GEOLOGICAL REPORT
on the

THOM GROUP

Mt. Thomlinson, Omineca Mining Division
93M/11W
Lat 55°35' Long 127°29'

by

Peter R. DeLancey, P.Eng.

Owner: Texasgulf Canada Ltd.
Operator: Texasgulf Canada Ltd.

Vancouver, B.C. March, 1980

TABLE OF CONTENTS

APPENDICES

MAPS

PLATES

INTRODUCTION

Location, Access, Terrain and Climate

The Mt. Thomlinson property is located 38 km northeast of the town of Hazelton in central British Columbia (Figure 1). The camp and exploration workings lie at the 1845 metre elevation along a ridge between Shegisic Creek and a northeasterly flowing tributary of the Babine River. Mt. Thomlinson, a 2500 metre peak, is 4.5 km to the south.

Direct access to the property is via helicopter. Chartered helicopters are available in Smithers, 90 km south. Supplies and equipment can be trucked on a logging road to a staging area, 15 km northwest of the property (Figure 1).

The regional terrain is characterized by several isolated rugged mountains separated by broad wooded valleys. Many of the mountain peaks are over 2,000 metres in elevation and are surrounded by snow and ice fields. The mountain slopes have an average grade of 35° and are largely covered by talus. Tree line is approximately 1,370 metres.

The climate of the area is not unduly harsh - except at the higher elevations. The mountainous areas are generally covered with snow until mid-July; the winter snow can begin to fall as early as September. High winds and local clouds prevail, even during the summer months.

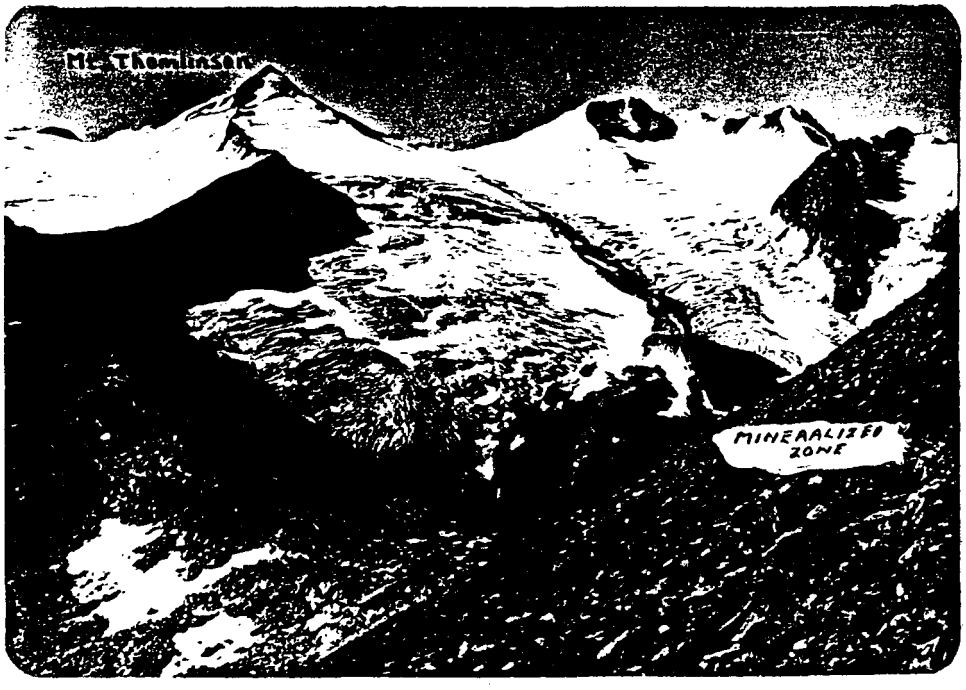


Plate 1 General view looking south from northeastern mineralized zone.

