

MAP NO.

ASSESSMENT REPORT X

DOCUMENT NO.: 092083

PROSPECTUS

MINING DISTRICT: WHITEHORSE

CONFIDENTIAL X

TYPE OF WORK: Road Construction; Trenching

115 I 3

OPEN FILE

REPORT FILED UNDER: Archer, Cathro and Associates (1981) Ltd.

DATE PERFORMED: June 4 - September 17, 1987

DATE FILED: February 3, 1988

LOCATION: LAT.: 62°07'N

AREA: Mt. Nansen

LONG.: 137°15'W

VALUE \$: 30,000.00

CLAIM NAME & NO.:	TAWA 1-12 YA75263-YA75274	TAWA 15-24 YA75277-YA75286
	TAWA 25F-26F YA95051-YA95052	TAWA 27-34 YA95151-YA95158
	TAWA 47-63 YA95163-YA95179	TAWA 64-71 YA95301-YA95308
	TAWA 72-79 YB06963-YB06970	TAWA 83-90 YB06971-YB06978

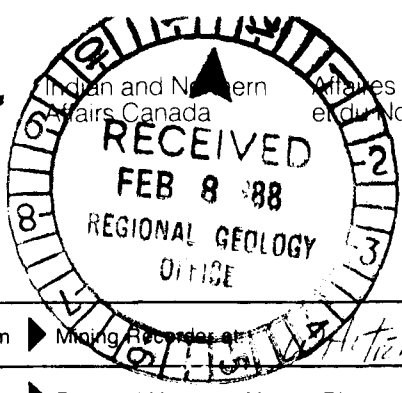
WORK DONE BY: W.J. Wall; W.D. Eaton

WORK DONE FOR: Archer, Cathro and Associates (1981) Ltd.

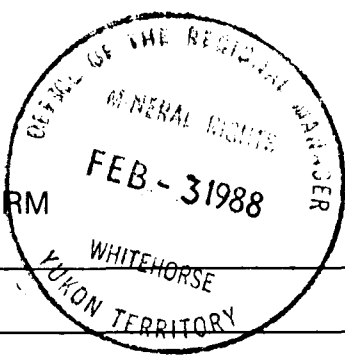
DATE TO GOOD STANDING | REMARKS: #42 ESANSEE



Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada



TRANSMITTAL FORM



M.R. file no.
R.M.M.R. file no.
Date forwarded <i>3 FEB 1988</i>

From *Mining Recorder at Whitehorse -*

To *Regional Manager, Mineral Rights at Whitehorse, Y.T.*

For action are:

<input type="checkbox"/> NEW APPLICATION FOR PLACER LEASE TO PROSPECT	Name	
<input type="checkbox"/> RENEWAL APPLICATION PLACER LEASE TO PROSPECT	Name	Lease no.
<input type="checkbox"/> AFFIDAVIT OF EXPENDITURE ON PLACER LEASE	Name	Lease no.
<input type="checkbox"/> SECURITY DEPOSIT		
<input type="checkbox"/> FINANCIAL ABILITY		
<input type="checkbox"/> ASSIGNMENT OF PLACER LEASE NO.	From	To
<input type="checkbox"/> GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT.	Owner	
<input type="checkbox"/> DIAMOND DRILL LOGS	Claims	Claim sheet no.
<input checked="" type="checkbox"/> QUARTZ ASSESSMENT REPORT	Claims <i>TAWA 1-12, 15-24, 25-34, 36-38, 47-77, 83-90</i>	Claim sheet no. <i>115-I-3</i>
	<i>YA75263-74 YA75277-86 YA95051-72 YA306963-78</i>	
	Type of report <i>Repeal Construction, Tracing</i>	Submitted by <i>Archie Cothran</i>
	Cl. work performed on <i>TAWA 2-8, 10 YA75264-270, YA75270</i>	\$ req. for ren. application <i>\$30,000</i>

