-	
District	Geologist, Kamloops Off Confidential: 89.04.13
ASSESSME	r REPORT 17327 MINING DIVISION: Osoyoos
PROPERTY	Venner
LOCATION	LAT 49 17 08 LONG 119 18 02 UTM 11 5461527 332696 NTS 082E06W
CLAIM(S)	Venner, Gold
OPERATOR	
AUTHOR (S	
REPORT Y	
COMMODIT	
SEARCHEI	FOR: Gold, Silver
GEOLOGIC	
SUMMARY:	An east trending quartz-carbonate vein, dipping steeply
	southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton
	southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with
WORK	southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group.
	southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling, Geophysical, Physical, Geochemical
WORK	southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ
WORK	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500</pre>
WORK	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF</pre>
WORK	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km</pre>
WORK	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000 ROCK 251 sample(s) ;AU</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000 ROCK 251 sample(s) ;AU SAMP 284 sample(s) ;AU TREN 550.0 m 22 trench(es)</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000 ROCK 251 sample(s) ;AU SAMP 284 sample(s) ;AU</pre>
WORK DONE:	<pre>southward, about 0.5-1.5 metres wide, cuts andesites and rhyolites and carries modest gold values (>3.42 grams per tonne). The vein has been disrupted by a late fault which also strikes easterly with shallow dips southward. Host rocks belong to the Tertiary Penticton Group. Drilling,Geophysical,Physical,Geochemical DIAD 531.6 m 9 hole(s);NQ Map(s) - 2; Scale(s) - 1:500 EMGR 12.5 km;VLF Map(s) - 1; Scale(s) - 1:625 MAGG 3.8 km Map(s) - 1; Scale(s) - 1:2000 ROCK 251 sample(s) ;AU SAMP 284 sample(s) ;AU TREN 550.0 m 22 trench(es)</pre>

TRENCHING, DIAMOND DRILLING & GEOPHYSICAL

ASSESSMENT REPORT

on the

VENNER CLAIMS

N.T.S. 82E/6W

OSOYOOS MINING DIVISION

1.06 NO: 0502	RD.
ACTION:	
FILE NO:	

Pathia

49° 20'N LATITUDE & 119° 20' W LONGITUDE

owned by:

LACANA MINING CORPORATION #312-409 Granville Street Vancouver, B.C. V6C 1T2

operated by:

TIGRIS MINERALS CORPORATION 2246 Sifton Ave. Kamloops, B.C. VIS 1A5

written by:

PETER S. PETO, Ph.D. 125 Bassett Street Penticton, B.C. V2A 5W1

> 29 FEBRUARY 1988 GEOLOGICAL BRANCH ASSESSMENT REPORT

TABLE OF CONTENTS

TEXT

INTRODUCTION 1
PROPERTY, LOCATION, ACCESS, PHYSIOGRAPHY 1
HISTORY 2
REGIONAL & PROPERTY GEOLOGY 3
TRENCHING & ROCK CHIP SAMPLING RESULTS 4
DIAMOND DRILLING RESULTS 8
GEOPHYSICAL SURVEY RESULTS
INTERPRETATION
ITEMIZED COST STATEMENT 14
REFERENCES CITED 15
AUTHOR'S QUALIFICATIONS 16

ILLUSTRATIONS

FIGURE 1:	PROPERTY & CLAIM LOCATION MAP	17	
FIGURE 2:	COMPILATION MAP OF PREVIOUS WORK	18	
FIGURE 3:	REGIONAL GEOLOGY MAP	19	
FIGURE 4a & b:	SURFACE PLAN TRENCHING	(in	pocket)
FIGURE 5:	SURFACE PLAN DRILLING	(in	pocket)
FIGURE 6a & b:	VLF-EM SURVEY (RAW & FILTERED DATA)	(in	pocket)
FIGURE 7:	MAGNETOMETER SURVEY	(in	pocket)
FIGURE 8:	SURFACE PLAN GEOLOGY	(in	pocket)

APPENDICIES

APPENDIX	1:	ASSAY	CERTIFICATES	20
APPENDIX	2:	DRILL	HOLE LOGS	32
APPENDIX	3:	THIN S	SECTION DESCRIPTIONS	50

INTRODUCTION

The writer was commissioned by Mr. Gerry D'Angelo, President of Tigris Minerals Corporation, to supervise an exploration program of the Venner claim, between 4 January and 10 February 1988, as part of an ongoing exploration program recommended by Eugene Larabie, P. Eng. (1987). In the course of this program, some 22 backhoe trenches covering 550 meters were excavated by High Alpine Contracting and 251 rock chip samples were collected therefrom. In addition, 531.7 meters or 1744 feet of NQ diamond drilling was carried out by Beaupre Drilling in 9 holes and 284 core samples were collected for assay. A total of 535 rock samples were assayed for gold by Acme Analytical Laboratories and Eco-tech Laboratories Ltd. This work was complemented by 12.5 line km of VLF-EM and 3.8 km of magnetometer surveys. An aggregate of some \$77,000 was expended on this program and exploration results are reported for assessment credit. The writer was assisted by Keith D'Angelo and Gerrard Gallisant of Pacific Northwest Geo-Tech Ltd.

PROPERTY, LOCATION, ACCESS, PHYSIOGRAPHY

The "O,K. Falls" gold property comprises a large claim block consisting of 10 adjoining, 4-post claims, totalling some 3540 hectares. The property consists of the following claims.

CLAIM	NO. OF UNITS	RECORD NO.	ANNIVERSARY
VENNER	9	1078	9 MAY 1994
VENNER #2	20	1273	10 OCT.1990
VENNER #3	· 8	1694	21 MAR.1988
VENNER #4	2	1695	21 MAR.1988
VENNER #5	18	1916	17 OCT.1989
VENNER #6	18	1917	17 OCT. 1989
			2/

DREN #1	15	2594	21 APRIL 1988
DREN #2	20	2595	21 APRIL 1988
DREN #3	20	2596	21 APRIL 1988
DREN #4	8	2597	21 APRIL 1988
The principal claim	is the Venner	(1078) upon w	hich all the work

was carried out. These claims are owned by Lacana Mining Corp. which recently optioned the claims to Tigris Minerals Corp.

The property is located 26 km east of the town of Okanagan Falls beside the main Shuttleworth Creek logging road (Figure 1) and is accessed via the "R200" branch road. The drill site is located immediately northeast of km 26, a distance of some 47 km from Penticton.

The claims are situated along "Venner Meadows" a flat to gently rolling upland area consisting of marshland and gently sloping, glaciated, hillsides timbered largely with lodgepole pine, fir and aspen. The area has been strongly glaciated and is buried under a mantle of transported glacial till and alluvial deposits obscuring bedrock over 99 percent of the survey area. A succession of glacial terraces can be observed along Fish Creek. The area is drained by tributaries of Vaseaux Creek; ranging in elevation from 1350 to 1750 meters.

HISTORY

The main showing, consisting of an auriferous quartz-carbonate vein, was exposed in a road cut and staked by Dusty Ewers, Sandy McLean and K.G. Thompson of Okanagan Falls in 1973. A considerable amountof exploration work was carried out in the vicinity of the main

- 2 -

.....3/

showing by the above prospectors, Teck (1973 & 1974), Granby (1975 & 1976), Lacana (1981, 1982, 1983), Rio Algom (1984), Daughtery and Associates whose findings are reported in the following assessment reports: 5009, 5702, 5886, 8961, 9413, 10410, 10624, 10735, 11276, 11745, 11798, 12156, 12750, 13113 and 13477. A compilation map showing some relavent exploration details is shown in Figure 2.

REGIONAL AND PROPERTY GEOLOGY

The claim area covers an erosional remanent (outlier) of Tertiary volcanic rocks which unconformably overlie mesozoic batholithic rocks and proterozoic granite gniesses and amphibolites (Figure 3). These subareal, continental, volcanic rocks are generally known to host several structurally controlled gold and silver deposits such as those found near Okanagan Falls (Dusty Mac), Orofino Mountain, Whitman Creek (Brett) and Clinton (Black Dome).

The property is underlain by dark green to reddish green, massive, feldspar porphyry flows and breccias (andesite or trachyandesite). Light grey to beige, rusty weathering, very fine grained massive quartz-feldspar porphyry (rhyolite) and dark green, mottled, poorly sorted, volcanic conglomerates and gritstones with interbedded narrow coal seams. In the writer's opinion these rock units are correlative with similar tertiary volcanic rocks found in the White Lake basin, on the west side of the Okanagan Valley, which correspond respectively to the Marron Formation, Marama Formmation and White Lake Formation of the Penticton Group (Church, 1973).

Gold mineralization occurs largely in 0.5 to 3.0 meter wide, east trending, steep, southward dipping, quartz + carbonate

....4/

- 3 -

fissure veins and replacement breccias cutting hydrothermally altered and brittlely deformed andesites which are overlain by conglomerates to the north and bounded by rhyolites to the east. Within the mineralized area andesites are pervasively altered to a propylitic assemblage consisting largely of chlorite and calcite but without the presence of visible epidote. Calcite may occur as narrow, irregular fracture infillings, which when intensely concentrated form carbonate cemented crackle breccias. It also occurs as medium to coarse grained replacements, sometimes associated with brown or red siderite or ankerite and occasionally with purple fluorite in irregular veinlets from 1 mm to 5 cm wide. Pure grey to white (chalcedonic) quartz veinlets are rare with calcite predominating over quartz in carbonate vein replacements which are usually devoid of pyrite or other sulphides. At surface, quartz veinlets commonly show drusy, medial cavities strongly stained with manganese oxides.

In addition to strong propylitic alteration, andesites may also locally develop a strong, pervasive hematite alteration or pervasive argillic (clay) alteration near well developed fault zones. Very fine grained, disseminated pyrite may also occur in andesites near these fault zones but rarely otherwise. Within and adjacent to these fault zones andesites become crushed and sheared giving it a cataclastic, or brecciated texture consisting of altered andesite clasts set in a fine grained, comminuted matrix of broken andesite and secondary chlorite with or without hematite. Sometimes the clasts consist of broken quartz-carbonate veins, or andesite with disrupted carbonate veinlets. These textures may have been mistakenly

.....5/

- 4 -

identified as "agglomeritic" previously although some core intervals clearly show rounded, poorly sorted andesitic cobbles which could represent subaqueous lahars rather than true subareal, pyroclastic "agglomerates".

Near fault zones, rhyolites show very strong, pervasive argillic alteration accompanied by disseminated pyrite and irregular quartzcarbonate veinlets or clay seams. Near the fault plane rhyolites become strongly sheared producing a clay-rich fault gouge embedded with subangular to rounded, intensely altered, tectonic rhyolite clasts. Commonly the fault zone occurs just above and in contact with the andesite giving the impression that the clay fault gouge represents a "regolith" unconformably overlying the andesite.

However a regolith, by definition, consists of decomposed, weathered, detrital rock derived from and overlying the parental bedrock, which in this case is andesite not rhyolite. Nor would one expect to find fresh pyrite in an oxidized, leached regolith. The rhyolite was observed as veins cutting the andesites, contacts with andesite are sharp and often sheared when observed in core. There is no evidence of flow banding or bedding planes or flow tops, but rather the rhyolite appears to have a massive texture suggesting that it may represent an intrusive rather than an extrusive body. The rhyolite is generally fractured, and carries thin carbonate or clay fracture fills but rarely carries quartz veinlets although some crackle breccias have been observed but do not have the appearance of flow tops or autoclastic breccias. TRENCHING AND ROCK CHIP SAMPLING RESULTS

A program of systematic trenching and rock chip sampling was carried out over the area of main interest between OE to 187.5E by

- 5 -

....6/

digging 18 north-south trenches using a Hitachi excavator equipped with a 1 yard bucket from 11 to 17 January and from 8 to 11 February, 1988. A total of 550 meters were excavated and 251 rock chip samples were collected and assayed for gold. Samples were normally collected over two meter sample intervals although some one meter fill in sampling was also carried out. Trench locations and assay results are plotted in Figures 4a & b.

The assay results are summarized below and illustrated in Figure 8.

(1) A major, east trending, southwardly dipping fault zone disrupts rhyolite and andesite rock units near the base line. Where observed the footwall dips 30 to 60 degrees southward and consists of a rusty weathering, grey, pyritic, clay-rich fault gouge with rounded clasts of broken wallrock. The dip angle appears to shallow eastward with surface intersections increasing from 2 meters at OE to 22 meters at 162.5E

(2) The footwall, which is usually andesite is strongly propylitic in character, with abundant chlorite and secondary carbonate whereas the hangingwall is strongly argillic with abundant disseminated pyrite. Gold values are invariably low or absent in fault gouge. (3) A prominant east-trending, 1.5 to 3.0 meter wide, vertical dipping, quartz + carbonate vein was observed at 44W & 10N, 2.5E & 1N, and 150E & 25S which yielded modest gold values. These may represent a single vein which has been disrupted by the main fault.

(4) A carbonate vein, 0.3 to 1.0 meters wide, trending southeasterly and dipping steeply southward, was observed in the vicinity of the

- 6 -

"G" trench outcrop shown in figure 4b. This yielded gold assays ranging from 2.77 oz/t over 15cm to 0.08 over 1 meter. At some locations adjacent wallrock also carrys gold, 147.5E & 16S yielded 0.885 oz/t gold over 1 meter. This vein has been traced for 23 meters from 130E & 10S to 153E & 17S.

(5) In trench 162.5E at 26 to 30S andesites are cut by narrow north trending drusy quartz veinlets which yielded 0.352 and 0.267 oz/t gold over 2 meter intervals. In trench 112.5E, from 70 to 73 north, in altered conglomerates, a three meter sample yielded 0.048 oz/t gold initially, 0.069 oz/t gold upon reassy and values from 0.001 to 0.009 oz/t gold upon resampling at 1 meter intervals.

(6) A 0.5 meter wide, east trending, subvertical, quartz + carbonate breccia zones, separating andesite from rhyolite, was observed in trench 175E & 9S which yielded 0.131 over 2 meters and 0.306 oz/t gold from a grab sample.

(7) In trench 150E & 25S, a 1m wide quartz + carbonate vein dipping 70° south, was situated in the main fault zone and consequently shattered and accompanied by large, adjacent, angular, quartz breccia fragments embedded in fault gouge, which yielded gold assays of 0.017 and 0.006 oz/t over two meters each respectively.

(8) Overburden ranges from 1 to 6 meters thick consisting of a basel chaotic glacial till and an upper sequence of bedded alluvial desposts.

.....8/

- 7 -

DIAMOND DRILLING RESULTS

A total 531.7 meters (1744 feet) of NQ core were obtained from 9 drill holes, DDH88-21 to DDH88-29, by Beaupre Diamond Drilling from 20 January to 6 February 1988. Drill core was logged by the writer and sampled by Gerrard Gallisant. Drill hole collar locations are shown inFigure 5 and drill logs and sample assay results are listed in appendicies 1 & 2. The core is stored on the property in core racks located at 115E & 50S as shown in Figure 5.

The purpose of the drill program was to further test the main zone drilled by Lacana (Wells, 1983) largely by means of shallow drill holes. A brief summary of the purpose and outcome of each drill hole is given below.

DDH88-21 collared at 110E & 25S was drilled northward at 45 degrees in an attempt to intersect the upward projection of a 0.5 meter intercept that yielded 8 oz/t gold in DDH83-9. The hole penetrated altered rhyolite from 6 to 20m, thereafter 6.7m of fault gouge and remained in propylitized, footwall andesite to 45.7m without intersecting significant gold intervals.

DDH88-22 collared at 125E & 26S was drilled northward at 45 degrees in an attempt to find the lateral extension of DDH83-9 gold intercept again without success. The hole encountered altered rhyolite 5 to 10m, thereafter 5.6m of fault gouge, the remainder of the hole stayed in propylitic, footwall, andesite which was hematized in part to 45m. The last sample interval, at the bottom of the hole, from

.....9/

- 8 -

45.0 to 45.72 meters, carried a few grey chalcedonic quartz veinlets which yielded 0.370 oz/t gold.

DDH88-23 was collared at 137.5E & 25S, drilled northward at 45 degrees to test the upward projection of gold intercepts of 0.147 & 0.185 oz/t gold in DDH83-7. The hole encountered, propylitic andesite with hematitic and brecciated intervals throughout without yielding any significant gold intercepts except between 16-17m which yielded 0.112 oz/t gold in brecciated andesite with irregular, narrow quartz veinlets.

DDH88-24 was collared at 170E & 32S, drilled at 45 degrees and 325° azimuth in order to test the subsurface expression of a zone of quartz veinlets exposed by trenching at 162.5E & 20 to 24S, which yielded 0.31 oz/t gold over 4 meters at surface. The hole encountered rhyolite from 5.8 to 7.0m, fault gouge, with small quartz vein at 8.65m, to 17m and propylitic andesite to 45.7m without encountering any significant gold mineralization. DDH88-25 was collared at 60E & 85S, drilled 45 degrees northward in order to test east trending fault zones paralleling the main fault, exposed in trenches at 50E and 100E and a fault which yielded 0.232 and 0.166 oz/t gold in DDH83-20. The hole encountered rhyolite from 5.8 to 7m, fault gouge from 7-14.7m, and propylitic andesite, which is intermittantly brecciated and hematitic down to the end of the hole at 92.7m. No significant gold assays were encountered.

DDH88-26 was collared at 112.5E & 50N, drilled at 45 degrees

....10/

- 9 -

northward in order to test the subsurface expression of a 3 meter surface sample of altered conglomerate located at 112.5E & 70 to 73N which yielded 0.069 oz/t gold. The hole encountered poorly sorted, volcanic conglomerate throughout with occasional narrow coal seams. Quartz + carbonate veinlets were rare and no significant gold values were encountered.

<u>DDH88-27</u> was collared at 182E & 27S, drilled at 45 degrees and 330 azimuth in order to test the subsurface projection of a quartz + carbonate breccia vein which yielded 0.306 oz/t gold in trench 175E & 10S as well as a 0.432 oz/t gold intercept encountered in DDH82-6. The hole encountered rhyolite from 3.65 to 16.1m, a 25cm quartz vein at 16m, a fault zone from 16 to 22.5m and propylitic, locally brecciated footwall andesite to 45.7m, with no significant gold intercepts.

