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OPERATOR: RAT RESOURCES LTD. OWNER: SMD MINING COMPANY LTD.

TA HOOLA PROPERTY

ASSESSMENT REPORT

Kamloops Mining Division

British Columbia

N.T.S. 92P/9W

Latitude 51°34'54"N

Longitude 120°25'48"W

by

Rebagliati Geological Consulting Ltd.

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,462

C. M. Rebagliati, P. Eng.

October 30, 1987

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SUMMARY

The Ta Hoola property, comprising 186 units, is located in South Central British Columbia, 25 km northwest of Little Fort. Highway 24 lies approximately 3 km to the south of the claims. Good quality logging roads and rough range roads leading from the highway provide good vehicle access.

Triassic-Jurassic volcanic units of the central volcanic core of the Quesnel Trough, and their derived sediments, underlie the claims. All are intruded by diorite plutons.

The first mineral exploration in the region took place in 1930, when a gold-bearing skarn was discovered at Deer Lake. Exploration began within the claim area in 1966, when Anaconda American Brass and United Copper Mines undertook extensive soil geochemical and IP surveys in their search for porphyry-type deposits. Porphyry exploration continued until 1981 when SMD Mining Co. Ltd., Lornex, and Selco/BP sequentially explored the property for precious metal deposits.

Rat Resources Ltd. optioned the property in 1987 from SMD Mining Co. Ltd. and conducted a 310 m, three hole, diamond drilling program on the Ta Hoola 4 claim. A broad interval of carbonate altered breccia, geochemically anomalous in gold, arsenic and molybdenum, was intersected.

A favourable geological environment has been identified on the Ta Hoola property, which is only partly explored.

A program of geochemical surveying and diamond drilling, is proposed to cover the remainder of the claim group and to drill the anomalies.

- 1 -

INTRODUCTION

This report is based on the writer's knowledge of the area gained by the study of available government and private reports; regional studies; the supervision of exploration on the Ta Hoola property during the period 1981-1982; in-house corporate technical reviews of the 1984-1985 exploration programs; an examination on July 13, 1986; the supervision of work undertaken in 1987 on the claim adjoining the east side of the Ta Hoola 9 & 12 claims; and the supervision of the diamond drilling program undertaken by Rat Resources Ltd. on the Ta Hoola 4 claim in August - September, 1987.

The property is held under option from SMD Mining Co. Ltd.

LOCATION AND ACCESS

The Ta Hoola claim block is located approximately 25 km northwest of Little Fort, British Columbia on NTS Map Sheet 92P/9 at latitude 51°34'N and longitude 120°22'W (Figure 1).

A network of good quality logging roads provides easy access to the southern half of the property from Highway 24, which links the Yellowhead South Highway (No. 5) along the North Thompson River at Little Fort to the Cariboo Highway (No. 97) at 100 Mile House. Rough range roads provide good 4-wheel-drive access to the northern claims.

The property lies within the Thompson Plateau, a part of the Interior Plateau characterized by rolling uplands with rounded hills and numerous small lakes. Topography within the claim is moderate and elevations range from approxmately 1300 m to 1600 m (a.s.l.).

- 2 -



Vegetation consists of a mature spruce, fir and jack pine forest. Underbrush is moderately thick near moist valley bottoms and thins at higher elevations. Portions of the Silver 1, 2 and Ta Hoola 9 & 10 claims have been logged.

CLAIMS

The 166-unit Ta Hoola-Silver claim block is owned by SMD Mining Co. Ltd. Rat Resources Ltd. hold an option to earn a 50% interest in the claims. The 20-unit Rock Island claim is jointly owned by SMD and Rat Resources (Figure 2).

Claím <u>Name</u>	Record	No. of <u>Units</u>	Mining Division	Recording Date	Expiry _Date_
Ta Hoola 2	3333	20	Kamloops	Mar.17/81	Mar.17/92
Ta Hoola 4	3335	16		Mar.17/81	Mar.17/92
Ta Hoola 6	3337	8	14	Mar.17/81	Mar.17/92
Ta Hoola 9	3572	16	14	June 11/81	June 11/88
Ta Hoola 10	3856	16	**	Oct.16/81	Oct.16/88
Ta Hoola 11	1 3857	20		Oct.16/81	Oct.15/88
Ta Hoola 12	3858	12	81	Oct.16/81	Oct.16/89
Ta Hoola 13	3 3859	12	11	Oct.16/81	Oct.16/91
Silver 1	4242	16	11	Nov.17/81	Nov.17/88
Silver 2	4243	18	85	No∨.17/81	Nov.17/88
Silver 3	4244	12	н	Nov.17/81	Nov.17/88
Rock Island	1 7237	20	11	Aug.20/87	Aug.20/88
		186 un	its		

Essential claim data are as follows:

EXPLORATION HISTORY

The Deer Lake-Friendly Lake district has a long exploration history. In 1930, the Lake View gold skarn deposit was discovered at the south end of Deer Lake.



A second prospect discovered in the 1930's is reported by Hirst (1966) to be located near Silver Lake. Hirst describes it as a zinc-lead-silver prospect occuring in a zone of sheared argillite. This prospect has not been relocated by the writer.

Since the mid-1960's, various parts of the Ta Hoola property have been explored by Anaconda American Brass Ltd. (1965 - 1968), United Copper Corporation (1966-1968), Imperial Oil Ltd. (1972-1973), Prism Resources (1972), Barrier Reef Resources (1972-1973), Cities Service Mineral Corp. (1973-1975), Meridian Resources (1977), Commonwealth Mining (1979-1982), SMD Mining Co. Ltd. (1981-1982), Lornex Mining Corporation Ltd. (1983), and Selco Division - BP Resources Canada Ltd. (1984-1986).

