

CHAMPION BEAR RESOURCES LTD.

# PLOMP FARM RESOURCE ESTIMATION AND TECHNICAL REPORT

FEBRUARY 05, 2018





# PLOMP FARM RESOURCE ESTIMATION AND TECHNICAL REPORT

CHAMPION BEAR RESOURCES LTD.

PROJECT NO.: 161-10880-00\_RPT-01\_R0  
DATE: FEBRUARY 05, 2018

WSP  
SUITE 300  
93 CEDAR STREET  
SUDBURY, ON, CANADA P3E 1A7

T +1 705 674-0119  
WSP.COM

---

# REVISIONS

Revision #	Date	Prepared by	Remarks
0	February 5, 2018	Todd McCracken	First issue to Client

---

# SIGNATURES

## PREPARED BY

*Original signed by  
Todd McCracken, P.Geo.*

---

Todd McCracken, P.Geo.  
Manager - Mining

This report was prepared by WSP Canada Inc. (WSP) for the account of Champion Bear Resources Ltd., in accordance with the professional services agreement. The disclosure of any information contained in this report is the sole responsibility of the intended recipient. The material in it reflects WSP's best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. WSP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This limitations statement is considered part of this report.

The original of the technology-based document sent herewith has been authenticated and will be retained by WSP for a minimum of ten years. Since the file transmitted is now out of WSP's control and its integrity can no longer be ensured, no guarantee may be given with regards to any modifications made to this document.

# ABBREVIATIONS

## Units of Measure

above mean sea level .....	amsl	kilometres per hour .....	km/h
acre .....	ac	kilopascal .....	kPa
ampere .....	A	kiloton .....	kt
annum (year) .....	a	kilovolt .....	kV
billion .....	B	kilovolt-ampere .....	kVa
billion tonnes .....	Bt	kilowatt .....	kW
billion years ago .....	Ga	kilowatt hour .....	kWh
British thermal unit .....	BTU	kilowatt hours per tonne .....	kWh/t
Centimetre .....	cm	kilowatt hours per year .....	kWh/a
cubic centimetre .....	cm <sup>3</sup>	less than .....	<
cubic feet per minute .....	cfm	litre .....	L
cubic feet per second .....	ft <sup>3</sup> /s	litres per minute .....	L/m
cubic foot .....	ft <sup>3</sup>	megabytes per second .....	Mb/s
cubic inch .....	in	megapascal .....	Mpa
cubic metre .....	m <sup>3</sup>	megavolt-ampere .....	Mva
cubic yard .....	yd <sup>3</sup>	megawatt .....	MW
Coefficients of Variation .....	Cvs	metre .....	m
day .....	d	metres above sea level .....	masl
days per week .....	d/wk	metres Baltic sea level .....	mbsl
days per year (annum) .....	d/a	metres per minute .....	m/min
dead weight tonnes .....	DWT	metres per second .....	m/s
decibel adjusted .....	Ba	microns .....	µm
decibel .....	dB	milligram .....	mg
degree .....	°	milligrams per litre .....	mg/L
degrees Celsius .....	°C	millilitre .....	mL
diameter .....	∅	millimetre .....	mm
dollar (American) .....	US\$	million .....	M
dollar (Canadian) .....	Cdn\$	million bank cubic metres .....	Mbm <sup>3</sup>
dry metric tond .....	mt	million bank cubic metres per annum .....	Mbm <sup>3</sup> /a
foot .....	ft	million tonnes .....	Mt
gallon .....	gal	minute (plane angle) .....	'
gallons per minute .....	gpm	minute (time) .....	min
Gigajoule .....	GJ	month .....	mo
Gigapascal .....	GPA	ounce .....	oz
Gigawatt .....	GW	pascal .....	Pa
Gram .....	g	centipoise .....	mPa-s
grams per litre .....	g/L	parts per million .....	ppm
grams per tonne .....	g/t	parts per billion .....	ppb
greater than .....	>	percent .....	%
hectare (10,000 m2) .....	ha	pound(s) .....	lb
hertz .....	Hz	pounds per square inch .....	psi
horsepower .....	hp	revolutions per minute .....	rpm
hour .....	h	second (plane angle) .....	"
hours per day .....	h/d	second (time) .....	s
hours per week .....	h/wk	short ton (2,000 lb) .....	st
hours per year .....	h/a	short tons per day .....	st/d
inch .....	in	short tons per year .....	st/y
kilo (thousand) .....	k	specific gravity .....	SG
kilogram .....	kg	square centimetre .....	cm <sup>2</sup>
kilograms per cubic metre .....	kg/m <sup>3</sup>	square foot .....	ft <sup>2</sup>
kilograms per hour .....	kg/h	square inch .....	in <sup>2</sup>
kilograms per square metre .....	kg/m <sup>2</sup>	square kilometre .....	km <sup>2</sup>
kilometre .....	km	square metre .....	m <sup>2</sup>
kilometre .....	km		

## Acronyms

Champion Bear .....	Champion Bear Resources Ltd.
DTM .....	Digital Terrain Model
ID <sup>2</sup> .....	Inverse Distance Squared
MNDM .....	Ministry of Northern Development and Mines
NAD .....	North American Datum
NN .....	Nearest Neighbour
NSR .....	Net Smelter Return
NTS .....	National Topographic System
OGS .....	Ontario Geological Survey
OK .....	Ordinary Kriging
QP .....	Qualified Person
QSS .....	Quartz-Sericite Schist
UTM .....	Universal Transverse Mercator
VMS .....	Volcanogenic Massive Sulphide
WSP .....	WSP Canada Inc.
WGM .....	Watts, Griffis and McQuat Limited



# TABLE OF CONTENTS

1	SUMMARY .....	1
1.1	Geology .....	1
1.2	Resource Estimation.....	1
1.3	Recommendations .....	2
2	INTRODUCTION.....	3
3	RELIANCE ON OTHER EXPERTS.....	4
4	PROPERTY LOCATION AND DESCRIPTION	5
4.1	Location.....	5
4.2	Claim Status.....	7
5	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY.....	10
5.1	Site Topography, Elevation, and Vegetation .....	10
5.2	Access .....	10
5.3	Climate.....	10
5.4	Infrastructure .....	10
6	HISTORY .....	11
7	GEOLOGICAL SETTING AND MINERALIZATION .....	13
7.1	Regional Geology .....	13
7.2	Property Geology .....	14
7.3	Mineralization.....	16
8	DEPOSIT TYPES.....	18
8.1	Pre-Orogenic Atypical Greenstone Belt Gold Model .....	18

8.2	<b>Magmatic Hydrothermal Archean Lode Gold Deposits (ALGD).....</b>	<b>19</b>
8.3	<b>Volcanogenic Massive Sulphide Deposits (VMS) ....</b>	<b>19</b>
9	<b>EXPLORATION.....</b>	<b>20</b>
9.1	<b>1996 Ground Magnetics and VLF-EM Survey.....</b>	<b>20</b>
9.2	<b>2005 Induced Polarization / Resistivity and Magnetic survey .....</b>	<b>22</b>
10	<b>DRILLING.....</b>	<b>25</b>
10.1	<b>Surveying .....</b>	<b>25</b>
10.2	<b>QP’s Opinion.....</b>	<b>26</b>
11	<b>SAMPLE PREPARATION, ANALYSES, AND SECURITY .....</b>	<b>27</b>
11.1	<b>Sample Preparation.....</b>	<b>27</b>
11.2	<b>Analytical Procedure.....</b>	<b>27</b>
11.3	<b>Quality Assurance / Quality Control.....</b>	<b>27</b>
11.4	<b>QP’s Opinion.....</b>	<b>28</b>
12	<b>DATA VERIFICATION.....</b>	<b>29</b>
12.1	<b>Site Visit .....</b>	<b>29</b>
12.2	<b>Independent Sampling.....</b>	<b>29</b>
12.3	<b>Database Validation .....</b>	<b>29</b>
12.4	<b>QP’s Opinion.....</b>	<b>29</b>
13	<b>MINERAL PROCESSING AND METALLURGICAL TESTING .....</b>	<b>30</b>
14	<b>MINERAL RESOURCE ESTIMATE .....</b>	<b>31</b>
14.1	<b>Database.....</b>	<b>31</b>
14.2	<b>Specific Gravity .....</b>	<b>31</b>
14.3	<b>Topographic Data.....</b>	<b>31</b>





14.4	<b>Geological Interpretation.....</b>	<b>31</b>
14.5	<b>Exploratory Data Analysis.....</b>	<b>34</b>
14.6	<b>Resource Block Model.....</b>	<b>39</b>
14.7	<b>Estimation Parameters .....</b>	<b>39</b>
14.8	<b>Resource Classification.....</b>	<b>40</b>
14.9	<b>Mineral Resource Tabulation .....</b>	<b>40</b>
14.10	<b>Validation .....</b>	<b>41</b>
14.11	<b>Previous Estimates .....</b>	<b>45</b>
15	<b>ADJACENT PROPERTIES .....</b>	<b>46</b>
16	<b>OTHER RELEVANT DATA AND INFORMATION .....</b>	<b>47</b>
17	<b>INTERPRETATION AND CONCLUSIONS ...</b>	<b>48</b>
18	<b>RECOMMENDATIONS .....</b>	<b>49</b>
18.1	<b>Phase 1 .....</b>	<b>49</b>
18.2	<b>Phase 2.....</b>	<b>49</b>
18.3	<b>Other Recommendations.....</b>	<b>50</b>
19	<b>REFERENCES.....</b>	<b>51</b>
20	<b>CERTIFICATE OF QUALIFIED PERSON .....</b>	<b>52</b>

---

## TABLES

TABLE 4.1	CLAIMS LIST .....	9
TABLE 6.1	SUMMARY OF PREVIOUS WORK ..	11
TABLE 10.1	PLOMP FARM DRILL COLLAR SUMMARY .....	25
TABLE 10.2	SUMMARY OF DOWNHOLE SURVEY .....	26
TABLE 14.1	PLOMP FARM DRILLHOLE SUMMARY .....	31
TABLE 14.2	GEOLOGICAL WIREFRAME SUMMARY .....	32
TABLE 14.3	PLOMP FARM DRILLHOLE STATISTICS .....	35
TABLE 14.4	PLOMP FARM CAPPED DRILLHOLE STATISTICS .....	36
TABLE 14.5	PLOMP FARM 1 M COMPOSITED DRILLHOLE STATISTICS .....	37
TABLE 14.6	PLOMP FARM VARIOGRAM SUMMARY .....	37
TABLE 14.7	PLOMP FARM SEARCH ELLIPSE PARAMETERS .....	38
TABLE 14.8	PARENT MODEL SUMMARY .....	39
TABLE 14.9	PLOMP FARM ESTIMATION PARAMETERS .....	39
TABLE 14.10	PLOMP FARM CUT-OFF TABLE .....	40
TABLE 14.11	PLOMP FARM MINERAL RESOURCE .....	40
TABLE 14.12	PLOMP FARM GLOBAL MODEL COMPARISON .....	41
TABLE 18.1	PLOMP FARM PHASE 1 EXPLORATION BUDGET .....	49
TABLE 18.2	PLOMP FARM PHASE 2 EXPLORATION BUDGET .....	50

---

## FIGURES

FIGURE 4.1	REGIONAL PROPERTY LOCATION MAP .....	6
FIGURE 4.2	PROPERTY LOCATION MAP .....	7
FIGURE 4.3	CLAIM MAP WITH CLAIM CELLS .....	8
FIGURE 7.1	PROPERTY LOCATION ON A REGIONAL GEOLOGY MAP .....	14
FIGURE 7.2	PROPERTY GEOLOGY .....	16
FIGURE 9.1	PLOMP FARM MAGNETIC SURVEY .....	21

FIGURE 9.2	PLOMP FARM INDUCED POLARIZATION SURVEY.....	23
FIGURE 9.3	PLOMP FARM RESISTIVITY SURVEY .....	24
FIGURE 14.1	SS_HG VS. SS_LG CONTACT PLOT – GOLD.....	33
FIGURE 14.2	SS_HG VS. SS_LG CONTACT PLOT – SILVER .....	34
FIGURE 14.3	PLOMP FARM EASTING SS_HG SWATH PLOT .....	42
FIGURE 14.4	PLOMP FARM NORTHING SS_HG SWATH PLOT .....	42
FIGURE 14.5	PLOMP FARM ELEVATION SS_HG SWATH PLOT .....	43
FIGURE 14.6	PLOMP FARM EASTING SS_LG SWATH PLOT .....	43
FIGURE 14.7	PLOMP FARM NORTHING SS_LG SWATH PLOT .....	44
FIGURE 14.8	PLOMP FARM ELEVATION SS_LG SWATH PLOT .....	44

---

## *APPENDICES*

- A** DRILLHOLE COLLARS
- B** SIGNIFICANT DRILLHOLE INTERSECTIONS

# 1 SUMMARY

The Plomp Farm Project (“the Project”) is located approximately 20 km west of Dryden, in northwestern Ontario. The claims are currently owned 100% by Champion Bear.

In July 2016, Champion Bear retained WSP Canada Inc. (WSP) to provide technical support to Champion Bear on their various explorations projects. The decision to complete a resource estimate and technical report on the Project was made in 2017. This technical report complies with disclosure and reporting requirements set forth in National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects, Companion Policy 43-101CP, and Form 43-101F.

---

## 1.1 GEOLOGY

The Project lies within the northern portion of the western Wabigoon sub-province of the Superior province. The Wabigoon sub-province is a 150 km wide volcano-plutonic domain with an exposed strike of 700 km and is comprised of primarily volcanic supracrustal sequences (greenstone belts) intruded by syn-volcanic to post tectonic felsic plutonic rocks of the Superior Province of the Canadian Shield. The magmatic components of the greenstone belts vary from ultramafic to felsic tholeiitic, calc-alkaline and alkali groups. The secondary sedimentary successions include both clastic and chemical deposits and the plutonic rocks include syn-volcanic tonalitic, quartz dioritic and granodioritic plutons of which emplacement has caused major deformation along the greenstone belts.

The Project is underlain by an Archean aged narrow belt of rocks belonging to the Sioux Lookout Domain which is characterized by a series of alternating felsic volcanics, fine grained, grey, weakly foliated meta-greywackes, and iron formations with a southward, sub-vertical to vertical dip that has been intruded by mafic to felsic dykes.

The initial focus on the mineralization style on the Project was on gold associated quartz veining within the quartz-sericite schists. With further investigations, highly anomalous gold values were identified on the property hosted within sericitized felsic tuffaceous units which indicates a second style of mineralization is present on the Project.

---

## 1.2 RESOURCE ESTIMATION

The resource estimation on the Project was based on 125 diamond drillholes completed up to the end of 2007. A total of 8,478 gold assays were captured within four geological domains for modeling.

The geological domain SS (sheared schist) contained the majority of the mineralized intervals (4,362). Grade capping was conducted on the raw samples, with a different capping value being applied to gold and silver within each domain.

Sample intervals were composited to 1 m with a length weighted option applied to account for intervals less than 0.75 m. A variogram analysis was completed on each capped and composited file for each domain. Search ellipses for each domain were generated based on the results of the variogram.

The block model was generated with 5 m x 2.5 m x 2.5 m un-rotated blocks. A four-pass estimation strategy was used to estimate gold and silver within the model. Ordinary Kriging estimation was completed with inverse distance and nearest neighbour estimation for validation.

Based on gold pricing of US\$1,350 per ounce, a review of several other open pit gold projects, a cutoff grade of 0.3 g/t was deemed appropriate for the resource. At the early stage of this Project, the resource is not pit constrained. The resource is constrained to within the top 200 m.

The Plomp Farm mineral resource contains an Inferred resource of approximately 5.7 Mt with an average grade of 0.58 g/t gold, 0.21g/t silver.

---

## 1.3 RECOMMENDATIONS

It is WSP's opinion that additional exploration expenditures are warranted. Two separate exploration programs are proposed. Phase 2 is dependent on the results of Phase 1 and should be completed or adjusted upon the completion of Phase 1.

---

### 1.3.1 PHASE 1

Phase 1 is designed primarily to expand the current resource at the Project by testing the strike and dip extension of the deposit as well as preserving the existing drillcore

The proposed budget for Phase 1 is estimated at \$629,000.

---

### 1.3.2 PHASE 2

If Phase 1 is successful at further delineating a gold resource along strike and / or at depth, Phase 2 programs should be initiated. Phase 2 is designed to further delineate the Project at depth and along strike.

The proposed budget for Phase 2 is estimated at \$945,000.

## 2 INTRODUCTION

The Property is a shear-hosted gold system located approximately 20 km west of Dryden, in northwestern Ontario. The claims are currently owned 100% by Champion Bear.

Exploration has been sporadic through the years with Champion Bear conducting most of the efforts between 1994 and 2007. The Project has been inactive until 2017, when Champion Bear re-evaluated the Project.

To date, Champion Bear has delineated two mineralized domains on the Property through the compilation of mapping, and diamond drill data.

The objectives of this report are to:

- Prepare a technical report on the Plomp Farm Property in accordance with NI 43-101 summarizing land tenures, exploration history, and drilling;
- Provided an initial mineral resource estimate;
- Provide recommendations and budget for additional work.

This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

All work is completed using the metric system and all values are in Canadian dollars unless otherwise stated.

