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A GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE TEN PROPERTY **GERMANSEN LANDING AREA** CENTRAL BRITISH COLUMBIA, B.C. NTS 94C/3,4

OMINECA MINING DIVISION

LATITUDE 56°07'N LONGITUDE 125°30'W

CYPRUS GOLD (CANADA) LTD. 1810-1055 West Hastings Street, Vancouver, B.C. V6E 2E9

by David B. Stevenson Cyprus Gold (Canada) Ltd.

June 6, 1991



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#### SUMMARY AND CONCLUSIONS

The Ten property, which is located in the vicinity of the Duckling Creek Syenite - Hogem Batholith area, was investigated for alkalic porphyry type Au-Cu mineralization between August 5 and August 17, 1990. The property was surveyed by reconnaissance-style geological mapping, soil-rock sampling and proton mag surveying.

No significant gold values in soil or rock were encountered on the Ten property. However, the property does host several broad moderate to strong copper anomalies which are associated with strong potassically altered syenites which may warrant follow-up as a porphyry copper target. Some of these anomalies can be traced for greater than 1400 meters along strike and up to 400 meters in width. Copper values range from 300 to 600 ppm and reach a high of 1200 ppm.

## **RECOMMENDATIONS**

No further work is recommended for gold exploration on the Ten property. However, the property does host several significant copper soil anomalies which may warrant further investigation for their porphyry copper potential.

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## 7.1 TEN PROPERTY

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#### 1. INTRODUCTION

The Ten property, which is located in the vicinity of the Duckling Creek Syenite, Germansen Landing area, B.C. was investigated for alkalic porphyry type Au-Cu mineralization during the period August 5 to August 17, 1990. The property was surveyed by reconnaissance-style geological mapping, soil-rock sampling and proton mag surveying.

No significant Au values were encountered on the Ten property, however several moderate to strong widespread Cu soil anomalies were found to be associated with strong potassically altered symples.

#### 2. LOCATION AND ACCESS

The Ten property is located 70 kilometers northwest of Germansen Landing and 800 kilometers north of Vancouver, British Columbia (Figures 1 and 2). The property can be found on NTS map sheet 94C/3 and C/4.

Access is by logging road from either Windy Point or Fort St. James to the Osilinka logging camp a distance of 250 kilometers and 270 kilometers, respectively. From a point near the logging camp a helicopter is then to required to access the property.

#### 3. <u>PHYSIOGRAPHIC SETTING</u>

The Ten property is underlain by steep mountainous terrain. Relief varies from 1400 m to up to 2080 m above sea level. Treeline is generally along the 1600 to 1700 m contour.

Regional drainage direction is eastward towards Williston Lake. Vegetation consists of mature engleman spruce and sub alpine fir some of which is of commercial value. There is active logging being conducted within 10 kilometers of the property. Figure 1 - Project Location Map

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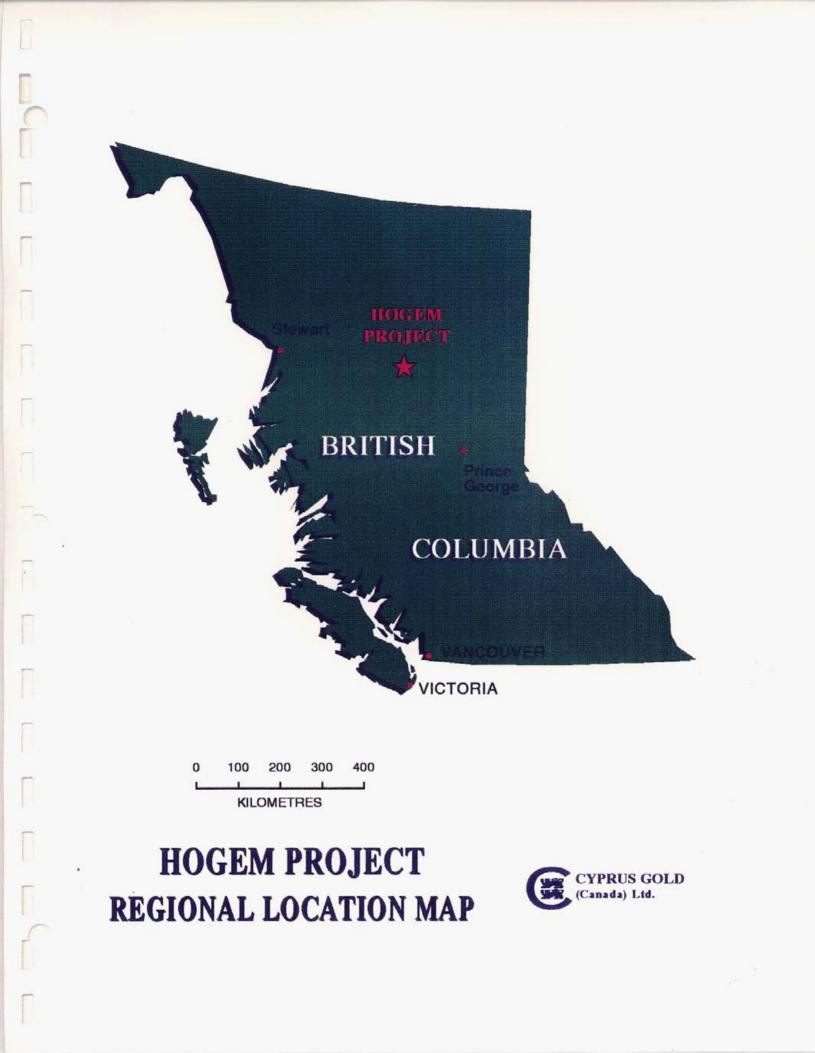
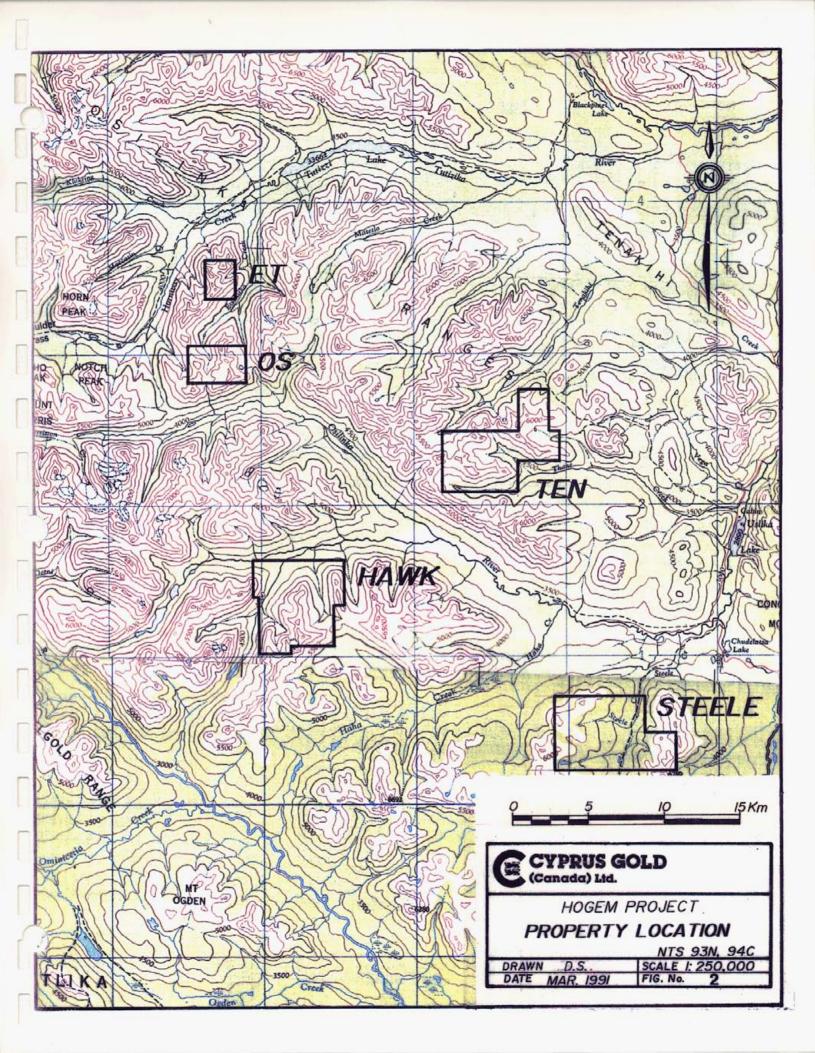


Figure 2 - Property Location Map

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#### 4. <u>PROPERTY STATUS AND OWNERSHIP</u>

Listed below are the six claims comprising the Ten property and some relevant claim information for each.

CLAIM NA	AME NO. OF L	JNITS <u>RECORD N</u>	O. <u>EXPIRY DATE</u>
Ten 1	20	11779	April 29 1994
Ten 2	20	11780	April 29 1994
Ten 3	20	11781	April 29 1994
Ten 4	20	11782	April 29 1994
Ten 5	20	11783	April 30 1994
Ten 6	<u>20</u>	11784	April 30 1994
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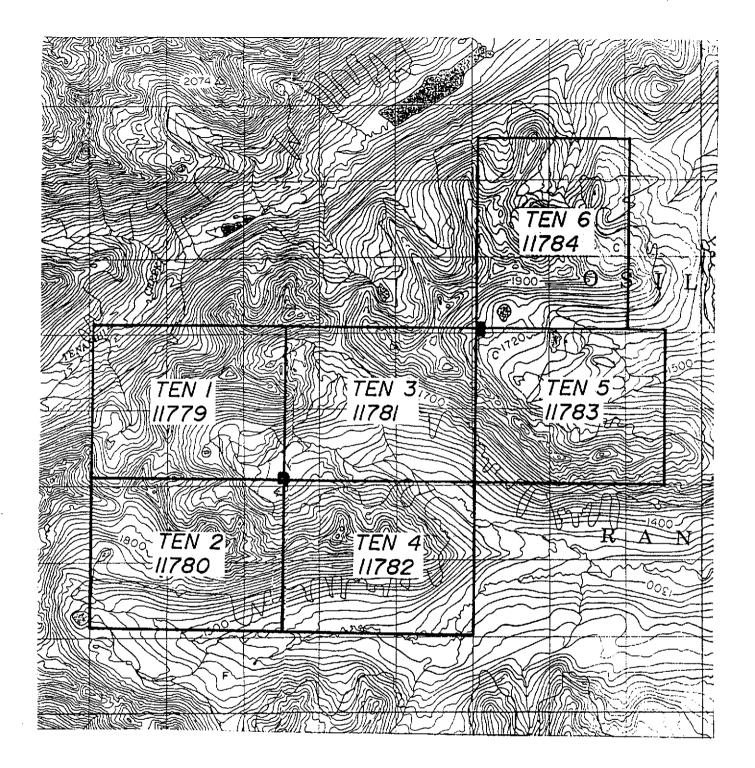
Cyprus Gold (Canada) Ltd, has a 100% undivided interest in the entire claim group (Figure 3).

