

GEOCHEMISTRY REPORT

HOPEFUL #1 GROUP

Skeena Mining Division

Latitude: 55° 41' N

Longitude: 129° 44' W

NTS: 103 P/12

By: D.A. Visagie, P. Geo.

December 15, 1997

Owner/Operator: International Northair Mines Ltd.  
860-625 Howe Street  
Vancouver, B.C.  
V6C-2T6

0-3834-3001-207 (2000) 11/11/97 11:11 AM  
VANCOUVER, B.C.

25,328

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## 1.0 INTRODUCTION

International Northair Mines Ltd.'s Hopeful #1 property is located 32 kilometers southwest of Stewart, B.C. The property was staked in 1995 to cover an area of prospective Lower Jurassic Hazelton Group volcanics. Geochemical sampling, completed in 1996, showed the Hope 3 & 4 claims to host anomalous precious and base metal stream sediment values. In 1997, a 2 man crew spent 6 man-days attempting to locate the source of these values. The work, completed between July 4 and August 15, 1997, resulted in the taking of 16 rock chip samples. The program was hampered by inclement weather and steep topographic conditions. The work did not outline any economic zones of precious or base metals. The cost of the program is calculated to be \$3689.

## 2.0 LOCATION AND ACCESS (Figure 1)

The property is located 32 km southeast of Stewart, B.C. It is centred at 55° 41'N, 129° 43 W, occurring on NTS sheet 103 P/12. Access to the property is by helicopter from Stewart.

## 3.0 CLIMATE, TOPOGRAPHY AND VEGETATION

Climate in the area is typical of the northern Coast Range with summers being mild and wet while winters are cool and wet. Temperatures vary from a minimum to -25°C in the winter to +25°C in the summer.

Topography on the property is rugged and steep. Elevations on the property range from 800 to 1800 metres. U-shaped glaciated valleys are common throughout.

At higher elevation, >1000 metres, sub-alpine vegetation consisting of alpine heather and stunted spruce and fir is common. Below 1000 metres, the vegetation is thick consisting of slide alder, devil's club blueberry bushes, spruce, fir, hemlock and cedar forests.

## 4.0 PROPERTY STATUS (Figure 2)

The Hopeful #1 Group, upon acceptance of this report, will consists of the following:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Units</u>
Hope 3	341438	Oct 15, 1998	18
Hope 4	341439	Oct 15, 1998	18

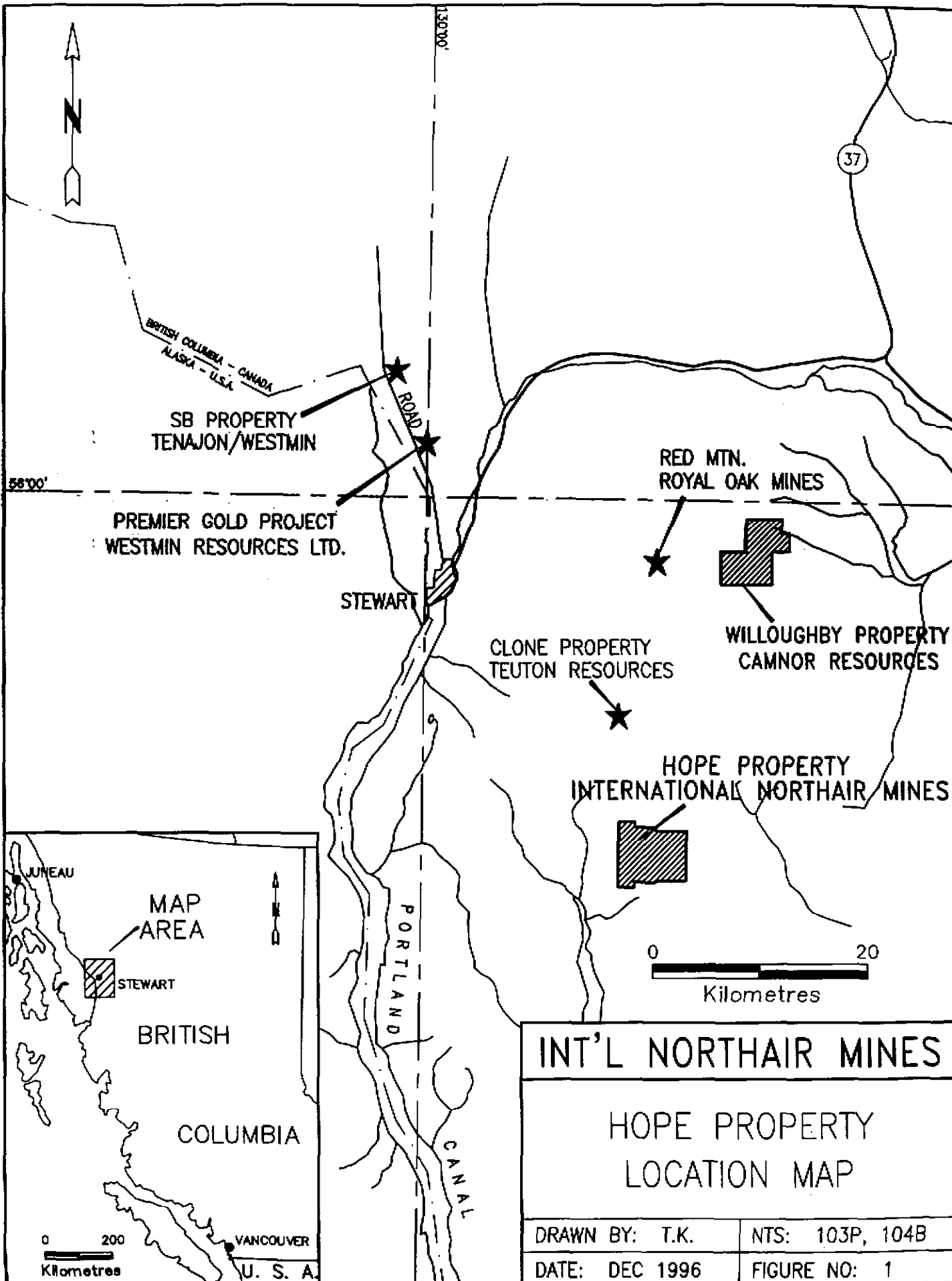
All claims occur within the Skeena Mining Division and are 100% held by International Northair Mines.

