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GEOLOGNE EXPLORATIONS LTD. ASSESSMENT REPORT

FILE NO:

21324
ASSESSMENT REPORT ON DIAMOND DRILL HOLES H90-1 TO H90-9

### HOPE PROPERTY

HOPE 2 CLAIM

SLOCAN MINING DIVISION

LEMON CREEK AREA

N.T.S. 82F/11

LAT:  $49^044'N$ 

LONG: 117°25'W

### OWNER

CHAPLEAU RESOURCES LTD.

AND

MR. CRAIG KENNEDY

c/o 607 - 325 Howe St.,

Vancouver, B.C.

V6C 1Z9

### **OPERATOR**

KOKANEE EXPLORATIONS LTD.
Suite 104, 135 - 10th Ave. S.,
Cranbrook, B.C.
V1C 2N1

Work performed from Sept. 18, 1990 to Oct. 22, 1990

Report by: L. Stephenson Submitted: April, 1991

### TABLE OF CONTENTS

										PAGE
1.00	INTRODUC	TION	•	•	•	•	•	•	•	1
2.00	LOCATION	AND	ACCESS	•			•	•	•	1
3.00	TOPOGRAP	HY AN	D VEGE	TATI	ON.		•	•	•	1
4.00	REGIONAL	GEOL	OGY				•	•		1
5.00	PROPERTY	GEOL	OGY	•			•		•	2
6.00	1990 DIA	MOND	DRILL	PROC	GRAM -	Holes	Н90-3	L to	9	2
7.00	CONCLUSI	ons	•			•				3
EXHIE	BIT "A" -	Stat	ement	of E	Expend	litures	•	•		4
AFFIC	AVIT		•		•		•			5
AUTHC	R'S QUAL	IFICA	TIONS	•	•	•	-			6
PROPE	ERTY LOCA	TION	MAP	•	•	٠				7
LOCAT	TION MAP	- Dri	ll Hol	es H	190-1	to H90	-9		•	8
APPEN	IDIX I -	Drill	Core	Assa	ıys	•	•			9
APPEN	- זז ציחו	Dril	1 1000	L	100-1	+0 #00	- Q			1./

### REPORT ON DIAMOND DRILL HOLES H90-1 TO H90-9 HOPE 2 CLAIM

### Slocan Mining Division

### L. Stephenson

April, 1991

### 1.00 INTRODUCTION

In our exploration drilling on the Hope claim group, under option from Chapleau Resources, nine diamond drill holes were completed to evaluate the subsurface potential of the surface mineralization. The results are described below.

### 2.00 LOCATION AND ACCESS

The Hope property is located some 6 km southeast of Slocan, B.C. at latitude  $49^044$ 'N and longitude  $117^025$ 'W on N.T.S. map sheet 82F/11, within the Slocan Mining Division.

Access is via good logging roads from Highway 6 along Lemon Creek road and then Chapleau Creek road which passes the eastern boundary of the Hope 3 and 4 claims.

### 3.00 TOPOGRAPHY AND VEGETATION

The Hope property, encompassing Cameronian Creek, is generally steep in terrain with a maximum relief of 825 m and a maximum elevation of 1800 m.

Slopes are generally tree covered with a thin to moderate layer of soil and/or talus.

### 4.00 REGIONAL GEOLOGY

The Hope property is underlain in part by a roof pendant of Triassic, Slocan Group, meta-sediments lying within a Nelson Grandioritic Batholith complex.

Metasediments consist largely of argillite, quartzite, micaceous quartzite and minor carbonate horizons. Beds generally strike NW-SE with shallow dips to the southwest.

### 5.00 PROPERTY GEOLOGY

The immediate property conforms to the regional scope with sediment bands interjected with granodiorite. Most significant mineralization on the property is a massive sulphide body of the old workings, referred to as the Glory Hole. Mineralization, consisting largely of sphalerite, pyrite, pyrrhotite, and minor galena, appears to be locally skarned (garnet/epidote) by the proximal batholith complex.

As well, an approximately one foot wide bed of massive pyrrhotite, pyrite, sphalerite and galena is stratigraphically conformable within quartzitic horizons.

### 6.00 1990 DIAMOND DRILL PROGRAM - Holes H90-1 to 9

Nine shallow (maximum depth 48 m) diamond drill holes were drilled during this phase of the operation, mainly focussing on the high grade open pit zone near the old mine area.

All holes intersected sediments and granite while some intersected massive to disseminated sulphides. The sediments (quartzites, limestones and argillites) exhibited some of the metamorphic effects of the granodiorite intrusive and are cut by numerous granitic related intrusives. Some skarnification and silicification is associated with the mineralized zones and the intrusive rocks. Seven holes terminated in granodiorite suggesting that the roof pendant in the granite batholith is quite thin.

Four holes hit the high grade zone delineating a small tonnage readily available for direct shipping ore. The zone is limited in its western extent but does have some on-strike potential to the east.

In conjunction with the initial sampling done by Kokanee in the open pit area, a reserve of approximately 15,000 tons grading 1.73 oz/ton silver, 1.3% lead and 3.6% zinc is readily available to open pit mining with 1.7:1.0 waste to ore ratio.

Drill Hole Locations:

DITII IIO	TO HOCKETON	.1.5 •			
<u> Hole #</u>	Section	Departure	Dip	Azimuth	Total Depth (m)
H90-l	1000E	1000N	$-48.5^{\circ}$	200°	47.85
H90-2	1000E	1000N	-90	200	20.40
H90-3	985 <b>E</b>	1003N	-50	200	37.20
H90-4	985 <b>E</b>	1003N	-90		38.70
H90-5	1013E	995 <b>N</b>	<b>-4</b> 9	198	29.30
H90-6	1013E	995N	-90		12.20
H90-7	950E	1010N	-62	200	29.60
H90-8	200E	725N	<b>-4</b> 5	$249^{0}$	22.90
H90-9	450E	100N	-90°		17.40

The most signficant holes are:

Hole # H90-1 includes	Metera From 14.3 16.3	ge <u>To</u> 22.6 18.8	Width 8.3 m 2.5 m	Silver oz/ton 1.78 6.96	Pb <u>%</u> 0.74 3.02	Zn <u>%</u> 2.35 8.38
H90-3	16.4	25.7	9.3 m	0.60	0.51 2.23	1.67
includes	24.4	25.7	1.3 m	2.34		5.67
H90-5	16.4	19.9	3.5 m	0.74	0.70	2.00
includes	17.7	19.7	2.2 m	0.77	0.71	
H90-6	4.7	5.8	1.1 m	1.22	0.59	2.31
includes	5.1	5.7	0.6 m	1.66	0.81	

### 7.00 CONCLUSIONS

Drilling has defined a limited high grade tonnage potential associated with the old mine workings on the Hope property. Although some strike length potential to the east could be possible, the limited size of the roof pendant of sediments suggests that only a small zone is present.

Report by

Lawrence Stephenson,

### EXHIBIT "A"

### STATEMENT OF EXPENDITURES

## DIAMOND DRILLING PROGRAM (H90-1 to H90-9)

ON HOPE 2 CLAIM SLOCAN M.D.

Covering the period of September 18th to October 22nd, 1990

### INDIRECT

### SALARIES:

P. Klewchuk - Geologist - Site preparation/Supervision/
Core logging 14.5 days @ \$250/day \$ 3,625.00
L. Stephenson - P.Eng. - Report writing
1 day @ \$400/day 400.00

ASSAYS: Acme Analytical Laboratories, Vancouver, B.C.
67 core samples - 30 element ICP & Fire
assays 969.55

DOMICILE: Hotel + meals - 1 man for 13 days 502.72

TRANSPORTATION: 1 - 4X4 truck; 14 days @ \$50/day 700.00

### DIRECT

Connor's Drilling Ltd. 2007 West Trans Canada Highway, Kamloops, B.C. (9 Holes)

32,349.83

TOTAL INDIRECT AND DIRECT = \$ 38,447.10

LAURENCE STEPHENSON B.Sc., M.B.A., P. Eng.

### IN THE MATTER OF THE

### B.C. MINERAL ACT

AND

### IN THE MATTER OF A DIAMOND DRILLING PROGRAM

CARRIED OUT ON THE HOPE PROPERTY

### LEMON CREEK AREA

in the Slocan Mining Division of the Province of British Columbia

More Particularily N.T.S. 82F/11

### AFFIDAVIT

- I, L. Stephenson, of the City of Cranbrook, in the Province of British Columbia, make oath and say:
- 1. That I am employed as a Geologist by Kokanee Explorations Ltd. and as such have a personal knowledge of the facts to which I hereinafter depose:
- That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a diamond drilling program, on the Hope mineral claims;
- 3. That the said expenditures were incurred between the 18th day of September, 1990 and the 22nd day of October, 1990 for the purpose of mineral exploration

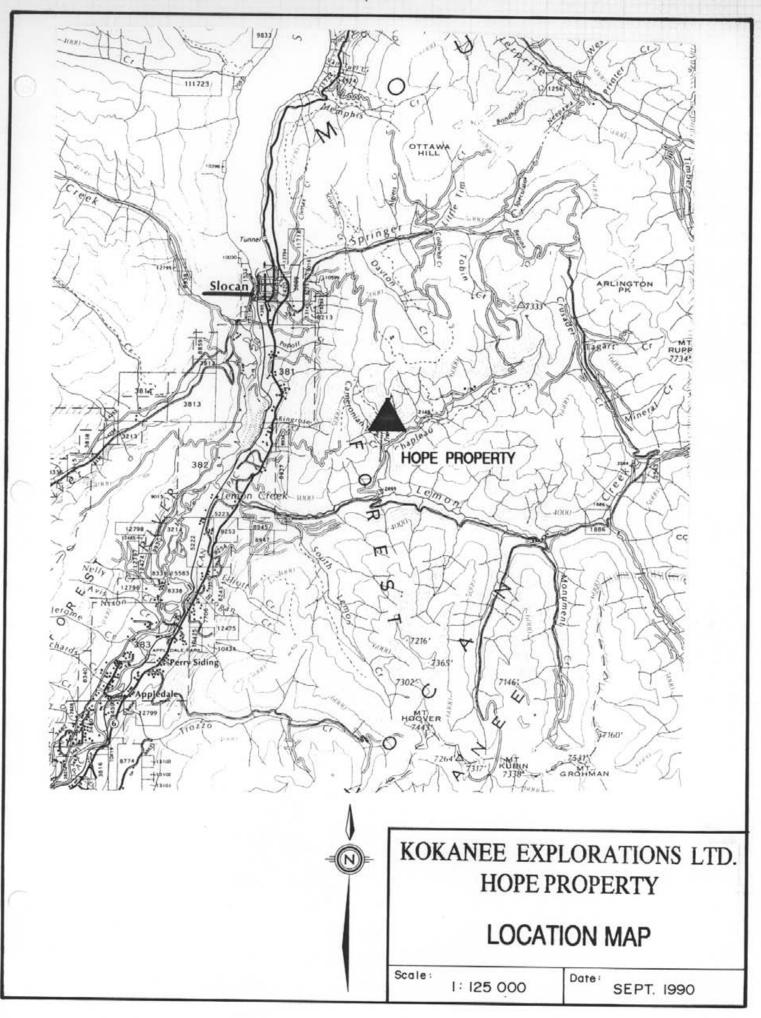
LAURENCE STEPHENSON B.Sc., M.B.A., P.Eng.