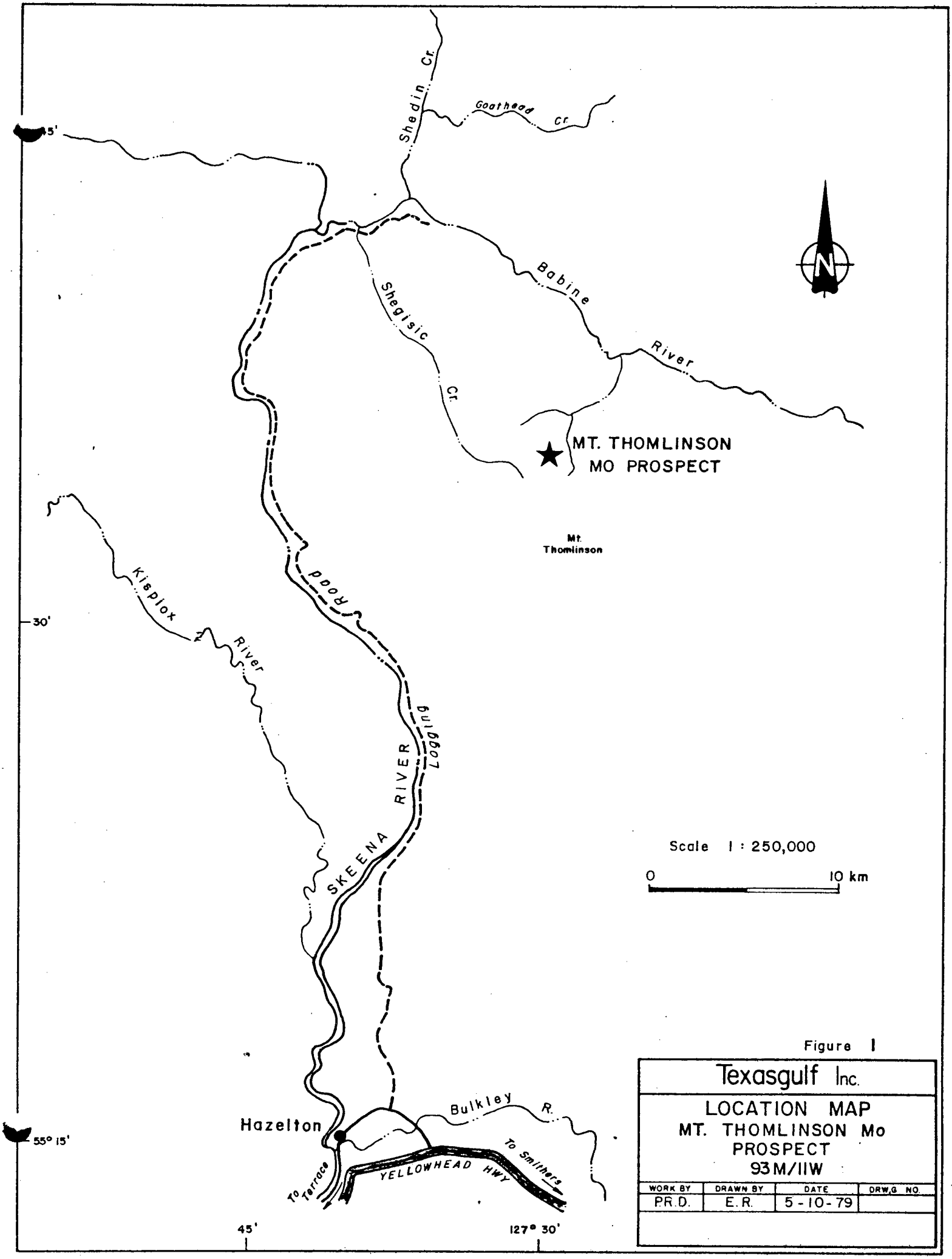


Figure 1

Texasgulf Inc.			
LOCATION MAP MT. THOMLINSON Mo PROSPECT 93M/11W			
WORK BY	DRAWN BY	DATE	DRW.G NO.
P.R.D.	E.R.	5-10-79	

Property

History

The Mt. Thomlinson property was first staked in 1962 by three Hazelton prospectors (Simpson, Marshall and Sterritt), who optioned it to Buttle Lake Mining (now Stampede International Resources Ltd.). The following year Buttle Lake carried out a trenching programme on the southern portion of the mineralized zone. The prospect was visited by Southwest Potash (now Amax) personnel during the summer of 1963. Southwest Potash optioned the property and in 1964 undertook a programme of diamond drilling (5 holes totalling 1,377 metres), geological mapping, surveying and prospecting. Continued exploration in 1965 included geological mapping, geochemical sampling and diamond drilling (4 holes totalling 1,082 metres). The claims were dropped but the ground was staked again by Amax in 1975 (Why 1 Claim); geological mapping was done at a scale of 1:2400. The claims were allowed to lapse and in 1979 John Bot, an independent prospector from Smithers, staked the Molly Tom #1 to #8 claims. He optioned the property to Texasgulf Canada Ltd. on May 16, 1979. No previous assessment reports describing technical surveys on this property have been filed.

