DIAMOND DRILLING PROGRAMME

NWB 180, NWB 67 and DINA 2
MINING CLAIMS

OMINECA MINING DIVISION

NTS 93L/1W
Lat. 54° 08.9'
Lat.126° 15'

OWNER AND OPERATOR:

MUTUAL RESOURCES LIMITED
#904-1199 West Hastings Street
Vancouver, British Columbia
V6E 3V4

AUTHOR:

GRAHAM H. SCOTT, B.Sc., M.A.
VANCOUVER, British Columbia

August 1, 1980

TABLE OF CONTENTS

		PAGE:
1	INTRODUCTION	
	1.1. Location and Access	1
	1.2. History	1
	1.3. Current Programme	1 & 2
	1.4. Property Description	2
	1.5 Core Storage	2
2	GEOLOGY	
	2.1. Regional Geology	3
	2.2. Property Geology	3
	2.2.1. 1970 Diamond Drilling	3 & 4
	2.2.2. 1980 Drill Programme	4
	2.2.3. Surface Geology	5 & 6
	2.2.4. Mineralization	6 & 7
	2.3. Summary of Geology	8
3	GEOPHYSICS	9
4	SUMMARY AND RECOMMENDATIONS	10

BIBLIOGRAPHY

Appendix A: Property Description
Appendix B: I.P. Data Review
Appendix C: Assay Results
Appendix D: Abbreviated Drill Logs
Appendix E: Statement of Cost
Appendix F: Author's Qualifications

I INTRODUCTION

1.1. LOCATION AND ACCESS

The property is located approximately 33 km southeast of Houston B.C. and can be reached via Buck Flats Road or the recently-completed road to Equity Silver Mines Ltd. and thence by logging roads. The site of the current drilling programme is 54 km by road from Houston, using Buck Flats Road, and the last 3 km to the drill-site is a four-wheel-drive road.

The claims cover a combination of virgin stands of timber, recent logged off areas, and an old burn which cover the north side of Buck Creek valley between 1400 m and 1000 m above sea level. The current drilling programme was located entirely within the burn area and within 700 m of the common Legal Corner Post for claims DINA 1-3 (see Figures 1 and 2).

1.2 . HISTORY

The ground covered by the claims was originally staked in early 1969 when it became apparent that Kennco Explorations (Canada) Ltd. had intersected ore-grade copper-silver mineralization approximately 3 km to the north. The claims were staked by Dorita Silver Mines Ltd. (N.P.L.) and were subsequently optioned to Silver Standard Mines Limited. In 1970 Silver Standard carried out a programme of geochemical surveys, induced polarization surveys and diamond drilling on the subject claims. Silver Standard exercised its right to purchase under the option agreement, but no further work was performed after 1970, and all but eight of the claims were allowed to lapse.

In February 1980, the DINA 1-3 claims, totalling 44 units were staked by Silver Standard, who then optioned the complete claim block to Mutual Resources Limited.

1.3. CURRENT PROGRAMME

The fourth and final diamond drill hole completed in 1970 intersected significant amount of copper-silver mineralization.

..../2

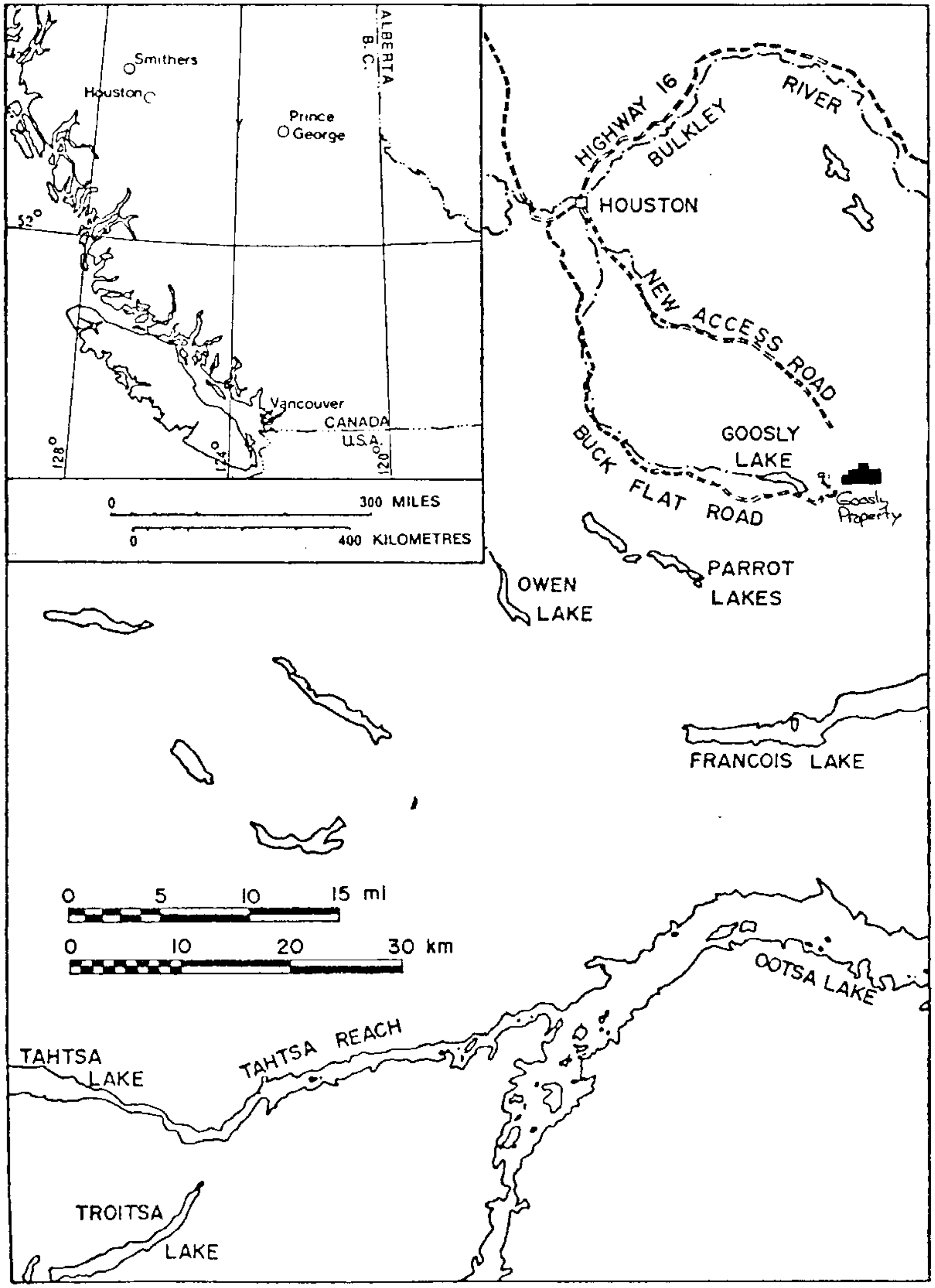
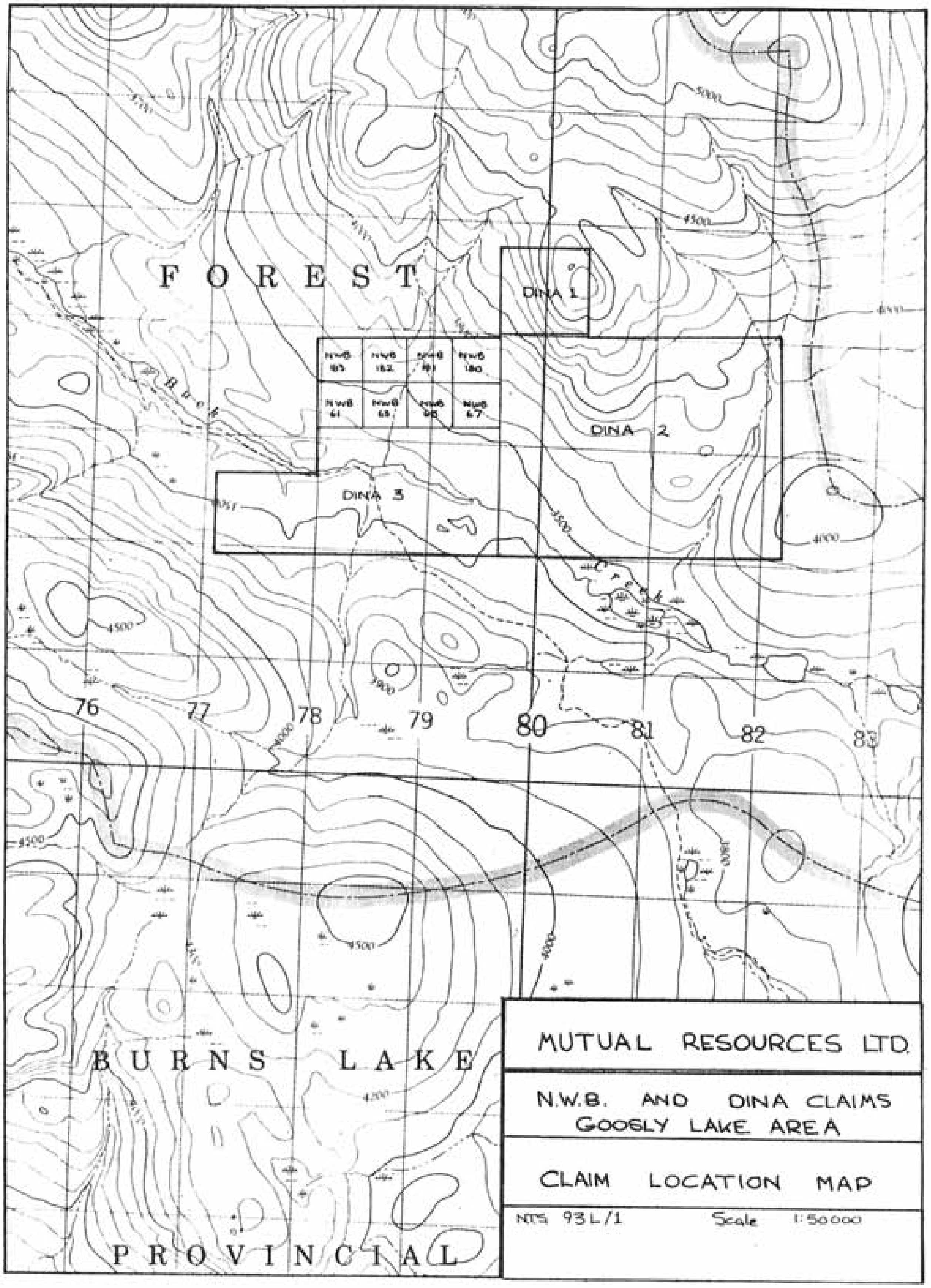
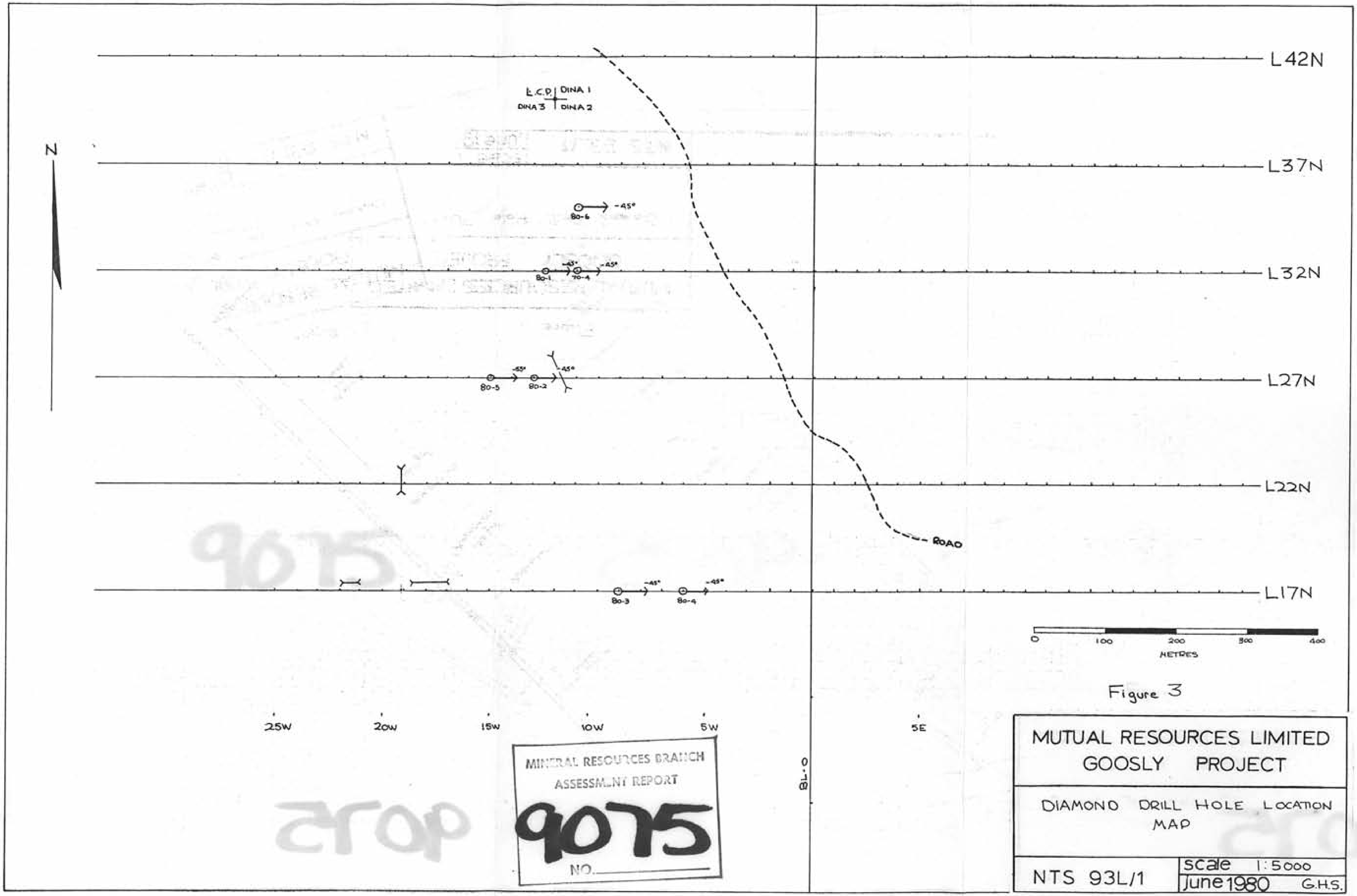


