

GEAREX
GEAREX

ENGINEERING
MANAGEMENT

LTD.

ASSESSMENT

GEOLOGICAL

REPORT

[DIAMOND DRILLING]

ON THE

TAM [1015] MINERAL CLAIM

LIKELY, B.C. AREA

CARIBOO MINING DIVISION

93A12E & 11W

FOR

Edward Friesen

Gerhard von Rosen, P.Eng.

April 25, 1983

MISSION

B.C.

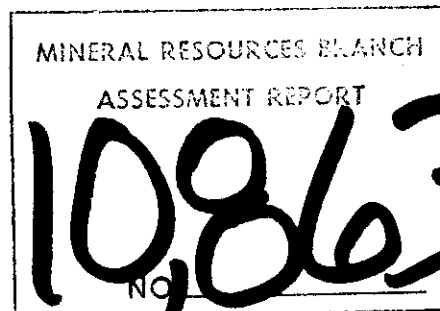
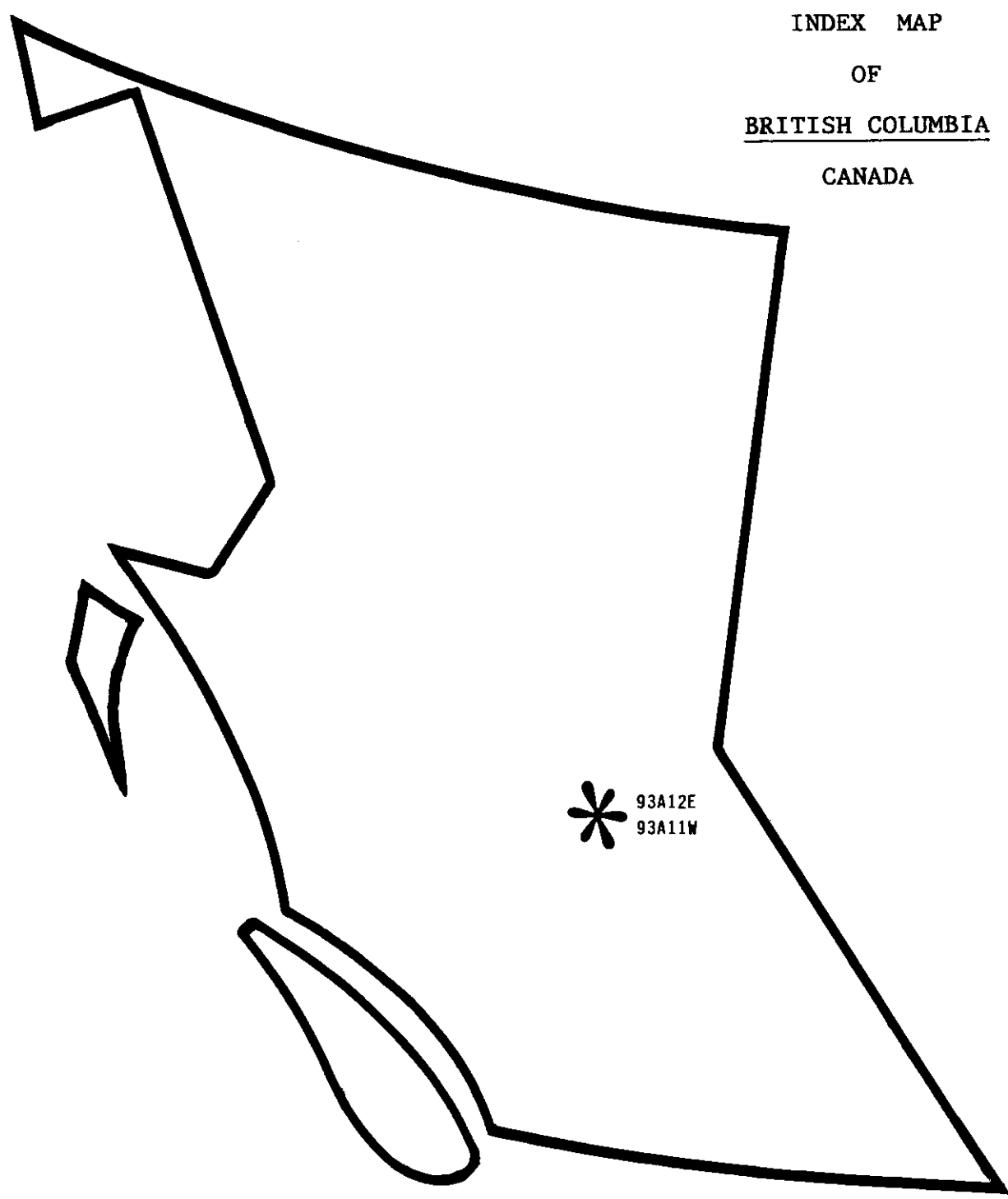


FIGURE "A"

INDEX MAP
OF
BRITISH COLUMBIA
CANADA



TAM [1015] MINERAL CLAIM
Likely, B.C. CARIBOO M.D.