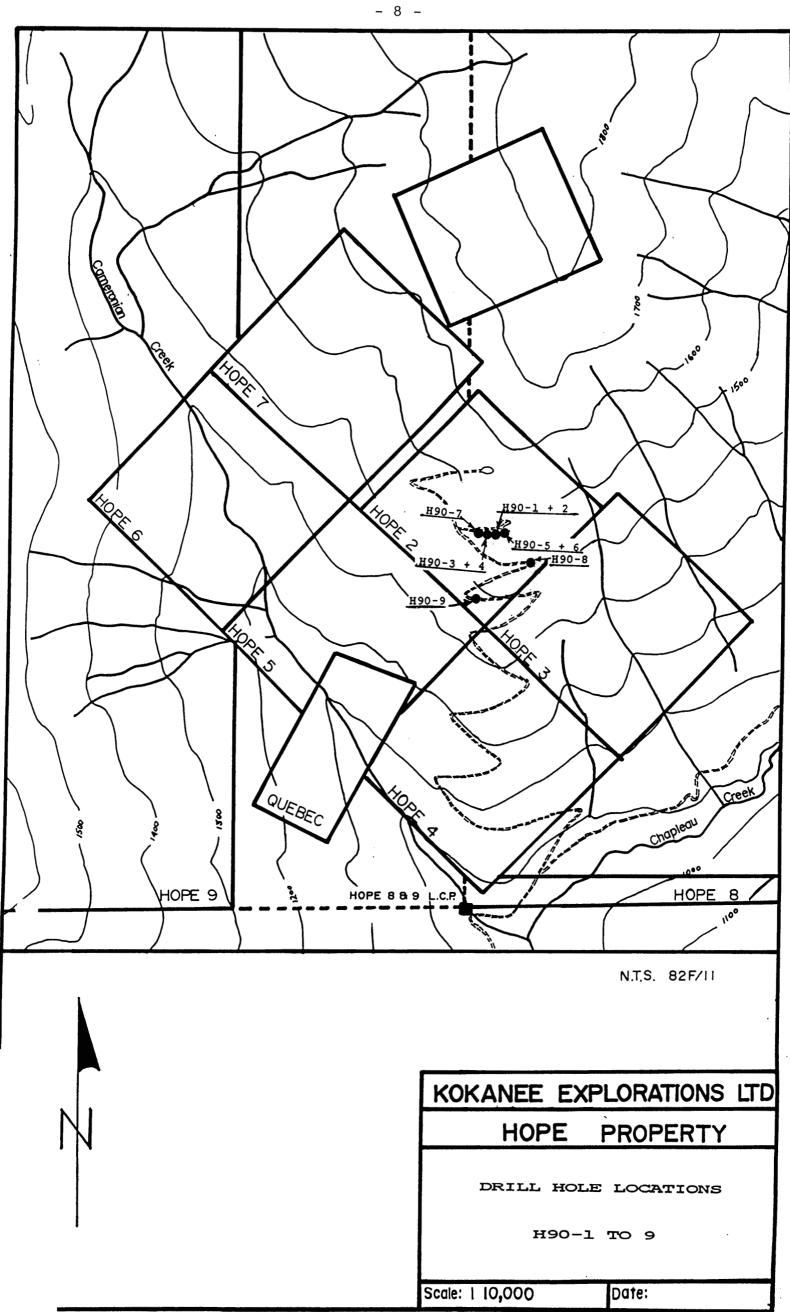
### AUTHOR'S QUALIFICATIONS

- I, Laurence Stephenson, of the City of Cranbrook, in the Province of British Columbia, do hereby certify that:
- I graduated from Carleton University in 1975 with a Bachelor 1. of Science degree in Geology then, in 1985, graduated from York University with a Masters of Business Administration;
- 2. I am registered as a Professional Engineer for the Province of Ontario (1981) and currently a member in good standing;
- I have had over 24 years experience in the field of mining 3. exploration.

LAURENCE STEPHENSON

B.Sc., M.B.A., P.Eng.





### APPENDIX I

DRILL CORE ASSAYS

PHONE (604) 253-3158 FAX (61) 253-1716

### GEOCHEMICAL ANALYSIS CERTIFICATE

H90-1

File # 90-5612 Kokanee Explorations Ltd. PROJECT HOPE 104 - 135 - 10th Ave S., Cranbrook BC V1C 2N1

SAMPLE#	Мо	Çu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	٧	Ca	P	La	Cr	Mg	Ba	Ti	В	Αl	Na	K	200000000	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	*	ppm	ppm	ppm	ppm	ppm	ppm	bbu	ppm	ppm	*		ppm	ppm	X	ppm	*	ppm	*	X		ppm	ppb
04501	136	9	87	358	1.8	67	2	2294	1.08	37	5	ND	2	377	2.9	6	2	49	8.82	,148	9	11	.50	39	.03	4	.46	.01	.01	4	16
04502	52	60	1293	2982	13.7			4092	1.84	23	5	ND	2	2511	41.0	2	2	45	20.83	.157	8	27	.29	245	.02	2	.38	.01	.04	1	9
04503	45	50	373		15.3			5273	1.41	23	5	ND	2	1569	360000000000000000000000000000000000000	۰	2	18	20.46	.130	5	8	.29	196	.02	4	.17	.01	.02	1	18
04504	48	79	2731	10040	12.8			4331	2.20	11	5	ND		1361	166.3	5	3	17	21.97	.164	9	14	.18	59	.02	4	.21	.01	.01	2	21
04505	121	32	2000	3747	18.4	64		1969	1.88	8	6	ND	2	304	59.2	3	41	18	8.41	.315	13	14	.35	7	.04	2	.46	.01	.01	4	1
04506	58	47	14087	15314	143.2	27	2 :	2009	2.42	13	24	ND	4	242	284.1	11	399	20	6.90	.252	14	28	.65	60	.03	2	.60	.01	.03	2	10
04507	27			31949				1996	2.77	12	-	ND	1	441	606.5	4	24	12	11.50	555707070	7	12	.49	96	.02	2	.36	.01	.03	3	17
04508	1			99999				B118	8.21	95	5	ND	1	170	2186.4		1252	16	2.61	.031	2	1	.01	10	.01	2			.01	2	15
04509	28	522	25005	34453	71.4	236				53	5	ND	4	96	843.8	42	10	25	1.92	.097	8	1	.03	25	.01	2	.36	.01	.02	2	8
04510	18	218	2147	3900	31.3	63	3 (	6749	5.55	293	5	ND	1	805	76.5	4	2	13	19.69	.034	6	20	. 23	130	.01	2	.28	.01	.03	1	11
04511	12		3981		31.2			7373		305	5	ND	2	1205	104.0	4	2	34	11.42	200000000000000000000000000000000000000	4		.29		.01	2			.05	1	10
04512	38				2.4			2945	8.72	<b>2</b>	5	ND	3	298	276.9	2	2	32		.127	6		. 13	_	103	2			.01	1	5
04513	47	78		11541	7.9			2773	3.88	2	5	ND	2	247	210.0		16	79		,186	9		.31		.04	3					1/
04514		110	632	1774	<b>5.3</b>			2402	2.67	14	5	ND	3	695	28,4		8		10.20		9		.42		.04	2				1	2
04515	68	61	106	3235	1.2	135	6 2	2270	2.69	7	5	ND	3	212	53.5	2	2	59	5.15	.230	11	20	. 16	76	.05	2	.75	.01	.02	1	1
04516	60 '	189	1059	2507	8.0	216	10 1	1323	3.24	5	5	ND	4	153	40.7	2	33	112	2.80	.263	14	33	.18	128	.06	2	.54	.03	.03	1	2
04517	57	71	736	4359	6.6			1491	2.04	4	5	ND	2	187	75.0		25	57	3.49	.188	12				.04	2	.62	.01	.01	1	2
STANDARD C/AU-R	19	62	37	133	7.1		32 1			41	21	7	40	53	19.0		19	60		.097	39	61	.89	187	.08	33	1.89	.07	.13	13	540

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

OCT 30 1990 DATE REPORT MAILED:

### GEOCHEMICAL "VALYSIS CERTIFICATE

Kokanee Explorations Ltd. PROJECT HOPE F 104 - 135 - 10th Ave S., Cranbrook BC V1C 2N1 File # 90-5658

