MARKSMEN RESOURCES LTD.

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

ON THE GOLDEN EAGLE PROPERTY

ATLIN MINING DIVISION

(BRITISH COLUMBIA)

Latitude: 59° 53' N Longitude: 134° 47' W

N.T.S. 104 M/15

OWNER OF CLAIMS: MARKSMEN RESOURCES LTD.

OPERATOR:

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MARKSMEN RESOURCES LTD.

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Submitted by: Kieran Downes, Ph.D., P.Geo. Date: 2003 July

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APPENDICES

Appendix I Report on the Mineralization, Geology and Exploration History of the Golden Eagle Project, Northwestern British Columbia by John Nebocat, P.Eng.

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Appendix II A Geophysical Report on an Induced Polarization Survey and a Total Field Magnetic Survey, Golden Eagle Project, Tutshi Lake Area, British Columbia by Franz Dziuba, B.Sc.

1.0. INTRODUCTION

In August 2002, Marksmen Resources Ltd. carried out a program of geological mapping, prospecting, soil sampling, and magnetic and induced polarization surveys. The program was supervised by Dr. Ronald McMillan, P.Eng. of Victoria, B.C. who was on-site throughout the program. The geophysical surveys were performed by Aurora Geosciences Ltd. of Whitehorse, YT. Coureur Des Bois of Whitehorse, YT, supplied the camp and line cutters/prospectors. John Nebocat, P.Eng. of PGS Pacific Geological Services, Gibsons, B.C. provided mapping services. Dr. Kieran Downes, P.Geo. of Marksmen was on-site at the end of the program.

In addition, fieldwork was conducted by M. Mihalynuk of the B.C. Geological Survey, on behalf of the Golden Eagle Public-Private Partnership Project, between Marksmen Resources Ltd. and the provincial Geological Survey Branch.

Three reports have been produced.

- "Report on the Mineralization, Geology and Exploration History of the Golden Eagle Project, Northwestern British Columbia" by J. Nebocat, P.Eng. is attached as Appendix I.
- 2. "A Geophysical Report on an Induced Polarization Survey and a Total Field Magnetic Survey, Golden Eagle Project, Tutshi Lake Area, British Columbia" by F. Dziuba, B.Sc. is attached as Appendix II.
- 3. Geofile 2003-9 was produced by M. Mihalynuk of the B.C. Geological Survey. This document may be viewed at the Geological Survey web site.

The total cost of the exploration program was \$100,933.79. A Statement of Work, Event No. 3193369, has been filed in respect of claims Tannis 5, 6, 7, 8, 9 and 11.

2.0. LOCATION and ACCESS

The Golden Eagle claims are located at longitude 134⁰ 47'W and latitude 59⁰ 53'N in the Atlin Mining Division of British Columbia (N.T.S. 104 M/15). Location maps are included in Appendices I and II. The claims are located on the east side of Tutshi Lake east of the Whitehorse-Skagway (Klondyke) highway which traverses the west side of Tutshi Lake. The project is 65 kilometers northeast of the port of Skagway, Alaska, and 40 kilometers south of the Carcross, Yukon. Access is by helicopter from either Whitehorse or Atlin or from a staging point on the Klondyke Highway on the west side of Tutshi Lake.

3.0. PHYSIOGRAPHY and CLIMATE

The project is located in the Tagish highlands, east of the Coast Mountain Range. The Bennett-Tutshi-Tagish Lakes intermontane systems occupy long, narrow north-trending valleys in the area. Elevations range from Tutshi Lake level at 707 meters to mountain peaks of 1800 meters.

Lower elevations are forested with spruce, balsam, fir, pine and poplar. Alpine conditions prevail above 1200 meters.

4.0. PROPERTY DESCRIPTION AND TENURE

Claims tenure information is provided in Appendix I.

5.0. PREVIOUS WORK

Previous work is documented in Appendix I.

6.0. GEOLOGY

6.1. Regional Geology

The regional geology is described in Appendix I.

6.2. Project Geology

The project geology is described in Appendix I.

6.3. Mineralization

Mineralization on the project lands is described in Appendix I.

6.4. Exploration Targets

The exploration targets are multi-million ounce gold deposits similar to those at Eskay Creek, Pogo and Fort Knox.

Fieldwork conducted by M. Mihalynuk on behalf of the Golden Eagle Public-Private Partnership Project, a partnership between Marksmen Resources Ltd. and the provincial Geological Survey, permitted confirmation of the submarine nature of felsic volcanics in the western Tutshi Lake map area. Both the geological setting and age of volcanism appear analogous with that of the Eskay Creek deposit (Mihalynuk, 2002). Exploration targets on the project lands are described in Appendix I.

7.0. ANALYSIS

Rock and soil assaying/analyses are described in Appendix I.

8.0. GRID

A geophysical grid was established for ground magnetic and induced polarization surveys.

Details of grid establishment are described in Appendix I.

9.0. MAPPING & PROSPECTING

Mapping and prospecting are described in Appendix I. All exploration data and previous compilation work were transferred and re-compiled on Terrain Resources Inventory Map (TRIM) base, TRIM maps utilize NAD 83 whereas previous topographic and geological maps utilized NAD 27. There is up to a 250 meter difference between NAD 83 and NAD 27.

10.0 SOIL SAMPLING

Soil sampling is described in Appendix I.

11.0. GEOPHYSICAL SURVEYS

Geophysical surveys are described in Appendix II.

12.0. CONCLUSIONS AND RECOMMENDATIONS

The Conclusions and Recommendations are presented in Appendix I and are summarized here.

Conclusions

The Camp Zone is a highly anomalous area of gold-in-soils measuring approximately 400 meters NE-SW by 800 meters NW-SE. This target has not been drilled.

The Carbonate Zone is located between 1 km and 2 km east and southeast, respectively, from the Camp Zone. An intensely carbonatized and chloritized

mafic volcanic suite has been mapped over a minimum thickness of 400 meters, and has been traced for several kilometers to the southeast. Minor malachite and minor chalcopyrite occur along fractures and with quartz veins in the volcanics. This volcanic unit would seem to be a suitable host, or at least source, for a volcanogenic massive sulphide deposit.

The center of the Tannis Zone, located 9 km to 10 km northwest of the Camp and Carbonate Zones, respectively, is hosted by a Cretaceous (?) fine grained felsic intrusive believed to be of rhyolitic composition. The rhyolite is host to sheeted, auriferous, arsenopyrite-bearing quartz veins that reach up to 3 meters in thickness. The deposit type best to describe the Tannis Zone is a "porphyry gold" like those found in the Tombstone Belt that hosts the Fort Knox, Pogo and Donlin Creek deposits in Alaska.

Recommendations

Additional exploration budgeted at \$276,650 is recommended.

Further mapping and prospecting are recommended on the Camp and Carbonate zones prior to drilling. On the Carbonate zone, Noranda's geochemical and IP grids focused primarily on the carbonatized volcanics, while Marksmen's work in 2002 was focused on the volcanic-sedimentary interface. Both horizons are recognized as possible loci for VMS-style copper-gold mineralization.

Anomalous gold values in soil and rock samples collected at the Tannis Zone by Frame Mining Corp. between 1988 and 1989 range from the low 100's ppb to several g/t. Hand trenches located on certain veins on the north slope yielded values of 41.1 g/t Au over 1.4 m, 3.98 g/t Au over 1.5 m, 6.96 g/t Au over 1.5 m and 6.10 g/t Au over 1.7 m from individual samples. A program of detailed mapping and prospecting is recommended prior to drilling.

Gold anomalies identified by Frame Mining Corp. in metamorphic rocks northeast of the Tannis zone should be prospected and mapped to determine if they represent drill targets.

The South Mountain area should be further prospected and mapped. Frame Mining Corp. noted rhyolite similar to the Tannis zone in this area and a buried, or "blind," target may be present.

Gold-in-stream sediment anomalies identified by the RGS surveys should be prospected.

A four hole, 1000 meter drilling program is recommended to test targets on the Camp and Tannis zones.

13.0. COST STATEMENT		
ACME Analytical Laboratories Lt	td.	\$ 1,149.77
Aurora Geosciences Ltd. (geoph	iysics)	20,265.95
Computerized Compilation of Da	ita	
with the B.C. Geological S	Survey	10,159.02
Coureur Des Bois (camp/line cul	tters)	13,187.00
D. Fitzpatrick (cook)		3,000.00
Discovery Helicopters Ltd.		20,222.79
Field Supplies		320.69
Food		1,200.00
Mapping & Geological,		23,634.52
Mobilization/demobilization (airfa	ares/truck)	5,000.00
Reporting/Drafting		<u>2,794.05</u>
	Total	\$ 100,933.79*

*This includes \$5,200 in support costs to the Golden Eagle Public-Private Partnership Project between Marksmen Resources Ltd. and the B.C. Geological Survey

Personnel On-Site R.H. McMillan, Geologist August 18 to September 1, 2002 J. Nebocat, Geologist K. Downes, Geologist F. Dziuba, Geophysicist G. Lee, Geophysical Crew Chief J. Bogle, Geophysical Technician E. Martinsen, Geophysical Helper W. Kapaniuk, Geophysical Helper D. Fitzpatrick, Cook D. Jacob, Prospector/Line cutter M. Gauvreau, Line cutter R. Qusenel, Line cutter

J. Roderique, Line cutter

August 20-28, 2002 August 28-30, 2002 August 20-30, 2002 August 19 to September 1, 2002 August 20 - 25, 2002 August 20 - 23, 2002 August 24 & 25, 2002 August 26 - 30, 2002

14.0. REFERENCES

References are included in the two reports included as Appendix I and Appendix 11.

15.0. QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, KIERAN M.J. DOWNES, of the City of Nanaimo, Province of British Columbia, DO HEREBY CERTIFY THAT:

- 1) I am a Consulting Geologist with a business office at 282 Castle Way, Nanaimo, British Columbia, V9T 1L4.
- I am a Registered Member of the Association of Professional Engineers of Saskatchewan (No. 4892) with a permit to consult, and a Registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia (No. 21005).
- 3) I am a graduate of University College Galway, Ireland, with a B.Sc. (Hons. Geology 1971), and of Trinity College Dublin, Ireland, with a Ph.D. in Geology (1974).
- 4) I have practiced my profession throughout Canada, as well as in other areas of the world continuously since 1971.
- 5) I am a Director of Marksmen Resources Ltd. the property owner.
- 6) The forgoing report on the Golden Eagle project is based on exploration carried out on the project in August 2002, and my site visit on August 29 and 30, 2002.
- 7) Field supervision was provided by R. H. McMillan, Ph.D., P.Eng., P. Geo.
- 8) Appendix I entitled "Report on the Mineralization, Geology and Exploration History of the Golden Eagle Project, Northwestern British Columbia" by John Nebocat, P.Eng. includes a statement of his qualifications.
- 9) Appendix II entitled "A Geophysical Report on an Induced Polarization Survey and a Total Field Magnetic Survey, Golden Eagle Project, Tutshi Lake Area, British Columbia" by Franz Dziuba, B.Sc. includes a statement of his gualifications

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KIERAN M.J. DOWNES, Ph.D., P.Eng., P.Geo.

Dated at Nanaimo this 15 day of July 2003

Report on the Mineralization, Geology and Exploration History of the Golden Eagle Project, Northwestern British Columbia

N.T.S. 104 M/15 Latitude: 59° 53' N Longitude: 134° 47' W Atlin Mining Division

by

John Nebocat, P.Eng.

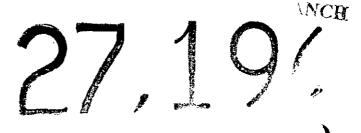
Prepared for

Marksmen Resources Limited

December 6, 2002

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

APPENDIX I



PGS Pacific Geological Services

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Summary

Marksmen Resources Ltd. has an option to acquire 100% interest in certain mineral claims located in northwestern British Columbia. The properties, owned by R.H. McMillan, consist of thirteen mineral claims located in two areas less than ten kilometres apart. The *Golden Eagle* area is covered by three contiguous mineral claims totalling 825 hectares; the *Tannis* area consists of ten contiguous claims totalling 1675 hectares.

To earn 100% interest, Marksmen must make staged payments over eight years totalling C\$500,000. The properties are subject to a 1% net smelter royalty of which one-half can be purchased for C\$500,000 at any time before October 1, 2009.

The properties straddle the Klondike Highway which joins the Alaska Highway just south of Whitehorse, Yukon. The town of Carcross, Yukon is situated about 42 km north of the property, and the deep water seaport of Skagway, Alaska is located at the end of the Klondike Highway, 64 km further south.

The properties are located near the boundary between two geological terranes separated by the northwest-southeast trending Llewellyn Fault system. The Cretaceous to Tertiary age Coast Intrusive Belt lies to the west and the Mesozoic island arc-derived volcanics and sediments occur to the east. The volcanics and sediments are part of the Stikine Terrane, which locally are represented by the Stuhini Group. Near to, or straddling the Llewellyn Fault occurs a suite of metamorphic rocks that may be derived from both the adjacent terranes and possibly older rocks.

Above these rocks lie middle to upper Jurassic sediments of the Laberge Group and a series of felsic to intermediate volcanics and volcaniclastics. Collectively, these rocks are believed to be part of an "overlap" assemblage that overlies both the terranes described above.

Exploration dates back to the Klondike Gold Rush which saw the first major influx of people into the area. Some old undocumented adits and trenches on the Tannis Zone may date back to this time. Molybdenum and copper deposits were sought after in the 1970's, but most of the documented exploration dates to the 1980's when major companies such as DuPont and Noranda conducted regional and property scale exploration in the district.

Noranda discovered anomalous gold and copper values in stream sediment samples collected during a 1985 regional program geared for the exploration of volcanogenic massive sulphide deposits. Subsequent work discovered an intensely carbonatized and chloritized mafic volcanic that was traced for about 0.5 km in width and for up to 5 km in length. Spotty ocurrences of chalcopyrite were found in this formation. This area was named the "Carbonate Zone."

Less than 2 km west Noranda found a zone of highly anomalous gold both in soil and rock samples. Their work defined the anomalous zone to be roughly 400 metres by 800 metres in size and centred on a ridge crest called the "Camp Zone." After conducting airborne and ground geophysical surveys, Noranda drilled two holes on the south flank of the Camp Zone, intersecting

anomalous but sub-ore grade gold values. The core of the Camp Zone has not been tested by drilling.

The Tannis Zone was previously staked as the Catfish property in the mid-1980's. It was operated for two years by Frame Mining Corp. (1988-1989).

Soil and rock geochemistry and geological mapping has shown that a fine grained felsic intrusive hosts arsenopyrite-bearing quartz veins containing highly anomalous gold and silver values. The veins occur in east-west and north-south fractures, and at least one occurrence of stockwork veining was noted. The host rock is up to 280 metres wide and sits between the Boundary Range metamorphics to the east and middle Jurassic, or younger, sediments and volcaniclastics to the west.

Marksmen Resources performed 8.050 km of induced polarization (IP) surveying on ten lines on the Camp and Carbonate Zones and on three lines on the Tannis Zone in 2002. A magnetic survey was also done on the Camp and Carbonate Zones. The IP surveys experienced some difficulties in obtaining complete results in certain areas due to either poor ground conductivity or very steep and innaccessible terrain. The results of the 2002 survey largely support the results obtained by Noranda Exploration and Frame Mining where comparisons were possible.

A line of soil samples was collected parallel to a line sampled by Noranda, yielding anomalous gold values ranging from the low 100's to several 1000's ppb over a 400 metre distance and supporting the results obtained by Noranda. Geological mapping and limited rock sampling was done on all the zones by the author of this report.

The geology and controls to the mineralization on the Camp Zone are not yet fully understood, but it is of sufficient size to host a bulk tonnage, open-pittable precious metal deposit.

The geology of the Carbonate Zone indicates the potential for hosting a volcanogenic massive sulphide deposit, but no clear target has yet been found.

The Tannis Zone contains Cretaceous intrusive-hosted vein-type gold mineralization with local high grades. The zone has the potential to host a bulk tonnage or a vein gold deposit. In addition, work by the provincial Geological Survey Branch indicates the Jurassic volcanics have the potential to host Eskay Creek type mineralization.

Additional surface work is proposed for all zones followed by two diamond drill holes to test the centre of the Camp Zone and at least one hole to test the Tannis Zone. The surficial work would be a first phase program estimated to cost C\$68,200; the second phase, which involves about 1000 metres of HQ diameter core drilling, is estimated to cost C\$208,450. The total for both phases of exploration is C\$276,650.

Introduction and Terms of Reference

The author was commissioned by Kieran Downes, President of Marksmen Resources Ltd. (the "Issuer," to evaluate, map and report on the mineral concessions located within the Golden Eagle Project.

This report is a summary of all previously documented exploration work done on the respective properties plus the work conducted by Marksmen Resources and by the author on Marksmen's behalf. This report also serves as a qualifying report which Marksmen can use as an instrument for public financing and to make public disclosures.

The sources of information used in compiling this report include: six assessment reports filed with the Geological Survey Branch of the British Columbia Ministry of Energy and Mines--two on the Camp and Carbonate Zones, four on the Tannis Zone; a report on airborne geophysics flown over the Camp and Carbonate Zones by AERODAT; British Columbia Geological Survey Bulletin 105 on the Geology and Mineral Resources of the Tagish Lake Area (and accompanying maps); and Acme Analytical Laboratory's web site. The Map Place was used as a source for claim tenures, claim maps and geological publications.

The author worked on the project between August 21, 2002 and August 27, 2002.

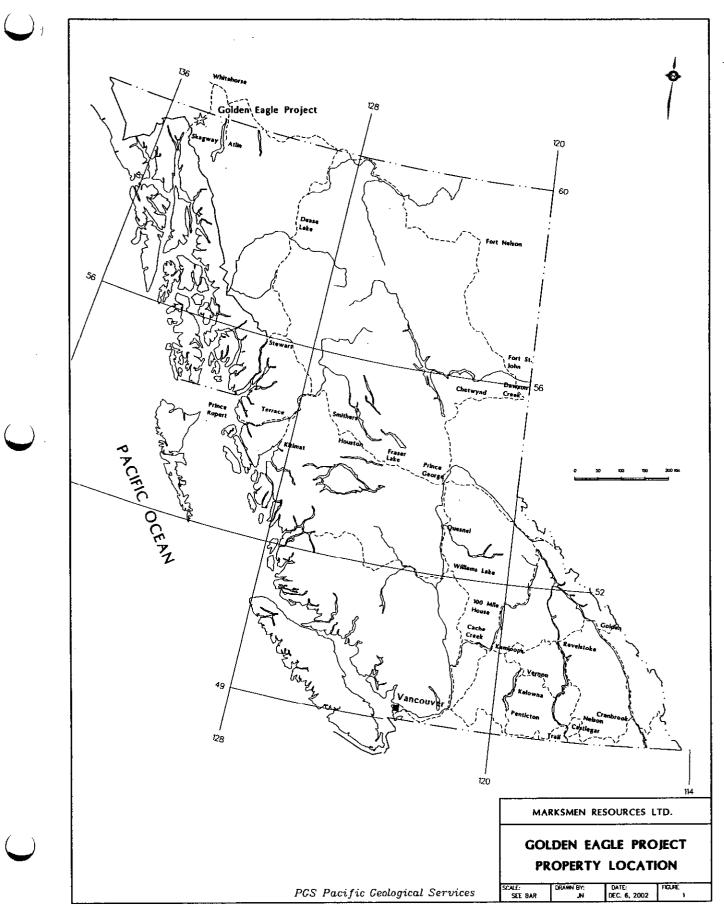
Disclaimer

The data referenced and sourced in the preparation of this report was done by persons deemed as "professionals" in their respective disciplines. These being geologists and geophysicists that were employed directly by Noranda Exploration Company Ltd., Frame Mining Corporation and Marksmen Resources Ltd., and outside contractors such as AERODAT, Peter Walcott & Associates, Beacon Hill Consultants and Aurora Geosciences Ltd. These individuals would all be "qualified persons" today, although that designation did not exist when most of the historic work was done. The author assumes no responsibility for the interpretations and inferences made by these individuals prior to the inception of the "qualified person" designation.

Property Description and Location

The concessions lie in two areas: the Golden Eagle, which includes the Camp Zone and Carbonate Zone southeast of Tutshi Lake; and the Tannis Zone, located just west of Tutshi Lake and the Klondike Highway.

The Golden Eagle zones are covered by three claims, namely the Golden Eagle 2, Golden Eagle 3 and Connor 1 claims. The Tannis zone is covered by ten concessions, the Tannis 1-9 and Tannis 11 claims.



