



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

Quartz Claims

**093969**

**Beethoven 001-096 YB99893-988**

March 15, 1999

Mayo Mining District  
N.T.S. 105J/15

Latitude: 62°57' North  
Longitude: 130°50' West

Owner: Viceroy Exploration (Canada), Inc.

Author: Carl M. Schulze

Date of work: June & August 1998

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## SUMMARY

The Beethoven Property, consisting of the Beethoven 1-96 Claims, is located in Central Yukon on NTS Sheet 105 J/15. It was staked in 1997 by Viceroy Exploration (Canada), Inc.

The Beethoven 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. The Mid-Cretaceous Tombstone-Tungsten Intrusive Suite (95-89Ma) 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 to the Yukon-NWT border. Tombstone Suite intrusives, predominantly monzonites and quartz monzonites, are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting across the Selwyn Basin began during Late Jurassic time, resulting in creation of a compressional regime. Most thrust faults are oriented roughly ESE, and dip 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 Beethoven Property occurs towards the eastern limit of a broad deformation belt unofficially called the "Gold River Fold Belt" extending along the south side of the Hess River. Several WNW trending thrust faults, re-activated as strike-slip faults associated with fairly intense folding, extend across this belt. The property itself is underlain by several alternating chert and shale members of Road River Group sediments intruded by a Tombstone Suite biotite granite stock and associated dykes.

Exploration indicates that auriferous mineralization occurs within argillically altered marginal portions of the stock, as well as arsenopyrite veining up to 300 metres outbound in adjacent country rock. Soil sampling returned two strongly anomalous values to 570 ppb Au with 22.4 gpt Ag from a north-south lineament 100-200 metres south of the stock. This is associated with elevated gold values from 1998 silt sampling to 75 ppb Au, with 3.6 gpt Ag, 16 ppm Bi, and 30 ppm Sb. Contour soil sampling returned a value of 30 ppb Au/ 600 metres, extending west from the lineament. Anomalous geochemical values occur across approximately three square kilometers.

Gold and associated pathfinder element signatures, particularly copper and silver, suggest mineralization typical of mid-levels of intrusive emplacement, rather than upper level epithermal assemblages. Outlying soil anomalies may reflect outlying zones of more evolved epithermal mineralization. However, exploration to date suggests a fairly restricted mineralizing system.

A total of \$11,456 in exploration expenditures was incurred in 1998.

Exploration in 1999 shall focus on detailed geological mapping, rock chip and systematic soil sampling across the south flank of the stock. Particular focus will be given to the north-south trending lineament to determine if significant structural control of mineralization exists. Surface exploration shall also focus on untested flanks of the ridge to the east. However, due to the possible restricted nature of mineralization, a failure to delineate substantial exploration targets during this phase should warrant no further exploration.

## CHAPTER 1: INTRODUCTION

### 1.1 Introductory Statement

The Beethoven Property consists of 96 contiguous quartz mining claims (Beethoven 1-96 Claims) covering a 21 square kilometre area measuring seven by three kilometres within NTS Sheet 105 J/15, in the Mayo Mining District (Figure 1).

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

### 1.2 Location and Access

The Beethoven Property is located 130 kilometres north-east of Ross River, Yukon, and 15 kilometres northwest of the Canol Road. It is centered at 62° 57' North latitude, 130° 50' West longitude on NTS Map Sheet 105 J/15. (Figure 2)

Access is by helicopter from the North Canol Road.

### 1.3 Physiography and Vegetation

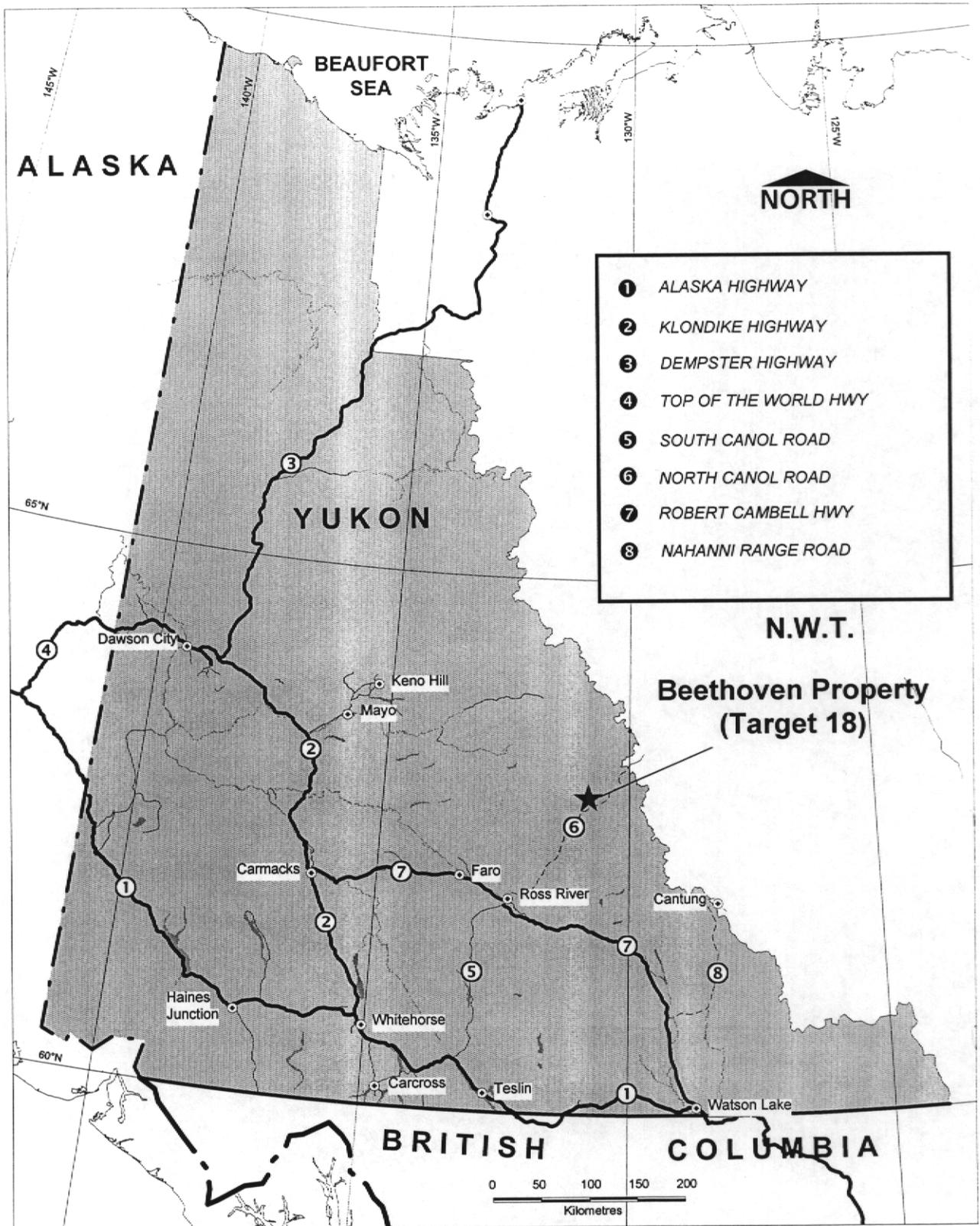
The property extends along an ESE trending ridge attaining 5,600 feet of elevation. Topography is fairly rugged, with small areas of high elevation inaccessible to exploration. Typical northern boreal spruce forest covers lower elevations, grading to subalpine fir forests towards the tree line. Higher elevations are covered by typical tundra vegetation, with steep north facing zones barren of vegetation.

### 1.4 Regional Exploration History and Competitor Activity

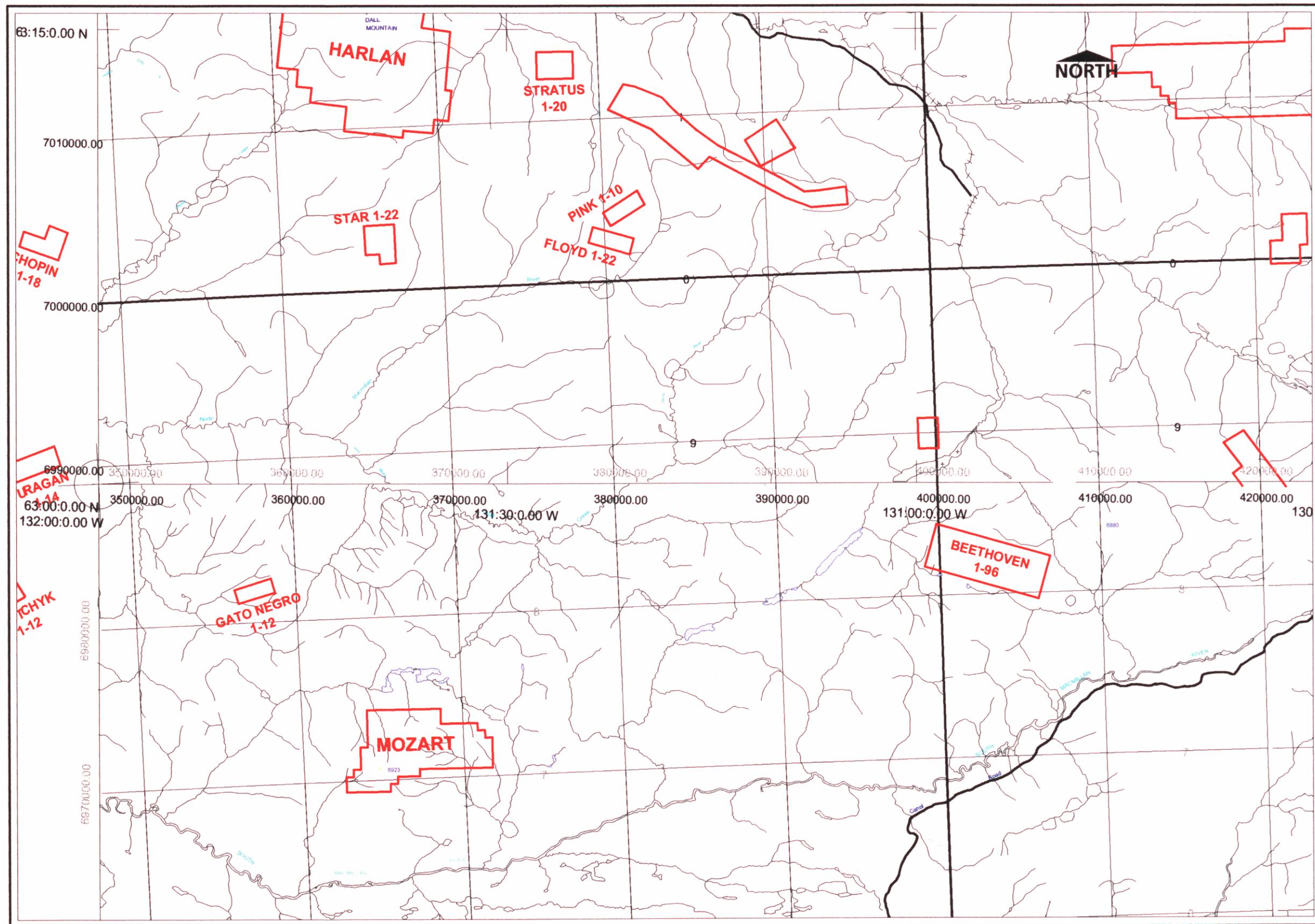
Limited exploration has occurred in the immediate Beethoven Property vicinity. The JET Claims held by the Archer-Cathro Group located roughly thirty kilometres north-west overlie barite occurrences within Earn Group sediments. Several claim blocks overlie Tombstone Suite stocks and associated gold mineralization and gold in silt anomalies. These include the YZ, NID, EM and CYP Claims, held by Alliance Pacific Gold Ltd., which added the WEAS Claims to the CYP Claims in 1997; and the NUG Claims held by Mr. B. Kreft. The PLATA lead-zinc-silver prospect is located roughly eighty kilometres to the north-west. The TOM and JASON lead-zinc-silver Sedex style deposits, held by Cominco, occur roughly forty kilometres to the north-east. The BRICK-NEVE Claims, held by Cameco, located roughly thirty kilometres to the north, overlie sediment and dyke hosted gold mineralization.

### 1.5 Property Exploration History

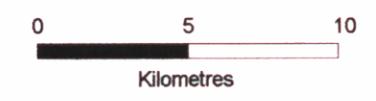
The present Beethoven Property was visited in 1996 by Hemlo Gold Mines Inc., which obtained favorable gold results from rock and soil sampling. The Beethoven 1-96 claims were staked in 1997 (Figure 3) to cover anomalous gold values returned from soil and rock sampling in Road River Group sediments near a biotite granite stock. The original target was selected due to a combination of coincident gold-arsenic-mercury-antimony anomalies from RGS silt sampling, favorable Road River stratigraphy and proximity to a Tombstone Suite pluton. The 1998 exploration program returned favorable results across the southern flank of the stock.