<u>DDH88-28</u> was collared at 187E & 55S and drilled at 42.5 degrees and 55° azimuth in order to test the eastward projection of the fault aone under the rhyolite "capping". It remained in rhyolite throughout to 103.7m, with the exception of a narrow septum of altered andesite encountered between 52 to 57m downhole. <u>DDH88-29</u> was collared at 112E & 6S, drilled vertically to test the 8 oz/t gold intercept located in DDH83-9 on the presumption it was an emanation from an upward protruding, mineralized pinnacle. The hole encountered rhyolitic fault gouge from

- 10 -

....11/

8.53 to 16.85m, ankeritic(?)-calcite replacement from 16.85 to 18m, and propylitic, locally brecciated and hematitic footwall andesite to 57.9m with significant gold intercepts at 32-33m and 34-35m yielding assays of 0.076 and 0.094 oz/t respectively.

All the 1982 and 1983 drill core was re-examined and an additional 37 core samples were split and assayed as shown in Appendix 2. No further significant gold values were obtained with the exception of DDH83-9, from 55-56m which yielded 0.120 oz/t.

GEOPHYSICAL SURVEY RESULTS

Close comparison of previous VLF-EM and ground magnetic surveys conducted by Lacana over the area presently trenched suggests that the major fault zone coincides with a weak VLF-EM conductor and a coincident magnetic depression. Furthermore, the area underlain by rhyolite was expressed as a magnetic high in contrast to altered, relatively non-magnetic andesites. It was therefore decided to extend the geophysical grid in order to better define the extent of the rhyolite and fault structures beyond the area presently drilled.

Two VLF-EM surveys were carried out, a detailed survey, consisting of 4.5 line km over the main area (Figure 6a) and 8 line km over the southwest portion of the Venner claim (Figure 6b). A Sabre model #27 was used to take tilt angles using Cutler, Maine as the transmitter at 17.8 khz on north-south lines at 12.5m station intervals. A very weak cross-over was detected over the main fault zone which may therefore construed to be a weak EM conductor. It appears to terminate at about 187.5E near the rhyolite/andesite contact zone. Another east trending weak conductor was detected at

....12/

- 11 -

about 100N of the base line from OE to 525E. Other anomalies may be due to topographic effects and/or operator error in consistantly measuring small angles of tilt.

The same grid was also intended to be surveyed by ground magnetics using a Scintrex, MP-2, measuring total field strength. Unfortunately only 3.87km of grid were completed due to malfunction of sensor cable. The results are plotted on Figure 7 from which it is evident that high magnetic contrasts occur at 275N on lines OE and 75E. The survey ought to be completed at some future date and further comments are inappropriate until more magnetic data is obtained.

INTERPRETATION

Based on the foregoing observations the writer offers the following geological interpretation of present and past data as illustrated in Figure 8 and summarized below.

(1) A thick succession of andesitic flows belonging to the Marron Formation and overlain by volcaniclastics of the White Lake Formation is invaded by rhyolitic intrusions of the Marama Formation. (2) The andesites were brittlely deformed and hydrothermally altered to a propylitic assemblage and accompanied by the emplacement of an east trending steep southward dipping quartz + carbonate fissure filling (vein) carrying good gold values locally. In addition, the andesite was also injected with narrow, erratically dispersed and impersistent quartz + carbonate veinlets which may carry erratic concentrations of electrum from place to place as evidenced in the 1982-1983 drill core. There is however a (0.3 to 1.0m), wide carbonate vein now exposed by

..../13

- 12 -

stripping on the dip slope of the "G"-trench outcrop, which yielded consistently higher gold values up to 2.77 oz/t.

(3) The andesite and rhyolites were subsequently faulted by easttrending faults, dipping at variable angles southward, which fragmented and dislocated the pre-existing fissure veins and with strong clay alteration, usually accompanied by pyrite in the hanging wall and hematitie predominantly in the footwall. These hydrothermal events carried no significant gold mineralization.

(4) Post-mineral dislocation by later faults would explain why previous drilling intercepts are discontinuous and sporadic. The quartz + carbonate vein appears to remain intact between 44W & 3E along the base line and should be drilled according to Cann (1984) although this section is located on Energex's Gold claim.

(5) Thin section examination of selected rock samples (see appendix 3) indicate pervaisive hydrothermal alteration of rhyolites and trachy-andesites resulting in the formation of secondary chlorite, leucoxene, quartz, sericite ? (kaolinite), marcasite (?), and carbonate. Veinlets consist of (1) aragonite ± k-feldspar and quartz (2) quartz ± chlorite and (3) calcite. Unit 3 carrys clasts of andesite, trachy-andesite, rhyolite, dacite and quartz and is probably an erosional derivative of Unit 1 & 2. Auriferous quartz/carbonate vein is described as a "cherty dacite" breccia. (6) The rhyolites to the east probably do not represent an extrusive 'capping' unconformably overlying an andesitic regolith as previously thought. (Although further investigation is required by means of magnetic surveys and trenching to confirm the following hypothesis.) The rhyolites probably represent, structurally disrupted north trending intrusions which dip moderately eastward

....14/

- 13 -

and truncate the quartz + carbonate veins east of 187E. These rhyolite intrusions may adjoin similarly mineralized fissures elsewhere along their strike.

Drill holes 83-13, 83-19 and 88-28 indicate that the up-dip projection of the main fault zone separates rhyolite from andesite and trends northwesterly as encountered in drill holes 83-14 and 83-15. The faulted contact may host auriferous quartz + carbonate breccia zones such as the one observed in trench 175E & 10S. This contact zone can be traced on a magnetic map produced by Hardy & Associates for Lacana in 1982.

Narrow panels of rhyolite adjacent to andesite, south of the core shack, may represent fault slices whereas andesitic panels encountered in drill holes 83-13 & 19 may represent upwardly displaced fault slices or septa (inclusions) enveloped by rhyolitic intrusions.

(7) The presence of auriferous structures suggests a favourable geological environment for the presence of gold deposits in altered andesitic rocks adjacent to rhyolitic feeder dykes or intrusions.

ITEMIZED COST STATEMENT

The costs of the above exploration is apportioned as follows, according to Gerry D'Angelo, Presidnet of Tigris Minerals Corporation:

....15/

(1)	Trenching (excavator) costs: 60 hours, mob and demob	\$7,202.00
(2)	Drilling costs, 1744 feet @ \$19.50/foot plus catwork backfilling trenches	34,723.00
(3)	Geochemical analysis: 535 samples for gold	6,785.00
(4)	Geophysical (VLF-EM/mag) survey costs, 16.3 km	4,275.00
(5)	Geological supervision, P. Peto 23 days	7,239.46
(6)	Mob/demob	400.00
(7)	Supplies	1,119.14
(8)	Food & accommodation	868.25
(9)	4 x 4 truck rental	1,500.00
(10)	Gasoline	419.58
(11)	Equipment rental	835.00
(12)	Freight, telephone, office equipment	852.52
(13)	Labor (K. D'Angelo, G. Gallisant)	7,650.00
(14)	Petrographic descriptions	469.00
	SUB-TOTAL	\$74,337.95
(15)	Administration	2,598.00
	TOTAL COST	\$76,935.95

Respectfully submitted

Peter Peto, Ph.D., F.G.A.C. Consulting Geologist

REFERENCES CITED

Cann, R.M. (1984) Gold Option, Okanagan Falls, Geology, Geochemistry, Magnetic, VLF Surveys and Drilling. Assessment Report #13477

Church, B.C. (1973) Geology of the White Lake Basin, B.C. Ministry of Energy, Mines & Petroleum Resources, Bull 61, 120pp.

Larabie, E.N. (1987) Report on the O.K. Falls Gold Property, prospectus report, Tigris Minerals Corp.

Wells, R.C. (1983) Report on the O.K. Falls project, B.C. internal report, Lacana Mining Corp.

- 15 -

AUTHOR'S QUALIFICATIONS

I, PETER S. PETO, of 125 BASSETT STREET, PENTICTON, in the PROVINCE OF BRITISH COLUMBIA, HEREBY certify as follows:

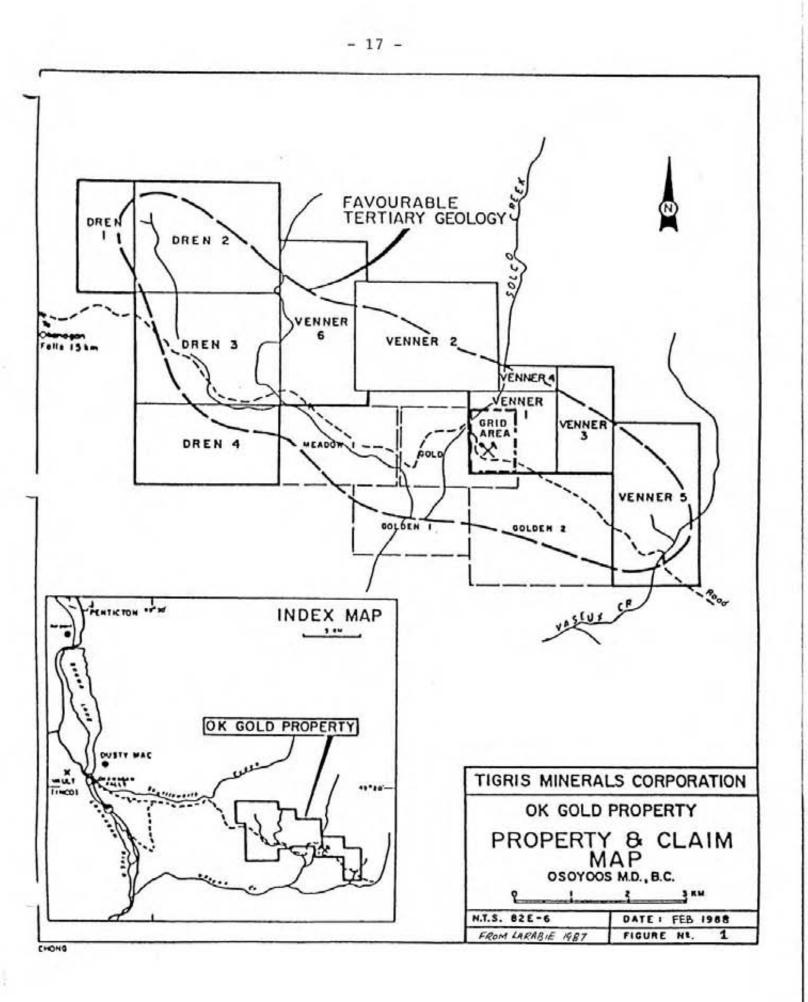
- (1) I am a consulting mineral exploration geologist.
- (2) I am a graduate of the University of Alberta and hold Bachelor of Science (1968) and Master of Science (1970) degrees in geology and that I hold a Doctor of Philosophy in geology (1975) from the University of Manchester, U.K.
- (3) I am a fellow of the Geological Association of Canada.
- (4) I have been practicing in the geological profession continuously since 1975.
- (5) I have personnaly supervised the exploration program reported herein on behalf of Tigris Minerals Corporation.

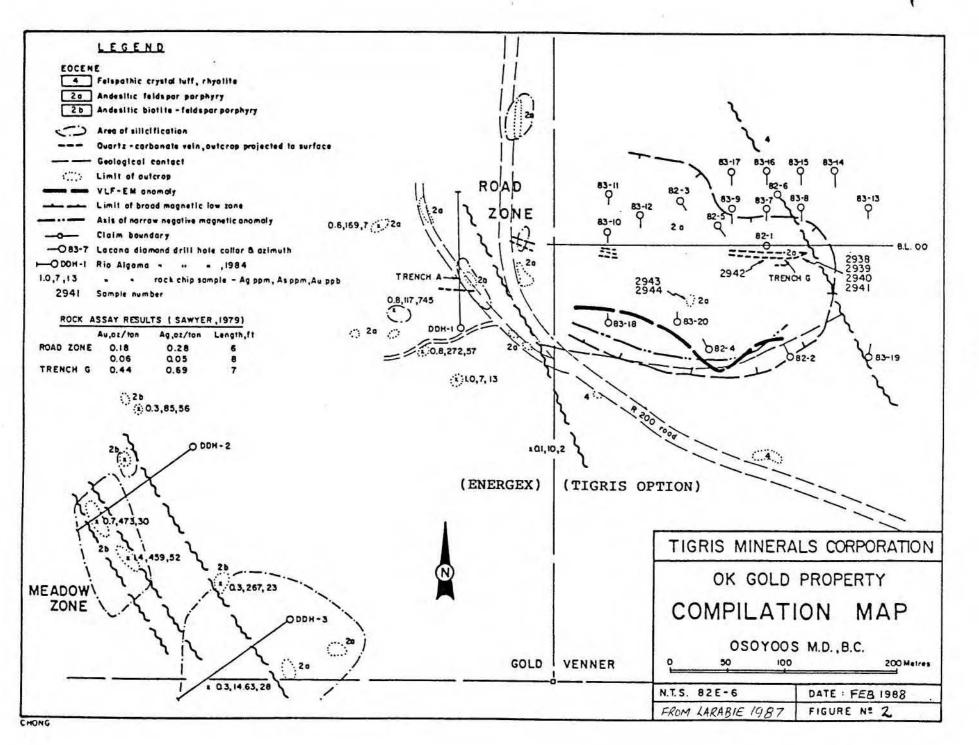
Dated at Penticton, British Columbia, this $\frac{29}{29}$ day of $\frac{29}{1000}$, 1988.

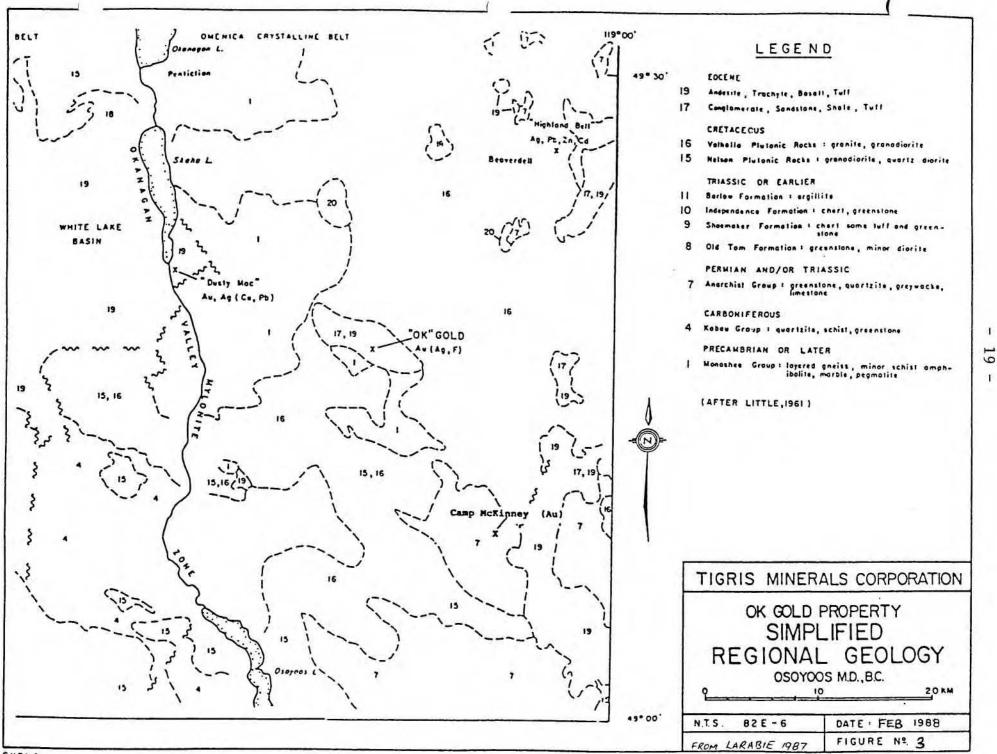
Peter Peto, Ph.D., F.G.A.C.