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-4-

The three contiguous claims at the Golden Eagle zones comprise 825 hectares, and the contiguous Tannis 1 through 11 claims total 1675 hectares. The actual area covered by the latter claims is only 1575 hectares because the original Tannis 1-4 claims lie entirely within the area of the Tannis 5 and Tannis 6 claims.

The properties are situated in the Atlin Mining Division, northwestern British Columbia. The Tannis claims are situated on mineral tenure map sheet M104M086 (NTS, 1:20,000 scale) and are centered roughly at UTM coordinates 510000E, 6637000N. The Golden Eagle zone claims are found on mineral tenure map sheet M104M087 and are centered approximately at UTM coordinates 516000E, 6631000N. The claim maps are shown in figures 2, 3 and 4, following.

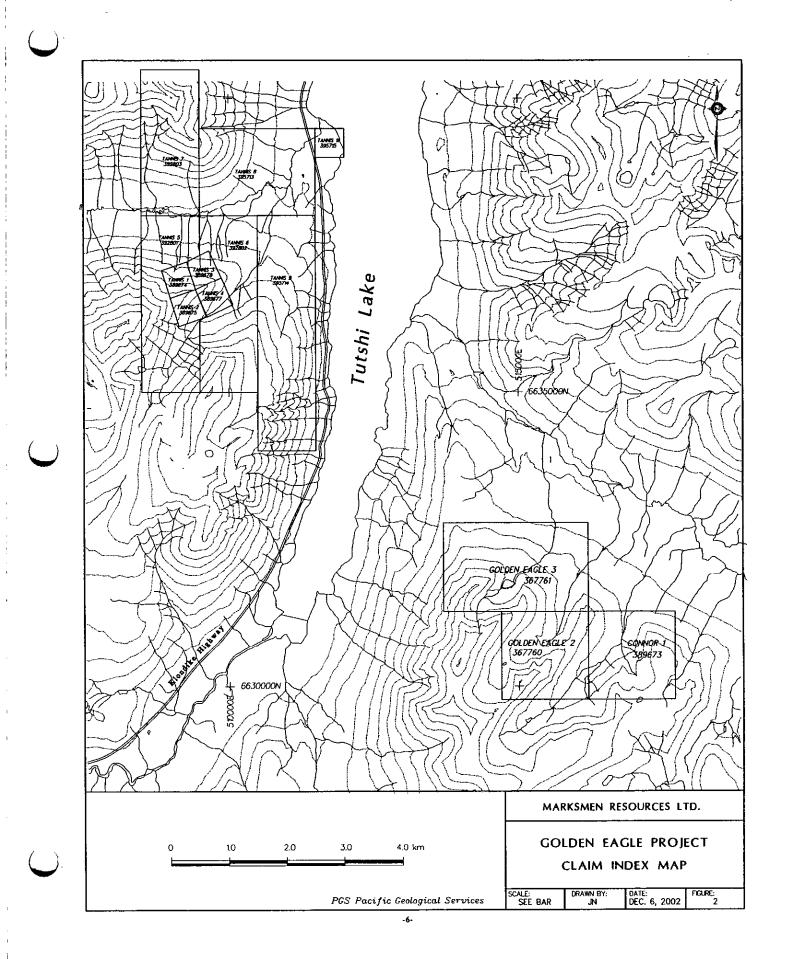
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Mar 21 Charles In Mar +	Number	Number	CIMIS -	(ha)	and the second second second second	
Golden Eagle 2	367760	104M087	9 units	225	January 1, 2005	20.30
Golden Eagle 3	367761	104M087	15 units	375	January 1, 2005	3 ~ 3 1
Connor 1	389673	104M087	9 units	225	September 10, 2005	ļ
Tannis 1	389674	104M086	1 unit	25	September 10, 2003]
Tannis 2	389675	104M086	1 unit	25	September 10, 2003	
Tannis 3	389676	104M086	1 unit	25	September 10, 2003	
Tannis 4	389677	104M086	1 unit	25	September 10, 2003]
Tannis 5	392801	104M086	12 units	300	April 18, 2003	
Tannis 6	392802	104M086	12 units	300	April 19, 2003	
Tannis 7	392803	104M086	10 units	250	April 18, 2003	
Tannis 8	395713	104M086	12 units	300	August 10, 2003	
Tannis 9	395714	104M086	16 units	400	August 9, 2003	
Tannis 11	395715	104M087	1 unit	25 🗆	August 9, 2003]

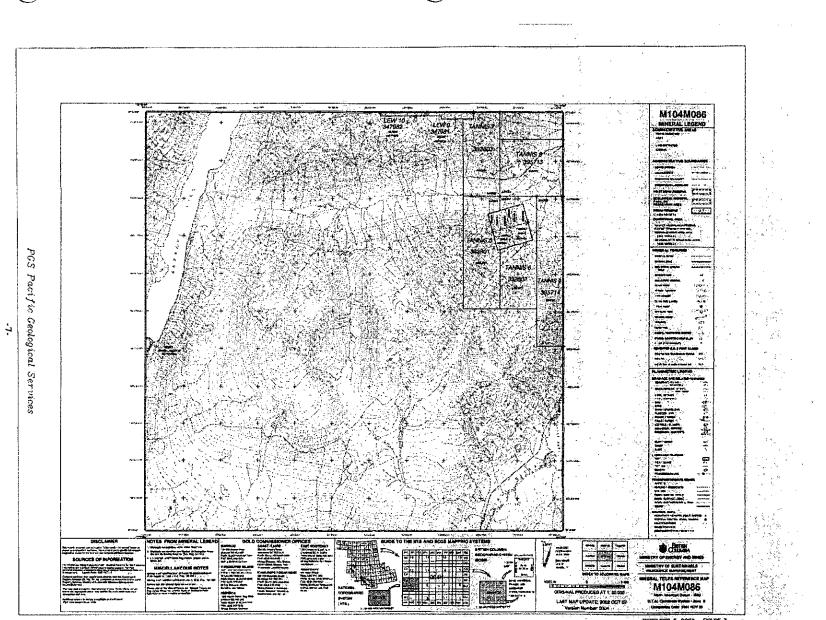
Table 1. Claim Statistics

Under the laws governing mineral tenure in British Columbia, a mineral claim holder is required to perform certain types and amounts of work to maintain the tenure and to document said work in a report as per the guidelines stipulated in the Mineral Tenure Act. Most significantly, a claim holder is required to perform the equivalent of \$100.00 of assessment work per claim unit (25 hectares) per year in each of the first three (3) years, increasing to \$200.00 per year thereafter. A maximum of 10 years assessment is permitted to be filed on a property. Further details are documented in the Mineral Tenure Act and Regulations.

The claim holder is entitled to only the subsurface mineral rights. Use of water, land, timber, etc. is regulated by the various government authorities that oversee these resources, and the claim holder may be required to pay for the use of these resources or to post a bond when the type of work proposed may have an impact on the resources that exist on the mineral claim.

The mineral claims have not yet been legally surveyed.

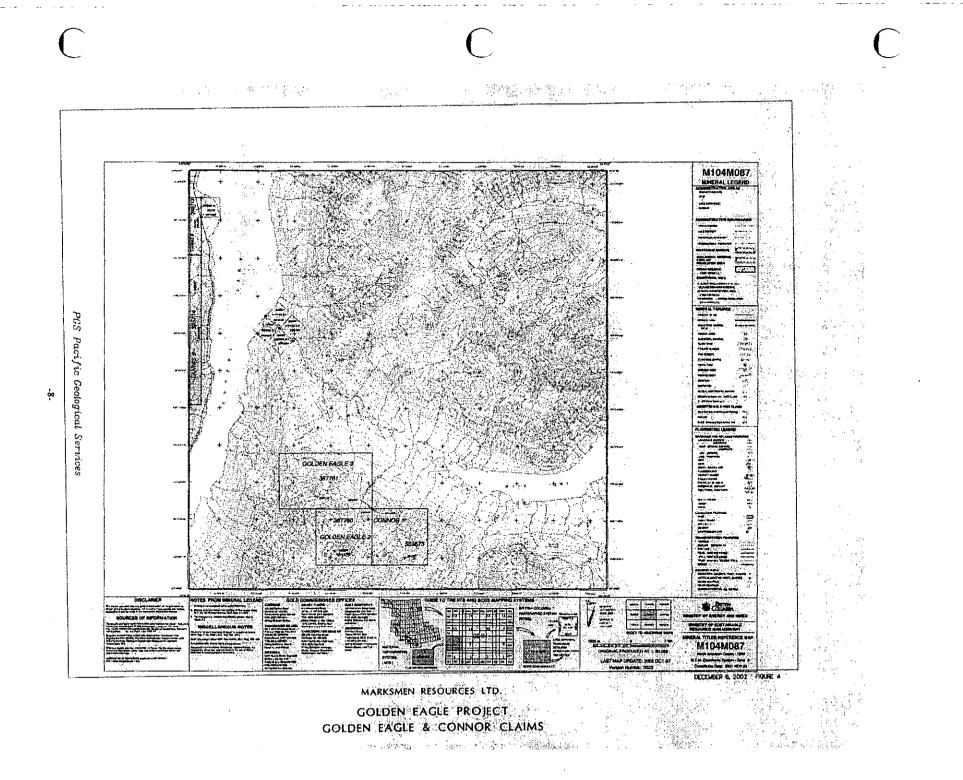




MARKSMEN RESOURCES LTD. GOLDEN EAGLE PROJECT TANNIS CLAIMS

DECEMBER 6: 2002 FIGURE 3

1.115



It is unknown to the author if the properties are subject to any previous environmental liabilities; there is no indication from the provincial government that any outstanding monies or reclamation are due on the concessions.

The properties are subject to all the environmental regulations as outlined by the various ministries in their respective acts. Usually, a performance bond is all that is required by the claim holder if a certain amount of surface disturbance is anticipated during exploration. The claim holder is also required to perform reclamation of disturbed lands once exploration has ceased.

A Notice of Work and Reclamation Permit is required in British Columbia before work can be done on a mineral property. Additional permits may be required from certain ministries if there is a perceived significant impact on certain resources other than surface disturbance.

The properties are subject to an agreement between Marksmen Resources Ltd. and Ron H. McMillan, the property vendor, dated October 1, 2001.

Contained within the original agreement are the mineral claims Golden Eagle 2, and Golden Eagle 3 that were staked on January 30, 1999, and the Tannis 1 though 4 and Connor 1 claims staked on September 10, 2001.

To earn 100% interest in the properties Marksmen must make the following cash payments to the vendor:

Anniversary year 1 (Oct. 1, 2002)	\$10,000
Anniversary year 2 (Oct. 1, 2003)	\$15,000
Anniversary year 3 (Oct. 1, 2004)	\$20,000
Anniversary year 4 (Oct. 1, 2005)	\$40,000
Anniversary year 5 (Oct. 1, 2006)	\$75,000
Anniversary year 6 (Oct. 1, 2007)	\$80,000
Anniversary year 7 (Oct. 1, 2008)	\$80,000
Anniversary year 8 (Oct. 1, 2009)	<u>\$180,000</u>
Total Payments:	\$500,000

There is a 2.5 km area of influence around the claims described above, whereby any properties staked by either party within this perimeter are subject to the terms of this agreement.

The properties are subject to a 1% net smelter royalty (NSR), of which one-half can be purchased for \$500,000 cash at any time before October 1, 2009.

Any additional claims staked by either party on NTS map sheet 104M15, that lie outside the 2.5 km perimeter, as described above, shall be included in this agreement at no extra cost to

PGS Pacific Geological Services -9-

Marksmen. However, if the core properties, or any contained within the 2.5 km perimeter should be dropped from this agreement, then those additional claims shall be subject to the following option payments:

Anniversary year 1 (Oct. 1, 2002)	\$5,000
Anniversary year 2 (Oct. 1, 2003)	\$7,500
Anniversary year 3 (Oct. 1, 2004)	\$10,000
Anniversary year 4 (Oct. 1, 2005)	\$20,000
Anniversary year 5 (Oct. 1, 2006)	\$37,500
Anniversary year 6 (Oct. 1, 2007)	\$40,000
Anniversary year 7 (Oct. 1, 2008)	\$40,000
Anniversary year 8 (Oct. 1, 2009)	<u>\$90,000</u>
Total Payments:	\$250,000

These additional claims would be subject to a 0.5% net smelter return (NSR) of which one-half could be purchased by Marksmen for a cash payment of \$250,000 at any time prior to October 1, 2009.

Marksmen is obliged to submit assessment work with respect to all exploration carried out on the properties that fall within this agreement.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The topography at both areas of the project is similar. It varies from gently rolling hills to extremely rugged and precipitous terrain in the higher elevations. Elevations range from about 1000 m ASL at the eastern end of the Tannis property to around 1900 m ASL along its western and northern boundaries. Similarly, the topography on the Golden Eagle zones ranges from about 1200 m ASL in the north to 1900 m ASL in the south.

The lower elevations are typically covered with balsam and locally lodgepole pine forest. Various types of willow and alder occur along drainages and avalanche chutes, giving way to scrub balsam, heather and alpine flora further uphill.

The property is accessible from Whitehorse, Yukon via the Alaska Highway south to the Klondike Highway that services Carcross, Yukon and continues to Skagway, Alaska. The Klondike Highway passes through the property area and just crosses the eastern margin of the Tannis claims about 42 km south of Carcross, Yukon. The Tannis property extends from the highway westward over a distance of about 2 km. The Golden Eagle zones are located southeast of Tutchi Lake about 10 km from where the highway crosses through the Tannis property.

The Klondike Highway is paved all the way to Skagway, Alaska a deep water seaport located about 64 km southwest of Tutshi Lake. The road is maintained year-round.

A helicopter is required to access the Golden Eagle zones, and even though the Tannis property is located next to the highway, a helicopter is essential to reach the central target area that is several hundreds of metres higher than the lake/highway level.

A four-wheel-drive road accesses the northern portion of the Tannis property along an east-west valley called Paddy Pass.

Whitehorse is the nearest population centre and is within 2 hours driving time of a staging area on Tutchi Lake. There is an ample labour and equipment/supply source in Whitehorse and neighbouring communities to support an exploration program on these properties.

Whitehorse has daily airline service from Vancouver and Edmonton.

At an early exploration level, the properties can be only be worked effectively during the summer months between mid-June and early October.

The land underlying the concessions is Crown Land, i.e., not privately held, and falls under the jurisdiction of the Provincial Government of British Columbia. Surface rights would have to be obtained from the government if the property reaches a development phase.

There are adequate sources of water on both properties to conduct exploration and/or development. The nearest source of electricity is at the town of Carcross, Yukon, about 30 km to the north.

The author did not see any topographic or physiographic impediments for potential mine, mill, heap leach or waste disposal sites. However, there are areas of steep terrain and major drainages in which such facilities could not be located. These environmental concerns, along with any land claims with the local First Nations are issues that Marksmen will have to address from time-to-time as the project advances.

Part A: Camp and Carbonate Zones

History

Past exploration in the area dates back to 1901 with the discovery of the Venus vein system near Tagish Lake, about 25 kilometres to the north, by J.M. Pooley. The Jessie showing was originally staked as the Great Northern group by Joe Bussinger in 1906. Exploration of the showing was limited to hand and blast trenching and was not reported until 1929 when a group of engineers from Timmins, Ontario expressed interest in the property. Average assays of the "ore" zone were reported to be 0.15 oz/t gold, 23.6 oz/t silver and 4.9% copper across a 6 foot wide shear zone in andesites.

No further exploration is reported in this area until 1981 when both Dupont and Kennco staked the area east of Tutshi Lake between Moon Lake and Skelly Lake. Acquisition of the ground was based on encouraging results from regional geochemical programs. Work during the 1981 field season for both companies consisted of limited soil, silt and rock sampling as well as some geological mapping. No work was recorded by Kennco on its Moon 1-7 claims, however, B.C. Department of Mines reports indicated the claims covered a zone of minor sulphide mineralization in a sheared granodiorite. The claims were allowed to lapse in 1982. Dupont recorded work on its Skelly claims but not on its Skel 1 and 2 claims. Results were discouraging and both claim groups were allowed to lapse in 1982.

In 1985 Noranda initiated a regional program in the area aimed at evaluating the Triassic volcanics for their potential to host massive sulphide deposits (MacKay, 1987). Whole rock analysis was done on 45 rock samples taken at various locations throughout the package of Triassic volcanics. Results were inconclusive. During this program pods and lenses of massive pyrrhotite were found in a sequence of cherts, shales and tuffs in Moon Creek north of Noranda's claims. These pods returned values of up to 130 ppb Au.

From June 20 to June 23, 1986, a two man crew conducted an initial program of exploration aimed at resampling the "Po" showing found in 1985 as well as silt sampling and prospecting the surrounding area. This reconnaissance work also concentrated on the south side of the Moon Valley where earlier work had located an area of alteration characterized by sodium depleted volcanics. Snow conditions allowed for only a limited amount of the area to be examined. Several carbonate-altered rocks found in float returned weakly anomalous gold values of up to 450 ppb. Other anomalies were 6,000 ppm Cu and 7,800 ppm Zn from different rock samples.

Based on these results, a second two-man fly camp was established at the west end of Moon Lake from July 19 to 21. A program of rock, soil and silt sampling, as well as some regional mapping, was carried out, aimed at locating the source of the anomalous float pieces. Results proved to be encouraging with the discovery of a 75 metre wide carbonate alteration zone traced for several hundred metres which has anomalous gold and copper associated with it. One float sample collected northwest of the "Carbonate Zone" returned a value of 44,000 ppb Au.

From August 21 to September 2, 1986, a crew of 3 to 5 people conducted a detailed exploration program on the TUT 1 to 3 claims consisting of establishing a 4.9 km long baseline and 11.4 km of cross lines. The grid was soil sampled at various intervals for a total of 524 samples and geologically mapped at 1:2,500 scale. The rest of the property was regionally mapped at 1:10,000 scale.

A detailed rock sampling program was undertaken consisting of chip/grab samples, outcrop samples and float samples. In order to chip sample the more inaccessible areas in the western parts of the property, a short mountaineering program was done. A total of 224 rock samples were sampled and analyzed in that year of which 146 were taken after the claims were staked.

In 1986 Noranda collected 25 silt and 3 pan concentrate samples from streams draining the property/target areas. Most of these were taken prior to staking the property. The samples were analyzed for Cu, Pb, Zn, Ag, As and Au. The highest gold anomaly obtained was 380 ppb.

Noranda noted that there was a fairly high correlation of elevated copper and silver values with anomalous gold, while zinc showed a moderate degree of correlation.

The soil grid lines were spaced from 100 m to 1000 m apart, the latter being in the outer, more reconnaissance areas. Sample intervals ranged from 10 m over the carbonate altered zone to 50 m in the outlying areas; the average was 25 m. All soil samples were analyzed for Cu, Pb, Zn, Ag, As and Au.

Soil horizon development was only evident in the lower valleys where the B horizon was sampled at depths of 20 cm to 30 cm. Along the steeper slopes and more alpine portions of the grid, samples generally consisted of a heterogeneous B/C mixture or a fine grained talus (colluvium).

Copper showed a strong spatial correlation with the carbonate altered zone and again, as with the stream sediment samples, a strong correlation with gold, silver and zinc values. The copper effectively traced the alteration zone, but anomalous gold values suggest several linear anomalies within the alteration package or near its margin. The most significant value was a 2000 ppb Au anomaly at L18200E/79925N. A 1500 ppb Au anomaly from a sample taken near a waterfall on the creek draining the Carbonate Zone is underlain by a zone of sulphide-bearing silicified rock. A 1700 ppb Au anomaly at L16400E/79200N has an unknown source. Several high silver-in-soil anomalies, up to 18.0 ppm at L17600E/80025N and 12.0 ppm at 80000N also occur within the carbonate alteration zone.

Several isolated anomalies occur throughout the grid, and no real pattern can be drawn from their distribution. The most significant values are mentioned above.

The reconnaissance rock sampling program (non-gridded) of 1986 demonstrated that anomalous values in Au, Ag, Cu, Pb and Zn are concentrated mostly in two areas: 1) Cu and Au with a lesser Pb-Zn-Ag correlation within the carbonate alteration zone and, 2) Au-As-Pb-Zn mineralization associated with mylonitized or foliated breccias with lesser Cu association.

The Carbonate Zone yielded values of up to 6.4 g/t Au and 4% Cu (Sample #97537). A list in Noranda's report describes this sample as a mafic volcanic containing blebs of chalcopyrite and malachite with pyrite. The table shows this to be a chip sample taken over 3.0 metres of outcrop, yet the text of the report states that this is a grab sample. Several samples collected near the northwest end of the Carbonate Zone produced values from trace Au to 100's and 1000's ppb Au.

