

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.04.26

ASSESSMENT REPORT 17343

MINING DIVISION: Omineca

PROPERTY: Tets
LOCATION: LAT 53 50 34 LONG 126 56 53
UTM 09 5967764 635006
NTS 093E15W

CLAIM(S): Tets
OPERATOR(S): Shelford, J.
AUTHOR(S): Shelford, J.
REPORT YEAR: 1988, 30 Pages

COMMODITIES
SEARCHED FOR: Copper, Zinc, Cadmium, Silver

GEOLOGICAL
SUMMARY: The claims appear to be underlain by sediments and volcanic rocks.

WORK
DONE: Drilling, Physical
DIAD 28.7 m 1 hole(s); EX
PITS 1 pit(s)
TREN 32.0 m 1 trench(es)

RELATED
REPORTS: 16003
MAPFILE: 093E 084

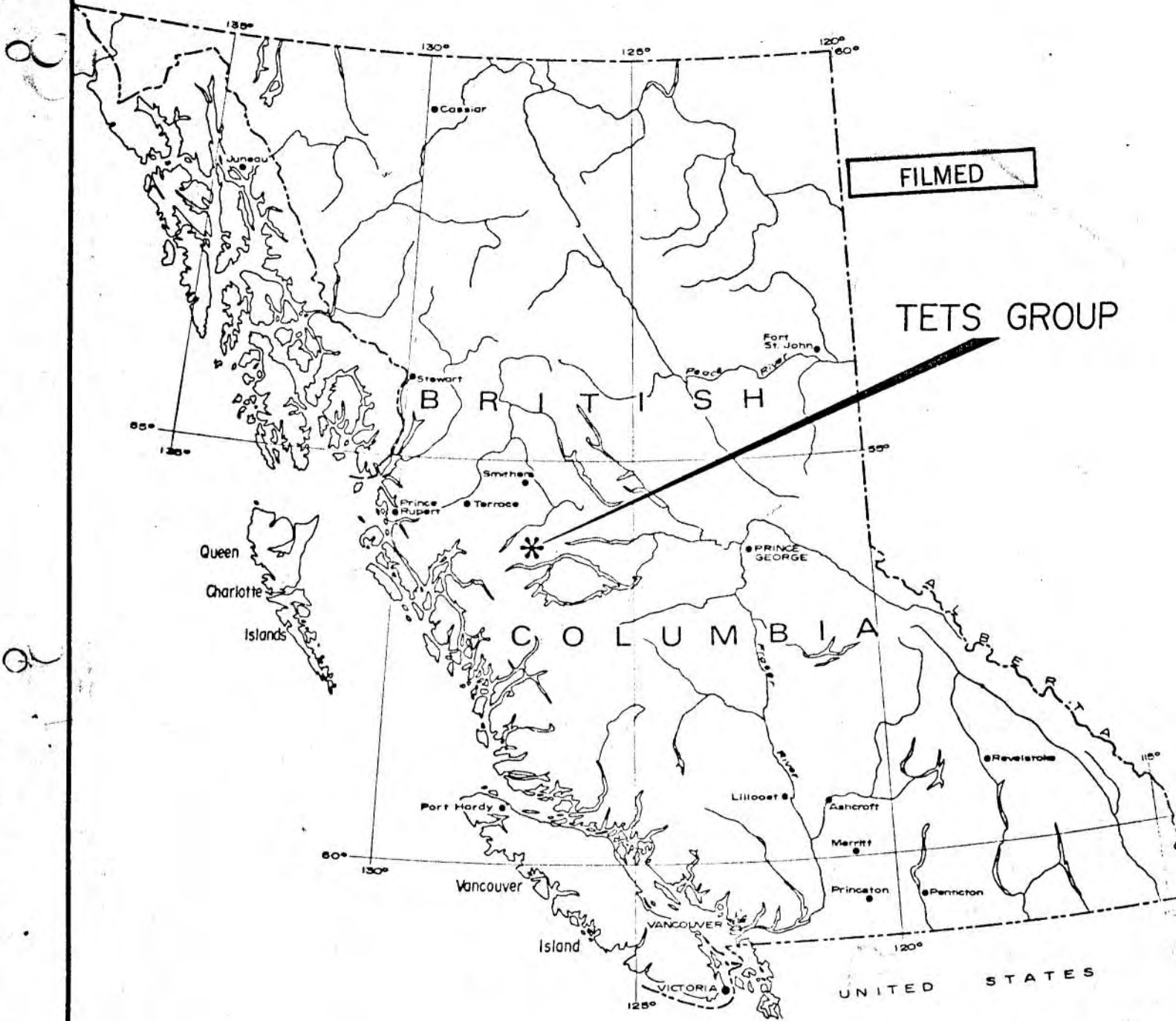


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Figure 2 Claim Map.

