3372

TANZILLA EXPLORATIONS LTD. (N.P.L.)

KAY, KING, KO & KING FR. MINERAL CLAIMS

104 I-5 LIARD M.D., B.C.

LAT. 58° 17' N., LONG. 129° 56' W.

GEOLOGICAL REPORT - DIAMOND DRILLING

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3372 MAP

bу

H. S. Aikins
under the supervision of
P. H. Sevensma Ph.D., P.Eng.

October 15, 1971

Peter H. Sevensma Consultants Ltd.

TABLE OF CONTENTS

INTRODUCTION	1
PROPERTY, LOCATION, ACCESS	2
GEOLOGY	3
HISTORY	5
MINERAL OCCURRENCE	6
DIAMOND DRILLING	7
SUMMARY	8
RECOMMENDATIONS	8
COST ESTIMATE	9

APPENDIX "A"

GEOLOGICAL LOGS, DRILL HOLES 1, 2 & 3.

List of Figures

A Fig.	1	Location Map		1"	=	30 Mil	Les
<pre>7 Fig.</pre>	2	Claims location Plan & Data.		1"	=	2,500	Ft.
S Fig.	3	Surface Drill P.	lan	1"	=	400	Ft.

TANZILLA EXPLORATIONS LTD. (N.P.L.)

KAY, KING, KO & KING FR. MINERAL CLAIMS

104 I-5 LIARD M.D., B. C.

LAT. 58° 17' N., LONG. 129° 56' W.

1. INTRODUCTION

During the period from September 15 to October 6, 1971 a program of site preparation and diamond drilling was carried out on some of the claims herein referred to as the "KING" GROUP.

Diamond drill targets were selected primarily on the basis of a recently completed induced polarization survey.

Approximately one and three quarter miles of tote road was constructed to provide truck access to all sites.

Geological mapping, controlled by transit-stadia and pace-compass traverses, was conducted to provide data which could be of value in correlating drill results.

Three holes were completed for a total of 745 feet.

AW wire line equipment was employed with satisfactory results.

2. PROPERTY, LOCATION, ACCESS

The property at present consists of the following mineral claims:-

	Claim	No.	Record No.	Date	of I	Record
	KAY 1 & 2 2	2	35920-35921	Aug.	25,	1969
	KAY 17 to 28	12	35936-35947	Aug.	25,	1969
	KIM 1 to 14	14	41296-41309	Nov.	18,	1969
KIR	SKING/1 to 10	10	34574-34583	Dec.	20,	1968
	KING 21 to 30	10	34584-34593	Dec.	20,	1968
	KING 61 to 86	26	26510-26535	Mar.	3,	1967
	BOX 1 to 10	10	29512-29521	Feb.	15,	1968
	KO 1 to 10	10	49923-49932	Nov.	4,	1970
	KING FR. 1 to 9	9	49933-49941	Nov.	4,	1970
	TOTAL	103				

Claim locations as shown on Fig. 2 are subject to revision upon survey.

The property is situated some 12 miles SSE of the community of Dease Lake and approximately 3 miles west of the present highway.

Access to a number of points within the claim group is possible by four wheel drive vehicle. The seven mile tote-road commences from a point on the Stewart-Cassiar highway located 2.7 miles south of the Tanzilla river bridge.

3. GEOLOGY

A succession of Mesozoic sediments and volcanics intruded by offshoots of the Hotailuh batholith underlie the property.

Andesitic and basaltic flows, pyroclastics, and clastics ascribed to early Upper Triassic comprise the layered sequence. The main body of the metalliferous Hotailuh batholith lies to the southeast while comparable intrusives outcrop to the south and west of the current area of interest. The layered sequence therefore occurs as a pendant or narrow re-entrant mass.

Recent studies* provide the following K-Ar dates for the Hotailuh and other plutons of the western cordilleran:
Hotailuh (193 m.y.), Galore Creek (198 m.y.), Guichon (200 m.y.),

Thuya (194 m.y.), Takamkane (187 m.y.), and Copper Mountain

Stock (195 m.y.). The Hickman batholith (Shaft Creek) is of similar age. The major "porphyry copper" deposits of British

Columbia are associated with this period of intrusive activity.