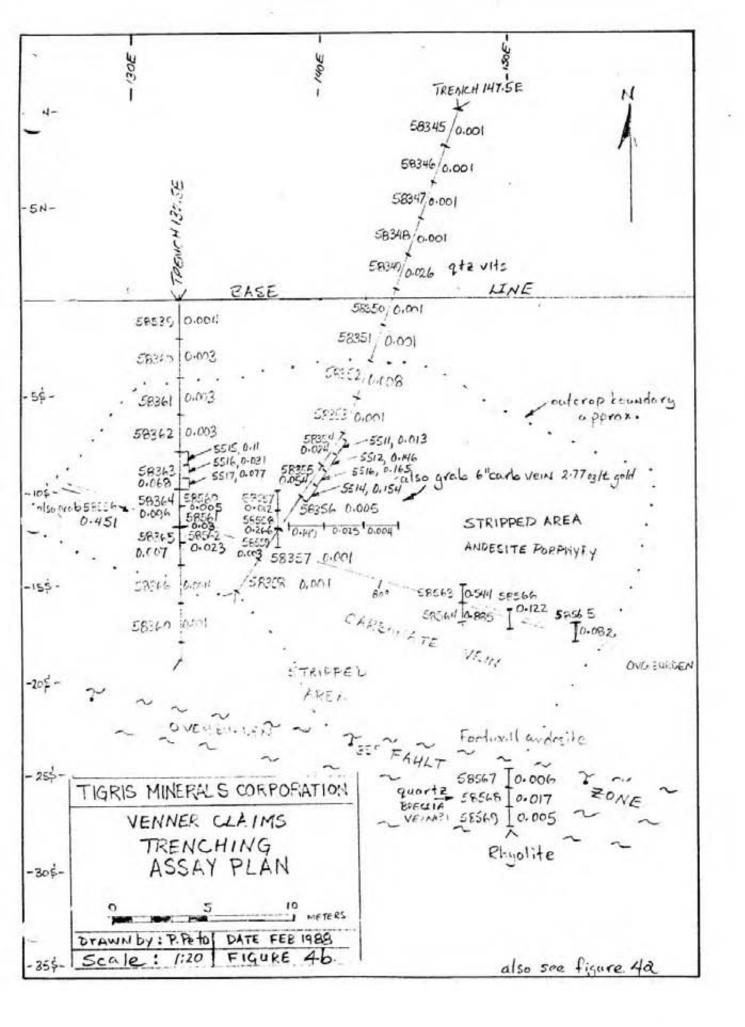
- 16 -







1



1 1 1 1 1 1 1

APPENDIX #2

PROPER		VENI	NER
DRILL	HOLE	NO.	21
DRILL	TYPE		NQ
DATES		20-21	TANUARY 1488

DRILL HOLE LOG & ASSAYS LOCATION 110 E 2 0725 S ELEVATION 1507 m BEARING NogTH DIP - 45°

LENGTH_	45.7	Im	15ofeet
% RECOVE	ERY	10	0
LOGGED H		P. P.	eto
PAGE / OF		Two	

SAMPLE	FROM	то	LENGTH	NOTES		ASSAYS		
SAPELE	FROM	10	DENGIN	NOIED	oz Au	oz Ag		
	0	6.1	6.1					
58501	6.1	7.0	0.9	grey, fractured v hydite, disspy, clay, early vits	0.003			
58502	7.0	8.0	1.0	rhydite Breecia, fault zone, diss py + clay	0.002			
58503	8	9	1	fractured gray vhyolite, clay seams, diss py	0.003			
58 504	9	10	1	grey rhyolite, diss my, clay altin, chlor fracs	0.001			
58505	11	12	1	grey fractured thyslite, diss py, sty + carl vits, clay seams	0.002			
58506	12	13	1	grey chyolite, minor py, gtz + cart vits	0.002			
58507	13	14	1	direcciated vhyolite, fault gouge, diss py, clay	0.003			
58508	14	15	1	vhyslite breecia, diss py, clay	0.005			
58509	15	16	1	grey rhydite, diss py, chilor fraces, cleny, cash vits	0.003			
58510	16	17	1	grey compact vhyolite, diss py, gtz vits to rem	0.008			
58511	17	18	1	grey compact rhyolite, diss py , carb frac's	0.001			
58512	18	19	. 1	grey chyslite, diss, 2, clay, minor carl frac's	0.001			-
58513	19	20	1	rhyolite fault Bx, diss py, clay, cash frac's	0.001			
58514	20	21	1	grey rhyolite, diss py, clay, carl vits	0.001			
58515		22	1	grey chyslite, weatly Bx, disspy, clay altin	0,001			
58516	22	23	1	rhyslite fault Bx, minor py & earch	0.004			
58517	1	24	1	alter hale dit by 150 at 1001 the alter	0.002			
58518	24	25	+	altered rhydite Bx, 15cm st3+carb vin, clay alter				
58519		26	1	swartz + carbonate fault breecia, clay thematito altin	0.003			
58520		27		fault Bx, clay + cliss py + rhydite clasts	0.001		·	
			1-1-1	green anderite, clayt chlor alter, hematite foult Bx				
58521	21	28	1/	green andesite, no prite, fractured	0.001			

22

- - ----

PROPER	VENDER				
DRILL	HOLE	NO.	21		
DRILL	TYPE	Verant	NQ		
DATES	2	0-21	Jan	1988	
	1. 15. 174112		17		

.

		LOG	&	ASSAYS
LOCAT:		NOE	2	0+255
ELEVAS		15	07	*
BEARI	NG	N	nt	2
DIP	1. 2.2.12	- 45		
	Sec. 12.94			

(

. 11

LENGTH	150 feet
% RECOVERY_	100
LOGGED BY_	7. Peto
PAGE 2 OF	TWO

•

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	
-	non		DIGII		oz Au	oz Ag	
58522	28	29	1	dkgran andesite Bx, allor alti, no pyrite	0.002		
58523	29	30	1	anderite BX, 2 cm stavne 29.3, carly frac fills	0.001		
58524	30	31	1	anclesite Bx, hematite fracs, broken carb vits	0.001		
58525	31	32	1	andesite Bx, minor carl fracs, no prite, chlorath	0.009		
58526	32	33	1	anderite Bx	0.001		
58527	33	34	1	andente Bx	0.001		
58528	34	35	1	andesite Bx	0.001		
58529	35	36	1	anderite Bx	0.001		
58530	36	37	1	fractured anderite, chlorite seams, carb frac's	0.001		
58531	37	38	1	andesite Bx, hematite altin	0.001		
58532	38	40	2	anderite, 2em stzvite 38.3, 50% core loss	0.00/		
58534	40	41	1	anderite grey stavits to 2mm, chilor alti	0.002		
58535		42	. 1	andenite vare sty 1ts to Summ, chlor atta, carlifrais	800.0		
58536	42	43	1	anderite, carl frac's, lem hematite seame 43.5 m			
585 37		44	1	andesite strong chiles alto prais carl	0.001		
585 38	10000	45	1	compact anclesite (EOH 45.75 m)	0.001		
				SYNOPTIC LOG.			
	0	6.1	6.1	CASING, glacial overburden + rhyolite			
	6.1	20.0		prachured, pyritic, strongly asgillic rhyolite			
	20.0	26.7	6.7	fault gouge, clayt diss py, vhyolite clasts, (FAULT)	land and the second	· · ·	
	26.7	45.7	19.0	altered andesite, chlor+clay, No prite, cut by irreg.			
				quarts vits & carb fracture fills.	Here and the second sec		

PROPER	RTY Y	VEN	NER
DRILL	HOLE	NO.	22
DRILL			NQ
DATES	21-	- 22	JANUARY 1988

÷.

DRILL HOLE LOG & ASSAYS LOCATION 125E & 0426 ELEVATION 1509 m BEARING NORTH DIP -45°

1.00

	LENGTH_	45.7m	150 feet
1	% RECOV	ERY	100
	LOGGED		Peto
1	PAGE 10	F_Tu	10

SAMPLE	FROM TO LENGTH NOTES		LENGTH	NOTES	ASSAYS		
SAFE DE	FROM	_		NOIED	oz Au	oz Ag	
	0	4.87	4.87	Casing			
585.39	5	6	1	pyritic, fractured rhyolite, irreg striks	0.001		
58540	6	7	1	10 to 3cm	0.001		
58541	7	8	1	" " sptcash + 1ts, clayath	0.001		
58542	8	9	1	grey pyritic, broken regolite, 10 cm sta vien e 8.25	0.007		
58543	9	10	1	breeciated rhyolite, pyrite + cluy, stavits to 3mm 30ACA	0.001		
58544	10	11	1	grey preceived rhyolite, few strutts	0.002		
58545	11	12	1	grey pycific feldspor porphyry shydite	0.002		
58546	12	13	1	area strongly argillic (clan) rhustite 30% coreloss	0.001		
58547	13	14	1	grey pyritic vhyolite, 10em carb vite 13.9m, clayt carb	0.001		
58548	14	15	1	fault gouge, clay + hematite, sem carl vite 14.2	0.001		
58549	15	16	1	dk green preceivated andesite, chlort heme fite matrix	0.002		
58550	16	17	1	prescipled andesite, chlosalti, no prite	0.001		
58601	17	18	1	audente Bx, vare star its, chlor altin	0.00/		
58602	18	19	1	anderite Bx	0.001		
58603	19	20	1	anderite Bx, sty+ calcite + siderite replacement Bx 19.5-19.9	6.040		
58604		21	1	andesite porphyry, vare strutts, no pyrite	0.004		
58605		22	1	anclesita porph.	0.001		
58606	104 H 102 L	23	1	andraite porch kin ab vite			
58607		24	1	andinite porph few sta vits bleached andenite porph stavits 40'ACA, chilorthem altri	0.003		
58608		25	1	andesite porph, fractures 0-10° A CA	0.001		
58609	25	26	1	mottled anderite porph, patchy hematite a Itm	0.002		

PROPER	RTY	VENNER		
DRILL	HOLE	NO.	22	
DRILL	TYPE	e destrementes	NQ	
DATES		21-	22 JAN 1988	

1

DRILL	HOLE	LOG	æ	ASSAYS
LOCATI		12SE	8	0+265
ELEVAS	TION	15	09	m
BEARIN	NG	No	RTI	н
DIP	-	- 45	0	

ł.

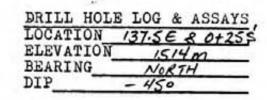
LENGTH	45.7m
% RECOVERY	100 %
LOGGED BY_	7. Peto
PAGE 2 OF	Two

.

SAMPLE	FROM	то	LENGTH	NOTES		ASSAYS	
	FROM		DBROIN		oz Au	oz Ag	
58610	26	27	1	green sred anderite porphy broken stavits, hematite alt	0.020		
58611	27	28	1	· · · · · · · · · · · ·	0.002		
58612	28	29	1	clkgrein andesite posph, few stateast vits	0.002		
58613	29	30	1		0.002		
58614	30	31)	andesite porph	0.001		
58615	31	32	1		0.001		
58616	32	33	1	sween to veddish andesite poph, patchen hematite ath	0.001		
58617	33	34	1	green to reddish anderite poph, patchy hematite ath dt green anderite poph	0.001		
58618	34	35	1		0.001		
586 19	35	36	1	" " " \$ 1 1 1 35.7	0.001		
58620	36	37	1	andesite purph	0.001		
58621	37	38	1		0.001		
58622	38	39	.1		0.001		
58623		40	1	" " fens irres cash frais	0.001		
58624		41	1	" " few irreg cash frais	0.001		
586 25	and the second second	42	1	At come presented anderite hemabite alter stavits	0,020		
58626		43	1	Ak green preciated andesite, hematite alter, sta vits vedegreen " posph, hematite alter	0.007		
58627	43	44	1	andente porph	0.00/		
	44	45	1	" SVWA PTIC IDC	0.00/		
58628	4.87	45:12	9.53	fractured, pyritic, argillic vhyslite cherty gry 3t3 vits	0.370		
	14.3	19.9	5.6	Fault tonse, 14.3 chloritic, argillic anderite Bx,			
7.12	19.9	45.7	25.6	anderite porphyry, hematitic sections, chilor altri			

PROPER		VEN	INER
DRILL	HOLE	NO.	23
DRILL		-	NO
DATES		22 -	23 JAN 1988

Ĕ.



11.0

LENGTH_	45.7m Sofeet
% RECOVE	RY /00
LOGGED B	Y P.Peto
PAGE / OF	Two

.

SAMPLE	FROM	TO	LENGTH	NOTES	· · · · · · · · · · · · · · · · · · ·	ASSAYS	
	0	4.27	4.27		oz Au	oz Ag	_
58630		5	1	dkgreen andesite porph	0.005		+
58631	5	6	1	" " " " ISem sto vale 6m	0.004		+
58632	6	7	1	"" " irreg ourle vits	0.007		
586 33	7	8	1	altered anderite	0.005		
586 34	8	9	1	weakly preceived andesite, 10 cm sart ite 8.7m			
58635	9	10	1		0.003		
586 36		11	1	" "few cash vits	0.005		
586 37	11	12	1		0.004		
58638	12	13	1	" " chlorath	0.003		
58639	13	14	1	1, 1, 1, 1, 1	0.018		
58640	14	15	1	11 11 U	0.011		
58641	15	16	.1	altered underite porph	0.029		
58642	16	17	1	dk green preceivated anderite, irreg. Staviktesman			
58643	17	18	1	attered anderite porph, irreg carbt " "	0.001		
586 44	18	19	1	desnounderite noral sestant alle use usered alle	4 002		
58645		20	1	dkgreenanderite posph, scientit e 18.8 45°ACA, clibr	0.008		-
586416	20	21	1		0.009		+
58647		22	1	andenite porph	/		+
586 48		23	1	" lasing parties	0.004		-
586 49	1	24	1	" ", few irreg carber 11ts " ", strutte 23.1m, chilor frais	0.000		+
58650		25	1	", chlos frac's, irregeast vits	0.002		-

PROPER		VE	NI	VER	
DRILL	HOLE	NO.		23	
DRILL	TYPE		1994 C	NO	
DATES		22-2	3,	JAN 1988	

DRILL HOLE LOG & ASSAYS LOCATION 137.5E 8 0+255 ELEVATION 1514 m BEARING NORTH DIP - 45°

......

LENGTH_	150 feet
% RECOVERY	100
LOGGED BY	P.Peto
PAGE ZOF	Two

.

....

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	
					oz Au	oz Ag	
58651	25	26		dkgreen, altered andesite Bx	0.001		
586.52	1000000-00-0	27		" " , irveg statcarly vita	0.017		
58653	27	28		altered underite BX, drusy staval e 27.2m	0.024		
58654	28	29	1	dkyreen, fractured anderite posph, irreg carbults	0.001		
58655	29	30	1	" " staven to zane) 29.65	0.001		
58656	30	31	1	" , hematite seums, itreg cash itts	0.001		
58657	31	32	1		0.001		
58659	32	34	2	degreen andesite word, stautse 32.6- 33.08 33.5m	0.00/		
58660	34	35	1	et green, andesite posph, sty+ cash vein e 34.3 m to sem	0.003		
58661	35	36	1		0.001		
58662	36	37	,	"" " " " " Cash vite 36.4m, weakly Bx "" " " " stateark vitse 37.25m 45ACA, hemetic	0.002		
58663	37	38	1	11 " " " statearly vitse 37.25 m 45 ACA hemetic	0.001		
58664	38	39	.1	degreen anderite bx	0.001		
58665	39	40	1	"" " " ztz vits 45xcA. e.	0.001		
58666	40	41	1	" " " porph	0.001		
58667	41	42	1	" " Bx, ch los + hematite matrix	0.001		
58668	42	43	1	<i>u u u</i>	0.001		
58669		44	1	11 11 11 11	0.003		
58670	1 2 2 2 2 2 2 2	45	1	" " " mol	0.001		
58671		45.75	0.75	" " BX E gtg vein e 45°cH e 45.5m	0.001		
				SYNOPSI'S			
	0	45.75	45.75	dkgreen, attered andesite porph, locally Brd, statearboth			

PROPER	RTY	VEN	NER
DRILL		NO.	24
DRILL	TYPE		ND
DATES		29 gu	n 1988
	11000	0	

**

DRILL HOLE LOG & ASSAYS, LOCATION 170 E & 0+32 \$ ELEVATION 1518 m BEARING 325° Azimuth DIP -45°

LENGTH 4	5.7m isofeet
% RECOVERY	\$100
LOGGED BY	PiReto
PAGE / OF	ONE

.

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	5 C	cocher	m
SALE DE	FROM		DENGIN	NOIES	oz Au	oz Ag	gold	(1906)	
	0	5.8	5.8	CASING (19feet)			0		-
	5.8	7.0	1.2	grey, compact rhyolite, carb vits, 20% coreloss					4
	7.0	7.6	0.6	grey cluy fault gouge					L
	7.6	9.5	1.9	thyslite & fault souge, gtz vein a 8.65-8.40, 90°ACA					L
	9.5	15.5	60	dkgreen (chlorite) altired andesite, minorpy, gy+coshull	5				
	15.5	16.6	1.1	fault gouge					Ē
	16.6	23.0	6.4	altered alk green andesite, clay seame 20.0-20.5m					Ē
	23.0	45.73	22.7	dk green, anderste prophyry, hen fan H seam 34.5, styrne	36.5m				
				a finiregular sty + carle vits , chlor prais					4
5526	8.3	8.65		pyritic sucrta vein in a Hered vhyolite			21		4
5527	9.0	11.0	1.0	footwall, altered andente, statcarh vits			56		1
55 28	11.0	13.0	2.0	attered green andesite			33		L
5529	13.0	15.0	2.0	··· ···			13		L
5530	15.0	17.0	2.0	Clay fault gouge 16.6-16.0 m, altered anderite			103		L
5531	17.0	19.0	2.0	altered clayrich andesite, for curb v 1ts			(3		L
55 32	19.0	21.0	2.0	creen attered auderite " " "			20		Ē
5533	21.0	23.0		green, altered anderite, "" "			156		Ē
5534	34.0	35.0	A sea a sea se	grengreen andesite, 2 5t3 ults, hematite seams e 34.5-34.7			88		Ĩ
5535	36.3	36.7		15 cm & B + carl v N in altered greyandente	-		51		Ē
				is the gradient of the second			~		Ē
	1								ſ
	1								ſ

PROPER	RTY	VEN	NER	
DRILL	HOLE	NO.	25	
DRILL			NQ	
DATES	2	3-25	JANUARY	1988

.