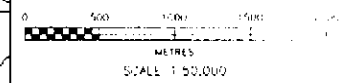
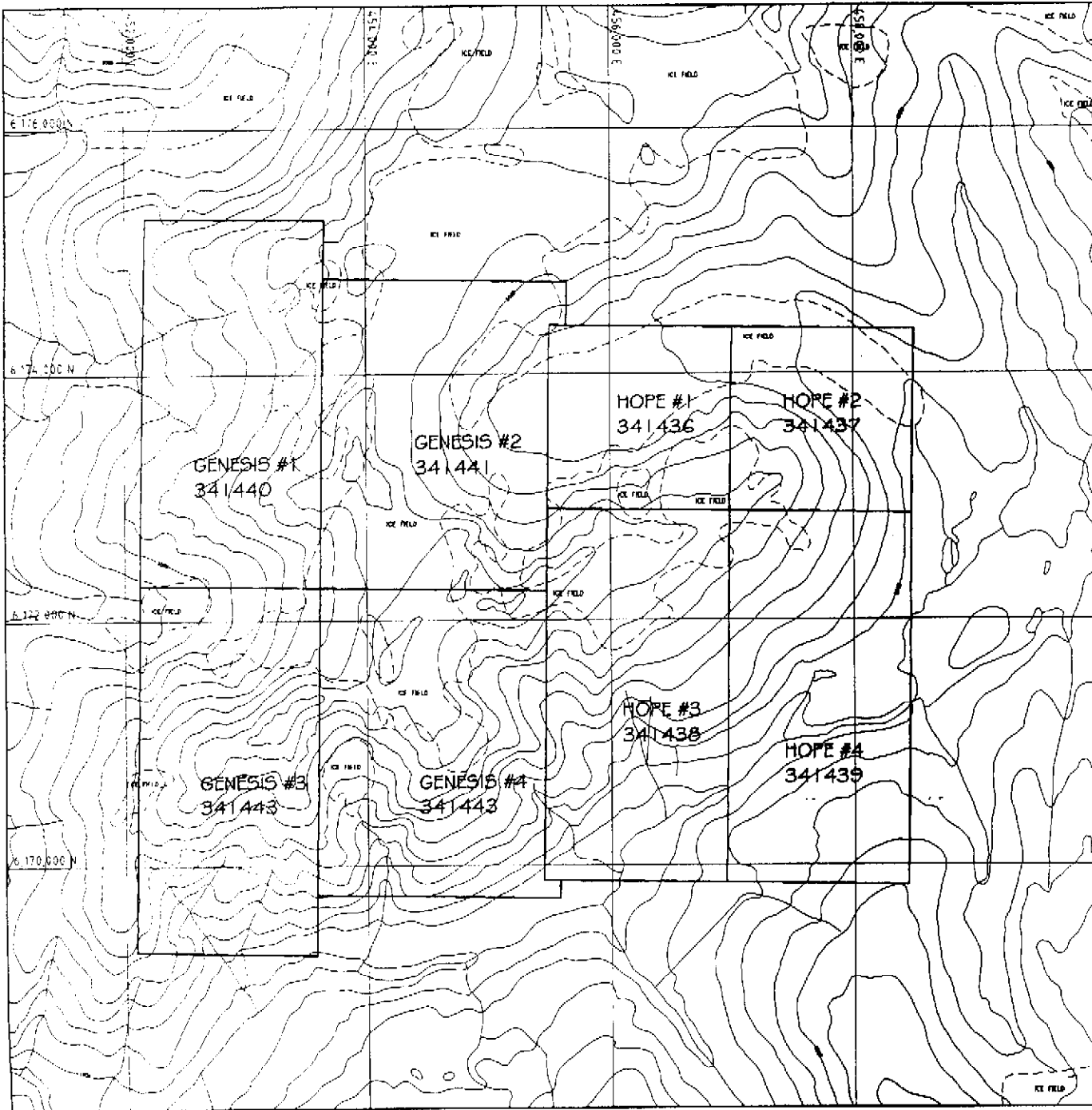
## 5.0 PROPERTY HISTORY

The Hopeful Claim Group occurs within an area host to many past and present producers and promising exploration prospects.

Exploration, completed at the turn of the century in the Kitsault River area, 12 kilometers to the east, resulted in the discovery of several silver-lead-zinc stratabound volcanogenic deposits including the past producing Dolly Varden and Torbit Mines. Production at the Dolly Varden Mine was 33,434 tonnes containing 1,300,000 ounces of silver, 3,200 tonnes of copper and 15,400 tonnes of lead. At the Torbit 1,251,339 tonnes were mined producing 18,600,000 ounces of silver and 5,000 tonnes of lead.

At the Georgie River Property, located 22 kilometers to the northwest visible gold and electrum occur in association with galena within narrow quartz veins. In 1937 limited production was achieved resulting in the recovery of 10,233 grams of gold, 12,752 grams of silver and 3,312 kilograms of silver from 454 tonnes of ore.

