

**REPORT ON THE  
2003 TRENCHING PROGRAM  
ON THE TOG PROPERTY,  
JAKES CORNER AREA,  
SOUTHERN YUKON  
094473**

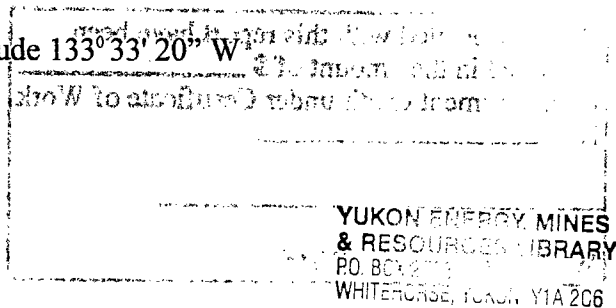
By

Scott Casselman B.Sc, P. Geo.  
Aurora Geosciences Ltd  
108 Gold Road  
Whitehorse, Yukon, Y1A 2W3

For

**Dunvegan Exploration Ltd**  
3791 – West 37<sup>th</sup> Street  
Vancouver, BC, V6N 2W1

Location: Latitude 60° 25' N, Longitude 133° 33' 20" W  
Mining District: Whitehorse  
NTS: 105C/05  
Date: October 2004



Costs associated with this report have been approved in the amount of \$ 1800.00 for assessment credit under Certificate of Work No. QU27680

*[Signature]*  
Mining Recorder  
Whitehorse Mining District

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## 1.0 SUMMARY

Dunvegan Exploration Ltd contracted Aurora Geosciences Ltd to conduct an exploration program on the TOG Property, located 88 km south of Whitehorse, during the fall of 2003. The program consisted of a one-day visit to the property to conduct rock chip sampling on 4 short hand-cleared trenches across a previously blast-exposed quartz vein. Ten chip samples were collected. As well, three rock grab samples were collected of blasted "fly-rock" in the pit area.

Previous work on the property identified a "Bull" white quartz vein known as the Main Showing that was blasted and exposed over 90 m in length. Samples from the vein returned highly anomalous gold values and drill results returned up to 1.547 oz/ton gold over 0.18 m. The vein strikes northwest and dips 25 to 30 degrees southwest.

The 2003 trenching program on the vein did not return any significant gold values and it was observed that the vein contains very little sulphide mineralization. However, samples of the host ultramafic rock from the pit area returned highly anomalous values of 61.7 gm/mt (1.80 oz/t), 76.0 gm/mt (2.22 oz/t) and 181.4 gm/mt (5.29 oz/t) for DUN03-01 to 03, respectively. The silver assays returned 41.84 gm/mt (1.22 oz/t), 121.95 gm/mt (3.36 oz/t) and 159.09 gm/mt (4.64 oz/t), respectively. The PGE analysis for these samples was not anomalous. *Av & Ag values reversed.*

The gold in the pit rocks is contained in narrow, gray, translucent quartz veins that have a different appearance than the "Bull" quartz vein. The author suspects the historic gold values may have come from the footwall rocks and not from the "Bull" quartz vein. However, having spent only one day on the property, it is difficult to formulate a sound geological conclusion as to what the mode of occurrence of the gold.

Recommendations for future work on the property are to compile the geological and geophysical data, conduct additional mapping, sampling and geophysics in the area to determine the genesis of the precious metals mineralization and to trace its extent. An estimated budget for this program is \$50,000.

## 2.0 INTRODUCTION

Dunvegan Exploration Ltd contracted Aurora Geosciences Ltd to conduct an exploration program on the TOG Property during the fall of 2003. The program consisted of a one-day visit to the property to conduct rock chip sampling on 4 short hand-cleared trenches across a previously blast-exposed quartz vein. As well, three rock grab samples were collected of blasted "fly-rock" in the pit area. The property is located 88 km south of Whitehorse, Yukon and is accessible by 4 km of gravel road from the Alaska Highway.

The crew consisted of Scott Casselman (geologist), Susanne Aichelle (field assistant) and they were accompanied by the original discoverer of the showing, prospector Gord McLeod. The crew drove from Whitehorse to the property to conduct the program and returned to Whitehorse later that day.

This report includes a review of historical exploration work conducted in the area by previous operators and by Dunvegan Exploration Ltd. The author is a professional geologist and managed the field exploration program on the property. The author has relied on data, interpretation, and information supplied by others noted above and listed in the References: primarily assessment reports on record with the Yukon Territorial Government (previously federal Department of Indian and Northern Affairs).

## 3.0 PROPERTY LOCATION AND ACCESS

The TOG property is located south of Squanga Lake and east of Summit Lake, 88 km south of Whitehorse, Yukon on NTS map sheet 105C/05. The property is centered at 60° 25' 00" latitude and 133° 33' 20" longitude in the Whitehorse Mining District (see Figure 1).