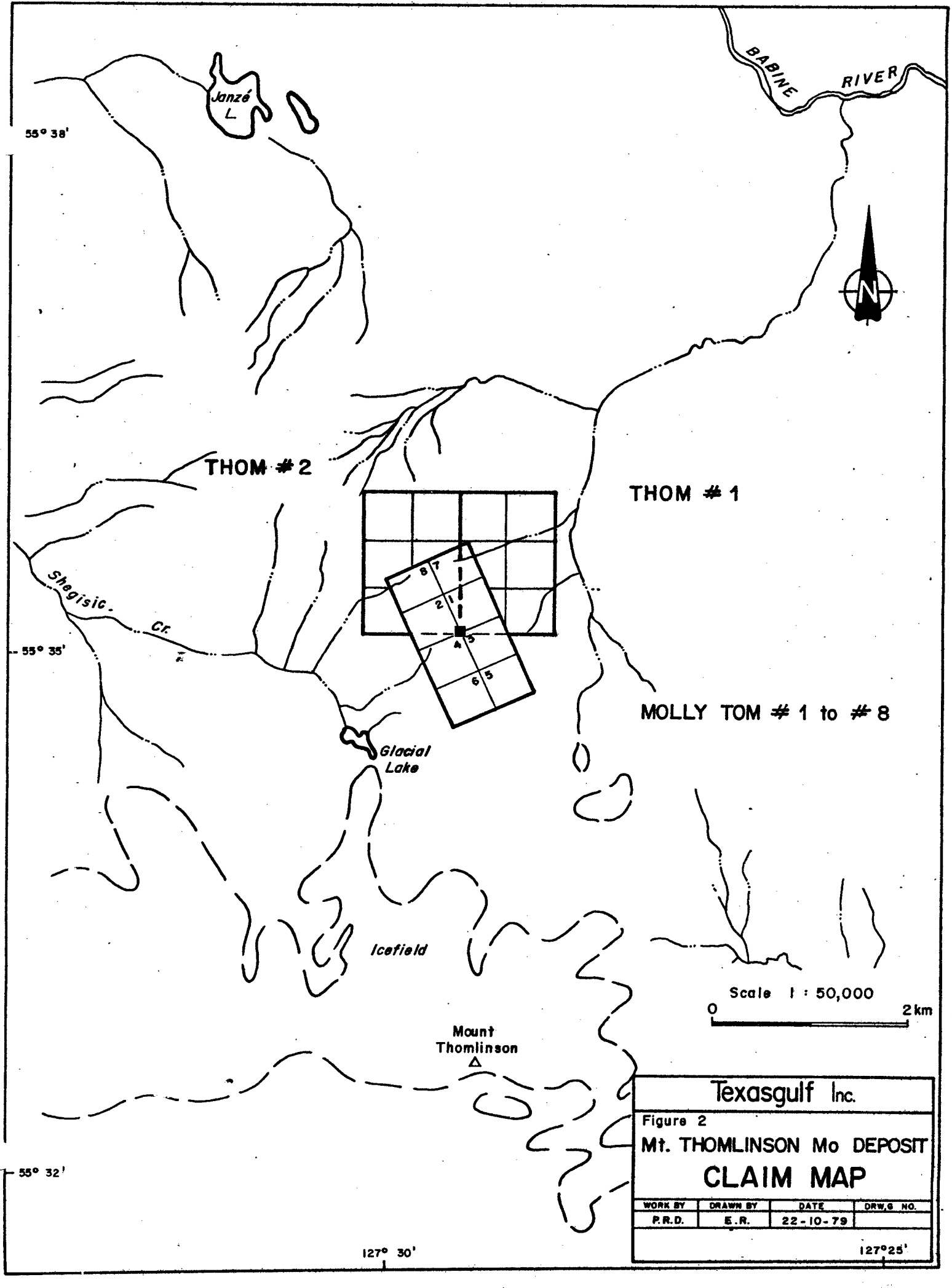
Claim Status

Claims covering the Mt. Thomlinson property consist of eight "two post" claims - Molly Tom #1 to #8, and the Thom #1 and Thom #2 claims, each consisting of 6 units (Figure 2). All claims are registered in the name of Texasgulf Canada Ltd.

Economic Assessment

Previous drilling and trenching by Amax indicated a mineralized zone, calculated to contain 40 million tonnes averaging .12 MoS_2.[1] The

1 Porphyry Deposits of the Canadian Cordillera, C.I.M. Special Vol. 15, p. 422



Texasgulf Inc.

Figure 2

Mt. THOMLINSON Mo DEPOSIT

CLAIM MAP

WORK BY	DRAWN BY	DATE	DRW.G NO.
P.R.D.	E.R.	22-10-79	

possibility of increasing the size and grade of the deposit by deeper drilling prompted Texasgulf's interest in the property.

Summary of Work Completed

Geological Investigations

In anticipation of a 1980 drilling programme, and because the old Amax geological data were not immediately available to Texasgulf, a brief geological survey was made of the property. Amax's old camp served as a base of operation.

The purpose of the work was to gain general knowledge of the geology of the property and the factors controlling mineralization, and to become familiar with the physical setting in order to plan a drilling campaign.