All data reviewed for the report was provided by Champion Bear in digital format, with access to paper reports and logs when requested. The work completed by Champion encompasses surface exploration, including mapping, sampling, geophysics and geological modeling. Champion Bear has completed five phases of diamond drilling on the Property.

Historical work conducted in the region has been compiled by Champion Bear and was available for review.

The author of this report and qualified person (QP), Mr. Todd McCracken, P.Geol. is a professional geologist with 26 years of experience in exploration and operations, including several years working in shear-hosted deposits. Mr. McCracken visited the Property between June 28 and 29. Mr. McCracken was accompanied on the site visit by Mr. Richard Kantor, President for Champion Bear and Mr. Todd Dillabough, Director for Champion Bear.

WSP considers the site visit current, per NI 43-101CP, Section 6.2, on the basis that the work completed on the Property has been reviewed by the QP and all practices and procedures documented were reviewed.

### 3 RELIANCE ON OTHER EXPERTS

WSP has reviewed and analyzed data and reports provided by Champion Bear, together with publicly available data, drawing its own conclusions augmented by direct field examination.

This report includes technical information, which required subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QP does not consider them to be material.

The QP who prepared this report relied on information provided by experts who are not QPs. The QP believes that it is reasonable to rely on these experts, based on the assumption that the experts have the necessary education, professional designations, and relevant experience on matters relevant to the technical report.

- Todd McCracken, P.Geo, relied upon Richard Kantor, President of Champion Bear for information pertaining to mineral claims as disclosed in Section 4.0. The information pertaining to mineral claims was confirmed by the Ontario Ministry of Northern Development and Mines CLAIMaps website ([www.mndm.gov.on.ca](http://www.mndm.gov.on.ca)).

# 4 PROPERTY LOCATION AND DESCRIPTION

---

## 4.1 LOCATION

The Plomp Farm property is located in Aubrey Township approximately 20 km west of Dryden, Ontario and consists of two contiguous group blocks (East and West blocks) and two non-contiguous claims situated within the Kenora Mining Division in northwestern Ontario. The east blocks are centered approximately at Universal Transverse Mercator (UTM) co-ordinate 500,345m E and 5,514,588m N (North American Datum (NAD) 83, Zone 15). The west blocks are centered approximately at UTM coordinate 490,239m E and 5,513,054m N. Both claim groups are located within National Topographic System (NTS) map sheet 52F/15 SW.

Surface rights on the property are owned by the Crown and Freehold owners respectively. Under the mining regulations of Ontario, Champion Bear has access rights to mineral resources found on the property, limited by Federal and Provincial resource extraction and by environmental regulations.

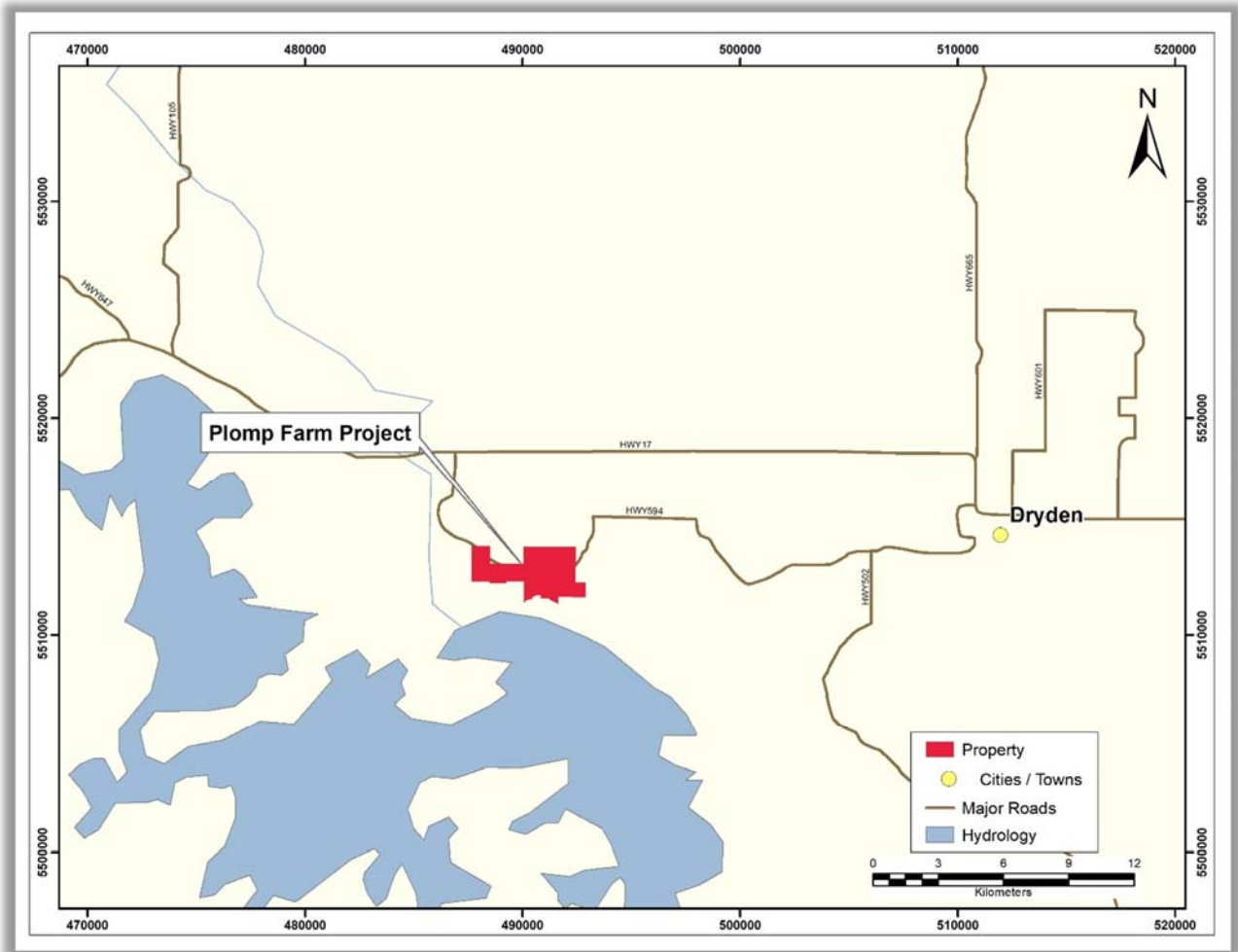
Figure 4.1 presents the regional property location map, and Figure 4.2 presents the property location map.



Figure 4.1 Regional Property Location Map



Figure 4.2 Property Location Map



## 4.2 CLAIM STATUS

The current claim status was validated through the Mining Claims Information page on the Ministry of Northern Development and Mines (MNDM) website. This webpage provides an updated online database that can be accessed through [https://www.mci.mndm.gov.on.ca/claims/clm\\_mnen.cfm](https://www.mci.mndm.gov.on.ca/claims/clm_mnen.cfm).

The Plomp Farm Gold property is composed of 18 unpatented mining claims and 7 patented claims that consists of an east group and a west group. The east group is comprised of two contiguous blocks and one non-contiguous claim and the west group consists of one contiguous block and one non-contiguous claim. The 18 unpatented mining claims (80 claim units in total) covers 1,176.53 hectares and are all in good standing and wholly owned by Champion Bear Resources Ltd. Figure 4.3 and Table 4.1 summarize the mining claims.

**Plomp Farm Agreement No. 1:** November 2003, Champion Bear entered into an agreement between Fred Plomp and David Schultz where Champion Bear was to reacquire an undivided 100% interested in the Plomp Farm Property for an aggregate of \$40,000 to be paid upon execution of the acquisition agreement. A NSR (Net Smelter Return) of 2% was retained by the owner, of which 1% may be purchased by Champion Bear for \$2,000,000 prior to commencement of production.

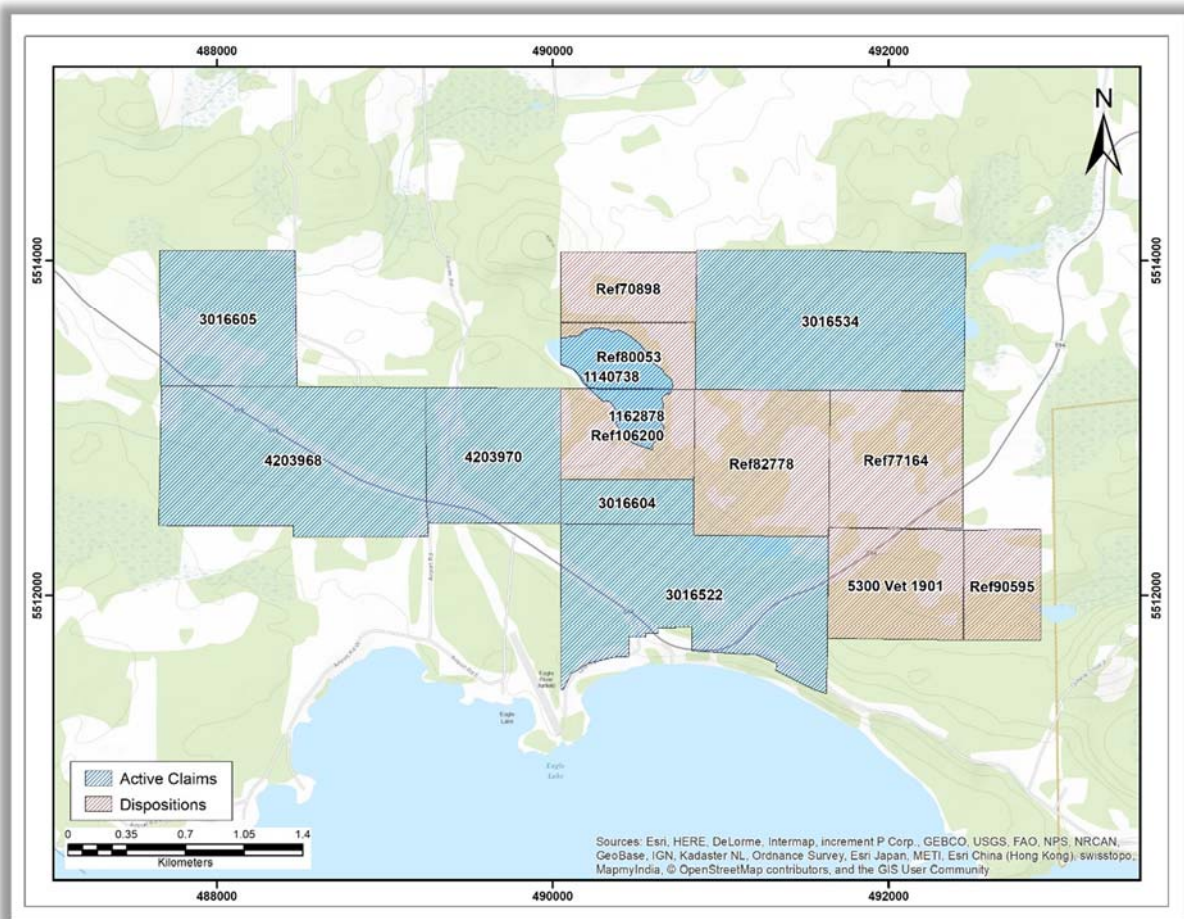
**Plomp Farm Agreement No. 2:** August 2004, Champion Bear entered into an agreement with Teck Cominco Ltd. to acquire 100% interest in the Aubrey Gold Property which consisted of 18 unpatented claim units, extending west of the Plomp Farm Property.

Champion Bear was to spend an aggregate of \$250,000 in exploration expenditures by August 2007 to obtain 100% interest in the property. Champion Bear also optioned the Aubrey Gold Property from Teck Cominco by issuing 50,000 common shares. The agreement was subject to a back-in right and a 2% NSR to Teck Cominco. After Champion Bear fulfilled the agreement terms and earned 100% interest in the property as well as completion of a feasibility study, Teck Cominco was able to exercise the back-in right within a 90 day period. In order to earn back 65% interest of the project, Teck had to provide Champion Bear with a completed feasibility study on the property. Teck Cominco did not exercise the back-in right after the terms were met by Champion Bear. Champion Bear holds 100% in the property.

Plomp Farm Agreement No. 2 pertains to claims 3016604, 6016605, 4203968 and 4203970 which were restaked in January 2005.

**Plomp Farm Agreement No. 3:** September 2004, Champion Bear entered into an agreement with Mary-Jane Sussko to acquire 100% interest in claim number Ref982238. Upon execution of the of the acquisition agreements, Mary-Jane Sussko was to be paid an aggregate of \$6,000.00. The agreement states that the claims are subject to a 2% NSR (Net Smelter Return) of which 1% may be re-purchased by Champion Bear for \$1,000,000 prior to commencement of production.

**Figure 4.3 Claim Map with Claim Cells**



**Table 4.1 Claims List**

<b>Project</b>	<b>Township / Area</b>	<b>Claim Number</b>	<b>Recording Date</b>	<b>Claim Due Date</b>
<b>Plomp Farm - East</b>	AUBREY	<a href="#">3016606</a>	2006-Jul-04	2020-Jul-04
<b>Plomp Farm - East</b>	AUBREY	<a href="#">3016607</a>	2006-Jul-04	2020-Jul-04
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206121</a>	2006-Jul-04	2020-Jul-04
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206122</a>	2006-Jul-04	2020-Jul-04
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206123</a>	2006-Jul-04	2020-Jul-04
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206823</a>	2006-Jul-18	2020-Jul-18
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206824</a>	2006-Jul-18	2020-Jul-18
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206825</a>	2006-Jul-18	2020-Jul-18
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206826</a>	2006-Jul-18	2020-Jul-18
<b>Plomp Farm - East</b>	AUBREY	<a href="#">4206124</a>	2006-Jul-04	2021-Jul-04
<b>Plomp Farm - West</b>	AUBREY	<a href="#">1140738</a>	1995-May-11	2022-Aug-06
<b>Plomp Farm - West</b>	AUBREY	<a href="#">1162878</a>	1995-May-18	2022-Aug-13
<b>Plomp Farm - West</b>	AUBREY	<a href="#">3016604</a>	2005-Feb-02	2022-Feb-02
<b>Plomp Farm - West</b>	AUBREY	<a href="#">3016605</a>	2005-Feb-02	2022-Feb-02
<b>Plomp Farm - West</b>	AUBREY	<a href="#">4203968</a>	2005-Jan-17	2022-Jan-17
<b>Plomp Farm - West</b>	AUBREY	<a href="#">3016522</a>	2006-Mar-06	2022-Mar-06
<b>Plomp Farm - West</b>	AUBREY	<a href="#">4203970</a>	2005-Jan-17	2023-Jan-17
<b>Plomp Farm - West</b>	AUBREY	<a href="#">3016534</a>	2005-Jan-24	2023-Jan-24

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

---

## 5.1 SITE TOPOGRAPHY, ELEVATION, AND VEGETATION

The topography of the Plomp Farm Property is typical of the Canadian Shield with a mix of poorly drained low lying areas and well drained highlands. Topographical relief ranges from ~ 350 m to > 400 m above sea level. There are numerous low lying swamp lands and streams that intersect the property and provide access for exploration. The vegetation is mix of low shrubbery and mixed deciduous and coniferous forests. Outcrop exposure is limited to higher elevations and overburden depths vary across the property and consist typically of a thick upper humus layer in the lowlands and boulders in the areas of high relief.

---

## 5.2 ACCESS

Direct access is provided via Highway 594 which runs east-west through the property.

The Trans-Canada Highway (Hwy 17), CP Railway and the Trans-Canada Gas Pipeline are all located within 7 km of the property.

---

## 5.3 CLIMATE

The climate is typical of northwestern Ontario temperatures with humid continental conditions ranging from -30°C to 30°C annually with snow cover expected from November until early May. Summers bring warm to hot conditions while winters are typically cold and dry. The average snowfall is 170 cm and average annual rainfall is 90 cm.

---

## 5.4 INFRASTRUCTURE

A base camp with capacity for 20 people is established on the camp from which the exploration programs are carried out. Logistical support and access to the property is via highway 594 which runs east-west through the property providing direct access. The property is situated within the Municipality of Machin, population ~1200, approximately 8 km west of the community Eagle River and is located approximately 20 km west of Dryden (population ~8,000). Dryden is serviced by daily commercial flight connections to Thunder Bay, Ontario and Winnipeg, Manitoba and offers a number of government branches and private businesses which provide services to the exploration sector. A long history of mineral exploration in the region contributes to a well-skilled workforce.

## 6 HISTORY

Gold mineralization was identified on the property in 1991 by Mr. Fred Plomp through prospecting and grab sampling. After the discovery of a second gold occurrence, Champion Bear acquired the property and carried out a series of exploration programs. A summary of the previous work is outlined in Table 6.1.