In the period 1965 to 1981, the exploration was directed towards porphyry copper and molybdenum deposits and comprised of repeated soil geochemical and IP surveys. In the 1960's, Anaconda drilled several holes, on ground now covered by the Ta Hoola 4 claim, to test Cu-Mo. Low grade copper-molybdenum mineralization was encountered in potassium metasomatized volcanic rock.

Imperial Oil drilled several widely-spaced percussion drill holes to test a broad area of high IP response on the Ta Hoola 2 and 4 claims. Trenches excavated by SMD Mining Co. Ltd. at the east end of Friendly Lake exposed a pyritic carbonate alteration zone which ran 370 ppb gold across 11 m, and was also anomalous in copper, molybdenum and arsenic. In 1982, SMD Mining withdrew from exploration in British Columbia, and the property was farmed out to Lornex.

In 1983, Lornex drilled several short vertical percussion holes on geochemical-IP targets. No ore grade intersections were obtained.

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In 1984, Selco/BP optioned the claims and undertook more geological, soil geochemical and IP surveys; identifying several new anomalies. In 1985, several of the anomalies were trenched. Thick overburden (greater than 4 m) and flooding prevented the anomalies from being adequately assessed. A program of diamond drilling was proposed to assess the overburden-covered IP and soil anomalies, however, the property became inactive in late 1985 when the Company's western Canadian exploration budget was sharply reduced.

In August of 1987, Rat Resources Ltd. optioned the Ta Hoola property from SMD Mining Co. Ltd. and, in September, sank three diamond drill holes comprising 310 m to test the auriferous carbonate alteration zone situated east of Friendly Lake.

REGIONAL GEOLOGICAL SETTING

The Ta Hoola property is situated within the Quesnel Trough, a 2000 km long northwesterly-trending belt consisting of Upper Triassic - Lower Jurassic volcanic rocks, derived sedimentary rocks and intrusives. The belt is characterized by a volcanic core of Triassic subaqueous andesite pyroxene porphyritic flows, tuffs and breccias. Interbedded with the volcanics are calcareous argillite, siltstone, silicious cherty sediments and limestone. On the eastern and western margins of the volcanic core is an overlying and flanking sequence of Lower Jurassic pyroxene porphyritic volcaniclastic breccias with proximal to distal epiclastic sediments consisting of conglomerate, greywacke and argillite (Figure 3). To the extreme east are fine clastic sediments, consisting of a siltstone, shale and argillite assem-. blage, which appear to form the base of the Triassic sequence.

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Regional mapping indicates that the property area is underlain by Nicola Group alkaline volcanic and sedimentary rocks intruded by numerous comagmatic diorite to symplet stocks (Preto 1970, Campbell and Tipper, 1971).

The Ta Hoola claim block lies within an area of intense block faulting, formed where the North Thompson Fault bifurcates into a multitude of northwesterly trending splays (Figure 4).

At Little Fort, where the North Thompson Fault breaks into the splays, there are two ultramafic bodies aligned along the fault. These ultramafic bodies are evidence that the fault represents a zone of deep crustal weakness, a favourable host structure for gold mineralization.

PROPERTY GEOLOGY

The Ta Hoola property overlies the central Upper Triassic volcanic core of the Nicola Group, which is flanked on the east by a sequence of interbedded Lower to Mid-Jurassic pyroxene porphyritic pyroclastics and distal epiclastic sediments (Figure 3). To the west, a large diorite pluton and a series of smaller satellitic plugs intrude the volcanic assemblage. Block faulting has disrupted the stratigraphy, which has been rotated into a near-vertical attitude.

Three main bands of pyroxene lapilli tuff-agglomerate trend northwesterly across the claims (Figure 5). These rocks are medium to dark green, massive and medium to coarse-grained pyrclastics. Fragment sizes 'vary from 1 cm to 20 cm and are comprised of subangular to subrounded porphyritic augite andesite. Clasts are supported by a matrix of fine-grained ash

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tuff. Subordinate units of andesite flows and feldspar crystal tuffs are interbedded with the pyroxene porphyritic units. Pyrite occurs in minor concentrations as widely-spaced disseminated grains.

The epiclastic sediments interbedded with and flanking the volcanic units comprise siltstone, argillite, chert, greywacke and conglomerate. Siltstone predominates. Pyrite is sparce, occurring as disseminated grains, but reached .5% to 10% in light grey bands as heavy disseminations with interstitial carbonate. Surbordinate very-fine-grained, massive, black, carbonaceous argillite is occassionally interbedded with the siltstone. Disseminated pyrtie is ubiquitous and commonly comprised up to 5% of the rock.

A large fine to medium-grain diorite stock comprised of 20% mafics, 75% plagioclase and 5% quartz lies along the western side of the claims. East of Deer Lake, the intrusive is a hornblende-diorite.

At the boundary between the Ta Hoola 10 and 13 claims, a diorite breccia has formed as a contact phase along the margin of the main diorite pluton. It contains angular diorite fragments to 10 cm in size, which are supported in a diorite matrix. Epidote-chlorite-quartz veins are present. The pyrite content is less than 1%.

Numerous northwest and northeast-trending faults traverse the property. Their traces are marked by the alignment of lake chains and a rectangular stream drainage pattern.

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ALTERATION AND MINERALIZATION

Carbonate alteration is widespread on the property. Narrow, randomly oriented, calcite stringers and grain aggregates are common in all units. They are generally sulphide free and barren. Veinlet density increases in the fractured rocks adjacent to many of the major structures.