#### 5. <u>HISTORY AND PREVIOUS WORK</u>

During the summer of 1971 Amoco Canada conducted a reconnaissance stream sediment sampling-mapping program over the Hogem Batholith in search of porphyry Cu-Mo deposits. A total 7376 silts, water, rock, and soil samples were collected from an area of approximately 2400 square kilometers and analyzed for copper and molybdenum. Amoco did not assay for gold in any of these samples. Numerous areas with anomalous Cu and/or Mo in stream sediments were detected. Four areas were staked and worked by Amoco during 1972 to 1974. These areas were known as the Tyger, Needle, Oy and Hawk properties. Property work consisted of reconnaissance and detailed soil sampling and geological mapping.

The latter three properties have recently been in part or entirely restaked by Cyprus and named the Steele, Ten and Hawk properties, respectively. Figure 3 - Ten Claim Map

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## HOGEM PROJECT - TEN PROPERTY CLAIM MAP

NTS 94C/3, C/4 3Km 2 Scale: 1: 50,000

Several other major and junior mining companies were evaluating the Hogem Batholith for porphyry Cu-Mo during the same period of Amoco's evaluation. Numerous occurrences were located and worked during the 1970's. The majority of the Cu occurrences within the Hogem Batholith were noted to be localized with a particular intrusive phase known as Duckling Creek Syenite. The main bulk of the Duckling Creek Syenite is found in the north end of the Hogem Batholith where it trends northwest and has dimensions of approximately 32 kilometers by 6 kilometers. The main Cu occurrences are known as the Hawk (Amoco), Tam (UMEX), Misty (El Paso), Lorraine (Kennco), Dorothy (Kennco), Rondah (Tyee Lake Resources) and Duckling (Donna Mines). There are numerous smaller intrusions of syenite throughout the Hogem Batholith and adjacent volcanics which may also warrant follow-up for their porphyry Au-Cu potential.

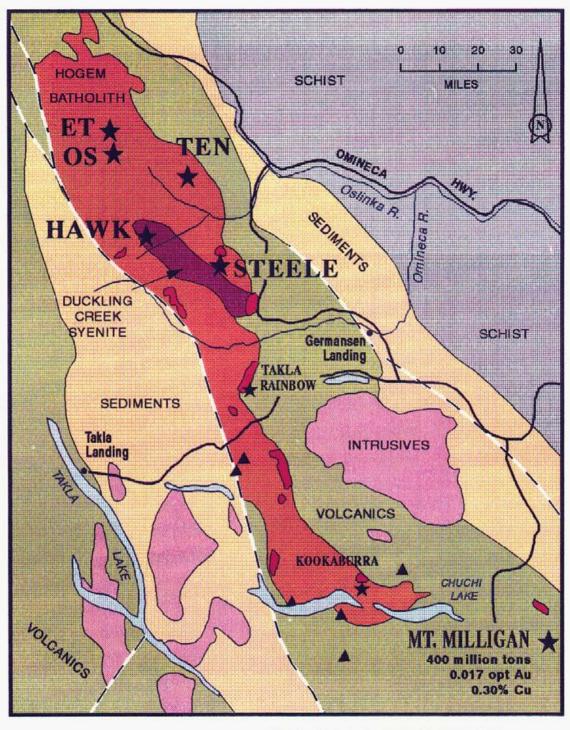
#### 6. <u>REGIONAL GEOLOGICAL SETTING</u>

The Ten property is located within or in the vicinity of the Duckling Creek Syenite (Figure 4). The Duckling Creek Syenite is part of several calc-alkalic and alkalic intrusions comprising the Hogem Batholith. These intrusions are dominated by granites and granodiorites but most importantly by a younger suite of intrusive syenitic bodies. The Hogem Batholith is the largest of the Omineca Intrusions which forms the spine of the island arc related allochthonous Intermontane super terrane in British Columbia. This NW trending elongate batholithic body extends for 120 km from Chuchi Lake in the south to the Misilinka River in the north. It is bordered to the west by the Pinchi Fault and to the east by the Upper Triassic to Lower Jurassic Takla volcanics.

#### 7. <u>1990 EXPLORATION PROGRAM</u>

A total of 451 soils and 79 rock samples were collected on the Ten property during 1990. Thirty-six kilometers of ground magnetic surveying was also conducted in conjunction with the soil survey. Figure 4 - Regional Geology Map

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- > Fault
- ★ Cu Occurrences
- Mo Occurrences
  - Alkalic Suite Intrusives (Syenite, Syenodiorite, Monzonite)

# HOGEM PROJECT REGIONAL GEOLOGY MAP



Where possible the "B" horizon of the soil profile was collected utilizing a grubhoe or pick. Average hole depth would be 25 centimeters. A composite sample was then collected and placed in a 10 cm by 25 cm kraft paper envelope. Sample stations were marked on the envelope and their locations were later plotted on a 1:10,000 scale map. In talus material, which was encountered usually above treeline, a composite of the surrounding soil was sieved through a conical metal screen before placed in the kraft envelope. If the terrain permitted, soil sampling was conducted on a 250 m x 75 m grid pattern. However if the terrain was too steep contour sampling was conducted. Spacing between contour lines varied, due to topography, but in most cases did not exceed a 250 m horizontal distance. Sample spacing remained at 75 meters. Grid lines were established by hip chain and compass while contour lines were established using hip chain, compass and an altimeter. All sample stations were appropriately marked and flagged.

All soil and rock samples were analyzed for Au and Cu by wet geochemistry. All analyses were performed at Min-En Labs located in North Vancouver, B.C. Canada. Gold and copper values have been plotted and contoured. Property geological, geochemical and geophysical maps can be found at the back of the report. Reports on analytical procedures are also found at the back of the report.

All grid and contour soil lines were also surveyed with a proton magnetometer. Readings were taken at the same stations as the soil samples. All mag data was corrected for diurnal drift. Two Scintrex MP-2 proton precession magnetometers, one for each crew of three people, were used for the surveys.

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#### 7.1 TEN PROPERTY

7.1.1 Ten - Reconnaissance Exploration

7.1.1.1 Ten - Recon Geology

Two areas were investigated on the Ten property. These are known as the Ten Main grid and Ten Northeast grid.

Seven rock types were identified on the Ten property. These include porphyry dykes, leucocratic syenite, mesocratic syenite, monzonite, diorite and mafic volcanics.

The porphyry dykes are very fine grained, massive and light grey to chocolate brown in color. Mineralogically they consist of numerous irregular phenocrysts of orthoclase and plagioclase in a groundmass which is too fine grained to be identified. These dykes are less than 1-2 m thick and tend to occur in small northerly trending swarms.

Leucocratic syenites are fine to coarse grained, massive and light orangegrey to bright orange in color. Compositionally they consist of orthoclase with very minor quartz and less than 20% biotite and hornblende. These rocks at times show local intense potassic alteration as present in the western end of the Ten Main grid. Local minor disseminated pyrite and chalcopyrite does occur and, along with the monzodiorite, are likely the source for the anomalous copper values which rim the cirque on the Ten Main grid and the Ten Northeast grid. No magnetite was observed with these rock types.

Mesocratic syenites are similar to the leucocratic syenites except they are darker in color, which is likely due to the higher mafic content, and do not contain very much sulphide. These rocks also contain minor disseminated magnetite. The monzonite is a fine to coarse grained light grey rock. Compositionally it consists of minor to moderate biotite and hornblende with equal amounts of orthoclase and plagioclase. Minor disseminated magnetite is present.

The monzodiorite is similar to the monzonites but is coarser grained, light to dark grey and contains a higher percentage of biotite and hornblende. These rocks locally contain minor disseminated and fracture-filling pyrite and chalcopyrite. Minor to moderate epidote, chlorite and limonite alteration is observed throughout. Local very weak potassic alteration is also present. No magnetite to only very minor magnetite was observed with this rock type.

The diorite is a fine to coarse grained rock, dark grey-black in color with abundant biotite and hornblende. Minor chlorite, potassic, epidote and limonite alteration is present. Very minor to disseminated pyrite is present. These rocks contain no to only locally minor disseminated magnetite.

Mafic volcanics which are present only on the Ten Northeast grid are fine grained massive to moderately schistose black-green andesites. These rocks are strongly chloritized with minor to locally abundant disseminated pyrite and magnetite.

On the Ten Main grid the monzodiorite is the dominant rock type. It is intruded by small plugs and dykes of the other intrusive rocks types described in the above. Leucocratic syenites and monzonites are the main rock types seen to intrude the monzodiorite and tend to occur along the western and southern rim of the cirque. A large diorite intrusive was observed in the NE corner of the Ten Main grid. The most impressive alteration observed is intense potassic alteration associated with most leucocratic syenites on the property. Epidote, chlorite and limonite alteration is quite pervasive within the monzodiorite but usually weak to only locally moderate.

No major structural features were noted on the Ten Main grid.