**Table 6.1 Summary of Previous Work**

Date	Company	Description	Significant Results
1900s	Various prospectors	Early prospecting.	
1934-1941	Ontario Department of Mines	Geological mapping.	
1960's	Geological Survey of Canada	Area included in the regional magnetic airborne survey.	
1970	Inco	Completes drilling (1 hole, 38 m EOH).	Intersects sulphides over 13.6 m at 14 m depth – no sample results were reported.
1976	Ontario Department of Mines	Area included in regional mapping during "Operation Kenora – Ear Falls".	
1984	Ontario Geological Survey	project area included in regional mapping of the Eagle River – Ghost Lake area.	
1987	Ontario Geological Survey	Portion of claims are covered by a regional airborne EM and Magnetics GeoTEM survey at 100 m line spacing.	Several EM anomalies detected on claims 4224356 and 4224359, as well as the southern portion of 4224358.
1991	Fred Plomp	Prospecting and sampling identified gold mineralization within quartz-tourmaline veins and identified associations with narrow mafic dykes cutting a sequence of metasedimentary and felsic metavolcanics.	Assays returned values of up to 34.93 g/t Au and 0.27% Cu.
1994-1996	Champion Bear	Champion Bear acquired the property after a second gold occurrence was identified within quartz-filled fractures hosted within a quartz-sericite schist on the norther portion of the property. Linecutting Geological mapping and orientation geochemical and VLF-EM surveys were carried out as a preliminary program in 1994. Mag and IP surveys in 1995. One diamond drillhole totaling 242.8 m was drilled to test a surface gold occurrence identified by Mr. Fred Plomp in 1994 which initiated a 84 diamond drillhole program that continued until 1996. A 20-person, permanent base camp was also established in the fall of 1994.	Mineralization traced >700m along strike to 36 m widths. Anomalous Cu, Zn, Au, Ag were intersected in hole PF26.
2001-2002	Ontario Geological Survey (OGS)	Systematic sampling, litho-geochemical analysis, and alteration studies conducted to evaluate potential of area to host VSM mineralization. Geological Mapping	Highly anomalous samples taken from the sericite altered felsic unit returned values of 53.5 g/t Au and 92.1 g/t Au as well as elevated Zn and Cu values Results indicated potential to host VMS mineralization as well as another gold source

*(table continues on next page)*

Date	Company	Description	Significant Results
2003	Champion Bear / WGM	Geotechnical program conducted which involved re-examining previous drillcore, geological mapping, sections and assay data. Re-evaluation Program under supervision of Watts, Griffis and McOuat Limited.	The program identified possible structural controls on the mineralization and main gold system within the quartz-sericite-schist zone.
2004	Champion Bear / WGM	Re-evaluation Program under supervision of Watts, Griffis and McOuat Limited. Eight diamond drillholes totaling 2,800.5 m were drilled in the western part of the property in the spring of 2004. All holes were drilled to test anomalies identified through a previous IP survey. Re-logging and re-sampling historic drillcore (1,170 samples).	This program concluded that mineralization is associated with an alteration pattern as anomalous gold (>100 ppb) is found in association with barite, silver, copper, zinc and molybdenum. Also found that another phase of gold mineralization is associated with higher zinc and silver without barite and molybdenum.
2005	Champion Bear / WGM	Re-evaluation Program under supervision of Watts, Griffis and McOuat Limited. Nine diamond drillholes totaling 2,790.8 m were drilled on the central portion of the property to test the continuity of gold mineralization along strike and down dip. The drilling also tested a new structural model developed following the 2004 re-evaluation program. Drillcore from 1994 to 1998 was also re-logged and re-sampled (13,968.1 m). Spring of 2005, IP, Resistivity and Magnetics surveys were conducted on the property by Vision Geophysics and Matrix GeoTechnologies Ltd. The objective of the surveys was to identify target areas to increase the understanding of lithology and structural controls on the mineralization.	Confirmed new structural model and further understanding of the alteration pattern.
2006	Champion Bear / WGM	Re-evaluation Program under supervision of Watts, Griffis and McOuat Limited. Drilled 6 holes totaling 4,828.7 m to test continuity of gold mineralization. The drilling also tested new structural model and undefined alteration zones.	New interpretation of structural controls of mineralization and geochemical signatures were identified. Anomalous gold mineralization and associated multi-element alteration plunge steeply to the southwest. Observed alteration patterns and features confirm the VSM association.
2007	Champion Bear	Three wedge holes and three diamond drillholes to test mineralization at depth.	Results indicated mineralization at depth with highest intersection at 71.6g/t Au over 0.4 m at a depth of 623.6 m.

# 7 GEOLOGICAL SETTING AND MINERALIZATION

---

## 7.1 REGIONAL GEOLOGY

The Superior Province of North America has been divided into subprovinces of which have been divided into domains based on lithology and structural association.

The Plomp Farm property lies within the northern portion of the western Wabigoon subprovince of the Superior province. The Wabigoon subprovince is a 150 km wide volcanoplutonic domain with an exposed strike of 700 km and is comprised of primarily volcanic supracrustal sequences (greenstone belts) intruded by syn-volcanic to post tectonic felsic plutonic rocks of the Superior Province of the Canadian Shield. The magmatic components of the greenstone belts vary from ultramafic to felsic tholeiitic, calc-alkaline and alkali groups. The secondary sedimentary successions includes both clastic and chemical deposits and the plutonic rocks include syn-volcanic tonalitic, quartz dioritic and granodioritic plutons of which emplacement has caused major deformation along the greenstone belts (*Beakhouse, 2001*).

To the north lies the English River subprovince (2.8 – 3.1 Ma) which is composed of highly metamorphosed metasediments and metasedimentary gneisses, migmatites and granitic rocks of magmatic origin. The English River subprovince is a linear belt up to 50 km wide and greater than 800 km long.

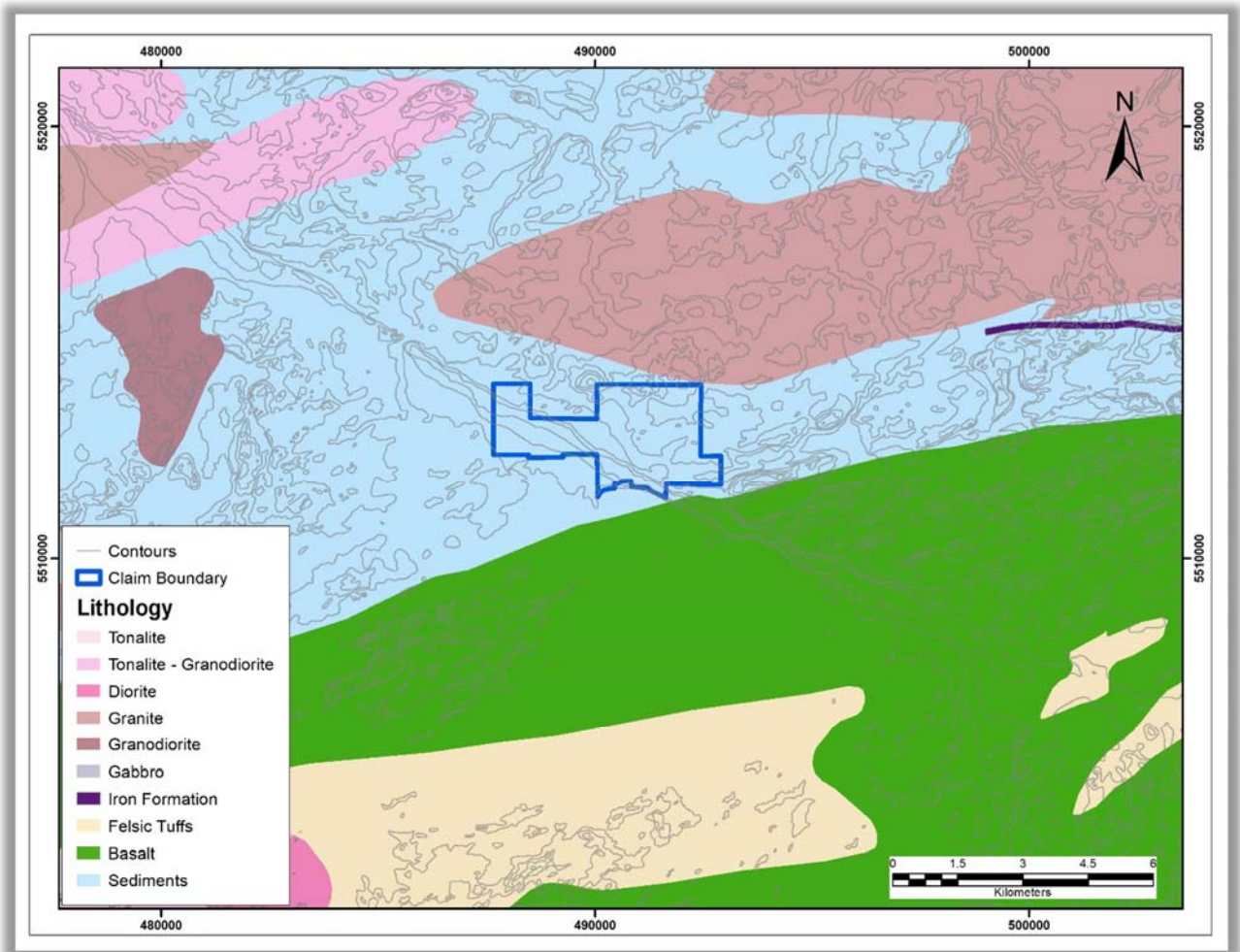
South of the property lies the Wabigoon Fault which has been linked to most gold occurrences in the region. The Wabigoon Fault is located at the contact of the Populus volcanics and the Warclub Sedimentary Assemblage and has been confirmed by Blackburn (1981) to be the point of which is the contact between the northern and southern supracrustal domains. The fault is a major structural divide that groups the area into lithological domains with specific mineral associations. North of the fault the Wabigoon subprovince has been noted to have linear, fault bounded panels trending parallel to the subprovince boundary and exhibits recumbent folding and thrust faulting as well as dextral shearing. This structural setting has been identified as being specific to this area and has not been identified elsewhere on the subprovince. The Wabigoon Fault is situated adjacent to the Plomp Farm property and provides multiple intersections with several regional scale fault structures and small scaled folds indicating a dextral movement along the fault system (*Blackburn, 1981*).

The Warclub Assemblage is an alternating series of laterally extensive felsic volcanics, iron formations and metasediments that extend approximately 250 km. The assemblage contains both geochemically enriched and depleted zones which suggests volcanogenic massive sulphide (VMS) deposition from hydrothermal environments. Mapping on the Warclub Assemblage by Beakhouse (2000, 2001, and 2002) has differentiated the Warclub Assemblage into four panels with younging direction to the south. The four panels have been identified as the Brownridge Sediments-Volcanics, the Thunder Lake Sediments-Volcanics, the Thunder River Volcanics and the Zealand Sediments. Most of the panels appear to be fault bounded and exhibits complex deformation with parallel bedding fabric (D<sub>1</sub>) being deformed to regional scale, southwest plunging, Z asymmetrical folds with development of a second fabric (D<sub>2</sub>) parallel to the axial surface of these folds (*Blackburn, 1991*).

Figure 7.1 shows the Project outline on the regional geology.



Figure 7.1 Property Location on a Regional Geology Map



## 7.2 PROPERTY GEOLOGY

The Plomp Farm project is underlain by an Archean aged narrow belt of rocks belonging to the Sioux Lookout Domain which is characterized by a series of alternating felsic volcanics, fine grained, grey, weakly foliated meta-greywackes and iron formations with a southward, sub-vertical to vertical dip that has been intruded by mafic to felsic dykes. This layered package has been classified as being part of the Warclub Assemblage and was thrust emplaced against the Wabigoon Subprovince about 2.7 Ma (*Beakhouse, 1988*). Figure 7.2 shows the geology on the Project.

The Warclub Assemblage is underlain by weakly to locally altered, felsic to intermediate volcanics of fine-grained, grey to light grey felsic tuffs and flows. Interbedded between the two units is a highly altered quartz-sericite schist (QSS) zone which appears as fine grained, off white to light grey, strongly foliated with altered mineralized tuff containing locally 1 to 5 % disseminate pyrite, sphalerite, and chalcopyrite. In the eastern part of the property, the QSS is overlain by a thick sequence of a magnetic iron formation characterized by a fine grained foliated, recrystallized chert with up to 20% localized magnetitic banding and localized pyrite stringers. The Ontario Geological Survey (OGS) has interpreted this magnetite iron formation as a 'cap rock' or 'exhalite' of the VMS sequence. There is an increase of metamorphic grade northward within the sedimentary units at the Plomp Farm project.

The geologic units of the Plomp Farm property were defined from drillcore and are listed below.

**Litho 1 – Felsic to Intermediate Volcanics (rhyolite, dacite and andesites)**

Fine pale to medium grey felsic to intermediate volcanic with sericite alteration, felsic tuffs and localized flows.

**Litho 2 – Quartz Sericite Schist (altered rhyolite or dacite tuffs with pyrite)**

Light grey, sheared quartz porphyry with localized quartz +/- veining, locally moderate silicified banding, localized biotite and sericite, intensely foliated with up to 5% pyrite, sphalerite and chalcopyrite.

**Litho 3 – Iron Formation: Chert-Magnetite**

Fine grained, medium grained, moderately to locally intense foliation, moderate recrystallized chert with up to 20% localized magnetitic (+/- chloritic) banding. Few pyrite stringers with traces of fine grained chalcopyrite. This zone is interlayered with the felsic volcanics and has been interpreted as the 'cap rock' or 'exhalite' of the VMS sequence by the OGS.

**Litho 4 – Metasedimentary (primarily greywacke, secondary arkose or argillite)**

Light to dark grey fine to very fine grained, weakly foliated metasediment with localized alteration, sericite and carb/quartz filled fractures containing trace pyrite.

**Litho 5 – Gabbro (diabase)**

Fine to medium grained, dark grey to almost black, moderately magnetite diabase with trace to 1% fine grained disseminated pyrite.

**Litho 6 – Felsic Intrusive (granite)**

Medium grained, grey, moderately foliated, locally altered, massive to weakly porphyritic with primarily granodiorite composition.

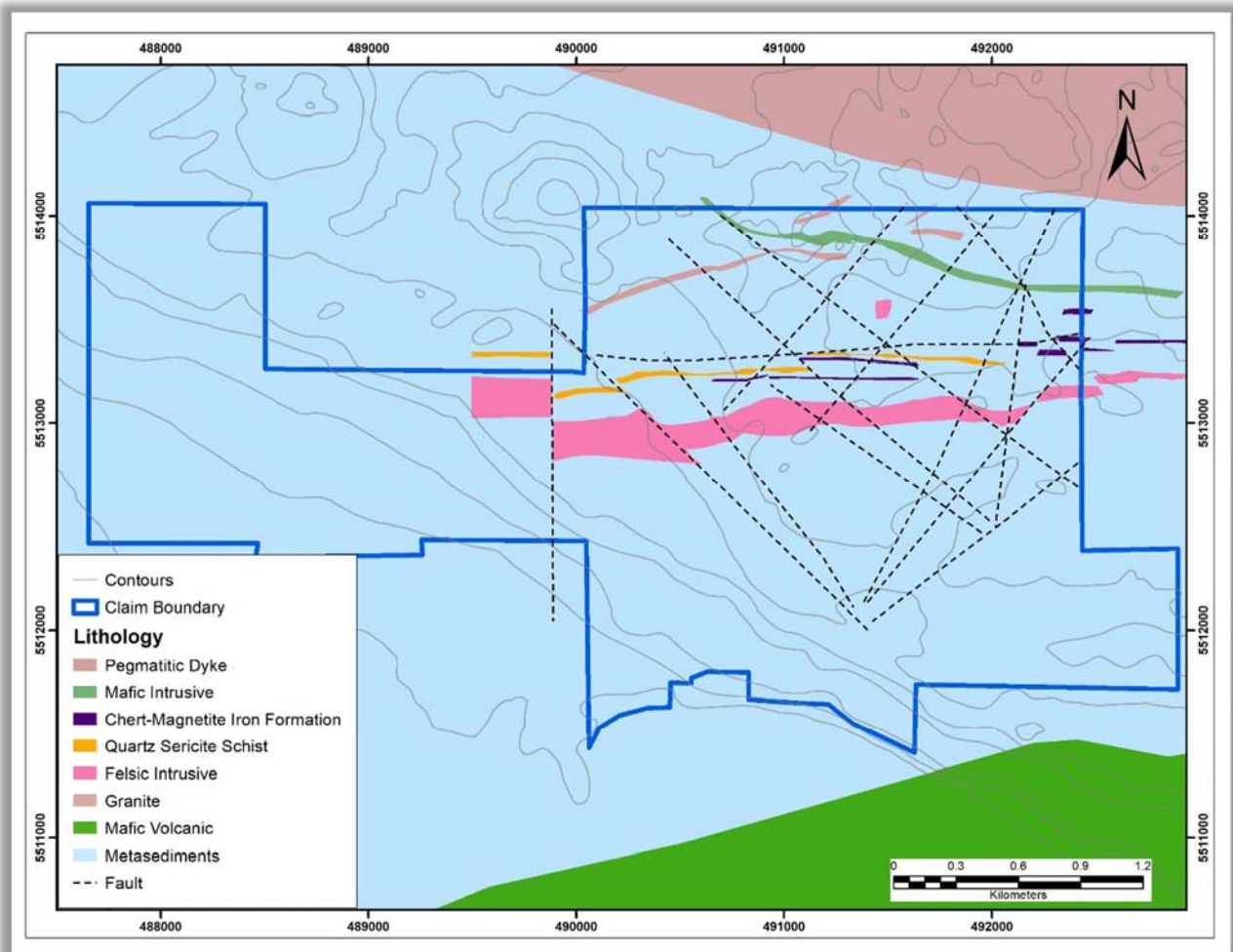
**Litho 7 – Porphyry (QFP or feldspar)**

Light to medium grey, fine to medium grained, locally sheared and altered quartz-feldspar porphyry or feldspar porphyry with up to 2 mm phenocrysts (>10% locally) and trace to 5% pyrite +/- chalcopyrite.