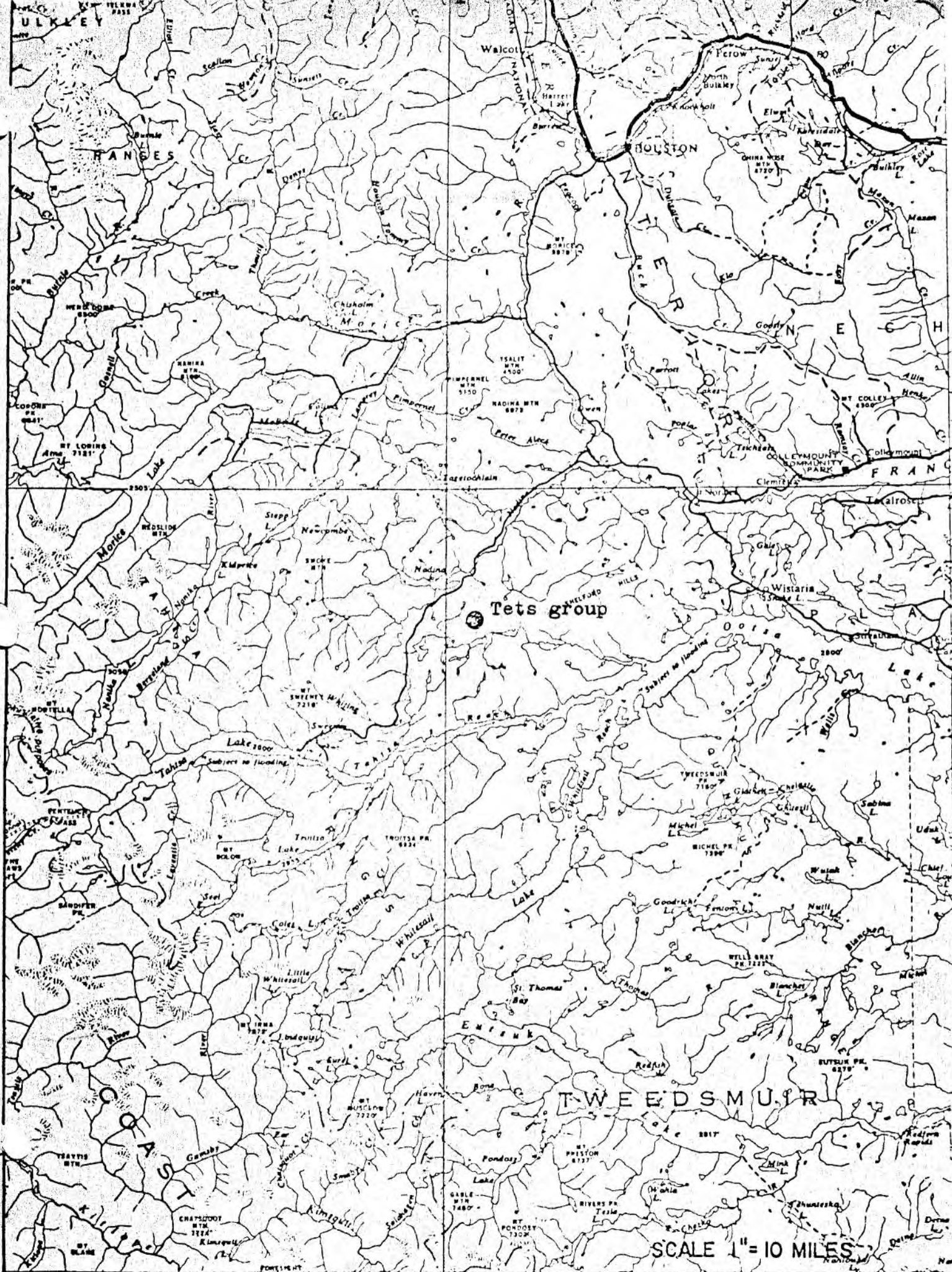
Figure 3 Location of Drill Holes and Physical
Work on Claim Map.

Figure 4 Location of Drill Holes and Physical
work on Grid Map.

Figure 5 Diamond Drill Hole 60 E / 6 N Hole No I

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a



SCALE 1" = 10 MILES

INTRODUCTION

The writer was born in the area in 1916, has prospected actively since 1950, and has been engaged in development work since 1959, during which time two drill programs were observed as to methods and results. In 1980 the writer directed a small drill program which produced useful information.

HISTORY

The Tets claims were first staked in July 1969 by J. Snelford; Tets 7-14 were added in April 1970; Tets 15-16 were staked to replace Tets I-2 (lapsed by mistake); Tets 17-30 were staked in Sept. 1971; Tets 31-42 were staked in May 1972; Tets 43-54 were staked in May 1972; nine fractions Tets 55-67 were added in Aug. 1973.

The property was optioned to Sibola Copper Mines (later Sibola Mines) in 1970. On June 22, 1973 Grangus Exploration Aktieblag optioned the property and carried out work during 1973-74, at which time the option was abandoned.

By Sept. 1977 all claims were abandoned except Tets 2-12, Tets 15, 24 and 26.

In Sept. 1977 the claims were regrouped under the grid system as 15 units, named Tets claim.

In 1978 John Boy 5 units, Jim Bo 10 units, South 5 units, and Lake 5 units were added, and grouped as the Tets group.

In Feb. 1980 Sibola dropped the option and all claims were transferred to J. Snelford.

In 1980 a small shallow drill program was undertaken in the area known as Swamp Show, which illustrated the dip and strike of the known mineralized area, assisted by some blasting and trenching etc.

LOCATION AND ACCESS

"The TETS claims are located approximately 5 miles (8.05 km) northeast of Twinkle Lake, which is 40 miles (64.37 km) south of Houston, B.C. Twinkle Lake is accessible via the Tahtsa Lake road from Houston. During the 1973 program the property was serviced by an Alpine Helicopters machine, based at Twinkle Lake." Sibola built a short, 4-wheel drive access road 84 miles west of Burns Lake, near Nadina Lake, from the northwest. Logging by Eurocan Pulp & Paper has since provided an all-weather access route from the south directly onto the property.