Widely scattered outcrop on or adjacent to the property confirms a near east-west trend to formational units with northerly dips ranging from 12 to 20 degrees. Rock types observed include pillowed basaltic lavas, pyroclastics, tuff, andesite, greywacke, and siliceous argillites. Alteration effects, more apparent in drill core than in surface exposures, ranged from minor to intense, showing little apparent correlation with proximity to the inferred intrusive contact.

^{*} Geological Survey of Canada, Economic Geology Report No. 1, page 440.

3. GEOLOGY (Cont'd)

Strong NS trending lineaments infer the presence of faulting but no direct evidence of major displacement exists.

The nature and extent of fluvioglacial surficial deposits is a matter which merits close attention. In general it is noted that from several inches to more than two feet of organic material overlie a subsoil composed of unsorted sand and gravel containing large granitic erratics. Subsurface drainage is generally lacking, giving rise to extensive marshy areas.

4. HISTORY

A copper prospect located some 5 to 6 miles to the south has been held under crown grant for many years. Recent activity in the immediate area dates from completion of that portion of the Cassiar-Stewart highway which extends from Dease to Kinaskan Lake. During the period between 1963 and 1968 several companies were active within a 10 mile radius of the upper Gnat Lake.

During this period work by Dease Lake Mines, a subsiduary formed by Lytton Minerals and Mitsui Mining & Smelting Co., is reported to have indicated mineral deposits containing 20,000,000 tons grading 0.44% Cu.

During the winter of 1967-68 some of the claims which now comprise the "KING" group were acquired. These, and claims subsequently acquired, covered an extension of the inferred trend of the Lytton deposits and were known to cover minor sulphide occurrences.

Subsequent work has entailed geochemical and geophysical surveys on a system of grid lines established for control.

Geological mapping of a reconnaissance nature has been carried out. An induced polarization survey completed in mid 1971 provided several drill targets which were tested during the course of recent work.

5. MINERAL OCCURRENCE

Surface mapping was carried out concurrent with drilling operations. A traverse within the existing grid along a tributary of Tsenaglode creek provided several previously unmapped exposures.

A small oxidized outcrop along the west side of the creek was found to consist of biotitized volcanic clastic sediments containing chalcopyrite as fine disseminations and fracture filling.

Two samples from this exposure are reported as follows:-

Sample No.	Type	Width	% Cu.	Lab &	Cert. No.
1.	grab sample	- ·	0.25%	Crest	No. 3373
70680	chip sample	18.0 ft.	0.19%	Crest	No. 3372

Hand trenching exposed an area of 6 ft. by 22 ft. showing the mineralized zone to be bounded on the north by a dyke and open to the south. A short distance to the south-west a large monzonite outcrop suggests that the showing is in close proximity to the main intrusive contact.

Traces of bornite and an as yet unidentified metallic mineral together with minor pyrrhotite and magnetite are associated with the chalcopyrite. The sediments have a fresh appearance on the broken surface and are somewhat silicified with minor biotitization. Fracture surfaces are highly oxidized.

6. DIAMOND DRILLING

Detailed geological logs are attached as Appendix "A".

Drilling failed to reveal any significant concentration of copper mineralization. Holes 1 and 2 did however encounter anomalous sulphide concentrations which could explain the chargeability effects obtained by induced polarization. Hole 3 intersected less mineralization and in general a much lower degree of metamorphic alteration consistent with the results of the induced polarization survey.

Chalcopyrite was noted in core from all three holes.

Significant results obtained from examination of the core are provided in the following table:-

Hole No.	Major Alteration effects	Sulphides Present
	Albitization-biotitization-chloritization	Pyritized & irregular blebs of pyrrhotite-chalco-pyrite.
2	Kaolinization-silicification	Pyritized, minor chalcopyrite in fractures.
3	Epidotized-minor chlorite	Sparse pyrite- trace chalcopyrite imepidote.

Assay results obtained from split core are as follows:-

Hole	Sample	B										
No.	No.	Foot	tage	Ler	ngth	٠	<u>Au./Oz.</u>	Ag./Oz.	% Cu.	% Ni.		
1	70676	30.3	to 31.	3	1.0		Tr.	Tr.	0.02	Tr.		
2	70677	120.5	to 123	.0	2.5		-	0.1	0.04	-		
3	70678	169.0	to 172	.5	3.5		Tr.	0.1	0.09	_		
	All sa	amples	were t	aken	bv H.	. S.	Aikins	and assaved	bv			

Crest Laboratories (B.C.) Ltd.