**Litho 8 – Pegmatites**

Coarse grained, quartz-feldspar-muscovite +/- biotite with localized tourmaline and trace pyrite.

Figure 7.2 Property Geology



## 7.3 MINERALIZATION

The western Wabigoon subprovince has been an area of continuous gold prospecting since the 1880s. The discoveries have been identified in quartz veining, shear zones and sulphide rich environments. Gold deposits in the area are typical of Archean load – gold deposits. The OGS has concluded that a number of gold deposits within the area are controlled by shearing and fracturing which has been linked to the dextral movement along the Wabigoon Fault.

Until 2001 the focus for gold mineralization was primarily on vein-type mineralization with occurred as late stage quartz-tourmaline veins that have been associated with the late stage  $D_2$  fabric ( $050^\circ$ ) and are found to cross cut the stratigraphic sequence of the Warclub Assemblage. This gold mineralization is suspected to be related to the remobilization of the  $D_1$  mineralization event.

In 2001 and 2002, it was discovered that highly anomalous gold mineralization were not only identified in the QSS zone (varying thickness of a few metres to 10s of metres) but also within an alteration pattern in the felsics, metasediments, granitoids and the porphyritic zones with no quartz association. A southwest plunging fold structure ( $40^\circ W$ ) within the QSS zone and contains higher grade intercepts has been identified.

Through Watts, Griffis and McOuat Limited (WGM)'s re-analysis programs, two phases of gold mineralization has been identified from multi-element geochemical analysis. In one phase, gold mineralization is not associated with barite or molybdenum but is associated with zinc and silver. Geochemical analysis indicates a 90 to 180 m wide zone of barite enrichment ( $Ba > 1000$  ppm) where both copper and molybdenum is restricted to the barite envelope and zinc, gold and silver enrichment is identified within the barite zone, along the lower contact and below the alteration zone. The barite alteration weakens within the central and western portions of the zone. Gold enrichment is noted towards the outer flanks of the zone. The anomalous gold mineralization and associated geochemical alteration characterized by extensive silver, barite and copper halo, appear to plunge steeply to the southwest and both the main zone mineralization and alteration are associated with major sub-vertical shearing.

## 8 DEPOSIT TYPES

The initial focus on the mineralization style on the Plomp Farm project was on gold associated quartz veining within the quartz-sericite schists. With further investigations, highly anomalous gold values were identified on the property hosted within sericitized felsic tuffaceous units which indicates a second style of mineralization.

As with the Goliath Gold Deposit, the Rainy River Deposit, and many other gold base metal deposits within the prolific greenstone belts, the Plomp Farm mineralization style does not seem to conform to the classic orogenic model and as such, can be classified as a hybrid deposit-type model, Pre-orogenic Atypical Greenstone Belt Gold Model, hosted within a highly altered sedimentary assemblage with two distinct styles of gold mineralization. The mineral deposition of these hybrid models occur early in the formation of the greenstone belts prior to regional scale structural events of orogeneses and since has been intensely overprinted by deformation and alteration events that may contribute to the concentration and remobilization of both base and precious metals. The mineralization style ranges from disseminated stockwork zones to veining with associated sulphide wallrock replacements to, less commonly, sulphide rich vein systems. The hybrid model combines the potential for both VMS gold deposition style and Magmatic Hydrothermal Archean Load Gold Deposit style, both of which are typical within the Archean Superior Province.

---

### 8.1 PRE-OROGENIC ATYPICAL GREENSTONE BELT GOLD MODEL

Hardie et al. (2012) explains that ‘the gold mineralization at the Rainy River gold deposit can be interpreted to consist of an early (pre-orogenic) gold-rich, volcanogenic sulphide mineralization overprinted by shear hosted, post-orogenic gold mineralization. Both of the type of gold mineralization has been subjected to intense deformation and alteration, where aquiferous quartz veining post-date the sulphide stringers and veins emplaced during active deformation.’

Treasury Gold has integrated the Pre-orogenic Atypical Greenstone Belt Gold Model into stages for the Goliath Gold Deposit. These stages consist of: 1) Pre-Orogenic Event – anomalous Au, Ag, Pb, and Zn is introduced as part of a VMS system along a Pre-Orogenic structure with stratigraphically sheared felsic volcanoclastic and sedimentary rocks; 2) D<sub>1</sub> Deformation Event with development of Z folding, regionally and locally; and 3) D<sub>2</sub> Deformational Event with development of extensions and quartz veining which sealed the area after the mineralization event. This process is also similar to that at Hemlo where feldspar porphyry dike swarms oriented parallel to the D<sub>2</sub> fabric.

A well-developed D<sub>1</sub> fabric has been identified within the felsic volcanic rocks on the Plomp Farm property with associated, locally deformed Z-folded quartz veins (065° – 80°). A weaker D<sub>2</sub> fabric, resulting from NW directed compression, overprints the D<sub>1</sub> fabric and also exhibits quartz veining which is similar to those found in the Thunder Lake Sediment- Volcanic Assemblage which host Treasury Gold’s Goliath Deposit.

---

## 8.2 MAGMATIC HYDROTHERMAL ARCHEAN LODE GOLD DEPOSITS (ALGD)

Magmatic Hydrothermal Archean Lode Gold Deposits are a variation of porphyry deposits spatially related to brittle and/or ductile deformation zones due to Archean felsic plutonic rocks which developed in a post arc setting distal from magmatic sources. Large poly-phase hydrothermal systems developed within and around these felsic intrusions reacting with meteoric fluids resulting in distribution and concentration of metals (*Brimhall, 1980*). These deposits are characterized by gold bearing veins or disseminated replacement mineralization typically associated with major transcrustal structural settings related to late, regional style, tectonic processes. These deposit tend to be steeply dipping to near vertical tabular bodies with an extent of up to 2 km. Typical alteration associated with these deposits present as sericite, silica, carbonate, talc, tremolite, aluminosilicates, biotite, albite, potassic feldspar, and hematite.

An example of a Magmatic Hydrothermal Archean Load Gold Deposit is the Troilus disseminated gold and copper deposit in the Archean Frotet-Evens greenstone belt of Québec, Canada.

---

## 8.3 VOLCANOGENIC MASSIVE SULPHIDE DEPOSITS (VMS)

Volcanogenic Massive Sulphide deposits are significant producers of base metal rich deposits which may also contain precious metals. Gold-rich VMS deposits are a sub-type of both VMS and lode gold deposits (*Poulsen et al., 2000*). These deposits are a type of hydrothermal deposit which comprise semi-massive to massive sulphide zones or lenses that develop in submarine volcanic environments which are underlain by a stockwork or feeder zone (*Galley et al., 2007*). These deposit range in age from Archean to modern day and are presently developing along mid ocean ridges and within back arc basins and fore arc rifts.

VMS deposits vary in size and composition depending on the tectonic structure and host rock. The semi-massive to massive sulphide zones are typically composed of chalcopyrite, sphalerite, galena, pyrite, and pyrrhotite, and may contain gold-bearing minerals.

Studies conducted on the Plomp Farm property by Raoul, A. (2001) suggest that there is a potential for VMS deposit style mineralization due to the presence of pyrite stringers +/- chalcopyrite and sphalerite mineralization as well as elevated anomalous Barium (Ba) and depletion of Sodium Oxide (Na<sub>2</sub>O) within the altered felsic volcanics. There is also intense sericitization associated with hydrothermal alterations of the felsic rock unit with the presence of magnetite-chlorite bearing chert.

An example of a gold rich VMS deposit is the LaRonde Extension of Agnico-Eagles Mines within the Abitibi region of northwestern Québec.

## 9 EXPLORATION

Prior to Champion Bear's ownership of the mineral claims, sporadic work has been completed by local prospectors.

---

### 9.1 1996 GROUND MAGNETICS AND VLF-EM SURVEY

The 1996 program involved establishing a flagged compass and hip-chain grid followed by ground magnetometer and VLF-EM survey.

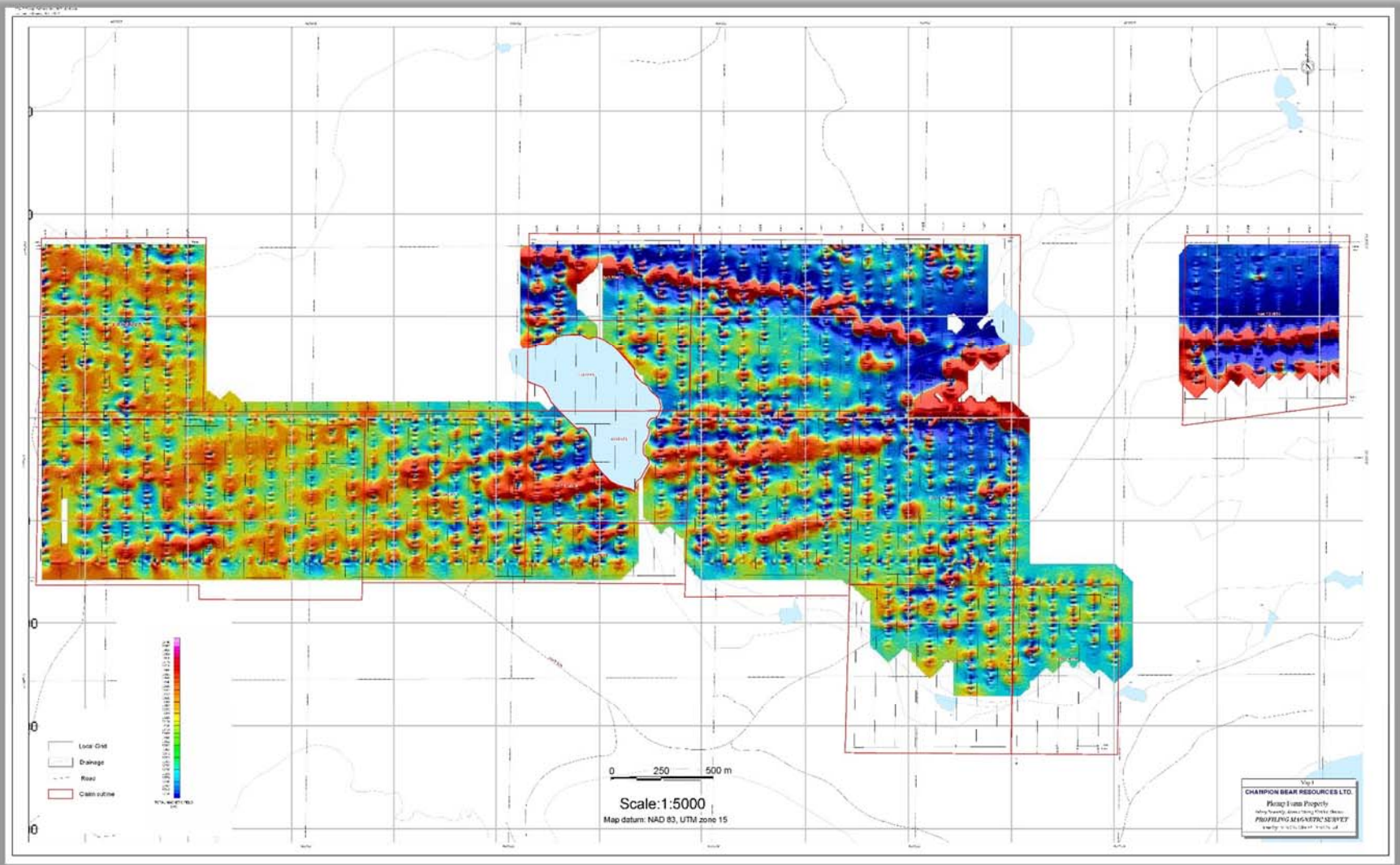
The baseline oriented at 082° was established with 100 m spaced north-south and 25 m stations. The grid totalled 8,000 m.

The ground magnetic survey was completed using a Geometric G-816 portable Proton Magnetometer. The VLF-EM survey utilized a Geonics EM-16 instrument.

A series of strong magnetic anomalies were outlined on the Project, likely caused by the magnetic iron formation. Several conductive features were identified with the VLF-EM survey, which are also related to the iron formation.

Figure 9.1 is the results of the magnetic survey.

Figure 9.1 Plomp Farm Magnetic Survey





---

## 9.2 2005 INDUCED POLARIZATION / RESISTIVITY AND MAGNETIC SURVEY

The induced polarization/resistivity/magnetics surveys over the Project was completed in April and May, 2005 by Matrix Geotechnologies Ltd. The surveys consist of time-domain induced polarization/resistivity, using gradient, multigradient (in one line) and dipole-dipole techniques (in one line), and station magnetics line profiling.

The various anomalies detected could potentially represent valid exploration targets. The low resistivity/high chargeability represents the best geophysical target signature, based on the geologic model, although the resistive IP signatures are indicators of disseminated mineralization along quartz/silica or sericitization.

The Gradient/Pole-Dipole induced polarization \ resistivity over the Project has identified geophysical signatures, potentially relating to lithologic contacts or geochemical alteration, fault-fracture structures and, most importantly, the presence of increased chargeability, potentially relating to sulphide mineralization.

Figures 9.2 and 9.3 are the results of the induced polarization and resistivity survey.

Figure 9.2 Plomp Farm Induced Polarization Survey

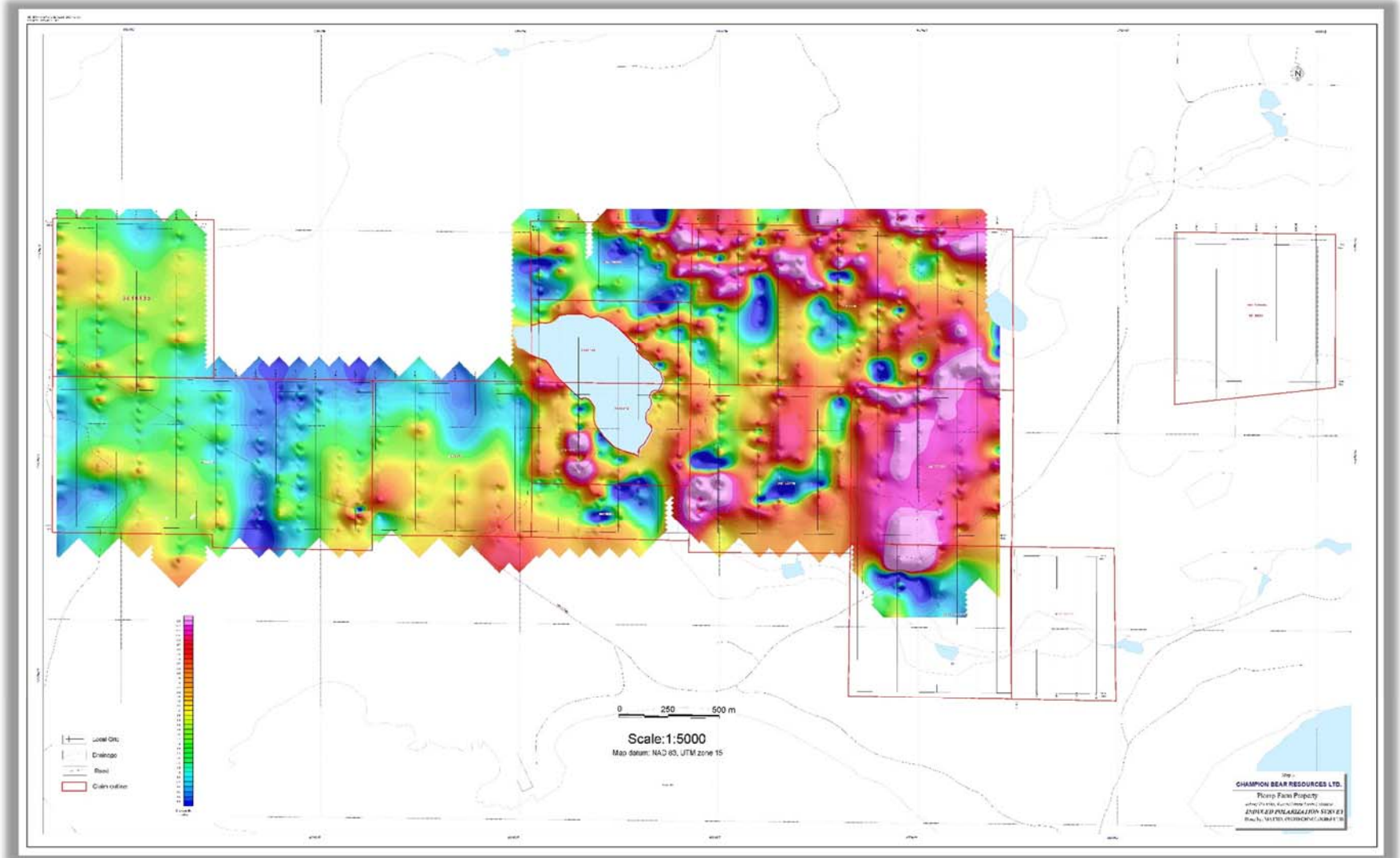
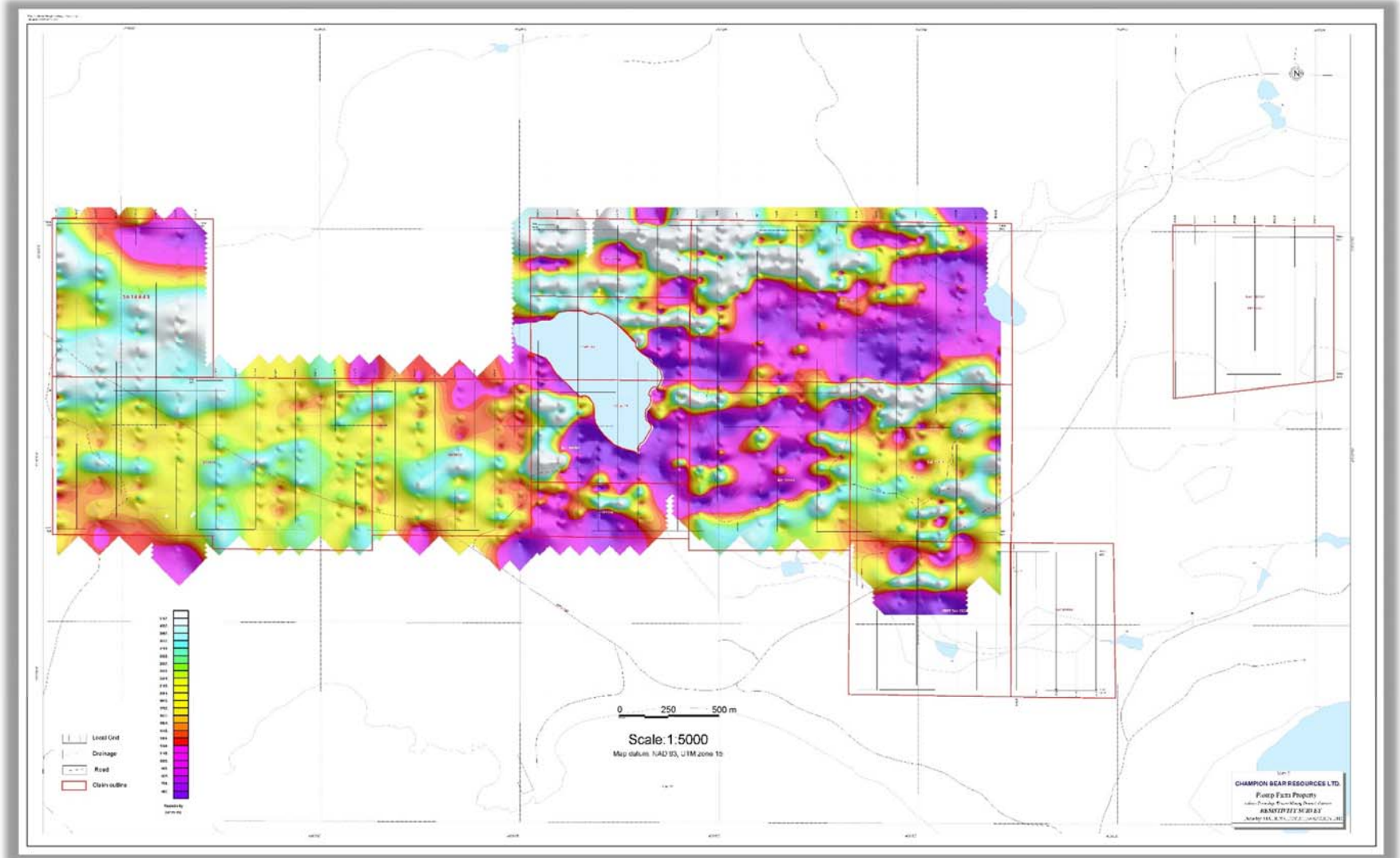