TOPOGRAPHY AND CLIMATE

"Topography on the property varies from moderate to rugged with elevations ranging from 3300 to 4700 feet (1,006 m - 1,433 m). The topography appears to be structurally and geologically controlled, with the ridges exposed and the troughs occupied by swampy meadows.

The property is heavily forested with balsam, spruce and pine, all of commercial value. A logging access road has been constructed across the south-west corner of the property.

The climate is of a temperate nature, with warm summers and cold winters. The area is free of snow from July through October, making the area more readily accessible and more easily worked during this period."

REGIONAL GEOLOGY

The area has received substantial geological activity since the discovery at Goosly Lake. Dr. Neil Church * has spent substantial time on original mapping in the district. He shows that the region is underlain by "... a diverse suite of Mesozoic and Tertiary volcanic rocks and a number of small intrusions ...".

Specific units of the volcanic suite act as host to mineralization resulting from the feeder intrusions.

Mineralization most sought after in the area are termed "Volcanogenic" deposits. These are usually higher grade, smaller tonnage, massive and mixed sulphides of copper, lead and zinc, with substantial values in silver and some gold.

"The main stratigraphic divisions compose a lower sequence of metamorphosed strata, believed to be early Mesozoic age, and an upper sequence of cover rocks of Tertiary and possible late Mesozoic age."

"The igneous intrusions consist of acid, intermediate and basic alkaline types.

Most of these bodies are clearly younger than the lower series strata and some appear to be volcanic necks and feeders to the Tertiary volcanic rocks."

The Goosly Lake deposit, owned by Equity Mining - now under option to Granby Mines, consists of four main zones of massive and disseminated mineralization in Lower Mesozoic volcanic rocks.

Mineralization includes pyrite, pyrrhotite, chalcopyrite with minor tetrahedrite and sphalerite. The key value is in the silver which is probably related to the tetrahedrite.

The mineral zone lies within an alteration zone near the contact of syeno-monzonites and dacite.

The Nadina property near Owen Lake is also a significant mineral deposit.

The belt from Goosly, Nadina to Tsalit Mountain and reaching to the Sibola property has received substantial exploration activity by major and junior companies.

* Church (1970) Geology of the Owen Lake, Parrott Lakes and Goosly Lake Area, G.E.M. pp. 119 - 125.

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Property Geology

No geological map has been made of the property.

Rock structure appears to strike N/S and dip nearly vertical. Mineral showings appear to dip vertically, but there is a different strike of some showings.

Rock types vary greatly from sediments surrounding the property and encroaching close to alteration areas on the north and south. Rhyolite, dacite, trachyte, tuff, and diorite in andesite occur, and now two areas in a general line stretching E/W from the westerly limit of known mineralization to nearly the easterly limit of mineralization, and nearly parallel to base line, and close to it.

Mineral showings consist of six general areas.

(1) Shovel Snow which consists of Shovel Snow, Swamp Show, Tets 28 Snow, and Base 44 Snow. This is the most westerly group.

Shovel Snow appears to be a volcanic neck composed of volcanic breccia conglomerate, minor copper minerals visible in it.

Swamp Show is a vein type deposit with a vertical dip and strike N from Shovel Snow. This is one of the most stable showings drilled to date with a width of 10-20 ft, containing disseminated chalcopyrite in a gangue which shows signs of containing rock

fragments from the neck material. Tets 28 is a vein type deposit, with a vertical dip, and strike S from Shovel Snow. Vein material has very clear evidence of rock fragments of hematite included with minerals, which are pyrite, chalcopyrite, spalerite, galena. tests at UBC revealed that at least four separate pulses of mineralization occurred.

Base 44 is a fault containing bornite striking E from Shovel Snow with a steep dip to the N.

(2) Stump Snow, 12 different mineral showings have been found, rocks are mostly tuffs, but some breccia conglomerate is visible, minerals are chalcopyrite, pyrite, bornite, tetrahedrite. Most showings have a N/S strike and a vertical dip.

(3) PUMP HILL rocks mostly andesite, with dykes of diorite. Mineral showings are small and erratic, containing chalcopyrite, bornite, tetrahedrite, and galena. Most showings are close to the diorite.

(4) Base 60E/6N which includes the Grangus Shows.

At 61E7N a cone of volcanic breccia conglomerate caps the ridge, it appears to be only 100 ft wide, but appears to get much larger just underground.

60E/6N contains several parallel veins with a S strike from the neck, and a vertical dip. This is in a mixed up mess of highly fractured tuff with breccia conglomerate forced into the country rock, the veins contain mostly spalerite.

Property Geology continued

The Grangus Shows are 400 ft to the E of this area in fractured altered rhyolite, and evidence of breccia in place can be found. Mineralization consists of sphalerite rim coating with wolframite, chalcopyrite, bornite.

(5) Jim Show, which includes Zinc Pitts. Jim Show N/S strike vertical dip containing chalcopyrite, bornite, tetrahedrite.

In tuff. Zinc Pitt a glob of mineral containing disseminated sphalerite, bornite, chalcopyrite in tuff.

