	59	3	0	59			
TC200-013	45	3	0	45			
TC200-014	62	8	0	62	2		
TC200-016	51	3	0	51			
TC200-017	48	1	0	48	1		
TC200-018	35	9	0	35			
TC200-019	0						
TC200-019A	129	19	1	129	6		
TC200-020	0						
TC260-001	78	24	0	78	1		
TC260-002	104	7	0	104	1		
TC260-003	90	5	0	90	1		
TC260-004	131	19	0	131	2		
TC260-005	109	7	0	109	5		
TC260-006	81	4	1	81	1		
TC260-007	30	0	0	30			
TC260-008	33	0	1	33			
TC260-009	72	0	0	72			
TC260-010	101	0	0	101			
TC260-011	97	0	0	97			
TC260-012	34	0	0	34			
TC260-013	114	0	0	114			
TC260-014	85	1	0	85			
TC260-015	84	17	1	84	6		
TC260-016	0						
TC260-017	0						
TC260-018	0						
TC260-019	0						
TC260-020	171	2	0	171			
TC260-021	122			75			
TC260-022	0						
TC260-023	0						
TC280-001	0						
TC280-001A	33	2	0	33			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC280-002	80	11	0	80	1		
TC280-003	75	16	0	75	2		
TC280-004	88	9	0	88	1		
TC280-005	0						
TC280-005A	36	8	0	36	2		
TC280-006	42	12	0	42	1		
TC280-007	0						
TC280-007A	66	11	0	66	5		
TC280-008	40	12	0	40	1		
TC280-009	34	5	0	34			
TC280-010	6	0	0	6			
TC280-011	0						
TC280-011A	0						
TC280-011B	63	11	0	63	3		
TC280-012	53	4	0	53			
TC280-013	0						
TC280-013A	75	9	0	75	1		
TC280-014	0						
TC280-014A	0						
TC280-014B	41	2	0	41	1		
TC280-015	0						
TC280-015A	101	15	1	101	3		
TC280-016	60	11	0	60	1		
TC280-017	82	10	0	82	3		
TC280-018	0						
TC280-018A	47	18	0	47	3		
TC280-019	0						
TC280-019A	43	14	1	43	2		
TC280-020	70	3	0	70			
TC280-021	68	8	0	68	2		
TC280-022	54	8	0	54	2		
TC280-023	91	6	0	91	2		
TC280-024	43	7	0	43	1		
TC280-025	111	6	0	111	1		
TC280-026	30	3	0	30			
TC280-027	58	11	0	58	2		
TC280-028	65	1	0	65			
TC280-029	56	11	0	56	1		
TC280-030	94	10	0	94	1		
TC280-031	54	5	0	54	1		

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC280-032	108	9	0	108			
TC280-033	84	6	0	84	1		
TC280-034	81	10	1	55		26	
TC280-035	72	10	0	72			
TC280-036	51	6	0	51	3		
TC280-037	58	13	0	58	1		
TC280-038	100	9	0	100			
TC280-040	42	3	0	42			
TC280-041	52	1	0	52			
TC280-042	33	7	0	33			
TC280-043	30	5	0	30	1		
TC280-044	77	2	0	77	1		
TC280-045	97	6	0	97	1		
TC280-046	99	12	0	99			
TC280-047	83	9	0	83	1		
TC280-048	69	14	1	69	5		
TC280-049	76	3	0	76			
TC280-050	62	6	0	62			
TC280-051	70	12	0	70	1		
TC280-052	94	20	0	94	2		
TC280-053	141	8	3	141	2		
TC280-054	119	10	1	119	2		
TC280-055	95	2	0	95			
TC280-056	53	9	0	53	1		
TC280-057	68	12	0	68	1		
TC280-058	36	5	0	36			
TC280-059	50	6	0	50	1		
TC280-060	67	8	0	67			
TC280-061	75	9	0	75	1		
TC280-062	43	2	0	43			
TC280-063	98	0	0	98			
TC280-064	132	3	0	132			
TC280-065	37	2	0	37			
TC280-066	81	3	0	81			
TC280-067	41	4	0	41			
TC280-068	75	12	0	75			
TC280-069	109	0	0	109			
TC280-070	180	12	0	180	1		
TC280-071	59	4	0	59	2		
TC280-072	63	1	0	63			
TC280-073	71	9	0	71	1		

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC280-074	50	11	0	50	1		
TC280-075	95	7	0	95			
TC280-076	144	20	0	144			
TC280-077	113	0	0	113			
TC280-078	77	3	0	77	1		
TC280-080	81	11	0	81	1		
TC280-081	16	0	0	16			
TC280-082	23	3	0	23			
TC280-083	26	2	0	26			
TC280-084	28	1	0	28			
TC280-085	28	0	0	28			
TC280-086	10	0	0	10			
TC280-087	26						
TC280-088	22	0	0	22			
TC280-089	11	0	0	11			
TC280-090	23	6	0	23			
TC280-091	17	3	0	17			
TC280-092	75	15	0	75			
TC280-093	27	2	0	27			
TC280-094	22						
TC280-100	37	11	0	37			
TC280-101	46	8	0	46			
TC280-102	45	5	0	45			
TC280-103	33	7	0	33			
TC280-104	45	0	0	45			
TC280-105	42	7	0	42			
TC280-106	55	0	0	55			
TC280-107	44	2	0	44			
TC280-108	61	8	0	61			
TC280-109	63	0	0	63	1		
TC280-110	68	17	0	68			
TC280-111	51	2	0	51			
TC300-001	14	5	0	14			
TC300-002	16	8	0	16			
TC300-003	26	7	0	26			
TC300-004	22	9	0	22			
TC300-005	29	9	0	29			
TC300-006	28	7	0	28			
TC300-007	38	3	0	38			
TC300-008	48	8	0	48			
TC300-009	38	8	0	38			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC300-010	17	7	0	17			
TC300-011	19	10	0	19			
TC300-012	26	18	0	26			
TC300-013	32	9	0	32			
TC300-014	44	3	0	44			
TC300-015	49	11	0	44	4		
TC300-016	26	4	0	26			
TC300-017	27	6	0	27			
TC300-018	20	6	0	20			
TC300-019	31	11	0	31			
TC300-020	19	2	0	19			
TC300-021	30	8	0	30			
TC320-001	43	4	0	43			
TC320-002	65	5	0	65			
TC320-003	0						
TC320-003A	57	5	0	57			
TC320-004	37	4	0	37			
TC320-005	58	2	1	58	1		
TC320-006	52	5	0	52			
TC320-007	68	7	0	68			
TC320-008	52	9	0	52	2		
TC320-009	39	2	0	39	1		
TC320-010	70	2	0	70			
TC320-011	70	3	0	70			
TC320-012	31	3	0	31			
TC320-013	53	8	1	42		11	
TC320-014	67	9	0	59	1	8	
TC320-015	46	5	0	46	1		
TC320-016	59	4	0	59			
TC320-017	66	6	0	66			
TC320-018	35	7	0	35	1		
TC320-019	48	4	0	48	1		
TC320-020	30	3	0	30			
TC320-021	40	10	0	40			
TC320-022	65	7	0	65	1		
TC320-023	52	13	0	52	3		
TC320-024	55	8	0	55	3		
TC320-025	66	5	0	66	1		
TC320-026	32	0	0	32			
TC320-027	59	2	0	59			
TC320-028	47	4	0	47			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC320-029	58	4	0	58	1		
TC320-030	56	3	0	56	1		
TC320-031	43	1	0	43			
TC320-032	72	6	0	72			
TC320-033	54	12	0	54	2		
TC320-034	50	9	0	50	1		
TC320-035	46	7	0	46			
TC320-036	39	1	0	39			
TC320-037	62	3	0	62			
TC320-038	33	1	0	33			
TC320-039	25	1	0	25			
TC320-040	52	7	0	52			
TC320-041	45	4	0	45			
TC320-042	33	1	0	33	1		
TC320-043	45	5	0	45			
TC320-044	0						
TC320-045	59	0	0	59			
TC320-046	29	1	0	29			
TC320-047	50	3	0	50			
TC320-048	49	6	0	49	2		
TC320-049	86	5	0	86	1		
TC320-050	66	3	1	66	1		
TC320-051	38	10	0	38	2		
TC320-052	41	13	0	41	1		
TC320-053	53	14	0	53	3		
TC320-054	81	13	0	81			
TC320-055	78	14	1	78			
TC320-056	75	4	0	65			
TC320-057	68	1	0	68			
TC320-058	65	3	0	65			
TC320-059	63	7	0	51			
TC320-060	109	3	0	109			
TC320-061	79	5	0	79			
TC320-062	85	3	0	85			
TC330-001	35	10	0	35	1		
TC330-002	39	8	0	39	1		
TC330-003	33	13	0	33	2		
TC330-004	64	12	0	64	2		
TC330-005	53	4	0	53	1		
TC330-006	42	5	1	42			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC330-007	53	6	0	53			
TC330-008	69	10	0	69			
TC330-009	55	4	0	55			
TC330-010	56	1	0	56			
TC330-011	53	7	0	53			
TC330-012	54	7	0	54	1		
TC330-013	38	4	0	38			
TC330-014	48	0	0	48			
TC330-015	35	8	0	35	3		
TC330-016	55	1	0	55			
TC330-017	50	5	0	50			
TC330-018	32	7	0	32			
TC330-019	39	9	0	39	1		
TC330-020	58	5	0	58	1		
TC330-021	75	5	1	75	1		
TC330-025	53	8	1	53	3		
TC330-026	53	18	0	53	1		
TC330-027	86	16	0	86	3		
TC330-028	72	0	0	72			
TC330-029	90	18	0	90	2		
TC330-030	121	7	0	121	2		
TC330-031	67	4	0	67			
TC330-032	56	1	0	56			
TC330-033	66	3	0	66			
TC330-034	85	3	0	85			
TC330-035	85	3	0	85			
TC330-036	20	0	0	20			
TC330-037	32	0	0	32			
TC330-038	58	1	0	58			
TC330-039	97	28	3	97	10		
TC330-040	87	4	0	87			
TC330-041	72	0	0	72			
TC330-042	86	5	0	86			
TC330-043	77	0	0	77			
TC350-001	90	6	0	90			
TC350-002	41	12	1	41			
TC350-003	37	8	0	37			
TC350-004	39	12	0	39			

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC650-001	227	55	4	227	7		
TC650-002	246	8	0	246			
TC650-003	234	1	0	234			
TC650-004	0						
TC650-004B	181	51	2	181	10		
TC650-005	144	32	0	144	9		
TC650-006	21	0	0	21			
TC650-007	197	40	0	197	2		
TC680-001	197	0	0	163			
TC680-002	325	0	0	325			
TC680-003	456	1	0	456			
TC680-004	401						
TC680-005	601						
TC680-006	0						
TC680-007	0						
TC680-008	0						
TC680-009	0						
TC710-001	186	40	0	186			
TC710-002	189	19	0	189			
TC710-003	214	16	0	214			
TC710-004	160	36	0	160	3		
TC710-005	130	24	2	130			
TC710-006	209	37	0	209	7		
TC710-007	221	0	0	75			
TC710-008	265						
TC710-009	0						
TC710-010	0						
TC710-011	476						
TC710-012	281	21	0	281			
TC710-013	0						
TC710-014	0						
TC710-015	0						
TC710-016	0						
TC710-017	0						
TC710-018	0						
TC710-019	0						
TC710-021	0						
TC710-022	161						
TC710-023	0						
TC710-024	191	41	0	135			
TC730-001	157	48	1	58		133	

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC730-002	101	30	0	101	8		
TC730-003	113	25	4	96		17	
TC730-004	140	63	6	140	24		
TC730-005	156	61	0	156	11		
TC730-006	123	41	0	123	4		
TC730-007	104	26	0	104	4		
TC730-008	108	27	2	108	6		
TC730-009	222	58	4	198	5	24	
TC730-010	177	75	4	177	21		
TC730-011	146	67	4	146	24		
TC730-012	141	65	8	141	20		
TC730-013	173	52	1	173	8		
TC730-014	86	31	0	86	3		
TC730-015	83	17	1	83	3		
TC730-016	84	21	1	84	2		
TC730-017	95	25	0	95	3		
TC730-018	112	31	2	112	7		
TC730-019	103	45	1	103	11		
TC730-020	92	21	3	83	3		
TC730-021	66	15	0	66	1		
TC730-022	71	26	0	71			
TC730-023	106	28	1	106	2		
TC730-024	102	8	1	102	1		
TC730-025	39	9	0	39			
TC730-026	33	3	0	33	1		
TC730-027	49	3	0	49			
TC730-028	47	4	0	47	1		
TC730-029	49	14	0	49	2		
TC730-030	608	55	2	608	4		
TC730-031	44	4	0	44	1		
TC730-032	48	4	0	48			
TC730-033	61	6	0	61			
TC730-034	57	10	0	57			
TC730-035	54	10	0	54			
TC730-036	60	4	1	60	1		
TC730-037	58	9	0	58			
TC730-038	53	12	1	53	3		
TC730-039	52	19	2	52	5		
TC730-040	56	16	0	56	2		
TC730-041	52	16	0	52	1		
TC730-042	52	21	0	52	8		

Hole Number	Number of Samples	Number Assays ≥ 1 g/tonne Au	Number of Assays ≥ 34.29 g/tonne Au	Analysis FA aa Au	Analysis FA g Au	Analysis metallics Au	Analysis aa As
TC730-051	81	34	0	81	4		
TC730-052	77	29	4	77	7		
TCGRT-001	36	4	0	36	2		
TCGRT-002	0						
TCGRT-003	55	7	0	55			
TCGRT-004	76	6	0	76			
TCGRT-005	114	2	0	114			
TCGRT-006	0						
Totals	67,949	5,298	157	64,190	863	2,377	9,283

Highlighted diamond drill holes are incomplete at the closure of the database for the effective date of October 28, 2011.

APPENDIX 4

TABLE 10.4: DIAMOND DRILL HOLES NOT USED IN THE BLOCK MODEL

TABLE 10.4: DIAMOND DRILL HOLES NOT USED IN THE BLOCK MODEL.

Hole Number	Comment
TC09-78	Hole was abandoned due to extreme deviation, no samples taken.
TC11-102	Hole to test area of vent raise, no samples taken.
TC11-103	Hole to test area of vent raise, no samples taken.
TC11-104	Hole to test area of vent raise, no samples taken.
TC11-105	Hole to test area of vent raise, no samples taken.
TC11-106	Hole to test area of vent raise, no samples taken.
TC11-107	Hole to test area of vent raise, no samples taken.
TC11-108	Hole to test area of vent raise, no samples taken.
TC11-109	Hole to test area of vent raise, no samples taken.
TC11-110	Hole to test area of vent raise, no samples taken.
TC11-87	Drill hole is being processed, geology and assays pending.
TC200-001	Hole was abandoned due to extreme deviation, no samples taken.
TC200-001A	Hole was abandoned due to extreme deviation, no samples taken.
TC200-002	Hole was abandoned due to extreme deviation, no samples taken.
TC200-005	Hole was abandoned due to extreme deviation, no samples taken.
TC200-009	Hole was abandoned due to extreme deviation, no samples taken.
TC200-009A	Hole was abandoned due to extreme deviation, no samples taken.
TC200-010	Hole was abandoned due to extreme deviation, no samples taken.
TC200-010A	Hole was abandoned due to extreme deviation, no samples taken.
TC260-016	Drill hole is being processed, geology and assays pending.
TC260-017	Drill hole is being processed, geology and assays pending.
TC206-018	Hole was abandoned due to extreme deviation, no samples taken.
TC206-019	Hole was abandoned due to extreme deviation, no samples taken.
TC206-022	Drill hole is being processed, geology and assays pending.
TC206-023	Drill hole is being processed, geology and assays pending.
TC280-005	Hole was abandoned due to extreme deviation, no samples taken.
TC280-007	Hole was abandoned due to extreme deviation, no samples taken.
TC280-011	Hole was abandoned due to extreme deviation, no samples taken.
TC280-011A	Hole was abandoned due to extreme deviation, no samples taken.
TC280-013	Hole was abandoned due to extreme deviation, no samples taken.
TC280-014	Hole was abandoned due to extreme deviation, no samples taken.
TC280-014A	Hole was abandoned due to extreme deviation, no samples taken.
TC280-015	Hole was abandoned due to extreme deviation, no samples taken.
TC280-018	Hole was abandoned due to extreme deviation, no samples taken.
TC280-019	Hole was abandoned due to extreme deviation, no samples taken.
TC280-087	Drill hole is being processed, geology and assays pending.
TC280-094	Drill hole is being processed, geology and assays pending.
TC300-015	Drill hole is being processed, geology and assays pending.
TC320-003	Hole was abandoned due to extreme deviation, no samples taken.
TC320-044	Hole was abandoned due to extreme deviation, no samples taken.
TC320-056	Drill hole is being processed, geology and assays pending.
TC680-004	Drill hole is being processed, geology and assays pending.
TC680-005	Drill hole is being processed, geology and assays pending.
TC680-006	Drill hole is being processed, geology and assays pending.
TC680-007	Drill hole is being processed, geology and assays pending.

Hole Number	Comment
TC680-008	Drill hole is being processed, geology and assays pending.
TC680-009	Drill hole is being processed, geology and assays pending.
TC710-007	Drill hole is being processed, geology and assays pending.
TC710-008	Drill hole is being processed, geology and assays pending.
TC710-009	Drill hole is being processed, geology and assays pending.
TC710-010	Drill hole is being processed, geology and assays pending.
TC710-011	Drill hole is being processed, geology and assays pending.
TC710-013	Drill hole is being processed, geology and assays pending.
TC710-014	Drill hole is being processed, geology and assays pending.
TC710-015	Drill hole is being processed, geology and assays pending.
TC710-016	Drill hole is being processed, geology and assays pending.
TC710-017	Drill hole is being processed, geology and assays pending.
TC710-018	Drill hole is being processed, geology and assays pending.
TC710-019	Drill hole is being processed, geology and assays pending.
TC710-020	Drill hole is being processed, geology and assays pending.
TC710-021	Drill hole is being processed, geology and assays pending.
TC710-023	Drill hole is being processed, geology and assays pending.
TC730-020	Drill hole is being processed, geology and assays pending.
TCGRT-002	A grout hole, no samples taken.
TCGRT-006	A grout hole, no samples taken.

APPENDIX 5

THUNDER CREEK SOLIDS INTERSECTIONS

Thunder Creek Resource Solid Intersections

HOLE-ID	FROM	TO	AU	Au Capped	Width	Zone	LOCATIONX	LOCATIONY	LOCATIONZ
	(m)	(m)	g/t	m.g/t	(m)		(m)	(m)	(m)
TC08-54	644.19	684.06	4.09	4.09	39.87	PZ1A	4471.16	7025.31	9425.08
TC08-54A	649.80	664.97	2.11	2.11	15.17	PZ1A	4446.96	7008.94	9430.19
TC08-54B	620.00	630.47	4.88	4.88	10.47	PZ1A	4442.41	6994.22	9471.96
TC08-54C	619.50	629.00	1.63	1.63	9.50	PZ1A	4444.04	6993.07	9474.37
TC08-54D	623.10	652.20	4.28	4.28	29.10	PZ1A	4481.14	7011.45	9464.29
TC08-64	581.46	598.90	2.21	2.21	17.44	PZ1A	4417.86	6995.26	9497.00
TC09-68	896.05	900.44	3.49	3.49	4.40	PZ1A	4414.90	7095.08	9252.66
TC09-68A	895.76	900.75	9.32	9.32	4.99	PZ1A	4415.19	7094.52	9253.22
TC09-68B	866.30	871.20	5.61	5.61	4.90	PZ1A	4429.71	7085.38	9301.34
TC09-68C	815.80	848.00	2.80	2.80	32.20	PZ1A	4427.77	7078.52	9355.06
TC09-68D	823.99	839.70	4.85	4.85	15.71	PZ1A	4451.40	7068.84	9378.60
TC09-68E	844.50	850.30	7.16	7.16	5.80	PZ1A	4473.84	7096.21	9349.06
TC09-68F	825.50	849.20	6.54	6.54	23.70	PZ1A	4477.79	7079.02	9382.67
TC09-69	777.25	806.12	7.59	7.59	28.87	PZ1A	4383.24	7039.23	9336.72
TC09-69A	776.84	803.55	6.01	6.01	26.71	PZ1A	4384.90	7037.99	9340.00
TC09-69B	758.15	776.49	11.25	11.25	18.34	PZ1A	4395.74	7016.75	9382.22
TC09-69C	736.29	762.34	3.38	3.38	26.05	PZ1A	4416.34	7010.23	9423.03
TC09-69D	820.75	834.00	5.58	5.58	13.25	PZ1A	4362.20	7059.64	9282.89
TC09-69E	817.02	830.75	4.98	4.98	13.73	PZ1A	4359.11	7054.14	9287.03
TC09-69F	815.05	829.89	4.62	4.62	14.84	PZ1A	4359.18	7053.92	9288.91
TC09-69G	786.80	803.20	10.82	10.82	16.40	PZ1A	4363.58	7027.47	9330.00
TC09-69H	753.70	763.00	6.19	6.19	9.30	PZ1A	4370.36	7007.41	9386.01
TC09-69J	734.20	744.10	3.77	3.77	9.90	PZ1A	4377.30	7007.99	9413.51
TC09-69K	718.90	727.80	6.72	6.72	8.90	PZ1A	4358.43	6986.28	9441.13
TC09-80B	883.39	891.80	1.08	1.08	8.40	PZ1A	4455.11	7126.10	9250.82
TC09-80C	860.40	864.30	2.43	2.43	3.90	PZ1A	4458.52	7115.55	9292.20
TC09-80F	878.56	882.85	4.20	4.20	4.29	PZ1A	4414.00	7095.62	9251.13
TC11-111	758.88	773.86	0.04	0.04	14.97	PZ1A	4346.70	6988.02	9363.21
TC11-111A	782.50	784.50	9.09	9.09	2.00	PZ1A	4343.22	6993.60	9333.75
TC11-111B	726.50	731.50	9.61	9.61	5.00	PZ1A	4345.49	6975.30	9406.52
TC11-111C	728.49	730.64	0.00	0.00	2.14	PZ1A	4329.30	6956.91	9409.99
TC11-112	669.86	704.21	3.93	3.93	34.35	PZ1A	4458.70	7036.85	9407.54
TC11-112A	687.00	707.40	3.60	3.60	20.40	PZ1A	4437.07	7040.70	9385.57
TC11-113A	933.70	941.30	23.90	23.90	7.60	PZ1A	4343.83	7083.66	9215.56
TC11-114	780.91	799.06	6.18	6.18	18.16	PZ1A	4482.45	7104.85	9360.80
TC11-115	924.13	934.82	6.05	6.05	10.69	PZ1A	4355.73	7085.77	9225.83
TC260-003	353.60	357.10	5.88	5.88	3.50	PZ1A	4503.82	7021.61	9491.38
TC260-004	366.30	388.30	2.85	2.85	22.00	PZ1A	4496.13	7039.50	9448.07
TC260-006	373.00	379.60	3.99	3.99	6.60	PZ1A	4494.41	7087.18	9421.74
TC260-015	365.03	385.96	7.27	7.27	20.93	PZ1A	4411.11	6990.81	9495.34
TC650-001	335.80	342.10	2.08	2.08	6.30	PZ1A	4454.47	7119.97	9268.36
TC650-004B	355.79	360.53	2.17	2.17	4.75	PZ1A	4442.55	7102.97	9280.55
TC650-005	398.80	473.18	3.59	3.59	74.38	PZ1A	4358.34	7049.30	9302.48
TC710-001	207.00	250.50	5.21	5.21	43.50	PZ1A	4395.66	7061.58	9310.24
TC710-002	210.31	216.40	1.46	1.46	6.10	PZ1A	4399.52	7079.27	9276.77
TC710-003	283.50	299.30	1.86	1.86	15.80	PZ1A	4354.57	7015.05	9351.68
TC710-004	200.50	215.80	3.46	3.46	15.30	PZ1A	4409.39	7085.41	9255.87
TC710-005	254.02	311.67	3.52	3.52	57.65	PZ1A	4374.11	7020.88	9380.34
TC710-006	177.49	183.33	3.17	3.17	5.83	PZ1A	4434.30	7110.43	9244.03
TC710-024	169.31	269.75	2.96	2.96	100.44	PZ1A	4473.80	7063.76	9393.37
TC730-002	38.70	46.64	10.13	10.13	7.94	PZ1A	4424.38	7091.36	9287.56
TC730-003	47.89	54.90	1.41	1.41	7.00	PZ1A	4415.88	7083.33	9288.69
TC730-004	70.81	109.60	14.38	14.38	38.80	PZ1A	4379.92	7065.44	9291.34
TC730-010	96.60	96.78	11.28	11.28	0.18	PZ1A	4409.08	7041.17	9333.99
TC730-010	109.18	155.21	7.23	7.23	46.02	PZ1A	4380.95	7029.99	9352.50
TC730-011	79.89	126.00	11.98	11.98	46.11	PZ1A	4389.59	7058.34	9323.53
TC730-012	79.40	120.40	7.89	7.89	41.00	PZ1A	4399.24	7058.49	9334.27
TC730-014	60.52	68.05	0.16	0.16	7.53	PZ1A	4463.76	7095.44	9342.58
TC730-017	54.30	58.95	5.29	5.29	4.65	PZ1A	4444.64	7111.18	9260.04
TC730-018	61.70	76.12	2.20	2.20	14.42	PZ1A	4441.20	7114.09	9243.84
TC730-019	53.65	62.49	17.07	17.07	8.84	PZ1A	4470.85	7104.42	9342.48
TC730-021	28.00	30.85	3.43	3.43	2.85	PZ1A	4461.96	7118.45	9301.51
TC730-022	58.45	66.19	0.01	0.01	7.75	PZ1A	4446.01	7116.32	9252.94
TC730-023	46.00	61.15	1.78	1.78	15.15	PZ1A	4452.87	7128.16	9247.09
TC730-024	14.68	22.37	0.67	0.67	7.69	PZ1A	4451.43	7110.95	9285.43
TC730-025	8.94	13.90	2.60	2.60	4.95	PZ1A	4458.21	7119.05	9285.06