At the east end of Friendly Lake, the Company sank three NQ size diamond drill holes to assess a northwesterly-striking pyritic carbonate alteration zone where SMD Mining had obtained anomalous values in gold, arsenic and molybdenum. The mineralization is hosted by pervasively carbonate-sericite-chlorite altered brecciated biotite hornfelsed mafic volcanic units. Calcite, an iron-carbonate, and fine rock fragments form the matrix. Disseminated fine-grained pyrite impregnates the breccia fragments and, to a lesser degree, the calcareous matrix. Average pyrite concentrations within the alteration zone are in the range of 1 to 3%. Trace amounts of chalcopyrite, galena, sphalerite, molybdenite and arsenopyrite are present.

Gold and the indicator elements, arsenic and molybdenum, occur in geochemically anomalous concentrations. The values are an order of magnitude below ore grade. Geochemical analyses for the diamond drill holes are contained in Appendix I.

All drill core is stored on the Ta Hoola claim, 45 m north of the collar of hole 87-1 at the end of the drill access trail. (Figure 6.)

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CONCLUSIONS

The Ta Hoola property overlies the central volcanic core of the Quesnel Trough in a geologically prospective area of complex faulting and plutonism. Several zones of carbonate alteration, variably geochemically enriched in gold, base metals and indicator elements, are evidence that precious metal-generating hydrothermal events took place within the claim area. The auriferous carbonate alteration zones are hosted by a series of northwesterly-trending faults.

Diamond drilling by Rat Resources has demonstrated that the structure at the Friendly Lake prospect is wide.

A program of diamond drilling is justified to explore the extensive IP and geochemical anomalies for ore bodies. Soil geochemical surveys are also required to test the Silver 2 and Rock Island claims for mineralization.

RECOMMENDATIONS

<u>Phase I</u>

1. Cover the Silver 2 and Rock Island claims with a soil geochemical grid, to test for mineralized structures.

The recommended survey will complete the soil geochemical coverage of the claim block. This will allow the merits of the presently-identified drill targets to be assessed relative to any new anomalies defined by the Phase I program.

Phase II

 A diamond drilling program is recommended to test the presently identified geochemical and geophysical anomalies.
Prioritization of these anomalies, and new anomalies defined by the Phase I program, will determine the sequence of drilling and the allocation of drill footage to each target.

STATEMENT OF COSTS

Rebagliati Geological Consulting Ltd. Professional Services August 14-Sept.20 C.M. Rebagliati, Consultant 19.83 days @ \$450/day \$ 8,923.50 Robert Lane, B.Sc., U.B.C.,1986 Geologist Aug. 29-Sept. 2 5 days @ \$250/day 1,250.00 Ross Rebagliati, labourer Sept.2-6, 5 days @ \$80/day 400.00

Amex Exploration Services Ltd. Milton Mankowski, Sept 5-11, 7 days @ \$305.77/day Core splitting, Vehicle, Room & Board Sept.5-11 2,140.00

Truck Rental and fuel1,021.84Meals and Accommodation857.95Grass Seed for reclamation33.30Drafting157.50Phil's Diamond Drilling Ltd.310 m NQ CoreAcme Analytical Laboratories Ltd.1,636.00

TOTAL COSTS \$46,719..50

REFERENCES

- Campbell,R.B. and Tipper,H.W., 1971; Geology of Bonaparte Lake Map Area, British Columbia, G.S.C. Memoir 363.
- Gamble, A.P.D., 1986; 1985 Summary Exploration Report, Geology, Geochemistry, Geophysics and Trenching on the Ta Hoola Project, Kamloops Mining Division.
- Hirst, P.E., 1966; Anaconda American Brass. Company correspondence.
- Preto, V.A.G., 1970; Geology of the area between Eakin Creek and Windy Mountain; in Geology, Exploration and Mining in British Columbia. B.C. Department of Mines and Petroleum Resources, pp 307-312.
- Rebagliati, C.M., P.Eng. 1987; Report on the HC Gold Project, Kamloops Mining Division, British Columbia for Lancer Resources Inc.
- Ruck, P., 1982; 1982 Exploration Report, Geology, Geochemistry, Geophysics, Ta Hoola Project, Kamloops M.D.
- Serack, M.L., 1983; 1983 Percussion Drill Report on the Ta Hoola, RO and Silver Claims, Kamloops M.D., Lornex Mining Corporation.
- B.C. Assessment Reports: 981, 1061, 1169, 1690, 4028, 4260, 4262, 4678, 4684, 5191, 10287, 10880, 11413, 12101, 15221.

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CERTIFICATE OF QUALIFICATIONS

I, Clarence Mark Rebagliati, of 3536 West 15th Avenue, Vancouver, B. C., hereby certify that:

- 1. I am a consulting Geological Engineer with offices at 3536 West 15th Avenue, Vancouver, B. C.
- 2. I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario (Mining Technology, 1966).
- 3. I am a graduate of the Michigan Technological University, Houghton, Michigan, U.S.A., (B.Sc., Geological Engineering, 1969).
- 4. I have practiced my profession continuously since graduation.
- 5. I am a member in good standing of the Association of Professional Engineers of British Columbia.
- 6. The foregoing report is based on:
 - a) A study of all available company and government reports.
 - b) My personal knowledge of the general area resulting from regional studies and from examinations of the property made in 1980, 1981, 1982, 1986 and 1987, while supervising a series of exploration programs.
- 7. I have not directly or indirectly received nor do I expect to receive any interest, direct or indirect, in the property of Rat Resources Ltd., or any affiliate, or beneficially own, directly or indirectly, any securities of Rat Resources Ltd., or any affiliate.