The intrusives, comprising leucocratic syenite, mesocratic syenite, monzonite and diorite, are in contact with andesites on the Ten Northeast grid. This contact trends northwest and is irregular. Leucocratic and mesocratic syenites intrude the andesites. No significant alteration other than strong chlorite alteration in the andesites was observed on the Ten Northeast grid.

### 7.1.1.2 Ten - Recon Rock Geochemical Results

Sixty-four rock samples were collected on the Ten Main grid while fifteen rock samples were collected on the Ten Northeast grid. The highest gold value encountered on both grids was 110 ppb while all others are below 65 ppb. The 110 ppb Au value is from a quartz vein float sample which contained minor malachite stain and disseminated chalcopyrite, bornite and molybdenum.

Several rock samples have returned anomalous copper values up to 0.53 percent. This value was detected from the sample which returned the 110 ppb Au value. Most other anomalous copper values are below 1500 ppm.

#### 7.1.1.3 Ten - Recon Soil Geochemical Results

Only spotty gold highs in soil were detected on the Ten Main and Ten Northeast grids. Most anomalies are single station anomalies of which the highest on the Main grids is 80 ppb and 40 ppb on the Northeast grid.

As on the Steele property, copper anomalies are much more prevalent than gold. Most major anomalies are rimming the ridges of the cirque on the Main grid with a few smaller anomalies present in the basin of the cirque. At the Northeast grid the copper values are primarily concentrated within the intrusives. Although these values are quite extensive (100 m by 300 m) on both grids they are relatively low order anomalies. The highest copper value on the Main grid is 1200 ppm with most anomalous values ranging between 300 to 600 ppm. At the Northeast grid the highest copper value is 780 ppm with most being in the 300 to 400 ppm range.

## 7.1.1.4 Ten - Recon Ground Geophysical Results

Due to the rather subtle differences in magnetite content in most rock types the mag data did not reveal anything of significance. Two mag highs were detected on the Main grid but are hosted entirely within the monzodiorite. Presumably these highs are merely reflecting higher magnetite concentrations in the monzodiorite. These highs do not relate to any rock or soil anomaly. Magnetic lows occur along the western rim and in the southeast end of the cirque. The western mag low does coincide with a broad copper anomaly in this area but it is questionable whether there is any direct relation. The southeastern mag anomaly does not relate to anything whatsoever.

Mag surveys in Ten Northeast area appear to be inconclusive.

Appendix 1 - Ten - Analytical Results for Rocks

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OV-1119-RG2

Company: CYPRUS GOLD CANADA Project: HOGEM Attn: D.B.STEVENSON

NERAL

(DIVISION OF ASSAYERS CORP.)

ENVIRONMENTS LABORATORIES

> SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS + ASSAYERS + ANALYSTS + GEOCHEMISTS

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Date: AUG-23-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 26 ROCK samples submitted AUG-12-90 by D.B.STEVENSON.

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SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB .: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .: TELEPHONE/FAX (604) 847-3004

0V-1226-RG2 Certificate Geochemical Analysis

Company: Project: Attn:

CYPRUS GOLD CANADA HOGEM DAVID B. STEVENSON

Date: AUG-29-90 Copy 1. CYPRUS GOLD, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 ROCK samples submitted AUG-21-90 by DAVID B.STEVENSON.

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Certified by

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2722	5	198		
2723	5 	48	3	
2724	5	162		
2725	10	338		
2726	30	650	all Ten	
	5	310	<i>m</i>	
2728	5	149		- Astronomic Contractor
2729		465		
2730	10	815		
_ 2731	5	438		
) 2732	5	138		
2733	5	805		
2734	5	195		
2735	5	95		
2736	5	93		
2737	15	8 170		
2738	5	170		
_ 2739	5	9		
2740	5	142		
2741	5	104		
2742	5	845 98		
2743		70		
STD	390		A	

Certified by Brynap

MIN-EN LABORATORIES

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	MINERAL • ENVIRONMENTS LABORATORIES DIVISION OF ASSAYERS CORP. CIVISION OF ASSAYERS CORP. SPECIALISTS IN MINERAL CHEMISTS - ASSAYERS - AVALY	VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9821 THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004			
Ge	ochemical Analy	sis Certi	ficate	-vo	1226-RG5
Compar Projec Attn:			Copy 1. CYPRUS (	Date: A GOLD, VANCOUVER,	.ŬG-26-90 8.C.
He sub	nitted AUG-21-90 by DAVID	ing Geochemical B.STEVENSON.	Analysis	of 9 ROCK	samples
Samp Numb		CU PPM			
- 2744	5	157	toget textering a same		
2745	5	58			
2746		210	-		
2747		81 270	AN Ten		
2					1961 - Marine and an 1979 - 1979 - 1979 - 1979 - 1979
2749		76			
2750		215			
2751	5 5	81 191			5.43
2/32		171		243	
	415				
		Certified by	Bur Man-	Mals en laborat	ORIES

Appendix 2 - Ten - Analytical Results for Soils

.

DIVISION OF ASSAULT	ONMENTS ATORIES		705 WEST 15T NORTH VANCC TELEPHONE ( FAX (604) 980 THUNDEF TELEPHONE ( FAX (807) 623 SMITHER	DUVER, B.C. CANADA V7M 1T2 804) 980-5814 OR (604) 988-4524 -9621 I BAY LAB.: 807) 622-8958 -5931
Geochemic	al Anal	ysis Ce	ertificate	0V-1118-SG7
Companyi CMPRUS Projecti HBGEM Attn: D.STEVENS	Neuconserve a serve		Copy 1. CYPRUS GOLD, V	Date: AUG-20-90 ANCOUVER, B.C.
We hereby cert. submitted AUG-	ify the follo 13-90 by D.SI	wing Geoche EVENSON.	emical Analysis of 3	O SOIL samples
Sample Number	AU-WET PPB	CÚ PPM		
HNW1800 11+25N	60	331		ando olivani tiloloo tiloo daga ay saga ay
- HNW1800 12+00N	45	117		
( HNW1800 12+75N	30	21		
HNW1800 13+50N	5	62		
HNW1800 14+25N	160	78		
HNW1800 15+00N	5	40		
HNW1750 4+50N	20	495		
HNW1750 6+00N	65	356		
HNW1750 6+75N	40	167		4
HNW1750 7+50N	20	261	52 C	
	Statistic data and a second			
HNW1750 8+25N	5	257		
HNW1750 9+00N	5	108		
HNW1750 9+75N	5	143		
HNW1750 10+50N	5	109		
HNW1750 11+25N	5	32		
The second s	COMMONDARY COLOR			
(		. Mail		
HNW1750 12+75N	90	46		
10 strategy of the second se		184		
HNW1750 13+50N	75	137		
HNW1750 14+25N	30	47		
HNW1750 15+00N	185	68		
NUMBER OF THE OWNER		and the set of the set		
TNE1720 0+00E	5	267		
TNE1720 0+75E	5	218		
TNE1720 1+50E	5	258		
TNE1720 2+25E	5	127		
TNE1720 3+00E	5	67		
	alah sebah sebah sebah sebah sebah sebah s			
TNE1720 3+75E	5	192		
TNE1720 4+50E	5	168		
TNE1720 5+25E	5	293		
TNE1720 6+00E	5	53		
TNE1720 6+75E	5	41		
STD	450			
			5	
			R-0	_ /

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MIN-EN LABORATORIES

na

KOH.	WINERAL • ENVIRONMENTS LABORATORIES DIVISION OF ASSAYERS CORP.) SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS - ASSAYERS + ANALYSTS + GEOCHEMISTS				705 WEST 15T NORTH VANCO TELEPHONE ( FAX (604) 980 THUNDER TELEPHONE ( FAX (807) 623 SMITHER	VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621 THUNDER BAY LAB:: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB:: TELEPHONE/FAX (604) 847-3004		
	Geoc	hemical	Anal	ysis Cert	tificate	OV-1118-SG8		
	Company: Project: Attn:	CYPRUS GOLD HOGEM D.STEVENSON	CANADA		Copy 1. CYPRUS GOLD CA	- Date: AUG-21-90 NADA, VANCOUVER, B.C.		
	He her submit	<i>eby certify</i> t ted AUG-13-90	he follo by D.ST	wing Geochemic EVENSON.	al Analysis of 3	O SOIL samples		
	Sample Number		AU-WET PPB	CU PPM				
81211-0345962404	TNE1720	7+50E	5	225		ezerlekentzetőzelezerezerlekentettetettettettettettettettettettettet		
	TNE1720		5	210				
1	TNE1720		5	295				
C	TNE1720		40	162				
	TNE1720	10+50E	5	300				
State State	TNE1720	11+25E	5	295				
	TNE1720	12+00E	5	280				
Total	TNE1720	12+75E	5	147				
distant)	TNE1720	13+50E	5	102				
Au-14130000 10110000	TNE1720	14+25E	5	31				
No. of Concession, No. of Conces	TNE1720	15+00F	States and a second	88				
	TNE1720		25	148				
	TNE1720		20	153				
1 1 2 3 3 4	TNE1720	Contraction of the Contract of	5	255				
E	TNE1720		5	230				
	0				and			
1	TNE1720		10	172				
1	TNE1720		5	585				
	TNE1720		5	146				
	TNE1720		5	110				
ENGELERICE	TNE1660	0+00W	C Lectro Reset	91				
	TNE1660	0+75W	20	58				
	TNE1660		5	93				
Same	TNE1660		5	107				
5915	TNE1660		5	171				
-	TNE1660	3+75W	5	178				
	TNE1660	4+50W	30	97	Net hat all led and all the set and and and and an all any any set in a set any			
	TNE1660	S4211 S10 S10 CS	5	390				
Sacore		0.200	0	070				
and the second		6+00W	.5	100				
	TNE1660 TNE1660		5	100 74				

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MIN-EN LABORATORIES





SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OV-1118-SG9

Company: CYPRUS GOLD CANADA Project: HOGEM Attn: D.STEVENSON

Date: AUG-22-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-13-90 by D.STEVENSON.