Figure 9.3 Plomp Farm Resistivity Survey



# 10 DRILLING

Five phases of drilling have been completed on the Property between 1994 and 2007. A total of 125 holes were drilled totaling 49,975 m. Table 10.1 provides the collar information for all five phases of the drilling.

**Table 10.1 Plomp Farm Drill Collar Summary**

Years	Number of Holes	Metre
1994	1	242
1995 - 1996	84	3,294
2004	4	2,800
2005	9	2,791
2006	6	4,828
2007	3 (wedges)	653

A list of the complete drillhole collars is found in Appendix A.

A list of the significant drillhole intersections greater than 1 g/t gold is found in Appendix B.

---

## 10.1 SURVEYING

---

### 10.1.1 COLLAR SURVEY

Diamond drillhole collar locations were physically marked and flagged prior to drilling. The geologists would locate and mark the site based on the cut grid. Drill collar azimuth was determined by Silva compass and verified by line of sight. The geologist would verify the orientation of the drill once set-up was completed.

Casing were left in some of the holes and an aluminum cap was screwed in place with the drillhole identification engraved on the top of the cap.

In 2017, Champion Bear verified 67 of the holes using a hand-held GPS.

---

### 10.1.2 DOWNHOLE SURVEY

Downhole orientation surveys were completed by a variety of methods depending on the campaign. Table 10.2 summarizes the various methods used during the campaigns.

The first reading was taken at least 6 m past the end of the casing and then at an interval of approximately 50 m until the end of the hole. Acid tests and Pajari were read by the geologist. In the case of a Flexi or EZ-Shot, the readings were recorded by the driller and included the depth, azimuth (magnetic north), inclination, magnetic tool face angle, magnetic field strength, and temperature.

**Table 10.2 Summary of Downhole Survey**

Survey Type	Year	Number of Survey Record
Acid Test	1994 - 1995	165
Pajari	1995	6
Flexi	2005	59
EZ-Shot	2006 - 2007	185

---

### 10.1.3 CORE LOGGING PROCEDURE

The following is a summary of the Plomp Farm logging procedure.

- Sample security and chain of custody started with the removal of core from the core tube and boxing of drillcore at the drill site.
- The boxed core remained under the custody of the drill contractor until it was transported from the drill to the secure onsite Core Facility by either the drill contractor or one of Champion Bear’s designated personnel.
- At the onsite Core Facility, core boxes were opened and inspected to ensure correct boxing and labeling of the core by the drill contractor.
- The company geologists logged the core, and then marked and tagged it for sampling and splitting.
- Minimum sample unit was 0.3 m; maximum sample length was 2.0 m. Variations from a standard length of 1.0 m were often necessary to accommodate variations in pegmatite zonation and lithology.
- Each core sample was assigned a tag with a unique identifying number.

---

### 10.1.4 SAMPLING APPROACH

The following is a summary of the Champion Bear sampling procedure.

- Sample lengths were typically one metre, but would vary somewhat depending on zone mineralogy and boundaries.
- Core marked for sampling was sawn using a diamond core saw with a jig to assure the core was cut lengthwise into equal halves.
- Half of the cut core was placed in clean individual plastic bags with the appropriate sample tag.
- The samples were then placed in rice bags for shipment to an analytical laboratory for quantitative analysis of select elements.
- The remaining half of the core was retained and incorporated into Champion Bear’s secure core library.

---

## 10.2 QP’S OPINION

It is WSP’s opinion that the drilling and logging procedures put in place by Champion Bear meet acceptable industry standards and that the information can be used for geological and resource modeling.

# 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

WSP has access to all the assay certificates on the Project. The certificates have been recovered from ALS Minerals and Actlabs following a data request. Both Actlabs and ALS are accredited facilities. At the time the Project was active, ALS was called Bondar-Clegg.

---

## 11.1 SAMPLE PREPARATION

WSP did not have access to the specific sample preparation used during each of the phases of drilling.

A review of the assay certificate indicated a typical drillcore preparation was used:

- Dry, crush (<5 kg) -8 mesh (2 mm);
- Split (1000 g);
- Pulverize (to -75 µm).

At no time was an employee of Champion Bear involved with the preparation of the samples.

---

## 11.2 ANALYTICAL PROCEDURE

WSP did not have access to the specific analytical procedure used during each of the phases of drilling.

A review of the assay certificate indicated a typical gold exploration suite of analysis was used. Gold was analyzed using fire assay with atomic absorption finish (FA/AA). If the results exceeded 10 g/t, the samples were re-run using a gravimetric finish. If visible gold was observed in the drillcore, the samples were analyzed using a screen metallic method.

The following elements were routinely analyzed:

- Gold
- Silver
- Copper
- Lead
- Zinc

Additional elements were analyzed periodically.

At no time was an employee of Champion Bear involved in the analytical process.

---

## 11.3 QUALITY ASSURANCE / QUALITY CONTROL

Champion Bear did not run a dedicated quality assurance / quality control (QA/QC) program by inserting blanks, duplicates, and standards. Champion Bear relied upon the internal QA/QC program of the laboratories to identify quality issues.

---

## 11.4 QP'S OPINION

It is WSP's opinion that the sample preparation and analytical procedures put in place by Champion Bear met acceptable industry standards at the time. The information in the current state can be used for geological and resource modeling. WSP does not expect any resource using the current dataset to be classified any higher than an Inferred resource.

# 12 DATA VERIFICATION

---

## 12.1 SITE VISIT

Mr. McCracken visited the Property between June 28 and 29, 2017. Mr. McCracken was accompanied on the site visit by Mr. Richard Kantor, President for Champion Bear and Mr. Todd Dillabough, Director for Champion Bear.

Mr. McCracken examined the Project setting, numerous drill collar sites, and reviewed the core from several drillholes. The conditions of the samples pulps stored in locked shipping containers were examined.

---

## 12.2 INDEPENDENT SAMPLING

WSP did not collect any independent samples from drillcore or channel samples.

---

## 12.3 DATABASE VALIDATION

WSP validated 20% of the digital database against the drill logs and assay certificates. Errors identified were noted and then corrected in the database.

The database was imported into Surpac<sup>TM</sup> mining software. A validation routine was run in the software to check to overlapping intervals and sample gaps.

---

## 12.4 QP'S OPINION

WSP believes that the sample database provided by Champion Bear and validated by WSP is suitable to support the resource estimation.



# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

No metallurgical test work has been completed on the Project.

# 14 MINERAL RESOURCE ESTIMATE

WSP completed a resource estimation of the Plomp Farm Project. The effective date of the resource is November 20, 2017. The resource estimation was conducted using Surpac™ version 6.8.2.

---

## 14.1 DATABASE

Champion Bear maintained borehole data in variety of a Microsoft Excel® files. WSP rebuild the database in Microsoft Access® relational database following an extensive data review. Header, survey, assays, and lithology information are saved as individual tables in the database. The database information in CSV and Excel format was provided to WSP originally on July 17, 2017.

The database contains 125 boreholes. There are a total of 12,167 assays records, 423 survey records, and 1,066 lithology intervals in the database. Table 14.1 summarizes the borehole data.

**Table 14.1 Plomp Farm Drillhole Summary**

	Number of Drillholes	Length
<b>Project Total</b>	125	49,975

---

## 14.2 SPECIFIC GRAVITY

Champion Bear did not collect any specific gravity data during the drilling programs.

WSP reviewed the specific gravity values at New Gold's Rainy River Mine, which used 2.85 SG and Treasury Metals Goliath advanced project which used 2.78.

WSP used a specific gravity of 2.73 for all rock type and a specific gravity of 1.80 for overburden.

---

## 14.3 TOPOGRAPHIC DATA

Topographic data was generated as a Digital Terrain Model (DTM) created using drillhole collar data.

The area covered by the DTM is sufficient to cover the area defined by the current resource model.

---

## 14.4 GEOLOGICAL INTERPRETATION

Three-dimensional wireframe models of mineralization were developed in Surpac™ by WSP. The wireframes were based on the geological interpretation of the zones as distinct domains and not strictly on grade intervals.

Sectional interpretations were completed in Surpac™ version 6.8.2 software, and these interpretations were linked with control strings and triangulated to build three dimensional solids. Table 14.2 tabulates the solids and associated volumes. The solids were validated in the Surpac™ software and no errors were found.

**Table 14.2 Geological Wireframe Summary**

<b>Zone</b>	<b>Minimum X</b>	<b>Maximum X</b>	<b>Minimum Y</b>	<b>Maximum Y</b>	<b>Minimum Z</b>	<b>Maximum Z</b>	<b>Surface Area (m<sup>2</sup>)</b>	<b>Volume (m<sup>3</sup>)</b>
<b>FV</b>	489,625.96	492,421.78	5,512,748.36	5,513,610.63	-678.436	558.921	9,860,799	198,535,250
<b>GRDR</b>	489,570.89	492,266.86	5,512,536.50	5,513,343.13	-577.321	617.128	9,793,441	406,350,847
<b>QP</b>	489,600.00	489,700.00	5,512,902.88	5,513,086.75	-17.128	465.707	155,015	3,082,244
<b>SS_LG</b>	489,247.93	492,365.13	5,512,853.66	5,513,463.84	-594.216	569.825	7,763,209	94,065,078
<b>SS_HG</b>	490,050.00	491,331.10	5,512,975.62	5,513,314.79	-499.928	459.68	1,276,203	3,266,821

The modeling is broken into five separate domains based on rock types and grade distribution:

- 1 FV: Felsic volcanic
- 2 GRDR: Granodiorite
- 3 QP: Quartz Porphyry
- 4 SS\_LG: sheared schist – low grade
- 5 SS\_HG: sheared schist- high grade

Two wireframes were generated for the sheared schist material in order to separate the higher grade material from the lower grade material. This would prevent the smearing of grades between the two domains. Figures 14.1 and 14.2 are contact plots that demonstrate the results of separating the shear schist into a high grade and low grade domain.

**Figure 14.1 SS\_HG vs. SS\_LG Contact Plot – gold**

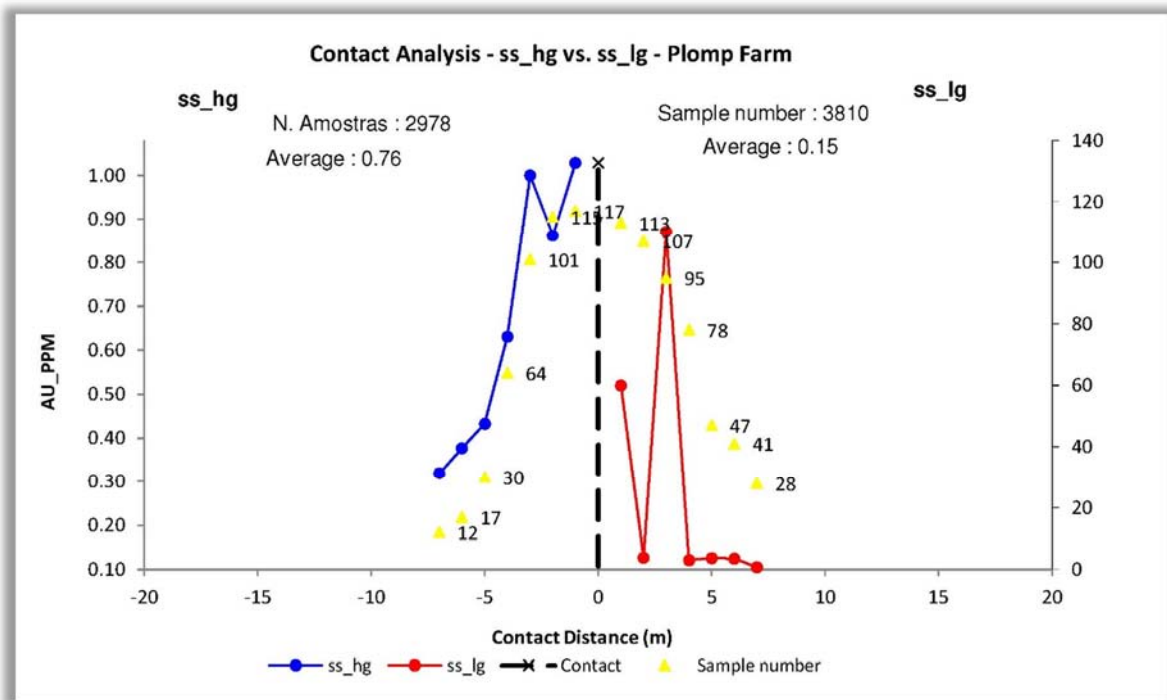
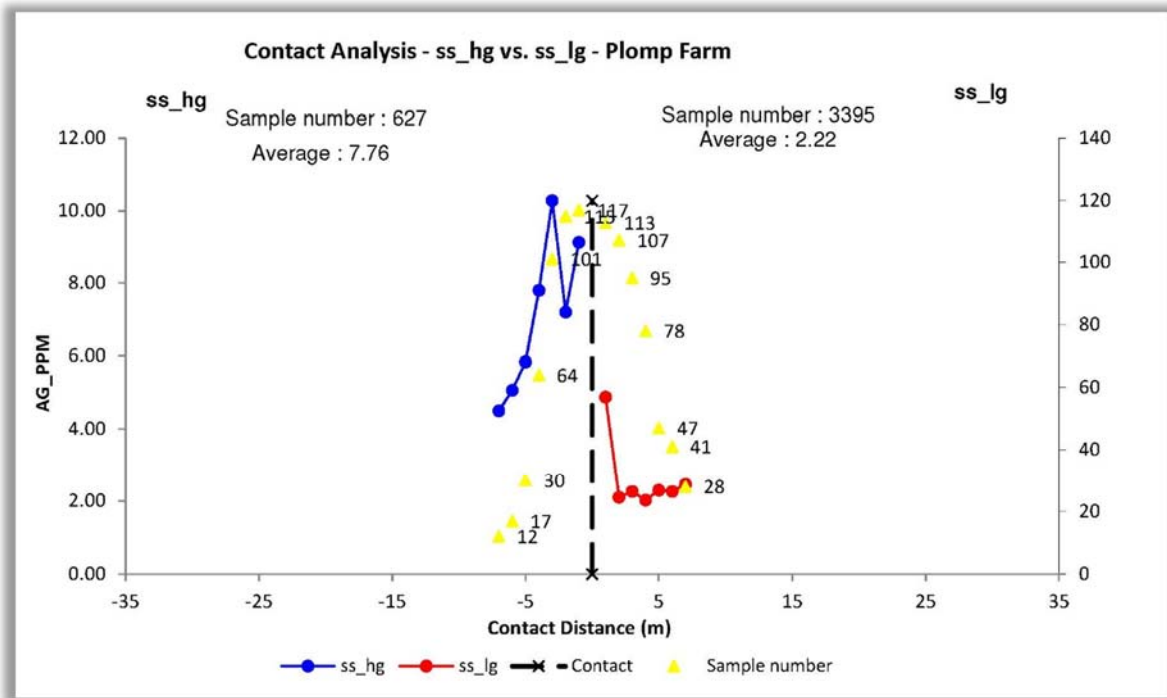


Figure 14.2 SS\_HG vs. SS\_LG Contact Plot – silver



The wireframes extend at depth, below the deepest diamond drillholes. This is to provide a target for future exploration. The resource model did not estimate grades into the full volume of the wireframes due to sheer size of the wireframes.

