

REPORT
ON THE
1980 DIAMOND DRILL PROGRAM
ON MARG #2 CLAIM
MARG #1-23 MINERAL CLAIM GROUP
GRANT NOS. YA33061-83
CONGLOMERATE CREEK
MOUNT BILLINGS AREA
WATSON LAKE MINING DISTRICT
YUKON TERRITORY

N. Lat. $61^{\circ}16'$

W. Long. $128^{\circ}33'$



For

MORNING STAR MINES LTD. (NPL)
704-525 Seymour Street
Vancouver, British Columbia

By

DONALD W. TULLY, P. ENG.

090827

October 7, 1980

West Vancouver, B.C.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
SUMMARY AND CONCLUSIONS.....	1
PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY.....	3
CLAIMS.....	3
HISTORY - PREVIOUS DEVELOPMENT.....	4
REFERENCES.....	5
REGIONAL AND LOCAL GEOLOGICAL SETTING.....	5
MINERALIZATION.....	7
RESULTS OF THE 1980 PROGRAM OF DIAMOND DRILLING....	8
RECOMMENDATIONS.....	9
ESTIMATED COST OF THE PROPOSED WORK PROGRAM.....	11
CERTIFICATE.....	12

MAPS

Figure 1 - Location Map.....	(Frontispiece)
Figure 2 - Area Location Map.....	(Following page 1)
Figure 3 - Topographic Plan (1:250,000).....	(Following page 2)
Figure 4 - Claim Plan.....	(Following page 3)
Figure 5 - Regional Geology (After GSC Map 6-1966).....	(Following page 4)
Figure 6 - Plan of 1980 D.D. Holes.....	(Following page 6)
Figure 7 - Section through D.D. Hole No. MON 1-80.....	(Following page 7)
Figure 8 - Section through D.D. Hole No. MON 2-80.....	(Following page 8)
Figure 9 - Plan (modified after a plan by SILVER MARK MINES LTD. dated September 1970) showing location of 1980 Diamond Drill Program.....	(In pocket)

TABLE OF CONTENTS

APPENDIX

Assay Certificates Nos. 8008-2060B; 8009-2558

Logs with assays of Diamond Drill Holes
MON 1-80, MON 2-80

Logs with assays of Diamond Drill Holes
drilled in 1970 by SILVER MARK MINES in
the area of MON 1-80 and MON 2-80

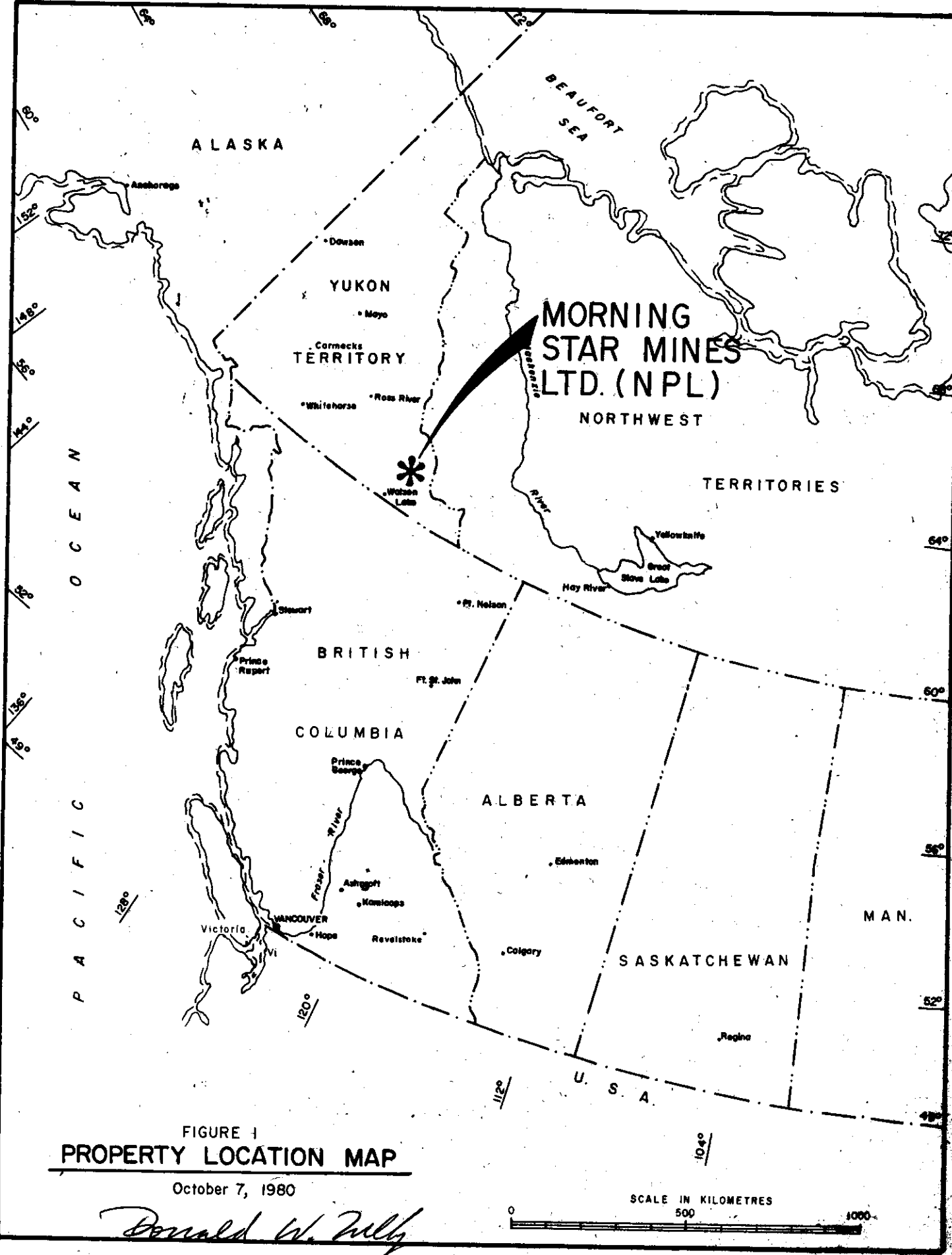
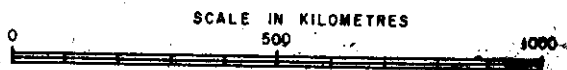


FIGURE 1
PROPERTY LOCATION MAP

October 7, 1980

Donald W. Tully



INTRODUCTION

This report was prepared pursuant to a request by Mr. V. Andersen, Suite 704, 525 Seymour Street, Vancouver, British Columbia.

The purpose of this report is to evaluate a program of two diamond drill holes drilled on the MARG #2 mineral claim during July - August, 1980, Conglomerate Creek Property, Watson Lake Mining District, Yukon Territory.

The writer logged and split the core in company with T. Fenton at the property on August 11 and again on September 11 and 12, 1980 with M. Johnson.

SUMMARY AND CONCLUSIONS

Two diamond drill holes, Mon 1-80 and Mon 2-80 were drilled in the period July 30 - August 28, 1980 on the MARG #2 mineral claim at the west end of the MARG #1 - 23 claim group. The total length drilled in both holes was 282.61 metres (926.9 feet).

Both diamond drill holes were drilled to intersect a strong shear carrying zinc-lead-silver-pyrite mineralization observed in a northwest striking zone on surface at the TOP-CLIFF zone, at the west end of the claim group. High values in silver were obtained from grab samples from two surface trenches and a pit dug on this zone (Figure 6). Although the diamond drill holes intersected the area below the downward projection of the high-grade surface showings, the holes failed to find the con-