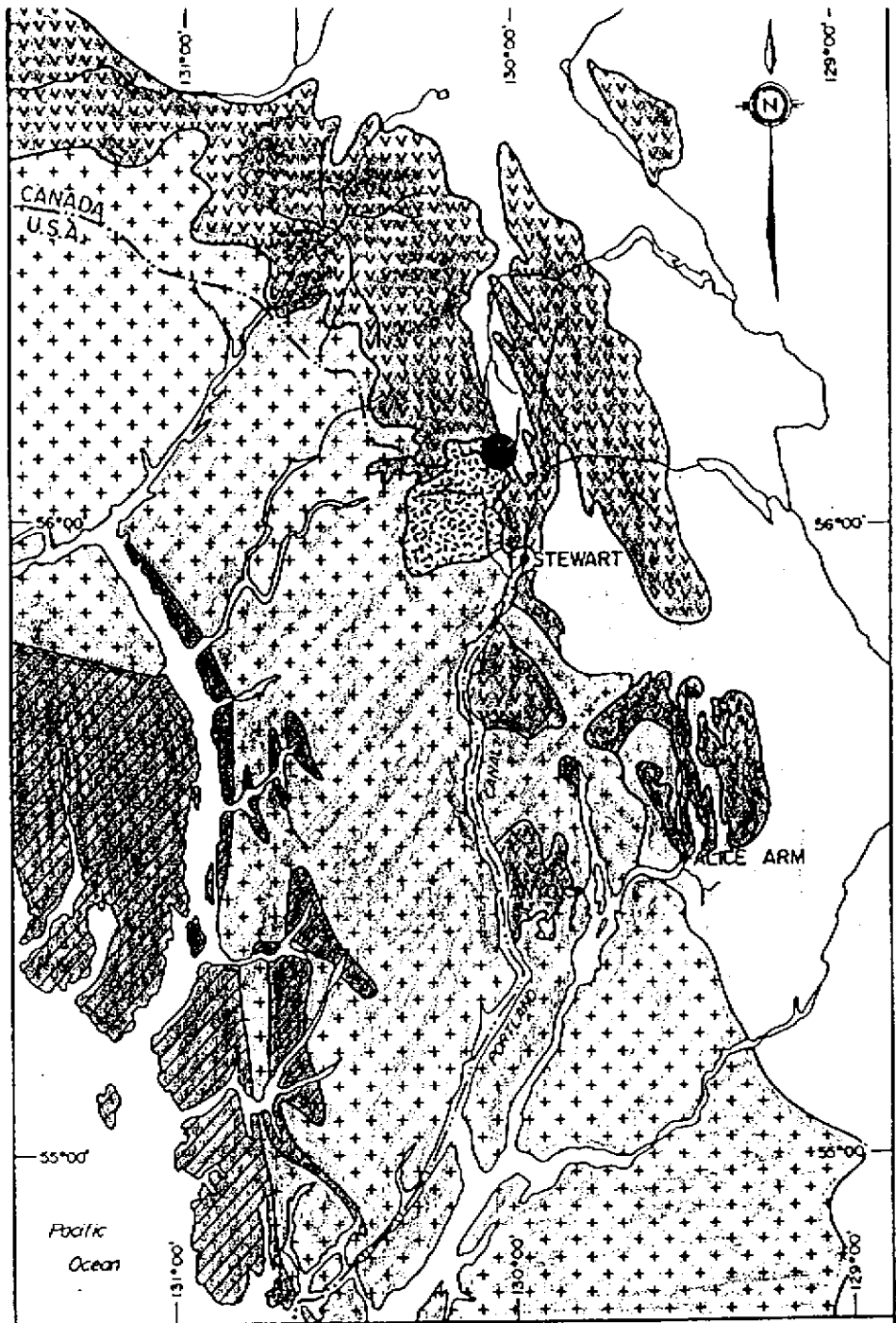









INTL NORTHAIR MINES LTD.  
HOPE PROPERTY

CLAIM MAP

DRAWN BY: T.K. SCALE: 1:50,000  
DATE: DEC 1996 FIGURE NO: 2



LEGEND

- |   |   |   |  |
|---|---|---|--|
|  | LOWER-MIDDLE JURASSIC<br>BOWSER ASSEMBLAGE  |  | UPPER TRIASSIC - LOWER JURASSIC<br>TEXAS CREEK INTRUSION |
|  | UPPER TRIASSIC - LOWER<br>JURASSIC<br>TAKLA & HAZELTON<br>ASSEMBLAGE<br>(STEWART COMPLEX) |  | CRETACEOUS - TERTIARY<br>COAST RANGE INTRUSIONS          |
|  | WRANGELL METAMORPHIC BELT<br>(UNDEFINED AGE)  |   |  |

REGIONAL GEOLOGY OF THE STEWART - ANYOX AREA



Figure 4 ( after Dykes et al, 1988 )

Twelve kilometres to the north-northwest is Teuton Resources Corporation/Minvita Enterprises Clone gold-cobalt prospect. Mineralization, consisting of shear controlled, hematitic breccia, has been traced for 1.5 km with widths variable to 8 metres.

Royal Oak Mining Corporation's Red Mountain gold deposit is located 30 km to the north. Exploration at the property has outlined a Geological Reserve of approximately 800,000 ounces of gold at an average grade of 0.30 opt.

## 6.0 REGIONAL GEOLOGY (Figure 3)

The Hopeful property occurs along the western edge of a broad, north-northwest trending volcano-plutonic belt composed of Upper Stuhini and Lower Jurassic Hazelton Group rocks. This belt, termed "Stewart Complex" by Grove (1986) forms part of Stikinia terrane. The belt has been traced for 150 km from near Anyox in the south to the Iskut River in the north. It hosts several past and presently producing gold-silver mines including the Snip, Eskay Creek and Premier. To the west, the Complex is bordered by Cretaceous Coast Plutonic Complex rocks while to the east it is overlain by Middle to Upper Jurassic Bowser Lake Group sedimentary rocks.

## 7.0 PROPERTY GEOLOGY (Figure 4)

Reconnaissance mapping was completed in 1996. The mapping showed the property to be primarily underlain by Coast Mountain Plutonic Complex granodiorite to diorite. Minor feldspar porphyry is present. Epidote-chlorite veining is common. In the southwest corner of the Hope #2 claim hornfelsed siltstones and argillites occur in which minor gossan is developed.

At the Hill Showing an up to 3 metre wide, 100 metre long north east trending, steeply north dipping, quartz vein was located. Vein mineralogy consists of a quartz with minor carbonate gangue in which trace to 1%, disseminated pyrite and chalcopyrite occur. Malachite staining randomly occurs. Along strike the vein is overburden covered.

## 8 1997 WORK PROGRAM

The 1997 work program consisted of the prospecting and sampling of prospective source areas. The work was completed by a two man crew consisting of:

Dave Visagie	Senior Geologist
Jareb Sims	Labourer

The evaluation was completed on July 21 and 26, 1997.

## 9.0 GEOCHEMISTRY (Figure 5)

All 16 rock chip samples were sent to Chemex Labs, 212 Brooksbank Avenue, North Vancouver for gold and I.C.P analysis. The sample locations and gold values are plotted on Figure 5. Appendix 1 is a listing of the sample descriptions while Appendix 2 lists the assay results.

### 9.1 Field Procedure

Grab and measured width rock chip samples were collected using a hammer and moil, identified, stored in plastic sample bags then dried. The samples were then freighted to Vancouver for analysis.

## 9.2 Assay Procedure

The following is the procedure used in the analysis of the samples.

Samples dried (if necessary), crushed or sieved to pulp size and pulverized to approximately -150 mesh.