DRILL HOLE LOG & ASSAYS LOCATION 0+60E & 0+85 ELEVATION 1498 m BEARING NoRTH DIP -45°

LENGTH 92.7	Im 304 feet
% RECOVERY	~ 100
LOGGED BY	PiPeto
PAGE / OF	Two

1

12.2

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	
SAFEDE	FROM				oz Au	oz Ag	
- 5	0	5.8	and the second	CABING (Rfeet)			
58672	5.8	7.0	1.2	grey, fractured rhyolite, clay seams, early fraces	0.001		
58673	7.0	8.0	1.0	fault souse	0.001		
58674	8.0	9.0	1.0	Skyreen, preceived andesite	0.006		
58 675	9.0	10.0	1.0	" " " hematite seam 9.5-9.75	0.004		
58676	10.0	11.0	1.0	hematitic anderite Breccia	0.002		
58677	11.0	12.0	1.0	fault gouge 11.0-11.5 m anderite Bx	0.005		
58678	12.0	5.0	3.0	clay + hematite fault gouge, 60% core loss	0.007		
58679	15.0	16.0	1.0	fractured grey pyritic andesite / rhyolite?	0.002		-
58680	16.0	17.0	1.0	bractured andesite BX	0.003		
58681	17.0	18.0	1.0	green & reddish anderite Bx, hematitic	0.001		
58682	18.0	19.0	1.0	hematitic andesite Bx	0.003		
58683		20.0	1.0	anderitic fault souge, clay + py + hematite, coshult	0.007		
58684		21.0	1.0	greyish green, anderite? Breesia, elan alti			
586 85		22.0	1.0	gregist green, andesite Bx, strong clay alti	0.001		
58686		23.0	1.0	alk snew andonto by for obtach vite diserve	0.001		
58687	 A second sec second second sec	24.0		clkgrey, andente bx, few gtstcarb v Its, diss py			
58688		31.0	1.0	de cre, compact, anderite ale alte dise a store	1. 0.007		
58689	-	32.0	1.0	dkgrey, compact, anderite, clayaltin, diss py, stra	0.001		
586 90		34.0		" ", clayalter & statcashulter			
58691	34.0	35.0	-				
58692		39.0	2.0	weakly breeeicted, dk grey andesite, clay altin, shires	0.001		

÷

1

PROPER	RTY	VE	NNE	R	
DRILL	HOLE	NO.		25	
DRILL	TYPE		NO		
DATES		23 -	25 J	ANUA	RY1988

DRILL	HOLE	LOG	&	ASS	SAY	s,
LOCATI		0+6	OE	80	+8	\$ \$
ELEVAT	NOI	14	198	m		
BEARIN	IG	N	rt	h		
DIP		- 4	50	2	1	

LENGTH	304/ 92.7m
% RECOVERY	~ 100
LOGGED BY	Pifeto
PAGE 2 OF	100

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS		
and the States			TPNGIU		oz Au	oz Ag	-	
58693		46.0	2.0	dkgrey, pyritic anderite, irreg stytcart ulks	0.001			
58694	46.0	48.0	2.0		0.004			
58695	48.0	50.0	2.0	" " " clayalti fus stat carb vits	0.003			
58696	50.0	52.0	2.0	" " " weath Bx " "	0.001			
586 97	57.0	59.0	2.0	" " " " moderally Bx, few carb vits	0.001			
58698	60.0	62.0	2.0	over screen purific under te by in part carbults	0.001			
58699		64.0	2.0		0.001			_
58700	66.0	68.0	2.0	clay fault youge & Bx irvey cast vits	0.001			_
58701	68.0	70.0	2.0	clay fault youge & Bx, diss py fault cone andesite Br	0.001			_
58702	70.0	72.0	2.0	н Ч	0.001			_
58703	72.0	74.0	2.0	4 11	0.001			
58704	74.0	76.0	2.0	0 U	100.0		_	
58705	76.D	78.0	2.0	andesitic fauilt Bx, assolution chlorite netrix	0.001			_
58706	78.0	- 80.0	2.0	· · · · · · · ·	100.0			
58707	80.0	82.0	2.0		0.001			
58708	82.0	84.0	2.0	" " , 53+carb BX 83.5- 84.0	0.001		1	
58709		86.0	2.0	over sceen anderite familt Bx, chlor all' st tasbult	0.001			
58710		92.0	1.0	green andesite familt Bx, chlor alk, ght carbolk green andesite Bx, ght carbolts SYNOPSIS	0.001			_
				SYNOPSI'S				-
	0	7.0	7	allined theorists			-	_
	7.0	14.7	7.7	fault zone in rhyslite & endesite				_
	14.7	92.7	78	grey 8 green, fractured anderite, locally brecisted, abtent	Its			

PROPER	TY	VEN	NER	
DRILL	HOLE	NO.	26	
DATES	TITE	26-2	7 Janua	11 1488
			0	0

2.

DRILL HOLE LOG & ASSAYS LOCATION <u>112.5 & 8 0+5</u>0N ELEVATION <u>15/2 m</u> BEARING <u>NORTH</u> DIP <u>- 450</u>

LENGTH 48.8	m 16ofeet
% RECOVERY	100%
LOGGED BY	P.Peto
PAGE / OF	ONE

	man	mo	TEMORIT	NOTES		ASSAYS	
SAMPLE	FROM	TO	LENGTH	NOTES .	oz Au	oz Ag	
	0	5.49	5.49	CHSING (18 feet.)			
58711	6	8	2	dkgreen, highly fractured, audenitic conglomerate	0.001		
58712	8	10	2	" conclomente, clant grit matrix	0.001	-	
58713	10	12	2	" conglomerate, altered, fault zone?	0.001		
58714	12	14	2	" ", argillic matrix, minor pyrite,	0.001		
58715	14	16	2		0.001		
58716	16	18	2	" " alequetrix, minor pyrite, poorly sorted	0.001		
58717	18	20	2		0.001		
58718	20	22	2	11 11 11 11	0.001		
58719	22	24	2		0.001		
58720	24	26	2		0.001	-	
58721	26	28	2	" " weakly puritic, clay alta	0.001		
58722	28	30	2	· · · · · · · · · · · · · · · · · · ·	0.001		
58723	44	46	2	avgillacions Conclonusate, ribbonbunded styreash VN	0.001		
	5.49	48.78		dkyrey grun, poorly sorted volcanic conglomerate			
				Consisting of subrounded to rounded anderite clasts,			
				clan rich assillies to scitta matrix. This coul same	·p		
				e 37.5, 37.11, 39.9. Weath altered 9-16m, diss pyrite, clay alth, sty + carb vits			•

PROPE	RTY	VEN	NER	
DRILL	HOLE	NO.	27	
DRILL		(A	NQ	
DATES	2	8-20	7 JANUA	<u>ey1988</u>

DRILL HOLE LOG & ASSAYS LOCATION 182 E & 0+26.5 ELEVATION ~ 1536 m BEARING 330 Azimuth DIP -45°

5.7m isofeet
100
P. Peto
ONE

÷

SAMPLE	FROM	то	LENGTH	NOTES	- A.	ASSAYS ;	Geoch	1
	0	3.65	3.65	CASING	oz Au	oz Ag	gold	(ppb)
	3.65	15.7	0.63	beige, highly fractured, rhyolite, cutby earbs clay see	,			
58741	5.7	16.1	0.4	Paritic fault souce à andente clasts zien et vein	0.003			
58742	16.1	18.0	1.9	pyritie fault gonge è anderite clasts, zien strien dark green, chloritie anderite Bx, irreg carboults,	0.009			
58743	<i>B</i> .0	20.0	2.0				98	
58744	20.0	22.0	2.0	" " fractured andesite			38	
58745	22.0	24.0	2.0	" " altered andesite, irrey stz-carby 15			60	
58746	24.0	26.0	2.0.	" " argillic andesite fault Bx, " " " " andesite Bx				
58747		28.0	2.0	" " anderite Bx			37	
58748	32.0	33.0	1.0	11 11 11 14, styteastrults			10	
587 49	33.0	34.0	1.0	" " andesite purph, cut by statcarb vilts			9	
58750	34.0	35.0	1.0				8	
5523	38.0	40.0	2.0	de green andesite, chlos altin, clay secons,			18	
5524	40.0	40,5	0.5	" " " + sty + cash Vein			16	
5525	41.0	42.0	1.0	clk green anderite Bx			40	
				SYNOPSIS				
	3.65	16.1		fractured, argillic rhyslite & earlyfrais & clay seams				
	16.1	22.5		fault zone in chloritic, pyritic andente				
	22.5	27.4		bractured & preceipted andesite porcher.				
	27.4	45.7		fractured & brecciated andesite porphyry alk green, andesite porphyry, irreg. gts+carb vits				
	1		-					

•

PROPER	RTY	VEI	WER	2
DRILL	HOLE	NO.	28	
DRILL	TYPE		NQ	
DATES	30 J	AN to	4Feb	1988

÷,

DRILL HOLE LOG & ASSAYS LOCATION 187 E 8 0+555 ELEVATION 1533 m BEARING 55° AZIMUTH DIP - 45°

7m 340 feet
100
P. Peto
ONE

4

A. (2)

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	Geoch	em
SALE DE					oz Au	oz Ag	fold	Peb
	0	4.27	4.27	CASING (14 feet)			0	-
	4.27	28.0		rusty fractured rhyolite (stat feldspar porphyry)	-			
				CASING (14 feet) rusty fractured rhydite (stat feldspur porphyry) ent by this clay seams, irreg carb frac's, minor pyrite				
	28.0	.30.2		ent by then clay seams, irreg carb fracs, nemor pyrile erystal + affe?), pyritie + clay matrix grey, v. fn. gr. gh - feld x hydlite porphyry altered, green jch br + clay) anderite minorpy grey, v. fn. gr., x hydlite, locally presented & fract	1			
	30.2	52.0		aven v. m. er. ch - leld rhablite porphyre	1			
	52.0	57.0		altered, even ich br + clan) anderite minorpe	vite			
	57.0	103.66		gren v. E. dr. shnolite locally preciateds frag	fused			
5557	52	54	2	aveen anderite chlost hemeste + clayaltri				
5558	54	56	2	" " " " " few carbol	A		440	
5559	56	57	1	green anderite, ch los + hemaste + clayaltri """"""""""""""""""""""""""""""""""""			210	
1				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			45	
		<u> </u>					-	
					-			
	+	<u> </u>			1		-	
	+							
								t
	+'	├ ──′	++					t
100000000000000000000000000000000000000		├ ──′				1		+
	'	├ ───′				+		+
		 '				+		⊢
	-	/						╞
		1000						

PROPE	RTY		VE	JNE	R	
DRILL	HOLE	NC).	20	7	
DRILL	TYPE		N	0	-	
DATES	45	5	Fo	buA	RYK	188
DATES	4-	5	Fe	buA	RYK	68

-

DRILL HOLE LOG & ASSAYS LOCATION //2E & O+0 65 ELEVATION /SO9 BEARING VERTICAL DIP - 90*

90 feet
~ 100
P.Peto
Three

÷

2. 1

SAMPLE	FROM	то	LENGTH	NOTES		ASSAYS	Scoch	em
					oz Au	oz Ag	Gold	Polo
58553		56	/	hematitic compact andesete, Sem clay seam	0.002		80	"
58554		57	1	" " few carb-vits, 25% core loss?	0.002		70	
58.555	57	57.9	0.9	hematitic compact anclesite, sem clay seam """, for carb-v1k, 25% core loss? """, sty+carb-v1ts, diss py	0.001		50	
				SYNOPSIS				
	0	8:53		overburden, rholite fault souse, cusing (24/1+)				
	8.53	16.85		strongly altered clay + chlos + p andentic? fault			_	
	16.85	18.0		overburden, rhyolite fault gouge, cusing(24/t) strongly altered clay + chlost of andentic? fault gouge, hanging wall - curbonate + chlorite replacement Breecia				
	18.0	18.8		fault zouge				
	18.8	36.0		dk green, altered andesite locally hematific				
	36.0	57.9		attered anderite Bx, largely hematitic &				
				dk green, altered andesite locally hematific attered andesite Bx, largely hematific & locally breeciated, fractured & styt carle vits.			-	
		_						
							-	

1

. **

PROPER	RTY	VE	NNER	
DRILL	HOLE	NO.	29	
DRILL			NO	
DATES	A-	SFE	huAKY	1988

DRILL HOLE L	OG & ASSAYS
	12E865
ELEVATION	1509 m
BEARING	NONE
DIP -90"	VERTICAL

.....

LENGTH 57.9 m 190feet % RECOVERY ~100 LOGGED BY <u>P.Peto</u> PAGE 1 OF Three

۳3

Y

SAMPLE	mon		TRNOMU	NOTES		ASSAYS	CEOCH	1EM
SAMPLE	FROM	TO	LENGTH		oz Au	oz Ag	gold	
	0	8.53	8.53	CASING (28 feet) w side of trench			-	
5560	9	10	1	pyritic fault gouge 25% core loss daugthin			55	-
561	10	12	2				35	
5562	12	/3	1	strongly altered chyoliter?, stavits, clayseams, by			115	
5563	13	14	1	aritic churdite strong clan irreg early lits Bx			130	
5564	14	15	1	men-creen auderite Bx, clust chlost pratting			60	
5565	15	16.85	1.85	grengereen anderite Bx, clung + chlos + praltin "" " " " " " " " " " " " " " " " " " "			90	
5566	16.85	18.0	1.15	anterite? + calcite + chlorite replacement Breceia			20	
5567	18	19	1	fault gouge 18-18.6, chloritic anderite 18.6-19.0			190	
5568	19	20	1	chloritic anderite			40	
5569	20	21	1	andesite posphere			60	
5570	21	22		breeciated anderite Ehematite seam			30	
5571	22	23	.1	attired underite			55	
5572	23	25	2	altere Sanderite, 15 cm stavin + 30 cm hundite + day seum			1000	
5573		26	1	dkgreen andente porphyry			30	
5575		27	1	fractured chlorific andesite			20	
55 76		28	1,	"" " "			35	
55 77		30	2	" and it limities to Hanne 29-291 three	Lee		220	
55 78		31	1	" andesite, hemstitic fault gouge 29 29.6, 20 tore) breeciated andesite, chlor + alay alti			35	-
55 79		32		in in in the state of the state			250	_
5580	32	33	1,	fractured anderite, few carb vits' hematite alt	0.076		2620	-
5581	33	34	+ ; +	veddish green preceiated andesite, hematite rutrix			25	

U

PROPER			NER	
DRILL	HOLE	NO.	29	
DRILL	TYPE	NO	Q	
DATES	4	5 Feb	4AK-1 19	88

E LOG & ASSAYS
112E 8 0+065
1509
VERTICAL
-90*

· (·

% RECOVERY	100 .
LOGGED BY	P.Peto
PAGEZOF	Three

SAMPLE	FROM	то	LENGTH	NOTES		ASSAYS	GEOCHE	M
SAMPLE	FROM	10	TENGIN	r yang mangan	oz Au	oz Ag	Sold	Pok
5582	34	35	1	hematitic andesite			145	"
5583	35	36	1	altered andesite, few irreg. sty carb vits	0.094		3240	
5584	36	37	1	weakly preceived under to " " "			15	
5585	37	.38	1	veddish green andesite, chlorthemmatrix, corb+Flourite			Б	
5586	38	39	1	hematitie anderite Bx, carbolts			15	
5587	39	40	1	· · · · ·			10	
55 88	40	41	1	11 ··· ··			10	
55 89	41	42	1	" " carle 1ts unorganite			20	
5590	42	43	1	" " carb 1ts unorganite hematitic crastle Breecia E carb frais			25	
5591	43	44	1	" andesite breezie , carle frac's			20	
5592	44	45	1	hematitic andesite			80	
5593	45	46	1	dkgreen, crushed, altered undesite			290	
55 94	46	47	.1	reddish green, crushed anderite, early 115	-		160	
5595	47	48	1	" " " nimor pyrite			65	
5596	48	49	1	green altered andesite crackle Bx, hum in past.			30	
55 97	49	50	1	hematitic anderite cruckle Bx, each vits			60	
5598	50	51	1				140	
55 99	51	52	1	altered, crushed andesite, few sty+carb vHs			70	
5600	52	53	1	hematific crushed anderite " "			35	
58551	53	54	1	de ved, compact, hemabilic anderite, disspy, controll	0.003		120	
58552		55)	hematitic andente, carb vHs, 54.57-55 fault Bx	0.002		60	
				33% core loss			-	

PROPER	RTY Y	VENN	VER	
DRILL		NO.	9+0	13
DRILL	TYPE		BQ	
DATES		198	3	

Ť.

DRILL	HOLE	LOG	&	ASSAYS
LOCATI	ION			
ELEVAT	NOI			
BEARIN	VG			
DIP				
	Contraction of the second		100	1. St. 1. St. 1.

£77

LENGTH	in the second second
% RECOVERY	design of the local division of the local di
LOGGED BY_	P. Peto
PAGE / OF	Two

•

- - 5

SAMPLE	FROM	то	LENGTH	NOTES		ASSAYS	
SAPIT DE	FROM	10	TRUCIU		oz Au	oz Ag	
				Additional CORE samples collected from 1983 HOLES			
58724	47	48	1m	DDH83-9 brecciated andesite stavits	0.001		
58725	48	49	1	" " " " ^y Ou	0.001		
58726	49	50	1	<u>u u</u> u u	0.001		
58727	54	55	1	" " stytcarboults	0.001		
58728	55	56		" statearh breeciated andesite replacement vite	0.120		
58 729	15.0	15.5	0.5	DBH 83-11 pink sty+carb vein in green andente	0.001		
58730	25	27	2.0	" anderite porph = 9 st vits	0.001		-
58731	35	37	2.0	" dark green fault Bx E sts vits	0.001		
58732	91.5	93.0	1.5	" 13 ct vits in altered anderite porph	0.002		
58733	15.1	16.1	1.0	DDH 83-12, sty+ carb Bx in fault	0.005		
58734	24.1	25.1	1.0	" afferred undesite 6 stavits	0.001		
58735	84.15	86.15	2.0	" chloritic anderite, 55+carl Bx zone. 85.5	0.001		
58736	88.0	89.0	1.0	" altered underite + carle v15	0.004		
58737	91.5	92.5		" " + chlosaltn	0.001		
58738	107.8	106.3	1.5	DDH 83-13, altered anderite out by 52+ carbo Fluoriter			
58739				altered andesite, some sty + carte vits, DDH 83-13	0.001		
58740		1. M		" " clan altre "	0.001		
				, ang ana			

.

PROPER			NNER	
DRILL	HOLE	NO.	7 to 19	
DRILL	TYPE	1.10	BQ	
DATES		198.	3	

		LOG	å	ASSAYS
LOCATI	ION		111	
ELEVAT	NOIT			d
BEARIN	NG T			
DIP	A NOTE 21			11 - Contraction
			-	

LENGTH	
% RECOVERY	
LOGGED BY	P. Peto
PAGE 2 OF	Two

SAMPLE	FROM	TO	LENGTH	NOTES		ASSAYS	GEOCHEM
					oz Au	oz Ag	gold pp
5536	13.0	13.5	0.5	DDH 83-7			38
5537		18	1	a .			77
55 38	31.6	32.6	1			100	101
55 39	37.7	38.6	1				33
55 40	66.D	67.5	1.5	" Paritic faultzone			54
5541	14.8	15.9	1.1	DDH 83-8 indicite 35th vits			32
55 42	121.5	123.5	2.0	DDH 83-15 andesite crackle Bx, skteasht FI v 1ts			98
5544	37	39	2.0	DDH 83-15 andesite crackle Bx, styteerb+ Fl v lts DDH 83-16 andesite crackle Bx, carb v lts			38
5545	39	41	2.0	DDH 83-16 " "			60
5546	41	43	2,0	" " ", statcast vita			65
55 47		44.5	1.5	" " anderite " " " "			70
5548		81	2.0	11 11 11 11 ", fault zouge 79-79.5			10
5549		83	2.0				60
5550		85	2.0	" " " min or pyrite	+		9
5551	118	119	1.0	DDH 83-16 crackle Bx anderite " "			20
5552		137	2.0	n n n n n n n n			25
5553		139	2.0	" " Auchenite pople allor + a alter			20
5554	139	141	2.0	" " Andesite porph chlor+pratten " " Andesite cractle Bx			20
5555		143	2.0				20
5556		53	2.0	DDH 83-19 bleached pyritic fault pre è stachests			95

(

-20-

APPENDIX # 1

. .