**FIGURE 1: GENERAL LOCATION MAP**



 Valid Quartz Claims

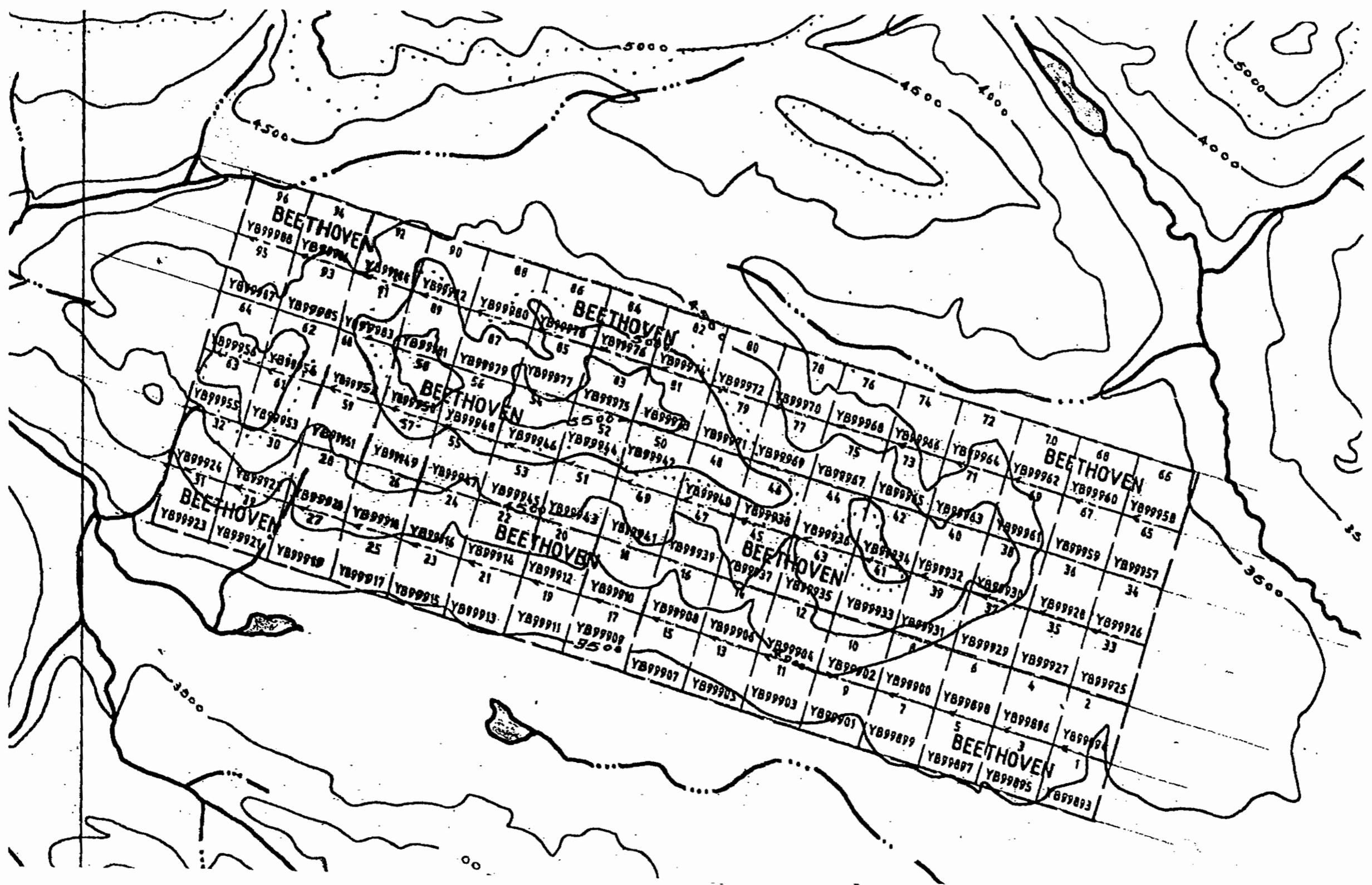


 **VICEROY RESOURCE CORPORATION**

**BEETHOVEN PROPERTY**  
 REGIONAL LOCATION  
 and  
 LAND TENURE MAP

DATE:	Mar. 99	NTS:	105J/15
SCALE:	1:250,000	FIGURE NO.:	2

093969



**BEETHOVEN PROPERTY  
CLAIM LOCATION MAP**

DRAWN BY:	SCALE: 1/2 Mile = 1"
DATA BY: S.C.	NTS: 105 J/15
DATE: 04/02/98	FIGURE: 3

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

**Table 1. Status of Beethoven 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>
Beethoven 001-021 Beethoven 023 Beethoven 025-052 Beethoven 054 Beethoven 056-096	YB99893-99913 YB99915 YB99917-99944 YB99946 YB99948-88	Viceroy Exploration (Canada), Inc.	October 27, 1999	Viceroy
Beethoven 022 Beethoven 024 Beethoven 053 Beethoven 054	YB99914 YB99916 YB99945 YB99947	Viceroy Exploration (Canada), Inc.	October 27, 2000	Viceroy

### 1.6 Work Program

In 1998, geological mapping of the property was undertaken, as well as rock, soil and silt soil sampling. Sample locations for 1998 and prior years are shown on Plate 1. Please note that the appendices contain data from 1998 sampling only.

#### 1.6.1 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.

#### 1.6.2 Personnel

All applicable assessment work was done by Carl Schulze, Senior Exploration Geologist; Gordon MacIntosh, Geologist; and field assistants S. Erdman and M. Mason. C. Meyer provided cooking and camp support services.

Fireweed Helicopters of Dawson City, Yukon provided helicopter services.

## CHAPTER 2: GEOLOGY

### 2.1 Regional Geology

The Beethoven 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 4). 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 Intrusive Suite (95-89Ma) consisting primarily of monzonitic to quartz-monzonitic intrusive structures, 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 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, and dip 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.*

The Beethoven Property occurs towards the eastern limit of a broad deformation belt unofficially called the "Gold River Fold Belt" extending along the south side of the Hess River. Several WNW trending thrust faults, re-activated as strike-slip faults associated with fairly intense folding, extend across this belt. Tombstone Suite intrusives occur within the belt, particularly along the north and south flanks, and are common in the Beethoven Property area.

### 2.2 Property Geology

Several members of Road River Group sediments (Plate 2) underlie the entire property. The west-central area, the focus of most exploration to date, is underlain by a south-east trending package of chert and shale. This lies in contact with a package of shale and minor chert to the west, and siltstone to the east; another chert and shale member underlies extreme eastern areas. Contacts are interpreted as extending SSE. A Tombstone Suite quartz biotite monzonite stock and associated dykes and apophyses have intruded the central chert and shale package, and a smaller stock occurs within siltstone to the east. Marginal areas of the main stock have undergone moderate to strong argillic alteration, particularly along southern contacts. Propylitic alteration and hornfelsing, resulting in limonitic staining, has occurred in sediments near the stock.

Stream drainages suggest a north-south trending lineation, as well as a NE-SW trending lineation within eastern areas. A north-south trending fault occurs just south of the stock. A NNE trending fault extends across west-central areas and a north-west trending fault just south of this has been inferred. Bedding trends ESE, dipping steeply to the south, roughly parallel to subvertical foliation trends.

**TABLE 2: STRATIGRAPHIC COLUMN, BEETHOVEN PROPERTY**

Age	Group	Formation (Lithology)	Geology Map Designation	Rock Code	Description
Mid-Late Cretaceous (95-89 Ma)	Tombstone-Tungsten Plutonic Suite	Diorite through Granite (Most commonly Quartz Monzonite), minor Syenite	Kg, Kqm, Ks	QBM	Felsic to intermediate dioritic to granitic intrusives, most commonly monzonitic, quartz monzonitic to quartz dioritic, Commonly feldspar to quartz-feldspar porphyritic within upper emplacement levels and dykes. Quartz biotite monzonite within central stock on property
Devonian - Mississippian	Earn Group	<b>Prevost Formation</b>	DMp (Dme)	CPC, GW	Grey chert-pebble-conglomerate to greywacke, locally fairly large clasts.
Devonian - Mississippian	Earn Group	<b>Portrait Lake Formation</b>	Dme	SH, CH	Black shale, minor chert.
Ordovician - Early Devonian	Road River Group	<b>Steel Formation</b>	SS (OSDr)		Siltstone to mudstone, commonly weakly to moderately calcareous, lesser sandstone to calcareous sandstone, all members commonly limonitic; minor limestone
Ordovician - Early Devonian	Road River Group	<b>Duo Lake Formation</b>	OSDr	CH	Thin bedded light grey chert, minor shale horizons. Weakly to moderately limonitic near intrusive contacts; local weak argillic alteration, silicification.
Ordovician - Early Devonian	Road River Group	<b>Duo Lake Formation</b>	OSDr	SH	Grey shale to siltstone, minor chert horizons.

**GEOLOGICAL LEGEND**

**I: Selwyn Basin (Northeast of Tintina Trench)**

**MESOZOIC**

- Cretaceous**
- 24  Bottle granite, bottle 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**

- Permian**
-  MOUNT CHRISTIE FORMATION: Green argillite, siliceous siltstone, minor sandstone and dolomite with deep-orange weathering

- Carboniferous to Permian**
- 20  Thin bedded limestone, minor black shale, chert, chert pebble conglomerate

- Mississippian**
- 19  Kano Hill quartzite: Massive quartzite, minor slate, phyllite, argillaceous quartzite. Eastern units may be temporally equivalent

- Devonian to Mississippian**
- 18  EARN GROUP: Prevost Formation: Thin bedded, to laminated, dark blue-grey to black slate, phyllite, commonly graphic, lesser calcareous siltstone and shale

- 17  Prevost Formation chert pebble conglomerate interbedded with chert-quartz arenite and greywacke, chert-quartz sandstone, blue-grey to black slate

- 16  EARN GROUP: Portrait Lake Formation and Unsubdivided: Thin bedded, siliceous black siltstone, shale and chert

- Ordovician to Early Devonian**
-  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 graphic

- RABBITKETTLE FORMATION**
- 11  Basalt, tuff, tuff breccia
-  Limestone and dolomite, minor black platy argillaceous limestone and dolomite

- Early to Mid-Cambrian**
-  GULL LAKE FORMATION: Dark grey to black siliceous siltstone

-  SEKWI FORMATION: Limestone, silty limestone, local limestone slope breccia, minor siltstone and black shale

**PROTEROZOIC**

- Late Hadyrnyian to Early Cambrian**
-  HYLAND GROUP: Narchile Formation: Argillite, dark grey, green to maroon shale and phyllite, minor argillaceous limestone and chert pebble conglomerate and "grit" unit

- Late Hadyrnyian**
-  YUSEZYU FORMATION: Grey to dark grey limestone, minor arenaceous limestone, dark quartzite, calcareous quartzite, minor argillaceous limestone

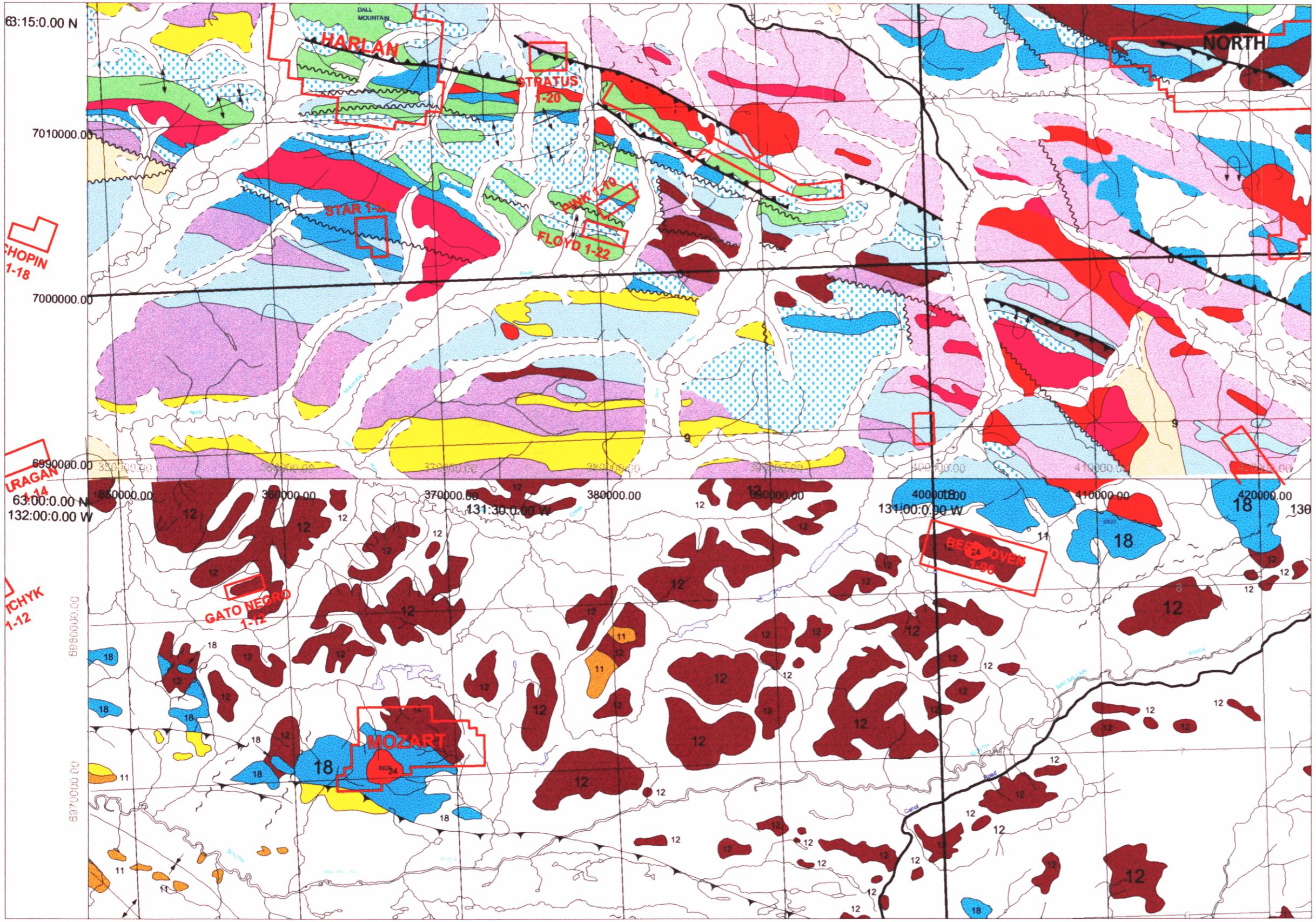
-  YUSEZYU FORMATION: Argillite, maroon and green thin bedded, also thick bedded quartzite, calcareous quartzite, minor argillaceous limestone

