

**1998 GEOLOGICAL and GEOCHEMICAL
ASSESSMENT REPORT
ON THE CHOPIN PROPERTY**

Quartz Claims

Chopin 001-018 YC01239-01256

Dec. 15, 1999

094 052

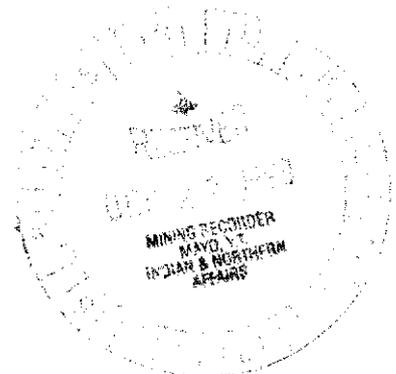
Mayo Mining District
N.T.S. 105N/01

Latitude: 63°08' North
Longitude: 132°03' West

Owner: Viceroy Exploration (Canada), Inc.

Author: Rick Diment

Date of work: August 1998



This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 3665.00.

M. B. [Signature]
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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SUMMARY

The Chopin Property, consisting of the Chopin 1-18 Claims located in Central Yukon on NTS sheets 105N/01, was staked in 1998 by Viceroy Exploration (Canada), Inc.

The Chopin Property is located within the Paleozoic Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the north-east. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in formation of comparatively high energy, shallow water sediments, often coarsely grained and variably calcareous. These are separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Suite (95-89 Ma) has been emplaced within the Selwyn Basin. Members of this suite occur along an ESE trending belt extending for over 500 kilometres from north-west of Dawson City, Yukon to the Yukon-NWT border. Tombstone Suite intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting along the entire extent of the Selwyn Basin began during Late Jurassic time, resulting in creation of a compressional regime. Most thrust faults are oriented roughly ESE, dipping to the south-west, subparallel to the overall ESE trend of stratigraphy. This regional lineation has been overprinted by a slightly less pronounced NE-SW lineation, marked by high angle orthogonal faults suggesting the compressional regime was followed by an extensional tectonic regime.

The Chopin Claims are underlain by a large package of ESE trending Earn Group chert pebble conglomerate lying in contact with Road River Group siltstone and sandstone to the north. A pronounced ESE trending lineament, illustrated by most stream drainages, occurs across the property. These lineaments occur as brecciated pyritic fault zones within the coarse clastics, and are associated with silicification, weak argillic alteration, and local gouge zones.

During 1998 a total of 29 rock, 103 silt and 26 soil samples were collected in the vicinity of what would become the Chopin Claims. Applicable work for assessment included 3 rock and 4 silt samples, collected in early August, as well as geological mapping and prospecting.

Grab sampling across gouge zones returned low values to 30 ppb Au. Several silt samples taken along the southern boundary returned anomalous values to 60 ppb Au and 630 ppb Hg.

Exploration expenditures in 1998 amounted to \$3,665.

A silt sample taken roughly one kilometre south of the property returned 670 ppb Au, 1.4 gpt Ag, and 490 ppb Hg. This is an isolated anomaly; however, elevated mercury values suggest the anomaly may be "real" rather than caused by "nugget effect", and warrants investigation.

CHAPTER 1: INTRODUCTION

1.1 Introductory Statement

The Chopin Property consists of 18 contiguous quartz mining claims (Chopin 1-18 claims) covering a 4 square kilometre area measuring 2 by 2 kilometres within NTS Sheets 105 N/01, in the Mayo Mining District (Figures 1, 3).

The 1998 exploration program involved reconnaissance silt sampling, limited geological mapping and rock sampling.

1.2 Location and Access

The Chopin Property is located 125 kilometres north of the town of Ross River, in the Yukon Territory. It is centered at 63° 08' North latitude, 132° 03' west longitude on NTS Map Sheets 105 N/ 01 (Figure 2).

Access is by helicopter from Fairweather Lake roughly 20 kilometres to the northwest.

1.3 Physiography and Vegetation

The Chopin Property occurs within moderately rolling terrain with limited outcrop exposure attaining elevations of 4,500 feet. The entire property is covered by typical northern boreal spruce and fir forest.

1.4 Property Exploration History

The Chopin Property area was targeted to evaluate anomalous gold, arsenic, antimony and mercury associated with Cretaceous intrusives and Lower Paleozoic stratigraphy. The Chopin claims were staked to cover weakly anomalous gold values in silt sampling.