Elsewhere, values of up to 78 g/t Au, 617 g/t Ag, >1,000 ppm As, 0.3% Cu and 5% combined Pb-Zn were obtained from grab samples of well brecciated, foliated to mylonitized siliceous rock with up to 15% sulphide in the matrix. These samples come mostly from the "Nasty Cirque" located on the south side of the small lake southeast of the Jessie showing. The Jessie showing, a small massive sulphide lens exposed in a trench, yielded 4.13 g/t Au over 4.0 m. Elsewhere in the cirque, values of up to 1,300 ppb Au over 7.0 m were obtained (MacKay, 1987).

Based on initial encouraging results, Noranda staked three more claims in September of that year; these claims also covered the historical Jessie and Big Thing showings. The TUT 7 and 8 claims were staked in December, 1986, and the TUT 9 claim was added in July, 1987.

In 1987 an AERODAT geophysical survey was flown which included a four frequency EM system, magnetometer and two-frequency VLF-EM system. A total of 182 line-kilometres were flown between March 21 and March 31, 1987. Four flights were required to complete the survey with flight lines oriented at azimuths of 045-225 degrees and flown at a nominal spacing of 200 metres (Podolsky, 1987).

An Aerospatiale A-Star 350D helicopter was used for the survey. Installation of the geophysical and ancillary equipment was carried out by AERODAT. The survey aircraft was flown at a mean terrain clearance of 60 metres.

The electromagnetic system was an AERODAT four frequency system. Two vertical coaxial coil pairs were operated at 946 Hz and 4625 Hz and two horizontal coplanar coil pairs at 4268 Hz and 33.9 kHz. The transmitter-receiver separation was 6.45 metres. Inphase and quadrature signals were measured simultaneously for the four frequencies with a time constant of 0.1 seconds. The electromagnetic bird was towed 30 metres below the transmitter.

The VLF-7-M System was a Herz Totem 2A. This instrument measures the total field and quadrature components of two selected transmitters, preferably oriented at right angles to one another. The sensor was towed in a bird 12 metres below the helicopter. The transmitting stations monitored were NLK, Jim Creek, Washington for the "Line" station and NSS, Annapolis, Maryland for the "Ortho" station broadcasting at 24.8 and 21.4 kHz respectively.

The magnetometer employed a Scintrex Model VIW-2321 H8 cesium, optically pumped magnetometer sensor. The sensitivity of this instrument was 0.1 nanoTeslas at a 0.2 second sampling rate. The sensor was towed in a bird 12 metres below the helicopter.

A Geometrics G803 proton precession magnetometer was operated at the base of operations to record diurnal variations of the Earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

A King KFA-10 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

A Panasonic video tracking camera was used to record flight path on VHS video tape. The camera was operated in continuous mode. Fiducial numbers and time reference marks, for cross-reference to the analog and digital data, were encoded on the tape.

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducial's, the following data were recorded:

<u>Channel</u>	Input	Scale
ALT	Altimeter (150 m at top of chart) 3 m/mm
CXII	Low Frequency Inphase	2.5 ppm/mm
CxQl	Low Frequency Quadrature	2.5 ppm/mm
CXI2	High Frequency Inphase	2.5 ppm/mm
CXQ2	High Frequency Quadrature	2.5 ppm/mm
CPII	Mid Frequency Inphase	10 ppm/mm
CPQI	Mid Frequency Quadrature	10 ppm/mm
CPI2	33 kiloherz Inphase	20 ppm/mm
CPQ2	33 kiloherz Quadrature	20 ppm/mm
VLT	VLF-EM Total Field, Line	2. 5%/mm
VLQ	VLF-EM Quadrature, Line	2. 5 %/mm
VOT	VLF-EM Total Field, Ortho	2. 5 %/mm
VOQ	VLF-EM Quadrature, Ortho	2. 5 %/mm
MAGF	Magnetometer, fine	1 nT/mm
MAGC	Magnetometer, coarse	10 nT/mm
PWRL	Power Line Indicator	

A DGR33 data system recorded the survey on magnetic tape. Information recorded was as follows:

Equipment	Recording Interval
EM system	0.1 seconds
VLF-EM	0.5 seconds
Magnetometer	0.25 seconds
Altimeter	0.5 seconds
Power Line Monitor	0.5 seconds

A 1:10,000 scale photomosaic made from enlarged aerial photos was used as a base map to plot the survey data. The photomosaic was not orthorectified, and it is estimated that the positioning accuracy is about 30 m with respect to the topographic detail of the base map.

Electromagnetic anomalies, conductors, peak locations were computed from the 4600 Hz coaxial response were delineated and plotted on an interpretation map.

The aeromagnetic data were corrected for diurnal variations by adjusting the digitally recorded base station magnetic values. No correction for regional variation was applied.

The 4269 Hz coplanar electromagnetic information was processed to yield a map of the apparent resistivity of the ground. The approach used in this computation was to assume a model of a 200 metre thick conductive layer (half-space) over a resistive bedrock.

The VLF-EM signals from NLK, Jim Creek, Washington, broadcasting at 24.8 kHz, were compiled in contour map format.

The magnetics showed a number of northwesterly to north-northwesterly trending features, one of which extends almost diagonally across the length of the survey block. The magnetic interpretation is not shown in Figures 8 to 10 (in pocket), only the electromagnetic conductors. This diagonal feature is believed to be a related to the Llewellyn Fault and intrusive bodies that occur along its trace. AERODAT interpreted a number of faults cross cutting the magnetic trends in northeasterly, northwesterly and east-west directions. Noranda did not provide AERODAT with any geological information, so their interpretations were based largely on conjecture. AERODAT stated that the total field values are characteristic of mafic to ultramafic dikes and sills. The mafic volcanics that host the Carbonate Zone would at least in part account for these elevated magnetic features.

Electromagnetic conductors were evaluated on the bases of magnetic correlations and man-made or surficial features not obvious to the analog charts. Seven conductive targets areas were identified (I to VII); two of these lie within the current concessions held by Marksmen.

Conductive zone III lies just east of the Camp Zone, identified later by Noranda. Subsequent mapping has shown that these dual to multi-banded conductors are caused by graphitic shales that lie just northeast of the Llewellyn Fault system. AERODAT interpreted their spatial distribution to be modified by two east-west faults on either side of this conductive zone. The author believes that the inflection in these conductors is actually caused by the confluence of the Llewellyn Fault and an interpreted NE-SW fault predicted to occur in the floor of the valley to the southeast.

Conductor VII is underlain by the carbonatized mafic volcanic suite previously described. AERODAT classed it as a possible bedrock zone and that it may be a surficial conductor. The author suspects that the location of this conductive linear feature is not quite registered properly with the photomosaic and that it represents a thin carbonaceous shale unit, described later in this report.

The apparent resistivity contour map shows two belts of moderately conductive bedrock within an otherwise resistive host rock. The data indicate a formational rather that structural attribute to these moderately conductive belts. The author concurs but recognizes that structural features like block faults appear to modify the formational trends.

The VLF-EM adds little additional information except for the possibility of a few additional faults not picked by the electromagnetic survey.

The AERODAT program was followed by a ground magnetometer survey over the airborne anomalies as well as detailed soil geochemistry, geological mapping and some minor blast trenching. The details of this 1987 ground program are not documented.

In the 1988 field season Noranda collected 153 rock, 2 silt and 74 rock samples on the property, mostly in the Camp Zone. Soil samples were collected generally at 25 m spacings on selected lines. About 2.6 km of soil sampling were completed, all of it in the Camp Zone.

Soil and rock samples were sent to Noranda's lab in Vancouver for preparation. Some analyses were done in Noranda's lab, but most of the samples were analyzed at Acme Analytical Laboratories Ltd., Vancouver, B.C. The samples run at Noranda's lab were analysed for Cu, Zn, Pb, Ag, As, and Au. The samples analysed at Acme's lab were run for 30 element ICP plus Au; mercury was also run for some samples.

Six geochemical lines on the Carbonate Zone grid were extended toward the west in the area of Noranda's camp between 15900E and 18000E in response to encouraging results obtained in 1987 near the edge of the grid in this area. This area is now termed the Camp Zone. The distribution of the lines is irregular due to the extreme relief in the area. A strong northwest-southeast trending soil anomaly up to 400 metres wide was defined over 1000 m NW-SE (see Figure 9). Values up to 18,000 ppb Au were obtained from soils near the camp with several samples yielding over 1000 ppb Au in this area. Subsequent rock sampling indicated that the anomaly is associated with a sheared mafic volcanic unit.

A 3 metre chip sample across a quartz-carbonate altered shear zone, on strike with and 470 metres northwest of the targets tested by diamond drill hole 1, ran 3460 ppb Au (R07044). A grab sample of sheared and highly altered granitic rock 15 m west of R07044 ran 1225 ppb Au. The highest base metal value in this area was 13,104 ppm Zn, 14,397 ppm Pb and 107 ppm Cd which included precious metal values that ran 88 ppb Au (sample R10248). There is no direct correlation between base metals and gold content; however, samples anomalous in Au also show elevated Cu, Pb, Zn, Ag and As. The best results from base metals typically do not coincide with the best gold results.

Generally, the results from rock sampling in the Camp Zone are similar to the results from soil geochemistry. This similarity and the very poor soil development in a very recently glaciated area suggests the soil geochem response is a direct reflection of the gold content of the bedrock.

Between August 2 and 9, 1988, an induced polarization survey (IP) was done on four lines over two prospective targets identified by encouraging results from samples taken in July. Two lines of five setups each were run 150 metres apart in the Camp Zone, and two more IP lines were run across the Carbonate Zone on the ridge east of Noranda's camp. Three setups on each line were completed (Duke, 1989).

The survey conducted on the south end of lines 16600E and 16750E over the Camp Zone tested the geophysical response in the area of the strong soil and rock geochemical anomaly. Rugged topography prevented additional coverage in this area.

Two lines were also run across 17800E and 18100E on the Carbonate Zone grid. A resistivity anomaly centred at Line 18100E, 79850N and Line 17800E, 79887.5N is coincident with an erratic north-trending soil anomaly roughly 1 kilometre long. The strong anomaly near 79550N

on Lines 17800E and 18100N marks a geologic change with strong carbonate alteration located to the north. There is no surface geochemical coverage over this area. Line 18100N is not shown on Figure 10.

Two drill sites were prepared by hand and explosives at the Camp Zone between August 19 and October 6, 1988. During this time an additional 37 rock samples were collected to follow up earlier results. A drill was moved onto the property on September 3, employing up to 20 trips by helicopter from the staging area on the Klondike Highway. The contractor was Azimuth Diamond Drilling of Atlin, B.C. A JKS 300 diamond drill, modified to be flown in by a Bell 206 helicopter, was used. Two holes were completed on the Camp Zone by October 6. All drill core was logged and split on site.

Two NQ diameter diamond drill holes totaling 286 metres were completed in the Camp Zone. Samples were taken every 1.5 m and sent to Acme Analytical Laboratories for 30 element ICP plus Au and Hg by atomic absorption. The drilling was targeted to test a NW-SE trending linear soil anomaly intersected on seven lines over a strike length of 800 metres. An IP survey over Line 16750E showed a local polarization and metal factor increase coincident with a minor resistivity decrease over the best soil anomaly (1300 ppb Au) on that line.

The holes intersected two main rock units: a subvolcanic intrusive, probably granodiorite in composition, and a variably sheared, metamorphosed, and locally mylonitic dark green volcanic rock. In both holes the metavolcanic rocks near the top of the holes had very high background levels of gold. The gold geochemistry was highly variable with an average value of 130 ppb over 18 metres of core in hole 1 and an average value of 146 ppb over 64.5 metres in hole 2. The highest gold values were 390 ppb in hole 1 and 690 ppb Au in hole 2. There is no clear consistent correlation between the gold geochemistry and other elements (Duke, 1989).

During this time a third hole was drilled on the "West Grid" (north of Figures 8 to 10). The target was a linear electromagnetic conductor believed to be on strike with the carbonatized volcanics found a few kms to the southeast. The drill hole encountered graphitic shales.

There is no known resource or reserve on the Golden Eagle property nor is there any record or evidence of any historic production.

Geological Setting

Regional Geology

The project area occurs more-or-less along the contact between the Coast Intrusive Belt and the western margin of the largely volcanic and sedimentary rocks of the Intermontane Belt. The Coast Belt is the result of mainly Late Cretaceous and Tertiary magmatism, whereas the Intermontane Belt at this latitude is composed of predominantly Mesozoic arc volcanic and arc-derived sedimentary rocks.

Wheeler (1991) proposed that the architecture of the area is a product of Late Triassic to Early Jurassic amalgamation of the following terranes (from east to west): mainly Paleozoic and lesser early Mesozoic oceanic crustal and supracrustal rocks of the Cache Creek Terrane; early Mesozoic arc volcanic and related sedimentary rocks of the Stuhini Group, at this latitude representing Stikine Terrane; and possibly (?) Late Proterozoic to Paleozoic metamorphosed epicontinental rocks of the Nisling Terrane. These terranes are overlapped by Lower to Middle Jurassic basinal turbidites of the Laberge Group that form part of the Inklin overlap assemblage. Laberge strata are succeeded by late Mesozoic and Tertiary mainly felsic volcanic strata of the Windy-Table and Montana Mountain complexes and the Sloko Group. Intrusive roots to the several volcanic episodes postdating Laberge deposition include the granitoids of the Whitehorse Trough and Coast Belt.

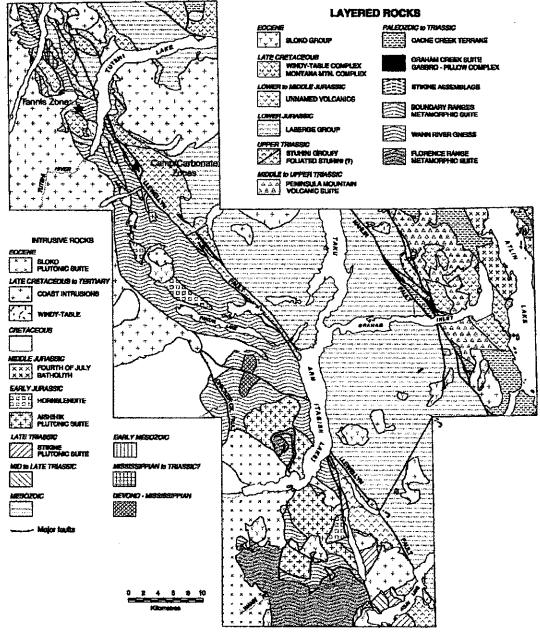
Mihalynuk (1997) has modified this interpretation somewhat. He posits that both the Laberge Group and the Stuhini Group strata constitute an overlap assemblage which he termed the Whitehorse Trough overlap assemblage. In addition, Mihalynuk questions whether or not the Nisling rocks constitute a separate terrane. In the interim, he chooses to refer to them as the Nisling **assemblage**.

Mihalynuk's bulletin refers to two major sub-parallel, north-northwest-trending faults that are grossly coincident with the boundaries between the Cache Creek and Whitehorse Trough and between the Whitehorse Trough and the Yukon-Tanana Terrane. The Nahlin fault more or less marks the western extent of the Cache Creek Terrane. It is a steeply dipping to vertical fault, or series of faults. This fault has seen intermittent activity probably since the Late Triassic and into the Tertiary. The major Llewellyn fault trace forms the contact between regionally metamorphosed rocks, including the Nisling assemblage, and Mesozoic strata of the Stuhini Group within the project area. Like the Nahlin fault, the Llewellyn structure shows evidence of having been active between Late Triassic and Tertiary times.

Property Geology

Figures 8 to 10 show the approximate contacts of certain units mentioned in the previous section and are derived from Mihalynuk's bulletin and the mapping done by Noranda. The Llewellyn Fault separates the Camp Zone to the southwest from interbedded shales and volcanics of the

MARKSMEN RESOURCES LTD. GOLDEN EAGLE PROJECT Regional Geologic Setting



(After Mihalynuk, 1997)

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PGS Pacific Geological Services -20Stuhini Group to the northeast. A parallel, or sub-parallel fault exists about 400 m to the southwest of the Llewellyn Fault and separates the "Camp Zone" lithologies (unit C) from older metamorphic rocks to the southwest. The regional maps prepared by Noranda and Mihalynuk indicate that the host rock to the Camp Zone is a Mesozoic intrusive of intermediate to felsic composition. The author did not traverse the ridge on which these rocks outcrop, but core examined from two holes drilled by Noranda in this zone indicate a medium grained, slightly foliated granodiorite (?) throughout the holes.

The base of the Camp Zone outcrop was traversed southwesterly across the major fault mentioned previously. Talus seen below the outcrop area suggests varied lithologies, described as greenstone and greenschist facies metamorphics. The rocks the author observed immediately southwest of the fault more resemble a light coloured felsic volcanic, like a rhyolite. The rock has a banded to "ropey" texture similar to primary flow features, but this may in part be due to metamorphic deformation.

The Carbonate Zone, located about 1 km east of the Camp Zone is in a different suite of rocks, presumably all part of the Stuhini Group. The basal unit is a dark green mafic volcanic that has undergone extensive carbonatization. The rusty-brown colour to many of the carbonate veins and stringers suggests that at least part of the carbonate is composed of ankerite and/or siderite. Textures are not readily visible in the rock, but auto-breccia clasts are seen locally. The rock, which is probably a basalt, has also been pervasively chloritized; fuchsite/mariposite are common. This volcanic (Figure 8, unit 1) outcrops for about 400 m apparent thickness in a northeast-

southwest direction.

Overlying this is a maroon to green tuff-breccia that appears to be genetically related to the underlying flows and breccias. This unit (2) is quite recessive and friable and subcrops only along two ridge saddles mapped by the author. The unit is 10 m thick, or less.

Stratigraphically above the tuff-breccia unit is a gray limestone bed intercalated within black carbonaceous shale. The shale is also recessive, but the limestone forms prominent blocks of outcrop and talus. Collectively, this unit (3) measures not more than 10 to 20 m in apparent thickness.

Overlying the shale/limestone unit is a thick sequence of epiclastic sediments (unit 4). These sediments appear to conformably overlie the shale unit. Lithologies vary from conglomerate, grit, wacke to mudstone. These sediments trend northwest-southeast and have moderate to steep northeasterly dips; the dips steepen heading from south to north. This sequence has an apparent thickness of about 200 m.

Intercalated between the unit 1 volcanics and the unit 4 epiclastics are two igneous rocks that may be intrusive. The lower one, unit 6, is recessive weathering and is evidenced by extensive leaching of sulphides, imparting considerable limonite and jarosite staining, boxwork cavities and intense argillic alteration; minor pyrite occurs throughout. The alteration in this rock increases up-section (northeast). This rock could be either an intermediate to felsic volcanic or sill.

Approximately between units 3 and 4 outcrops a small, creamy-beige to white felsic rock of probable dacite to rhyolite composition. This rock is crosscut by numerous ferruginous carbonate stringers similar to what is seen in the unit 1 volcanics, hence, it is believed to be contemporaneous with enveloping stratigraphy and not a much younger unit.

Above the epiclastic unit occurs a volcanic breccia of intermediate composition. The clasts are polymictic but often are plagioclase porphyry andesite in composition. The unit (5) appears to conformably overlie the epiclastic, although the contact between the two was not observed where the author traversed. A thin bedded unit within the breccia trends at 125 azimuth/77 deg. NE, this is in general agreement with the trend of the underlying sediments. The upper contact was not mapped by the author, but these volcanics are estimated to be at least 200 m thick.

Of significance is the occurrence of similar-looking volcanic breccias, observed by the author in the form of talus, that outcrop southwest of the carbonatized mafic volcanics described previously. Viewed from the old Noranda camp, located east of their drill holes, there exists a large, prominent carbonate vein along the ridge crest above from where the breccia float was observed in talus. These breccias, like those seen to the northeast and overlying the epiclastic unit, are quite fresh in appearance. It is suggested by the author that this carbonate "vein" marks a major NW-SE fault boundary that has juxtaposed the suite of rocks described as units 1 through 7 next to the "unaltered" andesite breccias seen southwest of this fault. Based just on appearances, unit 5 and these breccias to the southwest may be related. This area has not yet been remapped.

Mapping done by the provincial government and Noranda suggests that the Llewellyn Fault and nearby parallel structures are contiguous features trending NW-SE. However, the lithologies and geomorphology on the Carbonate Zone ridge and the Camp Zone ridge appear to be quite different. It is suggested by the author that a major NE-SW trending block fault may exist in the valley separating these two ridges. Noranda mapped a similar trending block fault crosscutting the trend of the Carbonate Zone further to the southeast (not shown on Figures 8 to 10).