-Sample Number		AU-WET PPB	CU PPM	
	8+25W	5	75	
TNE1660		5	76	
	9+75W	5	71	
TNE1660		10	56	
TNE1660	11+25W	5	60	
TNE1660	12+00W	5	50	
— TNE1660	12+75W	5	84	
TNE1660		5	58	
TNE1900		5	220	15
TNE1900		5	235	1
TNE1900	a substant of the second second	5	245	
TNE1900	4+50E	5	385	
TNE1900	6+00E	5	765	
	6+75E	5	152	
TNE1900	7+50E	5	750	
( E1900	8+25E	5	780	
L. E1900		5	690	
TNE1900		10	440	
TNE1900		5	485	
TNE1900		5	230	
TNE1900	12+00F	5	235	
TNE1900		5	168	
TNE1900		5	282	
TNE1900		5	150	
TNE1900		10	165	
TNE1900	15+755	5	85	
TNE1900		5	130	
TNE1900		5	138	
TNE1900		5	114	
		5	74	
STD		460		

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		TORIES	VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621 THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004		
Geoc	hemical	Analy	sis Cert	ificate	0V-1118-SG10
Company: Project: Attn:	CYPRUS GOLD HOGEM D.STEVENSON			Copy 1. CYPRUS 6DLD,	Date: AUG-20-90 VANCOUVER, B.C.
He here submit	eby certify ted AUG-13-9	the follow O by D.STH	ving Geochemica EVENSON.	l Analysis of 3	30 SOIL samples
Sample Number		AU-WET PPB	CU PPM	an a second di la seconda	
TNE1900	19+50E	5	128	مر المر المر المر المر المر المر المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة	n and data lain and the fact and the shift had been and and the fact had been had been been been been been been
TNE1900		5	235		
	0+00E	5	166		
TNE1800		5	143		
TNE1800		5	370		NI
TNE1800	2+25E	10	360		
TNE1800	3+00E	5	445		
TNE1800		15	350		
TNE1800		5	290		<b>1</b> 0
TNE1800		5 20/0080910 0000000	340		en e
TNE1800	6+00E	5	165		
TNE1800		5	69		
TNE1800	7+50E	5	106		
TNE1800		5	325		
TNE1800		5 1997 1997 1997 1997	114		
11800	9+75E	5	395		
E1800	10+50E	5	450		
TNE1800	11+25E	5	275		
TNE1800	12+75E		102		
TNE1800	13+50E	5 National (1997)	410	ann ann a'n ain an dar die fer bar ten an der ten ten ten ten and set and an	
TNE1800	14+25E	35	168		nn e an suite ann an staine an tha an California ann an California an San San San San San San San San San
TNE1800		5	300		
TNE1800	15+75E	5	125		
TNE1800			123		
TNE1800		20	220		
THE 1000	19+005	5	194		
TNE1800 TNE1800		5	194		
		5	99		
TNE1800		5	122		
	ZUTZJE		122		
TNE1800 TNE1800		-	71		

Certified by

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	ORIES	TS SMITHER	VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9821 THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004		
Geochemica	I Anal	ysis (	Certificate	OV-1118 SGII	
	y the follo		Copy 1. CYPRUS GOLD, hemical Analysis of		
submitted AUG-13- Sample Number	-90 by D.ST All-WEIN PPB	EVENSON, EU PPM			
TNE1800 21+75E TNE1800 22+50E TNE1800 23+25E TNE1800 24+00E TNE1800 24+75E	5 5 5 10 5	105 131 109 272 177		ĸĸĸĸĸĸŔĸŦĊŎĸĬŎĊŎĊŎĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊĊ	
TNE1800 25+50E HE1700 0+75S HE1700 1+50S HE1700 2+25S HE1700 3+00S	5 5 15 5 5 5	168 63 89 64 137			
HE1700 3+75S HE0+00W 0+00N HE0+00W 0+50N HE0+00W 1+00N HE0+00W 1+50N	75 40 5 25 5	52 10 53 64 42			
HE0+00W 2+00N HE0+00W 2+50N HE0+00W 3+00N HE0+00W 3+50N HE0+00W 4+00N	5 5 25 10 10	47 463 142 37 39			
HE0+00W 4+50N HE0+00W 5+00N HE0+00W 5+50N HE1+00W 0+50N HE1+00W 1+00N	25 5 20 5 65	41 28 32 38 30			
HE1+00W 1+50N A HE1+00W 1+50N B HE1+00W 1+50N C HE1+00W 2+00N HE1+00W 2+50N	150 100 10 5 5	47 88 91 99 73			
STD	435	Certif.	ied by Ann	26	

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	MINERAL • ENVIRONMENTS LABORATORIES DIVISION OF ASSAYERS CORP.) SPECIALISTS IN MINERAL ENVIRO CHEMISTS - ASSAYERS - AVALYSTS - GEOCHI			705 WEST 15TH NORTH VANCOL TELEPHONE (60 FAX (604) 980-9 <b>THUNDER</b> TELEPHONE (80 FAX (807) 623-5 <b>SMITHERS</b>	OUVER, B.C. CANADA V7M 1T2 (604) 980-5814 OR (604) 988-4524 0-9621 R BAY LAB.: (807) 622-8958 3-5931	
Geoc	hemical	Analy.	sis Certi	ficate	OV-1118-SG14	
Attn:	CYARDS GOLD HUGEM D.STEVENSUN by certify th ed AUG-13-90	e followi by D.STEV	ng Geochemical	Copy 1. CYPRUS 50LD, VA	ICOUVER, B.C.	
Sample Number	General de la A	U-WEII PPB	CU PPM		1999 - 1999 -	
HE5+00W 5		5	41		\$	
HE5+00W S		5	9			
HE1+50W ( TNE1840		5 10	216 153			
TNE1845		5	107			
THETOEO						
TNE1850 2 TNE1850 2		5	69 100			
TNE1855 2		5	62			
TNE1860 C		5	167		<del></del>	
TNE1860 C	Quality and a second	5	157	14 15 - 16 - 16 - 16 - 16 - 16 - 16 - 16 -		
TNE1860 1		5	247			
A CARLES AND A CARL	- 	97340 - 1960 - 114		n dan man kan awa awa kan kun tan awa kwa kan kan kan kan kan kan kan kan	er bler bler men efte alle men bler bler bler ant han bler ber ach bler alle bler and ster ann ann	
(~						
the second s						
HEALEN MARTINASA ANT ALTER AND A	an ann ann ann ann ann ann ann ann ann		En Strange de la companya de la comp			
			1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		n and and and and and and and and and an	
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AND			And had had had and and and any any one one out out had had had had			
11-13 L						
F 2337						
STD		415		and a first state of a long state of the state		
	en dat Makada		Certified by	Osin Juna	b	
				MEN-EN LA	BORATORIES	

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621 THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931

SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS + ASSAYERS + ANALYSTS + GEOCHEMISTS SMITHERS LAB .: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG18

Companys Coversuls closed crawson Progenty Harger Attn: D.B. Shevensen

**ENVIRONMENTS** 

LABORATORIES

(DIVISION OF ASSAYERS CORP.)

MINERAL

Date: SEP-03-90 Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 29 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

1 States and Stat				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Sample Number	PPB	CU PPM		
	120	47	ana ana matama juu juu juu juu na matama ana ana ana ana ana ana ana juu na matama juu na juu juu juu juu juu a	na ain an air air an tha tha an t
HE 1720 3+00S(B) HE 1720 3+00S(C)	200	35		
HE 1720 0+00N(A)	5	21		
HE 1720 0+00N(C)	5	29		
TEN 750E 0+005	20	7		
	- بنواس بهزید باد بوات سر بند.			
TEN 750E 0+758	10	58		
TEN 750E 1+50S	5	12		
TEN 750E 2+258	5	11		<u>5</u> 2
TEN 750E 3+00S	25	38	26	¥1
TEN 750E 3+759	10	181		1.1
			a man han han han ban yan ang ang ang ang ang kan kan han han han han han ban ang ang ang ang ang ang ang ang ang a	
TEN 750E 4+50S		28		
TEN 750E 5+25S	5	186		
TEN 750E 6+00S	NO	SAMPLE		
TEN 750E 0+75N	5	26		
- TEN 750E 1+50N	10	312		
TEN_750E_2+25N	. 5	81		
TEN 750E 3+00N	5	114		
TEN 750E 3+75N	5	213 96		
TEN 750E 4+50N	10	107		
TEN 750E 5+25N	0 1900-1900-1	107		
TEN 750E 6+00N	5 S	26		
TEN 750E 6+75N	10	53		
TEN 1000E 0+00S	5	107		
TEN 1000E 0+75S	5	79		
TEN 1000E 1+505	5	45		
TEN 1000E 2+255	5	107		
TEN 1000E 3+008	5	107		
TEN 1000E 3+755	5	515		
TEN 1000E 4+505	5	8		
TEN 1000E 5+255	5	14	147	
TEN 1000E 5+255		19. 19. 19. 19 Co		
CTD	450			
			6 1	
Charles -			80-1	
		1210-012-02020	Man March	
		Certifie	ed by Altry Thomas	

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MINERAL • ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

> SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS + ASSAYERS + ANALYSTS + GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG19

Company: CYPRUS GOLD CANADA Project: HDGEM Attn: D.B.STEVENSON

Date: SEP-04-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 28 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