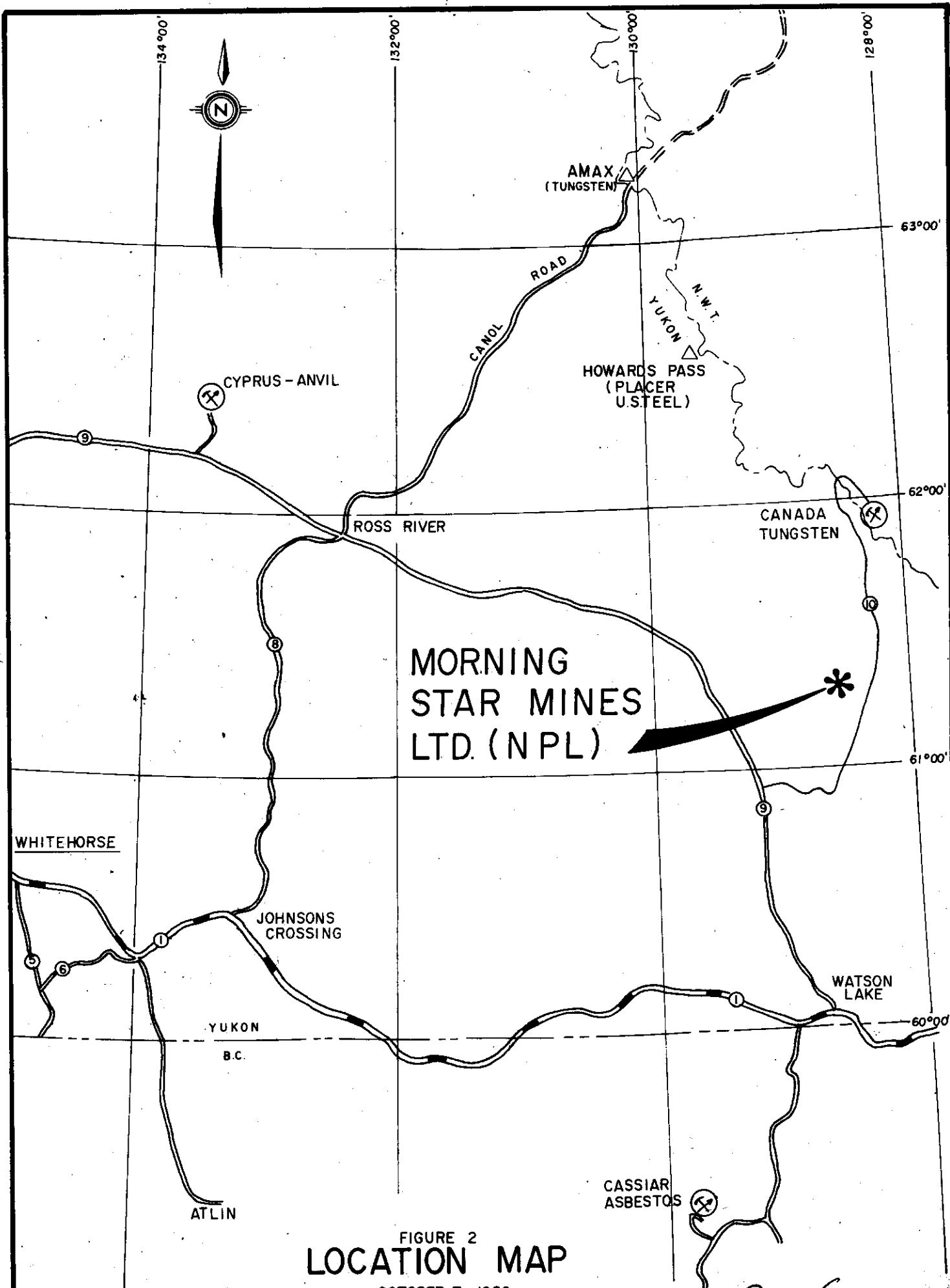


FIGURE 2
LOCATION MAP

OCTOBER 7, 1980

Donald W. Zullo

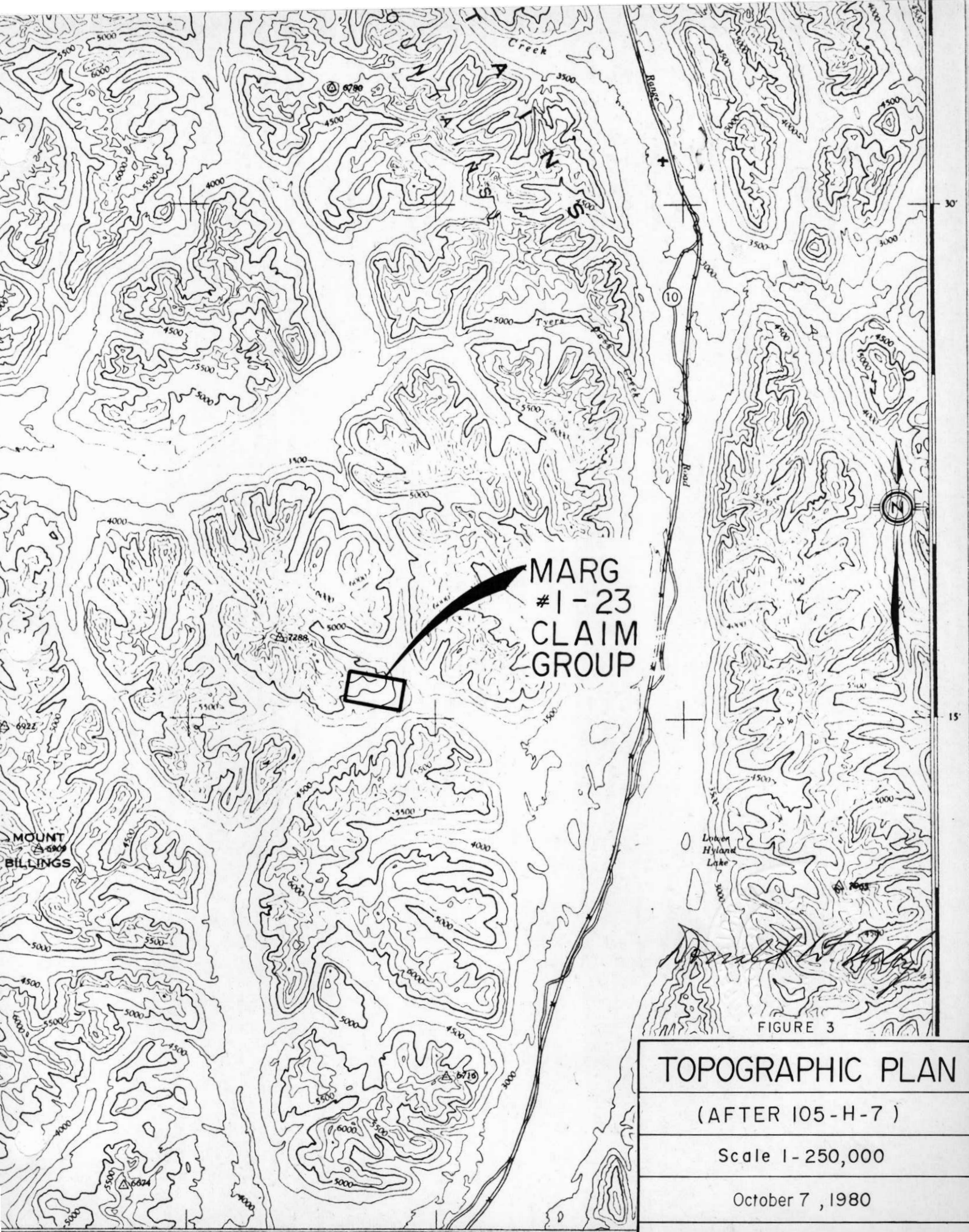
centrations of zinc-lead-pyrite found on surface. The weak zones of mineralization intersected in the diamond drill holes indicate the surface showings do not appear to continue to depth in the area tested by the diamond drilling. The surface showings in the trenches above the drill holes carry massive lead-zinc-pyrite mineralization in lenses.

The best assays intersected were in DDH 2-80 where 2.9, and 3.82 ounces of silver were found across separate core widths of 0.91 and 0.74 metres respectively.

The ratio of silver to lead varies from less than 1:1 to 3:1. The ratio of zinc to lead is variable in about the same range.

A study of the exploration work done to date on the MARG #1-23 claim group and outlined on Figure 9 shows those areas where mineralization has been found on the property. Some ten areas of lead-zinc-silver mineralization have been indicated along the east and north sectors of the property in the vicinity of the access road through the property.

It is concluded the MARG claim area is underexplored and requires a new program of mineral target preparation and delineation. The property is an excellent exploration bet in a favourable geological environment to find a large body of base metal with attendant silver content. Initially a geochemical soil sampling is proposed over the total claim area on a grid-pattern of 50 metres followed by a program of gravity surveying and follow-up diamond drilling. The estimated total cost to complete the recommended three-phase program of mineral exploration is \$297,238.



MARG
#1-23
CLAIM
GROUP

FIGURE 3

TOPOGRAPHIC PLAN
(AFTER 105-H-7)
Scale 1-250,000
October 7, 1980
DONALD W. TULLY, P. ENG.

PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY

The MARG claim group comprises 23 contiguous mineral claims located about 115 road miles (190 km) north of Watson Lake, Yukon Territory. Access is readily available by four-wheel drive vehicle from a point two miles (3 km) north of Conglomerate Creek on the Nahanni Range Road (Cantung Road) thence westward about twelve miles (20 km) to the property. Several roads already established on the ground make reasonable access over the claim group.

Elevations vary between 4,000 feet in the south-east part of the claims near Conglomerate Creek to about 5,900 feet above sea-level on MARG claims #1 and #2 in the northwest sector.

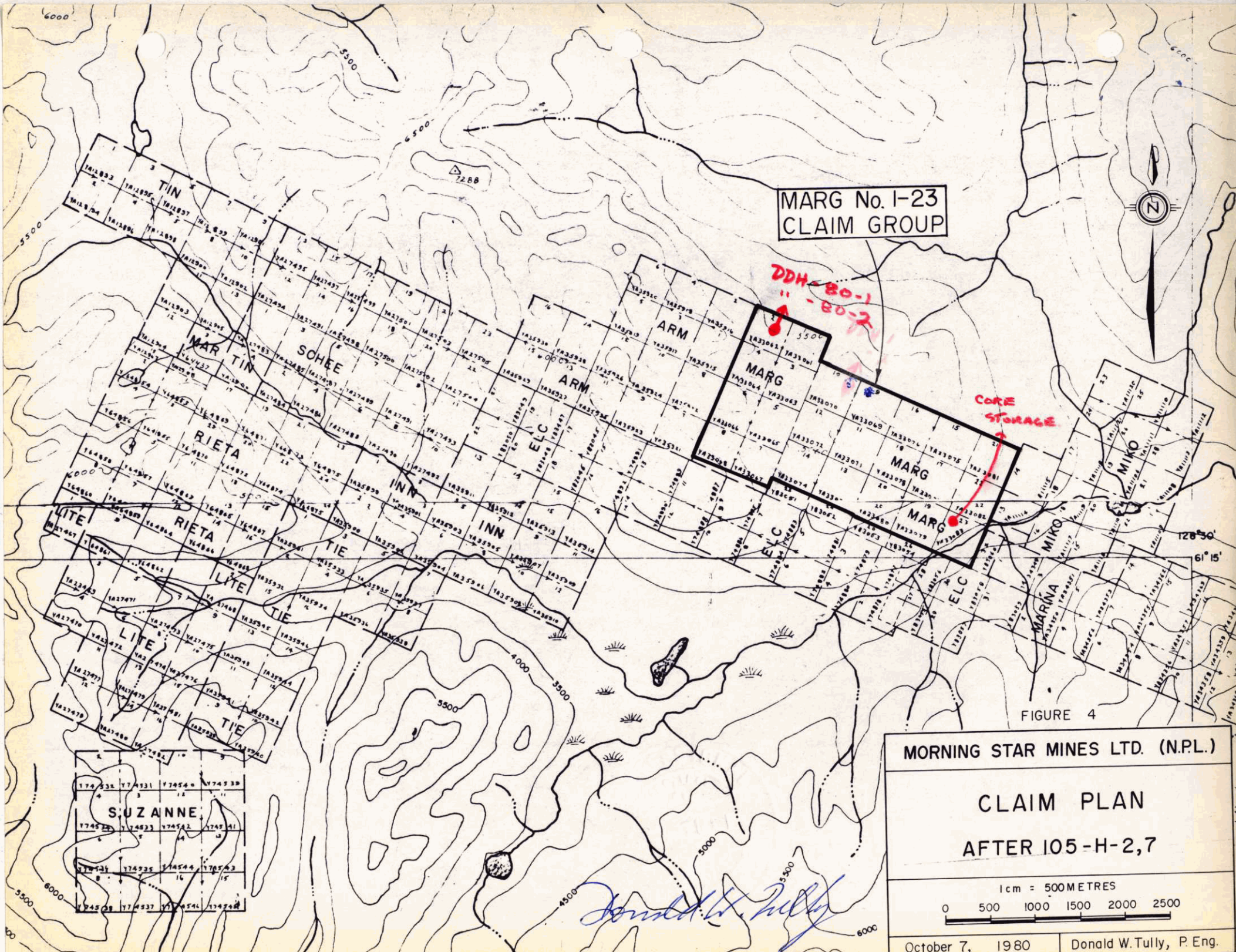
Forest cover consists of fair-sized growth spruce, poplar, and balsam with some underbrush.