For the 32 element I.C.P. analysis a 10 gram sample is digested with 3 ml of 3:1:3 nitric acid to hydrochloric acid to water at 90°C for 1.5 hours. The sample is then diluted to 20 mls with demineralized water and analyzed. The leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, Sb, Ti, U and W.

For gold analysis by atomic absorption a 10 gram sample that has been ignited overnight at 600°C is digested with hot aqua regia and the clear solution obtained is extracted with Methyl Isobutyl Ketone (MIBK). Gold is determined in the MIBK extract by atomic absorption using a background detection (limit 5 ppb).

## 10.0 ASSAY RESULTS

Of the 16 samples taken and submitted for assessment only 1 returned a value of >30 ppb Au. The sample, 33017, is a grab sample of locally derived float. The sample contains 15% disseminated pyrite within a granodiorite host. Base metal values are generally low with the best sample, returning 968 ppm Cu over 0.5 metre, being taken from a portion of the Hill Showing Vein.

## 11.0 SUMMARY AND CONCLUSIONS

Two days of labour were spent evaluating an area of anomalous stream sediment and rock chip geochemistry. The work resulted in the evaluation of two areas. The prospecting and sampling led to the discovery of the Hill Showing. The Hill Showing is a 100 metre long and open, up to 3 metre wide quartz vein in which minor, disseminated, chalcopyrite and pyrite occur. Assay results of chip samples taken from the Hill Showing and of other quartz vein systems located in the area did not outline any significant zones of precious or base metal mineralization. Elsewhere on the property precious and base metal values are non-economic.

## 12. RECOMMENDATIONS

It is recommended that no further work be completed on the Hopeful #1 Property.



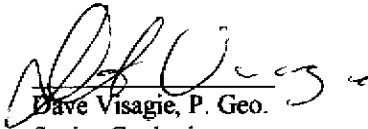
## 13.0 COST STATEMENT

1.	Labour (July 21, 26)	\$780
	D. Visagie 1.5 days @ \$370/day	
	J. Sims 1.5 days @ \$150/day	
2.	Room & Board	\$150
	1.5 man-days @ \$100/day	
3.	Transportation	\$1725
	1.5 days truck rental @ \$100/day	
	Helicopter: July 21-1.7 hours	
	July 26-0.4 hours	
	Total 2.1 hours @ \$750/hour	
4.	Assaying	\$299
	16 Samples @ \$18.70/sample	
	Geochem ring to approx -150 mesh	
	0-3 kg crush and split	
	I.C.P-32	
	Au ppb FA + AA	
5.	Report	\$400
	includes Xeroxing, writing and drafting	
		Sub-total
		\$3354
6.	Management Fee	\$ 335
	@ 10%	
		<b>TOTAL</b>
		<b>\$3689</b>

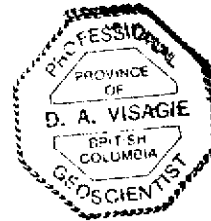
## 14.0 STATEMENT OF QUALIFICATIONS

I, David A. Visagie do hereby certify that:

1. I graduated in 1976 from the University of British Columbia with a Bachelor of Science Degree Major in Geology.
2. Since graduating I have continuously been employed in the mining industry
3. I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. For the last eight years I have been employed by The Northair Group as a Senior Geologist.
5. I supervised the exploration program completed on the Hopeful #1 Group.

  
Dave Visagie, P. Geo.  
Senior Geologist,  
International Northair Mines

Dated December 17, 1997 at Vancouver, B.C.





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

NORTHAIR MINES LIMITED

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Page Number : 1-B  
 Total Pages : 2  
 Certificate Date: 10-AUG-97  
 Invoice No. : 19735125  
 P.O. Number :  
 Account : K

Project : STEWART  
 Comments: ATTN: MARK PREFONTAINE CC: DAVID VISAGIE

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9735125</b>
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SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
M330001	205	226	545	1	0.06	5	1180	4	< 2	1	38	0.08	< 10	< 10	58	< 10	58
M330002	205	226	235	2	0.07	2	1270	4	< 2	1	42	0.05	< 10	< 10	36	< 10	24
M330003	205	226	450	< 1	0.11	6	1160	2	< 2	1	54	0.08	< 10	< 10	53	< 10	48
M330004	205	226	170	3	0.03	5	1440	4	< 2	1	52	0.10	< 10	< 10	35	< 10	24
M330005	205	226	975	9	0.13	2	490	10	< 2	8	53	0.17	< 10	< 10	93	< 10	242
M330006	205	226	890	< 1	0.09	5	1080	18	< 2	3	53	0.14	< 10	< 10	111	< 10	98
M330007	205	226	395	1	0.10	3	1060	6	< 2	1	53	0.08	< 10	< 10	40	< 10	28
M330008	205	226	495	< 1	< 0.01	4	770	4	< 2	2	98	0.17	< 10	< 10	50	< 10	52
M330009	205	226	1005	< 1	0.02	6	1030	2	< 2	4	52	0.15	< 10	< 10	92	< 10	74
M330010	205	226	510	2	0.05	1	1280	8	< 2	2	24	0.10	< 10	< 10	56	< 10	34
M330011	205	226	620	2	0.05	4	1220	8	< 2	1	32	0.08	< 10	< 10	54	< 10	64
M330012	205	226	410	1	0.06	5	1230	8	< 2	1	36	0.09	< 10	< 10	47	< 10	36
M330013	205	226	340	< 1	< 0.01	2	320	2	< 2	< 1	52	0.05	< 10	< 10	16	< 10	28
M330014	205	226	1090	< 1	< 0.01	1	690	< 2	< 2	< 1	70	0.05	< 10	< 10	15	< 10	34
M330015	205	226	1180	1	< 0.01	5	630	6	< 2	1	22	0.03	< 10	< 10	18	< 10	62
M330016	205	226	865	10	< 0.01	7	1040	90	< 2	< 1	7	0.03	< 10	< 10	14	< 10	144
M330017	205	226	870	53	0.01	2	900	10	< 2	2	7	< 0.01	< 10	< 10	55	< 10	54
M330018	205	226	680	< 1	< 0.01	1	170	2	< 2	< 1	176	< 0.01	< 10	< 10	14	< 10	18
M330019	205	226	340	1	< 0.01	7	280	348	48	4	72	< 0.01	< 10	< 10	27	< 10	104
M330020	205	226	475	4	0.01	14	600	4	< 2	3	15	0.09	< 10	< 10	62	< 10	60
M330021	205	226	415	1	< 0.01	21	380	2	< 2	1	12	0.05	< 10	< 10	28	< 10	204
M330022	205	226	805	19	0.03	115	960	8	< 2	4	23	0.11	< 10	< 10	149	< 10	264
M330023	205	226	300	4	0.02	44	500	2	< 2	3	13	0.10	< 10	< 10	66	< 10	102
M330036	205	226	310	4	0.01	1	230	136	< 2	1	4	< 0.01	< 10	< 10	7	< 10	14
M330037	--	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
M330038	205	226	400	18	0.01	2	470	10	< 2	2	20	0.09	< 10	< 10	32	< 10	34
M330039	205	226	1230	8	< 0.01	1	30	294	< 2	< 1	4	< 0.01	< 10	< 10	12	< 10	9050
M330040	205	226	775	< 1	0.01	13	620	2	< 2	3	40	0.08	< 10	< 10	27	< 10	64
M330041	205	226	425	< 1	< 0.01	9	110	2	< 2	< 1	29	0.01	< 10	< 10	7	< 10	54
M330042	205	226	360	< 1	< 0.01	< 1	110	< 2	< 2	< 1	183	< 0.01	< 10	< 10	2	< 10	14
M330043	205	226	1135	1	< 0.01	4	380	6	< 2	< 1	64	0.03	< 10	< 10	9	< 10	42
M330044	205	226	955	1	< 0.01	6	650	10	< 2	< 1	75	0.03	< 10	< 10	9	< 10	50
M330045	205	226	1720	1	< 0.01	5	590	14	< 2	1	43	0.04	< 10	< 10	19	< 10	72
M330046	205	226	730	< 1	< 0.01	5	780	14	< 2	< 1	8	0.03	< 10	< 10	6	< 10	14
M330047	205	226	535	< 1	0.01	2	380	< 2	< 2	2	19	0.08	< 10	< 10	32	< 10	38
M330048	205	226	705	< 1	0.01	2	590	< 2	< 2	2	31	0.11	< 10	< 10	42	< 10	56
M330049	205	226	325	< 1	< 0.01	2	110	< 2	< 2	1	6	0.03	< 10	< 10	17	< 10	20
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M330051	205	226	920	< 1	< 0.01	2	< 10	< 2	< 2	< 1	3	< 0.01	< 10	< 10	26	< 10	80
M330052	205	226	225	< 1	0.05	< 1	560	< 2	< 2	< 1	27	0.04	< 10	< 10	13	< 10	36