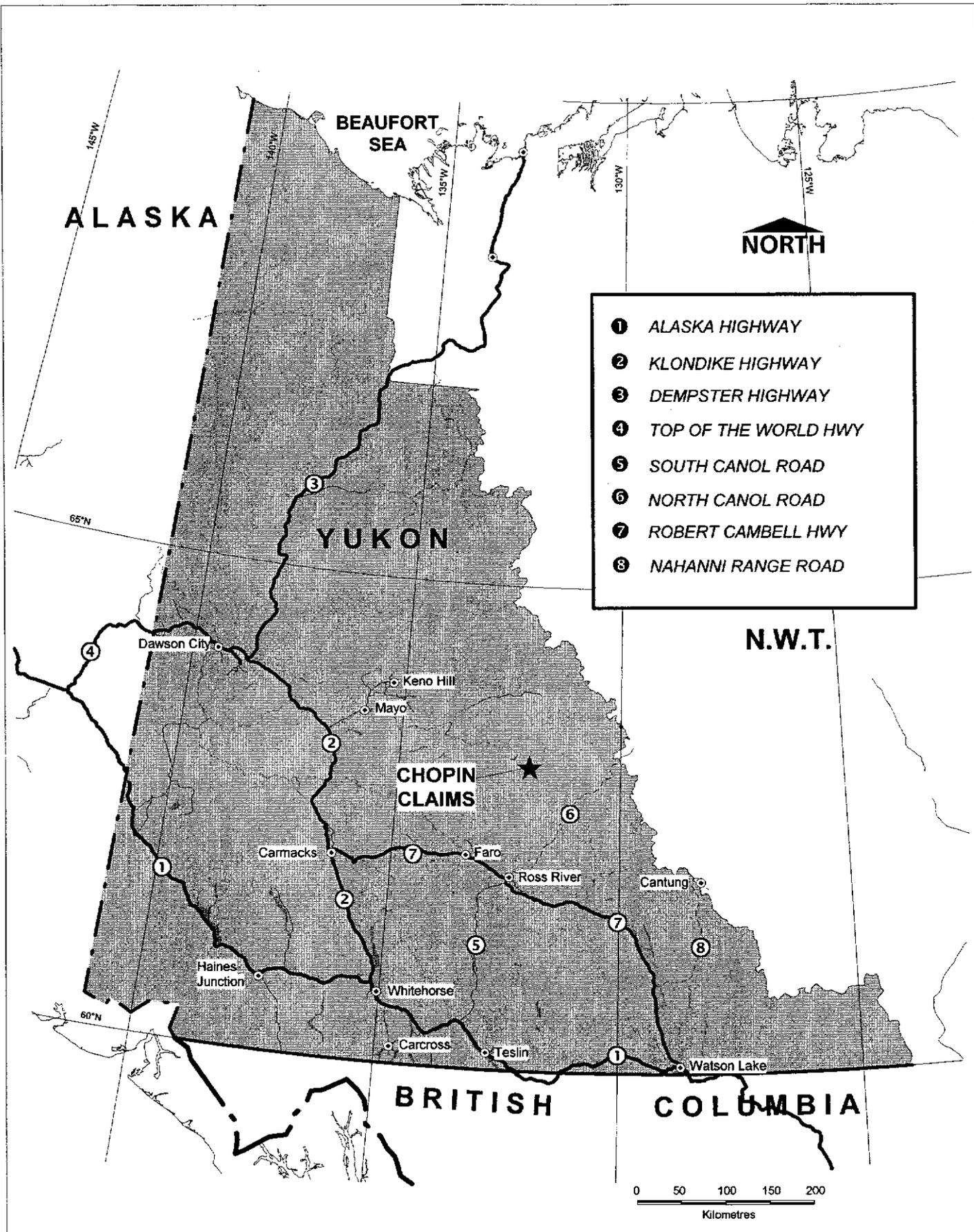


FIGURE 1: CHOPIN PROPERTY GENERAL LOCATION MAP

GEOLOGICAL LEGEND

I: Selwyn Basin (Northeast of Tintina Trench)

MESOZOIC

- Cretaceous**
- 24  Bicelle granite, biotite quartz monzonite, syenite (predominantly Tombstone Suite)
- Triassic**
-  JONES LAKE FORMATION: Brown to grey weathering calcareous and micaceous sandstone and siltstone, siliceous shale and slate, minor limestone

