

**National Instrument 43-101 Report on  
the Mount Nansen Property and the Tawa Property,  
Whitehorse Mining District, Yukon Territory  
for Guinness Exploration, Inc.**

Prepared by:

Robert S. Middleton P. Eng

November 27, 2009

Vancouver, Canada

## TABLE OF CONTENTS

<b>1</b>	<b>Summary .....</b>	<b>1</b>
<b>2</b>	<b>Introduction .....</b>	<b>2</b>
<b>3</b>	<b>Reliance on Other Experts .....</b>	<b>3</b>
<b>4</b>	<b>Property Description and Location.....</b>	<b>3</b>
<b>5</b>	<b>Accessibility, Climate, Local Resources, Infrastructure and Physiography.....</b>	<b>12</b>
<b>6</b>	<b>History.....</b>	<b>14</b>
6.1	Exploration History of the Mount Nansen Property AREA .....	14
6.2	Exploration history on the Tawa Property .....	15
<b>7</b>	<b>Geological Setting.....</b>	<b>16</b>
7.1	Regional Geology .....	16
7.2	Geology of the Mount Nansen Property .....	20
7.3	Geology of the Tawa Property .....	20
<b>8</b>	<b>Deposit Types .....</b>	<b>21</b>
<b>9</b>	<b>Mineralization .....</b>	<b>22</b>
9.1	Mineralization Description .....	22
9.2	Mineralized Zones in the Mount Nansen Property .....	23
9.2.1	Brown-McDade zone .....	23
9.2.2	Webber zone .....	23
9.2.3	Huestis zone .....	24
9.2.4	Flex zone .....	24
9.2.5	Other zones .....	25
9.3	Mineralized Zones in the Tawa Property .....	34
<b>10</b>	<b>Exploration .....</b>	<b>36</b>
10.1	Survey Specifications and Instruments .....	36

10.2	Interpretation of Geophysical Data .....	36
<b>11</b>	<b>Statement of Costs .....</b>	<b>40</b>
<b>12</b>	<b>Drilling.....</b>	<b>41</b>
<b>13</b>	<b>Sampling Method and Approach .....</b>	<b>41</b>
<b>14</b>	<b>Sample Preparation, Analyses and Security .....</b>	<b>41</b>
<b>15</b>	<b>Data Verification .....</b>	<b>41</b>
<b>16</b>	<b>Adjacent Properties .....</b>	<b>42</b>
<b>17</b>	<b>Mineral Processing and Metallurgical Testing.....</b>	<b>43</b>
<b>18</b>	<b>Mineral Resource and Mineral Reserve Estimates .....</b>	<b>46</b>
18.1	Introduction.....	46
18.2	Definition and Disclaimer.....	46
18.3	Historical Resource/Reserve Estimates on Brown-McDade, Webber, Huestis, and Flex deposits 47	
18.4	Brown-McDade Deposit .....	47
18.5	Webber deposit .....	49
18.6	Huestis deposit .....	50
18.7	Flex deposit.....	51
18.8	Other potential deposits .....	51
18.9	Summary .....	51
18.10	Other Relevant Data and Information.....	52
<b>19</b>	<b>Recommendations.....</b>	<b>53</b>
19.1	Ground IP-resistivity survey and VLF-EM survey.....	53
19.2	Exploration to depth.....	53
19.3	Untested anomalies .....	53
19.4	Understand metallurgy for sulphide ores .....	53

19.5	Historical data .....	53
<b>20</b>	<b>References.....</b>	<b>54</b>
<b>21</b>	<b>Certificate of Authorship.....</b>	<b>57</b>

## LIST OF TABLES

Table 1: Claim list for Mount Nansen property and Tawa property.....	5
Table 2: Coordinate of the corners of the Mount Nansen claim block (Unknown author, 2008).....	8
Table 3 Vein Ore Shoots Huestis and Webber Deposits (Stoshein, 2007b).....	26
Table 4 Summary Diamond Drill Hole Assays, Flex Zone, 1998 (Stoshein, 2007b).....	27
Table 5: Cost of the geophysical survey conducted by Geotech Ltd for Eagle Trail Properties Inc.in 2008. .....	40
Table 6: Mineral processing test in Mount Nansen property (Rodger, 1995).....	43
Table 7: Brown-McDade underground geological resource (Denholm et al, 2000).....	48
Table 8: Brown-McDade geological reserve calculated by various staff engineers and consultants before Denholm et al (2000). .....	48
Table 9: Webber geological resource (Denholm et al, 2000). .....	49
Table 10: Webber geological reserve calculated by various staff engineers and consultants before Denholm et al (2000). .....	49
Table 11: Huestis geological resource (Denholm et al, 2000). .....	50
Table 12: Huestis geological reserve calculated by various staff engineers and consultants before Denholm et al (2000). .....	50
Table 13: Flex geological resource (Campbell, 1994). .....	51
Table 14: Summary of Mount Nansen geological resources (Denholm et al, 2000). .....	52
Table 15: Summary of Mount Nansen potential mineral resources (Unknown author, 2008).....	52

## LIST OF FIGURES

Figure 1: Location of the Mount Nansen property and the Tawa property (modified from Denholm et al, 2000). .....	9
Figure 2: Road access in the Mount Nansen and Tawa properties (modified from Eaton and Archer, 1989 and Stroshein, 2007a). .....	10
Figure 3: Mount Nansen property and Tawa property on Claim Blocks. Red lines represent claim boundaries. Cyan square represents the boundary of the geophysical survey area. ....	11

Figure 4: Glaciation, Dawson Range, Yukon Territory. .... 13

Figure 5: Schematic map of tectonic terranes in Yukon Territory (modified from Carlson, 1987). .... 17

Figure 6: Regional geology in the Mount Nansen area (modified from Saunders, 1980). .... 18

Figure 7: Geology of the Mount Nansen area. Yellow lines represent the rough location of the core claim, which was withdrawn by DIAND..... 19

Figure 8: Simplified geology map of the Brown-McDade mine (modified from Stroshein, 2007 a). Note the two types of mineralized bodies (vein and breccias). .... 28

Figure 9: Plan view of the exploration work conducted around 1997 in Webber-Flex-Huestis vein systems (Anderson and Stroshein, 1998). .... 29

Figure 10: Webber deposit 4260 level plan map (Denholm et al, 2000)..... 30

Figure 11: Huestis deposit 4300 level plan (Denholm et al, 2000). .... 31

Figure 12: Plan view of the Flex vein system as exposed at surface. The four veins dip steeply west (Anderson and Stroshein, 1998). .... 32

Figure 13: Multi-element anomalies in the Mount Nansen property outlined during the soil geochemical survey conducted by BYG Natural Resources Ltd in 1985-1986 (modified from Denholm et al, 2000)..... 33

Figure 14: Map showing the relative locations of known mineralized zones with soil geochemical anomalies and geophysical anomalies outlined in the 1985-1988 exploration program by BYG Natural Resources Inc (Modified from Wall and Eaton, 1988). .... 35

Figure 15: Geology and the late time response of the 2008 geophysical survey in the Mount Nansen area. .... 37

Figure 16: Geology and the early time response of the 2008 geophysical survey in the Mount Nansen area. .... 38

Figure 17: Geology and the magnetic anomaly in the Mount Nansen area..... 39

Figure 18: Locations of Mount Nansen and Tawa properties and adjacent active properties. Aurchem represents Aurchem Exploration Ltd. Archer-Cathro represents Archer, Cathro & Associates Ltd. Martin Paquette, Shawn Ryan, Roger Hulstein, Frank Cochrane and Bill Trerice are names of individuals who own the claims. .... 42

Figure 19: Classification schemes for resources/reserves. Note that economic, mining, metallurgical, marketing, environmental, social, and governmental factors may cause material to move between resources and reserves. .... 47

## **1 SUMMARY**

Guinness Exploration, Inc. has contracted to acquire the Mt Nansen Property as herein defined, from Eagle Trail Properties Inc. (“ETP”). Eagle Trail Properties Inc. commissioned Robert S. Middleton, P. Eng, to review the Mount Nansen property and Tawa property located in Yukon Territory. The primary objectives of this report are to provide Guinness Exploration, Inc. with an independent summary and review of the previous and present exploration on the properties and to review and assess the potential for the property to host economic silver/gold/moly/copper mineralization.

Eagle Trail Properties Inc. initially acquired the properties from Price Waterhouse Coppers (“PWC”) in two transactions between 2007 and 2008 for total consideration of \$3.2 million dollars. In addition, Eagle Trail Properties Inc. entered into an option with PWC to acquire the Dome 12 claim block in consideration of the sum of \$25,000 expiring 2018. On November 19, 2009, Guinness Exploration, Inc. (“Guinness”) entered into an agreement to acquire up to a 100 % of ETP’s interest in the Mount Nansen and Tawa properties and to the option agreement on the Dome 12 block.

The Mount Nansen property and Tawa property consist of 203 full or fractional claims with a total area of 3692.75 hectare located in the Mount Nansen area of Yukon. Geographically, the properties are situated approximately 180 km northwest of Whitehorse and 60 km west of Carmacks in the Yukon Territory. Topographically, the properties have an average elevation of ~1,200 m with rolling hills broken up with broad stream valleys. Geologically, the Mount Nansen District is in the Dawson Range of the Yukon Tanana Terrane. The properties are mild and dry.

A large amount of historical exploration, mine development and operation were carried out in the properties. Two types of mineralization were identified: porphyry copper-molybdenum mineralization and vein style precious metal mineralization. The porphyry copper-molybdenum mineralization is mainly associated with the quartz feldspar porphyry intrusion in the north end of the Mount Nansen property and was explored mainly in 1970s by Cyprus Group and in 1990s by BYG Natural Resources Ltd. Existence of porphyry type copper/molybdenum mineralization was confirmed but no significant copper/molybdenum values of economic importance were encountered. The vein style precious metal mineralization has been the focus of the historical exploration and mining. Four zones (Brown-McDade, Webber, Huestis, and Flex) were discovered containing the vein style precious metal deposit. Precious metal veins on the surface and underground were mined in Brown-McDade and Huestis deposits by various operators including Pesco Silver Minerals Ltd and BYG Natural Resources Ltd. Low recoveries of gold were encountered due to the association of gold with sulphides and the high clay content of the ore. The refractory nature of the gold was not fully understood by historical operators. The author provided a review of the historical mineral processing and metallurgical test work conducted on the Mount Nansen property in Section 16.

The author reviewed the results of previously published resource/reserve estimates on the properties (Section 17). These historical estimates are not compliant with the NI 43-101 standard. The author is not treating the estimate as a current NI 43-101 defined resource and the historical estimate should not be relied upon. However, given both the historical mining and the

recent mining operation by BYG Natural Resources Ltd, the property has demonstrated that it has hosted economically viable mineralization in the past.

In 2008, a geophysical survey was conducted covering both Mount Nansen property and Tawa property with the aim of locating and evaluating the extent and nature of the mineralization in the district. Results show that the Mount Nansen porphyry is associated with a magnetic high, a large syenite mass occupying the northeast part of the survey is associated with a moderate magnetic high and localized magnetic highs, and a series of porphyry bodies trending northwest through the Brown-McDade mine area are associated with a series of northwest trending magnetic highs.

Based on results of the geophysical survey, voluminous technical data from the years of exploration, mine development and operation that are available for Mount Nansen property and Tawa property and on the writer's examination of the properties, the author concludes that Mount Nansen property and Tawa property have exploration potential.

All the data on activities on the properties before 2008 were provided by Eagle Trail Properties Inc.

## **2 INTRODUCTION**

Eagle Trail Properties Inc. has commissioned Robert Middleton to conduct a technical review of the Mount Nansen property and the Tawa property in the Whitehorse Mining Division, British Columbia, Canada, and prepare a National Instrument 43-101 ("NI 43-101") compliant report.

Subsequently, Guinness Exploration, Inc. ("Guinness") entered into an agreement to acquire up to a 100 % of Eagle Trail Properties Inc's interest in the Mount Nansen and Tawa properties and in the option agreement on the Dome 12 block as described in section 4 of this report.

The qualified person responsible for the preparation of this report is Mr. Robert Middleton, P. Eng (Geophysicist).

Technical information on the Mount Nansen property and the Tawa property was provided by Eagle Trail Properties Inc.

The Mount Nansen property and the Tawa property are located approximately 180 km northwest of Whitehorse and 60 km west of Carmacks in the Yukon Territory (Figure 1). Geological, the Mount Nansen District is situated in the Dawson Range of the Yukon Crystalline Terrane (Figure 5). The area is underlain by Early Mississippian metamorphic rocks and was subjected to volcanic and plutonic activities in the Mesozoic age.

The properties lie in a historic gold/silver mining district. Intense exploration activities have been carried out since 1899 in the area. Four distinct gold and silver mineralized zones (the Brown-McDade zone, the Webber zone, the Huestis zone, and the Flex zone) were identified. Estimated historical production totaled 145,330 g silver, 2,767,000 g gold and 19,459,113 g lead. The last operator on the properties was BYG Natural Resources Ltd. Low gold recovery was always major factor hindering the production.

Eagle Trail Properties Inc. performed an airborne VTEM-Magnetic geophysical survey on the property in 2008. To date, besides the geophysical survey, Eagle Trail Properties Inc. has been conducting a comprehensive review of the results of the geophysical survey and all the available data and then plan an exploration program.

### **3 RELIANCE ON OTHER EXPERTS**

The author has reviewed and analyzed data provided by Eagle Trail Properties Inc., the present owner of the property, and has drawn its own conclusions therefrom, augmented by its direct field examination. The author has not carried out any independent exploration work, drilled any holes or carried out any extensive program of sampling and assaying on the property.

The descriptions of geology, mineralization, exploration, mineral resource estimation methodology, mineral processing and metallurgy used in this report are based on reports prepared by various companies or their contracted consultants provided to the author by Eagle Trail Properties Inc. The conclusions of this report reply on results of the geophysical survey conducted by Eagle Trail Properties Inc. in 2008 and the project data from previous operators for the property.

### **4 PROPERTY DESCRIPTION AND LOCATION**

The Mount Nansen property and the Tawa property are located in the Whitehorse Mining District on NTS map sheet 105I-03 (Figures 1 and 3). The main claim block is highly irregular (Figure 3). The complete claim group includes 203 full or fractional quartz mineral claims (Table 1). Total size of the claim group is 3692.75 hectare.

Most of the claims are contiguous except for the two medium size non-contiguous blocks that are called Tawa property (Figure 3). The reason for the break up was due to BYG Natural Resources Ltd allowing the Klaza block, which is between the two Tawa blocks, to lapse. Klaza block was acquired by Archer-Cathro consulting geologist group (Figure 13).

The central block of the contiguous claims, Mount Nansen Property (Figure 3), is some 185 km NNW of Whitehorse. The Mount Nansen claim group measure 8.7 km in the NS direction and 5.1 km in the EW direction. The approximate geographical location of the Mount Nansen claim block is shown in Table 2.

All of the above claims (the “Mineral Claims”) are 100% owned by Eagle Trail Properties Inc.

Guinness Explorations, Inc., a Nevada Corporation, has entered into a Mineral Claim Purchase and Sale Agreement, dated November 13, 2009, (the “Agreement”) with Eagle Trail Properties Inc.(the “Vendor”). Subject to the terms of the Agreement, Guinness Explorations, Inc. will acquire a 65% interest in the Mineral Claims and an option to purchase the “Dome Claim”(the “Dome Option”), all of which claims are subject to a 3% net smelter return (NSR) in favor of the Vendor. In return for this interest, the Vendor will receive CAD \$1,000,000 in cash plus 60,000,000 shares of Guinness Explorations, Inc. at a deemed price of U.S. \$0.00103.

In addition, Guinness Explorations, Inc. also entered into a Mineral Claim Option Agreement, dated November 13, 2009 (the “Option Agreement”) with Eagle Trail Properties Inc., pursuant to which Guinness Exploration, Ltd. has the option to purchase the remaining 35% interest in the Mineral Claims and in the Dome Option by expending \$2,000,000 on the Mineral Claims and the Dome Claim by October 31, 2011

It is understood that the operation closure of BYG Natural Resources Ltd in Mount Nansen property was due to the environmental problem with high levels of cyanide and arsenic. Therefore, it is highly suspected that any exploration/mining activity in the Mount Nansen property and Tawa property would be subject to some intense scrutiny by Yukon Water Board, their consultants and the Little Salmon First Nation Officials. The Yukon Water Board will play a major part in the permitting of any revived activity.

**Table 1: Claim list for Mount Nansen property and Tawa property.**

Claim	Claim Owner	Grant Number	Expiry Date	Area (Ha)	Comments
ROSE	Eagle Trail Properties Inc.	04241	09/10/2019	20.42	Lease
GOLDEN					
EAGLE	Eagle Trail Properties Inc.	04278	09/10/2019	20.96	Lease
WAR EAGLE	Eagle Trail Properties Inc.	04279	09/10/2019	20.77	Lease
SHAMROCK	Eagle Trail Properties Inc.	04354	09/10/2019	20.73	Lease
SPOT	Eagle Trail Properties Inc.	04361	09/10/2019	19.92	Lease
ARLEP	Eagle Trail Properties Inc.	04368	09/10/2019	14.48	Lease
PHYLLIS	Eagle Trail Properties Inc.	04369	09/10/2019	20.26	Lease
RUB	Eagle Trail Properties Inc.	55633	09/10/2019	1.84	Lease
PUB	Eagle Trail Properties Inc.	55663	09/10/2019	1.93	Lease
SUN DOG	Eagle Trail Properties Inc.	55665	09/10/2019	3.20	Lease
CUB	Eagle Trail Properties Inc.	55666	09/10/2019	1.29	Lease
JAM	Eagle Trail Properties Inc.	55890	09/10/2019	11.64	Lease
PAM	Eagle Trail Properties Inc.	55892	09/10/2019	2.64	Lease
DOME 1	Eagle Trail Properties Inc.	73537	06/02/2014	15.10	-
DOME 2	Eagle Trail Properties Inc.	73538	06/02/2014	15.51	-
DOME 3	Eagle Trail Properties Inc.	73539	06/02/2014	17.29	-
DOME 4	Eagle Trail Properties Inc.	73540	06/02/2014	17.98	-
DOME 6	Eagle Trail Properties Inc.	73542	06/02/2014	17.32	-
DOME 7	Eagle Trail Properties Inc.	73543	06/02/2014	25.34	-
DOME 8	Eagle Trail Properties Inc.	73694	06/02/2014	12.47	-
DOME 14	Eagle Trail Properties Inc.	73700	06/02/2014	21.07	-
DOME 16	Eagle Trail Properties Inc.	73702	06/02/2014	20.61	-
DOME 17	Eagle Trail Properties Inc.	73703	06/02/2014	18.41	-
DOME 18	Eagle Trail Properties Inc.	73704	06/02/2014	18.56	-
DOME 19	Eagle Trail Properties Inc.	73705	06/02/2014	16.73	-
DOME 20	Eagle Trail Properties Inc.	73706	06/02/2014	13.42	-
JOANNE 1	Eagle Trail Properties Inc.	74283	06/02/2014	19.79	-
JOANNE 2	Eagle Trail Properties Inc.	74284	06/02/2014	19.51	-
JOANNE 3	Eagle Trail Properties Inc.	74285	06/02/2014	20.36	-
JOANNE 4	Eagle Trail Properties Inc.	74286	06/02/2014	14.78	-
JOANNE 5	Eagle Trail Properties Inc.	74287	06/02/2014	19.83	-
JOANNE 6	Eagle Trail Properties Inc.	74288	06/02/2014	19.69	-
DOME 25	Eagle Trail Properties Inc.	77746	06/02/2014	15.19	-
DOME 26	Eagle Trail Properties Inc.	77747	06/02/2014	22.54	-
DOME 27	Eagle Trail Properties Inc.	77748	06/02/2014	20.32	-
DOME 28	Eagle Trail Properties Inc.	77749	06/02/2014	21.74	-
DOME 33	Eagle Trail Properties Inc.	77754	06/02/2014	25.50	-
DOME 34	Eagle Trail Properties Inc.	77755	06/02/2014	23.29	-
DOME 35	Eagle Trail Properties Inc.	77756	06/02/2014	22.39	-
DOME 36	Eagle Trail Properties Inc.	77757	06/02/2014	23.97	-
DOME 37	Eagle Trail Properties Inc.	77758	06/02/2014	14.23	-
DOME 38	Eagle Trail Properties Inc.	77759	06/02/2014	18.48	-
DOME 39	Eagle Trail Properties Inc.	77760	06/02/2014	14.95	-
DOME 40	Eagle Trail Properties Inc.	77761	06/02/2014	20.51	-
DOME 41	Eagle Trail Properties Inc.	77762	06/02/2014	20.76	-
DOME 42	Eagle Trail Properties Inc.	77763	06/02/2014	19.93	-