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 14 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Jon. 18/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: ROCKS AU - 10 GH REGULAR ASSAY. ASSAYER: .C. Leong, CERTIFIED B.C. ASSAYERS

TIGRIS MINERALS PROJECT-VENNER CLAIMS File # 88-0104 Fage 1

SAMPLE#	AU oz/t
E58301	.001
E58302	.001
E58303	.047
E58304	.001
E58305	.001
E08000	.001
E58306	.001
E58307	.001
E58308	.003
E58309	.004
E5B310	.053
E58311	.021
E58312	.007
E58313	.002
E58314	.001
E58315	
E09210	.001
E58316	.001
E58317	.006
E58318	.002
E58319	.003
E58320	.012
E58321	.001
E58322	.010
E58323	.056
E58324	.352
E58325	.267
E58326	.006
E58327	.002
E58328	.001
E58329	.002
E58330	.002
E58331	.004
E58332	.131
E58333	.001
E58334	.001
E58335	.002
E58336	.001

TIGRIS MINERALS PROJECT-VENNER CLAIMS FILE # 88-0104 Page 2

٨

SAMPLER			AU	
			oz/t	
E58337			.002	
E58338			.002	
E58339			.001	
E58340			.002	
E58341			.001	
E58342			.001	
E58343			.001	
E58344			.001	
TRENCH	WALL	187.5	.013	

+

• ...

.

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 15 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Jan 20/08.

ASSAY CERTIFICATE

SAMPLE#	AU**
	oz/t
FOZAE	001 11:001 147.5E 10N-8N
58345 58346	.001 11000 1112
58347	
58348	.001
 58349	.001 2.11-011 AL
38347	.028
58350	.001
58351	.001
58352	.008
58353	.001
58354	.024 85-105
	10-125
58355	.034.
58356	.005
58357	.001 END
58358	
58359	.004 Treach 137,5 E
58360	.003
58361	.003
58362	.003
58363	.068.
58364	.096*
58365	.007
58366	.004
58367	.001
58368	.016 Trench 11.58 10-211
58369	.001
58370	.001
58371	.001
58372	.001
58373	.001
58374	.001
58375	.001
58376	.001
58377	.005
58378	.001
58379	.001
58380	.001

.

TIGRIS MINERALS CORP. PROJECT-VENNER FILE # 88-0115 Page 2

٠

	SAMPLE#	AU**	
		oz/t	
	58381	.005	
	58382	.003	
	58383	.003	
•	58384	.003	
	58385	.003	
	58386	.003	
	58387	.002	
	GRAB TRECH 1+12.5E	.002	
	GRAB TRECH 137.5	.017	
	GRAB CALCITE 1+52E	2.770	
	OUTCROP 1+50E	.071 3	

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 19 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Jan 22/88

ASSAY CERTIFICATE

ASSAYER: C.LEONG, CERTIFIED B.C. ASSAYERS

TIGRIS MINERALS CORP. File # 88-0141

SAMPLE#	AU**
	oz/t
U SOARO	.001 TIME, 137.5E 76-751
H 58458	
H 58459	.001
H 58460	.001
H 58461	.001
H 58462	.007
H 58463	.001
H 58464	.002 End
H 58465	.002 End .001 Trank 137.5 E 40-425
H 58466	.001
H 58467	.001
H 58468	.001
H 58469	.001 6.0
H 58470	.001 End 100 E 705-725
H 58471	.004
H 58472	.002
H 58473	.001
H 58474	.002
H 58475	.001
H 58476	.001 (
H 58477	.001 : . \
H 58478	.002 Trent. 0. COE 67-555
H 58479	.001
H 58480	.001
H 58481	.001
H 58482	.001
H 58483	.001
H 58484	.001
H 58485	.001
H 58486	.001 1 27 775
H 58487	.001 _ I.od _ 75-775
H 58488	.002 Trends 1+00E 35-375
H 58489	.001

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 19 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Jan 22/83

ASSAY CERTIFICATE

TIGRIS MINERALS CORP. File # 88-0137 Page 1

S	AMPLE#	AU**			
		oz/t			12.0 000000
		1	100 de	112.5E	22 - 2711
	58388	.002			
Е		.003			
E	58390	.007			and research
E	58391	.004			73-7011
Е	58392	.048			
-			E.I		
E	58393	.002	rug		10-1211
E	58394	.011	1 Cenes	112.55	10-1613
E	58395	.004			
E	58396	.001			
Е	58397	.004			
E	58398	.011 5	. (un fr	20.2211
E	58399	.003	- 10	115.20	- ()- L-
_	58400	.002 T.	endi 1	112.56	30- 37 M
	58401	.002			
	58402	.002			
-	00402	.002			36-385
E	58403	.018			
	58404	.006			
	58405	.002			
	58406	.001			
E	58407	.001			
-	50407	.001			
Ε	58408	.001	T.	-	9.202
E	58409	1 S S S S S S S S S S S S S S S S S S S	10		
	58410	.002 .1 /	ort.	102+0	25-712
	58411	.003			10
	58412	.012			12-16 -
-	00112		÷.		
E	58413	.001 :)		
E	58414	.003 11	roads	0+75E	0-25
E	58415	.001	1000900		
E		.001			
	58417	.001			
	58418	.007			
	58419	.003			
	58420	.001			
Ε	58421	.001			
Ε	58422	.001	÷		
E	58423	.001 F	1.	19.70	5
		2 -		10 .	

TIGRIS	MINERALS	CORP.	FILE #	88-0137	Page 2
	SAMPLE#		AU*	*	
			oz/t	t.	
	E 58424				onene van Mil
	E 58425		.001		
	E 58426		.003		
	E 58427		.002		
	E 58428		.003	3	
	E 58429		.001	1	2-6.1
	E 58430		.020		
	E 58431		.001	1	
	E 58432		.001		
	E 58433		.001		
	E 58434		. 001		
	E 58435		.001		45-65
	E 58436		.001		-1
	E 58437		.002		
	E 58438		.002		
			.002		
	E 58439		.003	5	
	E 58440		.003		
	E 58441		.003	3 - 1	
	E 58442		.002		
	E 58443		.001	Trank or	25E 8-6N
	E 58444		001		
	E 58445		.001		
	E 58446		.001		
	E 58447		.001		
	E 58448		.001		
	E 00440	×.	.002	5	
	E 58449		.007	7	6 2 . 6 -
	E 58450		.014	1	1995 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
	E 58451		.007	1 . A. 14.	1.5 25 - 95
	E 58452		.003	5	
	E 58453		.002	2	
	E 58454		.001		
	E 58455	*2	.003		
	E 58456		.005		
	E 58457		.006		14. 110
	TRENCH 1+	SOE 2ME	.004	0-25	11-10-
				11 1 5 -	gends
~	TRENCH 1+	SOE 4ME	.025	4-62	gendo
	TRENCH 1+	SOE 4MEA	.149	· 2.4E	

-

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 27 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Jan 29/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Core AU++ BY FIRE ASSAY FROM 1/2 A.T. ASSAYER: C. LEONG, CERTIFIED B.C. ASSAYERS

TIGRIS MINERALS CORP. PROJECT-VENNER CLAIM File # 88-0242

SAMPLE#		AU**
		oz/t
DDH88-25	58672	.001
DDH88-25	58673	.001
DDH98-25	58674	.006
DDH88-25	58675	.004
DDH88-25	58676	.002
DDH88-25	58677	.005
DDH88-25	58678	.007
DDH88-25	58679	.002
DDH88-25	58680	.003
DDH88-25	58681	.001
DDH88-25	58682	.003
DDH88-25	58683	.007
DDH88-25	58684	.003
DDH88-25	58685	.001
DDH88-25	58686	.001
DDH88-25		.001
DDH88-25	58688	.002
DDH88-25	58689	.001
DDH88-25	58690	.001
DDH88-25	58691	.001
DDH88-25	58692	.001
DDH88-25	58693	.001
DDH88-25	58694	.004
DDH88-25	58695	.003
DDH88-25	58696	.001
DDH88-25	58697	.001
DDH88-25	58698	.001
DDH88-25	58699	.001
DDH88-25	58700	.001
DDH88-25	58701	.001

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 27 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb. 1/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: CORE/ROCK AU++ BY FIRE ASSAY FROM 1/2 A.T.

TIGRIS MINERALS CORP. File # 88-0232

	SAMPLE#	AU**		
		oz/t		
	L 5501	.031		
	L 5502	.019		
	L 5503	.016		
	L 5504	.035		
	L 5505	.075		
	L 5506	.019		
	L 5507	.001		
	L 5508	.009		
	L 5509	.001		
	L 5510	.001		
	L 5511	.013		
	L 5512	.146		
1	L 5513	.165	2	58354 - 55
	L 5514	.154	2	1
	L 5515	.011	7	
	L 5516	.031		
	L 5517	.077		
	L 5518	.022		
	L 5519	.005		
	L 5520	.081		
	L 5521	.003		
	L 5522	.005		
	58702	.001		
	58703	.001		
	58704	.001		
	58705	.001		
	58706	.001		
	58707	.001		
	58708	.001		
	58709	.001		
	58710	.001		

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 28 1988 852 E. HASTINGS ST. VANCOUVER B.C. VAA 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 1/88

ASSAY CERTIFICATE

TIGRIS MINERALS CORP. File # 88-0250

S	AMPLE#	AU**
		oz/t
E	58711	.001
E	58712	.001
Ε	58713	.001
Ε	58714	.001
E	58715	.001
E	58716	.001
E	58717	.001
E	58718	.001
E	58719	.001
	58720	.001
E	58721	.001
	58722	.001
E	58723	.001

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 27 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 . PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb. 2/88...

ASSAY CERTIFICATE

- SAMPLE TYPE: Core AU++ BY FIRE ASSAY FROM 1/2 A.T.

SAMPLE#		AU**	
		oz/t	
DDH88-21		.003	6-7m
DDH88-21		.002	
DDH88-21		.003	
DDH88-21	58504	.001	
DDH88-21	58505	.002	
DDH88-21	58506	.002	
DDH88-21		.003	
DDH88-21	58508	.005	
DDH89-21	58509	.003	
DDH88-21	58510	.008	16-17m
DDH88-21	58511	.001	
DDH88-21		.001	
DDH88-21	58513	.001	
DDH88-21	58514	.001	
DDH88-21	58515	.001	
DDH88-21	58516	.004	
DDH88-21	58517	.002	
DDH88-21	58518	.006	24-25m
DDH88-21	58519	.003	
DDH88-21	58520	.001	
DDH88-21	58521	.001	
DDH88-21		.002	
DDH88-21		.001	
DDH88-21		.001	
DDH88-21	58525	.009	31-32m
DDH88-21		.001	
DDH88-21		.001	
DDH88-21	A CONTRACTOR OF	.001	
DDH88-21		.001	
DDH88-21	58530	.001	
DDH88-21	58531	.001	
DDH88-21	58532	.001	
DDH88-21		.002	
DDH88-21		.008	41-42m
DDH88-21	58536	.003	
DDH68-21	58537	.001	43-44m

.

SAMPLE#		AU**	
		oz/t	
DDH68-21	59579	.001	44-45m
DDH88-22		.001	5-6 m
DDH88-22		.001	5 6.
DDH88-22		.001	
DDH88-22		.007	8-9m
001100 22		• ~ ~ /	
DDH88-22	58543	.001	
DDH88-22	58544	.002	
DDH88-22		.002	
DDH88-22	58546	.001	
DDH88-22	58547	.001	
DDH88-22		.002	
DDH88-22	58549	.002	
DDH88-22	58550	.001	16 - 17m
DDH88-22	58601	.001	17-18M
DDH88-22	58602	.001	
DDH88-22	58603	.040	19-20 m
DDH88-22	58604	.004	
DDH88-22	58605	.001	
DDH88-22	58606	.001	
DDH88-22	58607	.003	
DDH88-22	Come of the come o	.001	
DDH88-22		.002	
DDH88-22		.020	26-27 m
DDH88-22		.002	
DDH88-22	58612	.002	
DDH88-22	58613	.002	
DDH88-22	A second realized and the real second	.001	
DDH88-22	58615	.001	
DDH88-22	58616	.001	
DDH88-22	58617	.001	
DDH88-22			
DDH88-22	58619	.001	
DDH98-22	58620	.001	36-37m
DDH88-22	58621	.001	
DDH88-22	58622	.001	
DDH88-22	58623	.001	39-40 m

.

TIGRIS MINERALS CORP. PROJECT-VENNER CLAIM FILE # 88-0233 Page 3

SAMPLE#		AU**	
		oz/t	
	50/04	0.01	a
DDH88-22		.001	40 - 41m
DDH88-22		.020	42 - 43m
DDH8S-22		.007	42 - 43 m
DDH88-22		.001	
DDH88-22	58628	.001	
DDH88-22	58629	.370	45.0-45.72
DDH88-23		.005	4-5m
DDH88-23		.004	7-311
DDH88-23		.007	
DDH88-23		.007	
DDH88-23	16000	.005	
DDH88-23		.013	8-9m
DDH88-23		.003	
DDH88-23	58636	.005	
DDH88-23	58637	.004	
DDH88-23	58638	.003	
DDH88-23	50/70	.018	13-14m
			10
DDH98-23		.011	17 11
DDH88-23		.029	15-16 m
DDH88-23		.112	16-17m
DDH88-23	58643	.001	
DDH88-23	58644	.003	
DDH88-23		.008	19-20m
DDH88-23		.009	A. 1. 1944 - 19
DDH88-23		.004	
DDH88-23	CONTRACTOR OF A CONTRACTOR	.006	
			23-24m
DDH88-23		.030	23-29m
DDH88-23		.002	
DDH88-23	58651	.001	
DDH88-23	58652	.017	26-27m
DDH88-23	58653	.024	27 - 28 m
DDH88-23	58654	.001	
DDH88-23		.001	
DDH00-23	10017	.001	
DDH88-23	58660	.003	34-35m

1

m

TIGRIS MINERALS CORP. PROJECT-VENNER CLAIM FILE # 88-0233 Page 4

20 C 10 C

SAMPLE#		AU**	
		oz/t	
DDH88-23	58661	.001	
DDH88-23	58662	.002	
DDH88-23	58663	.001	
DDH88-23	58664	.001	
DDH89-23	58665	.001	
DDH88-23	58666	.001	
DDH89-23	58667	.001	
DDH88-23	58668	.001	
DDH88-23	58669	.003	
DDH88-23	58670	.001	
DDH88-23	58671	.001	45.0 - 45.75m

N

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 01 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 4/88

ASSAY CERTIFICATE

TIGRIS MINERALS File # 68-0277

SA	MPLE#	AU** oz/t				
E	58724	.001				
E	58725	.001				
	58726					
	58727	001				1940 - 1940 (1945)
E	58728	.120	4	DDH	83 - 9	55-54M
E	58729	.001				
E	58730	.001				
E	58731	.001				
E	58732	.002				
E	58733	.005				
E	58734	.001				
E	58735	.001				
	58736	.004				
Е	58737	.001				
E	58738	.004				
E	58739	.001				
E	58740	.001				
	58741	.003				
	58742	.009				

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 04 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb. 9/88...

GEOCHEMICAL ANALYSIS CERTIFICATE

- SAMPLE TYPE: CORE/ROCK AU* ANALYSIS BY AA FROM 20 GRAM SAMPLE.

TIGRIS	MINER	RALS	File	#	88-0329
	S	AMPLE#	AL	j*	
				de	
		5523		18	
		5524		16	
		5525		10	
	L	5526		21	
	L	5527	:	36	
	L	5528	3	53	
	L	5529	1	13	
		5530	10	20	
		5531		13	
	L	5532	2	20	
	L	5533	15	56	
		5534	6	88	
	L	5535	5	51	
		5536		58	
	L	5537	7	77	
	L	5538	10	1	
	L	5539	3	53	
		5540		54	
		5541		52	
	E	58743	5	8	
		58744		38	
		58745		0	
		58746		5	
		58747		57	
	E	58748	1	Ů.	
	E	58749		9	
	E	58750		8	
		58490	940	00	
	E	58491	60)7	

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 05 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: FEB 05 1988

GEOCHEMICAL ANALYSIS CERTIFICATE

- SAMPLE TYPE: Pulp AU+ ANALYSIS BY AA FROM 20 BRAN SAMPLE.

TIGRIS MINERALS CORP. PROJECT-VENNER File # 88-0115R

old assay	SAMPLE#	AU* ppb	convers! on	02/t	
0.026 0.024 0.054 0.068 0.096	58349 58354 58355 58363 58364	236 785 1762 3016 4102	0.0075 0.025 0.057 0.057 0.132		

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 05 1908 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 9/88.

GEOCHEMICAL ANALYSIS CERTIFICATE

TIGRIS MINERALS PROJECT-VENNER File # 88-0104R

	SAMPLE#	AU* ppb	
0.053	E 58310 E 58326	1025 210	0.033

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 9/88

GEOCHEMICAL ANALYSIS CERTIFICATE

> SAMPLE# AU* ppb 0.048 E 58392 2155 0.069

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 18 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 25/88.

ASSAY CERTIFICATE

ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

TIGRIS MINERALS PROJECT-VENNER File # 88-0457

oz/t
.008
.083
.052
.016

ECO-TECH LABORATORIES LTD.