Ample water supply is available for any immediate needs from nearby Conglomerate Creek.

CLAIMS

The MARG #1 - 23 claim group is located on the north side of Conglomerate Creek, some twelve miles west of the Cantung Road. The claims are recorded in the Watson Lake Mining District as follows:

<u>Claim Name</u>	<u>Grant No.</u>	<u>Expiry Date</u>	<u>Staker</u>	<u>Recorded Holder</u>
MARG # 1 - 8	YA 33061-68	June 15, 1984	Charles Tibbet	(Morning Star
MARG # 9 - 16	YA 33069-76	June 15, 1984	Ivan Johnny	(Mines Ltd.
MARG #17 - 23	YA 33077-83	June 15, 1984	Gilbert Johnny	((NPL)



MARG No. 1-23
CLAIM GROUP

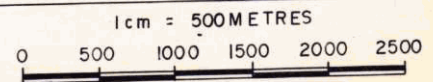
DDH-80-1
80-2

CORE
STORAGE

FIGURE 4

MORNING STAR MINES LTD. (N.P.L.)

CLAIM PLAN
AFTER 105-H-2,7



Donald W. Tully

The claims are shown on Yukon claim sheet 105-H-7.

HISTORY - PREVIOUS DEVELOPMENT

The mineral showings on the ground now held by the MARG #1-23 claim group were discovered by Messrs. Turner and Robinson in 1964 while prospecting for the Norquest Syndicate. At that time the Glenna #1-8 and Lake #9-16 claims were staked over the mineralization. Trenching was done in 1967 on the mineralized zones.

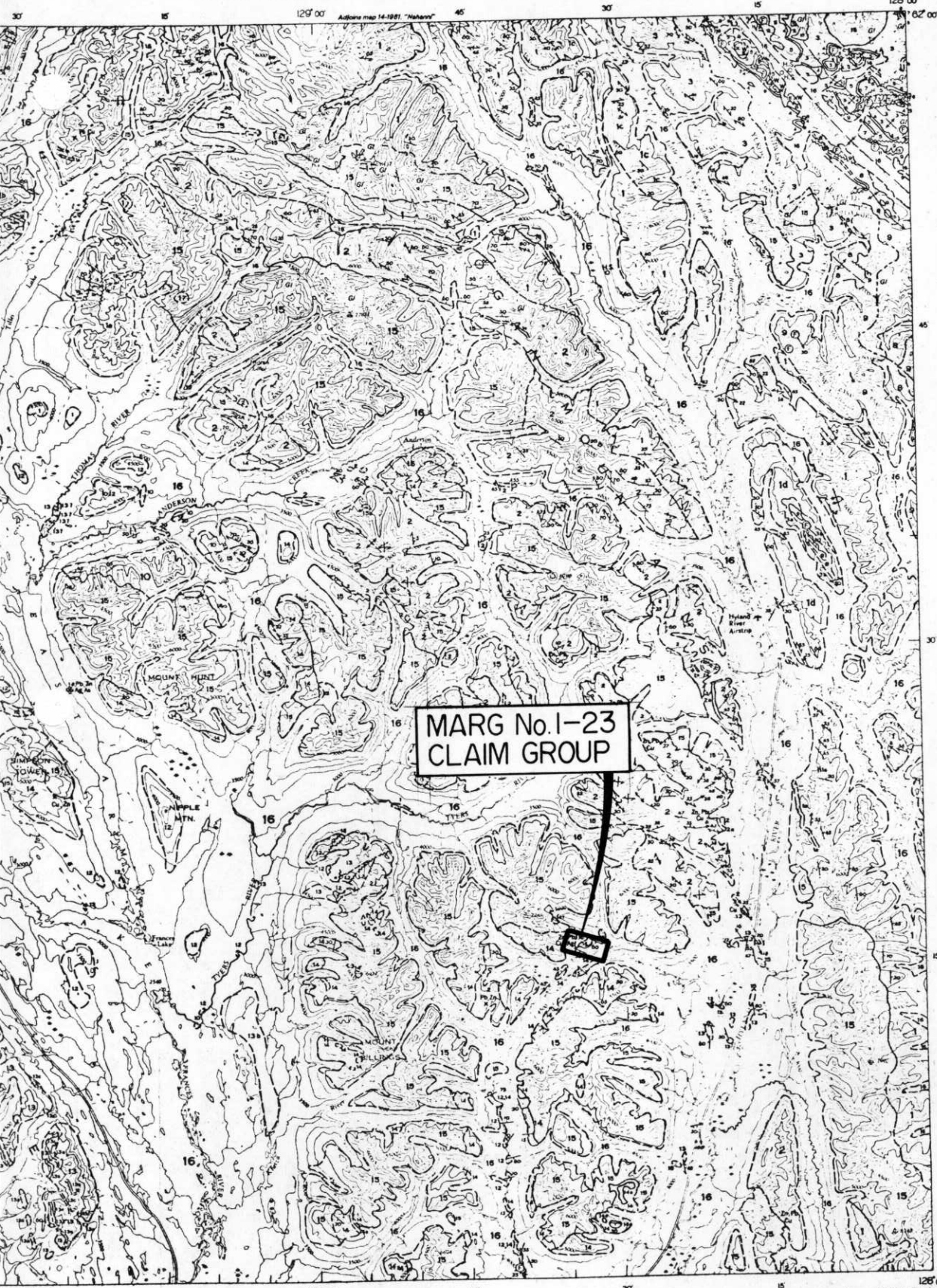
In 1968 road access was made, from Mile 47 on the Cantung Road by Monarch Metal Mines Limited (NPL), to the property.

Monarch optioned the ground and did bulldozer trenching and 1,489 feet of BQ size diamond drilling in twelve holes as well as a magnetometer survey at that time.

In 1969 Monarch Metal Mines optioned the claims to Silver Mark Mines and did a geochemical soil sampling survey and also diamond drilled 5,530 feet of BQ size core.

Morning Star Mines Ltd. (NPL) acquired an option on the MARG #1-23 mineral claim group in 1978 and did bulldozer trenching and 2,104 feet BX core size diamond drilling in seven holes in 1979.

In July-August, 1980 the company drilled two BQ core size diamond drill holes on MARG #2 claim totalling 282 metres (926 feet).



Access is provided by well maintained gravel roads linking Watson Lake on the Alaskan Highway, Ross River on the Canal Road, and the Canada Tungsten Mining community near the headwaters of Flat River.

An ice-sheet covered all but the highest peaks at least once during the Pleistocene Epoch, leaving erratics at elevations greater than 6,000 feet. Little evidence of direction of ice movement remains in the upland areas, but forms of drumlinoid ridges indicate that moving valley glaciers flowed southward down the major drainage systems.

Unit 1 comprises two main divisions with a combined thickness probably well in excess of 10,000 feet. A lower division is characterized by granite-pebble conglomerate and gritty quartzite and an upper one, at least 1,500 feet thick, is composed almost entirely of shale. The upper division is represented by map-unit 1d east of Hyland River and probably by units 1c and 1e, but owing to complex structure has not been separated elsewhere from unit 1.

Unit 3 contains appreciable siltstone and fine-grained quartzite near Flat River. Southwestward it changes progressively to shale and phyllite that may be correlative in part with uppermost strata of unit 1. A minimum thickness of 10,000 feet is estimated in the coarsest graded facies northeast of Flat River. The base of unit 3 is ill-defined in the shaly facies near Little Hyland River and some basal strata may be included within 1c. Unit 3a is tentatively correlated with unit 3 on the basis of lithologic similarity, but may be older.

Unit 4, informally termed the 'Swiss-cheese limestone' forms a distinctive and persistent marker 100 to 200 feet thick above unit 3. It is characterized by rounded facies weathering oval-shaped pods and lenses of limestone in a more resistant siltstone matrix.