7. SUMMARY

No unusual difficulties were encountered in the construction of access roads or in carrying out the drilling operations.

Drill results confirm the presence of a significant concentration of sulphide minerals in a predominantly sedimentary sequence within the contact aureole of the Hotailuh batholith.

The mineralized outcrop, showing a high ratio of chalcopyrite to other sulphides indicates a need for close examination of an area peripheral to the anomalous I.P. response.

Drill hole No. 2 encountered some 45 feet of fluvioglacial overburden which may effectively mask geochemical response over much of the property.

Further work is warranted in view of the marginal copper values encountered in outcrop and the widespread presence of copper mineralization associated with a pyritic halo near the Hotailuh batholith.

8. RECOMMENDATIONS

Detailed geological mapping in conjunction with selective hand trenching and limited soil and rock geochemical analysis is indicated. Bulldozer stripping may be warranted to explore anomalous geochemical response in areas of shallow overburden.

Key ground should be retained in good standing pending completion of further work. An area of at least 60 net claims is recommended. Detailed surface exploration in the vicinity of the recently located copper showing may indicate the presence of a zone which would require investigation by drilling.

9. COST ESTIMATE

STAGE (1) Firm.

Geological Mapping	
Geologist & assistant, 14 days field work	\$ 2,000.00
Trenching, soil sampling, etc.	
20 man/days @ \$30 per day	600.00
Assaying & geochemical analysis	
100 samples @ \$4.00 per sample	400.00
Camp Operation	
50 man days @ \$10.00 per day	500.00
Equipment Rental & Supplies	,
Truck, rock drill, explosive, etc.	500.00
Travel, and Communication	
Air-fares, telephone	500.00
Consulting fees Report Preparation, drafting	500.00
TOTAL (STAGE 1)	\$ 5,000.00

STAGE (2) * Contingent on Stage 1

Stage 1 may warrant expansion in the event of early encouragement and provision for the expenditures of up to an additional \$5,000.00 from the program outlined for Stage 2 is recommended.

Bulldozer stripping and trenching	•
100 hours @ \$35.00 per hour	3,500.00
Diamond Drilling	
1,000 feet @ \$15.00 per foot (inclus.)	15,000.00
Equipment Mobilization (subject to rental contr.)	1,500.00
Camp Operation or alternate accom.for Co.personne	500.00
Truck Rental and Operation	1,000.00
Sampling and Assaying	500.00
Engineering and Supervision	2,500.00
Consulting Fees & Expenses	1,000.00
Sub-Total \$	\$ 25,500.00
Contingency Allowance	4,500.00
TOTAL (STAGE 2)	\$ 30,000.00

Respectfully submitted,

H.S.Ails.

H. S. Aikins.

Endorsed by,

P.H. Sevensma, Ph.D., P.Eng. PETER H. SEVENSMA CONSULTANTS LTD.

Vancouver, B. C. October 15, 1971.

CERTIFICATE

I, PIETER H. SEVENSMA, of 908, 1280 Haro Street, in the City of Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

- THAT I am a Consulting Geologist, with a business address at 715 - 850 West Hastings Street, in the City of Vancouver, in the Province of British Columbia.
- 2. THAT I am a graduate of the University of Geneva, Switzerland (Physics and Chemistry, 1937; Geology and Mineralogy, 1937) where I obtained my Ph.D., in Geological and Mineralogical Sciences in 1941.
- 3. THAT I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columba and of the Association of Professional Engineers of Yukon Territory.
- 4. THAT I have practiced my profession as a Geologist for the past 32 years.
- 5. THAT I have personally examined the property held by Tanzilla Explorations Ltd., and was present during the conduct of the work herein described on September 25th, and again on September 28th.
- 6. THAT I have no interest, either directly or indirectly in any of the securities or properties of Tanzilla Explorations Ltd. (N.P.L.) and do not expect to acquire or receive any.

Vancouver, B. C. October 15, 1971.

P.H. Sevensma, Ph.D., P.Eng.