Each domain was modeled using the same principal assumptions and methodology.

## 14.5 EXPLORATORY DATA ANALYSIS

### 14.5.1 ASSAYS

The four of the domains included in the mineral resource were sampled by a total of 8,478 gold assays. The assay intervals within each mineral domain were captured using a Surpac™ routine to flag the intercept into a new table in the database. These intervals were reviewed to ensure all the proper assay intervals were properly captured.

Table 14.3 summarizes the basic statistics for the assays intervals for each of the mineral domains on the Project.

**Table 14.3 Plomp Farm Drillhole Statistics**

Zone	Field	No of Records	Minimum	Maximum	Mean	Standard Deviation
<b>FV</b>	Length (m)	2805	0.10	9.00	0.80	0.30
	Au (g/t)	2803	0.00	9.26	0.06	0.34
	Ag (g/t)	2287	0.10	47.80	1.19	2.08
<b>GRDR</b>	Length (m)	1227	0.20	1.70	0.96	0.17
	Au (g/t)	1227	0.00	35.11	0.09	1.01
	Ag (g/t)	597	0.10	25.10	1.09	2.01
<b>SS LG</b>	Length (m)	3811	0.10	6.00	0.77	0.30
	Au (g/t)	3811	0.00	71.60	0.15	1.31
	Ag (g/t)	3395	0.10	77.00	2.22	3.75
<b>SS HG</b>	Length (m)	637	0.40	1.60	0.73	0.25
	Au (g/t)	637	0.01	11.28	0.76	1.29
	Ag (g/t)	627	0.30	141.50	7.76	11.31
<b>SS LG + HG</b>	Length (m)	4362	0.10	6.00	0.76	0.29
	Au (g/t)	4362	0.00	71.60	0.23	1.31
	Ag (g/t)	3937	0.10	141.50	3.02	5.82

### 14.5.2 GRADE CAPPING

Raw assay data for each domain was examined individually to assess the amount of metal that is bias from high grade assays. A combination of viewing the histogram, QQ and cumulative frequency plots was used to assist in the determination if grade capping was required on each element in each domain.

WSP elected to apply the same top cut by element for each domain. Table 14.4 summarizes the results of the capping procedure.

**Table 14.4 Plomp Farm Capped Drillhole Statistics**

Zone	Field	No of Records	Minimum	Maximum	Mean	Standard Deviation	# Records Capped
<b>FV</b>	Length (m)	2805	0.10	9.00	0.80	0.30	
	Au (g/t)	2803	0.00	0.42	0.04	0.07	31
	Ag (g/t)	2287	0.00	5.58	0.88	1.08	45
<b>GRDR</b>	Length (m)	1227	0.20	1.70	0.96	0.17	
	Au (g/t)	1227	0.00	0.57	0.05	0.09	17
	Ag (g/t)	597	0.00	8.63	0.49	1.13	10
<b>SS LG</b>	Length (m)	3811	0.10	6.00	0.77	0.30	
	Au (g/t)	3811	0.00	2.20	0.12	0.20	12
	Ag (g/t)	3395	0.00	21.03	1.91	2.84	18
<b>SS HG</b>	Length (m)	637	0.40	1.60	0.73	0.25	
	Au (g/t)	637	0.01	2.20	0.60	0.62	46
	Ag (g/t)	627	0.00	21.03	6.45	5.88	42
<b>SS LG + HG</b>	Length (m)	4362	0.10	6.00	0.76	0.29	
	Au (g/t)	4362	0.00	2.20	0.18	0.34	53
	Ag (g/t)	3937	0.00	21.03	2.51	3.75	57

### 14.5.3 COMPOSITING

Compositing of all the assay data within the various domains was completed on downhole intervals honouring the interpretation of the geological solids. Statistics indicate that a majority of the samples were collected at 1 m intervals.

Surpac™ uses a length weighted option which allows all the composite segments less than 0.75 m to be used in the estimate on a length weighted basis. Table 14.5 summarizes the statistics for the boreholes after compositing.

**Table 14.5 Plomp Farm 1 m Composited Drillhole Statistics**

Zone	Field	No of Records	Minimum	Maximum	Mean	Standard Deviation
<b>FV</b>	Length (m)	5,065	0.01	1.00	0.79	0.31
	Au (g/t)	2,752	0.00	0.42	0.04	0.06
	Ag (g/t)	2,313	0.10	5.58	1.00	1.00
<b>GRDR</b>	Length (m)	2,220	0.01	1.00	0.77	0.31
	Au (g/t)	1,503	0.00	0.57	0.05	0.08
	Ag (g/t)	717	0.16	8.63	0.84	1.14
<b>SS HG</b>	Length (m)	903	0.01	1.00	0.94	0.19
	Au (g/t)	456	0.02	2.20	0.64	0.62
	Ag (g/t)	447	0.36	21.03	6.76	5.74
<b>SS LG + HG</b>	Length (m)	6,418	0.01	1.00	0.95	0.17
	Au (g/t)	3,392	0.00	2.20	0.18	0.32
	Ag (g/t)	3,026	0.10	21.03	2.69	3.63

### 14.5.4 SPATIAL ANALYSIS

Variograms for gold and silver were created for each domain in order to be used for kriging and to create the search ellipse dimensions. Table 14.6 summarizes the variogram parameters for each domain.

Table 14.7 summarizes the search ellipse parameters for each domain.

**Table 14.6 Plomp Farm Variogram Summary**

Zone	Elements	Geostats Parameters				
		Nugget	Sill		Range	
			1st. S	2nd. S	1st. S	2nd. S
<b>FV</b>	<b>Au</b>	0.521	0.276	0.203	97.82	106.28
	<b>Ag</b>	0.288	0.388	0.324	83.44	112.24
<b>GRDR</b>	<b>Au</b>	0.529	0.227	0.243	127.62	230.90
	<b>Ag</b>	0.737	0.084	0.178	114.59	130.82
<b>SS LG + HG</b>	<b>Au</b>	0.759	0.024	0.217	46.29	92.12
	<b>Ag</b>	0.499	0.237	0.264	121.61	268.28



**Table 14.7 Plomp Farm Search Ellipse Parameters**

Zone	Elements	Bearing	Plunge	Dip	Major Axis	Semi-major Axis	Minor Axis	Anisotropy Ratio	
								Major / Semi-major	Major / Minor
FV	Au	250.00	65.00	25.00	106.28	64.01	21.47	1.66	4.95
	Ag	280.00	-50.00	90.00	112.24	77.24	28.59	1.45	3.93
GRDR	Au	225.00	-85.00	30.00	230.90	83.84	48.55	2.75	4.76
	Ag	320.76	-75.82	-45.11	130.82	78.24	59.56	1.67	2.20
SS LG + HG	Au	280.00	80.00	84.92	92.12	40.24	19.94	2.29	4.62
	Ag	0.00	85.00	-15.00	268.28	99.51	77.94	2.70	3.44

---

## 14.6 RESOURCE BLOCK MODEL

Individual block models were established in Surpac™ for each of the mineral domains using one parent model as the origin. The model was not rotated.

A block size of 5 m x 2.5 m x 2.5 m was selected in order to accommodate a small scale open pit mining potential. Sub-blocking of the block was not used.

Table 14.8 summarizes details of the parent block model.

**Table 14.8 Parent Model Summary**

Parameter	
Minimum X Coordinate	487010
Minimum Y Coordinate	5512010
Minimum Z Coordinate	-400
Maximum X Coordinate	493990
Maximum Y Coordinate	5513990
Maximum Z Coordinate	400
Block Size (m)	5m x 2.5m x 2.5m
Rotation	0
Sub-block	none
Total No. Blocks	353,802,240

---

## 14.7 ESTIMATION PARAMETERS

The interpolations of the zones were completed using the estimation methods ordinary kriging (OK) nearest neighbour (NN), and inverse distance squared (ID<sup>2</sup>). The estimations were designed with four passes. In each estimation pass, a minimum and maximum number of samples were required as well as a maximum number of samples from a borehole in order to satisfy the estimation criteria. All estimation passes used the capped and composited dataset for the appropriate domain being estimated.

An anisotropic search ellipse was used for the estimation. Only the samples within the domain wireframe were used in the estimation. The result is that the search ellipse will not locate samples outside the domain wireframe. Table 14.9 summarizes the interpolation criteria for each domain.

**Table 14.9 Plomp Farm Estimation Parameters**

Estimation Pass No.	Search Ellipse Factor	Minimum No. of Composites	Maximum No. of Composites	Maximum No. of Composites per BH
1	Ellipse	5	15	2
2	Ellipse	4	15	2
3	Ellipse	3	15	2
4	Ellipse	2	15	2

## 14.8 RESOURCE CLASSIFICATION

Several factors are considered in the definition of a resource classification:

- NI 43-101 requirements;
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resource and Mineral Reserve Best Practice Guidelines;
- Author’s experience with shear-hosted deposits;
- Spatial continuity based of the assays within the drillholes;
- Understanding of the geology of the deposit; and
- Drillhole and channel spacing and the estimation runs required to estimate the grades in a block.

The current resource is fully classified as Inferred.

No environmental, permitting, legal, title, taxation, socio-economic, marketing, or other relevant issues are known to WSP that may affect the estimate of mineral resources. Mineral reserves can only be estimated on the basis of an economic evaluation that is used in a preliminary feasibility study or a feasibility study of a mineral project; thus, no reserves have been estimated. As per NI 43-101, mineral resources which are not mineral reserves, do not have to demonstrate economic viability.

## 14.9 MINERAL RESOURCE TABULATION

The resource reported is effective as of November 20, 2017 and has been tabulated in terms of a gold cut-off grade. The resources are tabulated using various cut-off grades to demonstrate the robust nature of the resource for each of the domains (Table 14.10).

**Table 14.10 Plomp Farm Cut-off Table**

Category	Cut-off Grades (g/t Au)	Tonnes	Au (g/t)	Ag (g/t)	Au oz	Ag oz
Inferred	0.2	11,215,000	0.42	0.41	149,700	149,300
Inferred	<b>0.3</b>	<b>5,702,000</b>	<b>0.58</b>	<b>0.21</b>	<b>107,100</b>	<b>38,400</b>
Inferred	0.4	4,346,000	0.66	0.19	92,000	27,192

Based on gold pricing of US\$1,350 per ounce, a review of several other open pit gold projects, a cut-off grade of 0.3 g/t was deemed appropriate for the resource. At the early stage of this Project, the resource is not pit constrained. The resource is constrained to within the top 200 m. Table 14.11 report the resource for the Plomp Farm Project.

**Table 14.11 Plomp Farm Mineral Resource**

Category	Tonnes	Au (g/t)	Ag (g/t)	Au oz	Ag oz
Inferred	5,702,000	0.58	0.21	107,100	38,400

- CIM definitions were followed for classification of Mineral Resources.
- Cut-off grades for the Mineral Resource is 0.30 g/t Au.
- Mineral Resources are estimated using a gold price of US\$1,350 per ounce.
- Bulk density is 2.73 g/cm<sup>3</sup> based on samples collect at the deposit.

- The resources are constrained within the top 200 meters.
- Mineral Resources which are not Mineral Reserves have not yet demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
- Numbers may not add due to rounding.

## 14.10 VALIDATION

The Plomp Farm model was validated by two methods:

- 1 Comparison of the global mean block grades for OK, ID<sup>2</sup>, NN, and composites.
- 2 Swath plots.

### 14.10.1 GLOBAL COMPARISON

The global block model statistics for the OK model were compared to the global ID<sup>2</sup> and NN model values as well as the composite capped drillhole data. Table 14.12 shows this comparison of the global estimates for the three estimation method calculations. In general, there is a good correlation between the three block models as well as with the composite drillhole file results are lower than the drillhole dataset. Comparisons were made using all blocks at a 0% Au cut-off.

**Table 14.12 Plomp Farm Global Model Comparison**

		Gold Grade (g/t)			
		DDH	NN	ID <sup>2</sup>	OK
		cap/composite	Grade	Grade	Grade
FV	Au (g/t)	0.04	0.03	0.03	0.03
	Ag (g/t)	1.00	0.75	0.79	0.80
GRDR	Au (g/t)	0.05	0.05	0.05	0.05
	Ag (g/t)	0.84	0.74	0.51	0.52
SS HG	Au (g/t)	0.64	0.59	0.66	0.67
	Ag (g/t)	6.76	6.72	6.86	6.90
SS LG + HG	Au (g/t)	0.18	0.13	0.15	0.15
	Ag (g/t)	2.69	2.02	2.22	2.22

### 14.10.2 SWATH PLOTS

Figures 14.3 to 14.8 display the comparison between OK estimate, the ID<sup>2</sup> estimate, the NN estimate, and the drillhole composites in a swath plot format.

As expected, there is a strong degree of grade smoothing with the OK and ID<sup>2</sup> methodologies. In general the models has similar trends as the boreholes.