SAMPLE#	Mo ppm		Pb ppm	Zn ppm	Ag ppm	Ni ppm		Mn ppm	Fe %	As ppn	ppm U		Th ppm	Sr ppm	Cd ppm	:	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ва ррп	Ti %	В	Al %	Na %	K %	300000	Au* ppb	
04518	56	393	1280	3248	*********	432	19	1257	6.33	6	5	ND	3	101	43.4	2	7	75	1.85	.205	13	21	.25	154	.06	2	.72	.05		1	6	¥
04519	40	162	2491		17.4	,	9	1545	3.60	2	5	ND	4	151	22.9	2	69	73	3.29	.191	13	21		183	.05	2		.05		6.0	2	
04520(490-1)	75	41 230			******		11	3037 2098	3.40 7.18	2	5	ND	4	242 340	326.9 184.6	2	_	164 111	6.62 5.44	.236 .107	14 16	30 35	.26 .48	126 61	.U3		1.06	.01	.03	2	5	¥
04 <u>521</u> 04 <u>522</u>		192	2815 46	11370 309	13.2 1.1		_	3178	5.38	11	5 5	ND ND	4	202	2.4	2	24	30	5.46	. 282		13	.45	51	.04	2	.98			1	- 1	よ
04322	٥,	172	40	207		77	12	3110	3.30		,	NO	_	202	-	-	_	30	3.40		''	.5	. 45	٠.		-	.,0	•••			-	4.
04523 Han-2	9	24	367	613	3.0	26	6	7823	1.19	56	5	ND	3	1438	12.2	13	2	3	29.74	.140	5	1	.04	100	.01	2	.48	.03	.02	1	36	
04523 HQO-2 04524	5	340	61	318	10.5	56	6	12344	4.13	17	5	ND	3	1849	7.0	2	2	5	31.14	.025	5	1	.26	246	.01	2	.14	.01	.02	1	22	
04525	43	48	119		1.1		6	1667	1.78	3	6	ND	6	212	6.2	5	2	43		.230	16	11		254	.04	2			.06	9	7	X
04526	44	34	936		10.3		8	3470	1.99	26	5	ND	7	688	197.5	2	14	_		.151	13	12		253	.03	2			.03	6	5	
04527	99	22	727	984	7.1	79	3	3204	2.02	.5	5	ND	4	313	15.1	3	13	24	8.89	.229	15	9	.70	54	.03	2	.82	.01	.01	7	1	
04528	- E.	90	771	5321	E 4	7,	,	1507	/ 3/			MD		200	02 E	,	17	27	7 27	.201	10	42	74	72	07	2	/ 0	01	01	7	,	
04529	56 92	80 211	731 5432		5.1 13.9		5	1593 1052	4.24 7.07	2 15	5	ND ND	1	288 131	82.5 366.7	2 10	13	27 37	7.27 4.31	.173	10	12 10	.36	32 54	.03	2			.01	2	3	¥
	120	67	1032	1402	3.7		5	800	2.59	14	5	ND	ż	245	23.2	14	2	38		199	7	11	.07	81	.04	2		.02		4	- 1	ł
lorera	82	434	5670	30713	22.4	155	7		15.89	7	5	ND	2	126	534.0	6	4	37	1.98	.152	7	8	.06	17	.03	2		.01	.01	2	3 .	ě.
04532 H90-3	88	174	249	1594	5.2	90	4	2382	6.52	11	5	ND	1	267	27.0	13	2	36	8.92	.202	8	18	.79	24	.04	2	.86	.01	.01	5	2	ĸ
							_				_					_	_															
04533		189	3531	7195			3	2580	5.15	86	5	ND	1	602	112.8	8	2		21.21		11	14	2.10	71	.02	20			.12		9	3
04534 04535				21582 86212	***********		12	2638 5785	9.06	51 71	2	ND	1	354	372.0 1758.6	29	9	13	12.44	.116	3	(	.64	51	.01 .01	2				3	19	F
04536	50	33	521		4.5		12	2488	1.94	11	5	ND ND	,	145 206	8.6	8	7	73		.113	14	12	.05	-	.05	2			.01	1	2	
04537	76	63	959		7.4	, -	5	1934	1.64	2	5	ND	3	181	63.1	3	27	103	4.59	.298	17	24	.16		.04	2			.02	2	2	
		-	,	0,00				1,54	1.04		-		•			•		.05	4.57		••			, 0		-					- 1	
04538	83	52	135	1559	1.3	230	5	1955	1.65	2	5	ND	3	147	26.4	27	4	157	4.03	.245	14	27	.20	84	.05	2	.72	.02	.01	2	1	
04539	62	150	159	3766			11	1103	2.60	∞ 2	5	ND	4	208	63.4	6	-	200		.525	25	44	.29		.04	2				1	2	
04540	53		10151		41.9		3	817	.76	6	5	ND	1	323	15.5		131	70	8.47	200	. 8	11	.74	89	.03	2			.02	53	5	
04541 04542 H9D-4	2	58	41		24.2			18496	2.64	15	5	ND	1	1652	18.2	2	2			.021	3	3	.28		.01	2		.01	-	1	18	
10434211710-24	10	119	67	815	2.2	48	6	3631	2.51	2	5	ND	2	454	12.6	2	2	12	11.34	.150	9	4	. 14	38	.02	2	.50	.01	.01	1	15	
STANDARD C/AU-R	19	58	41	129	7.1	72	31	1052	3.98	41	16	7	39	53	19.3	15	23	60	.45	.091	40	61	.89	184	.07	34 '	1.90	.06	.13	13 5	i00	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

Nor5/90 

ASSAY RECOMMENDED for 96. En 71% (In. Progress).

Reg 7 40 pp. (In. Progress).

\* Samples contain graphite, fire away Au recommended.

File # 90-5740 Kokanee Explorations Ltd. PROJECT HOPE F.
104 - 135 - 10th Ave S., Crambrook BC V1C 2N1

SAMPLE#	Ko	Cu	Pb	Zn	Ac	Ni	Co	Иn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	٧	Ca	P	La	Cr	Mg	Ba	T.	В	ΑL	Жa	K	W AU
	ppm	ppm	ppm	ppm	ppn	) bbo	ppm	ppm	X	ppm	ppen	ppm	ppm	ppm	ppm	ppm	ppm	ppm	X	1	ppm	ppm	*	bba		ppm	X	<u> </u>	<u> </u>	ppm ppb
0/5/7	27	377	770	780		68		1398	3.00	3745 3745	7	110		280	12.9	0	2	40	11.26	104	R	12	1.42	34	.03	2	1.25	Ω1	กя	<b>4</b> 6
04543 04544		277 622	778 6851		2520 777	B	_	1474				NID NID			186.6	_	42	24	3.62	A		11	.76		.02	5	.80			1 17
104545		437	1326		33	0		2046				NO			45:5	5	14	34	3.27	7.4.7.7.7		14	.50	13	.02	3	•	.01		. n 8
04546 Han 1					35.7	•	-	1975	7.97	24		ND.	4		320.B	3	121	29		128		16	.23		.02	2		.01		Z 21
04547 170-19		268	1679		3011	8			4.39	40000	-	ND	8		159.4	2	40	34		.080		16	.18	27	02	2	.62	-		1 18
<b>7</b>	70		.0.,	,,,,,		. GL	•	1977	4.57	800	•	N	•	-		-				11100			•			_		• • •		
04548	18	243	845	30230	×5°2	103	6	1446	4.24	13	5	ND	7	79	455.4	2	13	57	2.15	.148	10	19	.37	21	.03	2	.60	.01	.02	1 5
04549	25	.14	40	574	1 0	83	4	3210	1.84	.12	8	ND	2	143	·· 5.7	Z	2	12	7,11	2113	5	6	.26	17	.02	2	.70	.01	.01	167 5
04550	1	247	1860	1009	20.2	45	4	7463	3.18	34	13	ND	1	668	28.4	2	24	2	30.05	.003	10	1	.20	88	.01	9	.07	_01	.01	<b>#1 21</b>
04551 (11)	1	949	14101	47560	124.5	168	18	2264	12.97	. 26	5	ND	2	<b>220</b>	901.6	2	367	2	5.70	.006	2	1	.06	25	.01	2	.10	.01	.01	§1 17
04552 4 90-0	26	92	805	16195	7,2	43	5 3	2689	3.13	′′3	5	ND	2	127	287.0	2	28	15	4.94	.092	5	10	.27	6	SO	2	.65	.01	.01	2 5
										7818															388					<b>?</b>
04553	37	103	2493	1078	16.8	87	8	1405	3.04	11	5	ND	3	116	16.4	2	58	15	3.58	.144	8	11	.38	94	.03	3			.02	49/5 T )
04554	30	58	435	320	ેં 3.7	86	6	896	1.97	4	5	ND	5	102	4.1	3	6	26		:156	9	11	.31		.04	2	.57	.02	.04	<b>(31)</b> 3
STANDARD C/AU-R	17	57	38	131	7.0	72	32	1053	3.97	41	20	7	39	53	1904	14	20	56	.46	:095	38	58	-89	182	.08	32	1.89	.06	. 13	117 528

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MM FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

**ASSAY IN PROGRESS** 

### GEOCHEMICAL ANALYSIS CERTIFICATE

## Kokanee Explorations Ltd. PROJECT HOPE File # 90-5782

SAMPLE#	Mo ppm	Cu	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Со	Mn ppm	Fe As % ppm	U	Au mag	Th	Sr Cd	Sb	Bi ppm	V	Ca P	La	Cr ppm	Mg %	Ba Ti	B	Al %	Na %	K ¥ % ppm	Au*
	F	P P	P-P-III	PP	SEE F. S.	Parit	P-p-i	PP	2000-00000 2000-00000	FF···	PP	PP	5000000000	F-F			0000000000	• •			0000000000	<u> </u>			2000000.00	
04555	63	298	28	1489	2.5	107	10	394	6.18 79	5	ND	3	20 22.8	2	2	528	.59 .107	6	93	.20	34 _06	2	.57	.03	.06 2	3
04556	97	529	18	421	3.2	122	23	500	12.78 22	5	ND	4	44 5.2	2	2	196	.80 .119	5	43	.33	23 _04	2	.71	.02	.05 1	1
04557	56	39	28	200	.7	9	1	240	1.00 14	17	ND	14	39 2.9	4	2	10	.91 .012	6	5	.08	40 .01	2	.28	.02	.05 1	1
04558	31	325	10	3303	1.7	100	10	361	6.44 18	5	ND	2	52 40.6	2	2	105	1.10 .122	6	36	.75	34 🗘 06	2	.73	.03	.17 1	2
04559	40	435		3497	2.5	119	13	425	7.16 12	5	ND	2	55 41.3	2	2	158	2000,000,000	5	41	1.19	31 .06	2 1	. 15	.02	.42 1	1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