(6) Emerald Show (4) in tuff. Farthest to the N/E, vein type with a N/S strike and vertical dip containing chalcopyrite, bornite, tetrahedrite, and chalcocite.

PREVIOUS WORK *

"On June 22, 1973, GRANGES EXPLORATION AKTIEBOLAG optioned the property and implemented the 1973 program. Between June 30 and August 5 of 1973 they carried out 8.75 miles (14.05 km) of line cutting. They collected and assayed 1294 soil samples and ran 40.63 line miles (65.39 km) of magnetometer survey. The results from this program are given in the report: Sibola Option, GRANGES EXPLORATION AKT. by R.E. Reid and G. Zbituoff.

During 1974, GRANGES carried out a limited amount of soil sampling and trenching (154 samples and two blast trenches), then returned the property to Sibola.

The Company continued the work on the property to determine the validity of the geochemical results. Later in 1974 work was done on the Granges Show at 6N - 66E, to include 33 holes and pits. This soil zinc anomalous area (Granges H5), was found to contain zinc, both "black jack" and "ruby" sphalerite.

The zone follows a massive shatter-breccia zone with mainly disseminated and rim-textured sphalerite with some local chalcopryrite. Comparison of the soil zinc map and the zinc found in place indicates that the soil results are indicative in the Granges Area.

In 1975, physical work was carried out again. A 10' x 10' trench was blasted at "Jim's Pit" and sampled, uncovering massive bornite. Five test pits were dug at the "Zinc Pit" and 3 pits and one trench on the "Hill Top Show". The Zinc Pit contained Zinc, Copper, Silver and Lead replacing shattered pyrite. The Hill Top Show is contained in the large Copper anomalous zone centered 6N - 56E and explains the cause. Blasting and trenching uncovered native copper and chalcocite in small quartz-calcite veinlets. The size or magnitude is not known but can explain high soil copper.

In 1976, 27 blast holes and pits and a 15 foot by 4 foot trench were added to the Granges Show.

In 1977, a new area was found at "Base 48". Nineteen test holes, two ten foot trenches, one twelve foot trench and a ten foot by ten foot test hole were blasted into the overburden and underlying rock. This area contains good exposure of copper-silver, bornite-chalcopryrite-tetrahedrite(?) over an area 25 feet by 400 feet, open at both ends."

* - Summary by Sibola staff.

PREVIOUS WORK CONTINUED

Rock stripping and trenching 1979. A total of 1654 cubic feet or 71.5 cubic meters of rock was blasted to form trenches and pits in four zones on the property. The areas selected were near the diamond drill targets to broaden the visible rock exposures.

In zone 1 Stump Snow at base 43 area (DD No 6 to 9) two rock trenches were blasted totaling 1450 cu ft and eight pits for 384 cu ft were put in .

In zone 2 Bear Snow three rock trenches and twelve pits were blasted .

In zone 3 Base 44 two rock trenches and two rock pits were blasted.

In zone 4 the Granges Snow area one rock trench and four rock pits were put in .

DIAMOND DRILL PROGRAM

Mauro C Baretta 26985- 100 AVE Whannock B.B. completed 29 diamond drill holes for a total of 1800 ft using a winkie drill and a Passe Par Touts (all terrain vehicle) for transport of the drill , water was pumped from local water sources with one and two pumps in tandem.

This was done as a result of Ron Stokes

PREVIOUS WORK CONTINUED

recomendation that known showings be crosscut with a drill to test at depth, however very little of this was done , and instead most holes were of a prospecting nature in anomolus areas . Consequently they were so far apart that it is impossible to get structure information from any two holes to compare them.

In 1980 a shallow drill program was done in the Swamp Show area.

In 1981 one drill hole and some trenching was done at the Harry Snow , also eight very shallow holes were put in at the Granges Show .

In 1983 a drill program of four shallow drill holes were put in at Stump Show . Also more trenching and blasting was done to expose showings and establish a dip and strike.