Figure 1, Location Map, GOOSLY PROPERTY



FOREST
DINA 1
DINA 2
DINA 3
NWB 183
NWB 182
NWB 181
NWB 180
NWB 61
NWB 63
NWB 65
NWB 67
76
77
78
79
80
81
82
83
BURNS LAKE
PROVINCIAL
MUTUAL RESOURCES LTD.
N.W.B. AND DINA CLAIMS
GOOSLY LAKE AREA
CLAIM LOCATION MAP
NTS 93L/1
Scale 1:50000

Figure 2



L42N
L37N
L32N
L27N
L22N
L17N
N
L.C.P. DINA 1
DINA 3 DINA 2
80-6 -45°
80-1 -45°
80-4 -45°
80-5 -55°
80-2 -45°
80-3 -45°
80-4 -45°
ROAD
25W
20W
15W
10W
5W
5E
BL-0
0 100 200 300 400
METRES
Figure 3
MUTUAL RESOURCES LIMITED
GOOSLY PROJECT
DIAMOND DRILL HOLE LOCATION MAP
NTS 93L/1
scale 1:5000
June 1980 G.H.S.
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9075
NO.

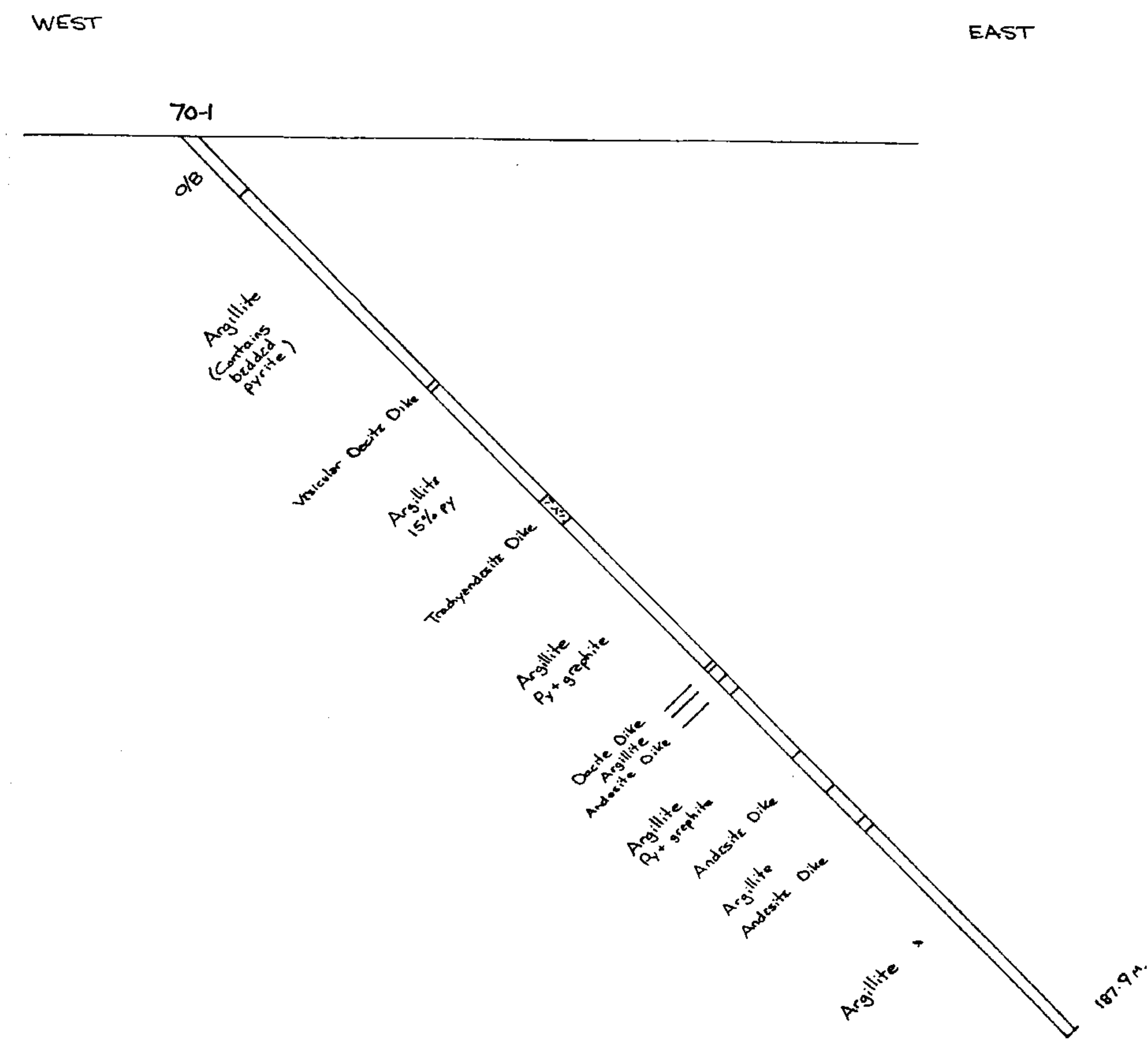


Figure 4

MUTUAL RESOURCES LIMITED
GOOSLY PROJECT

Diamond Drill Hole 70-1

NTS 93L/1

scale 1:1000
June 1980 / GHS

W

E

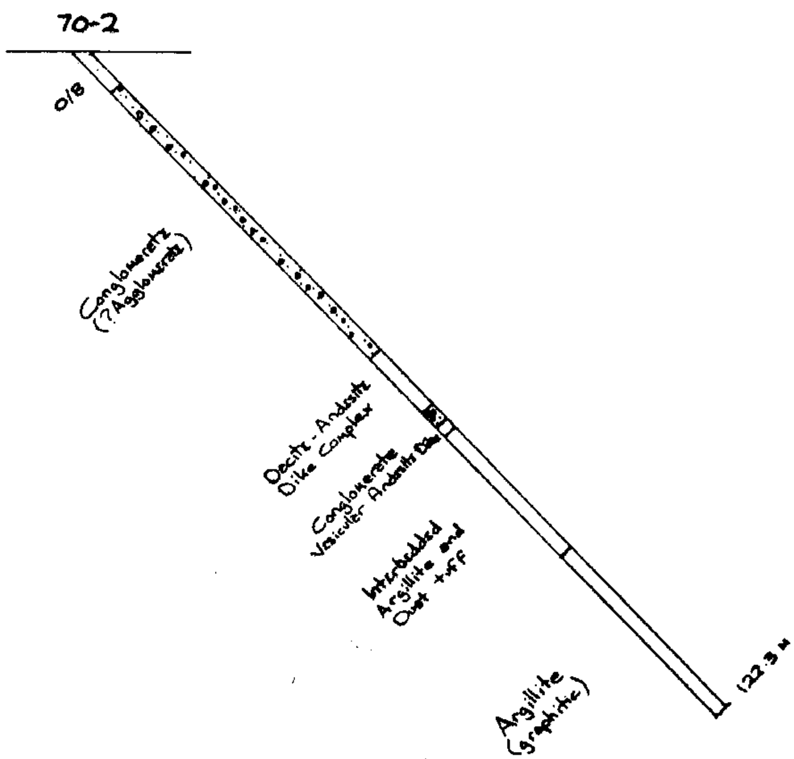


Figure 5

MUTUAL RESOURCES LIMITED GOOSLY PROJECT	
Diamond Drill Hole 70-2	
NTS 93L/1	scale 1:1000 June 1980 GHS