PALEOZOIC

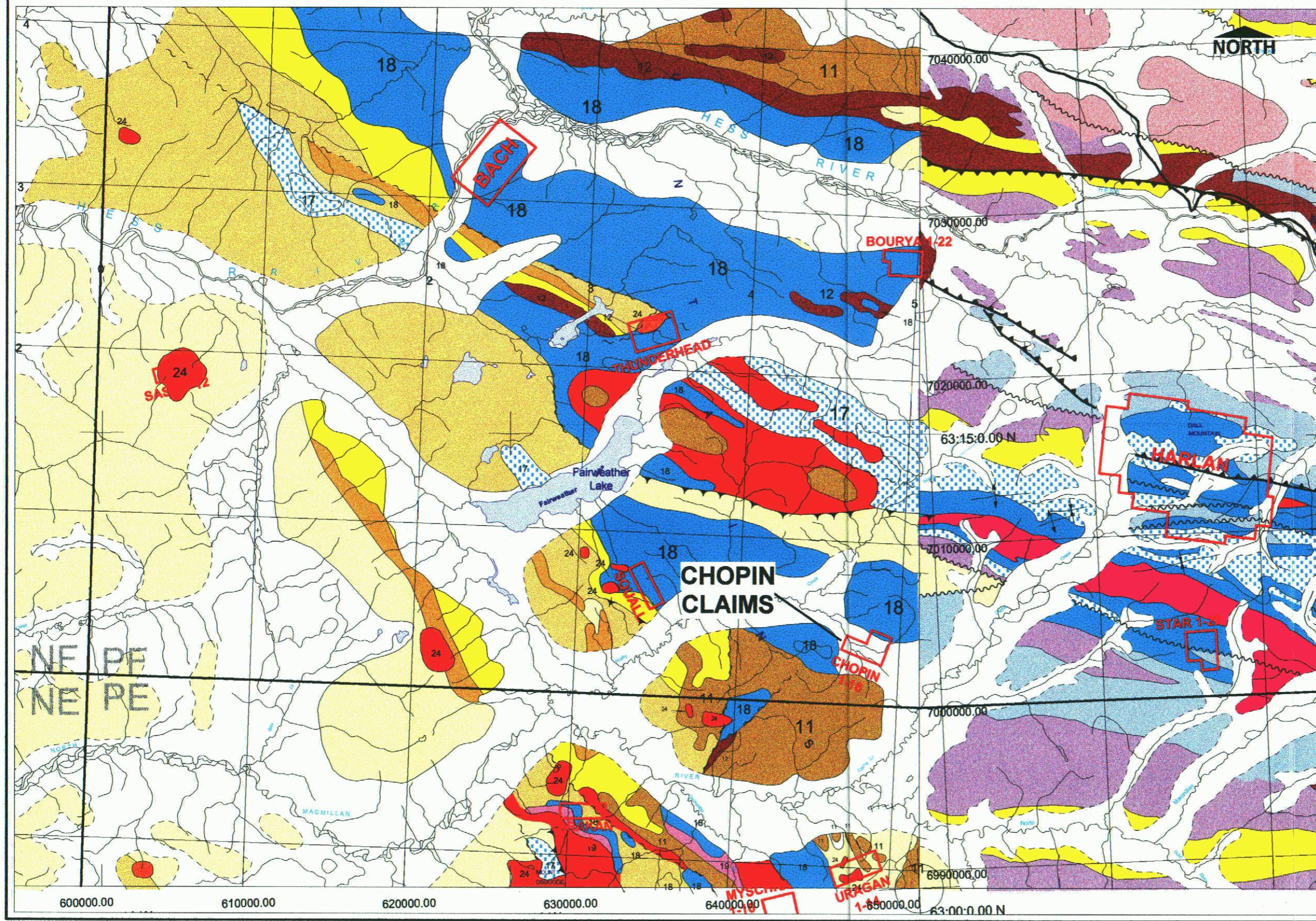
- Pennsylvanian**
-  MOUNT CHRISTIE FORMATION: Green argillite siliceous siltstone, minor sandstone and dolomite with deep-orange weathering
- Carboniferous to Pennsylvanian**
- 20  Thin bedded limestone, minor black shale, chert chert pebble conglomerate
- Mississippian**
- 19  Keno Hill quartzite: Massive quartzite, minor slate phyllite, argillaceous quartzite. Eastern units may be temporally equivalent.
- Devonian to Mississippian**
- 18  EARLY GROUP, Prevost Formation: Thin bedded to laminated, dark blue-grey to black slate, phyllite, commonly graphitic, lesser calcareous siltstone sandstone and shale
- 17  Prevost Formation chert pebble conglomerate interbedded with chert quartz arenite and greywacke, chert-quartz sandstone, blue-grey to black slate
-  EARLY GROUP, Portrait Lake Formation and Unsubdivided: Thin bedded, siliceous black siltstone, shale and chert
- 16  Folitic metavolcanics, quartz porphyry (part of lower schist?)
- Ordovician to Early Devonian**
- 12  ROAD RIVER GROUP, Steel Formation: Orange weathering, thin bedded, bioturbated dolomitic to grey-green mudstone to siltstone, lesser chert
-  ROAD RIVER GROUP, Duo Formation and Unsubdivided: Thin to medium bedded, light grey to black chert, black shale, often graphitic.
- RABBITKETTLE FORMATION**
-  Basalt, tuff, tuff breccia
- 11  Limestone and dolomite, minor black play argillaceous limestone and dolomite
- Early to Mid-Cambrian**
-  GULL LAKE FORMATION: Dark gray to black siliceous siltstone
-  SEKWI FORMATION: Limestone, silty limestone, local limestone slope breccia, minor siltstone and black shale
- PROTEROZOIC**
- Late Hadrynian to Early Cambrian**
-  HYLAND GROUP, Natchala Formation: Argillite, dark grey, green to maroon shale and phyllite, minor argillaceous limestone and chert pebble conglomerate and "grit" unit
- Late Hadrynian**
-  YUSEZYU FORMATION: Gray to dark grey limestone, minor arenaceous limestone, dark quartzite, calcareous quartzite, minor argillaceous limestone
-  YUSEZYU FORMATION: Argillite, maroon and green thin bedded, also thick bedded quartzite, calcareous quartzite, minor argillaceous limestone