I Sevenim

P.H.	SEVEN	SMA (CONSU	ological Log LTANTS LTD. ., Vancouver 1, B.C.	COMPANY		Tanzilla Explorat 558 Howe St. (Room Vancouver, B. C.	s Ltd. (N.P.L.)		
	tive: 7				Drilling Started: Sept	t. 22, 1971 D	Orilling Completed:	Sept. 25, 1971		
Logge	d by: 1	1. S. A	ikins	Date: Sept. 23 to 26,1971	Samples Submitted to:	CREST	(Lab.)-Date:			
Lat.:				Long.: Place: "88.0	ft. SE of Stn:"8 W	App.Bear.: West	App.Dip.: -50°	Length: 283.0		
From	То	Length	Recov:	Remarks:						
0.0	2.5	2.5	0	Overburden, glacial till.	•					
2.5	29.0	26.5	26.0	Graywacke, fine to medium grains:	ize, rounded to sub-and	gular generally .	less than 2 mm.bio	tized throughout.		
				2.5 - 7.0: Core badly bro	en, numerous oxidized	fractures. Rx	appears massive.			
				2 – 5% sulphide	e, pred. pyrrhotite as	fine disseminat	ions, irreg.blebs			
				7.0 –30.0: Massive, bioti	tized Rx with some loca	al vague laminat:	ions @ 14 ft.(30 ⁰)0	24 ft.(200).		
				Minor chlorite	& calcite along fractu	& calcite along fracture planes. Core has brown spotted appearance.				
				Disseminated p	rrhotite throughout wi	ith minor associ	ated chalcopyrite.			
29.0	30.3	1.3	1.3	fg. lt.grey limestone(?)	somewhat mottled appea	arance, minor py	rite and chalco.			
30.3	35.5	5.2	5.2	Graywacke, fg. dense Rx massive						
				30.3 -31.3: 10% Sulphide	in irregular stringers	s, blebs & disse	m.grains – pred. p	yrrhotite(*\$70678)		
					, similar to above.					
35.5	38.9	3.4	3.4	Andesitė (?) highly chloritized,	scattered blebs of py	rfine acicular to rrhotite, chlori	ourmaline scattered te pseudomorphs of	d throughout. phenocrysts -		
38.9	40.0	1.1	1.1	Limy Seds; bleached appearance,v	.f.g., greenish (epidot	te ?) alt'n., spa	rse sulphide.	brongora maric.		
40,0	71.3	31.3	29.1	Graywacke, fine to medium grain	size, biotitized with o	chlorite alt'n.	limited to fractur	3S•		
				40.0 -44.0: Sparse mineral:	ization except 2" sect	ion of 30% sulph	ide @ 41 ft.			
				44.0 -46.5: brecciated app	earance, partially alb	itized.				
		1.7		46.5 -71.3: vaguely banded	30° @ 54.5 ft., 38° @	∄ 61.0 ft., spot	ted alt'n intermit	- / · · · · · · · · · · · · · · · · · ·		
				sulphides:- 60	7 to 61.3 ± 30%; 2 to	5% in balance o	f section.	(gainetize)		
71.3	116.0	44.7	43.2	Albitite: moderate to intense al	oitization, both mottle	ed & brecciated	appearance common.			
				Sulphides @ - 71.4, 76.5,	35.0 to 86.0, 87', 89'	, 90.7 to 91.0,	95.2, 100.2, 10 1.0	to 101.2,		
				102.0 to 102.4	, 102.8 to 103.0, 103',	, 106.0 to 107.8	Property: KING G	ROUP		
					112.0.(pred. pyrrhot:					
				massive in sec	tions noted. chalcopyr:	ite as minute	Core Size: AW	Page 1		
				specks in or a	t margin of pyrrhotite.	•	Cole Size: AW	ruge +		
	<u> </u>			Beddino: 30° @ וות ft	. irrea. to obliterate	d elsewhere.	addition of the second of the			