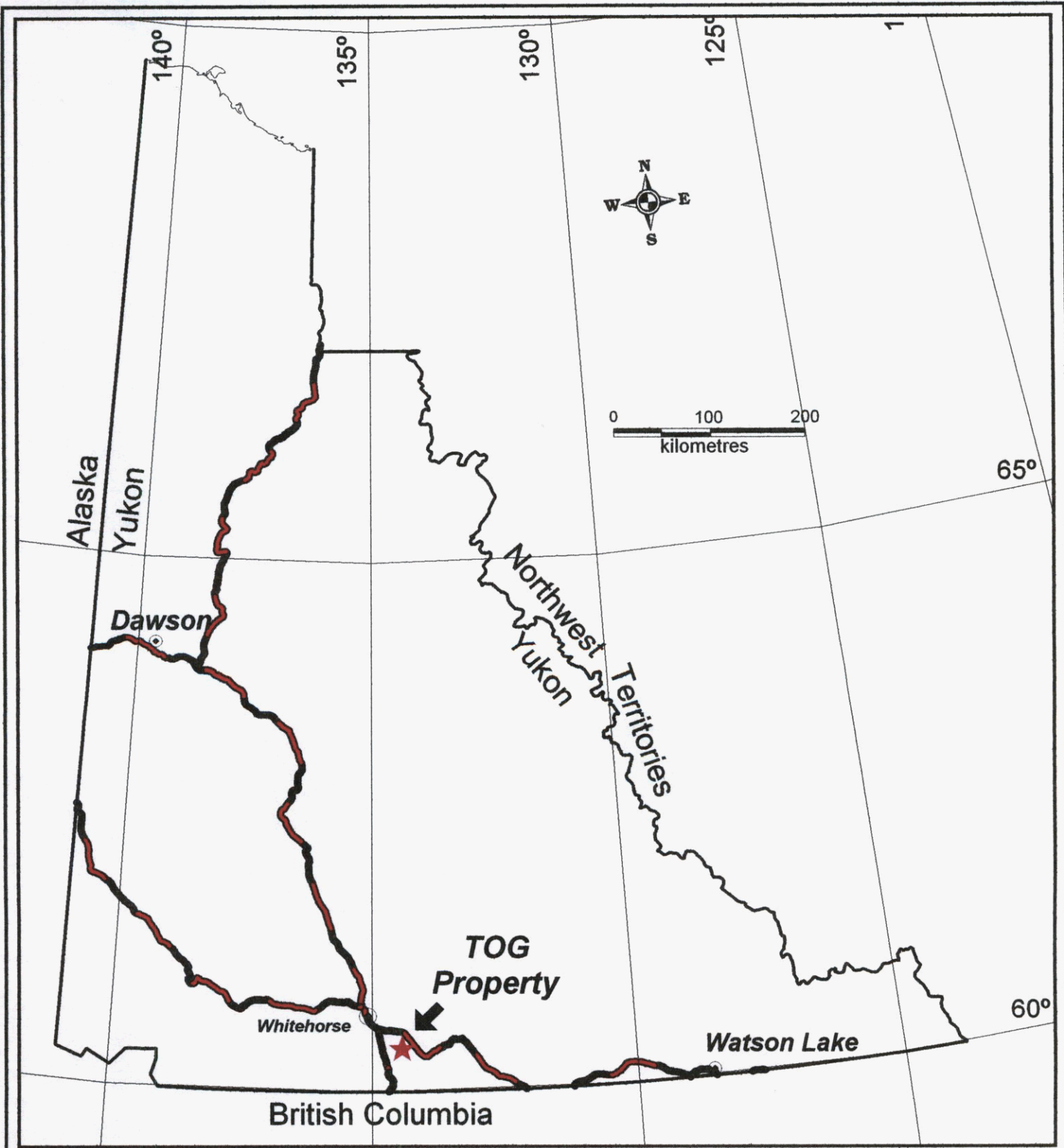
The project area lies immediately south of the Alaska Highway, near the small community of Jakes Corner. The highway is paved and maintained year-round. Gravel bush roads extend from the Highway 4 km to provide access to the central part of the property.

## 4.0 PHYSIOGRAPHY, INFRASTRUCTURE AND CLIMATE

The project area lies in a mountainous area of the Whitehorse Trough. The property is situated on lower slopes, which are fairly gentle. Elevations range from about 2900 feet to 3800 feet above sea level. The property area is treed, with spruce and pine trees dominating.

The area is affected by weather from the coast and receives abundant rain and snow. Snow generally begins accumulating on the north slopes in late September to mid October and begins receding in April. The snow is generally melted back sufficiently by early to mid May to allow for fieldwork at lower elevations.

The nearest major city centre is Whitehorse, a supply centre for this region with an ample labour force. Power is available along the Alaska Highway at the eastern boundary of the claims. Water resources are abundant in the project area in flowing streams and numerous large lakes.



22 October 2004  
 PROFESSIONAL  
 PROVINCE OF  
 S. CASSELMAN  
 BRITISH COLUMBIA  
 GEOSCIENTIST

**DUNVEGAN EXPLORATION Ltd.**  
**TOG PROPERTY**  
**LOCATION MAP**  
**Yukon Territory**  
**Figure 1 October, 2004**  
**AURORA GEOSCIENCES LTD**

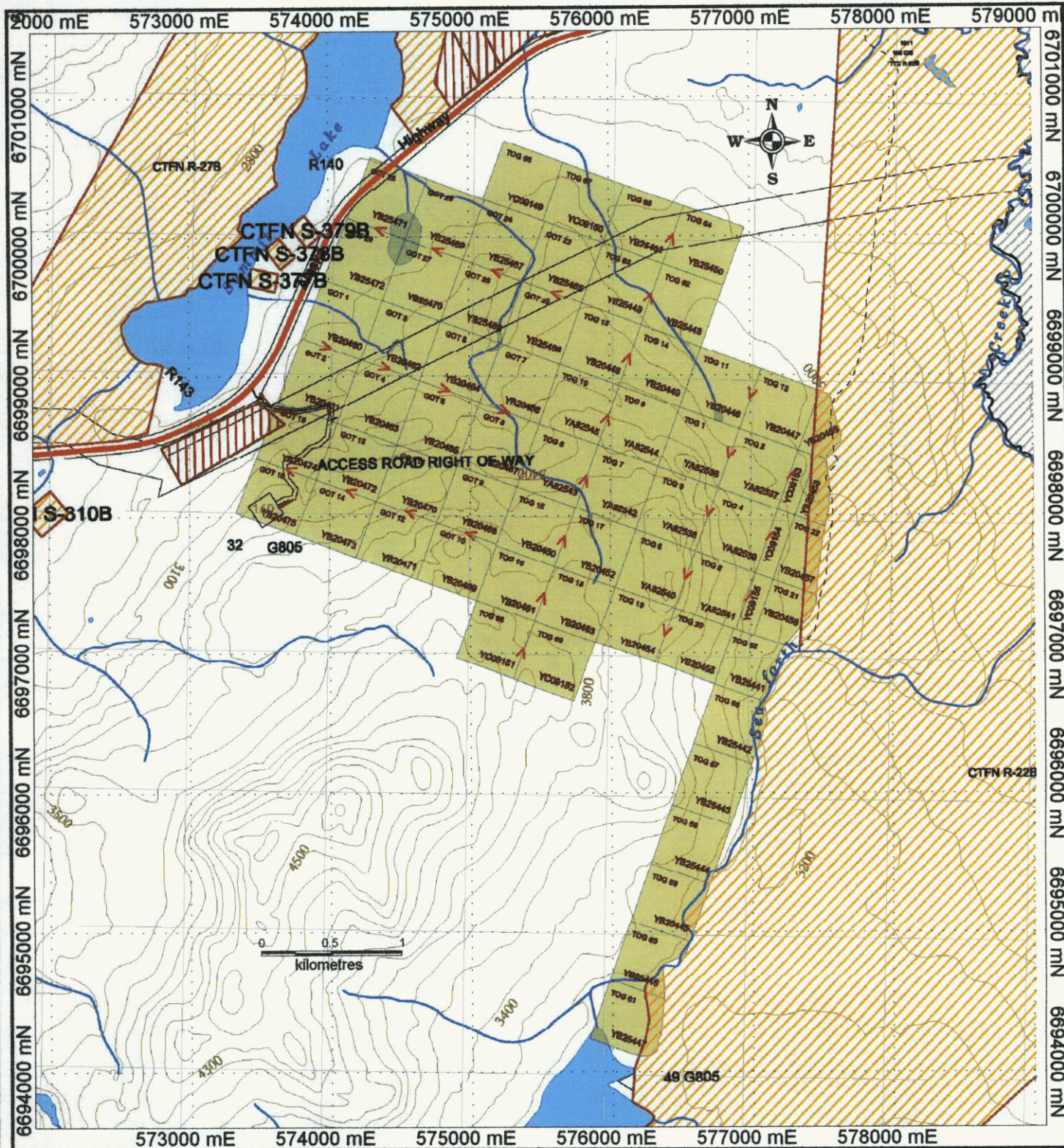
## 5.0 LAND STATUS

The land in which the mineral claims are situated is Crown Land and falls under the jurisdiction of the Government of Yukon. First Nation Settlement Land areas belonging to the Carcross-Tagish First Nation lie immediately east of the property and on the west side of the Alaska Highway from the property (Figure 2).