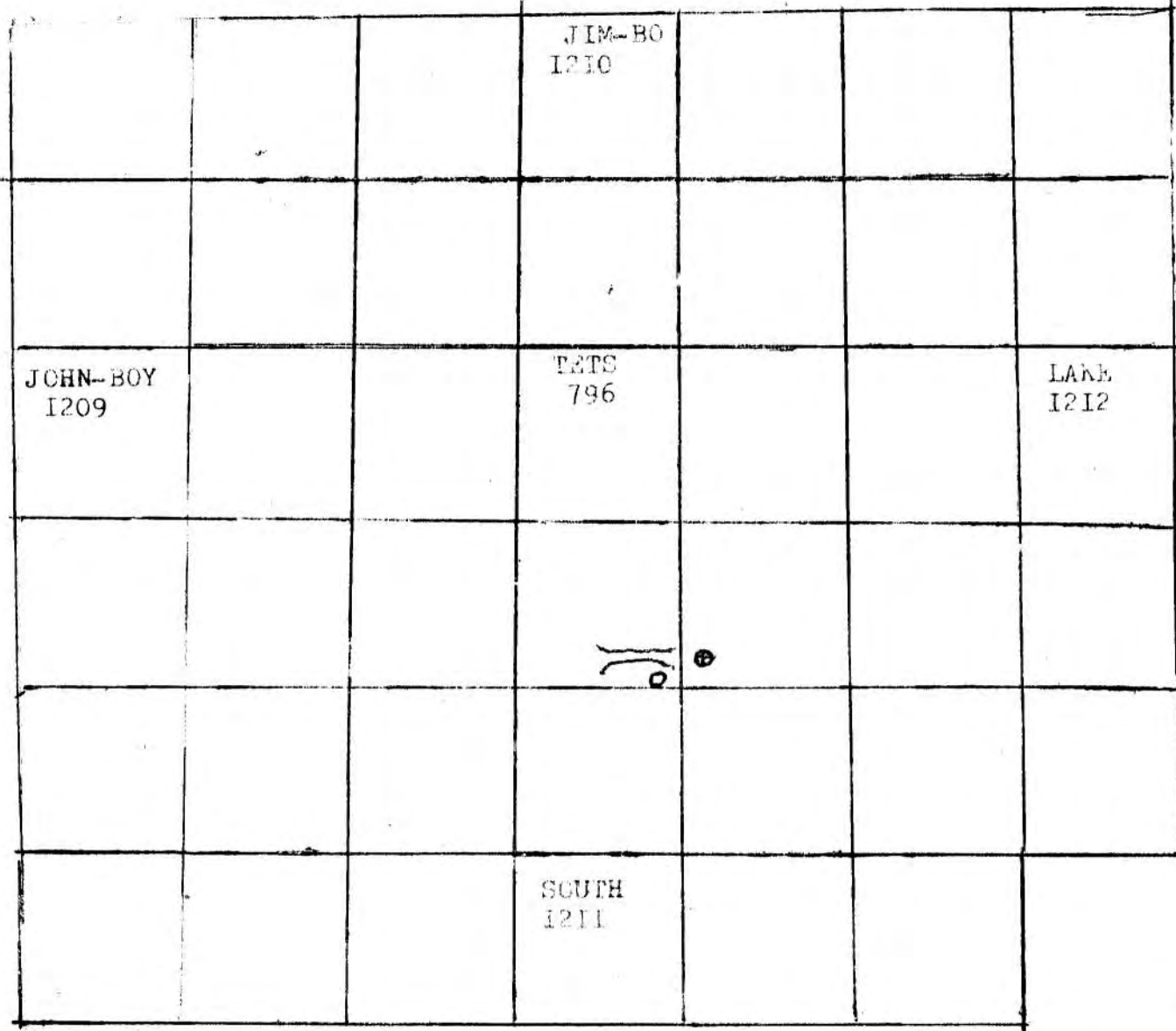
In 1984 four shallow drillholes were drilled at Stump Show , and a stripping and trenching program was carried out to gain imformation . Knowledge gained that apparently structure in the Stump Snow area consists of narrow vertical mineralized areas with a N/S strike . Which appears to link up some of the known exposures, and corresponds well with the long IP anomoly at base 49 . Stump No 7 appears to be in this anomolus area.

In 1985 the drill was moved to Pump Hill area , one hole was drilled and one started . A hole was blasted in the area of an intrusive..

In 1986 the second hole was completed at Pump Hill , and some furtner blasting and trenching was carried out ..

During 1986 a new mineralized area was discovered at 60E - 6 N, which matched the zinc anomoly on the soil grid done by Grangus .

The drill was moved to 60E- 6N during the 1986 season and a hole was collared to crosscut the visable vein system also some striping and trenching was carried out.