Figure 14.3 Plomp Farm Easting SS\_HG Swath Plot

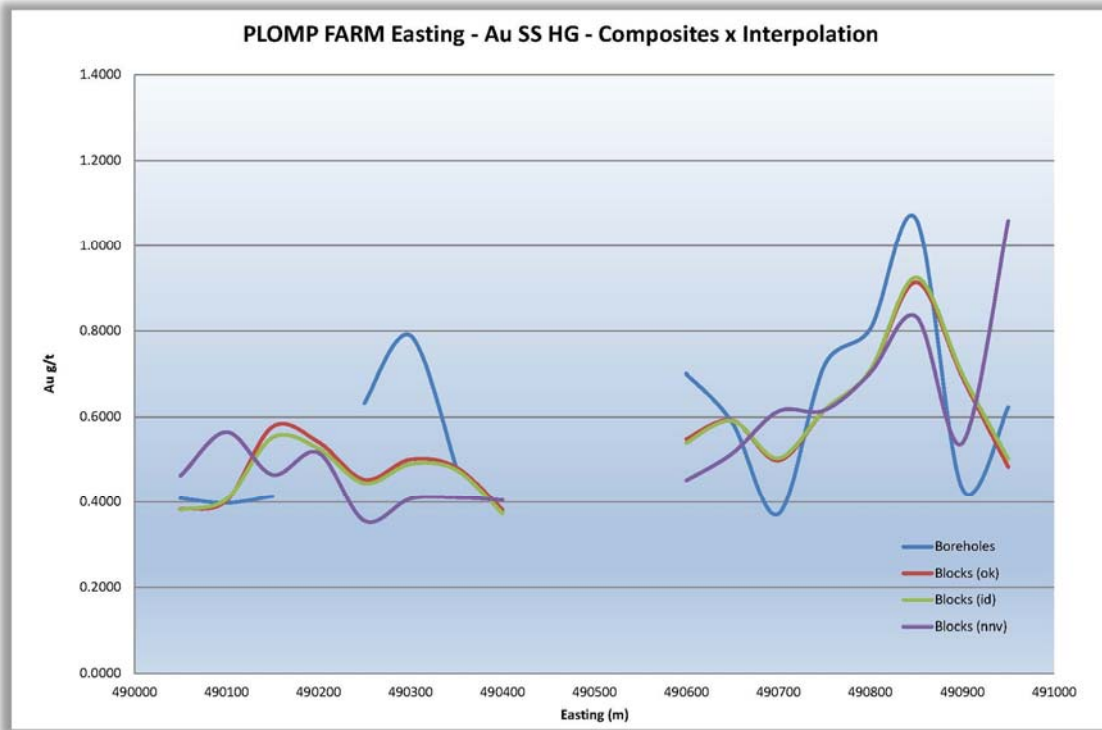


Figure 14.4 Plomp Farm Northing SS\_HG Swath Plot

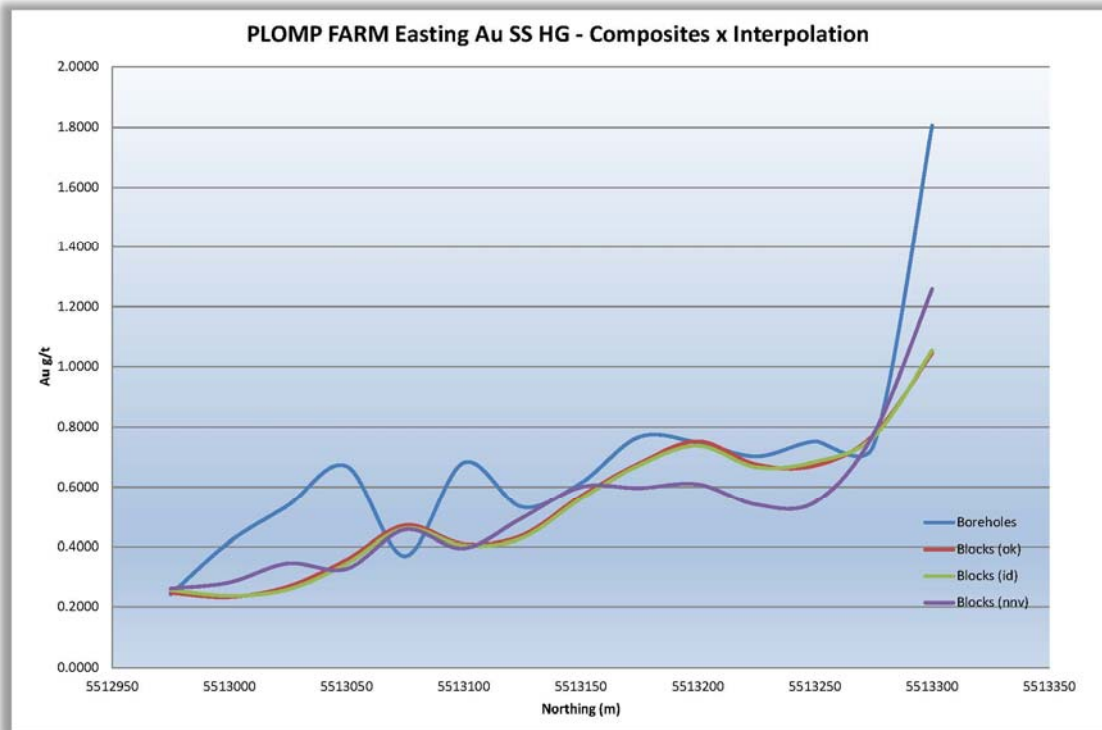


Figure 14.5 Plomp Farm Elevation SS\_HG Swath Plot

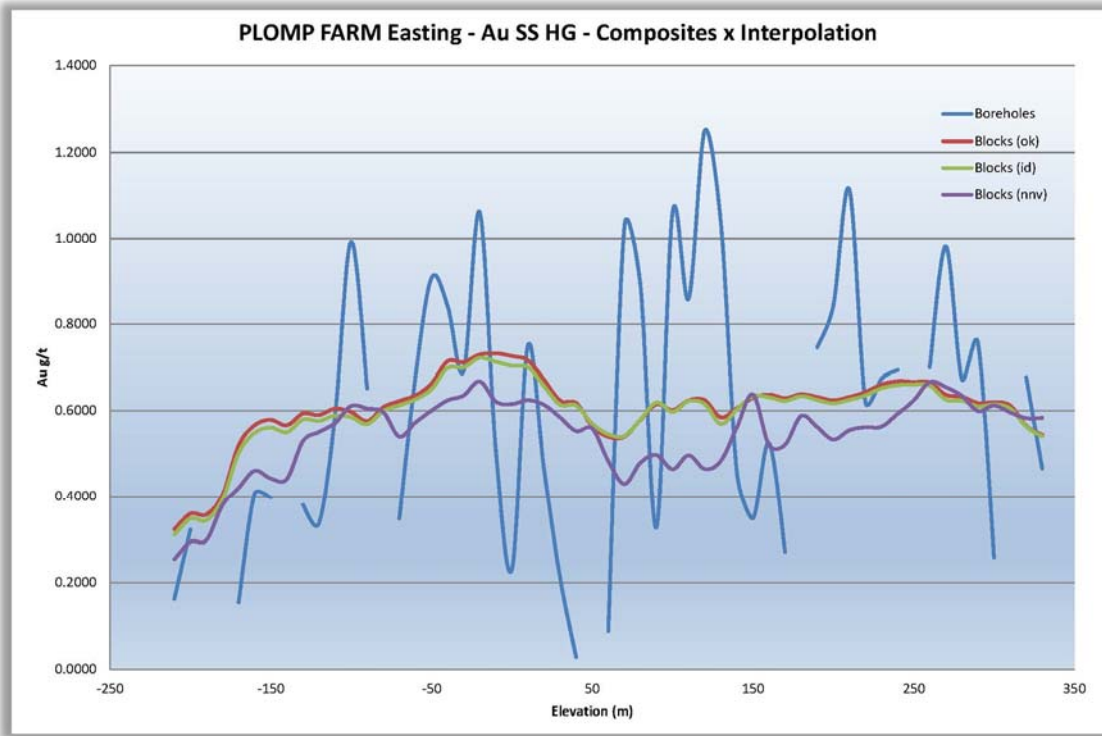


Figure 14.6 Plomp Farm Easting SS\_LG Swath Plot

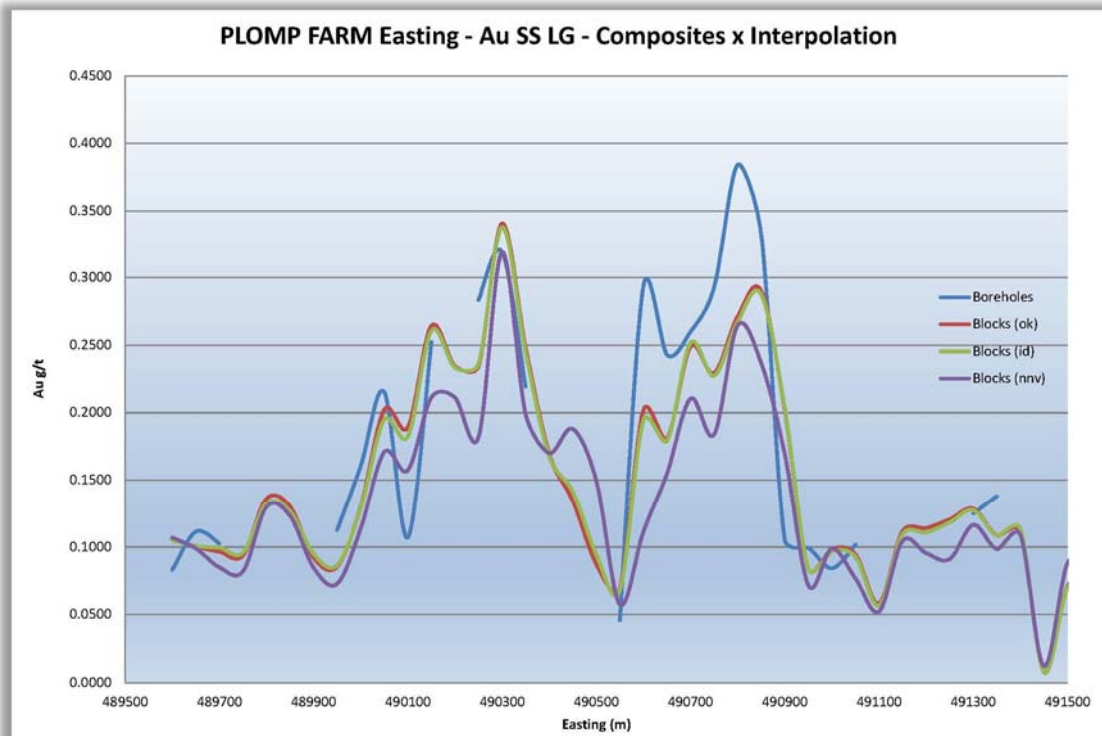


Figure 14.7 Plomp Farm Northing SS\_LG Swath Plot

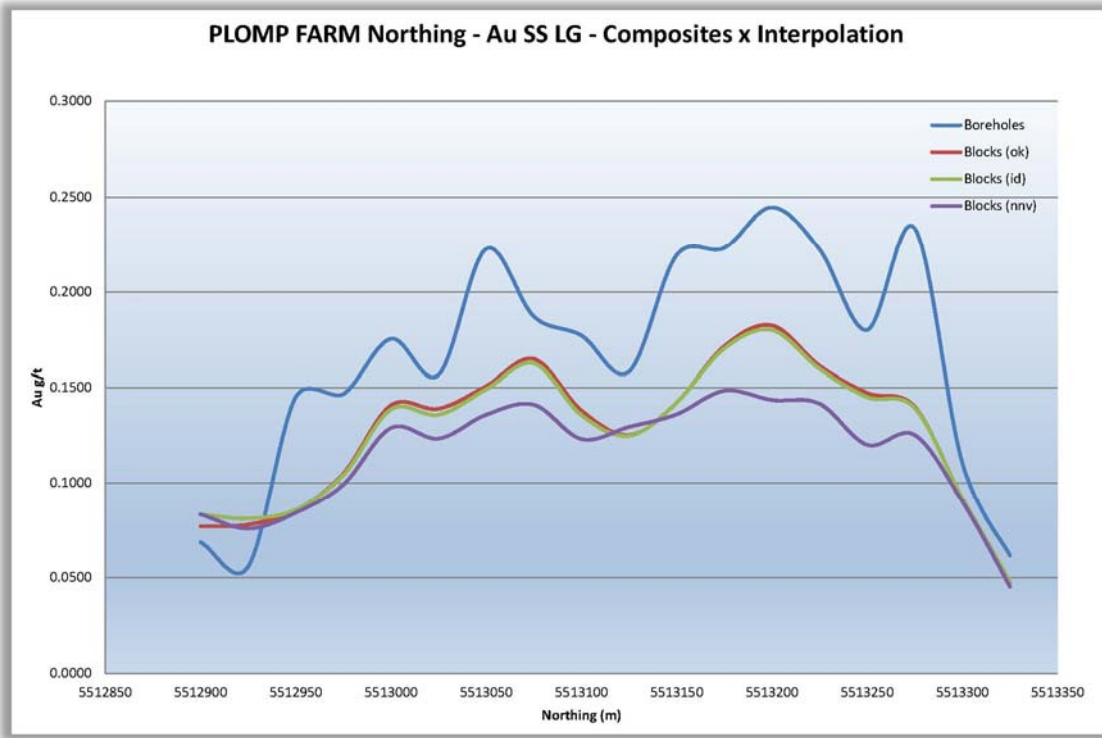
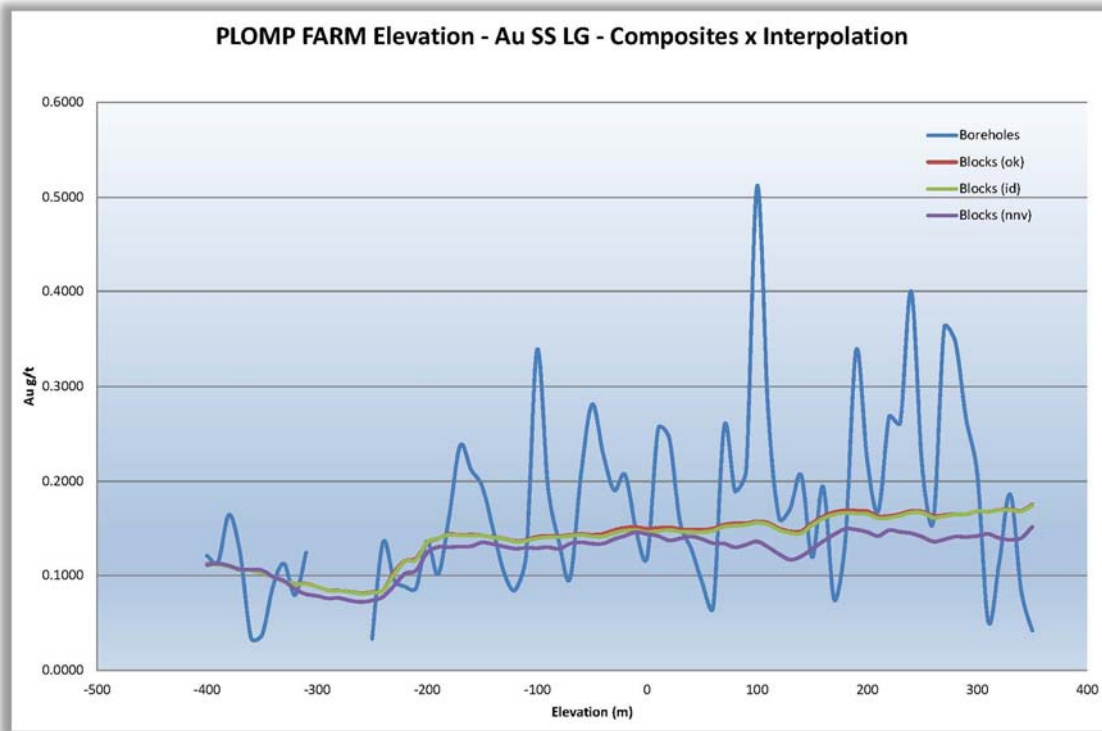


Figure 14.8 Plomp Farm Elevation SS\_LG Swath Plot



---

## 14.11 PREVIOUS ESTIMATES

There is no previous resource estimation on the Project.



# 15 ADJACENT PROPERTIES

There are no immediately adjacent properties to the Property.

Treasury Metal's Goliath Project is located approximately 35 km to the east. The Goliath Project is at the advanced exploration stage. Treasury Metals is advancing through the Canadian permitting process to begin production at its open-pit gold mine and up to 2,500 tpd processing facility in the near future.

# 16 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information on the Project.

# 17 INTERPRETATION AND CONCLUSIONS

The conclusions for the geology and resource of the Project are summarized below.

- The Property is currently held 100% by Champion Bear.
- The Project mineralization style does not seem to conform to the classic orogenic model and as such, can be classified as a hybrid deposit-type model.
- There are eight lithological domains on the Project.
- There is a good understanding of the regional and local geology to support the interpretation of the mineralized zones on the Project.
- Mineralization is currently defined in four domains; a sheared schist hosts the majority of the mineralization and is subdivided into a high-grade domain and a low-grade domain.
- Sampling procedures, sample preparation, and assay protocols conducted by Champion Bear were conducted with best practices at the time.
- Drilling and sampling procedures, sample preparation, and assay protocols conducted by Champion Bear were conducted in accordance with accepted practices at the time.
- Verification of the downhole surveys, assays, core, and drillhole logs indicates the data supplied by Champion Bear is reliable.
- Champion Bear did not conduct an independent QA/QC program apart from the internal lab program.
- The mineral models have been constructed in conformance to industry standard practices.
- The geological understanding is sufficient to support the resource estimation.
- The specific gravity value used to determine the tonnage was 2.73 and derived by reviewing the results of the specific gravity from two advanced projects in the region.
- The mineral resource was estimated by the Ordinary Kriging interpolation method.
- The mineral resource estimate for the Plomp Farm Project, at a 0.3 g/t gold cut off, is 5.7 Mt at 0.58 g/t Au, 0.21 g/t Ag in an Inferred resource.
- The resource remains un-tested along strike in both directions as well as down plunge.

# 18 RECOMMENDATIONS

It is WSP's opinion that additional exploration expenditures are warranted. Two separate exploration programs are proposed. Phase 2 is dependent on the results of Phase 1 and should be completed or adjusted upon the completion of Phase 1.

## 18.1 PHASE 1

Phase 1 is designed primarily to expand the current resource at the Project by testing the strike and dip extension of the deposit as well as preserving the existing drillcore. This will involve:

- Diamond drilling to increase the evaluated strike length from the current 400 m by infilling data gaps.
- Extend the strike length to both the east and the west.
- Drill at depth to increase the sample density below the current resource of 200 m down to 700 m.
- Split and sample historical core containing the quartz sericite schist.

Drillhole spacing should continue at approximately 50 m along section and 50 m to 75 m vertically on section in order to support an Inferred resource.

Table 18.1 summarizes the exploration program proposed for Phase 1.

**Table 18.1 Plomp Farm Phase 1 Exploration Budget**

Activity	Description	Cost (CAN\$)
<b>Core protection</b>	Acquire new core boxes	20,000
	Re-box deteriorated core boxes	10,000
<b>Unsplit QSS core</b>	Split 1,000 metres	4,000
	Log and sample core	3,000
	Assay core	2,000
<b>Wedge Drilling</b>	Drill 1,000 metres 17 Wedge holes	125,000
	Log and sample core	15,000
	Assay core	20,000
<b>New Drilling</b>	Drill 10 holes to 350m (3,500 metres)	375,000
	Log and sample core	15,000
	Assay core	15,000
<b>Resource Report 2</b>	Update NI 43-101 Resource report	25,000
<b>Phase 1 Total</b>		<b>\$ 629,000</b>

## 18.2 PHASE 2

If Phase 1 is successful at further delineating a gold resource along strike and / or at depth, Phase 2 programs should be initiated.

Table 18.2 summarizes the Plomp Farm Phase 2 exploration budget

**Table 18.2 Plomp Farm Phase 2 Exploration Budget**

Activity	Description	Cost (CAN\$)
<b>Drilling Deeper</b>	Drill 5,000 meters deep holes	875,000
	Log and sample core	20,000
	Assay core	25,000
<b>Resource Report 3</b>	Update NI 43-101 Resource report	25,000
	<b>Phase 2 Total</b>	<b>\$ 945,000</b>

## 18.3 OTHER RECOMMENDATIONS

The following recommendations are to assist in moving the Project forward.

- Rehabilitate the old core rack in order to preserve the historic drillcore.
- For future drilling programs, collect specific gravity measurement for the various rock types and alteration styles. Approximately 4 to 5% of the database should have a specific gravity measurement. This will allow for a more accurate calculation of the tonnage in the subsequent resource estimate.
- For future drilling programs, initiate a QA/QC program that meets current standards.

# 19 REFERENCES

- Beakhouse, G.A., 2009. Investigations of Granitoid Rocks in the Wabigoon Subprovince; Summary of Field Work and Other Activities 2009, Ontario Geological Survey, Open File Report 6240, p13-1 to 13-6
- Beakhouse, G.P., Blackburn, C.E, Breaks, Z.W., Ayer, J., Stone, D., and Stott, G.M., 1991. An Introduction of the Regional Geological Setting of the Western Superior Province, Geological Association of Canada, Field Trip Guidebooks p1-12.
- Blackburn, C.E, and Hinz, P. 1995. Kenora Resident Geologist's District; in Report of Activities 1994, Ontario Geological Survey, Open File Report 5921, p.321.
- Brimhall, G.H, 1980: Deep Hypogene Oxidation of Porphyry Copper Potassium-silicate Protore at Butte, Montana: A Theoretical Evaluation of the Copper Remobilization Hypothesis, Economic Geology 78, p. 73-90
- Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007: Volcanogenic Massive Sulfide Deposits in Goodfellow, W.D. ed., Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallongeny, the Evolution of Geological Provinces and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No.5, p.141-161
- Hardie, C., Runnels, D., Daniel, S., Ritchit, D., Cole, D., El-Rassi, D and Tolfree, D., 2012: Independent Preliminary Economic Assessment update on the Rainy River Gold Property, Ontario, Canada, unpublished report prepared for Rainy River Resources Limited., 430pp
- Litchtblau, A., Hinz, P., Ravnaas, C., Storey, C.C., Kosloski, L., and Raoul, A. 2002. Report of Activities 2001, Resident Geologist Program, Red Lake Regional Resident Geologist Report; Red Lake and Kenora Districts; Ontario Geological Survey, Open File Report 6079, p44-54
- P&E Mining Consultants Inc., 2015; Technical Report and Updated Resource Estimate for the Goliath Gold Project, Kenora Mining Division, Northwestern Ontario for Treasury Metals Inc. p.39-59
- Parker, J.R. 1989. Geology, gold mineralization and property visits in the area investigated by the Dryden 0-Ignace Economic Geologist, 1984-1987; Ontario Geological Survey, Open File Report 5723, 360p.
- Poulsen, K.H., Robert, F., and Dube, B., 2000; Geological Classification of Canadian Gold Deposits, Geological Survey of Canada, Bulletin 5640, 106pp.

# 20 CERTIFICATE OF QUALIFIED PERSON

Todd McCracken, P.Geol.

I, Todd McCracken, P.Geol., of Sudbury, Ontario do hereby certify:

- I am a Manager of Mining with WSP Canada Inc. with a business address at 93 Cedar Street, Suite 300, Sudbury, Ontario P3E 1A7.
- This certificate applies to the technical report entitled Plomp Farm Resource Estimation and Technical Report (the “Technical Report”).
- I am a graduate of the University of Waterloo, B.Sc. (Honours) Applied Earth Sciences, 1992. I am a member in good standing of Association of Professional Geoscientists on Ontario (APGO) 0631. My relevant experience includes 26 years of experience in exploration and operations, including working in shear-hosted deposits and resource estimations. I am a “Qualified Person” for the purposes of National Instrument 43-101 (the “Instrument”).
- My most recent personal inspection of the Property was June 28 and 29, 2017, inclusive.
- I am responsible for all sections of the Technical Report.
- I am independent of Champion Bear Resources Ltd.as defined by Section 1.5 of the Instrument.
- I have no prior involvement with the Property that is the subject of the Technical Report.
- I have read the Instrument and the sections of the Technical Report that I am responsible for have been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information, and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 5<sup>th</sup> day of February, 2018 at Sudbury, Ontario.

*Original document signed and stamped  
by Todd McCracken, P.Geol.*

---

Todd McCracken, P.Geol.  
Manager - Mining  
WSP Canada Inc.

# APPENDIX

## A DRILLHOLE COLLARS







Champion Bear Resources Ltd.  
Plomp Farm Resource Estimation and Technical Report  
161-10880-00\_RPT-01\_R0

APPENDIX A  
DRILLHOLE COLLARS

hole_id	y	x	z	max_depth	azimuth	dip
PF-01	5513420	490888	374	242.8	360	-45
PF-02	5513290	491078	371	245	360	-45
PF-03	5513234	491194	373	186	360	-45
PF-04	5513104	491064	373	285	359	-45
PF-05	5512903	491057	373	507	1	-47
PF-06	5512634	491187	373	162	360	-45
PF-07	5512673	492177	370	150	360	-45
PF-08	5513298	491998	371	249	15	-45
PF-09	5513260	491025	371	150	360	-45
PF-10	5513299	491028	370	147.2	360	-70
PF-11	5513201	490973	373	147	358	-45
PF-12	5513200	490974	373	252	1	-76
PF-13	5513219	490888	370	159	360	-45
PF-14	5513548	492189	371	255	360	-45
PF-15	5513297	492388	371	207	360	-45
PF-16	5513273	491788	371	219	360	-45
PF-17	5513299	491588	371	174	360	-45
PF-18	5513299	491388	371	132	360	-45
PF-19	5513298	491388	371	135	360	-68
PF-20	5513249	491588	371	129	360	-43
PF-21	5513205	490838	370	180	360	-45
PF-22	5513204	490838	370	225	360	-65
PF-23	5513150	490738	371	228	360	-45
PF-24	5513149	490738	371	248	360	-60
PF-25	5513180	490798	371	222	350	-45
PF-26	5513017	490873	369	396	2	-60
PF-27	5513100	490988	372	370.2	360	-60
PF-28	5513077	490779	372	363	355	-65
PF-29	5513077	490779	372	477	355	-76
PF-30	5513016	490873	369	450	358	-74
PF-31	5513050	490988	371	549	360	-70
PF-31W1	5513050	490988	371	522	360	-70
PF-32	5513062	490677	369	443	360	-56
PF-33	5513061	490677	369	357	360	-66
PF-34	5513061	490677	369	474.5	360	-75
PF-34W1	5513061	490677	369	451	360	-76
PF-35	5513054	490677	369	329.5	350	-52
PF-36	5513054	490677	369	498	320	-70
PF-37	5513053	490677	369	537	325	-77
PF-38	5512913	490373	369	552	330	-65
PF-39	5512920	490388	369	552	335	-70
PF-40	5512941	490094	374	531	360	-50
PF-41	5512941	490094	374	519	360	-65
PF-42	5513298	491988	371	126	360	-60
PF-43	5513297	491988	371	258	360	-85
PF-44	5513285	491888	371	240	360	-80
PF-45	5513298	492088	371	198	360	-80
PF-46	5513298	492188	371	258	360	-80
PF-47	5513298	492288	371	267	360	-80
PF-48	5513296	492388	371	303	360	-80
PF-50	5513372	490682	370	294	360	-55
PF-51	5513500	491139	371	351	360	-55



Champion Bear Resources Ltd.  
Plomp Farm Resource Estimation and Technical Report  
161-10880-00\_RPT-01\_R0

APPENDIX A  
DRILLHOLE COLLARS

hole_id	y	x	z	max_depth	azimuth	dip
PF-52	5513524	491289	371	204	360	-55
PF-53	5513400	491138	372	303	360	-55
PF-54	5513285	491088	371	201	360	-65
PF-55	5513037	491182	371	441	5	-58
PF-56	5512941	490094	374	648	360	-75
PF-57	5512941	490094	374	516	30	-65
PF-58	5513036	491181	371	537	5	-70
PF-59	5513098	492188	372	477	360	-65
PF-60	5513097	492188	372	615	360	-70
PF-61	5513098	492088	372	528	360	-65
PF-62	5512940	490888	369	654	360	-66
PF-63	5512939	490888	369	930	360	-75
PF-64	5513097	492088	372	510	360	-65
PF-65	5513049	491588	371	414	360	-50
PF-66	5512935	490847	368	675	350	-70
PF-67	5513048	491588	371	573	360	-75
PF-68	5512902	491058	378	593	4	-62
PF-69	5512902	491058	373	648	3	-70
PF-70	5513019	490821	370	396	358	-55
PF-71	5513018	490821	370	465	353	-64
PF-72	5513018	490821	370	459	360	-70
PF-73	5512961	491227	371	234	256	-72
PF-74	5512961	491227	371	792	256	-77
PF-75	5513023	490365	369	557	352	-59
PF-76	5513022	490365	369	588	351	-77
PF-77	5513022	491438	371	786	340	-75
PF-78	5513200	492945	371	360	350	-55
PF-79	5513139	490892	373	341	360	-68
PF-80	5513024	491438	371	591	328	-65
PF-81	5513023	491438	371	678	335	-70
PF-82	5512911	490374	369	573	360	-56
PF-83	5512912	490373	369	618	360	-48
PF-84	5512912	490374	369	517.3	355	-64
PF-85	5512911	490373	369	591	21	-60
PF04-100	5513055	490102	373	183.01	358	-45
PF04-101	5513005	490106	374	549.01	355	-50
PF04-102	5512979	490107	374	450.01	175	-53
PF04-103	5513035	490192	372	243.01	355	-45
PF04-104	5513033	490356	369	286.51	360	-45
PF04-105	5513081	490678	369	297.01	358	-45
PF04-106	5513415	490667	373	252.01	360	-45
PF04-107	5513535	490593	378	540.01	180	-55
PF05-110	5513139	490943	373	230.21	360	-55
PF05-111	5513138	490892	373	254.61	360	-55
PF05-112	5513115	490793	372	276.11	360	-60
PF05-113	5512938	490847	368	550	258	-70
PF05-114	5512938	490644	367	427.01	360	-50
PF05-115	5512923	490430	368	477.51	13	-60
PF05-116	5513139	490094	371	129.71	360	-50
PF05-117	5513071	489968	375	160.21	360	-50
PF05-118	5512986	489749	378	300.51	360	-50
PF06-119	5512796	490194	375	743.51	360	-70



Champion Bear Resources Ltd.  
Plomp Farm Resource Estimation and Technical Report  
161-10880-00\_RPT-01\_R0

APPENDIX A  
DRILLHOLE COLLARS

hole_id	y	x	z	max_depth	azimuth	dip
PF06-120	5512772	489861	384	548.01	358	-67
PF06-121	5512762	489758	386	702.11	360	-65
PF06-122	5512703	490193	375	1034.61	355	-80
PF06-123	5512775	489657	391	852.01	360	-78
PF06-124	5512699	490093	377	948.51	360	-80
PF07-119-W1	5512699	490093	377	637.01	360	-70
PF07-119-W2	5512699	490093	377	658.41	360	-70
PF07-119-W3	5512699	490093	377	671.21	360	-70
PF07-125	5513021	488075	383	449.01	180	-88
PF07-126	5512734	488665	379	248.01	360	-53
PFE07-01	5514842	501390	373	248.01	360	-50
PFE07-02	5514814	500491	390	260.01	360	-49
PFE07-03	5514836	500479	390	145.01	360	-50
TA-03	5512860	489650	381	376.01	360	-45
TA-04	5512961	489357	388	300	360	-50
TA-05	5512662	488950	383	450.01	350	-60
TA-06	5512438	488549	373	219.01	360	-60
TA-07	5512714	487950	375	300	360	-60
TA-08	5512714	487750	372	417	360	-60
TAE-01	5513007	489554	382	111.01	359	-47
TAE-02	5512986	489650	379	134.2	360	-45

# APPENDIX

**B**

SIGNIFICANT  
DRILLHOLE  
INTERSECTIONS



Borehole_id	depth_from (m)	depth_to (m)	length (m)	Au (ppm)
PF-02	21.4	22.5	1.1	1.249
PF-04	183.7	184.2	0.5	1.164
PF-05	32	32.3	0.3	1.826
PF-05	468	471	3.0	2.660
PF-10	67	68	1.0	1.630
PF-11	105.5	106.5	1.0	1.028
PF-12	181	182.6	1.6	1.781
PF-13	112	117.5	5.5	1.211
PF-21	119.7	122.1	2.4	1.409
PF-22	136.7	137.4	0.7	1.200
PF-22	145.2	146.6	1.4	1.145
PF-22	149.95	150.95	0.9	1.060
PF-22	158.5	159.7	1.2	3.403
PF-23	84	85	1.0	1.470
PF-25	138.3	143.3	5.0	1.332
PF-26	291.1	292.5	1.4	2.444
PF-26	334.2	337.4	3.2	3.383
PF-28	181.8	183.3	1.5	2.480
PF-28	297	300	3.0	1.556
PF-28	309.5	311	1.5	6.617
PF-29	113	114	1.0	1.280
PF-29	401	402.5	1.5	0.885
PF-30	419	423.5	4.5	1.143
PF-30	430	432.5	2.5	4.202
PF-30	447	448	1.0	1.200
PF-33	285	287.5	2.5	2.554
PF-33	292	292.5	0.5	1.770
PF-35	92	92.5	0.5	1.850
PF-35	254	254.5	0.5	1.370
PF-35	302	304.5	2.5	2.284
PF-37	356.7	357.2	0.5	5.860
PF-38	497	499	2.0	2.263
PF-38	527	528	1.0	1.860
PF-39	489.5	492.7	3.2	2.021
PF-40	415.5	416.5	1.0	2.906
PF-41	203	204	1.0	1.350
PF-41	231	236	3.7	0.814
PF-56	282	283	1.0	2.095
PF-56	312	312.8	0.8	1.160
PF-56	341.6	342.8	1.2	1.650
PF-57	399	399.5	0.5	2.120
PF-58	496.5	501.5	5.0	1.530
PF-62	569	569.5	0.5	1.370
PF-66	15	16.2	1.2	1.730
PF-66	51	53.5	2.5	1.484
PF-70	40	41	1.0	2.950
PF-70	253.5	255	1.5	7.990
PF-70	344	345	1.0	4.320
PF-71	389	392	3.0	4.683
PF-72	407	409.5	2.5	6.104
PF-74	609.5	611	1.5	2.190
PF-75	269	272	3.0	1.660



Borehole_id	depth_from (m)	depth_to (m)	length (m)	Au (ppm)
PF-76	429.9	434	4.1	1.318
PF-76	478.5	481.4	2.9	11.158
PF-79	282.5	285	2.5	3.476
PF-79	291	292	1.0	1.070
PF-82	468.6	469.3	0.7	1.200
PF-83	470	471	1.0	1.000
PF-83	569	570	1.0	10.250
PF-83	597.5	598.9	1.4	6.120
PF-84	430.5	431.5	1.0	2.150
PF-84	436.7	439	2.3	1.137
PF-84	437.4	445	2.6	1.087
PF-85	514.5	515	0.5	0.910
PF04-100	122	126	4.0	1.831
PF04-100	139	140	1.0	1.148
PF04-101	216	218	2.0	2.420
PF04-104	239	245	6.0	1.002
PF04-105	220	224	4.0	1.812
PF04-107	510	511	1.0	3.690
PF05-111	211	214	3.0	2.463
PF05-116	49	50	1.0	1.230
PF06-119	579	579.4	0.4	31.700
PF06-119	595	596	1.0	1.030
PF06-119	622.5	623.5	1.0	1.290
PF06-120	520.5	521.5	1.0	3.030
PF06-121	457	458	1.0	1.910
PF06-122	890.5	891	0.5	1.220
PF06-122	906	907	1.0	1.300
PF07-119-W1	592	594.1	2.1	1.032
PF07-119-W1	612	613	1.0	1.130
PF07-119-W1	623.7	625	1.3	22.079
PF07-119-W3	584	584.5	0.5	1.290
PF07-119-W3	593	594	1.0	2.710
PF07-119-W3	606	610	4.0	1.175
PF07-119-W3	612	615	3.0	1.120
TA-07	99	100.5	1.5	1.210

## ABOUT US

WSP is one of the world's leading professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, planners, surveyors and environmental specialists, as well as other design, program and construction management professionals. We design lasting solutions in the Buildings, Transportation, Infrastructure, Oil & Gas, Environment, Geomatics, Mining, Power and Industrial sectors as well as project delivery and strategic consulting services. With over 8,000 talented people across Canada and 42,000 people globally we engineer projects that will help societies grow for generations to come.

### HEAD OFFICE

WSP GLOBAL INC.  
1600 RENÉ-LÉVESQUE BLVD WEST, FLOOR 16  
MONTRÉAL, QUÉBEC H3H 1P9

T +1 514-340-0046

F +1 514-340-1337

[WSP.COM](http://WSP.COM)