FEBRUARY 16, 1988 CERTIFICATE OF ANALYSIS ETK88-37 TO: TIGRIS MINERALS CORPORATION 2246 Sifton Avenue KAMLOOPS, B.C V12 1AS

ATTENTION: 6. D'Angelo

SAMPLE IDENTIFICATION: 85 CORE AND/OR ROCK CHIP SAMPLES RECEIVED FEBRUARY 12, 1988

10041 E. TRANS-CANADA HWY

FAX: (604) 573-4557

(604) 573-5700

KAMLOOPS, B.C

A5C 513

TELEPHONE:

ET#	6		Description			Au (ppb)	
25	-	1	5542			30	
25	-	2	5543			70	
25		Э	5544			95	
25	-	4	5545			45	
25	-	5	5546			120	
25		6	5547			70	
25	-	7	5548			540	
25	-	8	5549			60	
25		9	5550			60	
25	-	10	5551			20	
25	-	11	5552			25	
25	-	12	5553			20	
25		13	5554			50	
25	-	14	5555			20	
25		15	5556			95	
25		16	5557			440	
25	-	17	5558			210	
25	-	18	5559			45	
25	-	19	5560			55	
25	-	20	5561			35	
25	-	21	5562			115	
25	-	22	5563			130	
25	-	23	5564			60	
25	-	24	5565			90	
25	-	25	5566			20	
25	-	26	5567			190	
25		27	5568	10		40	
25	-	28	5569			60	
25	++	29	5570		-	30	
25	-	30	5571			55	

Page 1

Tigris Minerals Corporation

February 16, 1988

-	ET#		Description		Ац (ррb)	Au (g/t)	Au · (oz/t)
	25 -	31	5572		1000	and and any any and any any any any part has been and but	with pair cars judy and 1 at may had add, and and the
		32	5573		30		
		33	5575		20		
		34	5576		35		
		35	5577		220		
		36	5578		35		
		37	5579		250		
		38	5580		>1000	2.62*	.076
		39	5581		25	100000000	
		40	5582		145		
		41	5583		>1000	3.24*	.094
		42	5584		15		
		43	5585		15		
		44	5586		15		
		45	5587		10		
		46	5588		10		
		47	5589		20		
		48	5590		25		
	25 -	49	5591		20		
		50	5592		80		
		51	5593		290		
	25 -	52	5594		160		
-	25 -	53	5595		65		
		54	5596		30		
		55	5597		60		
		56	5598		140		
		57	5599		70		
		58	5600		35		
		59	58551			.12	.003
	25 -	60	58552			.06	.002
		61	58553			.08	.002
		62	58554			.07	.002
		63	58555	in a start and the		.05	.001
		64	58556	G VEIN 1+4	7E	15.48*	.451
		65	58557			.40	.012
		66	58558			9.12*	.266
		67	58559			.12	.003
		68	58560			.17	.005
		69	58561			1.04*	.03
		70	58562			.80	.023
		71	58563			18.66*	.544
		72	58564	200		30.34*	.885
		73	58565	1		2.80*	.082
		74	R58566			4.17*	.122
	25 -	75	558567			.21	.006

Page 2

EDE TETA LABORATORIES LTD.

Tigris Minerals Corporation

ET#		Description	Ац (ррБ)	Au (g/t)	(oz/t)
25	- 76	58568	a and and and all and and and the same test and belt win him and a	.58	.017
25	- 77	58569		.17	.005
25	- 78	58570		.17	.005
25	- 79	58571		.03	.001
25	- 80	58572		<.03	<.001
25	- 81	58577		.10	.003
25	- 82	58578		.11	.003
25	- 83	58579	- 4	.25	.007
25	- 84	58580		.15	.004
25	- 85	58581		.28	.000

NOTE: < = less than

> = more than

* sample screened and metallics assayed

ECO-TECH LABORATORIES LTD. Frank J. Pezzotti, A.Sc.T., B.C. Certified Assayer

c.c. Peter Peto 125 Bassett Street PENTICTON, B.C. V2A 5W1 Page 3 88misc/SC1

EGENTES' LABORATORIES LTD.

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: FEB 12 1988 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Feb 19/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU++ BY FIRE ASSAY FROM 1/2 A.T. ASSAYER: C. Long. D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

TIGRIS MINERALS File # 88-0329R

SAMPLE#	AU** oz/t	
E 58490 E 58491	.306	statearl Bx gral trend 1756+10; Tre el 16212 gral

- 50-APPENDIX #3



Vancouver Petrographics Ltd.

JAMES VINNELL, Manager JOHN G. PAYNE. Ph. D. Geologist

Report for: Pete Peto, Tigris Minerals Corp., 125 Basset Street, Kamloops, B.C.

P.O. BOX 39 8887 NASH STREET FORT LANGLEY. B.C. VOX 1JO

PHONE (604) 888-1323 Invoice 7131 February 1988

Copy to: Keith D'Angelo, Tigris Minerals Corp., 304 - 1155 West Pender Street, VANCOUVER, B.C., V6E 2P4

Samples: BL TR 0+50E, TR 50E 0+60S, TR 100E + 77S, TR 100E 0+80S, Stn. 150E+6S, L-137.5E + 90N, 58326 (30S, T162.5 E)

Summary:

Many of the samples are felsic volcanic rocks (rhyolite), containing phenocrysts of sanidine and lesser ones of biotite and/or hornblende in a groundmass dominated by K-feldspar and lesser plagioclase. Others (trachy-andesite) contain plagioclase and lesser mafic phenocrysts in a groundmass of K-feldspar and plagioclase. Some fragmental types are present, mainly lapilli tuffs of intermediate to felsic composition. Rocks are variably replaced by guartz and carbonate, and cut by veins dominated by quartz and calcite. Marcasite/pyrite and minor chalcopyrite are abundant in some samples. Marcasite/pyrite generally has a cubic habit, with slight to locally moderate anisotropism. The latter feature is used to distinguish marcasite/pyrite from pyrite.

A: Rhyolite

BL TR Ø+5Ø E	disseminated marcasite/pyrite; quartz replacement in groundmass;early veins of aragonite-(K-feldspar)and of quartz, and late veins of calcite
TR 50E 0+60S	calcite/ankerite and quartz-(K-feldspar) replacement in groundmass; disseminated marcasite/pyrite; veins of calcite-(quartz) and quartz-marcasite/pyrite- K-feldspar
TR 100E + 77S	lapilli tuff(?) suggested by variation in groundmass texture; replacement patches and veinlets of quartz

(continued)

B: Trachy-andesite

- TR 100E 0+80S lenses of marcasite/pyrite; replacement patches and veins of quartz-(sericite)
- Stn. 150E+6S replacement patches and veins of guartz
- L-137.5E + 90N lapilli tuff with andesite, trachy-andesite, latite, and rhyolite fragments, and lesser ones of quartz grains and aggregates in a sparse groundmass; replacement patches and veins of quartz
- C: Dacite Breccia
 - 58326 (30S, T162.5E) fragments of cherty and sericitic dacite (no K-feldspar) in a matrix of carbonate-quartz, with late calcite veins

John & Kayne

John G. Payne

BL TR 0+50E Porphyritic Rhyolite cut by Veins of Aragonite-(K-feldspar), Quartz, and Calcite

The rock contains phenocrysts of sanidine and minor muscovite (after biotite), hornblende, and apatite in an extremely fine grained groundmass dominated by K-feldspar with patches of guartz. Early veins are dominated by aragonite-(K-feldspar), and by guartz. A late vein is dominated by calcite.

phenocrysts			vei	ns			
sanidine	X	8-10%	1)	aragonite-(K-feldspar)	4-	5%	
biotite		1- 2	2)	quartz	3-		
hornblende		1	3)	calcite	1-	2	
apatite		minor	1.1.1				
groundmass							
K-feldspar		45-50					
plagioclase		17-20					
quartz		8-10					
marcasite/pyri	te	2-3					
Ti-oxide		0.3					
chalcopyrite		trace					
replacement pat	ches						
quartz		1- 2					

Sanidine forms subhedral to euhedral phenocrysts averaging 0.8-2 mm in size. Several are replaced moderately by very fine grained quartz aggregates averaging 0.02-0.05 mm in grain size.

Biotite forms subhedral phenocrysts averaging 0.2-0.9 mm in length. It is altered completely to pseudomorphic muscovite with minor to moderately abundant patches of Ti-oxide.

Hornblende forms a few euhedral to subhedral grains up to 1.5 mm in length. Some are altered completely to very fine grained aggregates of guartz and sericite, with much less Ti-oxide and minor calcite. Others are altered to extremely fine grained chlorite, with or without patches of very fine grained guartz.

Apatite forms subhedral to euhedral prismatic phenocrysts up to 0.4 mm in length.

The groundmass contains lathy plagioclase grains from 0.05-0.1 mm in length. These are set in an extremely fine grained aggregate of K-feldspar. Quartz forms irregular, extremely fine to very fine grained replacement patches up to 1 mm in size. A few replacement(?) patches up to 0.9 mm across of guartz consist of grains averaging 0.2 mm in size.

Ti-oxide (leucoxene) forms a few anhedral patches up to 1 mm across of extremely fine grains, in part associated with euhedral marcasite/pyrite grains from 0.1-0.4 mm in size. One Ti-oxide patch is surrounded by extremely fine grained marcasite/pyrite.

Marcasite/pyrite forms clusters up to 0.3 mm in size of grains averaging 0.01-0.02 mm in grain size, mainly intergrown with groundmass. A few subhedral to euhedral grains are from 0.1-0.3 mm in size. Anisotropism is weak to locally moderate.

Chalcopyrite forms a very few patches up to 0.03 mm in size in coarser marcasite/pyrite aggregates.

(continued)

BL TR Ø+5ØE (page 2)

The rock is cut by a vein up to 1 mm wide dominated by fine grained, prismatic aragonite, with minor fine grained K-feldspar in patches along vein borders. Another, more irregular vein up to 1.5 mm wide contains very fine to fine grained aragonite with patches of extremely fine to very fine grained quartz.

Quartz forms irregular, extremely fine to very fine grained veins up to 1.5 mm in width, and a few very fine grained veinlets up to 0.1 mm in width; the former contain a few patches of subparallel aggregates of chlorite flakes up to 0.1 mm long, and the latter contain minor calcite.

A late, discontinuous vein up to 1 mm wide consist of fine grained calcite. It cuts and offsets the earlier aragonite and guartz veins by up to 1 mm.

TR 50E 0+60S Porphyritic Rhyolite cut by Calcite Vein

The rock contains scattered phenocrysts of sanidine and minor ones of hornblende and biotite in a groundmass dominated by K-feldspar and plagioclase. Marcasite/pyrite is moderately abundant in patches, seams, and disseminations. The rock is cut by veinlets of quartz-marcasite/pyrite-(K-feldspar) and a major vein of calcite-(quartz).

phenocrysts				
sanidine	5- 78			
plagioclase	minor			
hornblende	4- 5			
biotite	minor			
apatite	0.5			
groundmass				
K-feldspar	40-45			
plagioclase	15-17			
calcite/ankerite	10-12			
marcasite/pyrite	2-3			
replacement patches				
quartz-(K-feldspar)	3-4			
veins				
1) guartz-marcasite/	pyrite-K-feldspar)		18	
2) calcite-(quartz)		5-	7	

Sanidine forms subhedral to euhedral phenocrysts from 0.2-1.2 mm in size. Some coarser ones are replaced strongly by calcite/dolomite, with or without minor guartz.

Plagioclase forms a very few prismatic phenocrysts up to 0.3 mm in length.

Hornblende forms equant, euhedral phenocrysts from 0.5-1.7 mm in size; they are altered completely to very fine grained aggregates of quartz with minor to moderately abundant chlorite and/or calcite. A few patches are replaced by extremely fine grained chlorite with less Ti-oxide.

Biotite forms a very few phenocrysts up to 0.7 mm long. They are replaced completely by aggregates of sericite/chlorite-quartz with minor Ti-oxide.

Apatite inclusions are common in hornblende and biotite phenocrysts, as prismatic to equant grains 0.03-0.15 mm long. Many of them have a pale orange color, possibly from limonite. It also forms scattered euhedral prismatic phenocrysts from 0.07-0.1 mm in size in the groundmass away from mafic minerals.

The groundmass is dominated by an extremely fine grained aggregate of K-feldspar and lesser plagioclase, with the latter commonly forming ragged lathy grains up to 0.05 mm in length. Quartz forms irregular, extremely fine to very fine grained replacement patches up to a few mm across, and a few very fine to fine grained patches averaging 0.2-0.5 mm in size, in part with K-feldspar. Calcite/ankerite forms very irregular, very fine grained replacement patches up to 2 mm in size.

Marcasite/pyrite forms disseminated, subhedral to euhedral cubic grains averaging 0.02-0.03 mm in size, with a few up to 0.1 mm across, and clusters up to 0.3 mm across of similar grains. Disseminated marcasite/pyrite commonly is concentrated moderately in wispy seams.

The rock is cut by discontinuous veinlets up to 0.7 mm wide of pyrite-quartz-(K-feldspar).

A major vein up to 2 mm wide is dominated by very fine to fine grained calcite with minor subhedral quartz.

TR 100E + 77S Altered Rhyolite Lapilli Tuff(?)

The rock contains minor phenocrysts of sanidine and hornblende in a groundmass of extremely fine grained feldspars with disseminated grains and patches of chlorite/biotite and of marcasite/pyrite. Patchy variation in texture in the groundmass suggests that the rock may be fragmental. Quartz forms irregular replacement patches and a few discontinuous late veinlets. Limonite/hematite is common in patches and on fractures.

phenocrysts		
sanidine		4- 5%
hornblende		1- 1.5
apatite		minor
groundmass		
K-feldspar/	plagioclase	70-75
coarser	20-25%	
finer	50-55	
chlorite/bi	otite	8-10
marcasite/p	yrite	2-3
Ti-oxide		0.3
apatite		0.1
replacement	patches and	veins
quartz		8-10

Sanidine forms subhedral prismatic phenocrysts averaging 0.5-1 mm in size. Most are altered moderately to strongly to guartz and vellowish green to brown chlorite/biotite(?).

Hornblende phenocrysts average 0.3-0.5 mm in size, with a few up to 1.3 mm long. They are altered completely to very fine grained quartz with patches and seams of extremely fine grained chlorite/biotite.

Apatite forms a few euhedral prismatic phenocrysts up to 0.3 mm long.

The groundmass is dominated by feldspars in extremely fine grained aggregates. Patches up to several mm across (which may be fragments) contain lathy to feathery plagioclase(?) up to 0.05 mm in length grading into finer grained, anhedral K-feldspar. These are surrounded by zones of equant grains averaging 0.003-0.01 mm in grain size (possibly tuffaceous). Disseminated in the groundmass are single grains and aggregates of extremely fine grained, yellow-brown to greenish-brown chlorite/biotite. One patch up to 1.8 mm in size is dominated by yellowish green chlorite/biotite. Marcasite/pyrite is concentrated in a few patches as disseminated grains averaging 0.02-0.05 mm in size, with a few up to 0.2 mm across. Ti-oxide forms patches up to 0.1 mm in size of extremely fine grained aggregates. Apatite forms disseminated prismatic to acicular grains averaging 0.04-0.07 mm in length.

Quartz forms extremely fine grained, pervasive replacement in diffuse patches up to a few mm across, and well defined patches up to Ø.5 mm in size of very fine grained aggregates. A few irregular, discontinuous, very fine grained quartz veinlets are up to 0.15 mm in width.

The rock contains seams and patches of extremely fine grained limonite/hematite formed during weathering.

TR-100E 0+80S Porphyritic Trachy-andesite

The rock contains phenocrysts of plagioclase and lesser ones of biotite in a groundmass dominated by K-feldspar with scattered lathy plagioclase grains and disseminated patches of marcasite/pyrite. It contains replacement patches and veinlets of guartz. Limonite is common.

phenocrysts	
plagioclase	8-10%
biotite	1-2
hornblende	1
groundmass	
K-feldspar	65-70
plagioclase	10-12
marcasite/pyrite	3-4
apatite	minor
replacement patches	and veins
quartz-sericite	4- 5

Plagioclase forms subhedral to euhedral phenocrysts from 0.5-3 mm in size. It is altered strongly to completely to extremely fine grained sericite.

Biotite forms subhedral flakes from Ø.3-1 mm in average size. It is altered completely to pseudomorphic muscovite with minor Ti-oxide. One large grain contains lenses of extremely fine grained replacement guartz along cleavage.

Hornblende forms a few euhedral, prismatic phenocrysts up to 1 mm long. It is altered completely to very fine grained quartz with much lesser sericite (concentrated in seams parallel to the c-axis of hornblende), moderately abundant patches of extremely fine grained Ti-oxide, and minor prismatic inclusions of apatite up to 0.07 mm long.

The groundmass contains scattered lathy plagioclase grains from Ø.05-0.1 mm in average length. These are set in a groundmass of anhedral feldspars averaging Ø.002-0.01 mm in grain size. Ti-oxide and marcasite/pyrite form disseminated grains and clusters up to 0.1 mm in size of grains averaging Ø.005-0.01 mm in size.

Marcasite/pyrite is concentrated in lenses up to several mm long, in which it forms abundant disseminated grains averaging 0.02-0.05 mm in size, with a few patches up to 1.2 mm across of subhedral to euhedral grains up to 0.5 mm in size. In some patches, sulfide grains appear to have been finely granulated. Anisotropism is weak to locally moderate.

Apatite forms disseminated subhedral to euhedral, prismatic to acicular grains from 0.05-0.1 mm in average size.

The rock contains replacement patches and veins of quartz. Replacement patches are very irregular in outline and consist of extremely fine grained guartz (0.01-0.02 mm) with minor sericite. The veins contains patches up to a few mm across of anhedral to slightly prismatic grains averaging 0.03-0.07 mm in size. These are intergrown with patches of guartz grains averaging 0.1-0.5 mm in size and extremely fine grained, commonly interstitial patches and seams of sericite.

Limonite is common on fractures and in altered phenocrysts, and less common in patches in the groundmass.