 **VICEROY EXPLORATION (CANADA), INC.**

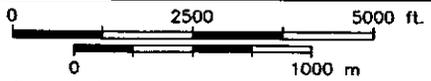
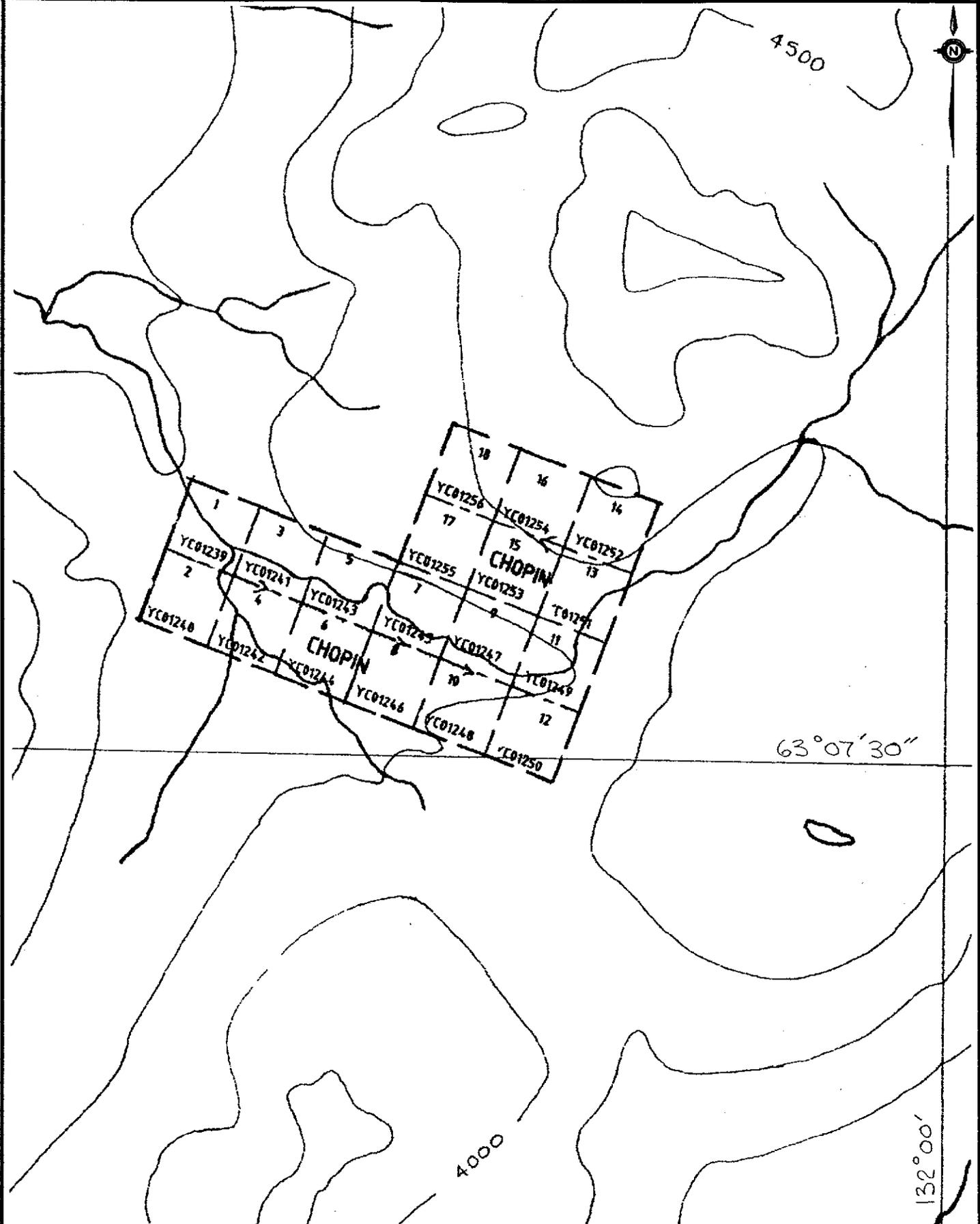
CHOPIN PROPERTY
REGIONAL GEOLOGIC SETTING

0 5 10
Kilometres

DRAWN BY:	DATE: June 99	NTS: 105N/1
	SCALE: 1:250,000	FIGURE NO: 2



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Scale 1 inch = 0.5 mile or 1:31,680