HOLE-ID	FROM	TO	AU	Au Capped	Width	Zone	LOCATIONX	LOCATIONY	LOCATIONZ
	(m)	(m)	g/t	m.g/t	(m)		(m)	(m)	(m)
TC730-041	23.47	28.55	0.91	0.91	5.08	PZ1A	4457.14	7117.60	9285.69
TC730-042	20.75	25.59	7.46	7.46	4.84	PZ1A	4450.57	7109.88	9285.85
TC09-68	915.12	931.04	5.15	5.15	15.92	PZ1B	4422.04	7082.88	9232.24
TC09-68A	915.10	930.10	3.81	3.81	15.00	PZ1B	4422.50	7081.49	9234.01
TC09-68B	885.53	923.00	15.43	13.08	37.47	PZ1B	4442.16	7066.14	9274.21
TC09-68C	869.30	909.72	2.49	2.49	40.42	PZ1B	4450.01	7043.07	9315.47
TC09-68D	856.50	897.80	4.82	4.82	41.30	PZ1B	4471.82	7040.60	9349.64
TC09-68E	855.90	866.80	4.40	4.40	10.90	PZ1B	4480.96	7088.92	9339.53
TC09-69	819.57	855.01	0.91	0.91	35.44	PZ1B	4400.02	7022.86	9297.60
TC09-69A	815.20	857.66	2.20	2.20	42.46	PZ1B	4403.40	7018.70	9302.28
TC09-69B	797.99	805.40	15.11	11.81	7.41	PZ1B	4409.75	7000.74	9355.22
TC09-69C	778.50	782.15	11.81	11.81	3.65	PZ1B	4431.95	6994.16	9401.60
TC09-69G	818.20	823.50	4.95	4.95	5.30	PZ1B	4371.66	7017.47	9307.58
TC09-73D	976.70	979.35	13.92	13.92	2.65	PZ1B	4350.87	7115.64	9160.71
TC09-73E	967.00	980.90	2.50	2.50	13.90	PZ1B	4371.47	7096.24	9189.12
TC09-80	931.42	938.99	5.90	5.90	7.57	PZ1B	4411.72	7141.76	9170.36
TC09-80A	914.50	933.40	1.72	1.72	18.90	PZ1B	4435.93	7126.32	9197.98
TC09-80B	901.70	918.00	1.24	1.24	16.30	PZ1B	4465.71	7117.57	9233.20
TC09-80C	868.56	908.50	2.97	2.97	39.94	PZ1B	4471.99	7103.03	9273.57
TC09-80E	920.20	927.20	6.28	6.28	7.00	PZ1B	4404.20	7128.35	9184.91
TC09-80F	897.00	913.62	1.11	1.11	16.62	PZ1B	4422.19	7084.36	9230.84
TC11-112	712.67	731.36	9.90	9.90	18.69	PZ1B	4470.66	7025.74	9376.61
TC11-112A	724.00	771.50	2.66	2.66	47.50	PZ1B	4450.76	7025.10	9339.48
TC11-113	971.06	974.41	0.49	0.49	3.35	PZ1B	4337.86	7096.45	9163.94
TC11-114	807.79	812.18	1.17	1.17	4.39	PZ1B	4489.48	7094.35	9345.29
TC650-001	361.50	406.50	7.69	5.37	45.00	PZ1B	4443.33	7077.51	9258.24
TC650-002	282.51	304.42	0.01	0.01	21.91	PZ1B	4504.91	7156.25	9273.86
TC650-002	320.51	347.10	0.62	0.62	26.59	PZ1B	4498.72	7117.50	9264.49
TC650-004B	377.20	430.80	3.46	3.46	53.60	PZ1B	4430.04	7059.75	9271.76
TC650-007	334.00	343.10	4.21	4.21	9.10	PZ1B	4461.58	7138.63	9204.27
TC710-001	274.68	284.00	2.25	2.25	9.33	PZ1B	4373.27	7016.26	9308.19
TC710-004	231.16	248.75	1.30	1.30	17.60	PZ1B	4396.37	7057.78	9247.01
TC710-006	200.10	223.11	7.37	4.61	23.01	PZ1B	4424.16	7083.60	9231.78
TC710-012	159.12	167.20	1.10	1.10	8.08	PZ1B	4463.38	7142.35	9200.53
TC710-022	137.85	222.50	9.25	7.45	84.65	PZ1B	4488.08	7085.83	9313.87
TC730-001	0.00	67.00	4.51	4.51	67.00	PZ1B	4439.15	7069.93	9287.44
TC730-001	87.46	105.00	2.48	2.48	17.54	PZ1B	4386.81	7035.52	9290.70
TC730-001	108.79	116.74	1.28	1.28	7.95	PZ1B	4372.82	7026.76	9291.58
TC730-002	0.00	22.38	3.88	3.88	22.38	PZ1B	4455.74	7089.36	9286.09
TC730-003	0.00	25.45	29.61	14.73	25.45	PZ1B	4454.28	7087.08	9286.27
TC730-004	0.00	29.97	3.79	3.79	29.97	PZ1B	4452.56	7084.34	9286.52
TC730-005	0.00	102.10	3.10	3.10	102.10	PZ1B	4429.17	7054.33	9287.74
TC730-006	0.00	85.94	1.88	1.88	85.94	PZ1B	4445.96	7051.13	9287.53
TC730-007	0.00	53.20	1.91	1.91	53.20	PZ1B	4461.19	7062.64	9286.70
TC730-008	0.00	45.74	5.63	5.63	45.74	PZ1B	4467.59	7065.78	9286.71
TC730-009	0.00	61.64	25.02	5.47	61.64	PZ1B	4459.54	7065.71	9268.73
TC730-010	0.00	70.00	4.24	4.08	70.00	PZ1B	4456.64	7064.07	9302.07
TC730-011	0.00	53.00	4.63	3.36	53.00	PZ1B	4459.06	7073.92	9295.72
TC730-012	0.00	56.30	7.97	6.72	56.30	PZ1B	4459.79	7071.81	9298.16
TC730-013	0.00	102.99	7.58	3.00	102.99	PZ1B	4436.97	7066.41	9265.03
TC730-014	0.00	55.50	2.69	2.69	55.50	PZ1B	4474.68	7085.06	9309.30
TC730-015	0.00	46.81	2.83	2.83	46.81	PZ1B	4472.30	7086.52	9302.56
TC730-016	0.00	41.69	3.81	3.81	41.69	PZ1B	4470.92	7087.79	9297.15
TC730-017	0.00	43.69	1.63	1.63	43.69	PZ1B	4468.40	7090.51	9274.80
TC730-018	0.00	52.45	5.68	4.04	52.45	PZ1B	4467.36	7091.43	9268.82
TC730-019	0.00	49.65	5.00	5.00	49.65	PZ1B	4474.80	7101.77	9309.57
TC730-021	0.00	22.34	2.56	2.56	22.34	PZ1B	4471.73	7106.93	9291.26
TC730-022	0.00	47.23	3.11	3.11	47.23	PZ1B	4469.29	7092.21	9272.29
TC730-023	0.00	29.50	9.11	5.10	29.50	PZ1B	4470.85	7107.45	9274.57
TC730-024	0.00	7.94	5.76	5.76	7.94	PZ1B	4465.57	7114.35	9285.07
TC730-025	0.00	4.48	1.26	1.26	4.48	PZ1B	4466.95	7116.27	9285.00
TC730-026	0.00	2.95	3.26	3.26	2.95	PZ1B	4469.13	7120.10	9285.00
TC730-027	0.00	4.26	0.56	0.56	4.26	PZ1B	4470.66	7121.58	9285.04
TC730-028	0.00	12.00	2.28	2.28	12.00	PZ1B	4474.95	7125.42	9285.25
TC730-029	0.00	32.80	2.22	2.22	32.80	PZ1B	4487.28	7128.37	9284.97
TC730-030	0.00	80.69	2.52	2.52	80.69	PZ1B	4458.06	7108.15	9245.40
TC730-031	0.00	3.00	4.23	4.23	3.00	PZ1B	4469.35	7119.96	9285.96
TC730-032	0.00	4.50	0.97	0.97	4.50	PZ1B	4469.00	7120.41	9283.34

HOLE-ID	FROM	TO	AU	Au Capped	Width	Zone	LOCATIONX	LOCATIONY	LOCATIONZ
	(m)	(m)	g/t	m.g/t	(m)		(m)	(m)	(m)
TC730-033	0.00	3.71	2.56	2.56	3.71	PZ1B	4469.91	7120.68	9285.72
TC730-034	0.00	6.63	4.89	4.89	6.63	PZ1B	4470.73	7121.46	9281.90
TC730-035	0.00	5.30	9.88	9.88	5.30	PZ1B	4470.74	7121.92	9283.25
TC730-036	0.00	9.69	1.18	1.18	9.69	PZ1B	4474.42	7123.80	9289.52
TC730-037	0.00	30.15	1.21	1.21	30.15	PZ1B	4477.71	7131.77	9276.44
TC730-038	0.00	33.55	2.97	2.97	33.55	PZ1B	4487.04	7128.31	9289.20
TC730-039	0.00	32.05	4.88	4.88	32.05	PZ1B	4486.57	7127.25	9279.85
TC730-040	0.00	39.28	1.84	1.84	39.28	PZ1B	4485.59	7128.11	9271.33
TC730-041	0.00	19.43	4.21	4.21	19.43	PZ1B	4465.24	7103.47	9285.48
TC730-042	0.00	16.70	5.82	5.82	16.70	PZ1B	4457.52	7096.79	9285.65
TC730-051	0.00	34.25	5.51	5.51	34.25	PZ1B	4468.39	7067.20	9285.53
TC730-052	0.00	38.20	7.99	7.99	38.20	PZ1B	4452.97	7055.01	9285.91
TC09-68	952.81	970.56	4.12	4.12	17.75	PZ1C	4432.81	7063.69	9200.51
TC09-68B	927.00	956.50	15.93	6.18	29.50	PZ1C	4455.17	7045.57	9245.70
TC09-69F	911.55	932.80	2.54	2.54	21.25	PZ1C	4390.97	7020.61	9200.51
TC09-73C	1026.20	1030.90	10.80	10.80	4.70	PZ1C	4353.86	7126.17	9099.48
TC09-73D	1015.80	1020.76	0.34	0.34	4.96	PZ1C	4368.11	7098.63	9128.55
TC09-73E	1016.66	1018.78	0.29	0.29	2.12	PZ1C	4391.95	7071.06	9159.76
TC09-80B	942.40	963.90	1.44	1.44	21.50	PZ1C	4486.32	7100.93	9198.95
TC09-80C	918.60	930.50	3.17	3.17	11.90	PZ1C	4490.31	7085.75	9247.81
TC09-80F	935.35	952.87	1.23	1.23	17.52	PZ1C	4434.97	7066.38	9198.92
TC650-001	440.03	446.90	3.02	3.02	6.88	PZ1C	4428.28	7021.60	9244.70
TC650-004B	446.80	472.03	3.66	3.66	25.23	PZ1C	4414.56	7007.70	9260.80
TC650-007	378.23	400.00	1.00	1.00	21.77	PZ1C	4449.77	7094.12	9183.37
TC710-006	266.54	284.10	0.98	0.98	17.57	PZ1C	4403.93	7028.96	9206.00
TC730-030	93.90	118.55	2.34	2.34	24.65	PZ1C	4439.29	7096.30	9183.37
TC09-68	1004.74	1008.16	0.60	0.60	3.41	PZ3	4444.63	7041.07	9163.74
TC09-69F	952.20	954.20	7.19	7.19	2.00	PZ3	4401.13	7010.37	9173.05
TC09-73E	1054.50	1057.00	3.60	3.60	2.50	PZ3	4409.04	7048.19	9134.63
TC09-79	1032.15	1034.10	2.70	2.70	1.95	PZ3	4346.80	7023.09	9128.34
TC09-79C	1019.90	1022.60	6.61	6.61	2.70	PZ3	4365.70	7002.37	9161.82
TC09-80	1022.49	1027.17	16.73	16.73	4.67	PZ3	4440.70	7112.77	9090.66
TC09-80A	1005.20	1009.20	0.40	0.40	4.00	PZ3	4466.14	7095.12	9126.96
TC09-80F	985.07	989.00	2.57	2.57	3.93	PZ3	4449.93	7046.80	9163.78
TC11-113A	1038.00	1040.00	3.13	3.13	2.00	PZ3	4382.90	7037.07	9134.33
TC11-115	1031.97	1034.08	0.19	0.19	2.10	PZ3	4387.17	7030.13	9144.35
TC650-007	450.00	454.00	1.95	1.95	4.00	PZ3	4435.18	7038.85	9157.17
TC710-012	242.20	245.20	3.35	3.35	3.00	PZ3	4473.93	7083.29	9146.82
TC320-023	82.00	87.00	5.06	5.06	5.00	RZ2	4562.82	6934.56	9698.29
TC320-025	87.00	91.18	0.34	0.34	4.18	RZ2	4590.10	6949.01	9697.33
TC320-033	83.90	87.00	9.49	9.49	3.10	RZ2	4569.51	6939.78	9686.49
TC320-034	84.20	86.40	1.37	1.37	2.20	RZ2	4566.62	6942.53	9675.13
TC320-035	88.60	92.20	2.62	2.62	3.60	RZ2	4549.17	6924.02	9693.01
TC320-040	82.90	87.50	2.95	2.95	4.60	RZ2	4574.28	6946.46	9677.79
TC320-041	82.47	83.58	0.54	0.54	1.12	RZ2	4563.09	6961.39	9650.93
TC320-048	82.90	88.90	5.68	5.68	6.00	RZ2	4595.57	6960.98	9692.34
TC320-049	80.00	82.00	11.23	11.23	2.00	RZ2	4583.50	6969.62	9665.90
TC320-050	85.90	89.40	13.70	13.70	3.50	RZ2	4573.33	6976.70	9640.04
TC320-058	80.91	84.97	1.09	1.09	4.06	RZ2	4601.81	6973.69	9683.28
TC320-059	79.77	82.27	3.12	3.12	2.49	RZ2	4598.35	6979.85	9673.17
TC320-061	83.30	85.80	3.64	3.64	2.50	RZ2	4606.68	6988.51	9674.34
TC320-062	82.23	85.31	0.40	0.40	3.08	RZ2	4590.86	6987.92	9652.50
TC330-021	102.05	105.05	15.18	15.18	3.00	RZ2	4548.80	6986.11	9607.01
TC07-33	425.27	428.72	1.66	1.66	3.44	RZ2A	4541.68	6906.91	9730.70
TC07-34	423.81	430.95	0.79	0.79	7.14	RZ2A	4565.64	6930.58	9728.61
TC280-034	125.34	137.03	12.53	7.27	11.69	RZ2A	4546.70	6901.85	9754.03
TC280-035	132.01	136.40	0.64	0.64	4.39	RZ2A	4543.38	6896.90	9769.52
TC280-036	125.76	129.00	1.64	1.64	3.24	RZ2A	4541.03	6899.29	9756.70
TC280-037	142.70	148.30	4.35	4.35	5.60	RZ2A	4545.47	6888.74	9785.45
TC280-047	134.10	136.10	0.87	0.87	2.00	RZ2A	4531.10	6888.02	9753.19
TC280-048	137.80	153.80	11.40	9.40	16.00	RZ2A	4552.47	6909.26	9758.02
TC280-049	141.40	144.40	1.30	1.30	3.00	RZ2A	4526.27	6874.46	9771.32
TC280-050	140.30	143.10	0.79	0.79	2.80	RZ2A	4533.77	6886.02	9768.69
TC320-008	54.84	57.80	3.88	3.88	2.96	RZ2A	4537.56	6895.47	9748.36
TC320-013	41.70	48.00	13.06	13.06	6.30	RZ2A	4553.56	6916.33	9728.20
TC320-014	49.50	59.65	6.17	6.17	10.15	RZ2A	4557.93	6917.22	9743.73
TC320-021	103.00	117.45	1.47	1.47	14.45	RZ2A	4555.20	6912.64	9751.26
TC320-028	93.92	104.70	1.06	1.06	10.78	RZ2A	4566.10	6927.32	9746.77

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	(m)	(m)	g/t	m.g/t	(m)		(m)	(m)	(m)
TC07-35	466.21	468.70	5.96	5.96	2.49	RZ3	4526.14	6966.54	9630.58
TC07-41	508.75	516.95	2.64	2.64	8.20	RZ3	4451.16	6978.84	9556.53
TC07-43	483.65	492.65	8.57	8.57	9.00	RZ3	4487.94	6955.58	9608.53
TC08-60	548.05	567.95	3.64	3.64	19.90	RZ3	4491.42	6974.34	9579.88
TC260-001	320.70	346.50	3.39	3.39	25.80	RZ3	4484.37	6986.91	9563.37
TC280-011B	117.60	120.50	7.59	7.59	2.90	RZ3	4469.80	6936.81	9616.72
TC280-014B	145.50	147.70	8.56	8.56	2.20	RZ3	4452.78	6952.49	9581.45
TC280-015A	130.50	141.36	1.08	1.08	10.86	RZ3	4467.16	6963.25	9593.31
TC280-019A	112.30	114.70	4.04	4.04	2.40	RZ3	4495.38	6939.90	9632.05
TC280-052	127.70	137.89	3.15	3.15	10.19	RZ3	4498.94	6951.24	9621.98
TC280-053	132.00	141.90	1.75	1.75	9.90	RZ3	4477.80	6950.67	9604.12
TC280-054	145.03	157.71	0.10	0.10	12.68	RZ3	4506.60	6976.69	9605.38
TC320-054	87.75	101.75	0.23	0.23	14.00	RZ3	4490.82	6938.91	9623.81
TC330-019	87.95	88.01	0.01	0.01	0.06	RZ3	4518.30	6961.58	9630.19
TC330-019	88.04	90.88	0.01	0.01	2.84	RZ3	4518.48	6960.60	9629.10
TC330-025	96.23	106.24	0.07	0.07	10.01	RZ3	4499.40	6951.87	9620.55
TC330-026	92.60	105.70	3.77	3.77	13.10	RZ3	4503.64	6970.91	9609.32
TC330-027	96.70	110.40	2.57	2.57	13.70	RZ3	4495.14	6956.32	9614.40
TC330-029	125.24	128.35	5.24	5.24	3.11	RZ3	4474.63	6973.93	9582.04
TC330-039	133.20	153.99	16.63	16.05	20.78	RZ3	4461.18	6980.74	9565.49
TC330-040	133.30	143.88	1.03	1.03	10.58	RZ3	4458.93	6964.71	9578.00
TC07-30	407.04	417.80	5.24	5.24	10.76	RZ3A	4503.08	6908.26	9721.06
TC07-31	424.70	435.60	2.14	2.14	10.90	RZ3A	4479.86	6917.75	9677.18
TC07-35	457.04	463.26	1.70	1.70	6.22	RZ3A	4522.99	6969.27	9636.57
TC07-36	342.82	357.64	11.91	11.91	14.83	RZ3A	4478.03	6896.89	9717.01
TC07-43	474.00	475.50	20.95	20.95	1.50	RZ3A	4482.56	6960.62	9619.72
TC07-45	429.17	437.70	0.21	0.21	8.53	RZ3A	4493.74	6923.20	9697.35
TC200-002A	368.75	389.82	4.84	4.84	21.07	RZ3A	4474.51	6905.24	9705.33
TC200-003	387.99	390.29	0.01	0.01	2.30	RZ3A	4481.65	6891.92	9724.80
TC200-005A	173.44	186.23	0.50	0.50	12.79	RZ3A	4484.28	6898.07	9719.81
TC200-006	210.19	215.86	0.98	0.98	5.67	RZ3A	4463.86	6869.82	9738.20
TC200-008	162.00	178.33	5.51	5.51	16.33	RZ3A	4485.93	6909.44	9706.53
TC200-012	213.28	214.47	0.02	0.02	1.19	RZ3A	4445.93	6875.68	9716.29
TC200-018	154.18	162.40	3.78	3.78	8.22	RZ3A	4497.01	6919.01	9704.59
TC280-001A	98.28	107.46	0.13	0.13	9.18	RZ3A	4475.35	6890.01	9725.78
TC280-002	86.55	101.15	1.59	1.59	14.60	RZ3A	4476.42	6899.98	9711.97
TC280-003	81.69	99.15	3.00	3.00	17.46	RZ3A	4474.83	6904.38	9706.13
TC280-005A	81.50	91.50	6.09	6.09	10.00	RZ3A	4486.14	6910.77	9702.53
TC280-006	110.69	124.44	2.54	2.54	13.75	RZ3A	4464.19	6875.38	9730.47
TC280-007A	78.56	92.20	5.59	5.59	13.65	RZ3A	4480.85	6912.21	9698.37
TC280-008	89.50	97.80	4.25	4.25	8.30	RZ3A	4459.25	6885.00	9702.51
TC280-016	74.94	88.21	2.82	2.82	13.26	RZ3A	4470.00	6900.01	9707.12
TC280-017	72.41	85.80	3.28	3.28	13.39	RZ3A	4478.04	6905.65	9708.25
TC280-018A	81.93	90.70	2.97	2.97	8.77	RZ3A	4495.84	6937.26	9669.51
TC280-019A	96.67	106.70	9.15	9.15	10.03	RZ3A	4489.68	6943.41	9641.79
TC280-028	101.98	103.06	0.39	0.39	1.08	RZ3A	4446.48	6875.06	9704.37
TC280-029	73.90	83.00	2.57	2.57	9.10	RZ3A	4464.44	6907.39	9690.08
TC280-051	111.06	128.46	0.17	0.17	17.41	RZ3A	4505.76	6956.14	9645.69
TC280-051	128.50	134.30	4.19	4.19	5.80	RZ3A	4514.33	6956.01	9637.82
TC280-052	112.20	125.36	4.87	4.87	13.16	RZ3A	4490.37	6952.53	9633.01
TC280-056	71.29	79.60	1.22	1.22	8.31	RZ3A	4463.14	6865.80	9736.66
TC280-057	70.60	78.45	3.36	3.36	7.85	RZ3A	4470.34	6874.90	9736.06
TC300-001	4.46	10.74	3.90	3.90	6.28	RZ3A	4465.78	6890.08	9719.70
TC300-002	3.24	11.50	3.37	3.37	8.26	RZ3A	4468.25	6891.77	9719.70
TC300-003	4.20	9.50	7.91	7.91	5.30	RZ3A	4466.67	6889.34	9722.04
TC300-004	2.87	9.00	6.68	6.68	6.13	RZ3A	4469.07	6890.17	9721.73
TC300-005	8.70	19.53	3.83	3.83	10.83	RZ3A	4493.57	6904.22	9718.90
TC300-006	8.97	16.00	5.78	5.78	7.03	RZ3A	4488.65	6902.18	9718.90
TC300-008	7.44	15.06	5.68	5.68	7.62	RZ3A	4489.58	6907.45	9712.13
TC300-010	7.71	15.50	9.81	9.81	7.79	RZ3A	4487.09	6904.99	9711.92
TC300-011	6.00	18.10	2.54	2.54	12.10	RZ3A	4463.30	6892.16	9714.42
TC300-012	4.93	18.80	6.17	6.17	13.87	RZ3A	4466.76	6894.70	9714.50
TC300-013	9.01	24.30	5.55	5.55	15.29	RZ3A	4497.69	6906.06	9718.90
TC300-016	10.69	19.54	1.12	1.12	8.84	RZ3A	4489.74	6900.22	9722.30
TC300-017	8.00	16.28	3.17	3.17	8.27	RZ3A	4488.20	6903.00	9715.15
TC300-018	10.55	20.30	7.34	7.34	9.75	RZ3A	4494.28	6903.64	9722.37
TC300-019	7.80	17.97	9.92	9.92	10.17	RZ3A	4492.12	6905.39	9714.92
TC300-020	11.02	21.10	0.99	0.99	10.07	RZ3A	4496.78	6906.49	9722.51