Stn. 150E+6S Porphyritic Trachy-andesite cut and replaced by Quartz

The sample contains phenocrysts of plagioclase, biotite, and hornblende in a groundmass dominated by K-feldspar with lesser plagioclase. Quartz forms replacement patches and late veins.

phenocrysts				
plagioclase	5- 7%			
biotite	5-7			
hornblende	3-4			
apatite	minor			
groundmass				
plagioclase	12-15			
K-feldspar	55-60			
zircon	trace			
limonite	minor			
replacement				
quartz	8-10			
veins				
guartz	3-4			

plagioclase forms subhedral to euhedral phenocrysts averaging Ø.7-1 mm in length. Alteration is strong to complete to patches of extremely fine grained sericite stained yellow by limonite. Some of the phenocrysts may originally have been K-feldspar; however, the nature of the alteration suggests that they were plagioclase.

Biotite forms subhedral to euhedral phenocrysts from 0.3-1.5 mm in length. Phenocrysts are replaced completely by extremely fine grained aggregates of quartz, with moderately abundant disseminated patches of Ti-oxide. Textures outline the original cleavage of biotite. Quartz grains commonly are oriented perpendicular to biotite cleavage in thin bands separated by Ti-oxide.

Hornblende forms subhedral to euhedral phenocrysts averaging 0.2-1 mm in size. These are altered to quartz and Ti-oxide, and do not show any original texture, except in some, which show the typical hornblende crystal outlines.

Apatite inclusions are common in many of the hornblende phenocrysts and in a few of the biotite phenocrysts. Apatite forms subhedral to euhedral grains averaging 0.07-0.1 mm in size.

The groundmass contains lathy plagioclase grains from 0.05-0.15 mm in length in an extremely fine grained groundmass dominated by K-feldspar, with lesser sericite and moderately abundant limonite. Ti-oxide forms disseminated patches up to 0.1 mm in size of extremely fine grains. Pyrite forms a few subhedral to euhedral grains averaging 0.03-0.07 mm in size; it probably is altered to limonite/hematite.

The rock is somewhat brecciated, and replaced by extremely fine to very fine grained patches of guartz, in part with moderately abundant extremely fine grained patches of sericite.

Quartz veins up to 1 mm wide cut the rock. These are very fine to fine grained, and locally contain minor sericite; they probably are related in origin to the replacement breccia groundmass.

Late seams and a few patches consist of extremely fine grained limonite formed during weathering.

L-137.5E + 90N Intermediate Lapilli Tuff with replacement Quartz

The rock contains fragments up to 1 cm in size of a wide variety of volcanic flows ranging from andesite to rhyolite, and lesser fragments of quartz, plagioclase, replacement quartz, and quartz-plagioclase aggregates. These are set in a sparse groundmass of K-feldspar-plagioclase-sericite, which is partly replaced by patches of quartz.

fragment types (% very approximate)	
1) andesite	25-30%
trachy-andesite	10-15
3) rhyolite	15-17
dacite/latite	10-12
5) replacement quartz patches, vein	10-12
6) quartz grains	1
7) guartz aggregates	1-2
groundmass	10-15
replacement, vein quartz	3-4

Andesite fragments contain prismatic to lathy plagioclase grains averaging 0.07-0.15 mm in length in a groundmass of finer grained plagioclase, lesser chlorite, and moderately abundant disseminated opaque (Ti-oxide +/- pyrite). Some fragments contain up to 5% plagioclase and/or hornblende phenocrysts. Plagioclase forms phenocrysts up to 0.8 mm in size; these are altered slightly to sericite. Hornblende phenocrysts are up to 0.2 mm in size, and are replaced completely by chlorite as in the groundmass. One large fragment contains a phenocryst of hornblende up to 1.7 mm in size; it is replaced by extremely fine grained quartz with irregular patches of chlorite/sericite and minor Ti-oxide. It contains a few crystals of apatite up to 0.2 mm in size. One fragment contains a euhedral pyrite cube Ø.3 mm across. A few andesite(?) fragments contain minor plagioclase phenocrysts and slender lathy plagioclase grains in a groundmass dominated by light greenish brown chlorite/sericite and lesser plagioclase.

One andesite fragment contains phenocrysts of plagioclase and hornblende averaging Ø.1-0.2 mm in size in an extremely fine grained, slightly foliated groundmass containing lathy plagioclase.

A few fragments of hypabyssal andesite contain plagioclase phenocrysts up to a few mm across in a groundmass of very fine grained plagioclase with much less interstitial chlorite. Plagioclase phenocrysts are altered strongly to sericite, and minor hornblende phenocrysts are altered completely to chlorite.

A few fragments are aggregates of anhedral plagioclase and quartz grains from 0.2-0.5 mm in size, with interstitial patches of extremely fine grained sericite.

A few fragments up to several mm across are of latite/dacite; they have a patchy texture defined by moderate variation in the ratio of sericite to extremely fine grained plagioclase/quartz. Opaque is moderately abundant as extremely fine, disseminated grains and clusters, the latter up to 0.3 mm across. Some contain a few plagioclase phenocrysts up to 0.4 mm in size, and others contain equant plagioclase phenocrysts from 0.05-0.1 mm in size. In some, the groundmass is replaced slightly to moderately by irregular extremely fine grained patches of guartz.

(continued)

L 137.5E + 90N (page 2)

Trachy-andesite forms several fragments up to a few mm across. It contains lathy to prismatic plagioclase up to 0.1 mm in grain size surrounded by finer grained K-feldspar and plagioclase, with minor chlorite/sericite, Ti-oxide, and apatite. In some fragments the groundmass is replaced moderately by irregular patches of very fine grained quartz. A few fragments contain phenocrysts up to 2 mm in size of plagioclase, partly replaced by irregular patches of K-feldspar.

Rhyolite fragments up to 1.5 cm in size are dominated by extremely fine grained intergrowths of K-feldspar and plagioclase, with moderately abundant chlorite-limonite and minor apatite. Some fragments contain phenocrysts of sanidine up to 0.7 mm in size.

Hypabyssal dacite contains phenocrysts of plagioclase up to 0.3 mm in size in a groundmass of plagioclase, K-feldspar, and lesser quartz averaging 0.03-0.07 mm in grain size. Minor minerals include sericite/chlorite and Ti-oxide.

Quartz forms angular grains averaging 0.2-0.5 mm in size, with a few up to 1 mm across; these may represent original phenocrysts.

One fragment 1 mm across is of a metamorphosed(?), very fine to fine grained quartz aggregate with minor sericite patches; quartz appears to have been partly granulated to extremely fine subgrains. A similar fragment 1.5 mm across is of slightly recrystallized fine to medium grained quartz.

One fragment several mm across consists of extremely fine grained replacement quartz and very fine to fine grained veins and patches up to 2 mm wide. Smaller fragments (up to 1.5 mm in size) are of very fine grained to extremely fine grained quartz with much less chlorite/sericite. Some patches contain a few relic Ti-oxide aggregates up to 0.3 mm in size in open networks and dendritic aggregates intergrown with quartz and lesser yellow sericite/limonite.

The groundmass is difficult to distinguish from some of the fragments. It is extremely fine grained and dominated by feldspars and sericite. Quartz forms extremely fine to very fine grained replacement patches and veinlets in the groundmass.

58326 (30S, T162.5E)

Brecciated Cherty and Sericitic Dacite with a Matrix of Carbonate-Quartz; Late Calcite Veins

The rock contains fragments of cherty and sericitic dacite averaging a few mm across in a variable groundmass of carbonate and lesser quartz. Late veins are of calcite.

fragments	
cherty dacite	30-35%
sericitic dacite	10-15
groundmass	
carbonate	25-30
quartz	15-20
chlorite-kaolinite	1- 2
veins	
calcite	4- 5

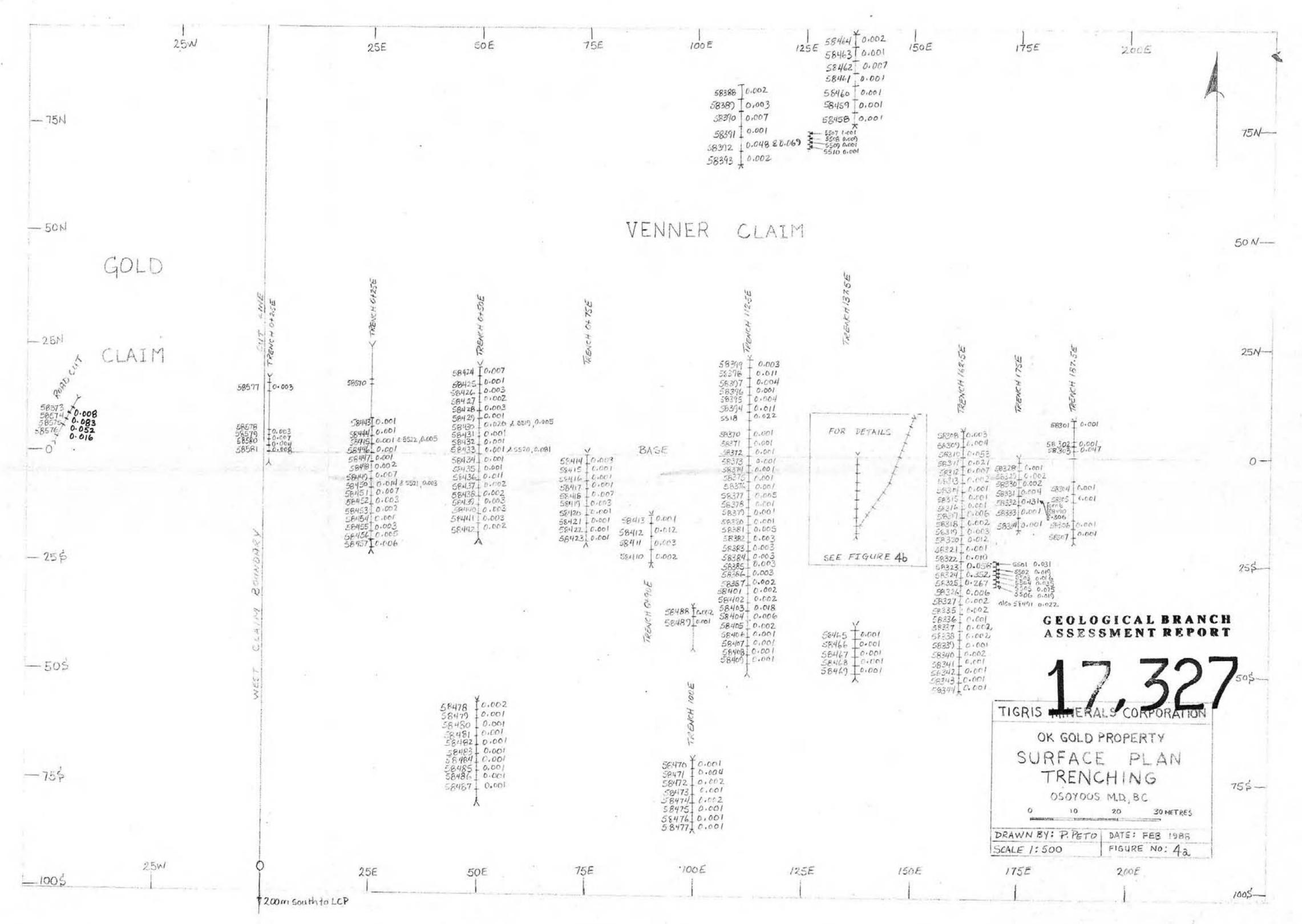
Cherty dacite fragments contain scattered phenocrysts of plagioclase and minor biotite. Plagioclase forms grains from 0.1-0.3 mm in size. It is altered strongly to sericite. Biotite forms ragged flakes up to 0.2 mm in size. It is partly fresh, with pleochroism from straw to medium brown. Ti-oxide forms extremely fine grains on borders of biotite and along cleavage planes.

The groundmass of the cherty dacite is dominated by equant, interlocking grains of plagioclase/quartz averaging 0.005-0.01 mm in size, with disseminated grains and scattered patches of finer grained (0.002-0.005 mm) chlorite. Apatite forms scattered subhedral to euhedral prismatic grains up to 0.12 mm in length, and acicular grains up to 0.2 mm long. Marcasite/pyrite forms scattered cubic grains averaging 0.01-0.02 mm in size, with moderately abundant coarser grains from 0.03-0.07 mm in size, and a few up to 0.2 mm across. Ti-oxide forms patches up to 0.2 mm across of extremely fine grained aggregates. Some fragments are replaced slightly to moderately by very fine grained patches and veinlets of quartz.

The other type of fragments is dominated by a pale brown groundmass of extremely fine grained sericite(?)-clay(?) intergrown with plagioclase/quartz averaging 0.002-0.005 mm in grain size. A few mafic phenocrysts up to 0.3 mm in size are altered completely to sericite. The fragments commonly contain abundant disseminated marcasite/pyrite grains averaging 0.02-0.03 mm in size, and scattered apatite grains up to 0.1 mm long. Some fragments are replaced moderately by ragged porphyroblastic grains of carbonate. A few large fragments of cherty dacite contain patches up to 0.8 mm in size of this rock type.

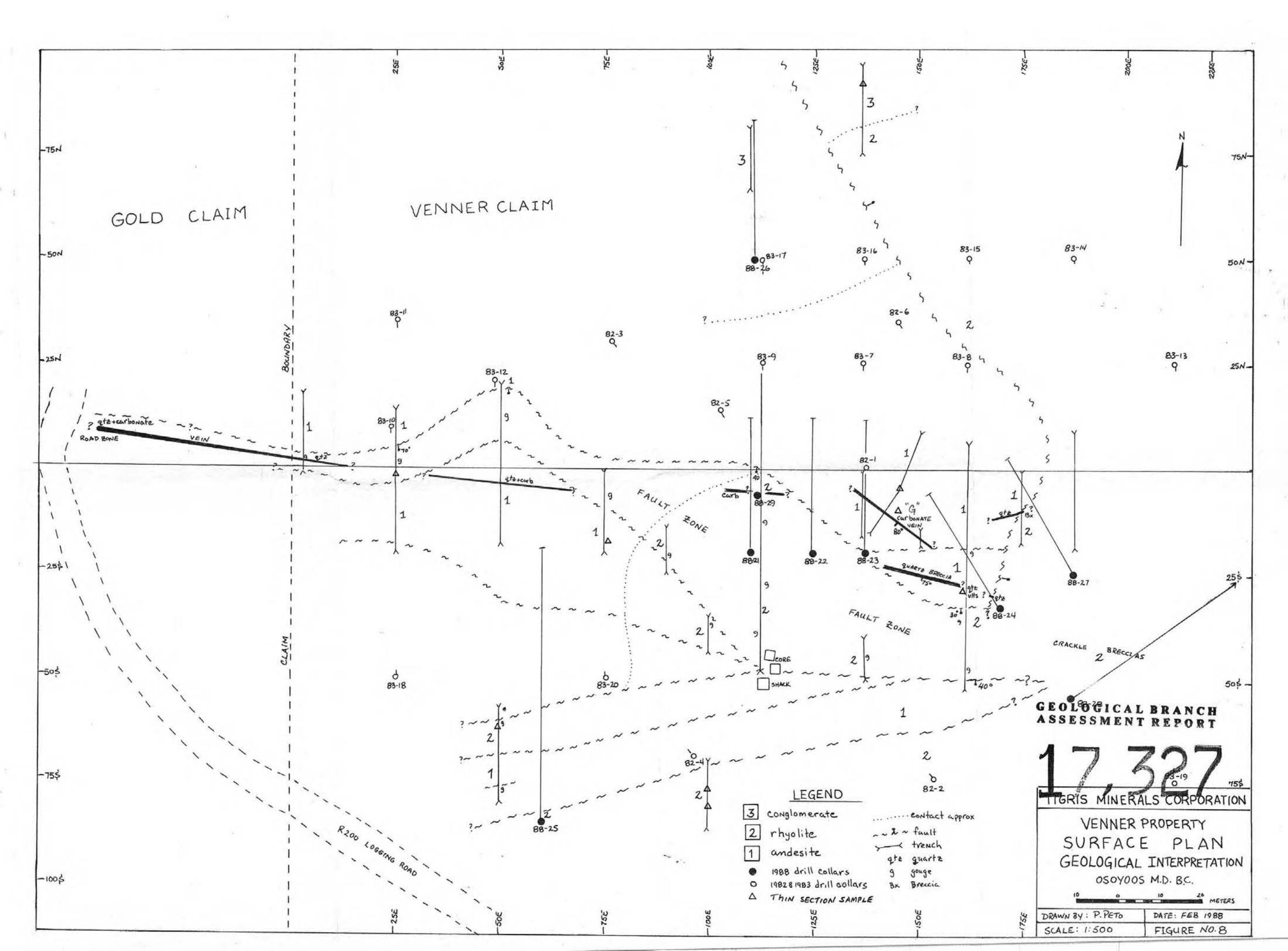
The rock is replaced by irregular patches of very fine grained carbonate and of quartz. Carbonate has abundant dusty inclusions and moderately high relief, suggesting that it is dolomite or ankerite; however, a vigorous reaction with cold dilute HCl suggests that it is calcite, and the higher relief is a function of the dusty inclusions. Quartz commonly occurs along borders of patches against fragments, where it forms subhedral grains averaging 0.05-0.1 mm in size growing outwards from the fragments into the carbonate. Scattered through carbonate aggregates are interstitial patches up to 0.7 mm in size of extremely fine grained (0.002-0.003 mm), equant, pale brown chlorite-kaolinite, and locally patches up to 0.15 mm in size of very fine grained (0.01-0.02 mm) flakes of chlorite. Chalcopyrite forms a few equant grains and interstitial patches up to 0.05 mm in size associated with ankerite and locally with quartz.