Signature *[Signature]*

REPLY ACTION *for your information* **092083** Date returned

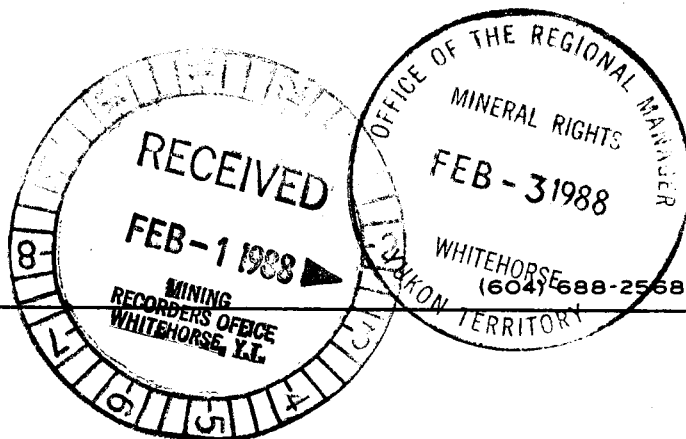
Signature

ARCHER, CATHRO

● ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

1016-510 WEST HASTINGS STREET
VANCOUVER, B. C. V6B 1L8



Report On

ROAD CONSTRUCTION AND TRENCHING PROGRAM

TAWA 1-12, 15-24, 25F-26F, 27-34, 36-36F,

37-38, 47-79 and 83-90 CLAIMS

(YA75263-74, YA75277-86, YA95051-52, YA95151-79

YB06963-YB06978)

NTS 115I-3

Latitude 62°07'; Longitude 137°15'

M.J. Walls, B.Sc.

W.D. Eaton, B.A., B.Sc.

December, 1987

Work done between June 4 and September 17, 1987

092083

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INTRODUCTION

Chevron Minerals Ltd. optioned the Tawa 1-24 claims from Consolidated BRX Mining and Petroleum Corporation in spring, 1986 on behalf of Freegold Venture (FV). The claims cover gold- and silver-bearing veins similar to those at the former Mt. Nansen Mine, located 10 km to the southeast, as shown on Figure 1 on the following page, which is under option to Chevron from B.Y.G. Natural Resources Ltd.

Geological mapping, prospecting, grid soil geochemistry and EM-16 surveys conducted in June, 1986 produced encouraging results and 37 additional Tawa claims were staked in late July to cover extensions of the anomalous trends. In August and early September, approximately 50% of the new claims were explored by grid soil geochemistry while several geochemical and geophysical anomalies on the core property were tested by bulldozer and excavator trenching. The best exposure graded 0.102 oz/ton Au and 0.44 oz/ton Ag over 4 m and came from a trench cut directly over a 1980 diamond drill intersection that averaged 0.183 oz/ton Au and 0.44 oz/ton Ag over 8.9 m (approximate true width 8.0 m). This and most other high assays came from a northwest-trending steeply south-dipping vein system (BRX Zone). Significant values (up to 0.062 oz/ton Au over 7.5 m) were also obtained about 200 m to the south from a weakly clay altered porphyry dyke trending subparallel to the veins.

The 1987 exploration program consisted of pre-stripping of new trench sites in June, claim surveys, excavator trenching and road construction in July and August, and pre-stripping of proposed 1988 trench sites in September. A further sixteen Tawa claims were added to the northwestern edge of the property in August after claim surveys showed that open ground was available along the

