

Ministry of Energy and Mines  
BC Geological Survey

**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

<b>TITLE OF REPORT [type of survey(s)]</b> 2013 DIAMOND DRILLING REPORT on the TAKLA-RAINBOW PROPERTY	<b>TOTAL COST</b> \$269,845.18
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AUTHOR(S) J. Douglas Blanchflower, P. Geo. SIGNATURE(S) \_\_\_\_\_

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) 1000034-201302/November 1, 2013 YEAR OF WORK 2013

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 5497061/March 31, 2014

PROPERTY NAME TAKLA-RAINBOW

CLAIM NAME(S) (on which work was done) 506567

COMMODITIES SOUGHT Copper, gold, silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 093N 082

MINING DIVISION Omineca NTS 93N/11

LATITUDE 55 ° 38 ' 51 " LONGITUDE 125 ° 17 ' 31 " (at centre of work)

OWNER(S)  
1) CJL Enterprises Ltd. 2) \_\_\_\_\_

MAILING ADDRESS  
P.O. Box 662,  
Smithers, B.C. V0J 2N0

OPERATOR(S) [who paid for the work]  
1) Manado Gold Corp. 2) \_\_\_\_\_

MAILING ADDRESS  
Suite 3023, Bentall Three, P.O. Box 49212  
595 Burrard St., Vancouver, B.C. V7X 1K8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
Structurally-controlled chalcopyrite-pyrite mineralization is hosted by andesitic volcanic and volcanoclastic rocks belonging to the Middle Triassic to Lower Jurassic Takla Group.  
The host rocks are a northwesterly-trending embayment in Early Jurassic to Early Cretaceous granitic, granodioritic and quartz monzonitic rocks of the Hogem Intrusive Complex.  
The 'West', 'East' and 'South' known zones of mineralization occur as parallel, northwesterly-striking, steeply dipping shear zones within and adjacent to the Intrusive rocks.  
The northwesterly-trending Twin Creek fault is the dominant structure. Propylitic alteration is ubiquitous, overwritten by local intense pyritization, silicification and carbonization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS \_\_\_\_\_  
EMPR ASS RPT 2501, 12162, 13171, 14103, 15319, 16759, 17013, 20511, and 22372

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL</b> (number of samples analysed for ...)			
Soil			
Silt			
Rock			
Other			
<b>DRILLING</b> (total metres; number of holes, size)			
Core	605.8 metres, 5 diamond drill holes, NQ2-size	506567	246,099.57
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying	314 drill core, 15 check-Au + 35-elements	506567	11,386.16
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)	GPS Drill Hole, 1:10 000, 100.0 ha.	506567	7,797.65
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other	Avalanche Risk Assessment Evaluation	506567, 506568, 504257, 1019381, 1023074	4,561.80
<b>TOTAL COST</b>			<b>269,845.18</b>

**2013 DIAMOND DRILLING REPORT**  
**on the**  
**TAKLA-RAINBOW PROPERTY**

**Twin Creek Area**  
**Omineca Mining District**  
**British Columbia, Canada**

**Latitude 53° 39' North by Longitude 125° 17' West**

**NTS Map-Area 93N/11**

**BC Geological Survey**  
**Assessment Report**  
**34850**

- Property Owned By -

**CJL ENTERPRISES LTD.**

825 Viewmont Road  
P.O. Box 662  
Smithers, British Columbia, Canada V0J 2N0  
Tel: (250) 847-3612

- Operator and Report Prepared For -

**MANADO GOLD CORP.**

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- Report Prepared By -

**MINOREX CONSULTING LIMITED**

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Tel: (604) 857-0442 Fax: (604) 857-0442

Date Submitted: March 28, 2014

J. Douglas Blanchflower, P. Geo.  
Consulting Geologist

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## DATE and SIGNATURE PAGE

The undersigned prepared this report titled '2013 Diamond Drilling Report on the Takla-Rainbow Property, Omineca Mining District, British Columbia, Canada', dated March 28, 2014, to document the exploration fieldwork carried out by Manado Gold Corp. from October 9 to November 18, 2013.

Dated: March 28, 2014

Signed by,

A circular professional seal for a geoscientist in the Province of British Columbia. The seal contains the text "PROFESSIONAL PROVINCE OF BRITISH COLUMBIA GEOSCIENTIST". A handwritten signature, "J. Douglas Blanchflower", is written across the seal.

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J. Douglas Blanchflower, P. Geo.  
Consulting Geologist

March 28, 2014  
Signature Date

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## STATEMENT OF QUALIFICATIONS

I, **J. DOUGLAS BLANCHFLOWER**, of Aldergrove, British Columbia, DO HEREBY CERTIFY THAT:

- 1) I am a Consulting Geologist with a business office at 25856 – 28<sup>th</sup> Avenue, Aldergrove, British Columbia, V4W 2Z8; and President of Minorex Consulting Ltd.
- 2) I am a graduate of Economic Geology with a Bachelor of Science, Honours Geology degree from the University of British Columbia in 1971. I have practised my profession as a Professional Geologist since graduation. I am familiar with lode gold-silver and porphyry copper-gold mineralizing systems, and have experience writing technical reports.
- 3) I am a Registered Professional Geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (No. 19086) and the Association of Professional Geoscientists of Ontario (No. 1913).
- 4) I am a 'Qualified Person' as defined in Section 1.1 of National Instrument 43-101.
- 5) I was retained by Manado Gold Corp. in September 2013 to manage and supervise an exploration program on the Takla-Rainbow property. Upon completion of the fieldwork I was retained to document the results of the program and submit this report.
- 6) I am responsible for all sections of this report titled '2013 Diamond Drilling Report on the Takla-Rainbow Property, Omineca Mining District, British Columbia, Canada', dated March 28, 2014. My work is based upon personal experience while managing and supervising the fieldwork, publicly-available government reports and documents, and private exploration data and information provided by CJL Enterprises Ltd. and Manado Gold Corp.
- 7) I am independent of Manado Gold Corp. as defined in Section 1.5 of National Instrument 43-101.

Respectfully submitted by,



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**J. Douglas Blanchflower, P. Geo.**  
Consulting Geologist

Dated at Aldergrove, British Columbia, Canada this 28<sup>th</sup> day of March, 2014

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**- TABLE OF CONTENTS -**

	<b>Page No.</b>
<b>DATE AND SIGNATURE PAGE</b> .....	i
<b>STATEMENT OF QUALIFICATIONS</b> .....	ii
<b>TABLE OF CONTENTS</b> .....	iii
<b>1 SUMMARY</b> .....	v
<b>2 INTRODUCTION</b> .....	1
2.1 Introduction .....	1
2.2 Sources of Information .....	1
2.3 Acknowledgements .....	1
2.4 Abbreviations and Units of Measure .....	2
<b>3 PROPERTY DESCRIPTION and LOCATION</b> .....	4
3.1 Property Description and Location .....	4
3.2 Property Ownership .....	4
3.3 Environmental, Liabilities and Permitting Issues .....	6
<b>4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY</b> .....	6
4.1 Accessibility .....	6
4.2 Climate and Vegetation .....	6
4.3 Local Resources and Infrastructure .....	7
4.4 Physiography .....	7
<b>5 HISTORY</b> .....	8
<b>6 GEOLOGICAL SETTING and MINERALIZATION</b> .....	13
6.1 Regional Geology .....	13
6.2 Property Geology .....	14
6.3 Mineralization .....	20
<b>7 2013 EXPLORATION PROGRAM</b> .....	23
7.1 Drill Hole GPS Survey .....	23
7.2 Avalanche Assessment .....	23
7.3 Diamond Drilling .....	23
7.4 Discussion of Diamond Drilling Results .....	25
<b>8 SAMPLE PREPARATION, ANALYSES AND SECURITY</b> .....	32
8.1 Sample Preparation .....	32
8.2 Sample Analyses and Assays .....	33
<b>9 DATA VERIFICATION</b> .....	33
9.1 2013 Quality Assurance and Quality Control Procedures and Results .....	33
<b>10 CONCLUSIONS AND RECOMMENDATIONS</b> .....	35
<b>11 STATEMENT OF EXPENDITURES</b> .....	36
<b>12 REFERENCES</b> .....	37

## - LIST OF TABLES -

Table No.		Page No.
3.1	List of Takla-Rainbow Mineral Tenures .....	4
5.1	Summary of Takla-Rainbow Exploration History .....	11
6.1	Table of Formations .....	16
7.1	2013 Diamond Drill Hole Information .....	24
7.2	Significant Weighted Average Diamond Drill Hole Intercepts.....	26

## - LIST OF APPENDICES -

Appendix No.	
I	2013 Diamond Drilling Data and Enlarged Drilling Plan and Cross-Sections
III	Drill Sample Assay and Analytical Results – Acme Analytical Laboratories (Vancouver) Ltd.
III	Check Assay Results – ALS Minerals Canada Ltd.
IV	Takla Rainbow Drill Program, 2013 QA/QC Review, March 2014 by J. McCrea
V	Avalanche Risk Assessment of Takla-Rainbow Property by Sean Fraser
VI	Drill Hole Survey Plans by W D McIntosh Surveys

## - LIST OF PHOTOGRAPHS -

Photograph No.		Page No.
4.1	Takla-Rainbow field camp and core storage looking southwestward.....	7
4.2	View of the Twin Creek valley looking northeastward .....	7
7.1	Re-contoured drill site TR13-88 .....	25
8.1	Silver Creek drill core processing building.....	32

## - LIST OF ILLUSTRATIONS –

Figure No.		Page No.
3.1	Location Map, Takla-Rainbow Property.....	3
3.2	Mineral Tenures Map, Takla-Rainbow Property .....	5
6.1	Regional Geology Map, Takla-Rainbow Property.....	13
6.2	Property Geology Map, Takla-Rainbow Property .....	18
6.3	Historic Drilling Map, Takla-Rainbow Property .....	22
7.1	Diamond Drill Hole Plan, Takla-Rainbow Property .....	27
7.2	Drill Section 28 NW, Takla-Rainbow Property .....	28
7.3	Drill Section 33 NW, Takla-Rainbow Property .....	29
7.4	Drill Section 35 NW, Takla-Rainbow Property .....	30
7.5	Drill Section 37 NW, Takla-Rainbow Property .....	31

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## 1 SUMMARY

The Takla-Rainbow property (the 'Property' or 'Project') is situated near the headwaters of Twin Creek, approximately 36 km east of Germansen Landing, 152 kilometres north-northwest of Fort St. James, or 156 kilometres northeast of Smithers in the Omineca Mining Division of northcentral British Columbia, Canada.

The Property is comprised of 6 contiguous mineral tenures, covering a total of 4,545.34 hectares, with a central block of 5 mineral tenures covering the known mineralization and field camp, and a mineral tenure covering the access road along Twin Creek. The centre of the property, excluding the road access, is located at latitude 55° 38' 51" North by longitude 125° 17' 31" West or within NTS map sheet 93N/11. Manado Gold Corp. ('Manado') operates the property subject to terms of an Option to Purchase agreement with C.J.L. Enterprises Ltd. ('CJL'), based in Smithers, B.C. which is the registered owner of the subject mineral tenures.

In early September 2013 Manado retained Minorex Consulting Limited ('Minorex') to supervise and manage a limited diamond drilling program on the Property and later prepare this report documenting results of this drilling program. Following a period of project planning and permitting, a differential GPS survey of the historic drill hole collars was carried out on October 9<sup>th</sup>; an avalanche risk assessment evaluation was undertaken on October 31<sup>st</sup>; and then five NQ2-size diamond drill holes, totalling 605.8 metres, were completed during the period of November 3<sup>rd</sup> to 18<sup>th</sup>.

Seasonal vehicular access to the Property is possible via the Leo Creek and Driftwood Forest service roads from Fort St. James. Alternative access is possible via a chartered helicopter from Prince George, Fort St. James, or Smithers, B.C. Yellowhead Helicopters Ltd. maintains a year-round helicopter base with a Bell Jet Ranger 206 in Fort St. James, B.C.

The subject mineral tenures cover the headwaters and drainage of Twin Creek which flows through a broad southeasterly trending valley to Kwanika Creek. The terrain is rugged sub-alpine to alpine with elevations ranging from 1,150 metres (3,772 feet) to 1,955 metres (6,412 feet). The climate is typical of northcentral British Columbia with cool summers and cold winters. The average temperature for this area is 3.1°C with a peak average monthly temperature of 21.9°C in July and an average monthly low of -15.8°C in January. The region receives an average of 295 mm of rainfall and 192 cm of snowfall annually, with 138 days per year where precipitation exceeds 0.2 mm. The Property is snow-covered from late October to May.

The area within and adjacent to the current Property has received intermittent exploration attention since 1969 when the NBC Syndicate identified a 2,100- by 1,800-metre copper-in-soil anomaly on their Twin claims. Since then Falconbridge Nickel Mines Ltd. (1971), Westfrob Mines Ltd. (1972), Hudson Bay Mining and Exploration (1973), Amir Mines Ltd. (1983), Imperial Metals Corp. (1983-88), Eastfield Resources Ltd. (1990), Cathedral Gold Corp. (1990-91) and Geoinformatics Exploration/Kiska Metals Corporation (2005-10) have carried out various exploration programs. This work has included: several survey control grids; reconnaissance and detailed geological mapping; soil and rock geochemical sampling; airborne electromagnetics, magnetics and radiometric surveys; ground magnetics, VLF and I.P. surveys; and several diamond drilling campaigns (106 holes totalling 20,029 m).

The Takla-Rainbow property covers a fault-bounded embayment of Upper Triassic Takla Group and Lower Jurassic Twin Creek Succession volcanic rocks that has been intruded by phases of the Early Jurassic to Early Cretaceous Hogem batholith. The property is transected by the northwesterly trending Twin Creek Fault, an inferred high angle fault with westward vertical displacement that is reflected by the Twin Creek

drainage. Rocks underlying the property are all part of the Quesnel Terrane which is comprised of Paleozoic and Mesozoic island arc and rift trough assemblages that formed above an easterly dipping subduction zone situated outboard of ancestral North America.

The known copper-gold mineralization within the Property occurs in four zones, called the Red, West, East and South zones. Within the West, East and South zones, mineralization reportedly occurs in parallel, steeply dipping, northwest-striking zones with increased shearing, silicification and hydrothermal alteration within or adjacent to intrusive rocks. The mineralization and alteration within the Red Zone is more similar to that commonly associated with calc-alkaline porphyry deposits. The West Zone has received most of the drilling attention to delineate the known gold, silver and copper-bearing mineralization while the other zones have only been sparingly tested with drilling.

The 2013 exploration program was carried out during the period of October 9 to November 18, 2013. It included: a GPS survey of existing drill hole collars and preparation of a drill hole and topographic plan; an avalanche risk assessment and report; and a five hole (605.8 m), helicopter-supported diamond drilling program.

## Conclusions and Recommendations

The results for drill holes TR13-84 (-90°) and TR13-85 (-45°), that were collared from the same drill pad within the West Zone, failed to confirm the gold mineralization reportedly intersected by the two historic drill holes DDH-013 and DDH-039. It is suspected that local faulting between the historic and recent drill holes may have displaced the reported mineralization. Also within the West Zone, drill hole TR13-86 tested its northwestern extension, and intersected several 8- to 10-metre intervals with interesting but lower grade gold and silver-bearing sulphide mineralization.

Drill holes TR13-87 and -88 tested the central and southeastern extension of the West Zone respectively. Both drill holes intersected several mineralized zones with strong to intense quartz flooding and pyrite mineralization with associated trace to significant precious and base metal values. Drill hole TR13-88 returned a 24.52-metre intersection near its terminus with a weighted average grade of 2.011 gpt gold and 2.0 gpt silver, including a 6.0-metre intersection (68.0 to 74.0 m) grading 4.225 gpt gold, 4.0 gpt silver and 0.36% copper.

Total cost of the 2013 exploration program, excluding preparatory work and applicable taxes, was \$269,845.18.

It is recommended that further diamond drilling be undertaken southeast of the known West Zone, in the vicinity of drill hole TR13-88 and southeastwardly through the poorly tested East Zone. Furthermore, detailed geological and basal till geochemical sampling should be carried out over the South Zone. The South Zone has received historic exploration attention resulting in the identification of several coincident copper- and gold-in-soil geochemical anomalies with both anomalous ground magnetics and I.P. geophysical features.

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## 2 INTRODUCTION

### 2.1 Introduction

The Takla-Rainbow property is comprised of 6 mineral tenures, covering 4,545.34 hectares, situated within the Omineca Mining Division, British Columbia, Canada. This property is being operated by Manado Gold Corp. subject to terms of an Option to Purchase agreement with CJL Enterprises Ltd. of Smithers, B.C. which is the registered owner of the subject mineral tenures.

In early September 2013 Manado retained Minorex Consulting Limited to supervise and manage a limited diamond drilling program on the Property and later prepare this report ('Report') documenting results of this drilling program. Following a period of project planning and permitting, a differential GPS survey of the historic drill hole collars was carried out on October 8<sup>th</sup> and 9<sup>th</sup>, an avalanche risk assessment was undertaken on October 31<sup>st</sup> and the diamond drilling program followed during the period of November 3<sup>rd</sup> to 18<sup>th</sup>. A total of five NQ2-size diamond drill holes, totalling 605.8 metres, were completed.

The author of this report, J. Douglas Blanchflower, P. Geo., consulting geologist and officer of Minorex Consulting Limited, managed the logistics of the drilling program on behalf of Manado, supervised the fieldwork and prepared this Report. This report is intended to be a comprehensive documentation of the subject drilling program and should be read in its entirety.

### 2.2 Sources of Information

The details and results of the 2013 diamond drilling program have been documented based upon the author's personal experience while managing and supervising the fieldwork.

CJL and Manado provided the author with available exploration data, including reports, maps and other public and private information pertaining to the Property. In addition, the author has downloaded several pertinent geological and assessment reports that are publicly available from the British Columbia Ministry of Energy, Mines and Petroleum Resources website:

<http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx>

The regional geology setting and historical exploration information referenced in this Report were documented by assessment reports prepared and filed by a variety of professional geologists on behalf of the various property owners at the time, and approved for assessment credit by the British Columbia Ministry of Energy and Mines, Mines and Petroleum Resources ('BCMEMP'). This information appears to be of good quality and the author has no reason to believe that any of the information is inaccurate. Technical reports and other documents used in the preparation of this Report are listed in the References section of this report.

### 2.3 Acknowledgements

The author wishes to thank the officers and directors of Manado Gold Corp. and CJL Enterprises Ltd. for providing the technical materials and assistance required to prepare this report.

The management and personnel of CJL provided excellent lodging, meals and help to the field crews of Minorex and More Core Diamond Drilling Services ('More Core') during the fieldwork. In addition to the several other contractors providing services to the Project, Yellowhead Helicopters Ltd.'s Bell Jet Ranger 206, based in Fort St. James, provided the air support for the field crews and equipment during the drilling program.

## 2.4 Abbreviations and Units of Measure

Metric units are used throughout in this report and costs are in Canadian Dollars (CAD\$). Market gold or silver metal prices are reported in US\$ per troy ounce. A list of abbreviations that may be used in this report is provided below.

%	per cent	l	litre
AAS	atomic absorption spectrography	li	limonite
AES	atomic emission spectrometry	m	metre
Ag	silver	m <sup>2</sup>	square metre
AMSL	above mean sea level	m <sup>3</sup>	cubic metre
Au	gold	Ma	million years ago
AuEq	gold equivalent grade	mg	magnetite
Az	azimuth	mm	millimetre
b.y.	billion years	mm <sup>2</sup>	square millimetre
CAD\$	Canadian dollar	mm <sup>3</sup>	cubic millimetre
cl	chlorite	mn	pyrolusite
cm	centimetre	Moz	million troy ounces
cm <sup>2</sup>	square centimetre	ms	sericite
cm <sup>3</sup>	cubic centimetre	Mt	million tonnes
cc	chalcocite	mu	muscovite
cp	chalcopyrite	m.y.	million years
cu	copper	NI 43-101	National Instrument 43-101
cy	clay	opT	ounces per short ton
°C	degree Celsius	oz	troy ounce (31.1035 grams)
°F	degree Fahrenheit	Pb	lead
DDH	diamond drill hole	pf	plagioclase
ep	epidote	ppb	parts per billion
ft	feet	ppm	parts per million
ft <sup>2</sup>	square feet	py	pyrite
ft <sup>3</sup>	cubic feet	QA	Quality Assurance
g	gram	QC	Quality Control
gl	galena	qz	quartz
go	goethite	RC	reverse circulation drilling
GPS	Global Positioning System	RQD	rock quality description
gpt	grams per tonne	sb	antimony
ha	hectare	SG	specific gravity
hg	mercury	sp	sphalerite
hm	hematite	st	short ton (2,000 pounds)
ICP	induced coupled plasma	t	tonne (1,000 kg or 2,204.6 lbs)
kf	potassic feldspar	to	tourmaline
kg	kilogram	um	micron
km	kilometre	US\$	United States dollar
km <sup>2</sup>	square kilometre	Zn	zinc

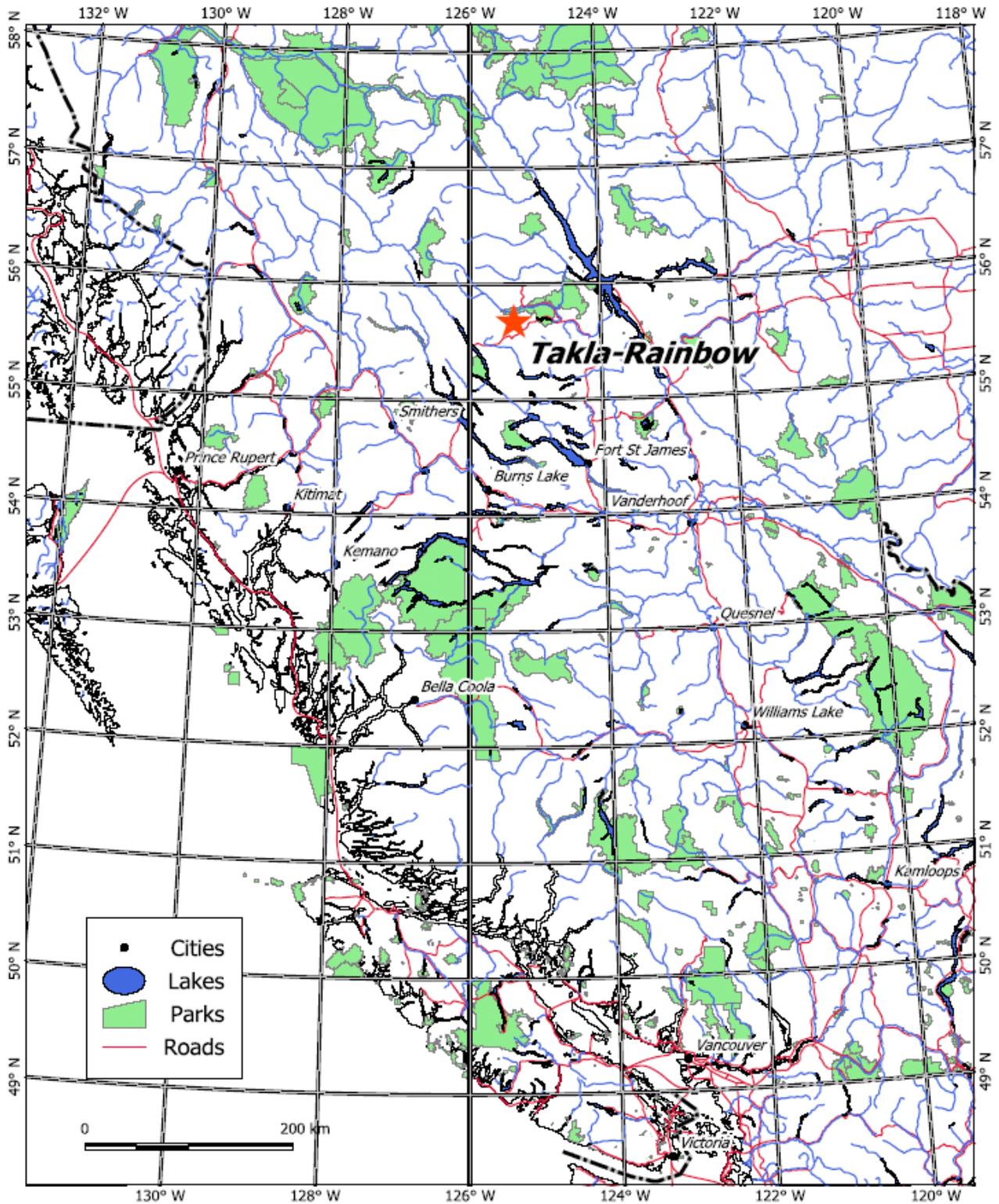


Figure 3.1: Location Map, Takla-Rainbow Property (after MacIntyre, 2004)

### 3 PROPERTY LOCATION and DESCRIPTION

#### 3.1 Property Description and Location

The Takla-Rainbow property is situated near the headwaters of Twin Creek, approximately 36 km east of Germansen Landing, 152 kilometres north-northwest of Fort St. James, or 156 kilometres northeast of Smithers in the Omineca Mining Division of northcentral British Columbia, Canada (see Figure 3.1). The centre of the property, excluding the mineral tenure covering the road access, is located at latitude 55° 38' 51" North by longitude 125° 17' 31" West or within NTS map sheet 93N/11.

The Property is comprised of 6 contiguous mineral tenures with a central block of 5 mineral tenures covering the known mineralization and field camp and a mineral tenure covering the access road along the Twin Creek drainage. The six mineral tenures cover a total area of 4,545.34 hectares. A list of the subject mineral tenures has been tabulated at Table 3.1.

**Table 3.1: List of Takla-Rainbow Mineral Tenures**

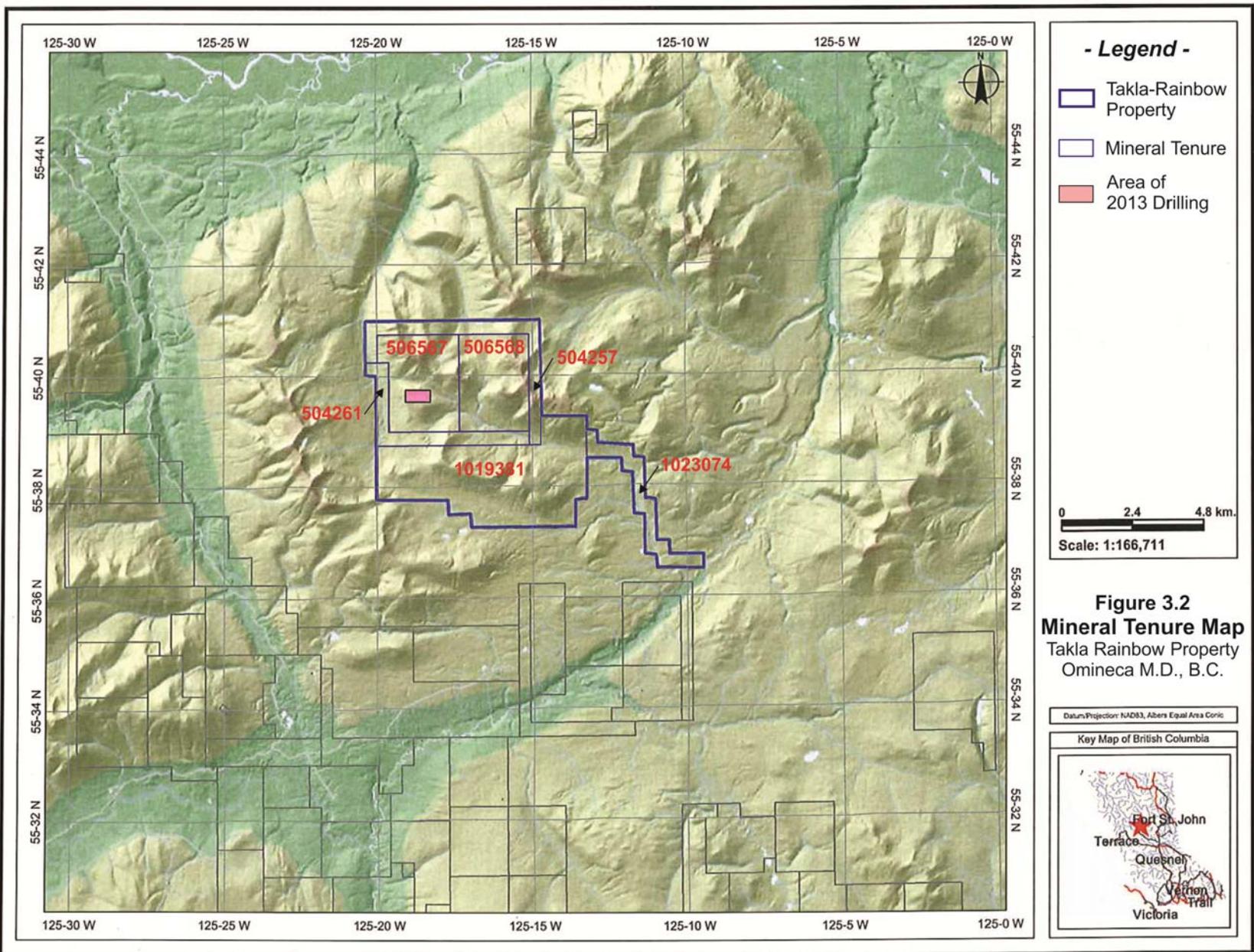
Tenure Name	Tenure No.	Area (ha)	Issue Date	Expiry Date	Registered Owner	Operator
Twin 05	504257	456.08	2005-01-19	2022-03-01	CJL Enterprises Ltd.	Manado Gold Corp.
Twin 0502	504261	346.82	2005-01-19	2022-03-01	CJL Enterprises Ltd.	Manado Gold Corp.
	506567	802.89	2005-02-10	2022-03-01	CJL Enterprises Ltd.	Manado Gold Corp.
	506568	766.41	2005-02-10	2022-03-01	CJL Enterprises Ltd.	Manado Gold Corp.
Twin South	1019381	1826.11	2013-05-09	2014-05-09	CJL Enterprises Ltd.	Manado Gold Corp.
Twin Road	1023074	347.03	2013-10-15	2014-10-15	CJL Enterprises Ltd.	Manado Gold Corp.
<b>Total Area</b>		<b>4,545.34</b>				

*Note: Based on information obtained from BCMEMPR website on February 10, 2014*

#### 3.2 Property Ownership

The Property is owned entirely by CJL Enterprises Ltd., subject to the terms of an Option to Purchase agreement with Manado Gold Corp. According to Manado's news release dated September 24, 2013, Manado will be able to acquire a 100-per-cent interest in the Takla-Rainbow property by paying CJL cash payments of \$150,000, issuing 600,000 common shares and incurring \$250,000 exploration expenditures over four years. CJL will retain a 2-per-cent net smelter return royalty on the property.

Manado may purchase each 1 per cent of the royalty by making separate cash payments of \$1-million to CJL. Commencing on the fifth anniversary of the agreement, Manado will be required to pay to CJL an annual advanced royalty payment. All advance royalty payments will be credited to and recoverable from any future royalty payable to CJL. The advance royalty payment will cease upon commencement of commercial production.



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### 3.3 Environmental, Reclamation and Permitting Issues

This property has a long exploration history resulting in a 14.2 gravel access road, several local drill site access roads, cleared drill site pads and the construction of a seasonal field camp with a drill core storage area. Prior to the commencement of the 2013 drilling program, Kiska Metals Corporation (formerly Geoinformatics Exploration Canada) maintained a general exploration bond covering any existing environmental liabilities within their tenure holdings and any disturbances as a result of their 2005 to 2010 exploration work in the region. This bond covered: the eventual decommissioning and reclamation of the main access road along Twin Creek and the reclamation of the dilapidated Takla-Rainbow field camp.

A property examination was carried out prior to the commencement of the 2013 drilling program. It was apparent during this trip that the 2013 field crew would not be able to utilize the field camp during the drilling. Most of the wooden tent frames had collapsed, and the insulated and metal-roofed cookhouse/dry had been destroyed by bears and porcupines.

Upon agreeing to the Option to Purchase with CJL, Manado assumed the existing environmental liabilities on the property, and posted a \$40,000 reclamation bond to cover the decommissioning of the access road, and the reclamation of the existing field camp plus 10 drill pads that were originally proposed for the 2013 drilling program. A 3-year Notice of Work has been filed and approved for the proposed exploration work.

## 4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

### 4.1 Accessibility

Seasonal vehicular access to the Property is possible via the Leo Creek and Driftwood Forest service roads (FSR's). From Fort St. James, drive north along the paved Tachie Road for approximately 50 kilometres to the junction of the Leo Creek FSR (0 km Leo Creek FSR; Radio Frequency 151.655). Continue driving north and northwestwardly on the Leo Creek FSR to the 68-kilometre mark. Turn right on to the Driftwood FSR (Radio Frequency 151.655) and continue northwesterly to the 54-kilometre mark. Turn right where the signage reads 'Tsayta Lake Lodge', and continue on this connector (the old Bralorne Takla Mine Road) to the 25.2-kilometre mark. Turn right at the split in the road and continue for another 30 kilometres on the Kwanika road to the junction of the Twin Creek Road. Turn left and drive 14.2 kilometres along the Twin Creek access road to the old Takla-Rainbow campsite, situated immediately adjacent to the 2013 drilling area (see Figure 3.2).

Alternative access to the Property is possible via a chartered helicopter from Prince George, Fort St. James, or Smithers, B.C. Yellowhead Helicopters Ltd. maintains a year-round helicopter base with a Bell Jet Ranger 206 in Fort St. James, B.C.

### 4.2 Climate and Vegetation

The climate is typical of northcentral British Columbia with cool summers and cold winters. The average temperature for this area (based on data from Fort St. James) is 3.1°C with a peak average monthly temperature of 21.9°C in July and an average monthly low of -15.8°C in January. The region receives an average of 295 mm of rainfall and 192 cm of snowfall annually, with 138 days per year where precipitation exceeds 0.2 mm. The Property is snow-covered from late October to May.

### 4.3 Local Resources and Infrastructure

There are no permanent infrastructures or facilities on the Property. A dilapidated 20-man exploration camp, including an insulated and metal-roofed cookhouse/dry and several collapsed tent frames, plus a network of historical exploration roads have resulted from this property's long exploration history. The 14.2 gravel access road plus local drill site roads can be utilized for future exploration work.

The Property is located approximately 70 km to the southwest of the Kemess power line, and B.C. Railway Company maintains an active rail line to Fort St. James (approximately 200 km via road) that could potentially be used for a future mining operation. There is sufficient water available in the immediate vicinity of the property to support both exploration and potential mining activities.



**Photograph No. 4.1: Takla-Rainbow field camp and core storage**  
(Photograph from 2004 technical report by D. MacIntyre, 2004)

### 4.4 Physiography

The Takla-Rainbow property covers the headwaters of Twin Creek which flows through a broad southeasterly trending valley to Kwanika Creek. The terrain is rugged sub-alpine to alpine with elevations ranging from 1,150 metres (3,772 feet) to 1,955 metres (6,412 feet).



**Photograph No. 4.2: View of the 1988 Cathedral Gold field camp at the headwaters of the Twin Creek valley looking northeastward**  
(Photograph from 1988 Cathedral Gold investor brochure)

At lower elevations the glaciated valley bottoms are covered by a variable thickness of glacial, fluvio-glacial and colluvial sediments which are dominated by a flora of pine, fir and spruce (Buskas and Bailey, 1993). This gives way to alpine meadows and ridges, and at higher elevations the flora are dominated by lichens, grasses, wild flowers and patches of dense pine scrub. A variety of wildlife has been noted around the property including black and grizzly bears, wolverine, marmots, caribou and moose (Buskas and Bailey, 1992).

Outcrop on the Takla-Rainbow property is scarce and limited to the tops of hills or incised creek valleys. There is no rock exposure in the vicinity of drilling on the West Zone.

## 5 HISTORY

The exploration history of the Takla-Rainbow property is well described by Buskas and Bailey (1993) in Assessment Report 22372 and later updated in the 43-101 technical report by MacIntyre (2004). The following text is quoted from the report by MacIntyre (2004).

*"The first recorded exploration activity in the Twin Creek area dates back to 1869 when placer gold was discovered on Vital Creek, 10 km northwest of the Takla-Rainbow property. Extensive prospecting in the area resulted in the discovery of a number of showings and additional placer occurrences around the Hogem Batholith. Placer gold production has been reported for Twin Creek, Silver Creek, Kenny Creek, 20 Mile Creek and Vital Creek but the source gold in these placer deposits is still not fully explained. The most significant producing mine in the area was the Bralorne Takla Mercury mine located 12 kilometres southwest of the property which produced 59,968 kilograms of mercury between 1943 and 1944.*

*Interest in the porphyry copper potential of the Twin Creek area peaked between 1969 and 1973. At this time the Lorraine porphyry deposit, located 25 kilometres to the northwest was being actively explored. The first published reference to the Twin claims is contained in Assessment Report 2501 which was filed with the B.C. Department of Mines and Petroleum Resources in 1970. This report was produced by Bacon and Crowhurst Limited for the NBC Syndicate (Bacon, 1970) and describes the results of geologic mapping and geochemical surveys done in 1969 and 1970 along the south facing slope north of Twin Creek. These surveys outlined a strong 1,800 to 2,100 metre long copper soil anomaly trending south-easterly, parallel to the contact between the Hogem Batholith to the north and the Takla volcanics to the south. South of this anomaly, an apparently parallel zone of predominantly pyrite mineralization was recognized, but the copper values found in the soil did not justify further follow-up.*

*In 1971 Falconbridge Nickel Mines Ltd. optioned the Takla-Rainbow property from the NBC Syndicate and carried out more geochemical surveys, geophysics and drilling of anomalies and showings mainly north of Twin Creek. According to Buskas and Bailey (1992) ten holes, totaling 141 metres of AX core were drilled and split for assay. These drill holes intersected altered rocks with copper values ranging from 0.24% to 0.35%. This work was not filed for assessment credit and no publicly available reports are available.*

*In 1971 and 1972, Noranda Exploration conducted a program on their Loop property which overlaps with the northeast corner of the present day Takla-Rainbow property. Their work consisted of a soil geochemical survey which outlined several zones of greater than 140 ppm copper and an induced*

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polarization survey. Further limited work was carried out in 1972 and 1973 by Wesfrob Mines Limited and Hudson Bay Mining and Exploration respectively. Reports pertaining to this work were prepared for internal use but were not filed for assessment credit.

In July of 1981, the property was re-staked by Lorne Warren and Neal Scarfe. They collected two samples from a trench located at approximately 1+80E/1+15S on the West grid that returned 0.57 and 0.68 ounces per ton Au (17.8 and 21.25 grams per tonne Au). This was the first indication that there was gold in the pyritic zone described earlier by W.R. Bacon. Examination of the property by Mattagami Lake Exploration, S.E.R.E.M. and Newmont followed, but apparently did not confirm the results obtained from the trench and the property remained idle until 1983. Amir Mines optioned the six Twin claims in 1983 and contracted Bema Industries Limited to carry out two days of helicopter reconnaissance, prospecting and sampling in order to assess the gold potential of the various gossans in the area (Edmunds, 1983). Analyses of up to 620 ppb Au and 3,900 ppm Cu were obtained from the samples collected.

In 1983 Imperial Metals started a reconnaissance program along the Pinchi fault zone in an effort to evaluate the potential of the general area for lode gold mineralization. A reconnaissance stream traverse along the Twin Creek indicated anomalous samples not only in silts but also in soil samples collected along the banks. Takla and Rainbow claims were staked and in 1984 a grid was established and ground surveys, including detail soil sampling and mapping commenced. Geochemical soil sampling revealed the presence of a 1000 metres by 400 metres gold (>40 ppb) and zinc (>300 ppm) anomaly with some elevated copper values on the northern part of the grid (Morton and Durfeld, 1984). A mineralized outcrop with significant base and precious metal mineralization was also found. At the same time, sampling of the discovery trench on the Twin claims returned 0.92 ounces per ton Au (28.75 grams per tonne Au) in highly pyritic andesitic volcanic rocks (Morton and Durfeld, 1984).

The Twin claims were subsequently optioned by Imperial Metals in the spring of 1985. Work that year consisted of extending the grid to the west detail geologic mapping, soil sampling and an induced polarization geophysical survey (Pesalj, 1985). Soil sampling on the West Grid outlined an area 1,000 metres long by 50 to 100 metres wide with anomalous Au values up to 990 ppb. In addition several smaller anomalous gold zones were also outlined. The induced polarization survey was conducted over both the older East Grid and newer West Grid. On the West Grid a zone of anomalous chargeability was delineated for over 900 metres. This anomaly was assumed to be related to mineralization along the volcanic-intrusive contact. Diamond drilling of this coinciding geochemical and geophysical anomaly led to the discovery of gold-silver-copper mineralization in the form of sulphide-bearing quartz stringers and disseminations in four holes that tested the zone 550 metres along strike and to a depth of 30 metres (Pesalj, 1985). The best intersection was 16.56 grams per tonne Au (0.53 ounces per ton Au) over 1.64 meters in DDH 4.

In 1986 the exploration program included the establishment of three new grids – the North, South and South 2. Geological mapping and geochemical soil sampling was completed on these new grids. Au, Ag and Cu anomalies on the North Grid were outlined across the southern and eastern parts of the grid. On the South and South 2 grids, several large Au anomalies up to 450 metres by 150 metres and 500 metres by 75 metres as well as numerous smaller Au anomalies were defined. Numerous Cu anomalies were also present but primarily on the western part of the South grid (Pesalj and Gorc, 1986). A diamond drilling program of fourteen holes totaling 1,748 metres of BQ core was complete over the main zone on the east and West grids. The mineralized zone was tested over a strike length

of 700 meters and was shown to be both open at depth and to the east along strike. The best intersection in 1986 was from DDH 13 which returned 20.3 grams per tonne Au (0.69 ounces per ton Au) over 1.5 meters (Pesalj, 1987).

In 1987, Imperial Metals continued an aggressive exploration program which included diamond drilling, soil geochemistry, IP and VLF surveys, geologic mapping and prospecting. The main objectives of this program were to continue testing the extent of the main zone mineralization, test a strong geochemical anomaly on the south grid and continue evaluation of the property by additional geophysical and geological surveys and prospecting in an effort to generate new drill targets. Soil sampling of the South grid indicated the continuation of Au anomalies to the south and west of previous sampling with the exception of the southwest corner. The highest anomaly record was 2,360 ppb Au located near a 25 metre wide shear or fault zone. In addition, 4 kilometres of soil traversing were completed with 98 samples being collected. This sampling indicated the presence of anomalous gold in several areas. The results of the VLF survey indicated the presence of several weak to moderate VLF conductors with strikes varying from the regional trend of northwesterly to northerly. The results of the IP survey outlined the presence of several weak northwest to southeast trending chargeability anomalies. The 1987 diamond drilling program resulted in the completion of an additional 23 BQ diamond drill holes totaling 6,042 metres. The first four holes totaling 635 metres were drilled on the South grid. The highest gold value intersected was 1,090 ppb over a 1.52 metre width in TRS 87-3. In TRS 87-4, a one metre interval contained 1.62% Pb, 2.99% Zn and 7.42 oz/ton Ag with no significant gold values present in the hole. Nineteen holes totaling 5,407 metres were drilled on the West grid in order to better define the mineralization discovered by previous drilling. The best intersection was 2.5 metres wide with a grade of 1.15 oz/ton Au and 12 oz/ton Ag (Pesalj, 1987).

In 1988, Imperial Metals conducted a program of diamond drilling and trenching on the West grid. A total of 132 metres of trenches were excavated with the best grab sample grading 11.43 oz/ton gold. Thirty-eight holes totaling 7,472 metres of BQ core were drilled to further delineate the dimensions of the main gold zone. The best assay obtained was in DDH-40 which return 0.836 oz/ton Au over 1.52 metres of core length. Imperial Metals did an internal resource calculation based on the results of the 75 holes totaling nearly 15,000 metres that were drilled into the main zone. This historical estimate suggested the main zone contained a resource of 321,101 tons grading 0.25 ounces per ton Au (Pesalj, 1988, 1989).

No work was done on the property in 1989. In April of 1990 Eastfield Resources Ltd. entered into an agreement with Cathedral Gold Corporation whereby Eastfield could earn a 50% interest in the property by expending \$3,000,000 in cash payments and work expenditures. Eastfield contracted Mincord Exploration Consultants Ltd. to carry out the exploration program. Work done in 1990 included an airborne VLF and magnetometer survey over the claim group (Garratt, 1990). In 1991, additional airborne VLF and magnetic surveys plus extensive soil and rock geochemical surveys were completed (Buskas and Bailey, 1992). This was followed by 679 metres of trenching and drilling of 8 NQ diamond drill holes totaling 1242 metres.

Expenditures incurred between 1969 and 1992 within the boundaries of the current Takla-Rainbow property, as documented by assessment reports filed with the BC Ministry of Energy and Mines, total \$1,744,600 or \$2,546,541 in 2004 dollars. These totals do not include expenditures by Imperial Metals in 1988 as this information was not available to the writer. The majority of expenditures on the property were incurred between 1985 and 1991.”

Table 5.1: Summary of Takla-Rainbow Exploration History

Operator	Year	Work done	Area	Reference
NBC Syndicate	1969-1970	Geologic mapping, 229 soil samples	Property Scale	Bacon, 1970; AR 2501
Falconbridge Nickel Mines Ltd.	1971	geologic mapping, magnetometer survey, trenching, DDH - 10 holes, 141 metres	Red Zone	GEM 1971, p. 203
Wesfrob Mines Ltd.	1972	Magnetometer survey, 16 km	not specified	GEM 1972, p. 453
Amir Mines Ltd.	1983	2 days of helicopter reconnaissance; 23 rock samples	North and South ridges	Edmunds, 1983; AR 12,162
Imperial Metals Corp.	1984	soil geochemistry, 445 samples; 12.2 KM of grid lines; 4 samples for petrography	Twin Creek	Morton and Durfeld 1984; AR13,171
Imperial Metals Corp.	1985	DDH - 4 holes (BQ) - 311.81 metres; geologic mapping, 22 KM of chain and compass line; soil geochemistry, 437 samples; rock geochemistry, 166 samples; IP survey, 8.75 line km	East and West grids	Pesalj, 1985; AR 14,103
Imperial Metals Corp.	1986	geologic mapping; soil geochemistry, 1441 samples; rock geochemistry 82 samples	North and South grids	Pesalj and Gorc, 1986; AR 15,319
Imperial Metals Corp.	1986	DDH - 14 holes – 1,748 metres	East and West grids	Pesalj, 1987; AR 15,487
Imperial Metals Corp.	1987	DDH - 4 holes - 634.59 metres (south grid); 19 holes – 5,407 metres (west grid); soil geochemistry, 271 samples; rock geochemistry, 64 samples; VLF survey, 14.6 km; IP survey, 9.5 km	West and South grids	Pesalj, 1988; AR 16,759

**Table 5.1: Summary of Takla-Rainbow Exploration History (Continued)**

Operator	Year	Work done	Area	Reference
Imperial Metals Corp.	1988	DDH – 38 holes – 7,472 metres; trenching 132 metres	West grid	Pesalj, 1989
Eastfield Resources	1990	VLF survey 424 KM; aeromagnetic survey, 424 km		Garratt, 1990; AR 20,511
Cathedral Gold Corp.	1990 1991	DDH – 8 holes – 1241.6 metres; geologic mapping; rock geochemistry, 975 samples; soil geochemistry 1274 samples; airborne VLF and magnetic surveys 624 km; IP survey 32.6 km; trenching 679 metres	Property-wide	Buskas and Bailey, 1992; AR 22,372
Geoinformatics Expl. Canada	2005	Data compilation, airborne magnetics and radiometrics	Property-wide	T. Worth and G. Bidwell, 2006; AR 28264
Geoinformatics Expl. Canada	2006	Soil and rock geochemistry, geological mapping, 7 drill holes (2,434 m) in Red Zone, 2 holes (639 m) in Rainbow zone	Red and Rainbow Zones	T. Worth and G. Bidwell, 2007; AR 29011
Geoinformatics Expl. Canada	2007	Red Zone, Pole-dipole 3D-IP with 100 m spacing and ground mag; 13 line-km	Red Zone	T. Worth and G. Bidwell, 2008; AR 29891
Geoinformatics Expl. Canada	2008	Recce soil geochemistry on Twin05 & Twin0502 tenures		Bidwell, G., 2009; AR 31012
Kiska Metals Corporation	2010	Helicopter-borne AeoTEM EM-Mag survey, 619 line-km	Property-wide	Bidwell, G. E., 2010 (amended 2011) AR 31933

Geoinformatics Exploration (Canada) Inc. (later merged with Kiska Metals Corporation) carried out detailed exploration of the Property and southward to Tchentlo Lake during the 2005 to 2010 field seasons. This work included: airborne and ground magnetics, airborne radiometrics and electromagnetics, 3D-IP, geological mapping, rock and soil geochemical sampling and diamond drilling on the Red Zone and in the vicinity of the East Zone (called the Rainbow Zone by Geoinformatics).

No further work was carried out on the property until the November 2013 drilling program by Manado.

## 6 GEOLOGICAL SETTING and MINERALIZATION

There are several detailed government and private company reports describing the regional geology. The following text is derived from the British Columbian Geological Survey publication 'The Geology and Mineral Deposits of North-Central Quesnellia; Tezzeron Lake to Discovery Creek, Central British Columbia' by Nelson and Bellefontaine (1996) and the 43-101 technical report by MacIntyre (2004).

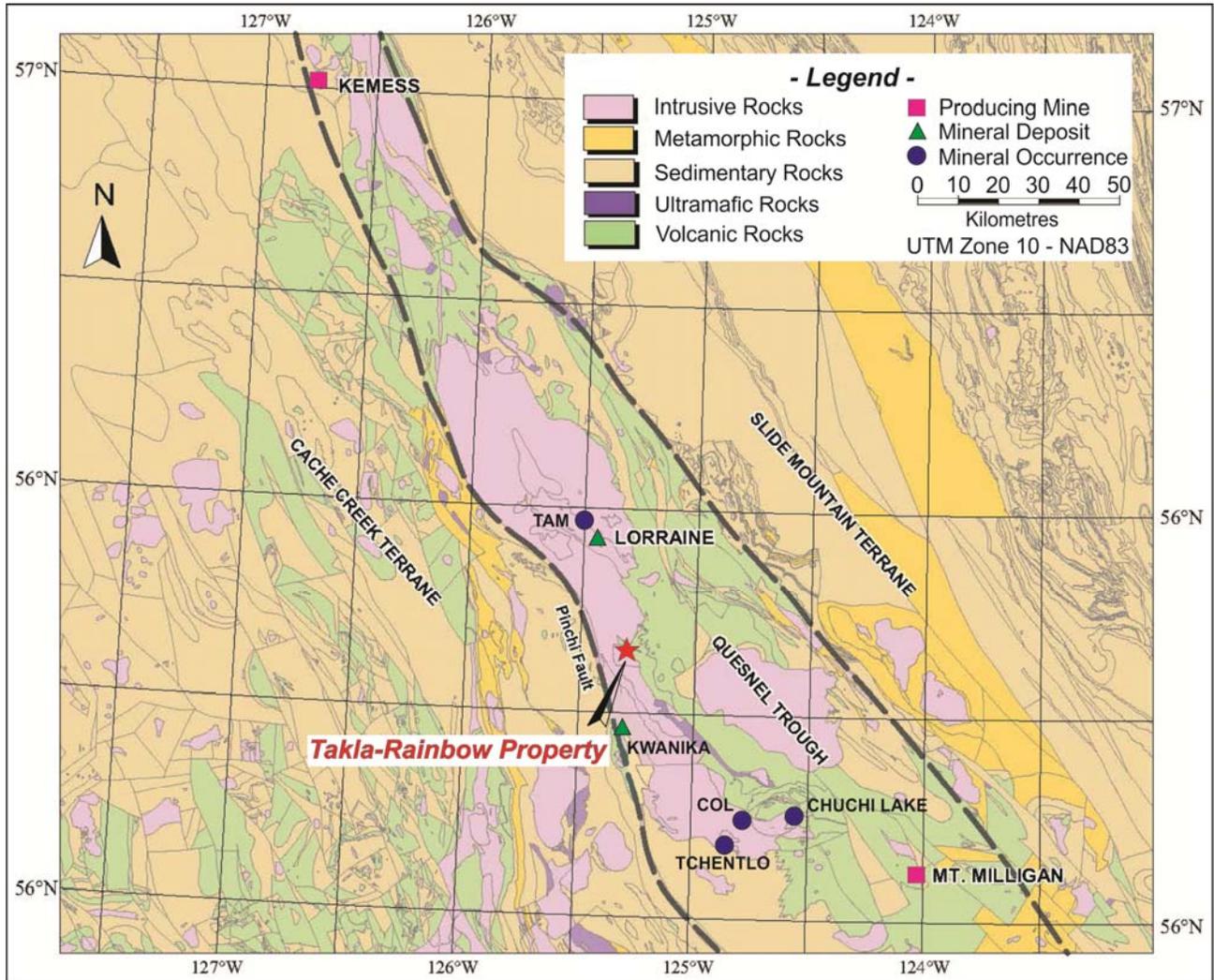


Figure 6.1: Regional Geology Map, Takla-Rainbow Property

### 6.1 Regional Geology

The Takla-Rainbow property is situated within the Quesnel Trough or Quesnellia, a Mesozoic-age island arc terrane juxtaposed against the ancestral North American continental margin (Nelson and Bellefontaine, 1996). The Quesnel Trough is largely comprised of Upper Triassic and Lower Jurassic island arc volcanic and sedimentary units of the Triassic-age Takla Group and the Jurassic-age Chuchi Lake and Twin Creek successions. The Late Triassic and Early Jurassic composite plutons comprising the Hogem Intrusive Suite are presumably the intrusive equivalents of the island arc volcanic units (Nelson and Bellefontaine, 1996). In

the vicinity of the Property Quesnellia is bounded by the Pinchi fault on the west and by the Manson fault on the east. The Pinchi fault separates Permian rocks of the Cache Creek Terrane to the west from the Upper Triassic Takla Group to the east (Garnett, 1978).