 **VICEROY RESOURCE CORPORATION**

**BEETHOVEN PROPERTY**  
**REGIONAL GEOLOGIC SETTING**

0 5 10  
Kilometres

DATE: Mar. 99	NTS: 105J/15
SCALE: 1:250,000	FIGURE NO: 4



## CHAPTER 3: MINERALIZATION

### 3.1 Property Mineralization

Exploration to date indicates most auriferous mineralization occurs within argillically altered marginal portions of the stock, and adjacent chert and shale country rock, with minor gold bearing arsenopyrite veins and vein breccias occurring up to 300 metres from the stock. Grab sampling of widespread narrow quartz-arsenopyrite veins and vein breccias 100 - 300 metres north-west of the stock returned values to 6.8 gpt Au. Exploration in 1998 revealed fairly abundant intrusive hosted arsenical mineralization, together with moderate argillic and phyllic alteration, along western margins of the stock. A value of 890 ppb Au, 116 gpt Ag, and 1.29% Cu was returned from strongly arsenical talus material along the western margin.

Soil sampling returned two strongly anomalous values, including 570 ppb Au with 22.4 gpt Ag from the north-south lineament 100 - 200 metres south of the stock. This is associated with several elevated gold values from silt sampling to 75 ppb Au, with 3.6 gpt Ag, 16 ppm Bi, and 30 ppm Sb. This suggests a partial structural control to mineralization. Contour soil sampling in 1998 returned a value of 30 ppb Au/ 600 metres, extending west from the lineament. This extends across a separate interval returning 42 ppb Au/ 150 metres (50 metre sample spacing). Weak gold in soil anomalies were also delineated across other parts of the stock, and small dykes and apophyses to the west.

Anomalous geochemical values occur across roughly three square kilometres. Minor unexplained gold anomalies from soil and silt sampling occur up to three kilometres east of the stock along the north flank of the ridge.

Gold and associated pathfinder element signatures, particularly copper and silver, suggest mineralization typical of mid-levels of intrusive emplacement, rather than upper level epithermal assemblages. Outlying soil anomalies, including the occurrence returning 42 ppb Au/ 150 metres, may reflect outlying zones of more evolved epithermal mineralization. Much of the eastern extension of the north flank of the ridge, as well as a southward extension of the lineament south of the stock, remains untested.

## CHAPTER 4: CONCLUSIONS

The Beethoven Property, consisting of the Beethoven 1-96 Claims, is located in Central Yukon on NTS Sheet 105 J/15. It was staked in 1997 by Viceroy Exploration (Canada), Inc.

The Beethoven 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 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 Intrusive Suite (95-89Ma), consisting primarily of monzonitic to quartz monzonitic intrusive structures, 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 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, and dip 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 Beethoven Property occurs towards the eastern limit of a broad deformation belt unofficially called the "Gold River Fold Belt" extending along the south side of the Hess River. Several WNW trending thrust faults, re-activated as strike-slip faults associated with fairly intense folding, extend across this belt. The property itself is underlain by several alternating chert and shale members of Road River Group sediments intruded by a biotite granite stock with associated dykes.

Exploration indicates that auriferous mineralization occurs within argillically altered marginal portions of the stock, as well as arsenopyrite veining up to 300 metres outbound in adjacent country rock. Soil sampling returned two strongly anomalous values to 570 ppb Au with 22.4 gpt Ag from a north-south lineament 100-200 metres south of the stock. This is associated with elevated gold values from 1998 silt sampling to 75 ppb Au, with 3.6 gpt Ag, 16 ppm Bi, and 30 ppm Sb. Contour soil sampling returned a value of 30 ppb Au/600 metres, extending west from the lineament. Anomalous geochemical values occur across approximately three square kilometers.

Gold and associated pathfinder element signatures, particularly copper and silver, suggest mineralization typical of mid-levels of intrusive emplacement, rather than upper level epithermal assemblages. Outlying soil anomalies may reflect outlying zones of more evolved epithermal mineralization. However, exploration to date suggests a fairly restricted mineralizing system.

A total of \$11,456 in exploration expenditures was incurred in 1998.

## CHAPTER 5: RECOMMENDATIONS

The 1999 exploration program shall include detailed geological mapping, prospecting and systematic B-horizon soil sampling along the south flank of the quartz biotite stock. The south extension of the lineament will be the particular focus of detailed exploration to determine whether mineralization is structurally controlled, or confined to marginal areas of the stock. Other targets will include the gold in soil anomalies west of the lineament. Grid control may be warranted following return of favorable results.

Several contour soil profile traverses combined with geological mapping and rock chip sampling are recommended for eastern areas, particularly along the north flank of the ridge. Detailed surface exploration shall occur upstream of drainages returning anomalous gold values.

Exploration results to date suggest the presence of a fairly restricted mineralizing system. If significant targets cannot be substantiated during surface follow-up exploration, no further work is recommended.

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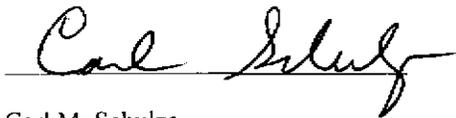
Roots, C.F. Abbott, J.G. Cecile, M.P. Gordey, S.P. 1995: Bedrock Geology of Lansing Range Map Area (105N), East Half, Hess Mountains, Yukon; Exploration and Geological Services, Yukon Region, and Indian and Northern Affairs Canada.

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

## STATEMENT OF QUALIFICATIONS

I, Carl Schulze, 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 its 1998 inception and with Viceroy International Exploration Inc. since 1996.
- 2) I graduated from Lakehead University with a Bachelor of Science Degree in Geology in 1984.
- 3) I have been continually active in mineral exploration since 1984.
- 4) I supervised the exploration program and performed part of the work described in this report.
- 5) I am currently president of the Yukon Chamber of Mines and a member of the Yukon Prospectors' Association.



Carl M. Schulze  
Senior Geologist  
Viceroy Exploration (Canada) Inc.

APPENDIX 1

APPLICABLE EXPENDITURES FOR ASSESSMENT CREDITS

<b>Beethoven Property Expenditures</b>	
<b>Description</b>	<b>Expenditure</b>
Labor	\$ 1,755
Camp costs	300
Helicopter	4,386
Geochemical Analyses	3,040
Ground Transportation	400
Report Writing	1,575
<b>Total</b>	<b>\$11,456</b>

**APPENDIX 2**

**ROCK ASSAY RESULTS**

**Target 18**  
**Rock Sample Description Sheet**

Sample	X_Coord	Y_Coord	Z_Coord	Traverse	Zone	Type	Width_m	Desc	Fm	Lithology	Modifier	Colour	Carb
M686729R	402281.8	6982601		18J	9	cg		Ta	Kqm	QBM	Mas	buff	
M686730R	401979.5	6982638		18J	9	cg		Rb	Kqm	AQBM	Frac	yl	C3
M686731R	401792	6982791		18J	9	cg		Ta	Kqm	AQBM	Sk	yl	
M686732R	401789.1	6982821		18J	9	cg		Ta	Kqm	AQBM	Brec	gry	
M686733R	401714.7	6982873		18J	9	cg		Ta	Kqm	AQBM	Frac	yl	
M686734R	401250	6983000		18J	9	cg		Oc	Kqm	AQBM	Fol	yl	
M690172R	402407.6	6983436		18G		g		Oc	DMe	SLT	Medbd	gry	
P133634R	401945.6	6982478		18Z	9	cg		Oc	Kqm	BGR	Frac	wh	C1
P133635R	401903.3	6982462		18Z	9	c	2.0	Oc	Kqm	BGR	Go	tan	
P133636R	401930.3	6982354		18Z	9	c	1.5	Oc	Kqm	BGR	Go	brn	
P133637R	401568.2	6982496		18Z	9	cg		rb	Kqm	QFP	Frac	buff	
P133638R	401540	6983060		18Z	9	c	1.3	Oc	OSDr	CH	brec	gry	
P133639R	401600	6983110		18Z	9	cg		Rubblecrop	OSDr	CH	Sk	buff	

## Target 18 Rock Sample Description Sheet

Sample	Silicif	Alt_ARG	Alt_POT	Alt_PHY	Limonite	Mineral_1	M1_Amt	Mineral_2	M2_Amt	Mineral_3	M3_Amt	Date	Name
M686729R	S1	A2		Ph3	strg	As	1	P	<1	Cp	<1	06/28/98	CS
M686730R	S1	A1		Ph2	wk	As	2	P	1			06/28/98	CS
M686731R	S1	A3		Ph3	wk	As	5	P	tr	Cp	tr	06/28/98	CS
M686732R	S1	A1			wk	As	35	P	2	Cp	<1	06/28/98	CS
M686733R	S1	A3		Ph3		As	tr					06/28/98	CS
M686734R	S1	A2		Ph2	wk	P	tr	As	tr			06/28/98	CS
M690172R	S3				wk	P	3	As	tr			06/28/98	GDM
P133634R	S3	A1				P	1					08/07/98	CS
P133635R	S1	A3			st	P	tr					08/07/98	CS
P133636R	S1	A3			st	P	tr					08/07/98	CS
P133637R	S2	A2		Ph3	wk	P	tr	scor	mod			08/07/98	CS
P133638R	S3	A1			mod	P	5					08/07/98	CS
P133639R	S3				wk	Scor	wk	P	tr			08/07/98	CS

**Target 18**  
**Rock Sample Description Sheet**

Sample	Au_ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
M686729R	10	6.2	1.16	624	80	0.25	6	0.05	0.25	1	129	440	3.28
M686730R	2	0.2	1.62	26	70	0.5	2	0.91	0.25	1	78	71	1.87
M686731R	120	5.4	0.61	10000	250	0.25	216	0.01	0.25	8	75	558	3.66
M686732R	890	116	0.1	10000	5	0.25	-1	0	0.25	154	0.5	12900	15
M686733R	45	0.6	0.97	1160	370	0.25	2	0	0.5	0.5	67	33	0.69
M686734R	2	0.1	1.55	94	370	0.5	1	0.01	0.25	0	60	47	1.12
M690172R	5	0.2	1.07	172	120	0.5	1	1.02	2	1	47	99	0.93
P133634R	5	1	0.52	466	60	0.25	1	0.68	0.2	0	174	4	0.39
P133635R	5	0.8	0.61	66	60	0.25	6	0.2	1.5	2	75	71	2.58
P133636R	20	2.6	1.25	1650	40	0.25	24	0.61	0.2	26	108	158	6.06
P133637R	80	6.2	0.73	1580	350	0.25	12	0.03	0.2	0	57	25	1.12
P133638R	10	1.4	0.78	234	310	0.2	1	0.06	0.2	1	125	57	3.59
P133639R	10	0.6	0.16	186	130	0.2	1	0	0.2	0	217	5	0.44