W

E

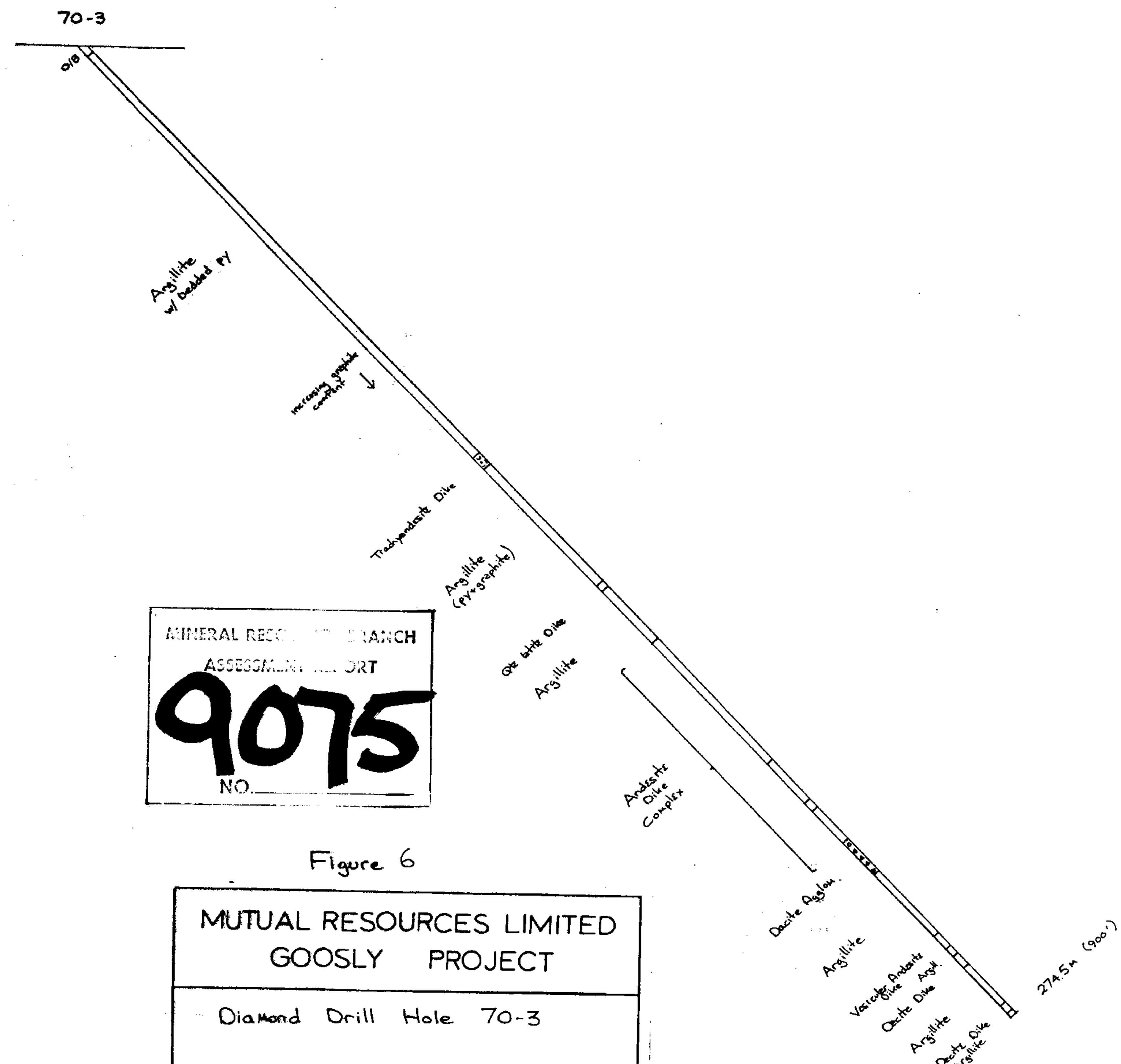


Figure 6

MUTUAL RESOURCES LIMITED GOOSLY PROJECT	
Diamond Drill Hole 70-3	
NTS 93L/1	scale 1:1000 June 1980 GHS