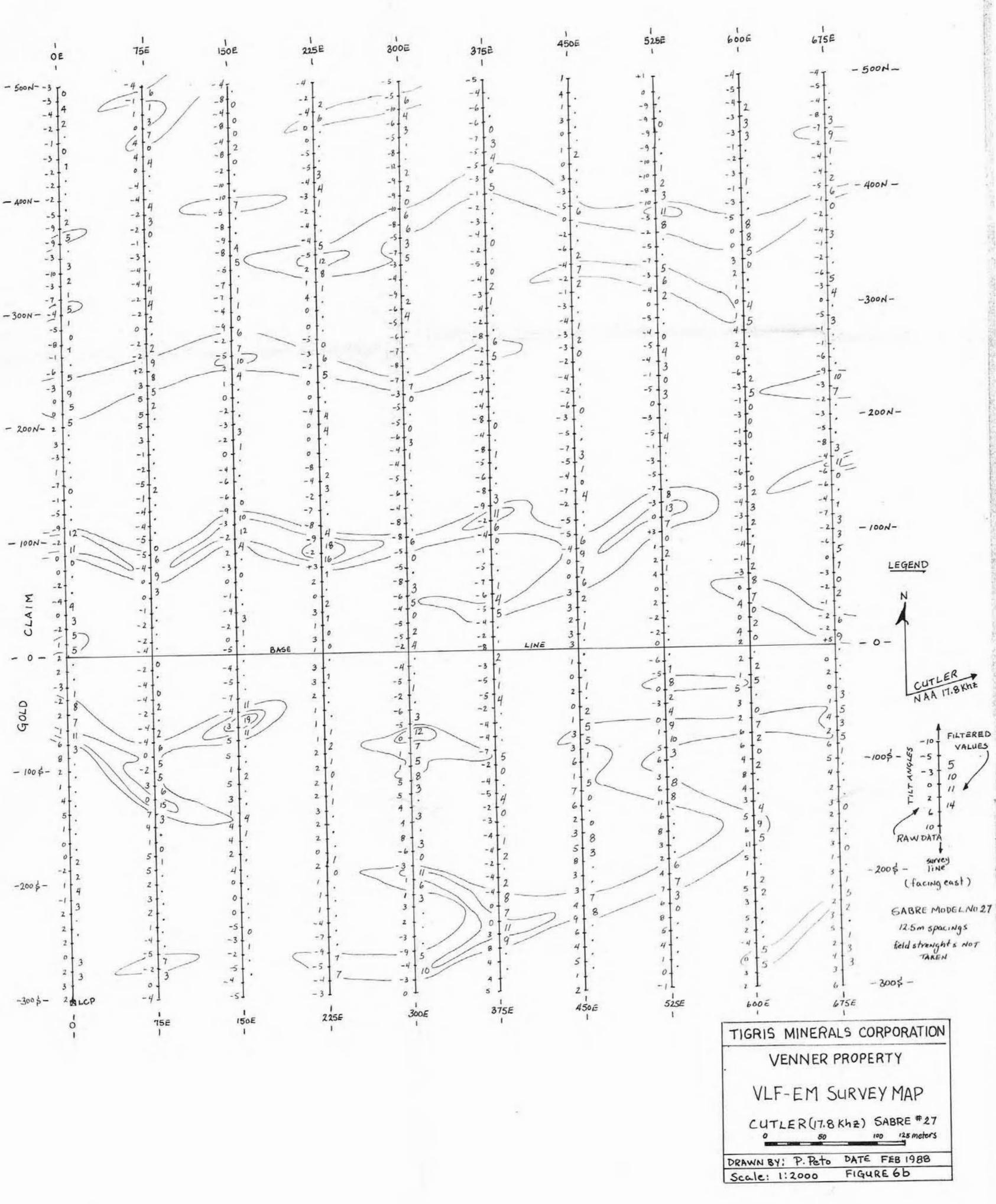
Late veins up to 1 mm wide and a few replacement patches consist of fine grained calcite, which is relatively free of dusty inclusions.



1

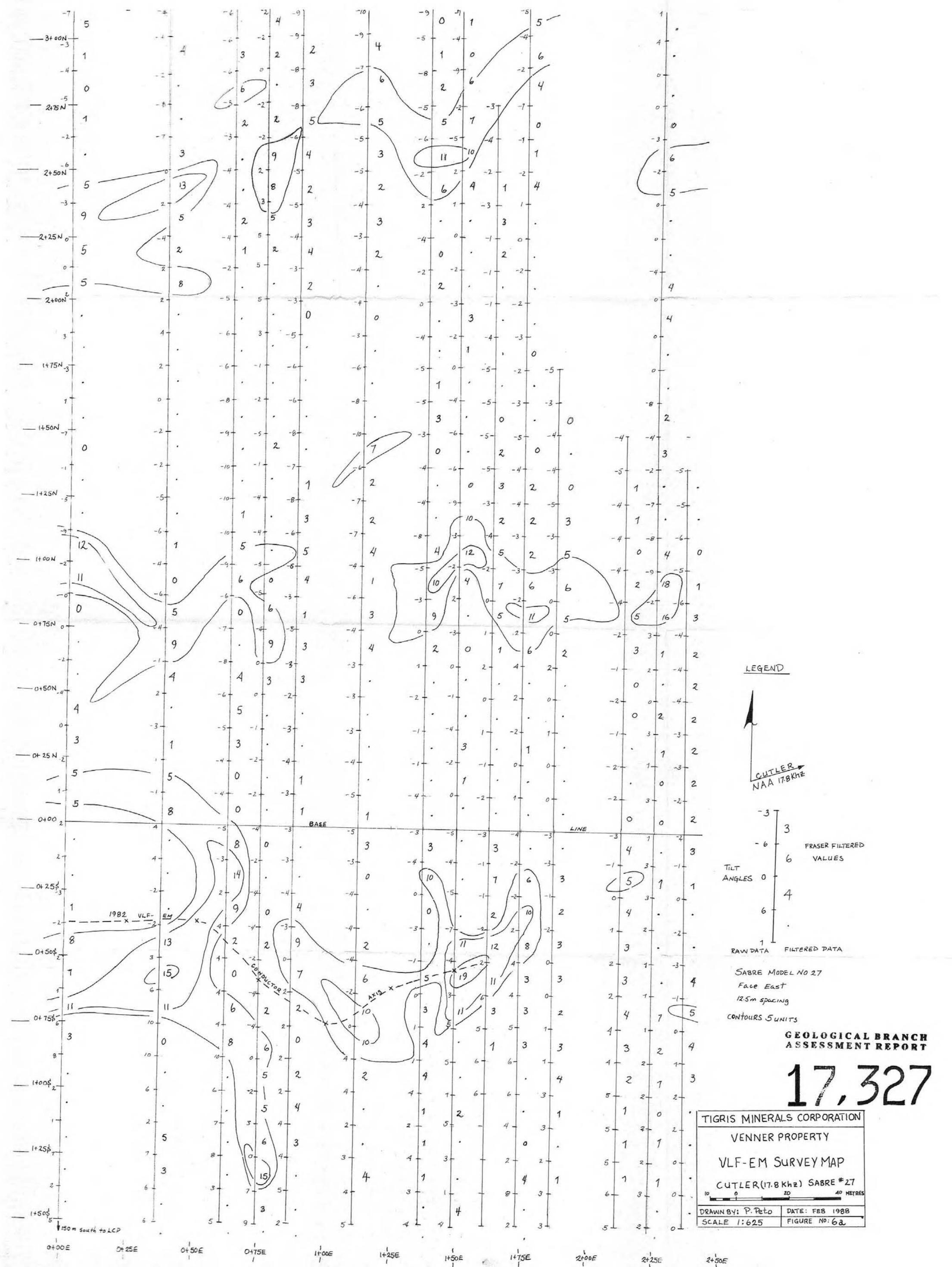
12 12

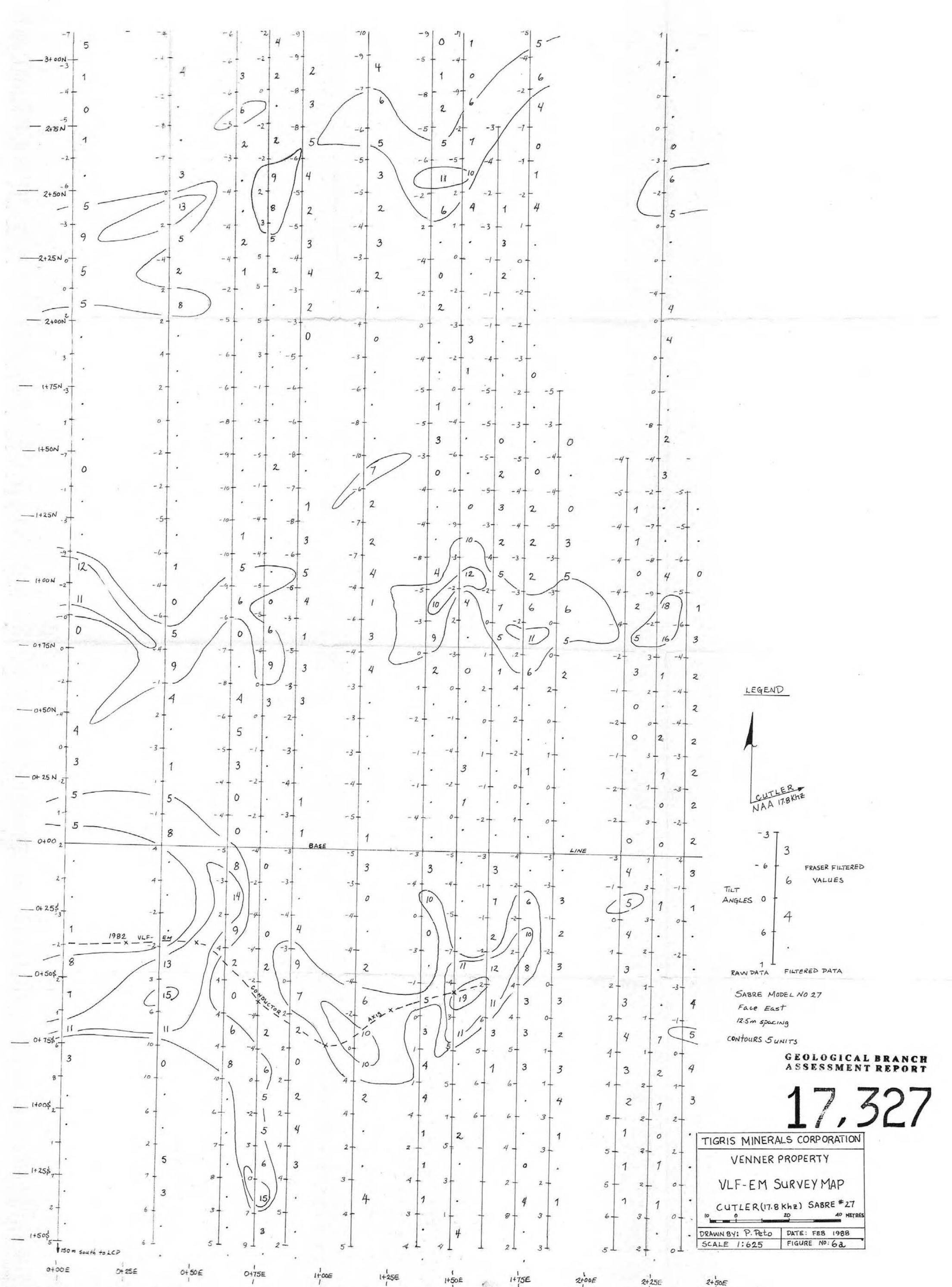


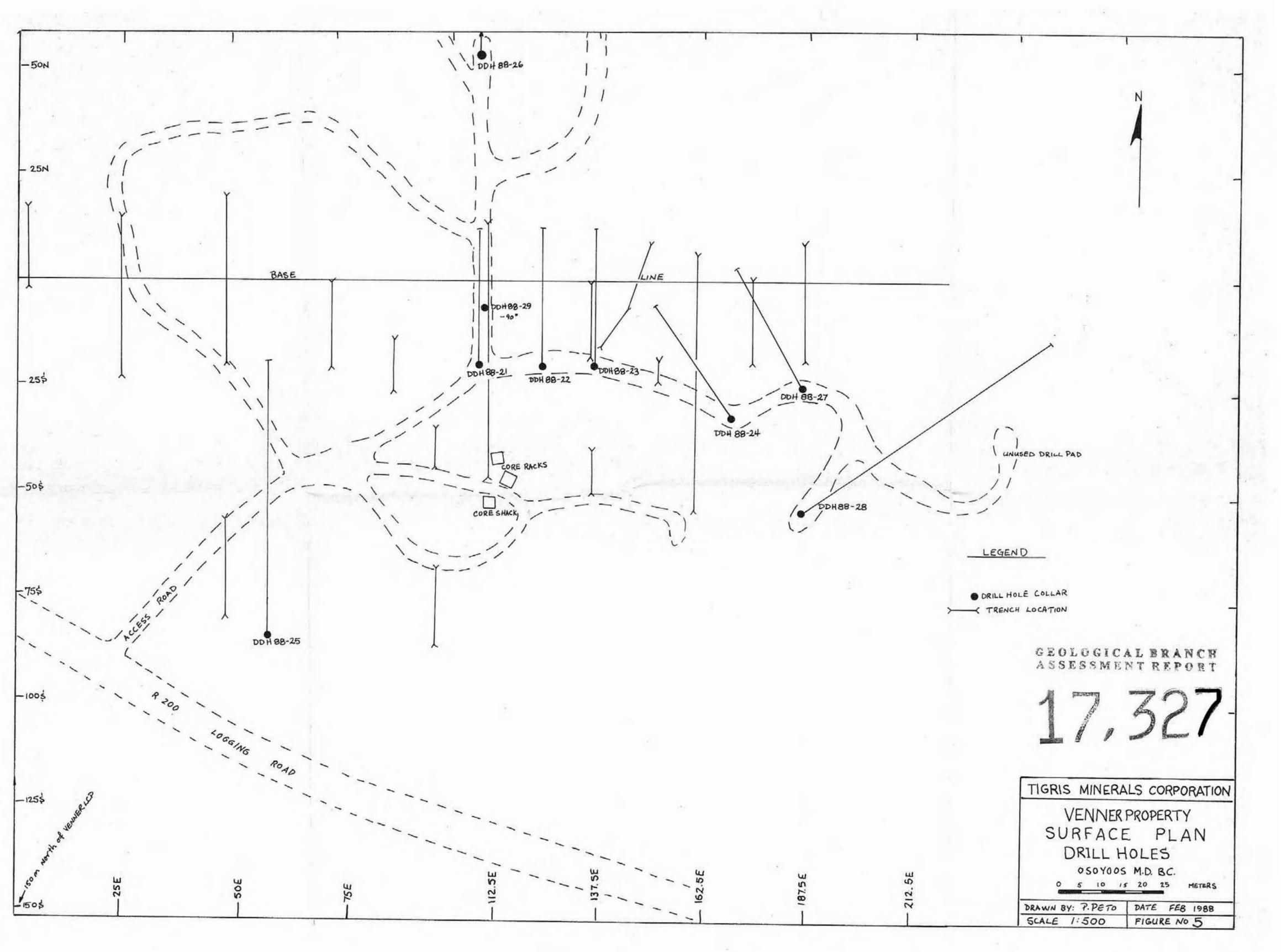


57293	T 570	05	T 57	1267	1.CTC		- 500N -
57265	- 571	33		257		1255	
57344		109		7240		72.53	
57342	- 57		1	7240		7236	
57355	24	260	1.2	7154		7 189	
57385	57	285		7148		57201	
57401	12.53	7363		7154	- 5	7/67	
		7460		7141	- 5	7225	- 400N -
57416	- 51	7 376	-5	7150	- 5	7234	No devise
57441	-57	390	-5	7146	- 5	57189	
57774	-5	7585		72.61	24	57155	
57774	+ 5	7500	+4	7354	-	57194	
- 57234	-5	7679	1.	7395		57261 52285	
- 57214		7541		742.3		57279	
- 57195		7440		7421		57178	2001 -
- 57168		7365		57362	+	57263	- 300N -
- 57046		7192	- E	57269	Section of the	57213	
- 56946		57.102		57372	+	57155	
57053		57124		57369	+	57205	
57096	+	57110	+	57229	+	57216	
- 57074	+	57047		57138	t	57255	
-57151	1	57097		57148	1	57217	
- 57189		57128		57165	1	57172	- 200N -
- 57199		57150	1	57127 57109		57104	
- 57165		57106	I	57131		57067	
+57121		57101		57116		57138	
- 57 132		57084 57077		57046		- 57174	
- 57101	1			57041	-	57093	
- 57081	-	57056		- 57017		57052	
- 57115	-	57064	11.54	- 56 484		57062	- 100N -
- 57067	-	57081	- 7	- 56951		- 57 043	
-57064	-	57148	1	57094		- 57165	
- 57032	1	5722.4		57250		57215	
- 57025	1	57171		57212		57276	
- 57012	1	-57130		- 57166		57249	
- 57047		57010		57086		57244	
- 57010 57040	BASE	- 56986 57009		57015	LINE	572.44	- 00+00 -
57042		56986		57000		- 57217	
57034		56961		56974		- 57181	
57084		57012		- 56944		- 57160	
- 56995		56945		56432		- 57163	
56912		56934		- 56936		- 57153	
- 56943		56857		57000		57225	
- 56962		- 57015		- 57024		- 57324	- 100\$ -
- 57087		- 57010		57105		- 57338	
- 57047		- 57047		57063		- 57306	
- 57048		- 57081 - 57006		- 57054		- 57282	
- 57101		57018		57108		- 57220	
- 5704		- 57046		- 57062		- 57190	
57198		- 57123		- 57076		- 57210	
57 25	E	57275		- 57103		+ 57161	-200\$
57270	6	57181		57122		- 57200	
57260	,	- 57182		57173		- 57183	
- 57169		57105		- 57226		- 5709	
5704		57139		- 57114		- 57139	Ê.
5699		5705		57080		- 57143	
5694		57129		57244		- 57696	
5688		57035		- 57249		- 5708	
		57060		57216		+ 5707	7 - 300\$
51.94		01000					
		1 75E		1 150E		225E	

LEGEND 1 57605 57403 TOTAL MAGNETIC - 57201 UNCORRECTED FIELD STRENGTH RAW DATA 57 101 - 5700 - 56 974 gridline 12.5m spacings INSTRUMENT: SCINTREX MP2 proton precession magnetometer staff mounted; operator : K. Dangelo FE8 6, 1988 GEOLOGICAL BRANCH ASSESSMENT REPORT - 17, 327 IGRIS MINERALS CORPORATION VENNER PROPERTY MAGNETIC SURVEY MAP (UNFINISHED) 100 125 METERS DRAWN BY: P. Peto DATE FEB 1988 FIGURE 7 SCALE 1:2000







ï