	Sample Number	AU-WET PPB	CU PPM	
·	TEN 1000E 6+00S	5	18	
1000	TEN 1000E 0+00N	NO	SAMPLE	
200 ( )	TEN 1000E 0+75N	5	54	
	TEN 1000E 1+50N		104	
	TEN 1000E 2+25N	5	69	
te	TEN 1000E 3+00N		48	
Deine	TEN 1000E 3+75N	10	21	
AND STREET	TEN 1700 0+75W	5	64	
	TEN 1700 1+50W	5	161	
WARES	TEN 1700 2+25W	66 diseign 5	78	
ARCHORAGE	TEN 1700 3+00W	5	39	
	TEN 1700 3+75W	5	184	
Faile .	TEN 1700 4+50W	5	211	
	TEN 1700 5+25W	5	321	
	TEN 1700 6+00W	10	193	
( MRSSORIES)	TEN 1700 6+75W	10	74	
( _	TEN 1700 7+50W	5	76	
The second	TEN 1700 8+25W	5 100000005	267	
	TEN 1800 0+00E		319	
25 CREEK CATCORS	TEN 1800 0+75E	5	112	
	TEN 1800 1+50E	NO	SAMPLE	
Aurea a and	TEN 1800 2+25E	5	150	
	TEN 1800 3+00E	10	145	
	TEN 1800 3+75E	5	489	
MERICAN AND AND AND AND AND AND AND AND AND A	TEN 1800 4+50E	10	523	
100000010192	TEN 1800 5+25E	5	491	
	TEN 1800 5+23E	5	317	
apel.	TEN 1800 6+75E	5	651	
	TEN 1800 7+50E	5	445	
	TEN 1800 8+25E	5	363	
0	STD	440		

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MINERAL ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

> SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB .: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .:

TELEPHONE/FAX (604) 847-3004

Certificate 0V-1227-SG20 Analysis Geochemical

Company: CYPRUS GOLD CANADA Project: HDGEM Attn: D. B. STEVENSON

Date: SEP-03-90 Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample Number	AU-WET PPB	CU PPM	
TEN 1800 9+00E	5	392	
TEN 1800 9+75E	5	481	
( TEN 1800 10+50E	30	620	
TEN 1800 11+25E	10	451	
TEN 1800 12+00E	5	592	
TEN 1800 12+75E	10	431	
TEN 1500E 0+00S	5	134	
TEN 1500E 0+755	20	119	38.J
TEN 1500E 1+50S	. 5	471	
TEN 1500E 2+258	10	123	
TEN 1500E 3+00S	10	251	
TEN 1500E 3+75S	5	51	
TEN 1500E 4+50S	5	22	
TEN 1500E 5+255	5	167	
TEN 1500E 6+00S	5	141	
	10	38	
	10	31	
TEN 1250E 1+50S	5	250	
TEN 1250E 2+25S		575	
TEN 1250E 3+00S	15	78	
TEN 1250E 3+75S	10	143	
TEN 1250E 4+50S	5	135	
TEN 1250E 5+25S	5	31	
TEN 1250E 6+00S	10	174	
TEN 500E 0+00N	5 4891030-000-000	68	
TEN FOOT OUTEN	10	E0	
TEN 500E 0+75N	10	52	
TEN 500E 1+50N TEN 500E 2+25N	5 10	201 153	
TEN 500E 2+25N TEN 500E 3+00N	10	221	
TEN 500E 3+75N	5	140	
TEN JOUE STIJN	STREET DE LA COLLECTE	140	

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na Certified by /4

MIN-EN LABORATOFIES



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

IENTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB .: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .:

TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG21

Company: CYPRUS GOLD CANADA HOGEM Project: D. B. STEVENSON Attn:

Date: SEP-03-90

Copy 1. CYPRUS 50LD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample	AU-WET	CU	
Number	PPB	PPM	
TEN 500E 4+50N	5	111	
TEN 500E 5+25N	5	134	
TEN 500E 6+00N	5	90	
TEN 500E 6+75N	10	113	
TEN 500E 7+50N	5	21	
TEN 500E 8+25N	5	61	
TEN 500E 9+00N	5	60	
TEN 500E 9+75N	10	193	
TEN 250W 9+00N		284	
TEN 250W 9+75N	5	197	
TEN 250W 10+50N	5	725	
TEN 250W 11+25N	5	231	
TEN 250W 12+00N	5	92	
TEN 250W 12+75N	10	153	
TEN 250E 0+75N	S.	331	
TEN 250E 1+50N	5	331	
TEN 250E 2+25N	5	206	
TEN 250E 3+00N	15	207	
TEN 250E 3+75N	5	64	
TEN 250E 4+50N		52	
TEN 250E 5+25N	5	134	
TEN 250E 6+00N	5	270	
TEN 250E 6+75N	5	144	
TEN 250E 7+50N	5	41	
TEN 250E 8+25N	5	99	
TEN 250E 9+00N	5	62	
TEN 250E 9+75N	10	93	
TEN 250E 10+50N	5	319	
TEN 250E 11+25N	5	19	
TEN 250E 12+00N	5	91	
STD	410		

410

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG22

CYPRUS GOLD CANADA Project: HDGEM Attn: D.B.STEVENSON Date: SEP-03-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample	AU-WET	CU	an a
Number	PPB	PPM	
TEN 250E 12+75N	10	41	
TEN 000 8+25N	15	730	
TEN 000 9+00N	35	427	
TEN 000 9+75N		304	
TEN 000 10+50N	5	135	
TEN 000 11+25N		291	
TEN 000 12+00N	10	188	
TEN 000 12+75N	5	51	
TEN 1700 0+00E	20	113	. · · · ·
TEN 1700 0+75E		73	
TEN 1700 1+50E		468	
TEN 1700 2+25E	5	421	
TEN 1700 3+00E	5	227	
TEN 1700 3+75E		507	
TEN 1700 4+50E	10	203	
TEN 1700 5+25E	30	241	
TEN 1700 6+00E	10	491	
TEN 1700 6+75E	5	193	
TEN 1700 7+50E		343	
TEN 1700 8+25E	5	313	
TEN 1700 9+00E		41	
TEN 1700 9+75E	5	122	
TEN 1700 10+50E	5	182	
TEN 1700 11+25E		141	
TEN 1700 12+00E	5	98	
TEN_1700 12+75E		650	
TEN 1700 13+50E	5	280	
TEN 1700 14+25E	5	407	
TEN 1700 15+00E		785	
TEN 1700 15+75E	5	150	
CTD	175		

STD

425

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THUNDER BAY LAB .: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG23

CYPRUS COLD CANADA Company: Project: HOGEM Attn: D.B. STEVENSON

Date: SEP-03-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample	AU-WET	CU	
Number	PPB	PPM	
TEN 1700 16+50E	15	825	
TEN 1600 0+00E	20	53	
TEN 1600 0+75E	5	22	
TEN 1600 1+50E	10	246	
TEN 1600 2+25E	5	200	
TEN 1600 3+00E	5	313	
TEN 1600 3+75E	5	61	
TEN 1600 4+50E	5	464	
TEN 1600 5+25E	5	261	,
TEN 1600 6+00E	5	78	
TEN 1600 6+75E	5	287	
TEN 1600 7+50E	35	174	
TEN 1600 8+25E	5	79	
TEN 1600 9+00E		118	
TEN 1600 9+75E	5	369	
TEN 1600 10+50E	10	475	
TEN 1600 11+25E	10	70	
TEN 1600 12+00E	5	31	
TEN 1600 12+75E	5	109	
TEN 1600 13+50E	5	135	
TEN 1600 14+25E	15	53	
TEN 1600 15+00E	40	505	
TEN 750W 0+00N	60	94	
TEN 750W 0+75N	10	168	
TEN 750W 1+50N	5	200	
TEN 750W 2+25N	30	91	
TEN 750W 3+75N	30	43	
TEN 750W 0+755	5	195	
TEN 750W 1+50S		194	
TEN 750W 2+25S	5	357	
CTD	470	NAMES OF A STREET OF A	

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG24

Company: CYPRUS GOLD CANADA Project: HOGEM Attn: D.B.STEVENSON Date: SEP-03-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

	Sample Number	AU-WET PPB	CU PPM	
	TEN 750W 3+00S	5	78	
1-	TEN 750W 3+75S	20	65	
(	TEN 750W 4+50S	10	62	
	TEN 750W 5+255	5	221	
	TEN 1000W 0+00N	5	168	
en menkisk	TEN 1000W 0+75N	5	95	
<b></b>	TEN 1000W 1+50N	5	389	
	TEN 1000W 2+25N	5	171	
	TEN 1000W 3+00N	5	381	
	TEN 1000W 3+75N	10	298	
- 32	TEN 1000W 0+755	5	108	
	TÈN 1000W 1+505	10	845	
	TEN 1000W 2+25S	5	610	
	TEN 1000W 3+005	5	760	
Wikina	TEN 250W 0+00N	10	210	*
Π.	TEN 250W 0+75N	5	245	
1	TEN 250W 1+50N	5	118	
	TEN 250W 2+25N	5	110	
n.	TEN 250W 3+00N	30	493	
	TEN 250W 3+75N	10	42	
an the second			n had fink han man and that had such such size from a	
	TEN 1800 0+00	5	431	
	TEN 1800 0+75	5	665	
	TEN 1800 1+50	5	371	
	TEN 1800 2+25	5	393	
1. 1865	TEN 1800 3+00	5	187	
ALCONTROL (	TEN 1800 3+75	5	128	
1 Land	TEN 1800 4+50	5	342	
	TEN 1800 5+25	10	157	
	TEN 1800 6+00	5	223	
Report	TEN 1800 6+75	5	141	
aj inserio C	STD	400	- New Prop. New York, State, and Address of States of States of States	

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG25

Company: CYPRUS GOLD CANADA Project: HOGEN D. B. STEVENSON Attn:

Date: SEP-04-90 Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-21-90 by D.B.STEVENSON.