The Quesnel Trough hosts several significant porphyry copper-gold deposits that are situated regionally in the vicinity of the Property, including: the Kwanika deposit (538 Mt @ 0.20% Cu; 0.15 gpt Au), situated south of the Property; the Mt. Milligan deposit (445Mt @ 0.215% Cu; 0.415g/t Au) and Chuchi Lake (50Mt @ 0.21% Cu, 0.21g/t Au) to the southeast; and the Lorraine (31.9Mt @ 0.66% Cu, 0.17g/t Au, 4.7g/t Ag), Kemess South (109Mt @ 0.234%Cu; 0.712g/t Au) and Kemess North (400Mt @ 0.224% Cu; 0.409g/t Au) deposits to the north (MINFILE database, 2005). Porphyry copper-gold deposits, such as the Mt. Milligan and Lorraine, are commonly associated with potassically altered diorite, monzodiorite, monzonite, and syenite plugs and stocks, as well as associated coeval andesitic volcanic rocks. These and other significant regional mineral deposits are associated with strong aeromagnetic features that trend both east-west and northwest, and with strong copper-gold stream sediment anomalies.

## 6.2 Property Geology

The following description of the geology within the Takla-Rainbow property is quoted from the technical report by MacIntyre (2004)

*"The Takla-Rainbow property covers the northwest end of a fault bounded embayment of Upper Triassic Takla Group (uTrTW) and Lower Jurassic Twin Creek Succession (unit IJTC) volcanic rocks that has been intruded by phases of the Early Jurassic to Early Cretaceous Hogem batholith (units EJH and EKH). The property is transected by the northwest trending Twin Creek Fault (Figure 4). This fault follows the trend of Twin Creek and is believed to be a high angle normal fault with downward displacement to the west (Nelson et al., 1993). Rocks underlying the property are all part of the Quesnel Terrane which is comprised of Paleozoic and Mesozoic island arc and rift trough assemblages that formed above an east dipping subduction zone situated outboard of ancestral North America. Accretion of Quesnel Terrane with North America is believed to have occurred sometime in the late early Jurassic, possible during the Toarcian period (Nelson et al., 1993). West of the property is the Pinchi dextral strike-slip fault that juxtaposes rocks of the oceanic Cache Creek Terrane (units PrrCC and PJCS) with gabbroic phases of the Hogem Batholith (unit LTrJHgb). The timing of movement on this fault is believed to be Late Cretaceous or Early Tertiary. Movement on the Twin Creek normal fault must be Early Cretaceous or younger as it offsets Early Cretaceous phases of the Hogem Intrusive Suite.*

### **Takla Group - Witch Lake Formation (uTrTW)**

*The Witch Lake formation of the Upper Triassic Takla Group underlies the area northeast of the Twin Creek fault. According to Buskas and Bailey (1992), exposures in this area are mainly red and maroon to grey, pyroxene bearing basaltic or andesitic flows, flow breccia and pyroclastic breccia with red sandstone and siltstone interbeds. These rocks lie stratigraphically beneath poly lithologic breccias of the Twin Creek Formation. In general the Witch Lake formation is interpreted to be in fault contact with the younger Twin Creek formation. However, an irregular unconformity is apparently exposed along a southeasterly-trending ridge southeast of the property where Twin Creek rocks are observed sitting on maroon basaltic rocks of the Witch Lake formation.*

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Regionally, the Witch Lake formation includes agglomerate, lapilli tuff, tuff-breccias, trachyte and latite flows and related epiclastic sedimentary rocks. Volcanic members typically contain abundant pyroxene and feldspar phenocrysts and locally some hornblende. The top of the Witch Lake formation west of Kwanika Creek includes bright red to maroon augite-olivine phyric basalt flows overlain by red sandstone. These rocks were formerly assigned to the Plughat Mountain formation (Nelson et al., 1993) but are now included with the Witch Lake formation (Massey et al., 2003).

### **Twin Creek Succession (IJTC)**

In the Twin Creek area the red basalt at the top of Witch Lake formation is disconformably overlain by shallow dipping andesite flows interbedded with heterolithic lapilli tuff, agglomerate, crystal tuff and local heterolithic volcanic conglomerate. Flow rocks are characterized by abundant small feldspar phenocrysts plus lesser augite and hornblende. These rocks underlie the eastern and southern portions of the Takla-Rainbow property and represent the type lithologies for the Twin Creek formation of Nelson et al., 1993. Although originally assigned to the Takla Group, they differ in apparent age and lithology and should probably be kept as a distinct lithologic succession. Overall these rocks are similar to andesitic volcanics of the Jurassic Hazelton Group of the Stikine Terrane.

Buskas and Bailey subdivided the Twin Creek formation (their Unit 2) into three mapable units based on composition and texture (Figure 4). Contacts are generally gradational within and between map units. The most common rock type is polyolithic breccia (IJTCa) which underlies almost all of the northern and central part of the Takla Rainbow property. This unit is generally poorly sorted with subrounded to subangular clasts of basalt, andesite or latite and intrusive equivalents of these rocks of which some are represented in the Hogem Batholith. Interbedded with massive to poorly bedded breccia horizons are occasional volcanoclastic sandstone and siltstone units (IJTCb). For the most part the poorly sorted breccias of the lower part of the Twin Creek succession are considered to have been derived by slumping, possibly as massive debris flows. However, pyroclastic breccias and tuffs are also present and these rocks have angular clasts ranging in grain size from ash to block.

Buskas and Bailey (1992) state that their subunit 2B (unit IJTCb in this report) is composed mainly of massive to poorly bedded tuffaceous siltstone and sandstone but with some breccia interbeds. Compositionally this unit is much more homogeneous than unit IJTCa being mainly of intermediate composition and dominantly feldspathic. Modal quartz has not been recognized in either one of these two units. In the southern and eastern part of the property monolithic breccias of latitic or andesitic composition with interclast material of the same composition as the clasts crop out and appear to overlie rocks of units IJTCa and IJTCb. These rocks are characterized by an abundance of plagioclase and often display a well-developed trachytic, or flow texture. Buskas and Bailey (1992) interpreted these rocks to represent a brecciated volcanic dome(s) of probable subaerial formation. Its contact with underlying rocks is generally sharp or gradational over only a few metres. Subunit 2C is the youngest volcanic unit represented within the Takla Rainbow property.

Covering low lying areas of the Takla Rainbow property is a veneer of glacial, fluvio-glacial and colluvial deposits of variable thickness. These deposits are almost certainly related to Pleistocene glaciation which has affected much of the region. Glacial transport directions are variable and reflect local topographic trends rather than regional ice sheet migration.

**Table 6.1: Table of Formations (after MacIntyre, 2004)**

Terrane	Unit ID	Age	Name	Description
Overlap	EKgd	Early Cretaceous	unnamed	granodiorite and diorite
Overlap	EKH	Early Cretaceous	Hogem Intrusive Suite	granite, often orthoclase megacrystic; also quartz syenite and alaskite phases
Quesnel	EJHhy	Early Jurassic	Hogem Intrusive Suite/Twin Creek Succession	hybrid zone of metasomatized volcanics of the Twin Creek succession and monzonite and granodiorite phases of the Hogem intrusive suite
Quesnel	EJHqm	Early Jurassic	Hogem Intrusive Suite	equigranular to porphyritic monzonite, quartz monzonite, granodiorite, monzodiorite, diorite
Quesnel	EJHdg	Early Jurassic	Hogem Intrusive Suite	diorite and monzodiorite
Quesnel	LTrJHgb	Late Triassic to Early Jurassic	Hogem Intrusive Suite	diorite, minor gabbro, pyroxenite and hornblendite
Quesnel	IJTC	Lower Jurassic	Twin Creek Succession	heterolithic lapilli tuff, plagioclase-augite and plagioclase, quartz porphyritic flows and agglomerate/tuff breccia
Quesnel	uTrTW	Upper Triassic	Takla Group - Witch Lake Formation	andesite augite (+/- plagioclase +/- hornblende) porphyry agglomerate, lapilli tuff and epiclastic sediments; trachyte flows and tuff-breccias; andesite plagioclase (+/- augite) porphyry latite flows and agglomerates
Quesnel	uTrTIm	Upper Triassic	Takla Group	reefoid limestone, fossil bearing
Quesnel	muTrTsf	Middle to Upper Triassic	Takla Group	interbedded black argillite, greywacke, siltstone, shale and minor limestone, minor ash tuff, tuffaceous argillite, basalt breccia and agglomerate in some localities
Cache Creek	PJCS	Lower Permian to Upper Jurassic	Cache Creek Group - Sowchea Succession	light to medium grey phyllite, siltstone, siliceous argillite, ribbon chert, slate, intraformational siltstone, conglomerate, chert conglomerate, platy quartzite and metachert; lesser amounts of recrystallized limestone, dark grey phyllite, greenstone (m)
Cache Creek	PTrCC	Upper Pennsylvanian to Upper Triassic	Cache Creek Group - Copley Limestone	dark-grey and grey micritic to clastic limestone (mostly Permian and may include undifferentiated Triassic); massive dark-grey to blue-grey recrystallized limestone, lesser bedded limestone, minor marble; lesser greenstone chert and argillite

### **Hogem Intrusive Suite**

According to Pesalj (1988) intrusive rocks mapped and drilled on the Takla-Rainbow property belong to the eastern margin of the Hogem Batholith, which consists of a variety of intrusive rock types including granite, granodiorite, monzonite, monzodiorite, quartz diorite, diorite and syenite. Within the property boundaries, most of the intrusive rock units can be interpreted as belonging to Phase I of the Hogem intrusive suite (Garnett, 1978).

Dykes and small stocks of granitic and dioritic porphyries are probably related to the late phases of the Hogem intrusive event (Phase III).

Buskas and Bailey (1992) state that almost all of the northwestern and southwestern parts of the Takla Rainbow property are underlain by intrusive rocks and, on the basis of mineralogy and apparent age, these can be divided into two distinct groups. The oldest intrusive rocks are thought to be of Lower Jurassic age and, on the basis of compositional similarities may be comagmatic with the volcanic rocks of the Twin Creek formation. These rocks crop out in the northwest part of the property (Figure 4) as a zoned stock ranging from an equigranular to slightly porphyritic diorite to monzodiorite marginal phase (unit EJHdga), through an intermediate equigranular monzodiorite to monzonite phase (unit EJHdgb) into a quartz monzonite to granodiorite phase (unit EJHqm). The stock intrudes rocks of the Twin Creek formation. The main mafic mineral of these intrusive rocks is hornblende although minor amounts of pyroxene have been recognized within diorite of the border phase. Biotite, although present, is not common within Early Jurassic intrusive rocks of the Takla Rainbow property although biotite granodiorite crops out to the north. A Lower Jurassic age for these intrusive rocks is supported by radiometric dating carried out on similar rocks within the Hogem Batholith (Garnett, 1978). Diorite and monzodiorite similar unit EJHdga also occur as small plugs and dyke-like bodies within volcanic rocks outside the main intrusive complex.

A distinctive coarse-grained to megacrystic hornblende biotite granodiorite to granite (unit EKH) underlies the southern and southwestern part of the Takla Rainbow property (Figure 4). According to Buskas and Bailey (1992) this intrusion also cuts all rocks and structures within the Twin Creek volcanic assemblage thus implying a younger, probable Early Cretaceous age. This age is supported by potassium-argon isotopic dating of compositionally similar megacrystic intrusive rocks within the Hogem Batholith which also give Early Cretaceous ages (Garnett, 1978).

The youngest intrusive rocks on the Takla-Rainbow property are felsic dykes and elongate bodies of commonly pink porphyritic quartz syenite to granite (unit EKHp) that cut volcanic rocks of the Twin Creek formation. These intrusions are compositional similarity to unit EKH and are interpreted to be of a similar age. Porphyritic intrusive rocks commonly occur within or near areas of gold mineralization suggesting a genetic link. Minor mafic to intermediate dykes also occur throughout the property and may be feeders to Takla volcanic rocks. In addition to these dykes, feldspar porphyry dykes, possibly related to Early Jurassic phases of the Hogem Batholith, are reported to have been intersected in drill holes in the western part of the property.

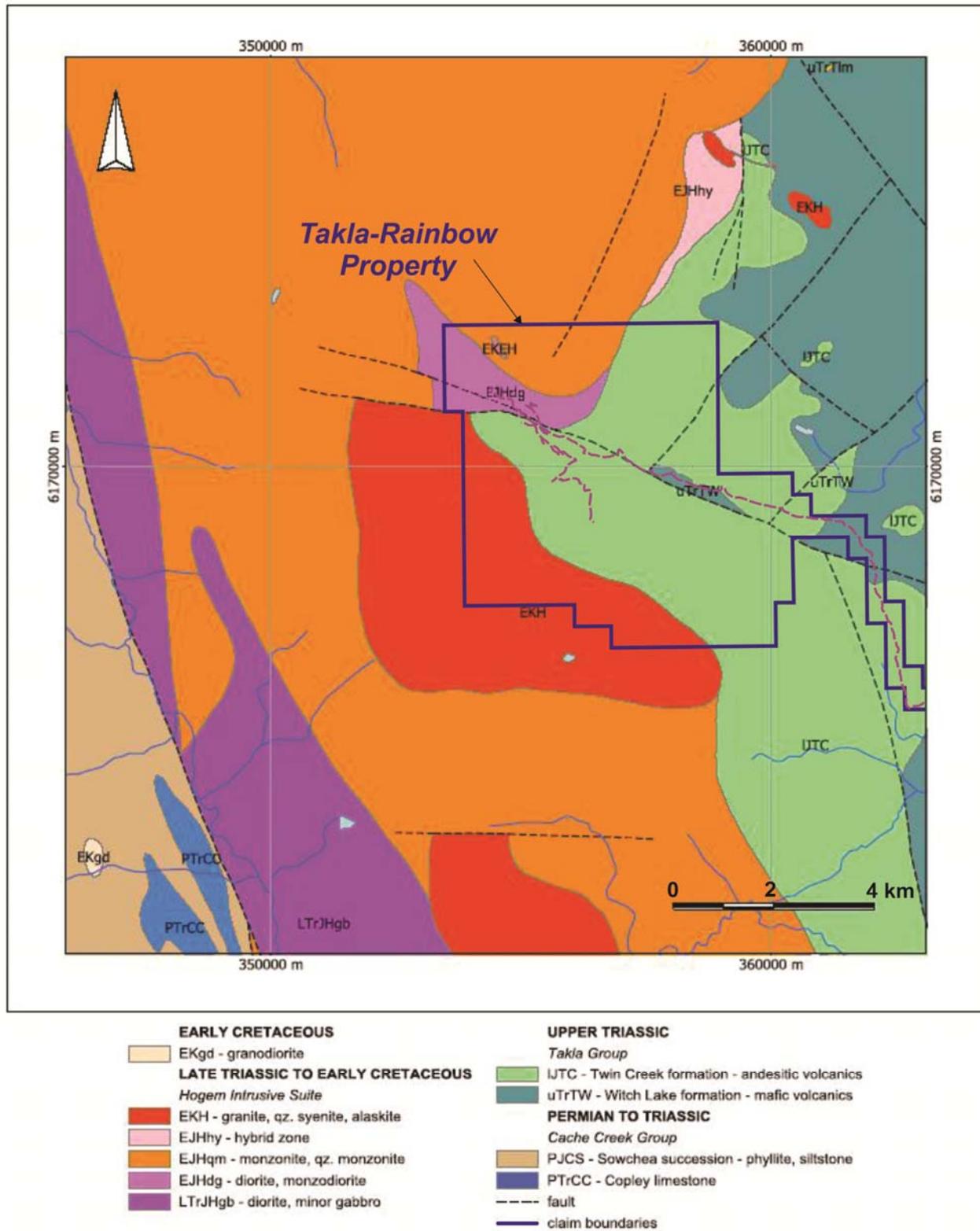


Figure 6.2: Property Geology Map, Takla-Rainbow Property (modified after MacIntyre, 2004)

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## Structure

Several northwest trending faults that are parallel to the Pinchi Fault zone, which is situated 9 kilometres to the west, transect the Takla-Rainbow property. The most significant of these faults was intersected in drilling on the West grid (Figure 5). Drilling confirmed the existence of at least three parallel fault structures. The dips of the faults encountered in drill holes appear to be steep to vertical. The intensity and magnitude of structural deformation is the strongest at the west end of the grid, where the zone of brecciation in volcanics and intrusive rocks is up to 23.16 m wide in drill hole #1.

Pesalj (1988) also reports that petrographic work on samples from the West grid indicates the presence of close-spaced, sub-parallel system of sheeted micro-fractures in feldspar phyric volcanic rocks that seem to be the locus of carbonate and epidote alteration.

At the south end of the property, dykes and sills of porphyritic granite intrude Takla volcanics along northwest striking breaks that parallel the Pinchi Fault zone. Northeast striking faults represent the second major fault system on the property (Pesalj, 1988).

The relative movements and timing of the two fault systems is not known, but could be contemporaneous. The information from surface mapping of the property and drill core data indicate the Takla volcanics dip steeply to the south, but determination of bedding attitudes is often difficult due to the massive, thick bedded nature of the volcanics. Thin, basaltic tuff beds provide the best information on the attitude of the volcanic strata. Overall, the Takla volcanics have a west to northwest trending strike with broad, open fold structures. Foliation of massive volcanic rocks is weak or completely absent.

Pesalj (1988) determined that the stratigraphic top of the volcanic succession is to the southwest based on amygdaloidal basaltic units drilled on the south grid. Dip and strike measurements during the course of surface mapping suggest dips of 50° to 65° to the southwest, and 75° to 85° from the two areas of drilling. Thin mafic tuffs are the only unit from which reliable bedding attitudes can be determined.

According to Buskas and Bailey (1992) the volcanic assemblage of the Takla Rainbow area has been folded into an open southwesterly-plunging syncline which is of regional extent. This structure can apparently be traced for over 20 kilometres to the north before it is lost under unconsolidated deposits of the Omineca River valley. The southern part of this syncline is cut by Early Cretaceous granite in the Takla Rainbow area although it can be traced further to the south and to the east of the Takla Rainbow property. Buskas and Bailey (1992) interpreted the map pattern observed in the southern part of the Takla Rainbow area to indicate that the fold plunges to the southwest at an angle of about 25 - 30 degrees. Apparently this conclusion is consistent with observations made to the north and east of the area.

Buskas and Bailey (1992) also describe two main sets of faults that have developed in the Takla Rainbow area, a northeasterly-striking set, sub-parallel to the major fold axis, and a northwesterly-striking set. To the north of the Takla Rainbow property northeasterly faults are apparently cut by northwesterly ones but in the area of Takla Rainbow the temporal relationship between the two sets of faults is not clear. A northwesterly-striking shear zone which according to Buskas and Bailey (1992) has controlled the emplacement of precious metal mineralization in the central and western part of the property is interpreted to have formed early in the structural development of the area and

to be cut by later northeasterly-striking faults. However, because of poor exposure there is no direct evidence for this relationship. This structural direction has clearly controlled the emplacement of feldspar porphyry dykes and, thus, the initial development of these structures must predate the emplacement of Early Cretaceous intrusive rocks. However, because northwesterly-striking faults and shears also occur within the Twin Creek formation the northwesterly-striking faults must have formed between the Early Jurassic and Early Cretaceous.

A third fault and fracture set, striking to the north or slightly east of north, is recognized in the western part of the property. Buskas and Bailey (1992) suggest this set of structures may have formed within a simple shear regime developed during movement along northeasterly faults and, thus, may be related to this fault set.

### **Metamorphism**

Volcanic rocks in the vicinity of the Takla Rainbow property have undergone only very low grade zeolite facies regional metamorphism (Buskas and Bailey, 1992). Where greenschist facies mineral assemblages are observed, these can generally be related to metasomatism rather than regional metamorphism.

Volcanic rocks intruded by Early Cretaceous granodiorite along the western edge of the property are pyritic and thermally metamorphosed to biotite hornfels. Elsewhere in the region contact metamorphic effects are not obvious.”

## **6.3 Mineralization**

The following text is summarized from the Takla-Rainbow (Twin) MINFILE Detail Report, BC Geological Survey, Ministry of Energy, Mines and Petroleum Resources (Minfile No. 093N 082) and the report by MacIntyre (2004). See Figures 6.2 and 6.3 for the geology and known mineralized zones on the property.

*“Mineralization on the Takla-Rainbow property occurs in four distinct zones referred to here as the Red, West, East and South zones. Within the West, East and South zones, mineralization occurs in one or more parallel, steeply dipping, northwest-striking shears within or adjacent to intrusive rocks. The majority of the testing to date has been carried out in the West zone, which underlies the upper reaches of Twin Creek.*

*At the West zone, mineralization is spatially and probably genetically related to the emplacement of a northwest striking intrusive body confined to the contact between Takla Group volcanics to the south and a dioritic border phase of the Hogem Intrusive Complex to the north. The presence of abundant orthoclase megacrystic granite dikes, many of them sheared, within the Twin Creek fault zone suggests syn-plutonic, probably Cretaceous-aged motion and mineralization (Nelson et al., 1992).*

*The West zone, which consists of up to five parallel, subvertical gold-bearing structures, measures 289 metres along strike by 100 metres wide and extends to a depth of 140 metres. It occurs within a strong pyritic halo measuring over 1000 metres in length and 150 metres in width. The most common type of mineralization intersected in drill holes is in the form of narrow quartz fillings along fractures ranging up to several 10’s of centimetres in width, and as disseminations of sulphides and native gold in both porphyries and volcanics. Mineral association in the zone is represented by pyrite, chalcopyrite, quartz, native gold, carbonates, sericite, chlorite and minor pyrrhotite, magnetite, galena, sphalerite, and specular hematite. This mineralization is confined to zones marked by*

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*microshearing, intense fracturing, pyritization, carbonatization and silicification. Gold is in its native form and gold-pyrite and gold-chalcocopyrite associations are common.*

*The East zone measures 183 metres along strike, is 130 metres wide and extends 140 metres below surface. The zone contains two or more parallel subvertical gold-bearing structures. To the west, the zone is bound by weak mineralization and the eastern boundary is undefined.*

*The South zone is largely untested and measures approximately 275 metres along strike. The zone is bounded by weak mineralization on the west side and seems to be cut off to the east. A 2.99-metre wide mineralized drill intersection grading 5.83 grams per tonne was made at a depth of 180 metres in 1987 (Pesalj, 1987).*

*The Red zone is located 1.2 kilometres northwest of the West zone. Drilling in this area has intersected low grade copper-gold mineralization in epidote, chlorite, carbonate-altered porphyritic to equigranular diorite that is cut by megacrystic granite to quartz syenite dykes. K-feldspar, clay, sericite and silica alteration also occurs locally. Sulphide minerals include pyrite, chalcocopyrite with minor amounts of molybdenite and bornite. Malachite and azurite occur on surface and to a depth of 40 metres. The style of alteration and mineralization here is different from the main gold zone (West, East and South zones). It is more similar to what might be expected in a porphyry Cu-Au system. Only a few drill holes have tested this zone with the best copper grades (up to 0.585%) occurring near surface suggesting possible secondary enrichment within the zone of oxidation.*

*The ridge south of the Twin Creek fault is apparently underlain by a strong quartz-kaolinite-pyrite alteration zone, capped by a discontinuous, horizontal alunite-quartz zone up to 5 metres thick that extends over 500 metres. According to Nelson et al., (1992), it represents an unexplored epithermal target.*

*Volcanic rocks in contact with Early Jurassic phases of the Hogem Batholith have strong propylitic alteration comprised of epidote, chlorite (+/- calcite) and magnetite (Buskas and Bailey, 1992). This alteration can extend for several hundred metres out from the intrusive contact. Alteration of the volcanic rocks becomes more intense towards the intrusion while the marginal phase of the intrusion has also undergone fracture controlled propylitic alteration. On the Takla-Rainbow property and in areas to the north, these fractures also contain pink potassium feldspar. Buskas and Bailey (1992) also state that in general potassium alteration, mainly in the form of orthoclase, is best developed along fractures within, or close to, mafic intrusive rocks of unit EJDg. Magnetite also appears to be best developed in this zone although the relationship of magnetite with potassium feldspar alteration is apparently not clear at the property scale. In the northern part of the Takla Rainbow property magnetite is more strongly developed in epidote-rich zones (Buskas and Bailey, 1992). Northerly to northeasterly structures can also host zones of limonite and ankerite (or siderite). Quartz veining and/or silicification and pyrite are also associated with these zones, along with minor amounts of copper mineralization (Buskas and Bailey, 1992).*

*Sulphide mineralization, commonly with elevated gold values, is developed along the zone of fracturing and shearing in the Twin Creek area. Buskas and Bailey (1992) refer to this structure as the Twin Creek shear zone. The western end of this zone hosts pyrite along with gold and copper sulphides; here gold concentration is sufficient to allow the estimation of a gold resource (Pesalj, 1988). In the central southern part of the property fractures which have developed sub-parallel to the*

Twin Creek shear zone also contain argentiferous galena and minor sphalerite. Quartz veining and silicification typically accompany sulphide mineralization in the Twin Creek shear zone and associated fractures. Fracture controlled copper mineralization is fairly common within propylitically altered volcanic rocks near the contact with mafic phases of unit EJHdg. According to Buskas and Bailey (1992), chalcopyrite, or malachite after chalcopyrite, has been deposited in discrete northeasterly-trending zones within both propylitized intrusive and volcanic rocks; these zones may be up to several hundred metres apart.”

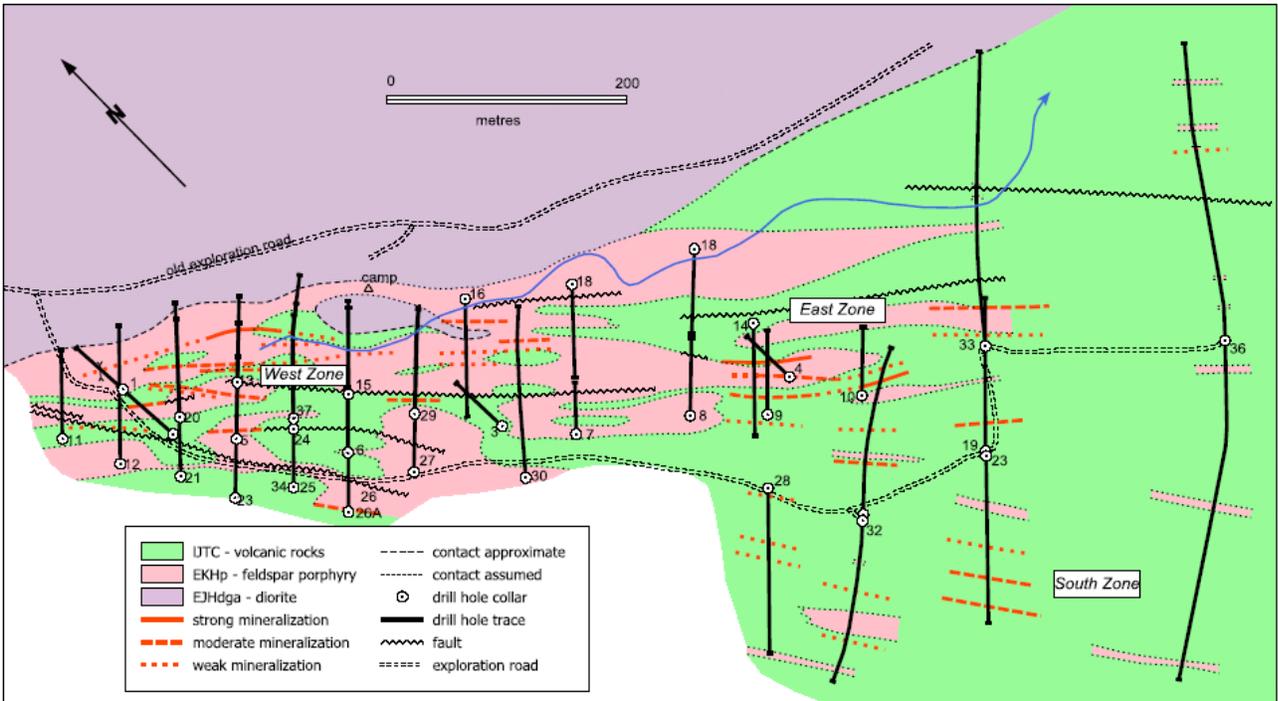


Figure 6.3: Historic Drilling Map, Takla-Rainbow Property (after MacIntyre, 2004)

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## 7 2013 EXPLORATION PROGRAM

On October 9, 2013 a pre-exploration program helicopter-supported site visit was made to survey any locatable drill hole collars and assess the condition of the existing Takla-Rainbow field camp last used by Geoinformatics Exploration Inc. during their 2010 exploration work.

The personnel for this pre-program work included: Mr. James A. McCrea, consulting project geologist and drilling supervisor; Mr. Lorne Warren, principal of CJL Enterprises Ltd.; Mr. David Alexander, representative of the Takla Lake First Nations; and Todd Wohlgemuth, an experienced GPS surveyor employed by W D McIntosh Surveys (Focus Corporation), a consulting survey company based in Vanderhoof, B.C. A Bell Jet Ranger 206 was chartered for the work from Yellowhead Helicopter Ltd.'s base in Fort St. James.

It was apparent from an inspection of the field camp that bears had broken into the metal-roofed kitchen building destroying much of the interior. Porcupines had later entered the building and gnawed most of the interior walls making the building uninhabitable. In addition, snowfalls since 2010 had collapsed most of the wooden tent frames. Thus, it was decided to provide board and lodging for the drilling and support field crew at CJL Enterprises Ltd.'s Silver Creek camp, situated 9.6 km west northwest of the Takla-Rainbow field camp, and carry out the drilling operation supported with a chartered Bell Jet Ranger 206 helicopter.

### 7.1 Drill Hole GPS Survey

While the field camp was being inspected Mr. Warren and Mr. Wohlgemuth attempted to locate the existing drill hole collars. However, due to the prevailing thin but extensive snowfall only DDH 1, near the discovery trench, was found with any certainty plus some claim post markers and all field camp structures. A differential GPS instrument with 1-cm precision was utilized for the survey work.

The surveyors at W D McIntosh Surveys later compiled existing drill hole survey data with the results of the October 9<sup>th</sup> work to produce a drill hole plan with topography and physical features covering the area of known drilling in the vicinity of the Takla-Rainbow field camp (see Appendix VI).

### 7.2 Avalanche Assessment

Prior to approving the filed Notice of Work, Ms. M. Marchuk-Fraser, the geologist responsible for approving Notices of Work at the B.C. Ministry of Energy, Mines and Petroleum Resources' office in Prince George, B.C., requested that an assessment be carried out to determine the avalanche risk to workers' safety while travelling along the Twin Creek access road and working near the Takla-Rainbow field camp. Mr. Sean Fraser of Hyland Backcountry Safety, based in Smithers, B.C., was contracted to carry out such an assessment. On October 31<sup>st</sup>, Sean Fraser was flown into the Property by Yellowhead Helicopters Ltd.'s Bell Jet Ranger 206, carried out the field assessment, and prepared a preliminary report. A final report on the avalanche risk was prepared by Mr. Fraser's associate, Mr. Christoph Dietxfebinger of Smithers, B.C. Based on the favourable preliminary results from this assessment, the permit to proceed with the proposed drilling program was approved on November 1<sup>st</sup>.

### 7.3 Diamond Drilling

The 2013 diamond drilling program consisted of five NQ2-size diamond drill holes, totalling 605.8 m, completed during the period of November 3 to 18. Minorex Consulting Limited of Aldergrove, B.C. was contracted by Manado Gold Corp. to manage and supervise the drilling program. More Core Diamond Drilling Services Ltd., based in Stewart, B.C., was contracted to provide a skid-mounted, hydraulic B-20 drill rig,

support drilling equipment and personnel to complete the drilling program. A Bell Jet Ranger 206 owned by Yellowhead Helicopters Ltd., based in Fort St. James, provided helicopter support during the entire drilling program, and Crying Stone Holdings Ltd. was contracted to provide a D6 bulldozer to fix and plow the access roads, and move the drilling rig and support equipment. Russell Transfer Ltd. of Fort St. James transported the bulldozer to the project, and the bulldozer and drilling rig and equipment from the property to Fort St. James at the end of the program. Two First Nations personnel, Messrs. David Alexander and Jim Rogers, employed by CJL Enterprises Ltd., were contracted to provide assistance to the author and Mr. James A. McCrea, the project geologist, with drill core sawing and sample collection. Mr. Alexander was also the First Aid attendant on site during the night shift and at Silver Creek camp during daylight hours.

The drill rig, equipment and crew mobilized from Stewart on November 2<sup>nd</sup>, stayed in Fort St. James that evening, and travelled to the staging area at the junction of the Kwanika and Twin Creek roads on November 3<sup>rd</sup>. It took 3 days to move the drilling rig and equipment into the property while fixing wash-outs along the Twin Creek access road. The first drill hole, TR13-84, was collared on November 7<sup>th</sup> and the last drill hole, TR13-88, was completed at 2:00 AM, November 13<sup>th</sup> due to the increased risk of a deep snowfall and escalating drilling expenses. The drill rig, support equipment and personnel were demobilized over the next two days using the bulldozer to drag the rig and equipment sloops east on the Kwanika-Germanson Landing road to a staging area and then loading the rig, equipment and bulldozer on low-boy transport trucks which carried all equipment to Fort St. James. The author, project geologist and assistants remained at the CJL's Silver Creek camp logging and sampling the drill core until November 18<sup>th</sup> when all CJL and Minorex field personnel demobilized. The author transported the sampled drill core to Smithers, B.C. on November 17<sup>th</sup>, stayed that evening in Smithers, and submitted the drill core samples to Acme Laboratories in Smithers on November 18<sup>th</sup> before demobilizing.

The following Table 7.1 contains all pertinent information for the 2013 diamond drill holes.

**Table 7.1: 2013 Diamond Drill Hole Information**

Drill Hole No.	Easting (m)	Northing (m)	Elev (m)	Lgth (m)	Azimuth (deg)	Dip (deg)	Start	Completion
TR13-84	354939.0	6170912.0	1608.0	76.07	0.00	-90.00	7-Nov-13	8-Nov-13
TR13-85	354940.0	6170913.0	1609.0	99.67	45.00	-45.00	8-Nov-13	9-Nov-13
TR13-86	354893.0	6170944.0	1617.0	139.29	45.00	-45.00	9-Nov-13	10-Nov-13
TR13-87	354927.0	6170830.0	1617.0	200.25	45.00	-45.00	10-Nov-13	12-Nov-13
TR13-88	355089.0	6170815.0	1608.0	90.52	45.00	-45.00	12-Nov-13	13-Nov-13

*Note: Collar coordinates based upon handheld GPS instrument using UTM projection NAD83, Zone 10.*

The downhole azimuth and dip measurements of each drill hole were surveyed using a Reflex EZ Shot® drill hole survey tool provided by More Core Diamond Drilling Services. Since most of the drill holes were relatively short downhole surveys were usually carried out at the mid-point and terminus of each hole.

Diamond drilling was carried out by two 12-hour drilling shifts with a qualified first-aid attendant at the drilling site during the night shift when the helicopter was inoperable. The drilling crew and drill core was transported twice per day by helicopter between the Silver Creek camp and the work site. The drilling rig and support equipment was mobilized, moved between drill sites and demobilized using a D6 bulldozer.



A total of 4 drill pads were constructed at sites that had been previously cleared during the Imperial Metals drilling campaigns in the late 1980's. Drill holes TR13-84 and -85 shared the same drill site. Local drill access to each site was along existing drill roads and trails that had been constructed by Imperial Metals. Once the drill rig and support equipment had been removed the bulldozer re-contoured the drill site. No further reclamation could be carried out at the time given the prevailing winter conditions.

**Photograph No. 7.1: Re-contoured drill site TR13-88**

The drill core processing, logging and sampling procedures are described in the following section 8 'Sample Preparation, Analyses and Security'. The digitized drill hole collar, downhole surveying, lithology and assay results accompany this report as Appendix 1.

## 7.4 Discussion of Diamond Drilling Results

Drill holes TR13-84 (-90°) and TR13-85 (-45°) were drilled from the same site to confirm significant gold mineralization intersected by two historic drill holes (DDH-013 and -039) along the same vertical cross-section. Low grade gold- and silver-bearing sulphide mineralization was intersected by these holes but not of the same tenor as the historic drill holes. It is suspected that local faulting between the historic and recent drill holes has displaced the higher grade mineralization.

Drill hole TR13-86 was collared to test for the northwestern extension of the West Zone. This drill hole intersected several 8- to 10-metre intervals with interesting, low grade gold and silver-bearing sulphide mineralization. Further drilling will be required to better define this mineralization both along strike and to depth.

Drill holes TR13-87 and -88 were collared to test the central and southeastern extension of the West Zone respectively. Both drill holes intersected several mineralized zones with strong to intense quartz flooding and pyrite mineralization with associated trace to significant precious and base metal mineralization.

Of particular exploration interest is the intersection of 24.52 metres of sulphide mineralization at the bottom of TR13-88 which returned a weighted average grade of 2.011 gpt gold and 2.0 gpt silver. This drill hole had to be terminated in the mineralized zone prior to its planned length due to weather and logistical considerations. This drill hole intersected quite shallow mineralization between the known West and East Zones, an area of little historic drilling. Future drilling will be required to test the lateral and vertical continuity of the mineralization.

The results of a correlation coefficient analysis of the multi-element ICP analytical results indicate that there is a strong spatial, and probably genetic, association between gold values with silver and copper-bearing mineralization. There is also a much weaker but apparent association between gold and bismuth values. Copper, iron and sulphur associations with gold values indicate the gold is spatially associated with chalcopyrite and pyrite mineralization which was confirmed by the drill core logging results.

The assay results for significant mineralized intercepts within the five diamond drill holes have been summarized in the following Table 7.2.

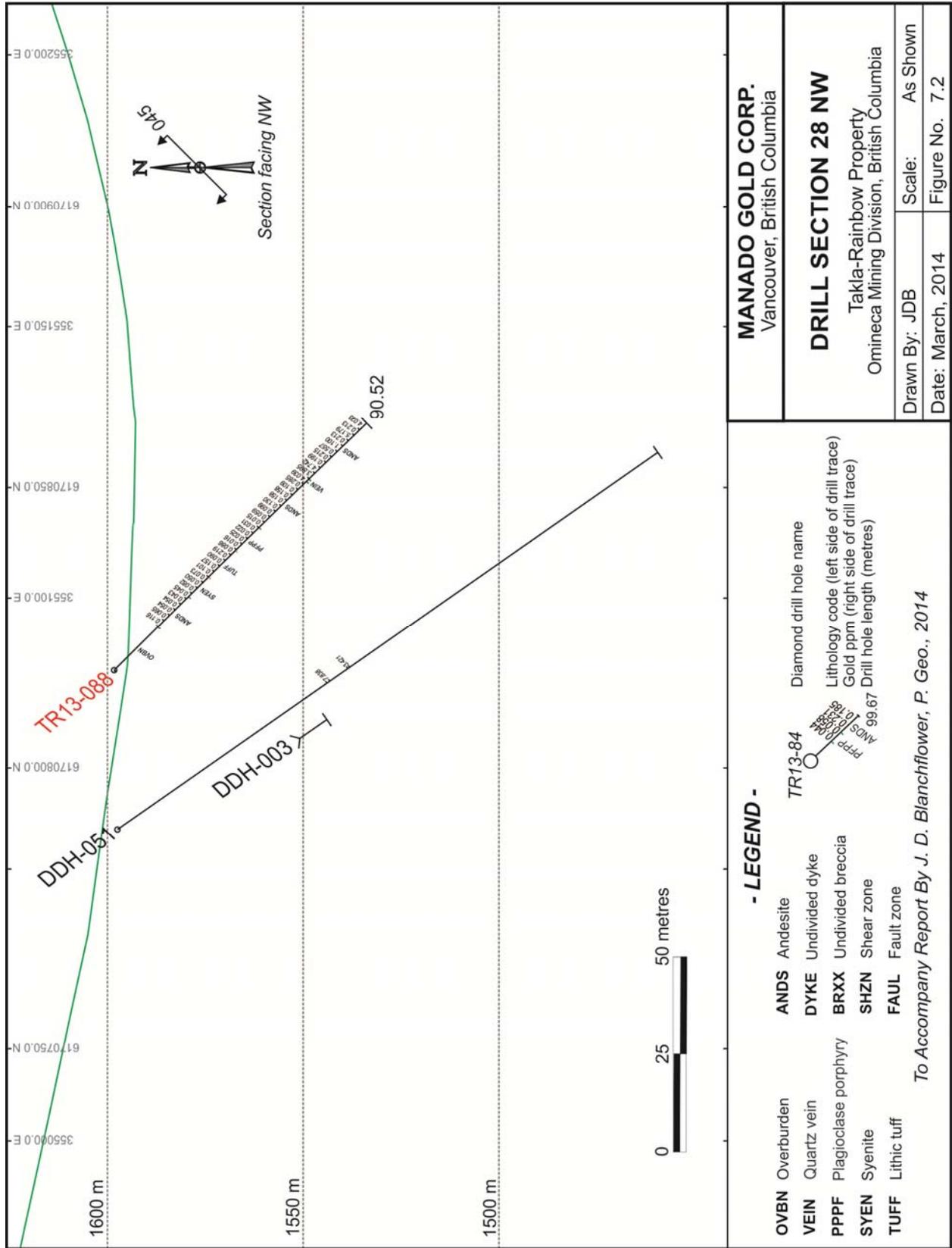
**Table 7.2: Significant Weighted Average Diamond Drill Hole Intercepts**

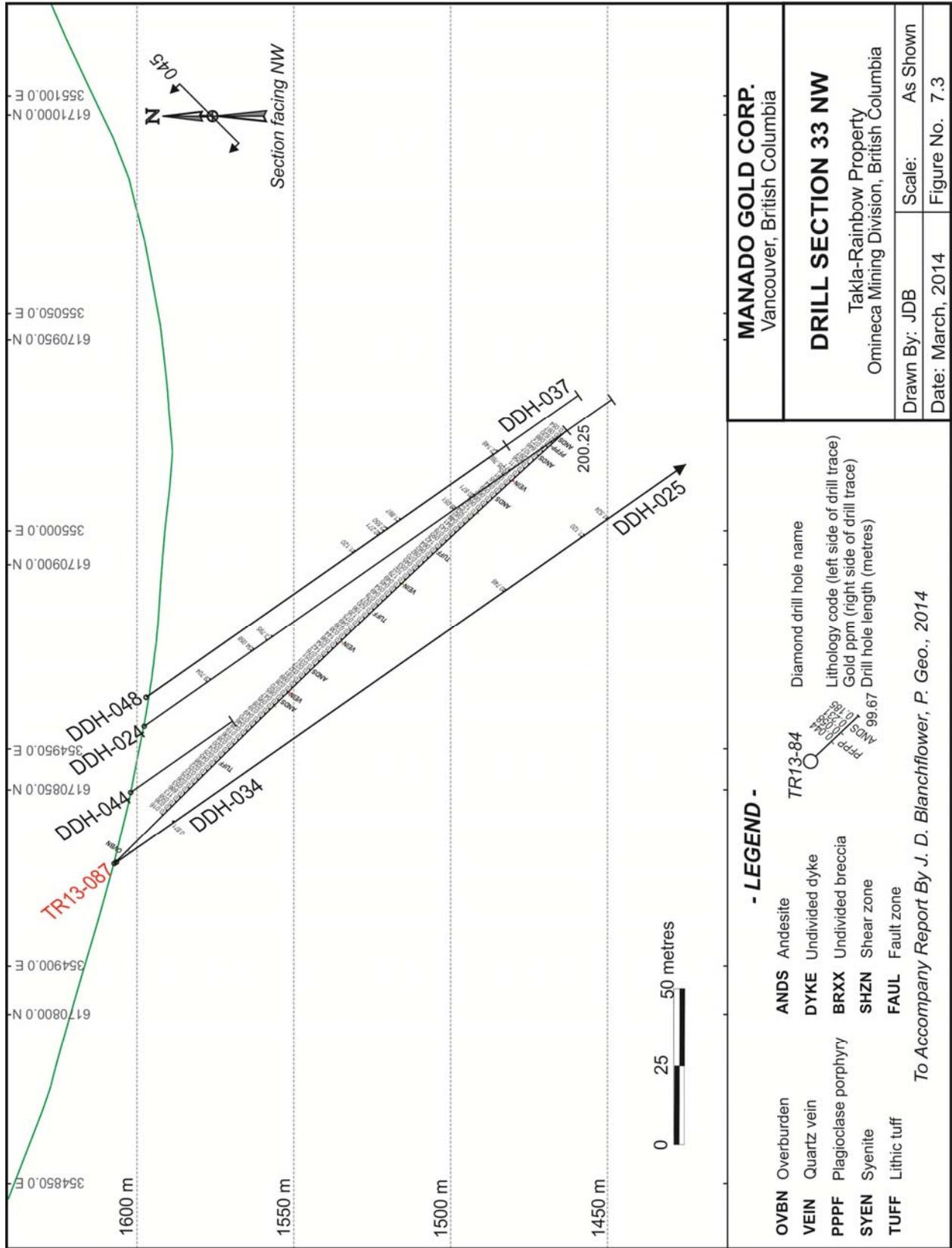
Drill Hole	From (m)	To (m)	Interval* (m)	Gold (gpt)	Silver (gpt)	Copper (ppm)
TR13-84	24.00	25.00	1.00	0.354	1.7	20
	66.00	76.07	10.07	0.353	0.5	156
TR13-85	89.00	91.00	2.00	0.487	2.6	857
TR13-86	45.00	53.00	8.00	0.707	0.4	281
	57.00	67.00	10.00	0.474	0.5	279
	81.00	91.00	10.00	0.349	0.5	311
TR13-87	30.00	32.00	2.00	0.886	0.5	68
	114.00	116.00	2.00	0.520	0.8	732
	158.00	160.00	2.00	0.794	1.8	1,217
	178.00	196.00	18.00	0.619	1.3	186
TR13-88	66.00	90.52	24.52	2.011	2.0	249
including	68.00	74.00	6.00	4.225	4.0	3,598

**\* Note: Intercept intervals are drilling lengths, not true widths.**

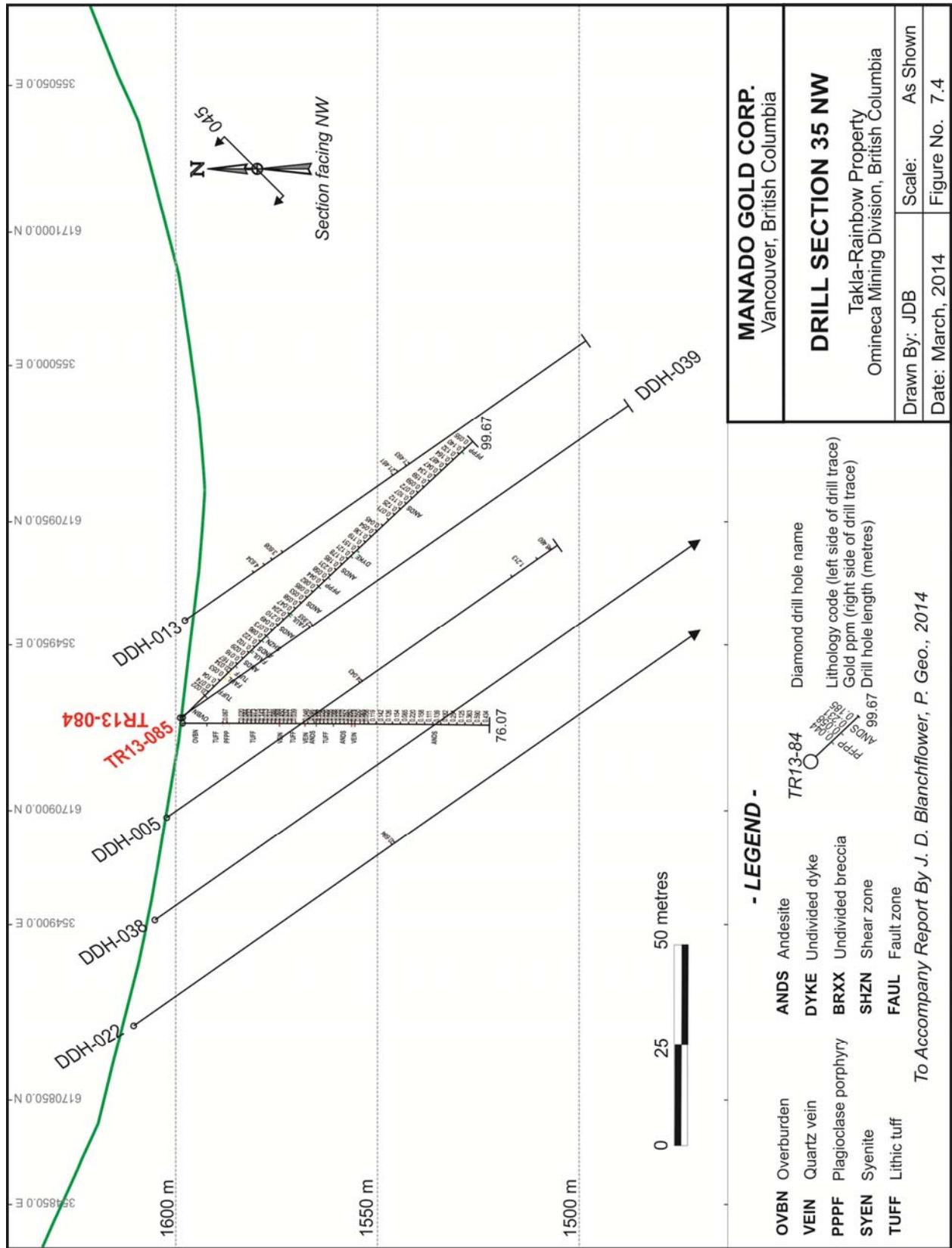
The location, orientation and results of the 2013 diamond drilling program have been illustrated in the following Figures 7.1 to 7.5. Enlarged versions of these illustrations accompany the drilling data in Appendix I of this report.