C. M. Rebeninet," P. Eng.

October 30, 1987

APPENDIX

ASSAY CERTIFICATES AND DRILL LOGS

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		DIAMOND	DRILL	1.0	G								
PROP	ERTY :	TA HOOLA HOLE NO. 87-1 CLAINS	TA HAOL	A 4.	<u> </u>								
Г	но		//////	<u> </u>			50.1	1/07		-	1.6.	0	
	FOOTAGE				DATE	BEGUN	Sept	1/81	SHEE	T No. :	IOT 0 M Do	<u>k</u>	- +.
		DEPARTURE : BEARING :	N 45° E		DATE	FINISHE	0 <u>a</u>	07.32 m	LOGGE	<u>ي:</u> D BY <u>: (</u> سرم ح	+ 5	<u>/ c 7</u>	11
		ELEVATION : DIP :	45°		CORE	SIZE :	NQ	<u></u> .	DATE	<u> </u>		<u> </u>	-
me	etres												
F00 FROM	TAGE	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES					
0	2.74	Casing	871101	1853	19.80	1.25	100%	Py					
2.74	3/./9	Andesite Flow: Dark green, minor feldspor	102	19.80	21.0	1.20							
		Crystals, Fractured and/or brecciated: chlorite	103	21.0	22	1.0						 	
		on early fractures which are cut be late calcite	104	22	23	1.0							
		Veinlets. 1-27 disseminated pyrite. Hemotite	105	23	24	1.0							
		coals some tractures. Whenk pervasive	106	24	25	1.0							
	1	De andores al anter al ander a sideria	101	25	26	0.1							
		Richterite fills many breesin print /matrix	100	27	28	1.0							
		A light blue film of unknown mineralon coats	110	28	29	1.0							
		many fractiones .	111	27	30	1.0							
	ļ	Shear Zone @ 35° to 4/A 7.88-8.13 m	1/2	30	3/	1.0							
		18.52-19.78 Strong carbonate alteration zone.	113	31	32	1.0							
			114	32	33	1.0						l	

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						_			87-	-/	201	2	
FOOT	AGE TO	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES					
31.19	48.55	Polylithic Breccio: Mostly feldspor porphysitic	871 115	33	34	1.0							
		andesite fragments with minor felsic fragments.	116	34	35	1.0							
		Strong carbonate alteration-all brecciated		35	36	1.0							
		light grey to greenish grey - carbonate motrix	118	36	37	1.0			[
		and replacement of fragments - rims. Unaltered	119	37	38	1.0							
		Fragment cores are black biotite hornfelsed.	120	38	39	1.0							
		Some pink calcit - black chlorite alteration	121	39	40	1.0							
		along late fractures. Late richterite veins	122	40	41	1.0							
		2-5% disseminated pyrit, Trace chalcopylite	123	41	42	1.0							
		and moly bdenite.	124	42	43	1.0							
		Very strongly altered 31.19-37.58m.	125	43	44	1.0							
		decreasing but strong alteration to 48.55m.	126	44	45	1.0			•				
			127	45	46	1.0							
48.55	50.22	Well Fractured andesite - weak carbonate	128	46	47	1.0							
		alteration 1-3% pyrite. Fractures heated	129	47	48	1.0							
		by celcit	130	48	49	1.0							
			. 131	49	50	1.0							
50.22	107.32	Augite - Plagioclase porphyritic andesite. Frequent	132	50	51	1.0							
		Fractures - local preciation - propylytic alteration	133	51	52	1.0							
		sausserilized feldspan.	134	52	53	1.0							
Ì		30 to 100 calcit filled traction per metre.	135	53	54	1.0					 		
		Vuggy carbonate matrix to precise at \$6.7-87.2m				 							
		and 92.07-93.0m 107.22m ENDOR HOLE										l !	

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		DIAMOND	DRILL	<u>L0</u>	G								
PROPE	RTY	TA HOOLA HOLE NO. : 87-2 CLAIM :	TA HOOLA	4									
F	но	E SURVEY COLLAR SURVEY			DATE	BEGUN	Sept	+ 4/81	SHEET	r No. :	10f	3	÷
E	FUUTAVE				DATE	FINISHE	ورک ۵	<u>t 5/81</u>	LOGGE	D ВУ	. <u>M.R.</u>	<u>e boçli</u>	4
E		DEPARTURE BEARING	N 45° E		TOTAL	DEPTH		89 m	DATE	5 < 1	<u>,+5/</u>	87	
E		ELEVATION : DIP :	45°		CORE	SIZE :	N	Q					
FOO	TAGE	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES		1			Г
0	6.4	Casine in overburden	872137	6.4	7.0	0.6							Γ
6.4	10.6	Poly lithic Breccia: Brecciated with	1 38	7.0	8.0	1.0							
		a ankerite-siderite corbonate, chlorite, servite	139	8.0	9.0	1.0							
		matrix. Andesitic fragments curry 2-4%	140	9.0	10.0	1.0							ļ
		very fine grained disseminated pyrite and	141	10.0	11.0	1.0							ļ
		are rimmed with pyrite. Felsic fragments	142	11.0	120	1.0						•	ļ
		are much less pyritic To not pyritic.	143	12.0	13.0	1.0							ļ
		Pervasive corbonate alteration and 2-4%	144	13.0	14.0	1.0							ļ
		pyrite throughout. Same wit as from	145	14.0	15.0	1.0	ļ						
		31.19-48.55 min hole 87-1.	. 146	15.0	16.0	1.0			ļ			ļ	-
10.6	26.0	Brecciated andesite : fine grained and dark	147	16.0	17.0	1.0						ļ	-
		green. Calcite and bluish richterite reinlets	148	17.0	18.0	1.0						ļ	
		in matrix . Generally 1-3% very fine grained	149	18.0	19.0	1.0	<u> </u>				ļ	ļ	
		disseminated pyrite throughout. The abundant	150	19.0	200	1.0			<u> </u>		L	ļ	_
ł		1-2 this dite cality verilate which fill corty	151	20.0	21.0	10			l				Ì