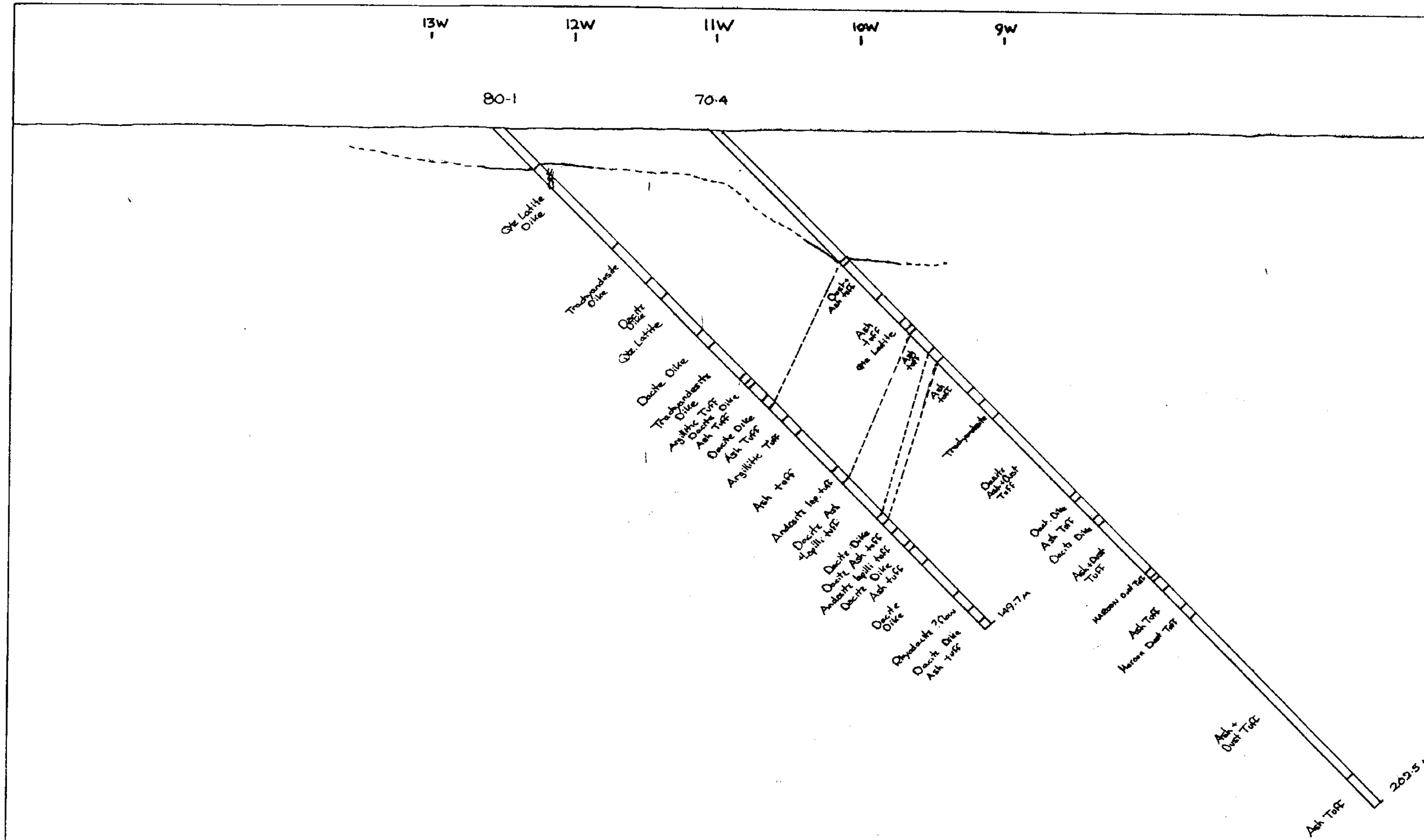


Figure 8

MUTUAL RESOURCES LIMITED
GOOSLY PROJECT

Section: L 32 N Showing DDH 70-4 And DDH 80-1

NTS 93L/1	Scale 1:1000
	June 1980 G.H.S

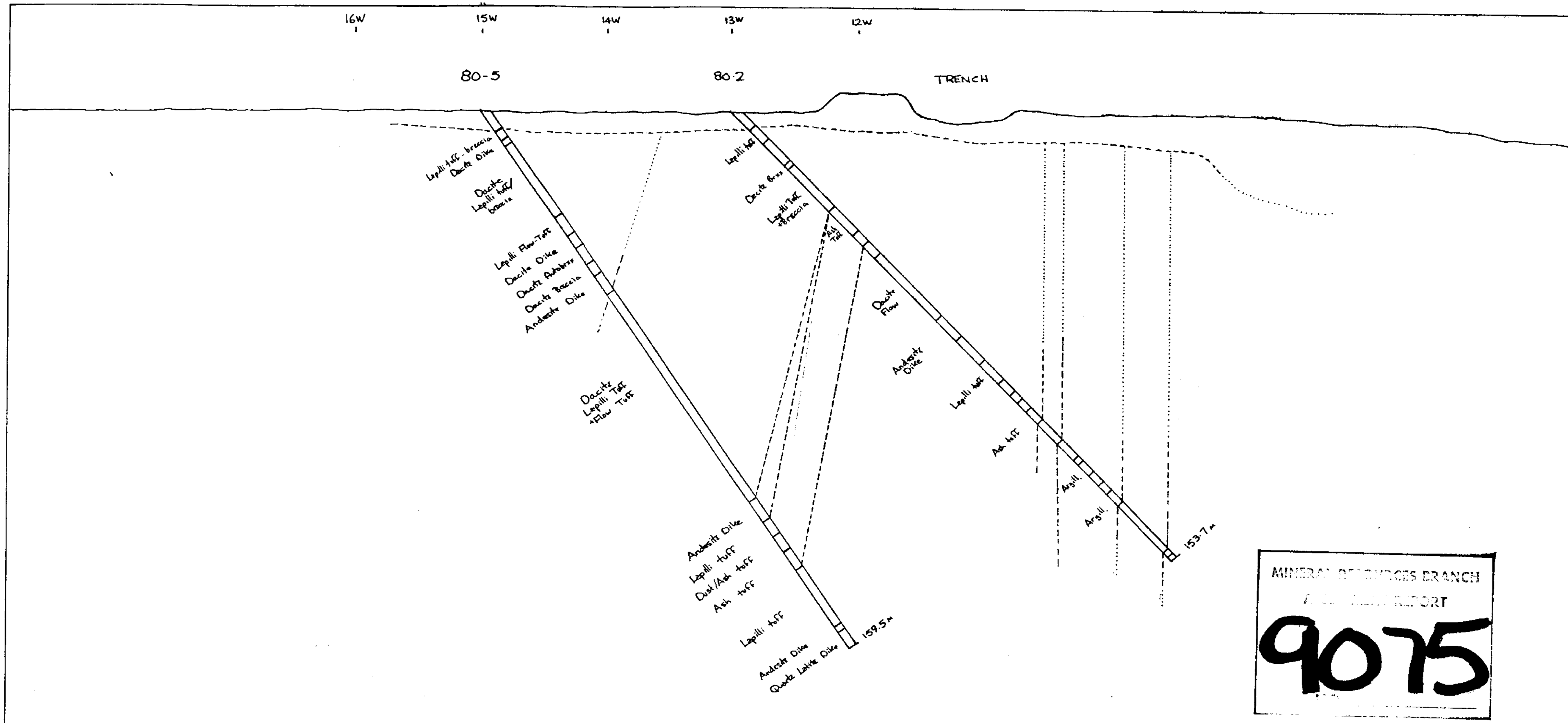


Figure 9

MUTUAL RESOURCES LIMITED
GOOSLY PROJECT

Section L27N Showing DDH 80-2 and DDH 80-5

NTS 93L/1	Scale 1:1000
	June 1980 GHS

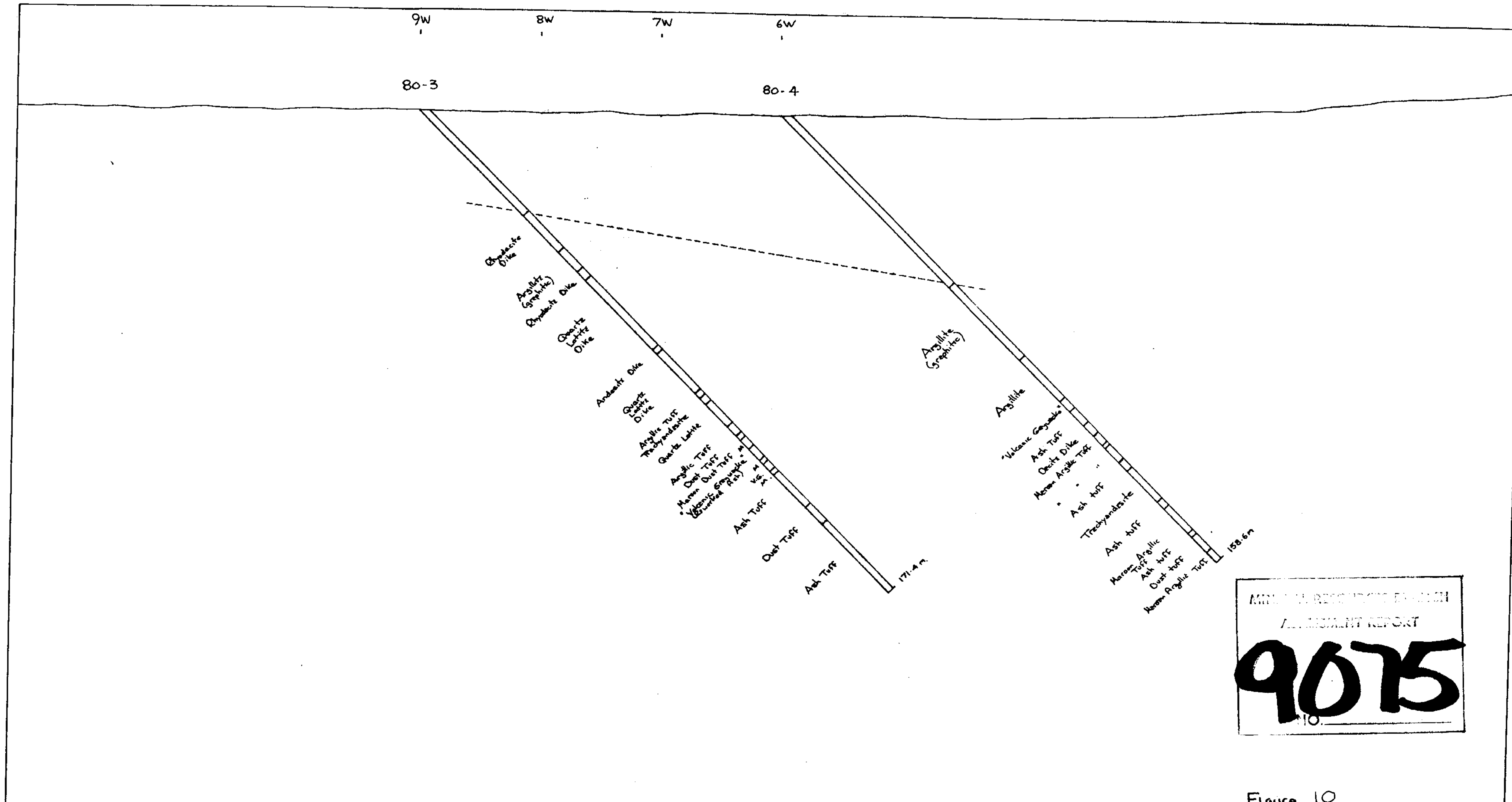


Figure 10

MUTUAL RESOURCES LIMITED
GOOSLY PROJECT

Section L 17 N Showing DDH 80-3 and DDH 80-4

NTS 93L/1	scale 1:1000	
	June 1980	GHS

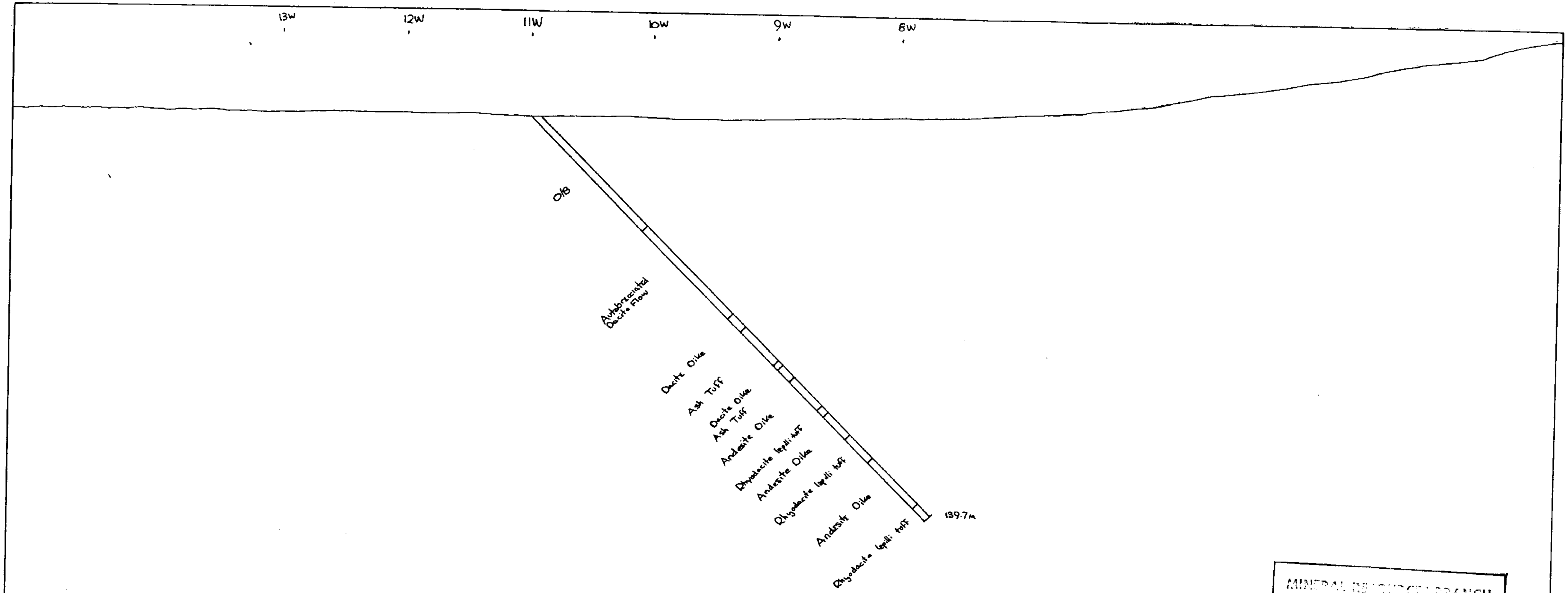


Figure 11

MUTUAL RESOURCES LIMITED
GOOSLY PROJECT

Section 35N, Showing DDH 80-6

NTS 93L/1 | scale 1:10,000 | June 1980 GHS

CURRENT PROGRAMME

1.3 continued ....

The current programme was designed to determine the extent of the mineralization and its relationship, if any, to induced polarization anomalies in the proximity.

Six diamond drill holes totalling 932.6 metres were completed between June 4 and June 18, 1980, utilizing a Longyear 38 BQ wireline machine. The drilling contractor was J.T. Thomas Diamond Drilling Ltd. of Smithers, B.C. The holes were numbered 80-1 through 80-6, of which 80-1 was drilled on claim N.W.B. 180, 80-5 on N.W.B. 67, and the remainder on DINA 2. In addition some reconnaissance geologic mapping was performed and the 1970 induced polarization data reinterpreted. The core from the four diamond drill holes was also relogged in order to ensure consistency with the current drill programme.

1.4 PROPERTY DESCRIPTION

The property consists of eight two-post claims staked in 1969 and retained in good standing since that time, and three modified grid claims, totalling 44 units, staked in February 1980.

These latter claims, the DINA 1-3 claims, overlap on to claims held by others, and also cover the N.W.B. claims held by Mutual Resources Limited. Figure 2 shows the area occupied by the subject claims, which are listed in Appendix A.

1.5 CORE STORAGE

Core is stored in Silver Standard Mine's warehouse at rear of house on SW corner of Highway 16 and Laughlin Road, Smithers, British Columbia.

/3

2. GEOLOGY

2.1. REGIONAL GEOLOGY

The Buck Creek - Goosly Lake area is underlain by an incomplete succession of volcanic and sedimentary rocks from Late Triassic to Miocene in age, and the reader is referred to the relevant published data on the area for a more detailed analysis (Lang 1941, Duffell 1959, Church 1970, Tipper 1971, 1972, Church 1973, Carter 1974, MacIntyre 1976, and Tipper and Richards 1976).

Geologic attention has been focused on the Goosly Lake area since the Kennco discovery in 1968. The mineralization there occurs in a series of tuffs and minor sediments dipping steeply to the west and exposed as an inlier of older rocks within shallow dipping Tertiary flows. Since 1968 the concensus of geologic opinion has been to the effect that the tuff-sediment assemblage was part of the Hazelton Group of Jurassic age which is the most widespread stratigraphic unit in the Nechako Plateau area. However, the continued exploration of the Kennco discovery, now known as Equity Silver Mines, has revealed more differences than similarities with the typical Hazelton sequence, and there is some current speculation that the host-rocks to the deposit may be Lower Cretaceous rather than Jurassic. Age-dating of the Equity property is planned for the 1980 season and will hopefully resolve the controversy (T.G. Shroeter, personal communication).

2.2. PROPERTY GEOLOGY

Glacial overburden covers most of the subject claim block, and bedrock is generally restricted to ridge-tops and creek bottoms lying approximately 1000 m above sea level and higher. All of the ridge-tops examined in the current brief geological reconnaissance were of the Tertiary flows. Consequently the geology of the property is known almost exclusively from the diamond drill core recovered in the 1970 and 1980 programme.

2.2.1. 1970 DIAMOND DRILLING

Four diamond drill holes were completed on the Goosly South Central and South East Claim Group by Canadian Longyear Ltd. in November 1970. The drill logs and the location of the holes were not available at the time of writing of the present report, but it is known that three holes were drilled across a strong I.P. anomaly in the northwestern part of the property, and that a fourth tested a reported I.P. - geochemical anomaly approximately 4000 feet to the east. For convenience, the holes are numbered here 70-1 through 70-4. The I.P. grid was relocated

1970 DIAMOND DRILLING

2.2.1. continued ....

and reflagged by the writer, and in the course of this work an old drill setup, almost certainly that for 70-4, was found at L32N 11W (see Figure 3). The western anomaly (see McPhar report on file) was drilled with a fence of three holes, bearing due east, and dipping at - 45°. The area where drilling took place was in timber in 1970 but was logged in 1972-73 and thus identification of drill-sites was extremely difficult. Some debris that could be drill-related was found at 40N 52W, a location that would be at the east end of the I.P. anomaly.