Title page.....	1
*Figure A Index Map of B.C.....	2
Index.....	3
Introduction.....	4
Claims.....	4
*Figure B Claim Location.....	5
Location.....	6
Topography-Vegetation-Climate.....	6
History of the Area.....	6
*Figure C DDH Locations.....	7
Geology of the Area.....	8
*Figure D Section DDH 81-1.....	9
Assay Results.....	11
*Figure E Section DDH 81-2.....	12
Assay Results: Drilling.....	13
*Geochemical Assay Certificate.....	14
Results.....	15
Conclusions.....	15
*Figure F Section DDH 81-1 : DDH 81-2..	16
Recommendations.....	17
Certificate of Qualifications.....	18
Itemized Cost Statement.....	19

INTRODUCTION

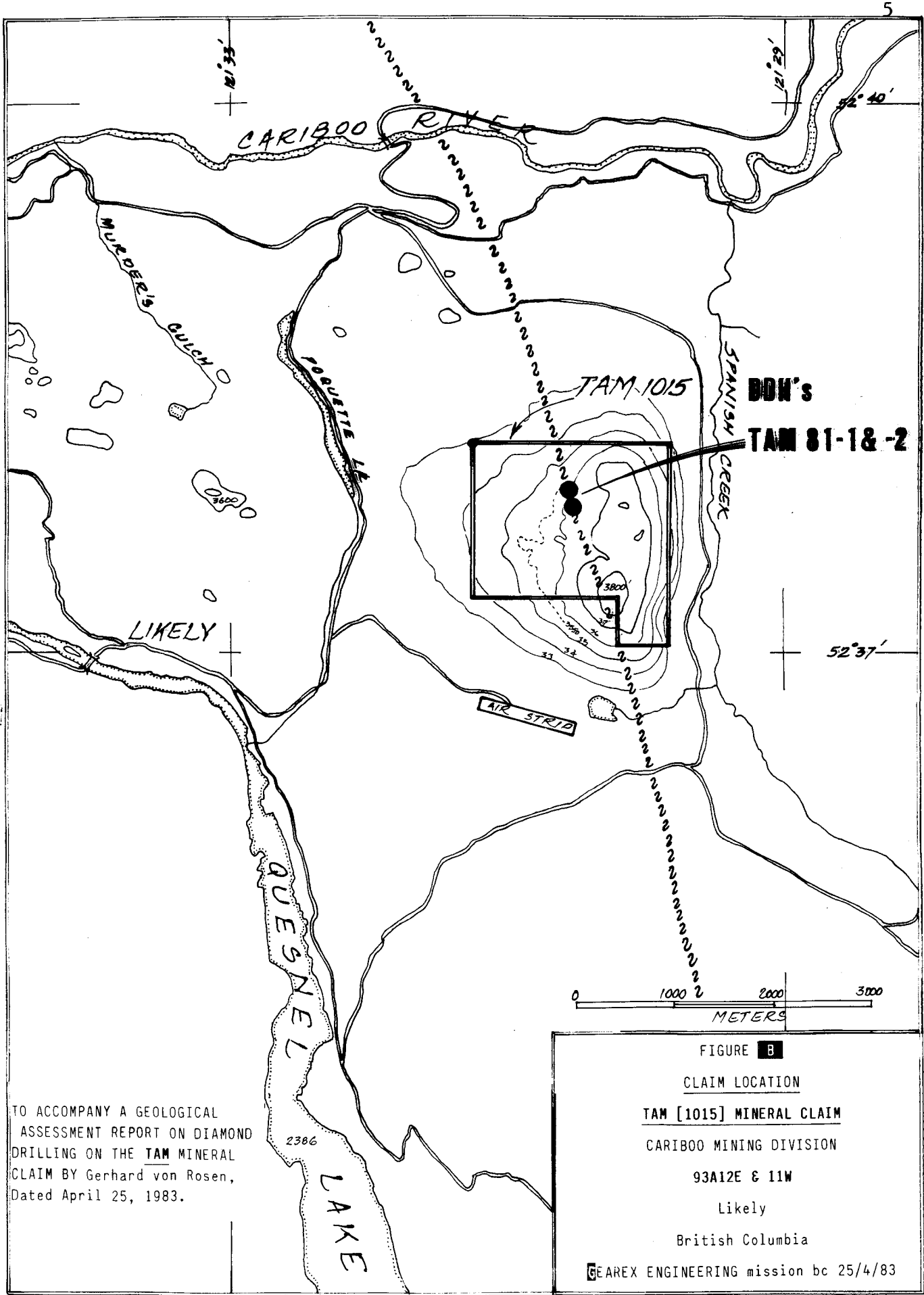
The writer was commissioned by Edward Friesen, owner of the TAM mineral claim, to prepare this report on the results of diamond drilling he performed on a showing of argentiferous galena.

The writer was flown from Abbotsford to Likely, British Columbia, on July 27, 1981, where he was driven to the drill sites, where DDH 81-2 had been finished. The writer logged both holes, on-site. A further hole was located on the basis of a weak geochemical anomaly about 400 meters downhill to the west, of which the writer has not seen the core, as it is still on-site.