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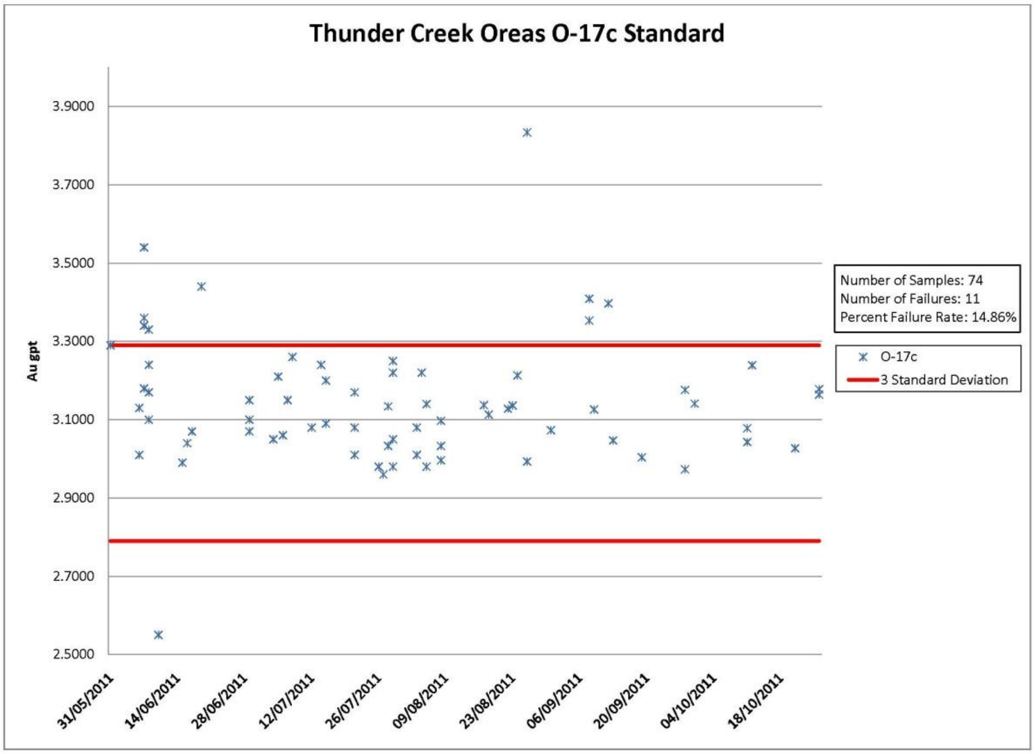
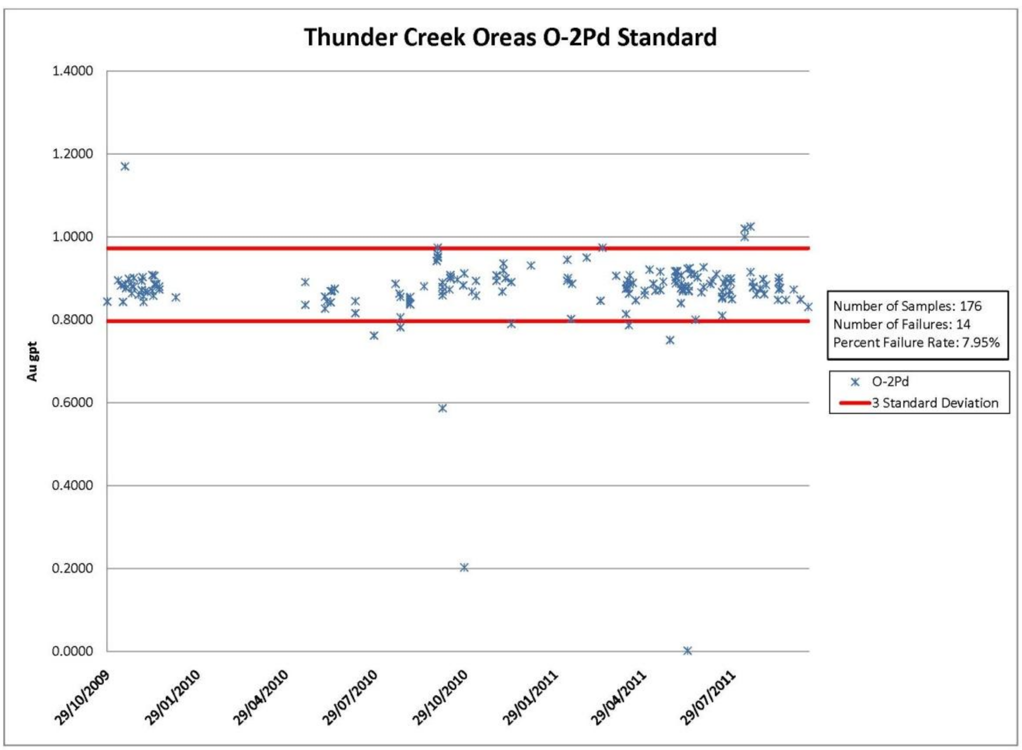
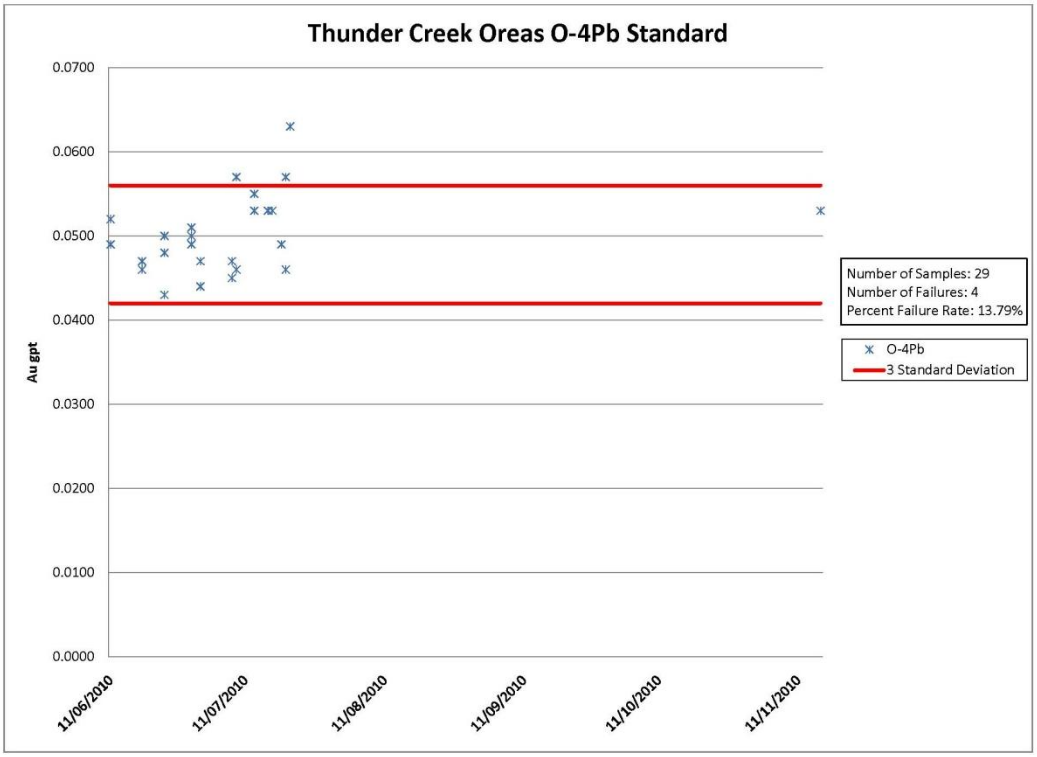
	(m)	(m)	g/t	m.g/t	(m)		(m)	(m)	(m)
TC300-021	8.02	22.10	8.24	8.24	14.08	RZ3A	4495.58	6907.05	9714.25
TC320-006	20.60	24.82	2.50	2.50	4.22	RZ3A	4515.54	6918.36	9705.01
TC320-017	20.00	23.90	2.17	2.17	3.90	RZ3A	4515.56	6922.51	9700.84
TC320-018	21.59	26.69	5.18	5.18	5.10	RZ3A	4515.07	6925.69	9695.71
TC320-019	17.02	21.40	4.89	4.89	4.38	RZ3A	4520.79	6925.91	9702.97
TC320-020	19.15	23.80	1.97	1.97	4.65	RZ3A	4518.56	6927.87	9698.08
TC320-027	66.20	73.44	1.35	1.35	7.24	RZ3A	4538.93	6952.14	9670.78
TC320-042	67.27	72.67	1.81	1.81	5.40	RZ3A	4539.65	6957.95	9662.59
TC320-051	37.00	54.59	3.27	3.27	17.59	RZ3A	4487.17	6920.67	9685.90
TC320-052	39.05	47.90	3.36	3.36	8.85	RZ3A	4491.22	6925.86	9683.16
TC320-053	46.92	64.80	4.90	4.90	17.88	RZ3A	4485.53	6933.27	9666.63
TC320-054	46.64	78.87	0.86	0.86	32.23	RZ3A	4494.55	6943.03	9655.32
TC320-055	39.20	49.90	1.84	1.84	10.70	RZ3A	4511.07	6949.40	9673.74
TC330-001	36.66	40.37	0.18	0.18	3.71	RZ3A	4502.40	6923.03	9681.85
TC330-002	30.07	37.14	3.21	3.21	7.07	RZ3A	4501.73	6932.43	9675.35
TC330-003	25.11	45.00	2.40	2.40	19.89	RZ3A	4500.95	6941.62	9665.38
TC330-004	25.51	45.50	3.47	3.47	19.99	RZ3A	4501.61	6949.11	9662.04
TC330-005	32.08	36.90	1.43	1.43	4.82	RZ3A	4513.58	6927.12	9688.11
TC330-006	32.35	41.22	5.67	5.67	8.88	RZ3A	4511.06	6933.25	9676.38
TC330-007	25.60	34.99	1.17	1.17	9.39	RZ3A	4506.39	6944.74	9673.20
TC330-008	25.40	44.04	2.60	2.60	18.64	RZ3A	4505.52	6948.30	9666.11
TC330-009	31.70	35.00	1.24	1.24	3.30	RZ3A	4522.58	6936.57	9691.12
TC330-010	30.90	36.06	0.23	0.23	5.16	RZ3A	4521.82	6937.97	9685.57
TC330-011	31.70	37.80	1.62	1.62	6.10	RZ3A	4522.22	6939.79	9680.48
TC330-012	29.48	37.60	2.54	2.54	8.12	RZ3A	4519.04	6942.87	9676.31
TC330-015	74.70	80.40	6.20	6.20	5.70	RZ3A	4529.85	6954.60	9659.03
TC330-016	72.36	77.08	0.22	0.22	4.72	RZ3A	4530.40	6964.91	9649.89
TC330-018	78.80	84.10	2.27	2.27	5.30	RZ3A	4520.77	6951.09	9652.94
TC330-019	77.00	85.00	6.95	6.95	8.00	RZ3A	4517.42	6966.22	9635.33
TC330-025	85.10	90.84	19.91	17.37	5.74	RZ3A	4500.45	6960.69	9630.40
TC330-027	83.70	93.70	5.12	5.12	10.00	RZ3A	4496.88	6965.29	9626.10
TC350-001	57.27	67.40	2.47	2.47	10.13	RZ3A	4535.23	6947.83	9672.35
TC350-003	30.08	44.07	0.51	0.51	13.99	RZ3A	4509.14	6951.17	9670.59
TC350-003	49.22	51.35	0.22	0.22	2.13	RZ3A	4520.68	6944.78	9671.51
TC350-004	28.84	41.47	2.06	2.06	12.62	RZ3A	4502.05	6944.71	9669.84
TCGRT-001	0.00	11.13	1.83	1.83	11.13	RZ3A	4467.43	6888.57	9721.23
TCGRT-003	0.00	3.81	1.12	1.12	3.81	RZ3A	4470.58	6888.94	9718.90
TCGRT-003	4.74	17.20	0.84	0.84	12.46	RZ3A	4461.89	6886.35	9718.82
TCGRT-004	0.00	10.67	0.22	0.22	10.67	RZ3A	4481.63	6893.26	9721.58
TCGRT-005	0.00	12.85	0.28	0.28	12.85	RZ3A	4482.52	6894.09	9716.17
TC280-060	82.14	90.10	1.02	1.02	7.95	RZ3A1	4439.47	6839.63	9738.13
TC280-061	93.99	97.12	11.13	11.13	3.13	RZ3A1	4427.61	6826.95	9738.67
TC280-067	99.50	102.00	6.23	6.23	2.50	RZ3A1	4419.11	6820.63	9736.88
TC280-068	111.00	113.45	5.11	5.11	2.45	RZ3A1	4405.80	6809.11	9738.23
TC280-074	101.60	105.20	5.55	5.55	3.60	RZ3A1	4440.61	6824.64	9756.55
TC280-107	12.08	20.62	0.06	0.06	8.53	RZ3A1	4444.42	6839.44	9747.51
TC08-57	601.30	602.20	12.52	12.52	0.90	RZ3B	4494.27	7013.92	9509.94
TC260-002	324.00	336.00	2.66	2.66	12.00	RZ3B	4502.06	7009.81	9539.31
TC260-003	336.94	339.58	0.01	0.01	2.63	RZ3B	4503.03	7033.13	9503.98
TC260-004	348.60	351.20	8.85	8.85	2.60	RZ3B	4495.77	7055.38	9470.40
TC280-054	177.81	180.80	12.69	12.69	2.99	RZ3B	4523.09	6980.28	9583.11
TC330-030	138.60	145.30	4.75	4.75	6.70	RZ3B	4526.93	6995.00	9557.51
TC330-031	110.90	113.90	5.06	5.06	3.00	RZ3B	4534.40	6982.87	9593.09
TC03-02	264.04	265.72	0.00	0.00	1.67	RZ5	4468.80	6818.69	9835.73
TC08-47	280.00	285.40	5.05	5.05	5.40	RZ5	4461.47	6847.40	9782.70
TC260-005	428.60	433.20	17.10	17.10	4.60	RZ5	4485.28	6835.03	9831.97
TC280-021	109.37	114.50	1.38	1.38	5.13	RZ5	4480.67	6876.96	9767.27
TC280-022	136.59	145.49	1.90	1.90	8.90	RZ5	4442.29	6838.22	9769.48
TC280-023	115.75	122.48	4.71	4.71	6.72	RZ5	4466.77	6863.94	9767.59
TC280-025	119.00	123.11	1.86	1.86	4.10	RZ5	4451.76	6856.12	9757.32
TC280-045	108.32	113.00	0.84	0.84	4.68	RZ5	4461.42	6860.96	9764.62
TC280-070	97.45	107.08	2.40	2.40	9.63	RZ5	4456.38	6844.06	9782.98
TC280-075	110.20	119.20	2.38	2.38	9.00	RZ5	4440.76	6824.02	9786.52
TC280-076	116.60	133.70	2.47	2.47	17.10	RZ5	4437.42	6817.83	9798.53
TC280-077	118.80	121.80	5.22	5.22	3.00	RZ5	4474.88	6862.51	9778.71
TC280-080	90.15	96.45	2.99	2.99	6.30	RZ5	4430.91	6835.37	9764.29

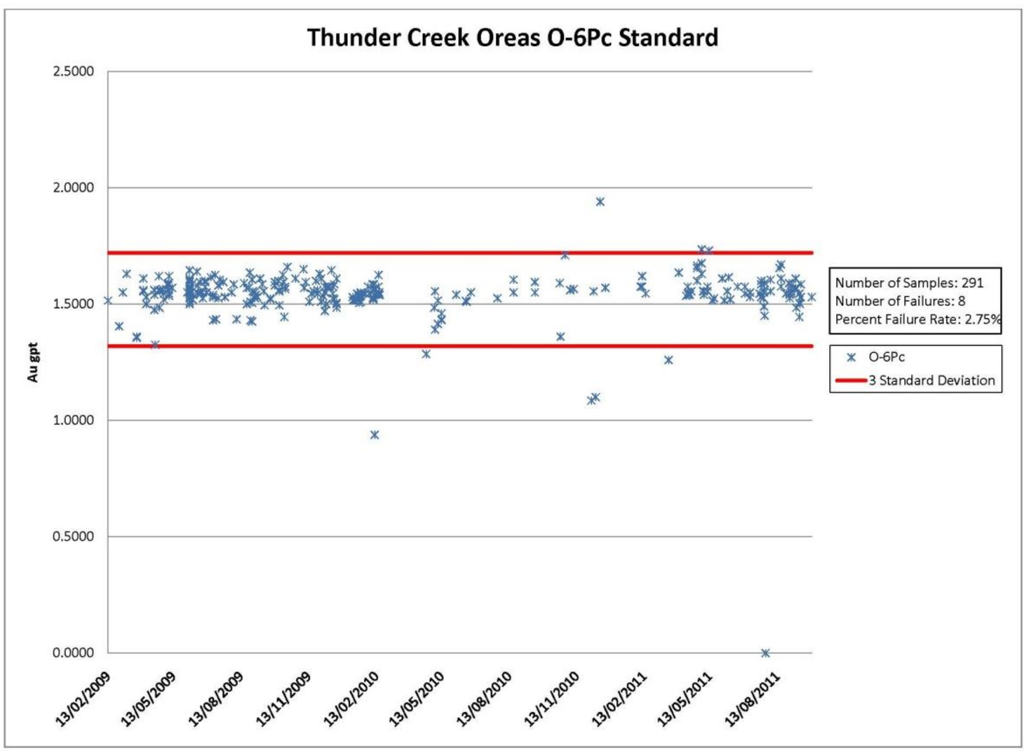
APPENDIX 6

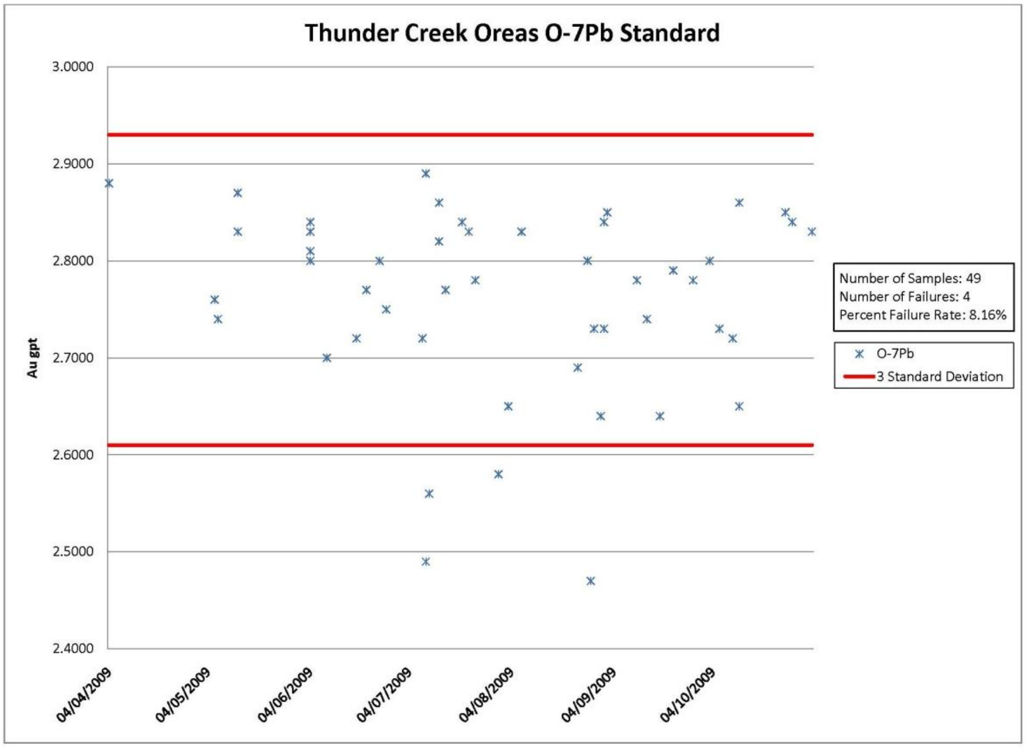
THUNDER CREEK QA/QC GRAPHS OF STANDARDS, BLANKS

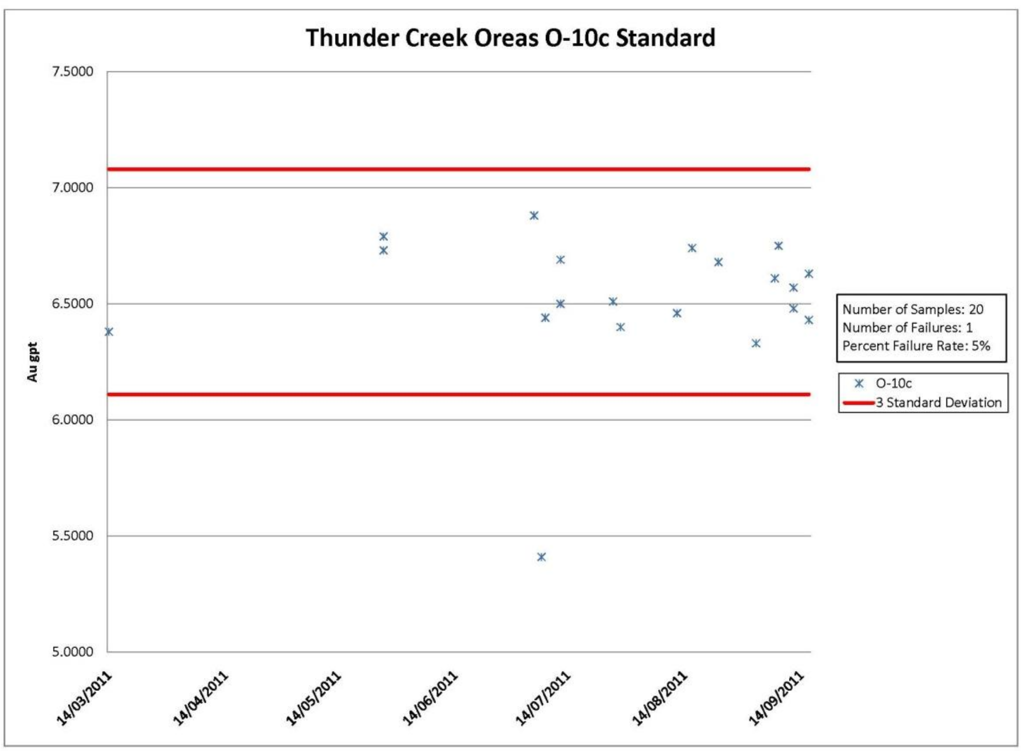

Thunder Creek Oreas O-17c Standard
Au gpt
3.9000
3.7000
3.5000
3.3000
3.1000
2.9000
2.7000
2.5000
31/05/2011
14/06/2011
28/06/2011
12/07/2011
26/07/2011
09/08/2011
23/08/2011
06/09/2011
20/09/2011
04/10/2011
18/10/2011
Number of Samples: 74
Number of Failures: 11
Percent Failure Rate: 14.86%
O-17c
3 Standard Deviation

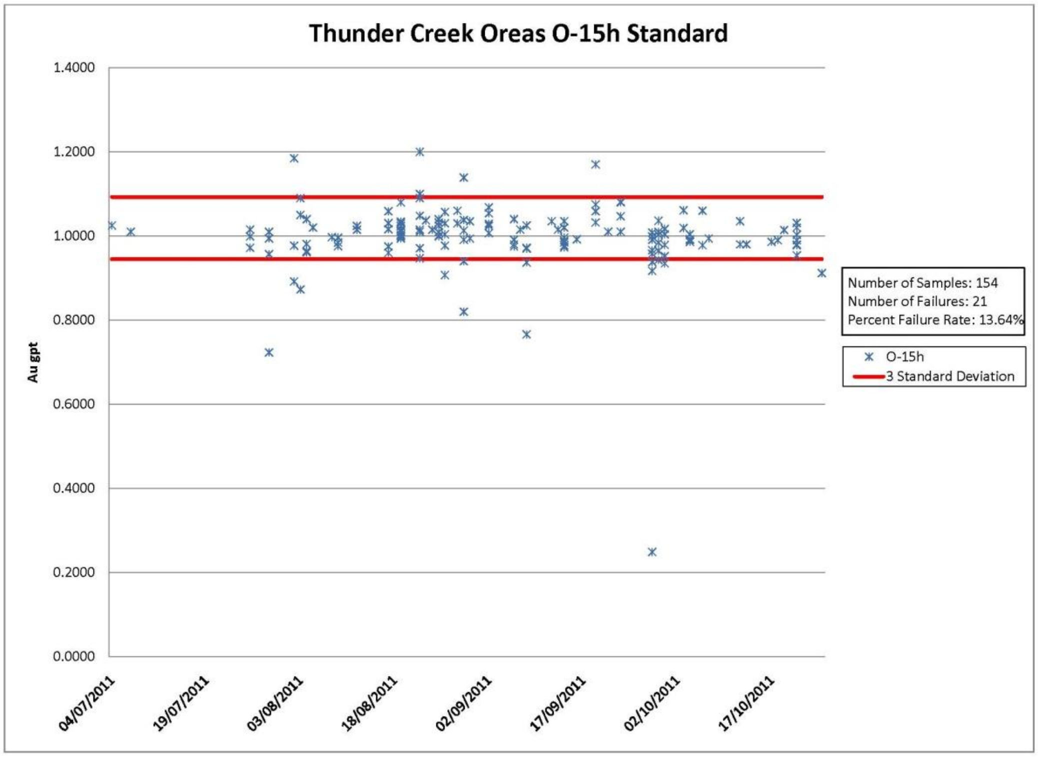

Thunder Creek Oreas O-2Pd Standard
Au gpt
1.4000
1.2000
1.0000
0.8000
0.6000
0.4000
0.2000
0.0000
29/10/2009
29/01/2010
29/04/2010
29/07/2010
29/10/2010
29/01/2011
29/04/2011
29/07/2011
Number of Samples: 176
Number of Failures: 14
Percent Failure Rate: 7.95%
O-2Pd
3 Standard Deviation

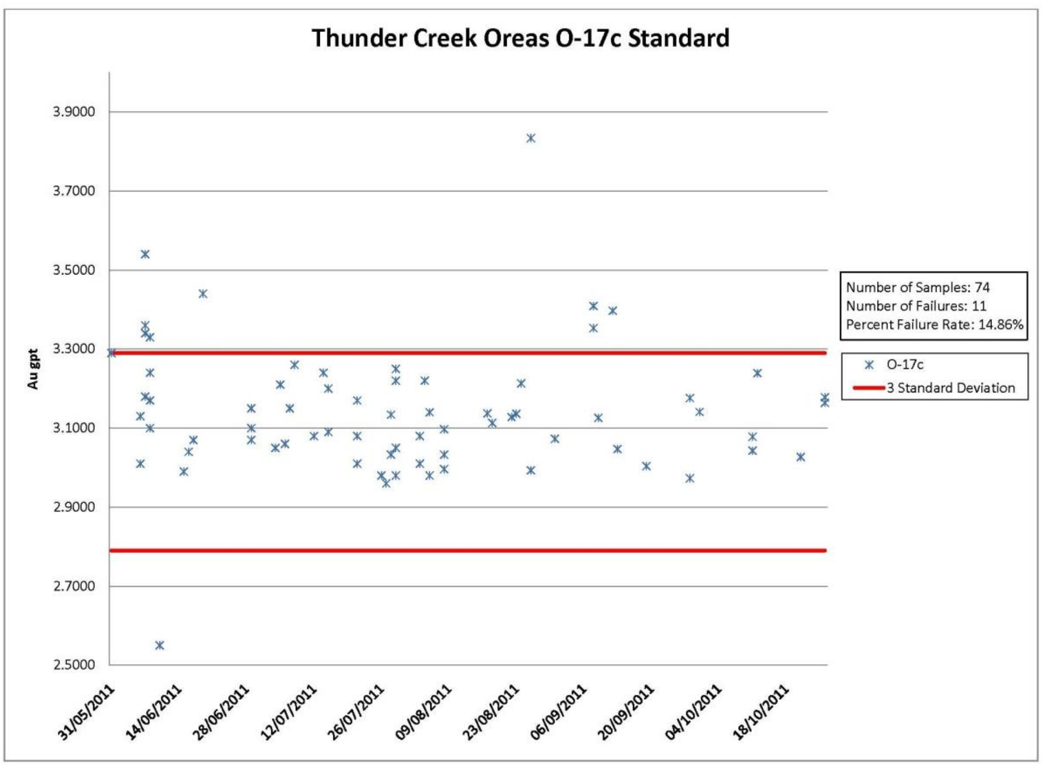

Thunder Creek Oreas O-4Pb Standard
0.0700
0.0600
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
Au gpt
11/06/2010
11/07/2010
11/08/2010
11/09/2010
11/10/2010
11/11/2010
Number of Samples: 29
Number of Failures: 4
Percent Failure Rate: 13.79%
O-4Pb
3 Standard Deviation