H96-9

### APPENDIX II

DRILL LOGS

H90-1 to H90-9

DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -48.5°

Remarks:

Hole No: H90-1

Length: 47.85 m

Location: Hope 2 Claim

Oct. 7/90 Start Date:

Finish Date: Oct. 8/90

Elevation:

Azimuth: 2000

Collar Dip:

Core Size:

NQ

Tests at:

Logged by: P. Klewchuk Date: Oct.8/90

METERAGE	DESCRIPTION	s	ampl	e					
From To		No.	From	To	Au	Аg	Pb	Zn	Cu
					dqq	mqq	8	<u> </u>	ppm
0.0 - 9.8	Overburden - ~2.5 m of rubbly core recovered of boulders of different lithologies including skarned quartzites of biotite granodiorite.								
9.8 - 10.3	ALTERED QUARTZITE: mottled, light gray to patchy pale pink and green. Fabric, possibly relict bedding, is at ~45° to core axis. Fractures are limonite-stained. Pale pink garnet and lessor light green diopside (?) are variably developed through most of the zone. Disseminated pyrrhotite occurs as fine, ragged, patches of very minor chalcopyrite and a bluish-gray metallic (possibly galena or molybdenite) is also present.								
10.3 - 10.7	GRANITIC DYKE: white to gray with about 10% chloritic-altered biotite. Coarse grained (mainly 2 - 4 mm grains). Estimated 55% pale to white feldspar,								

Page 2

Location: Hope 2

Property: HOPE

Hole No.: H90-1

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
	35% gray quartz and 10% biotite. Upper contact is at $^{85^{\circ}}$ to core axis, intact (i.e. not fractured). Lower contact is at $^{65^{\circ}}$ to core axis, also not broken.				ppb	mqq	<u>&amp;</u>	<b>%</b>	ppm
.0.7 - 13.0	ALTERED QUARTZITE: generally similar to 9.8 - 10.3 m interval. Mottled graypink-green color, fine + medium grained. Fabric tends to be at 30-400 to core axis but is not very distinct. A few thin, white, quartz veins are present, as well as small patches of white to light gray calcite. Distinctive MoS1 is present at 11.7 m as obvious blue-gray flakes; fine, disseminated MoS2 occurs through some of the rest of the quartzite as well. Disseminated pyrrhotite is common and minor patchy disseminated galena and sphalerite occur in the lower 30 or 40 cm. Core is fractured near 11.15m with probable core loss.		10.7	11.9		2 1 4	0.01	0.04	9
13.0 - 15.25	CALCAREOUS ARGILLITE/ARGILLACEOUS MARBLE: mixed argillite + marble. Dark gray to black laminated, sericitic + pyritic argillite is entirely brecciated with a matrix of gray-white calcite + dolomite. Carbonate generally increases downward. Fragments of argillite are typically aligned at 20° to core axis		13.0 14.3	14.3 15.3		15 13	0.04	0.12	50 79

Page 3

Property: HOPE

Hole No.: H90-1

METERAGE	DESCRIPTION	S a	m p l	e					
From To		No.	From	То	Au pb	Ag	Pb %	Zn %	Cu
	but variable from 0 to 40° to core axis. Disseminated and locally patchy sulphides include pyrite, pyrrhotite, sphalerite, galena and chalcopyrite. Sphalerite is darker brown to black and with galena, is more common in the lower, more carbonate-rich section.				200	ppiii			ppm
15.25 - 18.1	CALC-SILICATE/SKARN-ALTERED QUARTZITE/DIOPSIDE-QUARTZ-GARNET ROCK: Texture is mottled; fabric tends to be at 30-40° to core axis but not very consistent throughout. Sulphides occur through the entire zone; pyrrhotite, sphalerite and galena are most common with very minor pyrite and chalcopyrite. Galena and sphalerite are both disseminated and patchy, not uniformly distributed.	4505 4506 4507	15.3 16.3 17.4	16.3 17.4 18.1		18 143 43	0.20 1.67 0.14	0.37 1.98 4.05	32 47 131
18.1 - 18.6	Darker green chlorite is common throughout as thin veinlets and small irregular patches; most of the zone is weakly calcareous with local small patches of light gray to white calcite.  MASSIVE SULPHIDES: medium to coarse grained sphalerite and galena with finer grained pyrrhotite. Sphalerite predominates and comprises about 45% of the zone with galena and pyrrhotite each at about 10 or 15%. Patchy light green diopside and small rounded gray-white	<b>4</b> 508	18.1	18.6		716.2	10.10	29.78	30

Page 4

Property: HOPE

Hole No.: H90-1

METERAGE	DESCRIPTION	Sa	mpl	e					
From To		No.	From	To	Au ppb	Ag ppm	Pb %	Zn %	Cu
	clots of calcite make up the rest of the zone. Upper contact is at ~65° to core axis. Texture is quite granular with no obvious fabric.								
18.6 - 18.8	SULPHIDE-MATRIX BRECCIA/BRECCIATED SILTSTONE: light gray siliceous siltstone is broken into small angular elongate fragments in a matrix of swirly 'laminated' vein pyrrhotite and sphalerite. Minor fine grained galena and local chalcopyrite are also present. The massive sulphide zone above is foliated for "3-4 cm against a pyrrhotite vein at "80° to core axis but most of this zone is foliated at 25° to 45° to core axis. 45° fabric occurs at the base of the zone. About 65% of the zone is sulphides, mainly pyrrhotite, with "35% siltstone. Siltstone is locally chloritic.		18.6	18.8		71	2.85	5.21	522
18.8 - 20.4	MARBLE, MINOR QUARTZITE, MINOR SULPHIDES: white to light gray crystalline calcite with 20% irregularly distributed fragments of light gray, massive fine grained quartzite. The calcite locally forms a matrix to smaller fragments (eg. 18.8 - 19.0 m); elsewhere ragged fragments and bands of quartzites are scattered through the	4511	18.8	19.6 20.4		31 31	0.21 0.40	0.39 0.73	218 344

Page 5

Property: HOPE

Hole No.: H90-1

METERAGE	DESCRIPTION	_ Sa	m p l	e					
From To		No.	From	То	Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
20.4 - 31.2	marble. Quartzite fragments typically have pyrrhotite associated with them, both on margins and disseminated within the quartzite patches. Locally there is minor silver-gray arsenopyrite within quartzites. Disseminated sphalerite, pyrrhotite and minor galena occur within the more massive marble. One narrow lensy vein (6 mm maximum width) of finely laminated galena and sphalerite cuts the marble at 19.5 m.  CALC-SILICATE/SKARN-ALTERED QUARTZITE/MINOR SULPHIDES/QUARTZ-GARNET-DIOPSIDE-CHLORITE ROCK: mottled, healed breccia texture. Pale pink to reddish garnet, light green diopside and locally white to light gray calcite are patchily developed throughout the interval. A pervasive, healed breccia texture is evident with dark green chlorite typically developed along the fractures. Minor sulphides are scattered through much of the interval with pyrrhotite most common. Sphalerite is most common in the upper 1 m or so but both sphalerite and galena are present with pyrrhotite and very minor chalcopyrite to the base of the interval. Sphalerite	4512 4513 4514 4515 4516 4517 4518 4519 4520	20.4 21.4 22.6 23.8 25.0 26.2 27.4 28.6 29.8	21.4 22.6 23.8 25.0 26.2 27.4 28.6 29.8 31.2	6 2 5	2 8 5 1 8 7 5 17 1	0.01 0.08 0.06 0.01 0.11 0.07 0.13 0.25 0.01	2.00 1.50 0.18 0.32 0.25 0.44 0.32 0.14 1.76	219 78 110 61 189 71 393 162 41

Page 6

Property: HOPE

Hole No.: H90-1

rom To		No.	From	То	Au	Ag	Pb	Zn	Cu
	near 31.2 m is more reddish colored and occurs with a bright green mineral, probably a silicate.				ppb	ppm	8	<u> </u>	ppm
1.2 - 31.6	ARGILLITE: dark gray to black. Brecciated with fragmented veins of white dolomite. Evidently very finely laminated. Upper contact is in broken core, appears to be 25 or 30° to core axis. Lower contact is quite sharp, with ~3cm of laminated white vein dolomite developed near the contact, vein is separated from underlying granodiorite by 8-10 mm of argillite with <1 mm veins of dolomite. Lower contact is at 20° to core axis.								
1.6 - 35.8	BIOTITE GRANODIORITE: porphyritic with ~15% feldspar phenocrysts up to 4 cm across. Some are zoned. Feldspars are gray-white, plagioclase feldspars are white to pale green, quartz is light gray. Estimated composition; feldspar 35%, plagioclase 30%, quartz 20%. Biotite is medium grained and makes up ~10%, chlorite is common along discontinuous healed fractures and at some grain boundaries. No obvious sulphides noted.								