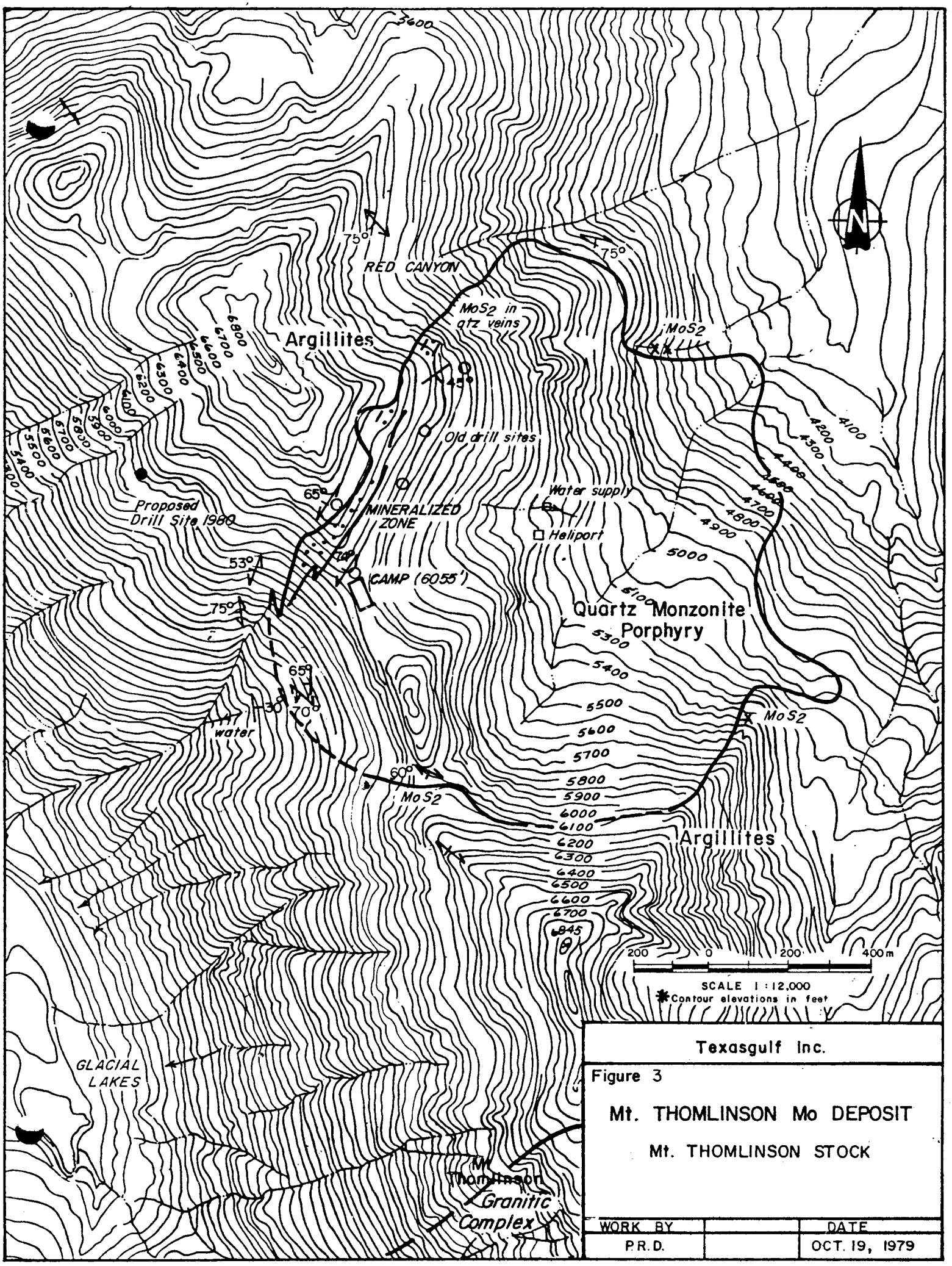
A 1:12000 geological map of the Mt. Thomlinson Stock, modified from Brian Williams' map[1], is presented in Figure 3. The geology of the mineralized northwest contact zone is shown on a 1:2500 topographic base map (Figure 4). This map also indicates claim boundaries, trenches, drill hole collars and projections.

Topographic Map Preparation

A topographic base map was needed to plot geological data and to serve as a control for future investigations such as diamond drilling.

McElhanney Surveying and Engineering Ltd. was contracted to prepare a topographic base map at a scale of 1:2500 and a 10 metre contour interval. The resultant map covering approximately 272 hectares is presented as Figure 5.

1 Brian Williams 1965, A Petrographic Study of the B.L. Stock, Mt. Thomlinson, B.Sc. Thesis, University of British Columbia.



Texasgulf Inc.

Figure 3

Mt. THOMLINSON Mo DEPOSIT

Mt. THOMLINSON STOCK

WORK BY		DATE
P.R.D.		OCT. 19, 1979

Work Distribution

The geological survey covers significant portions of Molly Tom 1, 2, 3, 4, 7 and limited portions of Molly Tom 5, 6, 8 and Thom 1, 2.

The topographic base map covers all of Molly Tom 1, 2, 3, 4, 7 and 8 and portions of Molly Tom 5, 6 and Thom 1, 2.