Figure 1

ARCHER, CATRO & ASSOCIATES (1981) LIMITED

LOCATION MAP

TAWA PROPERTY

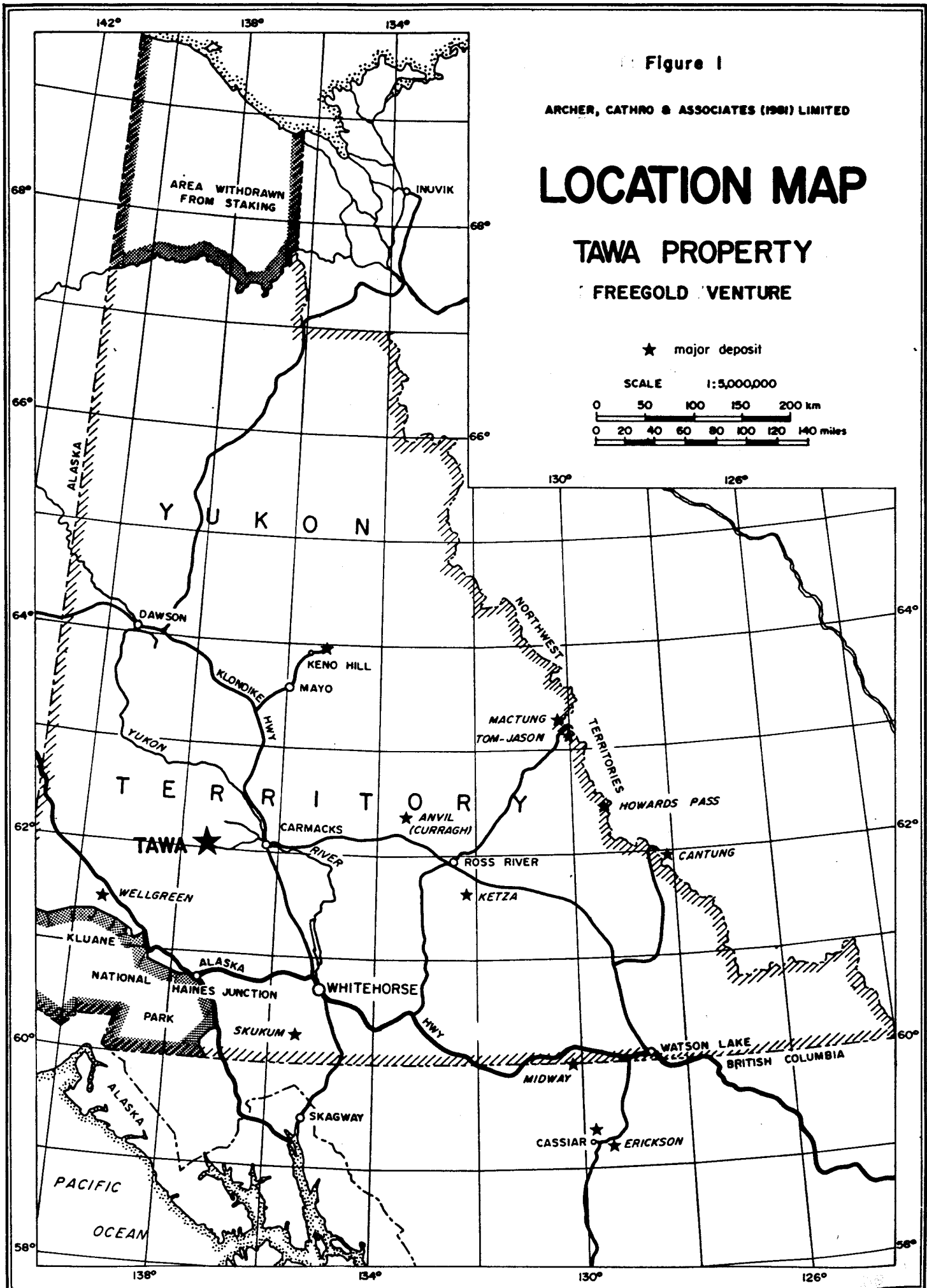
FREGOLD VENTURE

★ major deposit

SCALE 1:5,000,000

0 50 100 150 200 km

0 20 40 60 80 100 120 140 miles



favourable trend. The work was done under the authors' supervision by a two to three man crew operating from a camp on the Mt. Nansen property. Appendix I contains the Authors' Statements of Qualifications while Appendix II lists personnel who worked on the property.

PROPERTY, LOCATION AND ACCESS

The Tawa property consists of 71 full and 2 fractional claims as shown on Figure 2 in the pocket. During 1986, surveys established that the Tawa 13 and 14 claims optioned by Chevron did not exist on the ground; therefore, they were allowed to expire. The Tawa 1-12 and 15-24 claims are registered in the name of Chevron Minerals Ltd., while the remainder are registered in the name of Archer, Cathro & Associates (1981) Limited with the Whitehorse Mining Recorder as follows:

<u>PROPERTY</u> <u>(Claim Map)</u>	<u>CLAIM NAME</u>	<u>GRANT NUMBERS</u>	<u>EXPIRY DATE*</u>
TAWA (115I/3)	Tawa 1-12	YA75263-YA75274	January 3, 1990
	15-24	YA75277-YA75286	January 3, 1990
	25F-26F	YA95051-YA95052	January 3, 1991
	27-34	YA95151-YA95158	January 3, 1991
	47-63	YA95163-YA95179	January 3, 1991
	64-71	YA95301-YA95308	January 3, 1991
	72-79	YB06963-YB06970	August 14, 1988
	83-90	YB06971-YB06978	August 14, 1988

*Expiry dates shown above do not include assessment credits for work performed in 1987.

The claims are located 50 km west of Carmacks on NTS map sheet 115I/3 at latitude 62°07'N and longitude 137°15'W. Two-wheel drive road access is available to within 0.5 km of the property during summer and fall using the gravel Nansen Road which is maintained by the Yukon Territorial Government. During 1987, a 1.7 km four-wheel drive road was constructed from the Nansen Road to the centre of the property.

HISTORY

The first report of lode mineralization on what is now the Tawa property came in 1937 when Karl Paulson, a placer miner, was rumoured to have discovered high grade silver-lead float. The first claims were staked in October, 1947 by G. Dickson who optioned them to Conwest Exploration Limited which performed minor bulldozer trenching in 1948. From then until the late 1960's the property was dormant.

In 1967, J. Smith and associates of Whitehorse staked the May 1-8 claims and collected reconnaissance soil samples that yielded anomalous lead and silver values. This group also dug one bulldozer trench but no mineralization was intersected. In 1968 and 1969 Esensee Explorations Ltd. built a 14 km tote road from the Mt. Nansen millsite to the edge of the property and conducted geological mapping, geochemical and geophysical surveys and bulldozer trenching.