CERTIFICATION: \_\_\_\_\_



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## CERTIFICATE OF ANALYSIS A9735125

*Sutton*

SAMPLE	PREP CODE		Au ppb	Au FA	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
	FA+AA	g/t	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
M330053	205	226	< 5	-----	0.2	0.51	< 2	210	< 0.5	< 2	0.07	< 0.5	1	105	53	1.07	< 10	< 1	0.07	< 10	0.12
M330054	205	226	15	-----	0.2	0.28	< 2	260	< 0.5	< 2	0.03	< 0.5	3	66	34	0.98	< 10	< 1	0.07	< 10	0.03
M330055	205	226	5	-----	0.6	0.45	8	1920	< 0.5	< 2	0.22	< 0.5	7	44	156	0.74	< 10	< 1	0.06	< 10	0.24

CERTIFICATION: \_\_\_\_\_



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	CODE		ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
M330053	205	226	110	< 1	0.03	1	90	2	< 2	< 1	19	0.03	< 10	< 10	4	< 10	6
M330054	205	226	45	< 1	0.03	1	30	2	< 2	< 1	11	< 0.01	< 10	< 10	1	< 10	4
M330055	205	226	315	< 1	< 0.01	2	460	142	2	< 1	106	0.01	< 10	< 10	5	< 10	16