CLAIMS

<u>NAME</u>	<u>RECORD #</u>	<u>UNITS</u>	<u>ANNIVERSARY</u>
TAM	1015	16	June 6

CARIBOO MINING DIVISION 93A12E & 11W



TO ACCOMPANY A GEOLOGICAL ASSESSMENT REPORT ON DIAMOND DRILLING ON THE TAM MINERAL CLAIM BY Gerhard von Rosen, Dated April 25, 1983.

FIGURE **B**
 CLAIM LOCATION
TAM [1015] MINERAL CLAIM
 CARIBOO MINING DIVISION
 93A12E & 11W
 Likely
 British Columbia
 GEAREX ENGINEERING mission bc 25/4/83

LOCATION

52 38'N

121 30'W

93A12E & 11W

The claim is reached by driving east from Likely, to the south end of Poquette lake, from where a logging road leads easterly into the region of the claimed property. Even on the logging roads two wheel drive was possible.

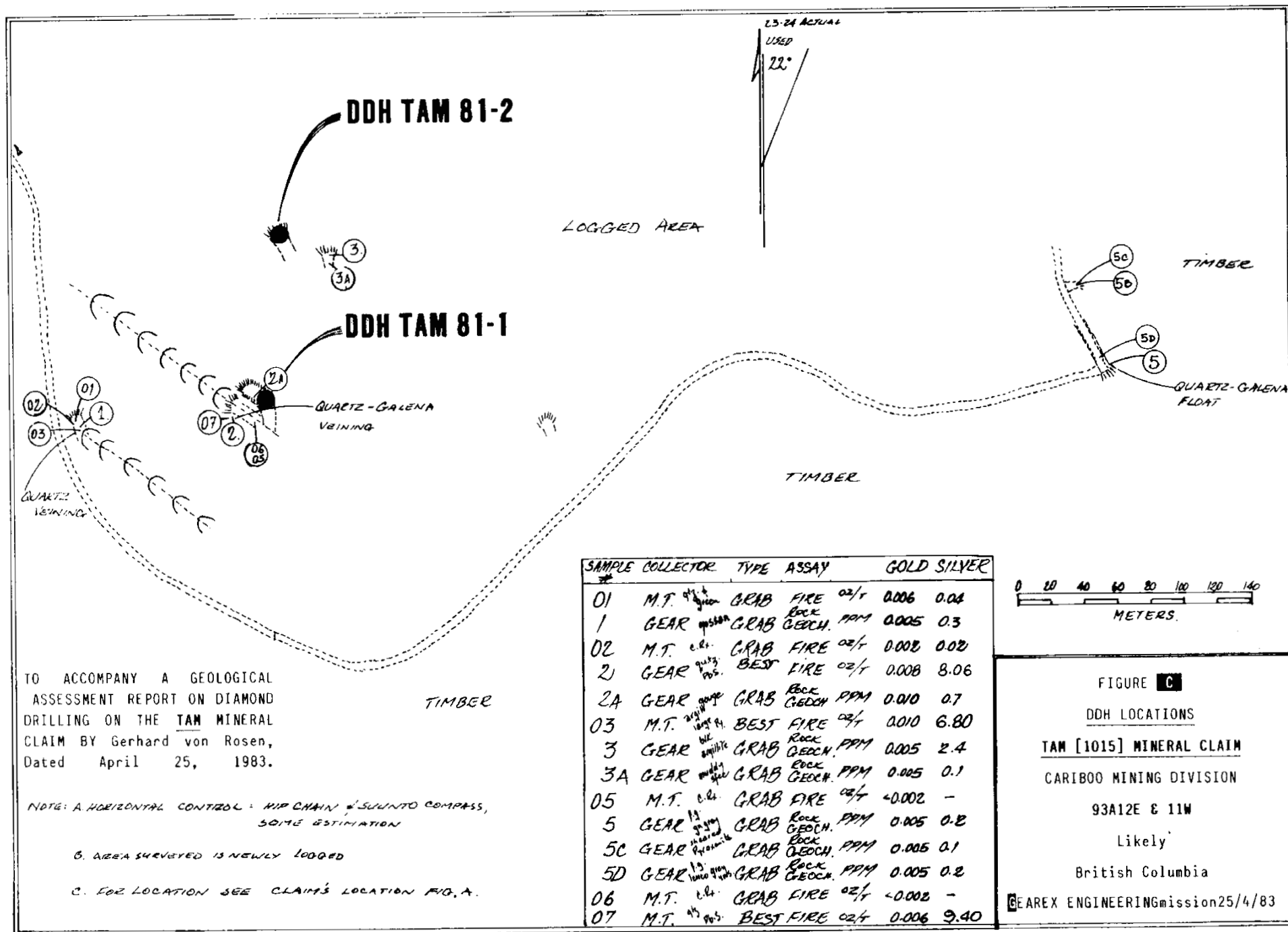
TOPOGRAPHY - VEGETATION - CLIMATE

The property covers a gently sloping hillside with a westerly aspect, for the most part, while on the east side it covers a portion of the steep slope into Spanish creek. Most of the west portion has been logged-off, and has only recently been replanted, so that the highest vegetation may be fireweed. The terrain is open. The south and eastern portion is still forested and has not been visited by this writer excepting along Spanish creek.