## Target 18 Rock Sample Description Sheet

Sample	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc
M686729R	5	200	0.57	10	0.13	40	1	0.01	1	610	120	22	3
M686730R	5	5	0.17	10	0.79	270	0.5	0.06	1	390	12	1	6
M686731R	5	30	0.38	5	0.03	15	3	0.01	2	140	44	70	2
M686732R	5	150	0.005	5	0.005	25	7	0.005	46	-1	378	1020	8
M686733R	5	520	0.34	10	0.09	20	0.5	0.01	4	110	34	6	2
M686734R	5	910	0.28	10	0.15	90	0	0.01	6	440	16	6	2
M690172R	5	5	0.18	5	0.26	265	1	0.1	8	160	34	1	1
P133634R	5	10	0.06	5	0.09	90	0	0.11	1	5	12	1	2
P133635R	5	170	0.32	10	0.04	480	0	0	5	220	174	34	1
P133636R	5	900	0.34	10	0.08	255	3	0.01	15	1410	108	20	2
P133637R	5	3260	0.43	30	0.06	45	0	0.01	1	230	1720	14	2
P133638R	5	170	0.21	5	0.27	135	15	0	20	730	34	4	3
P133639R	5	2140	0.08	5	0.01	20	7	0	3	60	136	12	0

**Target 18**  
**Rock Sample Description Sheet**

Sample	Sr	Ti	Tl	U	V	W	Zn	Comments
M686729R	22	0	5	5	14	5	60	Dissem As, Py, speckled lim. after sulphid
M686730R	25	0.01	5	5	24	5	30	Qzpas stringers, yellow scor. alteration
M686731R	9	0	5	5	14	5	10	Qz porphy monz; yellow As alteration
M686732R	0.5	0	5	40	0.5	5	160	As vein breccia?
M686733R	9	0	5	5	4	5	14	Mod. yellow scor. alt
M686734R	17	0	5	5	18	5	26	Mod. scorodite stain
M690172R	46	0	5	5	4	5	168	
P133634R	23	0.04	5	5	6	5	10	Strong Fe stain in soil, local Qz stringers
P133635R	9	0	5	5	5	5	206	Strong limonite, local pasty gouge + grap
P133636R	22	0	5	5	25	5	54	Strong limonite along joints, shear planes
P133637R	22	0	5	5	4	5	32	Mod, perv. scor; select c.gr
P133638R	20	0	5	5	78	5	160	Contains small shear zone
P133639R	14	0	5	5	5	5	2	Fractured, joint controlled scorodite

**APPENDIX 3**  
**SOIL ASSAY RESULTS**

**Target 18  
Soil Sample Description Sheet**

Sample	X_Coord	Y_Coord	Z_Coord	Zone	Horizon	Depth_cm	Slope_Ang	Colour	Permafros	Cae	Frag	Vegetatio	Surf_Geol	Frag_Lith	Organics	Date	Name
18G 0000	403846.1	6982939			9 C	15	st	gry		50		Stunted cf	Tf	Intrsv	10	06/28/98	GDM
18G 0100	403755	6982968			9 B/C	20	mod	brn		30		Stunted cf	Cv	SLT		06/28/98	GDM
18G 0200	403672.8	6983009		NS												06/28/98	GDM
18G 0300	403590.2	6983049			9 B/C	10	mod	brn		30		Stunted d	Cv	SLT		06/28/98	GDM
18G 0400	403494.9	6983091			9 B	5	mod	brn		0		Stunted d	Tf	SLT		06/28/98	GDM
18G 0500	403393.7	6983135			9 B	10	mod	brn		20						06/28/98	GDM
18G 0600	403308.8	6983189			9 B/C	10	st	brn		30		Stunted d	Cv	SLT		06/28/98	GDM
18G 0700	403408.8	6983269		NS	NS											06/28/98	GDM
18G 0800	402942.5	6983181			9 B/C	5	st	tan		0		Stunted d	Cv	Intrsv		06/28/98	GDM
18G 0900	403042.5	6983261			9 B/C	5	mod	brn		0		Stunted d	Cv	Intrsv		06/28/98	GDM
18G 01000	402947.8	6983291			9 B/C	10	mod	brn		10		Stunted d	Cv	Intrsv		06/28/98	GDM
18G 01100	402865	6983348			9 B	10	rt	brn		10		Stunted d	Cv	Intrsv		06/28/98	GDM
18G 01200	402783.9	6983381		NS	NS											06/28/98	GDM
18G 01300	402702.8	6983414			9 B/C	15	st	brn		10		Stunted d	Cv	Intrsv	10	06/28/98	GDM
18G 01400	402620.3	6983427			9 B/C	15	st	brn		10		Stunted d	Cv	Intrsv	5	06/28/98	GDM
18G 01500	402519.1	6983473			9 C	15	rt	brn		60		td	Cv	Intrsv	5	06/28/98	GDM
18G 01600	402426.9	6983516			9 B	15	st	brn		20		Stunted d	Cv	Intrsv	5	06/28/98	GDM
18G 01700	402342.7	6983549			9 B	15	flat	brn		10		Stunted d	Cv			06/28/98	GDM
18G 01800	402244.7	6983583		NS	NS										20	06/28/98	GDM
18G 01900	402146.6	6983618			9 B	15	sl	brn		0		cf	Cv		10	06/28/98	GDM
18G 02000	402067.8	6983633			8 B	15	mod	tan		10		cf	Cv		10	06/28/98	GDM
18G 02100	401989.1	6983673			8 B	15	st	tan		0		cf	Cv			06/28/98	GDM
18H 0000	404291.7	6982918			9 B	10	sl	tan		20		cf	Tf	CH	0	06/28/98	SE
18H 0100	404378.8	6982899			9 B	30	sl	brn		20		cf	Tf	CH	0	06/28/98	SE
18H 0200	404500.2	6982845			9 B	20	sl	tan		20		cf	Tf	CH	0	06/28/98	SE
18H 0300	404575.3	6982817			9 B	20	sl	tan		30		cf	Tf	CH	0	06/28/98	SE
18H 0400	404671.2	6982769			9 B	20	sl	tan		20		cf	Tf	CH	0	06/28/98	SE
18H 0500	404791.8	6982737			9 B	30	sl	gry		30		cf	ti		0	06/28/98	SE
18H 0600	404879.9	6982707			9 B	20	sl	gry		40		cf	ti		0	06/28/98	SE
18H 0700	404975.5	6982654			9 B	20	sl	brn		70		cf	Tf	CH	0	06/28/98	SE
18H 0800	405043.5	6982613			9 B	20	sl	brn		30		cf	Tf	CH	0	06/28/98	SE
18H 0900	405133.2	6982589			9 B	10	sl	brn		30		cf	Tf	CH	0	06/28/98	SE
18H 1000	405202.5	6982568			9 B	10	sl	gry		40		cf	ti		0	06/28/98	SE
18H 1100	405283.5	6982533			9 B	30	sl	gry		30		cf	ti		0	06/28/98	SE
18H 1200	405378.9	6982494			9 B	10	st	gry		20		cf	ti		0	06/28/98	SE
18H 1300	405457.8	6982465			9 B	20	mod	gry		20		cf	ti		0	06/28/98	SE
18H 1400	405520.9	6982440			9 B	10	sl	gry		20		cf	ti		0	06/28/98	SE
18H 1500	405617.2	6982408			9 B	30	sl	brn		10		cf	Tf	CH	0	06/28/98	SE
18H 1600	405713.4	6982369			9 B	20	sl	brn		30		cf	Tf	CH	0	06/28/98	SE
18H 1700	405798.1	6982332			9 B	20	sl	brn		40		cf	Tf	CH	0	06/28/98	SE
18H 1800	405901.7	6982288			9 B	10	sl	tan		30		cf	Tf	CH	0	06/28/98	SE
18H 1900	406003.3	6982253			9 B	10	sl	tan		30		cf	Tf	CH	0	06/28/98	SE
18H 2000	406081.7	6982222			9 A	40	sl	brn		0		cf			80	06/28/98	SE
18H 2100	406155.7	6982188			9 A	40	sl	brn		0		cf			60	06/28/98	SE
18H 2200	406251.8	6982130			9 A	40	sl	brn		0		cf			60	06/28/98	SE

**Target 18  
Soil Sample Description Sheet**

Sample	X_Coord	Y_Coord	Z_Coord	Zone	Horizon	Depth_cm	Slope_Ang	Colour	Permafros	Cse_Frags	Vegetation	Surf_Geol	Frag_Lith	Organics	Date	Name
18H 2300	406343.7	6982118			9 A	40	sl	brn		0	cf			80	06/28/98	SE
18H 2400	406421.9	6982089			9 A	30	sl	brn		0	cf			60	06/28/98	SE
18H 2500	406525.6	6982050			9 B	20	sl	tan		10	cf			10	06/28/98	SE
18H 2700	406669.8	6981982			9 B	20	sl	gry		10	bb			0	06/28/98	SE
18J 0000	402691.3	6982509			9 B	10	rt	brn		<5	td	Rb	QBM	<5	06/28/98	CS
18J 0085	402585.5	6982507			9 B	10	rt	tan		10	td	Rb	QBM	5	06/28/98	CS
18J 0200	402484.9	6982521			9 B	20	rt	brn		25	td	Tf	LQBM	<5	06/28/98	CS
18J 0300	402386.4	6982543			9 B	20	rt	tan		20	td	Tf	AQBM	10	06/28/98	CS
18J 0400	402299.9	6982571			9 B	25	st	tan		25	td	Tf	QBM	5	06/28/98	CS
18J 0500	402210.1	6982641			9 B	10	rt	brn		15	td		QBM	20	06/28/98	CS
18J 0600	402119	6982671			9 B	25	rt	brn		20	td		QBM	10	06/28/98	CS
18J 0700	402037.3	6982677			9 B	20	rt	tan		15	td	Tf	QBM	5	06/28/98	CS
18J 0800	401943	6982665			9 B	15	rt	brn		15	nv	Tf	QBM	<5	06/28/98	CS
18J 0900	401843.8	6982676			9 B	10	mod	tan		5	td	Tf	QBM	10	06/28/98	CS
18J 1000	401820	6982785			9 B	15	st	tan		35	nv	Tf	QBM	<5	06/28/98	CS
18J 1100	401756.3	6982666			9 B	20	st	tan		50	td	Tf	SH	10	06/28/98	CS
18J 1200	401669.1	6982903			9 B	15	st	brn		40	td	Tf	QBM	5	06/28/98	CS
18J 1300	401568.1	6982908			9	15	st	brn		50	nv	Tf	SH	5	06/28/98	CS
18J 1400	401456.2	6982896			9 A	30	st	brn		35	td	Tf	SH	30	06/28/98	CS
18J 1500	401378.8	6982909			9 A	20	st	brn		60	td	Tf	SH	20	06/28/98	CS
18J 1600	401280.5	6982971			9	10	st	gry		50	td	Tf	SH	<5	06/28/98	CS
18J 1700	401210.8	6982999			9	35	st	brn		35	td	Tf	SH	10	06/28/98	CS
18J 1800	401148.4	6983036			9	20	st	brn		40	td	Tf	SH	15	06/28/98	CS
18J 1900	401108.6	6983071			9 B	25	st	tan		5	td	Cv		10	06/28/98	CS
18J 2000	401026.4	6983092			9 B	25	st	brn		35	stunted cf	Cv	SH	5	06/28/98	CS
18J 2100	400943	6983118			9 B	30	st	gry		35	stunted cf	Cv	CH	15	06/28/98	CS
18L 0000	402693.3	6981852			9 B	20	st	gry		20	cf	Tf	CH	0	06/29/98	SE
18L 0100	402608.6	6981867			9 B	10	st	or		20	cf	Tf	CH	0	06/29/98	SE
18L 0200	402547.6	6981885			9 B	20	st	or		40	cf	Tf	CH	0	06/29/98	SE
18L 0300	402464.3	6981923			9 B	20	st	gry		50	cf	Tf	CH	0	06/29/98	SE
18L 0400	402383.1	6981950			9 B	20	st	gry		40	cf	Tf	CH	0	06/29/98	SE
18L 0500	402301.8	6981986			9 B	20	st	gry		20	cf	Tf	CH	0	06/29/98	SE
18L 0600	402235.4	6982020			9 B	10	st	gry		10	cf	Tf	Intrsv	0	06/29/98	SE
18L 0700	402144.4	6982074			9 B	10	st	gry		10	cf	Tf	Intrsv	0	06/29/98	SE
18L 0800	402054.6	6982098			9 B	20	st	brn		30	cf	Tf	Intrsv	0	06/29/98	SE
18L 0900	401964	6982142			9 AB	20	st	buff		40	cf	Tf	CH	30	06/29/98	SE
18L 1000	401882.6	6982167			9 AB	10	st	buff		30	cf	Tf	CH	40	06/29/98	SE
18L 1100	401803.4	6982211			9 AB	10	st	tan		30	cf	Tf	CH	20	06/29/98	SE
18L 1200	401713.8	6982239			9 AB	10	st	tan		30	cf	Tf	CH	30	06/29/98	SE
18L 1300	401634.9	6982271			9 B	30	st	or		10	cf	Tf	CH	10	06/29/98	SE
18L 1400	401535.1	6982312			9 B	20	st	gry		30	cf	Tf	CH	0	06/29/98	SE
18L 1500	401458.1	6982354			9 B	10	st	brn		10	cf	Tf	CH	10	06/29/98	SE
18L 1600	401377.2	6982394			9 B	10	st	or		30	cf	Tf	CH	0	06/29/98	SE
18L 1700	401303	6982428			9 B	10	st	tan		20	cf	Tf	CH	0	06/29/98	SE
18L 1800	401209.3	6982473			9 B	20	st	brn		10	cf	Tf	CH	0	06/29/98	SE