Date: May 99

NTS: 105N/1

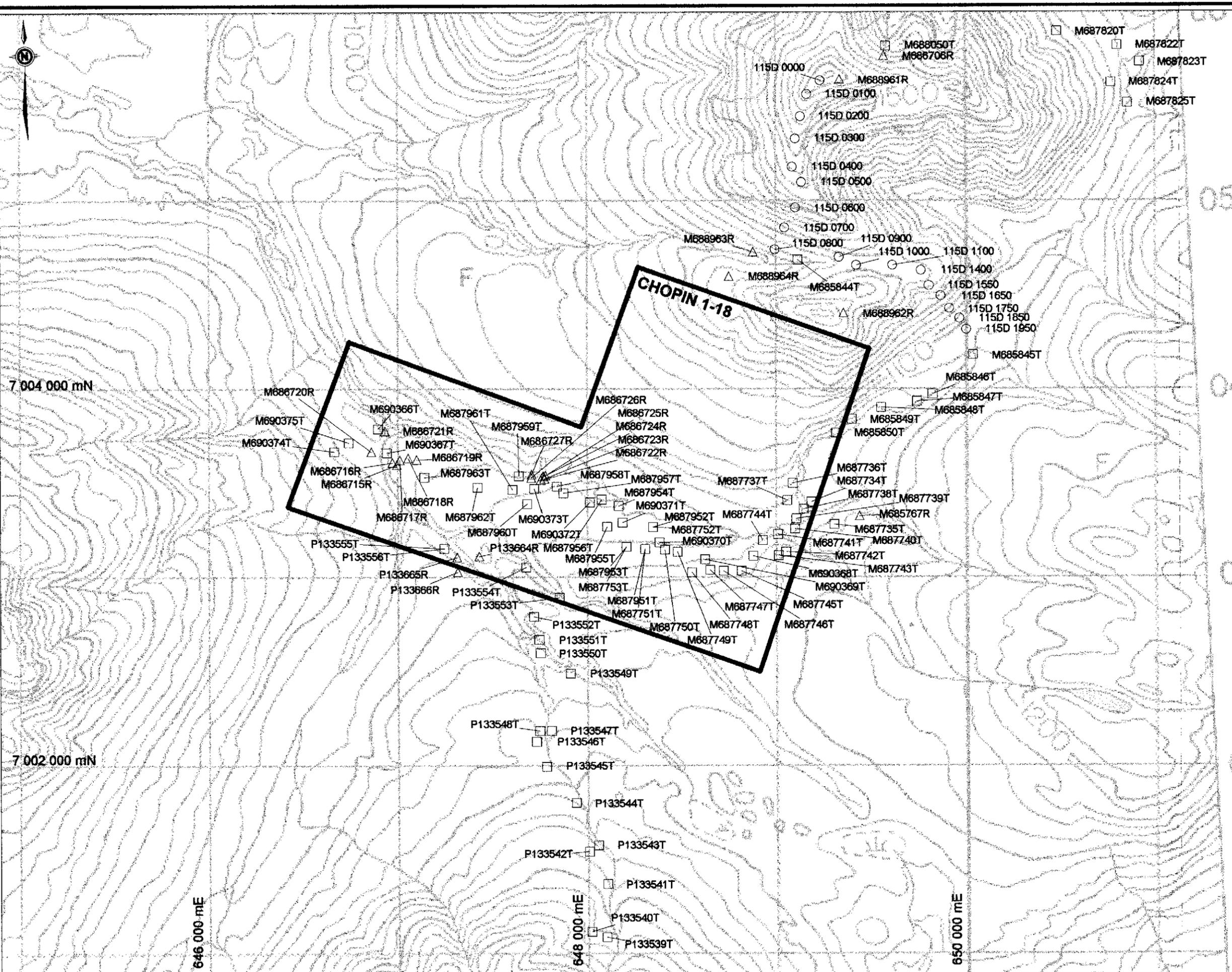


VICEROY EXPLORATION (CANADA), INC.

**CHOPIN PROPERTY
CLAIM MAP**

Fig.

3



LEGEND

- Silt sample
- Soil sample
- △ Rock sample



VICEROY EXPLORATION (CANADA), INC.

CHOPIN PROPERTY
(Target 115)
 (YUKON REGIONAL PROJECT)

SAMPLE NUMBER MAP

DRAWN BY: CS, TL	DATE: June 99	NTS: 105N/1
UTM, NAD27, ZONE 8	SCALE: 1:20,000	FIGURE NO: 4

7 004 000 mN

7 002 000 mN

646 000 mE

648 000 mE

650 000 mE

CHOPIN 1-18

Table 1 below lists detailed claim status, including assessment status and expiry dates following the 1998 filing.

Table 1. Status of Chopin Property claims after 1998 filing				
<i>Claim Name</i>	<i>Grant No.</i>	<i>Owner</i>	<i>New expiry date</i>	<i>Work completed By</i>
Chopin 001-018	YC01239-01256	Viceroy Exploration (Canada), Inc.	July 7, 2001	Viceroy

1.5 Work Program

During 1998 a total of 29 rock, 103 silt and 26 soil samples were collected in the vicinity of what would become the Chopin Claims. Applicable work for assessment included 3 rock and 4 silt samples, collected in early August, as well as geological mapping and prospecting. All sample locations for 1998 are shown on Figure 4. Please note that the appendices contain only costs and the 1998 rock and silt samples applicable for assessment.