DOME 43	Eagle Trail Properties Inc.	77764	06/02/2014	20.47	-
DOME 49	Eagle Trail Properties Inc.	77770	06/02/2014	8.18	-
DOME 50	Eagle Trail Properties Inc.	77771	06/02/2014	18.83	-
DOME 51	Eagle Trail Properties Inc.	77772	06/02/2014	19.05	-
DOME 52	Eagle Trail Properties Inc.	77773	06/02/2014	21.85	-
DOME 53	Eagle Trail Properties Inc.	77774	06/02/2014	22.80	-
DOME 54	Eagle Trail Properties Inc.	77775	06/02/2014	14.69	-
DOME 55	Eagle Trail Properties Inc.	77776	06/02/2014	13.09	-
DOME 56	Eagle Trail Properties Inc.	77777	06/02/2014	13.35	-
DOME 57	Eagle Trail Properties Inc.	77778	06/02/2014	20.47	-
DOME 58	Eagle Trail Properties Inc.	77779	06/02/2014	19.41	-
DOME 60	Eagle Trail Properties Inc.	77781	06/02/2014	20.06	-
DOME 61	Eagle Trail Properties Inc.	77782	06/02/2014	18.91	-
DOME 63	Eagle Trail Properties Inc.	77784	06/02/2014	22.51	-
DOME 64	Eagle Trail Properties Inc.	77785	06/02/2014	22.88	-
DOME 65	Eagle Trail Properties Inc.	77786	06/02/2014	20.66	-
DOME 66	Eagle Trail Properties Inc.	77787	06/02/2014	21.18	-
DOME 78	Eagle Trail Properties Inc.	81842	06/02/2014	25.41	-
DOME 79	Eagle Trail Properties Inc.	81843	06/02/2014	24.10	-
DOME 80	Eagle Trail Properties Inc.	81844	06/02/2014	24.20	-
DOME 81	Eagle Trail Properties Inc.	81845	06/02/2014	22.52	-
DOME 82	Eagle Trail Properties Inc.	81846	06/02/2014	23.26	-
DOME 83	Eagle Trail Properties Inc.	81847	06/02/2014	18.72	-
DOME 84	Eagle Trail Properties Inc.	81848	06/02/2014	19.37	-
DOME 86	Eagle Trail Properties Inc.	81850	06/02/2014	20.76	-
HIW 9	Eagle Trail Properties Inc.	YA23835	06/02/2014	19.44	-
HIW 10	Eagle Trail Properties Inc.	YA23836	06/02/2014	20.83	Fractions
HIW 11	Eagle Trail Properties Inc.	YA23837	06/02/2014	21.55	Fractions
HIW 12	Eagle Trail Properties Inc.	YA23838	06/02/2014	19.93	Fractions
HIW 13	Eagle Trail Properties Inc.	YA23839	06/02/2014	20.72	-
HIW 14	Eagle Trail Properties Inc.	YA23840	06/02/2014	19.55	-
HIW 15	Eagle Trail Properties Inc.	YA23841	06/02/2014	20.15	-
HIW 16	Eagle Trail Properties Inc.	YA23842	06/02/2014	19.86	-
HIW 17	Eagle Trail Properties Inc.	YA23843	06/02/2014	19.92	-
HIW 1	Eagle Trail Properties Inc.	YA24813	06/02/2014	4.74	Fractions
HIW 2	Eagle Trail Properties Inc.	YA24814	06/02/2014	5.15	Fractions
HIW 7	Eagle Trail Properties Inc.	YA24819	06/02/2014	3.01	Fractions
DD 1	Eagle Trail Properties Inc.	YA59596	06/02/2014	20.62	-
DD 2	Eagle Trail Properties Inc.	YA59597	06/02/2014	22.35	-
DD 15	Eagle Trail Properties Inc.	YA59610	06/02/2014	19.20	-
DD 16	Eagle Trail Properties Inc.	YA59611	06/02/2014	19.21	-
DD 17	Eagle Trail Properties Inc.	YA59612	06/02/2014	19.37	-
DD 18	Eagle Trail Properties Inc.	YA59613	06/02/2014	19.85	-
DD 19	Eagle Trail Properties Inc.	YA59614	06/02/2014	20.17	-
DD 20	Eagle Trail Properties Inc.	YA59615	06/02/2014	19.90	-
DD 21	Eagle Trail Properties Inc.	YA59616	06/02/2014	19.64	-
DD 22	Eagle Trail Properties Inc.	YA59617	06/02/2014	19.17	-
DD 23	Eagle Trail Properties Inc.	YA59618	06/02/2014	18.69	-
DD 24	Eagle Trail Properties Inc.	YA59619	06/02/2014	18.30	-
DD 25	Eagle Trail Properties Inc.	YA59620	06/02/2014	18.18	-

DD 26	Eagle Trail Properties Inc.	YA59621	06/02/2014	17.65	-
DD 27	Eagle Trail Properties Inc.	YA59622	06/02/2014	19.49	-
DD 28	Eagle Trail Properties Inc.	YA59623	06/02/2014	18.71	-
TBR 1	Eagle Trail Properties Inc.	YA86690	06/02/2014	8.92	-
TBR 2	Eagle Trail Properties Inc.	YA86691	06/02/2014	20.16	-
TBR 3	Eagle Trail Properties Inc.	YA86692	06/02/2014	20.03	-
TBR 4	Eagle Trail Properties Inc.	YA86693	06/02/2014	20.84	-
TBR 5	Eagle Trail Properties Inc.	YA86694	06/02/2014	18.34	-
TBR 6	Eagle Trail Properties Inc.	YA86695	06/02/2014	20.92	-
TBR 7	Eagle Trail Properties Inc.	YA86696	06/02/2014	15.96	-
TBR 8	Eagle Trail Properties Inc.	YA86697	06/02/2014	21.79	-
ONT 38	Eagle Trail Properties Inc.	YA87204	06/02/2014	20.26	-
ONT 40	Eagle Trail Properties Inc.	YA87206	06/02/2014	18.34	-
ONT 42	Eagle Trail Properties Inc.	YA87208	06/02/2014	5.73	-
EEK 1	Eagle Trail Properties Inc.	YA87210	06/02/2014	21.07	-
EEK 2	Eagle Trail Properties Inc.	YA87211	06/02/2014	20.08	-
EEK 3	Eagle Trail Properties Inc.	YA87212	06/02/2014	20.70	-
EEK 4	Eagle Trail Properties Inc.	YA87213	06/02/2014	20.68	-
EEK 5	Eagle Trail Properties Inc.	YA87214	06/02/2014	20.80	-
EEK 6	Eagle Trail Properties Inc.	YA87215	06/02/2014	19.58	-
EEK 7	Eagle Trail Properties Inc.	YA87216	06/02/2014	19.97	-
EEK 8	Eagle Trail Properties Inc.	YA87217	06/02/2014	21.91	-
EEK 9	Eagle Trail Properties Inc.	YA87218	06/02/2014	22.64	-
EEK 14	Eagle Trail Properties Inc.	YA87223	06/02/2014	21.36	-
EEK 15	Eagle Trail Properties Inc.	YA87224	06/02/2014	21.22	-
EEK 16	Eagle Trail Properties Inc.	YA87225	06/02/2014	21.76	-
EEK 17	Eagle Trail Properties Inc.	YA87226	06/02/2014	20.01	-
EEK 18	Eagle Trail Properties Inc.	YA87227	06/02/2014	20.74	-
ONT 44	Eagle Trail Properties Inc.	YA92655	06/02/2014	16.80	-
ONT 45	Eagle Trail Properties Inc.	YA92656	06/02/2014	12.91	-
ONT 46	Eagle Trail Properties Inc.	YA92657	06/02/2014	18.48	-
ONT 47	Eagle Trail Properties Inc.	YA92658	06/02/2014	14.41	-
TAWA 25	Eagle Trail Properties Inc.	YA95051	03/01/2010	4.33	Fractions
TAWA 26	Eagle Trail Properties Inc.	YA95052	03/01/2010	5.95	Fractions
TAWA 27	Eagle Trail Properties Inc.	YA95151	03/01/2010	17.11	-
TAWA 28	Eagle Trail Properties Inc.	YA95152	03/01/2010	22.34	-
TAWA 29	Eagle Trail Properties Inc.	YA95153	03/01/2010	16.14	-
TAWA 30	Eagle Trail Properties Inc.	YA95154	03/01/2010	20.77	-
TAWA 31	Eagle Trail Properties Inc.	YA95155	03/01/2010	23.90	-
TAWA 32	Eagle Trail Properties Inc.	YA95156	03/01/2010	21.36	-
TAWA 33	Eagle Trail Properties Inc.	YA95157	03/01/2010	12.16	-
TAWA 34	Eagle Trail Properties Inc.	YA95158	03/01/2010	18.45	-
TAWA 47	Eagle Trail Properties Inc.	YA95163	03/01/2010	7.01	-
TAWA 48	Eagle Trail Properties Inc.	YA95164	03/01/2010	8.00	-
TAWA 49	Eagle Trail Properties Inc.	YA95165	03/01/2010	21.93	-
TAWA 50	Eagle Trail Properties Inc.	YA95166	03/01/2010	23.59	-
TAWA 51	Eagle Trail Properties Inc.	YA95167	03/01/2010	23.22	-
TAWA 52	Eagle Trail Properties Inc.	YA95168	03/01/2010	23.93	-
TAWA 53	Eagle Trail Properties Inc.	YA95169	03/01/2010	15.03	-
TAWA 54	Eagle Trail Properties Inc.	YA95170	03/01/2010	22.93	-

TAWA 55	Eagle Trail Properties Inc.	YA95171	03/01/2010	5.90	-
TAWA 56	Eagle Trail Properties Inc.	YA95172	03/01/2010	13.37	-
TAWA 57	Eagle Trail Properties Inc.	YA95173	03/01/2010	14.12	-
TAWA 58	Eagle Trail Properties Inc.	YA95174	03/01/2010	16.15	-
TAWA 59	Eagle Trail Properties Inc.	YA95175	03/01/2010	13.35	-
TAWA 60	Eagle Trail Properties Inc.	YA95176	03/01/2010	16.19	-
TAWA 61	Eagle Trail Properties Inc.	YA95177	03/01/2010	12.44	-
TAWA 62	Eagle Trail Properties Inc.	YA95178	03/01/2010	11.28	-
TAWA 63	Eagle Trail Properties Inc.	YA95179	03/01/2010	8.41	-
TAWA 64	Eagle Trail Properties Inc.	YA95301	03/01/2010	18.96	-
TAWA 65	Eagle Trail Properties Inc.	YA95302	03/01/2010	15.20	-
TAWA 66	Eagle Trail Properties Inc.	YA95303	03/01/2010	21.82	-
TAWA 67	Eagle Trail Properties Inc.	YA95304	03/01/2010	22.03	-
TAWA 68	Eagle Trail Properties Inc.	YA95305	03/01/2010	20.61	-
TAWA 69	Eagle Trail Properties Inc.	YA95306	03/01/2010	19.68	-
TAWA 70	Eagle Trail Properties Inc.	YA95307	03/01/2010	19.61	-
TAWA 71	Eagle Trail Properties Inc.	YA95308	03/01/2010	18.94	-
TAWA 72	Eagle Trail Properties Inc.	YB06963	03/01/2010	19.15	-
TAWA 73	Eagle Trail Properties Inc.	YB06964	03/01/2010	18.69	-
TAWA 74	Eagle Trail Properties Inc.	YB06965	03/01/2010	19.02	-
TAWA 75	Eagle Trail Properties Inc.	YB06966	03/01/2010	18.61	-
TAWA 83	Eagle Trail Properties Inc.	YB06971	03/01/2010	19.28	-
TAWA 84	Eagle Trail Properties Inc.	YB06972	03/01/2010	6.48	-
TAWA 85	Eagle Trail Properties Inc.	YB06973	03/01/2010	20.10	-
TAWA 86	Eagle Trail Properties Inc.	YB06974	03/01/2010	21.08	-
TAWA 87	Eagle Trail Properties Inc.	YB06975	03/01/2010	19.83	-
TAWA 88	Eagle Trail Properties Inc.	YB06976	03/01/2010	20.96	-
TAWA 89	Eagle Trail Properties Inc.	YB06977	03/01/2010	19.91	-
TAWA 90	Eagle Trail Properties Inc.	YB06978	03/01/2010	20.97	-
<b>Total</b>				<b>3136.43</b>	

**Table 2: Coordinate of the corners of the Mount Nansen claim block (Unknown author, 2008).**

<b>Corner</b>	<b>N-S</b>	<b>E-W</b>
NW	62°06.0' N	137°12.0' W
NE	62°05.5' N	137°05.8' W
SE	62°01.2' N	137°05.3' W
SW	62°02.4' N	137°11.7' W

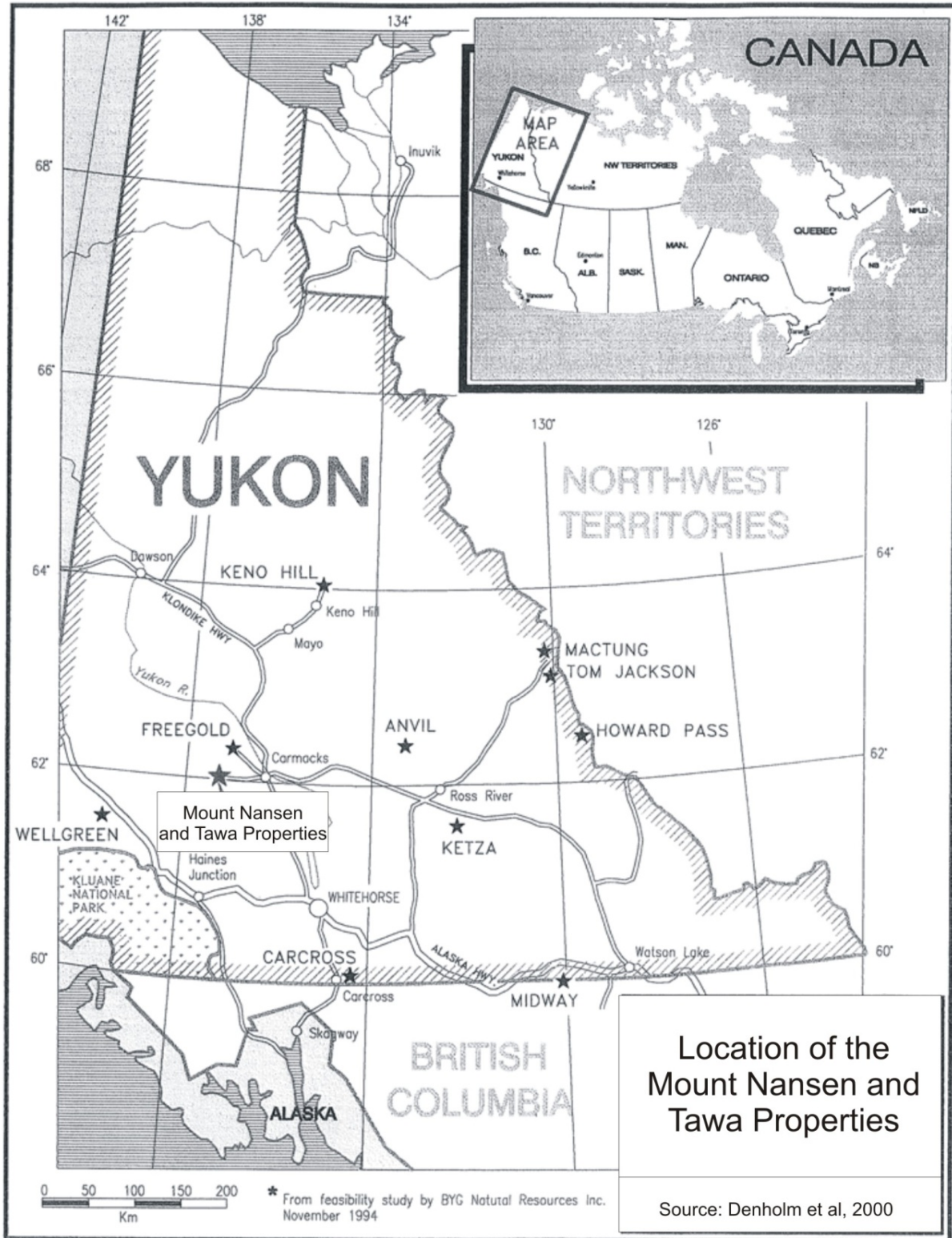


Figure 1: Location of the Mount Nansen property and the Tawa property (modified from Denholm et al, 2000).

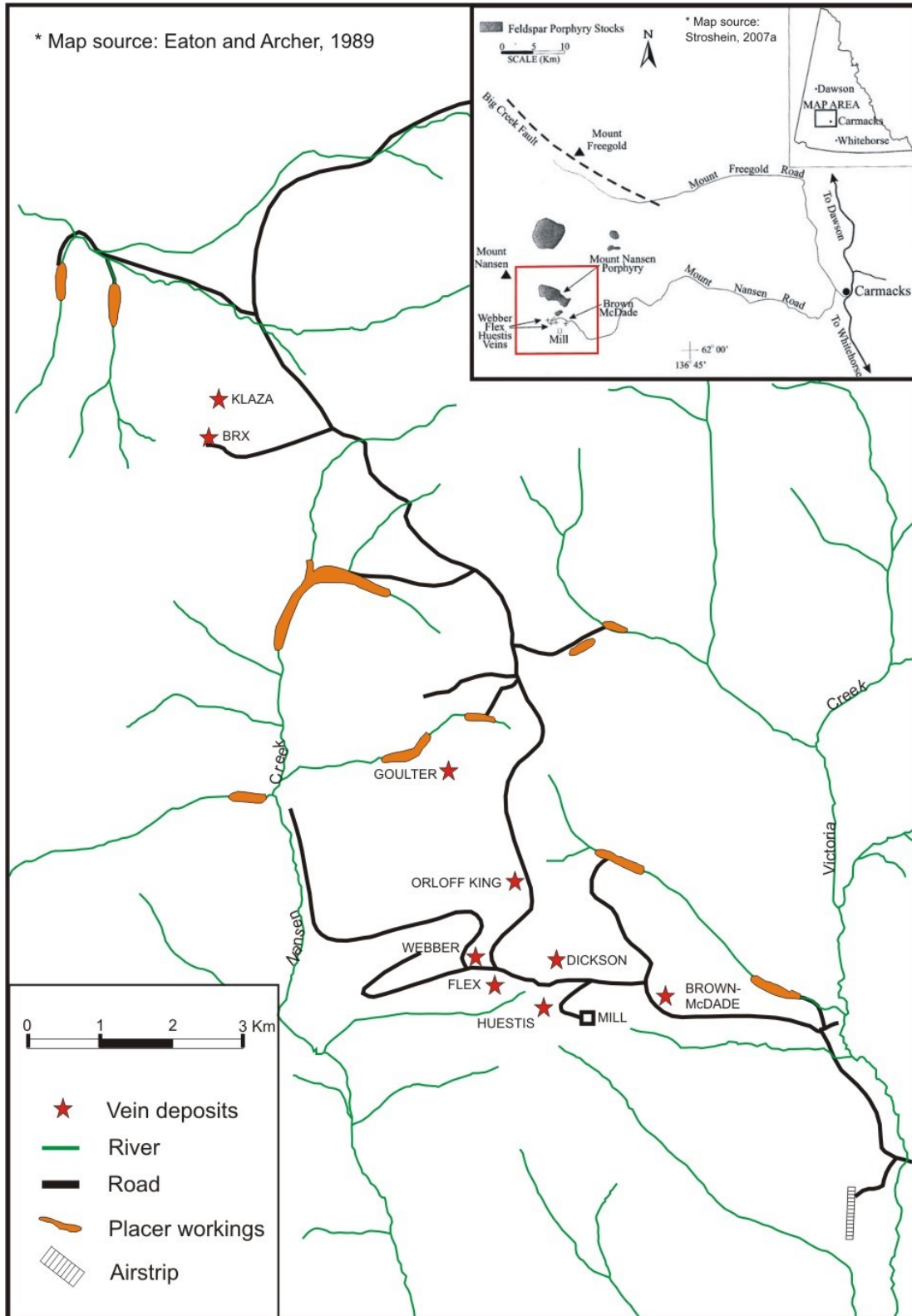


Figure 2: Road access in the Mount Nansen and Tawa properties (modified from Eaton and Archer, 1989 and Stroshein, 2007a).

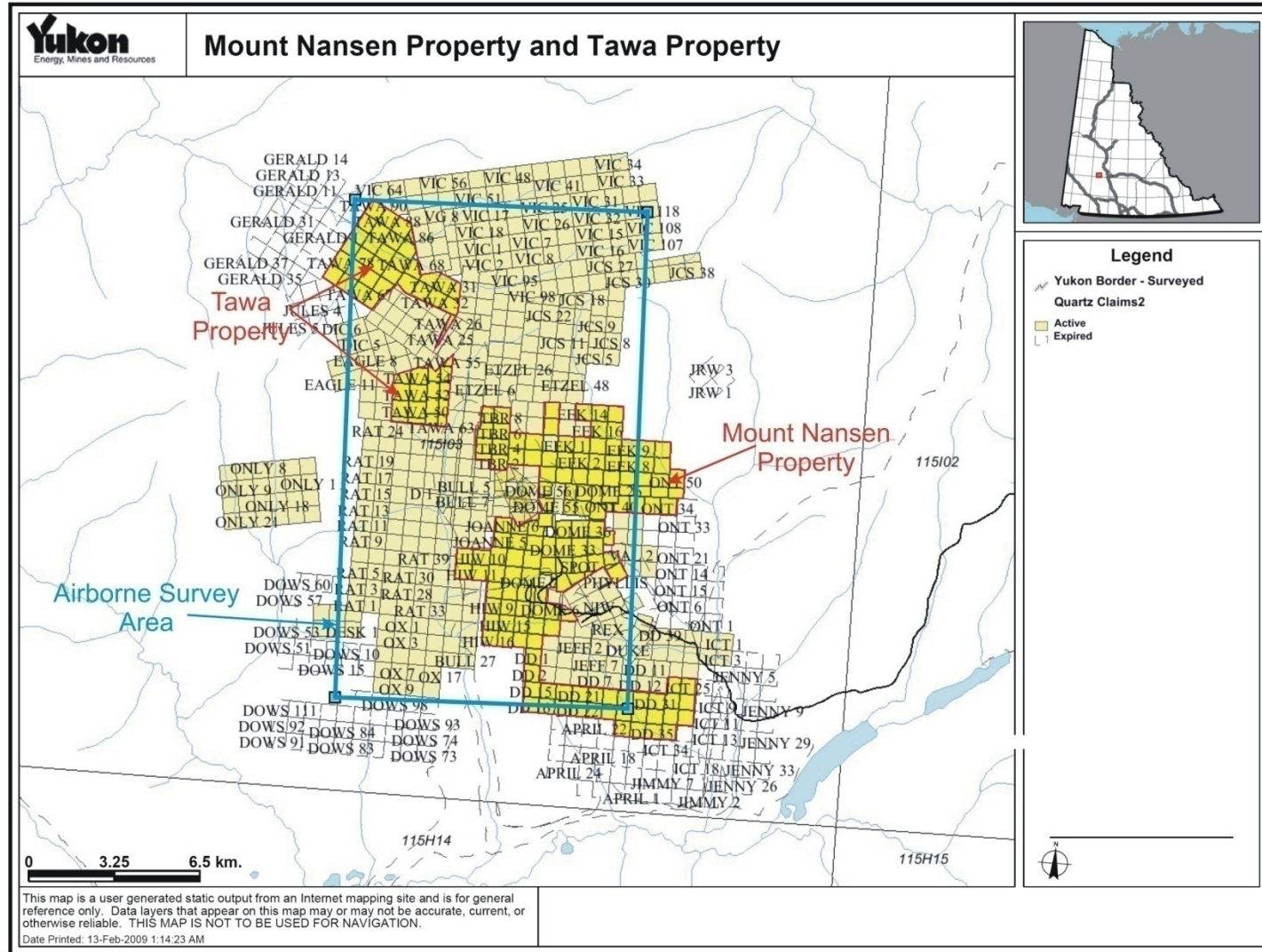


Figure 3: Mount Nansen property and Tawa property on Claim Blocks. Red lines represent claim boundaries. Cyan square represents the boundary of the geophysical survey area.