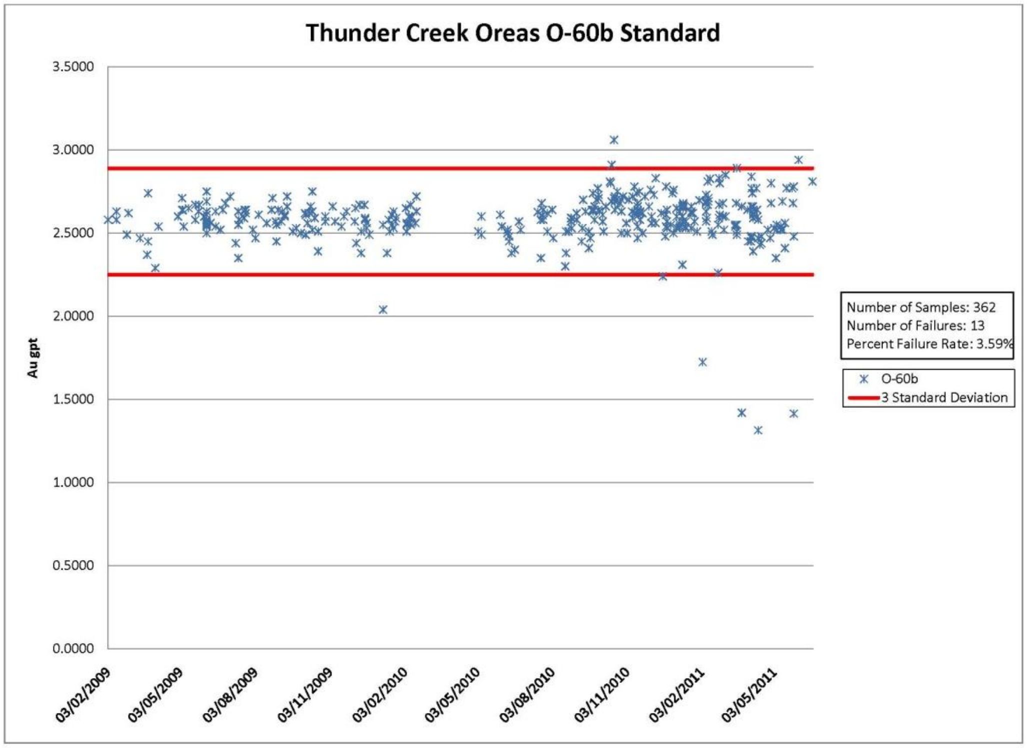

Thunder Creek Oreas O-6Pc Standard
2.5000
2.0000
1.5000
1.0000
0.5000
0.0000
Au gpt
13/02/2009
13/05/2009
13/08/2009
13/11/2009
13/02/2010
13/05/2010
13/08/2010
13/11/2010
13/02/2011
13/05/2011
13/08/2011
Number of Samples: 291
Number of Failures: 8
Percent Failure Rate: 2.75%
O-6Pc
3 Standard Deviation


Thunder Creek Oreas O-7Pb Standard
3.0000
2.9000
2.8000
2.7000
2.6000
2.5000
2.4000
Au gpt
04/04/2009
04/05/2009
04/06/2009
04/07/2009
04/08/2009
04/09/2009
04/10/2009
Number of Samples: 49
Number of Failures: 4
Percent Failure Rate: 8.16%
O-7Pb
3 Standard Deviation

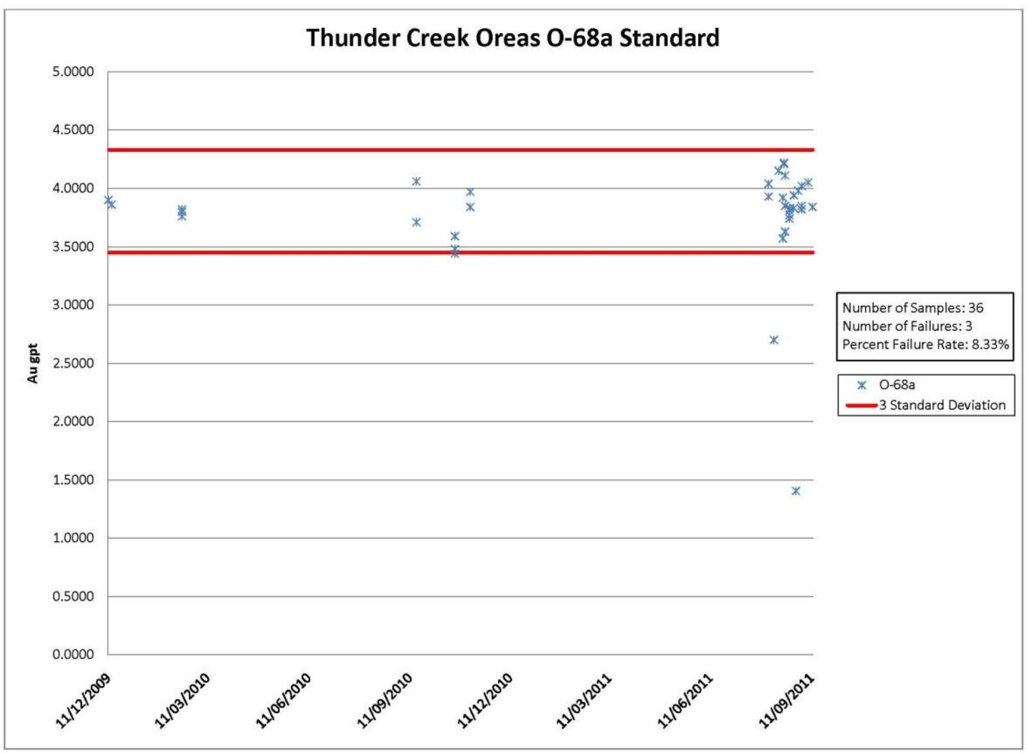

Thunder Creek Oreas O-10c Standard
7.5000
7.0000
6.5000
6.0000
5.5000
5.0000
Au gpt
14/03/2011
14/04/2011
14/05/2011
14/06/2011
14/07/2011
14/08/2011
14/09/2011
Number of Samples: 20
Number of Failures: 1
Percent Failure Rate: 5%
O-10c
3 Standard Deviation


Thunder Creek Oreas O-15h Standard
Au gpt
1.4000
1.2000
1.0000
0.8000
0.6000
0.4000
0.2000
0.0000
04/07/2011
19/07/2011
03/08/2011
18/08/2011
02/09/2011
17/09/2011
02/10/2011
17/10/2011
Number of Samples: 154
Number of Failures: 21
Percent Failure Rate: 13.64%
O-15h
3 Standard Deviation

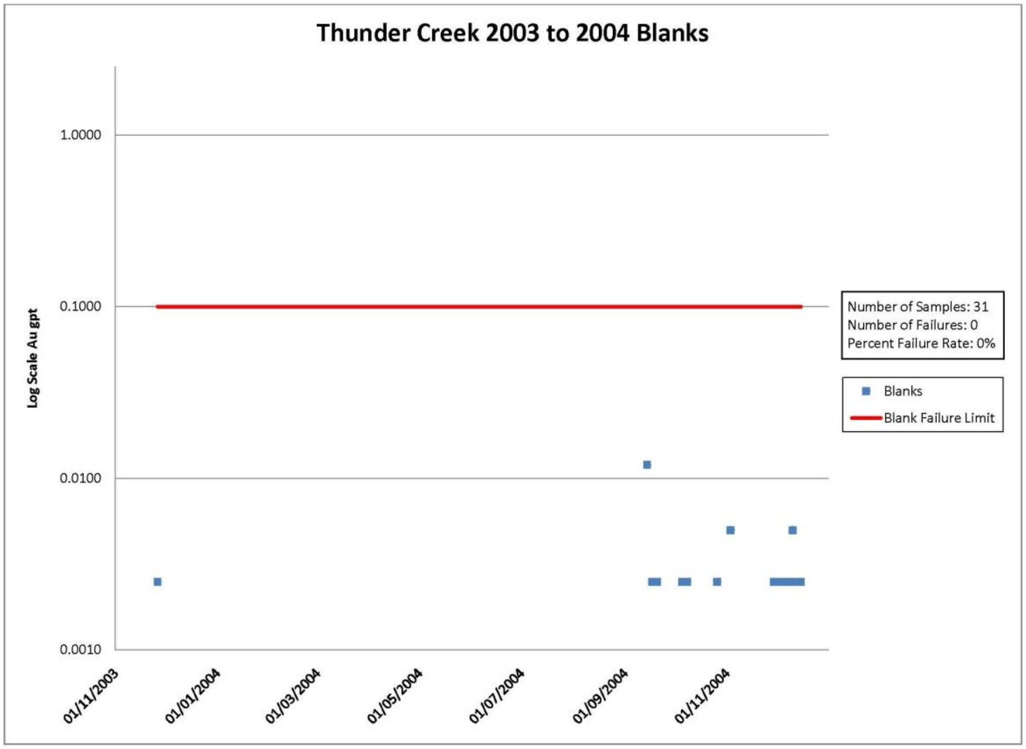

Thunder Creek Oreas O-17c Standard
Au gpt
3.9000
3.7000
3.5000
3.3000
3.1000
2.9000
2.7000
2.5000
31/05/2011
14/06/2011
28/06/2011
12/07/2011
26/07/2011
09/08/2011
23/08/2011
06/09/2011
20/09/2011
04/10/2011
18/10/2011
Number of Samples: 74
Number of Failures: 11
Percent Failure Rate: 14.86%
O-17c
3 Standard Deviation

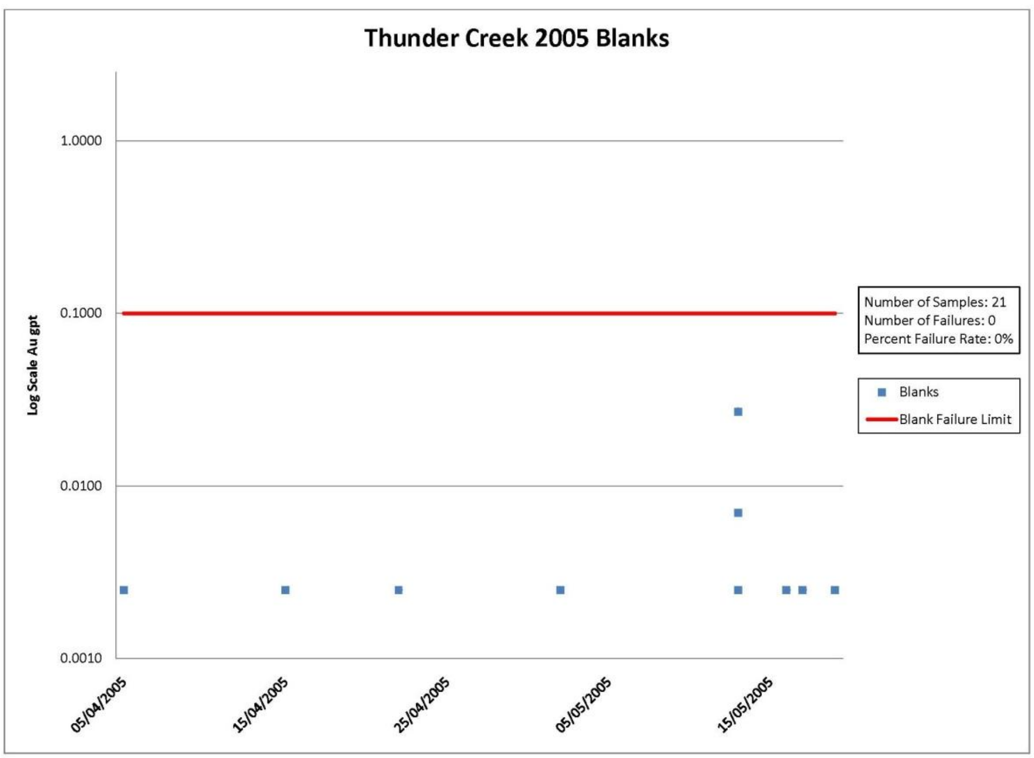


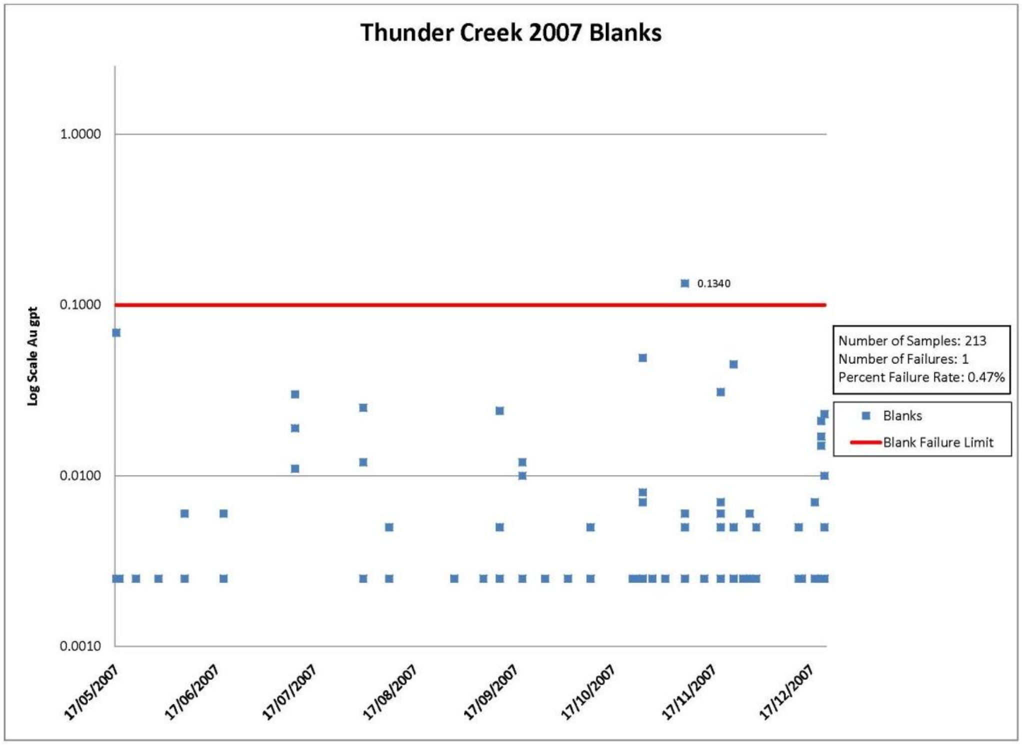
Thunder Creek Oreas O-60b Standard
Au gpt
3.5000
3.0000
2.5000
2.0000
1.5000
1.0000
0.5000
0.0000
03/02/2009
03/05/2009
03/08/2009
03/11/2009
03/02/2010
03/05/2010
03/08/2010
03/11/2010
03/02/2011
03/05/2011
Number of Samples: 362
Number of Failures: 13
Percent Failure Rate: 3.59%
O-60b
3 Standard Deviation



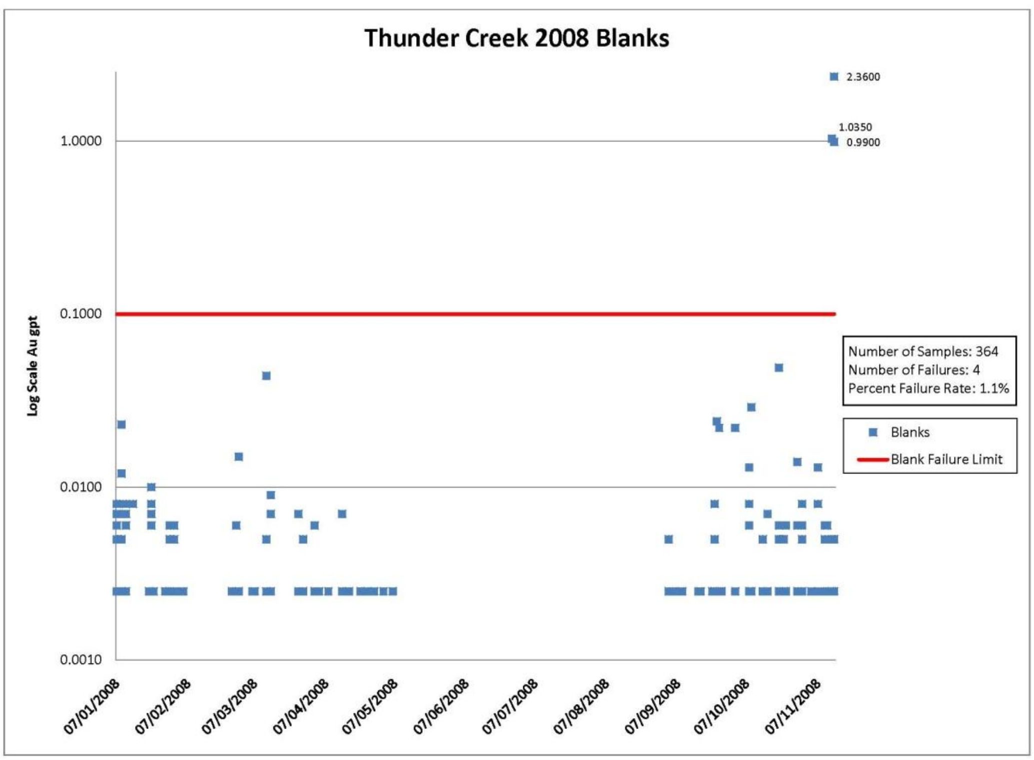
Thunder Creek Oreas O-68a Standard
Au gpt
5.0000
4.5000
4.0000
3.5000
3.0000
2.5000
2.0000
1.5000
1.0000
0.5000
0.0000
11/12/2009
11/03/2010
11/06/2010
11/09/2010
11/12/2010
11/03/2011
11/06/2011
11/09/2011
Number of Samples: 36
Number of Failures: 3
Percent Failure Rate: 8.33%
O-68a
3 Standard Deviation


Thunder Creek 2003 to 2004 Blanks
Log Scale Au gpt
1.0000
0.1000
0.0100
0.0010
01/11/2003
01/01/2004
01/03/2004
01/05/2004
01/07/2004
01/09/2004
01/11/2004
Number of Samples: 31
Number of Failures: 0
Percent Failure Rate: 0%
Blanks
Blank Failure Limit

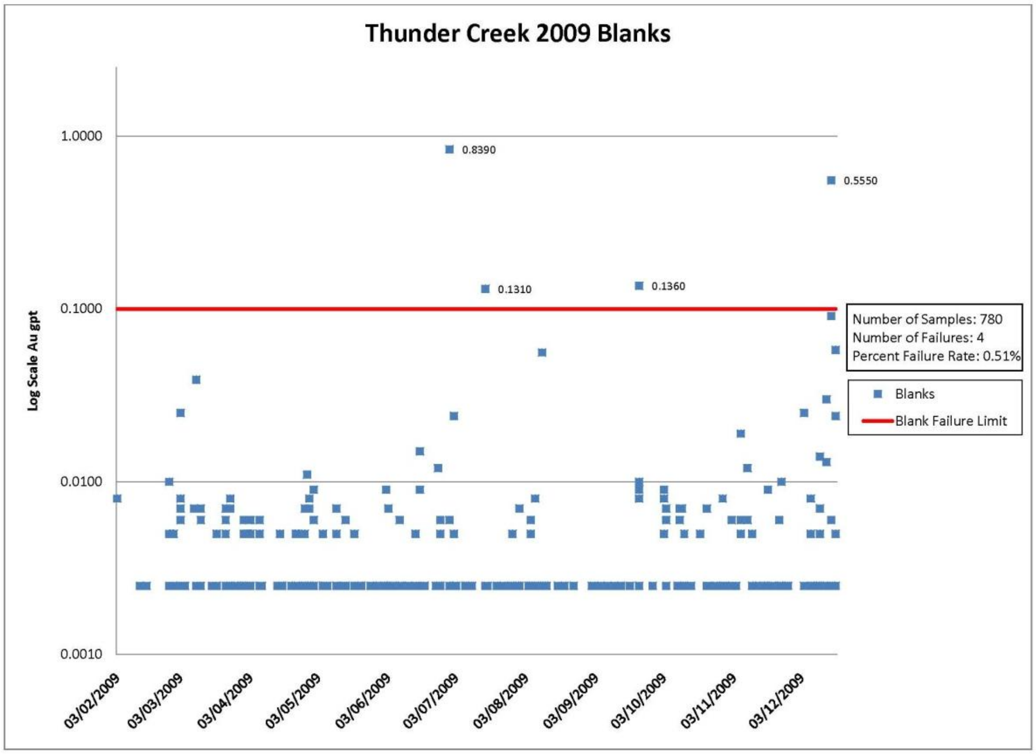

Thunder Creek 2005 Blanks
Log Scale Au gpt
1.0000
0.1000
0.0100
0.0010
05/04/2005
15/04/2005
25/04/2005
05/05/2005
15/05/2005
Number of Samples: 21
Number of Failures: 0
Percent Failure Rate: 0%
Blanks
Blank Failure Limit



Thunder Creek 2007 Blanks
Log Scale Au gpt
1.0000
0.1000
0.0100
0.0010
0.1340
Number of Samples: 213
Number of Failures: 1
Percent Failure Rate: 0.47%
Blanks
Blank Failure Limit
17/05/2007
17/06/2007
17/07/2007
17/08/2007
17/09/2007
17/10/2007
17/11/2007
17/12/2007



Thunder Creek 2008 Blanks
Log Scale Au gpt
2.3600
1.0350
0.9900
1.0000
0.1000
0.0100
0.0010
Number of Samples: 364
Number of Failures: 4
Percent Failure Rate: 1.1%
Blanks
Blank Failure Limit
07/01/2008
07/02/2008
07/03/2008
07/04/2008
07/05/2008
07/06/2008
07/07/2008
07/08/2008
07/09/2008
07/10/2008
07/11/2008


Thunder Creek 2009 Blanks
Log Scale Au gpt
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0.1000
0.0100
0.0010
0.8390
0.5550
0.1310
0.1360
Number of Samples: 780
Number of Failures: 4
Percent Failure Rate: 0.51%
Blanks
Blank Failure Limit
03/02/2009
03/03/2009
03/04/2009
03/05/2009
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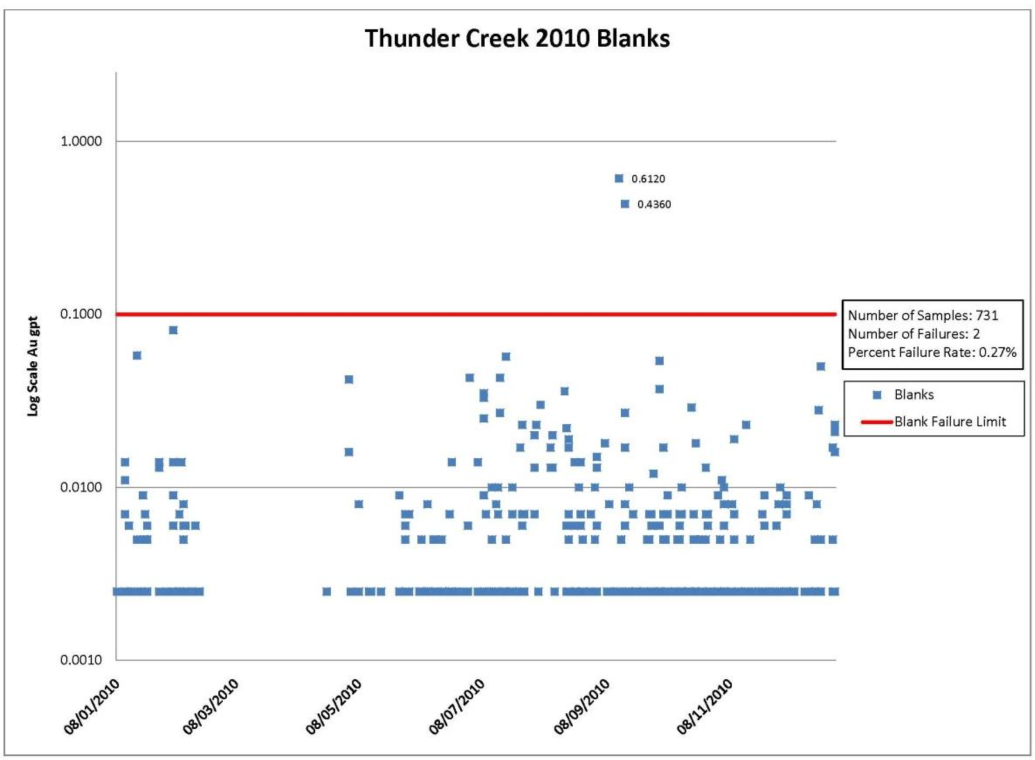
03/10/2009
03/11/2009
03/12/2009


Thunder Creek 2010 Blanks
Log Scale Au gpt
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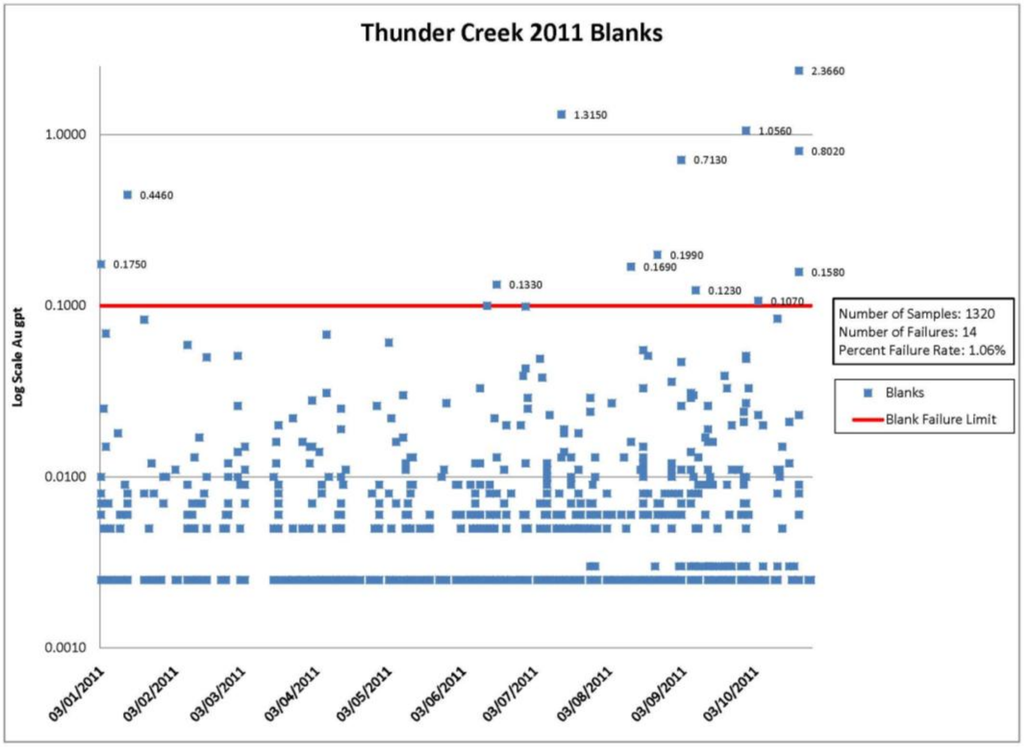
0.0100
0.0010
0.6120
0.4360
Number of Samples: 731
Number of Failures: 2
Percent Failure Rate: 0.27%
Blanks
Blank Failure Limit
08/01/2010
08/03/2010
08/05/2010
08/07/2010
08/09/2010
08/11/2010


Thunder Creek 2011 Blanks
Log Scale Au gpt
1.0000
0.1000
0.0100
0.0010
2.3660
1.3150
1.0560
0.8020
0.7130
0.4460
0.1750
0.1990
0.1690
0.1330
0.1230
0.1070
0.1580
Number of Samples: 1320
Number of Failures: 14
Percent Failure Rate: 1.06%
Blanks
Blank Failure Limit
03/01/2011
03/02/2011
03/03/2011
03/04/2011
03/05/2011
03/06/2011
03/07/2011
03/08/2011
03/09/2011
03/10/2011

APPENDIX 7

RESOURCE MODELING AND ESTIMATION OF THE THUNDER CREEK GOLD DEPOSIT
M. DAGBERT (2011)
SGS CANADA INC. GEOSTAT

RESOURCE MODELING AND ESTIMATION OF THE THUNDER CREEK GOLD DEPOSIT

Respectfully submitted to Lakeshore Gold Corp.
by SGS Canada Inc. - Geostat
December 14, 2011

SGS Canada Inc.