Climate is dry and pleasant during the summer months, and cold with some snow in the winter.

HISTORY OF THE AREA

The gold-rush days comprise the more well-known history of the area, due largely to rich placer operations of the past. The recent past of course has provided ample resurgence of interest in gold-placer. For a time there was a copper-staking rush in the area, centered around Bootjack lake. The property itself was reportedly only



TO ACCOMPANY A GEOLOGICAL ASSESSMENT REPORT ON DIAMOND DRILLING ON THE TAM MINERAL CLAIM BY Gerhard von Rosen, Dated April 25, 1983.

NOTE: A HORIZONTAL CONTROL: HIP CHAIN & SUNNY COMPASS, SOME ESTIMATION

B. AREA SURVEYED IS NEWLY LOGGED

C. FOR LOCATION SEE CLAIM'S LOCATION FIG. A.

recently discovered when bulldozers from logging operations opened-up some of the strongly iron-stained and pitted metasediments on the claim. Further prospecting, and bulldozer trenching exposed argentiferous galena quartz showings.

The writer first inspected, and reported on the showings with a report dated September 28, 1979.

Further work included a geochemical survey, which was intended to delineate any further lead, silver, and gold anomalous zones.

The present owner acquired the property, cored two diamond drill holes, and asked the writer to inspect them, and evaluate the situation. The writer logged the core, surveyed the hole locations, and was asked to determine a third drill site. This was drilled, and the writer has the location of the collar, but has not seen the core.

GEOLOGY OF THE AREA

The most recently available geological information, to the writer, is shown on the Geological Survey of Canada Open File #574, which displays geology and compilation by Dr. R.B. Campbell on the Quesnel Sheet 93A. The designations and metamorphic interpretations are somewhat different from the previous-available map 3-1961. However, outcrop locations have not been changed within the property environs. (but should be when the drill results of this report are validated) Generally speaking the rocks are Triassic and Jurassic metasediments exhibiting

NOTE: PROBABLY CASSED THROUGH ZONE OF METALLIC MINERALIZATION

HOLE DRILLED BY:

White Crown Res. Ltd.
Mt. Lehman, B.C.

DURATION

July 9 - July 14, 1983

CORE SIZE

NQ WIRE LINE

CORE STORAGE

on-site

SUPERVISION

Edward Friesen

CORE LOGGING

G.E.A. von Rosen, P.Eng.
July 27, 1983

HOLE SUMMARY

Hole collared on outcrop where there are showings of argentiferous galena in quartz. Cased for ca. 2.4m (?through mineralized section?). First portion of core from bottom of cased section to about 27 meters the rock is leucocratic, micaceous (?showing some fuchsite on outcrop?) and contains several quartz veins. From 27m to about 82 meters the rock changes back and forth between black and grey schist. This schist starts to be light grey around 82 meters and remains so until the end of hole.

ROCK TYPE

[black quartzose phyllite, slate, argillite, and siltstone]
of

PALEOZOIC AGE

MIDAS FORMATION

(ref: GSC Map 3-1961, unit 15)