P.H.	SEVEN:	SMA C	ONSU	logical Log TANTS LTD. , Vancouver 1, B.C.		COMPANY	55	anzilla Explorations 58 Howe St., (Room a ancouver, B. C.		
Object	ive: I	.P. An	omaly			Drilling Started:		Drilling Completed:		
Logged	by:	н. 5.	Aikins	Date: Sept. 26,	1971	Samples Submitted to:	CREST	(Lab.)-Date:	Date:	
Lat.:				Long.:	Place:		App.Bear.:	App.Dip.:	Length:	
From	То	Length	Recov:	Remarks:						
16.0	120.2	4.2	4.2	Greywacke; biotitized &	chloritize	ed, less sulphide than	n adjacent secti	ions.		
20.2	126.0	5.8	4.3	Albitite; white to gree					te.(less than.1%Cu)	
26.0	128.4	2.4	2.2	Albitized dyke?, appear				•		
28.4	156.9	28.5	28.5	Albitized Greywacke, ch	loritizatio	on local, sulphides ma	ainly scattered	euhedral pyrite; mi	inor pyrrhotite in	
56.9	168.0	11.1	11.1	Greywacke, generally fi	ner grained	d than previous (more	argillaceous),	minor chlorite alt	'n., some biotite.	
				scattered pyrrhotite {	k pyrite, n	min o r chalcopyrite not	ted at 166.5,fre	esh unalt'd Rx at er	nd of sect.<10% Fe	
68.0	173.3	5.3	5.2	Albitized sediments, be	dding well	preserved despite som	me local braccia	ation, Rx hard, whit	e to buff & pink	
				Bedding 11 ⁰ @ 169.5	, chloritiz	zed along irregular fi	ractures, only m	ninor pyrrhotite pre	esent.	
73.3	175.5	2.0	2.2	Greywacke → Siltstone:	Biotitized,	, minor chlorite, vari	iable disseminat	ed sulphides.		
75.5	186.2	10.7	10.4	Siltstone, massive very	fine grain	ned sediments, some lo	ocal biotitized	sections, dissemina	ated pyrrhotite	
86.2	190.5	4.3	4.2	Siltstone, similiar to	above but w	vith more biotite & lo	ocally more sulp	hide, 1 " pyrrhotite	± 5% Fe 88.5 tr.	
90.5	192.0	1.5	1.5	Albitized Sediments, bla	ebs & irreq	gular stringers of pyr	rrhotite & pyrit	· .	chalco	
92.0	201.0	9.0	8.8	Greywacke, some fine gra	ined elesti	lcs, heavily biotitize	ed throughout, π	ninor to heavily dis		
01.0	213.7	12.7	12.7	Albitized sediments, who	ite to fair	nt pink colour, hard,	very fine-grain	ned; faint somewhat	(pyrrhotite irregular banding	
						ontaining blebs of pyr			at low angle.	
13.7	225.2	11.5	11.5	Greywacke, biotitized w	ith dissemi	inated pyrrhotite, mir	nor albite at 21	.6.0, and from 221.0	to 222.0	
25.2	231.0	5,8	4.3	Albitized sediments, co	ce badly bi	roken, fine grained ar	nd darker colour	Rx medium than usual, some f	air sulphide.	
				specimen taken @ 230) – note ch	nalcopyrite & unidenti	ified grey sulph	nide mineral.		
31.0	238.5	7.5	7.5	Albitized sediments, sin	niliar to a	above but less broken,	, Rx appears mas	ssive.		
38.5	246.0	7.5	7.5	Albitized sediments, ex	cellent cor	ce, massive—minor biot	tite, chlorite,	scattered blebs of	pyrrhotite.	
46.0	252.2	6.2	6.2	Albitized sediments, th	in bedded 8	k pyrrhotite laminated	d 20 ⁰ @ 248.5 ft	Property: KING	ROUP	
52,2	254.0	1.8	1.8	Greywacke, coarse bioti	tized with	heavily disseminated	pyrrhotite.	Hole No.: 1		
54.0	283.0	29.0	29.0	Greywacke, bedded seque	nce, beds 1	$1/8$ " to $\frac{1}{2}$ 2.0 ft.thick	<−35 [°] @ 268.0°ft	•	Page	
	283 0			minor local biotits	e & chlorit	e: scattered blebs of	`sulphide.	Cole Size: '''	Page 2 of 2	