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										87-	-2	201	3
FOOT	AGE TO	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES					
		Fractures are dissrupted by the precipition	872152	21	22	1.0							
		and subsequent alteration.	153	22	z 3	1.0							
26.0	64.2	Andesite & intermittently precciated.	154	23	24	1.0							
		Breccipted intervals are pervasively	155	24	25	1.0							
		carbonate attered and pyritic similar, to	156	25	26	1.0							
		the interval from 10.6 to 26.0m. The Indesite	157	26	27	1.0							
		comprises a series of Flows. There are	158	27	28	1.0							
		occasional 2mm anyquiles filled with culite	159	28	29	1.0							
		and accasional intermittant intervals with	160	29	30	1.0							
		1-3mm feldspor and for augite phenocrysts.	161	30	3/	1.0							
		Generally Less pyritic than the interval	162	3/	32	1.0							ļ
		from 10.6 - 26.0m - a bout 0.5 - 2.5% pysite .	163	32	33	1.0			[
		The precipition has off set the confier	164	33	34	1.0	<u> </u>						<u> </u>
		calcite filled Fractions - Post Brecciation	165	34	35	1.0							
		movement has created frequent crushed zone	166	35	36	1.0			<u> </u>				
		From the top of the hole down. The blush	167	36	37	1.0	ļ					 	<u> </u>
[richterity accursing the matrix of the precise	168	37	38	1.0	<u> </u>						ļ
		as it did in the interval 10. 6-26.0 m.	169	38	39	1.0							<u> </u>
64.2	66.0	Brown Biotite Andesite Massive -15%	170	39	40	1.0		<u> </u>		ļ		ļ	<u> </u>
		brown brotite with an orientation 20°to c/A.	171	40	41	1.0							
		Not fractured or colcite veined.	172	41/	42	1.0	 	 	 		 		
66.0	77.9	Andesite - weakly felds par and augite	173	42	43	1.0		 		 			<u> </u>
		porphyritic. Feldspar is scuss with Early	174	43	44	1.0							

									8	-7-Z	30	<i>f3</i>
FOOT FROM	AGE TO	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES				
		chlorite costed fractures cross-cut	·175	44	45			·				
		by later calcite filled Fractures.	176	45	46							
77.9	79.35	Breccisted zone with a carbonate-chloriti	177	46	47							
		sericite matrix - 1102% disseminated pyrite.	178	47	48							
79.35	79.89	Andesite - same as interval from 66.0 to	179	48	49							
		77.9 m abone.	180	49	50				 			
			181	50	5/							
79.89		END of Hale	182	5/	52							
		•	183	52	53				 			
[184	53	54							
			185	54	55				 			<u></u>
<u> </u>			186	55	56				 			
Ì	ļ		187	56	57							
			188	57	58		ļ		 			
<u> </u>			189	58	59				 			
		-	190	59	60	 	ļ		 			
			191	60	61	 	ļ		 			
					ļ	NOS	MPLE	£	 			
			193	77	78				 			
 			194	78	79	1.0	ļ		 			
				79	79.89	0.89	 		 	{		
 				 					 			

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		DIAMOND	DRILL	<u>L0</u>	G								
PROPE	ERTY <u>.</u>	TA HOOLA HOLE NO. : 87-3 CLAIM :	TA HOOLA	4									
F	HO	E SURVEY COLLAR SURVEY			DATE	BEGUN	Sept	5/87	SHEE	T No. :	<u>/of</u>	5	
		LATITUDE : SECTION :			DATE	FINISHE	<u>م مک</u> : ۵	+6/87	LOGGE	:D BY <u>. C.</u>	<u>m.Ret</u>	<u>raç lia ti</u>	i I
		DEPARTURE : BEARING :	N 50°E		TOTAL	DEPTH	. 12	2.56M	DATE	Stpt	8/87	<u>'</u>	
E		ELEVATION : DIP :	45°		CORE		NO						
<u>те</u> - гоо	tres TADE	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES			<u> </u>	<u> </u>	
<u>FROM</u>	10 H. 6n	Casine in overburden	873/96	4.25	5.0	0.75	0.75						
4.6	9.0	Breccisted poly lithic Breccia : Rounded to											
		subrounded augite porphyry and feldspor	197	5.0	6.0	1.0							
		porphyry andesi & fragments ina saus writined	198	6.0	7.0	1.0							
		matrix of epidote, chlorite, calcite, minor	199	7.0	8.0	1.0	ļ						
		pink caleite and richterite . Rare fragments	200	8.0	9.0	1.0							
ļ		of felsic volcanics. Feldspor lathe are altered to	20/	9.0	10.0	1.0	 						
 		calit and calite - richterite + Augite ischloritie	202	10.0	11.0	1.0				┠───┼			
		1-5% very fine grained disseminated pyrite	203	11.0	12.0	1.0							
		throughout - fragments are usually more	204	12.0	13.0	1.0			 				
		pyritic that the matrix and are commonly	205	13.0	14.0	1.0	 						
		rimmed by pyrite . Traces Sprolybdenite.	206	14.0	15.0	10			<u> </u>			}	
		throughout.	207	15.0	16.0	1.0		1					
<u>9.0</u>	9.5	Brecciated and strangly carbonatized pyritic	208	16.0	17.0	1.0							
[andesite flow.	209	170	18.0	1.0							