Units 5 and 7 total a minimum of 4,000 feet in thickness northeast of Flat River where they are separated by a thin but conspicuous bright orange weathering dolomite unit (6). They comprise various mixtures of dolomite, sandstone, siltstone, minor limestone and shale. Individual members and beds lens out or interfinger abruptly and disconformities appear to be numerous. Basic volcanic flows and tuffaceous beds occur in the upper part of unit 5. An abrupt change in facies occurs westerly across Flat River where at least the lower part of this carbonate section (5), (6), and (7) changes to calcareous shale and argillite of unit 8. A discontinuous limestone member, about 100 feet thick, at the base of unit 8 is the host rock for the principal tungsten deposits near the Canada Tungsten mine. It gradually lenses out about 2 1/2 miles northwest and 4 miles southeast of the mine. Apparent thinning or absence of unit 3 or equivalent strata northeast of Hyland River airstrip is believed due to an unconformity at the base of unit 8.

Intercalated siltstone and limestone of unit 9 characteristically occurs in wavy, tabular or massconglomerate bands, which on weathering impart a very rough pitted surface. An important regional unconformity at the base of this unit in places sharply bevels Lower Cambrian and older strata. Unit 9 is at least 4,000 feet thick near the Yukon-Northwest Territories boundary, but is itself bevelled by an unconformity beneath unit 11, so that apparently its thickness varies markedly. Exposure of unit 11 is limited to narrow cuts along Flat River valley where it overlies unit 9 unconformably. Graptolites collected from the lowermost 500 feet are Upper Ordovician, but as the overlying part of unit 11 is much thicker, it may be in part of Silurian age.

Units 10 and 12 are lithologically correlated with strata previously mapped in adjacent regions.

Unmetamorphosed, predominantly pelitic, strata (13) are believed correlative with Devon-Mississippian shaly rocks in adjacent regions. Characteristic are chert-pebble conglomerate, varicoloured chert, and black quartz-bearing greywacke and gritty quartzite. In the Campbell Range unit 13 includes numerous small bodies of greenstone, many intrusive, but most of the greenstone, mapped as 13b, appears to be volcanic and probably overlies or occurs within the upper part of unit 13. Serpentine (13c) is thought to be an integral part of these strata overlies Mississippian assemblage. A profound angular unconformity occurs at the base of this sequence.

Unit 14 comprises mainly hornfelsed pelitic rocks whose age and correlation are in doubt. Overall lithologic character, lack of regional metamorphism in rocks near the gneissic belt (3) and one collection of Middle or Upper Devonian fossils (near the south boundary at 125° 45' W) suggest that probably most, if not all, of this unit is correlative with Devon-Mississippian strata of unit 13.

Granitic rocks (15) generally have sharply defined contacts, but in the schist-gneiss belt (3) they are commonly bordered by complex zones as much as 1/4 mile wide in which massive plutonic rock is interspersed with lit-par-lit migmatites and partly granitized inclusions. They are mapped intrusive to host rocks.

Outside the complexly deformed central crystalline terrain, regional structures trend northwest except in the northern part of the map-area where they become westerly. Regional metamorphism appears unrelated to Cretaceous (?) granitic intrusion and probably predates the Devon-Mississippian strata. These strata overlie schist and gneiss of unit 1 unconformably and are essentially non-schistose. Northwest-trending regional folds near Flat River, which may be related to tectonism in the central belt, are post Late Ordovician, as they involve rocks of this age and older. These folds clearly predate and are modified by intrusion of granitic rocks.

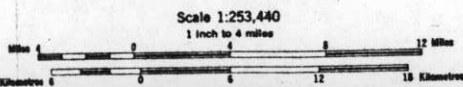
Sphalerite with minor amounts of galena, pyrrhotite and chalcocyanite occur in silicified calcareous members in several localities throughout the schist-gneiss terrain (3) and in hornfelses that may be equivalent to unit 13. Pyrrhotite with some chalcocyanite was noted in black slate and argillite of unit 13, west of Hyland River road at mile 53. Scheelite is reported in the north-central part of the map-area near 61° 48' in contact zones with calcareous beds of unit 1.

A high-grade tungsten deposit on Flat River is presently being mined by Canada Tungsten Mining Corporation. Scheelite, with pyrrhotite and minor amounts of chalcocyanite occurs with skarn minerals in massive Lower Cambrian limestone. The deposit is several hundred feet from nearest exposed granitic rocks, but within a zone of moderate to high-grade contact metamorphism.

MARG No. 1-23
CLAIM GROUP

FIGURE 5

MAP 6-1966
GEOLOGY
FRANCES LAKE
YUKON TERRITORY AND DISTRICT OF MACKENZIE



REGIONAL GEOLOGY
AFTER G. S. C.
MAP 6-1966
OCTOBER 7, 1980
DONALD W. TULLY, P. ENG.

MAP 6-1966
FRANCES LAKE
YUKON TERRITORY AND
DISTRICT OF MACKENZIE
105 H

Donald W. Tully

REFERENCES

Publications and private reports pertinent to the ground held by the MARG #1-23 claims are listed as follows:

- 1) Report on the Glenna and Lake Claims Project for Monarch Metal Mines Limited dated 11 February, 1969 by Rae G. Jury, P.Eng. (Alrae Engineering Ltd.).
- 2) Various reports, maps and diamond drill sections available from private sources.
- 3) Preliminary Summary of the 1970 Exploration of the Glenna and Lake claims for Silver Mark Mines Ltd., dated September 18, 1970 by Rae G. Jury, P.Eng.
- 4) Geological Survey of Canada Map 6-1966.
- 5) Topographic Map 105-H (Frances Lake) scale 1:250,000
- 6) Yukon Claim Sheet 105-H-7
- 7) Report on the MARG #1-23 Mineral Claims for Morning Star Mines Ltd. (NPL) dated August 31, 1979 by Donald W. Tully, P. Eng.
- 8) Report on the MARG #1-23 Mineral Claims for Morning Star Mines Ltd. (NPL) dated November 1, 1978 by Donald W. Tully, P.Eng.
- 9) Report on the 1979 Diamond Drill Program, MARG #1-23 Claim Group for Morning Star Mines Ltd. (NPL) dated February 11, 1980, by Donald W. Tully, P.Eng.

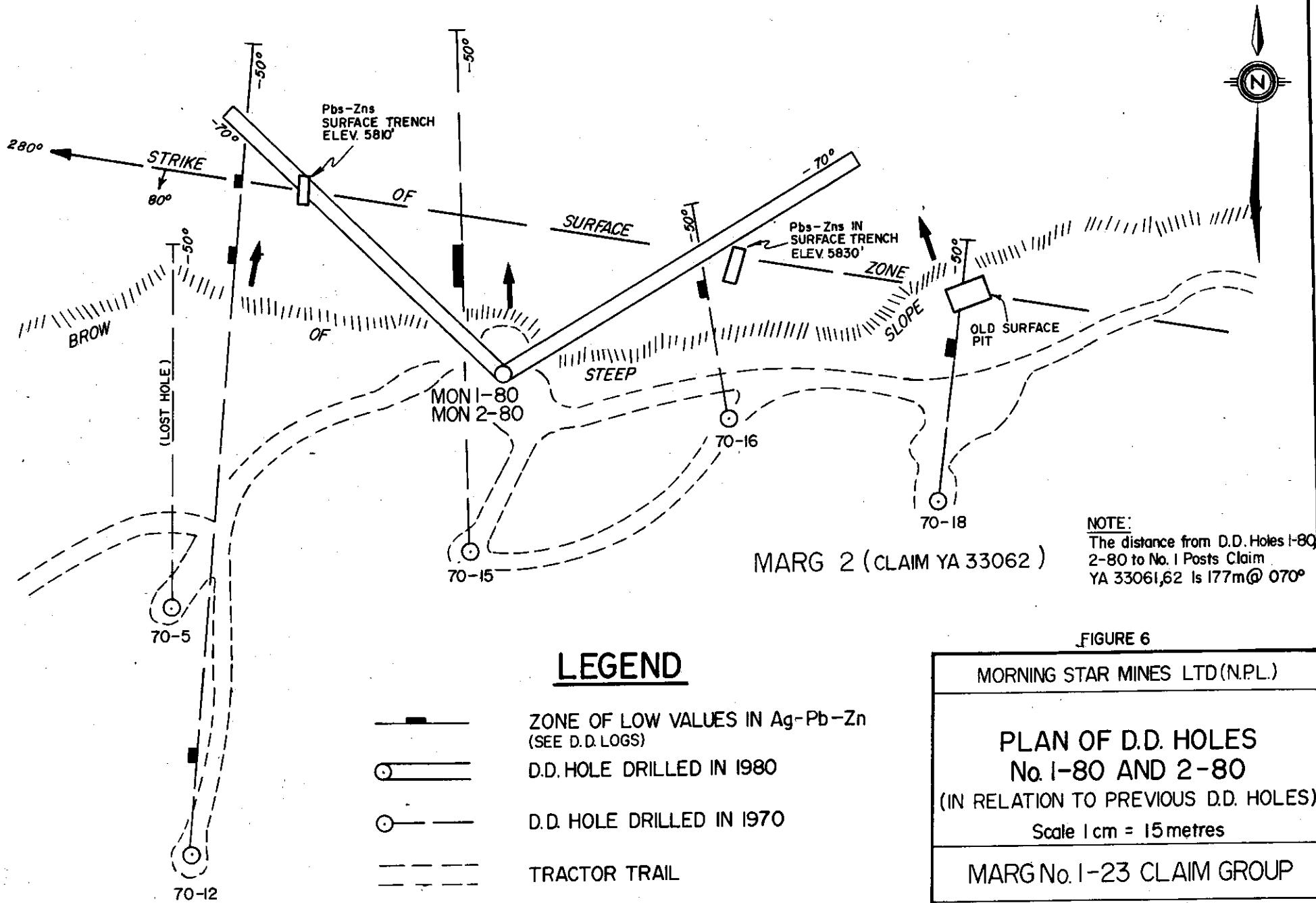
REGIONAL AND LOCAL GEOLOGICAL SETTING

Five lithological units are recognized on the MARG claim group. A tentative table of formations is as follows:

<u>Formation</u>	<u>Description/Event</u>	<u>Probable Age</u>
Unconsolidated sand, gravel and till	Glaciation	Quaternary
Skarn zones of epidote and silica enrichment	Metamorphism and lead, zinc, silver, pyrite, pyrrhotite, magnetite mineralization following tectonic activity associated with granitic and dyke intrusions	Tertiary (?)
Feldspar porphyry dykes, quartz monzonite and granodiorite intrusions	Shearing and associated tectonic activity	Cretaceous (?)
Impure quartzite gneiss, quartz-mica schist and marbleized limestone	Metamorphism as a result of granitic intrusions and hydrothermal solutions	Late Paleozoic (?)
Impure limestone		
Black argillite, shale and pelites		Paleozoic

An irregular steep-dipping contact between the granodiorite-quartz monzonite mass and the sediments trends easterly across the north part of the claim group. The sedimentary horizons have folded into a steep south-dipping position and striking west-northwesterly across the claims.