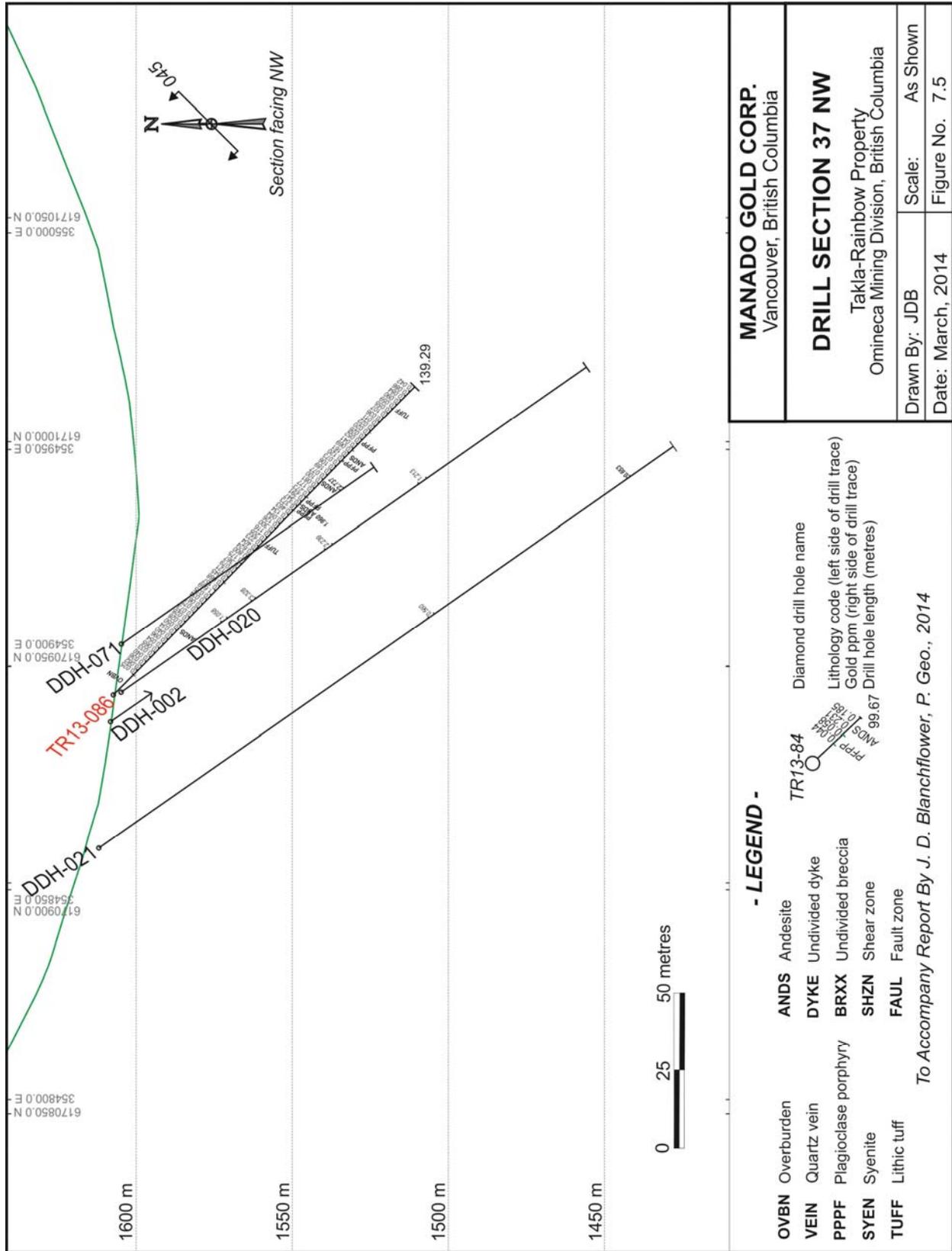




2013 Diamond Drilling Report on the Takla-Rainbow Property, Omineca M. D., B.C., Canada



2013 Diamond Drilling Report on the Takla-Rainbow Property, Omineca M. D., B.C., Canada



## 8 SAMPLE PREPARATION, ANALYSES AND SECURITY

A total of 283 samples was collected from the 605.8 m of NQ2-size drill core during the 2013 diamond drilling program. The 2013 diamond drilling program utilized handling, logging, sampling, QA/QC, security and storage procedures compliant with current industry-standard practises.

### 8.1 Sample Preparation

The drill core was placed in wooden boxes at each drill site and transported to CJL's Silver Creek campsite where there was a core logging building with appropriate logging tables and lighting. There the core boxes were opened and the drill core was accurately measured to determine core recoveries. After core recovery measurements and geotechnical logging the drill core was geologically logged for its lithology, structure, alteration and mineralization. These observations were recorded as written notes on pre-prepared log sheets. During the geological logging, the geologist marked the intervals of drill core that should be sampled, respecting lithological contacts and structural features, and the logged drill core was photographed.



**Photograph No. 8.1: Silver Creek drill core processing building**

The drill core was cut in half lengthwise using a diamond rock saw for those sections deemed worthy of sampling and analysis. One half of the sawn drill core was placed in a 6-mil sample bag and the other half of the drill core was returned to its correct position in the core box. A unique sample assay tag was placed in each core sample bag before the bag was securely sealed. Quality control standard, blank and field duplicate samples were inserted into the sample sequence at an average rate of 1 per 20 drill core samples, representing approximately five percent of the total samples. Core field duplicates were ¼ core duplicates.

After the drill core had been properly logged and sampled, the observations recorded in hand-written drill logs were input into a matrix-style spreadsheet for computerization. The core boxes were labelled with an embossed aluminum tag documenting the hole number, box number and drilled interval contained in each box. The core boxes were securely stacked outside within the private grounds of the Silver Creek campsite.

The sealed, documented and bagged drill core samples were placed in larger 'rice' bags which were securely sealed and stored prior to their delivery by the author to the Acme Analytical Laboratories' processing facilities in Smithers, British Columbia. Acme Laboratories, a member of the Bureau Veritas Group Company, is ISO 9001 and 17025 accredited.

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## 8.2 Sample Analyses and Assays

At the Analytical Laboratories' processing facilities in Smithers the drill core samples were logged in, sorted, dried and crushed to minus 0.5 cm. The resultant crushed samples were then riffle split down to 250-gram sub-samples which were then pulverized to 85% passing 200 mesh. The sub-samples were then air shipped directly to Analytical Laboratories' assaying laboratory in Vancouver for assays and analyses.

In Vancouver the sub-samples were again riffle spit into 30-gram and 0.25-gram splits. The 30-gram splits were utilized for gold assaying using lead collection fire-assay fusion with AAS finishes. The 0.25-gram splits were digested with four acids and analysed using ICP-ES methodology for 34 additional elements, including silver and copper. Automatic over-limit assays were requested using gravimetric finishes for the gold fire assays and AA for silver.

At the request of Mr. Lorne Warren, the coarse rejects from the 2013 drill core samples were delivered to his residence in Smithers where they are in secure storage. The analysed sample pulps were returned to Manado and securely stored pending any future analyses.

## 9 DATA VERIFICATION

### 9.1 2013 Quality Assurance and Quality Control Procedures and Results

Prior to the drilling program Minorex established a strict Quality Assurance and Quality Control ('QA/QC') program utilizing quality control samples to monitor accuracy (i.e. sample standards), contamination (i.e. sample blanks), precision (i.e. duplicates) and other possible sampling errors (i.e. sample mislabelling).

The QA-QC protocol utilized on the project targeted an insertion rate of quality control samples at a rate of 5 percent to the assay laboratory. Thus, a quality control sample was supposed to be inserted randomly within every 20 consecutive samples, alternating between standard, blank or field duplicate samples. The standard and blank samples were to be inserted into the sample sequence as the sample shipment was being readied. Any duplicate samples were inserted into the sample sequence at the time of collection. The quality control samples were similarly numbered as the primary samples and were not identified in any other manner.

Standard reference material ('SRM') samples were purchased in prepared 60-gram foil packets from CDN Resource Laboratories Ltd. in Langley, British Columbia, a qualified third-party vendor. The purchased blank reference material was comprised of barren quartzose rock that had been crushed to minus 2 cm and thoroughly assayed prior to its use.

Following the receipt of all assay results, fifteen samples were selected for third-party check assaying. These samples were selected based upon their wide distribution from the five drill holes and their grades. Acme Laboratories direct shipped the sub-sample pulps for these fifteen samples to ALS Minerals in North Vancouver, British Columbia. There the check samples were assayed for their gold content and analysed for 48 other elements using ICP-MS methods. The check assaying results are contained in Appendix III of this report.

Appendix IV of this report contains the QA/QC report titled 'Takla Rainbow Drill Program, 2013 QA/QC Review' by James A. McCrea, P. Geo., and dated March, 2014. This report documents a detailed study of the 2013 QA/QC results. The following text is quoted from various sections of this report.

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*“The QA/QC sampling supports the drill results from this latest exploration drill program on the Takla Rainbow West zone. These reviews should be completed internally at the minimum annually or for each drill campaign. The primary laboratory used by Manado was Acme Labs and the check lab was ALS Minerals.*

*Manado submitted 10 SRM samples for analysis with the drill core. There were no failures observed for the gold standards analyzed, based on a 2 standard deviations limit. The failure rate is zero and no corrective measures were required on the part of the company.*

*Manado used certified coarse blank material. The blank material was purchased from CDN Resource Laboratories. During the drill program 10 blanks were analysed. The blanks are inserted on a 1 in 20 basis. The assays of the blank material show that there is no observed contamination of the blank material in the drill program.*

*Manado submitted quartered core as duplicate samples for assaying in the 2013 drill program. 10 duplicates were submitted for assay. Figure 4 is a scatter plot of the original samples versus the duplicate samples for gold. The blue line is an ideal 1:1 reference. The dashed red line is the trend line of the data. The gold graph shows that the duplicates are plotting relatively much lower than the originals in the mid-range of the duplicate grades. Few conclusions can be made because of the small sample size. The results should be considered preliminary as duplicate analysis for precision normally requires 50 duplicate pairs or at least 30 duplicates.*

*Manado submitted check assays to an outside laboratory for the 2013 drill program. Fifteen samples were submitted to ALS Minerals of Vancouver for assay. The gold chart shows some mid-grade scatter but generally good reproducibility of gold pulp duplicates. The pulp duplicate data was analysed by methods described by Thompson and Howarth (1976). The results are shown as a Precision Chart for gold Figure 10. The precision charts are derived from the slope and y-intercept of the Thompson-Howarth Duplicate Analysis chart shown in Figure 11. These plots are used to check laboratory precision. The pulp duplicate samples show good precision.”*

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## 10 CONCLUSIONS AND RECOMMENDATIONS

The Takla-Rainbow property covers a fault-bounded embayment of the Upper Triassic Takla Group and Lower Jurassic Twin Creek Succession volcanic rocks that has been intruded by phases of the Early Jurassic to Early Cretaceous Hogem batholith. The property is transected by the northwesterly trending Twin Creek Fault, an inferred high angle, normal fault with westward vertical displacement that is reflected by the Twin Creek drainage. Rocks underlying the property are all part of the Quesnel Terrane which is comprised of Paleozoic and Mesozoic island arc and rift trough assemblages that formed above an easterly dipping subduction zone situated outboard of ancestral North America.

The known copper-gold mineralization within the Property occurs in four zones, called the Red, West, East and South zones. Within the West, East and South zones, mineralization occurs in one or more parallel, steeply dipping, northwest-striking zones with increased shearing, silicification and hydrothermal alteration within or adjacent to intrusive rocks.

The 2013 exploration program included: a GPS survey of existing drill hole collars and preparation of a drill hole and topographic plan; an avalanche risk assessment and report; and a helicopter-supported diamond drilling program that included five NQ2-size drill holes (605.8 m). This program was completed during the period of October 9<sup>th</sup> to November 18<sup>th</sup>.

The results for drill holes TR13-84 (-90°) and TR13-85 (-45°) failed to confirm the gold mineralization reportedly intersected by two historic drill holes (DDH-013 and -039). It is suspected that local faulting between the historic and recent drill holes may have displaced the earlier reported mineralization.

Drill hole TR13-86 tested for the northwestern extension of the West Zone, and intersected several 8- to 10-metre intervals with interesting but lower grade gold and silver-bearing sulphide mineralization.

Drill holes TR13-87 and -88 tested the central and southeastern extension of the West Zone respectively. Both drill holes intersected several mineralized zones with strong to intense quartz flooding and pyrite mineralization with associated trace to significant precious and base metal mineralization. Drill hole TR13-88 returned a 24.52-metre intersection (66.0 to 90.52 m) near its terminus with a weighted average grade of 2.011 gpt gold and 2.0 gpt silver, including a 6.0-metre intersection (68.0 to 74.0 m) grading 4.225 gpt gold, 4.0 gpt silver and 0.36% copper.

It is recommended that further diamond drilling be undertaken southeast of the known West Zone, in the vicinity of drill hole TR13-88 and southeastwardly through the poorly tested East Zone. Furthermore, detailed geological and basal till geochemical sampling should be carried out over the South Zone. The South Zone has received historic exploration work resulting in the identification of coincident copper- and gold-in-soil geochemical anomalies with both ground magnetics and I.P. geophysical anomalies.

## 11 STATEMENT OF EXPENDITURES

Labour		Totals
<b>Field Labour Expenses</b>		
D. Blanchflower, P. Geo. (Nov 5-18, 14 days @ \$900/d)	\$12,600.00	Project supervision & drill core geological logging
J. McCrea, P. Geo. (Oct 8-9, Nov 2-18, 19 days @ \$825/d)	15,675.00	Drilling supervision and drill core geotechnical logging
D. Alexander (Oct 9, Nov 2-17, 14.5 days @ \$388.71/d)	6,025.00	First aid attendant and drill core sampler
W. Rogers (Nov 6-17, 10.5 days @ \$288.10/d)	3,025.00	Drill core sampler
B. Sauer (Nov 7 and 13, 1.5 days @ \$350/d)	525.00	First aid tent construction and demantling
<b>Office Labour Expenses</b>		
D. Blanchflower (Nov 19-24, 20 hrs @ \$112.50/hr)	2,250.00	Drilling report and map preparation
J. McCrea (Nov 25-26, 12 hrs @ \$100/hr)	1,200.00	Gemcom database creation and data entry
	<b>\$41,300.00</b>	
<b>Drilling</b>		
<b>Diamond Drilling</b>		
More Core Diamond Drilling Services Ltd. (Nov 2-14)	112,128.97	5 NQ2-size holes totalling 605.8 m plus mob/demob
<b>Heavy Equipment</b>		
Crying Stone Holdings Ltd. - Bulldozer contractor	17,226.00	D6 bulldozer (Nov 4-14, 11 days) plus mob/demob
<b>Fuel</b>		
Vanderhoof CO-OP	5,614.35	20 barrels diesel and 2 barrels regular gas
Russell Transport	6,740.80	10 brls Jet A, 12 100-lb propane & drum charge
<b>Assaying and Analyses</b>		
Acme Laboratories	10,438.40	314 drill core & QA/QC samples for Au + 35-element ICP
ALS Mineral Group	710.35	15 samples for check assaying
CDN Resources Ltd.	237.41	Purchased 26 standard and blank samples
<b>Equipment and Supplies</b>		
Minorex Consulting Ltd.	469.11	Sample bags, flagging, ties, labels, pickets, paint, etc.
	<b>\$153,565.39</b>	
<b>Other Operations</b>		
<b>GPS Surveying</b>		
Focus Group, Vanderhoof	3,256.25	Site visit, GPS drill hole surveying & plan compilation
Yellowhead Helicopter Ltd. (Oct 9, 2.9 hrs, 464 l fuel)	4,541.40	Chartered helicopter for site visit & GPS survey
<b>Avalanche Assessment</b>		
Hyland Backcountry Safety - Sean Fraser	1,480.50	Site visit, avalanche assessment visit and report
Yellowhead Helicopter Ltd. (Oct 31, 3 hrs, 342 l fuel)	3,081.30	Chartered helicopter for avalanche assessment
	<b>\$12,359.45</b>	
<b>Transportation</b>		
<b>Air Fares</b>		
Commercial air travel Vancouver to Pr. George return	968.66	2 Airfares for J. McCrea
<b>Helicopter charter</b>		
Yellowhead Helicopters Ltd. (28.5 flying hrs @ \$839.00/hr)	23,911.50	Flying time during drilling program Nov 4 - 14 (11 days)
Yellowhead Helicopters Ltd. (718 l extra fuel @ \$1.65/l)	1,288.65	Company fuel when flying to/from hangar
Yellowhead Helicopters Ltd. (6 hrs pilot time @ \$150/hr)	900.00	Extra charge for pilot when flying time less than 3 hrs/day
<b>Truck Rental</b>		
Minorex Consulting Ltd. (2,324 km @ \$0.75km incl fuel)	1,743.00	Mob/demob - Blanchflower plus equipment & supplies
Car/truck Rental (Nov 8-9 car rental; Nov 4-17 trk rental)	1,441.89	4WD truck rental for personnel and sample transport
CJL Enterprises Ltd. (Nov 3-5; 2.5 days @ \$100/day)	250.00	4WD truck support during mobilization
<b>Freight</b>		
Russell Transport (Nov 3-4 and 14-15)	5,082.73	Mob/demob eqpt & fuel - Ft. St. James to Twin Crk road
Acme Laboratories (Courier charge to deliver booklets)	56.09	Shipping booklets & check samples to ALS
	<b>\$35,642.52</b>	
<b>Accomodation and Food</b>		
<b>Field Camp Accomodation &amp; Food</b>		
CJL Enterprises Ltd. (Nov 2-17, 160 man-days @ \$150.00)	24,000.00	16 days at Silver Creek camp & standby charge
CJL Enterprises Ltd. (Oct 30-Nov 2, 4 days)	1,775.00	Stand-by camp charge due to program delay
<b>Mobilization and Demobilization Accomodation &amp; Food</b>		
Motel lodging and food during mob/demob	374.28	Mob/demob for D. Blanchflower & J. McCrea
Truck fuel used during mobilization and demobilization	828.54	Fuel used by rental car and truck to/from Pr. George
	<b>\$26,977.82</b>	
<b>TOTAL EXPENSES (excluding G.S.T.)</b>	<b>\$269,845.18</b>	

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## **APPENDIX I**

### **2013 Diamond Drilling Data and Enlarged Drilling Plan and Cross-Sections**

## 2013 DIAMOND DRILL HOLE DATA

### COLLAR LOCATION DATA

Hole No.	UTM Easting (m)	UTM Northing (m)	Elevation (m)	Start	Finish	Logged By
TR13-084	354939.000	6170912.000	1608.000	7-Nov-13	8-Nov-13	JDB
TR13-085	354940.000	6170913.000	1609.000	8-Nov-13	9-Nov-13	JDB
TR13-086	354893.000	6170944.000	1617.000	9-Nov-13	10-Nov-13	JDB
TR13-087	354927.000	6170830.000	1617.000	10-Nov-13	12-Nov-13	JDB
TR13-088	355089.000	6170815.000	1608.000	12-Nov-13	13-Nov-13	JDB

### DOWNHOLE DATA

Hole No.	Azimuth (degree)	Inclination (degree)
TR13-084	0.000	-90.000
TR13-085	45.000	-45.000
TR13-086	45.000	-45.000
TR13-087	45.000	-45.000
TR13-088	45.000	-45.000

### DRILL CORE SIZES

Hole No.	From (m)	To (m)	Interval (m)	Core Size
TR13-84	0.00	76.07	76.07	NQ2
TR13-85	0.00	99.67	99.67	NQ2
TR13-86	0.00	139.29	139.29	NQ2
TR13-87	0.00	200.25	200.25	NQ2
TR13-88	0.00	90.52	90.52	NQ2

### SELECTED DRILL HOLE INTERCEPTS

Hole No.	From (m)	To (m)	Interval (m)	Gold (ppm)	Silver (ppm)	Copper (ppm)	
TR13-84	24.00	25.00	1.00	0.354	1.7	20	
	66.00	76.07	10.07	0.353	0.5	156	
TR13-85	89.00	91.00	2.00	0.487	2.6	857	
	TR13-86	45.00	53.00	8.00	0.707	0.4	281
		57.00	67.00	10.00	0.474	0.5	279
TR13-87	81.00	91.00	10.00	0.349	0.5	311	
	30.00	32.00	2.00	0.886	0.5	68	
	114.00	116.00	2.00	0.520	0.8	732	
	158.00	160.00	2.00	0.794	1.8	1,217	
TR13-88	178.00	196.00	18.00	0.619	1.3	186	
	<b>66.00</b>	<b>90.52</b>	<b>24.52</b>	<b>2.011</b>	<b>2.0</b>	<b>249</b>	
<b>including</b>	<b>68.00</b>	<b>74.00</b>	<b>6.00</b>	<b>4.225</b>	<b>4.0</b>	<b>3,598</b>	

## 2013 DRILL CORE LOGGING CODES

### **LITHOLOGY**

ANDS	Andesite
DYKE	Dyke - undivided
OVBN	Overburden
PEGM	Pegmatite
PFPP	Plagioclase porphyry
QZVN	Quartz vein
SYEN	Syenite
TUFF	Tuff
TFBX	Tuff breccia

### **LITHOLOGY MODIFIER**

BRXX	Breccia
FAUL	Fault
FLBX	Fault breccia
FLOW	Flow
FLZN	Fault zone
LAPL	Lapilli
LITH	Lithic
SHER	Shear
SHZN	Shear zone
VEIN	Vein

### **MINERALOGY**

BI	Biotite
CB	Carbonate
CL	Chlorite
CP	Chalcopyrite
EP	Epidotite
GL	Galena
HM	Hematite
KF	Orthoclase feldspar
LI	Limonite
MG	Magnetite
MS	Sericite
PY	Pyrite
QZ	Quartz
SP	Sphalerite

### **STRUCTURAL FEATURE**

CNT	Contact
FFV	Fracture filling vein
FLT	Fault
FRC	Fracture
JNT	Joint
KFV	Orthoclase feldspar vein
QZV	Quartz vein
SHR	Shear
VNS	Veins

### **SHADE**

LT	Light
MD	Medium
DK	Dark

### **INTENSITY**

T	Trace
VW	Very weak
W	Weak
M	Medium
S	Strong
I	Intense

### **COLOUR**

BK	Black
BN	Brown
GN	Green
GY	Grey
PK	Pink
WH	White

2013 DRILL HOLE GEOLOGICAL LOGS

Hole No.	From (m)	To (m)	Interval (m)	Rock Code	Modifier	Oxid	Shade	Color	Py	Cp	Gl	Sp	Mg	Qz	Cb	Ep	Cl	Hm	Kf	Ms	Li	Bi	Struct 1	Space 1	Angle 1	Struct 2	Space 2	Angle 2	
TR13-084	0.00	6.00	6.00	OVBN																									
TR13-084	6.00	10.00	4.00	TUFF	BRXX	M	DK	GN					3	VW	M	S	S	M					FRC	<10	25-35				
TR13-084	10.00	11.60	1.60	PFPP		M	MD	GN	1				1	W	W	S	S	M		M			FRC	<10	45				
TR13-084	11.60	18.32	6.72	TUFF	LAPL	W	DK	GN	1				2	W	W	S	S	W					FRC	<10	45				
TR13-084	18.32	18.78	0.46	TUFF	LAPL	W	MD	GN	1.5				2	W	S	I	S	S					FRC	<10	30				
TR13-084	18.78	19.71	0.93	TUFF	LAPL	W	DK	GN	1				2	W	W	S	S	W					FRC	15	45				
TR13-084	19.71	20.55	0.84	TUFF	PFPP	W	MD	GN	1.5				1	W	W	S	S	W	M	M			FRC	5	45				
TR13-084	20.55	23.98	3.43	TUFF	LAPL	W	MD	GN	1				1	W	S	S	S	W					FRC	<10	45				
TR13-084	23.98	24.00	0.02	VEIN	QZ	T		WH	1				0.5	I		VW	VW						QZV	1	15				
TR13-084	24.00	30.32	6.32	TUFF	ANDS	W	MD	GN	1				1	W	S	S	S	W					FRC	<10	45				
TR13-084	30.32	30.34	0.02	VEIN	QZ	T		WH	1				0.5	I		VW	VW						QZV	1	30				
TR13-084	30.34	32.60	2.26	ANDS	TUFF	VW	DK	GN	1.5	T			2	W	VW	S	S	W	M				FRC	10	60				
TR13-084	32.60	33.16	0.56	ANDS	TUFF	VW	DK	GN	1.5	T			2	W	VW	S	S	W	M				FRC	10	25				
TR13-084	33.16	37.39	4.23	TUFF	BRXX	VW	MD	GN	1				1	W	W	S	S	VW	W				FRC	<20	45				
TR13-084	37.39	39.50	2.11	ANDS	FLOW	VW	DK	GN	2				1	W	W	S	S	W	VW				FRC	<10	45				
TR13-084	39.50	41.92	2.42	ANDS	PFPP	VW	MD	GN	2				1	M	W	M	M	VW	M				FRC	<20	45				
TR13-084	41.92	42.72	0.80	VEIN	KFMG	VW	MD	GN	1				2	S	M	W	W		S				KFV	1	5				
TR13-084	42.72	45.65	2.93	ANDS	BRXX	TR	DK	GN	2				1	M	W	S	S	W	T				FRC	<30	60				
TR13-084	45.65	63.05	17.40	ANDS	FLOW	TR	VDK	GN	2.5				2	M	W	M	S	W	T				FRC	<20	45				
TR13-084	63.05	76.07	13.02	ANDS	FLOW	TR	DK	GN	3				2	M	W	S	S	W	VW				FRC	<15	60				
TR13-085	0.00	7.76	7.76	OVBN																									
TR13-085	7.76	11.20	3.44	TUFF	LAPL	M	DK	GY	1				1.5	W	W	M	M	W					FRC	<25	45				
TR13-085	11.20	13.56	2.36	TUFF	BRXX	M	MD	GY	1.5				1	M	M	M	M	W		M	W		FRC	<15	45				
TR13-085	13.56	14.33	0.77	TUFF	BRXX	W	LT	GY	1.5				0.5	S	W	W	W	VW	S	VW			FRC	<10	65				
TR13-085	14.33	15.94	1.61	FAUL	TUFF	W	LT	GY	1				1	M	M	VW	VW	VW	S		M	W	M	FLT	<5	50			
TR13-085	15.94	17.35	1.41	TUFF	LAPL	W	MD	GN	1.5				1	M	W	M	M	W	W	M		W	FRC	<10	30				
TR13-085	17.35	18.30	0.95	TUFF	LAPL	VW	DK	GN	1				1	M	W	W	W	VW	W	M		M	FRC	<20	30				
TR13-085	18.30	23.50	5.20	ANDS	FLBX	T	DK	GN	1.5				1	M	W	M	M	VW	W	VW			FRC	<20	45				
TR13-085	23.50	24.00	0.50	FAUL	ANDS	W	LT	GY	T				1	W	M	M	M	S		M			FLT	<3	25				
TR13-085	24.00	27.45	3.45	ANDS	FLBX	T	DK	GN	1.5				1	M	W	M	M	VW	M	VW			FRC	<20	45				
TR13-085	27.45	29.05	1.60	SHZN	ANDS	VW	MD	GN	1				1	M	M	S	S	M	W				SHR	<5	45				
TR13-085	29.05	36.70	7.65	ANDS	FLBX		DK	GN	3				2	M	M	S	S	VW	W	VW			FRC	<30	30				
TR13-085	36.70	37.30	0.60	FAUL	ANDS		DK	GN	2				1	M	S	M	M	M		M			FLT	<2	25				
TR13-085	37.30	45.30	8.00	ANDS	FLBX		DK	GN	2.5				1	M	M	S	S	W	VW	WW			FRC	<15	45				
TR13-085	45.30	47.00	1.70	ANDS	PFPP		MD	BN	2				2	S	W	W	M	W	S	M		W	FRC	<30	25				
TR13-085	47.00	50.27	3.27	PFPP	ANDS	VW	MD	GY	1				1	S	W	W	S	VW	M	M			SHR	<30	45				
TR13-085	50.27	58.00	7.73	ANDS	FLBX		DK	GN	2				1	M	W	W	S		S	W		W	FRC	<30	60				
TR13-085	58.00	60.10	2.10	ANDS	BRXX		DK	GN	1				2	M	M	W	S	W	VW	VW			FRC	<20	5				
TR13-085	60.10	60.13	0.03	DYKE	PEGM		MD	PK	1					S	M				S				CNT		50				
TR13-085	60.13	62.10	1.97	ANDS	BRXX		DK	GN	1				2	M	M	W	S	W	VW	VW			FRC	<20	5				
TR13-085	62.10	63.00	0.90	SHZN	ANDS	VW	DK	GN	1				1	W	M	S	S	VW					SHR	<20	25				
TR13-085	63.00	81.83	18.83	ANDS	FLBX		DK	GN	3				1	M	M	S	S	W	VW				FRC	<30	40				
TR13-085	81.83	89.11	7.28	ANDS	FLBX		DK	GN	3				2	M	M	S	S	W	S				FRC	<30	40				
TR13-085	89.11	94.75	5.64	ANDS	FLBX		MD	GN	2				2	S	W	M	M	W	S	W			FRC	<10	35				
TR13-085	94.75	95.91	1.16	ANDS	PFPP		MD	GY	1				T	S	W	W	W	W	M	M		VW	FRC	<10	40				
TR13-085	95.91	99.67	3.76	PFPP			MD	BN	1				T	S	M	VW	W	VW	VW	S			FRC	<1	35				
TR13-086	0.00	9.14	9.14	OVBN																									
TR13-086	9.14	13.30	4.16	ANDS	FLBX	S	DK	GN	3				2	W	W	S	S	S				W	FRC	<30	20				
TR13-086	13.30	20.86	7.56	ANDS	FLBX	M	DK	GN	3				2	M	M	S	S	M	W	VW		W	FRC	<10	35				
TR13-086	20.86	21.34	0.48	ANDS	SHER	M	DK	GN	3				2	M	M	S	S	M	W	VW		W	SHR	<5	25				
TR13-086	21.34	27.74	6.40	ANDS	FLBX	W	DK	GN	3				2	W	M	S	S	M					FRC	<5	45				
TR13-086	27.74	29.57	1.83	ANDS	SHZN	M	DK	GN	3				2	W	M	S	S	M					SHR	<5	10				
TR13-086	29.57	31.30	1.73	ANDS	FLBX	W	DK	GN	2				2	W	M	S	S	M					FRC	<5	60				

2013 DRILL HOLE GEOLOGICAL LOGS

Hole No.	From (m)	To (m)	Interval (m)	Rock Code	Modifier	Oxid	Shade	Color	Py	Cp	Gl	Sp	Mg	Qz	Cb	Ep	Cl	Hm	Kf	Ms	Li	Bi	Struct 1	Space 1	Angle 1	Struct 2	Space 2	Angle 2	
TR13-086	31.30	31.90	0.60	ANDS	FLZN	M	MD	BN	1				1		M	S	S	W					FLT	<1	60				
TR13-086	31.90	35.48	3.58	ANDS	FLBX	W	DK	GN	3				1	W	M	S	S	M					FRC	<15	35				
TR13-086	35.48	37.02	1.54	ANDS	FLBX	M	DK	GN	2				1	W	M	S	S	S					FRC	<10	25				
TR13-086	37.02	47.00	9.98	ANDS	FLBX	W	DK	GN	3				1	VW	M	S	S	W					FRC	<10	30				
TR13-086	47.00	49.00	2.00	ANDS	TFBX	M	MD	GN	3				1	VW	M	S	S	M		W			FRC	<10	20				
TR13-086	49.00	50.80	1.80	ANDS	TFBX	M	MD	GN	3				2	VW	M	S	S	S		W			FRC	<10	20				
TR13-086	50.80	57.00	6.20	TUFF	BRXX	W	DK	GN	3				2	M	M	S	S	W	W			W		FRC	<5	45	SHR	20	30
TR13-086	57.00	62.80	5.80	TUFF	BRXX	W	DK	GN	5				3	M	M	S	S	W	M					FRC	<10	60			
TR13-086	62.80	64.25	1.45	TUFF	BRXX	VW		BK	5				3	M	M	S	S	VW	S					FRC	<30	60			
TR13-086	64.25	68.50	4.25	TUFF	BRXX	W	DK	GN	5				3	M	M	S	S	W	M					FRC	<10	60	FFV		15
TR13-086	68.50	69.10	0.60	TUFF	BRXX	VW		BK	5				3	M	M	S	S	VW	S					FRC	<20	45			
TR13-086	69.10	79.15	10.05	TUFF	BRXX	T		BK	5				2	M	M	S	S	T	W					FRC	<10	45			
TR13-086	79.15	79.70	0.55	TUFF	FLZN	W		BK	5				2	M	M	S	S	M	W					SHR	<5	30			
TR13-086	79.70	80.00	0.30	TUFF	BRXX	T		BK	5				2	M	M	S	S	T	W					FRC	<10	45			
TR13-086	80.00	80.85	0.85	TUFF	FLZN	W	MD	GN	2				1	W	M	M	M	W			W		SHR	<1	40				
TR13-086	80.85	83.21	2.36	TUFF	BRXX	VW		BK	5				2	W	M	S	S	VW	VW					FRC	<10	60	FFV	<5	80
TR13-086	83.21	83.42	0.21	TUFF	SHZN	VW		BK	5				2	W	M	M	M	M	VW					SHR	<1	45	JNT	<10	80
TR13-086	83.42	84.43	1.01	TUFF	BRXX	VW		BK	5				2	W	M	S	S	VW	VW					FRC	<10	65			
TR13-086	84.43	85.23	0.80	PFPP	DYKE	T	MD	GY	T				1	M	W	W	W	T			M		CNT		80				
TR13-086	85.23	85.75	0.52	TUFF	BRXX	VW		BK	5				2	W	M	S	S	VW					FRC	<10	45				
TR13-086	85.75	86.10	0.35	PFPP	DYKE	VW	MD	GY	T				1	S	M	M	M	VW	M	M			FRC	<10	45				
TR13-086	86.10	89.25	3.15	ANDS	FLBX	VW	DK	GN	4				1	M	M	S	S	VW	W					FRC	<30	75			
TR13-086	89.25	89.31	0.06	PFPP	DYKE	VW		BN	1				1	M	M	S	S	VW	W		M		CNT		45				
TR13-086	89.31	95.30	5.99	ANDS	FLBX	T	DK	GN	5				2	M	M	S	S	T	W					FRC	<5	45			
TR13-086	95.30	105.59	10.29	ANDS	FLBX	W	DK	GN	5				2	M	M	S	S	W	W					FRC	<10	35			
TR13-086	105.59	105.94	0.35	PFPP	DYKE	T	DK	GN	1				T	S	M	S	S	T						FRC	<10	60			
TR13-086	105.94	110.45	4.51	ANDS	FLBX	W	DK	GN	5				2	M	M	S	S	VW						FRC	<10	35			
TR13-086	110.45	118.50	8.05	PFPP	DYKE	VW	DK	BN	1				1	M	M	M	M	VW	VW	M				FRC	<10	45			
TR13-086	118.50	122.10	3.60	TUFF	PFPP			BK	5				1	M	M	S	S	VW						FRC	<10	25	FFV	<10	30
TR13-086	122.10	131.92	9.82	TUFF	BRXX		DK	GN	3				1	M	M	S	S	VW	W	M				FRC	<10	40			
TR13-086	131.92	132.72	0.80	TUFF	FLZN		MD	GN	1				1	M	M	S	S	W		S				SHR	<5	30			
TR13-086	132.72	139.29	6.57	TUFF	PFPP		MD	GN	2				1	M	M	S	S	VW	VW	S				FRC	<10	45	FFV	<5	30
TR13-087	0.00	6.10	6.10	OVBN																									
TR13-087	6.10	21.66	15.56	TUFF	BRXX	S	DK	GN	1				2	W	M	S	S	S		VW				FRC	<3	30			
TR13-087	21.66	23.47	1.81	TUFF	LAPL	M	DK	GY	2				2	W	M	S	S	W						FRC	<10	45	FFV	<3	30
TR13-087	23.47	38.10	14.63	TUFF	BRXX	M	DK	GY	2				2	W	M	S	S	M						FRC	<5	30	FFV	<3	30
TR13-087	38.10	42.50	4.40	TUFF	BRXX	M	DK	GN	3				2	W	M	S	S	S						FRC	<5	45	FFV	<5	45
TR13-087	42.50	53.00	10.50	TUFF	BRXX	M	DK	GY	3				2	W	M	S	S	S						FRC	<5	40	FFV	<5	40
TR13-087	53.00	65.86	12.86	TUFF	BRXX	W	DK	GY	4				2	W	M	S	S	W		VW				FRC	<20	60	FFV	<10	60
TR13-087	65.86	71.98	6.12	TUFF	SHZN	W	DK	GN	2				2	M	M	S	S	W	VW					SHR	<5	60			
TR13-087	71.98	77.82	5.84	ANDS	FLBX	W	DK	GN	2	T			2	M	M	S	S	W	VW					FRC	<20	60	FFV	<5	60
TR13-087	77.82	78.35	0.53	VEIN	QZPY	VW	MD	GY	4	1			2	M	W	M	M	VW		M				SHR	25	QZV			25
TR13-087	78.35	81.70	3.35	ANDS	FLBX	W	DK	GN	2	T			2	M	M	S	S	W	VW					FRC	<20	60	FFV	<5	60
TR13-087	81.70	86.30	4.60	ANDS	FLBX	M	DK	GN	2	T			2	M	M	S	S	M	VW					FRC	<20	45	FFV	<30	45
TR13-087	86.30	90.85	4.55	ANDS	FLBX	W	DK	GN	2	T			2	M	M	S	S	W	VW					FRC	<20	30	FFV	<20	30
TR13-087	90.85	91.00	0.15	ANDS	SHZN	W	MD	GY	2				1	W	M	M	M	M		M				FRC	<20	30			
TR13-087	91.00	94.30	3.30	ANDS	FLBX		DK	GN	2				1	M	M	S	S	W						SHR	<10	60			
TR13-087	94.30	96.10	1.80	ANDS	FLBX		DK	GN	2	T			2	M	M	S	S	M		VW				FRC	<20	45	FFV	<20	45
TR13-087	96.10	101.40	5.30	ANDS	FLBX		DK	GN	3				1	W	M	S	S	W		T				SHR	<10	30			
TR13-087	101.40	101.58	0.18	VEIN	QZKF		DK	GN	3				1	S		W	W		S					CNT	85	QZV			85
TR13-087	101.58	111.33	9.75	TUFF	LAPL	T	DK	GN	3				1	M	M	S	S	VW		W				FRC	<10	25	FFV	<10	25
TR13-087	111.33	114.91	3.58	TUFF	BRXX		DK	GN	3				2	W	M	S	S	VW						FRC	<30	70	FFV	<100	30
TR13-087	114.91	117.27	2.36	TUFF	BRXX		MD	GN	3				2	M	M	S	S	VW						FRC	<30	70	FFV	<100	30
TR13-087	117.27	122.56	5.29	TUFF	BRXX		DK	GN	2				2	M	M	S	S	VW						FRC	<30	30			

2013 DRILL HOLE GEOLOGICAL LOGS

Hole No.	From (m)	To (m)	Interval (m)	Rock Code	Modifier	Oxid	Shade	Color	Py	Cp	Gl	Sp	Mg	Qz	Cb	Ep	Cl	Hm	Kf	Ms	Li	Bi	Struct 1	Space 1	Angle 1	Struct 2	Space 2	Angle 2
TR13-087	122.56	122.67	0.11	TUFF	SHZN		DK	GN	2				2	S	M	M	M	M		M			QZV		45			
TR13-087	122.67	128.39	5.72	TUFF	BRXX		DK	GN	2				2	M	M	S	S	VW					FRC	<30	30			
TR13-087	128.39	128.59	0.20	VEIN	QZKF									S	S				S				QZV		20			
TR13-087	128.59	134.20	5.61	TUFF	BRXX		MD	GN	3				2	M	M	S	S	VW					FRC	<30	70			
TR13-087	134.20	136.00	1.80	TUFF	LITH		DK	GY	3				2	M	M	S	S	VW					FRC	<10	25	FFV	<10	25
TR13-087	136.00	142.95	6.95	TUFF	LITH		DK	GN	3				2	M	M	S	S	T					FRC	<10	20	FFV	<200	25
TR13-087	142.95	144.88	1.93	TUFF	BRXX		DK	GN	3				2	S	S	I	I	W				W	FRC	<10	20	SHR		20
TR13-087	144.88	157.50	12.62	TUFF	LITH		MD	GN	4				2	M	W	S	S									FFV		30
TR13-087	157.50	158.10	0.60	TUFF	SHZN		MD	GN	3				1	M	W	S	S						SHR	<2	20			
TR13-087	158.10	161.37	3.27	TUFF	LITH		DK	GN	5				3	S	M	S	S	VW					FRC	<10	20	FFV	<30	30
TR13-087	161.37	176.65	15.28	ANDS	FLOW		DK	GN	4				2	M	M	S	S	T	VW				FRC	<15	35	QZV		30
TR13-087	176.65	176.79	0.14	VEIN	QZPY		LT	GY	5				1	S											QZV		40	
TR13-087	176.79	182.10	5.31	ANDS	FLOW		DK	GN	4				2	M	M	S	S	T	VW				FRC	<15	35	QZV		30
TR13-087	182.10	183.20	1.10	ANDS	FLOW		DK	GN	5				2	M	M	S	S	T					FRC	<10	60	FFV	<50	45
TR13-087	183.20	183.95	0.75	ANDS	SHZN		LT	BN	2				1	S	M	W	W	T	W	S			FRC	<10	40	CNT		70
TR13-087	183.95	193.20	9.25	ANDS	FLOW		DK	GN	5				2	M	M	S	S	T					FRC	<10	40	FFV	<50	40
TR13-087	193.20	194.42	1.22	ANDS	PFPP		MD	GN	7				3	S	M	S	S	VW	W				FRC	<10	40	FFV	<10	30
TR13-087	194.42	194.84	0.42	PFPP	DYKE		DK	BN	1				1	S	W	M	M	W	W	W			FRC	<30	25			
TR13-087	194.84	195.37	0.53	ANDS	FLOW		MD	GN	5				3	M	M	S	S	VW	W				FRC	<10	40			
TR13-087	195.37	196.20	0.83	ANDS	SHZN		LT	GN	1				T	S	M	W	W	M			S		SHR	<2	15			
TR13-087	196.20	200.25	4.05	ANDS	FLOW		DK	GN	3				1	M	M	S	S	VW					FRC	<20	30	FFV	<10	25
TR13-088	0.00	15.85	15.85	OVBN																								
TR13-088	15.85	17.40	1.55	ANDS	FLBX	M	DK	GN	2				2	W	M	S	S						FRC	<10	45	FFV	<15	45
TR13-088	17.40	20.10	2.70	ANDS	SHZN	M	MD	GN	3				2	S	S	S	S	M	VW	VW			SHR	<5	20	FFV	<5	20
TR13-088	20.10	26.85	6.75	ANDS	FLBX	W	DK	GN	3				2	M	M	S	S	W	W				FRC	<10	60	VNS		20
TR13-088	26.85	29.50	2.65	SYEN		M	MD	GN	3				1	W	W	M	M	M	S				FRC	<10	45	CNT		45
TR13-088	29.50	34.00	4.50	SYEN	ANDS	W	MD	GN	3				1	W	W	M	M	W	S				FRC	<10	40	CNT		20
TR13-088	34.00	37.00	3.00	TUFF	LITH		DK	GN	3				1	M	M	S	S	VW	VW				FRC	<15	45			
TR13-088	37.00	37.70	0.70	TUFF	SHZN		MD	GN	3				1	S	S	M	M	VW		W					QZV		15	
TR13-088	37.70	43.70	6.00	TUFF	BRXX		DK	GN	3				1	M	M	S	S	T	VW				FRC	<10	20	QZV		20
TR13-088	43.70	52.10	8.40	PFPP	DYKE		MD	GY	2				1	M	M	M	M	VW	VW	M			FRC	<5	45	FFV	5	45
TR13-088	52.10	59.00	6.90	ANDS	FLOW		DK	GN	2				1	W	M	S	S	VW					FRC	<20	45	FFV	<5	20
TR13-088	59.00	64.10	5.10	ANDS	FLBX		DK	GN	3				1	M	M	S	S	VW	M	W			FRC	<10	50			
TR13-088	64.10	69.05	4.95	ANDS	FLOW		DK	GN	5				2	M	M	S	S	VW	W	VW			FRC	<20	70	QZV		80
TR13-088	69.05	69.89	0.84	VEIN	QZKF			PK	7	1			1	S	M	S	S	T	S				QZV		5			
TR13-088	69.89	71.10	1.21	ANDS	FLOW		DK	GN	7	1			2	M	M	S	S	VW	W	VW			FRC	<20	70			
TR13-088	71.10	72.05	0.95	ANDS	SHZN		MD	GN	5	1			2	M	M	S	S	W	M	VW			SHR	<1	10			
TR13-088	72.05	83.00	10.95	ANDS	FLOW		DK	GN	5	1			2	M	M	S	S	T	VW				FRC	<30	45	FFV	<30	20
TR13-088	83.00	84.00	1.00	ANDS	FLOW		DK	GN	6	1			2	S	W	S	S	T	M				FRC	<30	45	FFV	<30	20
TR13-088	84.00	87.00	3.00	ANDS	FLOW		DK	GN	5	1			2	M	M	S	S	T	VW				FRC	<30	45			
TR13-088	87.00	88.00	1.00	ANDS	FLOW		DK	GN	5	1			2	S	W	S	S	T	M				FRC	<30	45	FFV	<30	20
TR13-088	88.00	88.50	0.50	ANDS	FLOW		DK	GN	5	1			2	M	M	S	S	T	VW				FRC	<30	45			
TR13-088	88.50	90.00	1.50	ANDS	FLOW		DK	GN	7	1	2		2	M	M	S	S	T	VW				FRC	<30	45	FFV	<30	20
TR13-088	90.00	90.52	0.52	ANDS	FLOW		DK	GN	5	1			2	M	M	S	S	T	VW				FRC	<30	45			

**SELECTED 2013 DRILL HOLE ASSAY DATA**

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-084	10.00	11.00	1.00	2598501	6.88	0.067	1.2	14	4	<5	84
TR13-084	14.00	15.00	1.00	2598502	9.04	0.020	<0.5	7	<2	<5	85
TR13-084	15.00	16.00	1.00	2598503	2.57	0.044	1.7	3	<2	6	126
TR13-084	16.00	17.00	1.00	2598504	2.83	0.032	1.4	6	<2	<5	92
TR13-084	17.00	18.00	1.00	2598505	2.15	0.073	1.4	4	<2	<5	92
TR13-084	18.00	19.00	1.00	2598506	1.82	0.015	1.1	10	<2	5	100
TR13-084	19.00	20.00	1.00	2598507	4.62	0.143	1.2	61	<2	<5	79
TR13-084	20.00	21.00	1.00	2598508	1.86	0.013	<0.5	13	<2	<5	53
TR13-084	21.00	22.00	1.00	2598509	1.76	0.031	<0.5	3	<2	<5	61
TR13-084	22.00	23.00	1.00	2598510	2.04	0.046	0.8	9	<2	<5	83
TR13-084	23.00	24.00	1.00	2598511	1.22	0.069	1.4	35	<2	<5	138
TR13-084	24.00	25.00	1.00	2598512	2.30	0.450	1.7	20	<2	<5	112
TR13-084	25.00	26.00	1.00	2598513	1.31	0.032	<0.5	5	<2	9	46
TR13-084	26.00	27.00	1.00	2598514	2.40	0.011	1.5	12	<2	<5	99
TR13-084	27.00	28.00	1.00	2598515	3.51	0.039	1.2	30	<2	<5	120
TR13-084	30.00	31.00	1.00	2598516	7.09	0.046	1.4	106	<2	15	132
TR13-084	31.00	32.60	1.60	2598517	2.85	0.246	1.9	227	<2	<5	84
TR13-084	32.60	33.16	0.56	2598518	3.59	0.084	1.3	33	<2	<5	115
TR13-084	33.16	34.00	0.84	2598519	1.50	0.172	<0.5	8	7	<5	50
TR13-084	34.00	35.00	1.00	2598520	2.30	0.026	<0.5	5	<2	<5	58
TR13-084	35.00	36.00	1.00	2598521	2.22	0.020	<0.5	<2	<2	<5	42
TR13-084	36.00	37.00	1.00	2598522	2.43	0.055	<0.5	8	<2	<5	42
TR13-084	37.00	38.00	1.00	2598523	2.10	0.088	<0.5	18	<2	<5	90
TR13-084	38.00	39.00	1.00	2598524	3.03	0.070	0.6	84	<2	<5	139
TR13-084	39.00	40.00	1.00	2598525	2.57	0.070	1.8	405	<2	<5	185
TR13-084	40.00	41.00	1.00	2598526	3.65	0.051	0.9	41	<2	<5	125
TR13-084	41.00	41.92	0.92	2598527	2.29	0.050	<0.5	10	<2	<5	42
TR13-084	41.92	42.72	0.80	2598528	2.51	0.019	<0.5	23	8	<5	39
TR13-084	42.72	44.00	1.28	2598529	4.24	0.050	1.2	84	<2	<5	81
TR13-084	44.00	45.00	1.00	2598530	3.04	0.065	1.0	56	<2	<5	103
TR13-084	45.00	46.00	1.00	2598531	2.19	0.056	<0.5	103	<2	19	116
TR13-084	46.00	48.00	2.00	2598532	6.20	0.119	<0.5	91	<2	19	100
TR13-084	48.00	50.00	2.00	2598533	0.93	0.142	<0.5	21	<2	12	107
TR13-084	50.00	52.00	2.00	2598534	4.39	0.126	<0.5	40	<2	12	101
TR13-084	52.00	54.00	2.00	2598535	5.31	0.154	<0.5	91	<2	12	111
TR13-084	54.00	56.00	2.00	2598536	2.18	0.065	<0.5	14	<2	18	118
TR13-084	56.00	58.00	2.00	2598537	4.74	0.220	<0.5	77	<2	12	123
TR13-084	58.00	60.00	2.00	2598538	6.37	0.158	<0.5	127	<2	18	114
TR13-084	60.00	62.00	2.00	2598539	6.61	0.111	<0.5	13	<2	12	128
TR13-084	62.00	64.00	2.00	2598540	5.50	0.139	<0.5	59	<2	10	147
TR13-084	64.00	66.00	2.00	2598541	5.47	0.182	<0.5	16	<2	16	125
TR13-084	66.00	68.00	2.00	2598542	5.31	0.254	<0.5	13	<2	15	122
TR13-084	68.00	70.00	2.00	2598543	5.92	0.125	<0.5	24	<2	11	120
TR13-084	70.00	72.00	2.00	2598544	5.73	0.363	0.6	224	<2	14	125
TR13-084	72.00	74.00	2.00	2598545	5.53	0.590	0.6	360	<2	16	122
TR13-084	74.00	76.07	2.07	2598546	5.63	0.434	<0.5	160	<2	12	143
TR13-085	7.76	9.00	1.24	2598547	1.00	0.022	<0.5	17	<2	18	107
TR13-085	9.00	11.00	2.00	2598548	4.13	0.074	<0.5	9	<2	18	129
TR13-085	11.00	13.00	2.00	2598549	3.79	0.104	<0.5	6	<2	21	72
TR13-085	13.00	15.94	2.94	2598550	5.38	0.053	<0.5	6	<2	15	75
TR13-085	15.94	17.00	1.06	2598551	5.43	0.034	<0.5	10	<2	12	67
TR13-085	17.00	19.00	2.00	2598552	2.90	0.167	<0.5	6	2	8	55
TR13-085	19.00	21.00	2.00	2598553	6.34	0.016	<0.5	5	<2	7	51