No further work was done until 1980 when BRX Mining and Petroleum Corporation restaked the property as the Tawa claims and explored with a soil geochemical survey, three short bulldozer trenches (two of which deepened 1968 trenches) and seven diamond drill holes totalling 447.3 m. BRX later changed its name to Consolidated BRX Mining and Petroleum Corporation.

PHYSIOGRAPHY AND GEOMORPHOLOGY

The property covers a broad rounded ridge that lies on the eastern flank of Mt. Nansen between Nansen Creek and the Klaza River. Local elevations range from 1200 to 1500 m above sea level. The area escaped Pleistocene continental glaciation; thus, overburden consists of a few centimetres of organics, 0 to 5 cm of volcanic ash and up to 200 cm of immature soil mixed with locally derived rock fragments over weathered bedrock. Outcrops are rare and talus is restricted to the ridge crest. Permafrost is extensive, particularly on the north- and west-facing slopes. Vegetation ranges from stunted black spruce, buckbrush and moss on the low slopes to lichens and grasses near the ridge top.

GEOLOGY

The Tawa property is situated within the Yukon Crystalline Terrane which consists of Paleozoic or older metamorphic basement rocks intruded and overlain by a variety of igneous rocks related to the Coast Plutonic Complex. The basement schist and gneisses are not exposed on the property and the igneous suite is limited to a granodiorite stock with lesser volcanic and hypabyssal dyke rocks, all of which are believed to be Mid-Cretaceous in age, as shown on Figure T-1 in the pocket. The granodiorite contains up to 30% hornblende plus biotite and is massive, coarse grained and non-foliated. Northwest-trending feldspar porphyry dykes (up to 30 m wide) cut the granodiorite in the main area of interest. These felsic rocks are strongly fractured and contain up to 15%, 1 to 2 mm orthoclase phenocrysts plus rare biotite and quartz phenocrysts in a buff aphanitic groundmass. Volcanic rocks are found peripheral to the main area of interest and include medium green-grey andesite flows and pyroclastic rocks with occasional buff to tan rhyolitic tuff horizons.

Two main fault trends (NW and NE) are present on the property. Northwesterly faults generally lack strong topographic expression but are highly significant as they host vein mineralization and appear to control the distribution of the porphyry dykes. Faults and porphyry dykes with the same orientation are associated with vein and stockwork mineralization at the Brown-McDade, Huestis and Webber Zones on the Mt. Nansen property. Northeasterly faults usually form prominent topographic linears but appear to be unmineralized cross faults. These structures commonly produce 5 to 50 m offsets on northwest-trending faults.

MINERALIZATION

Precious metal mineralization occurs in a series of northwest-trending veins and associated feldspar porphyry dykes that dip moderately to the southwest within the granodiorite host rocks. The veins typically consist of 1 to 10 m wide gouge zones containing a few cm to 3 m wide, pitted, light green quartz bands. In some areas, up to 30 cm wide lenses of relatively massive arsenopyrite, pyrite and/or galena are developed alongside the quartz. The footwall contacts are generally sharp while the hanging wall contacts show a gradual decrease in fracture density and alteration intensity. Typical alteration grades from quartz, sericite and kaolinite in the core of the vein, to strongly montmorillonite altered gouge containing orange limonite, to highly fractured, weakly montmorillonite altered and manganese stained wallrocks on the periphery.

Previous operators reported trench assays as high as 0.962 oz/ton Au with 17.72 oz/ton Ag over 30 cm (from a trench that was deepened in 1986 and renamed T-4) and drill intersections grading up to 0.183 oz/ton Au with 0.44 oz/ton Ag over 8.9 m, including 0.715 oz/ton Au with 1.46 oz/ton Ag over 1.5 m (from Hole 80-6 which was drilled beneath T-4). The other holes returned low values or were unmineralized, however many had poor recovery and some were drilled subparallel to the veins, never getting out of the footwall rocks. Three specimens of nearly massive galena (one collected by previous operators and the others by FV) returned 50 to 55% Pb with 0.048 to 1.702 oz/ton Au and 70.10 to 145.42 oz/ton Ag. Drilling by previous operators has shown that weak to moderate oxidation is present to a depth of about 20 m in mineralized structures.

TRENCHING

General

Trenching was done by Ibex Contracting Limited of Whitehorse using a ripper-equipped Caterpillar D7G bulldozer to strip vegetation and till from proposed trench sites and a Caterpillar 225 excavator to finish them. Twenty-eight trenches totalling 6385 m were pre-stripped, of which twelve totalling 1939 m were wholly or partially excavated, as shown on Figure T-1. Frozen ground and slumping which occurred when the frost thawed limited the speed of trenching and in some instances severely hindered mapping and sampling. Continuous 7 kg chip samples were normally collected over 1 to 5 m intervals from the trench ribs across all mineralized or strongly altered exposures. Soil samples were taken at 10 m along the floors of three of the stripped, but not completed, trenches to better define the probable source of the metals. A total of 227 chip and 43 soil samples was sent to Chemex Labs in North Vancouver where the chip samples were fire assayed for gold and silver while the soils were geochemically analyzed using a fire assay preparation and neutron activation finish.