Metamorphism is locally quite intense. Skarn zones both mineralized and unmineralized occur frequently within 400 feet of the intrusive contact and generally contain considerable epidote with minor magnetite. Those skarn further away from the intrusives may carry massive



Donald W. Tully

lead-zinc mineralization but sparse magnetite. Calcareous sediments near the intrusive contact are mostly converted to skarn.

Observations by the writer suggest the mineralization may well be stratiform in nature and may have been remobilized and reconcentrated as a result of north-northeasterly trending fault structures.

MINERALIZATION - ASSAYS

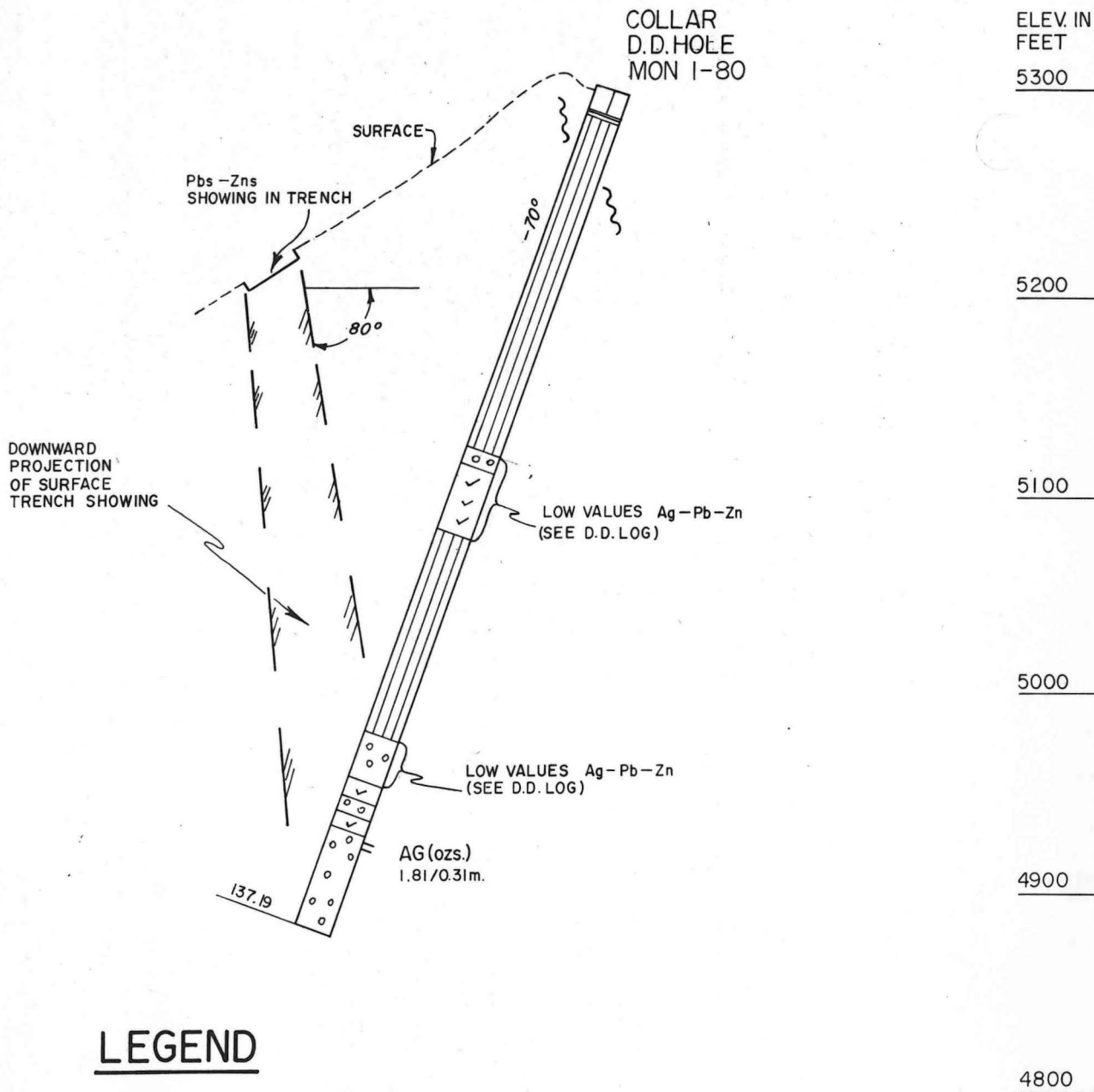
Minerals encountered in the skarn zones include galena, sphalerite, pyrrhotite, magnetite, chalcopyrite and minor scheelite. Concentrations of galena and sphalerite frequently occur as pods and lenses generally near the limestone contacts and appear to be localized by shear fractures.

Two distinct mineralized zones occur at both ends of the claim group, namely, the LOWER ZONE and the TOP-CLIFF ZONE with several intermediate zones over a strike length of some 10,000 feet.






The ratio of silver to lead appears to vary from less than 1:1 to around 3:1. The ratio of zinc to lead is variable in approximately the same ratio as the silver to lead.

Galena, sphalerite, pyrite, pyrrhotite and finely disseminated scheelite are the economic minerals observed in the core sections.

← 315°



LEGEND

-  SHEAR-FAULT ZONE
-  SKARN PLUS BRECCIATED ZONES
-  BROWN BIOTITE-SERICITE ZONES
-  CONGLOMERATE
-  SILSTONE

SCALE: 1cm. = 10m.

Donald W. Tully

FIGURE 7

MORNING STAR MINES LTD (N.PL.)
SECTION THROUGH D.D. HOLE 1-80
LOOKING NORTHEAST.
MARG No. 1-23 CLAIM GROUP
OCTOBER 7, 1980
DONALD W. TULLY, P. ENG.

A study of Figure 9 shows the numerous zones of mineralization in the area along the access road through the claim group. It is concluded a comprehensive program of target preparation should be undertaken over the total claim area. Geochemical and gravity surveying is proposed to explore this property.

RESULTS OF THE 1980 PROGRAM OF DIAMOND DRILLING

Two BQ core size wireline diamond drill holes were drilled to intersect a zone of shearing located in two surface trenches and a small pit (Figure 6). The surface showings exposed in the trenches and pit are mineralized along a northwest-striking shear zone with lenses of sphalerite-galena and pyrite-pyrrhotite.

The results of the diamond drilling are summarized as follows:

<u>Hole No.</u>	<u>Dir'n</u>	<u>Dip</u>	<u>Depth</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Intersection</u>		
							<u>Ag</u> <u>ozs.</u>	<u>Zn</u> <u>%</u>	<u>Pb</u> <u>%</u>
MON 1-80	315°	-70°	137.19m	106.40	110.06	3.66m	0.30	1.59	0.22 (av.)
				113.40	113.71	0.31m	1.43	2.45	0.37
				122.71	123.02	0.31m	1.81	2.64	0.66
MON 2-80	060°	-70°	145.42m	66.46	67.37	0.91m	2.91	3.47	2.43
				77.43	78.17	0.74m	3.82	2.10	2.04
			Total =	<u>282.61 metres</u>					

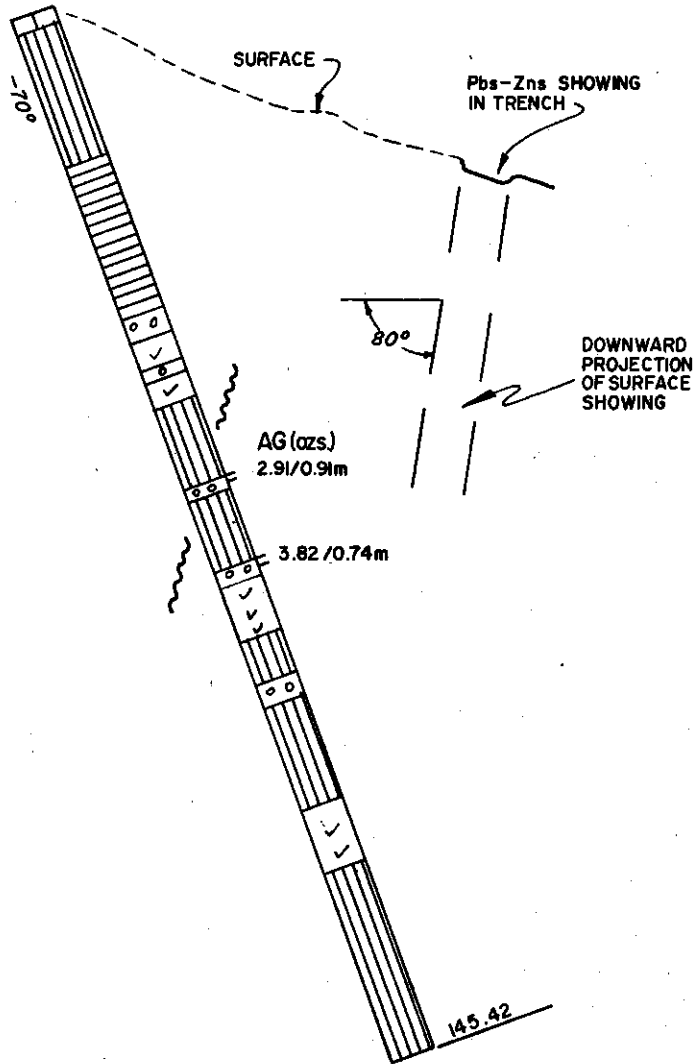
D.D. Hole MON 1-80 may not have been drilled deep enough to cover the downward projection of the surface trench zone (see Figures 6 and 7).