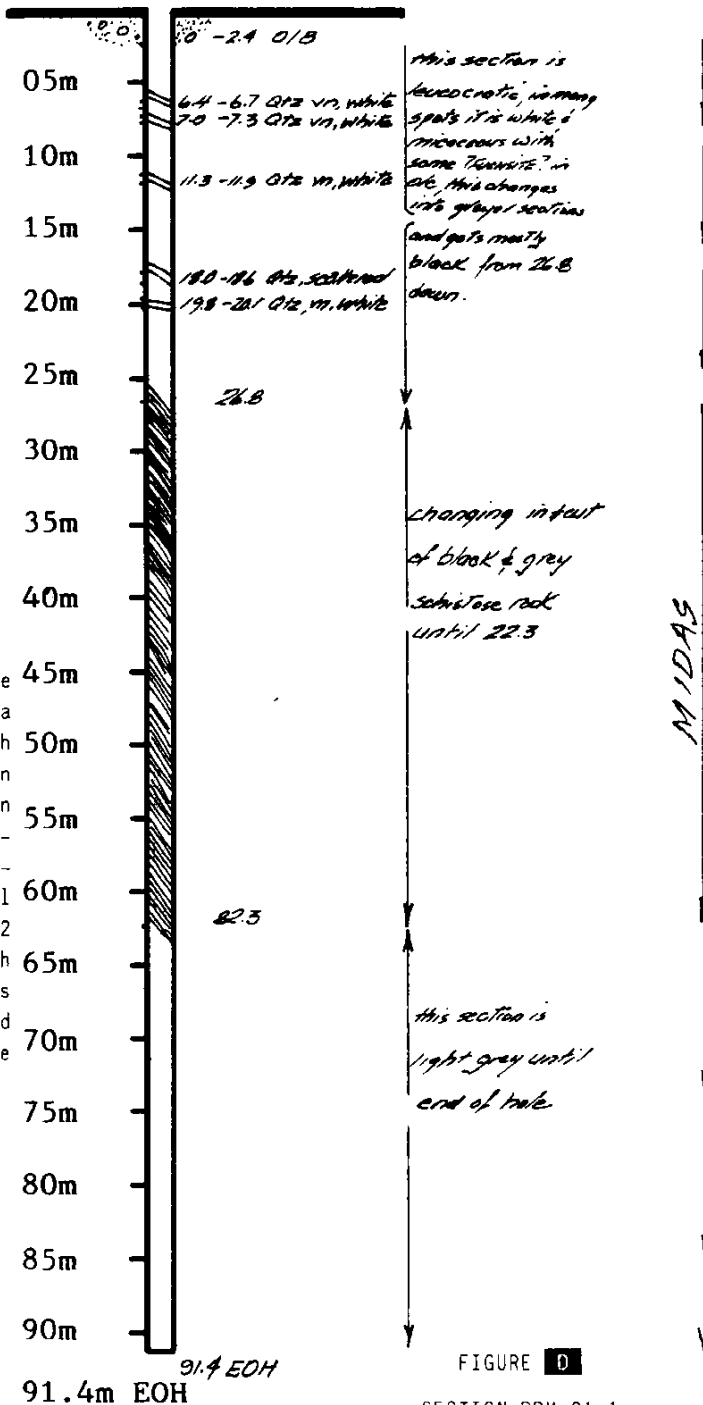


FIGURE D

SECTION DDH 81-1

TAM [1015] MINERAL CLAIM

CARIBOO MINING DIVISION

93A12E & 11W

Likely

British Columbia

GEAREX ENGINEERING mission bc 25/4/83

TO ACCOMPANY A GEOLOGICAL ASSESSMENT REPORT ON DIAMOND DRILLING ON THE TAM MINERAL CLAIM BY Gerhard von Rosen, Dated April 25, 1983.

up to amphibolite (kyanite) facies of metamorphism in the older rocks. The property area is mapped as covered by Quarternary glacial deposits with few scattered, unmapped outcrops. Closer inspection of the claimed area will result in even more outcrops or subcrops being found than could be expected during the short visits by the writer. It appears that areas exist where the Quarternary cover is quite thin and the rock types could be distinguished. As it is the writer encountered metasediments, and altered pyroxenites presumed to belong to the Midas formation of slate and argillite.

The few outcrops viewed by the writer revealed in one area alteration reminiscent of calc-silicate alteration with possible 'fuchsite' mineralization and total limonitization of probable pyrite crystals which strongly flooded the country rock. The gossan zone exists in a trench across the ridge at location 1 on Figure **C**. White quartz fragments are scattered throughout the brown rubble.

Location 2 on the same figure coincides with another parallel ridge on which white quartz vein pieces are visible on the southwest side of a small knoll. No subcrops were seen between the ridges. The quartz vein is in one place flat-lying with a brown selvage against coarser light grey rock which upon weathering is pitted and contains about 50% scattered brown semi-round ?fossils of pinhead dimension. Sulfide material appears to have weathered to limonite. The sample consisted of pieces of the vuggy white quartz vein containing fresh crystal masses of galena. Off the ridge to the northeast flank is a trench with a gougy grey seam exposed by the bulldozer.

To the east across a shallow 'valley' area is a trench

exposing quartz carbonate vein material which shows rust but not specific signs of galena. East from this location is a trench showing rusty grey "Midas formation" argillite containing one centimeter cubes of pyrite. (sample 3) On bedrock surface occurs a gougy silty grey material which appears like comminuted 'Midas formation' and a sample (#3A) was taken to test this material.

This material may well have been cored in DDH81-2 as the fault zone.

Further up the gentle rise to the east lies a large, man-sized boulder of brown-stained white quartz vein containing galena clusters. Bulldozer trenching in this sector cut fine-grained light-coloured rock with many rusty partings, possibly a quartzite (#5D). Sheared pyroxenite was sample 5C rock. Fine grained limy looking siltstones show limonite flooding to pervade the rock, selectively replacing small phenocrysts of carbonate. The source of the galena-rich boulder was not, as yet, exposed.

Map 3-1961 indicates the probable trace of a major fault to pass through the property. If the plot of the claim on Figure B is correctly positioned in relation to this fault, then the location of the diamond drill holes, subject of this report, happen to be very close to the fault.

ASSAY RESULTS

Two sets of assays had been incorporated into the 1979 report, and are here shown on Figure C. Fire assays are shown in ounces per ton, and rock geochemical analyses are shown in parts per million. In 1979 samples

HOLE DRILLED BY:
White Crown Res. Ltd.

DURATION
July 15 - July 27, 1981

CORE SIZE
NQ WIRE LINE

CORE STORAGE
on-site

SUPERVISION
Edward Friesen

CORE LOGGING
G.E.A. von Rosen, P.Eng.
July 27, 1981

HOLE SUMMARY
Hole collared on outcrop, but was cased to about 5.5 meters. Core to 10.4m is granular schist (with 'rolled' quartz eyes) From 10 to 31 m black schist contains obvious pyrite cubes. From 31 to 38.4 m core is of darker grey black schist, this continues to 56.4m. From here to 75.6m rock is leucocratic, similar to rocks in outcrop to south of drill collar, and also in top of DDH TAM 81-1. Slimy micaceous sections would give a phyllitic appearance. Black schist from 75.6-76.2m. From 76.2-83.5m schist is greyish white and contains schlieren. Black schist from 83.5-85.3m, the end of hole. Quartz veins occur within black schist between 30-40 meters.