Results

Significant assays are listed on Table 1 on the following page and shown with geology, gold geochemistry and EM-16 conductors on Figure T-1. Results from 1987 better defined the vein system that received most of the previous exploration (BRX Zone) and located a second parallel vein system 1000 m to the northeast (Klaza Zone).

Work on the BRX Zone has traced the veins 750 m along strike and shown that the intensity of mineralization and alteration is highly variable. The

TABLE 1:
1987 TRENCH ASSAY DATA, TAWA PROPERTY

<u>Trench</u>	<u>Zone</u>	<u>From (m)</u>	<u>To (m)</u>	<u>Width (m)</u>	<u>oz/ton Au</u>	<u>oz/ton Ag</u>
T-3X	BRX	74.0	77.0	3.0	0.069	0.48
		165.0	167.0	2.0	0.045	1.03
T-10X	BRX	---	---	---	---	---
T-11 including	Klaza	136.5	144.5	8.0	0.123	1.38
		136.5	137.5	1.0	0.212	2.53
		143.5	144.5	1.0	0.326	6.30
		217.0	218.0	1.0	0.130	12.80
T-14 including	BRX	31.5	38.5	7.0	0.091	1.35
		33.0	34.5	1.5	0.204	1.20
T-15	---	126.5	127.5	1.0	0.119	0.50
T-16	BRX	45.5	48.0	2.5	0.200	4.67
		55.5	57.0	1.5	0.255	0.83
T-17	BRX	39.0	43.0	4.0	0.063	1.83
T-18	BRX	25.5	28.5	3.0	0.052	0.71

best assays obtained from this zone in 1987 were from trench T-16, located 135 m northwest of T-4, where two veins located 7.5 m apart returned 0.200 and 0.255 oz/ton Au with 4.67 and 0.83 oz/ton Ag over 2.5 and 1.5 m, respectively. Samples taken from the interval between the two veins averaged only 0.013 oz/ton Au and 0.21 oz/ton Ag. The erratic nature of the mineralization in this zone is demonstrated by the fact that trench T-3X, located halfway between trenches T-4 and 16, yielded only one intersection (0.069 oz/ton Au and 0.48 oz/ton Ag over 3 m) on the main trend. Mineralization in the BRX Zone is still open in both directions but appears to be weakening to the southeast.

Trench T-11 was the only trench completed on the Klaza Zone, which is located on a moss covered, frozen north-facing hillside where soil sampling produced moderate to strongly anomalous values. The best assay averaged 0.123 oz/ton Au and 1.38 oz/ton Ag across 8.0 m including a 1 m interval that graded 0.326 oz/ton Au and 6.30 oz/ton Ag over 1 m. A second vein located 72.5 m to the southwest returned 0.130 oz/ton Au and 12.80 oz/ton Ag across 1 m. A third vein at the northeast end of the trench was only partially exposed, suggesting that other parallel structures may exist.

Only one trench (T-15) was cut off the trend of the two main zones. It tested a strong soil geochemical anomaly in the northeastern part of the property and exposed numerous 1 to 10 m wide gougy shear zones, most of which contained little or no quartz veining and returned values less than 0.03 oz/ton Au. The best assay (0.199 oz/ton Au and 0.50 oz/ton Ag across 1 m) came from an interval containing a 1 to 4 cm wide quartz vein in a 30 cm wide, limonitic and clay altered shear.

None of the trenches begun in the vicinity of the mineralized porphyry dyke exposed in trench T-5 southeast of the BRX Zone were completed; thus, its orientation and extent are uncertain.

CONCLUSIONS

The 1987 results are encouraging and indicate that at least two large vein systems are present on the property. Although individual veins tend to be relatively narrow, in some areas they are sufficiently high grade to be potential underground mining targets or close enough together to be mined as a small open pit operation. The mineralization is largely unoxidized and would require flotation to produce a sulphide concentrate that could then be shipped to a smelter or pre-oxidized and treated by cyanidization on site.

The next phase of exploration should focus on excavation of the more than 6 km of pre-stripped trenches plus completion of the access road in preparation for diamond drilling.