Dunvegan Exploration Ltd owns the mineral claims 100%. Claim information is as follows:

Table 1. Claim Information

Claim Name	Grant Number	Expiry Date
TOG 1 to TOG 7	YA82536 to YA82542	July 3, 2005
TOG 8	YA82453	January 3, 2006
TOG 9 to TOG 10	YA82544 to YA82545	July 3, 2005
TOG 11 to TOG 14	YB20447 to YB20449	July 18, 2005
TOG 15	YB20450	January 18, 2005
TOG 16	YB20451	July 18, 2005
TOG 17	YB20452	January 18, 2005
TOG 18 to TOG 24	YB20453 to YB20459	July 18, 2005
TOG 55 to TOG 65	YB25441 to YB25451	February 28, 2005
TOG 66 to TOG 69	YC09149 to YC09152	November 10, 2004
GOT 1 to GOT 4	YB20460 to YB20463	January 18, 2005
GOT 5	YB20464	July 18, 2005
GOT 6	YB20465	January 18, 2005
GOT 7	YB20466	July 18, 2005
GOT 8 and GOT 9	YB20467 and YB20468	January 18, 2005
GOT 10	YB20469	July 18, 2005
GOT 11	YB20470	January 18, 2005
GOT 12	YB20471	July 18, 2005
GOT 13	YB20472	January 18, 2005
GOT 14	YB20473	July 18, 2005
GOT 15	YB20474	January 18, 2005
GOT 16	YB20475	July 18, 2005
GOT 22 to GOT 29	YB25465 to YB25472	February 28, 2005



**DUNVEGAN EXPLORATION Ltd.  
TOG PROPERTY  
CLAIM MAP**

*21 October 2004*  
*S. Casselman*

**NTS 105C/05  
Figure 2**

**Yukon Territory  
October, 2004**

Scale = 1:40,000  
NAD 83 UTM Zone 8

**AURORA GEOSCIENCES LTD**

## 6.0 HISTORY

The TOG claims were first staked in 1972 by local Whitehorse prospector, Gord McLeod, upon discovery of a small pod of massive chromite in ultramafic rocks. In 1979, Archer Cathro and Associates conducted a geological mapping program on the property. As well that year, microprobe analysis was conducted on a sample of massive chromite by District Geologist, Michael Marchand. The analysis returned a value of 49.4% Cr<sub>2</sub>O<sub>3</sub>.

In 1982, Noranda Exploration Co. Ltd. Geologist G. Yeo conducted a property visit and discovered visible gold in a siliceous rock on the property. The main TOG Showing was discovered in 1984 by prospecting in the area.

Since then, a number of visits were made to the property by government and in mining company geologists interested in the property. In 1985, S.B. Ballentine of the Geological Survey of Canada visited the site and collected samples of material at the discovery. He reported assays up to 0.262 oz/ton with a gold fineness of 939.7 (93.5% Au and 6% Ag) and suggested that the mineralization appeared typical of Motherlode, or Bonanza-Style of mineralization. In 1987, then Whitehorse District Geologist, Trevor Bremner, sampled the Main Vein and reported values up to 0.244 oz/ton gold. Newmont Exploration also sampled the pits, but reported only low gold values. In 1988, geologist David Shaw of Resources Research Group examined the property, collecting a number of samples that returned values ranging from 0.39 to 31.651 oz/ton gold.

In 1989, Dunvegan Exploration Inc conducted an exploration program consisting of road construction, magnetometer and VLF-EM surveying, geological mapping and detailed sampling in the Main Showing area. Chip sampling of the Main Showing vein over 26 metres of exposed strike identified visible gold in 13 samples. Sample results returned values up to 41.482 oz/ton gold from a grab sample and 2.119 oz/ton gold from a 0.46 m chip sample. The VLF-EM survey identified a coincident conductor that extended 140 metres along strike. The geological mapping program reported listwaenite alteration of ultramafic rocks, confirming the theory of Motherlode- or Bonanza-style mineralization, which was also described in the Atlin Gold Mining camp 100 km to the south.

In 1990, Dunvegan Exploration Inc conducted a program consisting of bulk sampling of the Main Showing vein, and 262.5 m of diamond drilling in 8 holes. The bulk sampling was done in two stages, the first stage mined 250 lbs of material which was hand cobbled and sorted into two samples; high-grade ore with visible gold (sample No. 1), and ore considered to be auriferous (sample No. 2). The two samples were combined for a total weight of 80 kg and this material was submitted to Northern Analytical Laboratories for a bulk gold assay. The assay returned 3.16 oz/ton gold. For the second stage of the bulk sample test 26 kg of the No. 1 sample material was sent to Bacon Donaldson and Associates Ltd for a single scoping test on the cyanide leachability. The sample was processed by grind-jig-cyanidation with a primary grind of 70% - 200 mesh. The combined processed recovered 70.6% of the gold after 48 hours of cyanide leach. It was estimated by Bacon Donaldson that 90% recovery could be attained with another 48 hours of leaching. Bacon Donaldson recommended the mode of the gold occurrence be better defined and the nature of other sulphide and oxide mineralization in the ore be determined. They

also noted that the sample was of hand-cobbed material and recommended that future test work be done on run-of-mine ore.

The drill program on the Main Showing confirmed the vein to dip 25 to 30 degrees south and to extend at least 100 metres down dip and 90 metres along strike. The deposit remains open in all directions. Highlights of the drill program were identifiable visible gold in hole 5-90 which returned assays up to 1.547 oz/ton gold over 0.18 m. Also, a second quartz vein was intersected above the Main Vein in one of the drill holes.