	Sample Number		AU-WET PPB	CU PPM	
	TEN 1800		5	171	
	TEN 1800		10	211	
1	TEN 1800		5	180	
~	TEN 1800		10	3.06	
	TEN 1800	10+505	5	143	
(9894)	TEN 1800	11+258	5	140	
	TEN 1800	12+00S	10	302	
	TEN 1800	12+75S	5	149	
	TEN 1800	13+505	5	317	
Marina	TEN 1800		5	560	
Takititees	TEN 1800		5	128	
•	TEN 1800		5	110	
	TEN 1800	16+50S	10	350	
	TEN 1800		5	124	
朝鮮ないでなっ	TEN 1800		5	320	
	TEN 1800	18+755	5	119	
í .	TEN 1800		5	238	
·	TEN 1800		5	740	
	TEN 1800		5	475	
NUBLICE OF STATE	TEN 1800		10	550	
and the second	TEN 1800	the second secon	5	645	
	TEN 1800		5	1200	
	TEN 1800		5	514	
	TEN 1800		5	570	
ession to the	TEN 1800		5	495	
<b>建</b> 線出行。	TEN 1800	24+258	5	75	
	TEN 1800		0 0	262	
	TEN 1800		5	322	
	TEN 1800		10	350	
	TEN 1800		10	169	
				25 Se 7 . No man and and and and and are set of our one of a set of the set of	
	STD		400		

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MINERAL • ENVIRONMENTS LABORATORIES (DIVISION OF ASSAYERS CORP.)

> SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG26

Company: CYPRUS GOLD CANADA Project: HOGEM Attn: D.B.STEVENSON

Date: SEP-04-90 Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 28 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

	Sample Number	AU-WET PPB	CU PPM	
2.4.635569004061854C.45	TEN 1800 30+005	5	168	
	TEN 1800 30+755	5	140	
(	TEN 1800 31+50S	10	150	
C.	TEN 1800 32+255	5	184	
	TEN 1800 33+005	5	45	
	_TEN_1800_33+75S	5	280	
	TEN 1800 34+50S	10	600	
	TEN 1800 35+255	5	445	
	TEN 1800 36+00S	NO	SAMPLE	4
(二)徽派:	TEN 1800 36+75S	NO	SAMPLE	
÷.	TEN 1800 37+505	15	590	
•	TEN 1800 38+25S	5	560	
m	TEN 1250W 0+005	20	434	
I have been	TEN 1250W 0+755	5	88	
	TEN 1250W 1+50S	5	295	
is-meteration and it	TEN 1250W 0+00N	5	150	
1	TEN 1250W 0+75N	10	300	
	TEN 500W 0+005	5	388	
<b>—</b>	TEN 500W 0+755	5	169	
19/5 <del>51540</del> 7922/4	TEN 500W 1+50S	5	273	
因 <b>治理秘</b> 的外示。	TEN 500W 2+25S	5	65	
	TEN 500W 3+00S	5	90	
	TEN 500W 3+755	10	61	
	TEN 500W 4+50S	5	4.0	
	TEN 500W 5+255	5	65	
		111/ Page 1		
1	TEN 500W 0+75N	5	143	
	TEN 500W 1+50N	5	62	
e trate	TEN 500W 2+25N	5	132	
	TEN 500W 3+00N	5	287	
	TEN 500W 3+75N	5	260	
- Contraction	STD	430		

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate 0V-1227-SG27

Company: CYPRUS GOLD CANADA Project: HDGEM Attn: D.B.STEVENSON Date: SEP-03-90

Copy 1. CYPRUS GOLD CANADA, VANCDUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample	AU-WET	CU	
Number	PPB	PPM	
TEN 1900 0+00S	5	471	
TEN 1900 0+755	5	223	
TEN 1900 1+505	5	293	
TEN 1900 2+255	5	304	
TEN 1900 3+005	5	173	
TEN 1900 3+758	5	147	
TEN 1900 4+50S	5	152	
TEN 1900 5+255	5	130	
TEN 1900 6+005	5	121	
TEN 1900 6+75S	10	193	
TEN 1900 7+50S	5	454	
TEN 1900 8+255	5	483	
TEN 1900 9+00S	5	173	
TEN 1900 9+755	20	560	
TEN 1900 10+50S	40	261	
TEN 1900 11+255	40	391	
( TEN 1900 12+00S	5	555	
- TEN 1900 12+75S	5	263	
TEN 1900 13+50S	5	391	
TEN 1900 14+25S	10	605	
TEN 1900 15+00S	5	531	
TEN 1900 15+755	5	235	
TEN 1900 16+505	15	421	
TEN 1900 17+255	15	610	
TEN 1900 18+005	5 790-900 (1990)	141	
TEN 1900 18+75S	5	310	
TEN 1900 19+505	5	274	
TEN 1900 20+255	5	91	
TEN 1900 21+005	5	96	
TEN 1900 21+755	5	60	
. STD	425		

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VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

THUNDER BAY LAB .: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

0V-1227-SG2	8	
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100	Company:	CYPRUS GOLD CANADA	
	Project:	HOGEM	
	Attn:	D.B.STEVENSON	

Date: SEP-04-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

	Sample Number	AU-WET PPB	UU PPM		
VMMayesidk (Initial)	TEN 1900 22+505	10	255	a na ma ma a mana na ana ana ana ana ana	a na ma bai na dha ma ma ma ma na ma na ma
	TEN 1900 23+255	5	1.6x3		
	TEN 1900 24+005	5	243		
******	TEN 1900 24+755	10	30-5		
	TEN 1900 25+505	20	840		
			an and the last and a first second state of the second second second second second second second second second		. We will not the set of an art of a set
	TEN 1900 26+255	5	890		
	TEN 1900 27+005	30	¥rés+-		
	TEN 1900 27+755	5	330		
	TEN 1900 28+50S	10	205		51.
	TEN 1900 29+255	5	200		
	TEN 1900 30+005	5	132		
34) 	TEN 1900 30+755	5	141)		
	TEN 1900 31+505	5	397		
	TEN 1900 32+258	10	211 <sup>1</sup>		
	TEN 1900 33+005	5	520		
	TEN 1900 33+755	5	332		
	TEN 1900 34+505	2 6			
	TEN 1900 35+255	5	101 40072		
	TEN 1900 36+755	5	51/51		
	TEN 1900 37+505	10	229		
<b>期</b> 限工	TEN 1700 574305		1.7 · 7		
	TEN 1900 38+255	10	46		
	TEN 1900 39+005	5	710		
	TEN 1900 39+755	5	570		
	TEN 1900 40+505	5	490		
	TEN 5+00E 0+00S	10	52		
		· · · · · · · · · · · · · · · · · · ·			
	TEN 5+00E C+755	5	11		
	TEN 5+60E 1+50S	5	4.6		
	TEN 5+00E 2+255	10	290		
	TEN 5+00E 3+00S	10	217		
	TEN 5+00E 3+755	5	75		
Sec.					
(	STD	460			

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THUNDER BAY LAB.: TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate OV-1227-SG29

Company: CYPRUS GOLD CANADA Project: HOGEM Attn: D.B.STEVENSON

Date: SEP-04-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOILS samples submitted AUG-21-90 by D.B.STEVENSON.

Sample Number	AU-WET PPB	CU PPM			
TEN 2+50W 0+75	S 10	21	 n an	and who see that the stat size that but you	NHÀ NHÀ MHÀ MHÀ MAY MÀN NHÀ MHÀ MHÀ MHÀ MHÀ MHÀ MHÀ
TEN 2+50W 1+50	5 10	274			
TEN 2+50W 2+25	<b>5</b> 5	201			
TEN 2+50W 3+00	S 5	100			
TEN 2+50W 3+75	6 5	32			
TEN 2+50W 4+50	3 5	180		ter Har jaar sint die kijn kij van konstaar	
TEN 2+50W 5+25	6 5	20			
TEN 2+50W 6+00	<b>6</b> 80	30		27	
TEN 2+50W 6+75	6 5	67	14		
TEN 2+50W 7+50	3 10	57			
TEN 2+50W 8+25		<i>1</i> ; 4			
TEN 0+00E 0+00		1.3.41			
TEN 0+00E 0+75		290			
TEN 0+00E 1+50		2.00			
TEN 0+00E 2+25	3 5	24			
TEN 0+00E 3+00	3 5	21			
TEN 0+00E 3+75		O.			
TEN 0+00E 4+50		25			
TEN 0+00E 5+25		28			
TEN 0+00E 6+00	5	590	 		-
TEN 0+00E 6+75		344			
TEN 0+00E 7+508		196			
TEN 0+00E 8+259		287			
TEN 0+00E 0+75		4, ()			
TEN 0+00E 1+50		121	 	ar ban bin dan san san san san san san san	-
TEN 0+00E 2+25		915			
TEN 2+50E 0+009		172			
TEN 2+50E 0+759		345			
TEN 2+50E 1+509		-31			
TEN 2+50E 2+259	5	178	 1		
ern	700				

STD

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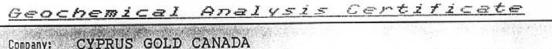
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VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621 THUNDER BAY LAB .:

TELEPHONE (807) 622-8958 FAX (807) 623-5931 SMITHERS LAB .:

TELEPHONE/FAX (604) 847-3004

10 15 TEN 2+50E 3+00S 5 TEN 2+50E 3+759 5 28 TEN 2+50E 4+50S 5 TEN 2+50E 5+25S 5 TEN 2+50E 6+005 5 15+00 28+00 S (C) 11 5 ET 1720 3+25 N 110 STN 7+50W 1+50S 10 497 15 Ē. HE 1720 4+00SA 35 а HE 1720 4+00SB 5 HE 1720 4+00SC 70 268 10 TEN 1800 1+75E 420 STD Certified by



We hereby certify the following Geochemical Analysis of 12 SOILS samples

Cu

PPM

Number

MINERAL

Company:

Project:

下の「日本でのため」 Sample

Attn:

INMENTS

SPECIALISTS IN MINERAL ENVIRONMENTS

CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

submitted AUG-21-90 by D.B.STEVENSON.

AU-WET

PPB

ABORATORIES

D.B.STEVENSON

(DIVISION OF ASSAYERS CORP.)

HOGEM

Date: SEP-04-90

Copy 1. CYPRUS GOLD CANADA, VANCOUVER, B.C.

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0V-1227-SG30

Appendix 3 - Geochemical Preparation and Analytical Procedures

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Division of Assayers Corp. Ltd.

ANALYTICAL PRECEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR WET GOLD GEOCHEMICAL ANALYSIS

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized on a ring mill pulverizer.