CERTIFICATION: \_\_\_\_\_



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SAMPLE	PREP CODE		Au ppb	Au FA	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg
	FA+AA	g/t	ppm	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
M330001	205	226	10	< 0.2	1.63	172	40	< 0.5	< 2	0.80	< 0.5	16	19	52	4.06	< 10	< 1	0.06	< 10	0.67	
M330002	205	226	45	< 0.2	1.06	16	60	< 0.5	< 2	0.95	< 0.5	6	24	18	1.08	< 10	< 1	0.07	< 10	0.25	
M330003	205	226	10	< 0.2	1.63	< 2	40	< 0.5	< 2	0.98	< 0.5	15	22	46	3.12	< 10	< 1	0.07	< 10	0.51	
M330004	205	226	< 5	< 0.2	1.03	< 2	30	< 0.5	< 2	1.25	< 0.5	25	19	126	3.58	< 10	< 1	0.09	< 10	0.20	
M330005	205	226	1760	1.75	13.2	3.59	< 2	180	< 0.5	16	0.63	4.5	13	56	4520	5.79	10	< 1	1.36	< 10	0.92
M330006	205	226	< 5	< 0.2	2.88	6	60	< 0.5	< 2	0.77	< 0.5	12	23	25	4.67	10	< 1	0.11	< 10	1.62	
M330007	205	226	< 5	< 0.2	1.57	4	110	< 0.5	< 2	0.85	< 0.5	8	23	32	3.02	< 10	< 1	0.11	< 10	0.59	
M330008	205	226	< 5	< 0.2	1.91	< 2	10	< 0.5	< 2	0.83	< 0.5	11	45	1	2.48	< 10	< 1	0.05	< 10	1.23	
M330009	205	226	< 5	< 0.2	2.72	< 2	70	< 0.5	< 2	0.75	< 0.5	13	24	34	4.03	10	< 1	0.06	< 10	1.54	
M330010	205	226	< 5	< 0.2	1.47	< 2	30	< 0.5	< 2	0.92	< 0.5	6	26	232	4.02	< 10	1	0.05	< 10	0.71	
M330011	205	226	< 5	< 0.2	1.62	156	20	< 0.5	< 2	0.88	0.5	18	17	268	5.02	< 10	< 1	0.05	< 10	0.81	
M330012	205	226	< 5	< 0.2	1.45	12	40	< 0.5	< 2	1.03	< 0.5	13	22	139	4.28	< 10	< 1	0.06	< 10	0.56	
M330013	205	226	< 5	< 0.2	0.79	2	< 10	< 0.5	< 2	0.61	< 0.5	6	104	10	1.00	< 10	< 1	0.01	< 10	0.30	
M330014	205	226	< 5	< 0.2	1.03	2	< 10	< 0.5	< 2	1.15	< 0.5	8	79	5	1.03	< 10	< 1	< 0.01	< 10	0.17	
M330015	205	226	< 5	< 0.2	1.16	18	60	< 0.5	< 2	1.19	0.5	17	73	5	2.60	< 10	< 1	0.12	< 10	0.57	
M330016	205	226	10	< 0.2	1.38	138	40	< 0.5	< 2	0.50	3.0	25	20	33	5.28	< 10	< 1	0.14	< 10	0.71	
M330017	205	226	355	< 0.2	2.06	6	10	< 0.5	< 2	0.18	< 0.5	10	27	22	9.47	10	< 1	0.08	< 10	1.12	
M330018	205	226	< 5	< 0.2	0.79	< 2	40	< 0.5	< 2	1.90	< 0.5	3	90	1	1.09	< 10	< 1	0.10	< 10	0.27	
M330019	205	226	20	< 0.2	0.80	18	10	< 0.5	< 2	1.55	4.5	8	123	626	1.14	< 10	< 1	0.06	< 10	0.77	
M330020	205	226	< 5	< 0.2	1.78	< 2	60	< 0.5	< 2	0.27	< 0.5	6	45	44	2.45	< 10	< 1	0.11	< 10	1.78	
M330021	205	226	30	< 0.2	1.23	8	50	< 0.5	< 2	0.66	1.0	7	68	47	1.87	< 10	< 1	0.11	< 10	1.09	
M330022	205	226	25	< 0.2	1.63	14	20	< 0.5	< 2	0.54	3.0	16	123	142	3.62	< 10	< 1	0.04	< 10	1.82	
M330023	205	226	10	< 0.2	1.35	6	30	< 0.5	< 2	0.30	0.5	9	90	87	3.08	< 10	< 1	0.04	< 10	1.28	
M330036	205	226	< 5	< 0.2	0.35	< 2	50	< 0.5	< 2	0.13	< 0.5	4	99	183	0.89	< 10	< 1	0.12	< 10	0.12	
M330037	--	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
M330038	205	226	< 5	< 0.2	1.11	8	60	< 0.5	< 2	0.34	< 0.5	17	45	17	4.11	< 10	< 1	0.65	< 10	0.76	
M330039	205	226	100	< 0.2	1.17	8	30	< 0.5	< 2	0.03	>100.0	15	100	6440	5.21	< 10	< 1	0.02	< 10	0.65	
M330040	205	226	< 5	< 0.2	1.24	< 2	50	< 0.5	< 2	0.34	< 0.5	10	86	14	1.96	< 10	< 1	0.04	< 10	0.99	
M330041	205	226	< 5	< 0.2	0.32	< 2	40	< 0.5	< 2	0.25	0.5	2	144	29	0.61	< 10	< 1	0.01	< 10	0.21	
M330042	205	226	< 5	< 0.2	0.18	20	1650	< 0.5	< 2	0.61	< 0.5	4	16	241	0.39	< 10	< 1	0.01	< 10	0.14	
M330043	205	226	20	< 0.2	0.73	16	950	< 0.5	< 2	1.84	< 0.5	10	71	221	1.59	< 10	< 1	0.07	< 10	0.38	
M330044	205	226	30	< 0.2	0.82	24	970	< 0.5	< 2	0.80	< 0.5	18	53	303	1.72	< 10	< 1	0.09	< 10	0.46	
M330045	205	226	20	< 0.2	1.36	26	1010	< 0.5	< 2	1.81	< 0.5	19	54	159	2.68	< 10	< 1	0.10	< 10	0.78	
M330046	205	226	10	< 0.2	0.42	8	750	< 0.5	< 2	0.32	< 0.5	23	60	342	0.98	< 10	< 1	0.14	< 10	0.14	
M330047	205	226	< 5	< 0.2	0.91	< 2	400	< 0.5	< 2	0.23	< 0.5	5	120	8	1.76	< 10	< 1	0.04	< 10	0.65	
M330048	205	226	< 5	< 0.2	1.25	< 2	120	< 0.5	< 2	0.33	< 0.5	7	78	15	2.28	< 10	< 1	0.04	< 10	0.86	
M330049	205	226	< 5	< 0.2	0.48	< 2	130	< 0.5	< 2	0.07	< 0.5	3	125	5	0.98	< 10	< 1	0.01	< 10	0.32	
M330050	205	226	< 5	< 0.2	0.47	< 2	80	< 0.5	< 2	0.49	< 0.5	3	108	968	0.96	< 10	< 1	0.01	< 10	0.32	
M330051	205	226	< 5	< 0.2	1.66	< 2	80	< 0.5	< 2	< 0.01	< 0.5	9	98	322	3.26	< 10	< 1	< 0.01	< 10	1.18	
M330052	205	226	785	< 0.2	1.28	< 2	110	< 0.5	< 2	0.47	< 0.5	3	64	50	2.07	< 10	< 1	0.39	< 10	0.39	