ROCK TYPE
[black, quartzose phyllite, slate, argillite, and siltstone]
of

PALEOZOIC AGE
MIDAS FORMATION
(ref: GSC Map 3-1961, unit 15)

TO ACCOMPANY A GEOLOGICAL ASSESSMENT REPORT ON DIAMOND DRILLING ON THE TAM MINERAL CLAIM BY Gerhard von Rosen, Dated April 25, 1983.

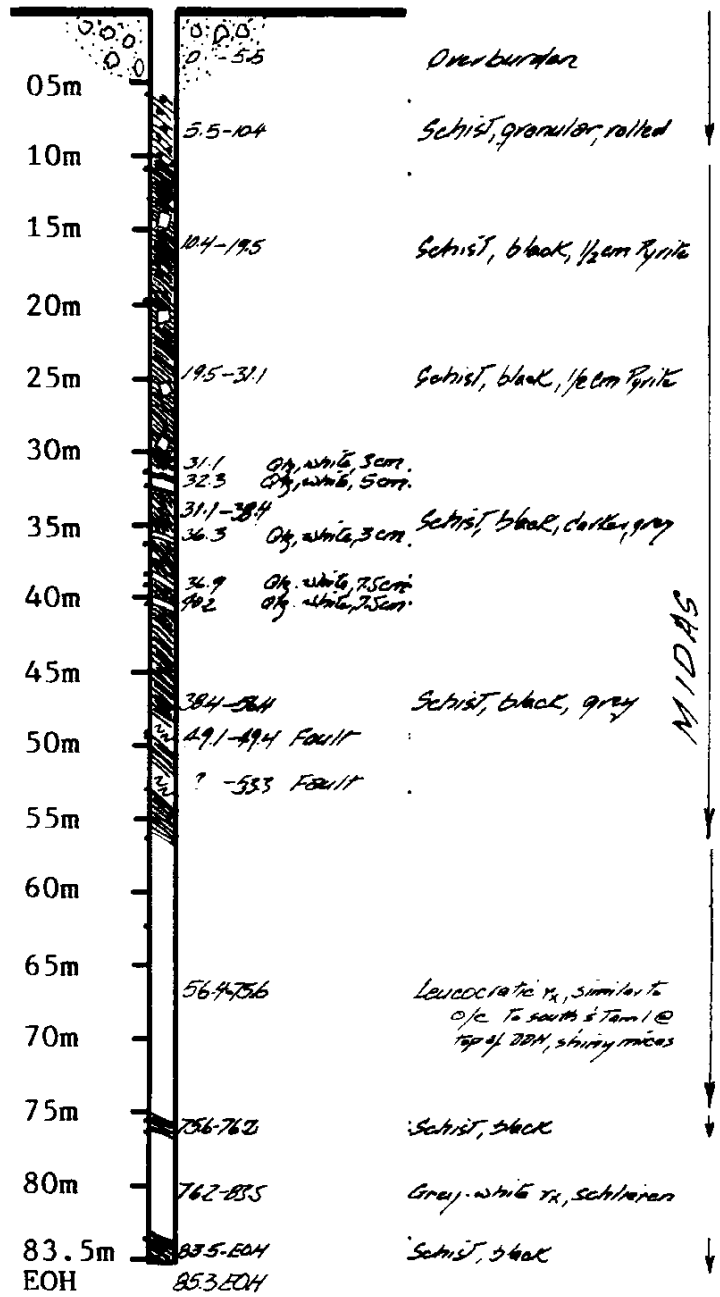


FIGURE E

SECTION DDH 81-2

TAM [1015] MINERAL CLAIM

CARIBOO MINING DIVISION

93A12E & 11W

Likely

British Columbia

were taken and assayed as shown of Figure C. Results indicate that the country rock surrounding the quartz-galena veins do not contain appreciable amounts of gold or silver, however the widely scattered occurrence of the silver-bearing quartz-galena veins is of further interest for exploration.

It appears to the writer that the galena-bearing boulder lies in an area of a different rock formation than the Midas, which occurs lower down the hill. On map 3-1961 are shown rock unit 11 or unit 16, which include more mafic constituents. In either case the galena boulder would derive from a rock type occurring farther down the hill.

ASSAY RESULTS: DRILLING

In view of the paucity of observable metallic mineralization in the drilled core, it was thought useful to obtain periodic assay checks of the country rock. Thus at regular intervals ca. 10cm samples of core were taken whole for analysis. The attached assay sheet shows this information for lead, zinc, silver, copper, and in certain spots for arsenic.

A sample of sludge was also taken from the pump pond.