P.H.	SEVEN	SMA (CONSU	Diogical Log LTANTS LTD. , Vancouver 1, B.C.	COMPANY	58	Tanzilla Explorations N.P.L.) 588 Howe St. (Room 4), Vancouver, B. C.			
Objec			.P. An	يها والمناف والمنافي والمناف والمنافض والمنافض والمناف والمناف والمناف والمناف والمناف والمناف والمناف والمناف	Drilling Started: Sept	. 26,1971 D	rilling Completed: Oc	et. 4, 1971		
Logge	d by:	H. S.	Aik i ns	Date: Oct. 5, 1971	Samples Submitted to:	CREST	(Lab.)-Date:			
Lat.:				Long.: Place: 1 + 34 W	est, line 4 North	App.Bear.: N 63°E	App.Dip.: -61 ⁰	Length: 328.0 ft.		
From	То	Length	Recov.	Remarks:						
0.0	50.0	50.0	-	Overburden, glacial sand, gravel a	nd occasional boulder	S.				
0.0	58.0	8.0	7,3	Siltstone: mass to vaguely banded	very fine-grained sed	s., bdg.50° @ 57	.5 ft., badly broke	en core, highly		
				Rx is partially albitized and/o	r silicified, chlorit	ization local, m	nuch of Rx is bleach	fractured. ned, minor pyrite.		
68.0	79.2	21.2	21.2	Siltstone; similiar to above, chlo	rite—albite alt'n.mor	e prevasive, sul	phide predominately	y pyrite-diss.		
				61.0 – 6330 somewhat biotitized	, bdg. 35 ⁰ @ 62.5 ft.	, less evidence	of leaching.	os & fract. filli		
79.2	82.0	2.8	2.8	Greywacke, near massive cg. seds,	buff to grey, minor s	cattered pyrite,	some biotite.			
32.0	109.0	27.0	27.0	Fine — medium grained sediments and altered equivalents, minor to strong albitization, some chlorite.						
					82.0 - 88.0, Excellent Tb. sequence, alternating lt.& dk. bands 1/8" to ± 2" thick, dip uniform at					
				88.0 - 89.0, Cemented breccia,	88.O – 89.O, Cemented breccia, strongly albitized, 10% sulphides as disseminations and small blebs.					
				89.D - 92.5, Massive fine grain	ed seds. with albite-	chlorite alt'n.,	intermixed pyrite-	-pyrrhotite blebs		
				92.5 -109.0, Fresh, relatively	unaltered (siltstone?), massive with	finely disseminated	d pyrrhotite-3-5%		
0.00	111.5	2.5	2.5	Greywacke, chlorite alt'n.increasi	ng to end of section.					
11.5	120.5	9.0	7.4	Kaolinized seds, fresher sections	similiar to above, so	ft whitish Rx, -	5% pyrite & pyrrho	tite,badly broken		
20.5	123.0	2.5	2.5	Leached & kaolinizeds seds. Sample						
23.0	124.0	1.0	1.0	Tb. Sediments, core crosses fold a	xis, maximum dips 20 ⁰	, less altered t	han adjacent sectio	manganite. ons.		
24.0	138.0	14.0	11.0	Leached & kaolinizeds seds, soft,w	hite featureless Rx.,	blebs of sulphi	de throughout $\stackrel{+}{-}$ 10			
38.0	141.5	3.5	3.0	Tuffaceous bed?-fine fragmental ap	pearance, alt'n. simi	liar to above.		pyrrhotite.		
41.5	158.0	16.5	11.0	Leached & kaolinized seds, numerou	s irregular fractures	,Qtz.—ankerite 1	illed with minor s	ulphide,vague		
58.0	163.0	5.0	0.0	Driller's note-Mud seams, no core	recovered. FAULT OR W	ATERCOURSE (oper	fracture).	banding ± 20°.		
63.0	168.5	5.5	2.2	Leached & kaolinized seds, core ba	dly broken,± 10% sulp	hides (pyrite &	pyrrhotite fr.min.)soft lt.coloured		
68.5	169.0	0.5	0.5	Silicified seds, minor fr.& dissem		1	Property: KING	GROUP RX.		
59.0	172.5	3.5	3.5	Silicified seds, light grey to gre	y vfg.seds,<1% chalco	pyrite in	Hole No.: 2			
72.5	180.7	8.2	6.5	Silicified seds, grey to almost bl	ack,well fractured, s	tringers of fg.				
 						pyrite	Core Size: AW	Page 1 of 2		