1.5.1 Sample Preparation and Assay Procedure

All samples were shipped and analyzed by Chemex Labs of North Vancouver, B.C. Soil samples were dried and sieved to – 80 mesh, and rock samples were crushed and pulverized to – 150 mesh. All samples were subject to 30g fire assay for gold with an atomic absorption finish, and also analyzed by 32 element ICP scan. Mercury was analyzed using a 10 ppb detection limit. Rejects are retained at Chemex Labs for one year. All sample locations have been tied into UTM co-ordinates and have been plotted. A sample database in Microsoft Excel format is included and can be interfaced with Autocad Map or MapInfo software programs.

1.5.2 Personnel

All applicable assessment work was done by S. Gower, consulting geologist and field assistant E. Thompson.

CHAPTER 2: GEOLOGY

2.1 Regional Geology

The Chopin Property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the north-east. Age of deposition ranges from Late Precambrian to Permian. At least two major episodes of rifting have occurred: the first during deposition of the Late Precambrian Hyland Group sediments, and the second during deposition of the Devonian-Mississippian Earn Group sediments (Table 2, Figure 2). These major rift zones often host poorly sorted coarse clastic sediments, such as debris flows or turbidite horizons. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in the creation of sequences of comparatively high energy, shallow water sediments, often coarsely grained and variably calcareous. These are separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Suite (95-89 Ma) has been emplaced within the Selwyn Basin. Intrusives of this suite occur along an ESE trending belt extending for over 500 kilometres from north-west of Dawson City, Yukon to the Yukon-NWT border. Intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

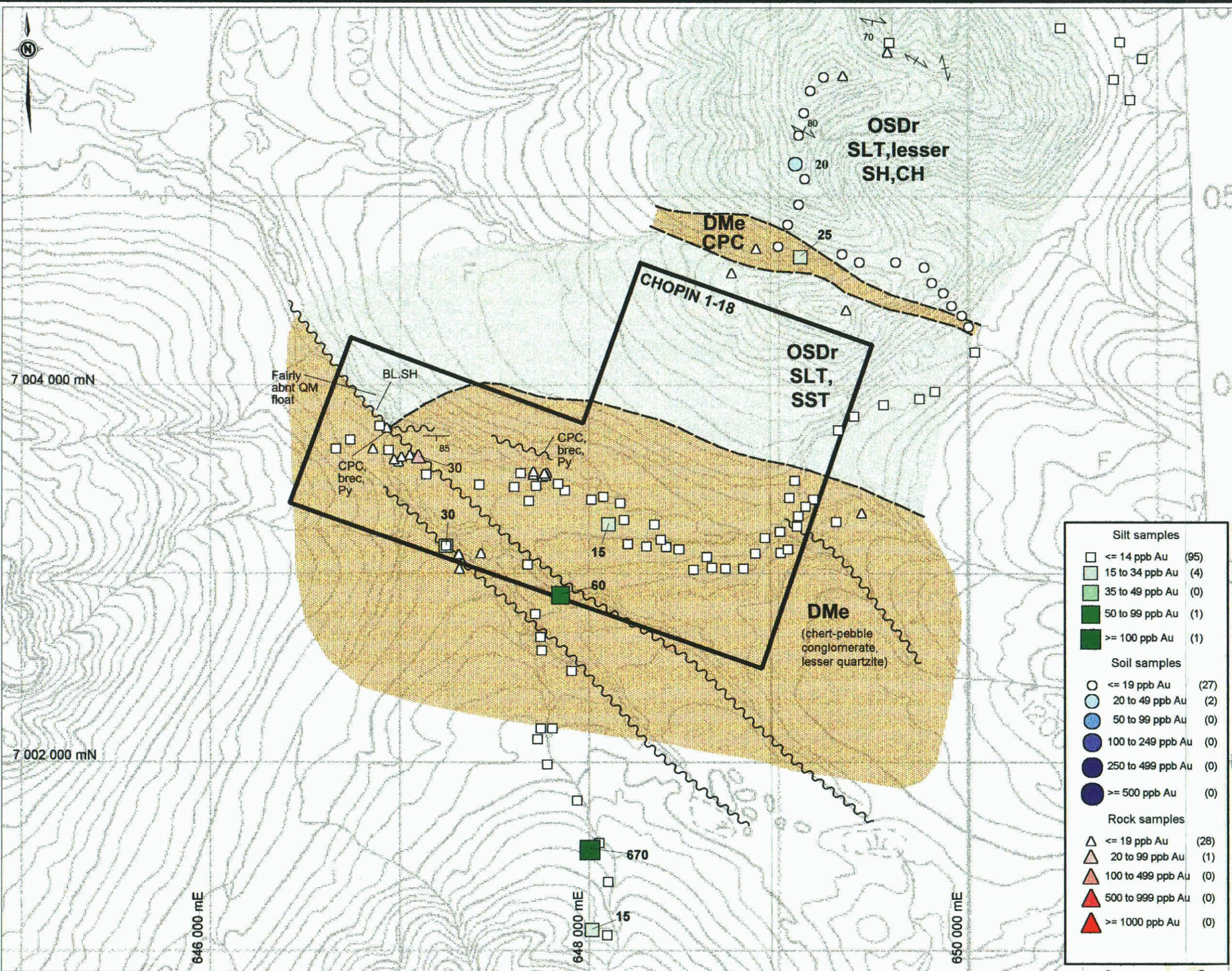
Extensive thrust faulting along the entire extent of the Selwyn Basin began during Late Jurassic time, resulting in creation of a compressional regime. Most thrust faults are oriented roughly ESE, dipping to the south-west, subparallel to the overall ESE trend of stratigraphy. Several major regional thrust faults were formed including the Dawson Thrust, Tombstone Thrust, and Robert Service Thrust. This regional lineation has been overprinted by a slightly less pronounced NE-SW lineation, marked by high angle orthogonal faults suggesting the compressional regime was followed by an extensional tectonic regime.