5.00 grams of sample is weighed into porcelain crucibles and cindered @ 800 C for 3 hours. Samples are then transferred to beakers and digested using aqua regia, diluted to volume and mixed.

Further oxidation and treatment of 75% of the above solution is then extracted for gold by Methyl Iso-butyl Ketone.

The MIBK solutions are analyzed on an atomic absorption spectrometer using a suitable standard set.

DE ICE AND LABORATORIES: 105 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C. 1 ADA V7M 1T2 PHONE: (604) 980-5814 (604) 988-4524 TELEX: VIA USA 7601067 FAX: (604) 980-9621



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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR AG, CU, PB, ZN, NI, CO OR CD GEOCHEM 

Samples are processed by Min-En Laboratories at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analysed on atomic absorption spectrometers using the appropriate standard sets. A background correction can be applied to Ag, Pb, and Cd if requested.

OFFICE AND LABORATORIES: TOS WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C. ADA V7M 1T2

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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B. C., laboratory employing the following procedures:

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized on a ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.

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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR TRACE ELEMENT ICP \_\_\_\_\_\_

> Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, U, V, 2n, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analyzed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers.

Appendix 4 - Project Cost Breakdown

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# PROJECT COST BREAKDOWN CYPRUS GOLD (CANADA) LTD. TEN PROPERTY (August 5 to August 17, 1990)

Salaries\$12000.00
Report Compilation\$5000.00
Assays\$4702.50
Field Supplies - Cookery\$2939.36
Helicopter (\$4995 x 20%)\$999.00
Drafting\$739.76
Mag Rental\$541.65
Freight\$538.50
Truck Rental\$490.76
Travel Expenses

Total Project Cost - \$28235.23

Appendix 5 - Statement of Qualification

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### STATEMENT OF QUALIFICATION

I, David B. Stevenson, of the Municipality of North Vancouver in the Province of British Columbia, certify as follows regarding the report on the Ten property, Omineca Mining Division, British Columbia.

I am a graduate of the University of New Brunswick, Fredericton, New Brunswick with a Bachelor of Science, Honours in Geology, 1981.

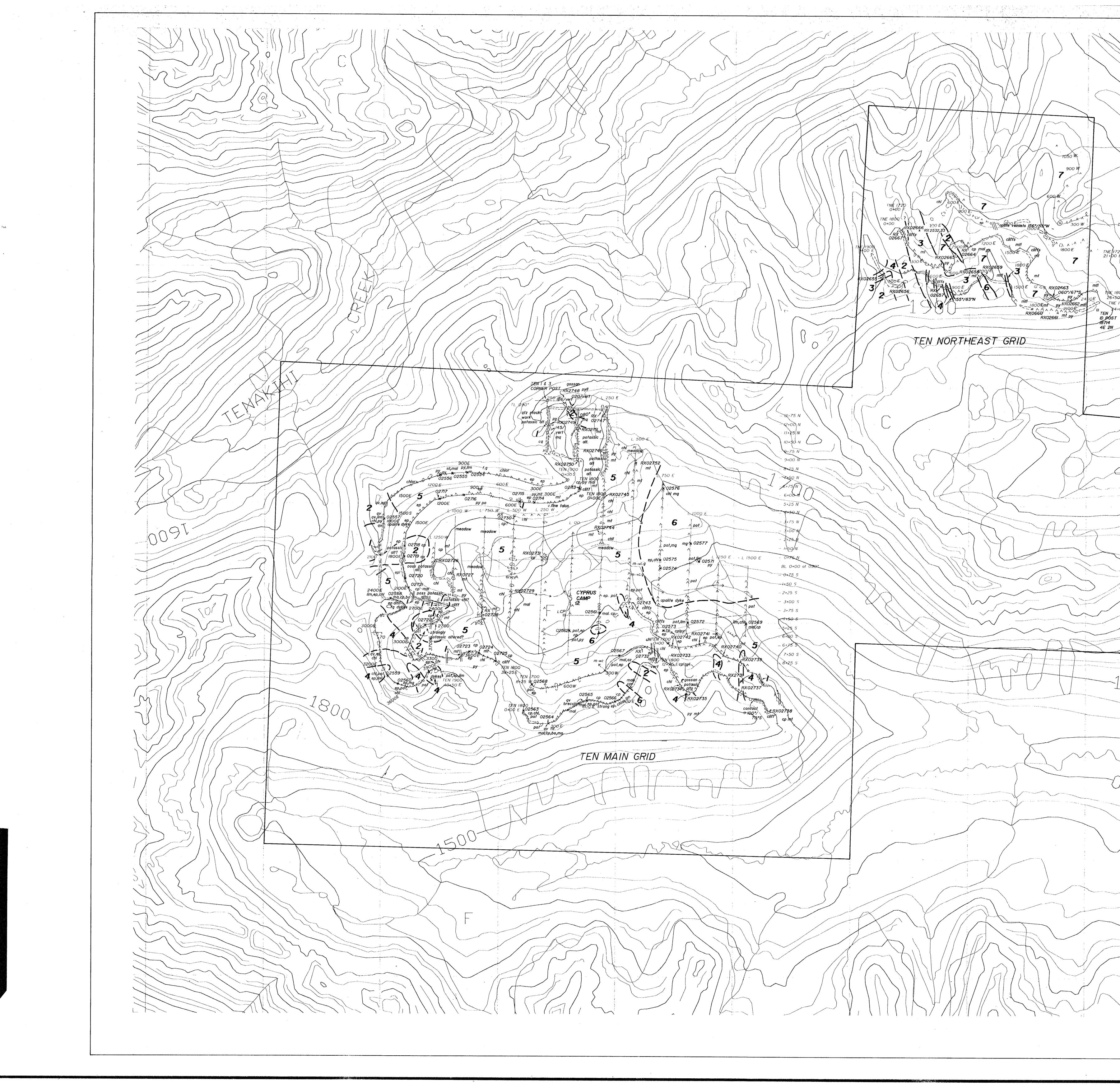
I have practised geology in Canada and Norway since 1981.

I am employed by Cyprus Gold (Canada) Ltd., 1810-1055 West Hastings Street, Vancouver, B.C. V6E 2E9.

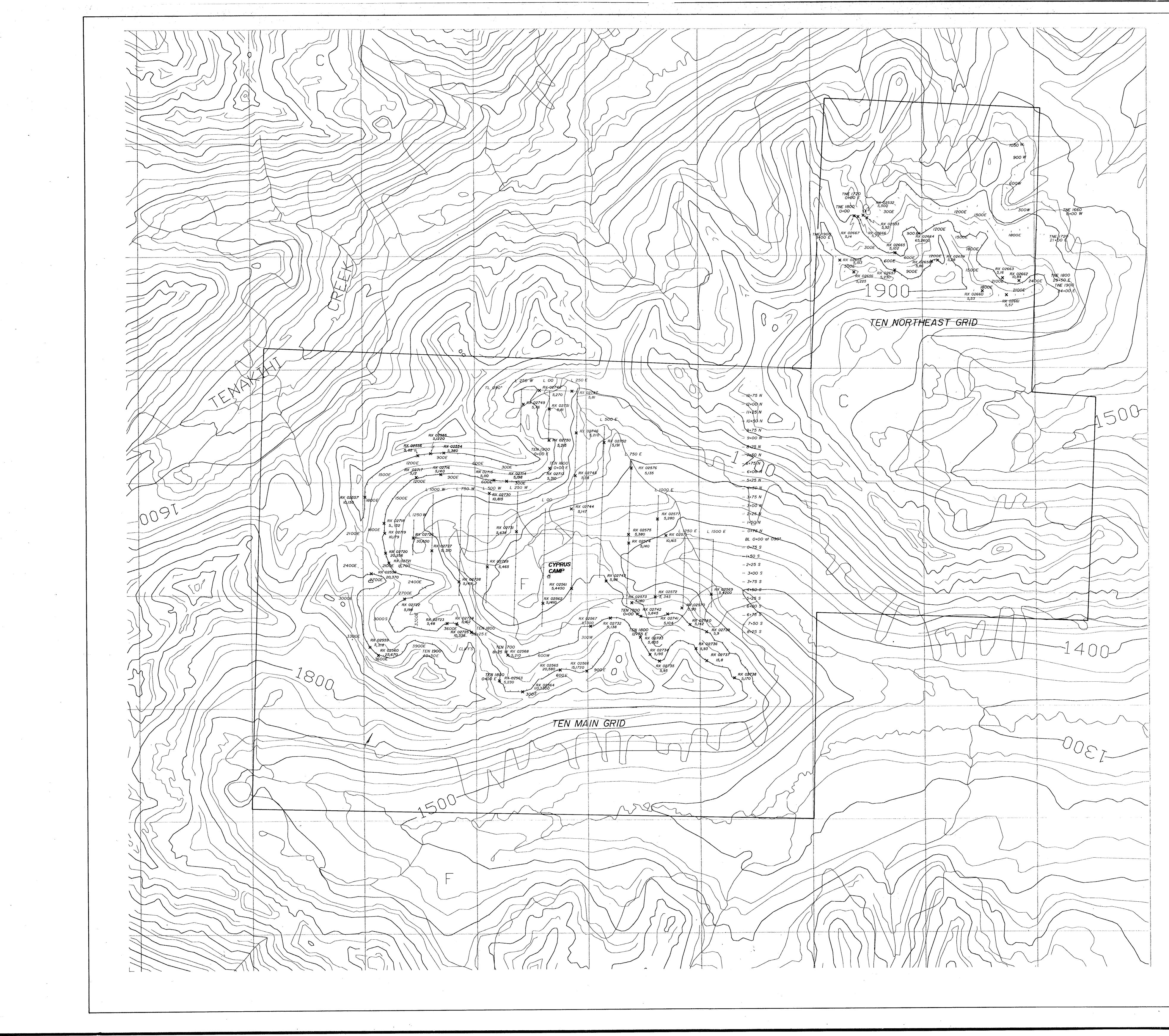
I supervised and coordinated exploration activities on or adjacent to the Ten property.