Page 7

Property:

HOPE

Hole No.: H90-1

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
					ppb	mqq	8	8	maa
35.8 - 36.7	ARGILLACEOUS SILTSTONE AND QUARTZITE: top 50 cm is dark gray, fine grained argillite or argillaceous siltstone. Weakly brecciated with thin veinlets of white dolomite and narrow irregular veins/patches of pyrrhotite. Locally there are patches of sphalerite with minor galena. Minor chlorite occurs throughout. Bottom 40 cm is altered quartzite which has a mottled, healed breccia texture. Patchy light reddishpink garnets are common with minor light green diopside and dark green chlorite. Both contacts are intact but are quite irregular.		35.8	36.7	5	13	0.28	1.18	230
36.7 <b>- 4</b> 7.85	BIOTITE GRANODIORITE: mainly medium-coarse grained and biotitic and chloritic, locally coarse grained and pegmatitic with no biotite. Typically porphyritic with large feldspars up to 3 cm across, usually with indistinct grain margins. Quite strongly chloritic throughout, chlorite is developed along thin healed fractures. Locally there is minor pyrite with the chlorite.								
*** EN	ND OF HOLE AT 47.85 METERS ***								

DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -90°

Remarks:

Hole No:

H90-2

Length: 20.4 meters

Location:

Hope 2 Claim

Start Date: Oct. 8/90

Finish Date: Oct. 8/90

Elevation:

Azimuth: 200°

Collar Dip:

Core Size:

NQ

Tests at:

Logged by: P. Klewchuk Date: Oct./90

METERAGE	DESCRIPTION	S a	mple						
From To		No.	From	To	Au	Ag	Pb	Zn	Cu
0.0 - 2.44	Overburden - No core.				ppb	mqq	8	- %	ppm
2.44 - 3.4	SILTSTONE or SILTY ARGILLITE: dark gray, mottled, laminated and crenulated. Fabric which may be bedding is at ~70° to core axis. Small, vague, whitish porphyroblasts are common. Siltstone/argillite is sericitic and pyritic; pyrite is developed as very small ragged patches. Contact with underlying quartzite is gradational over ~5 cm.								
3.4 - 5.5	ALTERED QUARTZITE: light gray, fine grained, light pink to brownish-red garnet porphyroblasts and patches of light green diopside are variably developed throughout giving a mottled texture. Minor sulphides are present through most of the interval, mainly pyrrhotite and very minor chalcopyrite		4.9	5.5	3	1	0.005	0.03	192

Property: HOPE

Hole No.: H90-2

Page 2 Location: Hope 2 Claim

METERAGE	DESCRIPTION	S	ampl	e					
From To		No.	From	То	Au	Ag	Pb	Zn	Cu
	but some sphalerite occurs in the lower 50 cm or so. At $5.35$ m a chloritic, silicified shear is at $30^{\circ}$ to core axis. Chlorite is common throughout occurring typically as thin discontinuous veinlets and usually with pyrite. Relict bedding is at $70^{\circ}$ to core axis.				dqq	mqq	8	8	mqq
5.5 - 6.6	PEGMATITE AND APLITE: coarse grained at margins, fine grained at center. White to light gray quartz and feldspar. Minor dark green chlorite on fractures. Minor pyrrhotite is developed in ragged patches with dark green chlorite at ~6.0 m.								
6.6 - 7.05	ALTERED QUARTZITE/CALC-SILICATE: garnet-diopside-quartz rock with patches of crystalline calcite and veins and patches of chlorite. Minor disseminated pyrrhotite occurs throughout, disseminated pyrite occurs with chlorite and disseminated dark brown sphalerite occurs with pyrrhotite in marble patches. Both contacts are at 45-500 to core axis.								
7.05 - 7.2	PEGMATITE DYKE: 15 cm wide mottled, light gray pegmatite of ~60% gray quartz, 40% light gray-white to pale								

Page 3

Property: HOPE

Hole No.: H90-2

Location: Hope 2 Claim

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
	green feldspar. Locally brecciated with chloritic fractures. Both contacts are at $45-50^{\circ}$ to core axis but are not parallel.				dqq	ppm	*	%	ppm
.2 - 10.9	MIXED ZONE OF ALTERED QUARTZITE + ARGILLITE: altered quartzite is typical quartz-garnet-diopside, more siliceous than most zones seen so far. Argillaceous quartzite is commonly weakly to moderately (healed) brecciated. Argillites are darker gray, recrystallized, laminations are only vaguely evident. Argillites contain disseminated, fine grained, pyrite. Altered quartzites and argillaceous quartzites contain minor disseminated pyrrhotite. Chlorite is fairly common throughout. Bedding and relict bedding is fairly evident throughout, at 75-80° to core axis. Detailed breakdown: 7.2 - 7.8 m - mainly quartzite. 7.8 - 8.5 m - mainly argillaceous quartzite. 8.5 - 10.3 m - mainly quartzite. 10.3 - 10.9 m - argillite. Irregular small patches of crystalline								

Property:

HOPE

Hole No.: H90-2

Page 4

Location: Hope 2 Claim

METERAGE	DESCRIPTION	S a	m p l	е					
From To		No.	From	To	Au	Ag	Pb	Zn	Cu
	white to light gray calcite occur through most of the interval, much of the altered quartzite is calcareous.				ppb	ppm	8	<b>&amp;</b>	mqq
10.9 - 12.55	MARBLE/25% ARGILLACEOUS QUARTZITE: mainly light gray to white calcite but with ragged patches of altered quartzite, garnet and diopside. 11.1 to 11.6 m is mostly recrystallized, laminated argillaceous quartzite with bedding at ~80° to core axis. Marble typically contains about 10% sulphide, not very uniformly distributed. Patches of pyrrhotite and 2-3 mm diameter grains of very dark green chlorite are also disseminated through the marble.	4524	10.9	11.6	36 22	3 11	0.04	0.06	24 340
12.55 - 17.45	ALTERED QUARTZITE/CALC-SILICATE: garnet-dioside-quartz rock in approximately equal proportions. Texture is generally quite mottled from patchy development of garnet + diopside. Relict bedding is locally evident at 50 to 65° to core axis. Variably chloritic, typically along discontinuous healed fractures. Minor sulphides are scattered through some of the interval, mainly disseminated pyrite but also minor sphalerite.								

Page 5

Property:

HOPE

Hole No.: H90-2

Location: Hope 2 Claim

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
17.45 - 18.1	ARGILLITE/FAULT ZONE: dark gray to black pyritic, brecciated trecrystallized, bedding is not evident At ~17.55 m, 5-10 cm of fault brecciand gouge with carbonate and quart veining at ~45° to core axis.	o a			dqq	ppm	8	8	mqq
18.1 - 20.4	BIOTITE GRANODIORITE: 15 cm of argillite ~19.25 - 19.4 m. Medium ar coarse grained, locally pegmatitic. ~10% biotite, chloritic fractures Minor brecciation is evident with this lensy quartz and quartz-chlorite veins	d n							
*** ]	END OF HOLE AT 20.4 METERS ***								
Core stored in ra	cks at Vine property site, Cranbrook, B.C	•							

### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -50°

Remarks:

Hole No: H90-3

Length: 37.2m

Location: Hope 2 Claim

Start Date: October 8, 1990

Finish Date: October 9, 1990

Elevation:

Azimuth: 200°

Collar Dip:

Core Size:

Tests at:

Logged by: PK

Date: Oct/90

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
					ppb	ppm	ૠ	8	ppm
).00 - 8.20	<pre>Overburden; some rubbly core of boulders, ~1.0m total, mainly altered quartzite.</pre>								
3.20 - 19.30	Altered Quartzite, Calc-Silicate, Minor	4525	15.30	16.40	31	1	0.01	0.05	48
	Argillaceous Quartzite; quartz-garnet-			17.40	5	10	0.09	1.23	34
	diopside rock. Varied, mottled texture;		17.40	18.50	i	7	0.07	0.10	22
	garnet diopside tend to be concentrated in		18.50	19.30	2	5	0.07	0.54	80
	patches although both occur throughout the	1320	10.50	17.50	2	3	0.07	0.54	80
	interval. Variably chloritic with dark green								
	chlorite, occurring along small healed								
	fractures. Narrow zones of medium and dark								
	grey argillaceous quartzite occur within the								
	interval; apparent relict bedding within								
	these zones varies from 25 to 45° to core								
	axis. Minor sulphides appear concentrated in								
	the lower part of the interval; pyrrhotite,								
	sphalerite and chalcopyrite tend to be								
	concentrated in small patches. At 18.6m a 2								
	x 4cm patch of disseminated molybdenum occurs								
	within a diopside rich zone.								

DRILL HOLE RECORD

Property: HOPE

Hole No.: H90-3

Location: Hope 2 Claim

METERAG	E DESCRIPTION	S a	mpl o	e					
From To		No.	From	То	Au	Ag	Pb	Zn	Cu
					ppb	ppm	- 8	<u> </u>	ppm
19.30 - 25.40			19.30	20.20	3	14	0.59	2.42	211
	black, locally medium grey. Vaguely			21.70	1	4	0.10	0.14	67
	laminated to massive and brecciated with			22.70	3	22	0.58	3.27	434
	irregular lensey veins of white/light grey		22.70	23.60	2	5	0.02	0.16	174
	calcite. Sulphides occur through most of the		23.60	24.40	31	24	0.35	0.78	189
	interval but are not uniformly distributed.		24.40	25.40	6	71	1.47	2.77	317
	Patchy and disseminated pyrrhotite is most								
	common; sphalerite occurs with larger patches								
	of pyrrhotite and isolated in small patches.								
	Minor disseminated chalcopyrite and galena								
	are also present. Bright green mineral								
	occurs locally with pyrrhotite and								
	sphalerite. Largest patches of sulphides								
	occur at 20.1m (5 to 8cm diam.), 22.2m (30%								
	of core over 15cm), 24.5m (5 - 6cm	ľ							
	diam.) coarse galena and 24.75m (25%								
	pyrrhotite and galena over 7 - 8cm of core).								
	All of the argillite is silicified. Relict								
	bedding tends to be 50 - 60° to core axis but								
	there is considerable wavy texture.	1							
	<u>19.30 - 20.20;</u> 0.9m, numerous patches of								
	pyrrhotite and sphalerite.	l							
	<u>20.20 - 21.70</u> ; 1.5m, very minor sulphides.	l							
	21.70 - 22.70; 1.0m, est. 12% total	[							
	sulphides, pyrrhotite-sphalerite, very minor								
	chalcopyrite.	]							
	22.70 - 23.60; 0.9m, minor sulphides, small								
	patches of pyrrhotite.	1							
	23.60 - 24.40; 0.8m, more brecciated, more	ĺ							
	siliceous, chloritic, minor pyrrhotite.								