To: WCR Construction Ltd.,
30836 Polar Ave.,
RR 1 Mt. Lehman Road,

Assaying & Trace Analysis 14

852 E. Hastings St., Vancouver, B. C. V6A 1R6

phone: 253 - 3158

File No. 81-0883

Type of Samples DD Core

Disposition

Attn.: Mr. E. Friesen

GEOCHEMICAL ASSAY CERTIFICATE
Tam Claims

1

SAMPLE No.		Pb	Zn	Ag	Au	As				
Tam 1 - 21	6.4	49	130	.1	.005					1
36	11.0	66	101	.1	.005					2
58	17.7	41	93	.2	.005					3
76	23.2	41	170	.1	.005					4
87	26.5	17	49	.3	.070			9		5
102	31.1	22	168	.2	.970			20		6
118	36.0	20	110	.3	.010			10		7
127	38.7	19	30	.2	.310			98		8
140	42.7	17	43	.3	.010			21		9
160	46.8	27	114	.4	.005					10
178	54.3	22	72	.1	.005					11
191	58.2	16	47	.1	.005					12
205	62.5	40	60	.1	.005					13
224	68.3	20	67	.1	.005					14
234	71.3	22	85	.2	.005					15
243	74.1	19	61	.1	.010					16
259	78.9	23	49	.2	.010					17
265	80.8	33	130	.1	.010					18
279	85.0	16	114	.2	.030					19
284	86.6	18	102	.1	.005					20
Tam 2 - 33	10.1	13	24	.1	.005					21
47	14.3	32	63	.2	.005					22
74	22.6	19	32	.4	.010					23
102	31.1	27	43	.4	.010					24
114	34.7	2760	670	7.2	.080			8		25
132	40.2	33	40	.2	.005					26
151	46.0	81	69	.4	.030					27
173	52.7	21	89	.1	.005					28
191	58.2	19	111	.1	.015					29
211	64.3	36	59	.2	.005					30
243	74.7	45	196	.1	.005					31
263	80.2	18	82	.1	.005					32
271	82.6	30	61	.1	.010					33
278	84.7	33	91	.2	.015					34
Pump Pond		15	65	.3	.015					35
										36
										37
										38
										39
										40

All reports are the confidential property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

RESULTS

DDH TAM 81-1, cored to a depth of 91.4 meter through three distinct dipping beds of what the writer considers to be Midas formation rock. The central one of the three consists of black schist with dark and grey interbeds. The top one comprises also the outcrop material which contains a shallowly dipping quartz-galena vein which carries silver.

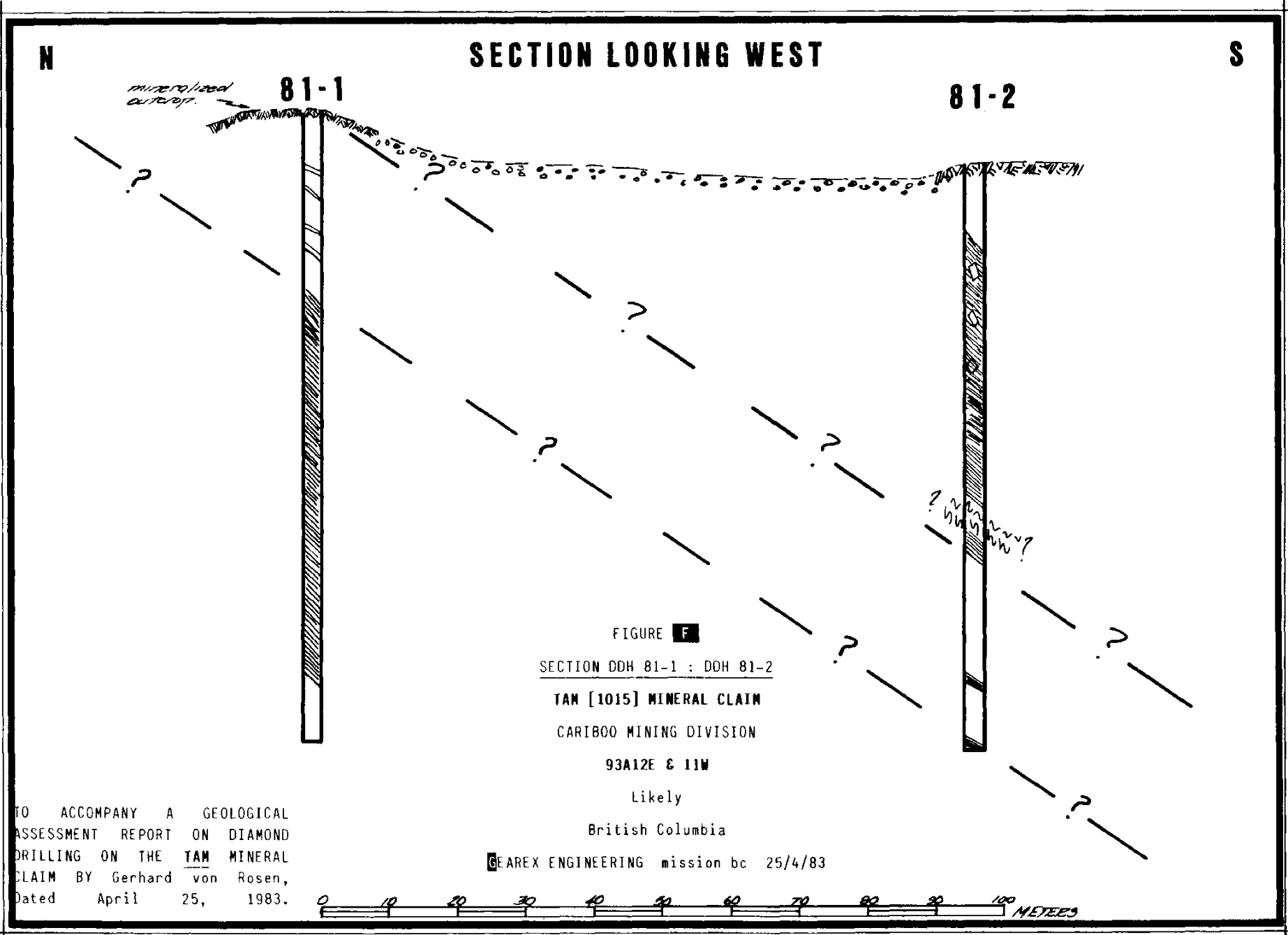
DDH TAM 81-2 was collared 100 meters north of the first hole. It has intersected three rock types also. The top of which is a dark/grey wavy banded granular schist with dark bands enfolding 'rolled' augen of quartz. The central section appears quite distinctive for Midas formation in that it is black schist (phyllitic) with conspicuous cubes of pyrite. The lower section is light coloured, and appears similar to that near the top of the first hole.