← 240°

COLLAR
D.D. HOLE
2-80

ELEV IN
FEET

5300








5200

5100

5000

4900

LEGEND

-  SHEAR-FAULT ZONE
-  SKARN PLUS BRECCIATED ZONES
-  BROWN BIOTITE-SERICITE ZONES
-  CONGLOMERATE
-  SILSTONE

4800

Donald W. Tully

FIGURE 8

MORNING STAR MINES. LTD (N.P.L.)
SECTION THROUGH D.D. HOLE 2-80 LOOKING NORTHWEST
MARG No. 1-23 CLAIM GROUP
OCTOBER 7, 1980.
DONALD W. TULLY, P. ENG.

SCALE: 1cm. = 10m.

The diamond drilling was done during the period July 30, through August 28, 1980.

The logs of the diamond drill holes are shown in the APPENDIX to this report.

For additional information, relating to values in those diamond drill holes drilled previously by Silver Mark Mines Ltd. (NPL) in 1970 in the area of MON 1-80 and MON 2-80, the logs of those drill holes drilled in 1970 are also included in the APPENDIX.

RECOMMENDATIONS

The results of the exploration work done on the property point out the need to develop new target areas for mineral exploration. A study of Figure 9 indicates the claim area has been tested by preliminary exploration and diamond drilling along the northeast and northern boundary portions of the property in the area of the sedimentary-granitic contact zone.

The numerous indications of lead-zinc mineralization over the ground from the very limited amount of exploration work done suggests this property is underexplored. Some ten areas of mineralization have been found so far and it is concluded the ground is an excellent exploration bet in a favourable geological environment for finding a large body of base metals.

A four-phase program of mineral exploration is recommended to test the ground for new target areas of potential economic significance as follows:

Phase I

A survey of the perimeter of the claim area along the east, south and west boundaries of the property is recommended.

Phase II

A program of geochemical soil sampling over the entire property area is proposed on a 50-metre grid (164 feet).

Phase III

Any geochemically anomalous areas should first be tested by a gravity survey before diamond drilling. A gravity survey measures variations in the density of the rocks beneath the earth's surface. In this way, bodies of base metals, which are relatively much more dense than the enclosing host rocks, can be detected in masses of apparent economic size.

Phase IV

Should the results of Phase 2, 3 and 4 prove rewarding and an engineering evaluation recommend a diamond drill test, it is proposed to test the anomalous conditions by drilling.

ESTIMATED COST OF THE PROPOSED WORK PROGRAMPhase I

Preliminary survey the perimeter of the east, south and west sectors of the claim area in relation to adjoining prior claims	\$ <u>5,000</u>
Carried Forward	\$ 5,000

Brought Forward

\$ 5,000

Phase II

Geochemical Soil Survey on a 50-metre (164') grid

- | | | |
|--|--------------|--------|
| a) Establish a cut-out baseline and sub-baseline over the property to control a chain and compass grid for geochemical soil sampling
Say 15 miles (25 km) @ \$1,000/line mile | \$15,000 | |
| b) Sample collection - estimate two 4-men crews for 30 days at a rate of \$4,000/man/month
4 men @ \$4,000/man | 12,000 | |
| c) Sample analysis (estimate 1,936 soil samples assayed for lead and zinc)
1836 samples x \$2.85/sample | 5,518 | |
| d) Camp supplies, travel, supervision | 10,000 | |
| e) Engineering Report and maps | <u>5,000</u> | 47,518 |

Phase III

Do a gravity survey over geochemically anomalous zones. Assuming 40% of the area is indicated to have soil anomalies and considering the steep topography in certain areas of the property, a gravity survey contractor has indicated such a survey would cost a total of about \$50 per occupied station on the grid.
40% x 1836 grid stations x \$50/occupied station

36,720

Phase IV

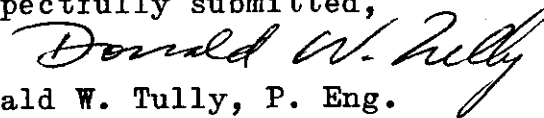
In the event the results of the exploration programs carried out under Phases 2, 3 and 4 prove rewarding and contingent upon an engineering evaluation recommending a diamond drill test of any new anomalous conditions, a program of follow-up drilling of eight BQ core size holes each 500 feet in depth is recommended.
(8 x 500 feet = 4000 feet x \$52/foot)

208,000

Total estimated cost of Phases I, II, III and IV

\$297,238

Respectfully submitted,



Donald W. Tully, P. Eng.

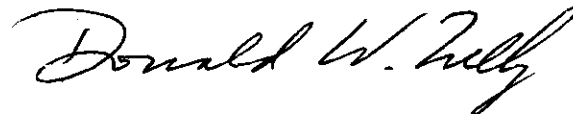
October 7, 1980

CERTIFICATE

I, DONALD WILLIAM TULLY, of the City of West Vancouver, Province of British Columbia, hereby certify as follows:

- 1) I am a Consulting Geologist with an office at Suite 102, 2222 Bellevue Avenue, West Vancouver, B.C.
- 2) I am a registered Professional Engineer of the Provinces of British Columbia and Ontario.
- 3) I graduated with a degree of Bachelor of Science, Honours Geology, from McGill University in 1943.
- 4) I have practiced my profession for thirty-five years.
- 5) I have no direct, indirect or contingent interest in the shares of Morning Star Mines Ltd. (NPL) nor the MARG #1-23 mineral claims, subject of this report, nor do I intend to have any interest.
- 6) This report dated October 7, 1980, is based on personal field examinations I made on August 11 and September 11-12, 1980, and from information gathered from available maps and reports.
- 7) Written permission from the author is required to publish this report dated October 7, 1980 in any Prospectus or Statement of Material Facts.

DATED at West Vancouver, Province of British Columbia, this 7th day of October, 1980.



Donald W. Tully, P. Eng.,
Consulting Geologist

DON TULLY ENGINEERING LTD.
SUITE 102 - 2222 BELLEVUE AVENUE
WEST VANCOUVER, BRITISH COLUMBIA
V7V 1C7

APPENDIX



TO:
DON TULLY ENGINEERING
 102 - 2222 Bellvue Avenue
 West Vancouver, B.C.
 V7V 1G7
MORNING STAR

General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

CERTIFICATE OF ASSAY

No.: 8008-2060 B DATE: Sept. 4/80

We hereby certify that the following are the results of assays on: Ore

MARKED	GOLD	SILVER	Copper	Lead	Zinc	Tungsten	XXX	X XX
	oz/st	oz/st	Cu (%)	Pb (%)	Zn (%)	WO ₃ (%)		
853	0.002	0.11	0.01	0.02	0.01	-		
864	0.002	0.09	0.01	0.15	0.20	-		
865	0.002	trace	0.01	0.20	0.37	-		
866	0.002	0.09	0.01	0.18	0.37	-		
867	0.002	0.22	0.01	0.54	0.52	-		
871	-	-	-	-	-	trace		
872	-	-	-	-	-	trace		
873	-	-	-	-	-	trace		
874	-	-	-	-	-	trace		
875	-	-	-	-	-	trace		
876	-	-	-	-	-	trace		
877	-	-	-	-	-	trace		
878	-	-	-	-	-	trace		
879	-	-	-	-	-	trace		
880	-	-	-	-	-	trace		
881	-	-	-	-	-	XXXXXX		
882	-	-	-	-	-	trace		
883	-	-	-	-	-	trace		
884	-	-	-	-	-	trace		
885	-	-	-	-	-	trace		
917	0.002	trace	0.01	0.02	0.02	trace		
918	0.002	0.11	0.01	0.16	1.25	trace		
919	0.002	0.34	0.01	0.24	0.38	trace		
920	0.002	0.12	0.01	0.25	2.24	trace		
921	0.002	0.13	0.01	0.16	0.55	trace		
922	0.002	0.27	0.01	0.08	1.97	trace		
923	0.002	0.59	0.01	0.23	2.28	trace		

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.

REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

[Signature]
 L. FOLG PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade



TO:
DON TULLY ENGINEERING LTD.
 102 - 2222 Bellvue Avenue
 West Vancouver, B.C.
 V7V 1C7

General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA. V6A 1W2
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

CERTIFICATE OF ASSAY

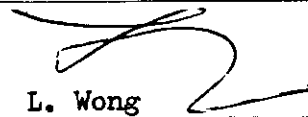
No.: 8009-2558 DATE: Oct. 6/80

We hereby certify that the following are the results of assays on: **Ore**

MARKED	GOLD	SILVER	Lead	Zinc	XXXX	XXXX	XXXX	XXXX
	oz/st	oz/st	Pb (%)	Zn (%)				
828	0.002	1.43	0.37	2.45				
829	0.002	1.81	0.66	2.64				
830	0.002	trace	0.02	0.01				
831	0.002	2.91	2.43	3.47				
832	0.002	3.82	2.04	2.10				

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.

REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED


L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade

HOLE No. MON 1-80

CLAIM MARG #2

Loc'n
PROPERTY MARG #1 - 23 claim groupCOMPANY MORNING STAR MINES LTD. (NPL)

DIAMOND DRILL CORE LOG - SAMPLE RECORD

HOLE DEPTH 137.19m

CORE SIZE dia. 36mm

HOLE DIRECTION 315°

DIP 70°

collar ELEV.5875 ft. PAGE No. 1 of 3

LENGTH IN METRES		DESCRIPTION	MINERALIZATION	SAMPLE No.	ASSAYS						Pb %	WO ₃ %
FROM	TO				From	To	Length	AU OZS	AG OZS	EN %		
0	3.05	Casing										
	5.18	Siltstone with conglomerate bands										
	11.07	Conglomerate-quartzite with siltstone bands										
	12.13	Fault zone in cong. + fine py. with	sericite	863				0.002	0.11	0.01	0.01	0.02 -
	32.93	Conglomerate-quartzite with siltstone bands + fine brown biotite bands @ 20° c/a, Fault @	17.99									
	39.33	Conglomerate with sericite bands @	15-30° c/a									
		very blocky										
	42.68	As above section with quartzite bands										
	59.50	As above section with sericite banding @ 45° c/a,										
		blocky										
	60.52	Brecciated zone in conglomerate with	fine py.	864				0.002	0.09	0.20	0.01	0.15 -
	61.40	Conglomerate (fault zone @ 60.52 - 60.70) fine pyrite		865				0.002	Tr	0.37	0.01	0.20 -
	62.35	Conglomerate with fine diss. py., sparse Zns + Pbs		866				0.002	0.09	0.37	0.01	0.18 -
	72.71	Brown biotite bands with sericite @	40-55° c/a									
	73.17	Conglomerate + sparse fine seams Zns	+ py.	867				0.002	0.22	0.52	0.01	0.64 -
	74.70	Quartzite + grit size pebbles, fine	pyrite + WO ₃	871				-	-	-	-	- Tr
	76.22	Quartzite + grit size pebbles + fine	WO ₃	872				-	-	-	-	- Tr
	77.74	As above section with fine WO ₃		873								

LEGEND

C/A - CORE AXIS

Bx - BRECCIATED

NA - NOT ASSAYED

Diss. - DISSEMINATED

f.g. - fine-grained

m.g. - med. grained

py - PYRITE

Mg - MAGNETITE

Pb - GALENA

Zn - SPHALERITE

Po - PYRRHOTITE

CORE Logged by: D.W. TULLY, P.ENG.

CORE Split by: T. FENTON

HOLE STARTED: July 30, 1980

HOLE FINISHED: August 11, 1980

HOLE No. MON 1-80

CLAIM MARG #2

Loc'n MARG #1 - 23 claim group
PROPERTY

COMPANY MORNING STAR MINES LTD. (NPL)

DIAMOND DRILL CORE LOG - SAMPLE RECORD

HOLE DEPTH 137.19m
CORE SIZE dia. 36mm
HOLE DIRECTION 315°
DIP 70°

collar ELEV. 5875 ft. PAGE No. 2 of 3

LENGTH IN METRES		DESCRIPTION	MINERALIZATION	SAMPLE No.	ASSAYS						Pb %	WO ₃ %	
FROM	TO				From	To	Length	AU OZS	AG OZS	CN %			CU %
77.74	80.64	Conglomerate + quartzite bands + fine	diss. py.+ fine WO ₃	873			-	-	-	-	-	Tr	
	82.16	As above section		876			-	-	-	-	-	Tr	
	83.69	As above section		877			-	-	-	-	-	Tr	
	85.21	As above section		878			-	-	-	-	-	Tr	
	86.71	As above section		879			-	-	-	-	-	Tr	
	88.20	As above section		880			-	-	-	-	-	Tr	
	92.36	As above section											
	93.17	As above section		881			-	-	-	-	-	Tr	
	97.96	As above section											
	99.39	Conglomerate with brown biotite bands @ 30° c/a											
		+ fine WO ₃											
	100.91	As above section		883			-	-	-	-	-	Tr	
	102.20	As above section		884			-	-	-	-	-	Tr	
	103.20	As above section		885			-	-	-	-	-	Tr	
	105.03	Conglomerate											
	105.49	Skarn zone with brown biotite +	fine pyrite	917			0.002	Tr	0.02	0.01	0.02	Tr	
	106.40	Skarn zone + epidote + seams (2-3mm)	Zns + py.	918	106.49	106.40	0.91	0.002	0.11	1.25	0.01	0.16	Tr
	106.95	Skarn zone + epidote + seams (2-3mm)	Zns + py.	919	106.40	106.95	0.55	0.002	0.34	0.38	0.01	0.24	Tr
	107.80	Skarn zone + epidote " sparse Zns +	py.	920	106.95	107.80	0.85	0.002	0.12	2.24	0.01	0.25	Tr

LEGEND

C/A - CORE AXIS

Bx - BRECCIATED

NA - NOT ASSAYED

Diss. - DISSEMINATED

f.g. - fine-grained

m.g. - med. grained

py - PYRITE

Mg - MAGNETITE

Pb - GALENA

Zn - SPHALERITE

Po - PYRRHOTITE

CORE Logged by: D.W. TULLY, P. ENG.

CORE Split by: T. FENTON

HOLE STARTED: July 30, 1980

HOLE FINISHED: August 11, 1980

HOLE No. MON 1-80

CLAIM MARG #2

LOC'n
PROPERTY MARG #1 - 23 claim groupCOMPANY MORNING STAR MINES LTD. (NPL)**DIAMOND DRILL CORE LOG - SAMPLE RECORD**HOLE DEPTH 137.19 m
CORE SIZE Dia. 36 mm
HOLE DIRECTION 315°
DIP 70°

collar ELEV. 5785 ft. PAGE No. 3 of 3

LENGTH IN METRES		DESCRIPTION	MINERALIZATION	SAMPLE No.	ASSAY							Pb %	WO ₃ %
FROM	TO				From	To	Length	AU OZS	AG OZS	SN %	CU %		
107.80	108.54	Skarn + epidote + fine seams (1-2mm)	Zns + Py.	921	107.80	108.54	0.74	0.002	0.13	0.55	0.01	0.16	Tr
	109.45	Skarn + epidote + fine seams (2-3mm)	Zns + Py.	922	108.54	109.45	0.91	0.002	0.27	1.97	0.01	0.08	Tr
	110.06	Skarn + epidote + fine seams (2-3mm)	Zns + Py.	923	109.45	110.06	0.61	0.002	0.59	2.28	0.01	0.23	Tr
	113.40	Skarn + brown biotite bands + sericite											
	113.71	Skarn 5% seam Zns, Pbs, Py.		828	113.40	113.71	0.31	0.002	1.43	2.45	-	0.37	-
	116.16	Brown biotite bands + sericite @ 60°	c/a										
	118.59	Skarn + sparse fine seams Zns + Py.	(-1%)										
	121.18	Skarn + brown biotite + sericite bands											
	122.71	Skarn + epidote alteration zones and brown biotite											
	123.02	Skarn + fine seams Zns, Pbs, Py.		829	122.71	123.02	0.31	0.002	1.81	2.64	-	0.66	-
	125.91	Skarn + sparse fine seams Zns, Pbs, Py.	(-1%)										
	128.35	Skarn + brown biotite - sericite bands @ 50°	c/a										
	129.87	Skarn + epidote zones											
	130.48	Skarn + brown biotite bands											
	132.31	Skarn, leached, vuggy and broken											
	134.45	Skarn + brown biotite bands @ 60°	c/a										
	137.19	Skarn + sparse fine seams Zns, Pbs, Py.	(-1%)										
		END OF HOLE											

LEGEND

C/A - CORE AXIS

Bx - BRECCIATED

NA - NOT ASSAYED

Diss. - DISSEMINATED

f.g. - fine-grained

m.g. - med. grained

py - PYRITE

Mg - MAGNETITE

Pb - GALENA

Zn - SPHALERITE

Po - PYRRHOTITE

CORE Logged by: D.W. Tully, P.Eng.

CORE Split by: T. Fenton

HOLE STARTED: July 30, 1980

HOLE FINISHED: August 11, 1980

HOLE No. MON 2-80

CLAIM MARG #2

Loc'n
PROPERTY

COMPANY _____ MORNING STAR MINES LTD. (NPL) _____
DIAMOND DRILL CORE LOG - SAMPLE RECORD

HOLE DEPTH 145.42m
 CORE SIZE 36mm
 HOLE DIRECTION 060°
 DIP 70°

collar ELEV. 5875 ft. PAGE No. 1 of 2

LENGTH IN METRES		DESCRIPTION	MINERALIZATION	SAMPLE No.	ASSAYS						Pb %	WO ₃ %
FROM	TO				From	To	Length	AU DZS	AG DZS	Fe %		
0	1.52	Casing										
	6.40	Conglomerate + quartzite bands, veinlets @ 70° c/a, blocky	glassy quartz									
	8.99	As above with brown biotite-sericite bands @ 70° c/a										
	13.41	As above with epidote zones @ 40° c/a										
	20.73	As above with brown biotite bands @ 20° c/a										
	41.76	Siltstone, banded @ 40-55° c/a, veinlets, epidote seams, diorite	glassy quartz dike @ 25,91									
	45.42	Skarn, tactite and epidote zones	(20%), qtz veinlets									
	49.08	Brown biotite-sericite, banded @	40° c/a									
	49.78	Skarn + sparse fine seams Zns, Pbs,	Py.	830	49.08	49.78	0.70	0.002	Tr	0.01	-	0.02 -
	54.87	Brown biotite - sericite zone banded @ 45° c/a										
	66.46	Conglomerate - quartzite, epidote zones										
	67.37	Skarn with fine seams Zns, Pbs, Py.		831	66.46	67.37	0.91	0.002	2.91	3.47	-	2.43 -
	77.43	Conglomerate with quartzite bands										
	78.17	Skarn zone with dissem. Zns, Pbs,	Py.	832	77.43	78.17	0.74	0.002	3.82	2.10	-	2.04 -
	79.26	Conglomerate + quartzite bands										
	81.70	Brown biotite - sericite zone, banded @ 60° c/a										
	82.92	Skarn zone										

LEGEND

C/A - CORE AXIS

Bx - BRECCIATED

NA - NOT ASSAYED

Dis. - DISSEMINATED

f.g. - fine-grained

m.g. - med. grained

py - PYRITE

Mg - MAGNETITE

Pb - GALENA

Zn - SPHALERITE

Po - PYRRHOTITE

CORE Logged by: D.W. TULLY, P.ENG.