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

The Mount Nansen property and the Tawa property are located approximately 180 km northwest of Whitehorse and 60 km west of Carmacks in the Yukon Territory (Figure 1). These two properties are accessible from Whitehorse via the Klondike highway to the town of Carmacks and then via an all weather gravel road. Carmacks is 170 km north of Whitehorse. Whitehorse is connected to Vancouver, Edmonton, and Calgary by air service. The Mount Nansen property is facilitated with an extensive network of gravel and dirt roads (Figure 2).

The Mount Nansen and Tawa properties lie northwest of the maximum advance of the Wisconsin ice sheet, and, consequently, are not affected by the Pleistocene continental glaciations (Figure 4; Eaton and Archer, 1989). This resulted in deep weathering in the properties reaching to depths of over 70 m from the topographic surface (Denholm et al, 2000; Roder, 1996). In mineralized zones, sulphides are commonly altered into limonite and other oxides (Denholm et al, 2000; Melling, 1995; Roder, 1996). The topography in the two properties is hilly with rounded ridges and shallow valleys. Local elevation ranges from 1030 m to 1560 m (Melling, 1995; Roder, 1996).

Permafrost is widespread in the area and varies according to the amount of vegetation and slope facing direction (Stroshein, 2007b). In the north-facing slopes, permafrost is frozen all year around and in the south-facing slopes permafrost thaw to a depth of 1-2 m in the summer (Eaton and Archer, 1989; Roder, 1996).

The average precipitation in the Mount Nansen property is ~ 25 cm, most of which falls as rain in the summer months (Stroshein, 2007b). Snow fall is normally 30-40 cm deep in late winter. The average monthly temperature ranges from -25°C in January to 15°C in July (Stroshein, 2007b).

The Mount Nansen property is situated in the traditional Territory of the Little Salmon/Carmacks First Nation (Stroshein, 2007b). At the mine site, there is no infrastructure other than the mine plant and buildings (Unknown author, 2008). The village of Carmacks has been established since 1893 and has provided fuel for river steamboats, a roadhouse on the Whitehorse to Dawson stage run, and an area service center (Campbell, 1994). In the village of Carmacks, there reside about 500 people of which some 60% being First Nations (Unknown author, 2008). The village is also the main and administrative center of the Little Samon Traditional Lands (Unknown author, 2008).

According to Unknown Author (2008), there may be a number of residents of Carmacks that will be interested in employment at the mine site, but very few people have the experience in working at a mine or mill. However, there may be a few people who will be willing to set up small machine and repair shops and Whitehorse can provide virtually all of the supplies and service that will be needed at the time.

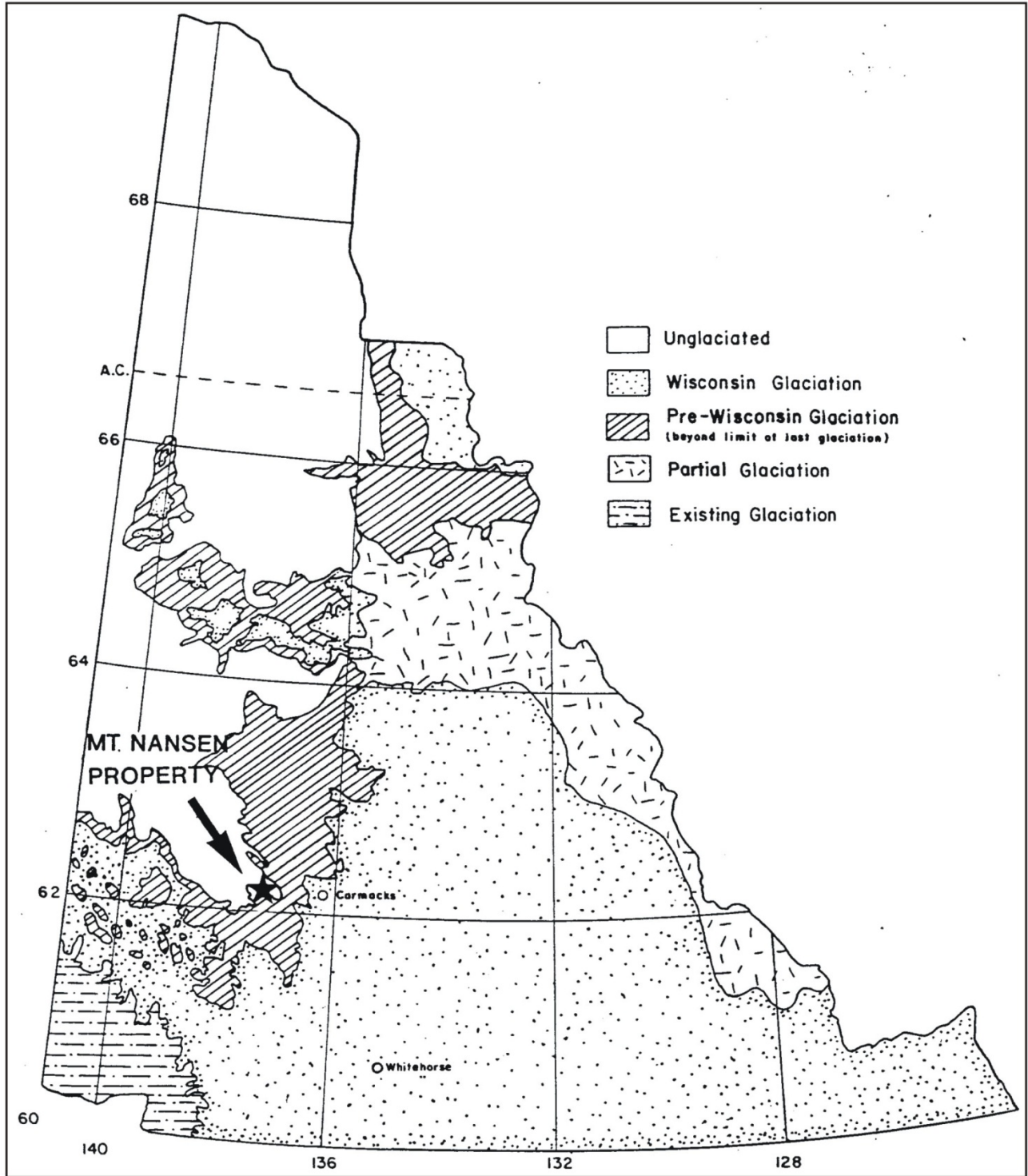


Figure 4: Glaciation, Dawson Range, Yukon Territory.

## **6 HISTORY**

### **6.1 EXPLORATION HISTORY OF THE MOUNT NANSEN PROPERTY AREA**

Placer gold was discovered in Nansen Creek by Captain Henry Seymour back in 1899 (Lecuyer, 1997). In 1943, the first lode deposit discovery was made by prospectors A Brown and G McDade and subsequently, Brown-McDade Mines Ltd was formed and the company undertook underground development and drilling on Brown-McDade deposit (Figure 7) in 1946. During the same period, the Webber and Huestis deposit (Figure 7) to the west of the Brown-McDade deposit was identified. After this initial activity, only sporadic exploration was conducted until 1963.

It should be noted here that the property held by Eagle Trail Properties Inc., surrounds the original Brown McDade mine described here and includes the Webber, Flex, and Huestis vein extensions. The Brown McDade mill and open pit are situated on adjacent property now in bankruptcy (core claims), see Figure 7.

In 1963-1967, Mount Nansen Exploration Syndicate carried out exploration on the Brown-McDade, Huestis and Webber zones and this work led to the construction of a small flotation mill by PESCO Silver Minerals Ltd in 1967 that treated approximately 16,350 tonnes of material from the Huestis deposit and produced 85,130 grams of gold, 2,624,000 grams of silver and 42,900 pounds of lead during 1968 and 1969 (Stroshein, 2007b). However, the operation was closed due to low recoveries (65% of the original grade estimate of the ore, Stroshein, 2007b). During 1975-1976, operations were attempted to resume, but poor gold recovery in the sulphide flotation circuit was encountered again and operation was closed again with the realization that a cyanide leaching circuit was required to recover the free gold in the ore (Denholm et al, 2000). In 1975, 5,500 tonnes of ore was processed in Huestis deposit and the ore produced 60,200 grams of gold and 143,000 grams of silver at similar recovery rate (Stroshein, 2007b).

In 1969, the porphyry copper showing was discovered in the area. The Cyprus Group conducted detailed field work between 1971 and 1973 and confirmed the existence of porphyry type copper/molybdenum mineralization in the northern part of the Mount Nansen Property (Figure 7, Sawyer and Dickinson, 1975). Detailed exploration included ground geochemical and geophysical surveys and 3,480 m of diamond drilling and 950 m of percussion drilling.

In 1985-1987, Chevron Minerals in a joint venture with BYG Natural Resources Inc conducted a further substantial exploration program, which included surface mapping, soil geochem survey, trenching, diamond drilling, and reverse circulation drilling (Denholm et al, 2000, Stroshein, 2007b).

In 1988, BYG Natural Resources Inc continued mineral exploration on Mount Nansen property by focusing on the Brown-McDade deposit and particularly the oxidize mineralization portion which would be susceptible to cyanide leaching treatment with much better gold recoveries than had experienced with the flotation of a sulphide concentrate (Denholm et al, 2000). Subsequently, a feasibility study was carried out in 1994 and production commenced from the Brown-McDade oxide open pit in November 1996. Production, however, was limited by higher clay contents than had been expected in the ore and continued through November 1997. There was a resumption of production from March 1998 to February 1999. About 269,000 tonnes of

material was processed with an average gold grade of 6.2 g/t and an average gold recovery rate of 67% during the combined operating period (Denholm et al, 2000). Total gold and silver production during the whole period was 37,500 ounces and 143,000 ounces respectively (Denholm et al, 2000; Stroshein, 2007b).

Between 1994 and 1998 BYG conducted exploration on the property. The exploration consisted of:

- Diamond drilling on the BMD and Flex in 1994 (990 metres in 12 holes).
- Diamond drilling on the Flex and Huestis in 1995 (1,490 metres in 21 holes).
- Diamond drilling programs in 1996 consisted of 7 holes (400 metres) on the Webber and Huestis/Flex junction and 10 holes (700 metres) on the BMD hanging wall zone (Vince Vein).
- Diamond drilling in 1998 included 360 holes (2,229 metres) on the Flex zone, 10 holes (762 metres) on the BMD, 12 holes (1,009 metres) on the BMD trend, 4 holes (402 metres) on the PPBX, 3 holes (308 metres) on the Tawa and 1 hole (123 metres) on the Orloff King. (Stoshein, 2007b)

On the porphyry complex (Figure 7), BYG Natural Resources Inc also undertook some geophysical survey, surface geological mapping, soil and silt geochemical survey, and diamond drilling. No copper/molybdenum values significant enough to be of economic importance were encountered.

In 1999, BYG Natural Resources Inc was ordered to terminate operations because they were not able to meet the Water Board's requirements for an environmental liability bond. BYG Natural Resources Inc went into bankruptcy shortly after the closure and a receiver of the property was appointed. The receiver abandoned the project in the same year. The Mount Nansen Property was reverted to the Department of Indian Affairs and Northern Development (DIAND).

In 2004, DIAND appointed PriceWaterhouse Cooper as the receiver of the property. DIAND and PriceWaterhouse Cooper divided the property into the Peripheral claim and the Core claim (Figure 7). The Core claim was withdrawn due to the high cost of environmental remediation and the extended duration needed for the remediation work (Unknown author, 2008).

## **6.2 EXPLORATION HISTORY ON THE TAWA PROPERTY**

In 1937, silver-lead mineralization was discovered in the Tawa area. Mineral claims were staked and subsequently dropped.

In 1947, a number of claims were staked in the Tawa area by G Dickson and optioned to Conwest Exploration. Conwest Exploration conducted minor trenching work on the property in 1948.

In 1967, J Smith and Associates staked claims May 1-8. Anomalous silver and lead values were discovered by reconnaissance soil sampling. One dozer trench failed to expose any mineralization.

In 1968-1969, Esanee Exploration Ltd built a road connecting the Mount Nansen mine to the property and carried out geological mapping, geochemical and geophysical surveys and some trenching.

In 1980, BRX Mining and Petroleum Corp re-staked 24 claims on the property and conducted an exploration program including a soil geochemical survey, some trenching and 447.3 m of diamond drilling in seven holes in the zone now referred as the BRX zone. In 1986, Chevron Minerals acquired an option on the Tawa property from BRX Mining and Petroleum Corp. Over the next two years, three mineralized zones (BRX, Klaza and BYG), as well as subsidiary systems, were identified (Rodger, 1996).

BYG Natural Resources Inc obtained Chevron Minerals' option on the Tawa property in 1988, but BYG Natural Resources Inc's work was mostly on the Mount Nansen property (Figure 7). Tawa property was purchased by Eagle Trail Properties Inc. in 2007.

## 7 GEOLOGICAL SETTING

### 7.1 REGIONAL GEOLOGY

The Mount Nansen property and Tawa property are located in the Mount Nansen Trend, which lies in eastern Dawson Range mineral belt of west-central Yukon. Mount Nansen Trend is a 15 km long, northwest-trending corridor that hosts a number of mineral occurrences.

Tectonically, the properties are situated in the Yukon Crystalline Terrane, which lies between the Coast Plutonic complex to the southwest and the Yukon Cataclastic Terrane to the northeast (Figure 5; Denholm et al, 2000).

Regional geology of the Mount Nansen area is shown in Figure 6. The property is underlain by Early Mississippian metamorphic rocks, which are the oldest rocks in the area (Denholm et al, 2000), and were intruded by several plutonic suites (Stroshein, 2007a and b). The metamorphic rocks are divided into meta-sedimentary suite and meta-igneous suite. The meta-sedimentary rock suite is composed of micaceous quartz-feldspar gneiss, schist, and quartzite (Stroshein, 2007a and b). In the Brown-McDade open pit, metamorphosed carbonate rocks are exposed (Stroshein, 2007a and b). The meta-igneous suite consists of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolites (Stroshein, 2007a and b).

The metamorphic assemblage was cut by foliated Upper Triassic and weakly foliated Jurassic plutonic rocks consisting of diorite, granodiorite and syenite (Stroshein, 2007a and b). The igneous and metamorphic rocks were in turn intruded by younger Mid-Cretaceous felsic Coffee Creek Plutonic Suite and capped by Mount Nansen Volcanic Suite which is a suite of mafic to intermediate volcanic lavas, tuffs and tuff breccias (Stroshein, 2007a and b). All rock types were intruded by sub-volcanic feldspar porphyry dikes and plugs that are genetically related to the Coffee Creek Suite and Mount Nansen Suite (Stroshein, 2007a and b).

The Late Cretaceous Carmacks Volcanic Suite, which is the youngest rock (75 million years old) in the region and is magmatically related to the Prospector Mountain Plutonic Suite, is lacking in the immediate Mount Nansen area, but it is voluminous in the region where relatively flat lying pyroclastic tuffs and flow units from prominent ridges capping the basement rocks (Figure 6; Stroshein, 2007a and b).

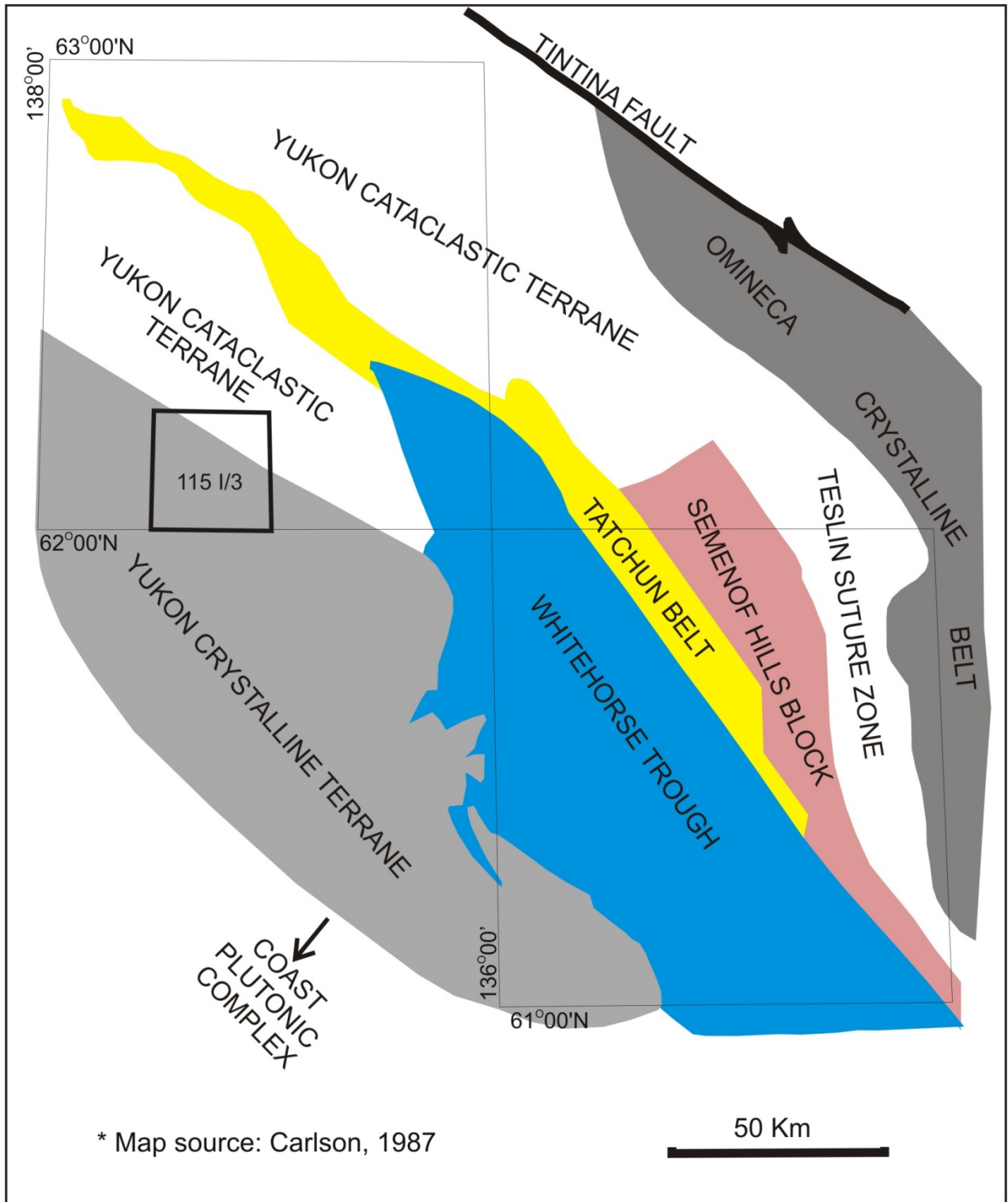


Figure 5: Schematic map of tectonic terranes in Yukon Territory (modified from Carlson, 1987).

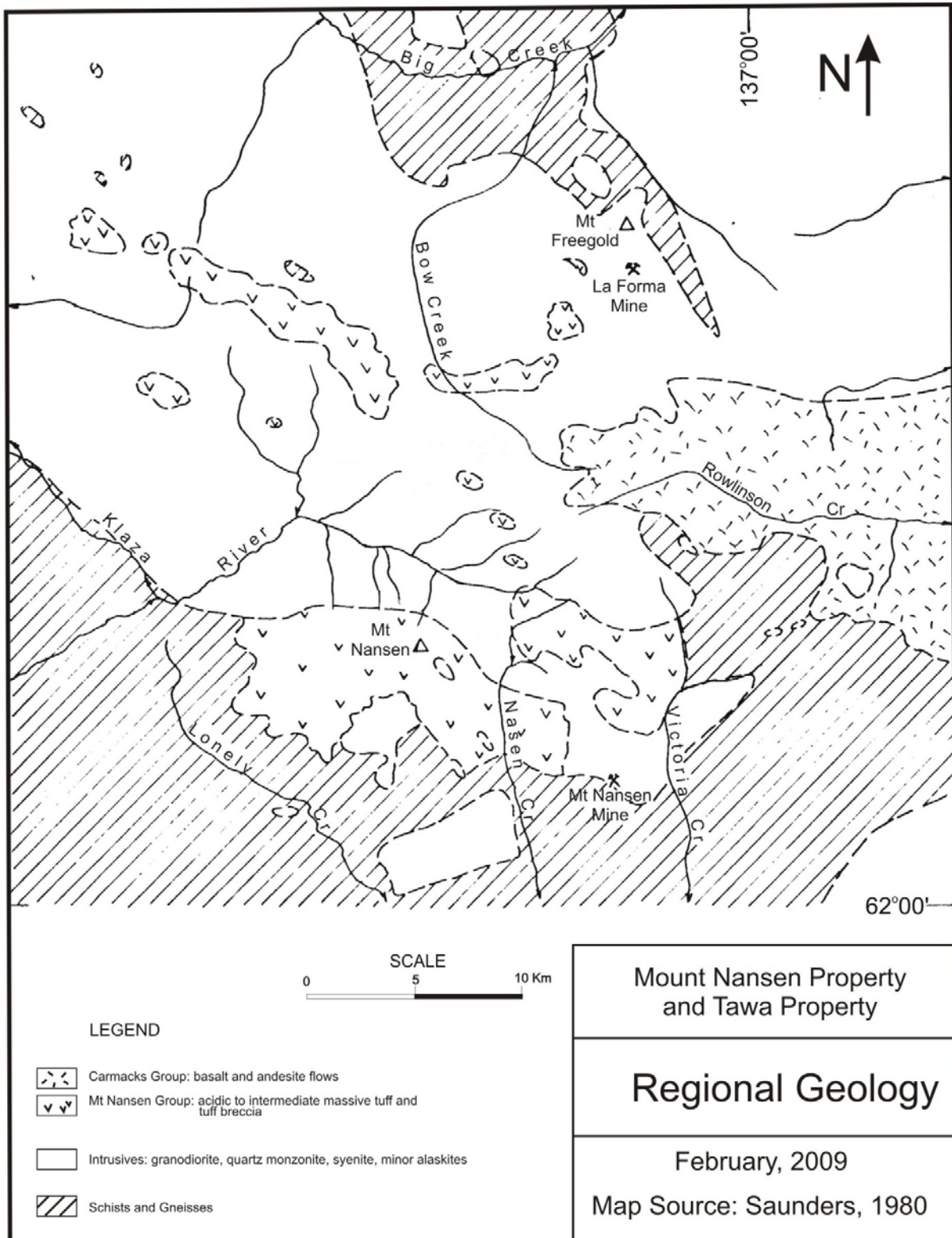


Figure 6: Regional geology in the Mount Nansen area (modified from Saunders, 1980).