LEGEND




-  rock trench
-  pitt
-  diamond drill hole

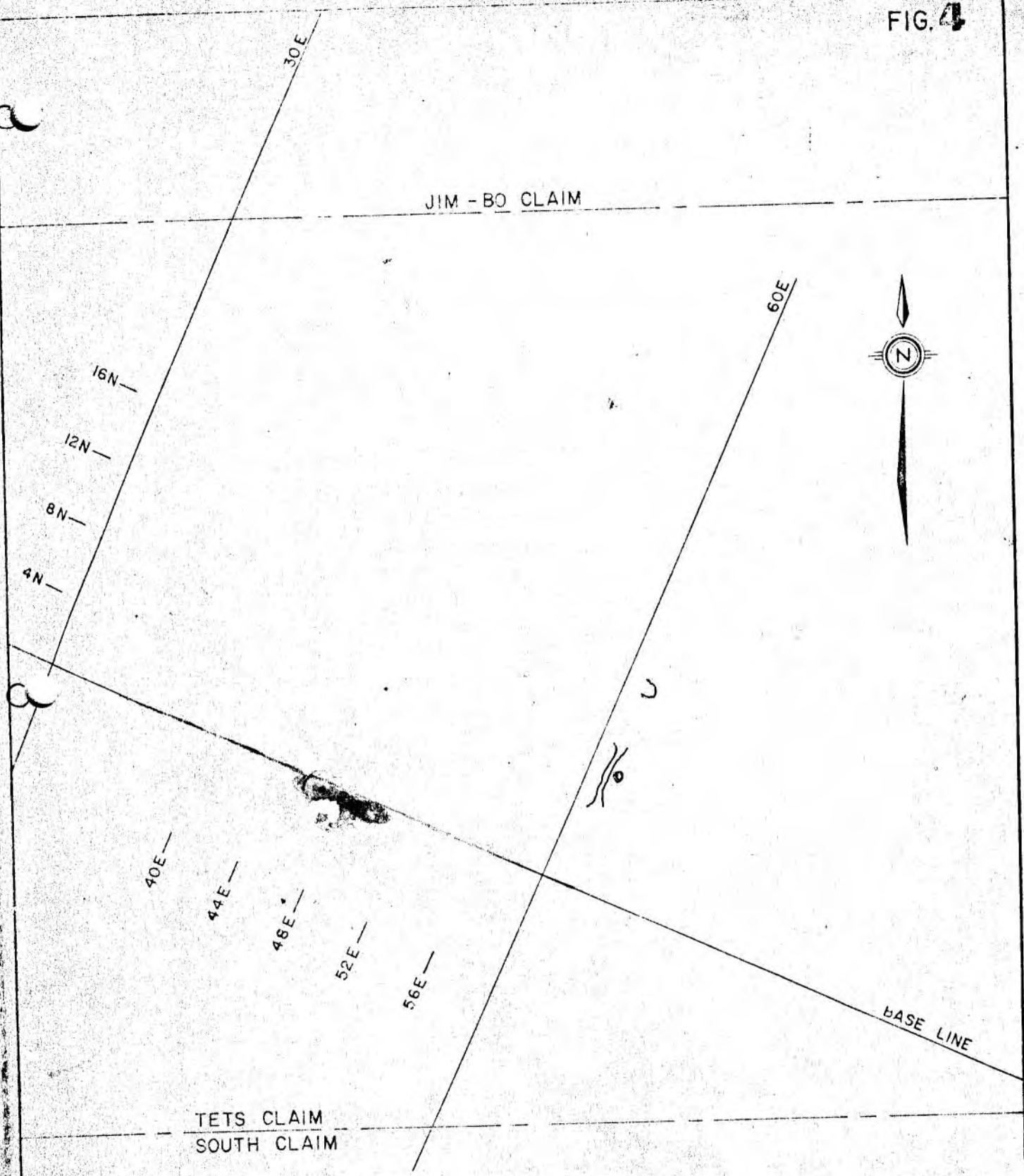
FIGURE 3

TETS GROUP
Diamond Drill Hole
and physical work
location map




1640 ft 3280 ft 4920 ft

J. Shelford | 16/88
For 1987

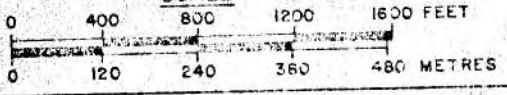
FIG. 4



LEGEND

-  Rock Trenches
-  Rock Pits
-  Diamond Drill Holes

SCALE



1987 Drill Program

Tets Property 93 E 15 W

During 1987 60 E/6N No I hole was drilled from 24 ft to 118 1/2 ft .

Again poor progress was made , due to very dry weather, however an improved water collection system was installed and appeared to provide nearly enough water even in dry spells .

June 30 John Shelford went in to the property to look over the situation , no motors would start , so all motors were brought out for repair.

July 1 John Shelford and grandson Mike took back 3 motors , but found drill motor still wouldnt start so it was again taken out.

July John Shelford and Mike took motors back and set up drill. July 11 John Shelford , HARRY Hewitt drilled to 30 ft.

Aug 5 no water , so John, Harry , and Mike took in 6 45 gallon drums and set them up in a step system with connecting hose with a water line from a seeping spring , and left to fill.

Aug. 12 John and Harry drilled to 59 ft and cased to 20 ft.

Aug 15 John and Harry drilled to 48 ft with no water return , so hole was cemented for 35 ft -

Aug 19 John and Harry drilled to 48 ft.

Aug. 26 John and Harry drilled to 59 ft.

Sept 1 John and Harry and Don Hill drilled to 69 ft .

Sept 13 John and Harry drilled to 73 ft .

Sept. 16 John and Harry drilled to 84 ft.

Sept 23 John and Harry drilled to 96 ft.

Sept. 30 John and Harry drilled to 101 ft.

Oct 12 John and Harry drilled to 118 1/2 ft

Oct 20 John and Harry went in and found water lines frozen so drill was closed down , and motors and some equipment was brought out.

physical Work Report for 1987

One trench was put in at 60E/6N

Blasted and dug 1 pitt near 60E/6N .

Cut out trail on water line , Enlarged water hole catch system , and laid 1000ft of gravity fed plastic hose to six forty five gallon drums set up so that they would fill one after the other , and close enough to drill site so that water could be pumped.

1987 Drill Hole Statment

| Hole | Casing | Cementing | Depth | Days worked | Dates worked |
|------------------|--------|-----------|------------|-------------|--|
| 60E/6N hole 1 | 12 ft | 35 ft | 118 1/2 ft | 12 | July 11 Aug 12, 15 19, 26 Sept 13, 16, 23, 30 Oct 12 |
| total | 12 | 35 | 118 1/2 | 12 | |

12ft casing @ \$40.00 = \$ 480.00

35ft cementing @ \$ 10.00 = \$ 350.00

118 1/2 ft diamond drilling @ \$ 25.00 ft = \$2362.00

total \$ 3192.00

1987 Physical Work Statement

1 trench 32 x 6 x 4 = 768 cu ft @ \$1.70 = \$ 1305.60
 1 pit 7 x 6 x 7 = 294 cu ft @ \$1.70 = \$ 499.80
 cutting out water line trail \$ 500.00
 enlarging water hole and setting up collection system
 \$ 450.00
 total \$ 2755.40