**SELECTED 2013 DRILL HOLE ASSAY DATA**

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-085	21.00	23.00	2.00	2598554	6.22	0.029	<0.5	6	<2	11	65
TR13-085	23.00	25.00	2.00	2598555	5.79	0.102	<0.5	8	<2	12	116
TR13-085	25.00	27.00	2.00	2598556	5.25	0.122	<0.5	10	<2	12	106
TR13-085	27.00	29.00	2.00	2598558	5.12	0.086	<0.5	70	<2	12	116
TR13-085	29.00	31.00	2.00	2598559	3.96	0.073	<0.5	22	<2	20	87
TR13-085	31.00	33.00	2.00	2598560	1.46	0.049	0.5	10	3	15	73
TR13-085	33.00	35.00	2.00	2598561	9.22	0.210	0.8	143	9	18	84
TR13-085	35.00	37.00	2.00	2598562	5.29	0.224	<0.5	178	<2	15	86
TR13-085	37.00	39.00	2.00	2598563	4.79	0.047	1.4	84	3	15	87
TR13-085	39.00	41.00	2.00	2598564	5.82	0.058	1.5	55	<2	13	67
TR13-085	41.00	43.00	2.00	2598565	2.87	0.053	1.0	103	<2	7	66
TR13-085	43.00	45.00	2.00	2598566	7.03	0.085	1.4	91	5	14	73
TR13-085	45.00	47.00	2.00	2598567	5.40	0.082	1.6	177	2	12	87
TR13-085	47.00	49.00	2.00	2598569	3.10	0.044	<0.5	8	<2	<5	69
TR13-085	49.00	51.00	2.00	2598570	6.97	0.058	<0.5	40	4	9	98
TR13-085	51.00	53.00	2.00	2598571	3.06	0.231	<0.5	509	<2	13	86
TR13-085	53.00	55.00	2.00	2598572	4.76	0.185	<0.5	345	<2	13	81
TR13-085	55.00	57.00	2.00	2598573	5.51	0.178	<0.5	264	<2	14	56
TR13-085	57.00	59.00	2.00	2598574	3.88	0.121	1.3	104	<2	17	61
TR13-085	59.00	61.00	2.00	2598575	5.23	0.151	1.4	208	<2	8	97
TR13-085	61.00	63.00	2.00	2598576	4.26	0.119	1.6	203	<2	10	114
TR13-085	63.00	65.00	2.00	2598577	5.46	0.136	1.7	387	<2	9	119
TR13-085	65.00	67.00	2.00	2598578	2.79	0.054	1.7	317	<2	6	95
TR13-085	67.00	69.00	2.00	2598580	5.10	0.045	1.2	149	<2	<5	98
TR13-085	69.00	71.00	2.00	2598581	NE	NE	NE	NE	NE	NE	NE
TR13-085	71.00	73.00	2.00	2598582	4.39	0.071	1.4	137	<2	<5	129
TR13-085	73.00	75.00	2.00	2598583	2.41	0.125	1.5	169	<2	8	133
TR13-085	75.00	77.00	2.00	2598584	3.73	0.112	1.4	161	<2	11	128
TR13-085	77.00	79.00	2.00	2598585	4.88	0.107	1.3	141	<2	7	107
TR13-085	79.00	81.00	2.00	2598586	4.97	0.072	1.6	118	<2	<5	104
TR13-085	81.00	83.00	2.00	2598587	5.32	0.059	1.2	116	<2	7	104
TR13-085	83.00	85.00	2.00	2598588	8.05	0.159	1.3	65	2	14	88
TR13-085	85.00	87.00	2.00	2598589	6.44	0.134	1.6	278	<2	7	107
TR13-085	87.00	89.00	2.00	2598591	0.41	0.047	1.1	52	3	<5	79
TR13-085	89.00	91.00	2.00	2598592	4.95	0.487	2.6	857	<2	9	110
TR13-085	91.00	93.00	2.00	2598593	5.95	0.164	1.4	483	<2	<5	93
TR13-085	93.00	95.00	2.00	2598594	4.57	0.132	1.8	316	<2	9	78
TR13-085	95.00	97.00	2.00	2598595	5.87	0.140	1.7	204	<2	7	72
TR13-085	97.00	99.67	2.67	2598596	4.91	0.055	<0.5	34	4	<5	61
TR13-086	9.14	11.00	1.86	2598597	7.56	0.025	<0.5	16	4	10	62
TR13-086	11.00	13.00	2.00	2598598	5.91	0.082	<0.5	5	<2	<5	84
TR13-086	13.00	15.00	2.00	2598599	2.32	0.036	<0.5	6	4	8	82
TR13-086	15.00	17.00	2.00	2598600	5.45	0.040	<0.5	7	12	11	96
TR13-086	17.00	19.00	2.00	2598602	4.66	0.033	<0.5	18	<2	8	105
TR13-086	19.00	21.00	2.00	2598603	6.66	0.065	<0.5	33	<2	15	84
TR13-086	21.00	23.00	2.00	2598604	7.56	0.054	<0.5	12	<2	10	86
TR13-086	23.00	25.00	2.00	2598605	3.27	0.096	<0.5	69	<2	10	81
TR13-086	25.00	27.00	2.00	2598606	5.61	0.040	<0.5	18	<2	5	96
TR13-086	27.00	29.00	2.00	2598607	4.10	0.034	<0.5	9	<2	9	93
TR13-086	29.00	31.00	2.00	2598608	9.06	0.050	<0.5	10	3	12	80
TR13-086	31.00	33.00	2.00	2598609	4.59	0.028	<0.5	11	3	12	165
TR13-086	33.00	35.00	2.00	2598610	5.50	0.028	<0.5	131	2	<5	238
TR13-086	35.00	37.00	2.00	2598611	3.21	0.073	<0.5	38	<2	12	98

**SELECTED 2013 DRILL HOLE ASSAY DATA**

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-086	37.00	39.00	2.00	2598613	5.23	0.075	<0.5	16	<2	15	81
TR13-086	39.00	41.00	2.00	2598614	6.89	0.067	<0.5	10	3	9	77
TR13-086	41.00	43.00	2.00	2598615	0.86	0.034	<0.5	33	3	13	77
TR13-086	43.00	45.00	2.00	2598616	2.78	0.035	<0.5	42	6	7	52
TR13-086	45.00	47.00	2.00	2598617	7.04	1.659	0.8	442	2	7	126
TR13-086	47.00	49.00	2.00	2598618	3.47	0.157	<0.5	137	<2	<5	141
TR13-086	49.00	51.00	2.00	2598619	5.23	0.668	0.8	351	<2	12	104
TR13-086	51.00	53.00	2.00	2598620	5.42	0.345	<0.5	195	<2	9	98
TR13-086	53.00	55.00	2.00	2598621	4.42	0.121	<0.5	44	<2	6	119
TR13-086	55.00	57.00	2.00	2598622	5.53	0.079	<0.5	21	<2	5	121
TR13-086	57.00	59.00	2.00	2598624	8.14	0.367	<0.5	78	<2	<5	136
TR13-086	59.00	61.00	2.00	2598625	4.52	0.175	<0.5	85	<2	8	124
TR13-086	61.00	63.00	2.00	2598626	5.80	0.800	0.6	235	4	7	121
TR13-086	63.00	65.00	2.00	2598627	6.02	0.624	0.7	465	2	<5	102
TR13-086	65.00	67.00	2.00	2598628	4.83	0.404	0.6	533	3	7	99
TR13-086	67.00	69.00	2.00	2598629	2.79	0.223	<0.5	333	<2	9	100
TR13-086	69.00	71.00	2.00	2598630	3.75	0.205	<0.5	189	<2	<5	171
TR13-086	71.00	73.00	2.00	2598631	5.43	0.116	<0.5	44	<2	<5	171
TR13-086	73.00	75.00	2.00	2598632	6.33	0.300	<0.5	54	<2	7	136
TR13-086	75.00	77.00	2.00	2598633	9.08	0.126	<0.5	21	3	9	145
TR13-086	77.00	79.00	2.00	2598635	8.68	0.094	<0.5	53	<2	8	129
TR13-086	79.00	81.00	2.00	2598636	5.96	0.134	<0.5	416	<2	<5	117
TR13-086	81.00	83.00	2.00	2598637	5.04	0.463	<0.5	164	<2	<5	108
TR13-086	83.00	85.00	2.00	2598638	5.64	0.373	0.6	537	<2	6	130
TR13-086	85.00	87.00	2.00	2598639	6.57	0.347	<0.5	355	<2	9	101
TR13-086	87.00	89.00	2.00	2598640	5.04	0.291	<0.5	145	3	7	83
TR13-086	89.00	91.00	2.00	2598641	6.28	0.273	0.5	355	<2	5	110
TR13-086	91.00	93.00	2.00	2598642	4.74	0.177	<0.5	234	<2	12	92
TR13-086	93.00	95.00	2.00	2598643	5.52	0.081	<0.5	58	<2	16	126
TR13-086	95.00	97.00	2.00	2598644	3.06	0.100	<0.5	129	3	7	88
TR13-086	97.00	99.00	2.00	2598646	4.59	0.077	<0.5	116	<2	<5	87
TR13-086	99.00	101.00	2.00	2598647	5.41	0.189	<0.5	150	<2	9	90
TR13-086	101.00	103.00	2.00	2598648	5.72	0.106	<0.5	98	<2	7	108
TR13-086	103.00	105.00	2.00	2598649	3.36	0.073	<0.5	103	<2	6	111
TR13-086	105.00	107.00	2.00	2598650	6.24	0.120	<0.5	78	4	13	88
TR13-086	107.00	109.00	2.00	2598651	5.53	0.161	0.7	674	331	<5	96
TR13-086	109.00	111.00	2.00	2598652	4.35	0.069	<0.5	100	2	<5	92
TR13-086	111.00	113.00	2.00	2598653	5.61	0.041	<0.5	104	<2	<5	79
TR13-086	113.00	115.00	2.00	2598654	5.68	0.052	<0.5	103	2	12	57
TR13-086	115.00	117.00	2.00	2598655	5.03	0.026	<0.5	67	17	<5	47
TR13-086	117.00	119.00	2.00	2598657	6.70	0.020	<0.5	109	<2	5	49
TR13-086	119.00	121.00	2.00	2598658	6.03	0.022	<0.5	161	<2	<5	72
TR13-086	121.00	123.00	2.00	2598659	4.42	0.011	<0.5	41	<2	<5	115
TR13-086	123.00	125.00	2.00	2598660	4.77	0.036	<0.5	279	2	<5	139
TR13-086	125.00	127.00	2.00	2598661	5.41	0.107	<0.5	388	12	8	91
TR13-086	127.00	129.00	2.00	2598662	6.42	0.055	<0.5	252	<2	11	97
TR13-086	129.00	131.00	2.00	2598663	6.57	0.059	<0.5	251	3	10	70
TR13-086	131.00	133.00	2.00	2598664	5.65	0.090	<0.5	361	86	8	59
TR13-086	133.00	135.00	2.00	2598665	4.72	0.084	<0.5	203	9	6	75
TR13-086	135.00	137.00	2.00	2598666	3.74	0.086	0.7	563	30	7	76
TR13-086	137.00	139.29	2.29	2598668	5.04	0.042	<0.5	352	45	11	66
TR13-087	22.00	24.00	2.00	2598669	5.58	0.016	<0.5	39	52	10	66
TR13-087	24.00	26.00	2.00	2598670	3.18	0.036	<0.5	10	<2	10	119

**SELECTED 2013 DRILL HOLE ASSAY DATA**

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-087	26.00	28.00	2.00	2598671	4.45	0.058	0.9	23	<2	12	124
TR13-087	28.00	30.00	2.00	2598672	6.46	0.113	0.5	326	<2	9	119
TR13-087	30.00	32.00	2.00	2598673	4.62	0.886	0.5	68	<2	<5	170
TR13-087	32.00	34.00	2.00	2598674	4.43	0.053	<0.5	32	<2	7	134
TR13-087	34.00	36.00	2.00	2598675	1.80	0.026	1.3	13	<2	11	138
TR13-087	36.00	38.00	2.00	2598676	1.32	0.025	<0.5	74	4	15	108
TR13-087	38.00	40.00	2.00	2598677	1.83	0.032	<0.5	72	<2	15	108
TR13-087	40.00	42.00	2.00	2598678	3.12	0.022	<0.5	28	<2	12	143
TR13-087	42.00	44.00	2.00	2598680	4.87	0.098	<0.5	11	<2	13	126
TR13-087	44.00	46.00	2.00	2598681	7.21	0.045	0.9	233	<2	20	112
TR13-087	46.00	48.00	2.00	2598682	2.78	0.025	<0.5	58	<2	13	106
TR13-087	48.00	50.00	2.00	2598683	6.41	0.024	<0.5	69	4	9	99
TR13-087	50.00	52.00	2.00	2598684	3.83	0.020	<0.5	102	<2	8	112
TR13-087	52.00	54.00	2.00	2598685	6.86	0.038	<0.5	58	<2	15	117
TR13-087	54.00	56.00	2.00	2598686	6.59	0.036	<0.5	44	<2	13	90
TR13-087	56.00	58.00	2.00	2598687	4.19	0.019	<0.5	42	<2	10	90
TR13-087	58.00	60.00	2.00	2598688	6.17	0.028	<0.5	28	<2	8	104
TR13-087	60.00	62.00	2.00	2598689	5.90	0.046	<0.5	52	2	9	102
TR13-087	62.00	64.00	2.00	2598691	6.92	0.070	<0.5	43	5	6	114
TR13-087	64.00	66.00	2.00	2598692	4.21	0.049	<0.5	88	<2	13	106
TR13-087	66.00	68.00	2.00	2598693	6.19	0.039	<0.5	90	<2	12	102
TR13-087	68.00	70.00	2.00	2598694	5.86	0.028	<0.5	45	<2	16	93
TR13-087	70.00	72.00	2.00	2598695	6.49	0.095	<0.5	8	<2	15	80
TR13-087	72.00	74.00	2.00	2598696	4.95	0.047	<0.5	282	<2	12	111
TR13-087	74.00	76.00	2.00	2598697	5.58	0.085	1.1	965	<2	7	145
TR13-087	76.00	78.00	2.00	2598698	6.33	0.070	0.9	793	3	11	150
TR13-087	78.00	80.00	2.00	2598699	4.43	0.028	<0.5	133	<2	<5	154
TR13-087	80.00	82.00	2.00	2598700	6.28	0.099	0.8	182	10	9	105
TR13-087	82.00	84.00	2.00	2598702	7.17	0.181	<0.5	70	<2	12	114
TR13-087	84.00	86.00	2.00	2598703	5.38	0.032	<0.5	34	<2	12	125
TR13-087	86.00	88.00	2.00	2598704	6.63	0.027	<0.5	34	<2	16	125
TR13-087	88.00	90.00	2.00	2598705	5.67	0.031	<0.5	19	<2	15	122
TR13-087	90.00	92.00	2.00	2598706	5.98	0.051	<0.5	42	<2	15	104
TR13-087	92.00	94.00	2.00	2598707	6.39	0.076	<0.5	124	<2	15	131
TR13-087	94.00	96.00	2.00	2598708	5.77	0.142	<0.5	21	<2	15	146
TR13-087	96.00	98.00	2.00	2598709	4.31	0.054	<0.5	73	<2	13	127
TR13-087	98.00	100.00	2.00	2598710	5.03	0.098	<0.5	299	<2	16	119
TR13-087	100.00	102.00	2.00	2598711	6.61	0.144	<0.5	198	<2	14	120
TR13-087	102.00	104.00	2.00	2598713	5.13	0.038	<0.5	31	<2	13	111
TR13-087	104.00	106.00	2.00	2598714	6.24	0.039	<0.5	41	<2	14	143
TR13-087	106.00	108.00	2.00	2598715	5.71	0.049	<0.5	121	<2	14	143
TR13-087	108.00	110.00	2.00	2598716	5.37	0.075	<0.5	125	<2	18	147
TR13-087	110.00	112.00	2.00	2598717	6.71	0.135	0.7	795	<2	19	118
TR13-087	112.00	114.00	2.00	2598718	4.58	0.156	2.4	500	<2	16	147
TR13-087	114.00	116.00	2.00	2598719	5.88	0.520	0.8	732	<2	11	176
TR13-087	116.00	118.00	2.00	2598720	6.25	0.027	<0.5	39	<2	7	179
TR13-087	118.00	120.00	2.00	2598721	6.15	0.078	<0.5	94	<2	12	153
TR13-087	120.00	122.00	2.00	2598722	6.13	0.049	<0.5	52	<2	16	116
TR13-087	122.00	124.00	2.00	2598724	6.41	0.054	<0.5	36	<2	15	125
TR13-087	124.00	126.00	2.00	2598725	5.14	0.045	<0.5	12	<2	13	130
TR13-087	126.00	128.00	2.00	2598726	7.47	0.049	<0.5	20	<2	12	126
TR13-087	128.00	130.00	2.00	2598727	3.54	0.179	<0.5	70	30	9	101
TR13-087	130.00	132.00	2.00	2598728	4.91	0.102	<0.5	49	3	14	134
TR13-087	132.00	134.00	2.00	2598729	6.09	0.053	<0.5	28	<2	14	153

**SELECTED 2013 DRILL HOLE ASSAY DATA**

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-087	134.00	136.00	2.00	2598730	6.08	0.045	<0.5	29	<2	12	122
TR13-087	136.00	138.00	2.00	2598731	7.06	0.070	<0.5	101	<2	20	129
TR13-087	138.00	140.00	2.00	2598732	5.30	0.092	<0.5	153	<2	15	132
TR13-087	140.00	142.00	2.00	2598733	4.39	0.062	<0.5	134	<2	11	146
TR13-087	142.00	144.00	2.00	2598735	8.12	0.064	0.5	189	3	<5	89
TR13-087	144.00	146.00	2.00	2598736	6.04	0.142	0.8	363	4	8	102
TR13-087	146.00	148.00	2.00	2598737	5.19	0.095	0.6	338	<2	<5	132
TR13-087	148.00	150.00	2.00	2598738	6.60	0.078	<0.5	160	<2	<5	117
TR13-087	150.00	152.00	2.00	2598739	5.79	0.043	<0.5	162	<2	<5	124
TR13-087	152.00	154.00	2.00	2598740	7.06	0.041	0.5	87	<2	<5	134
TR13-087	154.00	156.00	2.00	2598741	7.85	0.046	0.6	234	<2	<5	136
TR13-087	156.00	158.00	2.00	2598742	6.58	0.082	1.0	590	<2	<5	137
TR13-087	158.00	160.00	2.00	2598743	5.21	0.794	1.8	1217	3	<5	126
TR13-087	160.00	162.00	2.00	2598744	2.54	0.123	0.5	168	<2	<5	114
TR13-087	162.00	164.00	2.00	2598746	5.30	0.068	0.5	78	<2	<5	126
TR13-087	164.00	166.00	2.00	2598747	6.59	0.080	<0.5	40	<2	<5	125
TR13-087	166.00	168.00	2.00	2598748	6.23	0.062	<0.5	101	<2	<5	134
TR13-087	168.00	170.00	2.00	2598749	2.28	0.099	<0.5	81	<2	<5	95
TR13-087	170.00	172.00	2.00	2598750	3.81	0.054	<0.5	63	<2	<5	109
TR13-087	172.00	174.00	2.00	2598751	5.65	0.055	<0.5	72	<2	<5	95
TR13-087	174.00	176.00	2.00	2598752	5.94	0.091	<0.5	73	<2	<5	94
TR13-087	176.00	178.00	2.00	2598753	6.17	0.085	0.5	138	<2	<5	98
TR13-087	178.00	180.00	2.00	2598754	4.74	0.371	1.1	329	<2	<5	84
TR13-087	180.00	182.00	2.00	2598755	5.48	0.111	<0.5	130	<2	<5	97
TR13-087	182.00	184.00	2.00	2598757	4.83	0.256	0.6	229	<2	<5	131
TR13-087	184.00	186.00	2.00	2598758	6.47	1.297	0.7	77	<2	<5	120
TR13-087	186.00	188.00	2.00	2598759	5.36	0.107	<0.5	39	<2	<5	128
TR13-087	188.00	190.00	2.00	2598760	5.59	0.646	1.0	705	3	<5	113
TR13-087	190.00	192.00	2.00	2598761	5.52	0.072	<0.5	53	<2	<5	103
TR13-087	192.00	194.00	2.00	2598762	4.20	0.088	<0.5	29	4	<5	78
TR13-087	194.00	196.00	2.00	2598763	5.75	2.620	3.0	86	3	<5	61
TR13-087	196.00	198.00	2.00	2598764	5.96	0.097	<0.5	72	18	<5	59
TR13-087	198.00	200.25	2.25	2598765	10.82	0.054	0.6	358	21	<5	61
TR13-088	15.85	18.00	2.15	2598766	5.39	0.116	<0.5	100	<2	8	109
TR13-088	18.00	20.00	2.00	2598768	5.81	0.065	<0.5	45	4	<5	60
TR13-088	20.00	22.00	2.00	2598769	5.63	0.054	0.5	184	<2	10	87
TR13-088	22.00	24.00	2.00	2598770	5.15	0.054	<0.5	64	4	<5	78
TR13-088	24.00	26.00	2.00	2598771	5.90	0.043	<0.5	114	<2	<5	86
TR13-088	26.00	28.00	2.00	2598772	5.40	0.045	<0.5	72	<2	<5	78
TR13-088	28.00	30.00	2.00	2598773	5.09	0.082	<0.5	95	<2	<5	71
TR13-088	30.00	32.00	2.00	2598774	5.08	0.050	<0.5	58	<2	<5	91
TR13-088	32.00	34.00	2.00	2598775	5.34	0.073	0.7	148	5	<5	86
TR13-088	34.00	36.00	2.00	2598776	4.25	0.101	0.7	391	6	<5	112
TR13-088	36.00	38.00	2.00	2598777	2.91	0.157	0.9	444	4	<5	78
TR13-088	38.00	40.00	2.00	2598779	5.45	0.090	0.6	141	<2	6	83
TR13-088	40.00	42.00	2.00	2598780	6.60	0.219	0.5	136	<2	<5	78
TR13-088	42.00	44.00	2.00	2598781	4.56	0.086	0.7	437	<2	<5	67
TR13-088	44.00	46.00	2.00	2598782	6.17	0.016	<0.5	86	<2	<5	58
TR13-088	46.00	48.00	2.00	2598783	5.80	0.025	<0.5	13	<2	<5	52
TR13-088	48.00	50.00	2.00	2598784	2.71	0.022	<0.5	72	3	<5	52
TR13-088	50.00	52.00	2.00	2598785	4.88	0.031	<0.5	162	2	<5	62
TR13-088	52.00	54.00	2.00	2598786	5.13	0.015	0.5	71	<2	9	95
TR13-088	54.00	56.00	2.00	2598787	5.24	0.059	<0.5	63	<2	<5	84

### SELECTED 2013 DRILL HOLE ASSAY DATA

Hole No.	From (m)	To (m)	Interval (m)	Sample No.	Weight (kg)	Au (ppm)	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
TR13-088	56.00	58.00	2.00	2598788	5.73	0.099	0.6	136	<2	<5	111
TR13-088	58.00	60.00	2.00	2598790	5.21	0.130	0.5	208	23	<5	95
TR13-088	60.00	62.00	2.00	2598791	2.60	0.158	0.6	201	6	8	78
TR13-088	62.00	64.00	2.00	2598792	2.34	0.158	<0.5	72	20	<5	85
TR13-088	64.00	66.00	2.00	2598793	4.90	0.109	0.5	318	2	<5	91
TR13-088	66.00	68.00	2.00	2598794	4.38	0.285	0.8	724	2	<5	79
TR13-088	68.00	70.00	2.00	2598795	5.18	4.039	4.9	4206	46	<5	82
TR13-088	70.00	72.00	2.00	2598796	5.82	3.895	4.2	4352	8	5	75
TR13-088	72.00	74.00	2.00	2598797	4.86	4.742	2.9	2237	2	<5	61
TR13-088	74.00	76.00	2.00	2598798	5.16	0.199	0.5	396	2	<5	101
TR13-088	76.00	78.00	2.00	2598799	4.81	0.215	0.5	194	<2	<5	81
TR13-088	78.00	80.00	2.00	2598801	5.54	0.557	1.3	1078	<2	<5	90
TR13-088	80.00	82.00	2.00	2598802	4.61	1.100	1.7	1618	3	<5	98
TR13-088	82.00	84.00	2.00	2598803	2.91	0.213	0.6	264	<2	<5	92
TR13-088	84.00	86.00	2.00	2598804	3.23	5.179	3.8	4008	4	32	97
TR13-088	86.00	88.00	2.00	2598805	2.50	0.213	0.9	352	<2	20	104
TR13-088	88.00	90.52	2.52	2598806	2.32	4.023	2.3	2421	<2	11	131

### 2013 DRILL HOLE GEOTECHNICAL DATA

Hole No.	From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
TR13-084	6.00	9.00	3.00	2.80	93.33	1.02	34.00
TR13-084	9.00	12.05	3.05	3.00	98.36	0.64	20.98
TR13-084	12.05	15.10	3.05	2.85	93.44	0.35	11.48
TR13-084	15.10	18.14	3.04	2.85	93.75	0.82	26.97
TR13-084	18.14	21.19	3.05	2.95	96.72	1.15	37.70
TR13-084	21.19	24.24	3.05	2.95	96.72	0.63	20.66
TR13-084	24.24	27.29	3.05	2.93	96.07	0.00	0.00
TR13-084	27.29	30.34	3.05	2.97	97.38	0.73	23.93
TR13-084	30.34	33.38	3.04	3.00	98.68	1.69	55.59
TR13-084	33.38	36.43	3.05	2.95	96.72	1.96	64.26
TR13-084	36.43	39.48	3.05	2.95	96.72	1.20	39.34
TR13-084	39.48	42.53	3.05	3.04	99.67	2.65	86.89
TR13-084	42.53	45.58	3.05	2.66	87.21	2.04	66.89
TR13-084	45.58	48.62	3.04	3.04	100.00	2.35	77.30
TR13-084	48.62	51.67	3.05	2.94	96.39	1.61	52.79
TR13-084	51.67	54.71	3.04	2.82	92.76	2.06	67.76
TR13-084	54.71	57.76	3.05	2.94	96.39	2.31	75.74
TR13-084	57.76	60.81	3.05	3.01	98.69	2.52	82.62
TR13-084	60.81	63.86	3.05	2.83	92.79	2.46	80.66
TR13-084	63.86	66.90	3.04	2.90	95.39	2.12	69.74
TR13-084	66.90	69.95	3.05	3.00	98.36	2.66	87.21
TR13-084	69.95	73.00	3.05	3.05	100.00	2.27	74.43
TR13-084	73.00	76.07	3.07	3.07	100.00	2.13	69.38
TR13-085	7.76	8.23	0.47	0.47	100.00	0.34	72.34
TR13-085	8.23	11.28	3.05	2.92	95.74	1.62	53.11
TR13-085	11.28	14.33	3.05	3.04	99.67	2.17	71.15
TR13-085	14.33	17.37	3.04	1.80	59.21	0.49	16.12
TR13-085	17.37	20.42	3.05	3.05	100.00	1.98	64.92
TR13-085	20.42	23.47	3.05	2.91	95.41	2.00	65.57
TR13-085	23.47	26.52	3.05	3.05	100.00	1.66	54.43
TR13-085	26.52	29.57	3.05	3.01	98.69	1.65	54.10
TR13-085	29.57	32.61	3.04	2.51	82.57	1.47	48.36
TR13-085	32.61	35.66	3.05	3.02	99.02	2.67	87.54
TR13-085	35.66	38.71	3.05	2.96	97.05	1.90	62.30
TR13-085	38.71	41.76	3.05	2.73	89.51	1.62	53.11
TR13-085	41.76	44.81	3.05	2.04	66.89	1.47	48.20
TR13-085	44.81	47.85	3.04	2.76	90.79	1.93	63.49
TR13-085	47.85	50.90	3.05	3.04	99.67	1.62	53.11
TR13-085	50.90	53.95	3.05	2.26	74.10	1.56	51.15
TR13-085	53.95	57.00	3.05	2.88	94.43	0.91	29.84
TR13-085	57.00	60.05	3.05	2.30	75.41	0.67	21.97
TR13-085	60.05	63.09	3.04	2.68	88.16	1.29	42.43
TR13-085	63.09	66.14	3.05	3.00	98.36	1.97	64.59
TR13-085	66.14	69.19	3.05	2.98	97.70	2.33	76.39
TR13-085	69.19	72.24	3.05	2.39	78.36	2.12	69.51
TR13-085	72.24	75.24	3.00	3.00	100.00	2.46	82.00
TR13-085	75.24	78.33	3.09	2.91	94.17	2.66	86.08
TR13-085	78.33	81.38	3.05	3.03	99.34	2.46	80.66
TR13-085	81.38	84.43	3.05	2.94	96.39	2.44	80.00
TR13-085	84.43	87.48	3.05	2.81	92.13	1.81	59.34
TR13-085	87.48	90.53	3.05	3.02	99.02	2.26	74.10
TR13-085	90.53	93.57	3.04	2.92	96.05	1.86	61.18
TR13-085	93.57	96.62	3.05	2.95	96.72	1.84	60.33
TR13-085	96.62	99.67	3.05	2.84	93.11	2.12	69.51
TR13-086	9.14	11.28	2.14	1.71	79.91	0.33	15.42
TR13-086	11.28	14.33	3.05	2.39	78.36	0.57	18.69

### 2013 DRILL HOLE GEOTECHNICAL DATA

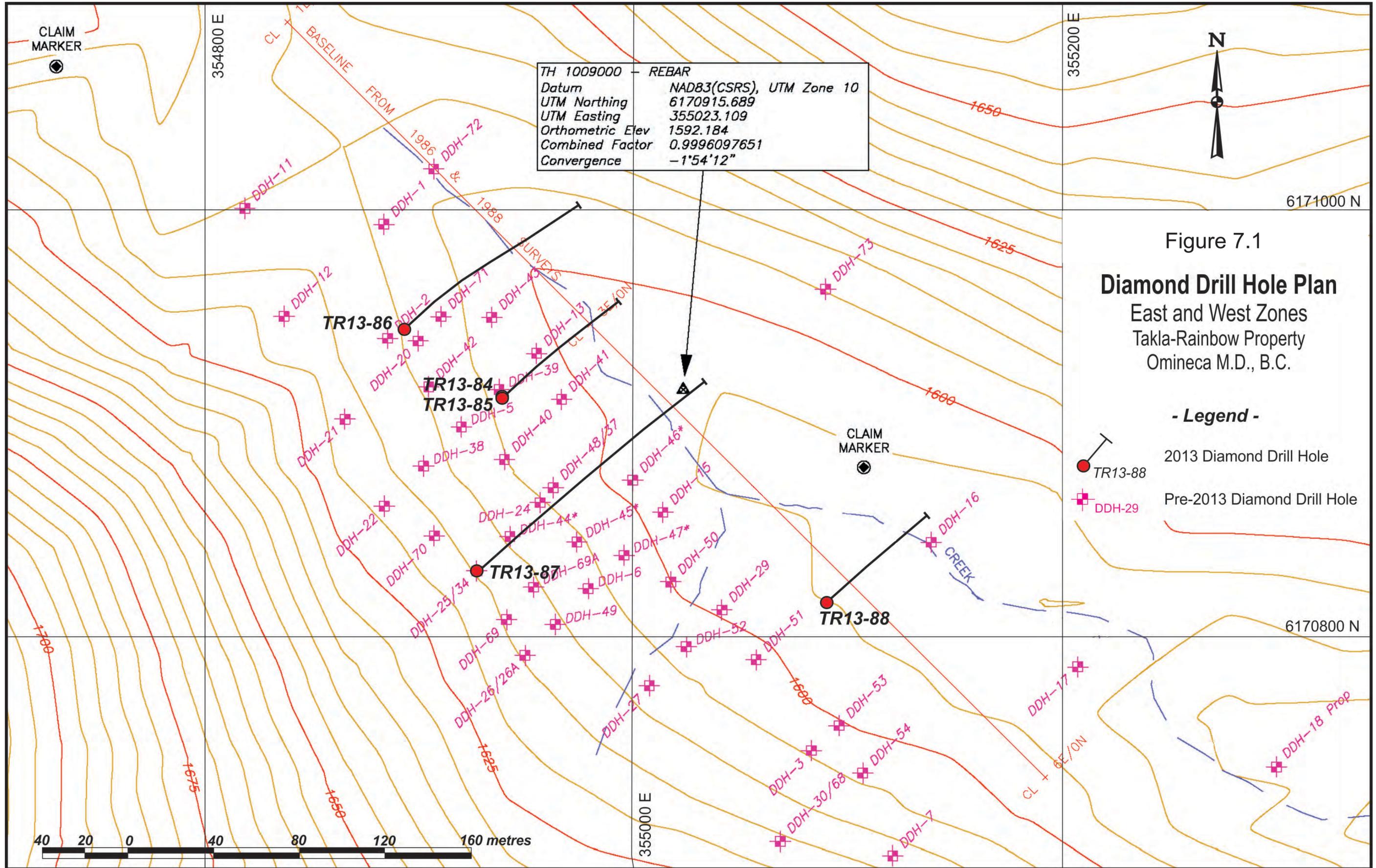
Hole No.	From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
TR13-086	14.33	17.37	3.04	3.02	99.34	1.86	61.18
TR13-086	17.37	20.42	3.05	2.96	97.05	1.42	46.56
TR13-086	20.42	23.47	3.05	2.57	84.26	0.79	25.90
TR13-086	23.47	26.52	3.05	2.60	85.25	0.35	11.48
TR13-086	26.52	29.57	3.05	2.46	80.66	0.48	15.74
TR13-086	29.57	32.61	3.04	2.65	87.17	0.51	16.78
TR13-086	32.61	35.66	3.05	2.69	88.20	1.50	49.18
TR13-086	35.66	38.71	3.05	2.87	94.10	0.77	25.25
TR13-086	38.71	41.76	3.05	2.96	97.05	1.21	39.67
TR13-086	41.76	44.81	3.05	2.73	89.51	0.58	19.02
TR13-086	44.81	47.85	3.04	3.02	99.34	0.86	28.29
TR13-086	47.85	50.90	3.05	3.03	99.34	0.83	27.21
TR13-086	50.90	53.95	3.05	3.05	100.00	2.39	78.36
TR13-086	53.95	57.00	3.05	2.77	90.82	0.82	26.89
TR13-086	57.00	60.05	3.05	2.80	91.80	1.60	52.46
TR13-086	60.05	63.09	3.04	2.80	92.11	2.28	75.00
TR13-086	63.09	66.14	3.05	2.88	94.43	2.33	76.39
TR13-086	66.14	69.19	3.05	2.88	94.43	1.60	52.46
TR13-086	69.19	72.24	3.05	3.00	98.36	2.13	69.84
TR13-086	72.24	75.29	3.05	2.60	85.25	0.98	32.13
TR13-086	75.29	78.33	3.04	2.91	95.72	1.52	50.00
TR13-086	78.33	81.38	3.05	2.43	79.67	1.18	38.69
TR13-086	81.38	84.43	3.05	3.04	99.67	1.42	46.56
TR13-086	84.43	87.48	3.05	3.05	100.00	2.24	73.44
TR13-086	87.48	90.53	3.05	3.03	99.34	1.63	53.44
TR13-086	90.53	93.57	3.04	2.39	78.62	0.79	25.99
TR13-086	93.57	96.62	3.05	2.82	92.46	0.94	30.82
TR13-086	96.62	99.67	3.05	2.83	92.79	1.24	40.66
TR13-086	99.67	102.72	3.05	2.48	81.31	1.28	41.97
TR13-086	102.72	105.77	3.05	3.04	99.67	2.35	77.05
TR13-086	105.77	108.81	3.04	2.76	90.79	1.44	47.37
TR13-086	108.81	111.86	3.05	2.90	95.08	1.80	59.02
TR13-086	111.86	114.91	3.05	2.79	91.48	1.74	57.05
TR13-086	114.91	117.96	3.05	3.04	99.67	2.34	76.72
TR13-086	117.96	121.01	3.05	2.83	92.79	0.66	21.64
TR13-086	121.01	124.05	3.04	2.90	95.39	1.34	44.08
TR13-086	124.05	127.10	3.05	3.05	100.00	1.11	36.39
TR13-086	127.10	130.15	3.05	3.00	98.36	1.62	53.11
TR13-086	130.15	133.20	3.05	2.51	82.30	1.55	50.82
TR13-086	133.20	136.25	3.05	2.82	92.46	1.38	45.25
TR13-086	136.25	139.29	3.04	3.00	98.68	1.26	41.45
TR13-087	6.10	8.23	2.13	1.09	51.17	0.30	14.08
TR13-087	8.23	11.28	3.05	1.49	48.85	0.21	6.89
TR13-087	11.28	14.33	3.05	0.66	21.64	0.00	0.00
TR13-087	14.33	17.37	3.04	0.05	1.64	0.00	0.00
TR13-087	17.37	20.42	3.05	0.47	15.41	0.00	0.00
TR13-087	20.42	23.47	3.05	3.02	99.02	1.12	36.72
TR13-087	23.47	26.52	3.05	2.71	88.85	1.16	38.03
TR13-087	26.52	29.57	3.05	2.55	83.61	0.69	22.62
TR13-087	29.57	32.61	3.04	1.53	50.33	0.64	21.05
TR13-087	32.61	35.66	3.05	1.16	38.03	0.25	8.20
TR13-087	35.66	38.71	3.05	1.38	45.25	0.41	13.44
TR13-087	38.71	41.76	3.05	2.43	79.67	0.71	23.28
TR13-087	41.76	44.81	3.05	2.95	96.72	0.23	7.54
TR13-087	44.81	47.85	3.04	2.95	97.04	1.13	37.17
TR13-087	47.85	50.90	3.05	2.80	91.80	0.93	30.49
TR13-087	50.90	53.95	3.05	2.95	96.72	1.13	37.05

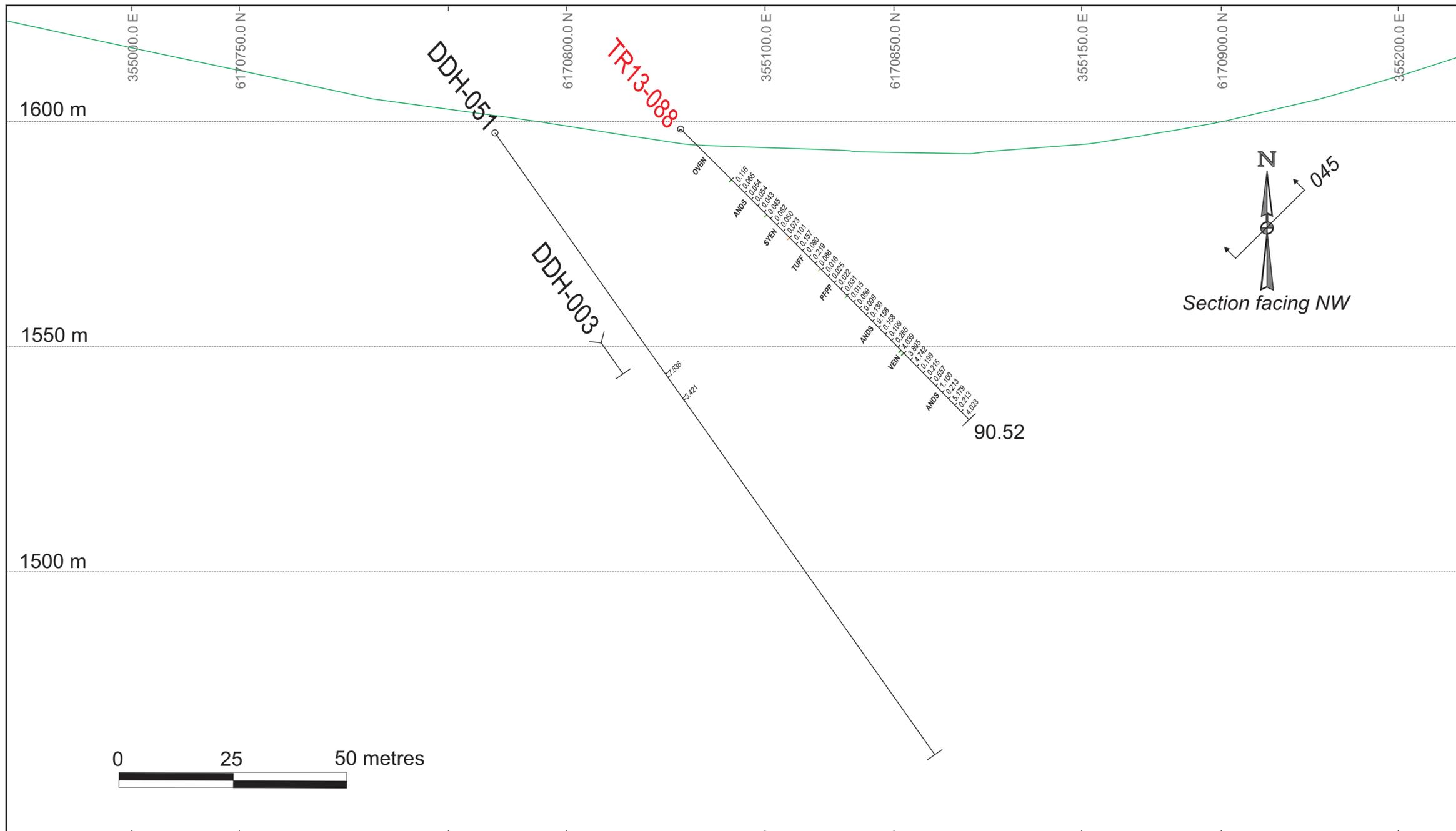
### 2013 DRILL HOLE GEOTECHNICAL DATA

Hole No.	From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
TR13-087	53.95	57.00	3.05	2.90	95.08	1.78	58.36
TR13-087	57.00	60.05	3.05	2.97	97.38	1.06	34.75
TR13-087	60.05	63.09	3.04	2.93	96.38	1.38	45.39
TR13-087	63.09	66.14	3.05	3.05	100.00	1.46	47.87
TR13-087	66.14	69.19	3.05	2.93	96.07	0.57	18.69
TR13-087	69.19	72.24	3.05	2.80	91.80	0.93	30.49
TR13-087	72.24	75.29	3.05	3.06	100.33	1.65	54.10
TR13-087	75.29	78.33	3.04	3.05	100.33	1.99	65.46
TR13-087	78.33	81.38	3.05	3.02	99.02	1.95	63.93
TR13-087	81.38	84.43	3.05	3.00	98.36	0.78	25.57
TR13-087	84.43	87.48	3.05	3.05	100.00	0.99	32.46
TR13-087	87.48	90.53	3.05	3.05	100.00	1.67	54.75
TR13-087	90.53	93.53	3.00	3.00	100.00	0.86	28.67
TR13-087	93.53	96.62	3.09	3.09	100.00	1.00	32.36
TR13-087	96.62	99.67	3.05	3.03	99.34	1.13	37.05
TR13-087	99.67	102.72	3.05	2.76	90.49	1.52	49.84
TR13-087	102.72	105.77	3.05	3.01	98.69	2.67	87.54
TR13-087	105.77	108.81	3.04	3.04	100.00	2.83	93.09
TR13-087	108.81	111.86	3.05	3.03	99.34	2.76	90.49
TR13-087	111.86	114.91	3.05	3.04	99.67	2.60	85.25
TR13-087	114.91	117.96	3.05	3.02	99.02	2.09	68.52
TR13-087	117.96	121.01	3.05	3.01	98.69	1.69	55.41
TR13-087	121.01	124.05	3.04	2.97	97.70	2.08	68.42
TR13-087	124.05	127.10	3.05	3.04	99.67	2.43	79.67
TR13-087	127.10	130.15	3.05	2.86	93.77	2.13	69.84
TR13-087	130.15	133.20	3.05	3.05	100.00	2.22	72.79
TR13-087	133.20	136.25	3.05	3.04	99.67	2.30	75.41
TR13-087	136.25	139.29	3.04	2.92	96.05	1.47	48.36
TR13-087	139.29	142.34	3.05	2.89	94.75	2.14	70.16
TR13-087	142.34	145.39	3.05	3.04	99.67	1.35	44.26
TR13-087	145.39	148.44	3.05	2.70	88.52	1.63	53.44
TR13-087	148.44	151.49	3.05	3.00	98.36	1.46	47.87
TR13-087	151.49	154.53	3.04	3.04	100.00	0.95	31.25
TR13-087	154.53	157.58	3.05	3.05	100.00	2.25	73.77
TR13-087	157.58	160.63	3.05	3.01	98.69	1.95	63.93
TR13-087	160.63	163.68	3.05	3.05	100.00	2.63	86.23
TR13-087	163.68	166.73	3.05	3.00	98.36	2.34	76.72
TR13-087	166.73	169.77	3.04	3.03	99.67	2.84	93.42
TR13-087	169.77	172.83	3.06	3.04	99.35	2.70	88.24
TR13-087	172.83	175.87	3.04	2.78	91.45	2.31	75.99
TR13-087	175.87	178.92	3.05	3.04	99.67	2.69	88.20
TR13-087	178.92	181.97	3.05	3.00	98.36	2.29	75.08
TR13-087	181.97	185.01	3.04	2.96	97.37	1.79	58.88
TR13-087	185.01	188.06	3.05	3.00	98.36	2.41	79.02
TR13-087	188.06	191.11	3.05	2.94	96.39	2.15	70.49
TR13-087	191.11	194.16	3.05	2.99	98.03	2.47	80.98
TR13-087	194.16	197.21	3.05	2.95	96.72	1.73	56.72
TR13-087	197.21	200.25	3.04	3.05	100.33	2.02	66.45
TR13-088	15.85	17.37	1.52	1.25	82.24	0.75	49.34
TR13-088	17.37	20.42	3.05	3.00	98.36	1.54	50.49
TR13-088	20.42	23.47	3.05	2.95	96.72	1.26	41.31
TR13-088	23.47	26.52	3.05	2.60	85.25	0.24	7.87
TR13-088	26.52	29.57	3.05	2.89	94.75	0.19	6.23
TR13-088	29.57	32.61	3.04	2.92	96.05	0.44	14.47
TR13-088	32.61	35.66	3.05	2.95	96.72	0.29	9.51
TR13-088	35.66	38.70	3.04	3.04	100.00	1.12	36.84
TR13-088	38.70	41.76	3.06	2.86	93.46	0.92	30.07

### 2013 DRILL HOLE GEOTECHNICAL DATA

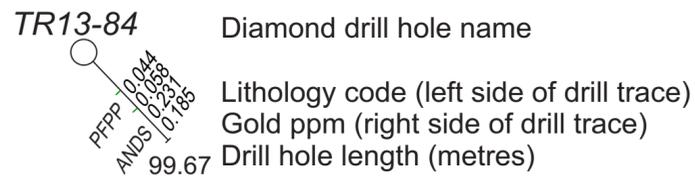
Hole No.	From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
TR13-088	41.76	44.81	3.05	2.89	94.75	0.38	12.46
TR13-088	44.81	47.85	3.04	2.90	95.39	0.27	8.88
TR13-088	47.85	50.90	3.05	1.23	40.33	0.51	16.72
TR13-088	50.90	53.95	3.05	2.64	86.56	0.62	20.33
TR13-088	53.95	57.00	3.05	2.85	93.44	2.76	90.49
TR13-088	57.00	60.05	3.05	2.70	88.52	0.91	29.84
TR13-088	60.05	63.09	3.04	3.05	100.33	1.26	41.45
TR13-088	63.09	66.14	3.05	2.57	84.26	0.73	23.93
TR13-088	66.14	69.19	3.05	3.02	99.02	1.71	56.07
TR13-088	69.19	72.24	3.05	3.03	99.34	1.46	47.87
TR13-088	72.24	75.29	3.05	3.04	99.67	1.57	51.48
TR13-088	75.29	78.33	3.04	2.92	96.05	1.68	55.26
TR13-088	78.33	81.38	3.05	3.02	99.02	2.51	82.30
TR13-088	81.38	84.43	3.05	3.04	99.67	2.97	97.38
TR13-088	84.43	87.48	3.05	3.05	100.00	2.98	97.70
TR13-088	87.48	90.52	3.04	3.05	100.33	2.90	95.39





**- LEGEND -**

- |                                  |                               |
|----------------------------------|-------------------------------|
| <b>OVBN</b> Overburden           | <b>ANDS</b> Andesite          |
| <b>VEIN</b> Quartz vein          | <b>DYKE</b> Undivided dyke    |
| <b>PPPF</b> Plagioclase porphyry | <b>BRXX</b> Undivided breccia |
| <b>SYEN</b> Syenite              | <b>SHZN</b> Shear zone        |
| <b>TUFF</b> Lithic tuff          | <b>FAUL</b> Fault zone        |



To Accompany Report By J. D. Blanchflower, P. Geo., 2014

**MANADO GOLD CORP.**  
Vancouver, British Columbia

**DRILL SECTION 28 NW**

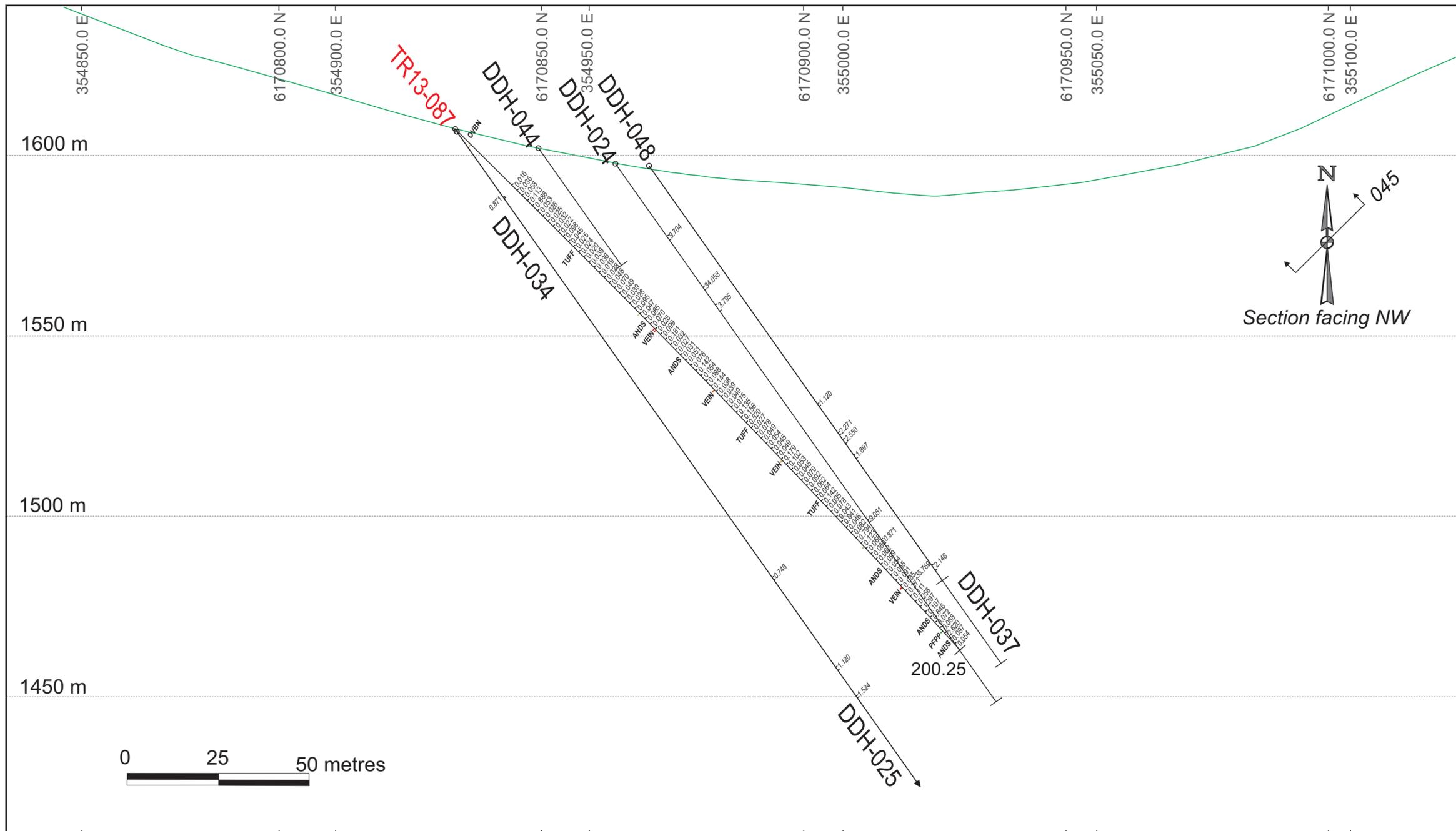
Takla-Rainbow Property  
Omineca Mining Division, British Columbia

Drawn By: JDB

Scale: As Shown

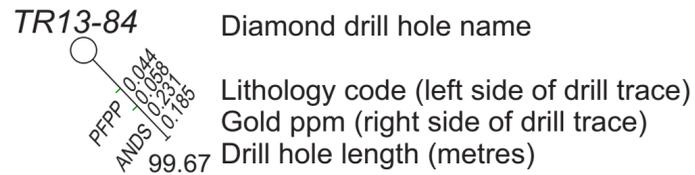
Date: March, 2014

Figure No. 7.2



**- LEGEND -**

- |                                  |                               |
|----------------------------------|-------------------------------|
| <b>OVBN</b> Overburden           | <b>ANDS</b> Andesite          |
| <b>VEIN</b> Quartz vein          | <b>DYKE</b> Undivided dyke    |
| <b>PPPF</b> Plagioclase porphyry | <b>BRXX</b> Undivided breccia |
| <b>SYEN</b> Syenite              | <b>SHZN</b> Shear zone        |
| <b>TUFF</b> Lithic tuff          | <b>FAUL</b> Fault zone        |