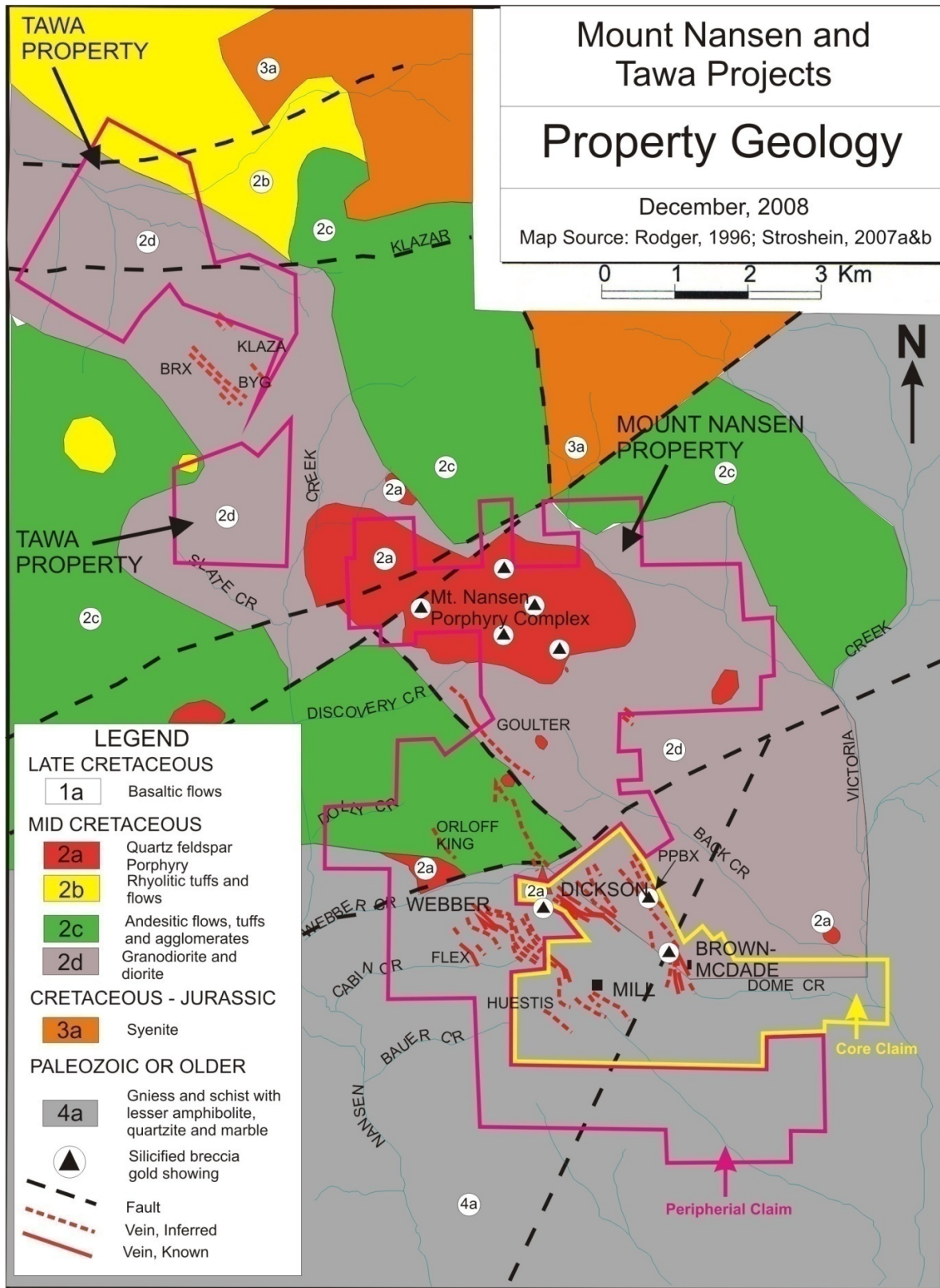


Figure 7: Geology of the Mount Nansen area. Yellow lines represent the rough location of the core claim, which was withdrawn by DIAND.

## 7.2 GEOLOGY OF THE MOUNT NANSEN PROPERTY

The lower third of the Mount Nansen property is covered by the deformed and medium to high grade metamorphic rocks consisting of inter-layered quartz feldspar-chlorite gneiss, quartzite, amphibole and augen gneiss (Denholm et al, 2000; Melling, 1995). These rocks are the host of the main mineralized zones (the Webber zone, the Huestis zone and the Flex zone). Strong foliation within these rocks strikes northeast and dips steeply to the northwest (Denholm et al, 2000; Lecuyer, 1997; Melling, 1995). The northeastern portion of the Mount Nansen property is composed of locally foliated mid-cretaceous granodiorite, quartz-dorite and quartz monzonite. These rocks host the other main mineralized zone, the Brown-McDade deposit, which lies in the core claim (Figure 7; Denholm et al, 2000). Coeval pegmatite and aplite dykes also commonly exist in the property (Melling, 1995).

The metamorphic and intrusive suites are uncomfortably overlain by extrusive andesitic flow and tuff units and are cut by the quartz-feldspar porphyry in forms of stocks and dykes (Melling, 1995). In the north-central part of the property, the largest quartz-feldspar porphyry intrusive complex occurs (Denholm et al, 2000; Melling, 1995). This intrusive complex hosts the porphyry style mineralization as evidenced by an alteration pattern that resembles that of a classical porphyry system (Sawyer and Dickinson, 1975) and a copper, molybdenum and bismuth geochemical signature (Denholm et al, 2000). Small silicified breccias pipe zones associated with local gold values exist in this intrusive complex (Figure 7; Denholm et al, 2000; Sawyer and Dickinson, 1975).

Five facies of hydrothermal alteration have been noted during the exploration work: propylitic alteration, argillic alteration, phyllic alteration, silicic alteration, and potassic alteration (Stroshein, 2007b). Propylitic alteration is widespread in the property and it consists of epidote, calcite, pyrite and magnetite replacement of hornblende (Denholm et al, 2000). Argillic alteration of host rocks occurring along vein contacts near surface resulted in the accumulation of clay that caused severe handling problems when mining the upper levels of the Brown-McDade deposit (Denholm et al, 2000).

Faulting is the main structural feature in the property and two sets of faults have been encountered (Denholm et al, 2000; Lecuyer, 1997; Melling, 1995). These two sets are described as follows:

Set 1: This set strikes north-northwest and dips at 50°-70° to the southwest (Denholm et al, 2000; Melling, 1995). This set parallels the main vein direction and is locally mineralized (Denholm et al, 2000; Melling, 1995). It consists of gouge-filled shear zones up to 15 m in width (Lecuyer, 1997).

Set 2: This set strikes northeast and dips subvertical. These faults locally cut some of the mineralized zones (Denholm et al, 2000). The displacement is up to 30 m but generally less than 5 m (Lecuyer, 1997). The major faults in this set are ~150 m apart and minor faults occur in group at 1-2 m interval (Lecuyer, 1997). These faults form part of the Mount Nansen Trend which is a larger regional structural corridor (Denholm et al, 2000).

## 7.3 GEOLOGY OF THE TAWA PROPERTY

The following description of the geology of the Tawa property is from Rodger (1996).

The Tawa property is covered by a massive, coarse-grained, unfoliated granodiorite stock. Hornblende crystals (up to 35%) and biotite are a common feature of the granodiorite.

Feldspar porphyry dykes, which generally trend in northwest direction, cut the granodiorite stock on the property. The dykes are strongly fractured, and contain orthoclase phenocrysts with minor biotite and quartz in a buff coloured aphanitic groundmass.

On the periphery of the property, there are volcanic rocks, including andesite flows and pyroclastic rocks and occasional buff to tan rhyolitic tuffs.

Similar to the faulting system in the Mount Nansen property, two sets of faults have been encountered on the Tawa property. The most important set of faults strike northwest. These faults appear to control the dykes, and in some cases, the mineralized veins. The second sets of faults strikes northeast. These faults cut the northwest faults and the mineralized zones, with displacements up to 50 m. For the most part, the displacements are less than 5 m. There are only a few major faults in this set, but they are prominent topographic features.

## **8 DEPOSIT TYPES**

The Mount Nansen project is considered to include two types of deposits: porphyry deposit and vein style precious metal deposit.

The porphyry deposit typically associates with the quartz feldspar porphyry intrusion in the north end of the Mount Nansen property. The porphyry intrusion is part of northwest trending belt of Mesozoic to Tertiary calc-alkaline igneous rocks which intruded and overlaid the Yukon Group metamorphic basement. The disseminated hypogene copper-molybdenum mineralization was introduced in the last stage of the major magmatic cycle. The magmatic cycle started with an early deep seated batholithic intrusion of predominantly quartz monzonite and diorite that was followed by uplift and emplacement of biotite-quartz monzonite and porphyritic adamellite. A volcanic period followed the intrusion beginning with formation of the andesitic Mount Nansen Group. The monzonite porphyry dykes were feeders to the flows and the subvolcanic plugs and dykes of the porphyry, including rhyodacite porphyry, quartz monzonite porphyry and quartz-feldspar porphyry, invaded the accumulating andesitic pile.

The last stage of the magmatic cycle was the explosion caused by the confined deep seated volatiles which formed the localized breccias bodies. The silicic, iron, copper, molybdenum, lead, silver, and gold rich volatiles flooded the breccias and surrounding fracture zone. The changing compositions of the hydrothermal solutions produced distinct wall rock alteration zones, characterized by an advanced argillic alteration zone ringed outward by phyllic, argillic, and propylitic alteration zones. Leaching of hypogene pyrite and chalcopyrite over a long dry period produced a thick chalcocite zone beneath the oxide cap.

The vein style precious metal deposits in the Mount Nansen project are quartz sulphide veins that are occasionally brecciated. They have been identified in the Webber zone, Flex zone, Huestis zone and Brown-McDade zone. The vein style precious metal deposits in these zones are similar to each other. They are all associated with the fault-shear-vein alteration zones. Near the surface the ores were oxidized. The vein style precious metal deposits in the Mount Nansen project was classified as typical epithermal mineralized deposits by Unknown author (2008).

## **9 MINERALIZATION**

### **9.1 MINERALIZATION DESCRIPTION**

Two types of mineralization have been found on the Mount Nansen property and the Tawa property: precious metal quartz sulphide vein zones and disseminated copper-molybdenum mineralization (Eaton and Archer, 1989; Unknown author, 2008).

The precious metal quartz sulphide vein zones occur as fault-shear-vein alteration zones and cut across all rock types (Eaton and Archer, 1989; Melling, 1995). This suggests that the mineralized structures are younger than the enclosing host rocks (Denholm et al, 2000; Lecuyer, 1997; Melling, 1995). Some quartz sulphide veins are brecciated and the precious metal vein zones can be divided into two subsystems: vein systems and breccia zones.

The vein systems are more common and are mostly found within planar structures (Denholm et al, 2000). These vein systems consist of quartz, carbonate, and some sulphide (Denholm et al, 2000). The vein systems range from simple quartz veins as exemplified by the Huestis and Webber zones to a complex anastomosing series of veins and veinlets as exemplified by the Brown-McDade zone (Melling, 1995). The vein systems strike northwest and dip steeply toward east or west (Melling, 1995). Individual vein system has a length of up to 600 m and a width of 2-8 m and is open to depth (Denholm et al, 2000). These vein systems form steeply plunging shoots and the high grade zones are usually found where the veins split, bend, or are cut by northeast trending cross fault (Melling, 1995) which created more open space for mineralizing fluids (Eaton and Archer, 1989).

The breccia zones are mostly siliceous and pipe-like, and are steeply plunging. These zones are up to 150 m wide and are composed of a series of sub-parallel faults separated by fractured and altered wallrocks (Eaton and Archer, 1989). The mineralization is best developed at places of faults cutting igneous rocks (Eaton and Archer, 1989). At least eight pipe-like breccias bodies have been found on the property (e.g. within the quartz feldspar porphyry complex and north end of the Brown-McDade open pit and PPBX showing, Figure 7). The breccias zones are believed to be associated with the late stage volatile-enriched silica flooding of fractured zone (Sawyer and Dickson, 1975).

Sulphides in the precious metals vein zones consist of pyrite and arsenopyrite with lesser amounts of galena, sphalerite, chalcopyrite, and stibnite (Denholm et al, 2000). The gold mineralization occurs as fine-grained (5-40 micron) inclusion in sulphides or in the interstices (Denholm et al, 2000; Lecuyer, 1997). The silver mineralization occurs mostly as inclusion in galena and sphalerite (Denholm et al, 2000). The silver to gold ratio varies greatly amongst the various zones. It was reported by Denholm et al in 2000 that the silver to gold ratio is about 7:1 in the planar vein mineralization and about 3:1 in the breccia pipe mineralization yet drilling by BYG in 1998 showed average silver gold ratios of 50:1. It was considered that this difference was caused solely by the difference in base metal values between the two types (Denholm et al, 2000). Other elements associated with the gold and silver in the property include arsenic, cadmium, zinc, copper, antimony, and lead (Melling, 1995).

The disseminated copper-molybdenum mineralization is associated with a quartz feldspar porphyry complex. It represents a deeper and hotter part of the hydrothermal system compared to

the quartz sulphide veins (Eaton and Archer, 1989). Wallrock alteration in the quartz feldspar porphyry complex includes localized silicic and potassic cores surrounded by advanced argillic and phyllic halos giving way to weak argillic and propylitic margins (Sawyer and Dickson, 1975).

Both hypogene and supergene copper mineralization exist in the property and copper grades appear to be at least doubled by supergene enrichment (Sawyer and Dickson, 1975). Copper mineralization is weak (average grade of less than 0.1% Cu) but extensive, covering a 4.5 km<sup>2</sup> area (Eaton and Archer, 1989). Highest copper grade (0.5-0.6%) is discovered in fracture zones where supergene chalcocite is relatively well developed (Sawyer and Dickson, 1975). Molybdenum mineralization is usually associated with late stage silica flooding and veining (Sawyer and Dickson, 1975) which formed localized porphyry breccia zones. The highest molybdenum value (~0.06%) is found at the siliceous breccia zone, but this molybdenum mineralization may not be regarded as the true “porphyry” mineralization (Sawyer and Dickson, 1975). Average molybdenum value in the property is probably <0.01% (Sawyer and Dickson, 1975). Beside molybdenum, the late stage fluids also carry elements iron, copper, lead, zinc, silver and gold (Sawyer and Dickson, 1975). In the writers opinion the porphyry may have acted as a heat engine that drove fluids which formed the veins and were the same source of the volatiles that created the breccia zones.

## **9.2 MINERALIZED ZONES IN THE MOUNT NANSEN PROPERTY**

The Mount Nansen property hosts four distinct gold and silver mineralized zones (the Brown-McDade zone, the Webber zone, the Huestis zone, and the Flex zone). Significant exploration and development work has been conducted in these zones.

### **9.2.1 BROWN-MCDADE ZONE**

The Brown-McDade deposit contains an upper, open pittable oxide zone and a lower sulphide zone which can be assessed by underground methods. In the Brown-McDade underground, there are two types of mineralization: the more prevalent anastomosing veins and veinlets of quartz with minor carbonate and varying amounts of sulphides and the less prevalent sulphide-rich siliceous breccias (Figure 8). The anastomosing veins occur in structurally controlled fractures which cut the coarse-grained granodiorite and the veins are spatially associated with a series of quartz porphyry dykes injected along a strong fault known as Footwall fault (Denholm et al, 2000; Melling, 1995). The Footwall fault strikes 160° and dips 50°-60° to the southwest (Melling, 1995). The second type of mineralization, sulphide-rich breccias, exists in the north end of the zone and is strongly cut by faulting (Denholm et al, 2000).

### **9.2.2 WEBBER ZONE**

In the Webber zone, a west-northwest striking quartz-vein network dipping 70°-80° to the west is the host of the mineralization (Figures 9 and 10; Melling, 1995). The veins occur as fracture-filling veins in the metamorphic rocks which were intruded by an extensive porphyritic body striking northeast (Campbell, 1994). The veins vary from 0.3 m to 2.0 m in width, and have been significantly explored over 500 m strike length through a combination of surface stripping, trenching and underground development (Campbell, 1994; Denholm et al, 2000).

Two main vein structures have been recognized in the Webber deposit, the No 1 (Footwall) and the No 2 (Hanging wall). The No 1 and No 2 veins have been developed over distances of at

least 200 m and 250 m respectively (Campbell, 1994). Individual mineralized shoots within each vein are typically 50 m in strike length and 100 m along the steep lunge direction with the main shoots open to depth (Denholm et al, 2000).

Seventeen ore shoots on the two veins defined by underground sampling averaged 25 metres in length, 1.0 metres in width with average grades of 14.06 g/t gold and 917 g/t silver (Stroshein, 2007b). The listing and description of the underground ore shoots are shown in Table 3.

Drilling between 1985 and 1987 was carried out to test the continuity of the deposit above and below the adit. Drill holes south of the deposit in 1996 intersected veins at 110 metres and 170 metres along the trend. Drill hole 96-177 intersected veining across 6 metres that averaged 6.7 g/t gold and 213 g/t silver. The Webber Creek fault appears to cut off the deposit to the North; however, the deposit remains open to the south and to depth. (Stroshein, 2007b)

The highest gold and silver grades occur within quartz veins containing fine-grained sulphides, including pyrite, galena, sphalerite, arsenopyrite and so on (Campbell, 1994). Shoot boundaries between gold-rich and barren vein are sharp and correlate well between the surface exposures and underground development (Denholm et al, 2000).

### **9.2.3 HUESTIS ZONE**

The Huestis deposit consists of a north-northwest striking quartz-vein network which dips 65-75° to the east (Figure 11; Melling, 1995). The veins, which individually vary from 0.3 m to 2.0 m and average 1.0 m in width, occupy shear-controlled fractures in metamorphic rocks and have been defined over 500 m along strike by both underground development and surface trenching (Denholm et al, 2000). Three main vein structures have been recognized, the No 11 (Hanging wall), the No 12 (Intermediate) and the No 13 (Footwall), and they have been developed and extensively chip sampled on two levels, the 4100 and 4300. Individual mineralized shoots within each vein are typically 100 m in strike length and 170 m along the steep plunge direction with the main shoots open to depth. A deep hole, 94-151, confirmed the continuation of the mineralized structure to a vertical depth of about 400 m below surface. The continuation of the mineralized structure to a vertical depth of ~400 m below has been confirmed by a deep hole (Denholm et al, 2000).

There are sixteen ore shoots identified by underground sampling. The shoots average 27 m in length, 1.0 metres wide with average grades of 19.88 g/t gold and 442 g/t silver (Stroshein, 2007b). The listing and description of the underground ore shoots are exhibited in Table 3.

The character and mineralogy of the Huestis veins are identical to the Webber veins with better grade gold mineralization again associated with arsenopyrite concentrations with the exception that stibnite appears more widespread in Huestis. Little oxidation has been reported in the Huestis deposit and the ores have been considered refractory by BYG Natural Resources Ltd geologists.

### **9.2.4 FLEX ZONE**

The Flex zone lies between the Webber zone and the Huestis zone (Figures 4 and 9). It has been defined by stripping, surface trenching and diamond drilling (Figures 9 and 12). There is a complex series of anastomosing narrow quartz veins filling fractures in the Paleozoic metamorphic rocks along the strike in the Flex zone (Denholm et al, 2000). The veins, including

the main vein, the footwall vein, the east vein and the hangingwall vein, are sub-parallel and dip steeply to the west (Anderson and Stroshein, 1998). The veins were offset by northeast-trending faults (Figure 11). The Flex zone has been traced for over 550 m and is open to depth (Denholm et al, 2000; Melling, 1995). In the top 15-40 m, sulphide minerals within the veins are mostly converted to limonite or other oxides (Denholm et al, 2000; Melling, 1995). Structural control on the individual vein is significant (Denholm et al, 2000).

The veins range from 5 to 110 centimetres thick. Silicification of the wall rock extends ore grade widths up to seven metres (Stroshein, 2007b). Table 4 contains a listing of diamond drill intersections from the 1998 diamond drill holes on the Flex Zone.