**Target 18  
Soil Sample Description Sheet**

Sample	X_Coord	Y_Coord	Z_Coord	Zone	Horizon	Depth_cm	Slope_Ang	Colour	Permafros	Cse_Frags	Vegetation	Surf_Geol	Frag_Lith	Organics	Date	Name
18L 1900	401110.2	6982512			9 B	10	st	brn		10	cf	Tf	CH	0	06/29/98	SE
18L 2000	401043.7	6982552			9 B	10	st	brn		20	cf	Tf	CH	10	06/29/98	SE
18L 2100	400954	6982574			9 B	10	st	brn		30	cf	Tf	CH	10	06/29/98	SE
18L 2200	400867.2	6982620			9 B	20	st	brn		10	cf	Tf	CH	10	06/29/98	SE
18L 2300	400765.8	6982662			9 B	20	st	brn		20	cf	Tf	CH	0	06/29/98	SE
18L 2400	400678.9	6982702			9 B	10	st	brn		10	cf	Tf	CH	10	06/29/98	SE
18L 2500	400611	6982720			9 B	0	rt	tan		10	td	Tf	CH	0	06/29/98	SE
18L 2600	400523.8	6982752			9 B	20	st	brn		20	td	Tf	CH	0	06/29/98	SE
18L 2700	400428.7	6982799			9 B	10	st	brn		10	td	Tf	CH	0	06/29/98	SE
18L 2800	400331.5	6982828			9 B	20	mod	brn		10	td	Tf	CH	0	06/29/98	SE
18L 2900	400243.2	6982875			9 B	10	mod	brn		0	cf	Tf	CH	20	06/29/98	SE
18L 3000	400163.7	6982908			9 B	20	mod	brn		10	cf	Tf	CH	0	06/29/98	SE
18L 3100	400073	6982951			9 B	20	mod	brn		30	cf	Tf	CH	10	06/29/98	SE
18L 3200	399984.1	6982967			9 B	10	mod	tan		10	cf	ti		0	06/29/98	SE
18L 3300	399905.4	6982998			9 B	10	mod	tan		10	cf	ti		0	06/29/98	SE
18M 0000	402764.6	6981817			8 B/C	16	mod	brn		50	de				06/29/98	M.M.
18M 0100	402878.6	6981772			8 B/C	16	mod	brn		60	de				06/29/98	M.M.
18M 0200	402981.3	6981725			8 B/C	16	mod	brn		60	de				06/29/98	M.M.
18M 0300	403080.6	6981689			8 B/C	16	mod	gry brn		60	de				06/29/98	M.M.
18M 0400	403178.5	6981643			8 B/C	16	mod	gry brn		50	de				06/29/98	M.M.
18M 0500	403275.5	6981601			8 B/C	16	mod	gry brn		50	de				06/29/98	M.M.
18M 0750	403492.5	6981511			8 B/C	16	mod	gry brn		50	de				06/29/98	M.M.
18M 0850	403559.2	6981481			8 B/C	20	mod	gry		60	de				06/29/98	M.M.
18M 0950	403631.2	6981447			8 B	20	mod	brn		50	de				06/29/98	M.M.
18M 1050	403703.4	6981422			8 B	20	mod	brn		50	de				06/29/98	M.M.
18M 1150	403798.7	6981380			8 B	18	mod	tan		40	de				06/29/98	M.M.
18M 1250	403880.3	6981339			8 B	14	mod	tan		30	de				06/29/98	M.M.
18M 1350	403948.9	6981296			8 B	12	mod	tan		30	de				06/29/98	M.M.
18M 1450	404045.6	6981252			8 A/C	16	mod	gry		60	de				06/29/98	M.M.
18M 1650	404168	6981201			8 A/B	20	mod	gry		40	de				06/29/98	M.M.
18M 1850	404343.7	6981108			8 A/B	20	mod	gry		40	de				06/29/98	M.M.
18M 1975	404438.2	6981065			8 B	20	mod	tan		50	de				06/29/98	M.M.
18M 2075	404521.4	6981028			8 A/B	14	mod	gry brn		60	de				06/29/98	M.M.

**Target 18  
Soil Sample Description Sheet**

Sample	Au_ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo
18G 0000	10	0.2	0.96	38	120	0.2	1	0.02	0.2	3	18	30	2.02	5	30	0.09	10	0.08	120	10
18G 0100	2	0.4	1.49	24	170	0.2	1	0.03	0.2	3	23	36	2.37	5	30	0.11	10	0.14	160	13
18G 0200	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18G 0300	5	0.6	1.34	88	110	0.2	1	0.03	0.2	5	15	50	3.08	10	10	0.08	10	0.16	145	12
18G 0400	5	0.6	1.37	68	140	0.2	1	0.09	1	4	11	29	1.76	5	30	0.06	5	0.18	150	3
18G 0500	10	1.4	1.05	16	130	0.5	1	0.01	0.2	8	12	54	2.69	5	60	0.12	10	0.05	110	7
18G 0600	15	1.4	1.89	124	350	1.5	1	0.35	8	25	28	137	3.79	5	130	0.24	30	0.52	2000	27
18G 0700	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18G 0800	15	0.2	3.17	168	210	1.5	8	0.35	0.5	10	13	58	2.38	5	20	0.12	10	0.63	520	1
18G 0900	20	0.2	2.99	312	110	0.5	8	0.1	0.5	6	12	47	2.51	5	20	0.07	10	0.35	265	3
18G 01000	2	0.1	0.47	6	10	0.2	1	0.15	0.2	1	2	6	0.59	5	5	0.02	5	0.04	30	1
18G 01100	2	0.2	1.55	28	180	0.5	1	0.03	0.2	2	22	22	2.73	5	30	0.16	10	0.3	105	8
18G 01200	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18G 01300	15	0.8	3.03	562	320	1	2	0.19	1.5	15	35	142	4.49	10	30	0.17	30	0.83	805	13
18G 01400	25	0.2	1.41	464	80	0.2	1	0.09	0.2	2	24	55	1.92	5	30	0.08	5	0.25	95	9
18G 01500	10	0.8	0.71	136	120	0.2	2	0.01	0.2	1	18	32	1.99	5	20	0.1	10	0.09	40	6
18G 01800	10	1	2.89	184	210	1	1	0.11	0.2	7	74	152	6.15	10	20	0.17	10	0.75	330	11
18G 01700	2	0.2	0.52	4	10	0.2	1	0.05	0.2	1	3	7	0.5	5	5	0.02	5	0.04	20	1
18G 01800	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18G 01900	45	6.8	3.08	1160	390	1.5	18	0.59	5	36	26	386	4.68	10	130	0.18	20	0.86	895	11
18G 02000	35	0.2	2.36	400	240	0.2	8	0.14	0.2	4	29	72	3.16	10	20	0.15	10	0.63	245	10
18G 02100	2	0.2	0.16	2	10	0.2	1	0.03	0.2	<1	1	1	0.39	5	5	0.03	5	0.03	20	1
18H 0000	2	0.6	0.95	16	250	0.2	1	0.03	0.2	3	22	24	2.1	5	60	0.14	10	0.12	135	6
18H 0100	10	0.8	1.11	18	220	0.2	1	0.03	0.2	4	24	32	2.24	5	50	0.12	10	0.12	115	8
18H 0200	10	1	1.19	24	220	0.2	1	0.08	0.2	7	25	44	3.2	5	110	0.13	10	0.17	345	7
18H 0300	2	0.1	0.59	8	100	0.2	1	0.01	0.2	3	11	21	1.33	5	10	0.09	5	0.05	65	5
18H 0400	2	0.4	1.03	8	180	0.2	1	0.04	0.2	3	20	17	1.72	5	30	0.1	10	0.13	140	4
18H 0500	10	1	0.88	20	410	0.5	1	0.07	2.5	5	27	68	1.9	5	200	0.18	10	0.12	85	25
18H 0600	2	0.2	0.93	16	180	0.2	1	0.01	0.2	5	21	34	2.37	5	30	0.12	10	0.09	175	9
18H 0700	2	0.1	0.67	8	130	0.2	1	0.01	0.2	3	13	33	1.46	5	10	0.14	5	0.05	35	4
18H 0800	10	0.1	1.28	14	430	0.5	1	0.01	0.2	17	20	88	4.57	5	100	0.27	5	0.12	455	14
18H 0900	5	2.4	0.83	16	260	0.2	1	0.01	0.2	5	51	47	1.97	5	60	0.17	10	0.07	75	12
18H 1000	10	0.8	1.03	18	300	0.2	1	0.03	0.2	5	27	47	2.22	5	120	0.16	5	0.15	165	8
18H 1100	15	1.8	0.98	54	880	0.5	1	0.29	12	10	35	139	2.12	5	860	0.2	10	0.16	620	47
18H 1200	2	1	0.86	20	190	0.2	1	0.02	1.5	3	25	50	1.45	5	170	0.12	5	0.07	45	23
18H 1300	10	0.6	0.9	20	170	0.2	1	0.01	0.2	7	24	50	2.43	5	30	0.15	10	0.07	100	14
18H 1400	5	1.2	1.24	8	120	0.2	1	0.01	0.2	8	15	69	3.69	5	10	0.15	5	0.07	160	6
18H 1500	5	0.2	0.76	12	140	0.2	1	0.01	0.2	8	10	59	3.65	5	10	0.11	5	0.04	105	6
18H 1600	2	0.2	0.85	10	140	0.2	1	0.01	0.2	6	18	41	2.12	5	10	0.13	5	0.06	100	8
18H 1700	2	0.6	1	10	170	0.2	1	0.01	0.2	9	17	62	2.46	5	30	0.11	5	0.05	240	8
18H 1800	5	0.1	0.97	10	150	0.2	1	0.01	0.2	6	18	72	2.81	5	40	0.12	10	0.05	100	5
18H 1900	2	0.6	0.77	6	110	0.2	2	0.01	0.2	8	12	46	2.84	5	10	0.14	5	0.06	185	1
18H 2000	25	2.6	2.05	6	1160	0.5	1	0.88	2	6	30	73	1.98	5	1040	0.19	5	0.37	225	5
18H 2100	25	4.4	2.02	10	980	0.5	1	0.64	3.5	12	33	68	2.46	5	1010	0.18	5	0.31	545	5
18H 2200	10	1.2	1.22	8	850	0.5	1	0.36	1.5	7	22	52	2	5	380	0.14	10	0.25	265	5