Additional Expenses

Core storage building 7x 8 ft = 56 sq ft @ \$18.00 = \$ 1008.00

3 core boxes @ \$ 15.00 = \$45.00

total \$ 1053.00

C

a

a

List of expenses to substantiate 1987 Drill Program

Diamond Drill rental 12 days @ \$ 100.00 = \$1200.00
 Power Saw rental \$300.00
 Play-cat rental \$ 300.00
 Atlas copco rental \$ 275.00
 Transportation \$200.00
 Fuel for drill and pumps \$ 30.00
 Oil for drill and pumps 12 qts @ \$ 1.89 = \$ 22.68
 Drill crew 12 days @ \$ 90.00 = \$ 108.00
 Power -saw winch for core pulling \$ 300.00
 total \$ 3607.68

Tets Group

List of claims and Distribution of work

| Claim | Record No | Valid to | Record date | Work credits applied for |
|--------------|-----------|------------------|-------------|--------------------------|
| Tets I-15 | 796 | 1991 | Sept | 1 year |
| John Boy I-5 | 1209 | 1988 | June | 1 year |
| Jim-bo I-10 | 1210 | 1988 | June | 1 year |
| South I-5 | 1211 | 1988 | June | 1 year |
| Lake I-5 | 1212 | 19 ⁸⁹ | June | 1 year |

Note. Withdrawal of \$999.60 from P.A.C. applied for.
This leaves a balance of \$35338.45 in P.A.C.

Comments

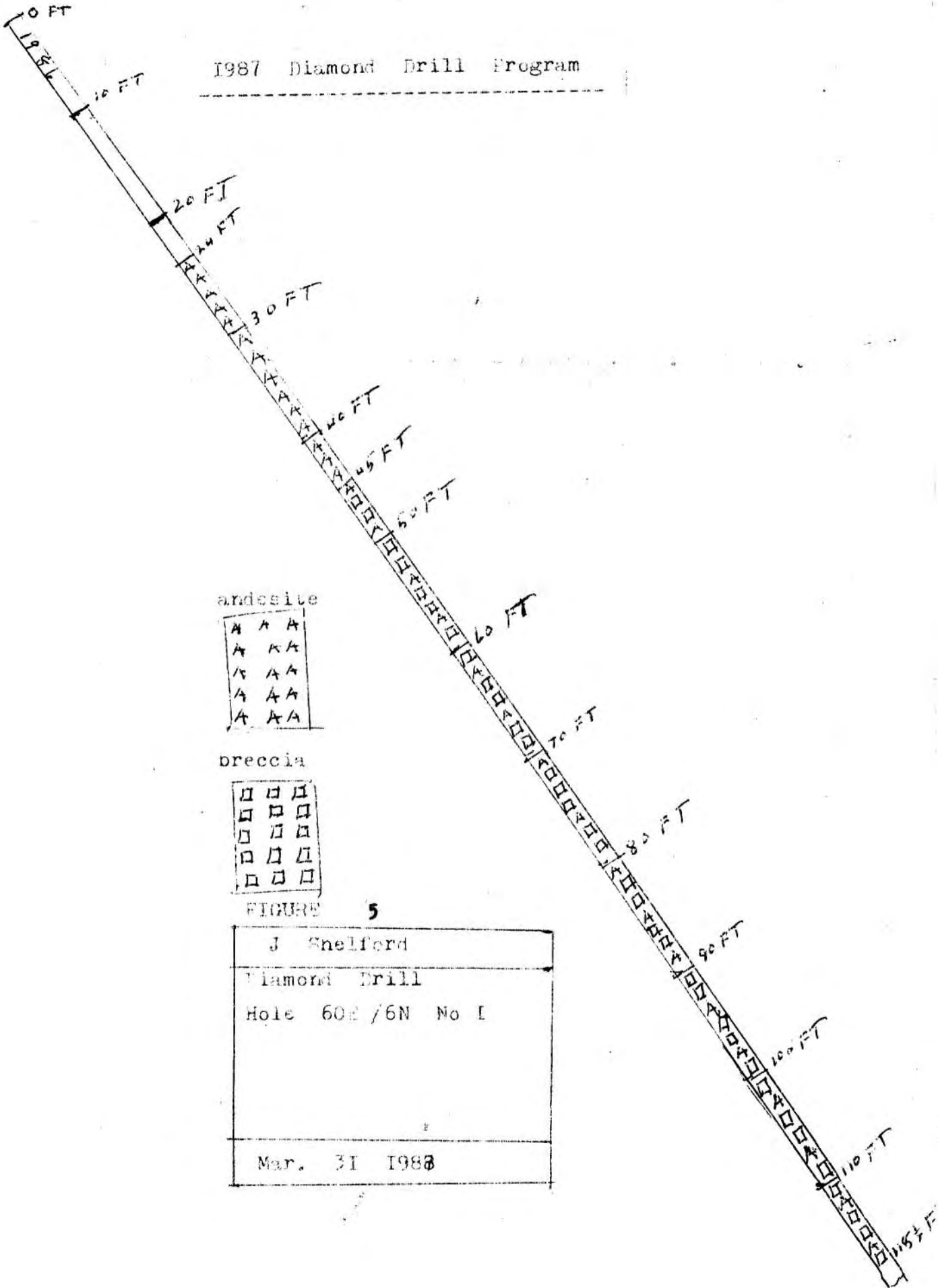
A geochronology assay of 603/6N NO I hole at 14 ft done in March of 1987 included in this report.