Deposit Types

From the descriptions provided by Noranda and the spatial distribution of the gold-in-soil anomalies, a bulk tonnage gold deposit would be the obvious target for the Camp Zone. The gold anomalies are contained within an area roughly 400 m NE-SW by 800 m NW-SE; this is an adequate area to contain a potentially economic deposit of this type.

Noranda's holes encountered a sheared and partly mylonitized mafic volcanic and a subvolcanic intrusive of approximate granodiorite composition. The volcanic was intersected in the upper parts of the holes and produced the higher gold values. The holes were located on the southern lower slopes of the ridge, and as such failed to test the central core of the target area. Some of the gold anomalies on the southeast slope may in fact reflect dispersion from the outcrop sources higher up.

Duke (1989) suggested that the gold enrichment is either related to a shear zone or to a distal facies of a volcanogenic sulphide deposit. He further extrapolates the gold anomalies at the Camp Zone another 2 km NW to the anomalies on and around the Jesse showing. Rock sample descriptions from some of the samples in this area suggest quartz-carbonate altered intrusive and/or metavolcanic rocks occur here as well.

The Carbonate Zone did not, have a clear target developed by 1989, but subsequent geophysical surveying and interpretation by Marksmen indicates that a possible target has been identified in one area. The geology is quite different from what is observed at the Camp Zone and along the Llewellyn Fault zone system. Localized pockets of copper mineralization, plus gold, occur randomly throughout an intensely carbonatized and chloritized suite of mafic volcanics. The degree and extent of alteration is impressive and leads one to ask if this is a regional feature or something related to a hydrothermal heat source. This type of lithology could host a back-arc, or Beschi/Cyprus-type of volcanogenic massive sulphide copper deposit. The work Noranda did focused mostly on the basal volcanic sequence and not on the higher stratigraphy. The geologic section in this area appears to represent a continuous regressive sequence grading from submarine mafic volcanics to equivalent pyroclastics, shale, limestone, epiclastics and finally a sequence of fresh looking intermediate volcanic breccias. The presence of felsic volcanics/intrusives in the stratigraphic column is an encouraging sign to explore in the stratigraphy overlying the mafic volcanics.

Mineralization

Gold mineralization appears to be related to some form of hydrothermal alteration associated with either a shear zone or to disseminations in a mafic volcanic. Noranda's drill logs and rock sample descriptions indicate a high degree of propylitic alteration accompanied by silicification, carbonatization and disseminated and fracture-filled pyrite and pyrrhotite. The author examined some pieces of drill core in Noranda's old base camp and concurs with their observations and drill logs. The core storage facility appears to have been vandalized as the core boxes are strewn about.

Chalcopyrite occurs as isolated pockets and is dominantly related to quartz veinlets within fractures in the Carbonate Zone. Of interest is a ferruginous seep that emanates from a spring near the felsic volcanic (?)/shale contact in the northernmost saddle mapped by the author. This concentration of iron could be indicative of a buried sulphide lens, or it could be a product of the weathered pyrite observed in the felsic rock (unit 6) found above this site. The geophysical surveying conducted by the Issuer in 2002 shows that this area is coincident with a moderate increase in chargeability associated with a broad deep source (Dzuiba, 2002). This area lies east of a geophysical anomaly found by Noranda.

Exploration

The property was first examined by Kieran Downes, President of Marksmen Resources Ltd., accompanied by Ron McMillan, the property vendor, on September 10, 2001. Only the Camp Zone and Jesse Showing were visited at that time.

Three soil samples were taken from the ridge crest at the centre of the Camp Zone, spaced about 40 m-50 m apart (see Figure 9). The soil samples were taken from C-horizon material and weighed about 400 g each. The samples were analyzed using inductively coupled plasma-mass spectrometry (ICP-MS) technique at Acme Analytical Laboratories in Vancouver, B.C.

Sample	Au -	Au	Ag	Ag	Cu -	Zn	РБ	As
Number	(ppb)-	*(g/t)*	(ppm)-	(g/t) -	(ppm)	(ppm):	(ppm)	(ppm)
S-01	5,140	7.43	2.7	2.7	40	261	344	173
S-02	3,093	1.88	1.3	1.5	23	193	151	126
S-03	327	0.4	0.5	< 0.3	14	81	37	82

Table 2. Soil Samples Collected by Marksmen Resources, 2001: Camp Zone

Four contiguous 1.0 metre chip samples were collected from the trench that exposes the Jesse showing. The showing consists of a lens of disseminated to semi-massive sulphides in the matrix of an angular breccia with felsic clasts up to approximately 3 cm in size. The rock is locally magnetic, possibly due to pyrrhotite. Sulphide minerals constitute approximately 25% of the rock, and in order of abundance are: pyrite, galena and sphalerite. One grab sample of high grade material was also collected.

The rock chip samples were analyzed by the same method as the soil samples at Acme Analytical Laboratories. All these samples were subsequently assayed for Au and Ag by fire assay technique, using 1 assay ton sample weight, and finished using inductively coupled plasmaemission spectroscopy (ICP-ES) technique.

Table 3. Rock Chip Samples	Collected by Marksmen	Resources, 2001: Jesse Showing

-Sample -	14	Туре			Ag	Carlo Carlo Carlo Carlo		the second s	As
Number	(ppm);		- (g/t) -	(ppm)	-(g/t)	(ppm).	(ppm)	(ppm)*	(ppm).
G-06	4	chip	5.49	8.5	8.1	359	3,082	1,831	80
G-07	16	chip	15.44	95.1	92	977	9,838	8,386	89
G-08	5	chip	7.02	50.4	47.2	679	6,594	5,455	59
G-09	5	chip	9.45	24.6	24.4	602	5,339	4,836	67
G-10	11	grab	n/a*	102.1	n/a*	1,433	14,020	12,132	188

* n/a: not analyzed

The four chip samples collected from the Jesse showing averaged 9.33 g/t Au, 42.9 g/t Ag, 654 ppm Cu, 6213 ppm Zn and 5127 ppm Pb over 4.0 metres

During the period August 20, 2002 to August 30, 2002, Marksmen Resources Ltd. contracted Aurora Geosciences Ltd. to complete time domain Induced Polarization (IP) and Total Field Magnetic (Mag) measurements on the Golden Eagle, Conner and Tannis claims. The surveys evaluated the property's potential to host a precious metal rich sulphide deposit similar to Eskay Creek Mines, or Pogo Alaska, which are believed to share similar geological settings to the Golden Eagle area and Tannis Zone. These surveys covered the main showings on the property and attempted to confirm previous IP results.

The IP and Mag surveys were carried out on 10 survey lines installed by a line cutting crew contracted by Marksmen Resources Ltd. Station spacing was kept constant (as opposed to slope-corrected) to accommodate the fixed length of the IP receiver cables. Aurora recorded survey grid locations as NAD 83, UTM Zone 8 coordinates, using a Garmin 76 non-differential global positioning satellite (GPS) receiver.

Measurements of apparent chargeability and resistivity were taken using a pole-dipole electrode array. A dipole spacing of fifty metres extending to six separations (n=1, 6) was used for the entire survey of 8.050 km. The data were plotted in a pseudo-section format and as plan maps. Modeling of the IP data was also done using the University of British Columbia (UBC) Geophysical Inversion Facility's DCIP2D program library

The IP equipment consisted of a GDD 2.8 Kw digital IP transmitter, one Iris Instruments Elrec-6 IP receiver and a Honda generator.

The apparent resistivity and apparent chargeability data were presented in pseudo-section format at a scale of 1:2,000. As well, the raw data were input into the UBC Inversion program in order to create inversion models for both apparent resistivity and apparent conductivity.

Total field magnetic surveying was done with GSM 19T digital proton precession magnetometers manufactured by GEM systems of Canada. Diurnal or other erratic variations in the Earth's magnetic field were corrected for with the use of a magnetometer base station recording the total magnetic field every ten seconds. The instrument operator made sure to divest himself of any objects containing iron before proceeding to survey and, as the entire survey was completed in one day by one operator; there was no need to level the data. Measurements of the total magnetic field were taken every 12.5 metres on the survey lines for a total of 7.6875 kilometres.

The corrected magnetic data were presented as profiles on the induced polarization pseudosections and as 1:2,000 scale colour contoured plan maps (Dziuba, 2002).

The following discussion and interpretation is extracted from Aurora Geosciences' report:

"...A line-to-line examination of chargeability pseudo-sections shows a low background chargeability of four to six millivolts per volt and outlines distinct anomalies which suggest sulphide mineralization. The inversion models may be used to better delineate the lateral extent and depth to top of the causative bodies.

Anomalous zones observed on the Carbonate zone data can be ranked by their apparent chargeability and resistivity values as well as size and shape.

Type 'A' chargeability highs are twice that of background, with low apparent resistivities, less than 300 ohm-metres. They extend to the surface and cover several sets of readings. They are observed on the north ends of Lines 0, 2W and 4W and on the south ends of 4W and 6W. These responses could possibly represent black shales, and due to their shallow depth the source of these anomalies may be determined by geologic mapping.

Type 'B' anomalies can be seen trending north-northwest from Line 3W at station 175N to Line 6W at station 450S and from Line 8W at station 425N to Line 10W at 1375N. They are moderate chargeability highs, on the order of 50% above background, with apparent resistivities greater than 1000 ohm-metres. Their features are within 25-50 metres of the surface. They are narrow zones, documented on consecutive readings. This type of response is expected from a sulphide bearing vein-like source.

Type 'C' anomalies are broad deep responses, with chargeability highs 50% above background and no resistivity signature. They trend northwest from Line 0 to Line 6W and are absent on Lines 8W and 10W.

The magnetic field strength varies over the Carbonate Zone from a low of 58500 nanoteslas (nT) to a high of 59500 nT with a mean reading of 58800 nT. A line can be drawn between magnetic low (less than 58800 nT) and high (greater than 58800 nT) provinces, trending in a north-northwest direction along the northern as well as southern ends of the survey lines (see Figure 10). A linear magnetic contact has been documented between rocks of high magnetic susceptibilities, the basic volcanic rocks of the Stuhini Group, and low magnetic susceptibilities, such as shales or limestones. A series of semi-continuous magnetic highs, 350 to 400 nT above background, are coincident with the Type B IP anomalies.

The northern parts of the survey lines on the Camp zone are dominated by strong chargeability highs, values greater than 25 mV/V. These chargeability highs are coincident with apparent resistivities of less than 100 ohm-metres. These are signature responses of graphitic shales which reportedly underlie the area. This zone terminates along a SE-NW line from Line 10W, 475N to Line 14W, 325N.

Pantleg chargeability anomalies are observed on Line 10W at 250N and on Line 14W at 50N. Due to the rocky ground and severe topography, lines 12W and 13W were not installed in this area. The anomalous values here are twice the background of 10 to 12 mV/V. Models generated by the UBC geophysical inversion facility's DCIP2D program library indicate that these anomalies are caused by chargeable bodies with limited depth extent (75 metres to 125 metres).

They occur near surface and occupy areas of lower apparent resistivity. There are no significant magnetic features associated with these anomalies..." The anomalies are shown on Figure 10.

The author performed geological mapping and prospecting on the Carbonate Zone and examined part of the southeast slope of the Camp Zone on August 22 and 23, 2002. Mapping was done on 1:2,000 scale topographic maps in the field; the finished product was digitized and is presented at 1:5,000 scale (see Figure 8).

The results of the mapping were discussed in a previous section.

The author collected one rock sample (73655) from the limonitic and leached felsic volcanic/sill unit near the north end of the Carbonate Zone. The sample is a grab representing random chips collected from a roughly 3 m diameter. This sample yielded no anomalous values; in fact the results suggest possible leaching much like its appearance. Only slightly elevated Fe levels are present.

Ron McMillan took 3 samples while accompanied by the author. Sample M23-1 is taken from the ferruginous seep just below and north from sample 73655. Except for a highly elevated iron content (52.3%), this grab sample yielded no other anomalous values.

Sample M29-1 is from a malachite-stained fracture in carbonatized and chloritized mafic volcanics. The elements showing elevated levels are Cu at 0.467%, Ag at 4.7 ppm, Fe at 6.76%, Ca at 7.77% and Mg at 3.57%. These values reflect features observed in the host rock.

Sample M29-2 is taken from a quartz vein containing coarse chalcopyrite crosscutting carbonatized mafic volcanics. This sampled yielded 1.277% Cu, 97.9 ppm Ag and 19.67% Fe. These two rock samples would be considered grab samples.

Two grab rock samples (F25-1, F25-2) collected by one of the geophysical contractors along line 3W at 425N and 450N are described as "malachite bearing float." These samples yielded 0.045 % Cu and 8 95% Cu, respectively. Sample DJ-21, collected by one of the line-cutting contractors on line L0, 425S, ran 0.204 % Cu; it is described as a carbonate altered volcanic.

The same line-cutting contractor collected a series of soil/colluvium samples along survey line L14W located along the NW side of the Camp Zone. Most samples were taken at 25 m intervals, but some were more widely spaced due to terrain or lack of soil. This line of soil samples roughly coincides with a line of samples collected by Noranda. There appears to be an excellent correlation in gold values between the two data sets in this location, supporting the results obtained by Noranda. Over a 400 m interval of gold-in-soil values range from 240.7 ppb to 1748.1 ppb (see Figure 9).

The geophysical surveys seem to have been performed in a professional and adequate manner. Limited geochemical sampling was conducted by the Issuer or the contractors in its employ. The author did not view the sites of soil samples that were collected at the Camp Zone.

Drilling

No drilling has yet been conducted by the Issuer on the Golden Eagle Project. The results of Noranda's drill program were discussed previously.

Sampling Method and Approach

Details of Noranda's sampling programs were discussed previously in the History section.

The area covered by their 1986 reconnaissance sampling program was roughly 7 km NW-SE by 4 km NE-SW. The 4.9 km long soil grid had an irregular cross-line pattern, thus an accurate estimate of area covered is not possible. Subsequent sampling in 1987 and 1988 was random, and several soil lines, described previously, were located over the Camp Zone.

The 1987 report by Mackay does not provide a description of sampling methodology except that the soil samples were collected from the B horizon, where developed, from a depth of 20 cm to 30 cm. No descriptions were given of how the rock samples were taken, but a rock description summary states whether the sample was a grab, float or outcrop, and the width where applicable.

The rock sample collected by the author was taken with a geologist's hammer/pick and placed in a plastic bag and sealed. The three samples collected by Ron McMillan were similarly collected.

The soil samples collected by Denis Jacob, of Courier de Bois Contracting were placed in kraft paper envelopes; the author did not observe the sampling method/tool used by the Mr. Jacob.

No sampling procedures or handling methods were observed by the author that suggest that any biases may have entered in the results. The sampling done by, or on behalf of, the Issuer has been quite limited in scope thus far.

Rock types and mineralization have been described in the previous section.

A list of sample descriptions and assay results are presented in Appendices I and II.

Sample Preparation, Analyses and Security

No particular sample preparation or security measures were undertaken on site during this program. There was limited access and few personnel in the field or the camp site. As stated previously, very few samples were collected at this time.

The Noranda report by Mackay (1987) shows that the silt samples they collected were analyzed at Rossbacher Laboratory Ltd., Burnaby, B.C. Six elements were analyzed: Cu, Ag, Zn, Pb, Au and As. The method of analysis is not mentioned but probably was atomic absorption. No

duplicate or check samples are observed in the assay certificate; there were only 44 samples in this batch.

The next batch of samples in Noranda's report are of silt, soil and talus fine samples. These samples were analyzed at Noranda's laboratory in Vancouver. The samples were analyzed for Cu, Zn, Pb, Ag, As and Au. A check sample was run after roughly every 100 samples.

Rock samples were analyzed for the same suite of elements as the silt, soil and talus fine samples at Noranda's laboratory. A table shows the results along with sample descriptions, but no mention is made of internal standards, repeats or duplicate samples.

A sheet describing the analytical methods for Au, Mg, W and U are included in Appendix 4 of Mackay's report. Gold was the only element of this suite that was reported. For gold, a 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with methyl iso-butyl ketone (MIBK) from the aqueous solution and determined using flame atomic absorption.

The 1989 Noranda report by Duke shows that the drill core was analyzed at Acme Analytical Laboratories Ltd., Vancouver, B.C. Multi-element ICP determined 30 elements after a 0.500 g sample was digested with 3 ml 3:1:2 HCl-HNO₃-H₂O at 55 deg. C. for one hour and diluted to 10 ml with water. Gold was detected by atomic absorption after a 10 g sample was leached in acid; mercury was analyzed by flameless atomic absorption.

A standard was introduced after every 25 samples, less if the sample suite was smaller than 25 samples.

Certain soil and silt samples were analyzed at Noranda's Vancouver laboratory for Cu, Zn, Pb, Ag, As and Au.

An analytical methods description provides further information on Noranda Lab's procedures: "..... Sediments and soils are dried at approximately 80[°]C and sieved with an 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analyzed in entirety when they are to be determined for gold without further sample preparation.

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for soil or silt samples.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.....

Arsenic: 0.2 g - 0.4 g sample is digested with 1.5 ml of 70% perchloric acid and 0.5 ml of concentrated nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest..."

Additional soil samples were analyzed by Acme Analytical Laboratories in 1988; the digestions and determinations were the same as described previously.

The samples collected by Marksmen Resources were also analyzed by Acme Analytical Laboratories in Vancouver. For soil and silt sample determinations, a 30.0 g sample was leached with 180 ml of 2:2:2 HCl-HNO₃-H₂O at 95 deg. C. for one hour, diluted to 600 ml and analyzed for 35 elements by inductively coupled plasma mass spectrometery (ICP-MS).

For rock samples a 1.0 g sample was digested in aqua regia (HCl-HNO₃-H2O), diluted to 100 ml and 22 elements were determined by inductively coupled plasma emission spectroscopy (ICP-ES). Gold and silver values were determined by fusing 1 assay ton of sample (29.166 g) in a furnace (fire assay), and finishing the determination with atomic absorption technique.

Repeat samples were run roughly after every 14 samples, and 1 standard for ICP and Au determinations was run per sample suite (5 to 20 samples).

The author is of the opinion that all known and observed sampling procedures, including security, were handled in an acceptable manner. There are no indications from the analytical determinations that any spurious results were produced from either sampling, sample handling or analytical problems.

Acme Analytical Laboratories is an ISO 9002 accredited facility. The following excerpt is taken from their website:

"...Acme Analytical Lab had dedicated itself to providing a high quality service to the mining and exploration industry. Foreseeing the need for a globally recognized mark of quality in 1994, Acme began adapting its QA/QC system to an ISO 9000 model. On November 13, 1996, Acme became the first commercial geochemical analysis and assaying lab in North America to be accredited under ISO 9002. Passing this milestone, we are moving onwards to ISO Guide 25 accreditation for specific analytical methods and are currently entering the second round of Proficiency Testing by CANMET and the Standards Council of Canada.

What is ISO 9000? The International Standards Organization (ISO) comprises national standards organization members from every major and developing country. In 1987 they adopted a series of guidelines (ISO 9000 to 9004) for the global standardization of Quality Assurance for products and services. A company seeking accreditation must implement and maintain a quality assurance system that is compliant with one of the three applicable models (i.e. ISO 9001, 9002 or 9003). Some of the aspects specifically addressed in a quality assurance system include:

Responsibility of management in defining and achieving quality goals, Contract review to ensure customer needs are understood and met, Procurement of supplies and services capable of delivering the desired level of quality,

Handling of material supplied by the customer to ensure integrity, Controlling processes to ensure consistency of quality, Inspection and testing to ensure that all work meets or exceeds quality criteria, Correction and prevention of non-conformities (errors),

Training of staff, and

Statistical analysis to ensure quality criteria are met.

After the system is in place and a track record established documenting its effectiveness, the company must undergo auditing by a registered External Auditor. If found compliant by the Auditor, the company is recommended for registration. Accredited companies must undergo periodic internal and external audits to ensure continued compliance."

The Noranda laboratory in Vancouver is an "in-house" laboratory to Noranda Inc. As such, they would not likely be ISO 9002 certified, at least not in the 1980's.

Data Verification

As mentioned previously, the samples collected by the author, the Issuer, and/or its representatives were small in volume. As such, no extra quality control measures were implemented.

The data received from Acme Analytical Laboratories Ltd. came both in hard copy and digital formats; the hard copies appear to be original documents, as determinable by the author. As such, the data appears legitimate and represents the samples collected or observed by the author on site.

Part B: Tannis Zone

History

Prospectors first entered the general area in 1878 with the building of the White Pass and Yukon Railroad. The Klondike Gold Rush between 1897 and 1898 saw a large influx of people.

Within the boundaries of the Tannis claims exist four small adits, but no documented records of their history seem to be available. It is believed that these workings date back to the time of the gold rush, or shortly thereafter.