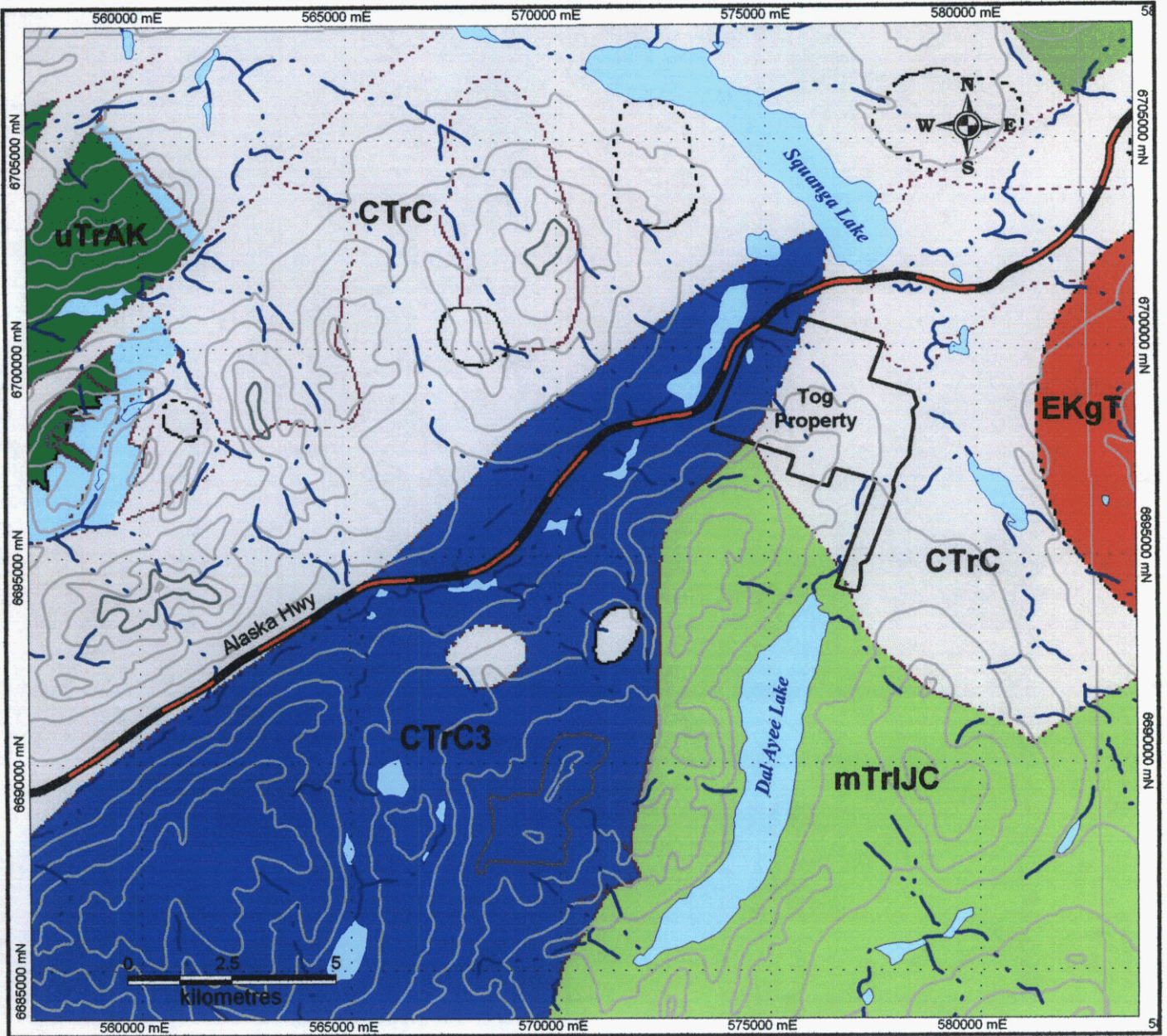
No further work was done on the property since then.

## 7.0 REGIONAL GEOLOGY

The TOG property is underlain by Carboniferous to Jurassic Cache Creek Group rocks. The Cache Creek Group consists of oceanic shale, siltstone chert, carbonates and ultramafic rocks (Figure 3). These are overlain by Upper Triassic rocks of the Aksala Group northwest of the property. The Aksala Group consists of mixed clastic and carbonate rocks that are divisible into three dominant facies: calcareous greywacke; thick carbonate; and red-coloured clastics.

The structural geology of the area is dominated by two major sub-parallel, north-northwest trending faults that divide and define the boundaries between the Cache Creek Terrane (to the east) and the Whitehorse Trough and between the Whitehorse Trough and the Yukon-Tanana Terrane (to the west). The Nahlin Fault more or less marks the western extent of the Cache Creek Terrane and eastern extent of the Whitehorse Trough. It is a steeply dipping to vertical fault, or series of faults and has seen intermittent activity from the Late Triassic to Tertiary time. The Llewellyn fault marks the boundary between the regionally metamorphosed Yukon-Tanana Terrane and the Whitehorse Trough. It is also steeply dipping and appears to have been active from Late Triassic to Tertiary time.

The nearest known intrusive rocks occur 4 km east of the property and are Early Cretaceous intrusions of the Teslin Suite. They are comprised of leucocratic, fine to coarse-grained, equigranular, hornblende-biotite granite, granodiorite, quartz monzonite and quartz monzodiorite.



- EKgT** Early Cretaceous - Teslin Suite  
granite, granodiorite to quart monzonite
- uTrAK** Upper Triassic - Aksala Assemblage  
mixed clastic and carbonate rocks
- CTrC** Carboniferous to Jurassic - Cache Creek Assemblage  
oceanic ultramafic rocks with carbonate and chert
- CTrC3** fossiliferous and brecciated limestone
- mTrIJC** ribbon chert with interbedded shale and siltstone

21 October 2004  
 P. B. CASSELMAN  
 BRITISH COLUMBIA  
 GEOLOGIST

**DUNVEGAN EXPLORATION Ltd.**  
**TOG PROPERTY**  
**REGIONAL GEOLOGY MAP**

**NTS 105C/05**  
**Figure 3**

**Yukon Territory**  
**October, 2004**

NAD 83 UTM Zone 8

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## 8.0 PROPERTY GEOLOGY

The property geology was mapped in detail in 1989 by W. Taylor and D. Shaw (Shaw, 1989). Their mapping identified four lithological categories: volcanics/tuffs; cherts; chloritic mafic lenses of gabbro, pyroxenite and diorite; and ultramafics. As well, they identified two alteration assemblages; carbonatization/silicification; and chrome-mica carbonatization of ultramafic rocks.

The property is underlain by a northwest trending package of submarine volcanics consisting of moderately chloritized, fine-grained volcanic flows and tuffs that are metamorphosed to greenschist facies. In the showing area these volcanics are carbonatized (listwaenite alteration) ultramafic volcanic rocks that commonly weather brown. The contacts between the ultramafic volcanics and other rocks are strongly foliated and serpentinized. The serpentinized ultramafic rock is dark green, very fine-grained to amorphous and occasionally pyritic.