**Target 18**  
**Soil Sample Description Sheet**

Sample	Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo
18H 2300	2	0.1	1.01	16	180	0.2	1	0.01	0.2	6	17	31	2.52	5	20	0.13	5	0.11	170	6
18H 2400	2	0.1	1.31	22	260	0.2	1	0.02	0.2	7	25	36	2.9	5	30	0.18	10	0.15	190	8
18H 2500	10	2.2	2.29	10	1170	0.5	1	0.49	2	8	36	42	2.15	5	590	0.23	10	0.36	930	6
18H 2700	2	0.6	0.81	16	260	0.2	1	0.03	0.5	5	19	40	2.02	5	80	0.13	5	0.09	270	7
18J 0000	2	0.1	4.05	124	750	1	1	1.17	0.2	11	16	15	2.5	5	20	0.21	40	0.68	485	1
18J 0085	2	2.2	2.84	1120	170	1.5	22	0.72	0.2	8	7	695	3.12	5	30	0.22	30	0.53	520	1
18J 0200	2	0.2	1.93	254	130	0.5	2	0.39	0.2	9	10	68	2.73	5	40	0.08	30	0.36	345	1
18J 0300	20	0.1	4	58	330	0.5	6	0.5	0.2	8	14	56	3.26	5	20	0.1	10	0.85	220	2
18J 0400	70	1	3.67	1310	200	1	80	1.23	0.2	13	12	239	3.54	5	30	0.14	40	0.68	335	2
18J 0500	70	0.8	4.55	532	280	1.5	18	0.99	0.2	8	10	244	2.76	10	20	0.15	30	0.89	325	1
18J 0600	2	0.1	3.84	88	180	0.5	6	0.82	0.2	10	9	65	3.2	10	5	0.12	20	0.99	215	2
18J 0700	2	0.2	2.9	134	80	1.5	1	0.81	0.2	10	6	34	2.65	5	20	0.09	30	0.72	630	1
18J 0800	20	0.2	4.21	352	160	1.5	10	0.85	0.2	15	15	79	3.95	10	40	0.19	20	0.98	465	3
18J 0900	10	0.1	3.2	66	140	1.5	2	0.72	0.2	10	15	34	2.73	10	10	0.23	20	0.98	300	2
18J 1000	145	1.6	2.26	1390	170	2	24	0.61	0.5	41	6	551	6.19	5	130	0.14	40	0.35	940	14
18J 1100	125	2	2.11	2220	290	1.5	16	0.25	2	22	20	335	6.44	5	30	0.26	30	0.53	1125	5
18J 1200	30	0.4	3.6	358	450	1.5	1	0.08	0.5	26	49	155	8.37	10	30	0.76	20	1.21	1565	14
18J 1300	50	1.6	3.06	316	400	1	8	0.06	0.2	9	87	314	12.9	10	50	0.65	20	1.28	745	22
18J 1400	15	0.6	3.23	72	370	2	1	0.06	0.5	10	61	129	5.55	10	130	0.44	30	1.25	640	20
18J 1500	2	0.8	1.42	72	430	0.5	1	0.04	0.2	5	39	70	4.15	5	180	0.23	20	0.17	1875	11
18J 1600	20	1.2	2.55	52	510	1.5	1	0.12	0.5	5	64	118	4.79	10	150	0.58	40	0.82	1075	17
18J 1700	10	1.4	1.25	38	340	0.2	1	0.01	0.2	3	52	53	3.59	5	510	0.3	20	0.13	200	7
18J 1800	10	0.2	1.3	14	230	0.2	1	0.08	0.2	2	20	34	2.02	5	320	0.25	10	0.37	100	6
18J 1900	2	0.4	0.53	8	60	0.2	1	0.07	0.2	1	6	12	0.66	5	30	0.06	5	0.07	45	1
18J 2000	2	0.2	1.37	22	330	0.2	1	0.03	1	7	24	50	2.71	5	60	0.2	10	0.09	1615	4
18J 2100	15	1	0.82	12	470	0.5	1	0.02	0.2	5	35	41	1.67	5	100	0.19	20	0.07	1540	3
18L 0000	2	0.1	0.63	12	180	0.2	1	0.01	0.2	2	11	15	1.12	5	10	0.09	10	0.07	100	3
18L 0100	2	0.1	1.66	16	250	0.2	1	0.05	0.5	7	28	34	3.27	5	20	0.15	10	0.32	365	4
18L 0200	2	0.1	0.87	6	280	0.2	1	0.11	0.5	4	16	37	1.56	5	30	0.09	10	0.13	530	2
18L 0300	2	0.2	0.88	10	140	0.2	2	0.04	0.5	2	11	18	1.12	5	10	0.06	10	0.06	70	1
18L 0400	2	0.2	1.03	26	210	0.2	1	0.04	0.5	4	14	32	2	5	10	0.1	10	0.15	170	1
18L 0500	2	0.2	1.05	16	170	0.2	2	0.02	0.2	3	14	29	1.98	5	10	0.1	10	0.11	110	1
18L 0600	2	0.1	1.32	18	130	0.2	2	0.01	0.2	18	21	117	4.29	5	10	0.09	20	0.1	1130	1
18L 0700	2	1	0.82	66	340	0.5	1	0.02	0.2	4	17	54	2.54	5	30	0.19	10	0.13	235	19
18L 0800	10	0.2	1.39	48	150	0.2	1	0.07	0.2	4	15	31	2.38	5	20	0.09	10	0.17	130	2
18L 0900	50	1.2	1.16	28	370	0.2	1	0.17	2.5	8	20	55	4.94	5	70	0.21	20	0.12	530	7
18L 1000	2	0.8	0.99	12	200	0.2	2	0.03	2	23	13	45	2.5	5	20	0.09	10	0.12	1050	1
18L 1100	60	0.8	1.95	26	370	0.5	6	0.06	2	7	39	222	10.3	5	70	0.25	10	0.21	415	6
18L 1200	20	1.6	2.11	64	260	0.5	1	0.06	0.2	8	44	126	5.7	5	40	0.29	30	0.54	670	12
18L 1300	25	0.6	5.05	1	310	2	1	0.17	1	50	61	109	6.38	10	10	0.16	20	4.83	2150	4
18L 1400	20	1.8	0.91	256	190	0.2	4	0.04	0.2	6	28	91	4.75	5	50	0.16	20	0.11	550	4
18L 1500	2	0.6	0.9	50	180	0.2	1	0.04	0.5	5	26	56	3.03	5	110	0.12	10	0.09	440	1
18L 1600	2	0.2	1.29	16	290	0.2	2	0.03	0.5	22	17	73	4.66	5	40	0.11	10	0.12	1800	1
18L 1700	2	0.2	0.71	24	110	0.2	2	0.01	0.2	3	9	38	1.94	5	10	0.07	10	0.04	150	3
18L 1800	2	0.4	1.42	56	180	0.2	4	0.03	0.2	8	27	45	4.01	5	30	0.13	10	0.27	340	5

**Target 18  
Soil Sample Description Sheet**

Sample	Au_ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo
18L 1900	30	0.2	2.25	42	230	1	1	0.06	1.5	33	29	178	6.8	5	160	0.14	10	0.38	1045	9
18L 2000	2	0.2	1.3	16	160	0.2	1	0.06	0.2	7	21	35	2.34	5	80	0.07	10	0.34	290	1
18L 2100	2	0.1	1.03	6	280	0.2	2	0.06	0.5	13	14	33	2.99	5	30	0.1	10	0.12	1420	4
18L 2200	2	0.2	1.33	10	480	0.2	1	0.03	2.5	14	26	48	3.21	5	40	0.17	10	0.12	965	3
18L 2300	2	0.1	1.04	6	390	0.2	2	0.09	4.5	24	14	44	2.57	5	30	0.14	10	0.1	2510	2
18L 2400	2	0.2	1.57	8	330	0.5	1	0.07	2	25	23	82	4.3	5	80	0.22	10	0.26	760	5
18L 2500	2	0.1	2.36	1	180	1	1	0.11	0.5	12	7	12	3.27	5	30	0.13	20	0.5	900	2
18L 2600	40	0.8	2.07	20	550	0.5	2	0.04	0.2	24	40	144	8.65	5	140	0.33	20	0.38	650	11
18L 2700	2	0.1	1.19	8	170	0.2	1	0.02	0.2	11	24	65	3.93	5	50	0.15	10	0.15	670	4
18L 2800	2	0.6	0.83	12	790	0.2	1	0.01	0.2	5	24	38	2.05	5	70	0.16	10	0.05	3410	5
18L 2900	2	0.1	1.59	2	350	0.5	1	0.04	1	16	22	81	3.87	5	20	0.21	10	0.19	3640	1
18L 3000	2	0.1	0.66	14	80	0.2	1	0.01	0.2	8	14	51	1.8	5	20	0.05	5	0.02	915	1
18L 3100	2	0.2	1.16	10	180	0.2	1	0.02	0.2	9	20	57	3.1	5	20	0.11	10	0.16	495	6
18L 3200	2	0.1	0.83	6	150	0.2	1	0.02	0.2	9	14	57	2.6	5	10	0.1	5	0.08	730	3
18L 3300	2	0.1	0.81	4	160	0.2	1	0.03	0.2	3	14	22	1.12	5	10	0.09	10	0.08	120	3
18M 0000	2	0.2	0.96	10	200	0.2	1	0.01	0.2	6	17	35	2.58	5	10	0.11	10	0.1	365	4
18M 0100	2	0.1	1.19	22	210	0.2	2	0.01	0.2	13	19	85	4.54	5	20	0.16	5	0.1	1185	4
18M 0200	2	0.1	0.86	10	140	0.2	2	0.01	0.2	5	14	21	2.25	5	10	0.08	5	0.09	320	2
18M 0300	2	0.4	0.95	18	260	0.2	1	0.09	0.5	13	18	36	2.35	5	60	0.09	10	0.18	760	5
18M 0400	2	0.8	1.03	18	220	0.2	1	0.04	0.2	9	16	35	2.06	5	100	0.07	10	0.17	375	5
18M 0500	2	0.2	0.75	10	200	0.2	1	0.03	0.2	4	15	21	1.97	5	20	0.1	10	0.11	160	3
18M 0750	2	0.6	0.83	16	460	0.2	1	0.07	1	13	16	39	2.01	5	70	0.12	5	0.15	950	1
18M 0850	2	0.2	0.53	8	160	0.2	1	0.04	0.2	2	9	12	0.9	5	10	0.08	5	0.06	130	1
18M 0950	2	0.2	0.6	10	200	0.2	1	0.01	0.2	3	10	17	1.44	5	20	0.08	5	0.06	115	1
18M 1050	2	0.2	0.88	20	300	0.5	2	0.08	0.5	9	15	61	2.41	5	130	0.13	5	0.17	530	2
18M 1150	15	0.1	0.89	18	270	0.5	1	0.01	0.2	22	13	110	4.97	5	50	0.13	5	0.12	500	3
18M 1250	2	0.1	0.55	14	110	0.2	1	0.04	0.2	23	10	99	5.13	5	30	0.06	5	0.04	1525	1
18M 1350	2	0.1	0.63	6	160	0.2	1	0.01	0.2	8	9	58	2.33	5	20	0.05	5	0.05	405	3
18M 1450	2	0.1	0.25	1	70	0.2	1	0.01	0.5	1	4	16	0.63	5	20	0.03	5	0.01	105	1
18M 1650	2	0.8	0.31	14	300	0.2	1	0.04	0.2	2	20	30	1.18	5	30	0.12	5	0.02	110	3
18M 1850	10	0.1	0.75	18	140	0.2	1	0.02	0.2	5	16	57	2.57	5	50	0.21	10	0.16	280	5
18M 1975	15	1.6	1.45	38	270	0.2	1	0.28	1	10	27	113	4.71	5	180	0.25	10	0.22	400	17
18M 2075	2	0.1	0.29	6	30	0.2	1	0.01	0.2	1	4	8	0.7	5	10	0.04	5	0.02	35	1

**Target 18**  
**Soil Sample Description Sheet**

Sample	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Comments
18G 0000	0.01	15	560	22	1	0	19	0.03	5	5	194	5	94	
18G 0100	0.01	25	920	34	2	0	25	0.01	5	5	195	5	156	
18G 0200	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	N/S
18G 0300	0.01	27	420	30	1	1	23	0.05	5	5	253	5	222	
18G 0400	0.04	18	640	12	1	0	21	0.01	5	5	72	5	160	
18G 0500	0.03	78	930	16	1	1	27	0	5	5	50	5	524	
18G 0600	0.01	160	920	108	18	5	73	0.02	5	5	218	5	932	
18G 0700	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	N/S
18G 0800	0	9	630	90	6	4	67	0.02	5	5	40	5	148	
18G 0900	0.01	8	600	224	14	1	18	0	5	5	43	5	158	
18G 01000	0.05	0	810	1	1	0	9	0.03	5	5	19	5	8	
18G 01100	0.04	12	900	18	2	0	16	0.02	5	5	74	5	108	
18G 01200	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	N/S
18G 01300	0.01	87	780	228	10	4	51	0.04	5	5	180	5	438	
18G 01400	0.03	13	760	38	1	0	28	0.04	5	5	218	5	84	
18G 01500	0.01	9	400	32	1	1	29	0.04	5	5	90	5	76	
18G 01600	0.01	57	1020	54	4	4	56	0.07	5	5	151	5	296	
18G 01700	0.06	1	280	2	1	0	6	0.03	5	5	15	5	8	
18G 01800	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	N/S
18G 01900	0.03	92	930	96	16	4	97	0.03	5	5	105	5	444	
18G 02000	0.01	23	570	38	2	1	30	0.04	5	5	187	5	144	
18G 02100	0.08	0	140	1	1	0	5	0.01	5	5	13	5	6	
18H 0000	0	17	1000	18	1	0	24	0	5	5	126	5	112	
18H 0100	0	25	1090	16	1	0	26	0	5	5	133	5	164	
18H 0200	0	24	1170	16	1	0	26	0.01	5	5	104	5	144	
18H 0300	0.03	15	300	6	1	0	9	0.01	5	5	92	5	92	
18H 0400	0.03	14	440	14	1	0	20	0.01	5	5	114	5	86	
18H 0500	0.01	47	640	12	8	1	44	0.01	5	5	335	5	332	
18H 0600	0.01	27	600	18	1	1	25	0.01	5	5	148	5	172	
18H 0700	0.03	24	400	4	1	0	8	0	5	5	60	5	186	
18H 0800	0.01	90	680	16	1	4	17	0	5	5	71	5	400	
18H 0900	0.01	42	630	20	2	0	50	0	5	5	239	5	236	
18H 1000	0	31	660	14	2	1	31	0	5	5	169	5	190	
18H 1100	0	101	800	14	16	4	56	0.01	5	5	595	5	832	
18H 1200	0.03	38	550	8	4	0	15	0	5	5	320	5	306	
18H 1300	0	45	600	14	4	1	20	0	5	5	248	5	308	
18H 1400	0	37	1000	6	1	1	8	0	5	5	87	5	164	
18H 1500	0.01	45	600	6	1	1	8	0	5	5	79	5	320	
18H 1600	0.01	40	490	12	1	1	16	0	5	5	137	5	264	
18H 1700	0.02	23	1000	8	1	0	13	0	5	5	76	5	182	
18H 1800	0.01	23	700	8	1	0	11	0.01	5	5	98	5	140	
18H 1900	0.03	27	490	4	1	2	8	0	5	5	45	5	88	
18H 2000	0.03	55	1390	12	1	5	90	0	5	5	102	5	276	
18H 2100	0.01	54	1790	20	1	4	83	0	5	5	146	5	314	
18H 2200	0.01	45	930	8	1	3	58	0.01	5	5	88	5	286	