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Member of SGS Group (SGS SA)

Foreword

This report describes the work completed in the fall of 2011 at SGS Canada Inc. – Geostat (thereafter SGS) to assist Lakeshore Gold Corp. (thereafter LSG) in their modeling and estimation of the resources of their Thunder Creek gold deposit (thereafter TC) from latest drill hole information available in the early fall of 2011. This report is not an NI43-101 Technical Report but it can be used to support the results in the NI43-101 Technical Report authored by LSG on the TC resources to be produced in December 2011. This work is covered by a proposal from SGS to LSG dated July 22, 2011 and accepted by LSG on September 09, 2011.

Summary, conclusions and recommendations

1- The main purpose of this work was to support resource estimates of the Thunder Creek deposit derived by LSG's geologists from DH information available at the end of October 2011 by a comparison model using the same DH information and mineralized zones limits but a different block grade interpolation from samples within those limits. The LSG's model uses a standard inverse squared distance method to interpolate the grade of 2m cube blocks from all 1m composites within zones. Our model first delineates blocks with a very low grade by interpolating an indicator at the 0.5 g/t cut-off. We then interpolate the blocks above that cut-off from just composites above the cut-off. Both interpolations (indicator + grade above 0.5 g/t) are done by ordinary kriging with appropriate variogram models.

2- In most zones, the average grade above a 1.5 g/t Au cut-off of our comparison model is more than the average grade above the same cut-off of the LSG's model (9.2% for all zones) and the gold metal above the same cut-off is less (6.2% for all zones). In other words, the estimated resources above 1.5 g/t from the comparison model correspond to the estimated resources from the standard ID2 model but at a higher cut-off (with slightly less metal, less than 5%).As expected, differences between models are more important in small zones with a small number of composites e.g. zone 332 with only 32 1m composites. Resources in those zones have generally been classified in the inferred category. Results from the alternative resource model support estimated resources derived from the standard ID2 model.

3- The Thunder Creek resources are currently confined to an inclined prism strongly dipping to the NW between elevations 9000 and 9950 (topo elevation is around Z=10000). Up to 11 mineralized zones or domains have been interpreted by LSG's geologists. Those zones are generally elongated along the N40 with the same strong dip of 60^{o} to N310 for all of them. Some statistics of assay intervals above various cut-offs inside and outside the interpreted mineralized zones indicate that there is a potential to refine existing zone limits or define additional mineralized zones in sectors where assay intervals with significant grade are not too much scattered.

4- We suggest a capping of 75m.g/tAu applied to the length*grade product of original assay intervals. It caps 24 intervals (0.35% of total) and generates a gold loss of 13.0% (length weighted average capped grade is down to 4.13g/t from 4.75 g/t uncapped). This capping has a similar effect as the one generally used by LSG i.e. a 95 g/t Au high cut which caps 28 intervals with a gold loss of 13.3%.

5- As a general rule, LSG's classification of block material of any given zone into indicated and inferred corresponds to the density DH intercepts with the zone in the various sectors of the zone. In particular, it is clear that all the material in the RZ2A and RZ3A deserves to be in the indicated category while all the material in the RZ3A1, RZ3A2, PZ1C and PZ3 can only be qualified as inferred at this stage.

6- Despite the high variability of gold grades from Thunder Creek samples, the QAQC data available tend to indicate that the quality of the sample grade values used in the resource estimation is satisfactory. Although we have significant differences between mean results and target values for some standards as well as a rather high proportion of results beyond the quoted gates of standards, we do not see any overall bias from the results of standards. Blanks show a few cases of likely contamination but the proportion of real failures keeps reasonably low (0.8%) at the main ALS lab. Lab and coarse duplicates show expected sample errors i.e. about 10% relative difference for pulp duplicates and 40% relative difference for coarse duplicates. Reproduction of original values at the Accurassay lab is more problematic and since the blanks and check data performance of this lab is not as good as the others, we would recommend discontinuing the use of their services. Check (pulp) samples at Accurassay and SGS do not show any statistically significant bias.

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1- Drill hole data

The last version of the drill hole database for Thunder Creek was received from LSG on Nov. 10, 2011. It has collar coordinates, orientation at collar, depth, deviation data, assay and litho intervals data for 502 drill holes.

Up to 151 of those holes are from surface (including wedges) with numbers from: TC03-01 to TC11-115 (in TCxx-yyy, xx is the year, yyy a sequential number and z a letter from A to K for wedges). Those holes are dipping to the SE on sections along N130 spaced by about 50m.

The balance of 351 holes are drilled from underground with numbers from TC200-001 to TC730-052 (in TCxxx-yyy, xxx is the level depth in meters i.e. 200, 260, 280, 300,320, 330, 350 then 650, 680, 710 and 730) and TCGRT-001 to TCGRT-005. Those holes are arranged in 3D fan pattern from a level at around Z=9700 (TC200 to TC330 series) and from a level at around Z=9300 (TC650 to 730 series).

Collar coordinates range from 2045x,5891y,9283z to 4967x,7997y,10048z i.e. about 3x2.0x0.8km extension. A majority of the drill holes dip from 45^o to 60^o to the N130 to N180. Drill hole length varies from 7 to 1582m. Total meterage is 160,688m including the depth of wedges. Holes are surveyed in azimuth and dip generally at depth of 10m and then at depth intervals of 20-30m.

We have 65,723 valid assay intervals along those holes. Assay length varies from a mere 0.1m to 9.8m (after excluding a 98.1m interval in hole TC260-015 from 261.9 to 360m with grade of 0.007g/t and with very low grades for the few intervals of 3m and more) for a total meterage of 54,214m (average of 0.83m/interval). A majority of intervals (42%) are 1m long with significant groups of 0.5m intervals (19%) and 1.5m intervals (4%). Gold assay values are mostly FA with AA finish for low grades or FA with gravimetry finish or PM (metallic screen?) for high grades. Final values range from 0 to 1600g/t (a 0.8m interval in TC730-009) with an uncapped weighted average of 0.62 g/t.

2- Mineralized domains

As illustrated on Figure 1, the Thunder Creek resources are currently confined to an inclined prism strongly dipping to the NW between elevations 9000 and 9950 (topo elevation is around Z=10000). Up to 11 mineralized zones or domains have been interpreted by LSG's geologists. As illustrated by the level maps of Figure 2, those zones are generally elongated along the N40 with the same strong dip of 60^{o} to N310 for all of them.

Some statistics of assay intervals above various cut-offs inside and outside the interpreted mineralized zones (Table 1) indicate that there is a potential to refine the limits of existing zones or to define additional mineralized zones in sectors where assay intervals with significant grade are not too much scattered.

Table 1 Statistics of sample data inside and outside mineralized zones

Cut-off	All	Inside Zones		Outside Zones	
g/tAu	m	m	%	m	%
0	54,414	5,250	9.6%	49,164	90.4%
1	4,023	2,494	62.0%	1,529	38.0%
2	2,551	1,826	71.6%	725	28.4%
3	1,913	1,451	75.9%	462	24.1%
5	1,307	1,053	80.6%	254	19.4%
10	622	522	84.0%	100	16.0%

Figure 1 Drill holes and mineralized domains

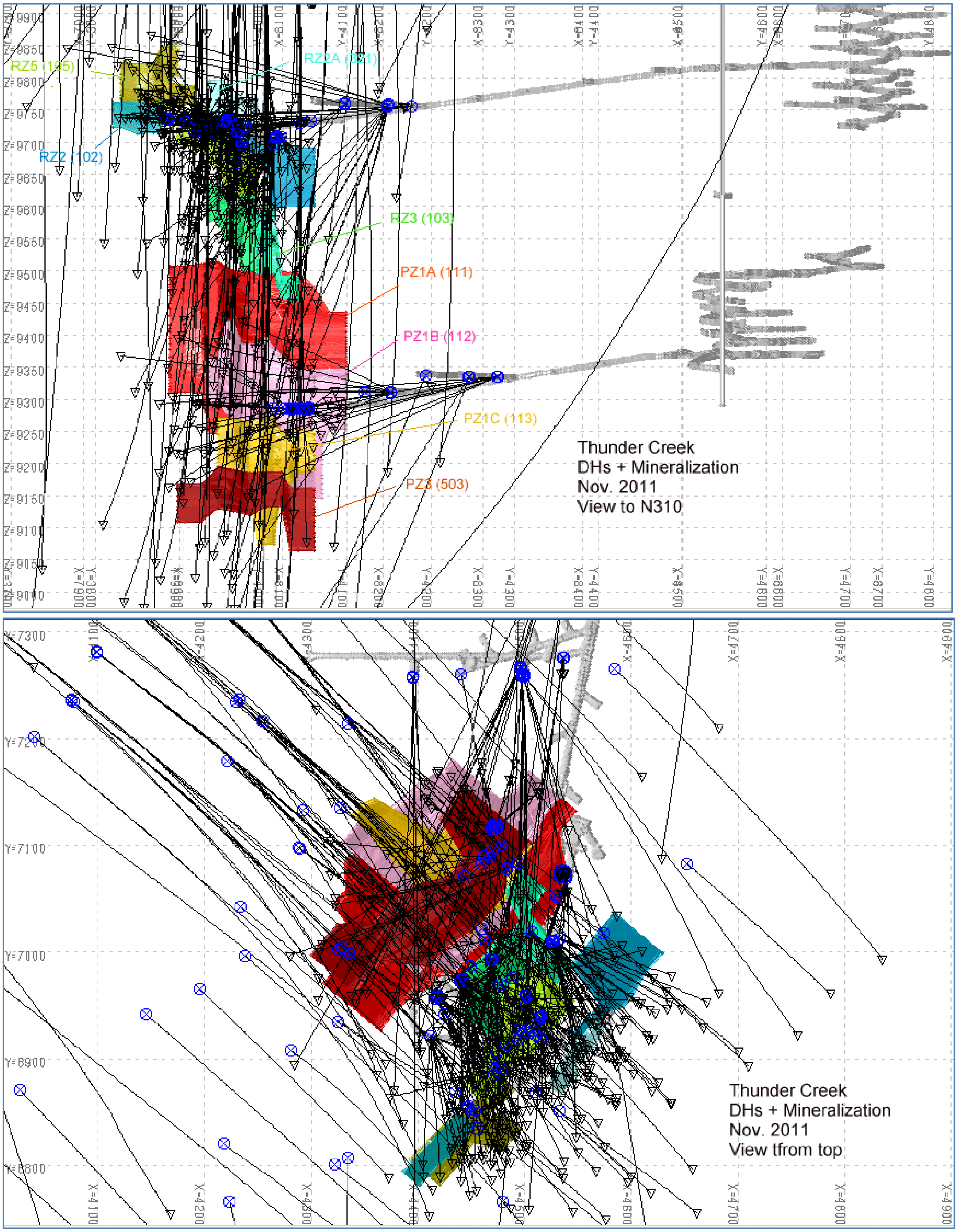
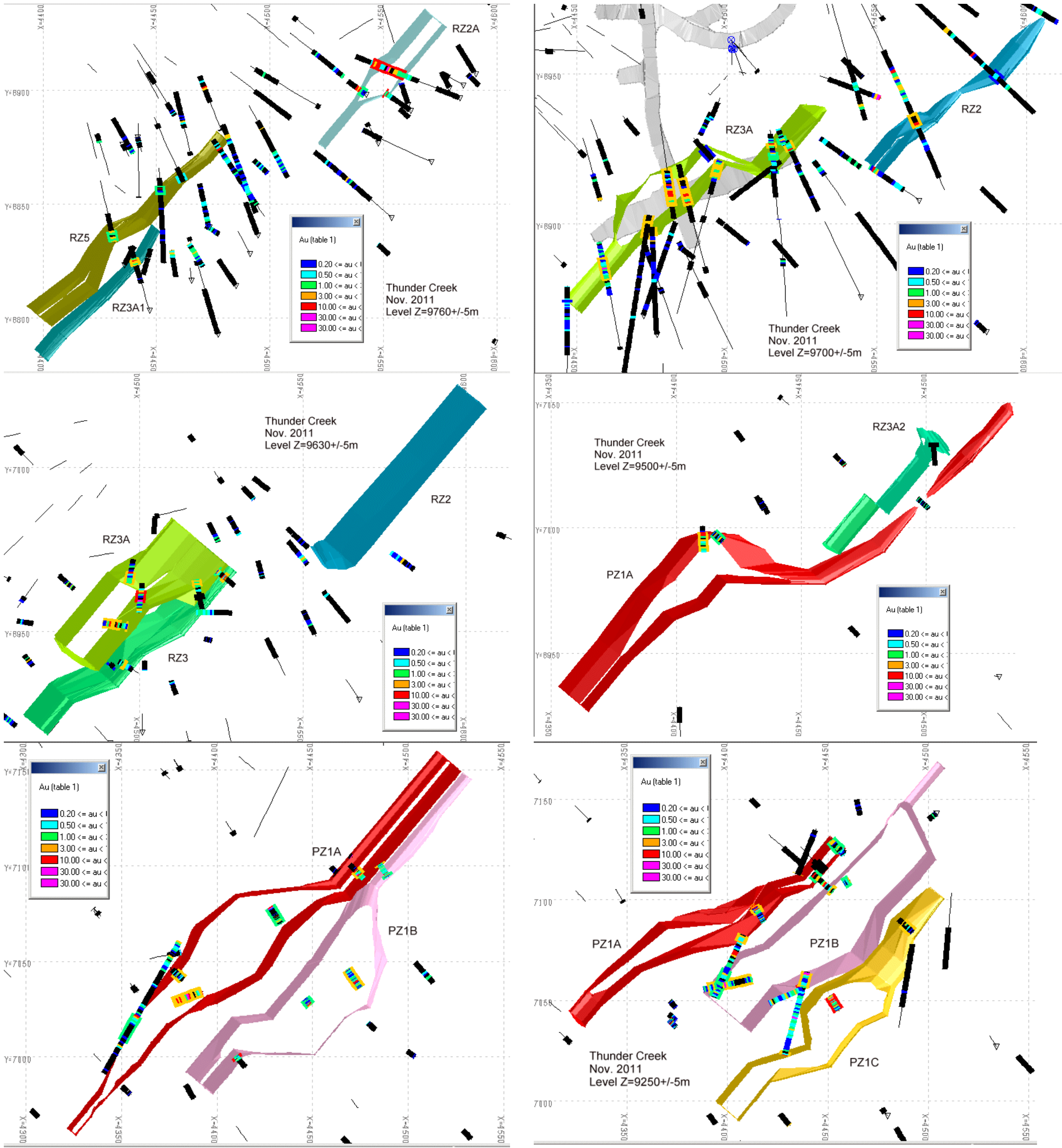


Figure 2 Level maps with outline of interpreted mineralized zones



3- Assay intervals in mineralized intercepts and capping

We have up to 6839 assay intervals in the 336 mineral intercepts of domains with holes. Their length ranges from 0.2m to 1.6m with an average of 0.77m. Like before, 1m is the most current length (47%) followed by 0.5m (24%). Gold grade of those assay intervals range from 0.002 to 1600g/t with a (weighted and uncapped) average of 4.75g/t

As shown on Table 2, intervals with the highest gold grade (above 80g/t) have a quite variable length (from 0.3m to 1m). Given that those outliers tend to be isolated with much lower grades on both sides, it makes more sense to cap according to gold content, hence the GT product of grade by length, rather than gold grade alone. In other words a 200 g/t over 0.5m is the same as a 100g/t over 1m when it comes to capping given that both yield the same 100g/t when composited over 1m.

The histogram of GTs of mineralized intervals with a logarithmic scale (which excludes zero grade intervals) is on top of next Figure 3. We clearly see a lognormal shape but still with a some very low values (less than 0.05m.g/t). On the high side, there is a clear tail of very high data above say 80 m.g/t.

The high end of the cumulative frequency plot with a log scale (bottom of Figure 3) shows several kicks upward corresponding to natural gaps in the distribution of GT products. We would tend to go with the middle one i.e. 75mg/t which corresponds to a gap between 72.9 and 80.4m.g/t. It caps 24 intervals (0.35% of total) and generates a gold loss of 13.0% (length weighted average capped grade is down to 4.13g/t from 4.75 g/t uncapped). This capping has a similar effect as the one generally used by LSG i.e. a 95 g/t Au high cut which caps 28 intervals with a gold loss of 13.3%. . Actually, the range of potential gold loss from capping is rather limited: from 15.6% with the low cap of 55m.g/t to 10.5% with the high cap of 110m.g/t.

Most of the capped intervals are in the large PZ1B zone with 43% of all mineralized intervals. In that zone, the capping limit could be raised to 90m.g/t i.e. right at the start of a long gap between 88.5m.g/t to 138.5 m.g/t with only two values at 99.5 m.g/t and 110.5 m.g/t. With that limit, 13 intervals are capped with a gold loss of 21% in the zone. In the PZ1A zone with 26% of intervals, the overall limit of 75 m.g/t can be kept with no interval capped in that zone. The next zone with the highest number of intervals is RZ3A with 16% of them. In that zone, the maximum of 89.6 m.g/t is an outlier (next value is 43.7m.g/t) hence the limit is lowered to 45 m.g/t with only one interval capped and a gold loss of 1.5%. The other 8 zones just capture 16% of the intervals. Proposed cap limits vary from 20 to 55 m.g/t (Table 3) and they generally correspond to obvious outliers with large gaps between them and the next highest value (e.g. zone PZ1C with a maximum at 362.5 m.g/t and next value at 51 m.g/t – cap limit would be at 55 m.g1t). Like zone PZ1A, zones RZ5 and RZ3A1 do not show outlier interval data which need to be capped. With this alternative zone capping scheme, 22 intervals are capped with an overall gold loss of 13.3% i.e. not far from overall capping of 75 m.g/t (24 interval capped with gold loss of 13.0%) or overall capping of 95 g/t (28 intervals capped with gold loss of 13.3%). All those capping schemes are almost equivalent in terms of bearing on estimated resources.

Table 2 Highest grade intervals in the mineralized intercepts

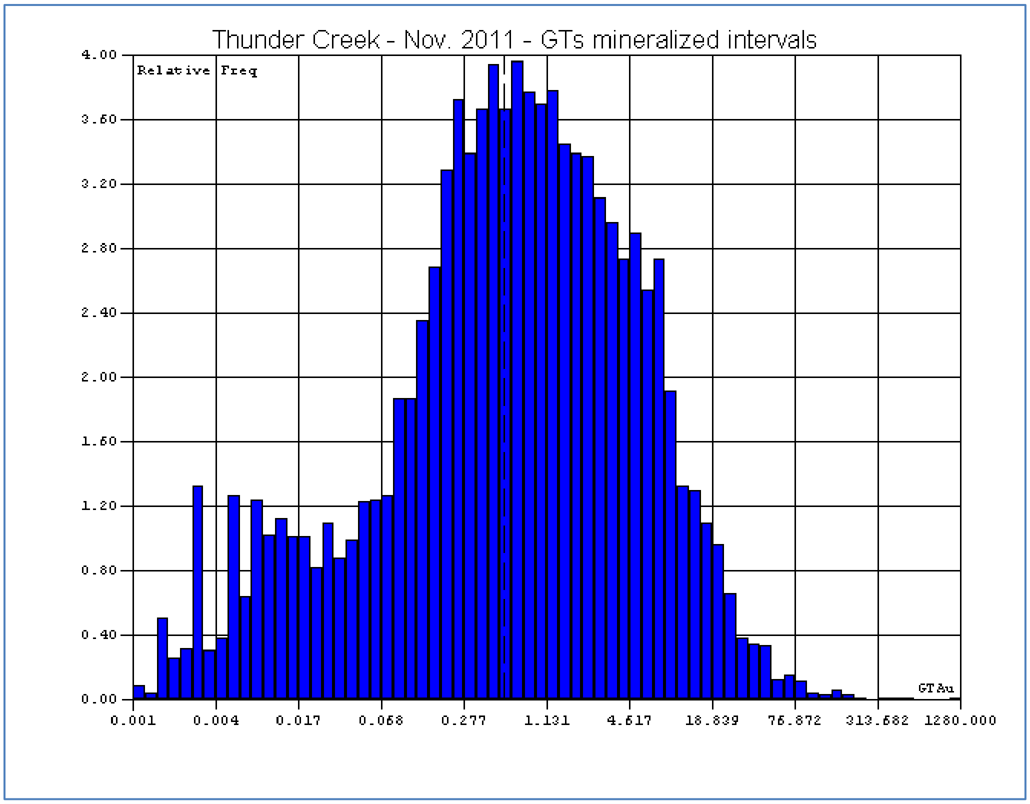
Hole name	Zone	Length	From	To	g/tAu
TC730-003	110	1	19.9	20.9	80.7
TC08-54D	110	0.3	645.6	645.9	82.5
TC11-113A	110	0.6	935.7	936.3	84.4
TC09-68A	110	0.5	916.1	916.6	86.2
TC730-010	110	1	25.7	26.7	86.2
TC330-039	103	1	143.3	144.3	87.2
TC09-69G	110	0.4	798	798.4	87.3
TC730-003	110	1	10.9	11.9	88.5
TC08-54	110	0.5	668.9	669.4	88.8
TC320-050	102	0.5	85.9	86.4	91.1
TC09-68B	110	0.5	893.4	893.9	97.4
TC11-112	110	0.3	734.7	735	101.5
TC650-001	110	0.5	387.6	388.1	104
TC280-048	102	1	144.8	145.8	107
TC280-109	103	0.6	25.3	25.9	109.1
TC730-003	110	1	17.9	18.9	110.5
TC330-025	103	0.8	89.5	90.3	112
TC09-68B	110	0.6	899	899.6	121.5
TC11-113A	110	0.5	936.3	936.8	128
TC710-006	110	1	216	217	138.5
TC09-69G	110	0.5	797.5	798	140.5
TC11-112	110	0.5	723.4	723.9	141.5
TC730-011	110	1	45	46	142
TC09-68B	110	0.6	917.9	918.5	143
TC09-68B	110	0.6	921.5	922.1	145
TC730-012	110	1	23	24	145
TC09-80	503	0.45	1026.75	1027.2	147.5
TC09-80C	110	0.4	902.9	903.3	156
TC730-018	110	1	35.45	36.45	161
TC650-001	110	1	398.5	399.5	179.5
TC730-023	110	1	23	24	193.5
TC09-69B	110	0.45	798	798.45	221
TC280-034	102	0.5	132.2	132.7	273
TC09-68B	110	0.5	898.5	899	281
TC730-003	110	1	18.9	19.9	399
TC730-013	110	1	93	94	547
TC09-68B	110	0.5	931.5	932	725
TC730-009	110	0.8	24.9	25.7	1600

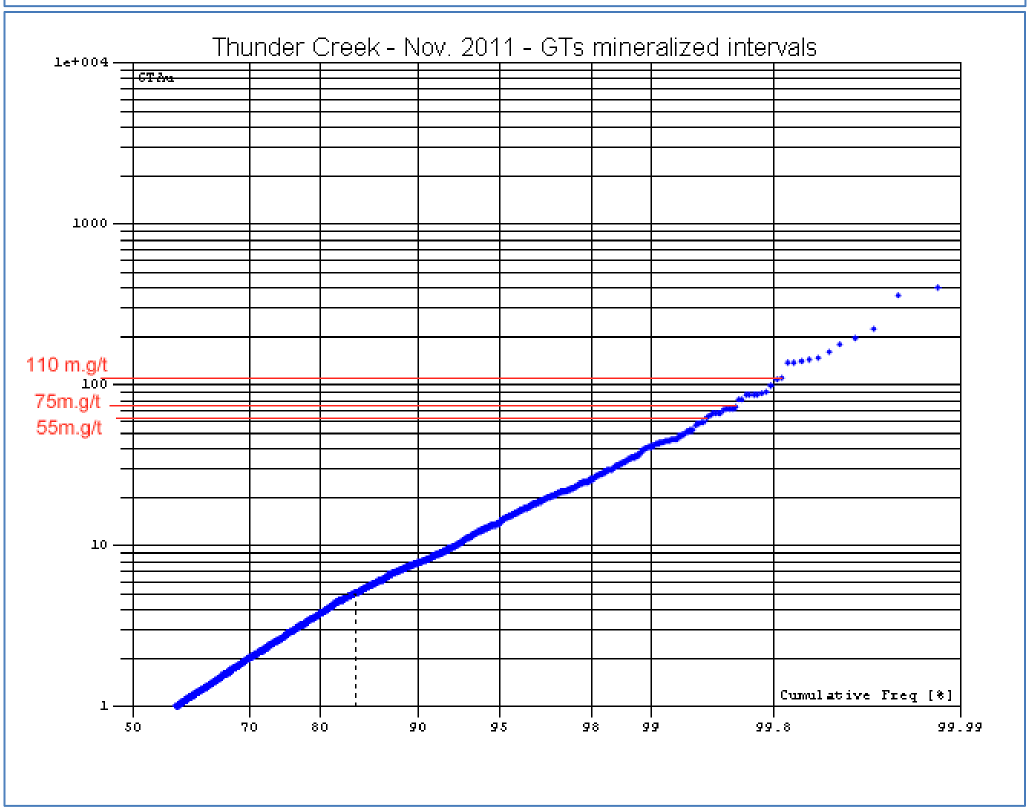
Table 3 Capping statistics in the different zones

Zone	Nzone	Int.	Aver. Length (m)	Aver. g/tAu	Aver. m.g/tAu	Cap m.g/tAu	Nb. capped	Aver g/tAuc	%Au loss
All together		6839	0.77	4.75	3.65	75	24	4.13	13.0%
RZ2	102	67	0.83	4.62	3.85	20	2	3.75	18.9%
RZ3	103	268	0.77	4.12	3.18	50	1	3.94	4.4%
RZ5	105	102	0.85	3.38	2.89	25	0	3.38	0.0%
PZ1A	111	1763	0.68	5.27	3.6	75	0	5.27	0.0%
PZ1B	112	2913	0.82	5.13	4.19	90	13	4.03	21.2%
PZ1C	113	361	0.64	4.13	2.64	55	1	2.8	30.1%
PZ3	503	58	0.67	4.33	2.92	20	1	3.14	27.4%
RZ2A	321	133	0.81	5.44	4.4	30	2	3.34	38.5%
RZ3A	330	1101	0.8	3.47	2.77	45	1	3.42	1.5%
RZ3A1	331	36	0.87	3.02	2.64	30	0	3.02	0.0%
RZ3A2	332	37	0.84	4.82	4.07	20	1	4.35	9.8%

All by zone	6839	0.77	4.75	3.651	20-90	22	4.11	13.3%

Figure 3 Histogram and cumulative frequency plot of GTs of all mineralized intervals





4- Compositing and variography

Given the variability of the length of original drill hole assay intervals, they need to be composited before being in block grade interpolation. The selected composite size is 1m which corresponds to the most frequent size of original assay intervals and is in accordance with the selected block size (2m cubes) of the resource model.