Respectfully submitted,

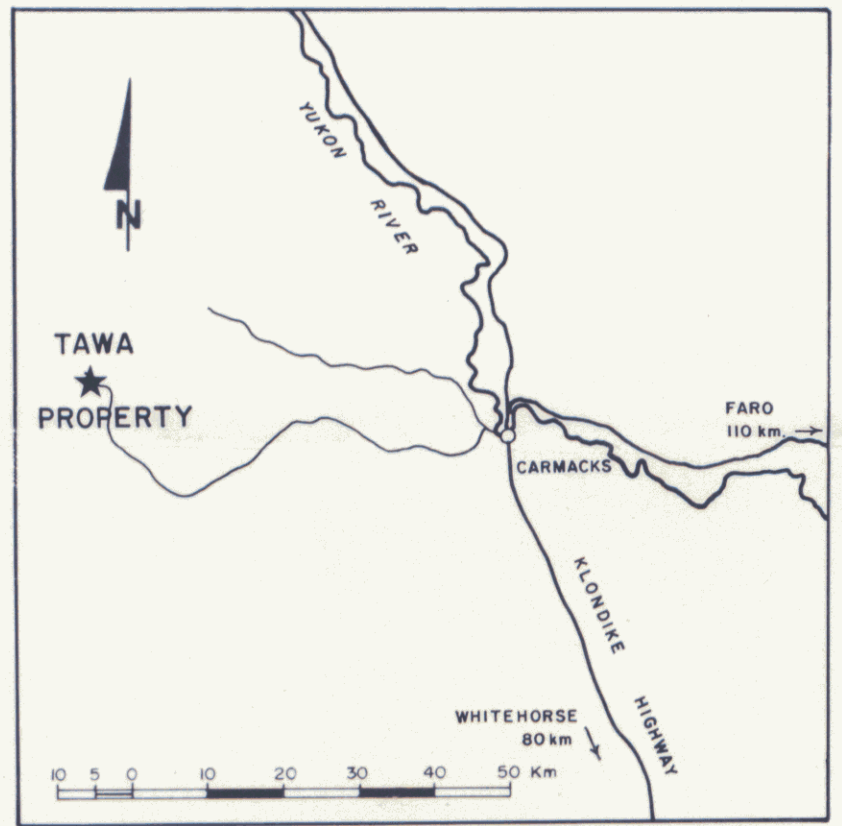
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED





M.J. Walls, B.Sc.