**Target 18**  
**Soil Sample Description Sheet**

Sample	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Ti	U	V	W	Zn	Comments
18H 2300	0.01	29	690	14	1	1	16	0.01	5	5	96	5	164	
18H 2400	0	34	810	18	1	1	20	0.01	5	5	134	5	194	
18H 2500	0.02	55	1020	10	1	4	51	0	5	5	180	5	412	
18H 2700	0.02	35	770	8	2	0	16	0	5	5	133	5	240	
18J 0000	0.05	11	600	20	2	5	259	0.02	5	5	35	5	66	Near ridgetop
18J 0085	0.01	3	440	42	12	6	218	0	5	5	19	5	82	sand grain size
18J 0200	0.03	8	640	26	1	3	66	0.03	5	5	32	5	54	Rock frags of LQBM
18J 0300	0.01	11	480	18	6	4	167	0.01	5	5	31	5	58	Weakly altered QBM in area
18J 0400	0.03	9	600	32	1	5	256	0.04	5	5	33	5	68	Weakly altered QBM rcrop/talus
18J 0500	0.01	6	440	22	1	5	309	0.01	5	5	26	5	48	Mod. slope near saddle
18J 0600	0.04	4	410	18	1	5	221	0.01	5	5	21	5	34	saddle
18J 0700	0	3	380	14	8	4	58	0	5	5	12	5	34	Edge of saddle
18J 0800	0.03	8	430	30	2	6	219	0.04	5	5	30	5	60	Rubblecrop, S. side of ridge
18J 0900	0.01	7	440	20	1	6	54	0.03	5	5	29	5	44	Sparse soil among talus
18J 1000	0.04	58	630	162	52	6	202	0	5	10	26	5	154	Partial talus fines
18J 1100	0.02	32	1300	334	72	5	68	0.01	5	5	62	5	224	Mixed shale, chert, QBM
18J 1200	0.03	36	2190	38	1	7	109	0.07	5	5	113	5	184	Mixed Chert, QBM, some talus fines
18J 1300	0.02	40	2580	204	6	9	99	0.09	5	5	215	5	154	Talus fines, mixed QBM, shale, chert
18J 1400	0.01	51	1290	52	2	5	48	0.09	5	5	197	5	174	Deep "A", mixed QBM, shale frags
18J 1500	0.01	17	1430	56	6	0	30	0.03	5	5	157	5	118	Stabilized talus
18J 1600	0	15	2460	76	2	4	68	0.04	5	5	159	5	116	Talus fines, insuff. "A" instabilized ta
18J 1700	0	12	1540	52	10	1	32	0.01	5	5	118	5	100	Talus fines, QBM + shale
18J 1800	0.04	6	1280	26	1	0	38	0.01	5	5	84	5	38	Talus fines, minor soil
18J 1900	0.07	4	420	8	1	0	10	0.01	5	5	19	5	18	Narrow tan layers, leached?
18J 2000	0.02	21	1680	28	1	0	30	0	5	5	68	5	108	West side of gulch
18J 2100	0	15	1340	22	1	0	52	0	5	5	108	5	52	Poss. AB mix - local tan layer
18L 0000	0.01	8	460	6	1	0	12	0	5	5	59	5	56	
18L 0100	0	25	1050	10	1	1	23	0.02	5	5	100	5	140	
18L 0200	0.03	35	790	14	1	0	24	0.01	5	5	42	5	92	
18L 0300	0.01	9	440	10	1	0	14	0.01	5	5	43	5	50	
18L 0400	0.01	17	790	18	1	0	20	0.01	5	5	57	5	88	
18L 0500	0.01	11	840	14	1	0	24	0	5	5	60	5	50	
18L 0600	0	53	840	8	1	2	14	0.01	5	5	67	5	178	
18L 0700	0.03	11	1050	64	2	0	29	0	5	5	70	5	50	
18L 0800	0	15	460	22	1	1	30	0.04	5	5	84	5	66	
18L 0900	0.02	14	3400	42	1	0	78	0.01	5	5	73	5	138	
18L 1000	0.04	16	1310	28	2	0	21	0.01	5	5	36	5	100	
18L 1100	0.01	20	2750	16	10	1	41	0.03	5	5	55	5	154	
18L 1200	0.01	34	1580	90	6	5	33	0.04	5	5	162	5	186	
18L 1300	0	170	230	12	1	6	16	0.18	5	5	92	5	756	
18L 1400	0	25	1310	478	32	0	28	0.01	5	5	95	5	154	
18L 1500	0.01	24	1020	78	6	0	16	0.01	5	5	92	5	140	
18L 1600	0.01	35	1150	18	1	1	7	0.01	5	5	47	5	188	
18L 1700	0.02	13	480	22	2	0	10	0.01	5	5	72	5	70	
18L 1800	0	21	780	28	1	1	23	0.03	5	5	127	5	122	

**Target 18**  
**Soil Sample Description Sheet**

Sample	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Ti	U	V	W	Zn	Comments
18L 1900	0	133	1020	56	2	4	31	0.03	5	5	66	5	434	
18L 2000	0.01	20	480	20	1	1	15	0.03	5	5	57	5	92	
18L 2100	0.03	20	830	16	1	0	18	0.01	5	5	41	5	126	
18L 2200	0.01	25	1400	18	1	1	19	0.01	5	5	65	5	136	
18L 2300	0.03	26	1260	26	1	0	27	0.01	5	5	43	5	178	
18L 2400	0	47	1750	18	1	2	44	0	5	5	54	5	236	
18L 2500	0	6	650	40	1	3	10	0	5	5	24	5	94	
18L 2600	0.03	52	2600	30	6	4	95	0.01	5	5	84	5	244	
18L 2700	0	29	1120	16	1	0	18	0.01	5	5	62	5	156	
18L 2800	0.01	11	1450	18	1	0	41	0	5	5	174	5	52	
18L 2900	0.01	42	1550	20	2	1	40	0	5	5	54	5	138	
18L 3000	0.03	33	830	8	1	0	25	0	5	5	46	5	72	
18L 3100	0	31	1070	10	2	0	22	0	5	5	82	5	146	
18L 3200	0.01	31	970	8	1	0	18	0	5	5	58	5	130	
18L 3300	0.01	10	510	8	1	0	18	0	5	5	64	5	54	
18M 0000	0	20	630	10	1	1	18	0.01	5	5	78	5	104	Good Sample
18M 0100	0	35	1120	8	2	3	26	0	5	5	70	5	200	Good Sample
18M 0200	0.02	15	500	6	1	1	13	0.01	5	5	78	5	104	Good Sample
18M 0300	0	26	1270	10	2	1	29	0.01	5	5	81	5	160	Good Sample
18M 0400	0	24	690	8	1	2	23	0	5	5	71	5	142	Good Sample
18M 0500	0	16	940	12	1	0	20	0	5	5	86	5	104	Good Sample
18M 0750	0	26	920	10	1	1	29	0	5	5	68	5	152	Thick Moss/Fair Sample
18M 0850	0.02	7	380	6	1	0	14	0.01	5	5	41	5	40	Fair Sample
18M 0950	0.01	11	500	6	1	0	14	0	5	5	62	5	86	Good Sample
18M 1050	0	36	970	8	1	3	32	0	5	5	65	5	180	Good Sample
18M 1150	0	65	670	10	1	4	11	0	5	5	27	5	258	Good Sample
18M 1250	0	78	640	2	1	4	14	0	5	5	37	5	300	Good Sample
18M 1350	0.03	30	340	2	1	1	18	0	5	5	38	5	128	Good Sample
18M 1450	0.02	5	340	1	1	0	6	0	5	5	10	5	24	Fair Sample
18M 1650	0.02	14	600	16	1	0	113	0	5	5	72	5	48	Thick Moss/Fair Sample
18M 1850	0	21	1060	8	2	1	10	0	5	5	67	5	156	Thick Moss/Good Sample
18M 1975	0	37	5110	28	6	3	49	0	5	5	207	5	310	Good Sample
18M 2075	0.06	4	190	1	1	0	4	0.01	5	5	26	5	22	Fair Sample

**APPENDIX 4**  
**SILT ASSAY RESULTS**

**Target 18**  
**Silt Sample Description Sheet**

Sample_No	X_Coord	Y_Coord	Z_Coord	Traverse	Zone	Fines	Colour	Date	Name
M686995T	403520	6983016		18G		9 80	brn	06/29/98	GDM
M686996T	402333.2	6983487		18G		9 80	brn	06/29/98	GDM
M687771T	402767.6	6981845		18M		50	gry	06/29/98	MM
M687772T	402817.6	6981816		18M		60	gry	06/29/98	MM
M687773T	403431.4	6981552		18M		60	gry	06/29/98	MM
M687774T	403974.2	6981328		18M		60	gry	06/29/98	MM
M690205T	404474.4	6982774		18H		100	brn	06/29/98	SE
M690206T	404684.7	6982691		18H		100	brn	06/29/98	SE
M690207T	404807.3	6982624		18H		20	brn	06/29/98	SE
M690208T	405283.3	6982599		18H		100	gry	06/29/98	SE
M690209T	405340.8	6982589		18H		70	gry	06/29/98	SE
M690210T	402048.3	6982212		18L		80	gry	06/29/98	SE
M690211T	401983.5	6982232		18L		60	gry	06/29/98	SE
M690212T	401201.3	6982557		18L		40	gry	06/29/98	SE
M690213T	401057.7	6982633		18L		100	gry	06/29/98	SE
P132432T	402066.8	6982147		18Z		9 75	buff	06/29/98	CS
P132433T	401925.4	6982051		18Z		9 70	gry	06/29/98	CS
P132434T	400987.5	6982554		18Z		9 65	lgry	06/29/98	CS
P132435T	400953.3	6982552		18Z		9 65	mgry	06/29/98	CS
P132436T	400929.1	6982387		18Z		9 70	wt	06/29/98	CS