P.H.	SEVEN	SMA (CONSU	Dlogical Log LTANTS LTD. ., Vancouver 1, B.C.		COMPANY	588	zilla Explorations (N.). Howe St., (Room 4) couver, B. C.		
			.P. An			Drilling Started:		Drilling Completed: C	Oct. 4, 1971.	
Logged by: H. S. Aikins Date:						Samples Submitted to:		(Lab.)-Date:		
Lat.:				Long.:	Place:		App.Bear.:	App.Dip.:	Length:	
From	То	Length	Recov.	Remarks:						
80.7	181.8	1.1	1.1	Kaolinized Seds, pyrite	& manganite	e in irreg. blebs & d	lisseminations.			
81.8	195.5	13.7	13.7	Silicified Seds, some ch	 				lusters.	
95.5	207.0	11.5	8.8	Vaguely banded seds, co						
07.0	257.0	50,0	18.0	Intensely fractured Rx.						
				207.0 - 210.0 breccia	ated highly	siliceous Rx, traces	of chalcopyri	te.		
				210.0 - 212.0 kaolin:	ized seds. 1	minor pyrite (good co	ore).			
				212.0 - 245' simila:	r to above b	out extremely broken	with very poor	recovery. hematite	in fractures.	
				2 45' - 250.0 lamina	ted black a:	rgillite with vfg. py	rite bands. di	p 40 ⁰ to core.(Rx hi	ghly silicified).	
				250.0 - 257.0 chloritized and silicified seds. poor recovery. minor coarse cohedral pyrite al						
57.0	264.0	7.0	7.0	Silicified Seds, minor	chloritizat:	ion, disseminated pyr	rite & traces o	f other metallic?. R	x massive and	
64.0	275.0	11.0	11.0	Laminated black chert,	laminae @: 3 0	3 ⁰ at 265 ', 42 ⁰ at 270)',fine stockwo	rk of qtz-carb.veinl	ets with haematit	
75.0	293.0	18.0	18.0	Silicified Tb.Seds, lt.	grey fine to	o medium grained, loc	ally chloritize	ed, minor dissem. py	rite in coarser	
93.0	317.6	24.6	24.3	Silicified Seds, massive	e to vaguel	y banded, chlorite ar	nd pyrite as abo	ove. Albitized beyon	digs, 8dg. 250 @.	
				specks of chalcopyri					317'.	
17.6	321.8	4.2	4.2	Hornfelsic Seds, tough l	nard Rx witl	n spotty alteration,	finely dissemi	nated sulphides thro	ughout.	
21.8	328.0	6.2	6.2	Dyke?, chloritic Rx with	n granulose	texture, mafic compo	sition (amphib	ole?) core is magnet	ic.	
				scattered pyrrhotite	throughout	, adjacent alt'n sugg	jests this is n	ot extrusive.		
	328.0			END						
		1		GENERAL: More pyrite bu	t less pyrr	hotite than in Hole l	. Pyrite show	s preferential repla	cement of seds.	
				Zone from lll.	5 to 257.0 i	may cross major fault	system.	Property: KING GR	OUP	
								Hole No.: 2		
								Core Size: AW	Page 2 of 2	
	li			in the second se						