More recent work included exploration in the 1970's (?) for molybdenum and copper at which time a 3 km long road was built on the north side of Paddy Pass (Morris, 1988). The company responsible for this work and the source is not cited by Morris.

The ground north of Paddy Pass was staked by H. Copland of Whitehorse, Yukon as the Catfish claims in 1986. Copland performed geological mapping, geochemical sampling and prospecting surveys. A total of 19 rock samples was collected and analyzed at Acme Analytical Laboratories in Vancouver, B.C. for Cu, Pb, Zn, Ag, Sb and Au.

Two major quartz vein trends are described by Copland: west-northwest and northeast. The first set is generally barren in appearance and geochemistry and are usually less than 50 cm wide. The major mineralized veins belong to the second set. A 15 m long adit is driven on such a vein that is about 1 m wide and can be traced for over 200 m along strike. The vein is described as being a coarse grained, comb-structured vuggy, milky to white quartz containing moderate to intense limonite and jarosite coatings (Copland, 1987). The vein contains blebs and streaks of pyrite, stibnite, arsenopyrite and galena, comprising up to 15% of the vein. Copland obtained values of up to 0.68 oz/ton Au and 4.29 oz/ton Ag from this vein; the nature of the sample is not mentioned.

Copland found numerous pieces of mineralized float on the property but was not able to determine their source. Quartz, similar to that described previously, containing bleby, euhedral galena to 2% and malachite staining, assayed up to 4.74 oz/ton Ag.

Quartz veins with fine grained stibnite and galena were frequently found as float and in situ, crosscutting rhyolite dykes. One float sample from a small vein yielded 3,890 ppb Au and 100.4 ppm Ag. A silicified piece of volcanic rock found in a creek bed, contained lenses and blebs of pyrite, pyrrhotite, sphalerite and galena comprising up to 20% of the rock. Zinc values from this sample ran 47,766 ppm. Coarse molybdenite was observed on fracture surfaces on a granite outcropping in one location.

A 1:10,000 scale geology map and sample location map are presented in Copland's assessment report (A.R.#15,972).

The Catfish property was either subsequently sold by Copland or optioned out. A 1988 report by R.J. Morris (Beacon Hill Consultants Ltd.) for Frame Mining Corporation states that the property was owned by C.J.R. Hart of Whitehorse. The original four claims (11 units) were expanded to 12 claims comprising 76 contiguous units. The ownership change(s) is not clear, but it seems that Frame Mining Corporation optioned the property from the then-owner, C.J.R. Hart, in 1988.

Morris states that the B.C. Geological Survey mapped the area and did reconnaissance stream sediment and lithogeochemical sampling in 1987. The results indicated that the creek from Paddy Pass and its most easterly south tributary are anomalous in gold, arsenic and antimony.

The field work conducted by Morris in 1988 was done between August 19 and September 9. The work completed in 1988 included:

• Nine day traverses.

- Two fly-camps.
- Twelve detailed soil sampling lines.
- A total of 297 soil and stream sediment samples, 61 rock samples and 31 petrographic samples.
- Air photo enlargements.
- 1:5,000 scale topographic base maps prepared from air photos.

The soil samples represent B-horizon material where available though generally soil is poorly developed at higher elevations. Where soil was not identified, the sample represents fine debris on scree slopes (colluvium). Stream sediment samples represent fine material from the active portion of a stream. Rock samples are of several types: float samples, where the source is not known; grab samples, a sample from outcrop which may not be representative of the total outcrop; and chip or channel samples which have been collected to represent an outcrop or portion of an outcrop (Morris, 1988).

Some elementary statistics performed by Morris indicate that the anomalous threshold value for gold is 120 ppb. Using this threshold value means that 34% of the samples are anomalous. The threshold value determined for arsenic is 600 ppm. This is highly anomalous, and Morris points out there could possibly be several sub-populations within the anomalous values.

Not shown here is a correlation matrix for copper, lead, zinc, silver, arsenic and antimony versus gold. Only arsenic appears to have any correlation with gold, though the correlation factor would not be useable in exploration.

Stream sediment sampling by the B.C. Geological Survey in 1987 showed that the creek draining east from Paddy Pass and its most easterly south drainage are anomalous in gold, arsenic and antimony. Samples from the main Paddy Pass Creek show very low values (maximum 3 ppb Au) while the south creek, between the *Middle Ridge* and the *south mountain*, has values up to eight times higher (maximum 25 ppb Au). Morris coined the terms *North Mountain* for the ridge north of Paddy Pass, *Middle Ridge* for the ridge on which the bulk of the mineralization has been discovered, located south of Paddy Pass, and *South Creek* and *South Mountain* for the stream and mountain found immediately south of the *Middle Ridge*, respectively.

The mineralized areas were located by prospecting, while geochemistry was used to explore for extensions and to determine the geochemical signature of the mineralization.

Four days were spent on the *North Mountain*. Sampling on the east slope and along the ridge top, as well as detailed work around the adit, indicated few anomalies. One grab sample collected by Morris yielded 2,605 ppb Au, but this represented dump material from the old adit. A rock sample taken about 100 metres northeast of the adit yielded 6720 ppb Au, and a soil sample located 200 metres west of the adit ran 3720 ppb Au. The nature of the rock sample was not described.

Three days were spent on the *South Mountain*. Sampling in the southeast and northeast drainages produced no anomalies, but detailed sampling on the ridge and northwest side has outlined a mineralized area.

Three level soil lines were located and designed to outline the extent of mineralization. The top line, shows only a single arsenic anomaly, the middle sample line shows an extensive arsenic anomaly with results up to ten times background. Gold in soil is up to twice background though the anomalies are scattered. The anomalous zone is at least 250 metres wide with the southwest edge defined though sampling was not carried far enough to the northeast to define the anomalous zone. The bottom sample line was designed to test the northeast extent of mineralization. Results indicate a single weak gold anomaly but an anomalous arsenic zone up to 150 metres wide. The arsenic values are not shown on Figure 11 of this report, only the gold values.

At least eight man days were spent prospecting and sampling on the *Middle Ridge*. Five detailed soil sampling lines were completed to outline the area of mineralization and to explore for extensions. Soil samples yielded values of up to 24,220 ppb (0.71 oz/ton) Au and up to 20,425 ppm As. Gold in soil is effective in showing the extent of mineralization as shown by the southeast sample line, above the south creek. Arsenic shows a larger dispersion trend and indicates the whole *middle Ridge* is anomalous.

Morris observed four types of mineralization: molybdenum in quartz veins, in granite; a bleached pyritic shear zone; a high antimony tuff horizon; and quartz veins with arsenopyrite. He deemed only the latter type to have any economic importance.

The molybdenite in quartz veins was observed on the *North Mountain* west of an old adit and was not investigated further. The bleached, pyritized shear zone is in a drainage on the east side of *North Mountain*. Although large gossans have formed, no mineralization other than pyrite was observed.

The high antimony tuff horizon is mentioned only as a passing curiosity and was not considered by Morris to be of significance. Although no mineralization was observed, a rock sample collected by Mihalynuk, et al. (1988) ran 975 ppm Sb. This sample came from Lower to Middle Jurassic volcanics which overly the Inklin Formation (LaBerge Group) shales along the west side of the property. The exact location of this sample is not documented.

The quartz veins with arsenopyrite are hosted by the Boundary Range metamorphics and a fine grained granitic intrusion (rhyolite). The veins occur on *North Mountain, South Mountain* and the *Middle Ridge*. The vein and adit described by Copland on *North Mountain* was likewise described by Morris: coarse blebs of sulphides within the vein while the western contact is essentially a quartz stockwork with finely disseminated mineralization.

On the *South Mountain*, the mineralized quartz veins are confined to a fine intrusive host (rhyolite). The northeast contact with the metamorphics is a sharp linear feature which has been accentuated by erosion. The veins are generally thin, reaching up to 0.6 m in width. Morris

suggests that some zoning may be present because there is a scarcity of veins between about 1385 m and 1400 m elevation, yet quartz veins are more numerous above and below this zone.

Mineralized quartz veins on the *Middle Ridge* occur both in the fine grained felsic intrusive and the metamorphic host rocks. Mineralization is reported occurring in two forms: arsenopyrite-rich cores with scorodite envelopes in the intrusive host and as coarse arsenopyrite, with rare chalcopyrite, in quartz veins, with no alteration in the metamorphic rocks. A 5 metre long adit and two trenches occur on the south side of the *Middle Ridge*. The veins here are up to 3.1 metres long and have an overall east-west trend. On the north side of the ridge, from the ridge crest to about 25 metres down slope, there is an altered, mineralized zone up to 1.6 metres thick, trending north-south. At approximately 1260 metres elevation on the north side of the ridge there is a zone up to 30 metres wide with weak, pervasive quartz-arsenopyrite veining that trends roughly eastwest.

Rock samples were collected from all the ridges described above, but the bulk of them came from the *Middle Ridge*. The results of selected samples from these areas are documented in Appendix I.

Frame Mining Corporation undertook a more extensive exploration program in 1989. The work was conducted and/or supervised by J.H. Davis between mid-June and early September. The work performed included:

- collecting 447 rock samples
- collecting 143 soil samples
- collecting 20 petrographic samples
- 1:5,000 scale geological mapping and prospecting over about 17 km²
- 1:1,000 scale mapping within the area mapped at 1:5,000 (partial)
- road upgrading (3.1 km)
- blasting and hand trenching (72.2 m² in 8 trenches)
- approximately 10 km of line-cutting
- approximately 10 km of induced polarization surveying

Davis performed some basic statistics, including correlation coefficients, on 414 samples; the elements tested were Au, As, Ag, Cu, Pb, Zn, Mo and Sb. The results showed a weak correlation between Au and As, and next to no correlation between Au and the remaining elements.

Cumulative probability plots for the economic elements Au and Ag were prepared to select the threshold values for both rock and soil samples.

Special Element Lastered	san Sample Type 42214	Threshold Value	Cumulative %
Au	Rock	668 ppb	90
Ag	Rock	14.9 ppm	94
Au	Soil	68 ppb	90
Ag	Soil	2.0 ppm	73

Table 4. Anomalous Au and Ag: Rock and Soil Geochemistry

It is noted that both the granite and metamorphic rocks on the *North Mountain* contain quartz veins up to 1 m wide but are generally lacking in arsenopyrite. Minor stockworking was noted in one shear zone, and anomalous Au (1962 ppb) and Ag (96.6 ppm) were obtained from two veins. Coarse rosettes of molybdenite are found locally in quartz veins.

The *Middle Ridge* is described as the most promising area to host gold mineralization on the property. The aplite (rhyolite) hosts arsenopyrite-bearing quartz veins that parallel the primary joint sets trending roughly east-west with near vertical dips. In the vicinity of trenches 7 and 8 the east-west veins crosscut a scries of north-south veins that parallel a secondary joint set.

Both the east-west and north-south vein sets contain anomalous gold and silver values. Gold in the east-west set runs as high as 62,297.1 ppb and silver as high as 555.3 ppm. This sample was taken from a vein located at the southwest end of line L200N on Frame Mining's grid. No sample width was documented. These veins, with widths to 2.5 m, generally parallel the joint sets. The trenching done by Frame Mining in 1989 has revealed that almost all joints (<10 cm) contain massive arsenopyrite. Some disseminated pyrite (<2%) occurs within gossanous areas of the aplite. Alteration is generally absent (Davis, 1989). Some silicic and potassic alteration occurs along mineralized joints. Higher gold values occur on the north side of the *Middle Ridge*. On the south side, the larger veins are generally barren; however, veining that continues into the metamorphics also contains anomalous gold (up to 99,565.7 ppb) and silver (up to 175.4 ppm). No sample widths were provided for these two samples, but the veins hosted by the metamorphics are generally under 0.5 m in width and not very well developed.

Davis states that the *South Mountain* has no developed vein systems. One vein contains 1,356 ppb Au and 39.3 ppm Ag. Soil values show a minor area of anomalous silver, primarily centred on a pyrite-bearing oxidized aplite.

Eight hand trenches were excavated on the north side of the *Middle Ridge* in 1989. The drawings generated by Frame Mining are not presented in this report, but the following table summarizes the geochemical results obtained from each. The trench locations are shown on Figure 12.

Thench	AU(g/0)	Ag -	-width (m)	Including	Including	width (m)
a find a faith and	Construction and a second	Sam (Shr) was	The same of the same same same	Sector Contractions	spans rike (K/1) ke sar	and the state of the
1	0.20	6.27	11.50	0.84	56.6	0.7
2	0.25	6.70	10.50	0.50	9.1	2.5
3	0.33	21.70	11.00	2.27	19.9	0.7
4	1.00	15.00	9.00	1.59	22.4	1.75
5	0.78	33.30	9.00	3.61	156.1	1.5
6	1.34	25.00	9.70	5.54	100	1.7
7	1.17	3.10	6.00	1.44	4.1	4
8	2.05	141.10	6.00	6.31	555.3	1.45

 Table 5. Summary of Geochemical Results From Trenches on Middle Ridge, 1989

Between September 6 and October 2, 1989, an induced polarization (IP) survey was conducted on the property between Paddy Pass Creek to the north and *South Mountain* to the south by Peter Walcott and Associates. Five lines were surveyed from two baselines: the northern baseline ran at 315 deg. azimuth; the southern one at 165 deg. azimuth. Three lines were run roughly perpendicular to the northern baseline, and two lines were similarly run from the southern baseline. The origin of the two baselines is along the crest of *Middle Ridge* at the contact between the aplite (rhyolite) and metamorphic rock units.

The survey was originally run using the dipole-dipole method but was abandoned for the poledipole method due to steep terrain, poor ground conductivity and inclement weather conditions. The survey was run at separations of n=1 to n=4, and the dipole separation was 25 m; the first to fourth separation measurements were made at 25 metre intervals along the lines. In all, some 10.4 kilometres of surveying was carried out using the above methods.

The IP survey was carried out using a pulse type system, the principal components of which are manufactured by Huntec Limited and EDA Instruments Ltd. The system consisted basically of three units, a receiver (EDA), a transmitter and a motor generator (Huntec). The transmitter, which provided a maximum of 2.5 kW d.c. to the ground, obtained its power from a 2.5 kW 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter was 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consisted of careful measurements of the current (I) in amperes flowing through the current electrodes C1 and C2, the primary voltage (V) appearing between the two potential electrodes, P1 and P2, during the "current-on" part of the cycle, and the apparent chargeability (Ma) presented as a direct readout in millivolts per volt using a 160 millisecond delay and a 1580 millisecond sample window by the receiver, a digital receiver controlled by a microprocessor.

In the pole-dipole method the current electrodes Cl, and the potential electrodes, P1 through P3, are moved in unison along the survey lines at a spacing "a" (the dipole) apart, while the second current electrode C2 is kept constant at "infinity." The distance "na," between C1 and the nearest potential electrode generally controls the depth to be explored by the particular separation, "n," traverse.

The chargeability results showed the area surveyed to exhibit a low chargeability background: 3 to 7 millivolts per volt, above which many anomalous features were clearly discernible. These were broken down into three classes based on their respective characteristics, namely Class A: narrow zones of higher chargeability with little or no resistivity contrast as would be expected from narrow vein like causative sources, Class B: apparently narrow but undefined zones of higher chargeability associated with lower resistivities and Class C: broad complex zones of higher chargeability with little or no resistivity contrast.

High chargeability readings accompanied by lower resistivity values of Class B type are observed on the western extremities of Lines 0, 1125 S and 1325 S as well as on the southern end of the baseline. These appear to represent the response of carbonaceous argillites.

A large complex zone of high chargeability of Class C type is observed on the eastern end of Line 0, the eastern half of Line 400 N, undefined to the east on both lines, the central portion of Line 800 N and on the baseline between 3+50 N and 9+00 N between similar elevations on all lines. Walcott attributes this to a formational cause but is located mostly in mapped intrusive with extension into the Boundary Range metamorphics on Line 0.

Higher chargeability readings occur on the smaller separations within this zone on Line 800 N where the hillside appears to have sloughed down to create a layer of mineralized talus.

A zone of similar characteristics is noted on the western end of Line 1325 S in the mapped Jurassic sedimentary-volcanic suites, and a similar one could occur at depth in the middle of the same line.

The majority of the Class A type of anomalies occur on the two baselines in areas of good rock exposure where the lines run mostly parallel to a shear(s) and over crosscutting quartzarsenopyrite veins. The broadest of these anomalies, located with the aborted dipole-dipole work between Lines 9+50 S and 7+75 S on the baseline, exhibits somewhat similar chargeability and resistivity responses to the anomalies on Line 1325 S.

A strong single anomaly was observed in the overburden covered area on the north side of the Paddy Creek valley bottom, as defined by lower resistivities.

The twenty samples collected for petrographic analysis were taken from a diverse suite of lithologies from the property. A review of the report prepared by Vancouver Petrographics Ltd., contained within the report by Davis (1989), does not contribute any further insight as to the genesis of the felsic intrusive or the quartz-arsenopyrite veins that it hosts. The locations of the petrographic samples is not shown on any of the maps provided.

There exists no record or evidence of any historic mineral resource or reserve on the property, nor is there any evidence of any historic mining production. The few small adits observed are only exploration workings dating to the turn of the 20th. Century.

Geological Setting

The regional geology that was described in *Part A* of this report (Golden Eagle Zones) also applies to the Tannis Zone. It will not be repeated here.

Property Geology

Although the author has compiled a more detailed map of the central part of the property, it is incomplete. The geological descriptions provided by Davis will be presented here plus additional information obtained by the author. The unit numbers shown on the author's map (Figure 14) will be used here.

Petrology done on the Boundary Range Metamorphic rocks (unit 1) suggests a volcanic and volcaniclastic affinity based on mineralogy that is atypical for rocks of pelitic protolith (Morris, 1988). Feldspar-hornblende + biotite + sericite gneiss, and feldspar-quartz-chlorite+sericite+ biotite schist dominate the unit. Minor augen gneiss and rare carbonate intervals occur, as do some occasional relatively unmetamorphosed intervals.

On the *Middle Ridge* localized hornfels has developed in contact areas with the aplite (rhyolite). Metamorphic grade and the degree of deformation are much higher in this unit than in the overlying Stuhini Group indicating the occurrence of a deformational event before the deposition of the Upper Triassic rocks.

On the North Mountain the lower Stuhini contact is faulted against the Boundary Range metamorphics. This sequence is typified by a dark green, in part variegated green-maroon, dense, massive, hornblende feldspar phyric volcanic that is pervasively epidotized (5%).

In hand specimen, the rock appears weakly porphyritic having 10% euhedral white feldspar phenocrysts to 3 mm. Thin section reveals 50% equant-euhedral secondary amphiboles to 6 mm pseudomorphed after hornblende.

Within the lower 150 m at least four intervals over 30 m of a light buff weathering light green tremolite marble-which is significantly altered and permeated by micro fractures, are interbedded with dark gray fine grained lapilli tuffs, with lapilli to 1 cm. A dextral fault offsets this marble unit about 100 m. Towards the upper contact with the Inklin Formation, minor dark green gray volcaniclastic breccia with clasts to 10 cm are interbedded with the volcanics.

On the *Middle Ridge* a section tentatively assigned to the Stuhini appears gradational with the overlying Inklin Formation (Laberge Group). From the cast, where the lower contact with the metamorphics is indiscernible and presumably faulted, an interbedded sequence of variegated very dark gray to maroon microcrystalline amygdaloidal (?) flows, greywackes, silty argillite, medium gray microcrystalline tuff, medium gray brown sub-trachytic microlitic felsic tuff/flow, grade into very dark gray argillites of the Inklin Formation.

The author mapped a section of what would appear to be the Stuhini Group (unit 2) along the western margin of Figure 14. Here the volcanics and volcaniclastics are in intrusive contact with an underlying equigranular biotite granite. The Stuhini has been hornfelsed along this contact and for most of the approximately 50 m-60 m thickness mapped above the contact in this section.

The Inklin Formation (Laberge Group) is composed of carbonaceous argillites interbedded with minor carbonaceous siltstones. The upper contact on the *Middle Ridge* and *South Mountain* is covered due to the recessive nature of the formation. Shearing is evident in the basal middle to upper Jurassic volcanics that overly the Inklin and could indicate a fault contact. Inklin derived clasts occur within intervals of the volcanics indicating an erosional unconformity. The lower contact on the *South Mountain* is intruded by aplite. Pinching out on the *South Mountain* the Laberge sediments are either faulted off or were locally not deposited. On the *North Mountain* the basal contact was not observed, but appears intruded by aplite.