Chert occurs throughout the property as lenses or boudins and is prominent within a northwest striking breccia zone in the center of the property. Argillite occurs north east of the quartz vein showing and is black to dark green, graphitic and fine-grained. It contains up to 15% fine-grained disseminated pyrite.

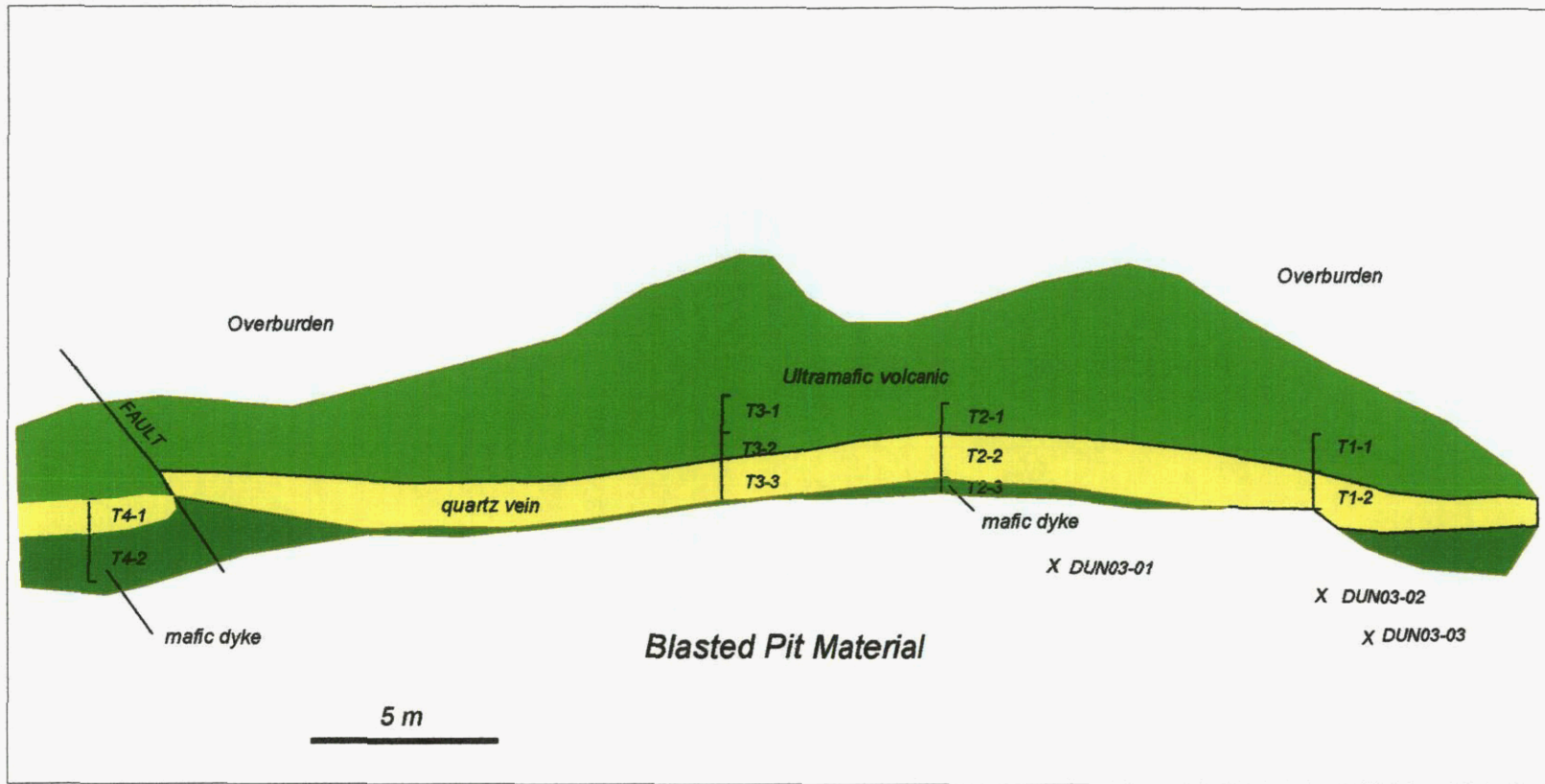
An orange-brown to brown rhyolitic dyke occurs along much of the bottom contact of the Main quartz vein. It is fine to medium-grained, bleached, with rare, fine-grained pyrite.

The Main Showing consists of a white to smokey grey, medium to coarse-grained "Bull" quartz vein. It contains rare inclusions of serpentinized ultramafics and rare disseminated pyrite. Fuschite and minor galena, magnetite chalcopyrite and sphalerite are occasionally observed along fractures. The vein is up to 2.5 m wide, strikes northwesterly, and dips 25° to 30° to the southwest. Historically, visible gold has been observed in smokey grey, graphitic quartz near the lower, commonly brecciated contact of the vein. In the 2003 exploration program no visible gold was observed in the Main Showing "Bull" quartz vein. However visible gold was observed in narrow (1 to 3 mm wide) grey, translucent quartz veins in the serpentinized ultramafic rocks in the footwall to the Main Showing quartz vein.

## 9.0 2003 EXPLORATION PROGRAM

The exploration program on the TOG Property consisted of a one day examination of the Main Showing occurrence, trench sampling across the vein in a series of four trenches and collection of selective grab samples in the pit area. A total of 10 trench chip samples and 3 rock grab samples were collected.

Sample locations are plotted on Figure 4 and shown in photographs in Appendix IV.



27 October, 2004  
 S. G. CASSELMAN  
 PROFESSIONAL  
 PROVINCE OF  
 BRITISH COLUMBIA  
 GEOSCIENTISTS

DUNVEGAN EXPLORATION LTD  
 TOG PROPERTY  
 TRENCH SAMPLE LOCATION SKETCH MAP  
 Figure 4 October, 2004

## 10.0 GEOCHEMICAL ANALYTICAL PROCEDURE

All samples were sent to Acme Analytical Laboratories in Vancouver for processing. Acme is an ISO 9002 accredited facility.

The analytical procedure for rock and trench samples involved preparation by drying the sample then crushing to -10-mesh. A 250 gm split was taken from the -10-mesh material and pulverized to -150-mesh. A 50 gm sample of the -150-mesh material was then digested in 180 ml of aqua-regia solution and diluted to 600 ml with distilled water. This solution was then analyzed for gold and 36 elements by Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Gold analysis was by fire assay with gravimetric finish of 29.2 gram (1 assay ton) of the 150 mesh material. For the rock samples containing visible gold the samples were also analysed for silver, platinum and palladium by fire assay with gravimetric finish of 29.2 gram (1 assay ton). Geochemical Analytical Certificates for the 2003 program are included in Appendix II.