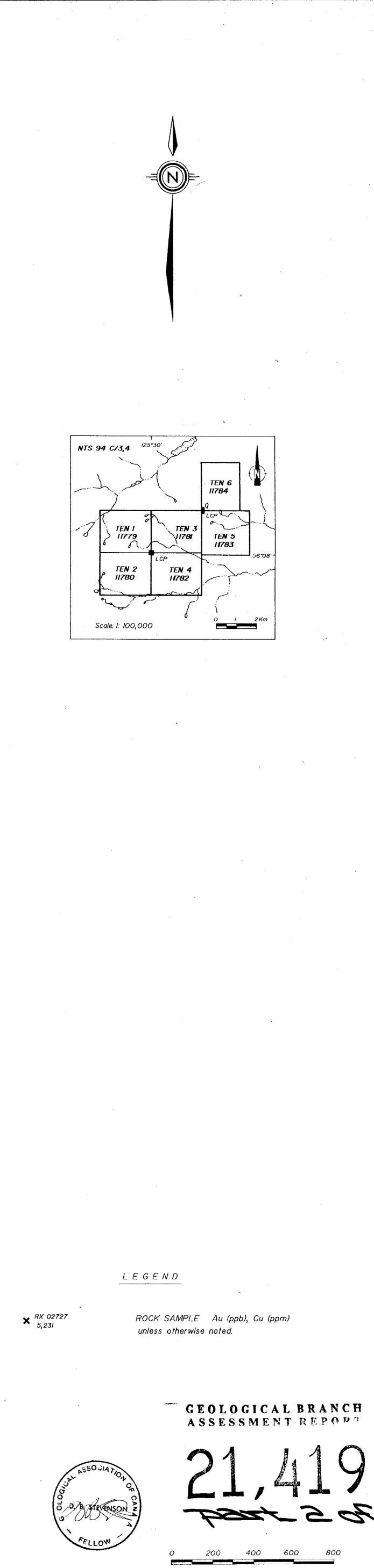
I am a Fellow of the Geological Association of Canada.

SSOULA B.Sc. FGAC Β. Dal enson id June 1097W



NTS 94 C/3,4 125'30' TEN 6 11784 CP CP TEN 1 11779 TEN 3 ten 5 1**1783** 1781 TEN 2 11780 TEN 4 11782 Scale: I: 100,000 LEGEND PORPHYRY DYKES-Fine grained massive light grey to chocolate-brown biotite-bearing 1 orthoclase – plagloclase porphyry dyke, only rare locally disseminated cp, py associated with minor quartz stockworking, non magnetic. LEUCOCRATIC SYENITE-2 Fine to coarse grained massive light orange-grey to bright orange biotite-hornblende bearing leucosyenite, local intense potassic alteration; locally minor disseminated py, cp; non magnetic. MESOCRATIC SYENITE-Fine to coarse grained massive dark orange-grey biotite-hornblende 3 mesocratic syenite, rare disseminated cp, non to locally weakly magnetic. MONZONITE-Fine to coarse grained light-grey biotite-hornblende bearing monzonite; 4 weakly magnetic. MONZODIORITE-Medium to coarse grained light to dark grey biotite-hornblende 5 monzodiorite; non to locally very minor disseminated and fracturefilling py,cp; minor to moderate epidote, chlorite and limonite alteration, locally very weak potassic alteration, non magnetic. DIORITE-Fine to coarse grained massive dark grey-black biotite-hornblende-rich diorite, non to locally magnetic. 6 MAFIC VOLCANICS-Fine grained massive to moderately schistose black-green andesite; abundant chlorite alteration; locally abundant disseminated pyrite; weak to locally strongly magnetic. 7 SYMBOLS Claim post 'ሳ<sub></sub> <sup>ś</sup>' Shearing × Rock sample  $\bigcirc \otimes \land$  Outcrop, possible outcrop, float Geological contact known, approximate Mineralization, weak, moderate, strong,pyrite (py), chalcopyrite (cp), malachite (mal), azurite (az), magnetite (mt), bornite (bo), molybdenum (mo). ру ру!ру!! Alteration, weak, moderate, strong;silicification (sil), chlorite (chl), epidote (ep), potassic (pot), llmonite (lim). sil sil! sil!! GEOLOGICAL BRANCH ASSESSMENT REPORT 20 400 600 800 DE STEVENSON CYPRUS GOLD (Canada) Ltd. HOGEM PROJECT - TEN PROPERTY GEOLOGY NTS 94C/3,4 DRAWN BY D. STEVENSON SCALE 1:10000 DATE SEPT 1990 MAP NO



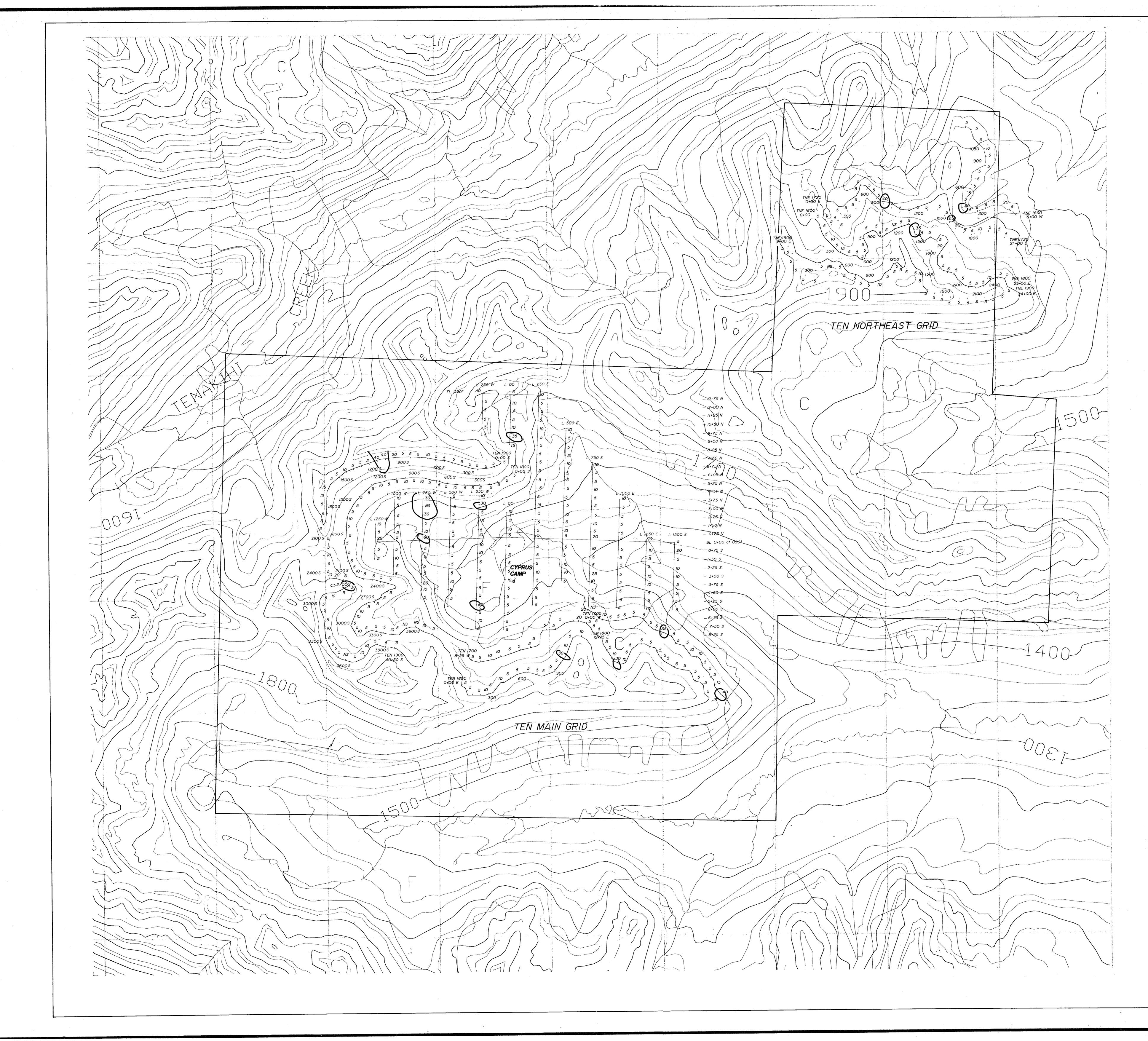


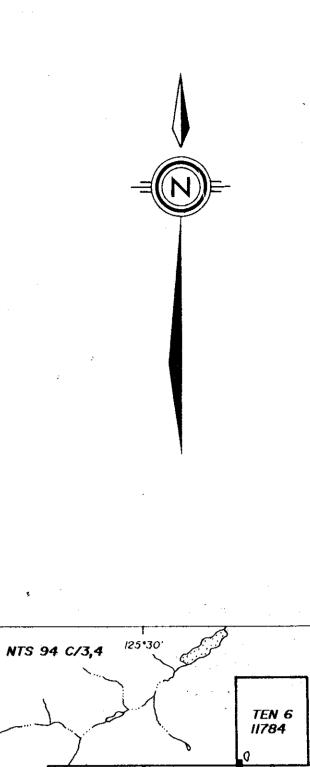
(Canada) Ltd.

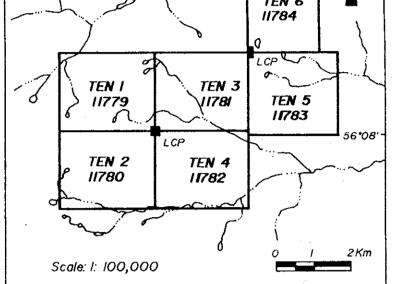
HOGEM PROJECT - TEN PROPERTY Au-Cu in Rocks

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# LEGEND

O. BUSTEVENSON

\_\_\_\_ ≥ 30 ppb Au

GEOLOGICAL BRANCH ASSESSMENT REPORT

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HOGEM PROJECT - TEN PROPERTY

Au (ppb) in Soils

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 D. STEVENSON
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