To Accompany Report By J. D. Blanchflower, P. Geo., 2014

**MANADO GOLD CORP.**  
Vancouver, British Columbia

**DRILL SECTION 33 NW**

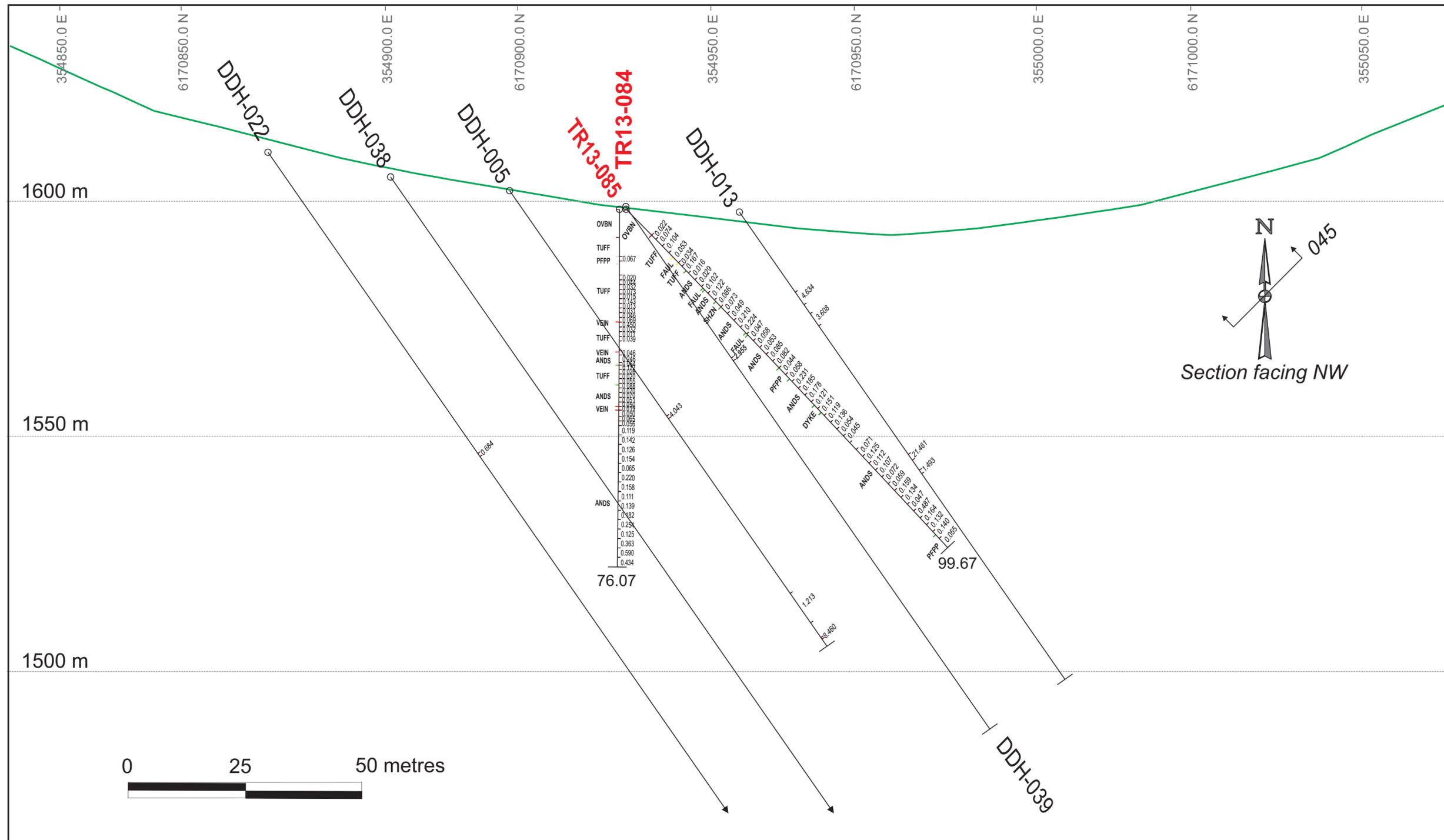
Takla-Rainbow Property  
Omineca Mining Division, British Columbia

Drawn By: JDB

Scale: As Shown

Date: March, 2014

Figure No. 7.3



**- LEGEND -**

- |                                  |                               |  |
|----------------------------------|-------------------------------|--|
| <b>OVBN</b> Overburden           | <b>ANDS</b> Andesite          | <b>TR13-84</b> Diamond drill hole name |
| <b>VEIN</b> Quartz vein          | <b>DYKE</b> Undivided dyke    | <b>PPPP</b> Plagioclase porphyry       |
| <b>PPPF</b> Plagioclase porphyry | <b>BRXX</b> Undivided breccia | <b>SHZN</b> Shear zone                 |
| <b>SYEN</b> Syenite              | <b>SHZN</b> Shear zone        | <b>FAUL</b> Fault zone                 |
| <b>TUFF</b> Lithic tuff          | <b>FAUL</b> Fault zone        |  |
- Lithology code (left side of drill trace)  
 Gold ppm (right side of drill trace)  
 Drill hole length (metres)

To Accompany Report By J. D. Blanchflower, P. Geo., 2014

**MANADO GOLD CORP.**  
Vancouver, British Columbia

**DRILL SECTION 35 NW**

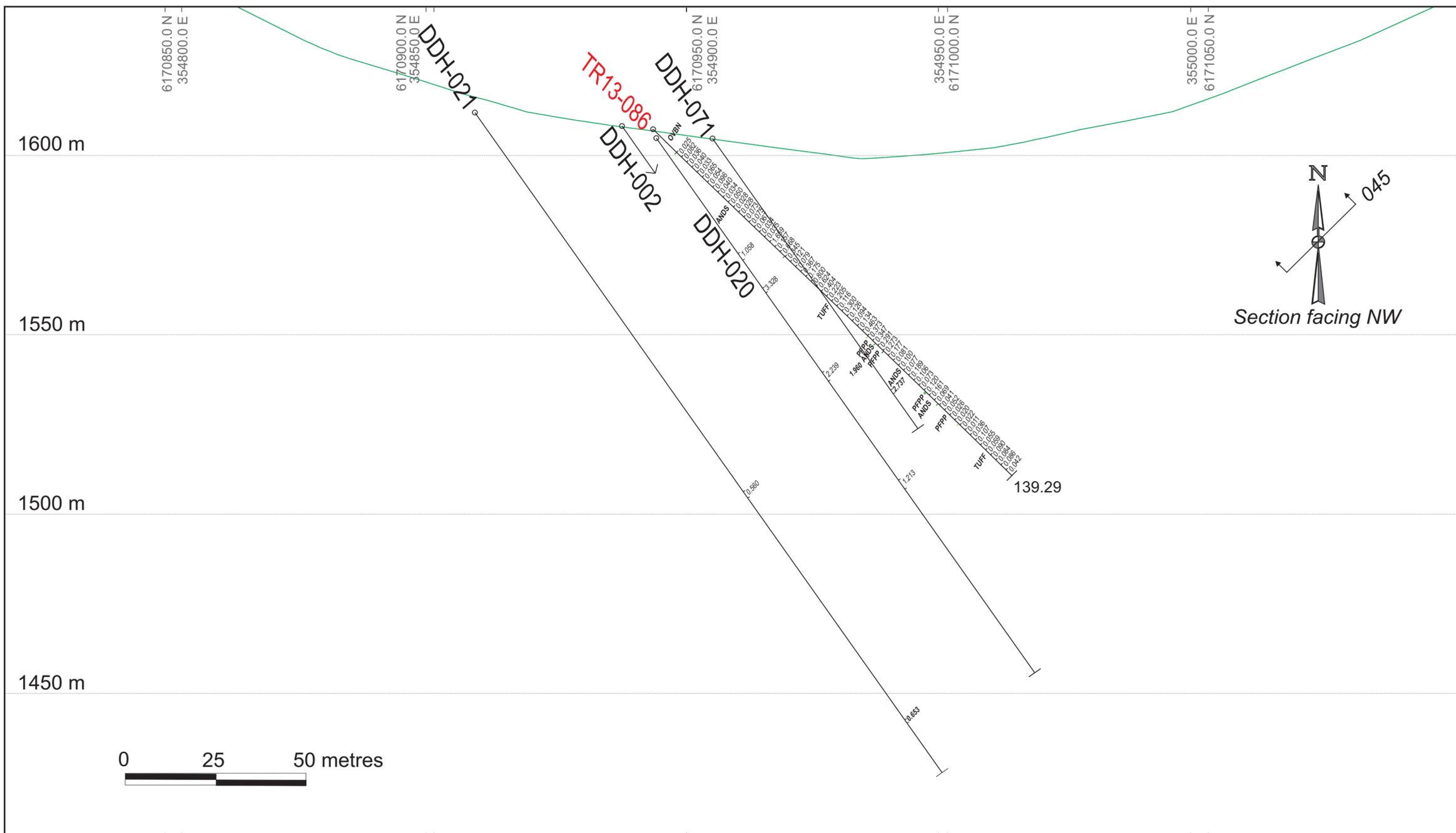
Takla-Rainbow Property  
Omineca Mining Division, British Columbia

Drawn By: JDB

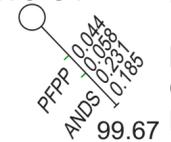
Scale: As Shown

Date: March, 2014

Figure No. 7.4



**- LEGEND -**

- |                                  |                               |   |
|----------------------------------|-------------------------------|---|
| <b>OVBN</b> Overburden           | <b>ANDS</b> Andesite          | <b>TR13-84</b> Diamond drill hole name  |
| <b>VEIN</b> Quartz vein          | <b>DYKE</b> Undivided dyke    |  |
| <b>PPPF</b> Plagioclase porphyry | <b>BRXX</b> Undivided breccia | Lithology code (left side of drill trace)   |
| <b>SYEN</b> Syenite              | <b>SHZN</b> Shear zone        | Gold ppm (right side of drill trace)  |
| <b>TUFF</b> Lithic tuff          | <b>FAUL</b> Fault zone        | Drill hole length (metres)  |

To Accompany Report By J. D. Blanchflower, P. Geo., 2014

<b>MANADO GOLD CORP.</b> Vancouver, British Columbia	
<b>DRILL SECTION 37 NW</b> Takla-Rainbow Property Omineca Mining Division, British Columbia	
Drawn By: JDB	Scale: As Shown
Date: March, 2014	Figure No. 7.5

## **APPENDIX II**

**Drill Sample Assay and Analytical Data**

**Acme Analytical Laboratories (Vancouver) Ltd.**



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: Minorex Consulting Ltd
25856 - 28th Avenue
Aldergrove BC V4W 2Z8 CANADA

Submitted By: Doug Blanchflower
Receiving Lab: Canada-Smithers
Received: November 18, 2013
Report Date: December 13, 2013
Page: 1 of 5

CERTIFICATE OF ANALYSIS

SMI13000429.1

CLIENT JOB INFORMATION

Project: Takla Rainbow
Shipment ID:
P.O. Number
Number of Samples: 108

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Procedure Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include R200-250, RIFL2, P200, G601, and 1E.

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Minorex Consulting Ltd
25856 - 28th Avenue
Aldergrove BC V4W 2Z8
CANADA

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598501	Drill Core	6.88	0.067	4	14	<5	84	1.2	25	24	1535	4.76	13	<20	<2	345	0.9	<5	<5	229	3.84
2598502	Drill Core	9.04	0.020	<2	7	<5	85	<0.5	16	13	1174	3.48	12	<20	<2	380	<0.4	<5	<5	179	2.99
2598503	Drill Core	2.57	0.044	<2	3	6	126	1.7	15	27	1760	5.94	20	<20	<2	385	1.1	<5	<5	233	3.53
2598504	Drill Core	2.83	0.032	<2	6	<5	92	1.4	14	25	1745	5.73	15	<20	<2	434	0.4	<5	<5	245	5.54
2598505	Drill Core	2.15	0.073	<2	4	<5	92	1.4	15	28	1881	5.73	13	<20	<2	375	0.8	<5	<5	241	4.79
2598506	Drill Core	1.82	0.015	<2	10	5	100	1.1	12	26	1943	5.82	20	<20	<2	461	0.5	<5	<5	263	4.66
2598507	Drill Core	4.62	0.143	<2	61	<5	79	1.2	17	32	1774	6.50	19	<20	<2	581	0.5	<5	<5	270	5.78
2598508	Drill Core	1.86	0.013	<2	13	<5	53	<0.5	16	5	791	2.08	9	<20	<2	349	0.6	<5	<5	103	2.22
2598508A	Rock Pulp	0.12	3.057	7	74	10	72	1.7	33	12	792	4.57	12	<20	<2	295	<0.4	6	<5	135	2.97
2598509	Drill Core	1.76	0.031	<2	3	<5	61	<0.5	19	5	854	2.07	12	<20	<2	364	0.6	<5	<5	94	2.35
2598510	Drill Core	2.04	0.046	<2	9	<5	83	0.8	33	17	1473	4.16	17	<20	<2	447	0.5	<5	<5	173	3.70
2598511	Drill Core	1.22	0.069	<2	35	<5	138	1.4	55	48	2884	7.32	19	<20	<2	751	<0.4	<5	<5	263	5.50
2598512	Drill Core	2.30	0.450	<2	20	<5	112	1.7	50	42	2156	6.37	11	<20	<2	379	<0.4	<5	<5	247	4.97
2598513	Drill Core	1.31	0.032	<2	5	9	46	<0.5	20	8	866	2.43	5	<20	<2	312	0.6	<5	<5	107	2.65
2598514	Drill Core	2.40	0.011	<2	12	<5	99	1.5	87	18	2186	4.91	8	<20	<2	430	0.5	<5	<5	232	6.62
2598515	Drill Core	3.51	0.039	<2	30	<5	120	1.2	70	33	2238	5.88	11	<20	<2	387	0.4	<5	<5	276	5.23
2598516	Drill Core	7.09	0.046	<2	106	15	132	1.4	56	46	2263	7.16	18	<20	<2	549	0.9	<5	<5	340	4.06
2598517	Drill Core	2.85	0.246	<2	227	<5	84	1.9	38	49	1879	7.27	12	<20	<2	387	<0.4	<5	6	227	4.67
2598518	Drill Core	3.59	0.084	<2	33	<5	115	1.3	44	56	2241	8.19	19	<20	<2	428	0.5	<5	<5	264	4.66
2598518A	Rock	0.50	<0.005	<2	54	7	53	0.6	7	8	981	3.57	<5	<20	<2	122	<0.4	<5	<5	67	2.59
2598519	Drill Core	1.50	0.172	7	8	<5	50	<0.5	20	20	1181	3.95	6	<20	<2	289	<0.4	<5	<5	114	4.14
2598520	Drill Core	2.30	0.026	<2	5	<5	58	<0.5	20	20	1001	3.44	9	<20	<2	279	0.4	<5	<5	106	2.50
2598521	Drill Core	2.22	0.020	<2	<2	<5	42	<0.5	15	7	873	2.50	6	<20	<2	267	0.4	<5	<5	86	2.49
2598522	Drill Core	2.43	0.055	<2	8	<5	42	<0.5	34	19	953	2.88	6	<20	<2	313	0.4	<5	<5	94	3.11
2598523	Drill Core	2.10	0.088	<2	18	<5	90	<0.5	100	34	1604	4.21	7	<20	<2	301	<0.4	<5	<5	121	4.03
2598524	Drill Core	3.03	0.070	<2	84	<5	139	0.6	174	27	2095	4.99	11	<20	<2	345	<0.4	<5	<5	179	3.85
2598525	Drill Core	2.57	0.070	<2	405	<5	185	1.8	243	31	3240	6.58	22	<20	<2	434	0.8	<5	<5	246	5.79
2598526	Drill Core	3.65	0.051	<2	41	<5	125	0.9	142	22	2176	4.94	10	<20	<2	371	0.5	<5	<5	186	3.95
2598527	Drill Core	2.29	0.050	<2	10	<5	42	<0.5	19	19	600	2.57	6	<20	<2	318	0.5	<5	<5	100	1.55
2598527A	Rock	0.45	0.005	<2	12	<5	96	1.2	10	8	1101	3.78	<5	<20	<2	141	0.6	<5	<5	79	3.28



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Acme Analytical Laboratories (Vancouver) Ltd.  
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
 PHONE (604) 253-3158

Client: **Minorex Consulting Ltd**  
 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 2 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598501	Drill Core			0.190	8	49	2.19	666	0.35	8.77	3.81	1.68	<4	20	<2	14	4	1	18	1.4
2598502	Drill Core			0.144	5	27	1.97	499	0.30	8.59	3.55	2.73	<4	29	<2	11	4	1	13	0.9
2598503	Drill Core			0.195	13	14	2.96	296	0.38	9.26	3.03	2.73	<4	16	<2	15	4	1	18	2.0
2598504	Drill Core			0.194	8	27	2.25	1008	0.40	9.54	3.56	2.08	<4	24	<2	19	4	<1	20	1.6
2598505	Drill Core			0.132	7	27	2.43	539	0.47	8.70	3.19	2.62	<4	30	<2	18	4	1	27	1.7
2598506	Drill Core			0.118	11	26	2.65	1389	0.51	8.73	2.32	3.61	<4	38	<2	19	4	1	30	1.0
2598507	Drill Core			0.138	11	34	2.05	812	0.47	8.92	2.40	2.75	<4	35	<2	20	4	1	26	2.0
2598508	Drill Core			0.090	2	34	1.16	1477	0.23	8.29	3.76	3.34	<4	35	<2	8	4	1	7	0.1
2598508A	Rock Pulp			0.061	8	53	1.36	529	0.34	6.60	2.36	0.96	9	27	2	15	4	<1	15	<0.1
2598509	Drill Core			0.077	2	38	1.18	1688	0.20	8.21	3.34	3.35	<4	38	<2	8	5	1	8	0.2
2598510	Drill Core			0.112	7	53	1.96	1188	0.35	8.72	2.37	3.13	<4	28	<2	13	4	1	15	0.8
2598511	Drill Core			0.152	7	73	3.72	420	0.48	8.88	2.77	1.22	<4	30	2	16	3	1	24	1.9
2598512	Drill Core			0.133	6	62	3.11	291	0.42	7.80	2.94	1.13	<4	26	<2	13	2	1	21	1.9
2598513	Drill Core			0.083	3	38	1.32	3160	0.22	8.27	2.87	3.12	5	31	<2	7	4	<1	8	0.2
2598514	Drill Core			0.146	8	96	3.02	1059	0.40	7.90	1.93	2.93	<4	29	2	15	3	1	23	0.3
2598515	Drill Core			0.148	10	98	3.55	284	0.46	8.52	2.61	1.65	<4	29	<2	13	2	1	25	1.3
2598516	Drill Core			0.160	7	103	3.85	241	0.58	8.38	2.41	1.68	<4	30	<2	15	3	1	25	2.3
2598517	Drill Core			0.139	6	57	2.51	326	0.40	7.91	3.26	1.88	5	22	<2	13	<2	1	18	4.0
2598518	Drill Core			0.143	9	81	3.43	518	0.47	8.43	2.23	2.16	10	26	<2	14	3	1	23	3.1
2598518A	Rock			0.057	14	17	0.94	693	0.32	7.39	2.11	2.07	<4	90	2	28	8	<1	12	0.2
2598519	Drill Core			0.069	3	38	1.38	165	0.20	7.24	2.22	3.03	8	26	<2	7	4	<1	8	1.6
2598520	Drill Core			0.085	4	40	1.47	368	0.24	8.05	2.91	3.19	5	28	<2	7	4	1	9	1.0
2598521	Drill Core			0.072	4	35	1.13	1706	0.19	7.91	2.76	3.20	5	32	<2	7	5	<1	7	0.4
2598522	Drill Core			0.074	8	41	1.18	478	0.19	7.52	3.47	2.73	5	30	<2	8	5	<1	7	0.9
2598523	Drill Core			0.100	8	171	2.10	1423	0.27	7.89	2.92	2.72	<4	26	<2	10	4	<1	14	0.8
2598524	Drill Core			0.126	6	225	3.83	1096	0.31	7.92	2.33	2.51	<4	36	<2	11	4	1	16	0.5
2598525	Drill Core			0.149	6	390	5.20	286	0.37	7.04	1.22	1.21	<4	31	<2	16	4	2	24	0.5
2598526	Drill Core			0.126	4	208	3.80	887	0.33	7.82	2.51	2.62	<4	35	<2	11	4	1	19	0.9
2598527	Drill Core			0.072	2	36	1.04	150	0.19	7.82	4.26	2.46	4	37	<2	6	4	1	8	1.5
2598527A	Rock			0.059	13	23	1.01	631	0.37	7.61	2.26	1.96	<4	74	<2	26	7	<1	15	0.2



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Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 3 of 5

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598528	Drill Core	2.51	0.019	8	23	<5	39	<0.5	16	11	780	2.24	5	<20	<2	301	0.5	<5	<5	95	2.29
2598529	Drill Core	4.24	0.050	<2	84	<5	81	1.2	26	28	1577	5.33	11	<20	<2	311	<0.4	<5	<5	218	3.62
2598530	Drill Core	3.04	0.065	<2	56	<5	103	1.0	21	42	1967	6.95	12	<20	<2	326	<0.4	<5	<5	235	3.71
2598531	Drill Core	2.19	0.056	<2	103	19	116	<0.5	20	39	2309	7.13	19	<20	<2	434	<0.4	<5	<5	306	4.71
2598532	Drill Core	6.20	0.119	<2	91	19	100	<0.5	20	45	2112	7.39	20	<20	<2	475	<0.4	<5	<5	277	4.34
2598533	Drill Core	0.93	0.142	<2	21	12	107	<0.5	16	26	1742	6.87	47	<20	<2	577	<0.4	6	<5	268	4.71
2598534	Drill Core	4.39	0.126	<2	40	12	101	<0.5	17	47	2314	9.30	23	<20	<2	505	<0.4	<5	<5	278	4.55
2598535	Drill Core	5.31	0.154	<2	91	12	111	<0.5	19	74	1752	7.84	28	<20	<2	459	0.4	6	<5	251	3.79
2598536	Drill Core	2.18	0.065	<2	14	18	118	<0.5	16	17	1635	7.30	19	<20	<2	449	<0.4	<5	<5	235	3.69
2598536A	Drill Core	1.76	0.046	<2	15	16	111	<0.5	14	18	1630	6.96	19	<20	<2	469	<0.4	<5	<5	240	3.97
2598537	Drill Core	4.74	0.220	<2	77	12	123	<0.5	25	55	2675	8.06	23	<20	<2	563	<0.4	5	<5	314	5.95
2598538	Drill Core	6.37	0.158	<2	127	18	114	<0.5	22	51	2773	7.91	23	<20	<2	683	<0.4	5	<5	343	6.00
2598539	Drill Core	6.61	0.111	<2	13	12	128	<0.5	24	39	3288	7.79	18	<20	<2	567	<0.4	<5	<5	355	6.77
2598540	Drill Core	5.50	0.139	<2	59	10	147	<0.5	24	46	2746	7.71	25	<20	<2	467	<0.4	8	<5	326	4.74
2598541	Drill Core	5.47	0.182	<2	16	16	125	<0.5	22	41	2728	7.38	15	<20	<2	514	<0.4	<5	<5	306	5.31
2598542	Drill Core	5.31	0.254	<2	13	15	122	<0.5	20	39	2756	7.15	12	<20	<2	429	<0.4	<5	<5	303	4.94
2598543	Drill Core	5.92	0.125	<2	24	11	120	<0.5	19	45	2306	7.27	15	<20	<2	435	<0.4	<5	<5	290	4.30
2598544	Drill Core	5.73	0.363	<2	224	14	125	0.6	22	41	2613	8.17	24	<20	<2	385	<0.4	<5	<5	332	4.01
2598545	Drill Core	5.53	0.590	<2	360	16	122	0.6	34	54	2093	9.54	22	<20	<2	299	<0.4	<5	<5	260	4.01
2598546	Drill Core	5.63	0.434	<2	160	12	143	<0.5	69	47	3747	8.33	16	<20	<2	356	<0.4	<5	<5	257	6.25
2598546A	Rock Pulp	0.13	1.099	9	55	18	66	0.8	42	13	809	4.37	29	<20	<2	309	0.4	<5	<5	129	3.16
2598547	Drill Core	1.00	0.022	<2	17	18	107	<0.5	28	26	1991	5.07	22	<20	<2	407	<0.4	6	<5	225	3.76
2598547A	Drill Core	5.47	0.277	<2	117	9	129	<0.5	40	45	2902	7.51	15	<20	<2	385	<0.4	<5	<5	271	4.75
2598548	Drill Core	4.13	0.074	<2	9	18	129	<0.5	34	41	1642	5.73	14	<20	<2	275	<0.4	<5	<5	218	3.61
2598549	Drill Core	3.79	0.104	<2	6	21	72	<0.5	14	22	1137	4.01	11	<20	<2	297	<0.4	<5	<5	181	3.48
2598550	Drill Core	5.38	0.053	<2	6	15	75	<0.5	12	20	1120	3.77	9	<20	<2	301	<0.4	<5	<5	164	3.50
2598551	Drill Core	5.43	0.034	<2	10	12	67	<0.5	12	16	1221	3.15	9	<20	<2	289	<0.4	<5	<5	153	3.92
2598552	Drill Core	2.90	0.167	2	6	8	55	<0.5	13	23	1035	3.57	7	<20	<2	309	<0.4	<5	<5	145	3.19
2598553	Drill Core	6.34	0.016	<2	5	7	51	<0.5	15	9	742	2.39	<5	<20	<2	310	<0.4	<5	<5	89	1.96
2598554	Drill Core	6.22	0.029	<2	6	11	65	<0.5	20	22	825	2.73	6	<20	<2	306	<0.4	<5	<5	92	1.90

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 3 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598528	Drill Core			0.078	<2	38	1.05	1124	0.18	7.88	4.03	2.61	5	31	<2	6	4	1	6	0.8
2598529	Drill Core			0.112	14	38	2.35	306	0.41	8.37	2.68	2.86	9	24	<2	12	4	1	18	1.6
2598530	Drill Core			0.133	15	33	2.89	305	0.44	8.60	2.58	2.94	<4	18	2	12	3	1	20	2.2
2598531	Drill Core			0.142	8	28	3.14	933	0.53	8.68	1.67	3.40	4	27	<2	13	2	1	26	2.4
2598532	Drill Core			0.140	6	34	2.82	473	0.47	8.13	1.82	3.37	<4	27	<2	13	3	1	25	3.3
2598533	Drill Core			0.160	8	18	2.04	749	0.44	9.40	0.65	3.62	<4	8	<2	14	3	<1	16	0.9
2598534	Drill Core			0.127	5	28	2.61	257	0.45	7.95	0.89	3.48	4	13	<2	11	3	1	25	3.8
2598535	Drill Core			0.147	4	20	2.46	102	0.47	8.93	1.24	3.99	<4	9	<2	13	3	<1	19	3.2
2598536	Drill Core			0.154	5	19	2.32	505	0.44	8.84	0.45	4.98	<4	7	<2	12	3	<1	16	0.9
2598536A	Drill Core			0.149	5	17	2.20	467	0.43	8.80	0.43	4.65	4	8	<2	13	3	<1	16	0.9
2598537	Drill Core			0.143	6	31	3.22	704	0.54	8.57	1.47	2.75	4	28	<2	14	3	1	27	2.9
2598538	Drill Core			0.141	6	31	3.22	811	0.56	8.79	1.54	2.87	<4	30	<2	15	3	1	30	2.8
2598539	Drill Core			0.127	7	38	3.64	719	0.55	7.56	1.08	2.50	9	24	<2	16	3	1	38	2.0
2598540	Drill Core			0.146	9	33	3.40	1056	0.53	8.42	0.92	4.03	<4	24	<2	15	3	1	30	1.9
2598541	Drill Core			0.137	6	35	3.14	1075	0.48	8.32	1.33	2.97	<4	28	<2	14	3	1	29	1.9
2598542	Drill Core			0.127	6	33	3.32	600	0.50	7.47	1.63	3.11	9	16	<2	14	2	1	31	2.1
2598543	Drill Core			0.133	5	28	3.22	739	0.50	7.87	1.95	2.78	4	23	<2	15	2	1	28	3.1
2598544	Drill Core			0.135	5	35	3.86	288	0.51	7.50	1.55	3.00	<4	19	<2	14	3	1	34	3.9
2598545	Drill Core			0.149	6	63	3.20	251	0.39	7.47	0.99	3.95	6	14	<2	12	2	<1	25	5.5
2598546	Drill Core			0.194	23	214	4.47	661	0.36	6.23	0.71	2.03	<4	25	<2	14	2	1	29	1.9
2598546A	Rock Pulp			0.062	8	58	1.39	525	0.34	6.85	2.44	0.98	<4	24	<2	14	4	<1	15	<0.1
2598547	Drill Core			0.171	7	38	2.33	353	0.43	8.85	2.20	4.09	<4	23	<2	15	4	1	20	1.1
2598547A	Drill Core			0.159	17	108	3.78	596	0.40	7.32	1.66	2.14	7	26	<2	14	2	1	28	2.7
2598548	Drill Core			0.164	10	37	2.47	233	0.39	9.01	2.83	3.24	5	20	<2	14	4	1	17	1.7
2598549	Drill Core			0.135	9	23	1.20	229	0.32	8.00	2.01	4.91	5	31	<2	11	5	<1	12	1.3
2598550	Drill Core			0.131	7	17	1.11	208	0.28	7.76	1.93	4.39	5	29	<2	9	4	<1	12	1.2
2598551	Drill Core			0.121	5	24	1.15	374	0.27	7.47	2.16	3.61	9	29	<2	8	4	1	11	0.7
2598552	Drill Core			0.113	3	31	0.80	137	0.26	7.97	2.84	3.53	6	34	<2	7	3	1	12	1.3
2598553	Drill Core			0.078	<2	38	0.78	1425	0.15	7.69	3.87	2.30	<4	38	<2	5	3	1	7	0.4
2598554	Drill Core			0.084	2	36	1.16	287	0.16	7.08	3.74	2.36	5	37	<2	5	3	<1	6	0.8

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	WGHT	G6	1E																		
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	%	ppm	%																
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598555	Drill Core	5.79	0.102	<2	8	12	116	<0.5	44	65	1585	6.15	10	<20	<2	259	<0.4	<5	<5	237	3.54
2598556	Drill Core	5.25	0.122	<2	10	12	106	<0.5	19	43	1496	5.80	13	<20	<2	369	<0.4	<5	<5	258	3.54
2598557	Rock	0.48	<0.005	<2	11	11	59	<0.5	9	8	963	3.54	<5	<20	<2	132	<0.4	<5	<5	78	2.82
2598558	Drill Core	5.12	0.086	<2	70	12	116	<0.5	16	47	1592	6.21	17	<20	<2	438	<0.4	<5	<5	247	3.85
2598559	Drill Core	3.96	0.073	<2	22	20	87	<0.5	14	48	1301	5.84	13	<20	<2	283	<0.4	<5	<5	221	3.58
2598560	Drill Core	1.46	0.049	3	10	15	73	0.5	8	30	1302	4.81	11	<20	<2	293	<0.4	<5	<5	197	4.07
2598561	Drill Core	9.22	0.210	9	143	18	84	0.8	11	49	1319	6.82	11	<20	<2	308	<0.4	<5	<5	184	3.37
2598562	Drill Core	5.29	0.224	<2	178	15	86	<0.5	12	53	1180	5.93	10	<20	<2	280	<0.4	<5	<5	190	2.51
2598563	Drill Core	4.79	0.047	3	84	15	87	1.4	17	37	1236	4.62	16	<20	<2	254	5.1	<5	<5	150	3.12
2598564	Drill Core	5.82	0.058	<2	55	13	67	1.5	11	22	1070	4.69	9	<20	<2	293	1.3	<5	<5	160	2.82
2598565	Drill Core	2.87	0.053	<2	103	7	66	1.0	10	16	978	4.67	7	<20	<2	360	1.4	<5	<5	163	2.29
2598566	Drill Core	7.03	0.085	5	91	14	73	1.4	12	16	1104	4.96	10	<20	<2	396	1.0	<5	<5	163	2.76
2598567	Drill Core	5.40	0.082	2	177	12	87	1.6	24	23	1206	5.81	11	<20	<2	380	1.4	<5	<5	177	2.17
2598568	Drill Core	4.85	0.044	<2	90	<5	70	1.4	18	16	1077	4.37	10	<20	<2	418	1.1	<5	<5	145	2.71
2598568A	Rock Pulp	0.13	1.099	9	52	19	64	1.9	41	13	827	4.38	28	<20	<2	318	1.0	<5	<5	127	3.16
2598569	Drill Core	3.10	0.044	<2	8	<5	69	<0.5	25	21	917	4.42	8	<20	<2	356	1.0	<5	<5	119	1.99
2598570	Drill Core	6.97	0.058	4	40	9	98	<0.5	38	39	1324	6.22	7	<20	<2	295	0.6	<5	<5	191	2.75
2598571	Drill Core	3.06	0.231	<2	509	13	86	<0.5	26	38	1351	7.02	13	<20	<2	261	0.6	<5	<5	248	3.12
2598572	Drill Core	4.76	0.185	<2	345	13	81	<0.5	6	23	1219	6.29	11	<20	<2	308	0.5	<5	<5	216	3.08
2598573	Drill Core	5.51	0.178	<2	264	14	56	<0.5	7	24	960	5.49	11	<20	<2	265	0.5	<5	<5	199	2.29
2598574	Drill Core	3.88	0.121	<2	104	17	61	1.3	5	19	1208	5.15	12	<20	<2	300	1.1	<5	<5	192	2.92
2598575	Drill Core	5.23	0.151	<2	208	8	97	1.4	28	28	1699	6.13	14	<20	<2	253	1.0	<5	<5	232	3.61
2598576	Drill Core	4.26	0.119	<2	203	10	114	1.6	44	35	2235	6.67	15	<20	<2	294	1.3	<5	<5	283	4.96
2598577	Drill Core	5.46	0.136	<2	387	9	119	1.7	51	30	2418	6.33	16	<20	<2	381	1.3	<5	<5	275	4.79
2598578	Drill Core	2.79	0.054	<2	317	6	95	1.7	45	28	2272	5.59	24	<20	<2	1184	1.1	8	<5	280	4.94
2598579	Drill Core	2.17	0.041	<2	268	<5	97	1.5	42	24	2344	5.07	22	<20	<2	1075	1.3	8	<5	282	5.03
2598579A	CORE DUP		0.038	<2	262	6	96	1.4	42	23	2366	5.03	24	<20	<2	1044	1.2	8	<5	279	4.92
2598580	Drill Core	5.10	0.045	<2	149	<5	98	1.2	44	31	2211	5.80	15	<20	<2	1089	1.4	5	<5	258	4.99
2598581	Drill Core	L.N.R.																			
2598582	Drill Core	4.39	0.071	<2	137	<5	129	1.4	51	28	2385	6.32	15	<20	<2	554	1.5	5	<5	296	4.47



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Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 4 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S	
Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	%							
MDL	0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1	
2598555	Drill Core	0.174	10	177	2.31	347	0.32	8.51	3.02	2.41	7	17	<2	11	3	1	18	2.4
2598556	Drill Core	0.192	11	17	2.01	247	0.37	8.63	1.39	4.38	5	18	<2	15	3	1	19	1.3
2598557	Rock	0.057	11	22	0.89	593	0.33	7.30	1.90	1.95	<4	74	<2	24	7	1	14	0.1
2598558	Drill Core	0.193	9	26	2.12	190	0.37	8.24	1.24	4.69	<4	17	<2	15	3	1	18	2.3
2598559	Drill Core	0.182	6	35	1.38	159	0.34	7.94	0.61	5.11	7	17	<2	12	4	<1	15	2.5
2598560	Drill Core	0.172	7	7	1.02	216	0.30	8.09	0.66	4.56	11	24	2	12	3	<1	12	1.8
2598561	Drill Core	0.135	6	16	1.52	136	0.30	7.79	1.14	4.85	6	27	<2	10	4	<1	13	3.9
2598562	Drill Core	0.121	7	17	1.62	148	0.28	7.86	0.81	5.25	6	30	<2	11	4	1	13	2.6
2598563	Drill Core	0.124	11	23	1.40	182	0.28	7.44	0.93	5.79	6	26	<2	14	4	<1	11	1.7
2598564	Drill Core	0.132	9	34	1.24	117	0.32	8.21	1.71	4.11	6	33	<2	11	5	1	13	2.4
2598565	Drill Core	0.134	11	23	1.38	141	0.34	8.29	1.75	4.47	5	33	<2	12	6	1	13	2.1
2598566	Drill Core	0.128	8	27	1.53	104	0.32	7.96	1.86	4.25	9	35	<2	11	5	1	12	2.9
2598567	Drill Core	0.130	6	75	2.14	60	0.32	7.80	2.00	3.81	7	29	<2	8	5	1	14	3.0
2598568	Drill Core	0.113	6	32	1.51	240	0.30	8.07	2.56	3.96	6	35	<2	7	5	1	11	1.6
2598568A	Rock Pulp	0.060	8	57	1.41	538	0.34	7.10	2.58	1.01	<4	25	2	15	4	<1	15	<0.1
2598569	Drill Core	0.092	3	50	1.56	73	0.23	7.73	2.82	3.33	4	31	<2	5	3	1	10	2.2
2598570	Drill Core	0.120	5	60	2.27	70	0.34	7.44	1.84	3.05	7	22	<2	6	2	1	13	3.7
2598571	Drill Core	0.170	6	51	1.80	104	0.38	8.04	1.64	5.64	8	20	<2	12	3	1	18	3.8
2598572	Drill Core	0.178	6	7	1.43	94	0.34	8.18	1.36	5.91	<4	22	2	14	4	<1	13	2.7
2598573	Drill Core	0.173	3	5	1.16	80	0.29	7.95	1.45	6.79	7	20	<2	11	3	<1	12	3.6
2598574	Drill Core	0.173	5	6	1.27	110	0.29	8.52	1.63	6.80	5	20	<2	13	3	<1	13	3.0
2598575	Drill Core	0.157	7	41	2.36	128	0.38	8.12	1.27	5.86	5	17	<2	11	3	1	18	3.4
2598576	Drill Core	0.145	9	69	2.67	193	0.47	8.24	1.03	4.10	5	15	<2	14	2	1	24	3.3
2598577	Drill Core	0.156	14	90	3.84	475	0.45	8.61	1.89	3.13	<4	29	<2	14	2	1	24	3.4
2598578	Drill Core	0.152	11	73	3.23	547	0.47	8.63	2.62	2.79	<4	29	<2	15	3	<1	24	3.2
2598579	Drill Core	0.158	11	74	3.32	455	0.49	8.75	2.69	2.95	<4	28	<2	15	3	<1	24	2.5
2598579A	CORE DUP	0.155	11	75	3.34	442	0.49	8.86	2.72	2.94	<4	29	<2	15	3	<1	24	2.5
2598580	Drill Core	0.151	10	61	3.28	449	0.44	8.73	2.48	3.05	4	27	<2	13	2	<1	23	3.4
2598581	Drill Core	L.N.R.																
2598582	Drill Core	0.157	11	75	3.92	677	0.49	8.73	2.16	2.72	<4	31	<2	14	3	1	25	2.5



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 PHONE (604) 253-3158

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 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 5 of 5

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598583	Drill Core	2.41	0.125	<2	169	8	133	1.5	47	30	2402	6.91	20	<20	<2	480	1.2	<5	<5	290	5.24
2598584	Drill Core	3.73	0.112	<2	161	11	128	1.4	54	45	2383	8.25	25	<20	<2	477	1.6	8	<5	297	4.85
2598585	Drill Core	4.88	0.107	<2	141	7	107	1.3	47	34	2255	6.99	22	<20	<2	490	1.4	7	<5	270	5.29
2598586	Drill Core	4.97	0.072	<2	118	<5	104	1.6	44	31	2313	5.97	18	<20	<2	593	1.1	<5	<5	260	5.08
2598587	Drill Core	5.32	0.059	<2	116	7	104	1.2	42	32	2034	6.26	20	<20	<2	383	1.3	<5	<5	259	3.98
2598588	Drill Core	8.05	0.159	2	65	14	88	1.3	21	22	1495	5.30	14	<20	<2	398	0.8	<5	<5	196	3.78
2598589	Drill Core	6.44	0.134	<2	278	7	107	1.6	20	28	1499	6.02	18	<20	<2	383	1.3	<5	<5	208	2.90
2598590	Rock	0.42	<0.005	<2	19	<5	67	1.1	9	8	836	3.52	<5	<20	<2	155	0.9	<5	<5	69	2.75
2598591	Drill Core	0.41	0.047	3	52	<5	79	1.1	12	17	1615	4.93	19	<20	<2	547	1.5	6	<5	209	4.83
2598592	Drill Core	4.95	0.487	<2	857	9	110	2.6	22	30	1888	8.02	18	<20	<2	452	1.1	<5	<5	207	4.56
2598593	Drill Core	5.95	0.164	<2	483	<5	93	1.4	21	24	1605	5.60	14	<20	<2	389	1.1	<5	<5	221	3.86
2598594	Drill Core	4.57	0.132	<2	316	9	78	1.8	16	23	1360	4.98	15	<20	<2	340	0.8	<5	<5	189	3.40
2598595	Drill Core	5.87	0.140	<2	204	7	72	1.7	17	18	1425	4.51	11	<20	<2	425	1.1	<5	<5	164	3.98
2598596	Drill Core	4.91	0.055	4	34	<5	61	<0.5	19	9	767	2.74	7	<20	<2	388	0.8	<5	<5	93	2.26
2598597	Drill Core	7.56	0.025	4	16	10	62	<0.5	19	12	966	2.89	9	<20	<2	533	0.4	<5	<5	102	2.54
2598598	Drill Core	5.91	0.082	<2	5	<5	84	<0.5	11	18	1429	4.53	10	<20	<2	332	<0.4	<5	<5	179	3.09
2598599	Drill Core	2.32	0.036	4	6	8	82	<0.5	13	27	1373	4.89	10	<20	<2	304	<0.4	<5	<5	174	2.78
2598600	Drill Core	5.45	0.040	12	7	11	96	<0.5	12	27	1640	5.39	17	<20	2	418	<0.4	7	<5	182	3.59

# CERTIFICATE OF ANALYSIS

SMI13000429.1

Method	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S	
Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1	
2598583	Drill Core	0.154	11	74	3.74	281	0.50	8.70	2.39	2.41	<4	22	<2	16	3	1	26	3.0
2598584	Drill Core	0.167	13	105	3.73	285	0.53	8.84	1.49	3.65	<4	21	<2	16	3	1	26	3.8
2598585	Drill Core	0.163	12	80	3.32	366	0.48	9.20	1.33	4.48	<4	20	<2	16	3	1	24	3.0
2598586	Drill Core	0.154	8	56	3.35	745	0.46	8.80	1.49	4.40	<4	27	<2	14	3	<1	23	2.9
2598587	Drill Core	0.151	7	59	3.37	218	0.44	8.55	1.25	4.98	5	16	<2	12	2	<1	22	3.1
2598588	Drill Core	0.145	8	31	2.10	111	0.35	8.11	1.31	5.34	8	27	<2	13	4	<1	16	2.4
2598589	Drill Core	0.162	9	31	2.21	85	0.40	8.11	1.30	4.64	5	26	<2	14	3	<1	19	2.8
2598590	Rock	0.063	13	22	0.86	802	0.34	7.74	2.28	2.30	<4	85	<2	26	8	1	13	0.2
2598591	Drill Core	0.134	9	29	1.66	405	0.33	8.43	0.52	5.29	<4	22	<2	14	4	<1	17	1.0
2598592	Drill Core	0.135	10	85	2.40	223	0.32	7.22	0.70	4.53	<4	25	<2	15	3	1	20	3.8
2598593	Drill Core	0.160	10	34	2.28	133	0.37	8.17	1.28	5.58	<4	26	<2	12	3	1	19	2.5
2598594	Drill Core	0.156	8	24	1.80	112	0.34	8.03	1.03	6.31	<4	28	<2	10	4	<1	15	2.6
2598595	Drill Core	0.118	8	35	1.69	144	0.29	7.55	1.54	5.23	5	30	<2	10	3	1	14	1.8
2598596	Drill Core	0.080	8	34	1.12	406	0.20	7.98	2.37	4.27	7	41	<2	7	4	1	7	1.2
2598597	Drill Core	0.081	6	39	1.25	366	0.19	7.74	2.44	3.56	4	38	<2	6	3	1	8	0.9
2598598	Drill Core	0.136	9	21	1.72	132	0.34	8.02	2.85	3.33	4	35	<2	13	5	1	14	1.9
2598599	Drill Core	0.137	7	22	1.76	119	0.34	8.20	2.78	4.02	<4	35	<2	11	5	1	14	2.3
2598600	Drill Core	0.134	9	20	1.88	153	0.35	8.09	1.68	3.81	<4	32	<2	14	5	1	13	2.2



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Page: 1 of 3

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
Pulp Duplicates																					
2598507	Drill Core	4.62	0.143	<2	61	<5	79	1.2	17	32	1774	6.50	19	<20	<2	581	0.5	<5	<5	270	5.78
REP 2598507	QC			<2	61	11	80	1.5	18	33	1839	6.68	21	<20	<2	595	0.4	<5	<5	278	6.09
2598508	Drill Core	1.86	0.013	<2	13	<5	53	<0.5	16	5	791	2.08	9	<20	<2	349	0.6	<5	<5	103	2.22
REP 2598508	QC		0.017																		
2598539	Drill Core	6.61	0.111	<2	13	12	128	<0.5	24	39	3288	7.79	18	<20	<2	567	<0.4	<5	<5	355	6.77
REP 2598539	QC			<2	12	12	129	<0.5	24	40	3311	7.92	16	<20	<2	579	0.5	<5	<5	358	6.94
2598547	Drill Core	1.00	0.022	<2	17	18	107	<0.5	28	26	1991	5.07	22	<20	<2	407	<0.4	6	<5	225	3.76
REP 2598547	QC		0.021																		
2598570	Drill Core	6.97	0.058	4	40	9	98	<0.5	38	39	1324	6.22	7	<20	<2	295	0.6	<5	<5	191	2.75
REP 2598570	QC			4	37	8	94	<0.5	37	38	1295	6.47	8	<20	<2	289	0.5	<5	<5	188	2.72
2598571	Drill Core	3.06	0.231	<2	509	13	86	<0.5	26	38	1351	7.02	13	<20	<2	261	0.6	<5	<5	248	3.12
REP 2598571	QC			<2	475	7	81	1.7	25	37	1332	6.64	11	<20	<2	274	1.5	<5	<5	225	2.97
2598600	Drill Core	5.45	0.040	12	7	11	96	<0.5	12	27	1640	5.39	17	<20	2	418	<0.4	7	<5	182	3.59
REP 2598600	QC			12	7	10	96	<0.5	11	27	1659	5.47	15	<20	2	411	<0.4	6	<5	183	3.61
REP 2598568	QC		0.043																		
Core Reject Duplicates																					
2598506	Drill Core	1.82	0.015	<2	10	5	100	1.1	12	26	1943	5.82	20	<20	<2	461	0.5	<5	<5	263	4.66
DUP 2598506	QC		0.016	<2	17	<5	102	1.8	13	27	1843	5.45	22	<20	<2	437	1.2	<5	<5	259	4.35
2598541	Drill Core	5.47	0.182	<2	16	16	125	<0.5	22	41	2728	7.38	15	<20	<2	514	<0.4	<5	<5	306	5.31
DUP 2598541	QC		0.198	<2	17	15	126	<0.5	22	41	2732	7.48	16	<20	<2	526	<0.4	<5	<5	307	5.35
2598576	Drill Core	4.26	0.119	<2	203	10	114	1.6	44	35	2235	6.67	15	<20	<2	294	1.3	<5	<5	283	4.96
DUP 2598576	QC		0.125	<2	192	<5	115	1.5	44	35	2260	6.68	15	<20	<2	299	1.5	5	<5	283	4.86
Reference Materials																					
STD OREAS24P	Standard			<2	47	<5	111	0.6	153	45	1079	7.47	<5	<20	<2	400	0.6	<5	<5	170	5.74
STD OREAS24P	Standard			<2	50	7	118	<0.5	146	46	1070	7.61	<5	<20	3	393	<0.4	<5	<5	172	5.90
STD OREAS24P	Standard			<2	49	<5	116	0.7	151	47	1090	7.31	<5	<20	4	385	0.5	6	<5	167	5.72
STD OREAS24P	Standard			<2	49	15	116	0.5	152	47	1120	7.57	<5	<20	<2	420	1.4	<5	<5	169	6.07
STD OREAS24P	Standard			<2	48	6	116	<0.5	158	48	1075	7.68	<5	<20	<2	398	0.8	<5	<5	174	5.76

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Project: Takla Rainbow  
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Page: 1 of 3

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

Method		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	%						
MDL		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
Pulp Duplicates																		
2598507	Drill Core	0.138	11	34	2.05	812	0.47	8.92	2.40	2.75	<4	35	<2	20	4	1	26	2.0
REP 2598507	QC	0.139	11	35	2.14	727	0.49	9.19	2.48	2.79	<4	29	<2	20	4	1	27	2.2
2598508	Drill Core	0.090	2	34	1.16	1477	0.23	8.29	3.76	3.34	<4	35	<2	8	4	1	7	0.1
REP 2598508	QC																	
2598539	Drill Core	0.127	7	38	3.64	719	0.55	7.56	1.08	2.50	9	24	<2	16	3	1	38	2.0
REP 2598539	QC	0.127	7	43	3.68	735	0.56	7.65	1.10	2.53	9	29	<2	16	2	1	39	2.0
2598547	Drill Core	0.171	7	38	2.33	353	0.43	8.85	2.20	4.09	<4	23	<2	15	4	1	20	1.1
REP 2598547	QC																	
2598570	Drill Core	0.120	5	60	2.27	70	0.34	7.44	1.84	3.05	7	22	<2	6	2	1	13	3.7
REP 2598570	QC	0.117	5	56	2.23	84	0.32	7.10	1.79	3.38	7	22	<2	6	3	1	13	3.6
2598571	Drill Core	0.170	6	51	1.80	104	0.38	8.04	1.64	5.64	8	20	<2	12	3	1	18	3.8
REP 2598571	QC	0.165	6	49	1.69	85	0.34	7.96	1.55	5.76	8	18	<2	12	3	1	18	3.5
2598600	Drill Core	0.134	9	20	1.88	153	0.35	8.09	1.68	3.81	<4	32	<2	14	5	1	13	2.2
REP 2598600	QC	0.133	9	23	1.86	145	0.35	8.02	1.67	3.79	<4	32	<2	14	5	1	13	2.2
REP 2598568	QC																	
Core Reject Duplicates																		
2598506	Drill Core	0.118	11	26	2.65	1389	0.51	8.73	2.32	3.61	<4	38	<2	19	4	1	30	1.0
DUP 2598506	QC	0.118	10	28	2.52	1238	0.51	8.26	2.21	2.90	<4	33	<2	19	4	1	29	1.0
2598541	Drill Core	0.137	6	35	3.14	1075	0.48	8.32	1.33	2.97	<4	28	<2	14	3	1	29	1.9
DUP 2598541	QC	0.136	6	36	3.17	1105	0.49	8.44	1.34	2.99	<4	28	<2	14	3	1	30	1.9
2598576	Drill Core	0.145	9	69	2.67	193	0.47	8.24	1.03	4.10	5	15	<2	14	2	1	24	3.3
DUP 2598576	QC	0.146	9	68	2.70	211	0.48	8.26	1.04	4.04	5	15	<2	14	2	1	24	3.2
Reference Materials																		
STD OREAS24P	Standard	0.137	18	211	4.28	282	1.10	8.09	2.59	0.70	<4	133	<2	23	20	<1	21	<0.1
STD OREAS24P	Standard	0.140	17	217	4.14	286	1.09	7.88	2.51	0.70	<4	131	<2	22	20	1	20	<0.1
STD OREAS24P	Standard	0.135	18	209	4.08	271	1.04	7.71	2.47	0.69	<4	130	<2	22	19	1	19	<0.1
STD OREAS24P	Standard	0.142	19	218	4.43	306	1.13	8.26	2.70	0.74	<4	137	<2	24	20	<1	21	<0.1
STD OREAS24P	Standard	0.141	18	215	4.14	293	1.06	7.74	2.55	0.73	<4	134	<2	22	20	1	20	<0.1

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Page: 2 of 3

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

		WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01
STD OREAS45E	Standard			<2	789	5	45	1.6	495	61	561	26.17	18	<20	9	16	<0.4	<5	<5	332	0.05
STD OREAS45E	Standard			2	784	25	51	0.9	476	63	566	27.07	19	<20	15	16	<0.4	<5	<5	335	0.06
STD OREAS45E	Standard			3	794	17	49	<0.5	478	63	558	24.99	12	<20	14	15	<0.4	8	<5	321	0.05
STD OREAS45E	Standard			<2	781	10	48	1.4	472	62	567	25.83	18	<20	12	16	2.6	<5	<5	321	0.06
STD OREAS45E	Standard			2	782	19	46	0.6	448	58	552	23.29	17	<20	8	16	<0.4	<5	<5	314	0.05
STD OXC109	Standard		0.202																		
STD OXC109	Standard		0.199																		
STD OXC109	Standard		0.202																		
STD OXC109	Standard		0.209																		
STD OXI96	Standard		1.760																		
STD OXI96	Standard		1.791																		
STD OXI96	Standard		1.710																		
STD OXI96	Standard		1.792																		
STD OXL93	Standard		5.949																		
STD OXL93	Standard		5.595																		
STD OXL93	Standard		5.631																		
STD OXL93	Standard		5.794																		
STD OXC109 Expected			0.201																		
STD OXI96 Expected			1.802																		
STD OXL93 Expected			5.841																		
STD OREAS24P Expected				1.5	52	2.9	119	0.06	141	44	1100	7.53	1.2	0.75	2.85	403	0.15	0.09		158	5.83
STD OREAS45E Expected				2.4	780	18.2	46.7	0.311	454	57	570	24.12	16.3	2.41	12.9	15.9		1		322	0.065
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
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BLK	Blank		<0.005																		



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Page: 2 of 3

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

		1E P %	1E La ppm	1E Cr ppm	1E Mg %	1E Ba ppm	1E Ti %	1E Al %	1E Na %	1E K %	1E W ppm	1E Zr ppm	1E Sn ppm	1E Y ppm	1E Nb ppm	1E Be ppm	1E Sc ppm	1E S %
		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
STD OREAS45E	Standard	0.034	11	1054	0.13	260	0.55	7.10	0.05	0.34	<4	97	10	8	8	<1	99	<0.1
STD OREAS45E	Standard	0.036	9	1018	0.15	261	0.55	6.77	0.06	0.34	<4	105	2	6	7	<1	97	<0.1
STD OREAS45E	Standard	0.035	11	1023	0.15	244	0.54	6.84	0.06	0.34	<4	103	<2	4	5	<1	94	<0.1
STD OREAS45E	Standard	0.036	11	1047	0.13	260	0.56	7.17	0.05	0.35	<4	101	3	8	8	<1	99	<0.1
STD OREAS45E	Standard	0.033	9	1022	0.15	236	0.50	6.69	0.06	0.33	<4	94	<2	5	5	<1	93	<0.1
STD OXC109	Standard																	
STD OXC109	Standard																	
STD OXC109	Standard																	
STD OXC109	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXC109 Expected																		
STD OXI96 Expected																		
STD OXL93 Expected																		
STD OREAS24P Expected		0.136	17.4	196	4.13	285	1.1	7.66	2.34	0.7	0.5	141	1.6	21.3	21		20	
STD OREAS45E Expected		0.034	11	979	0.156	252	0.559	6.78	0.059	0.324	1.07	97	1.32	8.28	6.8	0.62	93	0.046
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	



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 PHONE (604) 253-3158

**Client: Minorex Consulting Ltd**  
 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 3 of 3

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

		WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01
BLK	Blank	<0.005																			
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
Prep Wash																					
G1-SMI	Prep Blank	<0.005	<2	<2	6	53	<0.5	4	4	789	2.44	<5	<20	5	725	0.8	<5	<5	53	2.31	
G1-SMI	Prep Blank	<0.005	<2	2	6	55	<0.5	5	4	784	2.48	<5	<20	3	711	0.5	<5	<5	54	2.46	



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Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 3 of 3

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000429.1

		1E P %	1E La ppm	1E Cr ppm	1E Mg %	1E Ba ppm	1E Ti %	1E Al %	1E Na %	1E K %	1E W ppm	1E Zr ppm	1E Sn ppm	1E Y ppm	1E Nb ppm	1E Be ppm	1E Sc ppm	1E S %
BLK	Blank	0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
Prep Wash																		
G1-SMI	Prep Blank	0.081	21	10	0.72	1077	0.25	7.87	2.80	3.18	<4	14	<2	16	26	2	6	<0.1
G1-SMI	Prep Blank	0.082	22	10	0.71	1103	0.25	7.59	2.80	3.23	<4	16	2	16	26	3	6	<0.1



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Client: Minorex Consulting Ltd
25856 - 28th Avenue
Aldergrove BC V4W 2Z8 CANADA

Submitted By: Doug Blanchflower
Receiving Lab: Canada-Smithers
Received: November 18, 2013
Report Date: December 13, 2013
Page: 1 of 5

CERTIFICATE OF ANALYSIS

SMI13000430.1

CLIENT JOB INFORMATION

Project: Takla Rainbow
Shipment ID:
P.O. Number
Number of Samples: 101

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Minorex Consulting Ltd
25856 - 28th Avenue
Aldergrove BC V4W 2Z8
CANADA

CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Procedure Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include R200-250, G601, and 1E.

ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598601	Rock Pulp	0.12	1.101	10	57	13	67	2.2	43	14	881	4.55	31	<20	4	326	1.0	<5	<5	131	3.28
2598602	Drill Core	4.66	0.033	<2	18	8	105	<0.5	13	29	1591	5.54	14	<20	<2	305	1.2	7	<5	199	3.32
2598603	Drill Core	6.66	0.065	<2	33	15	84	<0.5	14	30	1700	5.74	13	<20	2	307	1.2	7	<5	200	4.62
2598604	Drill Core	7.56	0.054	<2	12	10	86	<0.5	14	35	1587	5.31	16	<20	3	331	1.3	5	<5	184	3.87
2598605	Drill Core	3.27	0.096	<2	69	10	81	<0.5	13	45	1438	5.23	14	<20	<2	283	1.1	<5	<5	172	3.53
2598606	Drill Core	5.61	0.040	<2	18	5	96	<0.5	12	33	1383	5.26	10	<20	<2	270	1.1	<5	<5	186	3.13
2598607	Drill Core	4.10	0.034	<2	9	9	93	<0.5	12	30	1368	5.24	12	<20	2	274	0.9	5	<5	183	3.11
2598608	Drill Core	9.06	0.050	3	10	12	80	<0.5	16	35	1546	5.32	6	<20	<2	256	1.1	8	<5	184	4.26
2598609	Drill Core	4.59	0.028	3	11	12	165	<0.5	195	30	2598	6.79	9	<20	6	325	1.2	8	7	235	4.77
2598610	Drill Core	5.50	0.028	2	131	<5	238	<0.5	305	38	3206	8.34	14	<20	3	285	1.2	6	<5	270	4.27
2598611	Drill Core	3.21	0.073	<2	38	12	98	<0.5	49	29	1780	4.87	17	<20	3	340	0.9	8	<5	194	3.60
2598612	Drill Core	2.78	0.039	<2	19	10	93	<0.5	45	29	1670	4.60	14	<20	4	343	0.9	6	<5	191	3.37
2598613	Drill Core	5.23	0.075	<2	16	15	81	<0.5	13	31	1270	5.16	15	<20	<2	313	0.8	6	<5	175	2.67
2598614	Drill Core	6.89	0.067	3	10	9	77	<0.5	11	24	1182	5.49	15	<20	3	299	1.0	<5	6	175	2.58
2598615	Drill Core	0.86	0.034	3	33	13	77	<0.5	9	27	1146	5.26	13	<20	2	295	1.1	<5	<5	172	2.34
2598616	Drill Core	2.78	0.035	6	42	7	52	<0.5	9	23	1099	4.90	9	<20	2	273	0.9	<5	<5	145	2.58
2598617	Drill Core	7.04	1.659	2	442	7	126	0.8	39	29	2464	7.00	19	<20	<2	301	0.9	<5	<5	272	3.99
2598618	Drill Core	3.47	0.157	<2	137	<5	141	<0.5	31	37	3217	8.32	21	<20	2	381	0.9	7	5	375	3.95
2598619	Drill Core	5.23	0.668	<2	351	12	104	0.8	27	40	1961	9.36	26	<20	2	461	1.2	8	<5	280	3.92
2598620	Drill Core	5.42	0.345	<2	195	9	98	<0.5	20	34	1794	7.81	27	34	<2	664	1.1	12	9	242	3.55
2598621	Drill Core	4.42	0.121	<2	44	6	119	<0.5	20	27	2552	7.35	19	<20	<2	480	1.0	11	<5	274	3.97
2598622	Drill Core	5.53	0.079	<2	21	5	121	<0.5	20	46	1955	8.38	19	<20	<2	364	0.9	10	8	294	3.05
2598623	Rock	0.53	<0.005	<2	13	8	52	<0.5	8	8	866	3.37	<5	<20	4	129	0.7	<5	<5	66	2.03
2598624	Drill Core	8.14	0.367	<2	78	<5	136	<0.5	22	52	1815	8.76	24	<20	<2	309	1.0	7	6	250	2.70
2598625	Drill Core	4.52	0.175	<2	85	8	124	<0.5	20	49	1734	7.15	29	<20	<2	374	0.8	7	<5	247	2.93
2598626	Drill Core	5.80	0.800	4	235	7	121	0.6	24	59	1784	9.90	23	<20	<2	339	0.7	<5	5	221	2.71
2598627	Drill Core	6.02	0.624	2	465	<5	102	0.7	20	40	1431	7.82	21	<20	<2	336	0.5	<5	8	213	2.15
2598628	Drill Core	4.83	0.404	3	533	7	99	0.6	127	29	2146	7.61	22	<20	4	486	0.8	8	<5	208	5.03
2598629	Drill Core	2.79	0.223	<2	333	9	100	<0.5	47	38	2244	8.23	22	<20	<2	537	0.8	11	<5	267	4.95
2598630	Drill Core	3.75	0.205	<2	189	<5	171	<0.5	202	24	3191	7.82	11	<20	<2	529	1.1	5	13	248	5.66

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S	
Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1	
2598601	Rock Pulp	0.062	8	67	1.47	549	0.35	7.53	2.65	1.03	<4	28	<2	16	4	<1	16	<0.1
2598602	Drill Core	0.149	9	25	2.05	405	0.38	8.53	1.28	3.44	<4	32	<2	14	5	1	16	1.7
2598603	Drill Core	0.151	8	19	1.69	416	0.37	8.67	0.98	3.70	<4	26	<2	14	5	1	15	1.8
2598604	Drill Core	0.138	9	24	1.73	484	0.36	8.48	1.32	3.65	<4	29	<2	14	6	1	14	1.6
2598605	Drill Core	0.141	9	21	1.50	337	0.35	8.64	2.52	3.26	7	29	<2	13	5	1	14	1.7
2598606	Drill Core	0.141	8	22	1.79	1014	0.35	8.41	3.25	2.36	5	32	<2	12	5	1	14	1.6
2598607	Drill Core	0.147	8	24	1.77	520	0.37	8.69	2.75	2.86	4	34	<2	12	5	1	14	1.7
2598608	Drill Core	0.145	8	24	1.78	323	0.36	8.61	1.88	3.39	<4	31	<2	13	5	1	14	1.6
2598609	Drill Core	0.220	27	264	4.73	1341	0.42	7.95	1.37	3.07	<4	55	<2	14	9	2	23	0.4
2598610	Drill Core	0.193	5	525	5.60	265	0.44	7.45	0.80	2.67	<4	43	<2	12	4	1	21	0.2
2598611	Drill Core	0.151	10	84	2.36	1591	0.39	8.44	1.26	3.85	<4	28	<2	12	5	<1	16	1.0
2598612	Drill Core	0.151	10	76	2.19	1607	0.38	8.47	1.39	3.32	5	28	<2	12	5	<1	16	1.0
2598613	Drill Core	0.135	8	23	1.76	244	0.35	8.28	1.21	4.18	<4	29	<2	13	5	<1	14	1.8
2598614	Drill Core	0.138	9	18	1.58	384	0.35	8.62	1.39	4.07	8	29	<2	12	5	<1	13	1.4
2598615	Drill Core	0.134	8	17	1.54	234	0.38	8.36	1.41	4.45	6	33	<2	13	5	1	13	2.1
2598616	Drill Core	0.121	6	16	1.22	165	0.29	7.99	1.28	4.63	4	31	<2	12	5	<1	11	2.7
2598617	Drill Core	0.142	6	104	3.64	491	0.43	7.75	1.48	3.27	5	27	<2	14	2	1	24	2.9
2598618	Drill Core	0.126	6	49	4.10	435	0.55	7.40	0.96	3.36	<4	21	<2	13	<2	1	30	3.9
2598619	Drill Core	0.136	4	24	2.49	166	0.52	7.92	1.49	3.00	6	15	<2	12	<2	<1	23	6.2
2598620	Drill Core	0.142	5	28	2.29	95	0.49	8.43	1.47	3.74	8	14	<2	12	<2	<1	23	4.8
2598621	Drill Core	0.143	5	30	3.08	403	0.52	8.62	1.06	4.24	4	17	<2	14	2	<1	23	2.7
2598622	Drill Core	0.135	4	28	2.90	158	0.49	8.04	0.73	3.72	5	14	<2	10	2	1	21	3.4
2598623	Rock	0.058	16	19	0.90	605	0.32	7.33	2.19	1.85	<4	84	<2	28	8	1	12	0.1
2598624	Drill Core	0.141	6	31	2.88	180	0.46	8.56	0.77	3.59	<4	13	<2	11	2	<1	19	2.4
2598625	Drill Core	0.150	6	25	2.66	172	0.46	8.76	0.64	3.71	<4	14	<2	12	3	<1	15	2.2
2598626	Drill Core	0.124	3	23	2.60	126	0.42	7.60	0.42	3.92	4	24	<2	9	3	1	18	3.7
2598627	Drill Core	0.132	4	23	2.18	88	0.41	8.30	0.47	4.53	6	22	<2	10	3	<1	16	4.3
2598628	Drill Core	0.143	6	208	2.85	272	0.36	7.02	0.54	3.23	5	24	<2	12	2	<1	22	3.6
2598629	Drill Core	0.140	8	106	2.62	464	0.44	7.82	0.85	3.54	4	24	<2	15	<2	1	23	4.1
2598630	Drill Core	0.158	6	356	5.37	668	0.37	6.59	0.48	2.55	<4	32	<2	11	3	1	25	2.1

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598631	Drill Core	5.43	0.116	<2	44	<5	171	<0.5	239	35	2754	7.57	17	<20	<2	377	0.9	10	7	245	4.83
2598632	Drill Core	6.33	0.300	<2	54	7	136	<0.5	28	65	1772	9.15	27	<20	<2	250	0.8	8	<5	265	2.28
2598633	Drill Core	9.08	0.126	3	21	9	145	<0.5	27	70	1698	8.63	26	<20	<2	278	1.0	6	8	267	2.26
2598634	Rock Pulp	0.12	1.031	8	53	<5	63	1.2	41	13	815	4.17	29	<20	5	299	<0.4	<5	<5	128	3.00
2598635	Drill Core	8.68	0.094	<2	53	8	129	<0.5	22	58	1757	7.54	19	<20	<2	315	<0.4	5	<5	274	3.10
2598636	Drill Core	5.96	0.134	<2	416	<5	117	<0.5	22	25	2073	7.49	11	<20	<2	381	0.4	<5	<5	268	3.96
2598637	Drill Core	5.04	0.463	<2	164	<5	108	<0.5	20	35	2024	6.94	9	<20	<2	258	<0.4	6	<5	251	4.32
2598638	Drill Core	5.64	0.373	<2	537	6	130	0.6	26	40	1819	8.28	9	<20	<2	249	0.4	<5	<5	280	3.49
2598639	Drill Core	6.57	0.347	<2	355	9	101	<0.5	24	33	1345	6.51	8	<20	<2	379	<0.4	<5	<5	218	2.87
2598640	Drill Core	5.04	0.291	3	145	7	83	<0.5	23	23	988	4.91	8	<20	<2	341	<0.4	<5	<5	183	2.03
2598641	Drill Core	6.28	0.273	<2	355	5	110	0.5	26	45	1249	7.41	12	<20	<2	286	0.7	<5	<5	265	2.39
2598642	Drill Core	4.74	0.177	<2	234	12	92	<0.5	21	28	1362	5.89	9	<20	<2	343	<0.4	8	<5	240	2.84
2598643	Drill Core	5.52	0.081	<2	58	16	126	<0.5	165	29	1933	6.18	10	<20	2	447	<0.4	<5	<5	225	4.12
2598644	Drill Core	3.06	0.100	3	129	7	88	<0.5	41	23	1413	5.46	7	<20	<2	392	<0.4	<5	<5	209	3.08
2598645	Drill Core	1.63	0.066	<2	111	8	85	<0.5	32	22	1249	5.30	11	<20	<2	343	<0.4	<5	<5	198	2.68
2598646	Drill Core	4.59	0.077	<2	116	<5	87	<0.5	16	22	1119	5.44	10	<20	<2	329	<0.4	<5	<5	190	2.13
2598647	Drill Core	5.41	0.189	<2	150	9	90	<0.5	17	22	1173	5.36	13	<20	<2	283	<0.4	<5	<5	180	2.43
2598648	Drill Core	5.72	0.106	<2	98	7	108	<0.5	21	27	1345	6.43	13	<20	<2	311	<0.4	5	<5	204	2.26
2598649	Drill Core	3.36	0.073	<2	103	6	111	<0.5	19	33	1237	6.14	13	<20	<2	303	<0.4	<5	<5	202	2.01
2598650	Drill Core	6.24	0.120	4	78	13	88	<0.5	18	26	1354	5.36	17	<20	<2	336	<0.4	<5	<5	195	2.52
2598651	Drill Core	5.53	0.161	331	674	<5	96	0.7	26	35	1115	6.10	17	<20	<2	284	<0.4	9	<5	207	2.37
2598652	Drill Core	4.35	0.069	2	100	<5	92	<0.5	23	30	1183	6.49	12	<20	<2	277	<0.4	<5	<5	208	2.86
2598653	Drill Core	5.61	0.041	<2	104	<5	79	<0.5	17	19	954	4.73	13	<20	2	429	<0.4	6	<5	157	2.56
2598654	Drill Core	5.68	0.052	2	103	12	57	<0.5	19	8	558	1.99	9	<20	<2	605	<0.4	6	<5	85	1.92
2598655	Drill Core	5.03	0.026	17	67	<5	47	<0.5	20	10	581	2.16	13	<20	<2	486	<0.4	<5	<5	85	1.91
2598656	Rock	0.55	<0.005	<2	15	8	65	<0.5	3	5	833	2.94	<5	<20	<2	117	<0.4	<5	<5	56	2.23
2598657	Drill Core	6.70	0.020	<2	109	5	49	<0.5	35	12	773	2.32	7	<20	<2	380	<0.4	5	<5	92	2.53
2598658	Drill Core	6.03	0.022	<2	161	<5	72	<0.5	116	17	1157	3.31	9	<20	<2	413	0.4	<5	<5	140	3.37
2598659	Drill Core	4.42	0.011	<2	41	<5	115	<0.5	315	27	1862	5.72	15	<20	4	538	<0.4	<5	<5	247	5.11
2598660	Drill Core	4.77	0.036	2	279	<5	139	<0.5	276	38	2194	6.17	11	<20	<2	328	<0.4	6	<5	224	4.82



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Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 3 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598631	Drill Core			0.165	5	414	5.23	366	0.41	7.25	0.53	2.58	<4	36	<2	12	3	1	23	1.8
2598632	Drill Core			0.136	3	24	2.92	144	0.48	7.70	0.56	4.43	6	15	<2	8	<2	1	17	5.2
2598633	Drill Core			0.146	3	25	3.08	110	0.49	8.62	1.00	4.80	4	17	<2	9	2	1	17	4.6
2598634	Rock Pulp			0.059	10	54	1.37	505	0.32	6.86	2.45	0.98	<4	25	<2	16	4	<1	15	<0.1
2598635	Drill Core			0.145	6	27	2.84	113	0.47	8.59	1.69	4.22	6	15	2	14	2	1	20	3.5
2598636	Drill Core			0.137	7	48	2.98	1711	0.46	7.98	0.98	3.72	6	19	<2	15	<2	1	22	0.7
2598637	Drill Core			0.122	8	30	2.51	216	0.43	7.56	0.75	3.38	7	16	<2	14	<2	1	19	1.6
2598638	Drill Core			0.133	6	38	3.10	146	0.48	7.97	0.70	4.51	<4	17	<2	11	<2	<1	23	3.1
2598639	Drill Core			0.116	7	37	2.53	135	0.38	7.94	1.78	4.44	<4	25	<2	13	2	1	18	3.1
2598640	Drill Core			0.114	4	38	1.93	92	0.31	7.14	2.54	3.12	<4	31	<2	12	3	1	15	3.1
2598641	Drill Core			0.144	8	42	2.73	122	0.40	7.59	1.12	5.02	5	24	<2	12	<2	<1	20	5.0
2598642	Drill Core			0.130	7	40	2.64	134	0.36	7.85	1.63	4.88	<4	30	2	13	3	1	22	3.7
2598643	Drill Core			0.143	7	190	3.87	406	0.34	7.04	1.16	3.56	5	31	<2	11	3	1	22	2.1
2598644	Drill Core			0.143	9	64	2.31	147	0.32	7.67	1.56	4.62	7	37	<2	12	3	1	18	2.3
2598645	Drill Core			0.141	10	46	2.10	149	0.31	7.55	1.46	5.19	5	31	<2	11	3	1	17	2.3
2598646	Drill Core			0.136	7	34	2.01	118	0.31	7.66	1.70	4.31	4	32	<2	11	3	<1	16	3.1
2598647	Drill Core			0.139	9	49	1.88	119	0.28	7.49	1.83	3.95	<4	33	<2	12	4	<1	15	2.7
2598648	Drill Core			0.141	6	36	2.18	113	0.32	7.39	1.39	3.88	7	30	<2	12	3	<1	17	2.6
2598649	Drill Core			0.144	5	35	2.11	89	0.32	7.60	1.58	4.33	6	31	<2	10	3	<1	16	3.5
2598650	Drill Core			0.145	6	34	2.00	121	0.32	7.62	1.75	5.00	6	32	3	12	3	<1	16	2.9
2598651	Drill Core			0.142	4	49	2.14	105	0.32	7.84	1.46	4.72	5	29	<2	9	4	1	18	3.1
2598652	Drill Core			0.137	5	39	2.25	143	0.31	7.54	1.66	4.04	4	27	<2	11	3	<1	18	4.1
2598653	Drill Core			0.119	4	32	1.60	87	0.28	6.92	1.91	2.59	6	26	<2	8	3	1	13	2.9
2598654	Drill Core			0.074	5	34	1.03	390	0.18	7.53	3.90	2.64	<4	27	<2	5	5	1	6	1.1
2598655	Drill Core			0.077	5	34	1.09	374	0.17	7.51	3.41	3.34	8	30	<2	5	4	1	6	1.1
2598656	Rock			0.055	13	12	0.74	629	0.29	7.04	2.26	1.99	<4	78	<2	25	7	1	12	0.2
2598657	Drill Core			0.078	5	51	1.23	288	0.17	7.37	3.47	2.96	5	30	<2	7	4	1	7	1.1
2598658	Drill Core			0.106	8	155	2.61	1245	0.23	7.67	2.91	2.65	<4	32	<2	11	3	2	14	1.1
2598659	Drill Core			0.158	8	425	6.02	715	0.38	6.70	1.66	1.80	<4	34	<2	13	3	2	28	0.6
2598660	Drill Core			0.151	8	339	4.97	681	0.35	6.88	1.41	1.89	<4	36	<2	12	3	2	24	1.4

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Page: 4 of 5

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598661	Drill Core	5.41	0.107	12	388	8	91	<0.5	27	35	1267	7.53	18	<20	<2	285	<0.4	7	<5	259	3.69
2598662	Drill Core	6.42	0.055	<2	252	11	97	<0.5	43	31	1650	6.97	13	<20	<2	427	0.5	6	<5	267	3.87
2598663	Drill Core	6.57	0.059	3	251	10	70	<0.5	25	26	1139	5.02	11	<20	<2	306	<0.4	<5	<5	208	3.04
2598664	Drill Core	5.65	0.090	86	361	8	59	<0.5	15	24	1163	4.29	16	<20	<2	734	<0.4	6	<5	183	3.45
2598665	Drill Core	4.72	0.084	9	203	6	75	<0.5	16	25	1091	4.43	12	<20	<2	294	<0.4	<5	<5	194	2.62
2598666	Drill Core	3.74	0.086	30	563	7	76	0.7	17	28	1245	5.02	13	<20	<2	247	0.4	<5	<5	207	3.09
2598667	Rock Pulp	0.17	3.386	7	74	15	67	1.0	30	13	772	4.32	12	<20	<2	278	<0.4	7	<5	130	2.80
2598668	Drill Core	5.04	0.042	45	352	11	66	<0.5	19	30	539	5.06	13	<20	<2	219	<0.4	<5	<5	181	1.00
2598669	Drill Core	5.58	0.016	52	39	10	66	<0.5	60	19	1058	3.79	8	<20	<2	236	0.7	<5	14	143	3.25
2598669A	Drill Core	3.34	0.127	<2	184	43	119	1.0	18	38	2888	7.32	14	<20	<2	401	0.8	<5	7	327	6.07
2598670	Drill Core	3.18	0.036	<2	10	10	119	<0.5	20	47	2757	7.77	12	<20	<2	377	0.9	<5	<5	378	5.08
2598671	Drill Core	4.45	0.058	<2	23	12	124	0.9	22	56	2721	9.28	17	<20	<2	396	1.0	5	9	450	4.61
2598672	Drill Core	6.46	0.113	<2	326	9	119	0.5	17	39	2279	7.01	15	<20	<2	438	0.9	7	8	349	4.59
2598673	Drill Core	4.62	0.886	<2	68	<5	170	0.5	24	73	2313	9.69	15	<20	<2	378	0.5	<5	11	320	3.66
2598674	Drill Core	4.43	0.053	<2	32	7	134	<0.5	18	50	2154	8.03	19	<20	<2	522	0.5	5	<5	310	5.42
2598675	Drill Core	1.80	0.026	<2	13	11	138	1.3	17	35	2413	6.85	13	<20	<2	279	0.8	<5	<5	316	6.05
2598676	Drill Core	1.32	0.025	4	74	15	108	<0.5	17	39	2249	6.74	8	<20	2	279	0.9	<5	9	307	6.46
2598677	Drill Core	1.83	0.032	<2	72	15	108	<0.5	17	35	2293	7.34	9	<20	<2	264	0.8	6	7	330	5.26
2598678	Drill Core	3.12	0.022	<2	28	12	143	<0.5	21	49	2319	7.75	21	<20	<2	467	0.8	14	7	341	4.61
2598679	Drill Core	1.58	0.020	<2	33	12	129	<0.5	19	45	2289	7.64	13	<20	<2	484	0.5	9	<5	342	5.03
2598680	Drill Core	4.87	0.098	<2	11	13	126	<0.5	19	47	2152	7.15	15	<20	<2	422	0.8	6	8	303	4.95
2598681	Drill Core	7.21	0.045	<2	233	20	112	0.9	21	43	1965	6.09	11	<20	<2	406	0.9	7	<5	262	4.48
2598682	Drill Core	2.78	0.025	<2	58	13	106	<0.5	17	35	1881	5.38	12	52	<2	981	0.7	<5	<5	255	4.41
2598683	Drill Core	6.41	0.024	4	69	9	99	<0.5	13	35	1793	5.70	19	<20	<2	1099	0.9	8	<5	263	4.42
2598684	Drill Core	3.83	0.020	<2	102	8	112	<0.5	15	43	1762	6.21	15	<20	<2	320	0.7	6	7	269	3.91
2598685	Drill Core	6.86	0.038	<2	58	15	117	<0.5	15	47	1595	6.30	12	<20	<2	348	0.7	6	<5	278	3.62
2598686	Drill Core	6.59	0.036	<2	44	13	90	<0.5	13	35	1923	5.90	17	<20	7	471	0.8	7	<5	266	6.08
2598687	Drill Core	4.19	0.019	<2	42	10	90	<0.5	13	35	1755	5.62	19	<20	<2	559	0.7	10	<5	259	5.19
2598688	Drill Core	6.17	0.028	<2	28	8	104	<0.5	15	29	2030	6.36	19	<20	<2	597	0.8	10	<5	288	4.84
2598689	Drill Core	5.90	0.046	2	52	9	102	<0.5	15	32	1995	6.49	10	<20	<2	362	0.9	7	<5	286	4.24

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Page: 4 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598661	Drill Core			0.164	7	51	3.04	199	0.38	7.53	1.00	4.26	<4	23	<2	13	3	<1	21	3.9
2598662	Drill Core			0.145	8	110	3.49	245	0.40	7.64	1.66	3.27	<4	25	<2	14	2	1	29	3.5
2598663	Drill Core			0.144	7	57	2.12	122	0.33	7.71	1.88	4.10	5	30	2	11	4	1	17	2.4
2598664	Drill Core			0.152	6	23	1.69	192	0.33	7.67	2.59	3.97	6	38	<2	13	4	1	15	1.9
2598665	Drill Core			0.146	6	30	1.93	145	0.34	7.52	1.87	4.91	8	30	<2	12	4	1	16	2.0
2598666	Drill Core			0.149	7	33	1.96	145	0.34	7.65	1.87	4.66	8	31	<2	11	4	1	17	2.4
2598667	Rock Pulp			0.058	9	52	1.27	500	0.32	6.24	2.26	0.96	10	28	<2	15	4	<1	14	<0.1
2598668	Drill Core			0.136	7	31	1.61	94	0.29	7.30	1.50	5.08	7	35	<2	8	4	1	14	2.9
2598669	Drill Core			0.120	8	112	1.60	209	0.23	7.36	1.66	3.92	<4	48	<2	10	4	2	12	1.7
2598669A	Drill Core			0.130	7	32	3.17	802	0.50	7.77	1.40	2.33	5	36	<2	15	2	1	24	2.2
2598670	Drill Core			0.143	8	28	3.66	225	0.55	7.90	2.06	1.49	5	34	<2	14	2	1	27	3.2
2598671	Drill Core			0.144	6	17	3.96	268	0.63	7.88	1.05	1.87	8	39	<2	15	2	1	30	4.0
2598672	Drill Core			0.147	9	25	3.29	389	0.52	7.97	1.89	2.05	5	35	<2	14	2	1	27	2.6
2598673	Drill Core			0.146	6	10	3.83	159	0.52	7.73	1.56	2.22	113	15	<2	10	2	1	25	5.1
2598674	Drill Core			0.141	7	21	3.19	406	0.52	7.90	0.90	2.67	5	35	<2	13	3	1	27	3.6
2598675	Drill Core			0.138	7	25	3.00	161	0.52	7.86	1.11	2.10	6	34	<2	15	2	1	25	1.7
2598676	Drill Core			0.151	6	20	2.83	426	0.52	8.34	1.12	2.81	5	36	<2	14	2	1	23	2.3
2598677	Drill Core			0.142	6	23	3.11	343	0.50	7.78	1.57	1.94	<4	34	<2	15	2	1	24	2.2
2598678	Drill Core			0.160	6	26	3.66	253	0.57	8.72	2.26	1.59	<4	40	<2	15	3	1	29	2.6
2598679	Drill Core			0.157	7	27	3.43	251	0.56	8.56	2.21	1.63	<4	38	<2	14	3	1	28	2.5
2598680	Drill Core			0.159	6	24	3.17	341	0.54	8.93	2.27	1.92	<4	40	<2	13	3	1	26	2.3
2598681	Drill Core			0.149	8	26	3.10	316	0.46	8.80	2.75	1.88	5	29	<2	14	2	1	24	2.0
2598682	Drill Core			0.154	8	21	2.97	389	0.46	9.31	3.32	1.78	<4	28	<2	14	2	1	22	1.7
2598683	Drill Core			0.158	9	20	2.79	290	0.46	9.47	3.70	1.45	<4	30	<2	15	3	1	22	1.9
2598684	Drill Core			0.154	9	23	2.82	341	0.47	8.87	3.14	1.72	<4	27	<2	16	2	1	25	2.7
2598685	Drill Core			0.165	8	24	2.71	467	0.49	9.26	3.03	2.33	5	26	<2	13	2	1	22	2.7
2598686	Drill Core			0.142	8	17	2.55	448	0.44	8.78	2.77	1.79	<4	37	3	15	2	<1	23	2.0
2598687	Drill Core			0.155	8	19	2.65	360	0.45	9.62	3.55	1.39	<4	33	<2	15	3	<1	23	2.0
2598688	Drill Core			0.158	9	21	3.11	218	0.49	9.75	3.69	0.93	<4	34	3	17	3	1	26	2.3
2598689	Drill Core			0.151	9	23	3.06	267	0.50	8.83	2.80	1.71	<4	27	<2	15	2	1	26	2.8



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Page: 5 of 5

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598690	Rock	0.55	<0.005	<2	14	<5	56	<0.5	9	9	995	3.51	<5	<20	3	125	0.7	<5	<5	69	3.01
2598691	Drill Core	6.92	0.070	5	43	6	114	<0.5	18	29	2180	7.05	12	<20	<2	323	0.9	7	7	324	4.49
2598692	Drill Core	4.21	0.049	<2	88	13	106	<0.5	18	33	2047	7.35	19	<20	2	291	0.7	8	5	332	4.40
2598693	Drill Core	6.19	0.039	<2	90	12	102	<0.5	17	32	2195	6.16	14	<20	<2	338	0.9	9	<5	307	4.88
2598694	Drill Core	5.86	0.028	<2	45	16	93	<0.5	18	30	2143	5.57	15	<20	2	443	0.7	<5	7	217	6.30
2598695	Drill Core	6.49	0.095	<2	8	15	80	<0.5	12	35	1517	5.20	14	69	<2	802	0.6	<5	<5	211	4.37
2598696	Drill Core	4.95	0.047	<2	282	12	111	<0.5	24	45	2019	6.38	13	<20	3	1674	0.8	<5	<5	260	5.17
2598697	Drill Core	5.58	0.085	<2	965	7	145	1.1	25	50	2448	7.56	12	<20	<2	603	0.9	8	<5	308	5.88
2598698	Drill Core	6.33	0.070	3	793	11	150	0.9	35	52	2512	7.64	9	<20	<2	410	0.8	8	<5	284	4.97
2598699	Drill Core	4.43	0.028	<2	133	<5	154	<0.5	37	39	2356	7.89	10	<20	<2	380	0.7	8	<5	313	4.18
2598700	Drill Core	6.28	0.099	10	182	9	105	0.8	38	64	2026	7.87	9	<20	<2	340	0.5	7	7	280	4.65

# CERTIFICATE OF ANALYSIS

SMI13000430.1

Method		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	%						
MDL		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598690	Rock	0.058	15	21	0.88	514	0.31	7.37	2.06	1.86	<4	78	<2	27	7	1	13	0.3
2598691	Drill Core	0.153	8	24	3.27	354	0.53	8.66	2.39	1.85	<4	25	<2	14	2	1	25	2.9
2598692	Drill Core	0.151	8	25	3.02	270	0.54	8.61	1.90	2.31	6	26	<2	14	2	1	26	3.0
2598693	Drill Core	0.141	6	35	3.02	316	0.50	7.97	2.75	1.59	<4	34	<2	15	2	1	24	2.5
2598694	Drill Core	0.143	8	68	2.59	503	0.37	7.28	0.85	2.90	<4	19	<2	11	3	<1	18	1.3
2598695	Drill Core	0.166	9	21	1.90	476	0.33	8.12	1.29	3.43	<4	22	<2	11	3	1	15	1.3
2598696	Drill Core	0.131	7	29	2.45	617	0.43	7.52	1.06	2.78	5	22	<2	11	2	1	24	1.7
2598697	Drill Core	0.127	7	33	3.14	479	0.50	8.52	1.84	2.06	<4	30	<2	15	2	1	29	1.8
2598698	Drill Core	0.160	5	76	3.14	612	0.44	8.26	0.92	3.50	5	13	<2	13	2	1	25	1.6
2598699	Drill Core	0.150	6	60	3.43	1166	0.47	8.20	1.37	3.26	8	16	<2	12	<2	1	25	1.1
2598700	Drill Core	0.128	10	80	2.67	265	0.42	7.73	2.09	2.39	14	24	<2	12	<2	1	22	3.4



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Client: **Minorex Consulting Ltd**  
 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 1 of 2

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000430.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
Pulp Duplicates																					
2598619	Drill Core	5.23	0.668	<2	351	12	104	0.8	27	40	1961	9.36	26	<20	2	461	1.2	8	<5	280	3.92
REP 2598619	QC	0.668																			
2598620	Drill Core	5.42	0.345	<2	195	9	98	<0.5	20	34	1794	7.81	27	34	<2	664	1.1	12	9	242	3.55
REP 2598620	QC	<2 192 6 99 <0.5 21 34 1788 7.77 32 23 <2 661 1.2 15 <5 243 3.50																			
2598640	Drill Core	5.04	0.291	3	145	7	83	<0.5	23	23	988	4.91	8	<20	<2	341	<0.4	<5	<5	183	2.03
REP 2598640	QC	0.321																			
2598655	Drill Core	5.03	0.026	17	67	<5	47	<0.5	20	10	581	2.16	13	<20	<2	486	<0.4	<5	<5	85	1.91
REP 2598655	QC	16 65 6 46 <0.5 17 10 560 2.07 11 <20 <2 469 <0.4 <5 <5 85 1.82																			
2598689	Drill Core	5.90	0.046	2	52	9	102	<0.5	15	32	1995	6.49	10	<20	<2	362	0.9	7	<5	286	4.24
REP 2598689	QC	<2 53 10 103 <0.5 16 33 2002 6.50 11 <20 <2 367 0.7 9 <5 291 4.25																			
2598693	Drill Core	6.19	0.039	<2	90	12	102	<0.5	17	32	2195	6.16	14	<20	<2	338	0.9	9	<5	307	4.88
REP 2598693	QC	0.029																			
Core Reject Duplicates																					
2598624	Drill Core	8.14	0.367	<2	78	<5	136	<0.5	22	52	1815	8.76	24	<20	<2	309	1.0	7	6	250	2.70
DUP 2598624	QC	0.293 <2 63 9 134 <0.5 22 51 1763 8.53 24 <20 <2 298 0.9 6 <5 247 2.61																			
2598662	Drill Core	6.42	0.055	<2	252	11	97	<0.5	43	31	1650	6.97	13	<20	<2	427	0.5	6	<5	267	3.87
DUP 2598662	QC	0.057 2 252 5 95 <0.5 44 32 1638 7.14 18 <20 <2 417 <0.4 <5 <5 269 3.92																			
2598699	Drill Core	4.43	0.028	<2	133	<5	154	<0.5	37	39	2356	7.89	10	<20	<2	380	0.7	8	<5	313	4.18
DUP 2598699	QC	0.038 <2 136 12 156 <0.5 37 42 2398 8.07 13 <20 2 394 0.6 8 <5 315 4.26																			
Reference Materials																					
STD OREAS24P	Standard	<2 44 <5 110 <0.5 146 45 1042 7.09 <5 <20 3 365 <0.4 <5 <5 163 5.50																			
STD OREAS24P	Standard	<2 47 <5 116 0.9 151 47 1080 7.48 <5 <20 7 389 0.9 <5 <5 165 5.71																			
STD OREAS24P	Standard	<2 48 <5 117 0.8 151 47 1090 7.47 <5 <20 6 395 1.7 5 <5 165 5.75																			
STD OREAS45E	Standard	<2 805 23 46 <0.5 490 66 572 27.01 18 <20 16 15 <0.4 5 <5 341 0.06																			
STD OREAS45E	Standard	3 796 20 48 <0.5 477 65 563 26.75 17 <20 14 15 <0.4 6 <5 324 0.05																			
STD OREAS45E	Standard	2 816 21 48 <0.5 482 66 575 26.79 14 <20 14 15 <0.4 8 <5 327 0.05																			
STD OXC109	Standard	0.202																			
STD OXC109	Standard	0.202																			

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

# QUALITY CONTROL REPORT

SMI13000430.1

Method		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm							
MDL		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	
Pulp Duplicates																		
2598619	Drill Core	0.136	4	24	2.49	166	0.52	7.92	1.49	3.00	6	15	<2	12	<2	<1	23	6.2
REP 2598619	QC																	
2598620	Drill Core	0.142	5	28	2.29	95	0.49	8.43	1.47	3.74	8	14	<2	12	<2	<1	23	4.8
REP 2598620	QC	0.143	5	28	2.28	124	0.49	8.33	1.46	4.04	5	14	<2	12	2	<1	23	4.7
2598640	Drill Core	0.114	4	38	1.93	92	0.31	7.14	2.54	3.12	<4	31	<2	12	3	1	15	3.1
REP 2598640	QC																	
2598655	Drill Core	0.077	5	34	1.09	374	0.17	7.51	3.41	3.34	8	30	<2	5	4	1	6	1.1
REP 2598655	QC	0.074	5	31	1.06	331	0.18	7.18	3.36	3.24	5	29	<2	5	4	1	6	1.1
2598689	Drill Core	0.151	9	23	3.06	267	0.50	8.83	2.80	1.71	<4	27	<2	15	2	1	26	2.8
REP 2598689	QC	0.153	10	25	3.08	267	0.50	8.92	2.81	1.72	5	26	<2	16	2	1	27	2.8
2598693	Drill Core	0.141	6	35	3.02	316	0.50	7.97	2.75	1.59	<4	34	<2	15	2	1	24	2.5
REP 2598693	QC																	
Core Reject Duplicates																		
2598624	Drill Core	0.141	6	31	2.88	180	0.46	8.56	0.77	3.59	<4	13	<2	11	2	<1	19	2.4
DUP 2598624	QC	0.139	5	31	2.81	188	0.46	8.46	0.78	3.71	5	13	<2	11	2	<1	19	2.3
2598662	Drill Core	0.145	8	110	3.49	245	0.40	7.64	1.66	3.27	<4	25	<2	14	2	1	29	3.5
DUP 2598662	QC	0.147	8	111	3.55	278	0.39	7.62	1.68	3.35	5	27	<2	14	2	1	29	3.5
2598699	Drill Core	0.150	6	60	3.43	1166	0.47	8.20	1.37	3.26	8	16	<2	12	<2	1	25	1.1
DUP 2598699	QC	0.153	6	59	3.49	1038	0.48	8.42	1.44	3.28	5	15	<2	12	<2	1	24	1.2
Reference Materials																		
STD OREAS24P	Standard	0.130	17	187	3.88	263	1.03	7.31	2.39	0.68	<4	121	3	22	18	1	19	<0.1
STD OREAS24P	Standard	0.137	19	211	4.17	273	1.05	8.04	2.55	0.69	<4	131	<2	22	19	1	19	<0.1
STD OREAS24P	Standard	0.137	18	215	4.14	279	1.04	7.98	2.55	0.70	<4	132	<2	22	19	1	19	<0.1
STD OREAS45E	Standard	0.034	12	1052	0.16	252	0.56	7.04	0.05	0.36	<4	104	<2	8	7	<1	96	<0.1
STD OREAS45E	Standard	0.035	12	1081	0.15	251	0.55	7.14	0.06	0.35	<4	109	<2	4	5	<1	96	<0.1
STD OREAS45E	Standard	0.035	12	1070	0.15	256	0.56	7.17	0.06	0.35	<4	117	<2	4	6	<1	96	<0.1
STD OXC109	Standard																	
STD OXC109	Standard																	



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**Client:** Minorex Consulting Ltd  
 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

**Project:** Takla Rainbow  
**Report Date:** December 13, 2013

Page: 2 of 2

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000430.1

		WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01
STD OXC109	Standard		0.200																		
STD OXI96	Standard		1.823																		
STD OXI96	Standard		1.710																		
STD OXI96	Standard		1.793																		
STD OXL93	Standard		5.765																		
STD OXL93	Standard		5.631																		
STD OXL93	Standard		5.766																		
STD OXC109 Expected			0.201																		
STD OXI96 Expected			1.802																		
STD OXL93 Expected			5.841																		
STD OREAS24P Expected				1.5	52	2.9	119	0.06	141	44	1100	7.53	1.2	0.75	2.85	403	0.15	0.09		158	5.83
STD OREAS45E Expected				2.4	780	18.2	46.7	0.311	454	57	570	24.12	16.3	2.41	12.9	15.9		1		322	0.065
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank			<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01
BLK	Blank			<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01
BLK	Blank			<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01
Prep Wash																					
G1-SMI	Prep Blank		<0.005	<2	3	22	55	<0.5	4	5	790	2.42	<5	36	13	719	0.9	<5	<5	52	2.40
G1-SMI	Prep Blank		0.011	<2	5	22	55	<0.5	4	5	784	2.36	<5	25	11	678	0.8	<5	<5	52	2.32



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**Project:** Takla Rainbow  
**Report Date:** December 13, 2013

Page: 2 of 2

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000430.1

		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S
		%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
STD OXC109	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXC109 Expected																		
STD OXI96 Expected																		
STD OXL93 Expected																		
STD OREAS24P Expected		0.136	17.4	196	4.13	285	1.1	7.66	2.34	0.7	0.5	141	1.6	21.3	21		20	
STD OREAS45E Expected		0.034	11	979	0.156	252	0.559	6.78	0.059	0.324	1.07	97	1.32	8.28	6.8	0.62	93	0.046
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
Prep Wash																		
G1-SMI	Prep Blank	0.085	27	13	0.68	1076	0.24	8.06	2.79	3.07	<4	17	<2	18	26	3	6	<0.1
G1-SMI	Prep Blank	0.076	24	13	0.79	1021	0.24	7.56	2.72	2.55	<4	16	<2	16	25	3	6	<0.1

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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Acme Analytical Laboratories (Vancouver) Ltd.  
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PHONE (604) 253-3158

**Client:** **Minorex Consulting Ltd**  
25856 - 28th Avenue  
Aldergrove BC V4W 2Z8 CANADA

Submitted By: Doug Blanchflower  
Receiving Lab: Canada-Smithers  
Received: November 18, 2013  
Report Date: December 13, 2013  
Page: 1 of 5

## CERTIFICATE OF ANALYSIS

SMI13000431.1

### CLIENT JOB INFORMATION

Project: Takla Rainbow  
Shipment ID:  
P.O. Number  
Number of Samples: 106

### SAMPLE DISPOSAL

RTRN-PLP Return  
RTRN-RJT Return

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Minorex Consulting Ltd  
25856 - 28th Avenue  
Aldergrove BC V4W 2Z8  
CANADA

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	102	Crush, split and pulverize 250 g rock to 200 mesh			SMI
G601	106	Lead Collection Fire - Assay Fusion - AAS Finish	30	Completed	VAN
1E	106	4 Acid digestion ICP-ES analysis	0.25	Completed	VAN

### ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598701	Rock Pulp	0.12	3.195	7	84	23	78	0.7	34	14	803	4.62	14	<20	<2	288	<0.4	<5	<5	145	3.04
2598702	Drill Core	7.17	0.181	<2	70	12	114	<0.5	45	28	2374	8.57	17	<20	<2	596	<0.4	<5	<5	312	5.12
2598703	Drill Core	5.38	0.032	<2	34	12	125	<0.5	49	45	2375	7.49	21	<20	<2	606	0.5	<5	<5	291	4.68
2598704	Drill Core	6.63	0.027	<2	34	16	125	<0.5	51	32	2442	7.38	21	<20	<2	638	0.8	8	<5	274	5.09
2598705	Drill Core	5.67	0.031	<2	19	15	122	<0.5	46	32	2872	7.14	26	<20	<2	727	0.4	6	<5	306	6.10
2598706	Drill Core	5.98	0.051	<2	42	15	104	<0.5	28	49	2470	7.24	21	<20	<2	575	<0.4	6	<5	309	5.11
2598707	Drill Core	6.39	0.076	<2	124	15	131	<0.5	27	58	2197	9.21	17	<20	<2	430	0.9	6	6	316	4.55
2598708	Drill Core	5.77	0.142	<2	21	15	146	<0.5	26	52	3265	8.99	23	<20	<2	547	<0.4	6	<5	349	5.60
2598709	Drill Core	4.31	0.054	<2	73	13	127	<0.5	23	52	2644	8.54	23	<20	<2	513	<0.4	6	<5	300	4.72
2598710	Drill Core	5.03	0.098	<2	299	16	119	<0.5	22	63	2292	8.45	21	<20	<2	506	<0.4	<5	<5	301	4.87
2598711	Drill Core	6.61	0.144	<2	198	14	120	<0.5	19	43	2829	7.66	18	<20	<2	438	0.4	5	<5	283	5.83
2598712	Drill Core	3.88	0.113	<2	155	18	122	<0.5	20	43	3021	7.50	17	<20	<2	429	0.8	<5	<5	269	6.36
2598713	Drill Core	5.13	0.038	<2	31	13	111	<0.5	19	35	2669	7.82	31	<20	<2	731	0.5	9	<5	325	5.73
2598714	Drill Core	6.24	0.039	<2	41	14	143	<0.5	28	41	3967	8.70	27	<20	<2	650	<0.4	9	<5	377	6.42
2598715	Drill Core	5.71	0.049	<2	121	14	143	<0.5	23	49	2954	8.18	26	<20	<2	488	<0.4	5	<5	345	4.91
2598716	Drill Core	5.37	0.075	<2	125	18	147	<0.5	26	55	3398	9.56	29	<20	<2	630	0.7	<5	<5	371	5.93
2598717	Drill Core	6.71	0.135	<2	795	19	118	0.7	20	39	2538	8.30	29	<20	<2	634	1.0	9	<5	318	5.54
2598718	Drill Core	4.58	0.156	<2	500	16	147	2.4	77	50	4872	10.11	42	<20	<2	764	0.9	9	<5	311	7.91
2598719	Drill Core	5.88	0.520	<2	732	11	176	0.8	110	63	5740	11.07	28	<20	<2	355	1.2	<5	<5	278	7.55
2598720	Drill Core	6.25	0.027	<2	39	7	179	<0.5	114	44	5669	8.77	34	<20	<2	372	<0.4	7	<5	281	7.15
2598721	Drill Core	6.15	0.078	<2	94	12	153	<0.5	61	45	4110	8.90	35	<20	<2	505	<0.4	8	<5	369	7.00
2598722	Drill Core	6.13	0.049	<2	52	16	116	<0.5	22	34	2840	7.83	44	<20	<2	796	0.5	16	<5	305	7.07
2598723	Rock	0.51	<0.005	<2	10	6	55	<0.5	6	6	862	3.14	<5	<20	<2	133	<0.4	<5	<5	59	2.32
2598724	Drill Core	6.41	0.054	<2	36	15	125	<0.5	25	48	3268	7.91	35	<20	<2	560	0.4	13	<5	355	6.33
2598725	Drill Core	5.14	0.045	<2	12	13	130	<0.5	22	38	3091	7.99	41	<20	<2	739	<0.4	15	<5	373	7.00
2598726	Drill Core	7.47	0.049	<2	20	12	126	<0.5	22	39	2678	7.63	29	<20	<2	587	0.7	7	<5	341	6.63
2598727	Drill Core	3.54	0.179	30	70	9	101	<0.5	23	33	3223	7.37	11	<20	<2	541	0.9	<5	<5	278	11.32
2598728	Drill Core	4.91	0.102	3	49	14	134	<0.5	28	53	2708	9.42	26	<20	<2	489	0.7	<5	<5	327	5.83
2598729	Drill Core	6.09	0.053	<2	28	14	153	<0.5	24	37	2544	7.77	27	<20	<2	462	<0.4	6	<5	320	5.26
2598730	Drill Core	6.08	0.045	<2	29	12	122	<0.5	22	33	2564	7.14	28	<20	<2	544	<0.4	7	<5	341	5.35