## 11.0 CONCLUSIONS

The 2003 trenching program on the massive, bull white quartz vein on the TOG Property did not return any significant gold values. The vein contains very little sulphide mineralization (ie. <<1%). However, grab samples of the host ultramafic rock from the pit area returned 61.7 *Silver* gm/mt (1.80 oz/t), 76.0 gm/mt (2.22 oz/t) and 181.4 gm/mt (5.29 oz/t) for DUN03-01 to 03, respectively. The ~~silver~~ assays returned 41.84 gm/mt (1.22 oz/t), 121.95 gm/mt (3.36 oz/t) and 159.09 gm/mt (4.64 oz/t), respectively. The PGE analysis for these samples was not anomalous. \*

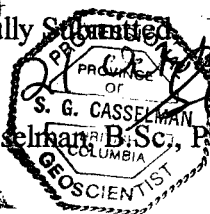
The gold in the pit rocks is contained in narrow, grey, translucent quartz veins that have a different appearance than the "Bull" quartz vein. The author suspects the historic gold values may have come from the footwall rocks and not from the "Bull" quartz vein. However, having spent only one day on the property, it is difficult to formulate a sound geological conclusion as to what the mode of occurrence of the gold.

Recommendations for future work on the property are to compile the geological and geophysical data. This data should be reviewed and a program of mapping, sampling and geophysics be conducted to determine the genesis of the precious metals mineralization and to trace its extent. This could be followed by additional drilling if warranted.

The budget for the data compilation and follow-up mapping and sampling estimated to be \$50,000.

Respectfully Submitted,

Scott Casselman B.Sc., P. Geo  
Geologist



**12.0 STATEMENT OF EXPENDITURES**

Contract Services		
Aurora Geosciences Ltd	– exploration services, sampling supplies and vehicle rental	\$ 1,148.30
Sample Analysis		
Acme Labs		531.84
Report Writing		
Aurora Geosciences Ltd		<u>1,500.00</u>
	<b>Total</b>	<b><u>\$ 3,180.14</u></b>

A circular professional seal for S. S. CASSELMAN, a Professional Geologist in British Columbia. The seal is stamped and has a handwritten signature over it. To the right of the seal, the year '2004' is handwritten.

**13.0 REFERENCES**

- Deklerk, R., 2002. Yukon Minfile, 2002, A Database of Mineral Occurrences. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.
- Gordey, S. P. and Makepeace, A. J., 1999. Yukon Digital Geology. Geological Survey of Canada, Open File D3826.
- Shaw, D. A., Taylor W. A. and Copeland, D. J., 1989. Geological Report on the Bug, Phil and TOG-GOT-POT Group of Claims.
- Webster, M. P., 1990. Diamond Drilling and Bulk Sampling Assessment Report on the TOG Property.

**APPENDIX I**


**STATEMENT OF QUALIFICATIONS**

**Statement of Qualifications**

I, Scott Casselman, P. Geo., certify that:

- 1) I reside at 33 Firth Road, Whitehorse, Yukon Territory, Y1A 4R5
- 2) I am a geologist employed by Aurora Geosciences Ltd. of Whitehorse, Yukon Territory.
- 3) I graduated from Carleton University in Ottawa, Ontario with a Bachelor of Science Degree in Geology in 1985 and have worked as a geologist since that time.
- 4) I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, Registration No. 20032.
- 5) I conducted the field exploration program on the TOG Property for Dunvegan Exploration Ltd during the fall of 2003.
- 6) I am responsible for the preparation of this report entitled "Report on the 2003 Trenching Program on the TOG Property", and dated October 20, 2004.
- 6) I am not aware of any material fact or material change with respect to the subject matter of this Technical Report that is not reflected in the Technical Report, the omission of which, would make this Technical Report misleading.
- 7) I have read National Instrument 43-101 and Form 43-101F1, and this technical report has been prepared in compliance with this Instrument and Form.
- 8) I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
- 9) I consent to the filing of this Technical Report with any stock exchange or other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 21<sup>st</sup> day of October, 2004, at Whitehorse, Yukon Territory.

  
Scott G. Casselman, BSc., P. Geo.

**APPENDIX II**

**GEOCHEMICAL ANALYTICAL CERTIFICATES**



GEOCHEMICAL ANALYSIS CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305678  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
SI	<1	1	<3	1	<.3	2	<1	8	.08	<2	<8	<2	<2	5	<.5	<3	<3	1	.24	<.001	1	1	.01	6	<.01	<3	.02	.89	.01	<2
T1-1	1	7	12	69	<.3	794	42	1254	3.26	204	<8	<2	<2	331	<.5	23	<3	36	6.03	.006	4	594	6.66	76	<.01	<3	.88	.01	.06	<2
T1-2	1	9	7	14	8.4	69	5	204	.41	7	<8	<2	<2	5	<.5	<3	<3	2	.06	.001	<1	18	.11	18	<.01	<3	.04	.01	.06	<2
T2-1	1	12	6	51	.4	917	54	838	3.13	441	16	<2	<2	214	<.5	27	3	28	3.15	.005	3	631	8.60	39	<.01	<3	.73	.01	.02	<2
T2-2	1	7	11	46	<.3	237	33	884	.41	31	<8	<2	<2	11	<.5	9	<3	2	.07	<.001	1	17	.15	98	<.01	<3	.06	<.01	.01	<2
T2-3	<1	90	81	437	.5	453	35	1252	4.74	151	9	<2	22	274	2.1	19	<3	73	3.39	.179	37	115	2.89	591	.10	<3	1.89	.04	.66	8
T3-1	1	4	<3	28	<.3	1099	73	875	3.82	242	<8	<2	<2	6	<.5	40	<3	10	.13	.003	<1	483	13.72	33	<.01	<3	.16	<.01	.01	<2
T3-2	1	32	4	65	<.3	1082	68	1102	3.70	364	14	<2	2	557	<.5	16	3	58	4.93	.013	7	1045	8.66	40	.01	<3	1.76	<.01	<.01	<2
T3-3	1	6	4	15	<.3	76	4	116	.65	13	<8	<2	<2	19	<.5	<3	<3	5	.14	.001	2	17	.29	91	<.01	<3	.18	<.01	.06	<2
RE T3-3	1	5	4	15	<.3	74	4	119	.64	15	<8	<2	2	19	<.5	3	<3	6	.13	.002	2	17	.28	92	.01	<3	.18	.01	.06	<2
T4-1	1	13	21	19	<.3	47	6	218	.59	12	<8	<2	<2	24	<.5	4	<3	1	.19	<.001	1	19	.14	29	<.01	<3	.03	.01	.01	<2
T4-2	6	58	68	198	1.4	87	15	349	3.59	127	<8	<2	8	75	1.3	19	<3	27	.74	.042	18	38	.89	270	.01	4	.61	.03	.28	<2
STANDARD DS5	12	139	23	131	.3	23	12	737	2.98	18	<8	<2	3	46	5.5	<3	5	59	.72	.093	12	190	.65	138	.10	16	2.10	.04	.14	5