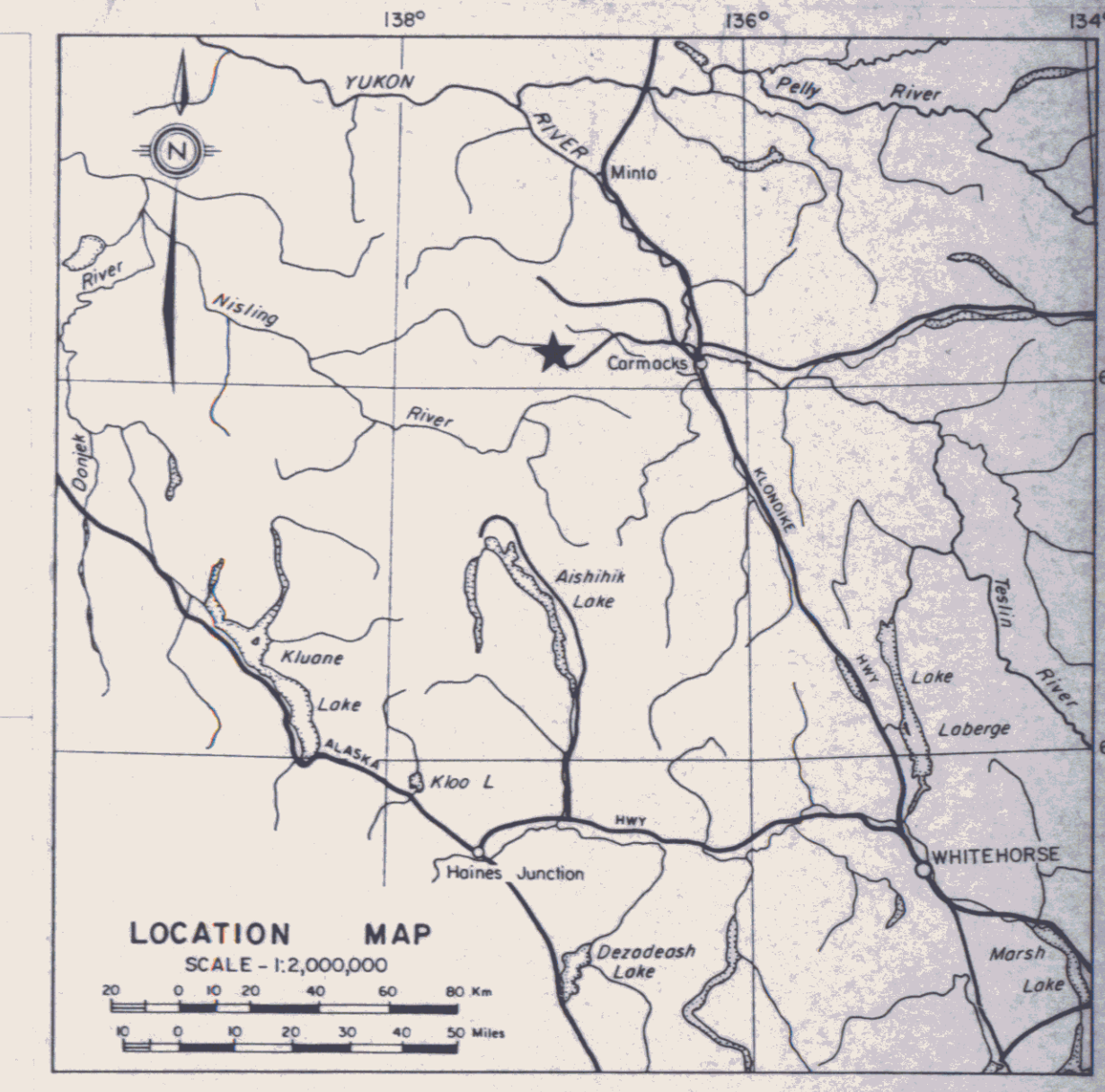
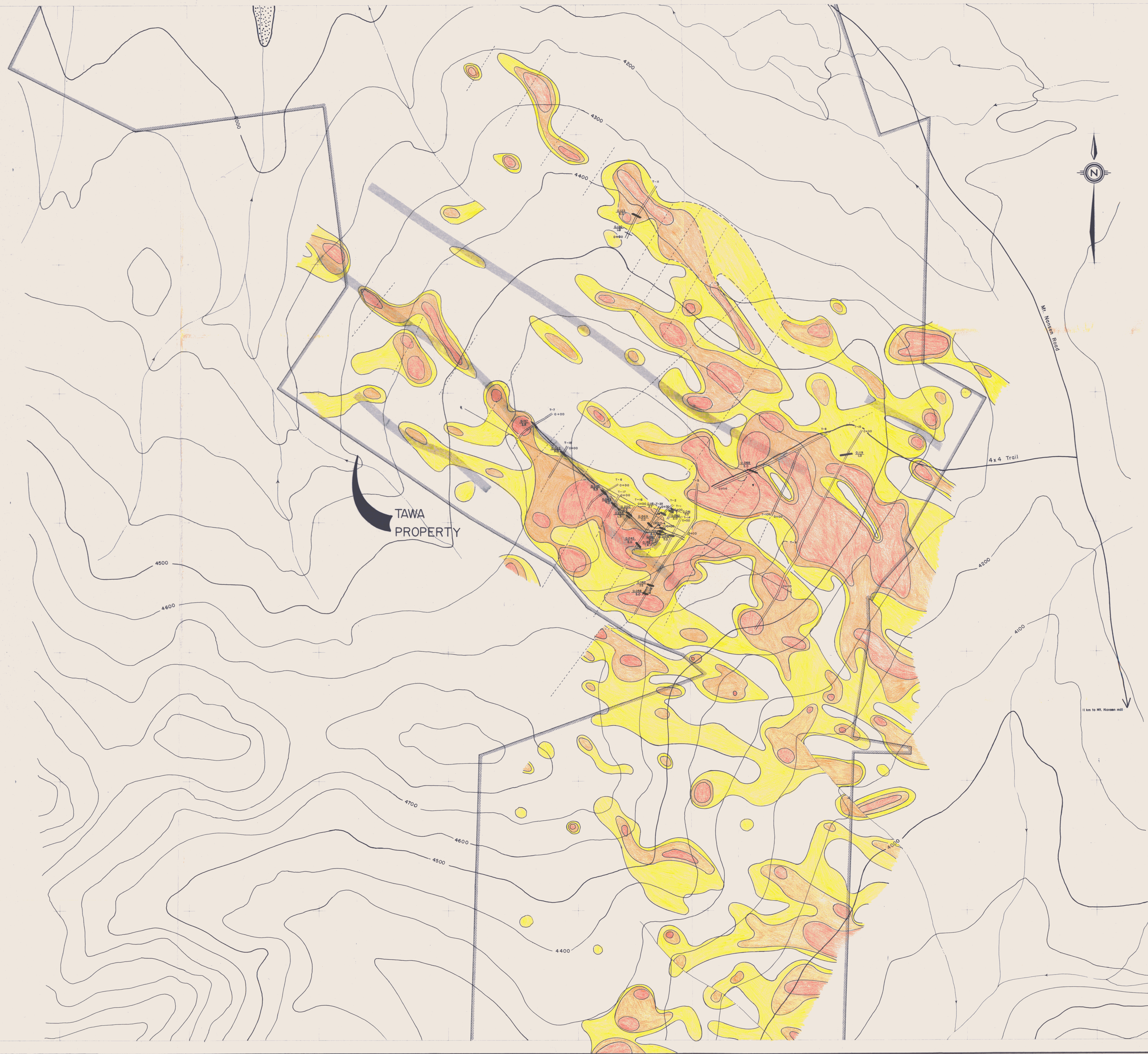
W.D. Eaton, B.A., B.Sc.