A sketch, to scale, showing the authors interpretation, is shown as Figure **3**.

Analysis for the precious and base metals did not indicate consistent quantities of anything, however little of the rock was totally barren.

CONCLUSIONS

The drilling did point out interesting relationships of Midas formation geology, however no commercial values are indicated at this time.



SECTION LOOKING WEST

N

S

81-1

81-2

mineralized outcrop

FIGURE **F**

SECTION DDH 81-1 : DDH 81-2

TAM [1015] MINERAL CLAIM

CARIBOO MINING DIVISION

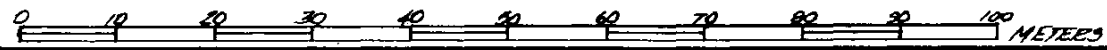
93A12E & 11W

Likely

British Columbia

GEAREX ENGINEERING mission bc 25/4/83

TO ACCOMPANY A GEOLOGICAL
ASSESSMENT REPORT ON DIAMOND
DRILLING ON THE TAM MINERAL
CLAIM BY Gerhard von Rosen,
Dated April 25, 1983.



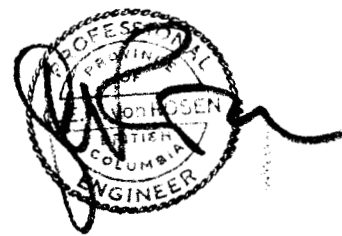
RECOMMENDATIONS

The TAM mineral claim comprises 16 units strategically located over an area that has only been recently been logged with a veneer of overburden shallowly covering metasediments which are known to host lead-silver mineralization.

An assessment of the mineral content of the rocks underlying the property should be made.

A program to perform such an assessment would consist of geological mapping, geochemical sampling, ground magnetic and electromagnetic surveys, and trenching. This would cover the entire property, on a reconnaissance basis at first, later focusing on details of interest.

Respectfully submitted,
G.E.A. von Rosen, P.Eng.
April 25, 1983



CERTIFICATE OF QUALIFICATIONS

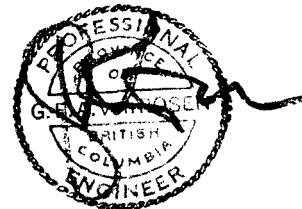
I, Gerhard von Rosen, reside at Mission,
British Columbia, at 33176 Richards Ave.

I have been practicing my profession of
consulting geologist since my graduation
from the University of British Columbia
in 1962 with a Bachelor of Science, and
in 1966 with a Master of Science degree
in Honours Geology.

I have been involved with geology and
core logging many times before, and am
qualified to compile and interpret this
information.

Gerhard von Rosen, P.Eng.

April 25, 1983



ITEMIZED COST STATEMENTDURATION

July 09-10	mob-in
July 11-13	DDH 81-1 300' = 91.4m
July 14	move
July 15-17	DDH 81-2 282' = 85.9m
July 27	moving
July 28-31	DDH 81-3 300' = 91.4m
August 1	mob-out

COSTS

mobilization-in		\$2800
site preparation		\$2450
drilling NQWL	DDH81-1 91.4m	
	DDH81-2 85.9m	
	DDH81-3 91.4m	
	Total <u>268.7m</u> @ \$98/m	\$26332
site clean-up and demob		\$2027
room & board included		
wages included		
engineering		\$500
assays		\$1120
core boxes		\$405
aircraft rental, transportation		\$1750
engineering assessment report		\$2500
<u>TOTAL COSTS</u>		<u>\$39884</u>

UNIT COSTS

Length drilled	882 feet = 269m
Length applicable to this report	177.3m
Proration of costs $177/269 \times \$37384 =$	\$24598
Add assessment report cost	\$2500
<u>TOTAL PRORATED COST</u>	<u>\$27098</u>
Cost per meter	\$153