Hope

Section

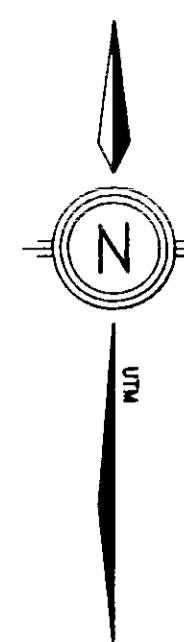
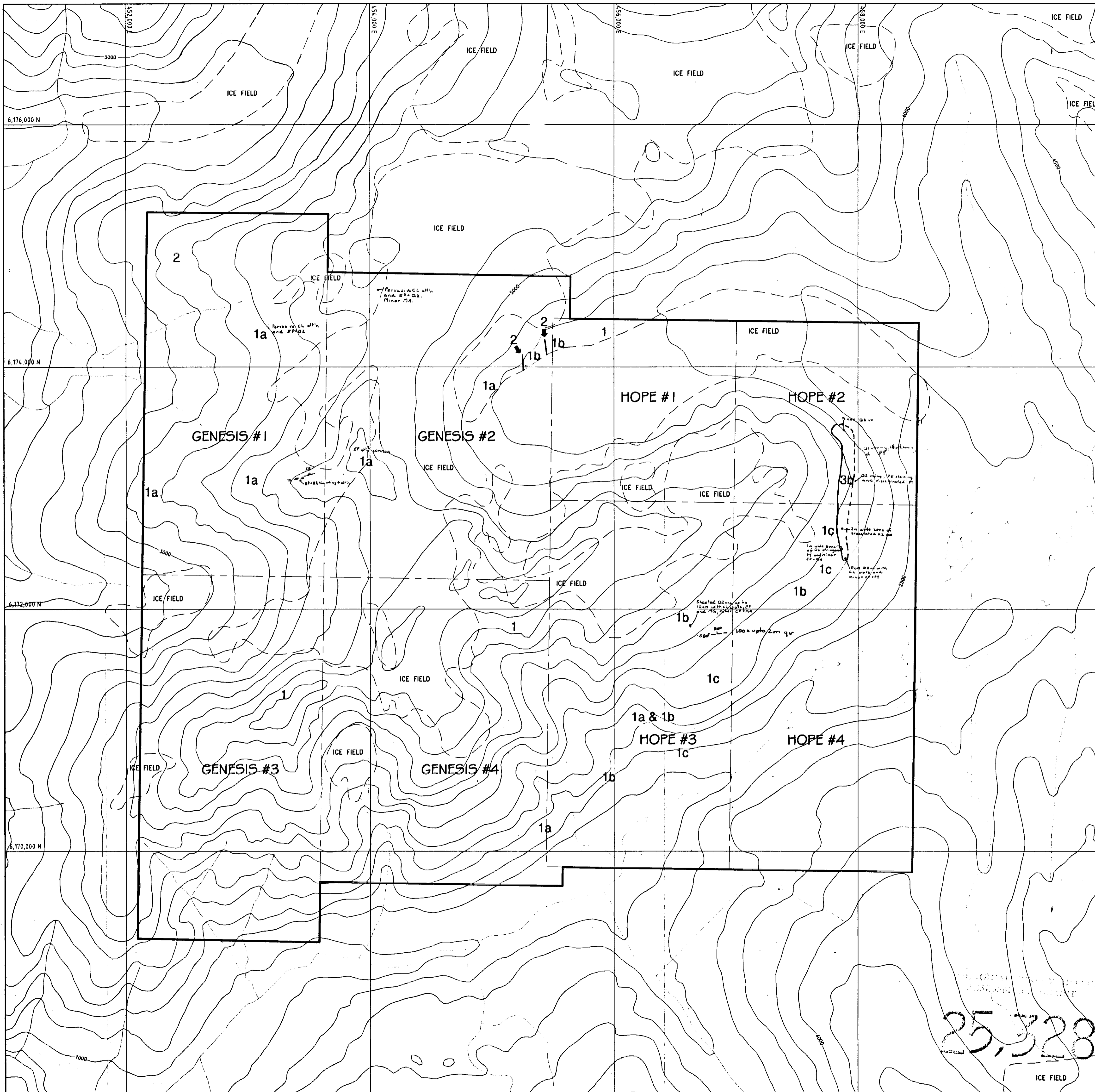
Section

Hope

Section

CERTIFICATION:

*David Visagie*



**LEGEND**

**LITHOLOGY**

- STRATIFIED ROCKS**
- HAZELTON GROUP**
- Lower to Middle Jurassic
- SEDIMENTS**
- 3 SALMON RIVER FORMATION siltstone, argillite, pyritic  
 a. homfels alteration; fine grained disseminated pyrrhotite and/or pyrite, chlorite  
 b. rusty weathering bedded siltstone and fine grained sandstone, siliceous and pyritic
- PLUTONIC ROCKS\***
- COAST PLUTONIC COMPLEX**
- Eocene?
- 2 Kahwan Glacier pluton: granodiorite; coarse grained, equigranular, hornblende-biotite granodiorite
- Early Jurassic?
- 1 Bulldog Creek pluton: granodiorite, diorite and feldspar porphyry diorite, commonly epidotized and chloritized  
 a: granodiorite; coarse grained, equigranular, hornblende-biotite granodiorite  
 b: diorite; fine to medium grained, equigranular, dark to medium greenish grey  
 c: feldspar porphyry diorite; fine grained, equigranular; dark grey diorite with 1mm-2 cm feldspar phenocrysts

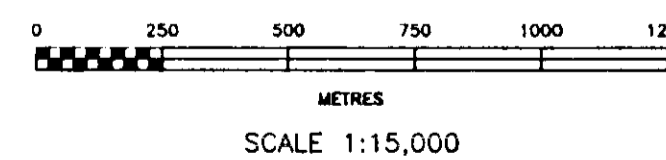
\*Note: Nomenclature based on comparing descriptions in most recent regional mapping north of the property by Greig et al. 1993. No definitive age dating of intrusives has been carried out.

**ABBREVIATIONS**

AK - ankerite	GL - galena
AS - arsenopyrite	HE - hematite
CA - calcite	MA - malachite
CB - carbonate	MG - magnetite
CL - chlorite	PY - pyrite
CP - chloropyrite	QZ - quartz
CY - clay	SC - scarnite
EP - epidote	SL - sphalerite
FX - feldspar	VG - visible gold
all'n - alteration	vn - vein
brxx - breccia	vring - veining
po - porphyritic	