Pelagic sediments of the Laberge group (unit 3) were mapped by the author overlying the Stuhini Group volcanics (unit 2) along the western margin of the map area and along the *Middle Ridge*. The eastern contact between the Laberge and fine grained felsic intrusive appears to be fault controlled. As mentioned by Davis, the western contact is recessive and covered in scree. Interbeds of argillite and argillaceous tuff occur within the overlying felsic to intermediate volcaniclastics which may suggest a conformable contact with the underlying Laberge.

Middle to Upper Jurassic volcanics appear in the southwestern corner of the claim group (Catfish claims, 1989) in a synclinal structure where a sub-unit of clast supported conglomerates are interbedded with and overlie a volcanic sequence (outside of the present map area).

The volcanic sequence (unit 4) consists of an intermediate medium brown-grey pyroclastic breccia with clasts ranging to 30 cm that towards its base is sheared and contains minor redhematitic chert clasts, <1% to 5 cm (Morris, 1988). Interbedded with the breccia are variably composed intermediate to mafic ash-lapilli-lithic tuffs that have up to 80% lapilli to 15 mm. Weakly aligned lapilli that include sericite altered glass indicate original bedding.

Also within the volcanic sequence are common brown bladed sub-trachytic feldspar porphyry flows having 50-60% porphyroblasts to 6 mm, that display graded bedding over intervals many metres thick; and a minor unit of intermediate to mafic agglomerate with porphyroblastic bombs to 40 cm in a fine-grained aphanitic matrix. The overlying clast supported conglomerate is composed primarily of Inklin derived, finely laminated clay silt and sand pebbles, in a coarse sandy matrix. These conglomerates have thin interbeds of carbonaceous argillite in part containing coarse woody fragments.

The unit 4 volcaniclastics were mapped by the author only in the southwestern corner of the present map. The basal section consists largely of felsic pyroclastics and agglomerate intercalated with argillaceous horizons; this section has undergone some hornfelsing as well. Rip-up clasts occur in the overlying argillaceous unit. Above the argillite is an admixed package of pelagics and pumiceous and welded tuff horizons; this sequence grades upwards into coarser grained pyroclastics which is capped by a 1 metre thick argillite bed. A thick and monotonous sequence

of fine grained, green volcanics overlies the argillite; no primary flow breccia or pyroclastics were observed.

Mihalynuk and Rouse (1988) have interpreted that the unit referred to by Davis as an aplite, and by the author as a rhyolite, is a facies equivalent to a coarse grained, equigranular biotite granite. The granite (unit 6) occurs west of the rhyolite (unit 5) and is in intrusive contact with the overlying Stuhini Group volcanics. Observations made by the author suggest that this is not a facies change but an intrusive and/or fault contact relationship between the two units; however, the two may be genetically related.

A narrow fault slip trending 175AZ/75E separates these units just below their respective intrusive contacts with overlying Laberge Group, or older lithologies. The easternmost contact between the rhyolite and the Boundary Range metamorphics is fault-bounded along a prominent linear feature trending about 150AZ/85NE on the north side of the *Middle Ridge*. South of the ridge, however, the rhyolite appears to be in intrusive contact, in the form of a sill or dyke, with the enveloping metamorphic rocks to the west and east; the large linear fault continues to the southeast entirely within the metamorphic unit (see Figure 14).

As was pointed out by previous observers, large east-west joints traverse the rhyolite, often filled with arsenopyrite-bearing quartz veins; this phenomenon is quite obvious in the dyke/sill body to the south. The author did not see these joints penetrating the granite to the west, even as much smaller features. Furthermore, the quartz-arsenopyrite veins penetrate the metamorphic rocks to the east but not the granite to the west even though mineralized quartz veins have been mapped almost to the western extremity of the rhyolite. The author opines that although these two intrusive bodies may be genetically related, they do not, in this location, represent a facies change phenomenon.

The granite (unit 6) is a medium to coarse grained, equigranular biotite variety on the north side of the *Middle Ridge*. On the south side of the ridge occurs a porphyritic granite of similar composition, except it contains large potash feldspar phenocrysts. This area is not yet completely mapped.

Unit 7 is a coarse grained plagioclase feldspar porphyry. It occurs as a sill within the Laberge sediments in the west-central part of the map area and as a dyke within the porphyritic granite described above.

The most obvious structural control on the property is transverse and block faulting. The NW-SE structure seen separating the rhyolite from the metamorphic rocks parallels the regional trend of the area and also appears to be the oldest fault trend mapped on this part of the property. This structure is observed continuing to the southeast on the South Mountain, but it seems to have been offset many 10's to 100's of metres in a right-lateral sense.

On the north side of the *Middle Ridge* this NW-SE structure is truncated by another fault trending roughly north-south. A series of near-parallel structures, trending from north-south to 015AZ and dipping from 80 deg. west to 85 deg. east, are mapped on this north slope. These structures are

modified by a series of drainages all flowing north into Paddy Pass Creek. The fault that separates the rhyolite from the granite (170AZ/75E) could belong to either the NW-SE trend or the north-south set, but the former trend is more likely. A north-south trending structure is projected to occur just west of the previously mentioned fault where a stream and gully project southerly into a saddle on *Middle Ridge*.

Of significance is the presence of what appears to be a rhyolite dyke intruding the granite along a north-south trending gully near the north end of the map area. This dyke, which presumably occupies a fault along this trend, would suggest that the rhyolite is younger than the granite. However, since there is post-rhyolite movement noted along these faults, it is also possible that this "dyke" is in fact a selvage of the rhyolite sandwiched between granite to the west and east of the fault. No other rhyolite dykes were observed cutting the granite in the present map area. Further mapping is needed to clarify the relationship between the two intrusive units.

Deposit Types and Mineralization

So far, the only area of the Tannis property that seems to have potential to host an economic deposit is the area underlain by the *Middle Ridge*. Here, a fine grained rhyolite hosts small and large arsenopyrite-bearing quartz veins which can contain highly anomalous quantities of gold and silver. The veins occupy dominantly east-west fracture sets and minor north-south sets, but reports state that massive arsenopyrite veins have been observed along these fractures as well. One report mentioned the presence of "stockwork" style veining around the area of hand trenches 6, 7 and 8 (Figure 14). The author traversed somewhere between the locations of hand trenches 5 and 8 and noted quartz stringers that resembled stockwork-like patterns. Similar looking veins were found at sample site 73657 over a 2 m + width trending 025AZ/sub-vertical.

Limonites coat a myriad of small, narrow fracture sets in the rhyolite, but these are derived from pyrite. The arsenopyrite alters to scorodite which imparts a yellowish-green cast on the outcrop near the mineralized veins. It is unknown if the pyrite contains any significant precious metal values.

Basically, the model that best fits this type of deposit would be a "porphyry gold," like those found in the Tombstone Granites in the Yukon and Alaska. The host rocks of the Pogo and Fort Knox deposits are quite different. They are medium to coarse grained granites or quartz monzonites that contain only small amounts of sulphides, mostly in the form of pyrite. Alteration is confined largely to thin envelopes of sericite around the quartz veins that host the mineralization. Arsenic and bismuth are characteristic accessory elements associated with the gold at Pogo and Fort Knox. While the arsenic content is extremely high at the Tannis property, as well as the total sulphide content, the bismuth values are extremely low. However, the Donlin Creek deposit, which is hosted in veins/veinlets in rhyolite sills and dykes, is not particularly enriched in bismuth.

Although the metallogeny between these two types is different, and the two types are probably not genetically related, the Tannis property should be explored as a bulk tonnage, intrusivehosted precious metal deposit. The individual veins do not appear to be either large enough or rich enough to be viable economic targets mined as discrete underground deposits.

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In addition, fieldwork conducted by M. Mihalynuk on behalf of the Golden Eagle Public-Private Partnership Project, a partnership between Marksmen Resources Ltd. and the provincial Geological Survey Branch, permitted confirmation of the submarine nature of felsic volcanics in the western Tutshi Lake map area. Here, rhyolite tuff is interbedded with fine-grained sediments of the Laberge Group. Based upon fossil ages in sediments nearby, and evidence for syndepositional orogenic activity within the volcanic succession, the age of the volcanic strata is probably between 172-178 Ma. Both the geological setting and age of volcanism appear analogous with that of the Eskay Creek deposit (Mihalynuk, 2002). Results are pending for a sample of rhyolite tuff that was collected for U-Pb geochronological age determination, and sediments sampled for microfossil age determination. Minor copper sulphide mineralization was discovered in volcanic flows immediately above cherty argillaceous sediments. The felsic volcanics occur on the Middle Ridge just west of and above the rhyolitic intrusive.

Exploration

Between August 24, 2002, and August 27, 2002, the author geologically mapped the central part of the *Middle Ridge* at 1:2,000 scale. The lower portion of North Mountain was prospected and mapped on August 21, 2002. Five rock chip samples were collected by the author: one from the adit on *North Mountain*, four from *Middle Ridge*. Ron McMillan collected two grab samples from talus on *South Mountain*.

Sample 73654 was taken from a quartz vein from an old adit on *North Mountain*. This sample and the traverse done by the author are not shown on these maps.

The following table lists the samples taken from the Tannis Zone by the author, Ron McMillan and Mitch Mihalynuk.

The gold and silver values in all samples collected by the author show elevated values. Sample M27-1, taken from high grade arsenopyrite yielded the highest levels of gold and silver. There appears to be a relationship between gold and arsenic but not a strong correlation, as was mentioned by Morris (1988).

Certain samples collected by Frame Mining in 1988, from veins found in the metamorphic rocks, yielded gold values as high as 42,918 ppb, and several ran in the 1000 ppb to 5000 ppb range.

An induced polarization survey was conducted by Aurora Geophysics Ltd. between August 26 and August 30, 2002. The following extract is taken from the report by Dziuba:

"....Three lines of induced polarization surveying completed on the Tannis Zone show well defined chargeability anomalies on Lines 4W and 6W and a fairly well defined chargeability anomaly on Line 10W. No total field magnetic readings were taken over this area.

Sample	Location	Collector	Uype/width	Au (g/t)	Ag (g/t)	As (%)	Sb((%))
73654	North Mtn.	J. Nebocat	chip/ 1.0 m	1.15	88.3	0.34	0.037
73656	Middle R.	J. Nebocat	chip/0.75 m	0.62	10.9	2.75	0.008
73657	Middle R.	J. Nebocat	chip/2.0 m	0.55	3.5	2.5	0.007
73658	Middle R.	J. Nebocat	chip/1.5 m	0.13	6.3	1.07	0.002
73659	Middle R.	J. Nebocat	chip/2.0 m	0.36	16.1	3.91	0.012
M27-1	South Mtn.	R. McMillan	grab	11.48	442.6	32.9	0.504
M27-2	South Mtn.	R. McMIllan	grab	0.05	2	0.64	0.003
39-14	Middle R.	M. Mihalynuk	grab	18.39	>100	>10	0.114
37-4	Nula Show.	M. Mihalynuk	grab	trace	0.50	0.95	0.005
37-9	Middle R.	M. Mihalynuk	grab	0.13	7.91	0.02	0.001
40-7	Middle R.	M. Mihalynuk	grab	0.31	4.42	3.69	0.012

Table 6. Rock Samples Collected From Tan	nis	nnis Zone, 2	2002.
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Increased chargeability anomalies are centered at 350N on Line 4W and 450N on Line 6W with values up to five times that of background. Both anomalies are narrow near the surface and have a deeper and broader component. The causative source for this anomaly may be a combination of two or more bodies; however the dipole spacing of 50 metres employed makes it impossible to resolve features of similar chargeability in close contact to each other. Modeling of the anomaly, done using the UBC geophysical inversion facility's DCIP2D program library, generates a body which is narrow near the surface and broadens with depth..." (Figure 13).

"....An apparent resistivity low observed on Line 4W at 200N is explained by a large previously mapped fault (Nebocat). The apparent resistivity inversion model delineates this feature. This fault separates rhyolites to the southwest from metamorphic rocks to the northeast. A similar apparent resistivity low is observed on Line 6W at 400N. Less distinct apparent resistivity lows on Line 4W at 500N and Line 6W at 700N may also indicate faults.

Moderate chargeability anomalies are observed on the northern end of Line 10W and remain open to the north. The inverted model of Line 10W shows these anomalies to be caused by both near surface and deeper sources. The apparent resistivity is lower, suggesting a thickening cover of overburden...."

The broad chargeability source between lines 4 West and 6 West occur largely east of the major fault described above. As such, it appears that a conductive source lies within the metamorphic rocks, perhaps either a carbonaceous slate or a pyritic hornfels. The author did not examine the metamorphic rocks in this area.

One deficiency in this survey is a lack of coverage in the main target area. This was due to the steep terrain that occurs southwest of the ends of the survey lines; the terrain is much steeper above the rhyolite contact and was not accessible. Because the pole-dipole survey required at least 150 metres coverage beyond the end of the lines, only a very small portion of the rhyolite was surveyed along its northeastern contact.

The broad chargeability source outlined by Aurora between lines 4 West and 6 West projects onto a wide moderate chargeability feature found on Frame Mining's Line 0. The intersection of Line 0 and Frame Mining's baseline shows two high chargeability features on the respective lines. This feature might be attributed to a structure along which a north-trending creek flows near this location. This area is underlain by granite.

The chargeability high/resistivity low features found along the southwest ends of Frame Mining's survey lines L0, L1125S and L1325S are attributed to the carbonaceous Laberge Group argillites. The narrow low resistive features seen on lines L4W and L6W, surveyed by Aurora, are probably caused by fault structures in the creeks along which they occur; this was suggested by Dziuba, previously.

The most significant anomalies obtained are probably the high chargeability features found by Frame Mining along their baseline between L0 and about L900S. These conductors are all within the rhyolite intrusive body, but the central and southern anomalies lie close to the metamorphic contact.

The first highly conductive feature located west of the baseline on L1125S lies along the projection of the rhyolite dyke seen above. This area is covered with talus and overburden.

The highly conductive feature located where the baseline crosses the northeasterly-trending creek may be caused by a fault running along the same direction.

Drilling

There is no record of drilling on this property, nor is there any evidence of any such activity anywhere on the ground.

Sampling Method and Approach

The numbers and types of samples and how they were collected by the Issuer and previous operators, where applicable, has been discussed in the *History* section of this report.

The area covered by geochemical sampling in the core area of the property is about 1.0 km eastwest by 1.5 km north-south. An area roughly 1.5 km north-south by 0.5 km east saw limited sampling on *South Mountain*, southeast of and adjoining the core area. Soil, rock and silt samples were collected from *North Mountain* over an area of 1.5 km NE-SW by 0.5 km NW-SE.

Rock types sampled were adequately documented by Copland and Morris; most of the samples were taken from the mineralized rhyolite host rock.

Most of the sites from where the previous operators collected their samples were not visited by the author, thus no comments can be provided as to their quality or any biases that may impact on the analytical results.

A list of individual samples taken by the author and Ron McMillan is shown in Table 6 in the *Exploration* section of *Part B* of this report.

Sample Preparation, Analyses and Security

The comments provided in the first paragraph of this section in *Part A* of this report apply here.

The 19 samples collected by Copland were submitted to Acme Analytical Laboratories of Vancouver, B.C. The samples were pulverized to -100 mesh and geochemically analyzed for Cu, Pb, Zn, Ag, Sb & Au. Certain samples were also fire assayed for Au.

The analytical sheets show that the base metals were analyzed using ICP technique. A 0.500 g sample was digested with 3 ml of 3:1:2 HCl-HNO₃-H₂O (aqua regia) at 95 deg. C. for one hour and then diluted to 10 ml with water.

For Au, a 10.0 g sample is similarly digested in aqua regia, then the Au is extracted in methyl isobutyl ketone (MIBK) from the aqueous solution and determined using flame atomic absorption.

One standard was used twice in this sample suite. No evidence of a repeat or blank exists in the assay certificates.

Copland did not document any particular field sampling, quality control or security measures in his report.

The samples collected by Morris in 1988 were also analyzed at Acme Analytical Laboratories, Vancouver, B.C. for multi-elements by ICP and for gold by atomic absorption finish. The same digestions techniques and sample weights described earlier were used here.

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A standard was inserted after every 36 samples, or portion thereof, where applicable. There is no mention in the report or indication in the assay certificates of duplicate or blank samples being introduced.

No mention is made of any extra quality control or security procedures in Morris' report.

The numbers and types of samples collected by Davis in 1989 was described previously in the *History* section of *Part B*. Davis noted that all rock samples were taken from outcrop only.

Soil samples were taken at approximately 100 metre intervals along lines in areas most likely to have good soil profiles; screes were avoided.

Sampling was done with a mattock and plastic sampling shovel. The soil profile was exposed to a depth of two or three feet in order to recognize the A, B, and C horizons. The preferred horizon was then sampled with the plastic shovel and placed in a paper soil envelope.

The B horizon was usually sampled, with exceptions being noted. Multiple horizons were sampled in one area on the north side of Middle Ridge to test variations between horizons. Three

samples of humus were collected from the A horizon and sent to Bondar Clegg for analysis; the remaining samples were analyzed by Northern Analytical Laboratories.

All elements except gold were analyzed using atomic absorption technique. Gold was analyzed using the trace level gold fire assay method or the free gold fire assay method. Davis refers to the list of analyses in Appendix II of his report, but this section is missing in the copy of the report provided to the author. Thus, no further comments or observations can be made on the techniques or quality control procedures used by the respective laboratories.

The samples collected by the author and Ron McMillan in 2002 are listed in Table 6, shown previously, and the analytical results are listed in Appendix I.

The analyses were done by Acme Analytical Laboratories of Vancouver, B.C., and the analytical and digestion techniques are the same as those described previously in *Part A* of this report and will not be repeated here.

Bondar Clegg, which was purchased by ALS Chemex in December 2001, is an ISO 9002 certified laboratory today but would not have been in 1989. Northern Analytical Laboratories is unknown to the author, but they too would not have been ISO 9002 certified in 1989.

There were no signs of any problems with the sampling, preparation, quality control or security of the samples, as far as could be ascertained from historical data. Most of these measures, if undertaken at all by the previous owners, were not generally mentioned in their reports as these were not required elements of an Assessment Report in the Province of British Columbia at that time. The results obtained by the previous owners, along with the nature and descriptions of the mineralization provided are supported by the observations made by the author on site.

Data Verification

The samples collected by the author, the Issuer, and/or its representatives were small in volume. As such, no extra quality control measures were implemented.

The data received from Acme Analytical Laboratories Ltd. came both in hard copy and digital formats; the hard copies appear to be original documents as determinable by the author. As such, the data appears legitimate and represents the samples collected or observed by the author on site.

Adjacent Properties

There are no nearby properties to either the Golden Eagle Zones or the Tannis Zone that are of a significant grade, tonnage, state of development or geological similarity to warrant mentioning in this report. Numerous showings exist in this northwest-southeast trending belt, and many claims have been staked over the years, some of which adjoined the Issuer's properties in the past.

Mineral Processing and Metallurgical Testing

To the knowledge of the author no mineral processing or metallurgical testing has been done on materials from either of the areas described in this report.

Mineral Resource and Mineral Reserve Estimates

To the knowledge of the author, no mineral resource or reserve estimate has been outlined on either of the areas described in this report.

Interpretation and Conclusions

The geochemical sampling programs performed on the Camp Zone have delineated a highly anomalous gold-bearing area of dimensions roughly 400 metres NE-SW by 800 metres NW-SE. It is feasible to contain an economic precious metal deposit within such dimensions.

The geology and mineral controls of this zone are not yet fully understood. Mapping and drilling by Noranda has identified a mafic metavolcanic and an intermediate to mafic intrusive (granodiorite-diorite) containing disseminated pyrite and pyrrhotite associated with quartz stringers. Noranda's two drill holes were located on the southeastern slope of the Camp Zone and were drilled from north to south. One hole was targeted on a geophysical conductor (IP).

Noranda's soil sampling lines yielded highly anomalous values ranging from several hundreds to several thousands ppb gold over a distance of 800 metres and up to 400 metres in width. A line of soil samples collected by the Issuer in the same vicinity as one of Noranda's lines yielded very similar results. Neither of the holes drilled by Noranda intersected the presumed source, and centre, of the anomalies, namely the ridge crest that roughly bisects the Camp Zone. In addition, the average gold values obtained in their holes were 130 ppb Au over 18 metres and 146 ppb over 64.5 metres, with high values of 390 ppb Au in hole 1 and 690 ppb Au in hole 2, respectively. Many of the gold-in-soil values are higher than those obtained in the drill core. Three soil samples collected from the ridge by Mssrs. Downes and McMillan in 2001 yielded 5140 ppb, 3093 ppb and 327 ppb Au.