#### **9.2.5 OTHER ZONES**

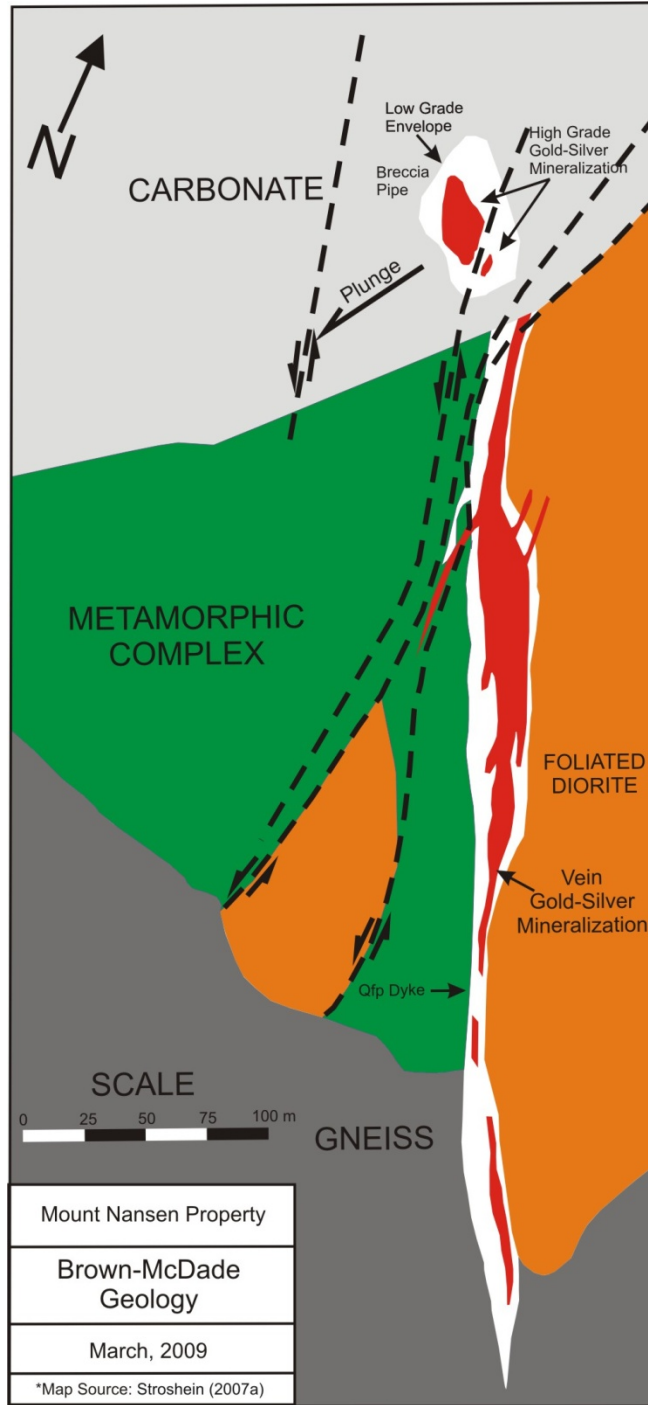
In addition to the above mineralization zones, there exist a few more exploration targets on the property. Potential exploration targets identified during the 1985 multi-element soil geochemical survey are shown in Figure 13. The Orloff King Zone (Figure 13) is on strike and to the northwest of the Dickson structure. It has been tested with shallow drill holes and trenches and has the potential to host low-grade near-surface open pitable oxide material (Denholm et al, 2000). The PPBX showing (Figure 13) is a sulphide-poor quartz-tourmaline breccias zone (Denholm et al, 2000). Over the Mount Nansen porphyry, large copper, molybdenum and bismuth soil geochemical anomalies occur (Figure 13) and placer gold is being mined in creeks draining the porphyry (Denholm et al, 2000). Many gold soil anomalies have not been tested and they mostly trend northwest-southeast, which is the main structure direction in the area. Follow-up work including detailed mapping, trenching, and drilling are recommended on these anomalies. Upper Back, Volcanic Basal Conglomerate and Upper Webber soil anomalies appear to be the most promising ones (Figure 13; Denholm et al, 2000). The fine grained pyrite associated with the veins as observed by the writer at the Webber and Flex trenches gives an opportunity to use induced polarization (IP) to trace the extension of these veins and any others that are similar. In addition the IP survey may locate areas where these zones may converge.

Table 3: Vein Ore Shoots Huestis and Webber Deposits (Stoshein, 2007b)

DEPOSIT	VEIN No.	ORE SHOOT	LENGTH (m)	WIDTH (m)	GOLD (gpt)	SILVER (gpt)	OUNCES Au	OUNCES Ag	TONNES/Vert.m.	
Huestis/1311	11	628	22.9	0.8	16.80	82.3	28.3	138.3	52	
		12	609	10.7	0.9	23.32	332.6	21.9	312.9	29
			609	18.3	1.2	16.46	226.3	35.4	486.6	67
			610	17.8	0.9	14.74	308.6	21.8	456.2	46
			612	24.4	0.9	21.26	480.0	54.7	1032.3	67
			615	33.5	1.5	22.63	802.3	111.5	3953.9	153
			617	30.5	0.9	21.6	377.1	58.1	1013.8	84
			650	30.5	0.9	16.11	401.1	43.3	1078.3	84
			653	42.7	1.0	17.14	205.7	68.8	825.8	125
			657	30.5	0.9	13.71	274.3	36.9	737.3	84
			660	32.0	0.9	20.57	154.3	58.1	435.5	88
			662	47.2	1.0	19.89	596.6	91.1	2734.3	143
		13	645	27.4	1.5	14.74	545.1	59.5	2198.2	125
			H-15	18.3	0.9	9.94	366.9	16.0	591.7	50
		15	H-12	18.3	0.9	24	174.9	38.7	282.0	50
		17	H-12s	18.3	0.9	10.29	264.0	16.6	425.8	50
	<b>Totals</b>			<b>423.1</b>	<b>16.1</b>			<b>760.7</b>	<b>16702.0</b>	<b>1207</b>
<b>Averages</b>			<b>26.4</b>	<b>1.0</b>	<b>19.88</b>	<b>441.7</b>				
Webber/1311	1	101	13.7	0.9	8.57	253.7	10.4	306.9	38	
		105	30.5	1.2	13.03	332.6	46.7	1192.0	111	
		107	30.5	1.8	10.97	462.9	59.0	2488.5	167	
		119	32.0	0.9	8.91	476.6	25.2	1345.2	88	
		120	21.3	0.6	5.83	384.0	7.3	481.7	39	
		120/121		15.2	1.5	8.91	1080.0	20.0	2419.4	70
			122	24.4	0.6	10.63	325.7	15.2	467.0	45
		2	129	33.5	0.9	10.63	925.7	31.4	2737.3	92
			130	30.5	0.9	6.86	1920.0	18.4	5161.3	84
			131	13.7	0.6	12.3	761.14	10.0	613.8	25
			134	15.2	0.6	8.23	452.6	7.4	405.5	28
			136	36.6	1.5	22.97	1491.4	123.5	8018.4	167
			139	6.1	0.9	11.66	984.0	6.3	529.0	17
			146	12.8	1.0	15.09	270.9	19.3	346.6	40
			153	27.4	1.1	8.57	822.9	24.2	2322.6	88
			154	22.9	0.9	15.09	1258.3	30.4	2536.9	63
			157	47.2	0.9	17.83	754.3	74.3	3142.9	130
<b>Totals</b>			<b>413.6</b>	<b>17.0</b>			<b>528.9</b>	<b>34514.9</b>	<b>1292</b>	
<b>Averages</b>			<b>24.3</b>	<b>1.0</b>	<b>14.06</b>	<b>917.5</b>				

Table 4: Summary Diamond Drill Hole Assays, Flex Zone, 1998 (Stoshein, 2007b)

DDH No.	From (m)	To (m)	Width (m)	Au (gpt)	Ag (gpt)
98-183	12.5	16.5	4.0	3.0	44.0
	14.7	15.2	0.5	8.7	98.8
98-184	37.0	38.0	1.0	4.7	295.8
98-185	20.1	21.0	0.9	12.3	134.6
98-186	6.4	7.9	1.5	4.4	52.7
	73.8	76.8	3.0	3.0	2.9
98-188	54.6	65.3	10.7	2.1	97.5
incl.	54.6	55.6	1.0	5.4	282.7
and	61.0	62.0	1.0	8.0	92.5
	91.2	94.2	3.0	19.0	802.8
98-189	36.7	37.6	0.9	1.5	7.1
	45.8	46.8	1.0	1.4	24.9
98-190	15.5	36.9	21.4	1.9	61.7
98-190	19.5	20.2	0.7	11.8	298.8
	36.5	36.9	0.4	13.7	1035.5
	47.2	48.0	0.8	5.9	243.5
98-191	31.3	51.8	20.5	2.0	143.4
incl.	32.2	32.9	0.7	31.5	4206.5
and	44.6	45.6	1.0	8.5	58.2
98-192	46.3	47.4	1.1	3.0	155.6
98-193	56.1	67.7	11.6	6.2	260.9
incl.	60.2	61.1	0.9	14.5	78.4
and	65.0	67.7	2.7	13.4	45.1
	86.2	86.9	0.7	17.5	362.0
98-194	64.0	69.6	5.6	5.0	80.8
	80.0	84.3	4.3	7.1	95.3
98-195	74.9	75.8	0.9	7.3	382.1
98-196	93.8	94.3	0.5	2.7	112.5
98-223	58.0	58.7	0.7	1.3	37.7
98-226	24.7	25.7	1.0	1.1	7.3
98-227	10.0	11.1	1.1	20.8	83.9
98-228	23.6	24.3	0.7	3.6	33.9
98-229	72.8	73.3	0.5	4.3	46.4
	90.0	90.5	0.5	9.1	89.0
98-230	33.5	38.2	4.7	1.2	45.7
98-231	9.8	20.3	10.5	5.0	76.1
incl.	14.7	15.0	0.4	31.9	443.4
and	17.7	18.4	0.7	25.0	302.7
and	18.9	19.3	0.4	21.8	436.2
	51.5	52.5	1.0	12.8	874.4
98-234	49.7	57.9	8.2	3.0	12.9
98-234	49.7	50.2	0.5	9.9	43.5
and	54.2	55.1	0.9	6.7	38.3
98-235	31.8	39.9	8.1	2.6	33.7
incl.	33.0	34.0	1.0	9.3	4.7
98-236	30.0	31.0	1.0	1.8	4.6
98-237	8.8	10.4	1.5	0.7	9.0
98-238	26.0	27.0	1.0	2.1	169.8
	51.3	52.5	1.2	2.4	120.8
98-239	19.8	20.6	0.8	8.0	401.9
incl.	19.8	20.1	0.3	17.3	1019.1
	39.6	40.6	1.0	8.6	40.2
	47.0	48.0	1.0	9.4	541.1



**Figure 8: Simplified geology map of the Brown-McDade mine (modified from Stroshein, 2007 a). Note the two types of mineralized bodies (vein and breccias).**

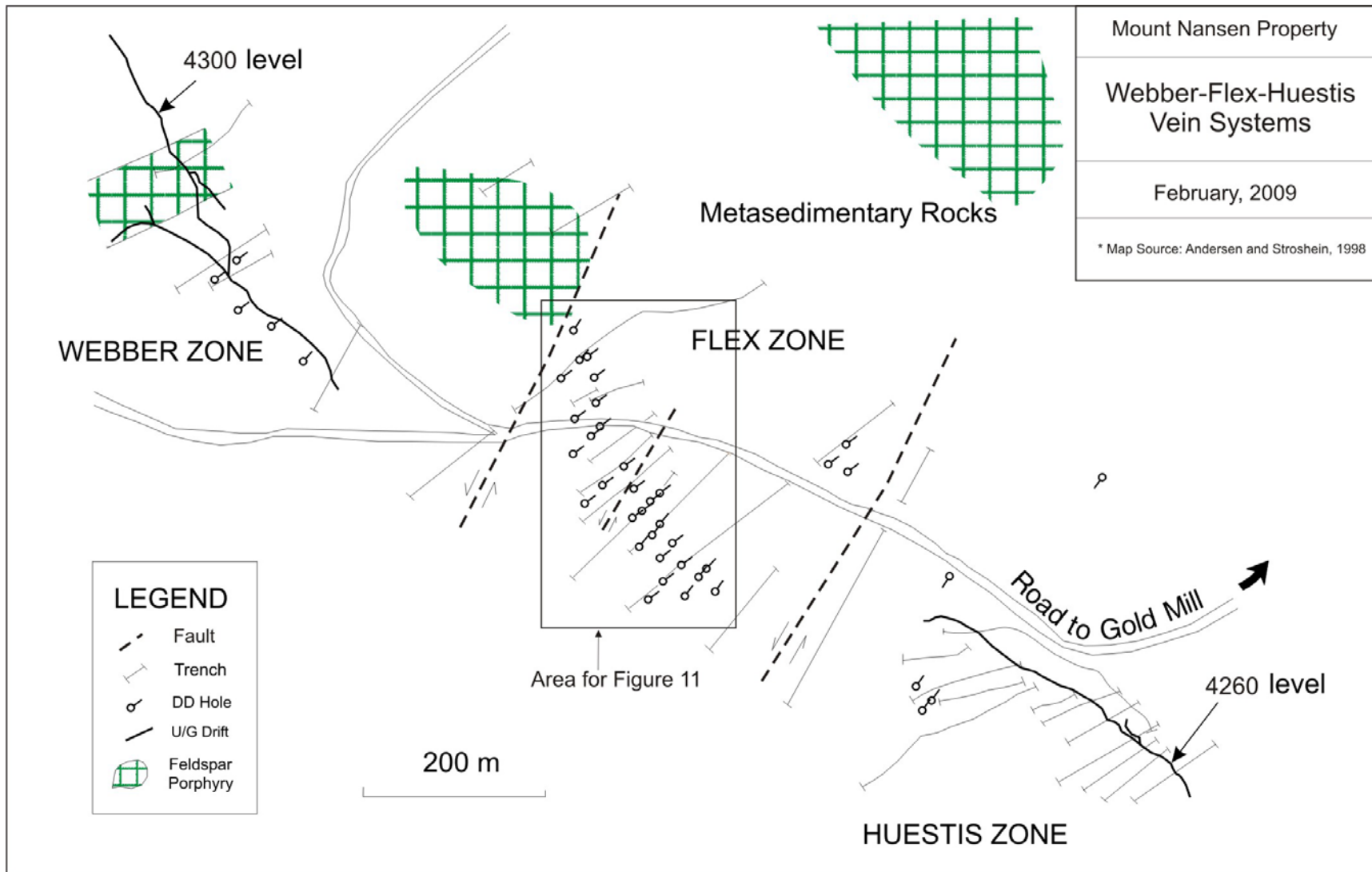


Figure 9: Plan view of the exploration work conducted around 1997 in Webber-Flex-Huestis vein systems (Anderson and Stroshein, 1998).

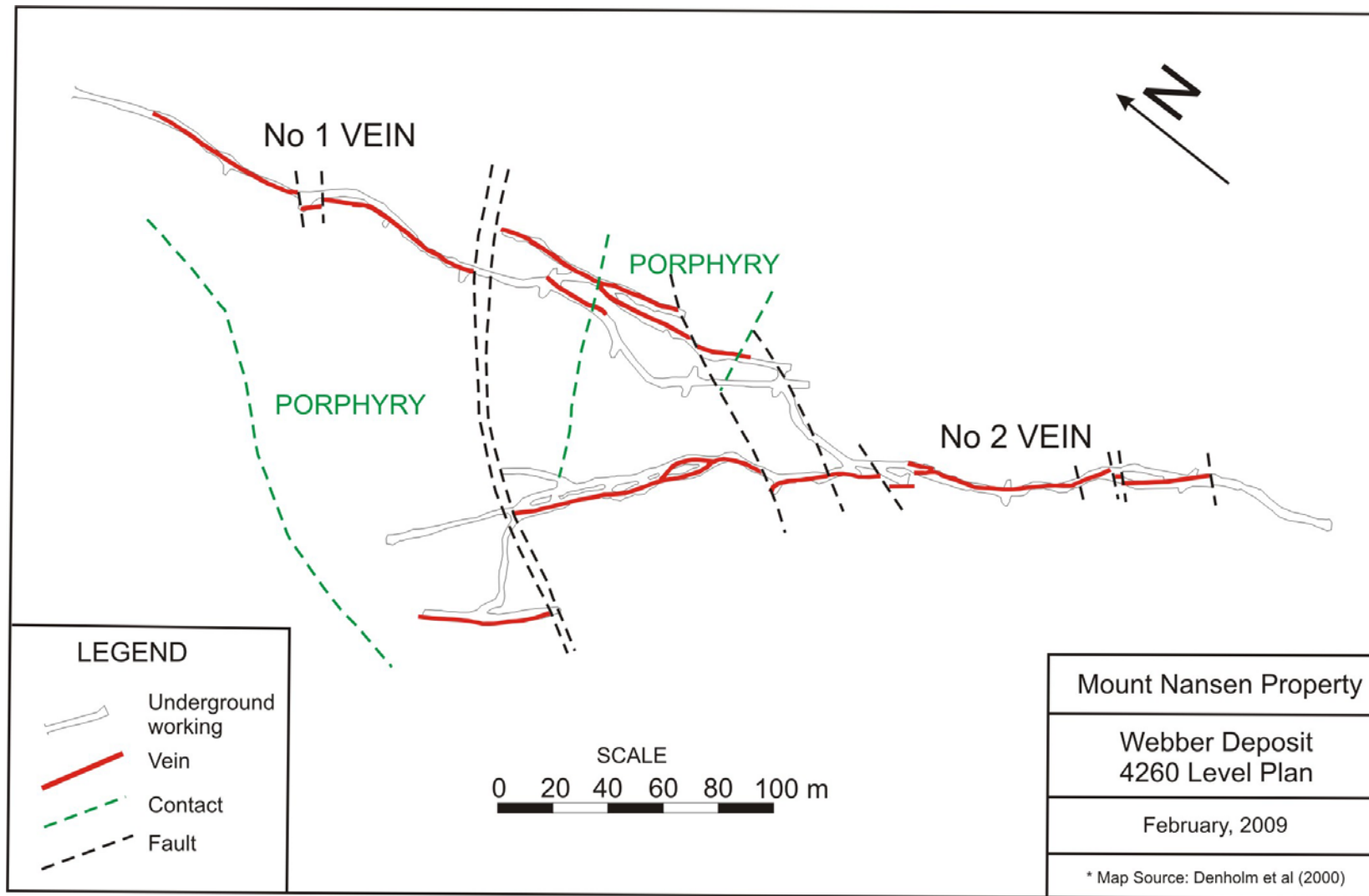


Figure 10: Webber deposit 4260 level plan map (Denholm et al, 2000).

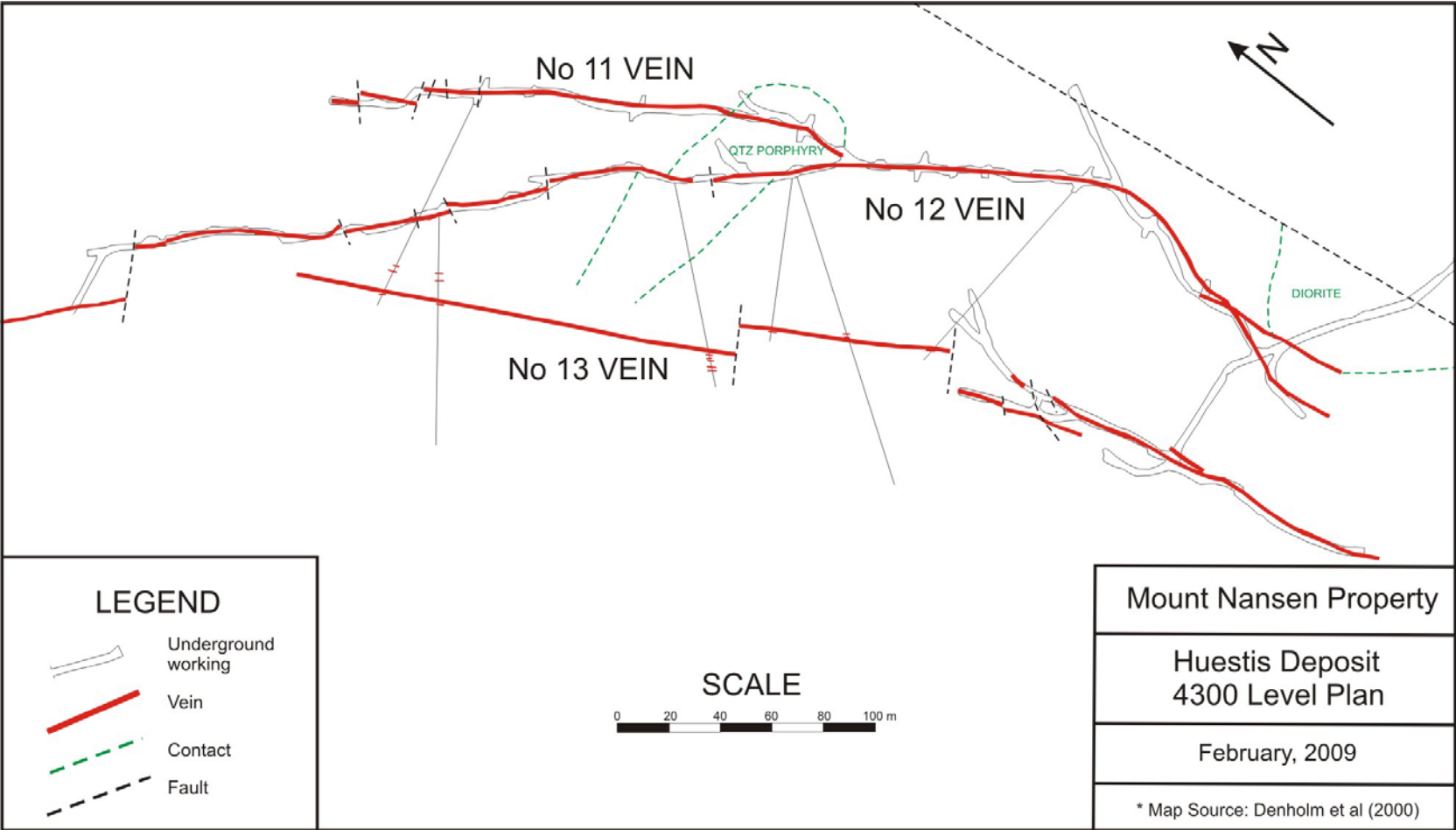


Figure 11: Huestis deposit 4300 level plan (Denholm et al, 2000).