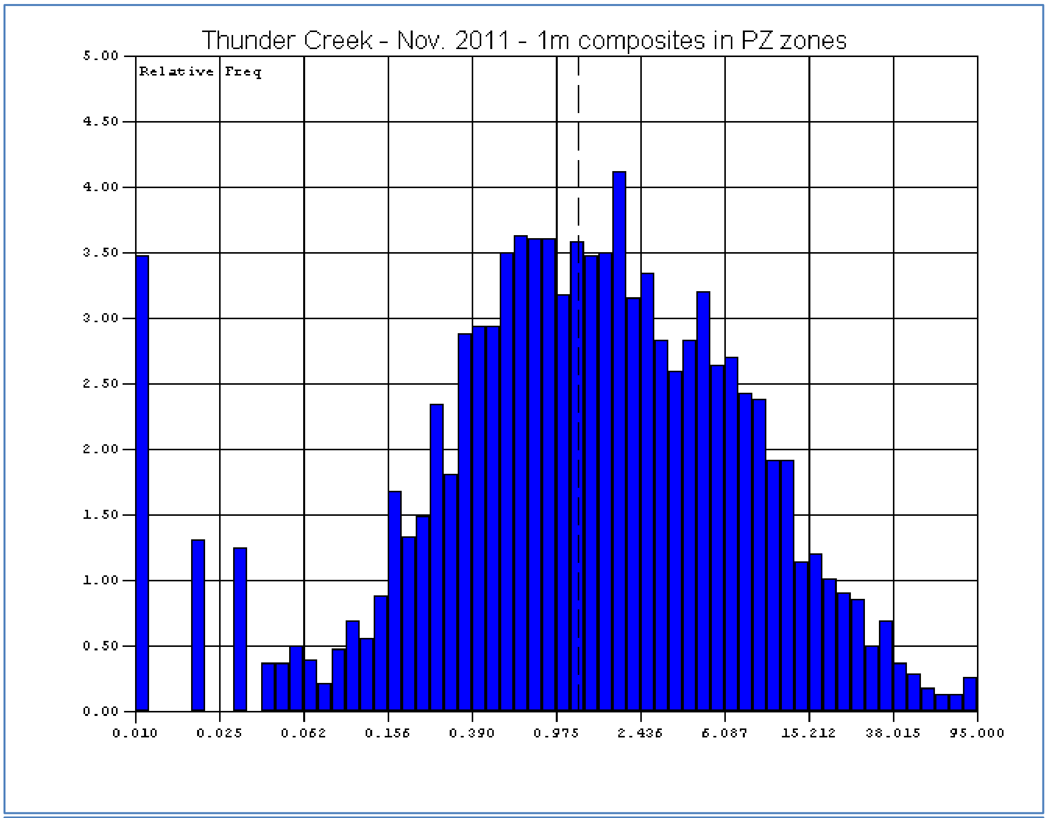
We have used the composite file produced by LSG (*TRCreek_Nov09_11.csv*). That file has coordinates, zone id and gold values of up to 5158 1m composites (with a documented length of at least 0.5m). Gold values include uncapped grade, grade with the 95 g/tAu capping and grade with the 75 m.g/t capping. Given that the last two are almost equivalent (see previous section), the rest of the work is conducted on composite grades with the 95 g/t cap on original assay interval data. We checked that those composite data are in accordance with original assay data and mineralized zone intercept limits in drill holes.

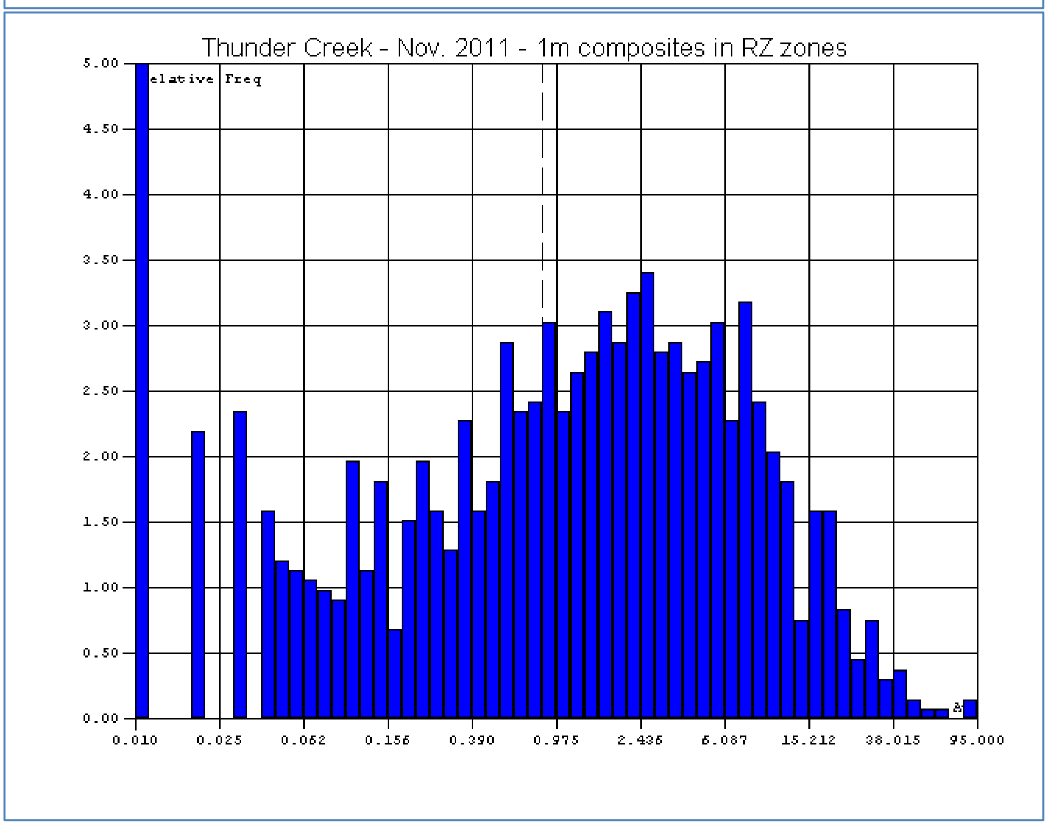
Statistics of composite (capped) grades are in Table 4. Composites can be regrouped into PZ zones at the bottom and RZ at the top. Histograms (with a log scale for grade) of composite grades in the two sets are on Figure 4. In both cases, we see a somewhat bimodal distribution with a lognormal like histogram for values above about 0.10-0.15 g/t plus a significant background of very low values, mostly 0.01 g/t Au. Those background values are still present despite repeated efforts by LSG geologists to interpret mineralized zone limits that exclude them. The bimodality of composite grade distributions in mineralized zones generates a high variability with coefficients of variation (standard deviation divided by mean) around 200% and means generally more than three times medians.

Table 4 Statistics of the capped grade of 1m composites in the mineralized zones

Zone	Nzone	# composites	MinAu	MedAu	MaxAu	Mean Au	%CVAu
			g/tAu	g/tAu	g/tAu	g/tAu	%
RZ2	102	51	0.01	1.62	45.7	5.15	177
RZ2A	321	103	0	1.18	95.0	4.53	265
RZ3	103	204	0	1.31	82.8	4.17	208
RZ3A	330	840	0	1.01	57.1	3.61	175
RZ3A1	331	29	0	0.91	29.5	3.32	177
RZ3A2	332	32	0.01	1.69	34.6	5.11	160
RZ5	105	87	0	0.75	23.8	3.41	160
All RZ		1346	0	1.15	95.0	3.84	192
PZ1A	111	1183	0	2.34	88.5	5.33	153
PZ1B	112	2362	0	1.11	95.0	3.96	240
PZ1C	113	230	0	0.85	51.0	2.83	216
PZ3	503	37	0.09	1.44	64.4	4.73	233
All PZ		3812	0	1.31	95.0	4.32	207
All		5158	0	1.27	95.0	4.17	204

Figure 4 Histograms of 1m composite capped grades in PZ and RZ zones





Because of the bimodality of composite grade distribution, the spatial analysis of composite grades is conducted in two steps : first, we look at the continuity of the very low grade through a low cut-off indicator and then we look at the grade continuity above that indicator cut-off. The selected cut-off for this indicator is 0.5 g/t with respectively 28% and 36% of composites above that limit in the PZ and RZ zones.

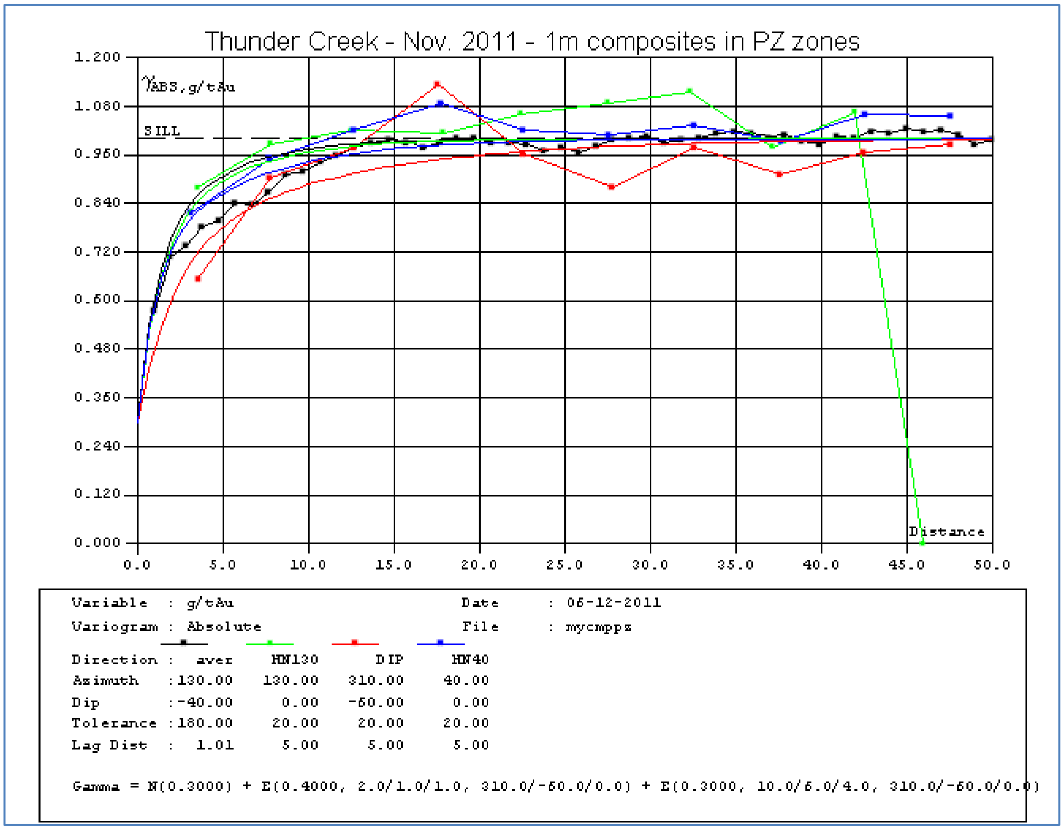
Variograms (actually 1-correlograms) are computed along all directions at the same time (average variogram with a lag of 1m) as well as along the principal directions of the mineralized zones themselves i.e. a dip of 60^o to N310, an horizontal strike of N40 as well as the horizontal N130 across dip and strike, all with a lag of 5m.

Variograms are computed with capped composite grades in RZ and PZ zones separately. In most zones, there are not enough composites to derive meaningful variograms from just composites in the zone. Exceptions could be PZ1B with 2362 composites, PZ1A with 1183 composites and RZ3A with 840 composites. The PZ variograms are somewhat of an average of PZ1A and PZ1B variograms while the RZ variograms mostly reflect RZ3A variograms. In any case, variograms are computed after excluding any pair with composites in two different zones.

The indicator variograms in PZ (top of Figure 5) are those showing the best continuity with a relative nugget effect of 30% and a maximum range of 30m along dip, 20m along strike and 10m across dip and strike. Continuity of the low grade indicator in RZ zones (bottom of Figure 5) is not as good although the relative nugget effect is the same 30% but the range does not exceed 15m along dip and strike and 5m across dip and strike.

Ranges of the variograms of mineralized grade (above the 0.5g/t cut-off) are fairly short. In the PZ zones (top of Figure 6), they do not exceed 5m along dip and 3m along strike and across dip and strike. In the RZ zones (bottom of Figure 6), variograms are more erratic but we can guess maximum ranges of 10m along dip, 5m along strike and 3m across dip and strike. In both cases, relative nugget effect keeps equal to 30%.

Figure 5 Variograms of low cut-off (0.5 g/t) indicators in PZ and RZ zones



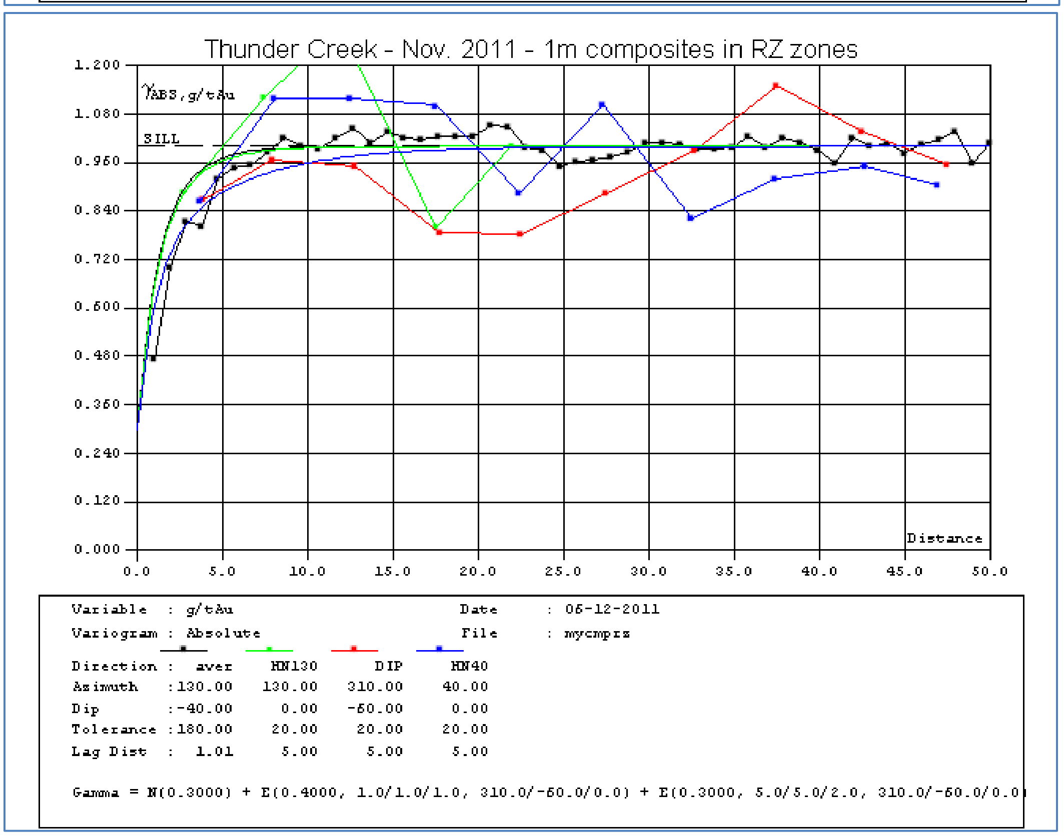
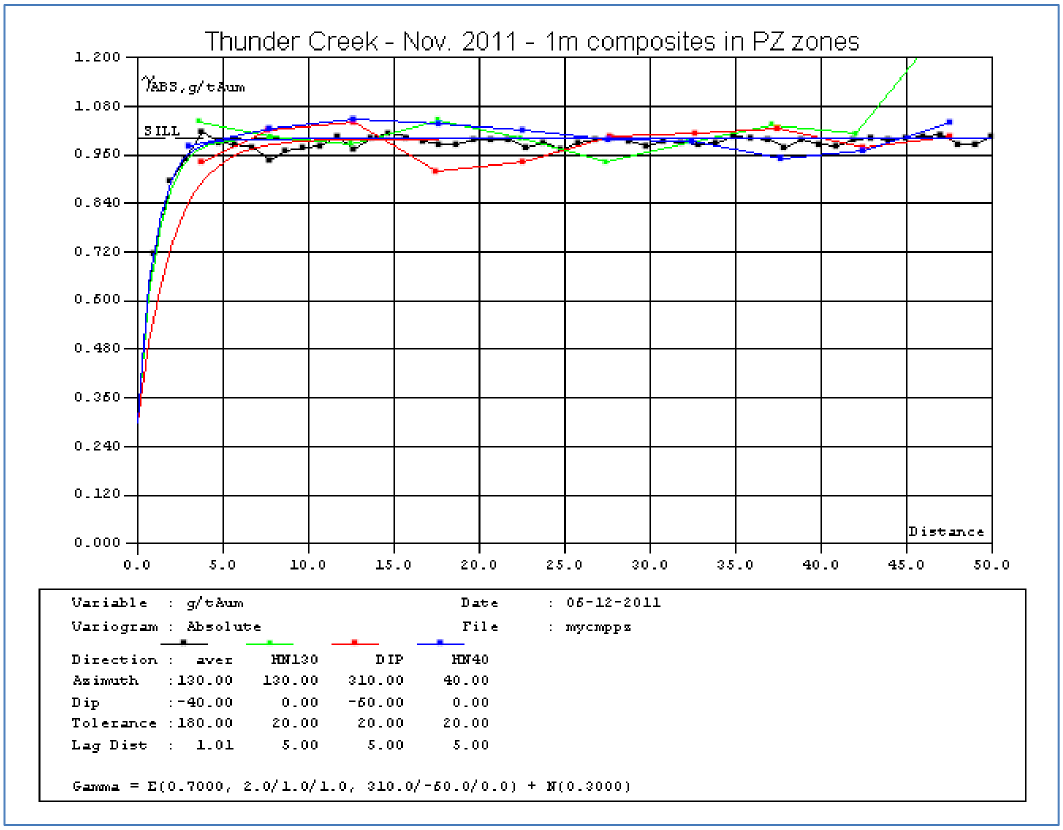
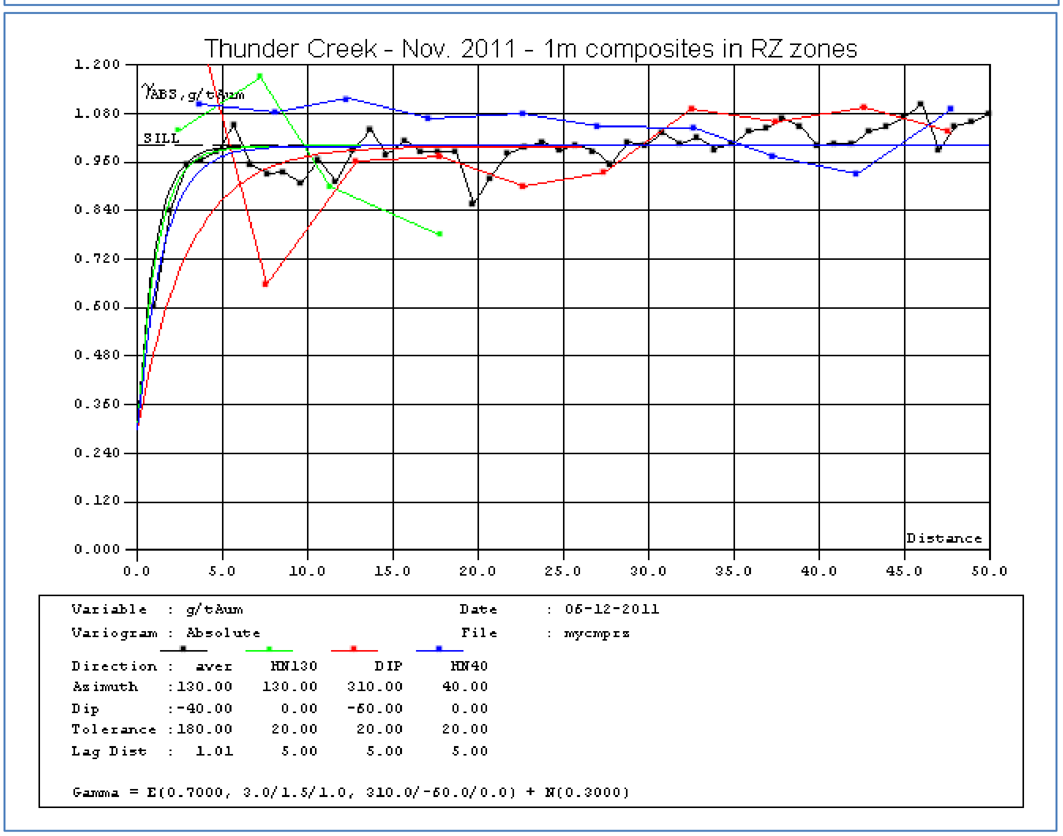


Figure 6 Variograms of mineralized grade (above 0.5 g/t) in PZ and RZ zones





5- Block grade interpolation with indicators

Although we do not see some natural cut-off or gap in the grade distribution of composites in the interpreted mineralized zones, it is clear that within the current limits of those zones, we have some high grade shoots in a background of weakly mineralized material. Block grade interpolation methods which use all available composites around a block i.e. from both high grade shoots and very low grade background is likely to over-dilute the grade of blocks in those high grade shoots.

In an attempt to separate blocks and composites in the two different types of mineralization, we can introduce a new variable called indicator which is defined at a cut-off which should correspond to the limit grade between the two types. As a first guess, we have selected 0.5 g/t Au for this limit. Any composite with a grade less than 0.5 g/t has an indicator value of 0 (i.e. 0% above 0.5g/t) and any composite with a grade equal to or more than 0.5 g/t has an indicator of 1 (i.e. 100% above or equal to 0.5 g/t). The indicator can be interpolated in blocks in the same way as grade. The interpolated block value, always between 0 and 1, can be interpreted as the estimated proportion of material (in the form of 1m DH intervals) inside the block above the indicator cut-off of 0.5g/t. The next step is then to interpolate the grade of that fraction just using composites with a grade above 0.5 g/t around the block while, if needed, the grade of the block fraction below 0.5 g/t is interpolated from just composites with a grade below 0.5g/t around the block. Resources above an economic cut-off (above the indicator cut-off) just consider the block fraction above 0.5 g/t with its interpolated grade.

In order to avoid the use of fractional blocks, we can set a limit to the interpolated indicator in blocks such that if it is above, the full block is considered to be made of material above 0.5g/t with the interpolated grade for that material and if it is below, the block is all less than 0.5g/t. This limit is not necessarily 0.5 or 50%. It has to be selected in such a way that the overall proportion of full blocks above 0.5g/t is equal to the average interpolated indicator in block which is close to the proportion of composites above 0.5g/t in the domain.

> We have applied this approach to the 1m composites and 2m cube blocks in the 11 interpreted mineralized zones. In each zone, we first interpolate the indicator in the blocks of the zone by ordinary kriging based on the variogram models presented in the previous section. That interpolation is done in up to 4 successive runs with a relaxation of search conditions from one run to the next until all blocks are interpolated. In the PZ zones, the first run uses a 30x20x10m ellipsoid tilted by 60^{o} to the N310 and asks for a minimum of 7 composites in a minimum of 3 holes (maximum of 3 composites in the same hole). Maximum number of composites kept is 20 (there is no risk of over-dilution at this stage). Next run uses a 60x40x20m ellipsoid of similar orientation with the same minimum conditions while the maximum number of composites kept is raised to 25. Third run uses a 120x80x40m ellipsoid with the same orientation and minimum conditions. Maximum number of composites is raised to 35. If needed, a fourth and last run uses the same 120x80x40m ellipsoid but a default minimum of 1 composite in that ellipsoid. In the RZ zones, the min./max. numbers of composites in each run are the same but the starting ellipsoid is 35x35x12m with the 35m long radius along dip and strike.