Figures 4, 5 and 6 show DDH 70-1, 70-2, and 70-3 respectively; from west to east the holes were numbered 70-2, 70-1 and 70-3, and were reportedly located on the same I.P. line. All three holes intersected a pyritic and graphitic argillite which was the cause of the I.P. anomaly. The argillite is at least 150 m in thickness and in places contains up to 15% pyrite which occurs heavily disseminated in slightly calcareous beds up to 1 cm in thickness. The graphite typically occurs along local shear planes and some bedding planes within the argillite. The argillite is dipping west at approximately 70° and is succeeded to the west by a dust tuff unit and then a conglomerate. The latter unit was found in outcrop (see Figure 7) and thus the location of DDH 70-2 can be determined approximately. The argillite grades downward into a pyroclastic sequence, seen in the bottom of DDH 70-3, which is similar to that found in some of the 1980 series of holes.

Of the four holes drilled in the 1970 programme mineralization of economic interest was encountered only in DDH 70-4, which from bedrock at 130 feet to 200 feet contained 0.23% Cu and 0.59 oz. Ag in a sequence of dacite ash and dust tuffs.

2.2.2. 1980 DRILL PROGRAMME

The object of the 1980 programme was firstly to determine the extent of the mineralization encountered in DDH 70-4, secondly to determine the cause of the I.P. anomalies in the vicinity of DDH 70-4 and thirdly to correlate the geophysical data with geology and mineralization. Figure 3 shows the location of the drill holes in relation to the I.P. and geochemistry lines. All the holes were drilled due east, with DDH 80-5 angled at - 55° and the remainder at - 45°.

PLATE ONE - DIAMOND DRILL AT DDH. 80-6

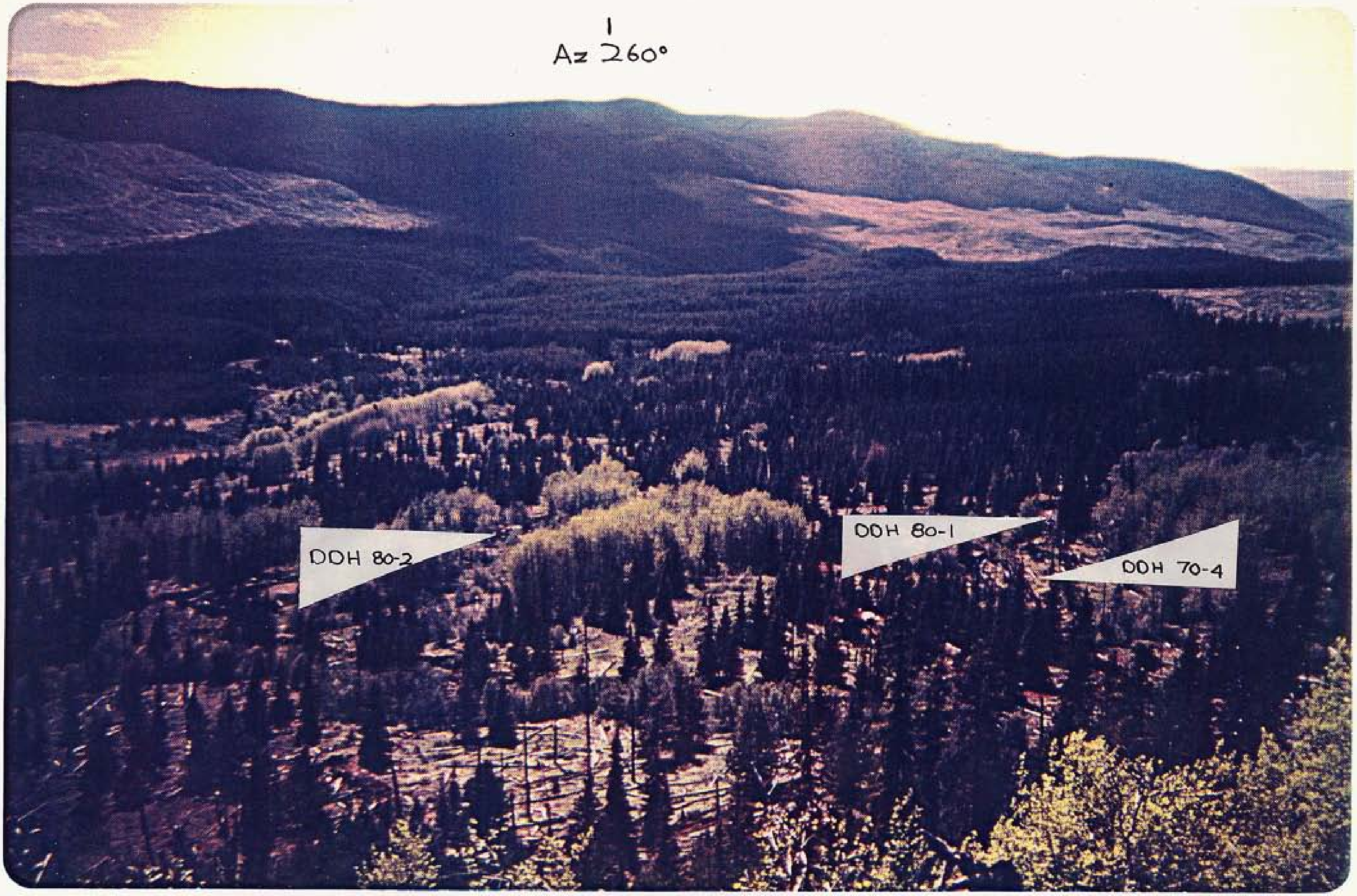


PLATE TWO - GOOSLY PROPERTY FROM L32N 4E

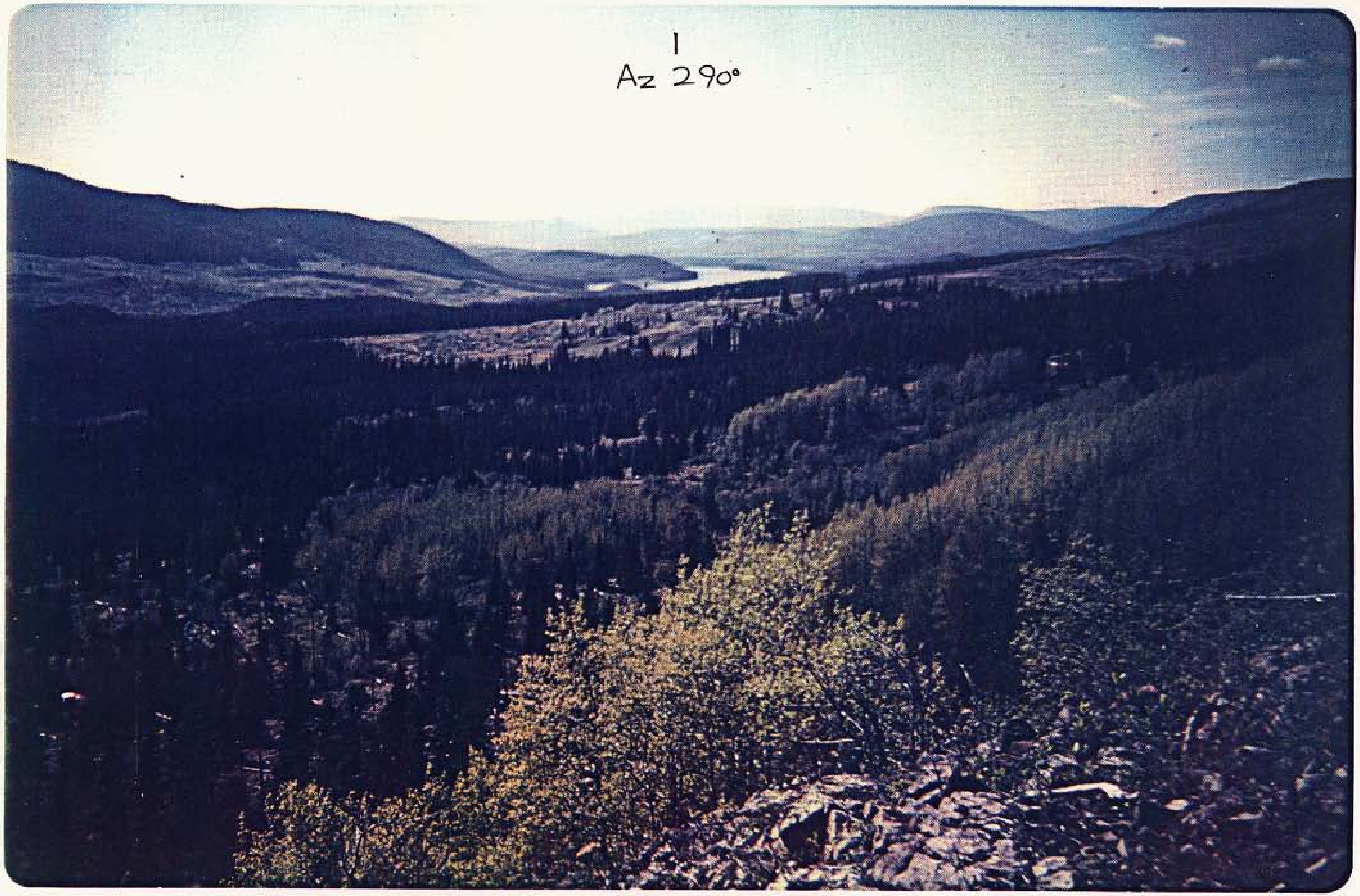


PLATE THREE - GOOSLY LAKE FROM L32N 4E, TERTIARY VOLCANICS IN FOREGROUND

1980 DRILL PROGRAMME

2.2.2. continued ....

The drilling intersected a sequence of predominantly dacitic pyroclastic rocks underlain by argillite and minor reworked clastic units. The sequence dips at a high angle to the west and in some places is vertical. The pyroclastic units, and in particular the ash and lapilli tuffs, vary considerably both in thickness and character between drill-holes, but several tentative correlations can be made and these are indicated on the sections in Figures 8 and 9 . The divisions between dust, ash, lapilli tuff and volcanic breccia were 0.5 mm, 5 mm and 50 mm, this being the system in use at the Equity Silver property. As is common in pyroclastic - sedimentary sequences,many rocks contain both volcanic and sedimentary components and this is particularly noticeable in the argillite which toward the top of the sequence in DDH 80-1 contains clasts of dacite and rhyodacite,but at the bottom of the sequence drilled in DDH 80-4 is a typical fine-grained sedimentary rock.

The lower parts of the sequence, as seen in 70-4, 80-4 and 80-6 are typically iron-stained, and the maroon colour pervades the argillites and dust tuffs. Overlying the fine-grained facies, the rocks become predominantly volcanic and increasingly coarse-grained so that at the top of DDH 80-5 there is a coarse dacite breccia. This latter unit resemblesthe lower parts of DDH 70-3.

2.2.3. SURFACE GEOLOGY

Outcrop of the Mesozoic rocks is generally poor and is normally restricted to creek beds and logging roads at higher elevations. Figure 7 shows the local geology as recorded during a one-day reconnaissance over the more accessible parts of the property and surrounding areas.

Unit 1 is an undifferentiated series of tuffs and argillites in which all of the 1980 drill holes were located. The sole outcrop found in this area was a dacite flow breccia near L17N 14W which correlates with the breccia found in DDH 80-5 and confirms the local strike as being close to north-south.

SURFACE GEOLOGY

2.2.3. continued .....

Unit 2 consists of a distinctive series of conglomerates and graywackes up to 500 m in thickness. The sequence is characterized by the maroon colour of the matrix and many of the fragments. Most of the fragments are of both bedded and massive dacite tuffs, but jasper is fairly common. Toward the top of the sequence (to the west), the maroon colour gives way to gray. The boundary between Units 2 and 3 was taken at a quartz-pebble conglomerate which differs from the underlying sequence in having almost monomineralic clasts which are ellipsoidal in cross-section and are aligned parallel to the bedding. Also the matrix contains approximately 25% sericite which is not found in the conglomerates of Unit 2.