2.2 Property Geology

The Chopin Claims are underlain by a large package of ESE trending Earn Group chert pebble conglomerate lying in contact with Road River Group siltstone and sandstone to the north (Figure 5). A pronounced ESE trending lineament, illustrated by most stream drainages, occurs across the property. These lineaments occur as brecciated pyritic fault zones within the coarse clastics, and are associated with silicification, weak argillic alteration, and local gouge zones. Abundant monzonitic float within western parts of the block suggests a buried intrusive.

TABLE 2: STRATIGRAPHIC COLUMN, CHOPIN PROPERTY

Age	Group	Formation (Lithology)	Geology Map Designation	Description
Mid-Late Cretaceous (95-89Ma)	Tombstone-Tungsten Plutonic Suite	Diorite through Granite (Most commonly Quartz-Monzonite)	Kqm, Kg, Kdr	Felsic to intermediate, dioritic to granitic intrusives, most commonly monzonitic, quartz monzonitic to quartz dioritic. Frequently quartz-feldspar to feldspar porphyritic within upper emplacement levels and dykes. Tungsten Suite along Yukon - NWT border is now believed to be part of Tombstone Suite.
Devonian - Mississippian	Earn Group	Prevost Formation Shale, chert-pebble-conglomerate, chert-quartz sandstone	DMp, (Dme)	Brown weathering shale, grey - grey-brown weathering chert-pebble-conglomerate, dark grey to black chert-quartz sandstone.
Devonian - Mississippian	Earn Group	Portrait Lake Formation Shale, chert	Dp, (Dme)	Shale, chert, minor sandstone and conglomerate.
Ordovician - Early Devonian	Road River Group	Steel Formation	SS (OSDr)	Weakly to moderately calcareous orange weathering mudstone to siltstone, often bioturbated reflecting oxygenated bottom water conditions.
Ordovician - Early Devonian	Road River group	Duo Lake Formation	OSD (OSDr)	Black siliceous shale and chert, minor limestone. Weathers black to bluish white; local tan weathering.
Ordovician - Early Devonian	Road River group	Menzies Creek Formation	Mv	Basalts, andesites; frequently porphyritic and calcareous.



LEGEND

MESOZOIC
CRETACEOUS - TOMBSTONE PLUTONIC SUITE (Kqm)
 Quartz monzonite (QM), Altered Quartz Monzonite (AQM), Quartz-feldspar porphyritic monzonite (QFP), Diorite (Dr).

PALEOZOIC
DEVONIAN to MISSISSIPPIAN - EARN GROUP (Dme)
 Thin bedded phyllite (Phy), commonly graphitic (GPhy), lesser calcareous siltstone (Slit), sandstone (SST) and shale (SH).
 Phyllite, siliceous shale, siltstone.
 Chert pebble conglomerate (CPC), lesser greywacke (Gw), sandstone.

ORDOVICIAN to EARLY DEVONIAN - ROAD RIVER GROUP (OSDr)
 STEEL FORMATION - Orange weathering, grey-green mudstone (Mst) to siltstone.
 DUO LAKE FORMATION - Chert, minor black shale, siltstone, argillite (ARG).
 DUO LAKE FORMATION - Shale, siltstone, minor chert.
 MENZIE CREEK FORMATION (Mv) - Andesite (And), basalt (Ba), often vesicular, calcareous.

PROTEROZOIC
LATE HADRYNIAN - EARLY CAMBRIAN
HYLAND GROUP (PrCh), YUSEZYU FORMATION
 Grey limestone to silty limestone.
 Phyllite, locally calcareous, argillite (ARG), shale, siltstone.
 Grit units; coarse clastic sediments, including quartz pebble conglomerate (QPC), quartzite (QZTE), sandstone.