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									8	7-3	_2	of 5	
FOOT	AGE TO	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES				<i>Y</i>	
9.5	34.0	Feldspor porphysitic andesite flow: The	873210	18.0	19.0	1.0							
		intensity of the carbonate alteration	211	19	20	1.0							
		diminishes below, 9.5 M varying between	212	20	21	1.0							
		weak to moderate except in short breccieted	213	21	22	1.0							
		intervals when it is strong. There is a	214	22	23	1.0							
		general increase in the pyrite content with	215	23	24	1.0							
		increased intensity of carbonatization . By about	216	24	25	1.0							
		20m the core is only weakly carbonate alter	217	25	26	1.0							
		Calcite filled fractures persist 30-200/m.	218	26	27	1.0							
L		-1% to 3% pyrite depending on degree	219	27	28	1.0							
		of consmall alteration (richterite, chlorib, seriest).	220	28	29	1.0			· · · ·				
34.0	47.0	Very fine grained Andesit Howor Dyke.	221	29	30	1.0	<u> </u>						ļ
	ļ	Exeguent colcile filled Fracture cut by loten	222	30	3/	1.0	<u> </u>		L				
		Fractures with a pale green selver. Local short	223	3/	32	1.0	ļ		ļ				ļ
	ļ	intervale of precisition where hematite and	224	32	33	1.0							
		Fichterite may occur in thin veinlete cutting the	225	33	34	1.0	<u> </u>						
		Carbonat matrix Atho breccia. 5% V-f-9	226	34	35	1.0	ļ						
		Justy pyrite Throughout	227	35	36	1.0	<u> </u>						ļ
47.0	58.5	Ausilo - Feldspor porphyritic Andesite	228	36	37	1.0	ļ	<u> </u>					<u> </u>
		Weakly to moderately altered -richterite	229	37	38	1.0	ļ	ļ	<u> </u>				ļ
Į	<u> </u>	and caleite filled Fractures. Minor pyrite with	230	38	39	1.0		ļ					
	ļ	bleaching - pale green - grey altered se loages - along	23/	39	40	1.0	<u> </u>		<u> </u>				_
		Fractures.	232	40	41	1.0							

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									87	2-3	30	Л5 ⁻	_
OOTAG	SE	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES					
M	TO	a it fulling a white Audrite	\$73233	41	42	1.0							
.5 64	5./	Augite - telaspor por payrille Antesia:	234	42	43	1.0							
_+-		Moderale 16 Strong Carbonole activities in	235	43	44	1.0							
-+		this Dreccia and include with the	236	44	45	1.0							
		1+ 1 - ++ withtante cruss-cutting verifits	237	45	46	1.0				L			
-70		A it Sallen Do abisiti Andosite	238	46	47	1.0				-			
./ 7	8.0	Processing loss - weeker servarive	239	47	48	1.0							
		Cart mate alteration and purite . Local	240	48	49	1.0				 			_
		Zones of precention persist but are	241	49	50	1.0							_
		proversive loss altered and altered.	242	50	5/	1.0			ļ	┠}			
		Ramen calcity filled fractures persist.	243	51	52	1.0							
E.0 1	2256	Augite - Feldsnor Porphyritic Andesit	244	52	53	1.0					┟────╂		
<u>,,, ,</u>		even less car bout alteration, chloritic augite	245	53	54	1.0		-l			}		
		- saussuritized feldspor	246	54	55	1.0							
22.5		END OF HOLE	247	55	56	1.0							_
		In holes 87-1,243 the polylithic breccia	248	56	57	1.0							Г
		is a matic Volcanic precia with a minor	249	57	58	1.0							F
		felsic component. While the enclosing flows	250	58	59	1.0	<u></u>						h
		are shattered the polylithic breccia has	251	157	60	1.0				+			t
		been preciated with the milling of fragments	252	60	- 47	1.0	<u>_</u>				1		ţ
		to produce 20 to 50% ground-pulsered motions	253	6/	0/	1.0	<u></u>				1	1	t
		which has been intensely carbonate altered	259	61	. 63	7.0			-	1	1	1	t
		and replaced.	255	63	64	1.0	2					<u> </u>	

									8:	7-3	401	5	
FOOT FROM	AGE TO	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES					
			873256	64	65	1.0							
			257	65	66	1.0							
			258	64	67	1.0							
			259	67	68	1.0							
			260	68	69	1.0							
			261	69	10	1.0							
			262	70	7/	1.0							
			263	7/	72	1.0							
			264	72	73	1.0							
			265	73	74	1.0							
			266	74	75	1.0			· · ·	_			
			267	75	76	1.0							
	l		268	76	77	1.0							
			269	77	78	1.0							
			270	78	79	1.0							
<u> </u>			271	79	80	1.0							
			272	80	8/	1.0							
			273	81	82	1.0							<u> </u>
	L	·	274	82	83	1.0	 					ļ	<u> </u>
			275	83	84	1.0						ļ	<u> </u>
j	<u> </u>		276	84	85	1.0	 					 	<u> </u>
			277	85	86	1.0						<u> </u>	
			278	86	87	1.0						1	

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									87-	3	5J :	5	
FOOT	TAGE	DESCRIPTION	SAMPLE NO.	FROM	то	WIDTH	RECOV.	SULPHIDES			/		
			873279	87	88	1.0		ж. С					
			280	88	87	1.0							
			281	89	90	1.0			•				
			282	90	91	1.0							
			283	91	92	1.0							
			284	52	93	1.0			>				
			285	. 93	94	1.0							
			286	94	95	1.0							
			287	95	96	1.0							
			288	96	97	1.0							
			289	97	98	1.0							
			290	98	99	1.0							
			291	99	100	1.0							
			292	100	101	1.0							
			293	101	102	1.0							
			294	102	103	1.0			<u> </u>	<u> </u>			<u></u>
			295	103	104	1.0			<u> </u>	<u> </u>			
			296	104	105	1.0		·	<u> </u>				
			297	105	106	1.0			<u> </u>				
			298	106	107	1.0				<u> </u>			
								l		 			
									<u> </u>	<u> </u>			
	<u> </u>		1			1		1	1	1	<u> </u>	L	L