**Target 18**  
**Silt Sample Description Sheet**

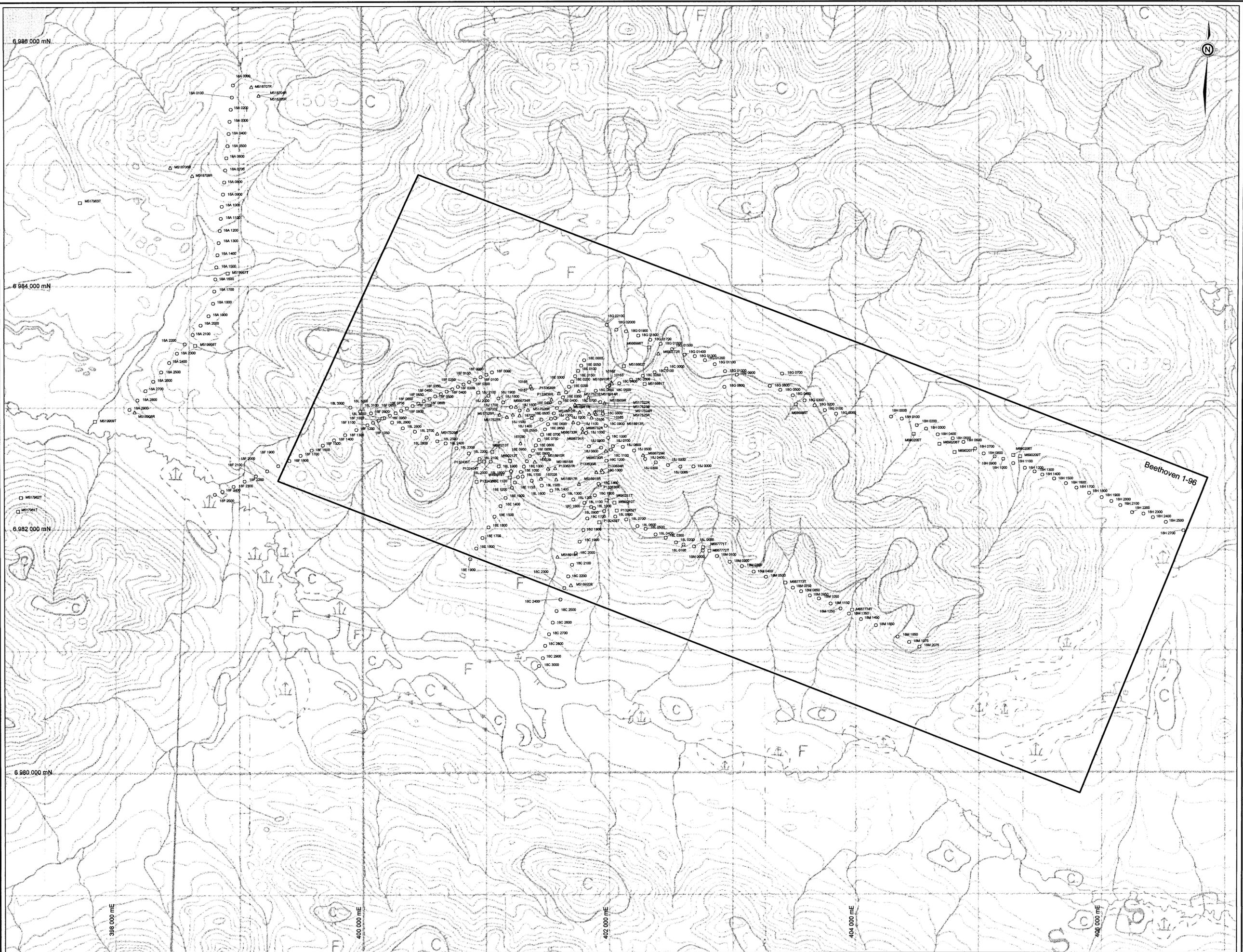
Sample No	Au_ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
M686995T	20	0.8	3.53	132	130	2	10	1.37	1.5	10	8	79	1.74
M686996T	20	0.8	3.92	470	180	1.5	10	1.43	0.5	13	9	157	2.57
M687771T	2	0.2	2.98	82	320	1.5	2	0.89	1	8	12	59	2.09
M687772T	10	0.4	1.94	60	340	1	1	0.54	5.5	12	21	61	2.79
M687773T	10	0.6	1.19	10	1060	0.5	1	0.68	20	22	22	76	3.21
M687774T	10	0.8	1.07	2	1440	0.5	1	1.15	10	11	14	71	3.04
M690205T	20	1.2	1.17	22	650	0.5	2	0.58	15.5	19	20	107	3.52
M690206T	10	1.4	0.84	20	420	0.5	1	0.56	12	10	11	90	2.07
M690207T	15	2	0.68	22	570	0.5	1	0.14	2	12	12	80	2.71
M690208T	15	1	1.03	26	1000	0.5	1	0.5	10.5	21	12	61	4.62
M690209T	15	1.6	1.04	28	1220	1	1	0.46	20	26	13	125	3.94
M690210T	10	0.2	2.71	1305	210	1	16	0.7	0.25	12	13	194	3.84
M690211T	20	0.6	2.16	694	150	1	10	0.82	0.5	10	8	118	2.44
M690212T	20	3.4	5.43	318	400	4	2	0.25	79	245	26	2540	10.6
M690213T	10	0.6	2.15	28	660	1.5	1	0.54	5	15	33	97	3.03
P132432T	30	0.4	2.64	686	180	1.5	6	0.94	0.2	9	7	184	2.9
P132433T	75	3.6	1.57	1085	260	1.5	16	0.44	6	23	13	222	3.69
P132434T	10	0.6	3.38	40	720	2	1	0.61	4	22	40	177	4.94
P132435T	2	1	1.47	24	730	0.5	1	0.57	3.5	8	29	42	2.4
P132436T	20	2.6	4.65	244	330	5.5	1	0.26	29.5	114	25	1365	7.6

**Target 18**  
**Silt Sample Description Sheet**

Sample_No	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc
M686995T	5	20	0.18	10	0.62	510	3	0.03	5	490	152	1	6
M686996T	5	30	0.21	20	0.72	585	3	0.05	10	500	98	6	6
M687771T	5	50	0.17	20	0.62	460	2	0.02	22	820	38	2	4
M687772T	5	120	0.2	10	0.61	1190	9	0.01	64	970	22	1	4
M687773T	5	340	0.17	10	0.35	10000	11	0	834	1310	12	2	3
M687774T	5	360	0.17	5	0.38	10000	6	0.01	155	1950	8	1	3
M690205T	5	290	0.16	10	0.45	5640	17	0	206	1210	22	2	3
M690206T	5	320	0.08	5	0.19	1125	14	0	110	1230	10	6	2
M690207T	5	270	0.09	5	0.13	650	18	0	54	1170	14	6	1
M690208T	5	470	0.09	5	0.23	8510	30	0	160	1720	10	2	3
M690209T	5	640	0.1	5	0.19	10000	28	0	297	1660	16	4	3
M690210T	5	40	0.17	30	0.64	590	0.5	0.02	17	620	50	2	5
M690211T	5	20	0.14	20	0.54	490	0.5	0.03	20	530	74	4	4
M690212T	5	1090	0.31	20	0.61	10000	11	0	551	2140	260	58	5
M690213T	5	540	0.31	20	0.83	1080	5	0.01	99	2370	30	1	3
P132432T	5	40	0.16	30	0.69	380	1	0.02	35	560	34	4	4
P132433T	5	80	0.15	40	0.33	1230	2	0.01	22	810	738	30	3
P132434T	5	720	0.55	30	1.44	925	10	0.01	96	3030	46	8	5
P132435T	5	330	0.17	10	0.38	2560	4	0.01	75	1960	22	2	0.5
P132436T	5	1050	0.21	20	0.55	10000	7	0	347	1910	248	18	5

**Target 18**  
**Silt Sample Description Sheet**

Sample_No	Sr	Ti	TI	U	V	W	Zn	Comments
M686995T	274	0.02	5	5	22	5	160	
M686996T	253	0.05	5	5	26	5	124	
M687771T	130	0.03	5	5	35	5	144	
M687772T	75	0.03	5	5	104	5	464	
M687773T	127	0.01	5	5	128	5	2110	
M687774T	150	0	5	5	66	5	584	
M690205T	57	0	5	10	163	5	1125	
M690206T	67	0	5	5	117	5	1205	
M690207T	51	0	5	5	106	5	298	
M690208T	53	0	5	10	111	5	680	
M690209T	60	0	5	20	138	5	1225	
M690210T	123	0.02	5	5	41	5	88	
M690211T	141	0.01	5	5	27	5	98	
M690212T	50	0.04	5	10	101	10	1625	
M690213T	79	0.03	5	5	103	5	466	
P132432T	169	0.01	5	5	25	5	116	Mostly biot. gr. fines, rare silt, active c
P132433T	64	0	5	5	44	5	468	Dry, steep drainage, base of talus
P132434T	117	0.06	5	5	146	5	628	Swift, steep active ck, rare silt
P132435T	65	0.01	5	5	66	5	276	Mossmat, limited fine silt, swift active
P132436T	42	0.04	5	5	85	5	1200	Strong As staining



6 986 000 mN  
6 984 000 mN  
6 982 000 mN  
6 980 000 mN

398 000 mE

400 000 mE

402 000 mE

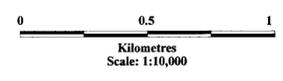
404 000 mE

406 000 mE

**LEGEND**

- Silt Sample
- Soil Sample
- △ Rock Sample
- XXXXXXX Sample Number

Map Datum : UTM Zone 9 (NAD27)



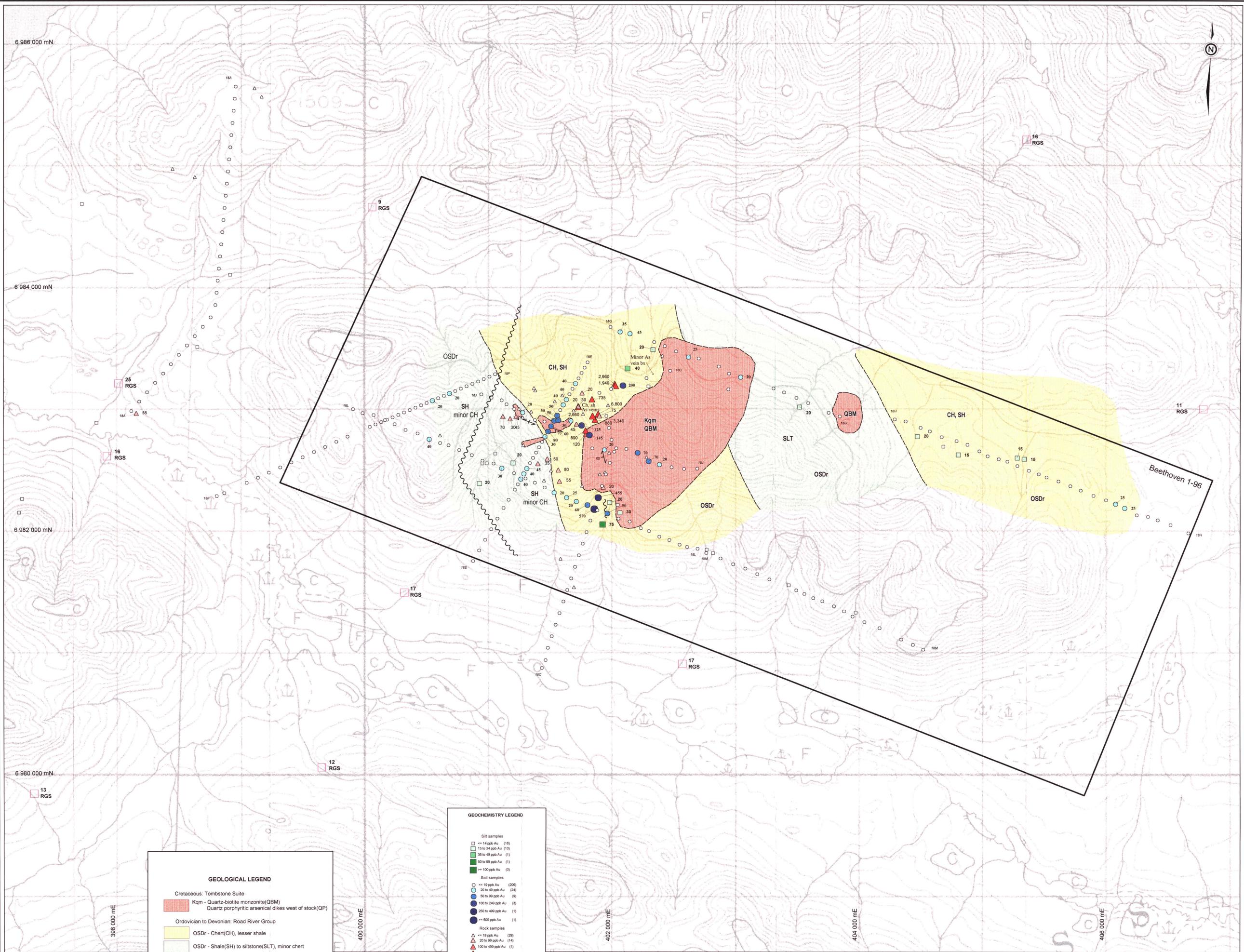
**VICEROY EXPLORATION (CANADA), INC.**

**BEETHOVEN PROPERTY (Target 18)**  
093 969

**SAMPLE LOCATION MAP**

DRAWN BY: CS,TLAF	DATE: Dec. 1998	NTS: 105J15
REVISION:	SCALE: 1:10,000	PLATE NO: 1

DIAMOND - YUKON REGION, LIBRARY



**GEOLOGICAL LEGEND**

Cretaceous: Tombstone Suite

- Kam - Quartz-biotite monzonite(QBM)
- Quartz porphyritic arsenical dikes west of stock(QP)

Ordovician to Devonian: Road River Group

- OSDr - Chert(CH), lesser shale
- OSDr - Shale(SH) to siltstone(SLT), minor chert

--- Geological contact

F Strike and dip of bedding

~ Strike and dip of foliation

~ Fault

**GEOCHEMISTRY LEGEND**

Silt samples

- ≤ 14 ppb Au (16)
- 15 to 34 ppb Au (10)
- 35 to 49 ppb Au (1)
- 50 to 99 ppb Au (1)
- ≥ 100 ppb Au (0)

Soil samples

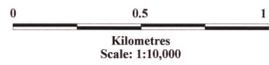
- ≤ 19 ppb Au (206)
- 20 to 49 ppb Au (24)
- 50 to 99 ppb Au (9)
- 100 to 249 ppb Au (3)
- 250 to 499 ppb Au (1)
- ≥ 500 ppb Au (1)

Rock samples

- △ ≤ 19 ppb Au (29)
- △ 20 to 99 ppb Au (14)
- △ 100 to 499 ppb Au (1)
- △ 500 to 999 ppb Au (3)
- △ ≥ 1000 ppb Au (5)

□ RGS Stream sediment sample  
Au in ppb (-1 = element not analysed)

Map Datum : UTM Zone 9 (NAD27)



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

**BEETHOVEN PROPERTY (Target 18)**  
093969

**COMPILATION & GOLD GEOCHEMISTRY**

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