SYMBOLS

Strike and dip of bedding
 Strike and dip of foliation
 Area of outcrop or rubble
 Geologic contact
 Limit of alteration zone
 Fault
 Thrust fault (Inferred), teeth indicate dip direction
 Cliff
 Soil traverse line

Silt sample
 Soil sample
 Rock sample

ABBREVIATIONS

abnt	Abundant	graph	Graphite
AQM	Altered quartz monzonite	hem	Hematite
Arg	Argillite	hfels	Hornfels zone
argl	Argillic alteration	lim	Limonite
Ag	Silver	Po	Pyrrhotite
As	Arsenopyrite	Py	Pyrite
Au	Gold	QFP	Quartz-feldspar porphyritic
bor	Bornite	QV	Quartz vein
brec	Brecciated	Qz	Quartz
calc-sil	Calc-silicate alteration	rcrop	Rubblecrop
carb	Carbonate	scor	Scordite
Cp	Chalcopyrite	sil	Silicified
Fe seep	Iron seep	silt	silty limestone
forte	Ferricrete	stwk	Stockwork zone
FP	Feldspar Porphyritic	o/c	Outcrop

Silt samples

□	<= 14 ppb Au	(95)
□	15 to 34 ppb Au	(4)
□	35 to 49 ppb Au	(0)
□	50 to 99 ppb Au	(1)
□	>= 100 ppb Au	(1)

Soil samples

○	<= 19 ppb Au	(27)
○	20 to 49 ppb Au	(2)
○	50 to 99 ppb Au	(0)
○	100 to 249 ppb Au	(0)
○	250 to 499 ppb Au	(0)
○	>= 500 ppb Au	(0)

Rock samples

△	<= 19 ppb Au	(28)
△	20 to 99 ppb Au	(1)
△	100 to 499 ppb Au	(0)
△	500 to 999 ppb Au	(0)
△	>= 1000 ppb Au	(0)



VICEROY EXPLORATION (CANADA), INC.

CHOPIN PROPERTY (Target 115)
 (YUKON REGIONAL PROJECT)

COMPILATION MAP

DRAWN BY: CS, TL	DATE: May 99	NTS: 105N/1
UTM, NAD27, ZONE 8	SCALE: 1:20,000	FIGURE NO: 5

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CHAPTER 3: MINERALIZATION

3.1 Property Mineralization

Grab sampling across gouge zones returned low values to 30 ppb Au. Several silt samples taken along the southern boundary returned anomalous values to 60 ppb Au and 630 ppb Hg. A sample taken roughly one kilometre south of the property returned 670 ppb Au, 1.4 gpt Ag, and 490 ppb Hg. This is an isolated anomaly; however, elevated mercury values suggest the anomaly may be “real” rather than caused by “nugget effect”, and warrants investigation.

CHAPTER 4: CONCLUSIONS

The Chopin Property, consisting of the Chopin 1-18 Claims located in Central Yukon on NTS sheets 105N/ 01, was staked in 1998 by Viceroy Exploration (Canada), Inc.

The Chopin Property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the north-east. Age of deposition ranges from Late Precambrian to Permian. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in formation of comparatively high energy, shallow water sediments, often coarsely grained and variably calcareous. These are separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Suite (95-89 Ma) has been emplaced within the Selwyn Basin. Members of this suite occur along an ESE trending belt extending for over 500 kilometres from north-west of Dawson City, Yukon to the Yukon-NWT border. Tombstone Suite intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

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CHAPTER 5: RECOMMENDATIONS

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Schulze, C, 1997: Yukon Regional Project, 1997 Progress Report; In-house Report, Viceroy Exploration (Canada), Inc.

STATEMENT OF QUALIFICATIONS

I, Rick Diment, of the City of Whitehorse, Yukon Territory, Canada, do hereby certify that:

- 1) I have held the position of Senior Exploration Geologist with Viceroy Exploration (Canada), Inc, since 1996.
- 2) I graduated from University of British Columbia with a Bachelor of Science Degree in Geology in 1986.
- 3) I have been continually active in mineral exploration since 1986.
- 4) Although I did not supervise the field activities or have not been to the property described in this report; information was compiled from the Field Party Chief's field notes and reports (Carl Schulze).

A handwritten signature in black ink, appearing to read 'R. Diment', is written over a horizontal line.

Rick Diment
Senior Geologist
Viceroy Exploration (Canada) Inc.

APPENDIX I

APPLICABLE EXPENDITURES FOR ASSESSMENT CREDITS

Bourya Property Expenditures	
Description	Expenditure
Labor	\$535
Camp costs	90
Helicopter	760
Fixed Wing	650
Geochemical Analyses	140
Ground Transportation	140
Report Writing	1,350
Total	3,665

APPENDIX 2

ROCK ASSAY RESULTS

APPENDIX 3

SILT ASSAY RESULTS