GEOLOGY

Regional Geology

Volcanic and sedimentary rocks of the Jura-Cretaceous Bowser Lake Group underlie much of this area of central British Columbia. These rocks are invaded by a number of granitic bodies lying on the eastern fringe of the Coast Range Batholitic Complex. One of the large granitic bodies is exposed in the area of Mt. Thomlinson. The Mt. Thomlinson property is centred on a peripheral stock located approximately 2 km to the north (Figure 3). This stock has been dated at 53.8 m.y.[1]

Property Geology

The property covers most of a small circular stock, 1.3 km in diameter. The stock intrudes a thick sequence of argillaceous rocks.

Lithologies

The stock is composed of grey to pink quartz monzonite porphyry. The core of the intrusive, exposed just south of camp, is characterized by large potash feldspar phenocrysts and quartz eyes in a fresh holocrystalline, medium- to coarse-grained rock. Close to the contact, the porphyritic texture becomes less distinct and the rock exhibits a slight foliation or shearing. Local dykes are noted in the adjacent country rock. There appears to have been only one major intrusive phase.

1 Porphyry Deposits of the Canadian Cordillera, 1976, C.I.M. Special Vol. 15, p. 425.

The contact with the argillaceous rocks is sharp. The argillites adjacent to the intrusive are baked and have developed a slaty cleavage approximately parallel to the contact. Locally the argillites are schistose.

The quartz monzonite porphyry is cut by aplite dykes, quartz veins, and fractures showing alteration envelopes. The best development of this hydrothermal vein system is along, and parallel to, the northwestern contact.

Plate 2 Quartz monzonite porphyry, core zone.

Mineralization

Concentrations of molybdenite, chalcopyrite and pyrite are associated with the system of aplitic dykes, quartz veins and fractures which cuts the porphyry along the northwestern contact. Only one period of MoS_2 mineralization is indicated. There is no direct correlation between the intensity of veining and intensity of mineralization.

Molybdenite is most common as fine flakes in quartz veinlets and as smears along fracture planes. Locally it occurs as coarse flakes in quartz veins. Minor ferrimolybdite is noted along zones of oxidation. Although chalcopyrite is found in the same general areas as molydbenite, the two sulphides occur independently of each other. Chalcopryite, malachite and azurite occur along fractures and veins. Pyrite (1 to 5%) is found as disseminations, fracture fillings and patchy crystalline concentrations, in the intrusive and adjacent argillites.

The mineralized zone is approximately parallel to the northwestern argillite-porphyry contact (Az. 030°/65°NW); the better grade rock lies several metres from the contact within the intrusive rock. Although mineralization has been found over a strike length of 900 metres, the width and grade varies considerably. The zone becomes more complex and less well defined to the northeast with narrow sections of mineralized rock separated by relatively barren rock.

Structure

Examination of the southwestern portion of the mineralized zone suggests that the movement and precipitation of the late stage hydrothermal fluids was largely controlled by a structurally prepared zone of fracturing, faulting and shearing. The zone is parallel to the primary foliation along the northwest contact and orientation of the zone was probably controlled by these planes of weakness. The shearing appears to be centred along the southern end of the mineralized zone and extends southwesterly into the

argillites (note alignment of creek). The zone becomes less well defined to the northeast and appears to split into several narrower zones in the Red Canyon area.

Interpretation

Deposition of sulphides appears to have been largely controlled by a northwesterly dipping zone of fracturing and shearing along the northwestern contact of the stock. Only one phase of MoS_2 mineralization is indicated. The mineralizing fluids were probably late stage silica-rich hydrothermal eminations associated with the crystallization of the quartz monzonite porphyry or a later intrusive body at depth.

CONCLUSIONS

The Mount Thomlinson deposit is a steeply dipping tabular body containing considerable quantities of low grade MoS_2 mineralization. The economic potential of the deposit lies in the possibility of finding significant tonnages in higher grade zones which could be exploited profitably by underground mining methods.

Peter R. DeLancey

Peter R. DeLancey
March 12, 1980

APPENDIX A

STATEMENT OF QUALIFICATION

J. Gosselin - Assistant

J. Goseelin is an undergraduate student in Geography and Geology at Universite de Sherbrooke. This was his second field season of employment with Texasgulf.