ACME ANALYTICAL LABORATORIES

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GEOCHEMICAL ICP ANALYSIS

.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 CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core Aut ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE	REC	EIV	ED:	SE	PT 14	1987	DAT	ER	EPOF	RT M	AILE	D: <	Sol	A 2	o /8	7	ASS	AYEI	а. <i>Ц</i>	أر	beje	(D	EAN	τογ	E. C	ERT	IFIE	D B	.с.	ASSI	AYER	2
$\mathcal{D}\mathcal{D}\mathcal{H}$	87	7	1				REB	AGL	IAT	GE	06.06	ICA	~7 L Ff	OJE	/ ст-`	" ГА Н	DOLA	I	File	∍ #	2 87-4	4124		Pag	₽ 1					ĸ		
SAMPLE	0 / 	י 10 אי	CU PPN	PB PPN	ZN PPM	A6 PPM	NI PPN	CO PPM	NN Ppn	FE	AS PPM	U PPN	AU Ppn	TH PP N	SR PPM	CD PPM	SB PPN	BI PPN	V PPN	CA X	P Z	LA PPM	CR PPN	NS Z	BA PPN	TI 2	8 PPN	AL Z	NA Z	ĸ	W PPM	AU# PPB
971101	1	57	509	82	40	1.4	21	77	1745	5 25	120	5	ND	1	154	7	2		117	7 74	075	7	79	1 07	0	00	. ,	47	01	78	1	305
871102	1	24	293	30	99.	.9	24	24	1075	5.89	92	5	ND	i	118	1	2	2	159	4.63	.099	6	99	2.33	17	.17	2	1.51	.03	1.59	i	235
871103		12	230	19	89	.6	27	26	1080	6.27	42	5	ND	1	109	1	2	2	142	3,97	.107	8	104	2.92	36	.19	4	1.90	.04	1.96	1	74
871104	:	33	288	44	86	1.1	27	25	1021	6.16	93	5	ND	1	105	1	2	2	135	3.73	.102	9	96	2.69	21	.18	2	1.72	.03	1.78	1	175
871105	1	28	293	69	11	1.1	27	26	1120	6.40	89	5	ND	1	114	1	2	6	120	4.59	.097	8	99	2,44	16	.17	2	1.56	.04	1.65	1	175
871106	;	52	250	46	79	.9	24	23	1045	5.97	95	5	ND	1	140	i	2	3	127	5.08	.095	7	95	2.26	17	.16	2	1.47	.04	1.52	1	175
871107		19	204	17	99	.5	30	26	1008	6.72	75	5	ND	1	100	1	2	2	146	3,49	. 102	7	115	3.06	27	. 20	2	1.93	.04	2.00	1	153
971108		14 47	233	14	101	с. т	30 79	26	1142	6.94	110	3 5	NU	1	130	1	2	2	140	4.52	.078	2	120	5.21	14	.1/	0 2	1.98	.03	2.11	2	100
871107		10	260	9	69	.3	28	25	1008	6.69	59	5	ND	i	132	i	ź	2	180	4.46	.109	4	123	2.78	25	.19	8	1.83	.03	1.90	i	102
•••••																				_												
871111	2	15	260	- 64	86	1.3	29	24	1176	6.70	143	5	ND	1	170	2	2	4	141	5.74	.099	5	122	2.83	10	.15	13	1.74	.02	1.85	1	430
871112		19 20	211	18	12	.4	28	26	1030	5.39	106	2	ND	1	142	1	2	2	3/4	5.08	.107	2	120	2.8/	21	.18	2	1.88	.03	1.70 RA	1	100
8/1113 971114	1	47 RT	327	25	43	1.4	22	21	1077	5.84	218	5	ND	1	139	i	2	5	44	7.66	.099	4	81	1.60	8	10.	5	. 26	.01	.30	2	480
871115	1	21	309	33	60	1.2	32	27	900	6.61	144	5	ND	1	102	i	2	3	65	5.61	.096	3	93	1.82	5	.03	5	.51	.01	.61	1	420
	_											-					_	-							-			-16				700
871116	1	02	466	25	67	1.0	30	28	953	5.69	138	2	ND	1	126	1	2	2	88 74	3.59	.100	4	100	2.75	/	CU. 70	4	./8 57	.02	.87	1	320 350
8/111/	1	41 96	190	30 29	70	1.0	29	21	1074	5.62	151	3	ND	1	179	1	2	0 7	/0 73	a. 37 7. 10	.094	ວ 5	90	2.64	a R	.04	ý	. 58	.01	. 66	1	360
871119	1	85	241	28	77	1.0	28	24	1183	5.74	152	5	ND	i	248	i	2	2	104	9.33	.090	7	113	2.50	13	.08	2	1.04	.02	1.12	i	320
871120	-	12	159	10	87	1.3	28	23	946	6.60	54	5	ND	1	107	1	2	2	168	4.32	.112	3	113	2.91	45	.19	9	1.80	.04	1.88	1	195
071121		57	137	71	87	12	29	76	1098	5 71	177	5	ND	,	250	1	2	5	89	8 19	079	a	121	2.51	10	- 08	10	1.03	.02	1.13	1	380
871122		90	361	30	128	1.2	43	27	1035	6.39	230	5	ND	i	134	. 1	2	2	106	5.39	.088	4	195	3.75	11	.09	2	1.35	.01	1.54	i	490
871123		57	294	36	80	.8	36	24	1048	5.48	52	5	ND	1	159	1	2	2	163	6.35	.089	4	183	2.90	39	.17	6	1.79	.03	1.89	1	150
871124		50	190	20	302	1.1	33	21	1289	5.40	149	5	ND	1	234	5	2	2	105	8.94	.084	6	144	2.95	14	.10	6	1.29	.02	1.42	1	320
871125		90	312	50	184	1.3	49	- 26	931	6.04	141	5	ND	1	167	. 2	2	2	147	6.16	.091	5	198	3.30	15	.14	2	1.69	.02	1.90	1	260
871126		75	205	67	110	1.7	38	24	1203	5.32	154	5	ND	1	217	1	2	4	123	7.76	.086	4	158	2.32	17	.12	3	1.29	.03	1.38	1	320
871127		25	146	62	77	1.3	37	26	1185	5.28	97	5	ND	1	171	1	2	2	142	6.70	.092	4	154	2.18	21	.14	5	1.36	.04	1.50	1	143 -
671128		15	340	344	67	2.5	45	25	1013	4.63	107	5	NÐ	1	148	1	2	5	110	5.60	.090	3	121	1.43	- 14	.10	1	.93	.04	1.01	1	160
871129		13	232	646	46	4.0	44	21	748	3.52	98	5	ND	1	142	1	2	9	103	4.98	.084	4	109	1.03	16	.08	2	.69	.04	.72	2	106
871130		55	279	193	80	1.4	31	23	952	6.07	130	5	ND	1	101	1	2	7	159	3.47	.109	5	94	2.16	12	•14	2	1.40	.03	1.4/	1	123
871131		33	232	27	93	.4	30	29	984	7:35	144	5	ND	1	96	1	2	2	164	2.66	.115	5	90	2.64	16	.14	2	1.72	.03	1.71	1	136
871132		84	314	32	79	.8	25	31	1065	6.72	107	5	ND	1	113	1	2	2	160	3.63	.113	8	89	2.44	20	.13	2	1.66	.03	1.68	1	122
871133		17	330	11	70	.6	26	25	1044	6.60	60	5	ND	1	129	1	2	2	158	3,94	.115	8	78	2.73	73	.16	2	1.91	.03	1.86	1	46
871134		9	92	6	66	.1	28	27	1035	6.91	39	5	ND	1	115	1	2	2	148	3.67	.113	8	73	2.92	108	. 18	2	2.10	.05	1.93	1	21 53
871135	2	12	232	28	15	.5	26	22	1119	6.27	64	3	AD.	1	136	1	2	2	141	4.42	.114	9	6đ	2.8/	32	.1/	2	2.04	.04	1.74	1	-1-2
STD C/AU	-R	19	61	37	132	6.9	67	29	1022	3.97	36	19	7	37	51	19	16	19	57	. 45	.084	38	59	. 82	181	.06	33	1.98	.06	.13	11	505