Page: 2

Page: 3

Property: HOPE

Hole No.: H90-3

Location: Hope 2 Claim

METERAG	E DESCRIPTION		mple			7	Pb	7	
From To		No.	From	To	Au ppb	Ag ppm	% %	Zn %	Cu ppm
	24.40 - 25.40; 1.0m, ~7% patchy pyrrhotite, sphalerite, galena, very minor chalcopyrite.						-		
25.40 - 25.70	Massive Sulphides; est. 55% pyrrhotite, 10% sphalerite, 10% pyrite and 25% quartzite and rounded blebs of calcite. Upper contact is at 35° to core axis, along a minor fault; lower contact is in broken core. Density of sulphides and pyrrhotite content increases downward; sphalerite is most prevalent in the upper 10cm. Pyrrhotite is vaguely foliated at ~65° to core axis; sphalerite and pyrite are intergrown with pyrrhotite and calcite.		25.40	25.70	19	80	4.78	15.32	287
25.70 - 32.50	Altered Quartzite/Calc-Silicate; mainly light grey quartzite with "35% streaks and patches of pink-brown garnet and light green diopside. Healed breccia texture; dark green chlorite on fractures. Minor sulphides, pyrrhotite, sphalerite and galena are scattered through the interval; locally the bright green mineral is associated with sulphides. Relict bedding is commonly wavy but tends to be at 40 - 60° to core axis. At 29.6m a 10cm wide pegmatite dyke cuts the quartzite at "40° to core axis and disrupts bedding.	4537 4538 4539 4540	25.70 26.70 28.00 29.60 31.30	26.70 28.00 29.60 31.30 32.50	2 2 1 2 5	5 7 1 3 50	0.05 0.10 0.01 0.02 1.08	0.07 0.38 0.16 0.38 0.06	33 63 52 150 32

DRILL HOLE RECORD

Property: HOPE

Hole No.: H90-3

Location: Hope 2 Claim

rom To		No.	From	To	Au	Аg	Pb	Zn	Cu
	31.30 - 32.50; 1.2m, minor sphalerite, local coarse galena.				ppb	mqq	98	8	ppm
32.50 - 34.60	<u>Argillite</u> ; dark grey to black, silicified. Relict laminations at ~65° to core axis. Healed breccia texture; numerous thin, discontinuous and irregular veins of quartz and calcite. Some fine disseminated pyrite with local small disseminated patches of pyrrhotite.								
4.60 - 35.30	Altered Quartzite; light grey, fine grained, 'bedded' (?) at ~45° to core axis. Small pink-light brown garnet porphyroblasts are developed throughout; locally there is minor, light green diopside. Lower contact with intrusive is at ~50° to core axis.								
35.30 - 37.20	Biotite Granodiorite/Pegmatite; white to light grey, medium and coarse grained; locally flecked with biotite and chlorite. Texture varies, in a mottled way, from pegmatitic to biotitic. Chlorite is typically developed on healed fractures, commonly at 20 - 30° to core axis.								
37.20	END OF HOLE Core stored in racks at the Vine property.								

Page: 4

### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -90°

Remarks:

Hole No: H90-4

Length: 38.7m

Location: Hope 2 Claim

Start Date: October 10, 1990

Finish Date: October 10, 1990

Elevation:

Azimuth:

Collar Dip:

Core Size: NQ

Tests at:

Logged by: PK Date: Oct./90

METERAG	E DESCRIPTION	S	ampl	e					
From To		No.	From	To	Au	Ag	Pb	Zn	Cu
0.00 - 2.40	<pre>Overburden; cased to 3.05m, core recovered from 2.4m.</pre>				ppb	ppm	<u> </u>	<u> </u>	mqq
2.40 - 7.10	Silicified Argillite, Minor Quartzite; dark grey to black, laminated throughout with bedding at 65° to core axis. Pyritic with fine pyrite disseminated throughout, variably calcareous. A few thin irregular calcite veins occur throughout, parallel, subparallel and cross-cutting bedding. Uppermost 12cm of core is ~50% calcite.								
7.10 - 7.80	Quartzite; light grey, fine grained and silicified. Mixed with 10 - 15% thin lensey bands of siltstone or argillite. Bedding is at 60 - 70° to core axis. Fine disseminated pyrite occurs throughout; coarse pyrite occurs locally at 7.5m with coarse rounded blebs of white calcite.								
7.80 - 9.00	Argillite, Minor Quartzite; medium to dark grey, laminated and banded, bedding at ~650								

Property: HOPE

Hole No.: H90-4

Location: Hope 2 Claim

Page: 2

METERAG	METERAGE DESCRIPTION Sample								
From To		No.	From	То	_ Au	Ag	Pb	Zn	Cu
	to core axis. Healed breccia texture; locally bedding is offset a few mm along en echelon healed fractures at ~80° to bedding, 30° to core axis; elsewhere elongate, bedding parallel fragments of argillite are rafted in a matrix of calcite. Minor pyrite is disseminated through much of this interval.				ppb	ppm	8	8	ppm
9.00 - 9.40	Est. 70% Marble, 30% Quartzite and Argillite; rounded to irregular fragments of light grey quartzite and dark grey to black argillite occur in a 'matrix' of white to light grey crystalline marble. Disseminated coarse grains of dark green (almost black) chlorite, dark brown sphalerite, pyrite and pyrrhotite are scattered through the marble. Pyrite and chlorite are locally concentrated along one quartzite-marble contact. Both contacts are cross-cutting bedding attitude; upper contact is at 60° to core axis and quite sharp; lower contact is very ragged, at 30° to core axis.		9.00	9.40	18	24	0.004	0.03	58
9.40 - 11.30	<u>Silicified Argillite/Siltstone</u> ; medium to dark grey, laminated at 65° to core axis. Pyritic and with numerous thin bedding parallel and cross-cutting calcite and quartz-calcite veinlets.								
11.30 - 14.20	Altered Quartzite/Calc-Silicate; light grey, fine grained quartzite is extensively skarn altered with mottled development of		11.30	12.50	15	2	0.007	0.08	119

Page: 3

Property: HOPE

Hole No.: H90-4

Location: Hope 2 Claim

METERAGE	DESCRIPTION	S a	mpl	e					
From To		No.	From	To	_ Au	Ag	Pb	Zn	Cu
di ve a wi pr	ale pink-brown garnets and light green iopside. Minor pyrrhotite, sphalerite and ery minor copyrite are concentrated within 30cm section of core at 11.8m, associated ith a weak calcareous zone. Fabric, robably relict bedding, is evident through art of the interval, at ~650 to core axis.				dqq	mqq	8	*	ppm
gr be si at pr co ve pa Lo br ca pa co to to to to to to to to to to to to to	ilicified Argillite, Minor Quartzite; dark rey to black, evidently laminated but edding is largely destroyed by ilicification. Bedding is quite consistent ~65° to core axis. Fine disseminated yrite is common throughout, ~2%; locally parse pyrite is developed with some calcite eins. Calcite veins occur throughout arallel to bedding and cross-cutting. In cally calcite forms a vein matrix in small reccia zones. At 22.0m and 24.3m, vein alcite occurs along minor faults, nearly arallel to core axis, with local broken one. Narrow, light grey quartzite zones, up to 25cm thick, occur in a few places; ypically these lack garnet or diopside but ome zones have garnet and/or diopside. The end only 1.3m of core was recovered; this includes a central quartzite zone; bedding in the quartzite and immediate hangingwall is teeper than normal, 0° to 20° to core axis auggesting local folding.								

Property: HOPE Hole No.: H90-4 Location: Hope 2 Claim

Page: 4

METERAG	E DESCRIPTION		ampl						
From To		No.	From	To	_ Au	Ag	Pb	Zn	Cu
					ppb	ppm	- 8		ppm
32.30 - 32.60	Pegmatite Dyke; light grey, coarse grained, mottled. Upper contact at 30° to core axis; lower one at ~45° to core axis; dyke is cut by (mostly healed) chloritic fractures at 60 - 65° to core axis. Minor pyrrhotite and pyrite occur with quartz along a healed fracture at ~90° to chloritic fractures.								
32.60 - 33.30	<u>Silicified Argillite</u> ; similar to above, silicified, locally brecciated with calcite vein matrix. Bedding at 60° to core axis.								
33.30 - 33.50	Pegmatite Dyke; similar to above; chloritic; top contact at 35° to core axis, broken and offset along a fracture at 10° to core axis; lower contact at 50° to core axis.								
33.50 - 35.70	<u>Silicified Argillite</u> ; as above but more massive; less brecciated, less carbonate veining. Bedding at 75 - 80° to core axis.								
35.70 - 38.70	<u>Biotite Granodiorite</u> ; pale grey-green, medium and coarse grained, porphyritic; chloritic. Texture is quite variable with numerous healed chloritic fractures and veins of light grey quartz and white calcite. Most fractures are at 15 - 30° to core axis.								
38.70	<pre>END OF HOLE Core is stored in racks at the Vine property.</pre>								

DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -45°

Remarks:

Hole No: H90-5

Length: 29.3m

Location: Hope 2 Claim

Start Date: October 11, 1990

Finish Date: October 12, 1990

Elevation:

Azimuth: 1980

Collar Dip:

Core Size: NQ

Tests at:

Logged by: PK Date: Oct/90

METERAG From To	E DESCRIPTION	No.	rom From	e To	Au	Ag	Pb	Zn	Cu
0.00 - 3.70	Casing; no core. Note: from 3.70 to 13.7m core is broken and rubbly; fractures and ends of pieces are oxidized. Bedding attitudes appear conformable at 30 - 45° to core axis. It appears that this is bedrock but a badly weathered zone. 25% core loss from 3.70m to 13.70m.				ppb	ppm	*	8	ppm
3.70 - 8.20	Altered Quartzite/Calc-Silicate; mottled texture with grey (quartzite), green (diopside) and pink (garnet). Minor veinlets of dark green chlorite. Local disseminated small patches of pyrrhotite. Relict bedding, where recognizable, is at 45° to core axis.								
8.20 - 10.80	Argillite; dark grey to black; broken weathered and punky. Locally brecciated. A few irregular quartz veins/inclusion are limonitic.	l							