**SYMBOLS**

- bedding
- foliation
- veins
- faults
- contacts



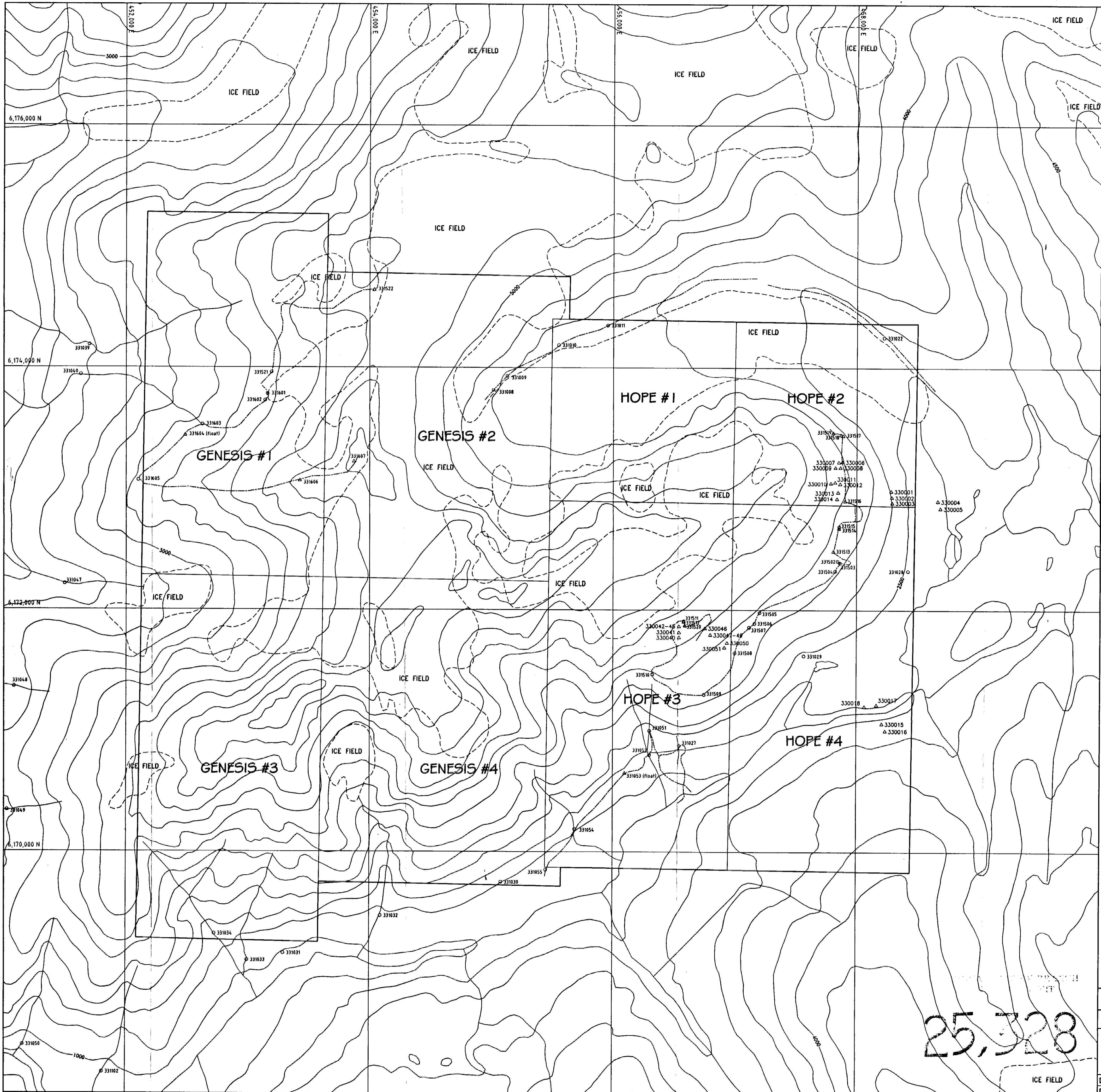
**INT'L NORTHAIR MINES LTD.**

**HOPE PROPERTY**

**GEOLOGY**

DRAWN BY: AW,KN,TK SCALE: 1:15,000  
 DATE: JULY 1996 FIGURE NO: 3

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**LEGEND**

- △ ROCK SAMPLE
- STREAM SILT SAMPLE
- TRAVERSE

**Rock samples - 1996**

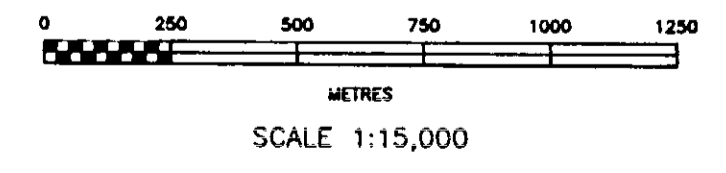
Sample	Au opt	Ag ppm
331053	0.001	18.4
331512	0.001	68.0
331513	0.009	4.4
331514	0.004	9.6
331516	0.015	0.8
331517	0.002	0.6
331518	0.001	0.2
331519	0.003	0.4
331520	0.017	6.30 opt
331522	0.005	1.4
331604	0.002	1.4
331606	0.002	1.8
331607	0.004	0.4

**Stream silt samples - 1996**

Sample	Au ppb	Ag ppm
331008	<10	<0.2
331009	20	0.2
331010	<10	<0.2
331011	40	0.2
331022	<10	<0.2
331027	na	<0.2
331028	520	0.8
331029	40	0.6
331030	<10	0.4
331031	<10	0.2
331032	<10	0.4
331033	<10	0.2
331034	<10	<0.2
331039	40	<0.2
331040	150	0.4
331047	60	<0.2
331048	40	<0.2
331049	60	0.4
331050	50	<0.2
331051	30	0.4
331052	30	0.8
331054	<10	3.8
331055	<10	0.2
331102	<5	0.8
331502	<5	0.8
331503	40	27.2
331504	<5	0.6
331505	<5	0.6
331506	5	0.4
331507	<5	0.2
331508	<5	0.8
331509	<5	0.6
331510	<5	<0.2
331511	<5	1.8
331515	235	5.2
331521	<5	<0.2
331601	<5	<0.2
331602	<5	<0.2
331603	<5	<0.2
331605	<5	<0.2

**Rock samples - 1997**

Sample	Au ppb	Ag ppm
330001	10	<0.2
330002	45	<0.2
330003	10	<0.2
330004	<5	0.2
330005	1760	13.2
330008	<5	0.8
330007	<5	0.2
330008	<5	<0.2
330009	<5	<0.2
330010	<5	0.4
330011	<5	0.6
330012	<5	0.2
330013	<5	<0.2
330014	<5	<0.2
330015	<5	<0.2
330016	10	1.0
330017	355	1.8
330018	<5	<0.2
330040	<5	<0.2
330041	<5	<0.2
330042	<5	1.0
330043	20	2.4
330044	30	3.2
330045	20	2.4
330046	10	1.2
330047	<5	<0.2
330048	<5	<0.2
330049	<5	<0.2
330050	<5	4.4
330051	<5	1.4



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**INT'L NORTHAIR MINES LTD.**  
**HOPE PROPERTY**  
**SAMPLE RESULTS**  
 DRAWN BY: TK      SCALE: 1:15,000  
 DATE: DEC 1997      FIGURE NO: