

84-#541 - 12601

GEOLOGICAL AND GEOCHEMICAL SURVEY REPORT

on the

TENAS CREEK PROPERTY

(HORSES ASS CLAIMS)

LILLOOET MINING DIVISION

LATITUDE 50 30'N

LONGITUDE 122 45'W

NTS 92J/7W, 10W

92J/7E, 10E

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,601

OWNER: MOREGAIN MINERALS INC.

CONTRACTOR: JMT SERVICES CORP.
8827 Hudson Street
Vancouver, B.C.

WRITTEN BY: G.G. Richards

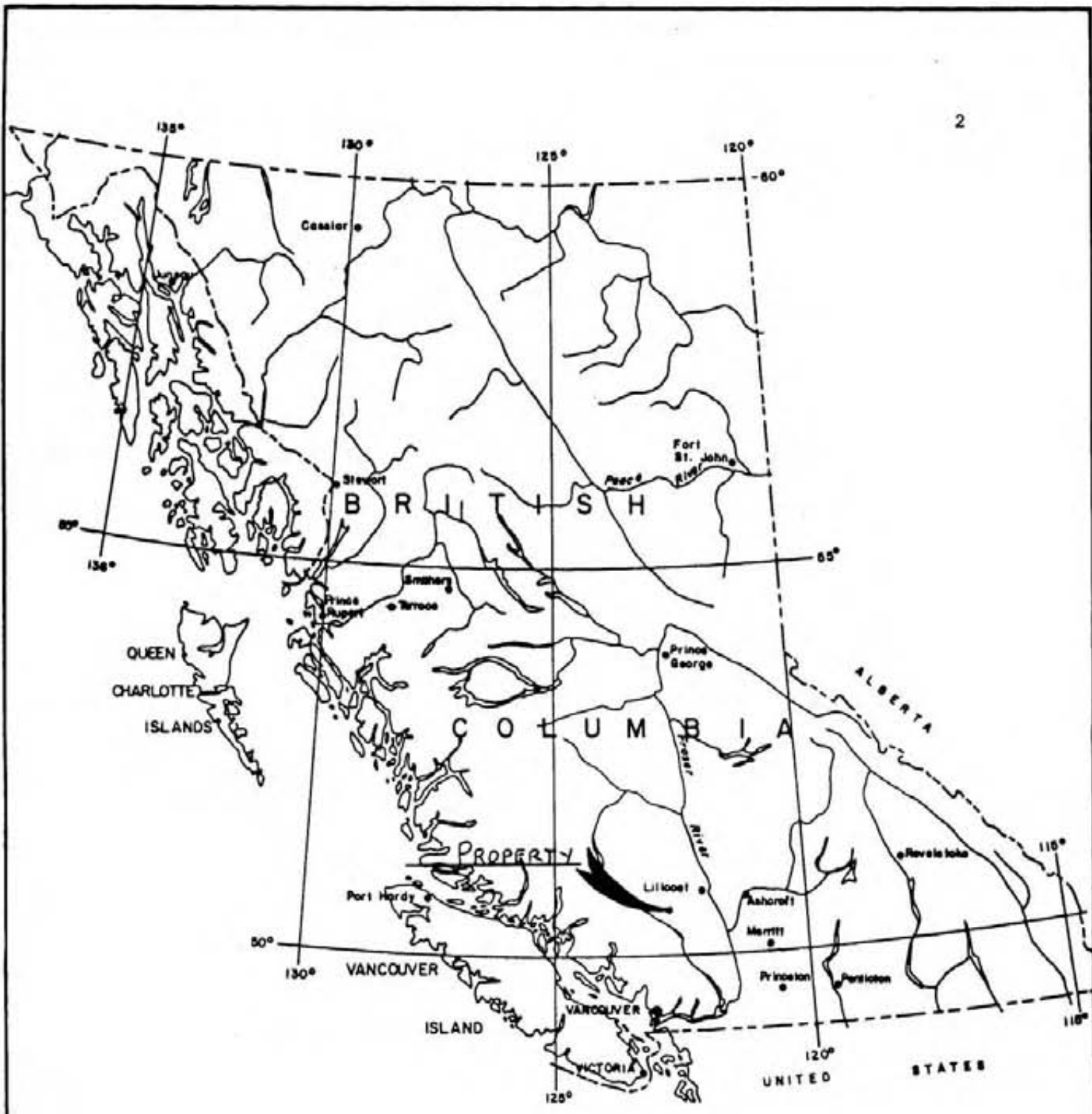
DATE: JULY 27, 1984.

TABLE OF CONTENTS

| | |
|--|------|
| INTRODUCTION | 1 / |
| LOCATION AND ACCESS | 1 / |
| MINERAL CLAIMS | 3 / |
| HISTORY | 3 / |
| TOPOGRAPHY AND VEGETATION | 5 / |
| GEOLOGY - Regional Geology | 6 / |
| Generalized Property Geology | 6 / |
| Mineralization | 8 / |
| GEOCHEMISTRY | 8 / |
| CONCLUSIONS AND RECOMMENDATIONS | 9 / |
| STATEMENT OF COSTS | 11 / |
| STATEMENT OF QUALIFICATIONS - Gordon G. Richards | 12 / |

LIST OF ILLUSTRATIONS

| | |
|--------------------------------|-------------|
| Figure 1 - LOCATION MAP | 2 / |
| Figure 2 - CLAIM MAP | 4 / |
| Figure 3 - GEOCHEMISTRY Zn, Au | In Pocket / |



| | | | |
|------------------------------------|----------|-----------------|-------------|
| JMT SERVICES CORP | | | |
| <i>FIG 1</i> | | | |
| PROPERTY LOCATION MAP | | | |
| <p>136 mi. 0 136 mi. SCALE</p> | | | |
| Prepared by: | Date: | N.T.S. MAP AREA | DRAWING No. |
| Drawn by: | Revised: | | |

INTRODUCTION

The Tenas Creek Property is situated in the Lillooet Mining District, near the junction of Tenas Creek and the Birkenhead River. Easy road access exists to the property from Pemberton, B.C.. The area is of interest because of a large pyritic, altered and gossanous zone along Tenas Creek that is geochemically anomalous in As, Au, Zn, and Cu. The regional geological setting has also been demonstrated to be favourable for massive sulphide deposits and is presently being successfully explored for precious metals (e.g., Rhyolite Resources).

Programmes consisting of continuation of a basic geological and geochemical evaluation (Stage I) and an electromagnetic survey with detailed geochemical follow-up (Stage II) are warranted for the property.

The work described in this report was done to extend soil sampling and geological mapping in the north part of the claims. A total of 109 samples were collected, of which 13 were rock chips and 96 were soil samples. Samples were analyzed for Zn and indicate anomalous Zn extends through the area surveyed.

LOCATION AND ACCESS (Figure 1)

The property is situated in NTS Map sheets 92J/7E, 7W, 10E and 10W and straddles Tenas Creek and the Birkenhead River near their junction. Access is by approximately 8 miles (12.0 km) of gravel road from Gramson's Siding on the B.C. Railroad. Gramson's Siding is reached via paved highway from Vancouver to Pemberton and then northward along the Pemberton-D'Arcy road approximately 20 miles (32.2 km).

MINERAL CLAIMS

The four claims listed below and shown on Figure 2 form the property:

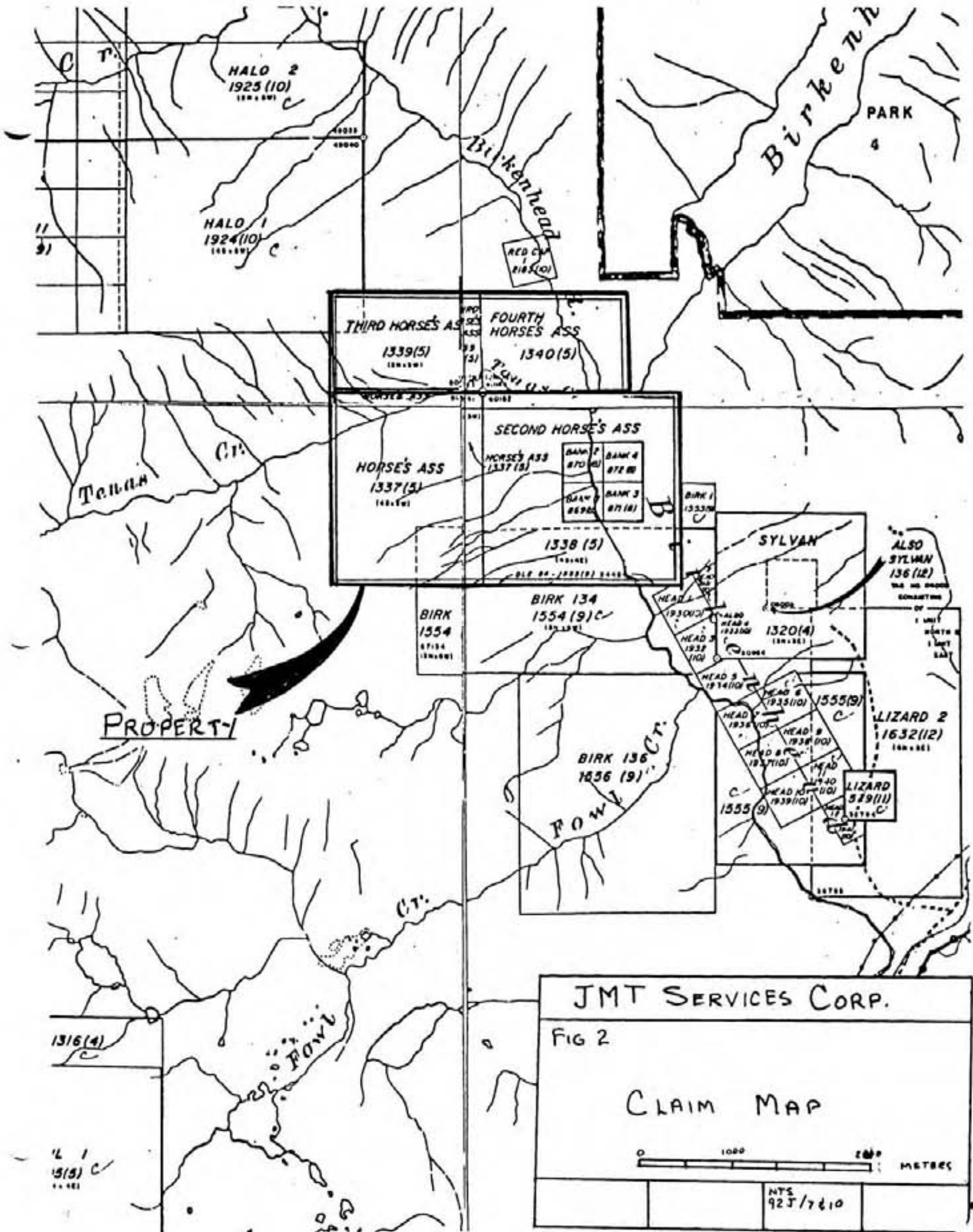
| <u>CLAIM NAME</u> | <u>TAG #</u> | <u>RECORD #</u> | <u>DATE RECORDED</u> | <u>UNITS</u> | <u>OWNER</u> |
|-------------------|--------------|-----------------|----------------------|--------------|------------------------|
| HORSES ASS | 60181 | 1337(5) | May 13, 1980 | 12 | Moregain Minerals Inc. |
| SECOND HORSES ASS | 60182 | 1338(5) | " | 16 | " " |
| THIRD HORSES ASS | 60183 | 1339(5) | " | 6 | " " |
| FOURTH HORSES ASS | 60184 | 1340(5) | " | 6 | " " |

HISTORY

Old exploration workings indicate that the Tenas Creek Property has experienced mineral exploration activity for at least half a century. Old claim posts and several sets of more recently tagged posts indicate intermittent activity on the property in more recent times. An established baseline and cut grid is believed to be about 10 years old.

A programme of trenching was completed in 1969 on ground held as the BASK 1-10 claims which straddled the Birkenhead River, south of the HORSES ASS claims. A brief discussion of these claims and trenches is contained in Assessment Report #4230 by J. Foster, Engineering and Management Services Ltd. for Home Exploration Ltd., dated 1969.

The claim area was first investigated by JMT geologists in 1977, as a consequence of regional exploration for massive sulphides in the area. Reconnaissance soil and silt samples and prospecting indicated an area of interest around Tenas Creek. In the spring of 1980, the present claims were staked to cover an area of massive sulphide potential. JMT



Services conducted geochemical surveys over parts of the claim area in 1981 and 1983. Moregain Minerals Inc. acquired the property from Geo-Ex Resources Ltd. in May 1983.

TOPOGRAPHY AND VEGETATION

Topographic relief on the property ranges from elevation 2,000 feet (600 m) along the Birkenhead River to 5,500 feet (1,700 m) on the southwestern boundary of the claims.

The claims are roughly bisected north-south by the Birkenhead River and east-west by Tenas Creek.

Slopes range from gently rolling in Birkenhead Valley to steeply wooded on the higher slopes. Tenas Creek has locally formed a precipitous canyon with several waterfalls between 2m and 20m in height.

Vegetation is generally quite 'open' with jackpine, and little underbrush on the lower to intermediate slopes where drainage is good and the underlying soil is, for the most part, gravelly tills. A few local areas support well developed stands of cedar and fir. Locally, particularly on the higher, steeper slopes in the southwestern portion of the claims are the scars of old avalanches. These areas are presently overgrown with alder, willow, and birch, a variety of shrubs, and, along the water courses devil's club is not uncommon.

Limited logging has taken place on the east side of the Birkenhead River within the claims and recent logging has taken place (1981) north and north-west of the property.

GEOLOGY

Regional Geology

A pendant of Triassic age rock extends from the B.C. Railway north and west of Pemberton to approximately Tenquille Lake; the pendant is composed of tuffs, argillites, limestones agglomerates and their medium grade metamorphic equivalents.

The pendant is contained within plutonic rocks of the coast crystalline complex, with diorite to granodiorite most common and lesser amounts of quartz monzonite to granite recognized (Roddick and Hutchinson, 1973). Local skarns may be developed close to the intrusive contacts.

The regional geology has been compiled and remapped on the Pemberton Map Sheet by G. Woodsworth of the Geological Survey of Canada.

Generalized Property Geology

The claims are underlain by andesitic volcanic breccias, rhyolite, argillite and minor limestone of the Upper Triassic Pioneer Formation. These have been intruded on the west part of the claims by granodiorite. Gossanous bedrock exposed in Tenas Creek is predominantly pyritic and argillic or propylitic altered andesite and rhyolite.

Detailed mapping on the property has not yet been completed. Outcropping bedrock is scarce over the lower to intermediate valley slopes and sparse at best over the upper slopes. The lower areas appear to be mantled with a gravelly till believed to be up to a few tens of feet thick, as suggested by drainage incision patterns and thicknesses observed along Tenas Creek.

The lower portion of Tenas Creek and the area around its confluence with the Birkenhead River appears to be a local boulder-gravel outwash fan, with the present Tenas Creek having cut into its own alluvium.

The present survey mapped two types of andesite and a highly altered zone intense enough to obliterate original textures. Outcrop varied from lithic and lapilli tuffs to andesitic flow rock. Structural orientation of foliations, bedding(?) schistosity and quartz veins are subparallel, striking 120° - 150° and dipping near vertical. An old caved adit was located at P4.15. Four thin sections were made with the following analysis:

P2.1 Altered Andesite Flow--medium grained groundmass of subophitic texture with laths of plagioclase An 30

Mode: 40% Plag

20% chlorite

20% epidote

20% phenocrysts of plag and (?) replaced by clay-epidote

P4.3 Altered Crystal Tuff--subrounded grains of quartz (40%) surrounded by fine grained aggregates of sericite exhibiting moderate foliation with stringers of limonite.

P4.11 Altered Lapilli Tuff--turbid lithic fragments are altered to very fine grained clay minerals. Quartz veinlets cross cut all other mineral grains and form about 20% of rock. Pyrite content is 8-10%.

P4.15 Altered Lapilli Tuff (from adit back near portal)--lithic fragments altered to very fine grained clay minerals with variable limonitic stain. Quartz veinlets make up 1-2% and pyrite content 7%.

In general propylitic/argillic alteration is pervasive with <1% to 15% of pyritization. Two sample localities, P4.1 and P4.13 exhibit a high degree of silicification. The degree of hydrothermal alteration obscures much of the original textures and mineralogy in most samples.

MINERALIZATION

The property covers a gossanous zone which reflects a pyrite content of up to at least several percent. Adjacent to the southern bank of Tenas Creek, a blasted pit reveals bedrock exposures containing minor sphalerite and chalcopyrite in a layered chloritic, epidote rock skarn zone. The projection of this zone at Tenas Creek has been explored by adits and pits which were inaccessible because of high water.

GEOCHEMISTRY

A programme was run to define a zone of anomalous zinc in soils indicated by regional reconnaissance and adjacent grid-controlled geochemical sampling. Geochemical soil and rock chip samples were collected using a grid for control. The grid was established using hip chain and compass. Lines were spaced 100m apart along a base line and samples were collected every 50 metres along each line. Outcrops were sampled along the soil lines.

Soil sample holes were excavated to a depth of 10-25 cm using a hand pick or grub hoe. A suitable sized sample was collected from the "B" horizon soil or the best approximation of it, using a stainless steel spoon or scoop. The sample was placed in a standard gusseted Kraft sample bag for shipment to the assay lab.

Rock chip samples were also placed in gusseted Kraft paper bags in preparation for shipment for analysis.

Analyses were done at Chemex Labs Ltd., 212 Brooksbank Ave., North Vancouver, B.C., V7J 2C1. Samples were analyzed for zinc using a perchloric-nitric acid extraction and standard atomic absorption detection. Rock chip samples were also analyzed for gold, using the Neutron Activation Analyses.

Zinc results range from a low of 14 ppm to a high of 365 ppm in rocks and from a low of 30 ppm to a high of 7500 ppm in soils, with a good clustering of greater than 200 ppm in the central part of the area surveyed.

Gold results in rocks range from a low of 16 to a high of 563 ppb Au.

CONCLUSIONS AND RECOMMENDATIONS

The anomalous zinc pattern described in previous reports of 1981 and 1983 continues northwards to the limit of the present survey, an additional 300 m. Several anomalous gold values in rock chips also are within this area. Geology, alteration, mineralization and geochemical response continue to indicate potential for massive sulphide mineralization.

Geophysical prospecting methods combined with detailed mapping of the section exposed along Tenas Creek should be considered for the next phase of exploration.

Respectfully submitted,

A handwritten signature in cursive script that reads "Gordon G. Richards". The signature is written in dark ink and is positioned centrally on the page, below the typed name.

Gordon G. Richards, P.Eng.

STATEMENT OF COSTS

July 27, 1984.

Vic Erickson
 Moregain Minerals Inc.
 c/o Pacific Mine Search Ltd.
 #711-850 West Hastings Street
 Vancouver, B.C. V6C 1E1

Invoice #84-760-047

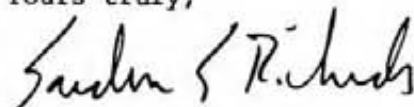
Dear Vic: re: HORSE'S ASS Mineral Claims, Lillooet Mining Division

The following is our bill for assessment work performed on the Horse's Ass Mineral claims, near Pemberton, B.C.

| | | | |
|--|--------------------|----------------|-----------------|
| TIME | | | |
| S. Courte | May 1-5 | 5 days @ \$150 | 750.00 |
| P. Casey | May 1-5 | 5 days @ \$135 | 675.00 |
| G.G. Richards | Apr. 29, 30, May 1 | 3 days @ \$250 | 750.00 |
| Truck Rental 4 x 4 Jimmy | May 1-5 | 5 days @ \$75 | 375.00 |
| Camp Rental | | | 50.00 |
| DISBURSEMENTS | | | |
| G.G. Richards, Expense account | | 393.37 | |
| Hudson Building Supplies | | 82.55 | |
| Chemex Labs 18411677 | | 259.20 | |
| 18412000 | | <u>139.75</u> | |
| | | 874.87 | + 10% |
| | | | 962.36 |
| Report: draughting, typing, reproductions, binding | | | <u>1,000.00</u> |
| | | Total | \$ 4,562.36 |

Please remit \$4,562.36.

Yours truly,



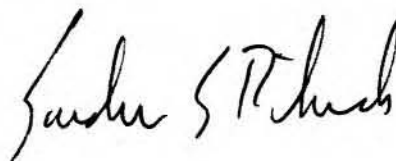
Gordon G. Richards

GGR:mh

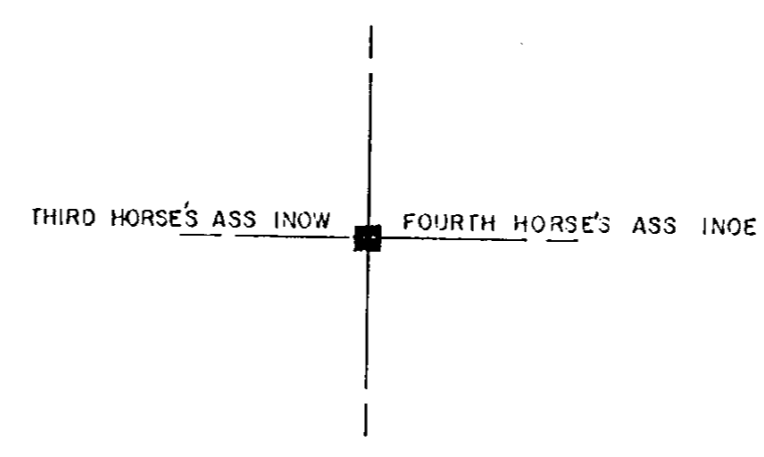
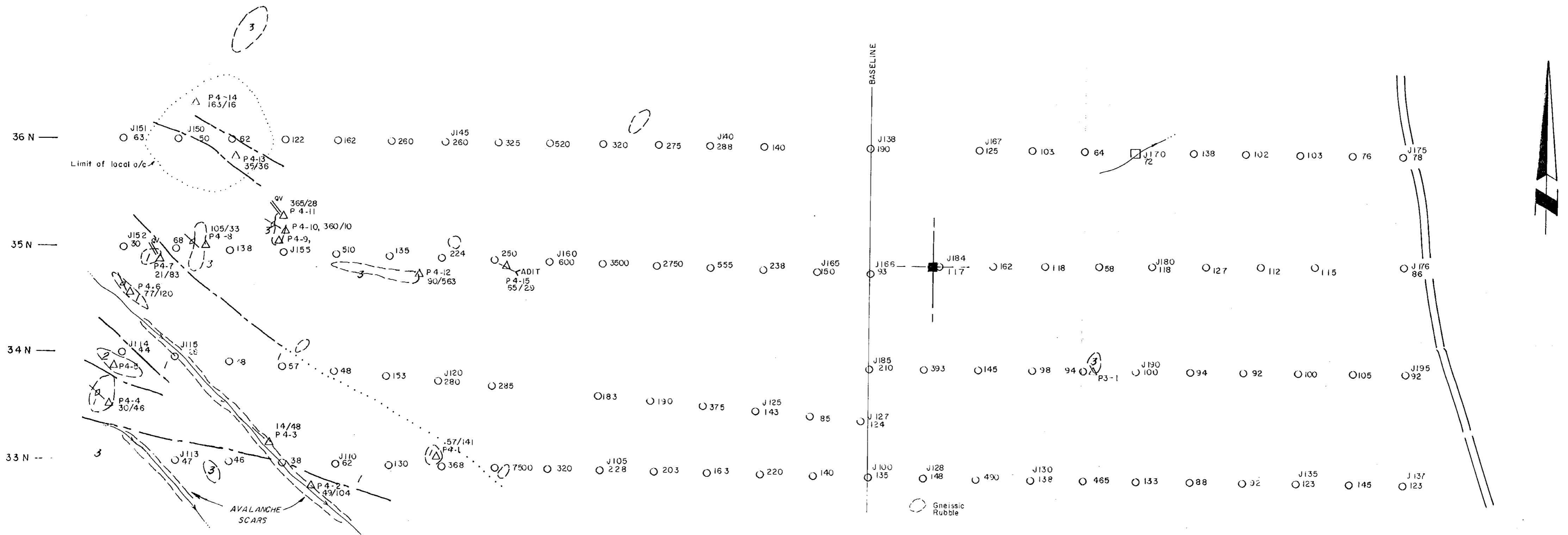
STATEMENT OF QUALIFICATIONS

I, Gordon G. Richards, of Vancouver, British Columbia, do hereby certify that:

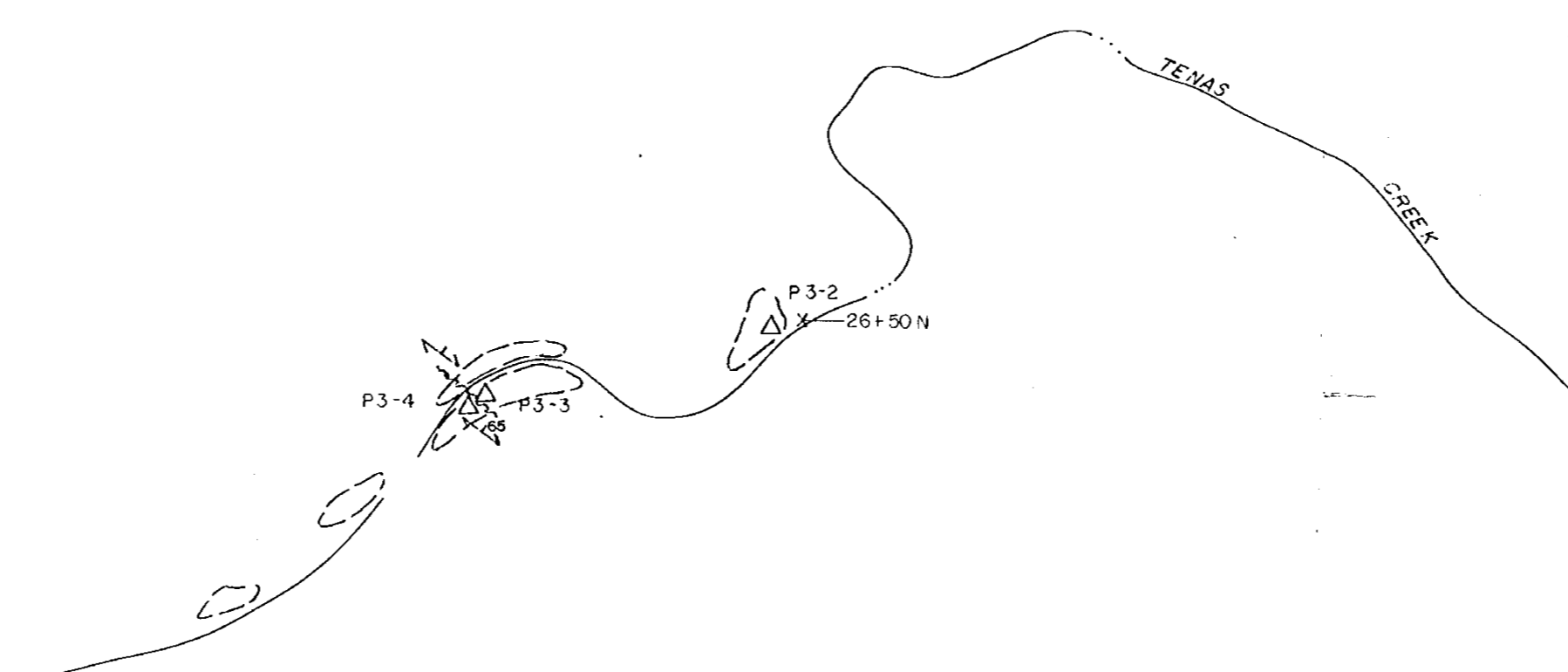
1. I am a Professional Engineer of the Province of British Columbia, residing at 6195 Lynas Lane, Richmond, B.C., V7C 3K8.
2. I am a graduate of the University of British Columbia, B.A.Sc., 1968, M.A.Sc. 1974.
3. I have practised my profession as a mining exploration geologist continuously since 1968.
4. This report is based on my personal knowledge of the district, and mapping of the geology at the property.



Gordon G. Richards, P.Eng.



2
P2-1



GEOLOGICAL LEGEND:

- 3 LAPILLI TUFF
- 2 ANDESITE FLOW
- 1 ALTERED TUFF ARG. / SIL.
- OUTCROP
- SHEAR ORIENTATION
- FOLIATION
- QUARTZ VEIN
- GEOLOGICAL CONTACT

LEGEND:

- CREEK
- ROAD
- CLAIM POST
- SOIL SAMPLE LOCATION & NUMBER
- ROCK SAMPLE LOCATION & NUMBER
- SILT SAMPLE LOCATION & NUMBER
- ZINC GEOCHEMICAL ASSAY, p.p.m.
- ZINC, p.p.m. / GOLD, p.p.b.

GEOLOGICAL BRANCH ASSESSMENT REPORT

12,601
MOREGAIN MINERALS INC.

TENAS CREEK PROPERTY
—HORSES ASS CLAIMS—
LILLOOET MINING DIVISION - N.T.S. 92 J/7, 10
BY JMT SERVICES CORP.

GEOCHEMICAL VALUES ZINC(PPM)/GOLD(PPB)