Peter P. DeLancey
March 12, 1980

APPENDIX B

STATEMENT OF EXPENDITURES

(THOM GROUP)

GEOLOGICAL SURVEY

SALARIES AND FRINGE BENEFITS - TEXASGULF CANADA LTD.

P.R. DeLancey - P.Eng. Period Aug 10-17, 1979. 8 days @ $130/day	$1,040.00	
J. Gosselin - Assistant Period Aug 11-17, 1979 7 days @ $ 40/day	280.00	
	$1,320.00	$1,320.00
ROOM AND BOARD		
14 man-days @ $30.00/day		420.00
HELICOPTER		
Okanagan Helicopters, Smithers		1,110.00
TRANSPORTATION		
Truck rental and operation		300.00
REPORT PREPARATION		
P.R. DeLancey, P.Eng. - office time 1 day @ $130/day	$ 130.00	
Draughting, secretarial, etc.	60.00	
	$ 190.00	190.00
	TOTAL	3,340.00
PREPARATORY SURVEY		
Topographic Base Map (McElhanney Surveying and Engineering)		1,280.00
	GRAND TOTAL	$4,620.00

Peter R. DeLancey

March 12, 1980

N6162000
N6161750
N6161500
N6161250
N6161000
N6160750
E594750
E595000
E595250
E595500
E595750
E596000

SNOW
SNOW
1750
1800
1850
1900
1950
2000
1925.0
1932.0
1926.0
2099.0
2086.0
1847.0
1845.5
1885.5
1632.0

RED CANYON

PYRITIC ARGILLITE

ARGILLITE

ARGILLITE

QUARTZ MONZONITE PORPHYRY

QUARTZ MONZONITE POPPHYRY

fresh QMP large K-spar megacrysts

THOM # 2 (6 units)

THOM # 1 (6 units)

MOLLY TOM #1 - # 8

SOUTH MINERALIZED ZONE

Proposed 1980 DDH (-70° at 117°) 600 m

64-3 (-70° at 115°)

64-4 (-40° at 350°)

64-5 (-20° at 295°)

64-2 (-30° at 295°)

64-1 (-40° at 297°)

65-6 (-37° at 335°), 65-8 (-58° at 335°)

65-7 (-45° at 335°), 65-9 (-58° at 335°)

358 m (65-6)

259 m (65-7)

152 m (65-9)

270 m

259 m (65-8)

321 m

215 m

152 m

421 m

Unused drill site

LCP

CAMP SITE

Helipad

Water supply

local Mo$_2$ in qtz veins

Mo$_2$ in qtz veins

Mo$_2$

location approx

shearing parallel creek

QMP

Note : Contour interval 10 metres

FIG. 4

MINERAL RESOURCES BRANCH ASSESSMENT REPORT NO. 7916

P.R. Walcott March 21, 1980

Texasgulf Inc.