The Carbonate Zone is located between 1 km and 2 km east and southeast, respectively, from the Camp Zone. The author has mapped an intensely carbonatized and chloritized mafic volcanic suite over a minimum thickness of 400 metres, but Noranda states that it attains 500 metres in width (apparent thickness) and has been traced for several kms to the southeast, beyond the area of the author's map found in this report. Overlying the volcanics is a thin sequence of altered tuff-breccia and black shale with interbedded limestone followed by a thick sequence of epiclastics which includes conglomerate, wacke, grit and mudstone. Above the epiclastics is a sequence of intermediate volcanic breccias (agglomerate?) and minor interbedded sediments. These volcanics are fresh in appearance unlike the basal mafic volcanic unit.

Malachite and minor chalcopyrite occur along fractures and with quartz veins in the volcanic host. This volcanic unit would seem to be a suitable host, or at least source, for a volcanogenic massive sulphide deposit. Noranda basically explored and sampled the carbonatized mafic volcanic unit along its strike extent to the southeast. The author is of the opinion that the volcanic/sediment contact overlying this unit may be a more favorable horizon to explore. A rusty seep (cold spring) emanates from a cirque near this contact which might indicate a sulphide-rich layer at this reducing interface. Several isolated geochemical anomalies occur in an area characterized by a moderate increase in chargeability and resistivity. Noranda identified a mineralized occurrence that assayed 6.4 g/t Au and in excess of 4% Cu, possibly over a 3 metre width, that coincides with these anomalies. Overburden is extensive throughout this area. The centre of the Tannis Zone, located 9 km to 10 km northwest of the Camp and Carbonate Zones, respectively, is hosted by a Cretaceous (?) fine grained felsic intrusive believed to be of

rhyolitic composition. The rhyolite is host to sheeted, auriferous, arsenopyrite-bearing quartz veins that reach up to 3 metres in thickness. The veins, which occupy fracture/joint sets, trend dominantly east-west and secondarily north-south. Some stringers and veins trend at slight variations to these prevalent trends, and in at least one location the veins appear to form a stockwork. Limonite, after pyrite, occurs along all minor fractures throughout the rhyolite.

The deposit type best to describe the Tannis Zone is a "porphyry gold" like those found in the Tombstone Belt that hosts the Fort Knox, Pogo and Donlin Creek deposits in Alaska. Although the geology, mineralogy and sulphide content is somewhat different, the distribution and style of mineralization on the Tannis would favour exploring for a bulk tonnage precious metal deposit. However, Pogo-type auriferous quartz veins should also be explored for. The Donlin Creek, Fort Knox and Pogo deposits represent, respectively, shallow, medium and deep levels of a mineralized system (Baker, 2002).

The rhyolite host rock has dimensions ranging from 80 metres east-west in the south part of the zone to 280 metres northeast-southwest in the north end. The main body of the rhyolite is at least 650 metres long in a northwest-southeast direction. The southern part is definitely dyke-like in nature, but the wider part on the north side of Middle Ridge appears more stock-like in dimensions and shape.

Some narrow arsenopyrite-quartz veins occur in metamorphic rocks to the northeast, but these do not appear to be bulk tonnage targets. Soil sampling done by previous operators have shown highly anomalous gold and arsenic values occurring throughout the rhyolite and in certain areas to the northeast and south.

The work done by the Issuer in 2002 is not comprehensive, but it substantiated the findings of previous operators and provided some insight regarding deposit/target types and future exploration programs. The induced polarization surveys performed in both areas were hampered in part by poor ground conductivity or limited access in certain areas. In certain areas the surveys corroborated the findings of the previous operators. The geophysical surveys on the Camp and Carbonate Zones were done on widely spaced lines that largely mapped geology.

A zone of apparent low resistivity found along the southwest contact of the Camp Zone may be caused by a large fault structure, and the zone of high chargeability to the northeast is attributed to graphitic shales that are known to occur there. Lines 12W and 13W did not completely cover the target area to the southwest due to terrain. It appears that the Camp Zone does not have a very responsive IP signature relative to the highly conductive shales to the northeast and the low resistivity feature to the southwest.

The IP survey over the Carbonate Zone mapped the carbonaceous shale contact but did not cover much of the underlying altered volcanic.

From the results to date, plus personal observations, the Camp Zone and Tannis Zone have some clearly defined targets while the Carbonate Zone does not, as yet.

Recommendations

Phase I

A minimum 10 day exploration program should be performed on the Camp and Carbonate Zones to infill the geology not mapped by the author in 2002 and to try to obtain a better understanding of the mineralizing controls before initiating a drill program.

The Carbonate zone does not, as yet, have a clear target established. Noranda's geochemical and IP grids focused primarily on the carbonatized volcanics, while Marksmen's work in 2002 was higher up in the stratigraphy, along the volcanic-sedimentary interface. This would be a more likely horizon to find a volcanogenic massive sulphide target, but further prospecting and sampling to the SE is required to test this theory. At this time two horizons are recognized as possible loci for VMS-style copper-gold mineralization.

Anomalous gold values in soil and rock samples collected at the Tannis Zone by Frame Mining Corp. between 1988 and 1989 range from the low 100's ppb to several g/t. Hand trenches located on certain veins on the north slope yielded values of 41.1 g/t Au over 1.4 m, 3.98 g/t Au over 1.5 m, 6.96 g/t Au over 1.5 m and 6.10 g/t Au over 1.7 m from individual samples.

A 14 day exploration program of detailed mapping and prospecting is recommended before any drilling commences. The north slope of the Middle Ridge needs to be thoroughly prospected, mapped and rock sampled, where necessary, to help define drill targets.

Some of the gold anomalies found by Frame Mining Corp. occur in the metamorphic rocks northeast of the target area. These sites should be prospected to see if these anomalies represent another target or are just caused by discrete and localized veins.

The South Mountain area should be prospected, mapped and further sampled if necessary. The rhyolite was noted by Frame Mining to occur on this slope. Additional prospecting southeast from here should also be done because a buried, or "blind," target may exist under the overburden that covers much of this hillside.

Phase II

A four hole, 1000 metre HQ diameter core drilling program is proposed for the Camp and Tannis Zones.

Two 250 metre, southwesterly directed angle holes (-50 deg.) should be drilled from the ridge of the Camp Zone to test the soil anomalies (Figure 6). This program should start shortly after the mapping and prospecting program is finished.

A tentative 380 m, -50 degree hole, trending 035 azimuth is proposed. This hole is to be collared on the crest of *Middle Ridge* southwest of the target area and is designed to penetrate the rhyolite from its hanging wall contact through to the large fault contact to the northeast. If a suitable drill

site can be found on the east side of the fault, along the projection of the first hole, then another shallower hole could be drilled to scissor this hole or to crosscut the porphyry to the southwest. This hole would be about 120 metres long.

The Phase I program is estimated to cost C\$68,200 and the Phase II drilling program about C\$208,450 for a total of C\$276,650.

John Nebocat, P. Eng.

Gibsons, B.C.

December 6, 2002

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Statement of Qualifications

I, John Nebocat, residing at 1486 Island View Drive, Gibsons, British Columbia, declare that:

- 1. I am a geologist and have been employed in mineral exploration and earth science studies with industry and government since 1973.
- 2. I obtained a diploma in Mining Technology from the British Columbia Institute of Technology in 1974. In 1984, I graduated from the Montana College of Mineral Science & Technology with a Bachelor's Degree in Geological Engineering (Honours).
- 3. I am an actively registered Professional Engineer with the Association of Professional Engineers and Geoscientists of British Columbia (1986.)
- 4. I worked on the Golden Eagle Project between August 21, 2002 and August 27, 2002. I examined and worked on the Golden Eagle 2 and Connor 1 mineral claims (Camp Zone and Carbonate Zone, respectively) and the Tannis 1 to 8 mineral claims (Tannis Zone).
- 5. I am not an employee or insider of the Issuer, I have no stock options in the Issuer nor do I expect to receive any.
- 6. I do not own any of the Issuer's stock, free-trading or otherwise.

John Nebocat, B.Sc., P. Eng.

December 6, 2002



Appendix I

Results of Gcochemical Analyses, 2002

SI M23-1 M29-1 M29-2	- 001 <.01 <.01 <.01 <.01 <.01 <.01 <.01
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All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data A FA

Mo Cu Pb Zo Mn Fe As U Au Th Sr Cd Sb BI V Ca P La Cr Mg Ba TI B All Na K V Ga SAMPLE# Mo Cu Pb Zn Ag NI Co Mn Fe As U Au Th Sr Cd Sb BI V Ca P La Cr Mg Ba< TI B All Na K V Hg Sc TI Sc All Na K V Hg Sc TI Sc		(ISO 9002 Accredited Co.) GEOCHEMICAL ANALYSIS CERTIFICATE	Phone (604) 253-3158 FAX	(604) 253 - 1716
ppm % ppm ppm % % ppm ppm % % ppm ppm % % ppm % % ppm % % ppm % % % ppm %		Marksmen Resources File # A203862 282 Castle Way, Nanaimo 8C V9T 1L4 Submitted by: R.H. McMillan		TT.
$\begin{array}{c} 0.1-1 \\ 0.1-2 \\ 0.1-2 \\ 0.1-2 \\ 0.1-2 \\ 0.1-2 \\ 0.1-3 \\$	SAMPLE#			
STANDARD DS4 6.3 128.6 30.9 153 .3 33.9 11.5 760 3.01 24.0 6.0 27.0 3.5 32 5.6 5.0 5.2 73 .59 .086 15 151.8 .55 148 .094 1 1.78 .035 .15 4.0 .27 3.7 1.0<.05 6 GROUP 1DA - 30.0 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP-MS. UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: SILT SS80 60C)J-1)J-2)J-3	6.1 64.2 26.0 96 .2 20.6 17.0 2251 4.13 227.0 6.8 6.0 2.4 119 2.8 13.3 .3 77 1.15 047 13 41.7 99 1.8 89.8 22.7 110 .3 19.3 12.2 554 2.38 175.7 10.3 14.2 1.3 172 2.7 12.1 .2 70 2.59 .082 12 52.3 .90 2.2 40.2 20.1 91 .2 12.4 7.8 444 1.93 56.2 13.5 5.3 1.5 109 1.1 5.0 2.41 1.47 072 14 27.1 54	2 162 .080 1 2.15 .043 .21 . 1 135 .073 2 2.18 .043 .23 . 1 139 .047 1 1 60 .024 16	.7 .03 5.1 .3<.05 6 .8 .06 5.6 .2 .13 5 .3 .03 2 9 1 .08 6
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: SILT SS80 60C			and the second	
		Jenne Septerner (TOYE, C.LEONG, J. WANG; CERTIF	IED B.C. ASSATERS
			TOYE, C.LEONG, J. WANG; CERTIF	IED B.C. ASSATERS
			TOYE, C.LEONG, J. WANG; CERTIF	

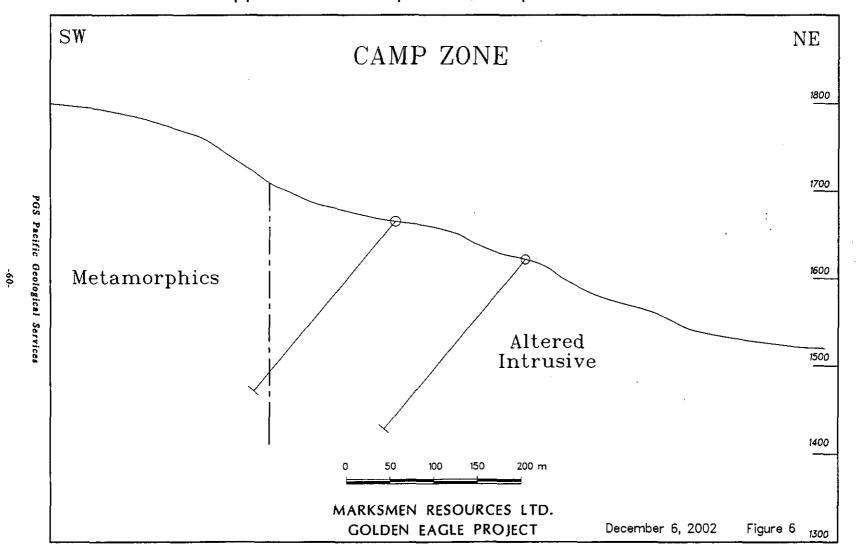
	NALYTICAL LABORATORIES LTD. SO 9002 Accredited Co.)	GEOCHEMICAL ANALYSIS CERTIFICATE	AA
TT		Marksmen Resources File # A203863 282 Castle Hay, Nanaimo BC V9T 1L4 Submitted by: R.H. McMillan	
WPLE#	Mo Cu Pb Zn Ag Ni Co Mn Fe ppm ppm ppm ppm ppm ppm ppm \$		TI B AI Na K N H9 Sc TJ S Ga X ppm X X ppm ppm ppm ppm X ppm
-1 J-5 J-6 J-7 J-8	1.6 15.1 49.2 123 .9 5.2 13.0 1136 2.89	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
J+9 J-10 J×11 J-12 J-13	1 9 17 4 49.8 129 .8 5.4 12.0 1487 3.61 2.0 17 1 56.4 127 .8 4.4 11.0 1423 3.05 3.1 47.6 59.2 124 1.1 6.8 19.4 2537 3.71 4.3 49.2 251.1 473 21.0 8.5 15.3 1528 4.31 1.5 20.4 59.6 97 8 6.4 11.7 1844 2.72	100.2 32.3 918.0 12.9 80 .5 21.6 .4 32 .71 .095 21 5.4 .72 276 . 199.8 45.3 1748.1 13.0 66 2.2 33.3 .7 34 .58 .094 20 7.8 .62 220 .	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
N-14 N-15 N-16 RE DJ-19 N-17	1.4 22.7 52.3 91 .7 7.7 11.4 1390 2.88 2.9 21.4 53.9 72 .7 6.3 9.0 878 2.15 2.4 38.4 87.1 114 1.0 9.1 13.8 1106 2.78 1.5 124.1 29.9 201 .3 52.7 30.9 1523 6.17 3.1 53.4 192.9 400 1.3 44.8 34.9 3171 6.56	81.8 7.3 640.7 9.5 23 .8 15.8 .6 17 .48 .083 17 9.4 .52 225 . 26.6 .7 10.0 3.0 72 1.0 7.4 .3 134 1.13 .116 13 102.6 3.06 298 .	004 1 1.14 .047 .23 2 .02 2.1 2 .18 .3 .007 1 1.32 .037 .24 .5 .03 .0 .1 .24 .4 .084 3.86 .037 .28 .2 .01 13.0 .1 <.05
DJ-18 DJ-19 DJ-20 STANDARD D54	1 8 287 8 27 6 292 5 55 7 33 8 1672 8 01	82.7 2.6 56.2 8.1 65 4.0 21.4 .4 78 95 .075 18 66.0 2.40 430. 26.1 .7 16.7 2.9 79 1.0 7.4 .3 131 1.14 .117 14 103.8 3.01 302 13.8 1.8 10.8 2.0 99 .8 6.7 1.0 170 1.68 120 6 100.9 3.49 367 24.0 6.0 26.7 3.5 32 5.6 5.0 5.2 73 59 086 15 151.8 55 148	.085 <1 3.70 .038 .29 .2 .01 13.0 .1 .07 10 156 1 4.72 .135 1.06 .5 .02 15.2 .4 .07 13
	UPPER LIMITS - AG, AU, HG, $W = 100$	D WITH 180 ML 2-2-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR, DILUTED TO 4 D PPM, MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.	SOD ML, ANALYSED BY ICP-MS. S. V. LA. CR = 10,000 PPM.
	RECEIVED: SEP 16 2002 DATE REPOR	T MAILED: Sept 27/02 SIGNED BY C. T	, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS
DALD F			

APPENDIX II: Sample Locations Descriptions

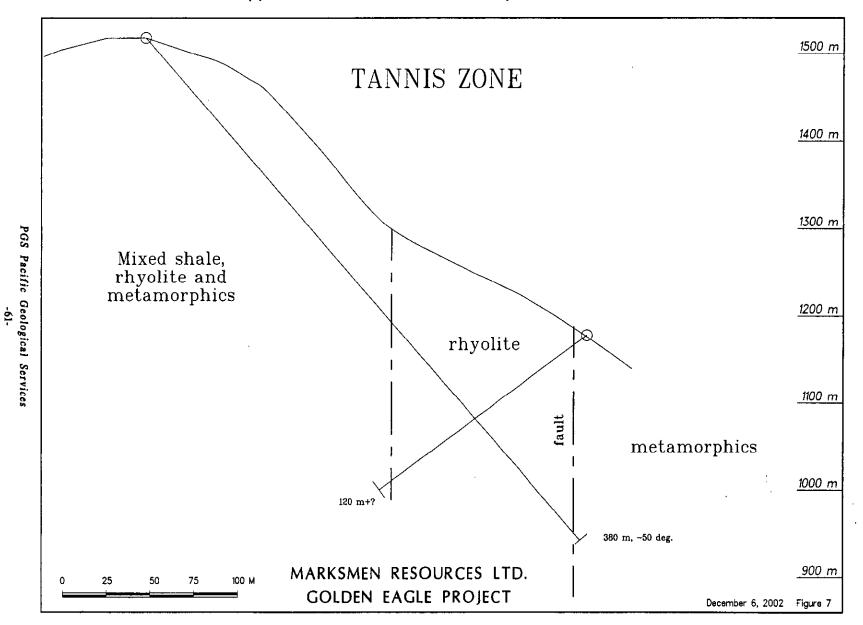
	COLLECTED BY	EASTINGS (X)	NORTHING (Y)	WIDTH (M)	DESCHIPTION
		DC COORDINAT	EG.		
NNIS PROPERTY	SAMPLES WITH G	IPS COURDINAT			
	01114	509724	6636330		float - 2 kg, boulder, massive arsenopyrite + scorodite east of creek
M27-1	BHM	509724	6636355	and the second second	float - rhyolite with guartz stringer and disseminated arsenopyrite and pyrite
M27-2	JN	509011	6639100	1.00	massive quartz vein in adit. Up to 5% py as boxworks and fresh sulphides; minor fuchsite/mariposite
73654*	JN	509336	6636970	0.75	arsenopyrite-scorodite bearing quartz vein hosted by rhyolite plug. Vein trends 100 Az/ 62 deg South
73656	the second second second second second second	509330	6636890	2.00	quartz "stockwork" zone with traces of aspy. 1/2 cm to 1 cm wide semi-massive aspy stringer at east end
73657	JN		6636814	1.50	quartz-aspy-scorodite vein in trench near ridge crest. Bounded by a fault to east trending 150 AZ/85NE
73658	JN	509505	6636638	2.00	contiguous chip across quartz-aspy-scorodite vein.
73659	JN	509523	6637961	2.00	silt samples collected by Denis Jacob
DJ-1*	DJ	511220	6637540	har and the state of the	sill samples collected by Denis Jacob
DJ-2*	LO	511465	6636648	A CONTRACTOR	silt samples collected by Denis Jacob
DJ-3*	DJ DJ	511601	6634838	the state of the	silt samples collected by Denis Jacob
DJ-4*	MM	509495	6636813	grab	Tannis sheeted qtz-aspy veins -high in system
39-14	MM	508652	6634975	grab	Nula showing, disseminated arsenopyrite in Jurassic volcanic rock
37-4*	MM	509010	6635925	grab	Stringers at ctc between volcs and seds
37-9	MM	509226	6636973	grab	Tannis sheeted qtz-aspy veins -lowest W in system
40-7	MM	DUASSO	0030373	gius	
OLDEN EAGLE PE	COCOTY CANDIE	E WITH OPS OF		ATES	
OLDEN EAGLE PH	IUPERTT SAMPLE	S min Gra O	Carlo Coorion	AN A LAN SANT SA	
20055	JN	517132	6630391	brab: 3 m dia	sericite-argiliste attered volcanic/intrusive, possibly felsic origin, Limonite, goethite, jarosite common.
73655 M23-1	RHM	517071	6630517	grab	ferruginous precipitate below spring, goethitic and hematitic colours, 4x10 metres, possibly 1m thick
M23-1 M29-1	RHM	516735	6630404	grab	malachite stained fracture in chloritized and carbonatized volcanic rock, no visible sulphides
M29-1 M29-2	BHM	516820	6630472	grab	coarse chalcopyrite in quartz veln cutting carbonatized volcanic rock
F25-1	FD	L3W	4+25N	grab	Carbonate Zone: malachite-bearing float
F25-2	FD	L3W	4+50N	grab	Carbonate Zone: malachite-bearing float
DJ-21	DJ	LO	4+255	grab	Carbonate Zone: malachite stained carbonate rock
DJ-21	DJ	L14W	4+00N		Camp Zone
00-0	DJ	L14W	3+75N	1	Camp Zone
D10	- 1 2	L14W	3+25N		Camp.Zone
DJ-6	01	CONTRACTOR OF THE OWNER OWNER OF THE OWNER O	3+00N	the second s	Camp Zone
DJ-7	DJ	1141			Camp Zone
DJ-7 DJ-8	DJ	L14W		11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11 1. 11	
DJ-7 DJ-8 DJ-9	DJ DJ	L14W	2+75N		
DJ-7 DJ-8 DJ-9 DJ-10	DJ DJ DJ	L14W L14W	2+75N 2+50N		Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11	DJ DJ	L14W L14W L14W	2+75N 2+50N 2+00N		Camp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12	DJ DJ DJ DJ DJ DJ	L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N		Camp Zone Camp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13	00 DJ DJ DJ DJ DJ DJ	L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N		Camp Zone Camp Zone Camp Zone Camp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ	L14W L14W L14W E14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N		Gamp Zone Camp Zone Camp Zone Camp Zone Camp Zone Camp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-13 DJ-14 DJ-16	LG DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+50N 1+75N 1+50N 1+25N 1+25N 1+00N		Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-16 DJ-16	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+25N 1+00N 0+75N		Gamp Zone Camp Zone Camp Zone Camp Zone Camp Zone Camp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-15 DJ-16 DJ-16 DJ-17	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ D	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+00N 0+75N 0+32N		Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-16 DJ-16 DJ-16 DJ-17 DJ-18	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ D	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+25N 1+00N 0+75N 0+32N 0+00N		Gamp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-16 DJ-16 DJ-16 DJ-16 DJ-17 DJ-18 DJ-19	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ D	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+00N 0+75N 0+32N 0+00N 1+00S		Gamp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-16 DJ-16 DJ-16 DJ-17 DJ-18	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ D	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+25N 1+00N 0+75N 0+32N 0+00N		Gamp Zone Camp Zone
DJ-7 DJ-8 DJ-9 DJ-10 DJ-11 DJ-12 DJ-13 DJ-14 DJ-16 DJ-16 DJ-16 DJ-16 DJ-17 DJ-18 DJ-19	DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ D	L14W L14W L14W L14W L14W L14W L14W L14W	2+75N 2+50N 2+00N 1+75N 1+50N 1+25N 1+00N 0+75N 0+32N 0+00N 1+00S		Gamp Zone Camp Zone

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Section.