The next step is to determine the cut-off on interpolated indicator such that if it is above, then we can assume that the entire block is above 0.5g/t. For example, in zone PZ1A (or 111), from the kriged indicator in each of the 133,933 2x2x2m blocks with a portion in the PZ1A zone and the size of that portion (in the block file supplied by LSG), we estimate that the total volume with material above 0.5g/t is 688,210m3 and we have about the same volume (688,048m3) in the 101,669 blocks with a kriged indicator above or equal to 0.6565. The "mineralized fraction" of the PZ1A zone would then be restricted to those 101,669 blocks.

We then krige the average grade of the blocks above 0.5g/t retained in each zone using the composites above that grade and the variograms of grade above 0.5g/t presented in the previous section. Again that interpolation is done in successive runs with a relaxation of search conditions from one run to the next until all retained blocks are interpolated. In the PZ zones, the first run uses a 30x15x15m ellipsoid tilted by 60^{o} to the N310 and asks for a minimum of 5 composites in a minimum of 3 holes (maximum of 2 composites in the same hole). Maximum number of composites kept is 10. Next run uses a 60x30x30m ellipsoid of similar orientation with the same min./max. number of composites. Third run uses a 120x60x60m ellipsoid with the same orientation and min./max. number of composites. If needed, a fourth run uses a the same 120x60x60m ellipsoid but a default minimum of 1 composite in that ellipsoid. In the RZ zones, the min./max. number of composites in each run are the same but the starting ellipsoid is 30x15x10m with the 35m long radius along dip and the 15m intermediate radius along strike.

6- Mineral inventory at various cut-offs from the alternative model

Next Table 5 compares the mineral inventory in blocks above 1.5 g/t derived from our alternative model and the block model supplied by LSG with block grades derived by ID2 interpolation from all composites in the same zone. We understand that LSG has used composites with grade capped with the 75 m.g/t limit while our alternative model uses composites capped with the 95 g/t limit but we have seen in the first section of this report that the two capping schemes are almost equivalent.

Table 5 Mineral inventory from supplied LSG model and alternative SGS model

Zone	Zone	Cut-off g/tAu	Density [1] t/m3	LSG Tonnage	LSG g/tAu	LSG OzAu	SGS Tonnage	SGS g/tAu	SGS OzAu
102	RZ2	1.5	2.92	75,157	7.44	17,969	60,806	7.30	14,279
103	RZ3	1.5	2.92	208,182	5.36	35,909	166,218	4.76	25,459
105	RZ5	1.5	2.92	110,912	4.94	17,631	74,125	5.19	12,372
111	PZ1A	1.5	2.92	2,390,461	6.51	500,292	2,003,245	7.53	485,043
112	PZ1B	1.5	2.65	1,756,156	5.15	290,810	1,578,754	5.44	275,944
113	PZ1C	1.5	2.65	633,746	4.69	95,494	523,501	4.86	81,811
503	PZ3	1.5	2.65	123,593	3.46	13,757	101,671	3.43	11,220
321	RZ2A	1.5	2.92	45,914	4.96	7,317	41,467	4.87	6,498
330	RZ3A	1.5	2.92	146,219	5.22	24,557	134,054	5.74	24,759
331	RZ3A1	1.5	2.92	24,130	5.44	4,222	20,845	5.41	3,623
332	RZ3A2	1.5	2.92	57,607	5.18	9,602	43,025	10.04	13,891
All		1.5	2.65-2.92	5,572,077	5.68	1,017,560	4,747,711	6.26	954,899

[1] From LSG – not checked by SGS

In most zones, the average grade above cut-off of the alternative model is more than the average grade above the same cut-off of the supplied model (9.2% for all zones) and the gold metal above cut-off is less (6.2% for all zones). In other words, the estimated resources above 1.5 g/t from the alternative model correspond to the estimated resources from the standard ID2 model but at a higher cut-off (with slightly less metal, less than 5%).

As expected, differences between models are more important in small zones with a small number of composites e.g. zone 332 with only 32 1m composites. Resources in those zones have generally been classified in the inferred category.

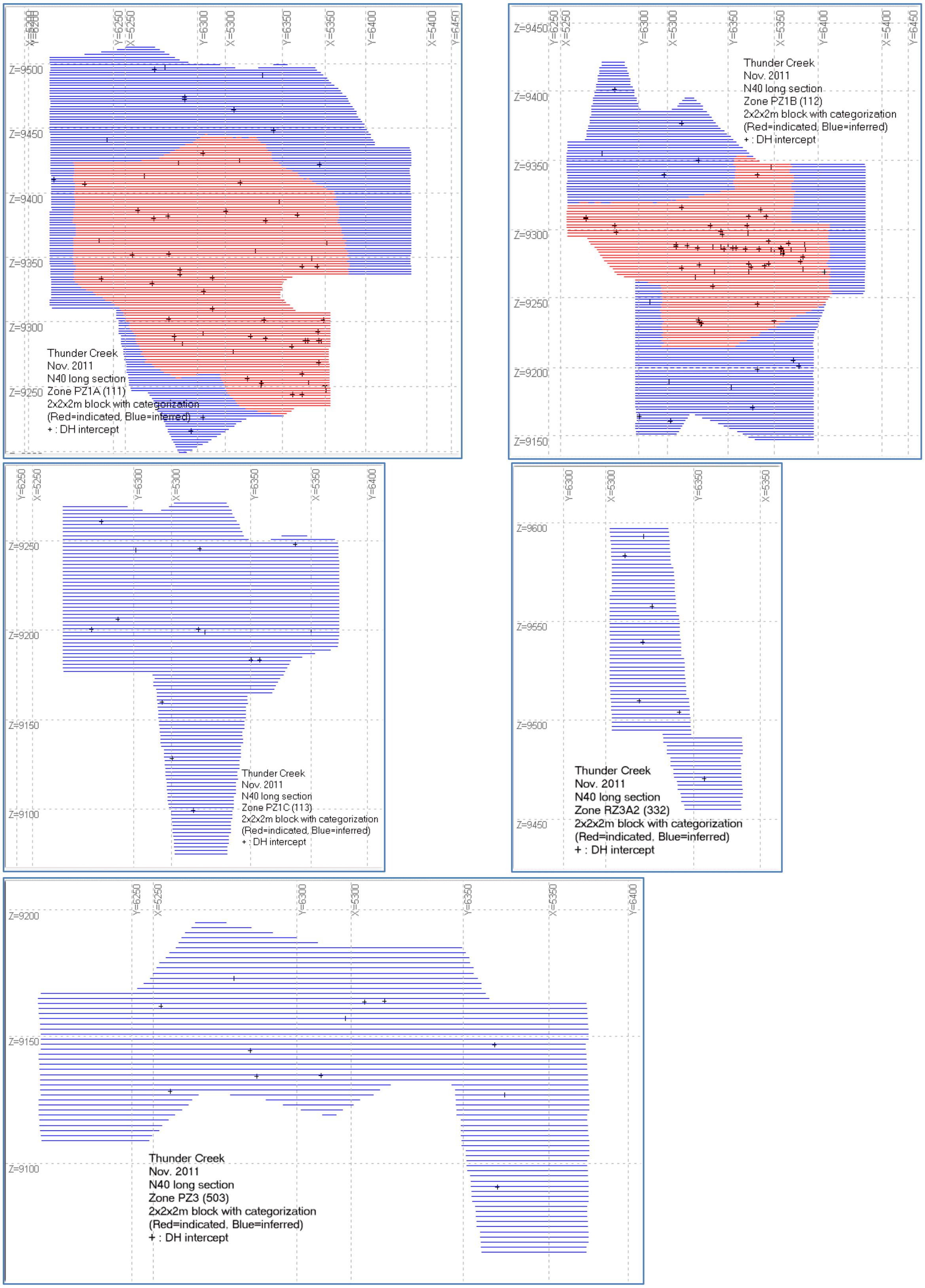
Results from the alternative resource model support estimated resources derived from the standard ID2 model.

7- Resource classification

LSG ‘s classification of 2x2x2m resource blocks is illustrated on long vertical sections of each mineralized zone along the N40 strike on Figures 7 and 8. On the same sections, we have plotted the center point of DH intercepts with the zone. As a general rule, LSG’s classification into indicated (red) and inferred (blue) corresponds to the density of those intercepts in the various sectors of the zone. In particular, it is clear that all the material in the RZ2A and RZ3A deserves to be in the indicated category while all the material in the RZ3A1, RZ3A2, PZ1C and PZ3 can only be qualified as inferred at this stage.

Figure 7 N40 long section with resource classification of each zone (1 of 2)

Figure 8 N40 long section with resource classification of each zone (2 of 2)



8- Statistical analysis of QAQC assay data

What follows is a statistical analysis of QAQC data for gold assays in Thunder Creek drill holes. Those data are in file *Master_List_QAQC_Thunder_Creek_43-101.xls* made available to us on Nov. 21, 2011.

8-1 Standards

From February 2009 to October 2011, up to 2900 standard pulps have been submitted to assay labs. Most of them (2628 or 91%) went to the ALS Canada Ltd. lab with the balance split between the Accurassay Laboratories lab (168), Cattarello Assayers Inc. lab (61)and the Bell Creek lab (42). Given the small number of results from labs other than ALS, the statistical analysis of the lab performance for standards is done with all data available and it mostly reflects the performance of the ALS lab.

Summary statistics of standard results are on Table 6. Up to 24 standards have been used by LSG in the last 3 years. Most commonly used standards are O-15Pb with a low target value of 1.06 g/t, O-60b with a medium target value of 2.57 g/t and O-61d with a high target value of 4.76 g/t. In addition to the target value, standard deviation (StDev) and corresponding “gates” of target +/- 3 standard deviations (Min and Max), the table lists :

+ the number of results for the standard (Nb)
+ the mean result (Average)
+ the % relative difference between the mean result and the target (%Diff.)
+ a flag to indicate if the difference between the mean result and the target is significant at the 95% confidence level given the quoted standard deviation and the number of results (Sig. = 1 if significant). The difference is significant if its absolute value exceeds $2*StDev/Nb^{0.5}$
+ the percentage of results below and above the target (PBelow and PAbove)
+ the percentage of results outside the Min/Max “gates” of Target+/- 3*StDev.

Relative differences between mean result and target range from -8.5% to 4.0%. As expected, highest relative differences occur with standards with a low number of results. Relative differences for the three most used standards quoted above are of the order of 1% or less. Nevertheless, with the quoted standard deviations of standards, most of differences (15 out of 24) are found to be significant at the 95% confidence level. As usual with standards, the quoted standard deviations are likely to be undervalued since derived from results in ideal conditions (round robin involving several labs). There is no specific trend for the sign of difference i.e. we have negative and positive differences for low grade and high grade standards. All together, average (weighted by number of results) difference is almost null (average result of 2.371 g/t vs. average target of 2.368 g/t Au) hence **there is no sign of an overall bias in the results for standards.**

Despite the above, there is some tendency to have more results above target value (average 59%) than below (average 41%). Also linked to the likely undervaluation of standard deviations, the average proportion of results beyond the three standard deviations gates is rather high (7.5% versus a “normal” score of only 1%).

Table 6 Statistics of results for standard pulps

Standar	Target g/tAu	StdDev g/tAu	Min g/tAu	Max g/tAu	Nb	Average g/tAu	%Diff. %	Sig.	PBelow %	PAbove %	POutside %
O-4Pb	0.049	0.002	0.042	0.056	29	0.049	-0.7%	0	43.1%	56.9%	13.8%
O-52Pb	0.307	0.017	0.255	0.359	63	0.319	4.0%	1	15.9%	84.1%	0.0%
O-65a	0.52	0.017	0.469	0.571	20	0.476	-8.5%	1	35.0%	65.0%	10.0%
O-53Pb	0.623	0.021	0.559	0.687	65	0.632	1.5%	1	27.7%	72.3%	0.0%
O-50Pb	0.841	0.032	0.746	0.936	102	0.859	2.1%	1	28.9%	71.1%	2.9%
O-2Pd	0.885	0.029	0.797	0.973	176	0.872	-1.5%	1	56.5%	43.5%	8.0%
O-15h	1.019	0.025	0.945	1.093	154	0.986	-3.3%	1	66.6%	33.4%	13.6%
O-15Pa	1.02	0.027	0.94	1.1	111	1.017	-0.3%	0	76.1%	23.9%	5.4%
O-15Pb	1.06	0.030	0.97	1.14	571	1.057	-0.3%	1	45.5%	54.5%	10.0%
O-66a	1.237	0.054	1.075	1.399	45	1.225	-0.9%	0	51.1%	48.9%	4.4%
O-6Pc	1.52	0.067	1.32	1.72	290	1.545	1.7%	1	21.6%	78.4%	1.7%
O-67a	2.238	0.096	1.95	2.526	18	2.209	-1.3%	0	52.8%	47.2%	0.0%
O-60b	2.57	0.107	2.25	2.89	362	2.562	-0.3%	0	40.2%	59.8%	3.3%
O-7Pb	2.77	0.053	2.61	2.93	49	2.761	-0.3%	0	42.9%	57.1%	8.2%
O-54Pa	2.9	0.110	2.57	3.23	62	2.903	0.1%	0	41.1%	58.9%	3.2%
O-17c	3.04	0.083	2.79	3.29	74	3.095	1.8%	1	23.6%	76.4%	13.5%
O-18c	3.52	0.107	3.2	3.84	6	3.507	-0.4%	0	33.3%	66.7%	0.0%
O-18Pb	3.63	0.070	3.42	3.84	44	3.603	-0.7%	1	61.4%	38.6%	9.1%
O-68a	3.89	0.147	3.45	4.33	36	3.762	-3.3%	1	61.1%	38.9%	8.3%
O-61d	4.76	0.143	4.33	5.19	476	4.814	1.1%	1	29.3%	70.7%	10.7%
O-10c	6.66	0.183	6.11	7.08	20	6.521	-2.1%	1	65.0%	35.0%	5.0%
O-10Pb	7.15	0.193	6.57	7.73	97	7.237	1.2%	1	32.5%	67.5%	10.3%
O-62c	8.79	0.213	8.15	9.42	28	8.164	-7.1%	1	50.0%	50.0%	17.9%
O-62d	10.5	0.330	9.51	11.49	1	10.400	-1.0%	0	100.0%	0.0%	0.0%
All	2.368				2899	2.371	0.0%		40.6%	59.4%	7.5%

8-2 Blanks

From September 2004 to October 2011, up to 3677 blanks have been submitted to assay labs. Like for standards, most of them (3369 or 92%) went to the ALS Canada Ltd. lab with the balance split between the Accurassay Laboratories lab (199), Cattarello Assayers Inc. lab (65)and the Bell Creek lab (44). Given the small number of results from labs other than ALS, the statistical analysis of the lab performance for standards is done with all data available and it mostly reflects the performance of the ALS lab.

The only statistics which can be derived from results for blanks is the proportion of them above a given threshold. Traditionally, this threshold is five times the detection limit which in the case of Thunder Creek looks like 0.0025 g/tAu hence a threshold of 0.0125 g/tAu. This in fact pretty low and we generally prefer to use a “practical” threshold of 0.1 g/t Au.

For the ALS lab, we have 329 results (9.8%) above 0.0125 g/t Au and 28 results (0.8%) above 0.1 g/t (up to 2.58 g/t Au). Most of the failures in that last batch are documented with contamination from extremely high assays before blank being the most common explanation.

For the Accurassay results, we have 27 results (14%) above 0.0125 g/t Au and 7 results (3.5%) above 0.1 g/t (up to 2.37 g/t Au).For the Bell Creek results, we have 19 results (43%) above 0.0125 g/t Au and none above 0.1 g/t (maximum is 0.057g/t Au). For the Cattarello results, we have 8 results (12%) above 0.0125 g/t Au and 2 results (3%) above 0.1 g/t (maximum is 0.199g/t Au). The performance of those labs is clearly worse than that of ALS.

8-3 Duplicates

Lab duplicates are assays from another split of the same pulp selected at random from the lab for its own quality control purposes. Up to 3780 lab duplicates from January 2008 to October 2011 and with an original and a duplicate grade can be identified in the supplied database. Like usual, the majority (3352 or 89%) are from ALS with the balance from Accurassay (301), Cattarello (61) and Bell Creek (66).

The statistic of interest with duplicates at the same lab is either the correlation coefficient of originals and duplicates (preferably with a log scale) or the average relative difference of originals and duplicates above a given threshold (very low grades tend to generate high relative differences with an undue influence on the average relative difference). In this case we use a threshold of 0.5g/tAu.

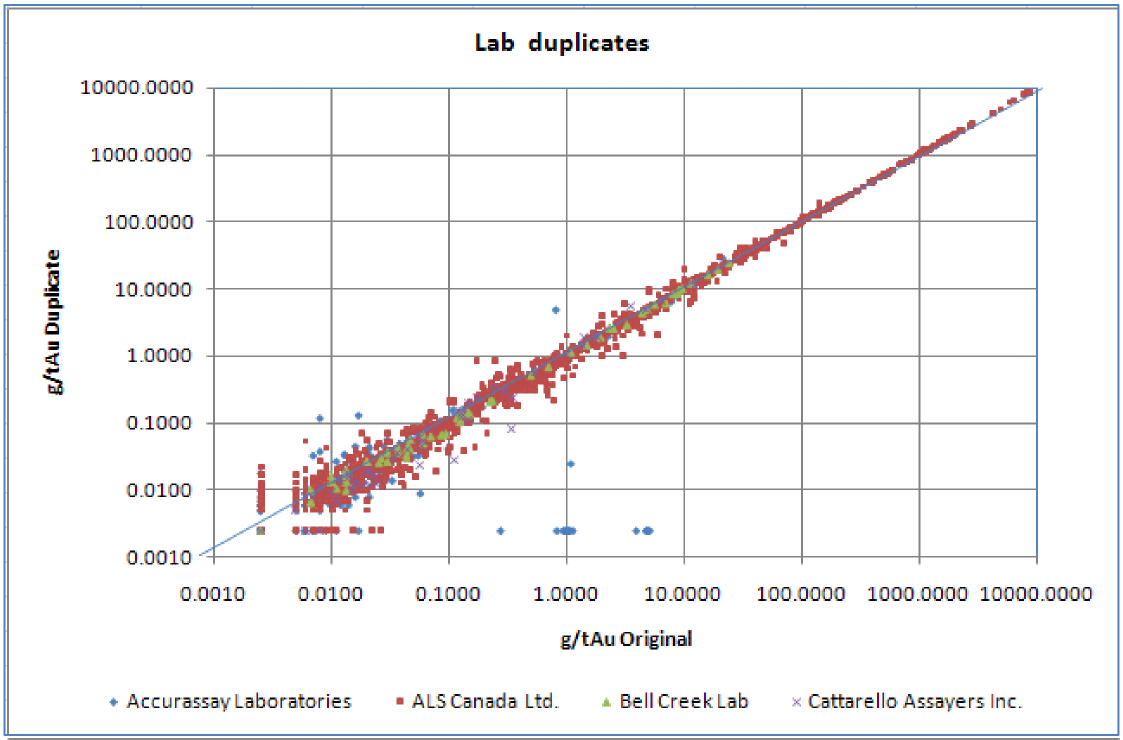
Like with blanks, the best performance is observed with duplicates from ALS with an average relative difference of 12.5% and a correlation coefficient of 0.997 as well as duplicates from Bell Creek with an average relative difference of 11.8% and a correlation coefficient of 0.998. Next comes Cattarello with an average relative difference of 22.7% and a correlation coefficient of 0.986. Accurassay has the worst performance with an average relative difference of 59.4% and a correlation coefficient of 0.749. The correlation plot at the top of Figure 9 shows that most of the outlier pairs are Accurassay duplicates (blue dots). An updated file of lab duplicates from the Accurassay lab gives much better results with an average relative difference of 8.6% and a log-log correlation coefficient of 0.94 (301 pairs). Apparently, in the original QAQC file, some missing duplicated data have been unduly replaced by the detection limit of 0.0025 g/t.

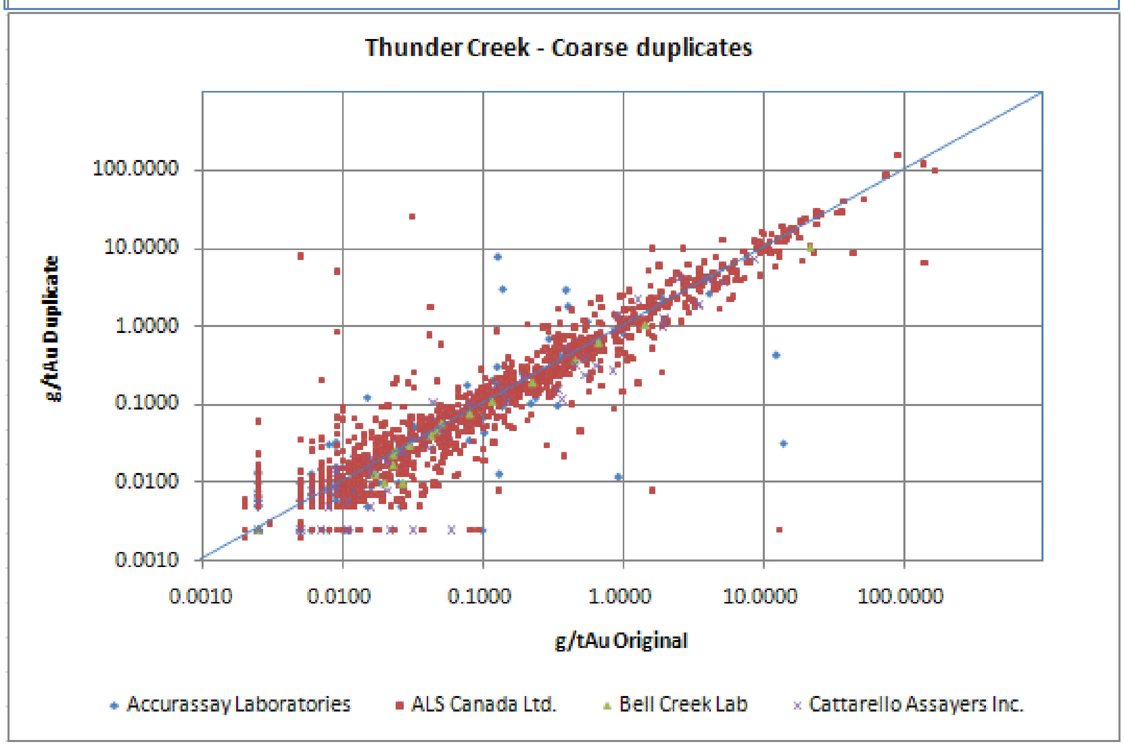
Coarse duplicates are normally assays from a new pulp made out of the crushed and ground (but not pulverized) reject of the original sample. Up to 1721 coarse duplicates from May 2010 to October 2011 and with an original and a duplicate grade can be identified in the supplied database. Like usual, the majority (1479 or 86%) are from ALS with the balance from Accurassay (165), Cattarello (58) and Bell Creek (19).

As expected, we see more differences between duplicated and original values with the coarse duplicates. For ALS, the average relative difference is 43.0% with a correlation coefficient of 0.951. For Bell Creek, average relative difference is a similar 37.4% with a correlation coefficient of 0.985. For Catarello, average relative difference is a similar 41.4% with a correlation coefficient of 0.954. For Accurassay, the performance of coarse duplicates is not as good with an average relative difference is 50.6% and a correlation coefficient of 0.904.

The scatter plot at the bottom of Figure 9 illustrates the lower reproduction of original values in the coarse duplicates.

Figure 9 Correlation plots of lab and coarse duplicates





8-4 Check assays

From data supplied, check assays look like samples from rejects of pulp originally assayed by ALS which have been sent to a different lab for a check assay. In the case of Thunder Creek the two check labs are Accurassay and SGS Canada Inc.

We can identify 758 complete check assay samples at Accurassay from July to September 2011. Original (ALS) values range from 0.0025 to 112.0 g/t with an average of 1.30 g/t while check (Accurassay) values range from 0.0025 to 91.33 g/t with a mean of 1.04 g/t. A T-test of paired data run on log grade (to respect some normality of parent population) shows that the differences of means is not significant at the 95% confidence level (T= -1.18 with a limit at -1.96 – the correlation coefficient of log data is 0.93). A sign test confirms the absence of a significant bias between the two sets (we have 53.2% of pairs with original value more than duplicate value with a 95% confidence limit at 53.6%).