DATE RECEIVED SEPT 14 1987 ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. DATE REPORTS MAILED PH: (604)253-3158 COMPUTER LINE: 251-1011 CERTIFICATE GEOCHEMICAL ASSAY SAMPLE TYPE : CORE - CRUSHED AND PULVERIZED TO -100 MESH. Aut - 10 5M, ISNITED, HOT ABUA REGIA LEACHED, MIBK EXTRACTION, AA ANALYSIS. DEAN TOYE , CERTIFIED B.C. ASSAYER ASSAYER PAGE# 2 FILE# 87-4124 REBAGLIATI GEOLOGICAL PROJECT TA HOOLA Au* SAMPLE DDH87-2 ppb

SAMPLE	Ац * ррb
872173	167
872174	210
872175	93
872176	85
872177	102
872178	74
872179	124
872180	125
872181	3
872182	10
872183	42
872184	103
872185	119
872186	35
872187	120
872188	37
872189	183
872190	127
872191	160
872193	40
DDH 87-3 872194	104
872195	29
873196	45
873197	37
873198	39
873199	81
873200	131
873201	68
873202	71
873203	81
873204 -	29
873205	63
873206	66
873207	71
873208	30
873209	29

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P	Δ	Ē	F	±	4
	_	0	_	π	-

SAMPLE	Au* ppb
873210	18
873211	72
873212	128
873213	58
873214	39
873215	37
873216	32
873217	27
873218	32
873218	57
873220	31
873221	19
873222	5
873223	1
873224	21
873225	4
873226	16
873227	18
873228	44
873229	43
873230 873231 873232 873233 873233 873234	51 49 34 39 76
873235	42
873236	42
873237	23
873238	106
873238	165
873240	154
873241	55
873242	75
873243	52
873244	104
873245	42

PAGE#	5
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SAMPLE	Au* ppb
873246	35
873247	69
873248	23
873249	22
873250	32
873251	24
873252	18
873253	12
873254	13
873255	19
873256	1
873257	6
873258	10
873259	13
873260	9
873261	51
873262	62
873263	76
873264	53
873265	5
873266	6
873267	21
873268	16
873269	5
873270	2
873271	1
873272	1
873273	9
873274	1
873275	13
873276	1
873277	1
873278	21
873279	12
873280	25
873281	7

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SAMPLE	Au* ppb
873282	24
873283	23
873284	25
873285	16
873286	38
873287	40
873288	21
873289	6
873290	34
873291	4
873292	1
873293	18
873294	3
873295	6
873296	8
873297	3
873298	2

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