CORE Split by: MIKE JOHNSON

HOLE STARTED: August 12, 1980

HOLE FINISHED: August 28, 1980

HOLE No. MON 2-80

COMPANY MORNING STAR MINES LTD. (NPL)

HOLE DEPTH 145.42m

CLAIM MARG #2

CORE SIZE 36mm

DIAMOND DRILL CORE LOG - SAMPLE RECORD

HOLE DIRECTION 060°

Loc'n
PROPERTY

DIP 70°

collar ELEV. 5875 ft, PAGE No. 2 of 2

LENGTH IN METRES		DESCRIPTION	MINERALIZATION	SAMPLE No.	ASSAYS						Pb %	WO ₃ %
FROM	TO				From	To	Length	AU OZS	AG OZS	SI %		
82.92	87.50	Brown biotite-sericite zone with few quartz pebbles										
	93.28	Conglomerate + epidote-skarn zones										
	96.03	Skarn-epidote zone										
	111.58	Conglomerate with epidote bands										
	119.20	Brown-biotite-sericite bands with few quartz pebbles, banded @ 10-20° c/a										
	145.42	Conglomerate with epidote zones and quartz pebbles										
		END OF HOLE										

LEGEND

- C/A - CORE AXIS
- Bx - BRECCIATED
- NA - NOT ASSAYED
- Dis. - DISSEMINATED
- f.g. - fine-grained
- m.g. - med. grained
- py - PYRITE
- Mg - MAGNETITE
- Pb - GALENA
- Zn - SPHALERITE
- Po - PYRRHOTITE

CORE Logged by: D.W. TULLY, P.ENG.
 CORE Split by: MIKE JOHNSON
 HOLE STARTED: August 12, 1980
 HOLE FINISHED: August 28, 1980

COLLAR

North 7 + 90
 East 6 + 10
 Elevation 5835'
 Azimuth 350°
 Dip -50
 Logged By Rae G. Jury

ALRAE ENGINEERING LTD.

SILVER MARK MINES LIMITED

DIAMOND DRILL RECORD

Hole No. 70-16
 Commenced August 20, 1970
 Finished August 21, 1970
 Purpose Of Hole _____

FROM	TO	DESCRIPTION	CORE LENGTH				ASSAYS					ACCUMULATIVE AVERAGES					
			FROM	TO	ACC WIDTH	SAMPLE NO.	AU OZ.	AG OZ.	% CU	% Pb	% Zn	AU W	AG W	CU W			
0	6	OVERBURDEN															
6	77	Quartzite, impure, banded 50° to core axis, medium grey colour, minor epidote and sericite along hairline veinlets, 25-26.5' - increased skarn. 26.5-33.5' - 10-15% epidote. 33.5-62.0' - dark grey, increasing biotite, banding 50° to core axis, mica's becoming coarser grained and crumpled. 62-77' - less mica, more typical of impure quartzite, minor epidote along fractures,	9.5	10.0	0.5	lost											
			14.5	15.0	0.5	lost											
77	86.4	Skarn, chiefly epidote, disseminated galena and sphalerite. 83.4-86.4' - less galena and sphalerite.	77	83.4	6.4	12596		.72		1.80	1.96						
			83.4	86.4	3.0	12597		Tr.		.01	.02						
86.4	100.5	Biotite sericite schist, banding 50° to core axis, at 98'6" epidote skarn,															
100.5	134.0	Limestone, light grey, mottled appearance, vague banding 50° to core axis, 126.6-132.1' - skarny, minor sphalerite. 132.1-134' - increased galena and	126.1	132.1	6.0	12598		.68		.64	1.02						
			132.1	134	1.9	12599		.93		2.06	1.84						



P.O. Box 269
Watson Lake, Yukon
YOA 1C0

1 April, 1981

Your file Votre référence

Our file Notre référence



REGIONAL DIRECTOR RESOURCES

Attention: Supervising Mining
Recorder

RESTRICTED

Enclosed for your files are drill logs submitted by Morning Star
Mines Ltd. (NPL) for assessment on the Marg mineral claims on map
105-H-7.

Marg 2 - MON 1-80 - 137.19 m.
MON 2-80 - 145.42 m.

Assessment credit requested: \$ 10,200.00

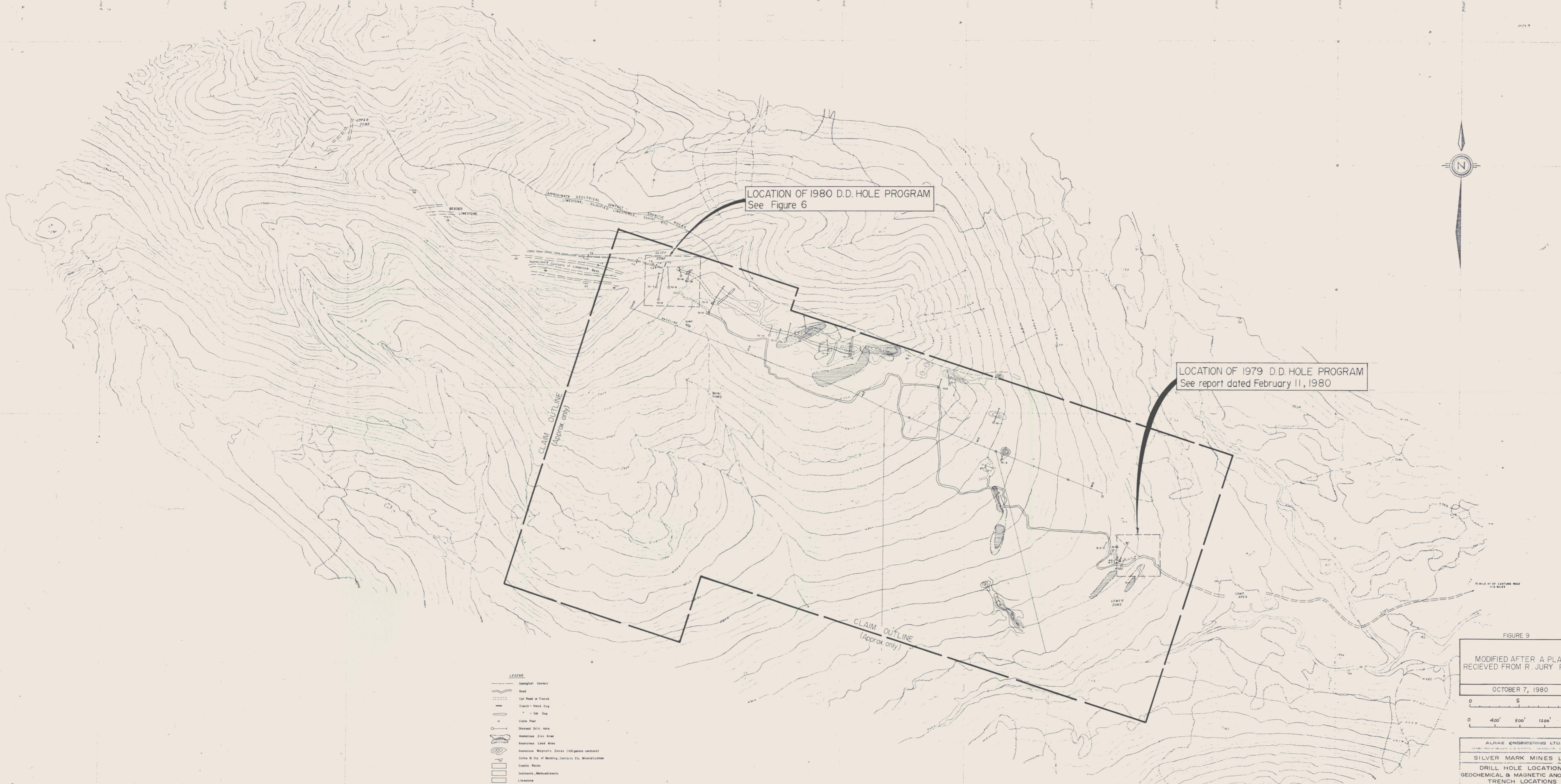
Drill core is being stored on Marg 23.

090827

Yours truly,

Patti L. McLeod
Mining Recorder
Watson Lake Mining district

PLM/fe
Encl.
cc: Regional Geologist



- LEGEND**
- Geological Contact
 - Road
 - Cut Road or Trench
 - Trench - Hand Dig
 - Cut Dip
 - Claim Post
 - Diamond Drill Hole
 - Anomalous Zinc Area
 - Anomalous Lead Area
 - Anomalous Magnetic Zones (100 gamma contours)
 - Strike & Dip of Bedding, Contacts Etc. Mineralization
 - Granite Rocks
 - Sediments, Metasediments
 - Limestone

FIGURE 9
 MODIFIED AFTER A PLAN
 RECEIVED FROM R. JURY P. ENG.

OCTOBER 7, 1980

0 5 10 CM

0 400' 800' 1200' 1600'

ALRAE ENGINEERING LTD.
 SILVER MARK MINES LTD.
 DRILL HOLE LOCATIONS
 GEOCHEMICAL & MAGNETIC ANOMALIES
 TRENCH LOCATIONS

NOTE: ALL LOCATIONS NOT GUARANTEED AND ARE SUBJECT TO D.L.S. SURVEY

Donald W. Kelly