Page: 2

Property: HOPE Hole No.: H90-5

METERAG	E DESCRIPTION	S a	mple	2					
From To		No.	From	To	_ Au	Ag	Pb	Zn	Cu
10.80 - 13.70	Altered Quartzite, Minor Calc-Silicate; medium grey, generally spotted throughout with very pale pink garget porphyroblasts. Locally pink garnets and green diopside creates a mottled texture. At ~12.80m a 10cm section of darker chloritic garnet-diopside altered quartzite comes minor sphalerite and pyrrhotite and the bright green mineral. Bedding is generally quite vague, at ~350 to core axis.				ppb	mqq	<b>%</b>	8	ppm
13.70 - 14.30	Silicified Argillite; dark grey to black, foliated (probably relict bedding) at 10 - 25° to core axis. Minor fine grained pyrite is disseminated throughout.								
14.30 - 16.00	<u>Biotite Granodiorite</u> ; mottled, light grey- white-very light green colour; medium coarse grained, chloritic. Fractures are limonitic from surface weathering; both contacts are broken and limonitic.								
16.00 - 19.90	Altered Quartzite/Calc-Silicate, Vein and Disseminated Sulphides, 2 Narrow Pegmatite Dykes; grey, fine grained quartzite is largely obliterated by strong mottled development of light pink-brown garnets and light green diopside. Most of the interval is a healed breccia with narrow discontinuous veinlets of dark green chlorite and sulphides	4544 4545 4546	16.00 16.40 17.10 17.70 18.50 19.30	16.40 17.10 17.70 18.50 19.30 19.90	6 17 8 21 18 5	5 37 5 52 10 5	0.08 1.16 0.13 1.73 0.17 0.08	0.08 1.72 0.34 2.85 1.35 3.72	277 622 437 641 268 243

Property: HOPE

Hole No.: H90-5

Location: Hope 2 Claim

Page: 3

Sample METERAGE DESCRIPTION Pb Cu From Au Αq Zn No. Τo From To daa ppm ፄ mag including pyrrhotite, sphalerite, pyrite, and very minor chalcopyrite. Sulphides occur through the entire interval but are irregularly distributed. Most of the interval is weakly to strongly magnetic; strongest where sulphides are concentrated. The top 40cm of the interval is more argillaceous, more brecciated with vein matrix of chlorite and white calcite or dolomite, and with only minor sulphides. At 17.40m a 15cm section of core is strongly, almost entirely, chloritic. Calc-silicate is weakly calcareous. Relict bedding is typically at ~40° to core axis. Two narrow pegmatite dykes are present; at 18.40 - 18.60 and 19.00 - 19.30m. Both are light grey to pale green, coarse grained and with virtually no mafics; very minor chlorite. All contacts are parallel or sub-parallel to each other at 30° to 45° to core axis. 19.90 - 24.40 Biotite Granodiorite; fairly leucocratic; biotite content varies from <1% to ~7%. Light grey mottled, medium coarse grained, Light pink garnet weakly chloritic. porphyroblasts are scattered through most of the interval, comprising 1 - 1.5% of the rock: locally there is minor disseminated pyrite.

Page: 4

Property: HOPE

Hole No.: H90-5

METERAG	E DESCRIPTION	Sa	mp1	e					
From To		No.	From	То	Au	Āg	Pb	Zn	Cu
24.40 - 25.90	Argillite; dark grey to black; relict bedding is at ~60° to core axis. Locally pyrrhotite and the bright green mineral are associated with light grey quartz (quartzite?) lenses or patches. Bright green mineral and pyrrhotite are also disseminated through the argillite. One thin biotite granodiorite dyke, 25.25 -25.45m, has sharp contacts at 60° to core axis, weakly chloritic.				ppb	ppm	8	8	ppm
25.90 - 29.30	Biotite Granodiorite; light grey, mottled, porphyritic; few large feld Spars up to 6cm long. Weakly chloritic throughout with a few light pink garnets and very minor disseminated pyrite.								
29.30	END OF HOLE		**						
	Core stored in racks at the Vine property.								

### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -90o

Remarks:

Hole No: H90-6

Length: 12.2m

Location: Hope 2 Claim

Start Date: October 12, 1990

Finish Date: October 12, 1990

Elevation:

Azimuth: 1980

Collar Dip:

Core Size: NQ

Tests at:

Logged by: PK

Date: Oct. 13/90

METERAG	<u>E DESCRIPTION</u>	S a	mple	<del>)</del>					
From To		No.	From	To	_ Au	Ag	Pb	Zn	Cu
					ppb	ppm	<u> </u>	8	ppm
0.00 - 3.05	Casing; no core.								
3.05 - 4.65	Calc-Silicate Skarn, Altered Quartzite; mainly light green diopside, darker green chlorite, pink - light brown garnets and minor light grey quartzite. Mottled texture, in part healed breccia. Minor pyrrhotite and sphalerite are scattered through the interval.		3.10	4.70	5	1	0.004	0.06	14
4.65 - 5.10	Marble, Disseminated Sulphides; light grey to very pale green, generally coarse grained, moderately magnetic. Disseminated and ragged vein sulphides occur throughout, estimate 7% total volume. Mainly pyrrhotite and sphalerite with lesser galena and minor chalcopyrite. Sulphides increase towards the base of the zone and grade into more massive sulphides below. Hangingwall contact is a "minor" slip, at 650 to core axis; sharp, broken contact.		4.70	5.10	21	20	0.19	0.10	247

Page 2

Property: HOPE

Hole No.: H90-6

METERAG	E DESCRIPTION		mple						
From To		No.	From	То	Au	Ag	₽b %	Zn se	Cu
5.10 - 5.30	Semi-Massive Sulphides; contact between marble and underlying skarn calc-silicate appears to be at 20° to core axis and hosts a 5 to 7cm wide pyrrhotite-sphalerite vein. Lower contact with silicate is sharpest but disseminated and ragged vein sulphides extend both upwards into marble and downwards into calc-silicate. Sulphides are mainly pyrrhotite with lesser, but significant, sphalerite and minor galena and chalcopyrite.		5.10	5.30	<u>ppb</u> 17	163	2.65	8.45	9 <b>4</b> 9
5.30 - 8.00	Altered Quartzite, 50% Calc-Silicate, 15% Silicified Argillite; mainly light grey, fine grained silicified quartzite with patchy development of garnet-diopside skarn and scattered narrow zones of silicified laminated black argillite. Pyrrhotite and sphalerite are common in the upper 10cm, diminishing rapidly below, although disseminated pyrrhotite and sphalerite occur throughout. Minor galena occurs locally, Chloritic, much of it is a healed breccia. Bedding in argillites is at 40° to 60° to core axis.	4552 4553 4554	5.30 5.80 6.90	5.80 6.90 8.00	5 6 3	7 17 4	0.08 0.25 0.04	1.84 0.11 0.03	92 103 58

Page 3

Property: HOPE

Hole No.: H90-6

METERAG	E DESCRIPTION	s	ampl	e					
From To		No.	From	To	Au	Ag	Pb	Zn	Cu
8.0 - 11.0	Argillite, Minor Calc-Silicate and Marble; dark grey to black, laminated, sericitic and silicified. Disseminated pyrrhotite and pyrite are common. Bedding is quite uniform at 65° to core axis. Narrow bands of lighter grey quartzite with some garnet-diopside are present; these typically have minor sulphides including pyrrhotite, pyrite, sphalerite and chalcopyrite. One 4cm wide band of white/light grey marble at 10.4m carries minor disseminated pyrrhotite, pyrite and sphalerite. Bright green mineral is				ppb	ppm	<b>%</b>	<u> </u>	ppm
11.0 - 12.2	Biotite Granodiorite; medium coarse grained, porphyritic. Pale grey to greenish, chloritic. About 30cm of the zone near 11.3m is light grey (bleached?) argillite or siltstone, brecciated by granodiorite.								
12.2	END OF HOLE								
	Core stored in racks at the Vine Property								

#### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -62°

Remarks:

Hole No: H90-7

Length: 29.6m

Location: Hope 2 Claim

Start Date: October 13, 1990

Finish Date: October 13, 1990

Elevation:

Azimuth: 2000

Collar Dip:

Core Size: NO

Tests at:

Logged by: PK

Date: Oct/90

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
0.00 - 6.10	<u>Casing</u> ; no core.				dqq	ppm	- 8	8	ppm
.10 - 7.00	Mixed Lithologies of Broken Core; bottom 30cm is mixed siliceous argillite and altered quartzite/calc-silicate, may be bedrock. Contact at 7.0m is in broken, oxidized core.								
.00 - 10.90	Granite/Biotite Granodiorite; light grey to very pale green, medium coarse grained. Varies from quite leucocratic to having 6% biotite and chlorite. Core is fairly broken with limonitic fractures. At 9.8m a 2 - 3cm wide quartz vein at 40° to core carries patchy irregular veinlets of sulphides, mainly pyrrhotite and sphalerite with minor pyrite and galena. Sulphides comprise about 15% of the narrow vein and extend a short distance into the adjacent leucocratic granite.								