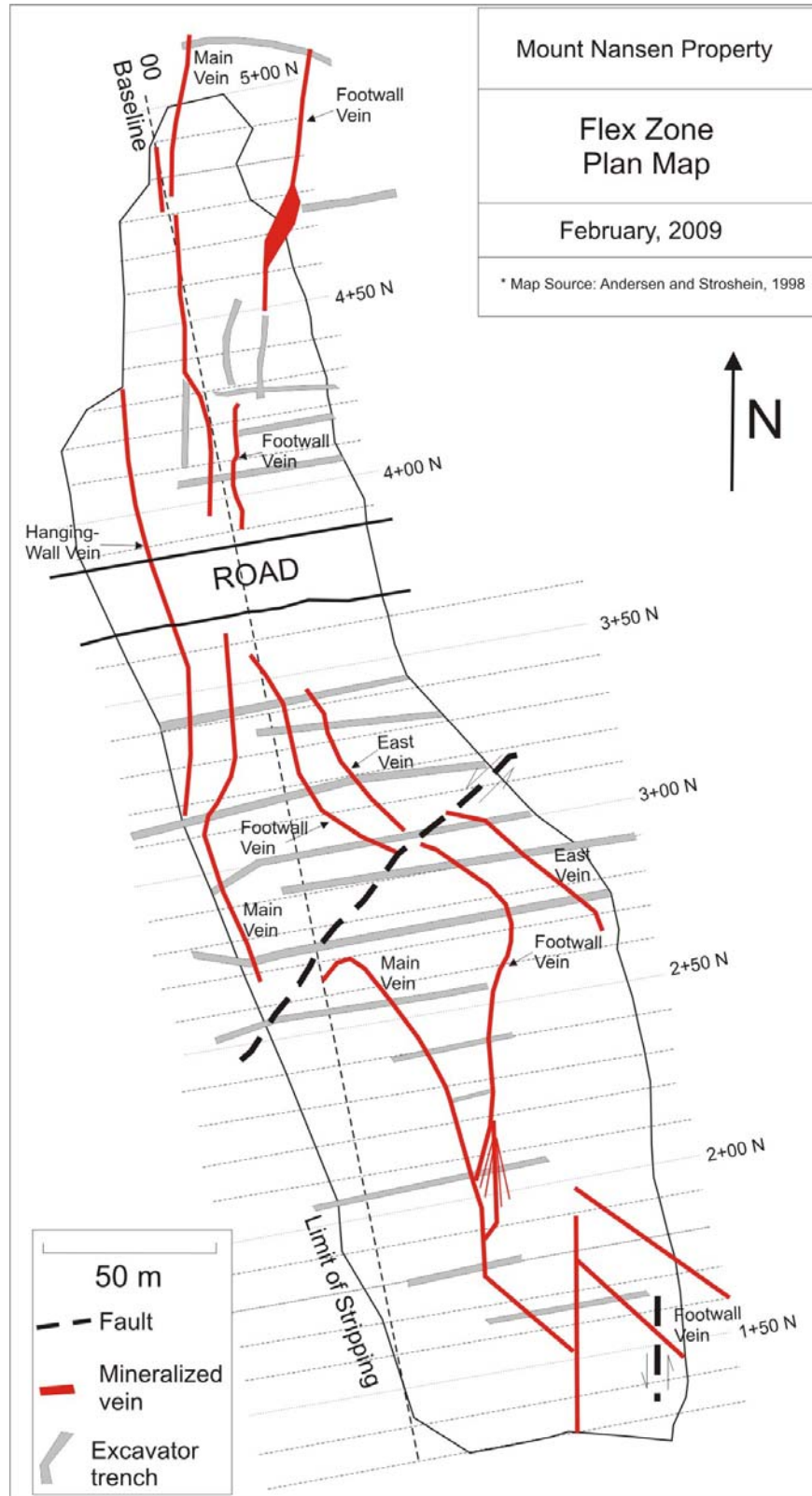


Figure 12: Plan view of the Flex vein system as exposed at surface. The four veins dip steeply west (Anderson and Stroshein, 1998).

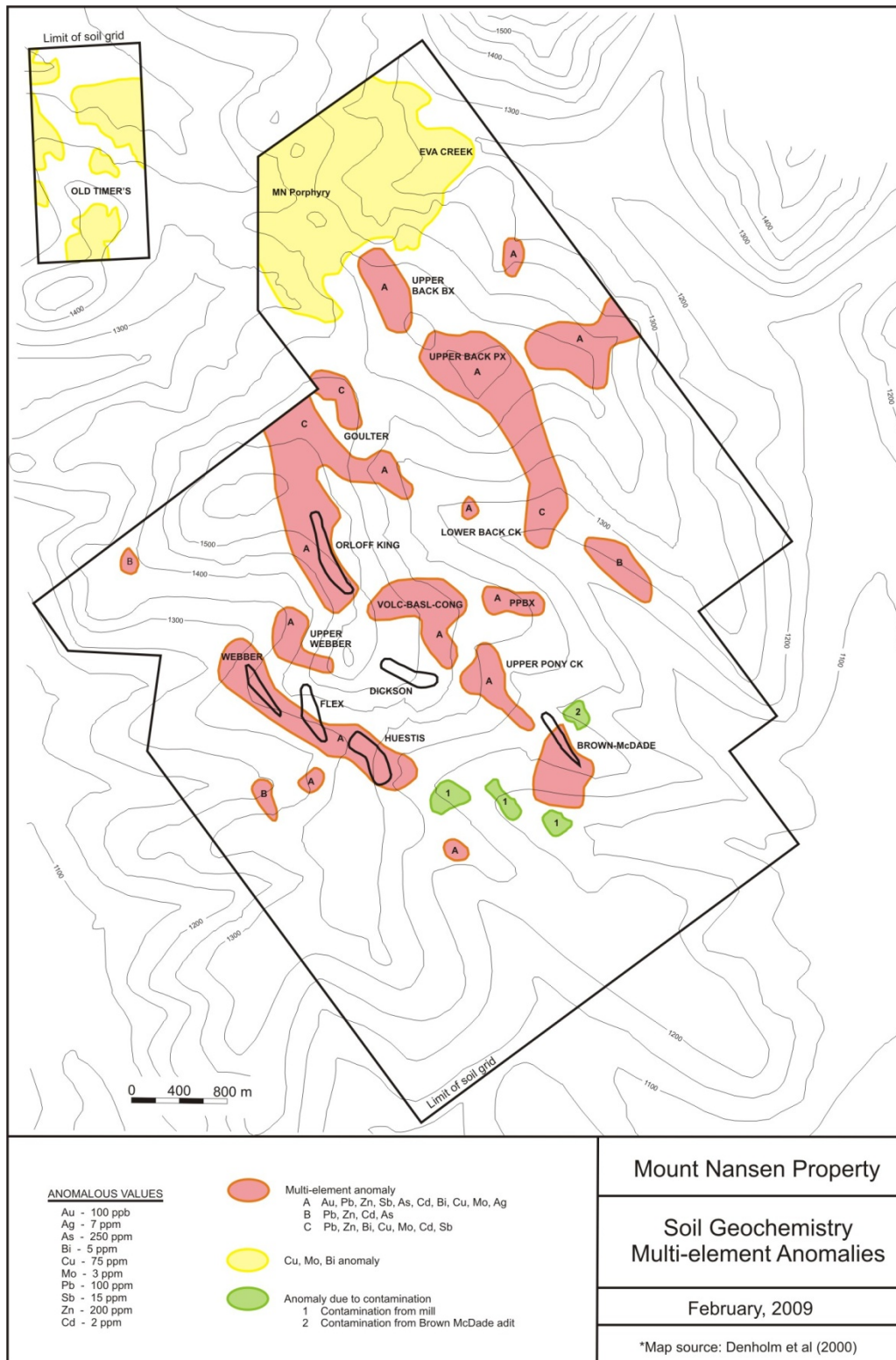


Figure 13: Multi-element anomalies in the Mount Nansen property outlined during the soil geochemical survey conducted by BYG Natural Resources Ltd in 1985-1986 (modified from Denholm et al, 2000).

### **9.3 MINERALIZED ZONES IN THE TAWA PROPERTY**

Three mineralized zones have been defined on the Tawa property: BRX, Klaza and BYG (Figures 7 and 14). These three zones are similar to the veins on the Mount Nansen property and occur within the northwest striking fault zones. The fault zones commonly consist of one to 10 m of gouge, containing pitted, light green quartz bands up to three meters wide. Locally, there are sulphides, massive pyrite, arsenopyrite, galena and sphalerite, within or adjacent to the quartz (Rodger, 1996).

The alteration within the gouge zones grades from quartz, sericite and kaolinite in the center to montmorillonite with yellow limonite on the edges. The montmorillonite alteration extends into the wall rocks, which are highly fractured and manganese stained close to the fault zones (Rodger, 1996).

Oxidation within the mineralized zones is evident, with alteration of the host rocks and remobilization of the gold. The sulphides are, generally, altered to limonite and other oxides (Rodger, 1996).

The BRX zone outlined comprises a number of veins with numerous small splays. The alteration and mineralization is most intense at junctions of the splays. The zone is coincident with a geophysical anomaly (Figure 14). The gold and silver values are erratic.

The Klaza zone, 1000 m north of BRX zone, is on a separate fault zone, has a known strike length of 250 m. This zone coincides with anomalous gold values outlined during the soil geochemical survey (Figure 14).

The BYG zone, located to the northeast of the BRX zone, also appears to be on a separate fault zone. This zone also coincides with anomalous gold values outlined during the soil geochemical survey (Figure 14).

As shown in Figure 14, the soil anomalies form a series of northwest-trending clusters. Individual clusters are strikingly linear with lengths of up to 2000 m. Results of the geophysical survey indicated a series of northwest-trending conductors that are continuous over strike lengths of up to 1900 m. Both the geochemical results and the geophysical results coincide with known mineralized structures (Figure 14). Considering the encouraging results of the soil geochemical and the geophysical survey, follow up work, including detailed mapping, stripping, trenching and eventually drilling are recommended.

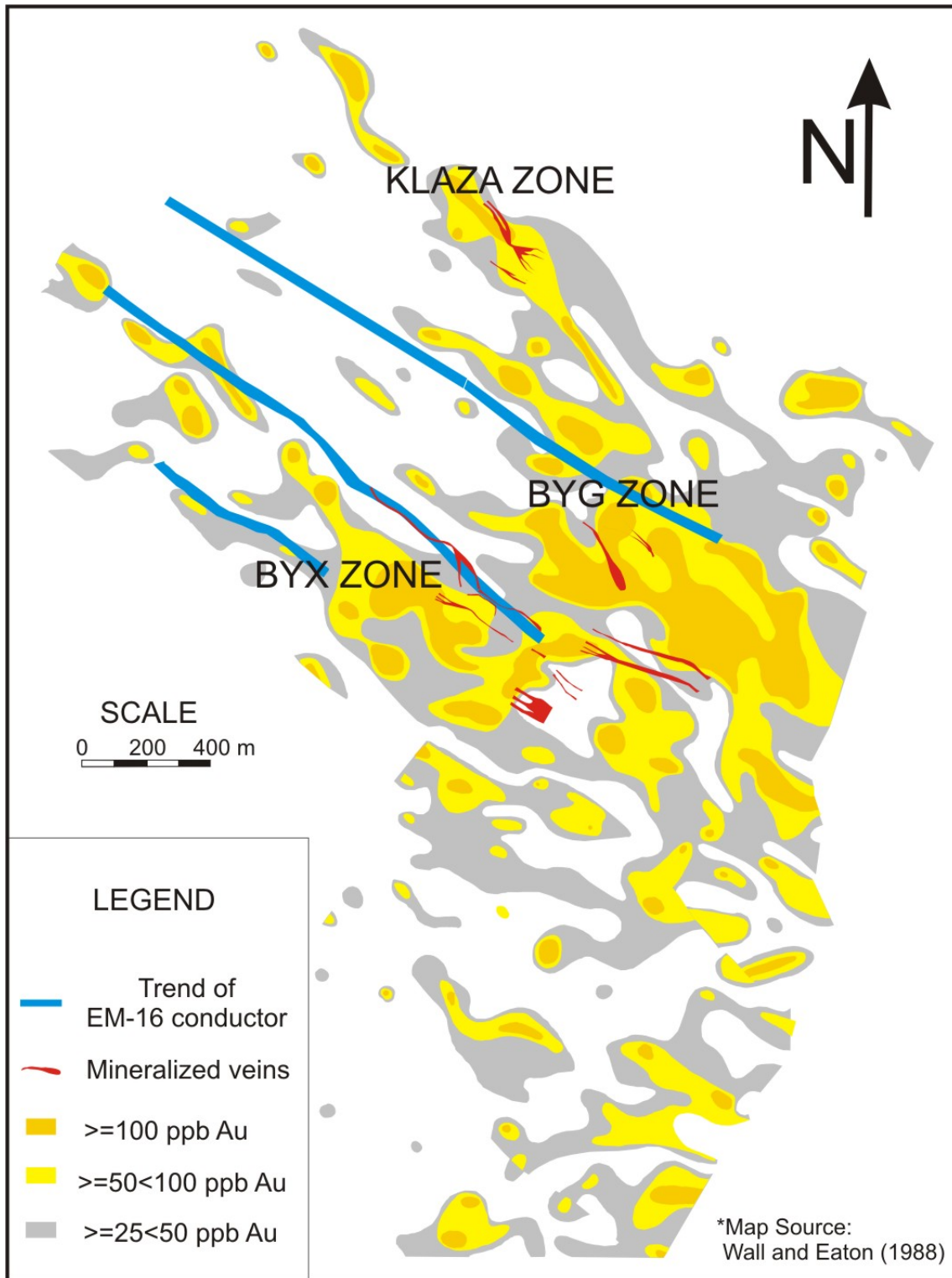


Figure 14: Map showing the relative locations of known mineralized zones with soil geochemical anomalies and geophysical anomalies outlined in the 1985-1988 exploration program by BYG Natural Resources Inc (Modified from Wall and Eaton, 1988).

## 10 EXPLORATION

In order to further delineate the known vein mineralization and examine the potential for possible extensions, an airborne VTEM-Magnetic geophysical survey was completed by Eagle Trail Properties Inc. under contract to Geotech Ltd. The survey was also designed to test for the presence of any additional massive sulphide type deposits that would warrant further exploration. In 2008, Geotech Ltd. based in Aurora, ON performed a Helicopter-borne time domain electromagnetic geophysical survey with VTEM system. The survey was flown for 638 line km.

### 10.1 SURVEY SPECIFICATIONS AND INSTRUMENTS

Survey specifications and instruments are described as below:

#### Survey Specifications:

Aircraft: Astar 350 B3 helicopter, Registration C-GWGK

Flight line Spacing: 200m

Nominal Terrain clearance: 75m

EM Loop is 40m under helicopter

Magnetic sensor is 15m under helicopter

#### Instruments:

Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry

Transmitter Loop Diameter 26m Base Frequency 30 Hz

Dipole Movement 548,000 NIA

Transmitter Wave Form: Trapezoid, Pulse Width 4.2ms

Geometrics Optically-pumped, high Sensitivity Cesium Magnetometer

Mag Resolution 0.2nT at 10 samples/sec

### 10.2 INTERPRETATION OF GEOPHYSICAL DATA

The 638 helicopter-borne VTEM – Magnetic Survey was flown at 200m line spacing in an east–west direction with 5 north–south tie lines at 1.8km spacing. One conductor was detected on line 1401.9 at coordinate 385400E, 6884900N, WGS84, Zone8N (NAD 83, Figure 15). This conductor has a late time response suggesting it is a moderate to good conductor, although the response is low. It is interpreted that this conductor is a sulphide zone, perhaps in a vein, with a short strike length since this is a one line response. A second very weak response was noted on line 1280.3 at coordinate 384600E, 6887260N (NAD83) WGS 84, Zone 8N (Figure 15). Both of these targets should be checked.

Broad early time responses correspond to conducting overburden in valleys and possible weathering of felsic intrusions which produces clay products (Figure 16).

The Mount Nansen porphyry is associated with a magnetic high and other extensions are possibly associated with other satellite magnetic anomalies (Figure 17). A large syenite mass occupies the northeast part of the survey which is outlined by a moderate magnetic high and localized magnetic highs (Figure 17).

Another series of northwest trending magnetic highs near the Orloff King Vein indicate a series of porphyry bodies trending northwest and southeast through the Brown McDade mine areas (Figure 17). These parallel a Northwest major Fault.

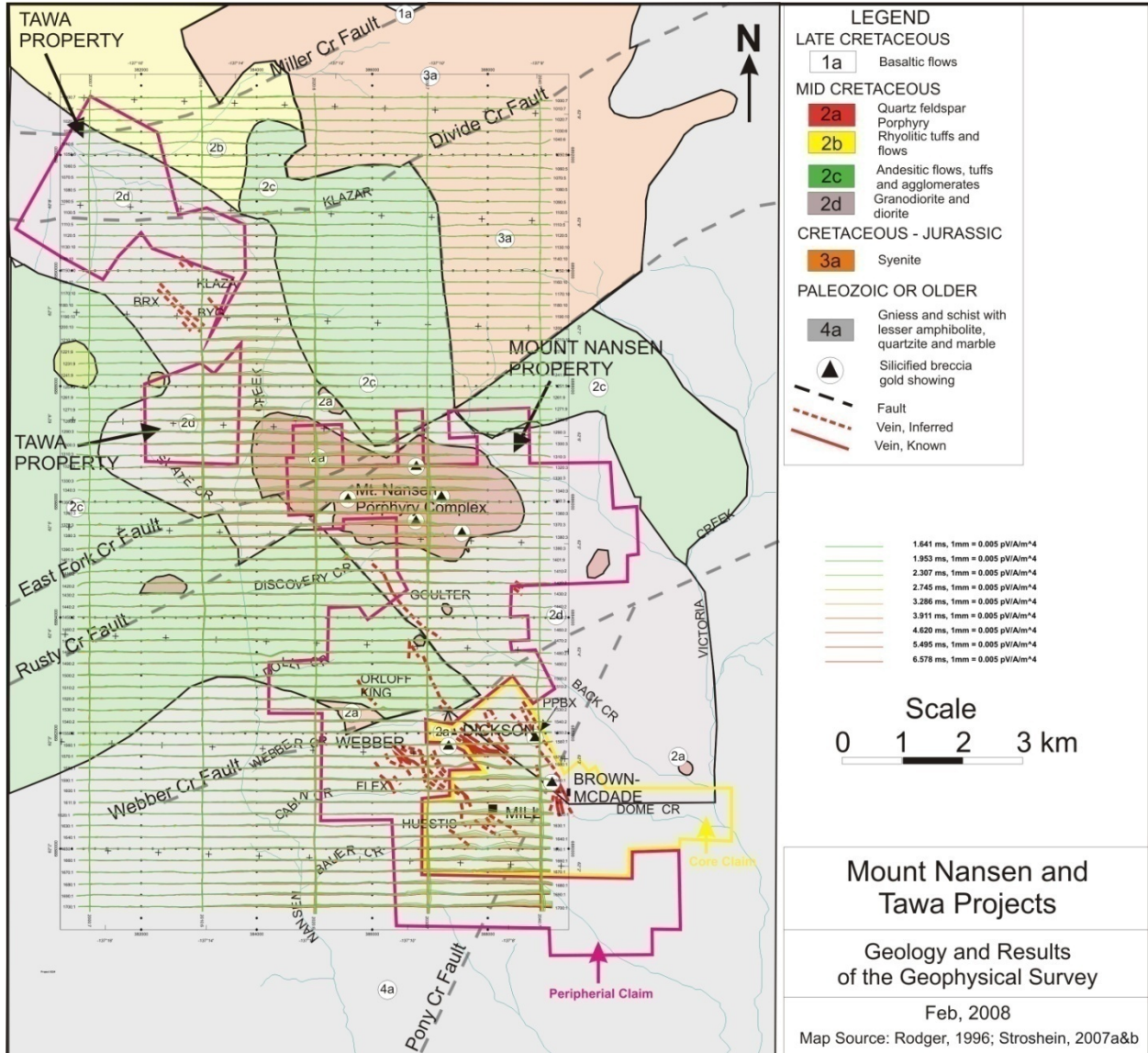


Figure 15: Geology and the late time response of the 2008 geophysical survey in the Mount Nansen area.

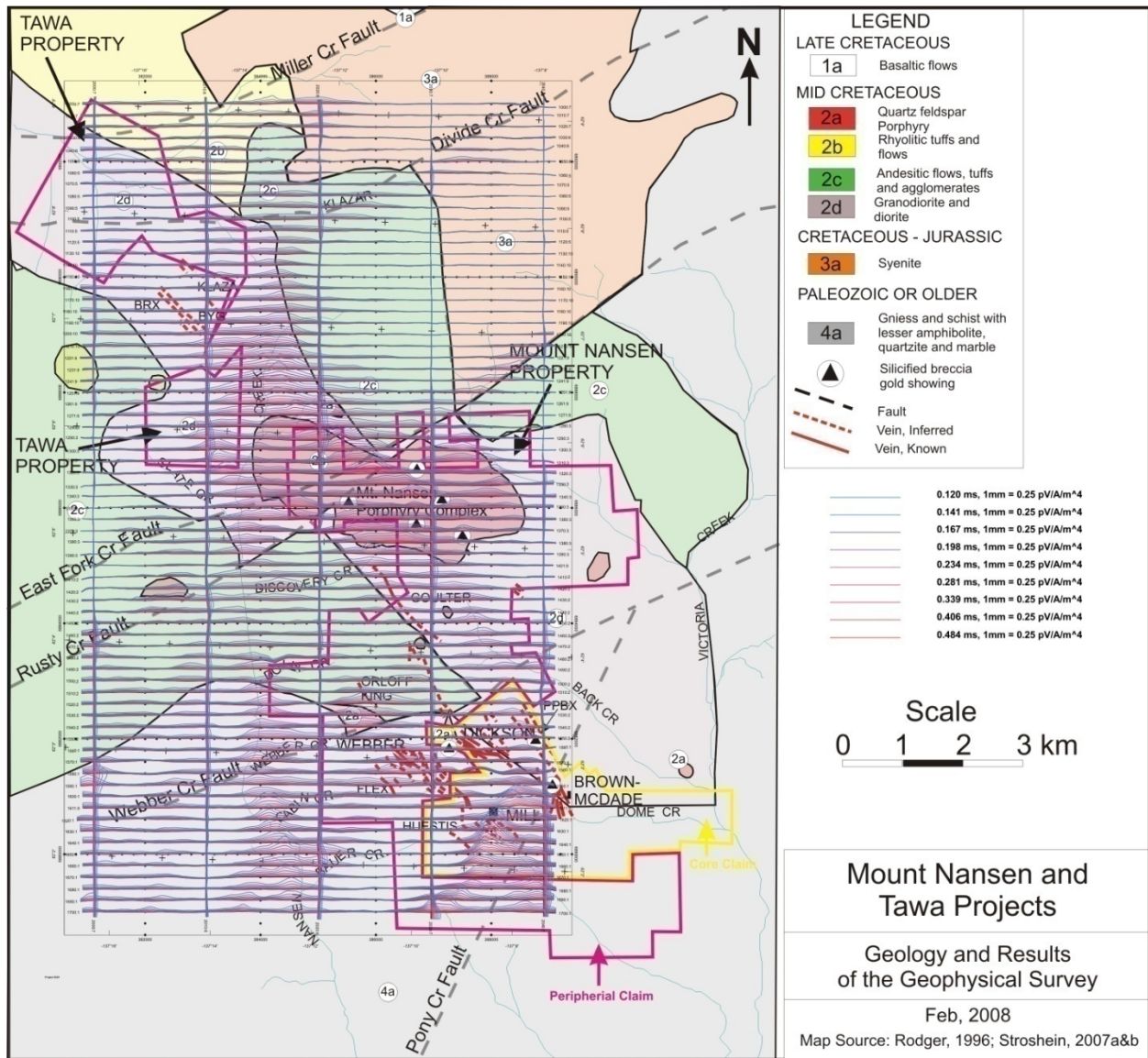


Figure 16: Geology and the early time response of the 2008 geophysical survey in the Mount Nansen area.