Mt. THOMLINSON Mo DEPOSIT

PROPERTY GEOLOGY

WORK BY	DRAWN BY	DATE	DRW.G NO.
P.R.D.	E.R.	MAR. 11, 1980	

100 50 0 50 100 150

Scale in Metres 1:2500

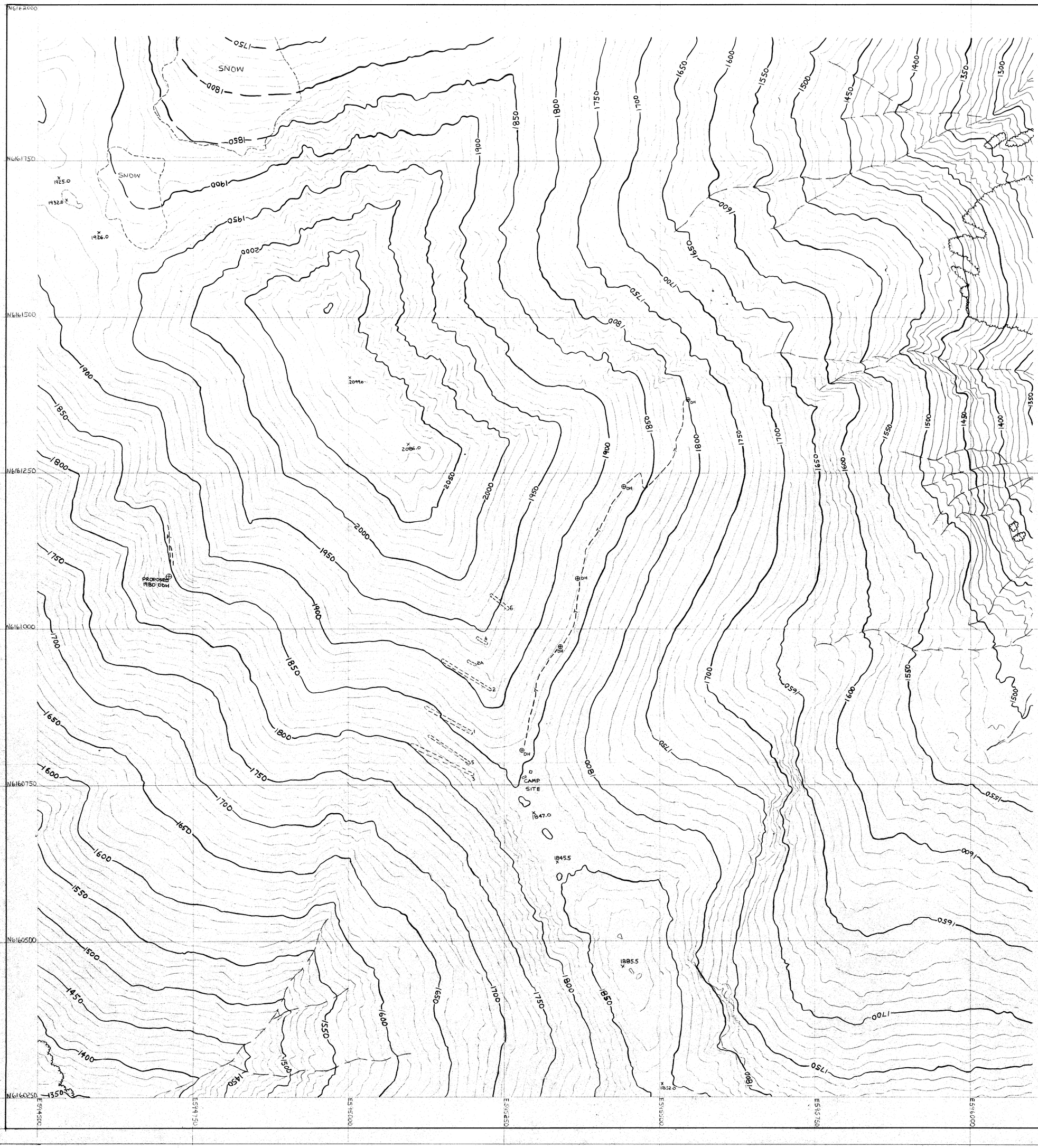


FIG. 5

TOPOGRAPHIC BASE MAP

Mt. THOMLINSON Mo PROPERTY

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
1916

P.R. Moody March 13, 1980

Scale and elevation datum based on limited ground control resulting in good relative, but uncertain absolute map accuracy.
Compiled from aerial photography at an approximate scale of 1: 20,000 taken in 1975.

TEXAS GULF INC.	
MT. THOMLINSON	
PRELIMINARY RECONNAISSANCE TYPE MAPPING	
Scale -	1:2500
Contour Interval -	10 Metres
Date -	MAR. 1980
Job No.-	06692-0
Sheet No.-	1 OF 1

McElhanney Surveying & Engineering Ltd.
1200 West Pender Street, Vancouver B.C., Canada