Unit 3 is poorly exposed, and the only other outcrops located were of massive argillite (or dark gray dust tuff), apparently slightly higher in the sequence than the conglomerate, and containing pyrite concretions and minor chalcopyrite in veinlets.

All three units are dissected by dikes of andesite (Unit 5), dacite (Unit 4), trachyandesite and quartz latite. The trachyandesite is particularly distinctive and is evidently a feeder zone for the extensive Tertiary flows of Unit 6. The Tertiary flows are a complex of dacite and andesite flows and flow breccias, and trachyandesite flows. Some of the andesite flows exposed to the east of the area drilled in the current programme contain sufficient pyrite and magnetite to give an I.P. response.

2.2.4. MINERALIZATION

In general, the sequence intersected in the 1980 drilling had a low sulphide content, and pyrite occurred to the virtual exclusion of all other sulphides. Pyrite commonly occurred in two forms: as disseminations in the matrix and some of the clasts of dacite lapilli tuff and breccia, and secondly as heavy disseminations along bedding planes in the argillites. Elsewhere, pyrite occurred in normal quantities. Chalcopyrite and tetrahedrite were seen only rarely, and occurred with pyrite along fracture planes in some dust tuffs.

The mineralized interval in DDH 70-4 was traced 35 m down-dip in DDH 80-1, but the length of the mineralized intersection had decreased from 21.35 m (70 feet) to 9.15 m (30 feet) and the grade had changed from 0.23% Cu and 0.59 oz. Ag/ton

MINERALIZATION

2.2.4. continued .....

to less than 0.01% Cu and 0.72 oz. Ag/ton. The host rock is a dacite ash and dust tuff, but the only visible mineralization is lightly disseminated pyrite. No other significant amounts of economic sulphides were found.

The split core from DDH 70-4 was resampled and assayed with disappointing results. The section from 130 feet (39.6 m) to 200 feet (61 m) contained less than 0.01% Cu and 0.048 oz. Ag/ton compared to 0.23% Cu and 0.72 oz. Ag/ton. It is possible that the discrepancy is due to loss of sulphides during the 1970 sampling procedure, this being likely if all of the mineralization occurred along fracture planes.

..../8

2.3 SUMMARY OF GEOLOGY

Based on a review of the literature on the regional geology, it appears that Unit 2, the maroon conglomerate, is very similar to the basal conglomerate of the Upper Early Cretaceous Kasalka Group (see MacIntyre 1976, Wetherell 1979, Woodsworth 1979). This is consistent with the hypothesis that the host rocks to mineralization at Equity were Albian in age and not Middle Jurassic. Indeed the notion that they were of the Hazelton Group was a reflection of the weight of geologic opinion rather than any quantitative data.

Unit 1 appears to be correlative with the Upper Jurassic Bowser Lake Group (Tipper and Richards 1976).

As a result, it appears that the host rocks to the mineralization at Equity Silver are those of Unit 3, and only the western and southwestern parts of Mutual's ground are underlain by this unit. The southwestern section of the DINA claims lies to the south of Buck Creek, an area which Seraphim's field notes suggest is underlain by Tertiary Volcanics. Thus the geologic setting of the mineralization on Mutual's Goosly property is most likely different from that on the Equity Silver Ground.

3 GEOPHYSICS

John Lloyd of Lloyd Geophysics Ltd. re-interpreted the I.P. data, and his report is included as Appendix B.

4 SUMMARY AND RECOMMENDATIONS

i) The Goosly property of Mutual Resources Ltd. is underlain by steeply-dipping volcanics and sediments of the Hazelton Group which are exposed as an inlier within shallow-dipping Tertiary Volcanics.

ii) A dust tuff unit within the Hazelton Group contains up to 0.23% Cu and 0.59 oz. Ag/ton over 21.35m (70 Feet) but it appears that neither the grade nor thickness is consistent, and the mineralization is found in only two of the seven drill holes in the vicinity.

iii) A reinterpretation of the induced polarization data suggests that the strong I.P. anomaly in the region of L 17 N 5W is caused by graphite and pyrite in argillites and the drilling results substantiate this. The drilling also shows that the strong metal factor response west of the baseline on claims NWB 68, NWB 69 and NWB 71is caused by conductive overburden in a bedrock trough. The trough occurs over soft Hazelton tuffs adjacent to a resistant north-south dike of quartz latite composition.

iv) Reconnaissance geological mapping combined with the results of the diamond drilling carried out in 1970 and 1980 suggest that the Mutual property is underlain by a volcanic-sedimentary sequence older than, and in the footwall of the mineralized sequence at the Equity Silver Mines property. Only the western and southwestern fringes of the Mutual property have potential for being underlain by the sequence which hosts the Equity orebody.

v) In the light of the following three factors:

a) The cause of the I.P. anomalies having been satisfactorily explained;
b) The mineralization encountered in 1970 being of inconsistent grade and of limited extent; and
c) The sequence that hosts the Equity Silver orebody very probably only has potential for underlying the Mutual ground at the western and southwestern extremes of the property,

it is the opinion of the writer that no further work be performed on the property. The ground should be retained however, since Placer Development recently completed an airborne geophysical survey over the ground, and may be expected to approach Mutual if any significant anomalies were located.

BIBLIOGRAPHY

CARTER, N.C., 1974. Geology and geochronology of porphyry copper and molybdenum deposits in west central British Columbia. Unpub. Ph.D. thesis, Univ. of British Columbia, Vancouver, B.C. 236p.

CHURCH, B.N., 1970. Geology of the Owen Lake, Parrot Lake, and Goosly Lake area. B.C. Min. of Mines and Pet. Res., G.E.M., 1970, p. 119-128.

CHURCH, B.N., 1973. Geology of the Buck Creek area. B.C. Min. of Mines and Pet. Res., Prelim. Map 11.

DUFFEL, S., 1959. Whitesail Lake map area, British Columbia. Geol. Survey Canada, Memoir 299, 119p.

MACINTYRE, D.G., 1976. Evolution of Upper Cretaceous volcanic and plutonic centers and associated porphyry copper occurrences Tahtsa Lake area, British Columbia. Unpub. Ph.D. thesis, Univ. of Western Ontario, London, Ontario. 148p.

TIPPER, H.W., 1971b. Smithers map area, British Columbia. Geol. Survey Canada, Paper 71-1A, p. 34-37.

TIPPER, H.W., 1972. Smithers map area, British Columbia. Geol. Survey Canada, Paper 72-1A, p. 39-41.

TIPPER, H.W. and T.A. RICHARDS, 1976. Jurassic stratigraphy and history of north-central British Columbia. Geol. Survey Canada, Bull. 270, 73p.

WOODSWORTH, G.J., 1979. Geology of Whitesail Lake map area, British Columbia. Geol. Survey Canada, Paper 79-1A, p. 25-29.

APPENDIX A

PROPERTY DESCRIPTION

NAME	RECORD	ANNIVERSARY DATE
NWB 61	66075	January 23
NWB 63	66077	"
NWB 65	66079	"
NWB 67	66081	"
NWB 180	66145	"
NWB 181	66146	"
NWB 182	66147	"
NWB 183	66148	"
DINA 1 (4u.)	2481	February 22
DINA 2 (20u.)	2482	"
DINA 3 (20u.)	2483	"

APPENDIX B

LLOYD GEOPHYSICS LIMITED
CONSULTING AND CONTRACTING SERVICES
N MINING AND ENGINEERING GEOPHYSICS

JOHN LLOYD, M.Sc., P.Eng.

410 - 675 WEST HASTINGS STREET
VANCOUVER, B.C.
CANADA V6B 1N2

TELEPHONE (604) 688-5813
TELEX 04-507672

July 7, 1980

Mr. W. St.C Dunn P.Eng
Superintendent of Exploration
Silver Standard Mines Ltd.
9th Floor - 1199 West Hastings Street
Vancouver, B.C.
V6E 3T5

Dear Mr. Dunn:

I have reviewed that portion of the 1970 IP survey data from the Goosly Lake property which you provided me with.

For this review the following data was supplied by you:-

A. "Summary of work done on the Goosly Lake property during the 1970 season" by Mr. N.W. Burmeister P.Eng.

B. I.P. field plots of the following lines

Line No.	From	To
42N	75W	69E
37N	73W	68E
32N	81W	66E
27N	68W	68E
22N	69W	66E

C. Induced Polarization and Resistivity Survey Plan Map by McPhar Geophysics Ltd.

In addition to the above data I have discussed the results of your recent drilling programme on the property with your geologist Mr. G. Scott.

From the data review and my meeting with Mr. Scott the following points are relevant and should be useful in further exploration of the property.

/2...

1. The strong IP response (frequency effect and metal factor) located on claims NWB 182, NWB 183, NWB 61 and NWB 63 (see McPhar Geophysics Plan Map) and designated Zone 'A' is most probably caused by heavily pyritized argillite, containing locally abundant graphite. No additional time has been spent studying this anomaly as the IP response is adequately explained by the rocks encountered in the 4 hole fence drilled across this anomaly in 1970.

2. The strong metal factor response, on which I have assumed your initial drilling was based, located immediately west of the baseline on claims NWB 68, NWB 69 and NWB 71 is most probably caused by more conductive over burden filling a bedrock trough. This in turn may reflect the presence of a fault. This feature runs roughly north-south and extends for a distance of at least 2500 feet. Some pyrite in graphitic rocks, similar to those seen by Scott and described by Burmeister from Zone 'A', were encountered in holes 80-3 and 80-4. Tertiary flows immediately east of the anomaly, which are assumed to overlie the Hazelton rocks, also contain disseminated pyrite.

   Here the frequency effect response is very weak and as it stands at present represents only a moderately attractive drill target.

3. The change in base level of the frequency effect response, clearly evident around 12W on L 32N, is most probably caused by changing from one IP receiver (the P660 unit) to another (the standard McPhar unit). This prevents any useful attempt being made to delineate rock units by preparing contour maps.

4. The 40-foot thick intersection of sulphide mineralization (8 to 10% disseminated pyrite) which occurs within 60 feet of surface in hole 80-5 should, in my opinion, have produced a much stronger IP response than appears on the data plot at about 10W on L 27N. Regardless of the amplitude of the frequency effect response, such an intersection should produce a recognizable anomaly pattern. There is not even a hint of such a pattern; this suggests either poor quality data or the dipole length (x = 300 feet) selected for the survey was too large to detect the thickness of mineralization encountered by drilling.

5. Abrupt changes in frequency effect at larger electrode separations (n = 2 and 3) indicate that certain portions of the data were collected with poor signal to noise ratios or during periods of strong geomagnetic activity.

/3...

6. The use of the IP method to better define the anomaly immediately west of the baseline, as an aid to future drilling is recommended as follows:

   A. Establish fill-in lines over the anomaly and resurvey both the old and the new lines using a 100-foot dipole length and making 4 electrode separation measurements for:-

      either $n = 1, 2, 3$ and 4
      or $n = 2, 3, 4$ and 5

      The above choice could most probably be resolved by reference to the most current drill sections.

Yours truly,

LLOYD GEOPHYSICS LTD.