Diamond rill Geological Log Tanzilla Explorations Lt. (N.P.L.). COMPANY 588 Howe Street, (Room 4) P.H. SEVENSMA CONSULTANTS LTD. Vancouver, B. C. 715 - 850 West Hastings St., Vancouver 1, B.C. Drilling Started: Oct. 4, 1971 Objective: Obtain stratagraphic & structural information Drilling Completed: Oct. 6, 1971 Test I.P. & Geochemical Anomalies. (Lab.)-Date: Logged by: H. S. Aikins Date: Samples Submitted to: Oct. 5, 1971 Place: 19 + 60' N - 0 + 42.5 App. Bear.: App.Dip.: Length: Lat .: Long.: -75° (near Baseline & line 20 N) S 10° W 134.0 Length Recov. Remarks: From To Collar near E-W striking Outcrops with 12 to 20° dips to north. 0.0 3.0 3.0 0.0 Overburden, no core. 3.0 134.0 Graded sediments, individual beds appear massive and average 5.0 feet thick. basal portions have coarse fragmental appearance on surface of core. contacts irregular, scour features? at 11.2 ft., $\frac{1}{4}$ " - $\frac{3}{4}$ " fg.frags in first 2" of base at 4.8 ft. coarser portions appear crystalline, propolitic alt'n. & silicification noted. 3.0-11.0 numerous oxidized fractures. 1.8 ft. of core lost between 5.0-11.0. 11.0-16' specimen taken at 11.0, fine siliceous seds - coarse chloritic Rx (Greywacke?) 16' -17.2 epidote-chlorite alt'n, 10% pyrite in blebs & stringers. 17.2-23.0 fresh relatively unaltered Rx, minor fractures generally about 30° to core. 23.0-26.8 epidote-chlorite alt'n., intense at 23.5 pyrite with minor chalcopyrite associated. 26.8-31.0 some selective epidote-chlorite alt'n. along fracture // to core. 31.0-55.0 graded seds. minor pyrite. 55.0-92.0 Rx becomes more siliceous, minor epidote at 63.0 and 64.0. 92.0-99.3 Banding more pronounced, some thin-bedded sections, i.e. 94.0 to 95.5. Bdg. 829 at 76.0 ft. 80° @ 92.0 ft., 80° @ 95.0 ft. minor amount epidote at 96.0. May be tuffaceous, white to buff bands $1/16" - \frac{1}{4}"$ thick, this section extremely siliceous, pyrite in fractures and scattered subhedral crystals. 99.3-102.0 massive grading to coarse crystalline Rx, somewhat chlorite with 1/8" epidote veins. 102.0-104.5 banded siliceous Rx. 800 at 104.0 ft. 104.5-134.0 massive chloritic (seds?) local epidote, blebs of chalcopyrite & pyrite @ 112.5 ft. narrow (tuffaceous?) beds at 126 & 127.5 chlorite more Property: KING GROUP pronounced. Hole No.: 3 134.0 END. Hole stopped due to frozen water line.

Core Size: AW

Page

APPENDIX "B"

to a Geological report by H.S. Aikins and P.H. Sevensma, P. Eng., dated October 15, 1971 prepared on behalf of TANZILLA EXPLORATIONS LTD. (N.P.L.)

Declaration as to Personnel Employed and Costs Incurred.

	지하는데 그 살아왔어요.	No.		
Individual or Firm	Date of Work	Days	Rate	<u>Total</u>
Peter H.Sevensma Cons.Ltd. P.H.Sevensma, P.Eng. H.S.Aikins, Technician (Expenses & disbursements	Sept.25 & 28/71	11.	\$170.	\$ 255.00
	Sept.l to Oct.8/71	28	80.	2,240.00
for above)				407.24
A.Stone, linecutting & trenching	Sept.15 to 21/71	7	25.	175.00
	Sept.15 to 30/71	15	25.	375.00
Camp Operation				365.40
Truck Operation and Expense			344.97	
TOTAL COST; GEOLOGICAL STUDIES, SUPPORT & DRILL SUPERVISION			\$4,162.61	
Preparation of drill sites & moving drill Grant Stewart Construction (bulldozer rental)			1,374.00	
Direct drilling costs (745 Kendrick Drilling Ltd.	ft. of AW)			9,167.50
* TOTAL COST, DIAMOND DRILLING				\$10,541.50
TOTAL COST				\$14,704.11

Average cost per foot \$14.15

Declared before me at the

of

, in the

Province of British Columbia, this

A Notaky Pub

day of

ritish Columbia or A Complissioner for talling Af

DOMINION OF CANADA

) IN THE MATTER OF, expenditures
) incurred and personnel employed
PROVINCE OF BRITISH COLUMBIA
) in conjunction with a geological
) survey carried out on the Kay,
TO WIT

) King, KO, Box and King Fraction
) mineral claims in the Liard M.D., B.C.

I, PIETER H. SEVENSMA, of 715-850 West Hastings St., Vancouver, B.C., DO SOLEMNLY DECLARE:

THAT attached hereto, this my affidavit and marked "Appendix B" is a statement of the personnel employed and the expenditures incurred in carrying out this work.

P.H. Sevensma, Ph.D., P. Eng.

October 15, 1971

Declared before me at the

of

VANCOUVER, B.C.

. Dritish Columbia, this

OCT 26 1971

I Milling

A Commission of taking Affiles in Via British Columbia or A Noter to a and include Sevence of Crisish Columbia,