 Tawa property boundary
 Mt. Nansen area of influence

WJG
Mike Refells

 Chevron Canada Resources Limited Minerals Staff			
CLAIM DATA (1042) TAWA PROPERTY			
FIGURE No. 2		PROJECT: FREEGOLD VENTURE	
DATE: DEC. 1987	REVISIONS:	SCALE: 1:20000	
NTS No. 115 1-3		FILE No.	
COMPILED BY ARCHER, CATHRO & ASSOCIATES (1981) LTD.			



- Excavator trench to bedrock
- Stripped area for proposed trenches
- Vein with mineralized interval - Au (g/ton) metres
- Quartz feldspar porphyry
- Trend of EM-16 conductor
- Property boundary
- Producing placer mine
- 25 < 50 ppb Au
- 50 < 100 ppb Au
- 100 ppb Au

TAWA PROPERTY

W.D. J. 4/88
M.H. P.H.

Chevron Canada Resources Limited
Minerals Staff

COMPILATION MAP

TAWA PROPERTY (104)

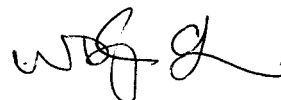
FIGURE No. 3	PROJECT FREEGOLD VENTURE	
DATE DEC 1987	REVISIONS	SCALE 1:5000
NTS No. 115 I-3		FILE No.
COMPILED BY ARCHER, CATRO & ASSOCIATES (1981) LIMITED		

APPENDIX I
AUTHORS' STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, W. Douglas Eaton, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in Burnaby, British Columbia, do hereby declare:

1. I graduated from the University of British Columbia in 1980 with a B.Sc.
2. From 1971 to the present, I have been actively engaged in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981, became a partner in Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



W. Douglas Eaton, B.A., B.Sc.

STATEMENT OF QUALIFICATIONS

I, Michael J. Walls, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1985 with a B.Sc. majoring in Geological Sciences.
2. From 1985 to present, I have been actively engaged as a geologist in mineral exploration in Yukon Territory and am presently employed with Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



Michael J. Walls, B.Sc.

APPENDIX II

PERSONNEL

<u>NAME</u>	<u>POSITION</u>	<u>DATES ON PROPERTY</u>
M. Walls	Geologist	June 30; July 3, 11, 17, 19; August 10, 21 22, 30
T. Becker	Fieldman	June 4,6,9,26; July 6-23; August 1, 3-9, 11-15, 18
G. Cockell	Fieldman	June 9; July 7,8
B. McTaggart	Surveyor	June 26,27; July 2,3,4
J. MacRory	Surveyor	June 26,27; July 2,3,4
J. Corrigan	Fieldman	August 3,4,6
R. Hancox	Fieldman	August 3-15,21,30; September 16
J. Sebben	Fieldman	August 30

TABLE 1

FREEGOLD VENTURE
TRENCHING ASSESSMENT CALCULATIONS

TAWA CLAIMS
 KLAZA RIVER AREA
 NTS 1151/3

CLAIM NAME	LINEAR METRES		TOTAL	\$ CREDIT
	BULLDOZER STRIPPING	BACKHOE TRENCHING		
TAWA 2	—	320	320	1814.40
3	495	220	715	4054.05
4	250	60	310	1757.70
5	655	720	1375	7796.25
6	350	—	350	1984.50
7	400	240	640	3628.80
8	375	—	375	2126.25
9	225	—	225	1275.75
10	310	—	310	1757.70
11	290	—	290	1644.30
12	360	—	360	2041.20
15	—	130	130	737.10
16	125	—	125	708.75
18	550	—	550	3118.50
20	1200	—	1200	6804.00
21	—	109	109	618.03
25F	—	350	350	1984.50
28	810	—	810	4592.70
30	335	125	460	2608.20
32	150	—	150	850.50
69	200	—	200	1134.00
		TOTAL	9354	

TOTAL EXPENDITURES \$53,053.50

\$ CREDIT/METRE $53,053.50 / 9354 = \$567$