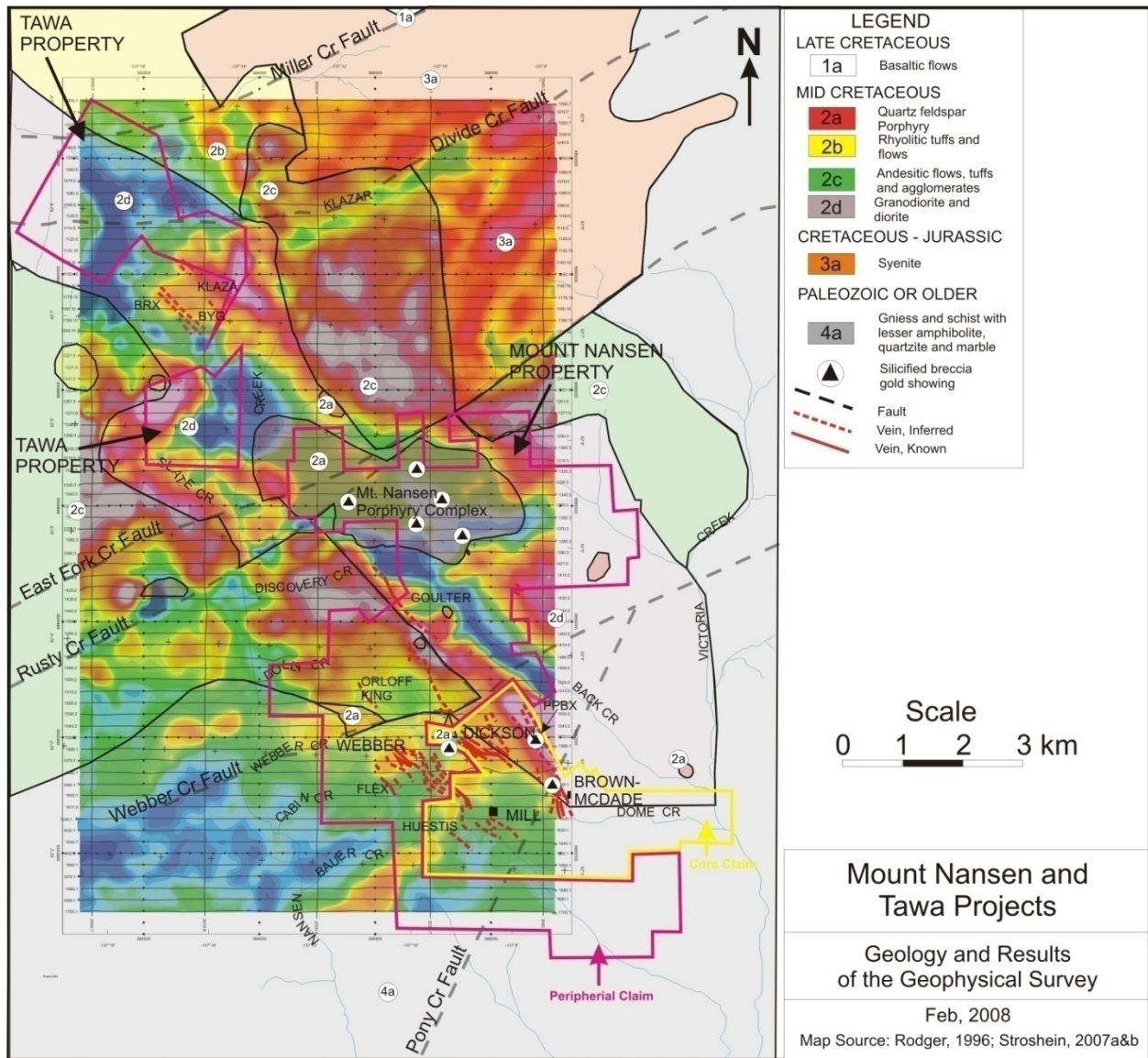


Figure 17: Geology and the magnetic anomaly in the Mount Nansen area.

## 11 STATEMENT OF COSTS

The contract cost for the VTEM survey flown by Geotech Ltd. paid by Eagle Trail Properties Inc. totaled CAD \$135,965.59.

The costs were broken down as shown in Table 3.

**Table 5: Cost of the geophysical survey conducted by Geotech Ltd for Eagle Trail Properties Inc. in 2008.**

638 line km Vtem Survey @ \$145/km	\$92,510.00
Mob/Demob Charges	\$9,000
4 Daily Ferry Charge (~50km) @	\$7,200
Contract Minimum Survey Charge	\$108,710.00
<u>Additional Costs:</u>	
2 Standby Days @ \$6,500/day	\$13,000
21 Fuel Drums	\$11,359.63
Frieght and Delivery of Drums	\$1,600
10% Handling fee	\$1,295.96
<b>Total Survey Charge</b>	<b>\$135,965.59</b>

*Note: the currency is stated in Canadian dollars.*

## **12 DRILLING**

Eagle Trail Properties Inc. has not conducted any drilling on the property to date.

## **13 SAMPLING METHOD AND APPROACH**

Eagle Trail Properties Inc. has not conducted any sampling programs on the property to date.

## **14 SAMPLE PREPARATION, ANALYSES AND SECURITY**

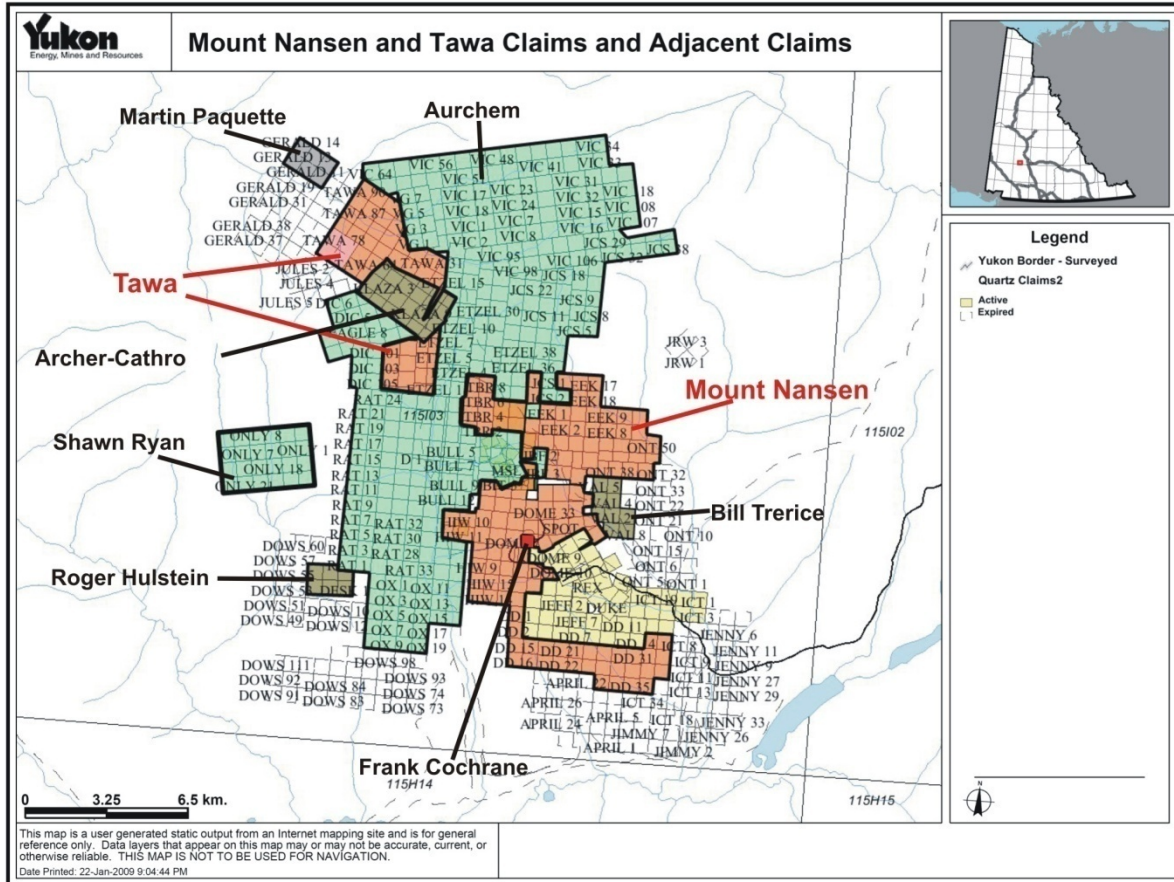
Eagle Trail Properties Inc. has not conducted any sample preparation or analysis as it has conducted no sampling programs on the property to date.

## **15 DATA VERIFICATION**

From late 1996 till closure of the mine in February 1999, assaying of both production blast holes and drill core samples was done at the Little Salmon Analytical Laboratory in Carmacks which was operated by BYG. No organized quality control and assurance procedures with independent checking at outside laboratories on a regular basis appeared to be in place and so there was no way to check on the quality of the assay information. Results of several duplicate samples assayed at the lab indicate there may have been problems with repeatability, especially for gold. There are indications from previous reports that some check sampling was done on drill core assays from earlier drilling campaigns but no actual comparative data was available to check the quality of that assaying. It should be noted that the Mount Nansen mine site is not included in Eagle Ridge Properties Inc's property holdings and this information is only being included for historical context.

## 16 ADJACENT PROPERTIES

Eagle Trail Properties Inc.'s properties exist within the Whitehorse mining district and are all surrounded by adjacent properties (Figure 18). The majority (396) of the adjacent claims are held by Aurchem Exploration Ltd.



**Figure 18: Locations of Mount Nansen and Tawa properties and adjacent active properties. Aurchem represents Aurchem Exploration Ltd. Archer-Cathro represents Archer, Cathro & Associates Ltd. Martin Paquette, Shawn Ryan, Roger Hulstein, Frank Cochrane and Bill Terrice are names of individuals who own the claims.**

The geology of these claims has been previously discussed in Section 7.1.

For the claims held by Aurchem Exploration Ltd, early stage exploration work (prospecting, stripping and trenching) has been carried out in the Discovery Creek in the center and the VIC area in the north. Exploration target in the Discovery Creek area was mainly epithermal vein systems that host Au, Ag, Pb and Zn. The Au-Ag mineralization consists of northwest trending quartz-sulphide veins, steeply plunging quartz-sulphide rich breccias bodies and east-westerly trending quartz-vein stockwork zones in clay-high alteration zones. The mineralization is spatially related to the central quartz porphyry complex and associated Late Cretaceous stocks

and dykes (Langdon, 1989; Langdon, 1993; Roth, 1991). Exploration target in the VIC area was the high grade Au (Ag, Bi, Te) bearing quartz veins. The veins are within a syenite host along steeply dipping, en echelon, east-west structures.

A number of other adjacent claims are held by Archer, Cathro & Associates Ltd, Martin Paquette, Shawn Ryan, Roger Hulstein, Frank Cochrane and Bill Trerice. Frank Cochrane and Bill Trerice's claims cover geochemical soil anomalies from the 1985 survey (Unknown author, 2008). No details were available to the authors regarding the historical exploration activities from other adjacent claims.

All the above information is in the public domain. The writer has not been able to verify the information on the adjacent claims in this section. To the authors' knowledge, the historical exploration results on the adjacent claims do not affect the authors' interpretation on the mineralization in the Mount Nansen property and Tawa property.

The author is unaware of any current activity on adjacent properties.

## 17 MINERAL PROCESSING AND METALLURGICAL TESTING

Eagle Trail Properties Inc. has not conducted any mineral processing or metallurgical testing on Mount Nansen Property and Tawa Property. Historical work on mineral processing and metallurgical testing is described below.

Rodger (1995) summarized the mineral processing test work done previously on the Mount Nansen property (Table 4). However, not all test work listed in Table 4 were found in the historical reports provided by Eagle Trail Properties Inc. The author compiled a summary on the test work that was described in the historical reports provided by Eagle Trail Properties Inc.

**Table 6: Mineral processing test in Mount Nansen property (Rodger, 1995).**

Date	Laboratory	Ore	Test Work
July 1967	Mines Branch Ottawa, Ontario	Huestis and Webber	Amalgamation, Flotation, Gravity Separation, Cyanidation
Dec 1967	Britton Research Vancouver, BC	Huestis and Webber	Work Index, Flotation, Gravity Separation, Cyanidation
May 1968	Cominco Trail, BC	Huestis and Webber	Flotation, Cyanidation
May-Sep 1968	Mines Branch Ottawa, Ontario	Huestis and Webber	Flotation, Cyanidation
July 1974	Lakefield Research Lakefield, Ontario	Huestis and Webber	XRD and Microscopy Flotation
Jan 1976	Kamloops Research Kamloops, BC	Huestis and Webber	Flotation, Gravity Separation
June 1976	Kilborn Engineering Vancouver, BC	Huestis and Webber	Mill operation and Flotation experiments
July 1976	Bacon Donaldson Vancouver, BC	Huestis	Gravity separation, Arsenopyrite Oxidation
Jan 1986	Hazen Research Colorado	Brown-McDade Oxide Sulphide	Cyanidation – Column, Bottle Roll and Vat Work Index, Flotation and Pressure Oxidation
March 1987	Lakefield Research Lakefield, Ontario	Huestis, Webber and Flex	Cyanidation

Nov 1988	Lakefield Research Lakefield, Ontario	Huestis	Gravity Separation
March 1989	Coastech Research North Vancouver, BC	Brown-McDade Oxide and Sulphide	Cyanidation – Column and Bottle Roll, Work Index, Flotation, Thickening
March 1989	Lakefield Research Lakefield, Ontario	Brown-McDade Sulphide	Flotation, Gravity Separation, Cyanidation
July 1989	Lakefield Research Lakefield, Ontario	Huestis	Flotation, Cyanidation
Sep 1989	Eimco Utah	Huestis Concentrates	Cyanidation, with and without Bio-oxidation

Many problems have been encountered during the historical mineral processing and metallurgical testing conducted by various companies. Major problems include different extraction methods required by oxide ores and sulphide ores, complex silver-lead-antimony sulphosalts and arsenic minerals, refractory nature of the sulphide ore, and high clay content of the oxide ore.

It was first realized that oxide ores and sulphide ores require different extraction methods. Results of metallurgical tests on Huestis and Webber ores in Britton Research Ltd and Mines Branch Ottawa showed that flotation was ineffective on oxide ore and cyanidation was ineffective on sulphide ore (Gunn and Unknown author, 1981 and 1982). In Gunn and Unknown author (1981 and 1982), D Gunn, the consulting metallurgist for Mount Nansen project, stated that “the major portion of the Huestis ore is characterized by a minor degree of oxidation and thus the ore responds well to flotation but poorly to cyanidation” and “the Webber ore has a much greater degree of oxidation than the Huestis ore and therefore responds favorably to cyanidation but less favorably to flotation, depending upon the degree of oxidation”. D Gunn also stated that it was impractical to try to separate the oxide ore from the sulphide ore for separate treatment in a cyanide plant. He explained that “oxidation varies widely in Mount Nansen area and oxidized ore always contains sulphide ore recoverable by flotation; also, the majority of the sulphide ore will have varying amounts of oxide ore that will be lost to flotation but amenable to cyanidation”.

Another issue is the complex silver-lead-antimony sulphosalts and arsenic minerals (Gunn and Unknown author, 1981 and 1982). Since the silver-lead-antimony concentrate and the gold-arsenic concentrate require different processing procedures, separating antimony and arsenic was recommended (Gunn and Unknown author, 1981 and 1982). D Gunn suggested that the “flotation of antimony sulphosalts and arsenic minerals prior to cyanidation would reduce the cyanide costs and simplify the operation of a cyanide plant, and the elimination of ore separation would simplify the mining and storage facilities”. According to Gunn and Unknown author (1981 and 1982), minor testing was done on caustic leaching of the silver-lead-antimony concentrate and the roasting and cyanidation of the gold-arsenic concentrate. No results on these tests were found by the author.

The bulk gold-silver concentrate produced from the Mount Nansen mill in 1968-1969 was shipped to Sweden for smelting. With the aim of reducing the shipping cost, the possibility of producing gold-silver dore bars on the property was discussed by Campbell (1983) and Unknown author (1984). In the reports by these two authors, possibility of utilizing a “Fluid-

Bed” type roster, which would collect the environmentally deleterious byproducts (e.g. arsenic, antimony and sulphur), to treat the concentrates was also mentioned to be under investigation to reduce the cost. The author of the present report did not find any results of these investigations.

The refractory character of the sulphide ore in Mount Nansen property has been well aware of (e.g. Eaton, 1986; Denholm et al, 2000; Salter et al, 1989). It was understood that the Mount Nansen ores were refractory due to the association of the gold and silver with sulphides.

Results of the metallurgical tests in Hazen Research Inc or Lakefield Research in 1985 on samples from Mount Nansen property showed that simple gravity and flotation gave 80-90% silver recovery but only about 60% recovery of gold (Eaton, 1986). It was noted that gold recovery could be increased slightly by grinding finer but the high silica content of the ores resulted in an unacceptably slow throughput (Eaton, 1986). The reason why cyanidation was ineffective was that gold was apparently finely encapsulated in the sulphides (Eaton, 1986).

Flotation, cyanidation and gravity test work on Brown-McDade sulphide ore composites conducted in 1989 confirmed that the refractory nature of the gold in two composites were due to the association of gold with arsenopyrite (Salter, Jackman and MacPhail, 1989). Results of test work on Huestis ore at Lakefield Research Ltd (Salter, Furey and MacPhail, 1989) also showed poor gold and silver recovery by cyanidation. Test work including pressure oxidation, roasting and bacterial leaching to break down the sulphides and liberate the gold for cyanidation were suggested by Lakefield Research Ltd (Salter, Jackman and MacPhail, 1989). The author did not find any report on further test work as suggested by Lakefield Research Ltd.

As to oxide ores, results of the metallurgical tests in Hazen Research Inc or Lakefield Research in 1985 suggested that “recoveries from oxidized ore using conventional grinding and cyanidation will be over 98% for gold and about 40% silver with cyanide consumption of less than 1 pound per ton. Column leach tests of ½ inch oxidized material returned about 90% gold recovery and 30% silver recovery in 21 days, with a similar low cyanide consumption”.

Heap leaching method, which could reduce capital costs, was also discussed in the historical report. Unknown author (1994) mentioned that heap leach test work carried out by Coastech in 1988 and Hazen Research in 1985-1986 gave positive results, but further test work was required and it was uncertain how heap leach would be perceived environmentally since there was never a heap leach approved for production in Yukon. The author did not find any details on heap leaching tests.

BYG Natural Resources Ltd. focused on mining the oxide ores in the Mount Nansen property. Carbon in Leach process was selected by BYG Natural Resources Ltd as the means of treating the oxide ores and future mixed oxides and sulphides (Campbell, 1994). In the Brown-McDade oxide zone, production commenced in November 1996 and was shut down in November 1997 due to the higher clay contents than had been expected in the ore. In the mill production memo for BYG (Unknown author, 1996), it was mentioned that “high clay content in the high grade sections of the ore body reduce the total throughput to as low as 250 tonnes per day.....the clay accumulates in the crusher, blinds the screens and causes severe hang ups in all of the bins”.

In Denholm et al (2000), it was noted that verbal communication with Robert Stroshein suggested that BYG Natural Resources Ltd did not fully understand the metallurgy of the

Brown-McDade open pit ore they were processing as was evidenced by the generally poor recoveries in the mill during the last eight months of operation.

Based on the above information, the author concludes that the historical metallurgical test work was only preliminary. The refractory nature of the sulphide ore was not fully understood. More test work and investigation need to be done on the sulphide mineralization and the high silicon content of the ore.

## **18 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

### **18.1 INTRODUCTION**

The Brown-McDade, Webber, Huestis and Flex deposits, together with several stockpiles, have been identified for their gold and silver values on the Mount Nansen property.

A variety of reserve/resource estimates have been previously completed on each of the deposits. The ore reserves presented in this report are solely a review of those that have been established.

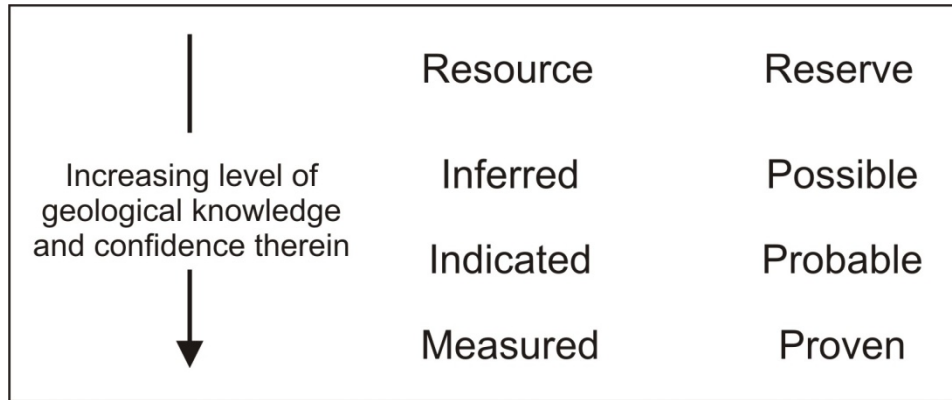
### **18.2 DEFINITION AND DISCLAIMER**

During the process of reviewing the literature, the following terms were encountered: resource, indicated, inferred, ore reserve, proven, probable, and possible.

Mineral resource, as defined in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards and referenced in NI 43-101, means a concentration or occurrence of natural, solid, inorganic, or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics, and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

Mineral Reserve, as defined in the CIM Standards and referenced in NI 43-101, means the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Mineral resources are categorized into Inferred, Indicated and Measured. Mineral reserves are categorized into Possible, Proven and Probable. Relations between these terms are illustrated in Figure 19.