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK M150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 17 2003 DATE REPORT MAILED: *Nov 27/2003* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ASSAY CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305678

108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt
SI	<1	<.01	<.01	-	<.01
T1-1	275	<.01	.01	-	.01
T1-2	459	<.01	<.01	-	<.01
T2-1	335	<.01	.02	-	.02
T2-2	365	<.01	<.01	-	<.01
T2-3	196	.01	.03	-	.08
T3-1	472	<.01	.02	-	.02
T3-2	180	<.01	.02	-	.02
T3-3	444	<.01	<.01	<.01	<.01
T4-1	293	.01	.01	-	.04
T4-2	372	<.01	.09	-	.09

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY.  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003 DATE REPORT MAILED: *Nov 27/2003* SIGNED BY: *[Signature]* D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305679  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
SI	<1	<1	<3	2	<.3	7	<1	3	.06	<2	<8	<2	<2	3	<.5	<3	<3	<1	.13	.001	1	1	.01	3	<.01	<3	.02	.55	.01	<2
DUN03-01	2	2342	>9999	2484	62.7	22	2	176	.77	112	<8	30	<2	341	19.4	290	<3	5	1.76	.007	3	21	.95	25	<.01	<3	.08	.02	.03	<2
DUN03-02	11	1547	4788	203	78.2	69	5	547	1.90	466	<8	123	2	1215	2.9	455	<3	9	6.13	.014	6	31	3.78	49	<.01	<3	.13	.01	.07	<2
DUN03-03	5	5778	>9999	1531	162.8	17	1	49	.74	50	<8	96	<2	49	17.3	589	5	2	.24	.001	1	21	.14	23	<.01	3	.06	.02	.02	<2
STANDARD D55	12	139	24	131	.3	23	12	748	2.98	17	<8	<2	3	46	5.5	4	6	58	.72	.093	12	190	.65	136	.10	16	2.10	.04	.14	6

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003

DATE REPORT MAILED: Dec 1/03

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Assay recommend for Pb > 5000ppm

(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305679  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	TotAu gm/mt
SI	297	<.01	<.01	<.01
DUN03-01	523	8.88	24.86	41.84
DUN03-02	367	6.16	105.17	121.95
DUN03-03	130	9.39	86.86	159.09

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY.  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003 DATE REPORT MAILED: *Dec 1/03* SIGNED BY: *C.L.* .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ASSAY CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305679  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	S.Wt gm	NAg mg	-Ag gm/mt	TotAg gm/mt
SI	297	.01	<.3	<.3
DUN03-01	523	1.56	58.7	61.7
DUN03-02	367	<.01	76.0	76.0
DUN03-03	130	2.42	162.8	181.4

-AG : -150 AG BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAG: AG DUPLICATED FROM -150 MESH. NAG - NATIVE SILVER, TOTAL SAMPLE FIRE ASSAY.  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003 DATE REPORT MAILED: *Dec 1/03* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE



**Aurora Geosciences Ltd. PROJECT Dunvegan File # A305679**  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	S.Wt gm	NPd mg	-Pd gm/mt	TotPd gm/mt
SI	297	<.01	<.01	.01
DUN03-01	523	<.01	<.01	<.01
DUN03-02	367	<.01	.03	.03
DUN03-03	130	<.01	.03	.03

-PD : -150 PD BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPPD: PD DUPLICATED FROM -150 MESH. NPD - NATIVE PD, TOTAL SAMPLE FIRE ASSAY.  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003

DATE REPORT MAILED: Dec 1/03

SIGNED BY: *C.L.* D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ASSAY CERTIFICATE



Aurora Geosciences Ltd. PROJECT Dunvegan File # A305679  
 108 Gold Road, Whitehorse YT Y1A 2W3 Submitted by: Scott Casselman

SAMPLE#	S.Wt gm	NPt mg	-Pt gm/mt	TotPt gm/mt
SI	297	<.01	.01	.01
DUN03-01	523	<.01	.01	.01
DUN03-02	367	<.01	.02	.02
DUN03-03	130	<.01	.01	.01

-PT : -150 PT BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPPT: PT DUPLICATED FROM -150 MESH. NPT - NATIVE PT, TOTAL SAMPLE FIRE ASSAY.  
 - SAMPLE TYPE: ROCK M150 60C

DATE RECEIVED: NOV 17 2003 DATE REPORT MAILED: *Dec 1/03* SIGNED BY: *C. Leong* D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

**APPENDIX III**

**ROCK and TRENCH SAMPLE DESCRIPTIONS**

# TOG PROPERTY TRENCH and ROCK SAMPLE DESCRIPTIONS

Sample	Type	Width (m)	Description
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## TRENCH T1

T1-1	Trench chip	1.0	Intensely altered ultramafic, hangingwall to massive quartz vein. Weathers orange-brown. On fresh surface is dark green and serpentinized. Listhwanite altered with abundant orange colored carbonate stringers. Rock is friable and difficult to break a fresh surface. No sulphides evident, occasional wispy quartz vein to 0.5 cm wide (no sulphide in vein). Lower contact with quartz vein is sheared.
T1-2	Trench chip	1.0	Bull white quartz vein with occasional grey, translucent patches and lenses of black graphitic material. Quite fractured and crackly with no sulphides evident. Occasional micro-fracture with mariposite. Not able to expose bottom contact of vein due to frozen talus.

## TRENCH T2

T2-1	Trench chip	0.8	Serpentinized ultramafic volcanic rock (similar to sample T1-1). Strongly sheared at contact with vein and contains 5% quartz veinlets in foliation plane. Intense listhwanite alteration and no sulphides.
T2-2	Trench chip	1.2	Bull white quartz vein as in sample T1-2. Contains 1 to 2 % graphitic lenses and occasional bleb of ultramafic included. Traces of pyrite towards lower contact (<1%).
T2-3	Trench chip	0.4	Fine grained to aphanitic mafic to ultramafic dyke. Contact with quartz vein is altered for 5 cm to orange-brown color. Weathers orange-brown; light grey-green on fresh surface. Rock is fairly competent and not sheared. Contains up to 3% quartz veinlets and no sulphides. Unable to expose the bottom contact of the dyke due to frozen muck pile, but dyke appears to parallel the quartz vein.