Three similar types of mineralization were intersected in this hole all above 45 ft .

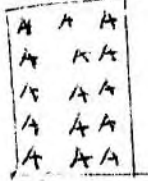
Further holes should be done in this area , as it appears to be an extension of the Grangus snow .

Core is stored at the residence of J.Shelford .

1987 Diamond Drill Program



andesite



breccia



FIGURE 5

| |
|--------------------|
| J Snelford |
| Diamond Drill |
| Hole 60E / 6N No 1 |
| Mar. 31 1988 |

STATEMENT OF QUALIFICATIONSRelevant Training

- B. Sc. (1970) - Pennsylvania State University
Geological Sciences
- M. Sc. (1973) - University of Toronto
Geochemistry

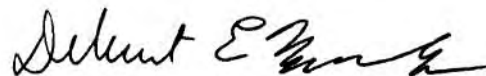
Relevant Experience

- 1973 - 1980 - Exploration and Mine Geologist
Cominco Limited
Vancouver and Yellowknife
- 1980 - 1982 - Project Geologist
Noranda Exploration Company, Limited
Yellowknife
- 1982 - 1983 - District Geologist
Noranda Exploration Company, Limited
Smithers
- 1984 - present - Project Geologist
Noranda Exploration Company, Limited
Prince George

Professional Affiliations

Fellow, Geological Association of Canada

Founding Member, Association of Professional Engineers, Geologists
and Geophysicists of the Northwest Territories.



DELBERT E. MYERS, JR.
Project Geologist
24 March 1988

MORANDA EXPLORATION COMPANY, LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. # **N-1**

DATE COLLARED:
1987

DATE COMPLETED:

CORE SIZE: 21 mm dia.

PROPERTY: TETS

N.T.S. # 93 E/15W

FIELD CO-ORDINATES:

LAT: 6 N
DEP: 61E

PURPOSE: deepen DDH N-1 PAGE 1 OF 1

INCL: -44
AZIMUTH: 330

HOLE NO: N - 1

ELEV:
LENGTH: 118 feet

| FROM (ft) | TO (ft) | REC (%) | DESCRIPTION | STRUCTURE ft/deg. WCA | % SULPH | SAMPLE NO. | INTERVAL (ft) | WIDTH (ft) | ANALYTICAL RESULTS | | | | | | | | |
|--------------|------------|------------|--|---|------------|---------------|------------------|---------------|--------------------|------------|-----------|------------|-----------|------------|--|--|--|
| | | | | | | | | | AU gmt | AG lppm | CU gmt | PB lppm | ZN gmt | ZN lppm | | | |
| 0 | 24.0 | | See log for DDH N-1 Core not presented for examination | | | | | | | | | | | | | | |
| 24.0 | 46.5 | 41 | ANDESITE: dark greenish gray, very fine to fine grained at end, massive except weathered at 33 feet. 15% cc-qz veinlets with minor hematite. | Slickensides at 145 feet geochem sample | | 09401 | 45.5' | 6" | | | | | | | | | |
| 46.5 | 118.0 | 87 | ANDESITE BRECCIA: maroon and green, fragments to 25cm, mainly 3cm diameter or less, 2.5% cc-qz veinlets with minor hematite. Fragments mainly gray/tan rhyolite at start, mainly andesite by 69 feet. | | trace py | | | | | | | | | | | | |
| | | | LOGGED BY DEL MYERS 122 March 1988 in Prince George, B.C. | geochem sample | | 09402 | 116.0' | 6" | | | | | | | | | |

Del Myers 24 March 1988

18

3

3

3

Tets (DM)

8804-004

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B N AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

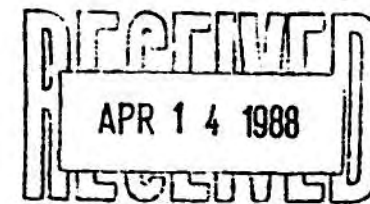
DATE RECEIVED: APR 05 1988 DATE REPORT MAILED: April 8/88 ASSAYER: C. Leong D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-240/8804-004 File # 88-0981

| SAMPLE# | MO | CU | PB | ZN | AG | NI | CO | MN | FE | AS | U | AU | TH | SR | CD | SB | BI | V | CA | P | LA | CR | MG | BA | TI | B | AL | NA | K | W | AU |
|---------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|------|-----|-----|-----|------|-----|-----|-----|-----|
| | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM |
| 09401 | 2 | 112 | 2 | 107 | .7 | 152 | 37 | 2121 | 6.57 | 7 | 8 | ND | 3 | 96 | 1 | 2 | 2 | 122 | 4.41 | .036 | 3 | 149 | 2.67 | 63 | .01 | 2 | 3.24 | .01 | .06 | 1 | 2 |
| 09402 | 3 | 132 | 27 | 299 | .6 | 16 | 7 | 1502 | 2.22 | 2 | 5 | ND | 2 | 28 | 1 | 2 | 2 | 50 | 6.39 | .051 | 9 | 25 | .14 | 81 | .04 | 12 | .71 | .01 | .28 | 1 | 4 |

Tet's property, NTS 93 E/15W, DD core, Hole N-1 dm

21



Copy to Dal.

2 Apr 88

3

3