John Lloyd, P. Eng.
Geophysicist

APPENDIX C

ASSAY RESULTS

SAMPLE NO.		INTERSECTION, metres (feet)	% Cu	OZ/TON Ag.
16301	DDH 80-1:	12.5 - 15.25 (41- 50')	<0.01	<0.01
16302	"	15.25- 18.3 (50- 60')	"	"
16303	"	18.3 - 21.3 (60- 70')	"	"
16304	"	21.3 - 24.4 (70- 80')	"	"
16305	"	24.4 - 27.4 (80- 90')	"	"
16306	"	27.4 - 30.5 (90- 100')	"	0.02
16307	"	30.5 - 33.5 (100- 110')	"	<0.01
16308	"	33.5 - 36.6 (110- 120')	"	0.03
16309	"	36.6 - 39.6 (120- 130')	"	0.02
16310	"	39.6 - 42.7 (130- 140')	"	0.01
16311	"	42.7 - 47.7 (140- 150')	"	0.02
16312	"	47.7 - 48.8 (150- 160')	"	0.01
16313	"	48.8 - 51.8 (160- 170')	"	0.01
16314	"	51.8 - 54.9 (170- 180')	"	<0.01
16315	"	54.9 - 57.9 (180- 190')	"	"
16316	"	57.9 - 61.0 (190- 200')	"	"
16317	"	61.0 - 64.0 (200- 210')	"	"
16318	"	64.0 - 67.1 (210- 220')	"	"
16319	"	67.1 - 70.1 (220- 230')	"	"
16320	"	70.1 - 73.2 (230- 240')	"	"
16321	"	73.2 - 76.2 (240- 250')	"	"
16322	"	76.2 - 79.3 (250- 260')	"	"
16323	"	79.3 - 82.3 (260- 270')	"	0.01
16324	"	82.3 - 85.4 (270- 280')	"	<0.01
16325	"	85.4 - 88.4 (280- 290')	"	0.01
16326	"	88.4 - 91.5 (290- 300')	"	<0.01
16327	"	91.5 - 94.5 (300- 310')	"	0.01
16328	"	94.5 - 97.6 (310- 320')	"	<0.01
16329	"	97.6 - 100.6 (320- 330')	"	"
16330	"	100.6 - 103.7 (330- 340')	"	"
16331	"	103.7 - 106.7 (340- 350')	"	0.02
16332	"	106.7 - 109.8 (350- 360')	"	1.34
16333	"	109.8 - 112.8 (360- 370')	"	0.48
16334	"	112.8 - 115.9 (370- 380')	"	0.34
16335	"	115.9 - 118.9 (380- 390')	"	0.04
16336	"	118.9 - 122. (390- 400')	"	0.01
16337	"	122. - 125. (400- 410')	"	0.12
16338	"	125. - 128.1 (410- 420')	"	0.09
16339	"	128.1 - 131.1 (420- 430')	"	0.04
16340	"	131.1 - 134.2 (430- 440')	"	<0.01
16341	"	134.2 - 137.2 (440- 450')	"	"
16342	"	137.2 - 140.3 (450- 460')	"	"
16343	"	140.3 - 143.3 (460- 470')	"	"
16344	"	143.3 - 146.4 (470- 480')	"	"
16345	"	146.4 - 149.4 (480- 490')	"	"

ASSAY RESULTS CONTINUED...

SAMPLE NO.	INTERSECTION, metres (feet)	% Cu	OZ/TON Ag.
16346	DDH. 80-2: 6.1 - 9.1 (20 - 30')	0.01	<0.01
16347	" 9.15- 10.7 (30 - 35')	<0.01	"
16348	" 10.7 - 12.2 (35 - 40')	0.01	"
16349	" 12.2 - 15.2 (40 - 50')	0.01	"
16350	" 15.2 - 18.3 (50 - 60')	0.02	"
16351	" 18.3 - 19.5 (60 - 64')	0.01	"
16352	" 19.5 - 21.6 (64 - 71')	<0.01	"
16353	" 21.6 - 24.4 (71 - 80')	<0.01	"
16354	" 24.4 - 27.4 (80 - 90')	<0.01	"
16355	" 27.4 - 29.0 (90 - 95')	0.01	"
16356	" 32. - 33.5 (105 -110')	<0.01	"
16357	" 33.5 - 36.0 (110 -118')	<0.01	"
16358	" 40.9 - 42.7 (134 -140')	"	"
16359	" 42.7 - 45.7 (140 -150')	"	"
16360	" 75.9 - 76.5 (249 -251')	"	"
16361	" 92.4 - 93.0 (303 -305')	"	"
16362	" 103.7 -106.4 (340 -349')	"	"
16363	" 113.5 -115.9 (372 -380')	"	"
16364	" 115.9 -118.9 (380 -390')	"	"
16365	" 120.5 -122. (395 -400')	"	"
16366	" 122. -124.7 (400 -409')	"	"
16367	" 130.7 -133.7 (428.5-438.5')	"	"
16368	" 127.8 -128.4 (419 -421')	"	"
16369	" 128.4 -134.7 (438.5-441.5')	"	"
16370	" 152. -153.1 (498.5-502')	"	"

16396	DDH. 80-2:29.0 - 30.5 (95 -100')	<0.01	0.01
16397	" 30.5 - 32. (100 -105')	"	"
16398	" 36.3 - 37.8 (119 -124')	"	"
16399	" 37.8 - 39.3 (124 -129')	"	"
16400	" 39.3 - 40.9 (129 -134')	"	"

ASSAY RESULTS CONTINUED...

SAMPLE NO.	INTERSECTION, metres (feet)	% Cu	OZ/TON Ag.
16371	DDH. 80-3: 50.3- 51.8 (165-170)	<0.01	0.01
16372	" 51.8- 54.6 (170-179)	"	<0.01
16373	" 54.6- 57.6 (179-189)	"	0.01
16374	" 100.9-102.5 (331-336)	"	<0.01
16375	" 115.9-117.7 (380-386)	"	0.01
16376	" 117.7-120.2 (386-394)	"	<0.01
16377	" 120.2-120.8 (394-396)	"	"
16378	" 124.4-125.7 (408-412)	"	"
16379	DDH. 80-4: 60.4- 63.4 (198-208)	<0.01	<0.01
16380	" 63.4- 65.6 (208-215)	"	"
16381	" 67.4- 70.4 (221-231)	"	"
16382	" 70.4- 73.5 (231-241)	"	0.02
16383	" 73.5- 76.5 (241-251)	"	<0.01
16384	" 76.5- 79.6 (251-261)	"	0.01
16385	" 79.6- 82.6 (261-271)	"	0.02
16386	" 82.6- 86.3 (271-283)	"	<0.01
16387	" 100.9-104. (331-341)	"	0.03
16388	" 104. -104.6 (341-343)	"	0.01
16389	" 117.7-120.8 (386-396)	"	0.01
16390	" 120.8-122.9 (396-403)	"	<0.01
16391	DDH. 80-5: 18.3- 21.3 (60- 70)	0.01	<0.01
16392	" 21.3- 22.9 (70- 75)	"	<0.01
16393	" 22.9- 25.9 (75- 85)	"	0.01
16394	" 25.9- 29.0 (85- 95)	"	<0.01
16395	" 29.0- 30.5 (95-100)	"	<0.01
16501	" 41.2- 44.2 (135-145)	0.03	<0.01
16502	" 46.0- 48.8 (151-160)	0.01	<0.01
16503	" 130.2-133.6 (427-438)	<0.01	<0.01

ASSAY RESULTS CONTINUED...

SAMPLE NO.	INTERSECTION, metres (feet)	% Cu	OZ/TON Ag.
16504	DDH. 80-6: 55.5- 58.6 (182-192)	<0.01	0.13
16505	" 68.0- 69.8 (223-229)	0.01	<0.01
16506	" 87.2- 91.5 (286-300)	<0.01	<0.01
16507	" 101.3-103.4 (332-339)	<0.01	0.01

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE June 18 19 80

Length 458' (139.7)

Location Goosly

Bearing 090°

35N 11W

Hole No. DDH 80-6

Dip -45°

Start June 16, 1980

Stop June 18, 1980

Logged By G. H. Scott

Depth	Core	Formation		Missing Core	Assays Cu %		Assays Ag oz/t		Core Samples Length	Core Samples No.
0.39-6		Overburden								
39.6-69.8	30.2	Autobrecciated Dacite	55.5-58.6		<.01		.13		3.1	16504
			68.0-69.8		.01		<.01		1.8	16505
69.8-74.1	4.3	Dacite Dike								
74.1-86.0	11.9	Rhyodacite Dust/Ash Tuff								
86.0-87.2	1.2	Vesicular Dacite Dike								
87.2-91.5	4.3	Rhyodacite Dust/Ash Tuff	87.2-91.5		<.01		<.01		4.3	16506
91.5-101.3	9.8	Andesite Dike								
101.3-103.4	2.1	Rhydodacite Lapilli Tuff	101.3-103.4		<.01		.01		2.1	16507
103.4-111.3	7.9	Andesite Dike								
111.3-119.6	8.3	Rhyodacite Lapilli Tuff								
119.6-135.1	15.5	Andesite Dike								
135.1-139.7	4.6	Rhydodacite Lapilli Tuff								

ASSAY RESULTS CONTINUED...

SAMPLE NO.	INTERSECTION, metres (feet)	% Cu	OZ/TON Ag.
16508	DDH. 70-4:39.6-42.7 (130-140)	<0.01	0.15
16509	" 42.7-47.7 (140-150)	"	0.06
16510	" 47.7-48.8 (150-160)	"	0.03
16511	" 48.8-51.8 (160-170)	"	0.05
16512	" 51.8-54.9 (170-180)	"	0.03
16513	" 54.9-57.9 (180-190)	"	<0.01
16514	" 57.9-61.0 (190-200)	"	<0.01

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

ABBREVIATED DRILL LOGS

DATE June 6 19 80

Length 491' (149.7 m) Location 32N 12+50W

Bearing 90° South Central Group Hole No. 80-1

Dip -45° Goosly Property Start June 5, 1980

(NWB + DINA CLS.) Stop June 6, 1980

Metres Logged By G. H. Scott

Depth	Core	Formation		Missing Core	Assays Cu %		Assays Ag oz/t		Core Samples Length	Core Samples No.
0-12.5		Overburden							M.	
12.5-15.9	3.4	Porphyritic Quartz Latite	12.5 -15.25		<.01		<.01		2.75	16301
			15.25-18.3		"		"		3.05	2
15.9-17.4	1.5	Shear Zone	18.3 -21.3		"		"		3.0	3
			21.3 -24.4		"		"		3.1	4
17.4-36.0	18.6	Porphyritic Quartz Latite	24.4 -27.4		"		"		3.0	5
			27.4 -30.5		"		.02		3.1	6
36.0-46.4	10.4	Trachyandesite Dike	30.5 -33.5		"		<.01		3.0	7
			33.5 -36.6		"		.03		3.1	8
46.4-47.3	0.9	Dacite Dike	36.6 -39.6		"		.02		3.0	9
			39.6 -42.7		"		.01		3.1	16310
47.3-47.6	0.3	Oxidized Shear Zone	42.7 -47.7		"		.02		5.0	11
			47.7 -48.8		"		.01		1.1	12
47.6-51.0	3.4	Dacite Dike	48.8 -51.8		"		.01		3.0	13
			51.8 -54.9		"		<.01		3.1	14
51.0-62.0	11.0	Porphyritic Quartz Latite	54.9 -57.9		"		"		3.0	15
			57.9 -61.0		"		"		3.1	16
62.0-65.6	3.6	Dacite Dike	61.0 -64.0		"		"		3.0	17
			64.0 -67.1		"		"		3.1	18
65.6-75.0	9.4	Trachyandesite Dike	67.1 -70.1		"		"		3.0	19
			70.1 -73.2		"		"		3.1	16320
75.0-76.2	1.2	Argillitic Tuff	73.2 -76.2		"		"		3.0	21
76.2-77.5	1.3	Dacite Dike	76.2 -79.3		"		"		3.1	22
77.5-81.7	4.2	Chloritized Andesite Pyroclastic	79.3 -82.3		"		.01		3.0	23