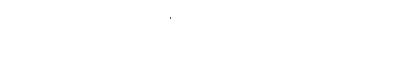
Appendix IV: Tannis Zone, Proposed Drill Holes

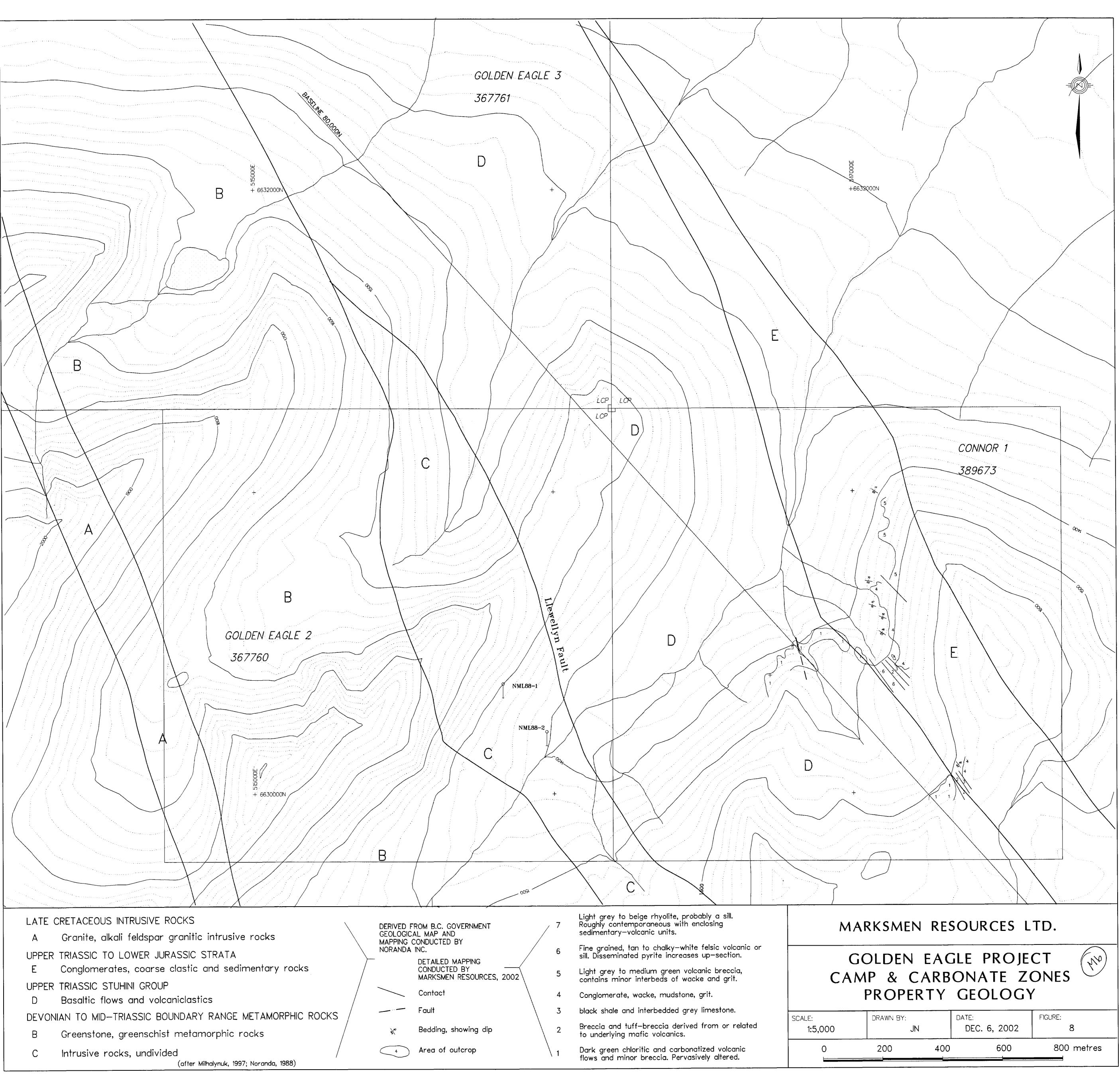


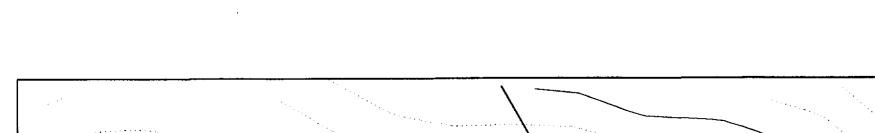
Appendix V.	Proposed Phase	1&	Phase II	Budgets
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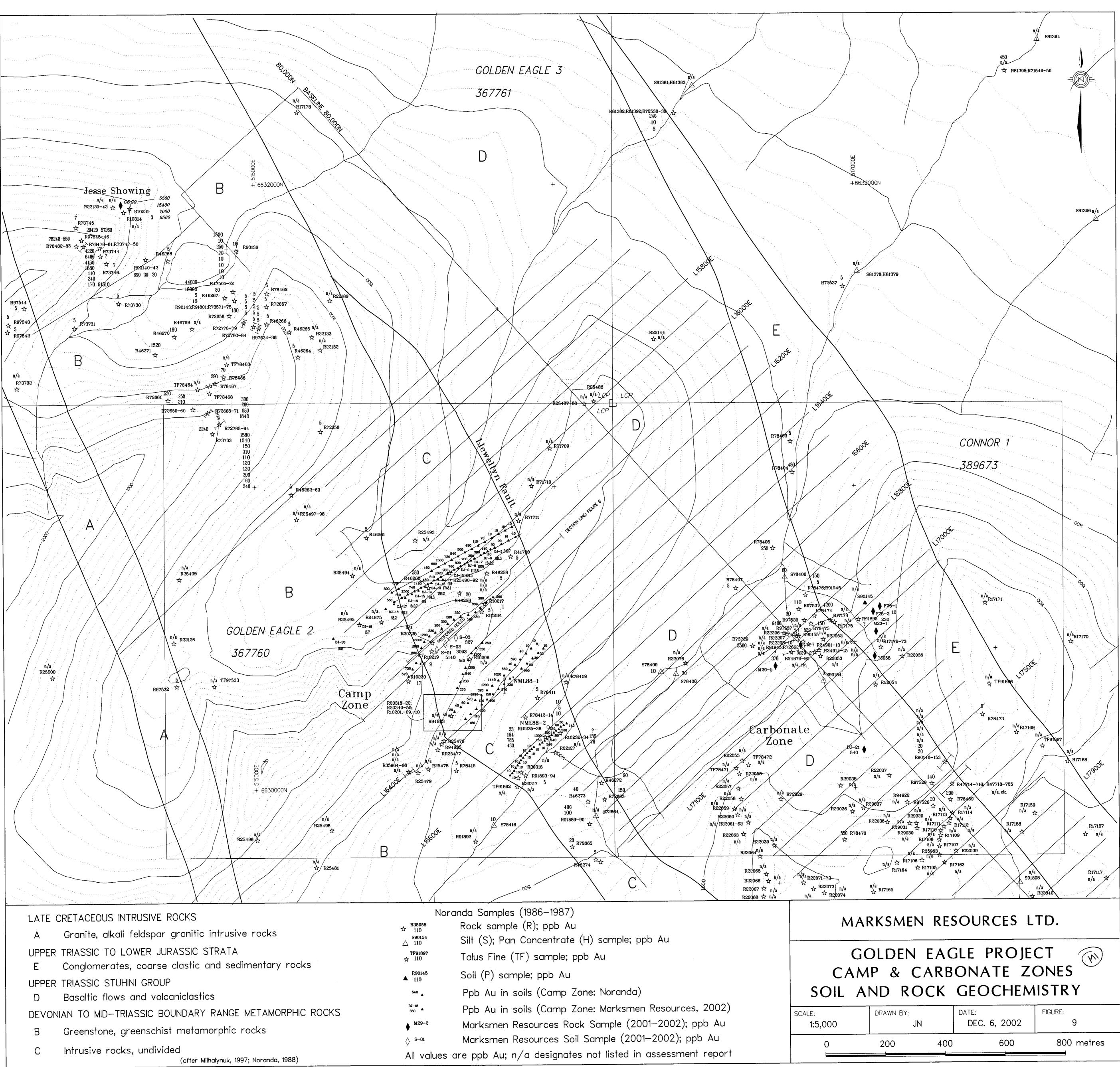
ITEM	QUANTITY	UNIT PRICE	EST. COST	Phase I	Phase II
	[persons, samples,	days, etc.]			
Phase I					
drilling (1000 m, all inclusive)	1000	\$125.00	\$125,000	\$0	\$125,000
helicopter: rate plus fuel	60	\$1,000.00	\$60,000	\$30,000	\$30,000
senior geologist	60	\$250.00	\$15,000	\$7,500	\$7,500
junior geologist/helper	60	\$150.00	\$9,000	\$4,500	\$4,500
vehicle rental	1	\$1,500.00	\$1,500	\$750	\$750
vehicle fuel	1	\$500.00	\$500	\$250	\$250
capital equipment & supplies	1	\$5,000.00	\$5,000	\$2,500	\$2,500
food, consumables, camp	1. · · · ·	\$10,000.00	\$10,000	\$5,000	\$5,000
travel expenses	1	\$5,000.00	\$5,000	\$2,500	\$2,500
analyses	500	\$25.00	\$12,500	\$2,500	\$10,000
compilation and reporting	1	\$3,000.00	\$3,000	\$1,500	\$1,500
landsat imagery	1	\$5,000.00	\$5,000	\$5,000	
Sub-Total:			\$251,500	\$62,000	\$189,500
contingencies (10%)			\$25,150	\$6,200	\$18,950
TOTAL:			\$276,650	\$68,200	\$208,450

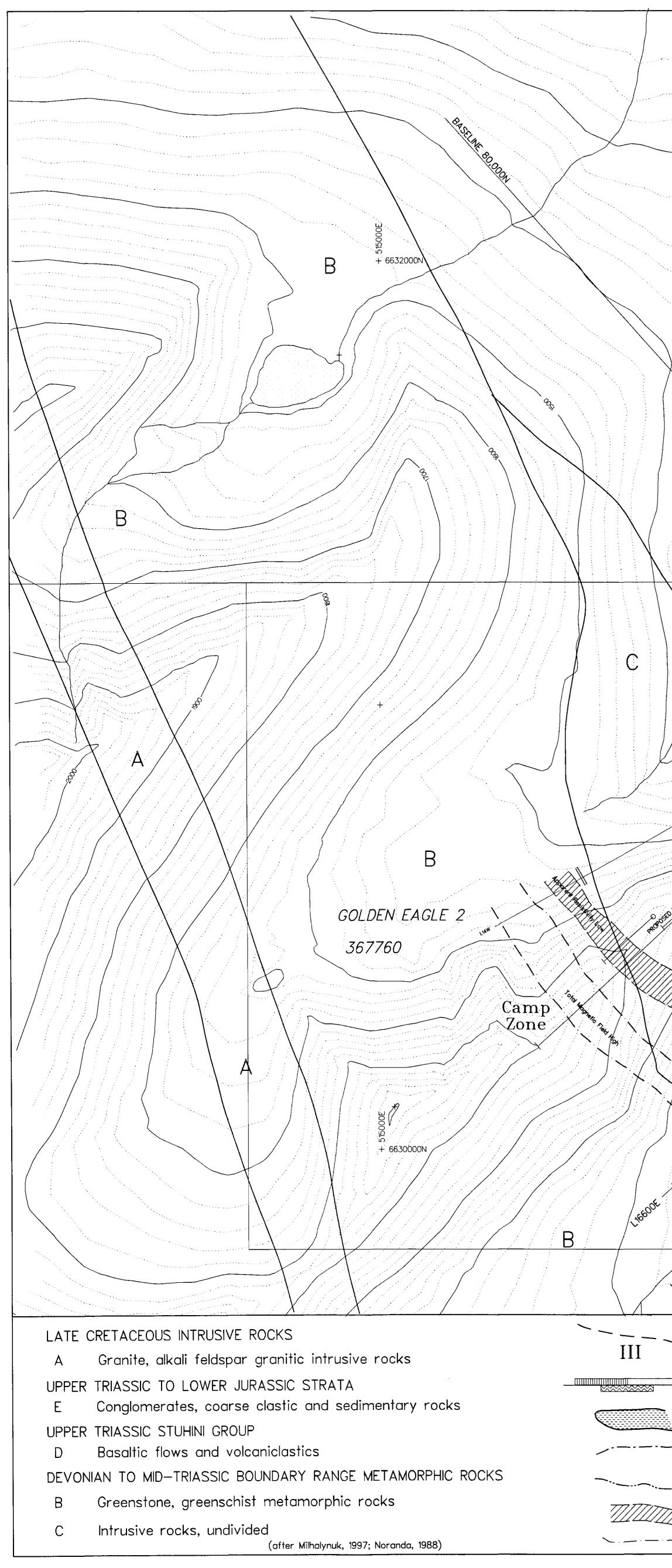
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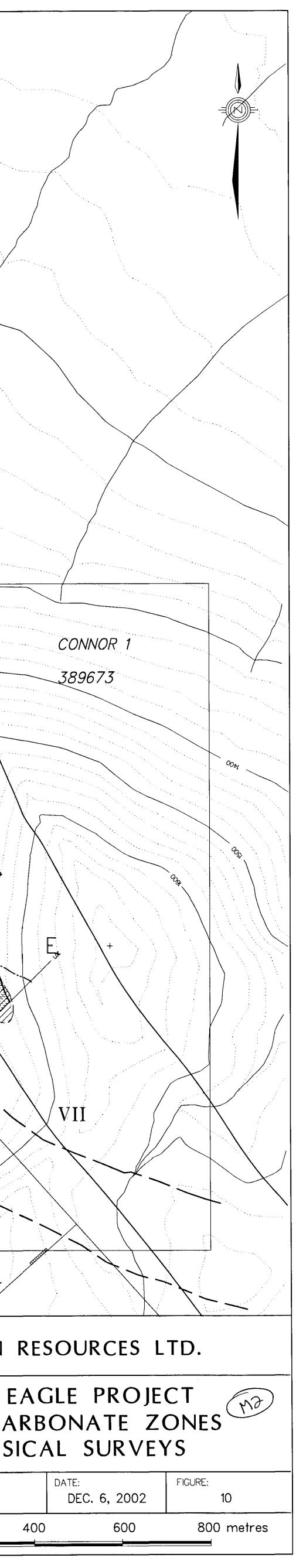




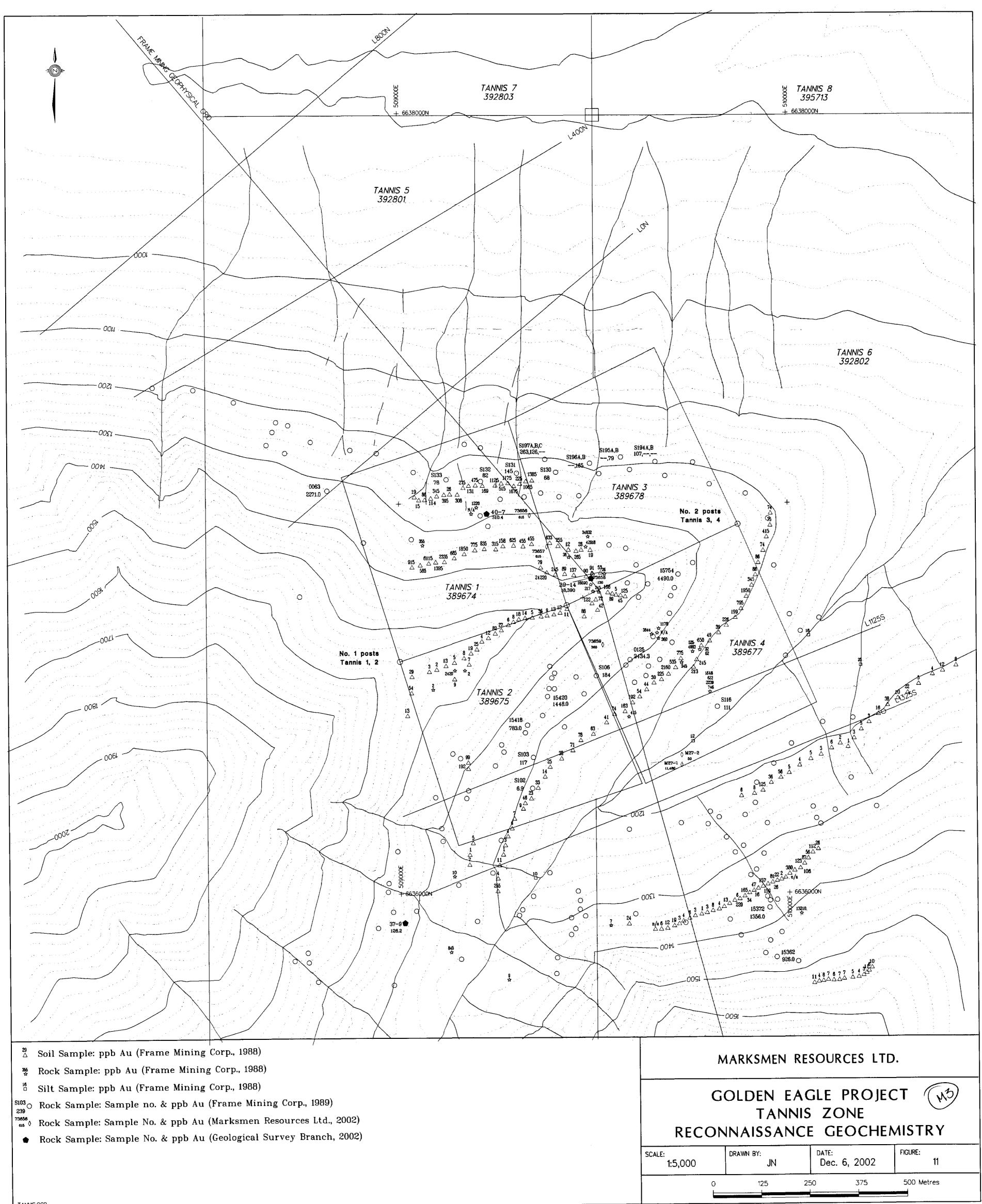
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	Anomaly "B": moderate in distinct increase in appare	rease in charged	ubility; \ ts s			GEOPH	
	Anomaly "C": moderate in no resistivity signature; br		ity ability; Source Surveys		SCALE:	DRAWN BY:	 k
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