## TRENCH T3

T3-1	Trench chip	1.0	Altered ultramafic volcanic hangingwall rock. Becomes more sheared close to quartz vein. Rock is light green color with abundant mariposite in matrix (listhwanite alteration). Contains rare quartz stringer veins as their concentration drops-off away from main quartz vein. 5-10% chlorite spots and no sulphides.
T3-2	Trench chip	0.7	Altered ultramafic volcanic near the massive quartz vein (same as samples T1-1 and T2-1). Intensely sheared and altered with 3% quartz veins. Rock is dark green to black and contains no sulphides.
T3-3	Trench chip	1.1	Bull white quartz vein with 5 to 10% black graphitic and chlorite patches and 3-5% mariposite on fracture surfaces. Contains no sulphides. Unable to expose the bottom contact due to frozen ground.

## TRENCH T4

T4-1	Trench chip	0.9	Bull white quartz vein with 3% black graphitic/chloritic lenses. Fairly fractured and crackly. Has sharp lower contact; upper contact is irregular due to slight faulting and folding. Contains no sulphides.
T4-2	Trench chip	1.3	Ultramafic dyke. Contact parallels the orientation of the quartz vein. Dyke is fairly sheared, due to local faulting and folding and contains 2-3% quartz veining. Weathers brown-orange and is dark green on fresh surface. Contains no sulphides.

## GRAB SAMPLES

DUN03-01	grab		Grab sample of blasted material in pit. Believed to have come from footwall to quartz vein. Altered mafic volcanic with vuggy, white, quartz-calcite veinlets. Minor iron oxide staining in quartz. Mafic rock is chlorite altered. Rare spec of visible gold in the quartz veinlets - at margins of veinlet. Sample comprised of 85% quartz-calcite vein material and 15% chloritized mafic volcanic.
DUN03-02	grab		Grab sample of blasted material in pit. Believed to have come from footwall to quartz vein. Sample is 10x10x3 cm. Quartz-calcite vein in altered mafic rock. Spec of visible gold at contact of vein. Minor iron oxide staining in quartz. Very little sulphides visible.
DUN03-03	grab		Grab sample of blasted material in pit. Similar to sample DUN03-01 and 02. Mostly quartz stringer material with minor calcite in an altered ultramafic host. Volcanic rock contains some graphite. Spec of visible gold on the margin of the quartz-calcite veinlet.

**APPENDIX IV**  
**TRENCH PHOTOGRAPHS**

# TRENCH T1

Ultramafic Volcanic

Quartz Vein

blasted material

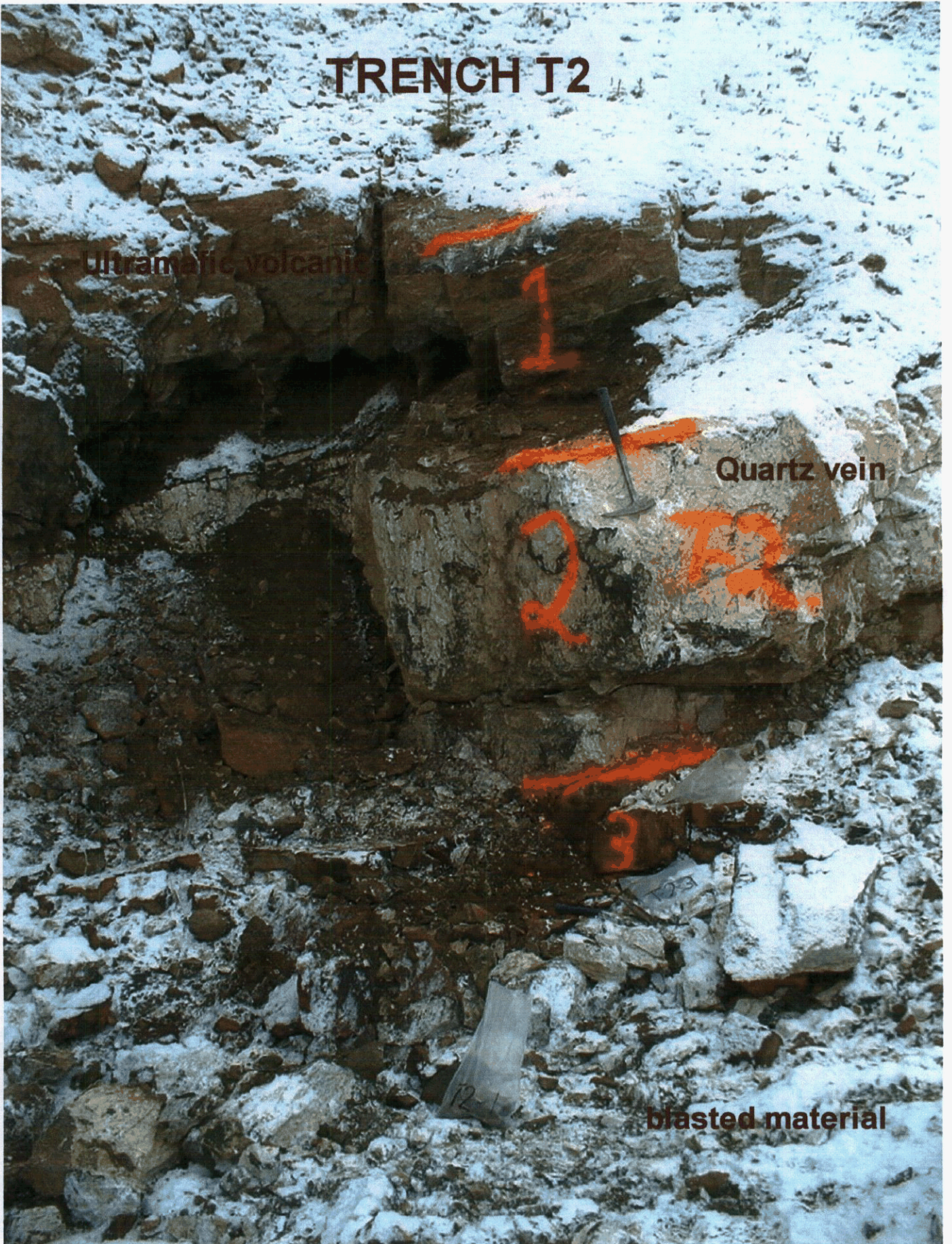


# TRENCH T2

Ultramafic volcanic

Quartz vein

blasted material





TRENCH T3

Ultramafic volcanic

Quartz vein

Blasted material

YUKON ENERGY MINES  
& RESOURCES LIBRARY  
P.O. BOX 2073  
WHITEHORSE, YUKON Y1A 2G6

# TRENCH T4

ultramafic volcanic

quartz vein

mafic dyke



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