**Figure 19: Classification schemes for resources/reserves. Note that economic, mining, metallurgical, marketing, environmental, social, and governmental factors may cause material to move between resources and reserves.**

The discussions related to resource and reserve estimates contained in this report refer to historical estimates only. The resource and reserve estimates discussed in this report, except for that by Unknown Author (2008), may have been prepared according to the accepted standards for the mining industry for the periods to which they refer, however, they do not comply with the current CIM standards and definitions for estimating resources and reserves as required by Canadian National Instrument 43-101 (NI 43-101) “Standards of Disclosure for Mineral Projects”. The historical resource/reserve estimates listed in this section is for better demonstrating the property and should not be relied upon.

### **18.3 HISTORICAL RESOURCE/RESERVE ESTIMATES ON BROWN-MCDADE, WEBBER, HUESTIS, AND FLEX DEPOSITS**

There were many estimates of the reserves in the Brown-McDade, Webber, Huestis, and Flex deposits before 1999, when BYG Natural Resources Ltd, the last producer in Mount Nansen property, was ordered to terminate production. These estimates are usually vague as to the variables and parameters used to develop the resource. In 2000, Denholm et al downgraded the quality of resources from proven and probable to possible and inferred due to missing data. Unknown author (2008) again downgraded the quality of resources to potential mineral resources in order to make it compliant to the 43-101 guidelines. In the following sections, reserve/resource estimations made by Denholm et al (2000), previous engineers/consultants, and Unknown author (2008) are discussed.

### **18.4 BROWN-MCDADE DEPOSIT**

As discussed in Section 9.2, in Brown-McDade deposit, there are two types of mineralization: anastomosing veins and veinlets of quartz with varying amounts of sulphides and sulphide-rich siliceous breccias. In the first type of mineralization, there are two principle veins known as the No 1 and No 2 veins which collectively host all the reserves within the Brown-McDade deposit (Campbell, 1994). The second type of mineralization, breccias pipe, is about 30 m long by 12 m wide in planar cross section with a different plunge than the first type of mineralization (Denholm et al, 2000).

The resource estimation on Brown-McDade deposit made by Denholm et al (2000) is shown in Table 5. The cut-off grade used was 3.5 g/t Au and the minimum mining width used was 2.0 m.

**Table 7: Brown-McDade underground geological resource (Denholm et al, 2000).**

<b>Zone</b>	<b>Tonnes</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>Category</b>
No 2 (FW)	105,400	5.5	52	Indicated
No 1 (HW)	20,700	9.8	50	Indicated
Total indicated	126,100	6.2	51	Indicated
Breccia Pipe	25,000	10.7	158	Inferred

Geological resources at Brown-McDade zone calculated by other workers before Denholm et al (2000) are shown in Table 6.

**Table 8: Brown-McDade geological reserve calculated by various staff engineers and consultants before Denholm et al (2000).**

	<b>Proven</b>		<b>Probable</b>			<b>Possible</b>		<b>Ave Grade</b>		<b>Reference</b>	
	<b>Tonnes</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Ag g/t</b>		
	14,795	17.29	144.58	51,850	22.96	133.24	47,000			Unknown author, 1982	
	14,795			51,850			47,000		21.83	136.1	Campbell, 1983
	22,204	11.62	160.46	22,204	11.62	160.46	22,204				Unknown author, 1984
<b>OP</b>	85,296	7.1	67	108,820	7.2	73	7,486	5.4	35		Campbell, 1994
<b>UG</b>	76,519	7.7	66	164,612	6.7	56	57,275	5.9	47		Campbell, 1994
<b>LG</b>	45,640	1.9	25	64,835	2.1	24	6,753	0.9	15		Campbell, 1994
<b>Total</b>	207,455	6.2	57.4	338,267	6.0	55.3	71,514	5.4	42.7		Campbell, 1994

*OP: Open pit reserve; UG: Underground reserve; LG: Low grade reserve. The recoverable mining reserve is "extractable" and economic.*

As shown in Table 5 and Table 6, there exists difference between resources calculated by various staff engineers and consultants. Difference in these reserve estimates is due to 1) application of different cut-off grades, depending on metal prices, 2) use of various minimum mining widths, and 3) new data incorporated in later calculation exemplified by Denholm et al (2000)'s inclusion of breccia pipe in the calculation.

## 18.5 WEBBER DEPOSIT

The two main vein structures (No 1 Footwall and No 2 Hanging wall) recognized in the Webber deposit collectively host the bulk of the reserves within the Webber deposit.

Denholm et al (2000)'s resource calculation on the Webber deposit is shown in Table 7. Geological reserves at Webber deposit calculated by other workers before Denholm et al (2000) are shown in Table 8.

**Table 9: Webber geological resource (Denholm et al, 2000).**

Zone	Tonnes	Au (g/t)	Ag (g/t)	Category
No 1 (FW)	22,800	13.1	561	Indicated
No 2 (HW)	35,700	8.9	625	Indicated
Total indicated	58,500	10.5	600	Indicated
No 1 (FW)	11,900	6.8	380	Inferred
No 2 (HW)	15,000	7.2	546	Inferred
Total inferred	26,900	7.0	472	Inferred

*HW: Hangwall; FW: Footwall*

**Table 10: Webber geological reserve calculated by various staff engineers and consultants before Denholm et al (2000).**

	Proven		Probable			Possible			Ave Grade		Reference
	Tonne	Ag	Tonne	Au	Ag	Tonne	Au	Ag	Au	Ag	
	s	Au g/t	s	g/t	g/t	s	g/t	g/t	g/t	g/t	
					501.5					448.7	Unknown author, 1981
29,600	7.94	0	29,488	6.80	7	42,300					Unknown author, 1982
42,912	6.89	7	36,528	7.31	9	48,500					Unknown author, 1982
42,912			36,528			48,500			7.09	419.5	Campbell, 1983
					454.4						Unknown author, 1984
34,128	8.50	7	30,383	9.07	4	29,660					Unknown author, 1984
UG	30,963	10.3	645	27,563	10.8	550	26,906	7.0	472		Campbell, 1994 *

*UG: Underground reserve.*

*\*: Recoverable mining reserve includes possible reserves.*

Denholm et al (2000) did not recalculate the resources in the Webber deposit because of the incomplete data base. The proven and probable ore from Campbell (1994) were simply transferred into the indicated resource category and the possible ore from Campbell (1994) were transferred into the inferred resource by Denholm et al (2000). Concerned was raised over the minimum mining width (1.22 m) used by Campbell (1994) by Denholm et al (2000).

## 18.6 HUESTIS DEPOSIT

Three main vein structures (No 11 Hanging wall, No 12 Intermediate, and No 13 Footwall) host the bulk mineral resources in the Huestis deposits.

Denholm et al (2000)'s resource calculation on the Huestis deposit is shown in Table 9. Geological reserves at Huestis deposit calculated by other workers before Denholm et al (2000) are shown in Table 10.

**Table 11: Huestis geological resource (Denholm et al, 2000).**

Zone	Tonnes	Au (g/t)	Ag (g/t)	Category
No 11 (HW)	1,700	9.6	58	Indicated
No 12	72,000	14.6	277	Indicated
No 13 (FW)	10,200	10.7	406	Indicated
Total indicated	84,000	14.0	288	Indicated
No 11 (HW)	3,500	9.6	58	Inferred
No 12	24,400	16.5	304	Inferred
No 13 (FW)	10,200	10.7	406	Inferred
Total inferred	38,100	14.3	309	Inferred

**Table 12: Huestis geological reserve calculated by various staff engineers and consultants before Denholm et al (2000).**

	Proven			Probable			Possible			Ave Grade		Reference
	Tonnes	Au g/t	Ag g/t	Tonnes	Au g/t	Ag g/t	Tonnes	Au g/t	Ag g/t	Au g/t	Ag g/t	
	35,856	13.04	260.25	45,792	10.77	253.44	54,200					Unknown author, 1981
	43,872	12.76	260.25	54,526	10.77	249.76	79,500					Unknown author, 1982
				54,526			79,500			11.62	255.15	Campbell, 1983
	45,159	12.19	229.06	49,344	10.77	241.54	42,014					Unknown author, 1984
No. 11	1,742	9.6	58.2	1,742	9.6	58.2	3,484	9.6	58.2			Campbell, 1994; Lecuyer, 1997
No. 12	37,828	15.3	279.4	34,198	13.9	273.6	24,415	16.5	304			Campbell, 1994; Lecuyer, 1997
No. 13	1,394	10.9	490.2	8,826	10.6	392.2	10,219	10.7	405.6			Campbell, 1994; Lecuyer, 1997
Total	40,964	14.9	277	44,766	13.1	289	38,118	14.3	309			Campbell, 1994; Lecuyer, 1997

Denholm et al (2000) did not recalculate the resources in the Huestis deposit because of the incomplete data base and raised concerns about several parameters used in the original reserve calculation for the Webber as included in the 1994 feasibility study by BYG Natural Resources (Campbell, 1994) relating to mining width, capping of high gold or silver values and categorization of reserves. The proven and probable ore from Campbell (1994) were simply

transferred into the indicated resource category and the possible ore from Campbell (1994) were transferred into the inferred resource by Denholm et al (2000).

### 18.7 FLEX DEPOSIT

Due to the lack of geological information for the drill holes and the trenching, it is difficult to correlate the various individual vein structures (Denholm et al, 2000). Denholm et al (2000) simply expanded each mineralized intersection to a minimum 2.5 m diluted true width during the reserve calculation process. Denholm et al (2000)'s calculation resulted in 35 blocks totaling 40,900 tonnes at 4.9 g/t gold and 158 g/t silver. This tonnage was categorized as an inferred resource.

BYG Natural Resources Ltd engineers also conducted reserve estimation for Flex deposit in 1994 (Campbell, 1994; Table 11). It was noted in Denholm et al (2000) that BYG Natural Resources Ltd engineers' open-pit method resulted in a 16 to 1 waste-to-ore strip ratio and this approach might not have been the correct one given the narrow size of the veins and discontinuous nature of the gold values within the structures.

**Table 13: Flex geological resource (Campbell, 1994).**

	Proven		Probable			Possible			Reference	
	Tonnes	Au g/t	Ag g/t	Tonnes	Au g/t	Ag g/t	Tonnes	Au g/t		Ag g/t
OP							62,606	7.4	178	Campbell, 1994
UG							52,245	7.7	226	Campbell, 1994

*OP: Open pit reserve; UG: Underground reserve.*

### 18.8 OTHER POTENTIAL DEPOSITS

Several other smaller and less well defined zones and showings occur on the property but not enough data was available to define resources (Denholm et al, 2000).

### 18.9 SUMMARY

Mineral resource/reserve estimation has been conducted by various engineers/consultants on Brown-McDade, Webber, Huestis and Flex deposits. A summary of the Mount Nansen geological resource estimated by Denholm et al (2000) is listed in Table 12. Unknown author (2008) calculated the potential mineral resources of Mount Nansen Project and claimed it to be compliant with the NI 43-101 standard using diluted resources and grades, a minimum mining width of 1.4 m and the cut-off grade of 7.3 g/t. The results of Unknown author (2008) are shown in Table 13. Unknown author (2008) did not calculate the resource for Brown-McDade deposit since it was essentially mined out (Unknown author, 2008).

**Table 14: Summary of Mount Nansen geological resources (Denholm et al, 2000).**

Zone	Indicated			Inferred		
	Tonnes	Au (g/t)	Ag (g/t)	Tonnes	Au (g/t)	Ag (g/t)
<b>Brown-McDade U/G (Breccia Pipe)</b>	126,100	6.2	51	25,000	10.7	158
<b>Flex Zone</b>				40,900	4.9	158
<b>Webber</b>	58,500	10.5	600	26,900	7.0	472
<b>Huestis</b>	84,000	14.0	288	38,100	14.3	309
<b>Brown-McDade Ore Dump</b>	12,000	5.0	42			
<b>Total</b>	280,600	9.4	236	130,900	9.2	266

**Table 15: Summary of Mount Nansen potential mineral resources (Unknown author, 2008).**

Mineralized deposit	Minimum		Maximum	
	Tonnes	Au (g/t)	Tonnes	Au (g/t)
<b>Flex</b>	50,000	8.70	148,000	9.60
<b>Webber</b>	39,000	10.0	95,000	11.0
<b>Huestis</b>	35,000	14.1	138,000	15.5
<b>Total and Average</b>	124,000	10.6	381,000	12.2

These historical estimations may not be relied upon until they are confirmed using methods and standards that comply with those required by NI 43-101. The purpose of the historical resource/reserve estimate is to demonstrate the amount of work that was put into the project. Investors are cautioned that a qualified person has not yet completed sufficient exploration, test work or examination of past work to define a resource that is currently compliant with NI 43-101.

## 18.10 OTHER RELEVANT DATA AND INFORMATION

Denholm et al (2000) stated that a significant amount of information dealing with the sampling and assaying of the Webber/Flex/Huestis deposits was probably missing. Unknown author (2008) pointed out that it could be anticipated that a great deal of searching would have to be done before finding any fresh data and there was no assurance that when found it would be relevant to the evaluation of the deposit.

The author is unaware of any other relevant data and information.

## **19 RECOMMENDATIONS**

### **19.1 GROUND IP-RESISTIVITY SURVEY AND VLF-EM SURVEY**

An airborne magnetic survey with a VLF-EM system may have assisted in mapping the veins and fault structures on the property. This could be completed on the ground on a grid that would be used for an IP survey. The VTEM system is an excellent tool for locating massive sulphides, but vein systems are the economic target in this case and associated porphyries with copper-molybdenum potential, hence the VTEM survey has not been the proper tool to use in this case. Ground IP-resistivity surveys could cover the porphyry and could map the veins.

### **19.2 EXPLORATION TO DEPTH**

In the Webber, Huestis and Flex zones, historical exploration has been focused in the area within 200 m below the surface. In the future, exploration to depth for sulfide ores should be carried to expand mineral resources.

### **19.3 UNTESTED ANOMALIES**

Several anomalies were outlined during the 1985-1987 exploration program conducted by BYG Natural Resources on Mount Nansen property and Tawa property (Figures 3 and 4). It is suggested that these untested soil geochemical anomalies should be tested in the future by trenching, stripping and eventually drilling with the aim of discovering new veins.

### **19.4 UNDERSTAND METALLURGY FOR SULPHIDE ORES**

This is the first thing that needs to be done in order to increase the recovery rate to make the deposit economical.

### **19.5 HISTORICAL DATA**

Many historical maps do not have coordinates or have different coordinate systems, making it hard to correlate the claim location, geology, geochemical and geophysical data to define future exploration targets. Historical drilling/trenching/stripping information needs to be organized and put into a database.

## 20 REFERENCES

- Andersen F and Stroschein R, 1998. Geology of the Flex Gold-Silver Vein System, Mount Nansen Area, Yukon. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 139-142.
- Carlson GG, 1987. Geology of Mount Nansen (115-I/3) and Stoddart Creek (115-I/6) Map Areas, Dawson Range, Central Yukon. Indian and Northern Affairs Canada Northern Affairs: Yukon Region Open File 1987-2.
- Campbell D, 1983. Summary Review on Mount Nansen Property, Carmacks, Yukon Territory, Canada. Report for Mount Nansen Gold and Silver Ltd.
- Campbell D, 1994. Feasibility Study Report on Mount Nansen Gold Project in Yukon Territory, Canada, Volume 1. Report for BYG Natural Resources Inc.
- Denholm E, Dumka D and Farquharson G, 2000. A Review of the Mount Nansen Property, Yukon Territory. Unpublished report for Department of Indian Affairs and Northern Development.
- Eaton WD, 1986. Report on Geological, Geochemical, Geophysical, Trench and Drilling Results from Work Done between June 15 and September 27, 1985 on the Mount Nansen Property Located at Latitude 62°05'N and Longitude 137°08'W on NTS Mapsheet 115I/3. Yukon Mineral Assessment Report. Document No: 091825.
- Eaton WD and Archer AR, 1989. Report on the Geology and Mineral Inventory of the Mount Nansen and Tawa Properties, Yukon Territory with Assessment of the Economical Potential for Open Pit Mining of Oxidized Mineralization in the Brown-McDade Zone. Report for BYG Natural Resources Inc and Chevron Minerals Ltd.
- Gunn D and Unknown author, 1981. Feasibility Report on Mount Nansen Mine, Carmacks, YT. Report by Dolmage Campbell and Associates (1975) Ltd, Vancouver, Canada.
- Gunn D and Unknown author, 1982. Feasibility Report on Mount Nansen Mine, Carmacks, YT. Report by Dolmage Campbell and Associates (1975) Ltd, Vancouver, Canada.
- Langdon M, 1989. 1989 Exploration Program: Report on Trenching, Geology, Magnetometer Survey and Soil Geochemical Survey Carried Out on Wedge 5, Wedge 6, Wedge 7, Wedge 8, Wedge 9, Wedge 10, Wedge 15, Ras 1, Ras 2, Ras 3, Ras 4, MSL, Bit 1, Bit 2, Bit 3, Bit 4, Bit 5 for Aurchem Exploration Ltd. Yukon Mineral Assessment Report. Document No: 092770.
- Langdon M, 1993. Report on a Soil Geochem Survey Carried Out on the Discovery Creek Property for Aurchem Exploration Ltd. Yukon Mineral Assessment Report. Document No: 093138.
- Langdon M, 1997. Summary Report on the Diamond Drilling Program of January 1997 to March 1997 Carried Out on the Claims of JON WEDGE-2F, JBF-1F, JBF-4F, JBF-6F, JBF-7F,

- J.BILL-30, BULL-1, BULL-2. Yukon Mineral Assessment Report. Document No: 093701.
- Lecuyer NL, 1997. Mount Nansen Property Huestis and Webber Zones Feasibility Study. Report for BYG Natural Resources Inc.
- Melling DR, 1995. Summary Report: 1995 Exploration Program on Mount Nansen Gold Project, Carmacks, Yukon Territory, Canada. Report for BYG Natural Resources Inc.
- Rodger RJ, 1995. Review of Proposed Work Programme on Mount Nansen Property. Report for BYG Natural Resources Inc.
- Rodger RJ, 1996.** Property Evaluation Report on Tawa Mineral Property and Arctic Mineral Property. Report for Trumpeter Yukon Gold Inc (a subsidiary of BYG Natural Resources Inc).
- Roth J, 1991. Report on Magnetic and IP Surveys Discovery Creek Project Yukon Territory for Aurchem Exploration Ltd. Yukon Mineral Assessment Report. Document No: 092987.
- Salter RS, Furey JT and McPhail RS, 1989. An Investigation of the Recovery of Gold from Nansen Project Samples Submitted by Archer Cathro and Associates (1981) Ltd per Melis Engineering Progress Report No 2.
- Salter RS, Jackman I, and MacPhail RS, 1989. An Investigation of the Recovery of Gold from Nansen Project Samples Submitted by Archer Cathro and Associates (1981) Ltd per Melis Engineering Progress Report No 1.
- Sawyer JBP and Dickinson RA, 1975. Porphyry Mineralization at Mount Nansen. Private Report.
- Stroshein RW, 2007a.** Geological Exploration Summary Mount Nansen Project Brown McDade Deposit (Core Claims), Yukon Territory. Report for Department of Energy, Mines and Resources, Assessment and Abandoned Mines Branch and Pricewaterhousecoopers Inc.
- Stroshein RW, 2007b.** Geological Exploration Summary Mount Nansen Project Brown McDade Deposit (Peripheral Claims), Yukon Territory. Report for Department of Energy, Mines and Resources, Assessment and Abandoned Mines Branch and Pricewaterhousecoopers Inc.
- Unknown author, 1996. Mill Production Memo for BYG Natural Resources Inc.
- Unknown author, 1984. Summary Review on Mount Nansen Property, Carmacks, Yukon Territory, Canada. Report for Nansen Mining Corporation.
- Unknown author, 1994. Mount Nansen Project Summary Report. Report for BYG Natural Resources Inc.
- Unknown author, 2008. An Exploration Report for the Mount Nansen Property, Yukon, Canada. Report for Eagle Trail Properties Inc.

Walls MJ and Eaton WD, 1987. Nansen Project Final Report. Yukon Mineral Assessment Report. Document No: 092122.

Wall MJ and Eaton WD, 1988. Tawa Property 1988 Fina Report. Yukon Mineral Assessment Report. Document No: 092585.

## **21 CERTIFICATE OF AUTHORSHIP**

I, Robert S. Middleton, am a graduate of the Provincial Institute of Mining (Haileybury, Ontario) (1965) – Mining Diploma; Michigan Technological University 1968, B.S. Applied Geophysics, 1969 M.S. Applied Geophysics.

Attended University of Toronto 1970 – Ph.D Geological program.

1. I am a Professional Engineer of APEO (Association of Professional Engineers of Ontario) #31595010 and have been a member since 1969.
2. I am a fellow of the Geological Association of Canada.
3. I am and have been a member of the Canadian Institute of Mining and Metallurgy since 1970.
4. I am a member of the Prospectors and Developers Association of Canada.
5. I am a member of the Ontario Prospectors Association.
6. I am a member of the Society of Economic Geologists.
7. I was employed as the first geophysicist for the Province of Ontario 1968-1971 at Queens Park and in that capacity reviewed all exploration work reports done in Ontario and amended and reviewed the Mining Act.
8. I was Manager of ground and airborne geophysics for Barringer Research Ltd. 1971-1974.
9. I was geophysicist, V.P. and Director of Rosario Resources Corp. 1974-1980.
10. I was Exploration Manager for Newmont Exploration Canada (Eastern) 1981-1983.
11. I was consulting for junior and major companies worldwide 1983-2009.
12. I do not own any shares of Guinness Exploration, Inc. or of Eagle Trail Properties Inc.
13. I have visited the Mt. Nansen Property on July 9 – 10, 2009.
14. I am responsible for the preparation of all sections of the Report titled "Technical Report on the Mount Nansen Property and the Tawa Property, Whitehorse Mining District, Yukon Territory for Guinness Exploration, Inc.", dated November 27<sup>th</sup>, 2009.
15. I have read the NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
16. I am a qualified person for the purpose of this instrument.
17. I am independent of the issuer of this report.
18. I have no prior involvement with the property.

19. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Date: November 27, 2009 R.S. Middleton, M.Sc., P.Eng. 