Property: HOPE

Hole No.: H90-7 Location: Hope 2 Claim

DESCRIPTION METERAGE Sample From То Pb Zn Cu From To No. Αu Ag ppb ppm ppm 10.90 - 14.20 Silicified Argillite; ~25% quartzite. Mainly dark grey to black but also medium and light grey. Mostly laminated at 40 - 500 to core Some healed breccia texture with veinlets and patches of quartz and calcite. Fine disseminated pyrite occurs throughout. 14.20 - 15.00 Mainly Quartzite, Minor Skarn and Marble; light grey to white, locally pink garnets and green diopside. Banded at 40° to core and mottled. Marble occurs intermixed with medium grey quartzite from 14.2 to 14.7m; mostly skarn below. Minor disseminated sphalerite and pyrrhotite and pyrite occurs in the marble and there is minor sphalerite and pyrrhotite in the skarn. One very small patch of molybdenite at 15.0m. 15.00 - 29.60 Argillite, very minor Marble and Quartzite; generally dark grey to black, locally medium grey. Typically laminated with bedding at 35 - 40° to core axis. Locally graphitic; at 18.3m a very irregular, convoluted contact between slightly folded argillite and mottled greenish quartzite/calc-silicate is graphite vein 1 - 4mm wide. Sericitic and pyritic. Minor patches of quartzite/calcsilicate of marble occur scattered through

Page: 2

Page: 3

Property: HOPE

Hole No.: H90-7

1 E T E R A C	GE DESCRIPTION	Sa	mpl	<b>e</b>					
From To	the argillite; these vary from being bedding- parallel to being irregular patches. Minor sulphides, pyrrhotite, sphalerite, galena and pyrite occur with some of the calc-silicate and marble.		From	То	Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
9.60	END OF HOLE								
	Core stored in racks at the Vine property								

### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -45°

Remarks:

Hole No: H90-8

Length: 22.9m

Location: Hope 2 Claim

Start Date: October 14, 1990

Finish Date: October 14, 1990

Elevation:

Azimuth: 249°

Collar Dip:

Core Size: NQ

Tests at:

interval differs from previous quartzite

Logged by: PK

Date: Oct/90

METERAG From To	E DESCRIPTION	S No.	ampl From	е	Au	Ag	Pb	Zn	Cu
110				10	nu ppb	ppm	8	8	ppm
0.00 - 1.50	<u>Casing</u> ; no core.						_		
1.50 - 4.80	Argillite; 1.5m to 4.6m only ~1.0m maximum recovery. Broken, rubbly core; generally dark grey to black, limonitic-oxidized. Fresher pieces are pyritic. A few pieces of core are of lighter grey quartzite. Bedding is at 40 - 45° to core axis. At ~4.0m 5-10cm of rubbly core is pegmatite, probably a narrow dyke.								
4.80 - 22.86	Quartzite, Minor Argillite, few Pegmatite/Granite Dykes; most of the interval is thin bedded, silicified quartzite; typically light grey, medium grey, light green, light brown and pinkish-orange i.e. quite vari-coloured. Pink garnets and green diopside are developed locally and chlorite is common through much of the zone. This								

Page: 2

Cu

ppm

Zn

ૠ

Property: HOPE

Hole No.: H90-8

From

Tο

Αu

daa

Location: Hope 2 Claim

Pb

ૠ

Ag

ppm

METERAGE DESCRIPTION Sample From To No. intersections in holes 1 through 7 in that the quartzite is more uniformly thin bedded and has less calc-silicate developed. Narrow zones are dark grey to black, evidently silicified argillite. Bedding is typically and fairly consistently at "45° to core axis but locally varies from 80° to 25° to core axis. Weak vein and disseminated sulphides occur through most of the section, usually pyrite with chlorite but also pyrrhotite and minor sphalerite. The bright green mineral is also present. Three pegmatite, granite dykes are present, detailed below. At 7.9m. an irregular white pegmatite vein 2 - 6cm wide cuts the core at "90° to bedding. Detailed stratigraphy: 4.80 - 5.45; banded quartzite, medium grey to pale pink chloritic, pyritic patches and bedding-11 laminations. 5.45 - 5.60; white-light grey chloritic pegmatite dyke, contacts 11 and sub-11 to bedding at 45° to 60° to core axis. 5.60 - 9.90; banded, vari-coloured quartzite with 20% darker grey argillite. Bottom 50cm is mainly argillite.

9.90 - 10.35; coarse-grained, light grey pegmatite dyke, leucocratic. Contacts subparallel to bedding, slightly irregular, at 700 to core axis.

Property: HOPE

Hole No.: H90-8

Location: Hope 2 Claim

Page: 3

	METERAG From To	E DESCRIPTION	No.	ampl From	То	Au	Ag	Pb	Zn	Cu
discontinuously interbedded with quartzite.  22.86 END OF HOLE		quartzite and 15% argillite. Vein and disseminated pyrrhotite and pyrite are common over 20cm near 10.75m.  11.25 - 12.00; biotite/chlorite granodiorite. Medium coarse grained; biotite and chlorite are generally strongly developed but vary in concentration. One 10cm zone at 11.85m contains ~40% mafics.  12.00 - 16.25; light grey, pink and brown banded quartzite.  16.25 - 22.86; mixed quartzite and ~30%		T T O III			_			ppm
	22.86	END OF HOLE								

### DRILL HOLE RECORD

Page No. 1

Name of Property: HOPE

Corr. Dip: -90°

Remarks:

Hole No: H90-9

Length: 17.4m

Location: Hope 2 Claim

Start Date: October 15, 1990

Finish Date: October 15, 1990

Elevation:

Azimuth:

Collar Dip:

Core Size: NQ

Tests at:

Logged by: PK

Date: Oct/90

METERAG	E DESCRIPTION	S	ampl	e					
From To		No.	From	To	_ Au	Ag	Pb	Zn	Cu
0.00 - 1.50	<pre>Casing; core starts at ~1.0m NOTE: Bedrock at drill site on surface is argillite so DDH H90-9 is collared at an argillite-quartzite contact.</pre>				dqq	ppm	<u> </u>	<u> </u>	mgg
1.00 - 17.37	Mainly Altered Quartzite, Minor Pegmatite Dykes and Biotite Granodiorite								
1.00 - 1.90	Altered Quartzite; light and medium grey, locally skarn/calc-silicate altered with pink garnets and light green diopside. Banded (relict bedding) at 60 - 80° to core axis. Minor sulphides are scattered through the quartzite; small patches of pyrrhotite and sphalerite.								
1.90 - 2.30	Pegmatite Dyke; light grey-white to very pale green. Coarse grained. Chloritic fractures at 5° to 30° to core axis; minor fault with some clay gouge at ~30° to core axis at ~2.0 m. Both contacts are at 70 - 80° to core axis.								

Property: HOPE Hole No.: H90-9 Location: Hope 2 Claim

METERAG	E DESCRIPTION	S a	mple				_		
From To		No.	From	То	_ Au	Ag	Pb	Zn	Cu
2.30 - 5.50	Altered Quartzite; medium to light grey, typically thinly banded at 75° to core axis. Fine grained and silicified. Very minor sulphides (1-2%) are scattered through the zone; disseminated and in ragged vein-like patches, usually associated with dark green chlorite. Pyrite, pyrrhotite and sphalerite are present.				ppb	ppm	<b>&amp;</b>	<u>&amp;                                    </u>	<u>ppm</u>
5.50 - 7.40	Altered Quartzite, Vein Sulphides; medium dark grey, vaguely banded and 65 - 70° to core axis. About 5% patchy vein and disseminated sulphides occur through the interval; these are typically associated with chlorite. Sulphides are mainly pyrrhotite and associated chalcopyrite with minor local sphalerite.	4556	5.50 6.00	6.00 7.40	3	3	0.003		298 529
7.40 - 7.95	Pegmatite, Minor Vein Sulphides; medium coarse grained, light grey-green, mottled, chloritic. Minor pyrrhotite, pyrite, and sphalerite occur with chloritic veins; a few small isolated patches of pyrite are scattered through the intrusive.		7.40	8.00	1	1	0.003	0.02	39
7.95 - 10.15	Altered Quartzite; medium to darker grey, quite chloritic. Fairly well banded/laminated at 70 - 80° to core axis. Minor patchy vein and disseminated sulphides occur throughout. Mainly pyrrhotite but with	4559	8.00 9.10	9.10 10.20	2	2 3	0.001	0.33 0.35	. 325 435

Page: 2

Page: 3

Property: HOPE

Hole No.: H90-9

rom To		No.	From	То	Au	Ag	Pb	Zn	Cu
	minor chalcopyrite and sphalerite. Texture is most disturbed where sulphides are more concentrated.				ppb	mqq	<u> </u>	<u> </u>	ppm
0.15 - 10.80	Altered Quartzite; medium grey, locally pink and brown from development of garnet. Still chloritic and with minor sulphides but diminished from overlying zone. Three narrow pegmatite dykes, 1 - 6cm wide, occur subparallel and cutting bedding at 40 to 80° to core axis.								
0.80 - 12.10	<u>Pegmatite or Granite</u> ; light grey-white, medium coarse grained, mottled and chloritic. May be leucocratic "biotite granodiorite". Both contacts cut bedding at $10.8m$ , $80^{\circ}$ to core axis, $20^{\circ}$ to bedding; at $12.1m$ , $40^{\circ}$ to core axis, $50^{\circ}$ to bedding.								
2.10 - 14.40	Altered Quartzite, Calc-Silicate Skarn; light grey to pink-brown. Locally darker pink-brown and light green from mottled development with garnet and diopside. Relict bedding is at 80° to core axis. Very minor disseminated pyrrhotite. 7 - 8cm wide, bedding-parallel quartz-rich pegmatite veins near 12.8m.								

Page: 4

Property: HOPE Hole No.: H90-9

From To		No.	From	To	Au	Ag	Pb	Zn	Cu
14.40 - 15.70	Biotite Granodiorite; grey-white quartz and feldspar, est. 10% biotite, 5% chlorite. Mottled, medium and coarse grained. Both contacts are sharp, parallel or sub-parallel to bedding at ~800 to core axis.				dqq	mqq	<u> </u>	<u> </u>	mqq
15.70 - 16.75	Altered Quartzite, Minor Granite; medium grey to grey-green, wavy laminated at 75 - 80° to core axis. Very minor disseminated iron sulphides, 15cm wide granite dyke, 70° to core axis, cuts bedding at ~30°, at 16.3m.								
16.75 - 17.37	Biotite Granodiorite; mottled light grey, est. 3 - 4% biotite, 3% chlorite, 1/2 - 1% very small pale pink-brown garnets. Hangingwall contact is bedding-parallel at ~650 to core axis.								
17.37	END OF HOLE								
	Core stored in racks at the Vine property.								