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 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 2 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S	
Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1	
2598701	Rock Pulp	0.065	6	56	1.29	513	0.35	5.91	2.39	0.97	13	29	2	14	4	<1	14	<0.1
2598702	Drill Core	0.158	7	87	3.36	552	0.48	8.37	2.28	1.84	7	38	<2	13	3	1	24	0.8
2598703	Drill Core	0.173	6	84	3.44	983	0.49	8.91	2.48	2.29	4	36	<2	14	3	1	22	1.5
2598704	Drill Core	0.174	6	91	3.25	972	0.50	8.92	2.34	2.29	<4	30	<2	13	4	1	21	1.4
2598705	Drill Core	0.171	7	80	3.53	468	0.50	8.93	2.65	1.25	<4	41	<2	14	3	1	23	1.6
2598706	Drill Core	0.155	6	46	3.08	691	0.49	8.29	2.37	1.98	<4	37	<2	14	3	1	23	2.6
2598707	Drill Core	0.154	5	37	3.23	410	0.54	8.73	1.99	2.38	9	20	<2	13	3	2	25	2.4
2598708	Drill Core	0.133	6	43	3.71	522	0.54	8.03	0.97	2.77	<4	16	<2	14	3	1	32	2.2
2598709	Drill Core	0.144	5	39	3.11	297	0.49	8.53	0.79	4.64	<4	12	<2	12	3	1	26	1.9
2598710	Drill Core	0.149	5	33	2.98	170	0.48	8.33	0.49	4.05	6	11	2	12	3	1	23	2.7
2598711	Drill Core	0.136	6	29	2.97	350	0.45	8.11	1.40	3.45	6	14	<2	12	3	1	23	1.9
2598712	Drill Core	0.135	5	28	2.95	501	0.46	8.38	1.63	3.72	5	15	<2	12	3	1	23	2.0
2598713	Drill Core	0.149	4	28	3.04	296	0.50	8.71	1.65	2.94	<4	16	<2	12	3	<1	24	2.1
2598714	Drill Core	0.135	5	44	4.42	759	0.59	7.96	1.56	1.70	<4	37	<2	15	3	1	36	1.8
2598715	Drill Core	0.147	4	38	3.67	333	0.55	8.60	1.45	3.54	<4	14	<2	14	3	1	28	2.1
2598716	Drill Core	0.142	4	48	3.58	245	0.59	7.79	0.59	3.47	<4	12	<2	13	2	<1	27	2.8
2598717	Drill Core	0.150	5	33	2.96	367	0.49	8.65	0.79	3.58	<4	14	<2	13	3	<1	22	2.0
2598718	Drill Core	0.216	6	231	4.64	1071	0.41	7.13	0.52	2.11	<4	29	<2	13	3	1	31	2.5
2598719	Drill Core	0.222	7	287	5.68	277	0.34	5.44	0.31	1.49	<4	22	<2	12	2	1	32	3.4
2598720	Drill Core	0.224	5	268	6.30	634	0.36	6.16	0.59	1.78	<4	25	<2	12	3	1	33	1.6
2598721	Drill Core	0.174	4	138	5.33	609	0.57	7.28	0.85	2.07	5	33	<2	14	3	1	35	2.3
2598722	Drill Core	0.143	4	27	3.10	609	0.53	8.72	0.58	3.68	4	12	<2	12	3	<1	23	1.9
2598723	Rock	0.070	12	13	0.76	633	0.30	6.64	2.28	1.88	<4	94	<2	25	8	1	11	0.1
2598724	Drill Core	0.133	4	31	3.68	249	0.58	7.93	1.30	3.09	4	16	<2	13	3	<1	29	2.6
2598725	Drill Core	0.148	5	33	3.49	779	0.60	9.02	1.22	2.83	<4	19	<2	15	3	1	28	2.0
2598726	Drill Core	0.143	6	27	3.01	597	0.56	8.83	1.16	3.15	5	22	<2	12	3	<1	24	2.3
2598727	Drill Core	0.107	5	27	2.60	441	0.41	6.54	0.66	3.61	33	15	<2	12	2	1	20	2.6
2598728	Drill Core	0.130	4	28	3.37	141	0.54	7.73	0.89	2.52	8	8	<2	13	3	1	24	4.0
2598729	Drill Core	0.147	6	39	3.46	203	0.53	8.31	0.95	3.67	5	10	<2	12	3	1	23	2.5
2598730	Drill Core	0.150	6	28	3.23	302	0.55	8.79	1.46	3.79	6	14	<2	14	3	1	24	2.6

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598731	Drill Core	7.06	0.070	<2	101	20	129	<0.5	23	40	2879	7.33	29	<20	<2	481	0.7	7	<5	346	5.59
2598732	Drill Core	5.30	0.092	<2	153	15	132	<0.5	23	45	2860	8.31	26	<20	<2	481	0.6	<5	<5	361	5.49
2598733	Drill Core	4.39	0.062	<2	134	11	146	<0.5	29	27	3861	7.76	25	<20	<2	504	0.7	<5	<5	397	7.11
2598734	Rock	0.61	<0.005	<2	10	<5	52	<0.5	7	7	892	3.47	<5	<20	<2	136	<0.4	<5	<5	70	2.30
2598735	Drill Core	8.12	0.064	3	189	<5	89	0.5	21	34	2140	6.11	12	<20	<2	500	0.6	<5	7	239	5.18
2598736	Drill Core	6.04	0.142	4	363	8	102	0.8	16	32	2484	6.40	<5	<20	<2	551	0.8	<5	<5	255	6.40
2598737	Drill Core	5.19	0.095	<2	338	<5	132	0.6	25	40	2351	7.10	17	<20	<2	432	0.7	<5	8	290	4.47
2598738	Drill Core	6.60	0.078	<2	160	<5	117	<0.5	22	30	2294	6.42	12	<20	<2	482	0.5	<5	<5	272	4.75
2598739	Drill Core	5.79	0.043	<2	162	<5	124	<0.5	20	30	2608	6.85	22	<20	<2	595	1.0	<5	11	307	5.68
2598740	Drill Core	7.06	0.041	<2	87	<5	134	0.5	24	24	2824	6.94	11	<20	<2	536	0.8	<5	<5	306	5.62
2598741	Drill Core	7.85	0.046	<2	234	<5	136	0.6	29	33	2887	7.27	19	<20	<2	502	0.6	<5	18	309	5.22
2598742	Drill Core	6.58	0.082	<2	590	<5	137	1.0	30	41	2895	8.06	15	<20	<2	518	0.7	<5	<5	319	4.98
2598743	Drill Core	5.21	0.794	3	1217	<5	126	1.8	38	70	2764	10.66	17	<20	<2	584	1.0	<5	9	303	6.62
2598744	Drill Core	2.54	0.123	<2	168	<5	114	0.5	31	49	2558	8.43	11	<20	<2	594	1.1	9	<5	325	6.08
2598745	Drill Core	2.42	0.140	<2	193	<5	116	0.5	29	44	2493	8.25	15	<20	<2	563	0.7	8	7	312	5.75
2598746	Drill Core	5.30	0.068	<2	78	<5	126	0.5	21	28	2576	7.28	5	<20	<2	506	<0.4	<5	5	315	5.68
2598747	Drill Core	6.59	0.080	<2	40	<5	125	<0.5	25	41	2791	7.93	<5	<20	<2	520	0.9	<5	8	348	6.28
2598748	Drill Core	6.23	0.062	<2	101	<5	134	<0.5	25	33	3256	7.49	<5	<20	<2	567	0.7	<5	<5	388	6.37
2598749	Drill Core	2.28	0.099	<2	81	<5	95	<0.5	20	26	2599	6.55	12	<20	<2	590	0.5	<5	<5	311	6.24
2598750	Drill Core	3.81	0.054	<2	63	<5	109	<0.5	21	26	2679	6.47	7	<20	<2	581	0.7	<5	16	314	5.95
2598751	Drill Core	5.65	0.055	<2	72	<5	95	<0.5	20	22	2600	6.74	5	<20	<2	566	0.7	8	11	320	6.40
2598752	Drill Core	5.94	0.091	<2	73	<5	94	<0.5	19	22	2575	6.56	14	<20	<2	558	0.9	8	8	322	6.26
2598753	Drill Core	6.17	0.085	<2	138	<5	98	0.5	19	29	2685	6.89	6	<20	<2	627	0.5	<5	<5	336	5.97
2598754	Drill Core	4.74	0.371	<2	329	<5	84	1.1	14	36	1703	7.68	15	<20	<2	451	0.6	<5	<5	277	4.65
2598755	Drill Core	5.48	0.111	<2	130	<5	97	<0.5	15	37	1555	7.26	6	<20	<2	390	<0.4	<5	8	268	3.71
2598756	Rock Pulp	0.12	1.043	8	54	<5	66	1.0	42	13	854	4.34	15	<20	<2	320	0.5	<5	<5	130	3.16
2598757	Drill Core	4.83	0.256	<2	229	<5	131	0.6	18	50	2047	9.28	12	<20	<2	330	0.8	<5	7	320	3.63
2598758	Drill Core	6.47	1.297	<2	77	<5	120	0.7	17	60	2157	9.19	7	<20	<2	368	1.0	<5	<5	247	5.22
2598759	Drill Core	5.36	0.107	<2	39	<5	128	<0.5	15	46	1814	7.18	<5	<20	<2	423	<0.4	<5	<5	276	4.29
2598760	Drill Core	5.59	0.646	3	705	<5	113	1.0	20	39	2440	8.59	<5	<20	<2	481	0.6	<5	<5	364	5.20

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598731	Drill Core			0.138	5	30	3.46	205	0.55	8.25	1.41	3.08	<4	16	<2	13	3	<1	26	2.8
2598732	Drill Core			0.134	4	28	3.70	184	0.55	8.00	1.66	1.80	<4	15	<2	13	3	1	27	3.8
2598733	Drill Core			0.132	4	43	4.27	470	0.62	7.85	1.54	1.61	5	36	<2	15	3	1	38	2.5
2598734	Rock			0.059	13	19	0.85	561	0.33	7.04	2.12	1.93	6	77	4	26	7	1	13	0.2
2598735	Drill Core			0.123	6	33	2.45	930	0.40	7.19	0.88	3.35	9	29	6	11	3	<1	19	3.0
2598736	Drill Core			0.130	5	21	2.57	788	0.42	7.69	0.89	3.18	19	28	5	13	3	1	20	2.9
2598737	Drill Core			0.159	6	46	3.26	1030	0.47	8.36	1.65	3.55	23	43	5	14	2	1	24	3.6
2598738	Drill Core			0.138	6	44	2.79	1293	0.43	7.89	1.27	3.89	8	35	6	13	3	<1	22	2.8
2598739	Drill Core			0.139	8	24	3.06	1306	0.51	8.52	1.36	3.34	8	36	7	13	3	<1	23	2.7
2598740	Drill Core			0.146	7	36	3.36	982	0.51	8.16	1.58	2.86	10	34	7	13	3	<1	25	2.7
2598741	Drill Core			0.166	8	49	3.75	972	0.49	8.26	1.88	2.59	6	42	7	14	3	1	27	2.7
2598742	Drill Core			0.162	9	57	4.05	819	0.50	8.38	1.91	2.32	10	40	7	13	3	1	29	3.2
2598743	Drill Core			0.143	10	60	3.55	554	0.45	7.17	0.69	1.69	19	37	5	12	2	1	26	5.4
2598744	Drill Core			0.143	13	42	3.15	1073	0.52	7.88	1.11	2.79	8	39	5	13	2	1	31	3.7
2598745	Drill Core			0.139	11	37	3.22	1124	0.50	7.89	1.32	2.79	10	37	12	13	2	1	30	3.5
2598746	Drill Core			0.135	9	28	3.65	207	0.51	8.01	2.75	0.77	7	37	7	14	2	1	30	2.4
2598747	Drill Core			0.137	10	33	3.77	163	0.53	7.82	2.29	1.05	4	36	<2	15	2	1	35	2.8
2598748	Drill Core			0.132	7	35	4.22	240	0.56	7.63	2.32	0.89	8	37	4	15	2	1	39	2.4
2598749	Drill Core			0.137	8	25	3.43	210	0.49	8.12	2.91	1.00	26	30	9	14	2	<1	29	2.3
2598750	Drill Core			0.138	9	28	3.77	219	0.51	8.06	2.83	1.03	14	33	4	15	2	1	32	2.5
2598751	Drill Core			0.139	7	27	3.51	443	0.50	8.18	2.65	1.25	11	33	6	14	2	1	31	2.1
2598752	Drill Core			0.139	8	28	3.49	434	0.49	8.02	2.64	1.24	12	34	8	15	2	1	30	2.0
2598753	Drill Core			0.134	8	39	3.71	1015	0.52	7.57	1.90	2.13	<4	39	4	16	2	1	38	2.4
2598754	Drill Core			0.139	4	19	2.74	166	0.41	7.84	2.03	2.78	12	12	8	12	2	1	23	4.8
2598755	Drill Core			0.139	12	20	2.93	201	0.43	8.11	1.50	4.15	16	10	4	10	2	<1	21	3.9
2598756	Rock Pulp			0.058	8	51	1.40	519	0.33	6.65	2.44	1.00	<4	24	9	14	4	<1	15	<0.1
2598757	Drill Core			0.147	7	24	3.57	113	0.50	7.73	1.27	2.87	14	10	6	11	3	1	22	5.5
2598758	Drill Core			0.127	6	12	2.41	86	0.37	6.80	1.49	2.34	18	11	9	11	2	<1	19	6.2
2598759	Drill Core			0.151	6	11	2.64	544	0.45	8.09	1.72	3.59	12	20	8	13	2	1	22	3.3
2598760	Drill Core			0.131	7	27	3.77	711	0.53	7.24	1.37	2.56	6	34	8	15	2	1	36	3.5

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598761	Drill Core	5.52	0.072	<2	53	<5	103	<0.5	20	38	2060	7.76	<5	<20	<2	441	<0.4	<5	6	357	5.02
2598762	Drill Core	4.20	0.088	4	29	<5	78	<0.5	25	29	1115	4.62	<5	<20	<2	393	<0.4	<5	<5	121	2.88
2598763	Drill Core	5.75	2.620	3	86	<5	61	3.0	17	30	834	5.31	<5	<20	<2	373	<0.4	<5	<5	121	2.02
2598764	Drill Core	5.96	0.097	18	72	<5	59	<0.5	13	29	873	4.24	<5	<20	<2	177	<0.4	<5	<5	118	2.45
2598765	Drill Core	10.82	0.054	21	358	<5	61	0.6	19	22	898	3.48	<5	<20	<2	267	<0.4	<5	<5	109	2.74
2598766	Drill Core	5.39	0.116	<2	100	8	109	<0.5	17	29	1709	6.51	<5	<20	<2	264	<0.4	<5	<5	226	2.80
2598767	Rock Pulp	0.13	3.057	7	79	<5	73	0.8	35	14	818	4.52	<5	<20	<2	314	<0.4	<5	<5	139	2.97
2598768	Drill Core	5.81	0.065	4	45	<5	60	<0.5	7	15	1370	4.05	<5	<20	<2	330	<0.4	<5	5	159	3.39
2598769	Drill Core	5.63	0.054	<2	184	10	87	0.5	15	20	1635	5.17	10	<20	<2	356	<0.4	<5	12	208	3.10
2598770	Drill Core	5.15	0.054	4	64	<5	78	<0.5	18	14	1548	4.43	<5	<20	<2	306	<0.4	<5	14	189	3.05
2598771	Drill Core	5.90	0.043	<2	114	<5	86	<0.5	19	20	1390	5.13	5	<20	<2	328	<0.4	<5	6	202	2.53
2598772	Drill Core	5.40	0.045	<2	72	<5	78	<0.5	11	16	1190	4.46	6	<20	<2	373	<0.4	<5	15	185	2.26
2598773	Drill Core	5.09	0.082	<2	95	<5	71	<0.5	13	17	1285	4.87	12	<20	<2	361	<0.4	<5	9	191	2.67
2598774	Drill Core	5.08	0.050	<2	58	<5	91	<0.5	15	21	1495	5.30	6	<20	<2	261	<0.4	<5	10	188	3.09
2598775	Drill Core	5.34	0.073	5	148	<5	86	0.7	15	21	1304	4.95	14	<20	<2	232	<0.4	<5	12	170	2.26
2598776	Drill Core	4.25	0.101	6	391	<5	112	0.7	24	27	1320	5.79	38	<20	<2	180	<0.4	<5	8	192	1.79
2598777	Drill Core	2.91	0.157	4	444	<5	78	0.9	25	32	1530	5.53	41	<20	<2	190	<0.4	<5	6	165	2.87
2598778	Drill Core	3.50	0.178	4	566	6	72	0.9	23	33	1771	5.47	49	<20	<2	203	<0.4	<5	15	156	3.83
2598779	Drill Core	5.45	0.090	<2	141	6	83	0.6	24	23	1107	5.18	15	<20	<2	211	<0.4	<5	15	169	2.17
2598780	Drill Core	6.60	0.219	<2	136	<5	78	0.5	23	26	1164	6.10	7	<20	<2	214	<0.4	<5	5	171	2.38
2598781	Drill Core	4.56	0.086	<2	437	<5	67	0.7	20	17	1095	4.60	<5	<20	<2	243	<0.4	<5	<5	165	2.27
2598782	Drill Core	6.17	0.016	<2	86	<5	58	<0.5	20	11	561	2.14	<5	<20	<2	318	<0.4	<5	8	70	1.29
2598783	Drill Core	5.80	0.025	<2	13	<5	52	<0.5	17	11	459	1.42	<5	<20	<2	287	0.5	<5	<5	63	1.19
2598784	Drill Core	2.71	0.022	3	72	<5	52	<0.5	22	18	561	1.72	<5	<20	<2	223	<0.4	<5	7	69	1.14
2598785	Drill Core	4.88	0.031	2	162	<5	62	<0.5	28	23	880	3.07	<5	<20	<2	204	<0.4	<5	9	118	1.36
2598786	Drill Core	5.13	0.015	<2	71	9	95	0.5	12	24	1587	6.22	<5	<20	<2	330	<0.4	<5	13	286	3.81
2598787	Drill Core	5.24	0.059	<2	63	<5	84	<0.5	11	23	1615	6.12	<5	<20	<2	378	<0.4	<5	16	269	4.55
2598788	Drill Core	5.73	0.099	<2	136	<5	111	0.6	95	36	1802	6.51	<5	<20	6	429	0.7	<5	12	275	6.05
2598789	Rock	0.59	<0.005	<2	12	<5	54	<0.5	10	8	914	3.79	<5	<20	<2	146	<0.4	<5	8	77	2.60
2598790	Drill Core	5.21	0.130	23	208	<5	95	0.5	20	36	1296	5.66	<5	<20	<2	266	<0.4	<5	9	213	3.02

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	Analyte	Unit	MDL	1E P	1E La	1E Cr	1E Mg	1E Ba	1E Ti	1E Al	1E Na	1E K	1E W	1E Zr	1E Sn	1E Y	1E Nb	1E Be	1E Sc	1E S
				%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
				0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
2598761	Drill Core			0.139	8	24	3.52	951	0.52	7.64	1.43	3.21	7	38	5	15	2	1	34	3.3
2598762	Drill Core			0.087	4	50	1.75	95	0.22	7.62	2.30	3.31	7	26	6	7	3	1	9	2.2
2598763	Drill Core			0.101	4	27	1.44	37	0.24	7.16	2.57	3.50	11	38	7	7	4	1	10	3.8
2598764	Drill Core			0.106	3	26	1.13	103	0.23	7.72	1.94	4.41	24	41	5	9	4	1	9	2.3
2598765	Drill Core			0.092	4	33	1.21	139	0.21	7.55	2.37	4.07	17	41	8	7	4	1	8	1.3
2598766	Drill Core			0.151	5	27	2.08	107	0.36	7.33	1.56	4.61	7	28	7	10	3	1	18	3.6
2598767	Rock Pulp			0.062	8	54	1.31	508	0.34	6.42	2.35	0.97	26	27	6	14	4	<1	15	<0.1
2598768	Drill Core			0.137	7	11	1.05	190	0.28	7.58	1.54	4.79	15	38	3	13	4	2	11	1.5
2598769	Drill Core			0.147	6	47	1.94	139	0.33	7.59	1.64	4.67	12	33	5	13	4	1	17	2.3
2598770	Drill Core			0.151	8	64	2.04	186	0.31	7.58	2.56	4.24	14	35	5	10	4	1	16	1.8
2598771	Drill Core			0.147	9	42	1.98	84	0.34	7.77	1.81	4.09	6	36	5	11	4	1	16	2.7
2598772	Drill Core			0.147	7	31	1.79	119	0.32	7.76	2.05	4.60	12	39	7	12	5	1	14	2.1
2598773	Drill Core			0.147	8	36	1.79	95	0.33	7.73	2.00	4.63	14	35	7	13	4	1	15	2.5
2598774	Drill Core			0.146	8	33	1.90	104	0.32	7.51	1.24	4.64	7	35	5	13	4	<1	17	3.0
2598775	Drill Core			0.139	6	30	1.73	72	0.29	7.14	0.83	4.37	10	37	5	10	4	<1	14	2.8
2598776	Drill Core			0.124	4	60	2.26	90	0.29	7.36	0.56	4.55	8	39	2	8	4	1	17	3.3
2598777	Drill Core			0.112	5	52	1.76	102	0.22	6.86	0.63	4.43	14	35	7	7	3	<1	15	3.6
2598778	Drill Core			0.105	6	49	1.67	169	0.20	7.00	0.45	5.12	12	33	5	9	3	<1	15	3.5
2598779	Drill Core			0.112	6	58	1.94	100	0.26	7.41	1.10	6.30	6	36	5	9	3	<1	17	2.9
2598780	Drill Core			0.103	6	52	2.15	63	0.27	7.12	1.22	4.56	10	32	6	10	3	1	17	3.9
2598781	Drill Core			0.112	6	56	1.88	89	0.27	7.66	1.69	4.33	11	41	6	10	4	1	16	2.4
2598782	Drill Core			0.067	6	29	0.98	2368	0.16	8.49	3.50	3.72	8	39	6	7	4	1	6	1.1
2598783	Drill Core			0.066	4	25	0.84	1301	0.15	7.80	4.16	2.75	13	34	3	5	4	1	5	0.5
2598784	Drill Core			0.067	5	29	1.04	646	0.17	9.08	5.29	1.72	7	38	<2	5	4	1	6	0.6
2598785	Drill Core			0.076	4	29	0.99	627	0.24	7.77	3.93	2.13	13	29	4	6	3	1	10	0.7
2598786	Drill Core			0.123	7	29	2.15	948	0.51	8.08	2.52	2.63	18	35	6	13	4	1	29	0.6
2598787	Drill Core			0.116	9	28	2.39	1168	0.48	8.02	2.37	2.93	11	55	6	16	3	<1	29	1.1
2598788	Drill Core			0.157	29	159	3.41	1494	0.44	8.55	1.51	4.37	12	68	7	18	6	1	28	1.3
2598789	Rock			0.055	12	23	0.87	613	0.35	7.12	2.22	1.86	<4	78	6	24	7	1	14	0.2
2598790	Drill Core			0.153	7	38	1.82	114	0.31	7.41	1.10	4.91	14	36	7	11	3	<1	17	2.7



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**Project:** Takla Rainbow  
**Report Date:** December 13, 2013

Page: 5 of 5

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
2598791	Drill Core	2.60	0.158	6	201	8	78	0.6	18	42	1366	5.60	<5	<20	<2	209	<0.4	<5	17	209	3.64
2598792	Drill Core	2.34	0.158	20	72	<5	85	<0.5	19	37	1291	5.35	<5	<20	<2	197	<0.4	<5	13	194	2.80
2598793	Drill Core	4.90	0.109	2	318	<5	91	0.5	13	20	1364	5.36	<5	<20	<2	248	<0.4	<5	13	195	2.74
2598794	Drill Core	4.38	0.285	2	724	<5	79	0.8	17	33	990	7.38	7	<20	<2	330	<0.4	<5	12	288	1.74
2598795	Drill Core	5.18	4.039	46	4206	<5	82	4.9	14	34	1536	7.37	15	<20	<2	247	0.4	<5	14	234	3.45
2598796	Drill Core	5.82	3.895	8	4352	5	75	4.2	19	45	1219	8.20	13	<20	<2	262	0.5	<5	18	234	3.28
2598797	Drill Core	4.86	4.742	2	2237	<5	61	2.9	34	42	1134	6.56	<5	<20	<2	252	<0.4	<5	26	222	3.95
2598798	Drill Core	5.16	0.199	2	396	<5	101	0.5	21	26	1593	6.50	7	<20	<2	289	0.4	<5	21	245	4.13
2598799	Drill Core	4.81	0.215	<2	194	<5	81	0.5	17	32	1190	7.03	12	<20	<2	343	<0.4	<5	21	235	2.74
2598800	Rock Pulp	0.13	0.993	9	53	<5	61	0.9	42	13	847	4.34	14	<20	<2	317	<0.4	<5	8	127	3.15
2598801	Drill Core	5.54	0.557	<2	1078	<5	90	1.3	17	35	1418	7.40	14	<20	<2	351	<0.4	<5	23	243	2.74
2598802	Drill Core	4.61	1.100	3	1618	<5	98	1.7	79	36	1281	7.45	7	<20	2	484	0.4	<5	20	239	3.34
2598803	Drill Core	2.91	0.213	<2	264	<5	92	0.6	244	43	1141	5.70	<5	<20	13	860	0.6	<5	15	211	5.68
2598804	Drill Core	3.23	5.179	4	4008	32	97	3.8	72	41	679	7.92	29	<20	<2	576	2.4	<5	<5	212	2.76
2598805	Drill Core	2.50	0.213	<2	352	20	104	0.9	104	34	1392	7.18	17	28	4	725	<0.4	<5	<5	287	4.50
2598806	Drill Core	2.32	4.023	<2	2421	11	131	2.3	64	36	1386	7.76	18	<20	3	586	<0.4	<5	<5	270	3.58



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**Project:** Takla Rainbow  
**Report Date:** December 13, 2013

Page: 5 of 5

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

SMI13000431.1

Method		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm							
MDL		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	
2598791	Drill Core	0.153	8	43	1.41	87	0.31	7.48	1.12	4.72	14	37	4	11	4	<1	17	3.1
2598792	Drill Core	0.154	5	31	1.49	69	0.31	7.23	1.44	4.30	16	37	4	10	3	<1	16	3.1
2598793	Drill Core	0.143	6	26	2.02	95	0.35	7.79	1.50	4.22	7	33	<2	11	3	<1	16	2.4
2598794	Drill Core	0.145	4	22	3.13	60	0.47	8.15	1.16	5.73	12	16	4	7	2	<1	19	4.1
2598795	Drill Core	0.126	6	20	2.11	120	0.36	7.55	1.14	5.08	9	17	4	9	<2	<1	18	5.3
2598796	Drill Core	0.125	6	19	1.95	68	0.39	7.29	0.98	4.29	13	18	5	9	<2	<1	17	5.9
2598797	Drill Core	0.140	16	98	1.56	139	0.38	7.33	1.06	4.56	13	28	7	12	4	<1	18	4.3
2598798	Drill Core	0.135	5	25	2.82	250	0.42	8.24	0.86	4.29	11	14	7	8	2	<1	17	2.0
2598799	Drill Core	0.143	3	19	2.47	73	0.43	8.35	0.72	5.46	<4	15	4	9	2	<1	16	3.1
2598800	Rock Pulp	0.056	7	52	1.38	512	0.34	6.63	2.51	1.01	<4	23	4	14	4	<1	15	<0.1
2598801	Drill Core	0.140	4	21	2.80	74	0.46	7.91	1.15	4.22	8	17	5	10	2	<1	18	3.6
2598802	Drill Core	0.140	15	111	3.93	163	0.45	7.42	1.08	3.88	8	30	5	11	5	<1	19	2.9
2598803	Drill Core	0.149	55	313	6.13	1309	0.42	6.62	1.21	2.75	<4	70	6	16	10	<1	26	1.1
2598804	Drill Core	0.120	14	83	2.38	83	0.35	6.50	1.05	3.78	<4	28	<2	10	4	<1	18	5.1
2598805	Drill Core	0.147	28	138	5.12	310	0.50	7.32	1.24	3.42	<4	40	<2	12	7	<1	25	3.4
2598806	Drill Core	0.134	21	108	4.28	206	0.47	7.21	1.18	3.64	<4	31	<2	12	5	<1	24	3.5



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Project: Takla Rainbow  
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Page: 1 of 2

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000431.1

Method	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	2	0.01	
Pulp Duplicates																					
2598711	Drill Core	6.61	0.144	<2	198	14	120	<0.5	19	43	2829	7.66	18	<20	<2	438	0.4	5	<5	283	5.83
REP 2598711	QC	0.151																			
2598729	Drill Core	6.09	0.053	<2	28	14	153	<0.5	24	37	2544	7.77	27	<20	<2	462	<0.4	6	<5	320	5.26
REP 2598729	QC	<2 28 13 149 <0.5 23 36 2480 7.71 26 <20 <2 455 0.5 7 <5 314 5.19																			
2598764	Drill Core	5.96	0.097	18	72	<5	59	<0.5	13	29	873	4.24	<5	<20	<2	177	<0.4	<5	<5	118	2.45
REP 2598764	QC	19 72 <5 58 <0.5 13 28 868 4.21 <5 <20 <2 178 <0.4 <5 <5 116 2.43																			
2598765	Drill Core	10.82	0.054	21	358	<5	61	0.6	19	22	898	3.48	<5	<20	<2	267	<0.4	<5	<5	109	2.74
REP 2598765	QC	0.043																			
2598786	Drill Core	5.13	0.015	<2	71	9	95	0.5	12	24	1587	6.22	<5	<20	<2	330	<0.4	<5	13	286	3.81
REP 2598786	QC	0.014																			
2598799	Drill Core	4.81	0.215	<2	194	<5	81	0.5	17	32	1190	7.03	12	<20	<2	343	<0.4	<5	21	235	2.74
REP 2598799	QC	<2 197 <5 80 <0.5 17 33 1206 7.12 15 <20 <2 350 <0.4 <5 11 236 2.77																			
2598806	Drill Core	2.32	4.023	<2	2421	11	131	2.3	64	36	1386	7.76	18	<20	3	586	<0.4	<5	<5	270	3.58
REP 2598806	QC	<2 2407 7 134 2.5 66 37 1392 7.82 19 <20 3 596 0.5 <5 <5 273 3.61																			
Core Reject Duplicates																					
2598702	Drill Core	7.17	0.181	<2	70	12	114	<0.5	45	28	2374	8.57	17	<20	<2	596	<0.4	<5	<5	312	5.12
DUP 2598702	QC	0.177 <2 70 15 113 <0.5 45 29 2383 8.55 16 <20 <2 594 <0.4 <5 <5 311 5.17																			
2598740	Drill Core	7.06	0.041	<2	87	<5	134	0.5	24	24	2824	6.94	11	<20	<2	536	0.8	<5	<5	306	5.62
DUP 2598740	QC	0.023 <2 87 <5 132 <0.5 23 24 2844 6.91 14 <20 <2 547 0.5 <5 <5 305 5.64																			
2598778	Drill Core	3.50	0.178	4	566	6	72	0.9	23	33	1771	5.47	49	<20	<2	203	<0.4	<5	15	156	3.83
DUP 2598778	QC	0.196 5 576 <5 72 0.9 24 33 1805 5.59 50 <20 <2 202 <0.4 <5 15 158 3.93																			
Reference Materials																					
STD OREAS24P	Standard	<2 51 9 122 <0.5 155 47 1095 7.72 <5 <20 <2 401 <0.4 <5 <5 178 6.00																			
STD OREAS24P	Standard	<2 46 <5 113 <0.5 149 48 1095 7.20 <5 <20 <2 403 0.6 <5 <5 167 5.80																			
STD OREAS24P	Standard	<2 46 <5 114 <0.5 150 47 1112 7.43 <5 <20 <2 399 <0.4 <5 <5 169 5.94																			
STD OREAS24P	Standard	<2 45 <5 117 0.6 149 46 1097 7.55 <5 <20 <2 414 <0.4 <5 <5 166 5.90																			
STD OREAS45E	Standard	3 792 29 51 <0.5 485 64 572 27.28 15 <20 13 15 <0.4 <5 <5 344 0.06																			
STD OREAS45E	Standard	3 828 <5 50 0.7 515 66 595 25.02 <5 <20 12 17 <0.4 <5 <5 353 0.05																			

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 PHONE (604) 253-3158

Client: **Minorex Consulting Ltd**  
 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 1 of 2

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000431.1

Method		1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	S
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	%						
MDL		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
Pulp Duplicates																		
2598711	Drill Core	0.136	6	29	2.97	350	0.45	8.11	1.40	3.45	6	14	<2	12	3	1	23	1.9
REP 2598711	QC																	
2598729	Drill Core	0.147	6	39	3.46	203	0.53	8.31	0.95	3.67	5	10	<2	12	3	1	23	2.5
REP 2598729	QC	0.146	6	37	3.44	206	0.52	8.46	0.93	3.50	5	11	<2	12	3	1	24	2.5
2598764	Drill Core	0.106	3	26	1.13	103	0.23	7.72	1.94	4.41	24	41	5	9	4	1	9	2.3
REP 2598764	QC	0.105	3	24	1.12	100	0.23	7.67	1.92	4.45	16	41	6	9	4	1	9	2.3
2598765	Drill Core	0.092	4	33	1.21	139	0.21	7.55	2.37	4.07	17	41	8	7	4	1	8	1.3
REP 2598765	QC																	
2598786	Drill Core	0.123	7	29	2.15	948	0.51	8.08	2.52	2.63	18	35	6	13	4	1	29	0.6
REP 2598786	QC																	
2598799	Drill Core	0.143	3	19	2.47	73	0.43	8.35	0.72	5.46	<4	15	4	9	2	<1	16	3.1
REP 2598799	QC	0.144	3	19	2.50	72	0.44	8.29	0.74	5.47	11	15	5	9	2	<1	16	3.2
2598806	Drill Core	0.134	21	108	4.28	206	0.47	7.21	1.18	3.64	<4	31	<2	12	5	<1	24	3.5
REP 2598806	QC	0.136	20	108	4.28	264	0.47	7.18	1.19	3.70	<4	31	<2	13	5	<1	24	3.5
Core Reject Duplicates																		
2598702	Drill Core	0.158	7	87	3.36	552	0.48	8.37	2.28	1.84	7	38	<2	13	3	1	24	0.8
DUP 2598702	QC	0.159	7	86	3.38	559	0.49	8.43	2.31	1.83	7	37	<2	13	4	1	24	0.9
2598740	Drill Core	0.146	7	36	3.36	982	0.51	8.16	1.58	2.86	10	34	7	13	3	<1	25	2.7
DUP 2598740	QC	0.145	7	36	3.40	1000	0.52	8.36	1.60	2.88	8	38	5	14	3	<1	26	2.7
2598778	Drill Core	0.105	6	49	1.67	169	0.20	7.00	0.45	5.12	12	33	5	9	3	<1	15	3.5
DUP 2598778	QC	0.106	6	51	1.72	143	0.21	7.12	0.46	4.47	9	35	7	9	3	<1	16	3.6
Reference Materials																		
STD OREAS24P	Standard	0.143	17	196	4.22	291	1.09	7.85	2.56	0.71	<4	135	<2	23	21	1	21	<0.1
STD OREAS24P	Standard	0.135	16	197	4.09	260	1.01	7.55	2.47	0.71	<4	129	2	20	18	1	19	<0.1
STD OREAS24P	Standard	0.135	17	197	4.09	274	1.04	7.61	2.44	0.73	6	133	7	21	19	1	20	<0.1
STD OREAS24P	Standard	0.138	18	207	4.31	288	1.11	8.01	2.60	0.74	<4	133	<2	22	19	1	20	<0.1
STD OREAS45E	Standard	0.036	8	1017	0.15	260	0.56	6.90	0.06	0.34	<4	105	<2	5	8	<1	97	<0.1
STD OREAS45E	Standard	0.036	11	1041	0.16	256	0.57	6.95	0.05	0.34	5	127	5	5	8	<1	101	<0.1

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 25856 - 28th Avenue  
 Aldergrove BC V4W 2Z8 CANADA

Project: Takla Rainbow  
 Report Date: December 13, 2013

Page: 2 of 2

Part: 1 of 2

# QUALITY CONTROL REPORT

SMI13000431.1

	WGHT	G6	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E	
	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	
	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
	0.01	0.005	2	2	5	2	0.5	2	2	5	0.01	5	20	2	2	0.4	5	5	5	2	0.01
STD OREAS45E	Standard		2	761	<5	45	0.8	479	63	540	23.47	<5	<20	9	15	<0.4	<5	37	321	0.05	
STD OREAS45E	Standard		3	821	<5	51	1.1	510	64	599	26.22	16	<20	11	16	<0.4	<5	<5	345	0.05	
STD OXC109	Standard	0.202																			
STD OXC109	Standard	0.202																			
STD OXC109	Standard	0.200																			
STD OXI96	Standard	1.823																			
STD OXI96	Standard	1.740																			
STD OXI96	Standard	1.793																			
STD OXL93	Standard	5.765																			
STD OXL93	Standard	5.622																			
STD OXL93	Standard	5.766																			
STD OXC109 Expected		0.201																			
STD OXI96 Expected		1.802																			
STD OXL93 Expected		5.841																			
STD OREAS24P Expected			1.5	52	2.9	119	0.06	141	44	1100	7.53	1.2	0.75	2.85	403	0.15	0.09		158	5.83	
STD OREAS45E Expected			2.4	780	18.2	46.7	0.311	454	57	570	24.12	16.3	2.41	12.9	15.9		1		322	0.065	
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
BLK	Blank		<2	<2	<5	<2	<0.5	<2	<2	<5	<0.01	<5	<20	<2	<2	<0.4	<5	<5	<2	<0.01	
Prep Wash																					
G1-SMI	Prep Blank	<0.005	<2	2	24	56	<0.5	4	5	717	2.22	<5	<20	4	651	0.5	<5	<5	53	2.26	
G1-SMI	Prep Blank	<0.005	<2	3	21	59	<0.5	4	4	738	2.25	<5	<20	4	627	0.4	<5	<5	54	2.19	

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Page: 2 of 2

Part: 2 of 2

# QUALITY CONTROL REPORT

SMI13000431.1

		1E P %	1E La ppm	1E Cr ppm	1E Mg %	1E Ba ppm	1E Ti %	1E Al %	1E Na %	1E K %	1E W ppm	1E Zr ppm	1E Sn ppm	1E Y ppm	1E Nb ppm	1E Be ppm	1E Sc ppm	1E S %
		0.002	2	2	0.01	1	0.01	0.01	0.01	0.01	4	2	2	2	2	1	1	0.1
STD OREAS45E	Standard	0.034	8	928	0.14	239	0.51	6.41	0.05	0.32	5	97	<2	2	7	<1	91	<0.1
STD OREAS45E	Standard	0.036	8	1086	0.15	271	0.57	7.07	0.05	0.36	<4	104	2	2	7	<1	100	<0.1
STD OXC109	Standard																	
STD OXC109	Standard																	
STD OXC109	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXI96	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXL93	Standard																	
STD OXC109 Expected																		
STD OXI96 Expected																		
STD OXL93 Expected																		
STD OREAS24P Expected		0.136	17.4	196	4.13	285	1.1	7.66	2.34	0.7	0.5	141	1.6	21.3	21		20	
STD OREAS45E Expected		0.034	11	979	0.156	252	0.559	6.78	0.059	0.324	1.07	97	1.32	8.28	6.8	0.62	93	0.046
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank																	
BLK	Blank	<0.002	<2	2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank																	
BLK	Blank																	
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	4	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	<2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
BLK	Blank	<0.002	<2	2	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<4	<2	<2	<2	<2	<1	<1	<0.1
Prep Wash																		
G1-SMI	Prep Blank	0.081	23	14	0.64	1092	0.24	6.79	2.65	3.05	<4	15	<2	16	24	3	5	<0.1
G1-SMI	Prep Blank	0.081	18	9	0.63	1101	0.25	6.06	2.69	2.95	<4	16	<2	14	24	3	5	<0.1

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## **APPENDIX III**

### **Check Assay Results**

**ALS Minerals Canada Ltd.**



ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **MINOREX CONSULTING LTD.**  
**25856-28TH AVE.**  
**ALDERGROVE BC V4W 2Z8**

Page: 1  
 Finalized Date: 3-FEB-2014  
 Account: MICOLT

**CERTIFICATE VA14013369**

Project: TAKLA-RAINBOW

This report is for 15 Pulp samples submitted to our lab in Vancouver, BC, Canada on 27-JAN-2014.

The following have access to data associated with this certificate:

LOGAN ANDERSON	DOUG BLANCHFLOWER
----------------	-------------------

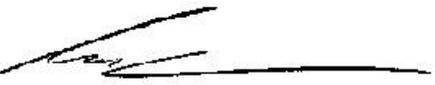
SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-MS61	48 element four acid ICP-MS	

To: **MINOREX CONSULTING LTD.**  
**ATTN: DOUG BLANCHFLOWER**  
**25856-28TH AVE.**  
**ALDERGROVE BC V4W 2Z8**

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

**Signature:**   
 Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A  
 Total # Pages: 2 (A)  
 Plus Appendix Pages  
 Finalized Date: 3-FEB-2014  
 Account: MICOLT

Project: TAKLA-RAINBOW

**CERTIFICATE OF ANALYSIS VA14013369**

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA23 Au ppm	ME-MS61 Ag ppm	ME-MS61 Cu ppm	ME-MS61 Pb ppm	ME-MS61 Zn ppm
		0.02	0.005	0.01	0.2	0.5	2
2598512		0.24	0.471	0.62	24.0	6.4	133
2598545		0.16	0.594	0.51	390	8.4	133
2598571		0.22	0.242	0.68	492	10.1	92
2598592		0.22	0.452	0.89	906	11.9	121
2598617		0.26	1.680	0.61	455	7.2	133
2598627		0.26	0.649	0.57	478	9.5	110
2598639		0.20	0.312	0.33	357	6.6	105
2598673		0.22	0.941	0.32	69.1	7.6	187
2598719		0.20	0.523	0.85	771	5.9	190
2598743		0.20	0.886	1.50	1290	9.5	142
2598754		0.22	0.404	0.67	349	7.4	92
2598753		0.18	2.96	2.59	88.0	17.8	64
2598780		0.24	0.334	0.49	140.0	10.8	83
2598795		0.24	4.03	3.80	4270	11.5	89
2598804		0.32	5.10	3.81	4050	30.2	100

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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Finalized Date: 3-FEB-2014  
Account: MICOLT

Project: TAKLA-RAINBOW

**CERTIFICATE OF ANALYSIS VA14013369**

## CERTIFICATE COMMENTS

### Method

ME-MS61	REE's may not be totally soluble in this method.
Au-AA23	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
LOG-24	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
ME-MS61	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
WEI-21	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.



ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
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To: **MINOREX CONSULTING LTD.**  
**25856-28TH AVE.**  
**ALDERGROVE BC V4W 2Z8**

Page: 1  
 Finalized Date: 3-FEB-2014  
 Account: MICOLT

**QC CERTIFICATE VA14013369**

Project: TAKLA-RAINBOW

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LOGAN ANDERSON	DOUG BLANCHFLOWER
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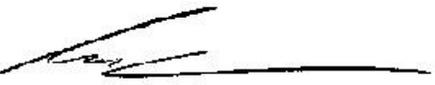
SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-MS61	48 element four acid ICP-MS	

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**ALDERGROVE BC V4W 2Z8**

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**Signature:**   
 Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A  
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 Account: MICOLT

Project: TAKLA-RAINBOW

**QC CERTIFICATE OF ANALYSIS VA14013369**

Sample Description	Method Analyte Units LOR	Au-AA23 Au ppm	ME-MS61 Ag ppm	ME-MS61 Cu ppm	ME-MS61 Pb ppm	ME-MS61 Zn ppm
		0.005	0.01	0.2	0.5	2
<b>STANDARDS</b>						
GBM908-10			2.92	3750	2140	1140
Target Range - Lower Bound			2.69	3380	1860	939
Upper Bound			3.31	3880	2270	1155
MG-12	0.902					
MG-12	0.874					
Target Range - Lower Bound	0.828					
Upper Bound	0.944					
MRGeo08		4.39	641	1110	853	
Target Range - Lower Bound		4.00	587	971	722	
Upper Bound		4.92	675	1185	886	
OxJ111	2.16					
OxJ111	2.20					
Target Range - Lower Bound	2.03					
Upper Bound	2.30					
<b>BLANKS</b>						
BLANK	<0.005					
BLANK	<0.005					
Target Range - Lower Bound	<0.005					
Upper Bound	0.010					
BLANK		0.01	0.4	<0.5	<2	
Target Range - Lower Bound		<0.01	<0.2	<0.5	<2	
Upper Bound		0.02	0.4	1.0	4	
<b>DUPLICATES</b>						
ORIGINAL	0.349					
DUP	0.344					
Target Range - Lower Bound	0.324					
Upper Bound	0.369					

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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Page: 3 - A  
 Total # Pages: 3 (A)  
 Plus Appendix Pages  
 Finalized Date: 3-FEB-2014  
 Account: MICOLT

Project: TAKLA-RAINBOW

**QC CERTIFICATE OF ANALYSIS VA14013369**

Sample Description	Method Analyte Units LOR	Au-AA23 Au ppm 0.005	ME-MS61 Ag ppm 0.01	ME-MS61 Cu ppm 0.2	ME-MS61 Pb ppm 0.5	ME-MS61 Zn ppm 2
<b>DUPLICATES</b>						
ORIGINAL		0.812				
DUP		0.813				
Target Range - Lower Bound		0.767				
Upper Bound		0.858				
ORIGINAL		<0.005				
DUP		<0.005				
Target Range - Lower Bound		<0.005				
Upper Bound		0.010				
ORIGINAL		<0.005				
DUP		<0.005				
Target Range - Lower Bound		<0.005				
Upper Bound		0.010				
ORIGINAL		0.026				
DUP		0.024				
Target Range - Lower Bound		0.019				
Upper Bound		0.031				
2598592			0.89	906	11.9	121
DUP			0.85	910	11.6	121
Target Range - Lower Bound			0.82	876	10.7	113
Upper Bound			0.92	940	12.8	129
2598795		4.03				
DUP		3.78				
Target Range - Lower Bound		3.70				
Upper Bound		4.11				

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



ALS Canada Ltd.  
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To: MINOREX CONSULTING LTD.  
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ALDERGROVE BC V4W 2Z8

Finalized Date: 3-FEB-2014  
Account: MICOLT

Project: TAKLA-RAINBOW

QC CERTIFICATE OF ANALYSIS VA14013369

## CERTIFICATE COMMENTS

### Method

ME-MS61	REE's may not be totally soluble in this method.
Au-AA23	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
LOG-24	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
ME-MS61	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
WEI-21	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

**APPENDIX IV**

**Takla Rainbow Drill Program**

**2013 QA/QC Review**

**By J. A. McCrea**

**March 2014**

# **TAKLA RAINBOW DRILL PROGRAM**

2013 QA/QC Review  
March 2014

Prepared for Manado Gold Corp.  
by  
James A. McCrea, P.Geol.

## CONTENTS

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1.0	INTRODUCTION AND RECOMMENDATIONS .....	1
2.0	STANDARD REFERENCE MATERIAL PERFORMANCE .....	1
3.0	2011 QA/QC BLANKS.....	2
4.0	2013 FIELD DUPLICATES.....	3
5.0	LABORATORY CHECK ASSAY RESULTS .....	6
6.0	REFERENCES .....	8
7.0	SIGNATURE PAGE .....	8

## TABLES

---

Table 1: SRM Samples Used in 2013 .....	1
---	---

## FIGURES

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Figure 1: Standard CDN-GS-1M – Gold ppm Assay Results .....	2
Figure 2: Standard CDN-GS-3L – Gold ppm Assay Results .....	2
Figure 3: Blank Materials – Gold ppm Assay Results .....	3
Figure 4: Core Field Duplicate Samples – Gold ppm Scatter Plot.....	4
Figure 5: Field Duplicate Samples – Gold ppm Difference Chart.....	4
Figure 6: Thompson-Howarth Precision for Field Duplicates - Gold ppm .....	5
Figure 7: Thompson-Howarth Duplicate Analysis for Field Duplicates - Gold ppm .....	5
Figure 8: Pulp Duplicates – Gold ppm Scatter Plot.....	6
Figure 9: Pulp Duplicates – Gold ppm Difference Chart .....	7
Figure 10: Thompson-Howarth Precision for Pulp Duplicates - Gold ppm .....	7
Figure 11: Tompson-Howarth Duplicate Analysis for Pulp Duplicates - Gold ppm .....	8

## 1.0 INTRODUCTION AND RECOMMENDATIONS

The author, James McCrea, has completed a review of the QA/QC data resulting from the drill program completed in November 2013 at the Takla Rainbow Project (Takla) for Manado Gold Corp (Manado).

The QA/QC sampling supports the drill results from this latest exploration drill program on the Takla Rainbow West zone. These reviews should be completed internally at the minimum annually or for each drill campaign. The primary laboratory used by Manado was Acme Labs and the check lab was ALS Minerals.

The author has no recommendations at this time.

The author completed this review using the following data:

- Assay data with QA/QC from 5 drill holes.

## 2.0 STANDARD REFERENCE MATERIAL PERFORMANCE

Manado used two different standard reference materials (SRM's) with certified values for gold. Table 1 contains a list of the SRM samples used and their corresponding grade ranges. The SRM samples were made by CDN Resource Laboratories of Langley, BC. The SRM samples were received in 100 gram sealed pouches.

**Table 1: SRM Samples Used in 2013**

Gold							
SRM ID	Value (Au ppm)	1*SD	2*SD		3*SD		No. Analyzed
			Low	High	Low	High	
CDN-GS-1M	1.07	0.045	0.98	1.16	0.94	1.20	6
CDN-GS-3L	3.18	0.11	2.98	3.40	2.87	3.51	4

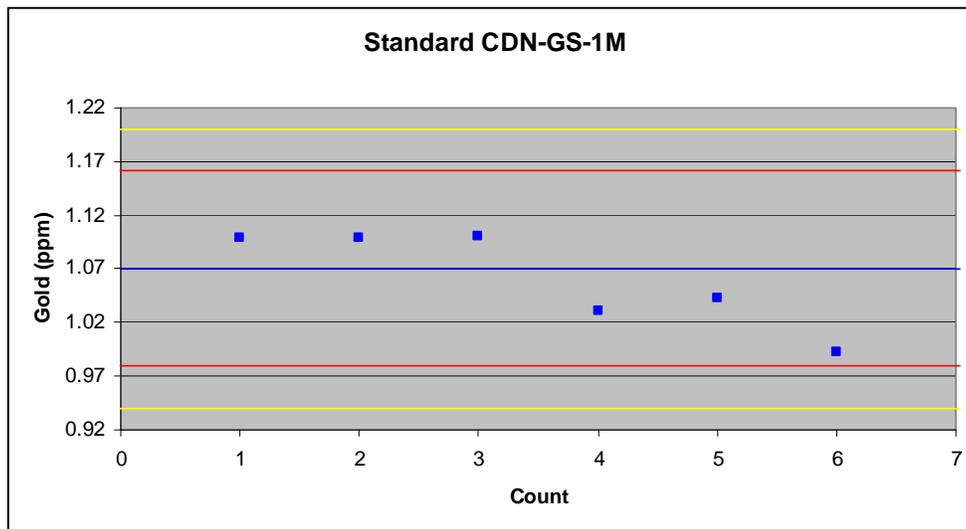
Acme Laboratories of Vancouver, BC is the primary lab. The sample preparation was completed at Acme's Smithers, BC preparation laboratory and the pulps sent to Vancouver for analysis. The samples were analyzed using a fire assay method with an atomic absorption finish for gold and a 32 element ICP. Assay over limits were by gravimetric methods for gold and Atomic Absorption for base metals and silver. The SRM results are charted in Figures 1 to 2.

Manado submitted 10 SRM samples for analysis with the drill core. There were no failures observed for the gold standards analyzed, based on a 2 standard deviations limit. The failure rate is zero and no corrective measures were required on the part of the company.

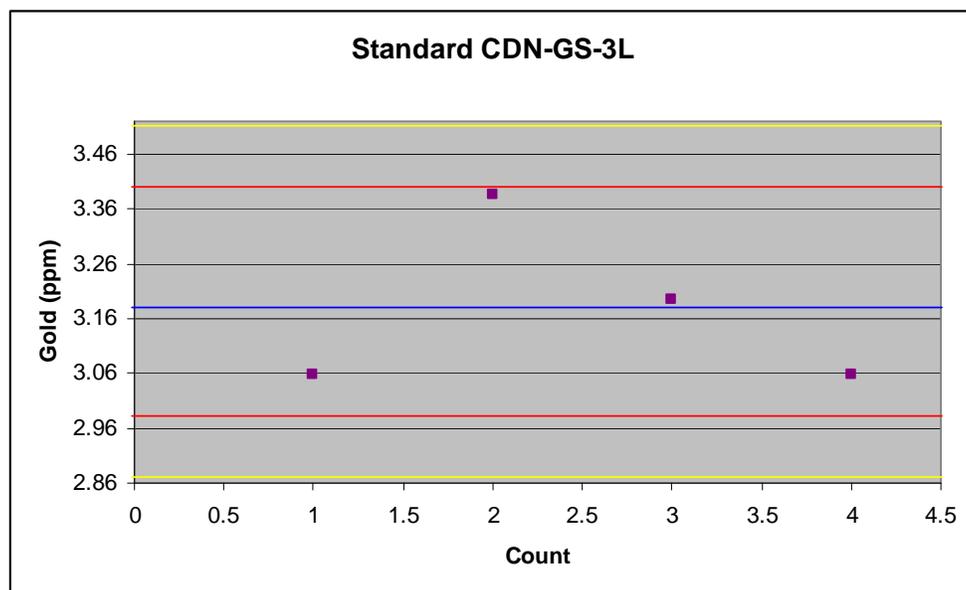
CDN Resource Laboratories of Langley, BC fabricated the 2 SRM samples used by Manado. The standards were certified for gold. CDN Resource Laboratories sells a variety of SRM's for gold, silver, copper, PGE and base metal projects.

The graphs of the SRM's show the certified value with +/- 2 Standard Deviations (SD) and 3 SD. Certified values in blue, 2 SD in red and 3 SD in yellow.

**Figure 1: Standard CDN-GS-1M – Gold ppm Assay Results**



**Figure 2: Standard CDN-GS-3L – Gold ppm Assay Results**

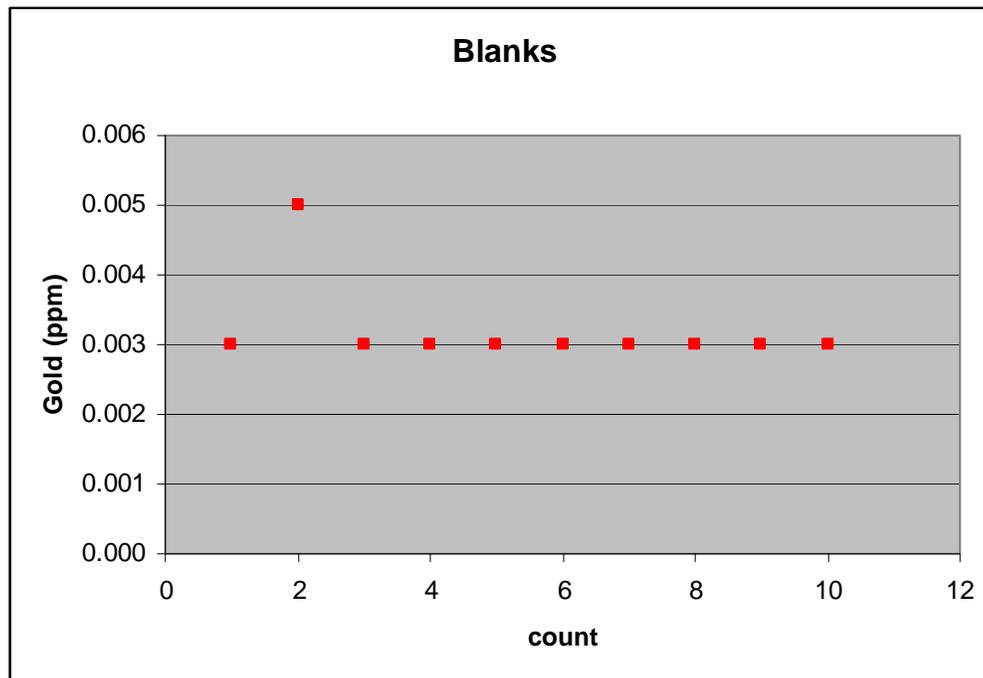


### 3.0 2011 QA/QC BLANKS

Manado used certified coarse blank material. The blank material was purchased from CDN Resource Laboratories. During the drill program 10 blanks were analysed. The blanks are inserted on a 1 in 20 basis. The assays of the blank

material show that there is no observed contamination of the blank material in the drill program. The results of the analysis of the blanks are in Figure 3

**Figure 3: Blank Materials – Gold ppm Assay Results**



#### 4.0 2013 FIELD DUPLICATES

Manado submitted quartered core as duplicate samples for assaying in the 2013 drill program. 10 duplicates were submitted for assay. Figure 4 is a scatter plot of the original samples versus the duplicate samples for gold. The blue line is an ideal 1:1 reference. The dashed red line is the trend line of the data. The gold graph shows that the duplicates are plotting relatively much lower than the originals in the mid range of the duplicate grades. Few conclusions can be made because of the small sample size. The results should be considered preliminary as duplicate analysis for precision normally requires 50 duplicate pairs or at least 30 duplicates.

**Figure 4: Core Field Duplicate Samples – Gold ppm Scatter Plot**

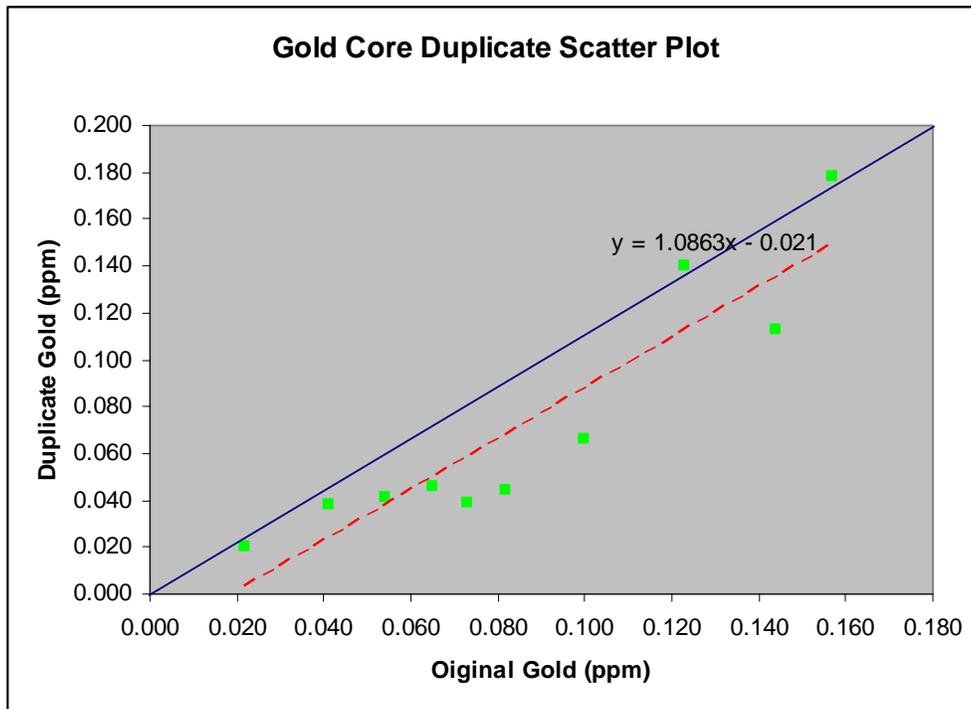
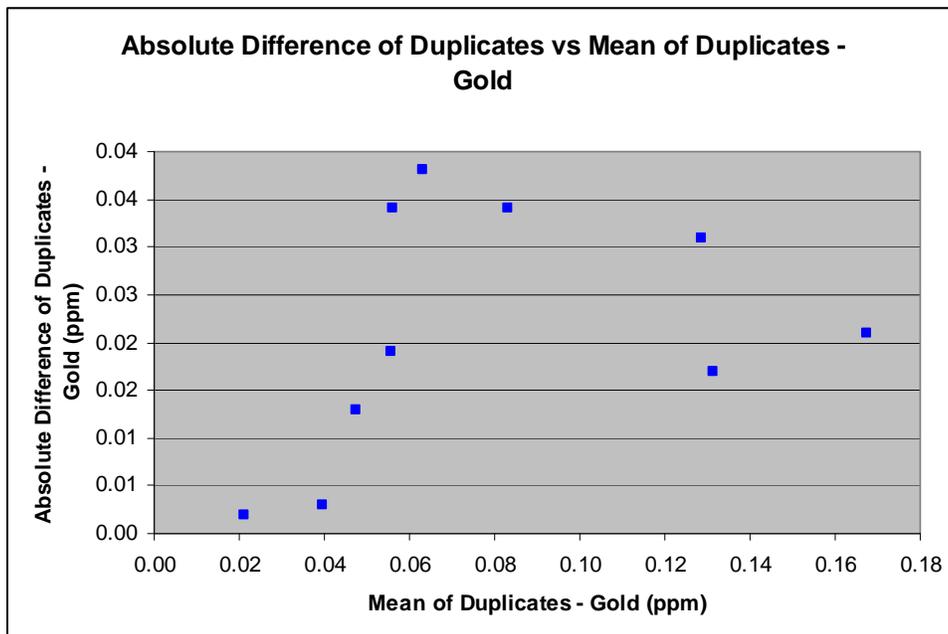


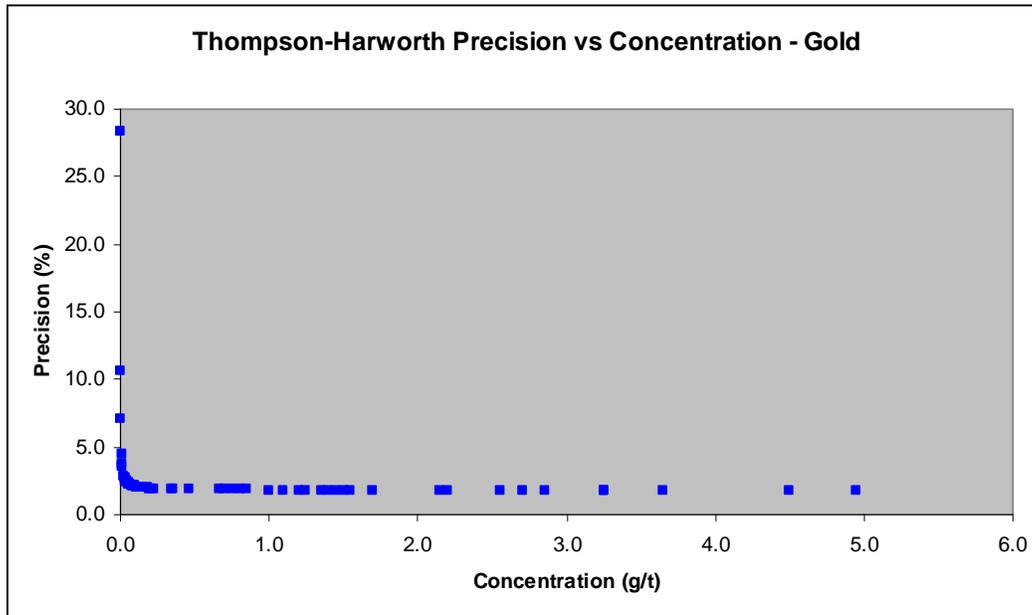
Figure 5 is a plot of the mean of the duplicate pairs plotted against the Absolute Difference. The gold chart shows a lot of scatter and further shows that the field duplicates reported notably lower than the originals. The small dataset may be exaggerating these results.

**Figure 5: Field Duplicate Samples – Gold ppm Difference Chart**

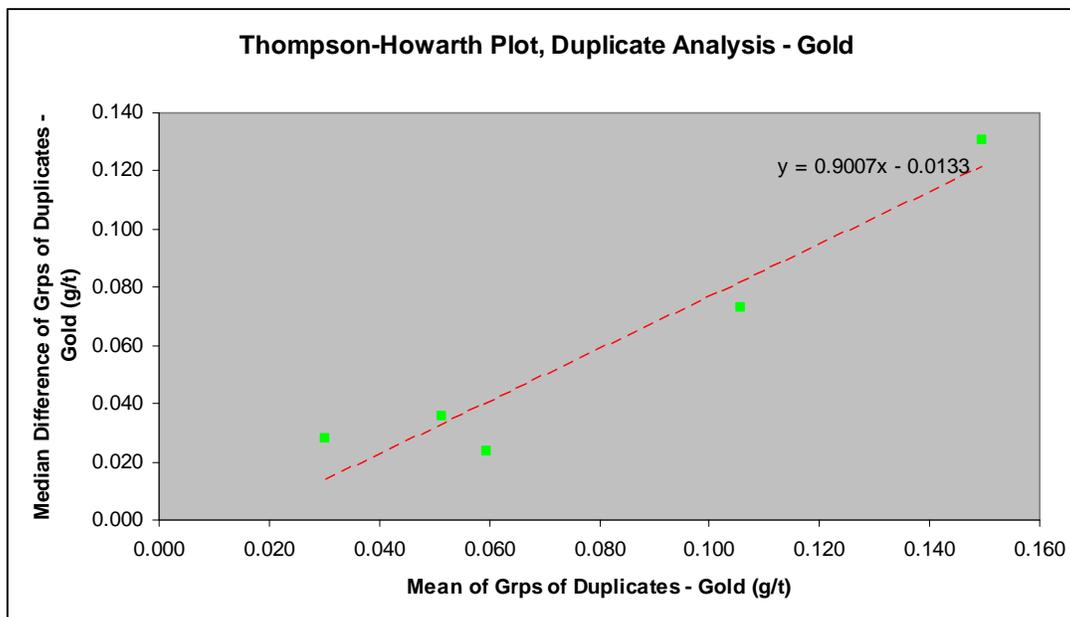


The duplicate data was analysed by methods described by Thompson and Howarth (1976). The results are shown as Precision Charts for gold in Figure 6. The precision charts are derived from the slope and y-intercept of the Thompson-Howarth Duplicate Analysis chart shown in Figure 7. These plots are used to check laboratory precision. The field duplicate samples show good precision but the size of the dataset is smaller than normally used for this analysis.

**Figure 6: Thompson-Howarth Precision for Field Duplicates - Gold ppm**



**Figure 7: Thompson-Howarth Duplicate Analysis for Field Duplicates - Gold ppm**



## 5.0 LABORATORY CHECK ASSAY RESULTS

Manado submitted check assays to an outside laboratory for the 2013 drill program. Fifteen samples were submitted to ALS Minerals of Vancouver for assay. The gold scatter plot for pulp duplicates for the 2013 drill program is shown in Figure 8. The scatter plot shows little scatter with most points plotting close to 1:1. The blue line is an ideal 1:1 reference.

**Figure 8: Pulp Duplicates – Gold ppm Scatter Plot**

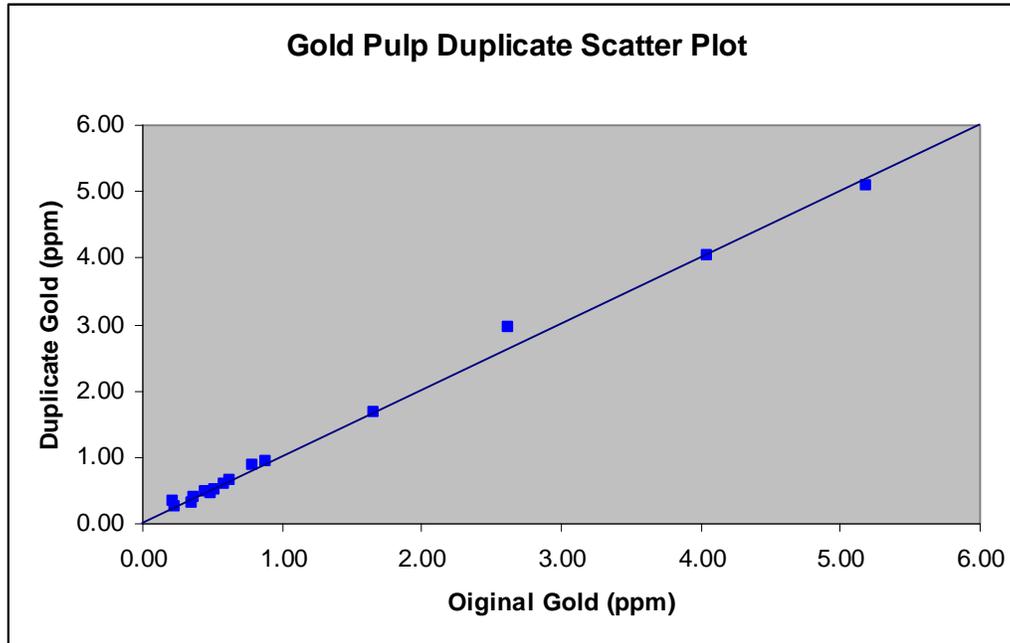
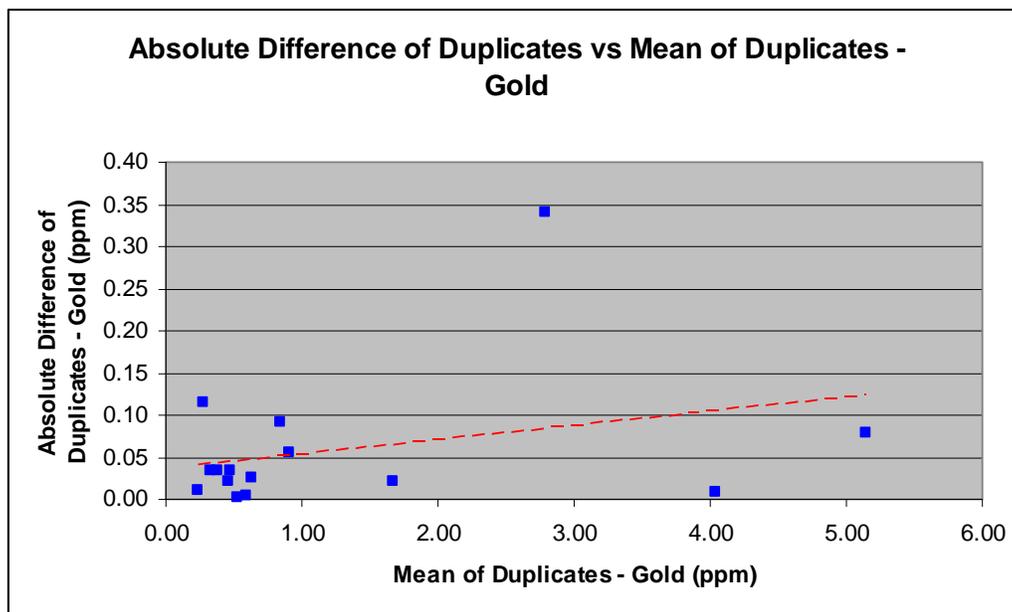


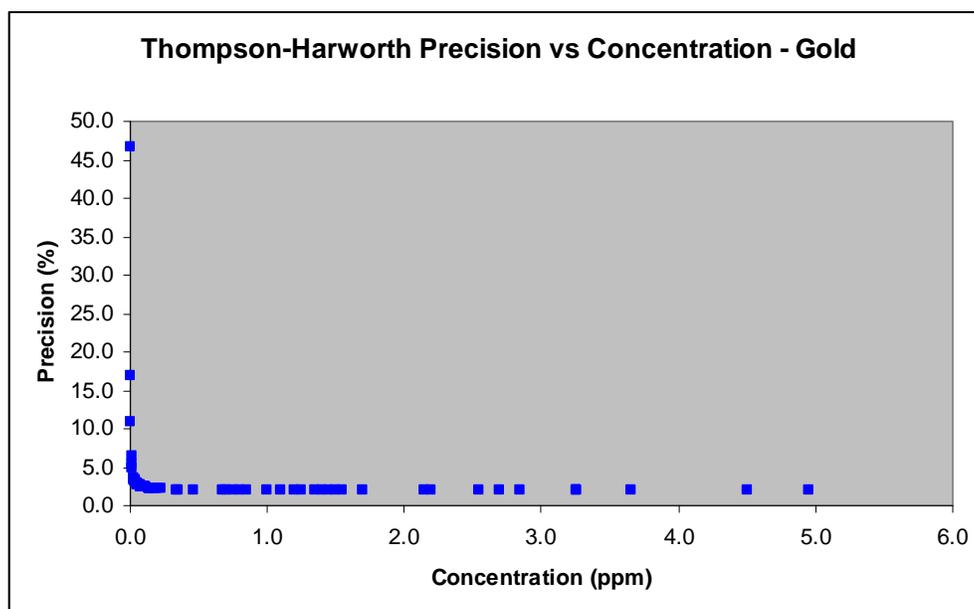
Figure 9 is the plot of the mean of the duplicate pairs plotted against the Absolute Difference for the 2013 drill program. The gold chart shows some mid-grade scatter but generally good reproducibility of gold pulp duplicates. The dashed red line is the trend line of the dataset.

**Figure 9: Pulp Duplicates – Gold ppm Difference Chart**

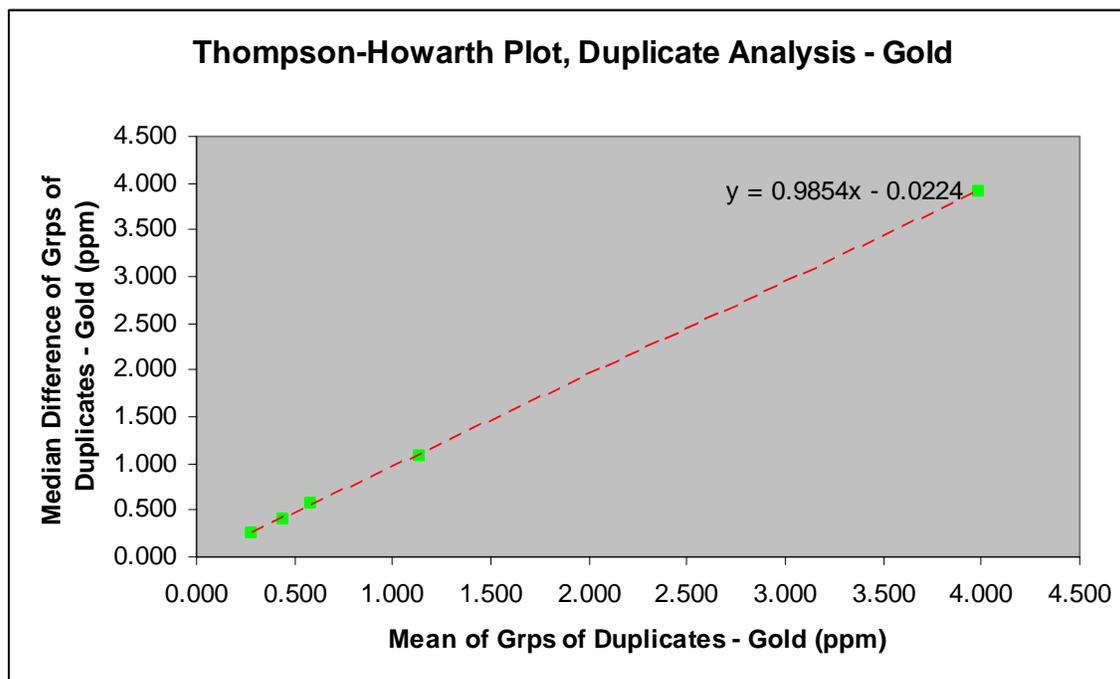


The pulp duplicate data was analysed by methods described by Thompson and Howarth (1976). The results are shown as a Precision Chart for gold Figure 10. The precision charts are derived from the slope and y-intercept of the Thompson-Howarth Duplicate Analysis chart shown in Figure 11. These plots are used to check laboratory precision. The pulp duplicate samples show good precision.

**Figure 10: Thompson-Howarth Precision for Pulp Duplicates - Gold ppm**



**Figure 11: Thompson-Howarth Duplicate Analysis for Pulp Duplicates - Gold ppm**



## 6.0 REFERENCES

Sinclair, A.J. and Blackwell, G.H., 2002: Applied Mineral Inventory Estimation. Cambridge University Press, pp. 111-113

Thompson, M. and Howarth, R.J., 1976: Duplicate Analysis in Geochemical Practice. Part 1, Theoretical Approach and Estimation of Analytical Reproducibility, Analyst, vol. 101, pp. 690-698

## 7.0 SIGNATURE PAGE

This review was completed with data supplied by Manado Gold Corp. and the data represented by the graphs in this report are in the attached Excel file.

Respectfully Submitted

James A. McCrea, P.Geo.

## **APPENDIX V**

**Avalanche Risk Assessment Of Takla-Rainbow Property**

**By S. Fraser and C. Dietxfebinger**

**November 2013**

# Avalanche Risk Assessment of Takla-Rainbow Property

Prepared for:

*Minorex Consulting Ltd*

Aldergrove, BC



*Sean Fraser*

November 2, 2013

Of:

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## **Summary**

Minorex consulting is obtaining a permit for a short term, 10 hole diamond drilling project on the Takla-Rainbow property expecting to be completed in 10 days. There is avalanche terrain that poses a risk to the property, and an avalanche risk assessment has been completed and mitigation methods are proposed to address these risks.

## **1. Introduction**

Bear Enterprises Ltd. was contacted by Doug Branchflower, P. Geo, of Minorex Consulting on Oct 29, 2013 and requested to provide an avalanche assessment for the Takla-Rainbow property owned by Manado Gold Corp. to support a late fall diamond drilling operation on the property.

This report will outline the findings based on a field trip to the area on Oct 31, 2013 by Sean Fraser involving a helicopter overflight of the project area, and ground based surveys of the project site and affected areas.

### **1.1. Location**

The Takla-Rainbow property is located approximately 150km NW of Fort St. James, BC and 25 km W of Germansen Lake, BC in the Swannell Ranges of the Omineca Mountains, and lies just west of the Rocky Mountain Trench in the headwaters of Twin Creek. The coordinates of the project site are UTM 10U 355070E x 6170768N at an elevation of 1600m ASL. The property is accessed by an old road that ascends above the north side of Twin Ck over a distance of approximately 14.5km.

## **2. Purpose**

An avalanche assessment is performed by a qualified avalanche professional for worksites that may be affected by snow avalanche hazards in British Columbia. These assessments are currently required under Worksafe BC regulation 4.1.1, and as directed by a Mines Inspector under the Mining Act of BC as required by the Ministry of Energy and Mines. The findings and recommendations of such are presented in this report and address avalanche risk to workers at the worksite.

## **3. Scope of Work**

A helicopter aerial reconnaissance was performed flying from Vanderhoof, BC to the Takla-Rainbow property, and included several landings and field surveys to gather information. The assessment took place on site over duration of approximately 4 hours.

## **4. Methods**

On Oct 31, 2013 a fieldtrip by Sean Fraser in a Bell 206B operated by Yellowhead Helicopters of the Takla-Rainbow property was conducted. This was undertaken by helicopter from Vanderhoof, BC. Weather on site at the time was a mix of sun and cloud,

and a trace of new snow on the ground. There was excellent visibility for the assessment. This included:

- Aerial observation to determine areas affected by avalanches.
- Creating an Avalanche Path Locator Map
- Photographs from the air and on the ground
- Field Surveys of several avalanche paths including avalanche start zones, avalanche tracks and avalanche runout zones
- Measurements of slope angles, elevations, length and width of avalanche paths
- Determining the areas of avalanche risk to the worksite including the access road and drill sites.
- Taking vegetation samples in the avalanche paths
- Taking GPS waypoints of the area
- Observations of the ground cover and characteristics of the avalanche paths

## **5. Results**

### **5.1 Climate**

The Takla-Rainbow property is located in the Engelmann Spruce-Sub Alpine Fir (ESSF) biogeoclimatic zone. (Ministry of Forests, 1998). Typical forest cover is a mix of spruce at lower elevations and sub alpine fir species in upper elevations. Winter in the area is generally from late October with snow often lasting into June at the upper elevations. In snow avalanche terms, the area is classified as having a continental snowpack. This is often characterized by an average mid winter snowpack of 150-200cm of settled snow on the ground. The area is often cold, with temperatures often below -10c, and frequent outbreaks of -40c associated with arctic air masses. As such, the snowpack often develops weak basal layers throughout the winter that can contribute to avalanche formation at times throughout the season. ( Haegeli & McClung, 2004)

### **5.1 Findings**

The area encompassed by the Takla-Rainbow property has several avalanche areas that can affect worker safety at times throughout the winter season. These areas have been broken down into 2 areas encompassing the property – the access road and the areas around the drill sites.

### **5.2. Twin Creek Road**

The Twin Creek road starts at an elevation of 1100m and climbs up the north side of the creek to gain the drill sites at 1600m elevation over a distance of approximately 14.5km. There are 2 avalanche zones that have been identified consisting of 7 major avalanche paths. These occur at roughly 7.5-8.75 km and 9.5 – 10.2km along the access road. These 2 zones have been divided into the East and West Avalanche Zones.

### 5.2.1 East Avalanche Zone

Between approx. km 7.5 –km 8.75 3 avalanche paths intersect the access rd. Path 6 & 7 intersect the road in the tracks of the avalanche path, at elevation 1480 m +/- and affect the road for a width of 50m and 70m respectively. Tree ring analysis of re growth in the avalanche path adjacent to the road shows approx. 75 years since the last major climax



Fig 1: Twin Ck road avalanche zones.

avalanches affected the road. There is a steep drop off the road cut below. Both avalanche paths have the potential to produce size 3-3.5 avalanches to the creek below. The paths are on a south aspect with start zones at approx. 1770m at treeline. The start zones have a ground cover mix of smooth grass, scree, talus, and krummholz trees with a roughness of 60cm above ground, and angles of 33-35 degrees. The tracks of both paths are thick with regenerating trees up to 5-8m in height. The runout zones are in the valley bottom below at elevation 1380m +/- . These are the largest paths affecting the project.



Fig 2: Twin Ck Rd with road line added.

Path 5 at the western edge of the zone is a man made cut slope that can affect the road with avalanches up to size 1.5. This affects the road for a width of approx. 50m.

## 5.2.2 West Avalanche Zone

Between approx. km 9.5 -10.2 of the Twin Ck rd, avalanche paths # 1-4 affect the road at 1500m+/- elevation. Paths 2-4 intersect the road at the lower end of the avalanche track, and affect the road 20, 30, & 50m respectively. Path 2 & 4 are capable of producing size 2 avalanches, and Path 3 up to size 3.

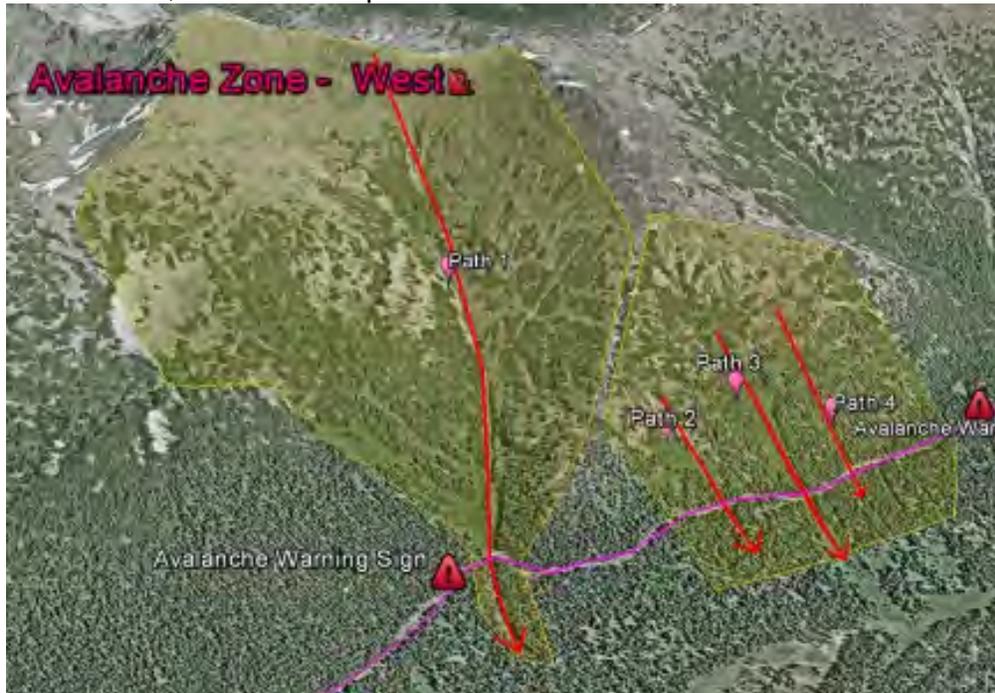


Fig 3. West Avalanche Zone

Tree ring analysis of re growth in these paths shows approx 75 years since the last major avalanche event. These avalanche paths are all on south aspects with the start zones for paths 2-4 at approx. 1600m elevation, below treeline. The start zones are 36-38 degrees and are on smooth grass and scree ground cover. The tracks are narrow with varying degrees of vegetation, and the runout zones are at 1470m +/- . Paths 2-4 likely affect the road with smaller avalanches on an annual basis in spring, with strong solar radiation and melting at lower elevations



Fig 4: West Avalanche Zone – Paths 2-4 ( L-R)

Path 1 is the largest avalanche path in this zone. Path 1 is furthest west and intersect the road at the bottom of the avalanche runout zone with size 3-3.5 avalanches. It is on a windward, SW aspect with start zone elevation of 1870. of scree and talus with a surface roughness of 50-60cm. The width of road affected is 30m, and tree ring analysis shows approx 75-80 years since last major event affected the road.



Fig 5: Avalanche Path 1

### 5.3. Drill Site Area:

The old Takla Rainbow camp and the proposed drill sites are not in avalanche terrain. However, there are 2 sites nearby that offer potential water sites, which should not be used.

#### 5.3.1 Northwest Avalanche Zone

This zone is a single path located above a small subalpine tarn. While the tarn may provide an attractive water source, it is located in the runout zone of the avalanche path.

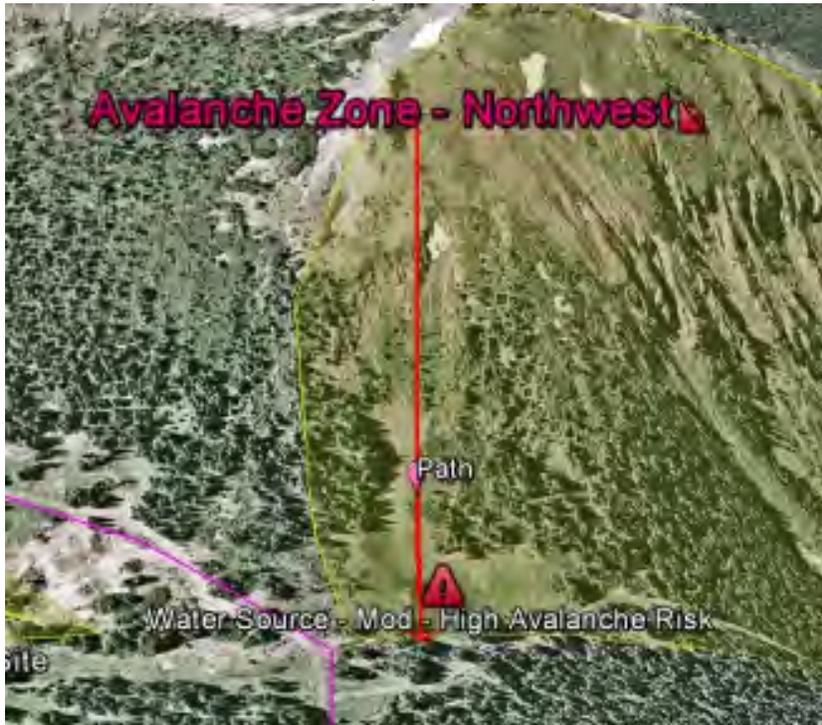


Fig 6: Northwest Avalanche Zone – Water hole path

The start zone is at 1700m with inclines of 40-45 degrees. The surface roughness here is fairly smooth grass and small scree, and there is a significant fetch for wind to transport snow into the start zone. The lake is at the bottom of the runout zone at 1600m elevation. .

This path can produce size 2 avalanches.



Fig 7: Water hole path

### 5.3.2 South Avalanche Area:

While not in the immediate vicinity of the drill site, the access by old road to the bottom of this path may make it an attractive water source. This path can produce size 2-3 avalanches. This area should not be used by workers.



## 6. Discussion

### 6.1 Avalanche Risk

In order to understand avalanche risk to a worksite, the following equation should be understood:

Avalanche Risk = (Avalanche Hazard) + Vulnerability + Exposure

Avalanche Hazard = Chance of avalanches starting and how big will they be

Vulnerability: How susceptible is the value at risk

Exposure: How long is the value exposed to the hazard

For the project we have 2 values at risk. They are workers on foot, and workers travelling in a vehicle. Workers travelling in a vehicle are less vulnerable than those on foot, and are in general, susceptible to damage from size 3 avalanches. Workers on foot are susceptible to damage from size 2 avalanches.

## Canadian System of Avalanche Classification

SIZE	Description	Mass (tonnes)	Typical length
1	Relatively harmless to people	< 10	10m
2	Could bury, injure or kill a person	100	100m
3	Could bury a car, destroy a small building or break a few trees	1000	1,000m
4	Could destroy a train carriage, large truck, several buildings or forest with an area of up to 4 hectares	10,000	2,000m
5	Largest snow avalanches known, could destroy a village or a forest of up to 40 hectares	100,000	3,000m

Fig. 8. Avalanche Size

While travelling in a vehicle, workers are exposed to avalanche hazard much less than on foot. Travel along the access road to the property would involve this. If a water source was located in the avalanche areas described previously, workers would be exposed for periods of time of various duration for maintenance or repair to a pump with higher levels of exposure to the hazard while on foot, thus the risk is greater.

The avalanche terrain along the access road shows a relatively low risk to workers. There is no avalanche hazard at this time along the road or at the work site as there is no snow. Road use is expected to be limited to moving the drill in to the site, and removing it, and occasional use by truck. The plan is to fly drillers to and from the site, thus this risk will be eliminated, except at times when weather does not allow flight.

There should be water sources located outside of the identified avalanche areas near the drills that will eliminate the risk to workers on foot.

### 6.2 Avalanche Threshold Depths:

Due to the infrequent nature of the avalanche paths along the road, avalanche risk to the road is low until a snow depth of 70cm is reached at a weather monitoring site located near the drill areas. This will give a fairly reasonable representation of snow depths in the nearby start zones. Snow threshold depth for avalanches to initiate is a combination of depth of snowpack, and the underlying natural anchoring effect of the surface roughness of the terrain. For moderate roughness ground, 50-60cm snow with an additional depth of 30 cm to create a slab is generally required. (Schaerer, 2010, Schaerer & McClung, 1993). On terrain with smooth features, often 30cm of snow is enough to create a hazard.

### 6.3 Avalanche Return Periods:

This is the time expected between major avalanche cycles that can occur in a path. The majority of the avalanche paths along the Twin Ck. road show vegetative clues that suggest the last major avalanches that affected the road occurred 75-80 years ago. Avalanche periods are often expressed in terms of frequency/year, and these paths appear to be low frequency paths, in the area of 1:75-100 years for a major event. However, small avalanches may still occur more frequently in the upper portions of the paths. This is a factor of the terrain and the weather conditions during a given winter.

## 7. Recommendations

Based on the findings of the field survey, and analysis of the data and information, the following recommendation should be followed to manage the risk to workers of avalanche at the Takla-Rainbow property:

- Start work immediately while there is no snow to present a hazard
- Establish a snow stake in a sheltered area near the drill site, away from wind, and rotor wash from helicopters that measures 75cm of snow on the ground. This should be monitored on a regular basis and reported to Project Managers.
- Not establish water sources in any of the described avalanche areas. If this is not possible, then avalanche technicians must be engaged to provide for worker safety to these areas
- Establish Avalanche Warning signs along the Twin Creek road, as identified on the map, and attached Google Earth KMZ file. These areas have also been provided to Doug Branchflower, P. Geo of Minorex Consulting, Project Manager.
- Once snow threshold depths of 70cm are recorded at the worksite, access along the Twin Ck. Road must stop until the area has been assessed by an Avalanche Technician. At this time avalanche safety measures such as avalanche rescue training, avalanche rescue equipment, a rescue plan and active avalanche hazard forecasting will be provided to workers.

## 8. Conclusion

While there is currently no risk to workers at the Takla-Rainbow property of avalanches with the current weather and lack of snowpack, this condition can change quickly in the mountain environment. Following the recommendations in this report, and completing the project in a timely fashion in the coming weeks will minimize the risk of avalanches to workers, and allow the work to be completed safely. Avalanche technicians have the knowledge and expertise to manage the risk should conditions deteriorate, and should be engaged as thresholds are approached to minimize the disruption to the project.

## **9. Certifications**

I, *Sean Fraser*, of Smithers, BC on Nov 2, 2013 certify that I:

- Am a Professional Member in good standing of the Canadian Avalanche Association
- Am a Ski Guide and member of the Association of Canadian Mountain Guides
- Am a Worksafe BC certified blaster for Avalanche Control
- Am a Ministry of Mines certified blaster for Avalanche Control
- Have completed the CAA Introduction to Snow Avalanche Mapping
- Have completed the CAA Level 3 Applied Avalanche Risk Management
- Have 15 years of experience in the avalanche industry

## 10. References Cited

Schaerer, Peter (2010) *CAA Intro to Snow Avalanche Mapping*. Ch.5 Application of climate data. Canadian Avalanche Association 2010.

Schaerer, Peter and McClung, David (1993) *The Avalanche Handbook*. The Mountaineers.

Haegeli, Pascal and McClung, David M. (2004) *INITIAL DESCRIPTION OF AVALANCHE WINTER REGIMES FOR WESTERN CANADA* . Proceedings, ISSW 2004

Ministry of Forests (1998) *Ecology of the ESSF Zone*. Province of BC. Queens Printers

## **APPENDIX VI**

### **Drill Hole Survey Plan**

**W D McIntosh Surveys, Focus Corporation**

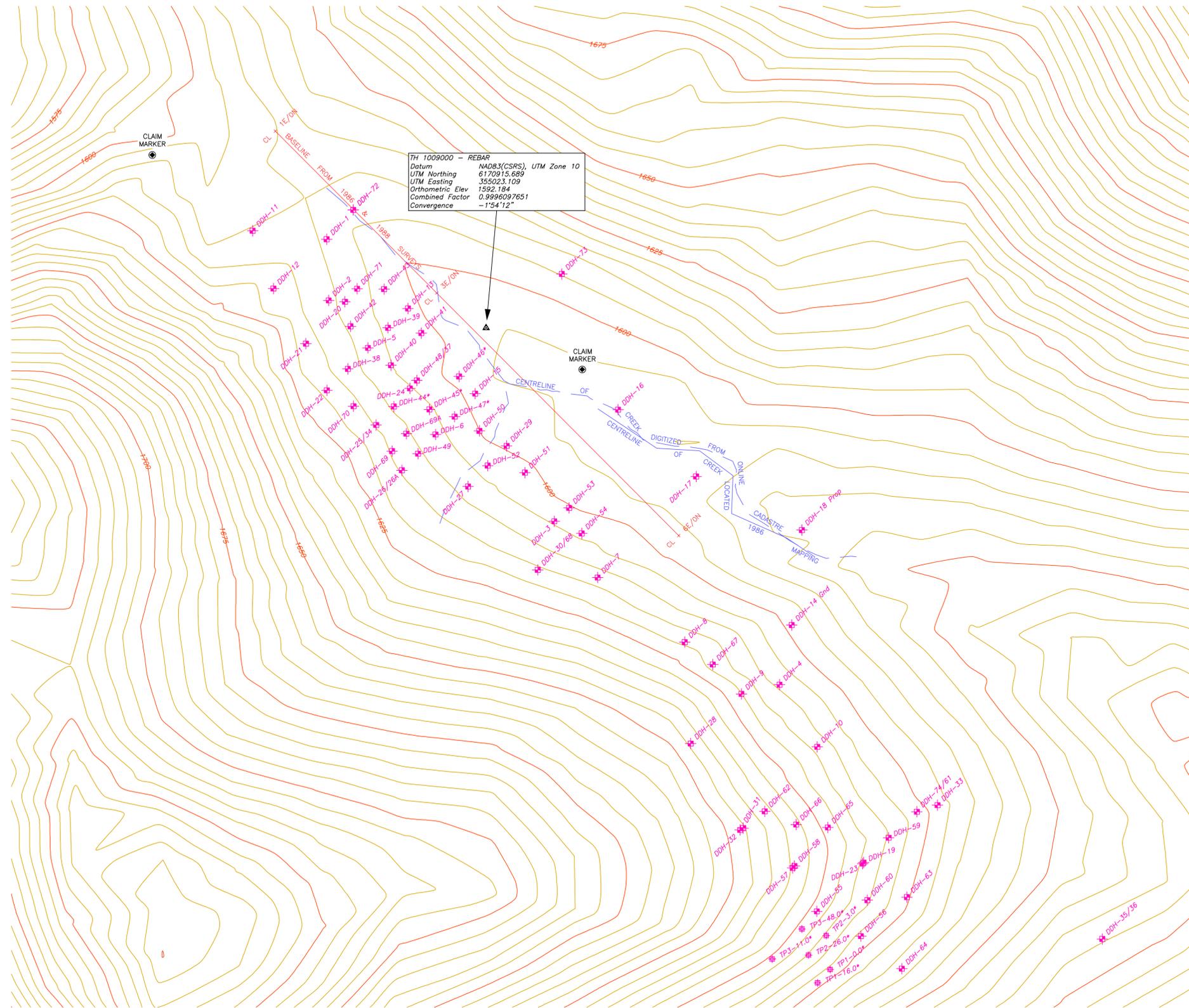
SKETCH PLAN SHOWING DIAMOND DRILL HOLES FOR TAKLA RAINBOW PROPERTY FROM 1986 AND 1988 SURVEYS RELATIVE TO UTM COORDINATES



All distances are in metres and decimals thereof.

The intended plot size of this plan is 864mm in width by 560mm in height (D size) when plotted at a scale of 1:2000.

Diamond Drill Holes				
Point #	DDH #	Northing	Easting	Elevation
1	DDH-1	6170993.1	354883.5	1609.1
2	DDH-2	6170939.8	354885.2	1608.2
3	DDH-3	6170746.7	355082.8	1600.4
4	DDH-4	6170603.9	355280.1	1607.4
5	DDH-5	6170898.3	354919.6	1602.2
6	DDH-6	6170822.6	354978.8	1602.4
7	DDH-7	6170697.6	355120.7	1608.7
8	DDH-8	6170641.2	355197.1	1614.5
9	DDH-9	6170595.9	355246.7	1618.1
10	DDH-10	6170549.7	355313.2	1611.5
11	DDH-11	6171000.6	354818.6	1606.9
12	DDH-12	6170950.1	354836.9	1619.2
13	DDH-13	6170932.7	354954.6	1597.7
14	DDH-14 Gnd	6170656.1	355290.8	1594.4
15	DDH-15	6170858.3	355013.5	1592.9
16	DDH-16	6170844.3	355138.7	1585.6
17	DDH-17	6170785.9	355207.1	1584.3
18	DDH-18 Prop	6170739.1	355299.7	1578.6
19	DDH-19	6170448.5	355353.7	1612.2
20	DDH-20	6170938.5	354899.5	1604.8
21	DDH-21	6170901.9	354865.3	1612.0
22	DDH-22	6170861.2	354883.6	1610.4
23	DDH-23	6170447.6	355352.9	1612.2
24	DDH-24	6170862.9	354956.3	1597.7
25	DDH-25/34	6170830.9	354926.8	1606.6
26	DDH-26/26A	6170791.3	354949.3	1611.0
27	DDH-27	6170777.1	355007.3	1603.4
28	DDH-28	6170552.6	355202.3	1637.1
29	DDH-29	6170812.6	355041.1	1595.4
30	DDH-30/68	6170704.3	355068.4	1612.2
31	DDH-31	6170478.6	355248.3	1640.0
32	DDH-32	6170477.0	355245.6	1640.2
33	DDH-33	6170498.7	355418.5	1593.0
35	DDH-35/36	6170381.8	355562.8	1554.3
38	DDH-38	6170879.9	354902.0	1605.2
39	DDH-39	6170915.8	354937.2	1598.9
40	DDH-40	6170883.0	354939.7	1599.6
41	DDH-41	6170911.2	354966.3	1594.8
42	DDH-42	6170917.1	354904.3	1603.2
43	DDH-43	6170949.6	354933.8	1600.2
44	DDH-44*	6170847.0	354942.3	1602.0
45	DDH-45*	6170844.5	354973.5	1598.0
46	DDH-46*	6170873.3	354999.5	1593.0
47	DDH-47*	6170838.1	354995.5	1597.0
48	DDH-48/37	6170869.8	354962.5	1597.1
49	DDH-49	6170805.8	354963.4	1605.6
50	DDH-50	6170825.7	355017.2	1596.1
51	DDH-51	6170789.3	355057.1	1597.5
52	DDH-52	6170795.4	355024.5	1599.3
53	DDH-53	6170758.4	355095.7	1597.1
54	DDH-54	6170736.1	355106.8	1599.7
55	DDH-55	6170405.9	355312.8	1620.2
56	DDH-56	6170384.2	355351.4	1602.9
57	DDH-57	6170443.8	355291.6	1630.0
58	DDH-58	6170445.6	355293.2	1629.8
59	DDH-59	6170470.2	355375.7	1607.2
60	DDH-60	6170415.7	355357.0	1608.4
62	DDH-62	6170493.3	355267.2	1631.4
63	DDH-63	6170418.3	355391.6	1600.6
64	DDH-64	6170355.8	355387.2	1586.0
65	DDH-65	6170479.2	355322.4	1617.4
66	DDH-66	6170481.8	355294.6	1609.6
67	DDH-67	6170621.6	355221.6	1614.9
69	DDH-69	6170808.1	354940.7	1608.1
68	DDH-68A	6170823.2	354953.2	1603.8
70	DDH-70	6170847.3	354906.9	1607.9
71	DDH-71	6170949.9	354910.1	1604.7
72	DDH-72	6171018.8	354906.7	1602.4
73	DDH-73	6170962.8	355089.4	1601.4
74	DDH-74/61	6170492.9	355400.4	1598.4



IMPORTANT NOTES:

Coordinates are NAD83 (CSRS) Grid and are derived from differential carrier phase GPS observations and are referred to the central meridian of UTM Zone 10 North. To obtain local astronomic bearings referred to the meridian through TH 1009000, subtract 1°54'12".

The UTM coordinates are derived from GPS Dual Frequency Baseline Ties to Prince George ACP.

This plan shows grid distances. To compute horizontal ground distances based on a mean ellipsoid elevation of 1584.059 metres, divide grid distances by the mean combined scale factor of 0.9996097654. Survey data collected from 11 October 2013.

Contours and Orthophoto are from Google Earth and are approximate only.

Positions of Supplied Survey Data from 1986 and 1988 were not checked for computational accuracy, though there was found to be two different positions (100m different) for DDH 66 which depending on its actual location will determine the location of DDH 60. There was some correspondence supplied stating that there seemed to be elevation differences between the surveys of 1986 and 1988. This compilation of data has used the elevations as supplied and no attempt was made to correlate elevation data between the 1986 and the 1988 supplied elevations. DDH's shown with a \* after its number means that the supplied elevation was not supplied or parts of the supplied elevation were unreadable and as such elevations were interpreted as best as possible and may have significant error.

Existing Latitude and Departure Coordinates were Transformed using DDH 72 as the reference coordinate and azimuth of reference line ON,1E to ON,6E of 135° (assumed Grid Bearing) used as per old notes. The centreline of creek tied in 1986 fits roughly with Google Orthophoto and Online Cadastre Mapping. As no azimuth datum is stated on the old notes, no other rotation has been applied.

Existing 1986 and 1988 DDH Elevations were shifted by -3.0m to match orthometric elevation taken on DDH 72.

Derived UTM Coordinates for Existing 1986 and 1988 DDH's may have significant error the further away from DDH 72 they are. Using the creek ties from the 1986 survey, DDH 72 is the best possible match for the DDH that was found on the 11 October 2013 Survey. As the actual bearing datum is not known for the 1986 and 1988 surveys, there will most likely be more adjustments required for true UTM positions of existing DDH's. This could be in the magnitude of +/- 30m in the South-East Corner, or more depending on whether the DDH found on 11 October 2013 is actually DDH 72.

**FOCUS**

PROJECT			
Minorex Consulting Ltd.			
PROJECT REF. 010046349			
SHEET TITLE			
SKETCH PLAN SHOWING DIAMOND DRILL HOLES FOR TAKLA RAINBOW PROPERTY			
DRAWN	DATE	CHECKED	SCALE
ARB	17 OCT 2013		1 : 2000
SHEET NO. 010046349-CHSK01-R00			