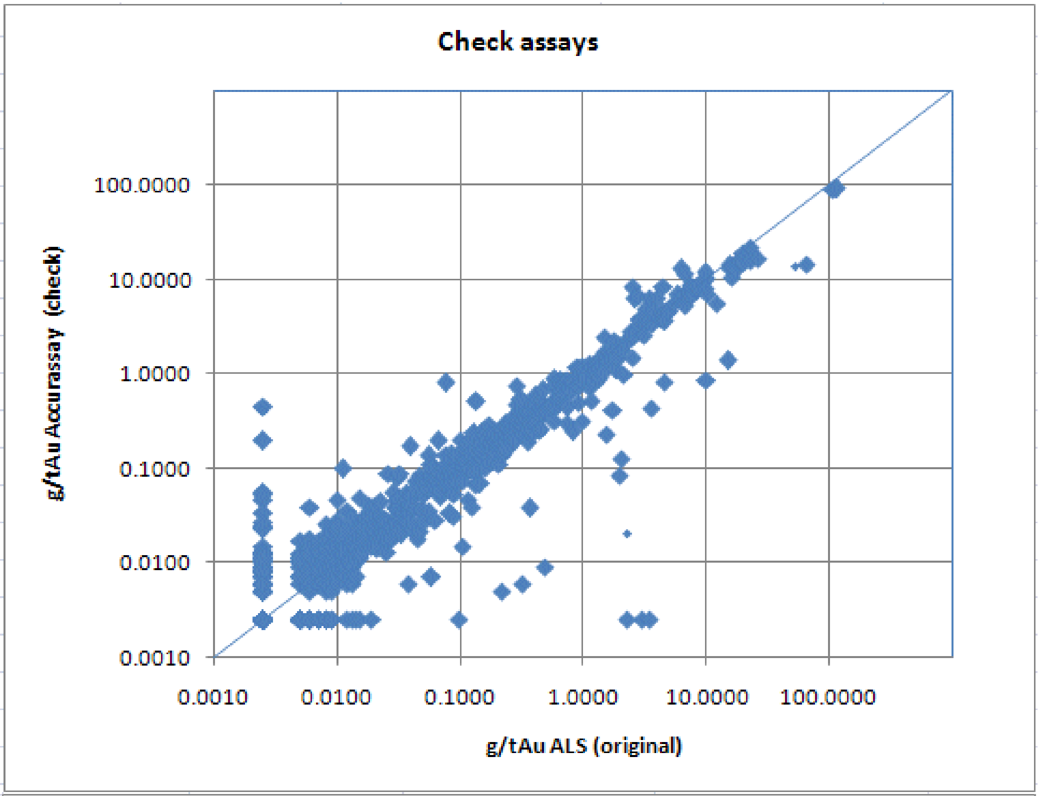
We also have 1117 complete check assay samples at SGS in February 2010, January-February 2011 and September 2011. Original (ALS) values range from 0.0025 to 97.4 g/t with an average of 1.36 g/t while check (SGS) values range from 0.0025 to 60.9 g/t with a mean of 1.32 g/t. The T-test of paired data run on log grade shows that the differences of means is not significant at the 95% confidence level (T= -0.58 with a limit at -1.96 – the correlation coefficient of log data is 0.97). In this case however, the sign test would show original data significantly higher than check data (we have 53.4% of pairs with original value more than duplicate value with a 95% confidence limit at 53.0%). However, the sign test is known to be rather severe when the number of pairs is quite high.

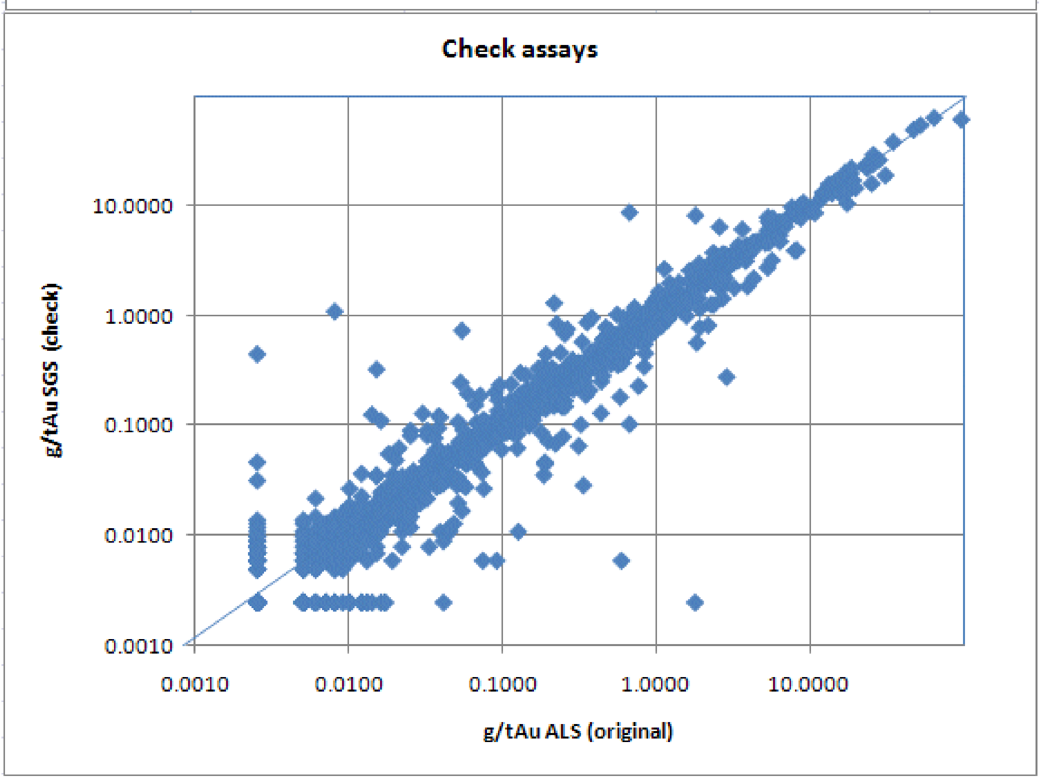
Correlation plots of check and original values in the two sets are on Figure 10.

8-5 Conclusions

Despite the high variability of gold grades from Thunder Creek samples, the QAQC data available tend to indicate that the quality of the sample grade values used in the resource estimation is satisfactory. Although we have significant differences between mean results and target values for some standards as well as a rather high proportion of results beyond the quoted gates of standards, we do not see any overall bias from the results of standards. Blanks show a few cases of likely contamination but the proportion of real failures keeps reasonably low (0.8%) at the main ALS lab. Lab and coarse duplicates show expected sample errors i.e. about 10% relative difference for pulp duplicates and 40% relative difference for coarse duplicates.

Figure 10 Correlation plots of check and original assays





APPENDIX 8

PHOTOS

The following photos and commentary have been provided courtesy of Mr. David Rhys from a PowerPoint presentation titled “Lake Shore Gold Thunder Creek Zones: Mineralization, Setting and Style in the Rusk and Porphyry Zones” (Rhys, 2011).

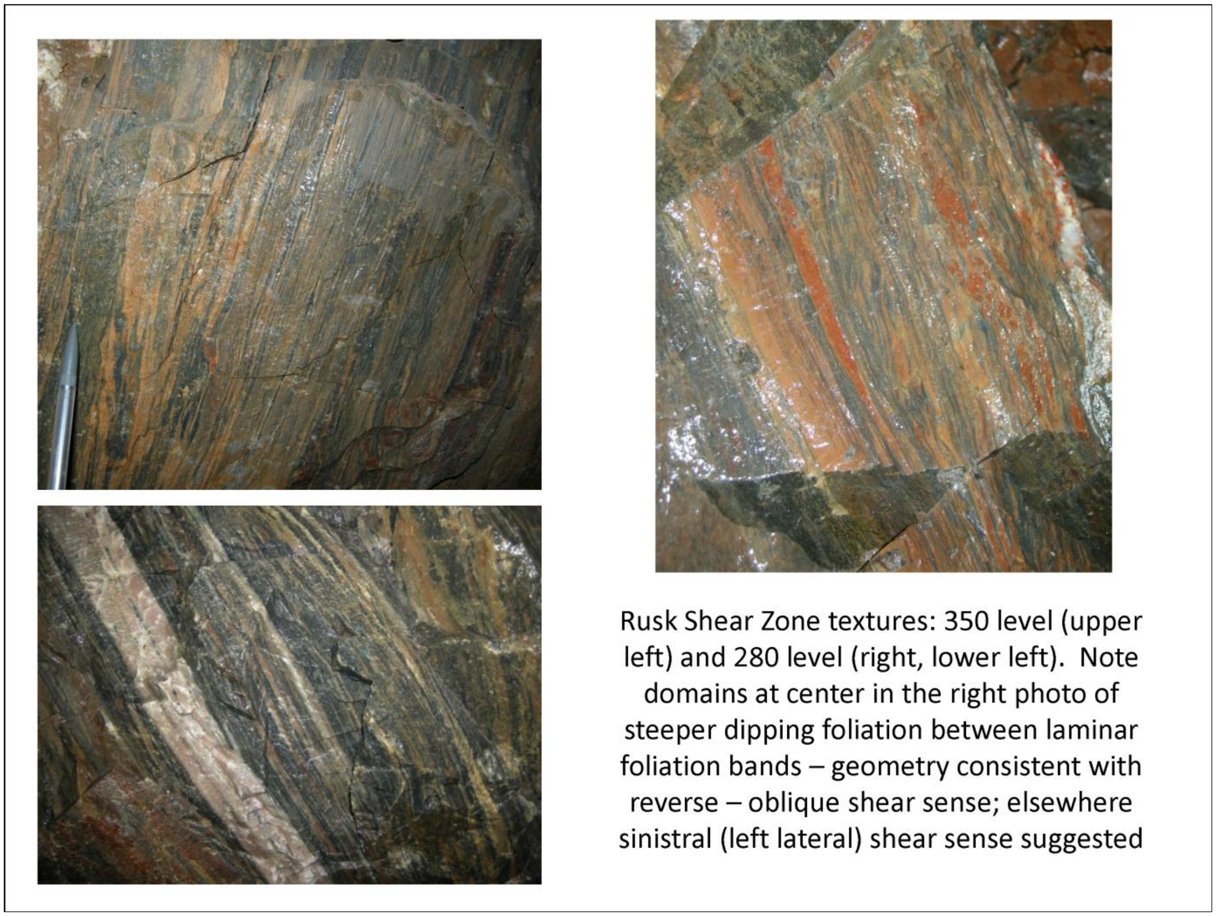


Plate 1:

280 level west: pyritic mineralization and brecciation associated with quartz veining overprint Rusk shear zone foliation. View looking east, west access near Rusk FW

Plate 2:

Detail of previous slide: note early quartz-feldspar vein with pyrite and later pale grey to white shallow dipping quartz extension veins

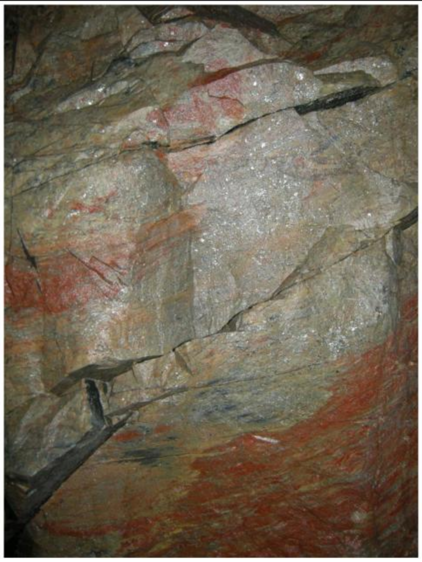
Plate 3:

280 level south central: shallow dipping quartz extension veins preferentially exploit syenite-monzonite sills in Rusk Shear Zone. The veins are associated with auriferous pyrite aggregates within, and in clots peripheral to the veins

Plate 4:

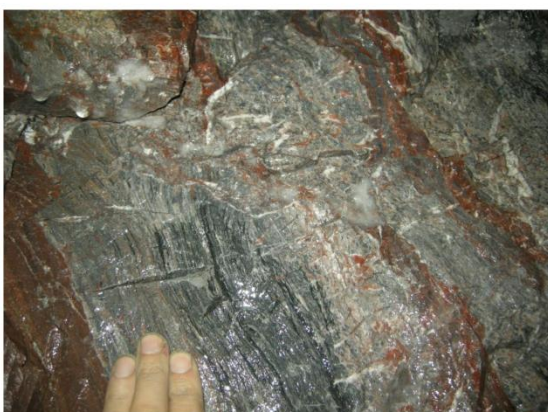
Late shallow dipping quartz veins occur preferentially in narrow syenite sills, cutting the shear zone fabric (left), but are also affected by the later set of folds with shallow dipping axial planes (D5) that overprint the shear zone (right), indicating that the folding is entirely post-mineral. 350 level crosscut (left, looking west)) and 280 level west crosscut (right photo, looking west)

Plate 5:



300 and 315 levels ore: massive pyrite-rich ?sericite-carbonate-?feldspar alteration, with reddish hematized wispy feldspathic domains and irregular quartz - ?albite-carbonate veinlets. Note lack of foliation in mineralization

Plate 6:

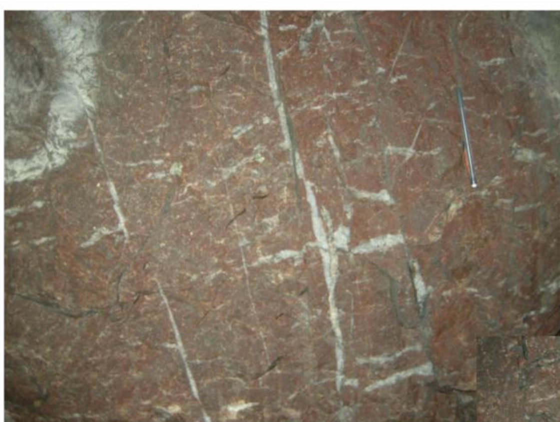


300 and 315 levels: Mineralization at upper right in both images is massive and unfoliated, overprinting foliated Rusk Shear Zone at lower left in both images: suggests a structurally late timing of mineralization

Plate 7:


730 level: Rusk style massive pyritic sericite-bearing mineralization adjacent to monzonite contact in HW of Rusk Shear zone. Beside crosscut at approximately 4370E

Plate 8:



280 level south: quartz extension vein sets in syenite-monzonite. Views to south. Shallow dipping quartz extension veins with associated pyrite clots are cut by steeply dipping, late NW trending extension veins

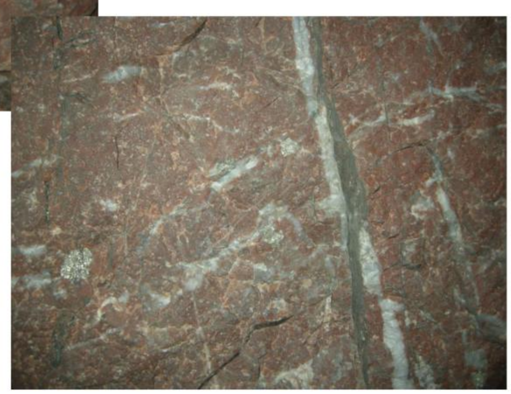
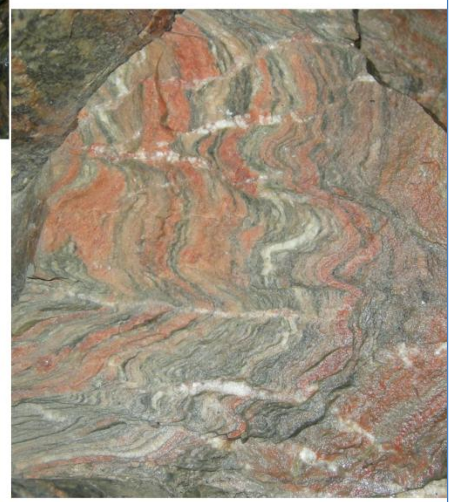
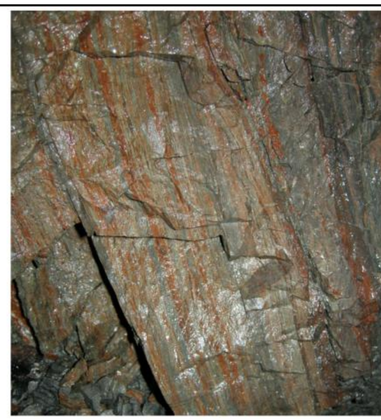


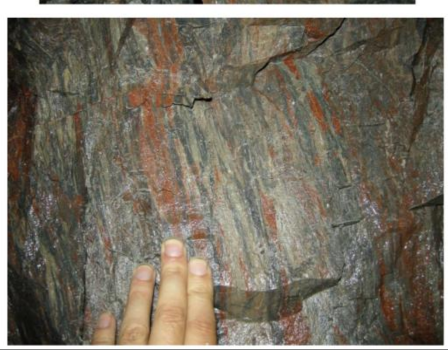
Plate 9:



Post-mineral crenulation folds with shallow dipping axial planes overprint shear zone fabric in "sedimentary" shear zone components. These at a larger scale may cause overall dip changes in the shear zone that could occur over distances of tens of meters, as is seen in the Holmer surface showings. 280 level west. Folds of this style are common in the Main Zone, Timmins mine and may be the dominant folds overprinting the Golden River Zone. Regionally = S5 (D5)

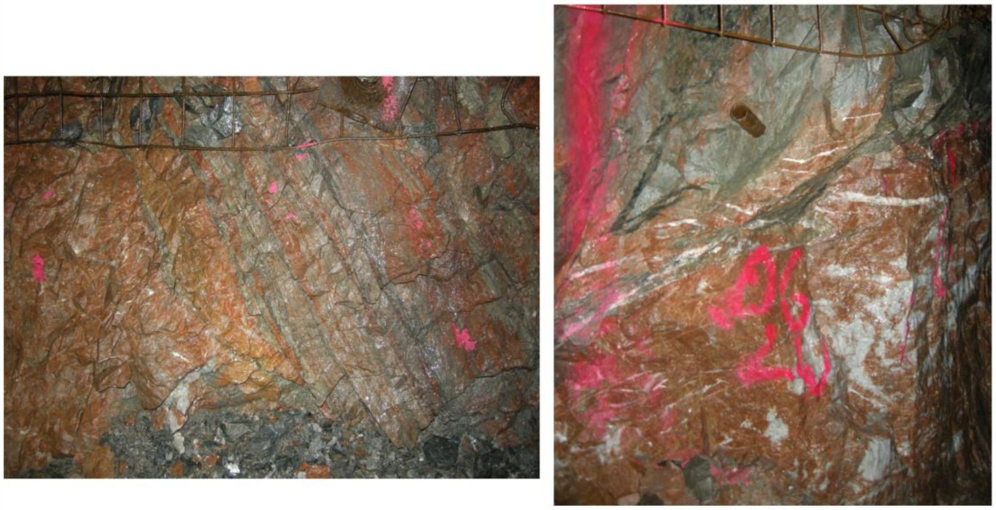
Plate 10:





730 level Rusk Shear Zone north of monzonite intrusion that is host to the Porphyry Zone. The shear zone is of similar style to that seen in the upper levels, varying from magnetite-chlorite bearing pyroxenite protolith to the north (left) to banded orange-pink sericite-feldspar bearing to the south with possible felsic or sedimentary protolith (right photos). Central 730 level in crosscut at 4380 E.

Plate 11:

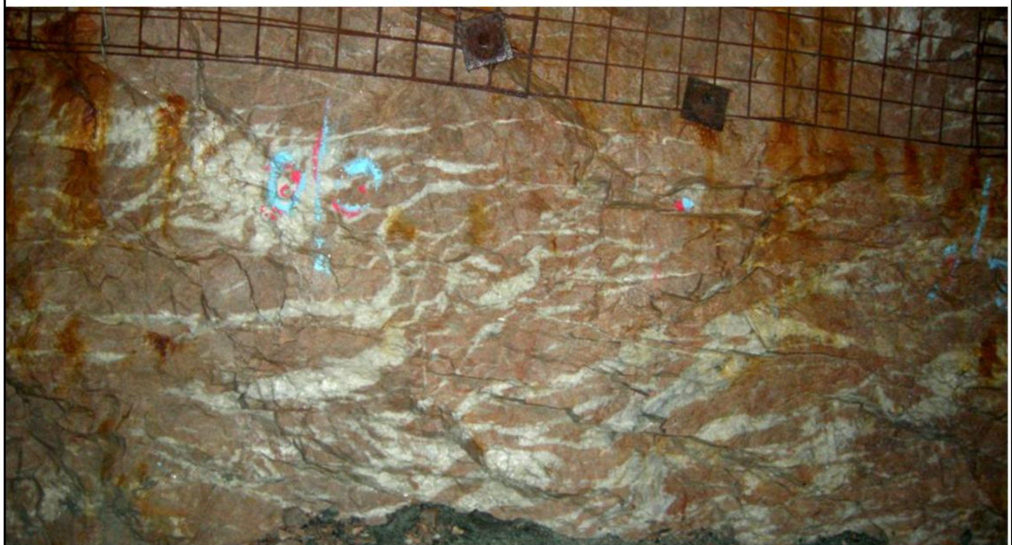


730 level, northern monzonite (porphyry) contact with Rusk Shear Zone in crosscuts between 4375E and 4390E. The contact and adjacent Rusk shear zone have abundant fine-grained red-orange secondary feldspar (probable K-feldspar) which likely contribute to the brittle reaction to the units when exposed underground, causing popping and periodic explosive stress release. Note sigmoidal vein array at right. Looking west (left) and east (right). Contact dips shallowly in right photo probably due to late folding (D5).

Plate 12:

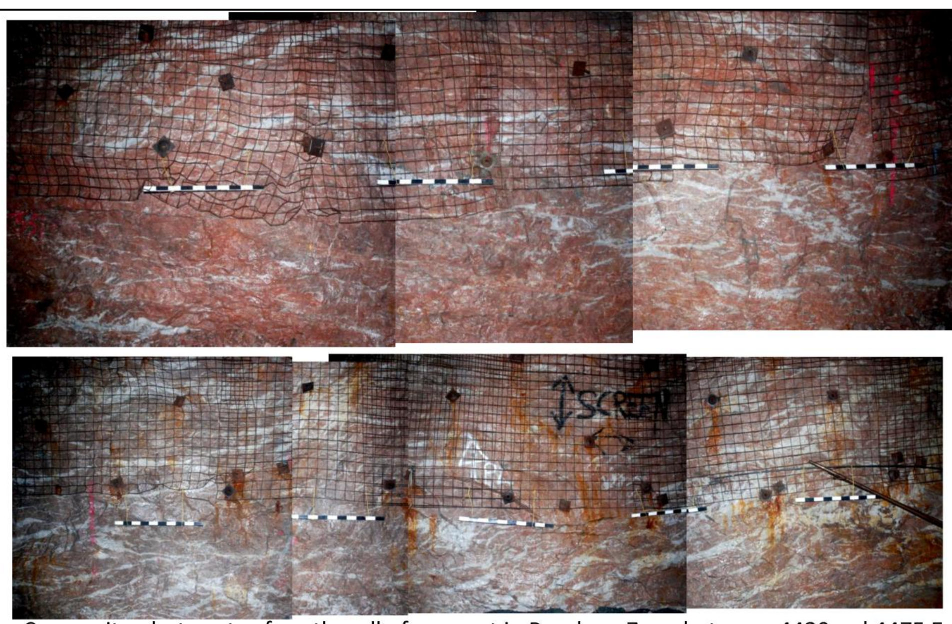
North wall, 730 level in Porphyry Zone within monzonite. Shallow easterly dipping sheeted quartz extension veins in central part of zone.

Plate 13:



Well developed en echelon, sigmoidal vein array in high grade area at approximately face 19. View to the north; array dips shallowly NE while extension veins within it dip south. Sigmoidal veins record reverse (north side up) shear sense.

Plate 14:



Composite photo sets of north wall of crosscut in Porphyry Zone between 4430and 4475 E, from mine photos. Lower photo is of north wall of approximately faces 18 to 20 which, returned high grades along this wall (4 to 30 g/t Au). Exposures contain multiple shallow N to NE dipping extension vein arrays which contain highest vein densities. Sigmoidal shapes record reverse, N side up shear sense.

Plate 15: (photos are courtesy of Mr. David Rhys, August 2011)


Plate 16: Rusk Shear Zone muck pile 715 Stope (D. Powers, December 08, 2011)


Plate 17: Sulphide Rich Mineralization, Rusk Shear Zone, 715 Stope (D. Powers, December 08, 2011)

Plate 18: 715 Stope, Scheelite and Molybdenum in Quartz Veins Within Monzonite (D. Powers, 2011)

Plate 19 : Diamond Drill Core that remains to be processed (December 08, 2011).

Plate 20: Thunder Creek ((LAKGOL) and Golden River Zone (LSGWTT) Reject Sample Storage on the Timmins Mine Site (D. Powers, 2011)

Plate 21: Ms. Laura Kruka logging Diamond Drill Hole 680-002. (D. Powers, December 08, 2011)

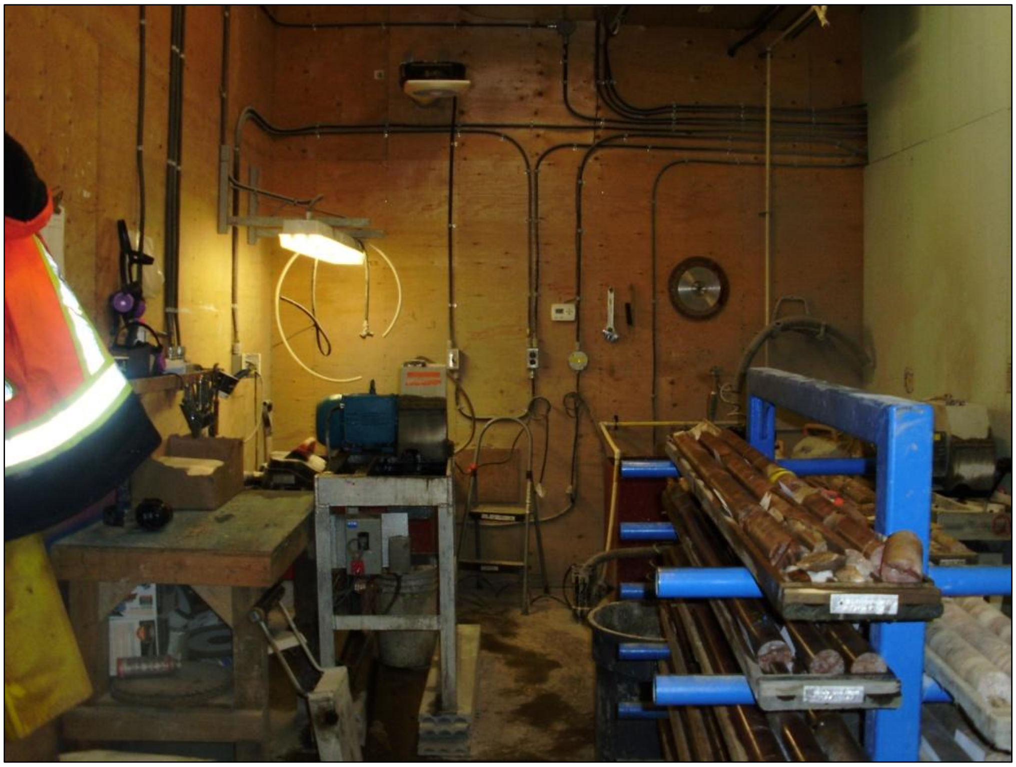


Plate 22: Timmins Mine Core Cutting Facility (D. Powers December 08, 2011)