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-1

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
81.7-83.9	2.2	Sericitized Dacite Dike	82.3-85.4		<.01		<.01		3.1	16324
83.9-87.5	3.6	Dacite Ash/Lapilli Tuff	85.4-88.4		"		.01		3.0	25
87.5-91.8	4.3	Chloritized Argillic Tuff	88.4-91.5		"		<.01		3.1	26
			91.5-94.5		"		.01		3.0	27
91.8-102.8	11.0	Dacitic to Andesitic Altered	94.5-97.6		"		<.01		3.1	28
			97.6-100.6		"		"		3.0	29
102.8-106.1	3.3	Chloritized Andesite Lapilli Tuff	100.6-103.7		"		"		3.1	16330
			103.7-106.7		"		.02		3.0	31
106.1-116.5	10.4	Chloritized Dacite Lapilli Tuff	106.7-109.8		"		1.34		3.1	32
			109.8-112.8		"		.48		3.0	33
116.5-118.3	1.8	Dacite Dike	112.8-115.9		"		.34		3.1	34
			115.9-118.9		"		.04		3.0	35
118.3-119.2	.09	Chloritized Andesite Lapilli Tuff								
119.2-121.0	1.8	Altered DaciteLapilli Tuff	118.9-122		"		.01		3.1	36
121.0-125.0	4.0	Chloritized Andesite Lapilli Tuff	122-125		"		.12		3.0	37
125.0-126.0	1.0	Dacite Dike	125-128.1		"		.09		3.1	38
126.0-130.2	4.2	Chloritized Andesite to Dacite	128.1-131.1		"		.04		3.0	39
			131.1-134.2		"		<.01		3.1	16340
130.2-136.3	6.1	Dacite Dike	134.2-137.2		"		"		3.0	41
136.3-140.0	3.7	Dacite Dike	137.2-140.3		"		"		3.1	42

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-1

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
140.0-144.6	4.6	Rhyodacite Flow	140.3-143.3		<.01		<.01		3.0	16343
144.6-147.5	2.9	Dacite Dike	143.3-146.4		"		"		3.1	16344
147.5-149.7	2.2	Chloritized Andesitic Ash Tuff	146.4-149.4		"		"		3.0	16345

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE June 8 19 80

Length 504' (153.7m) Location Goosly

Bearing 090° 27N 13W Hole No. DDH 80-2

Dip -45° South Central Grid Start June 7, 1980

Stop June 8, 1980

Metres Logged By G. H. Scott

Depth	Core	Formation		Missing Core	Assays Cu %	Assays Ag oz/t	Core Samples Length	Core Samples No.
0 - 6.1		Overburden					M	
6.1-10.7	4.6	Andesitic to Dacitic Lapilli Tuff	6.1-9.1		.01	<.01	3.0	16346
			9.15-10.7		<.01	"	1.55	47
10.7-18.3	7.6	Chloritized Andesite Lapilli Tuff	10.7-12.2		.01	"	1.5	48
			12.2-15.2		.01	"	3.0	49
18.3-19.5	1.2	Dacite Autobreccia Flow	15.2-18.3		.02	"	3.1	16350
			18.3-19.5		.01	"	1.2	51
19.5-21.6	2.1	Chloritized Andesite	19.5-21.6		<.01	"	2.1	52
			21.6-24.4		<.01	"	2.8	53
21.6-34.0	12.4	Dacite Lapilli Tuff to Breccia	24.4-27.4		<.01	"	3.0	54
			27.4-29.0		.01	"	1.6	55
34.0-42.1	8.1	Crystal Ash Tuff	29.0-30.5		<.01	.01	1.5	16396
			30.5-32		"	"	1.5	97
42.1-45.7	3.6	Dacite Crystal Flow-Tuff	32 - 33.5		"	<.01	1.5	16356
			33.5-36.0		"	"	2.5	57
45.7-54.9	9.2	Trachyandesite Dike	36.3-37.8		"	.01	1.5	16398
			37.8-39.3		"	"	1.5	99
54.9-71.4	16.5	Porphyritic Dacite Flow	39.3-40.9		"	"	1.6	16400
			40.9-42.7		"	<.01	1.8	16358
71.4-75.9	4.5	Andesite Dike	42.7-45.7		"	"	3.0	59
75.9-76.5	0.6	Chloritized Andesitic Lapilli Tuff	75.9-76.5		<.01	"	0.6	16360
76.5-78.1	1.6	Aphanitic Andesite Dike						
78.1-86.6	8.5	Porphyritic Dacite Flow						

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-2

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
86.6-87.8	1.2	Aphanitic Andesite Dike								
87.8-92.4	4.6	Porphyritic Dacite Flow								
92.4-93.0	0.6	Chloritized Andesite Lapilli Tuff	92.4-93.0		<.01		<.01		0.6	16361
93.0-97.0	4.0	Trachyandesite Dike								
97.0-99.3	2.3	Aphanitic Andesite Dike								
99.3-103.7	4.4	Silicified Trachyandesite Dike								
103.7-106.4	2.7	Chloritized Andesite Ash/Lapilli Tuff	103.7-106.4		"		"		2.7	62
106.4-113.5	7.1	Porphyritic Quartz Latite								
113.5-119.0	5.5	Chloritic/Graphitic Argillite	113.5-115.9		"		"		2.4	63
			115.9-118.9		"		"		3.0	64
119.0-120.5	1.5	Sericitic Dacite Dike								
120.5-124.7	4.2	Chloritic & Graphitic Argillite	120.5-122		"		"		1.5	65
			122 - 124.7		"		"		2.7	66
124.7-127.8	3.1	Trachyandesite Dike								
127.8-128.4	0.6	Chloritic & Graphitic Argillite	127.8-128.4		"		"		0.6	68
128.4-130.7	2.3	Sericitic Dacite Dike	128.4-134.7		"		"		6.3	69

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-2

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
130.7-134.6	3.9	Chloritic/Graphitic Argillite	130.7-133.7		<.01		<.01		3.0	16367
134.6-150.4		Porphyritic Quartz Latite								
150.4-150.8		Chloritic & Graphitic Argillite								
150.8-151.9		Dacitic Dike								
151.9-152.0		Chloritic & Graphitic Argillite								
152.0-153.1	1.1	Dacite Lapilli Flow Tuff	152 - 153.1		"		"		1.1	16370
153.1-153.7		Dacitic Ash Tuff								

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE June 11 19 80

Length	562' (171.4 m)	Location	Goosly		
Bearing	090^0		17N 9W	Hole No.	80-3
Dip	-45^0		Dina Claims	Start	June 9, 1980
				Stop	June 11, 1980
				Logged By	G. H. Scott

Depth	Core	Formation		Missing Core	Cu %	Assays	Ag oz/t		Core Samples Length	Core Samples No.
0 - 37.2		Overburden								
37.2-50.3	13.1	Rhyodacite Dike								
			50.3-51.8		<.01		.01		1.5	16371
50.3-57.6	7.3	Chloritic & Graphitic Argillite	51.8-54.6		"		<.01		2.8	72
			54.6-57.6		"		.01		3.0	73
57.6-60.4	2.8	Rhyodacite Dike								
60.4-66.2	5.8	Porphyritic Quartz Latite								
66.2-66.5	0.3	Rhyodacite Dike								
66.5-68.6	2.1	Porphyritic Quartz Latite								
68.6-69.8	1.2	Rhyodacite Dike								
69.8-85.1	15.3	Porphyritic Quartz Latite								
85.1-86.3	1.2	Andesite Dike								
86.3-100.9	14.6	Porphyritic Quartz Latite								
100.9-102.5	1.6	Chloritized Argillic Tuff	100.9-102.5		<.01		<.01		1.6	74
102.5-104.6	2.1	Trachyandesite Dike								
104.6-112.5	7.9	Porphyritic Quartz Latite								

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-3

Dip

Start

Stop

Logged By

Depth	Core	Formation	Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
112.5-115.9	3.4	Chloritized Argillic Tuff						M	
115.9-117.1	2.2	Dust Tuff 115.9-117.7		<.01		.01		1.8	16375
117.1-117.7	0.6	Chloritized & Graphitic Argillite							
117.7-120.2	2.5	Maroon Argillic Tuff 117.7-120.2		"		<.01		2.5	76
120.2-120.8	0.6	Autobrecciated Dacite 120.2-120.8		"		"			77
120.8-124.4	3.6	Volcanic "Graywacke"							
124.4-125.7	1.3	Maroon Argillic Tuff 124.4-125.7		"		"			16378
125.7-128.1	2.4	Volcanic Graywacke							
128.1-129.6	1.5	Maroon Argillic Tuff							
129.6-137.9	8.3	Sericitized Dacite Ash/Lapilli Tuff							
137.9-141.8	3.9	Chloritized Dust Tuff							
141.8-147.0	5.2	Sericitized Dacite Dust/Ash Tuff							
147.0-147.3	0.3	Volcanic Graywacke							
147.3-152.2	4.9	Sericited Dacite Ash/Lapilli Tuff							

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-3

Dip

Start

Stop

Logged By

Depth	Core	Formation	Missing Core	Assays				Core Sample Length	Core Sample No.
152.2-153.7	1.5	Chloritic & Sericitic Ash Tuff							
153.7-171.4	17.7	Sericitized Dacite Ash/Lapilli Tuff							

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE June 14 19 80

Length 520' (158.6)
Location Goosly Ppty.
17 6W
Bearing 090^{0}
Hole No. 80-4
Dip -45^{0}
Start June 11
Stop June 13
Logged By G. H. Scott

Depth	Core	Formation		Missing Core	Assays Cu %	Assays Ag oz/t	Core Samples Length	Core Samples No.
0 - 60.4		Overburden					M	
60.4-65.6	5.2	Chloritic & Graphitic Argillite	60.4-63.4		<.01	<.01	3.0	16379
			63.4-65.6		"	"	2.2	80
65.6-66.2	1.6	Dacite Dike						
66.2-66.8	0.6	Chloritic/Graphitic Argillite						
66.8-67.4	0.6	Dacite Dike						
			67.4-70.4		"	"	3.0	81
67.4-86.3	0.9	Chloritic/Graphitic Argillite	70.4-73.5		"	.02	3.1	82
			73.5-76.5		"	<.01	3.0	83
86.3-86.6	0.3	Dacite Dike	76.5-79.6		"	.01	3.1	84
			79.6-82.6		"	.02	3.0	85
86.6-94.8	8.2	Chloritic/Graphitic Argillite	82.6-86.3		"	<.01	3.7	86
94.8-101.0	6.2	Chloritic Calcareous Argillite						
101.0-104.6	3.6	(Pyro) Clastic Breccia	100.9-104		"	.03	3.1	87
			104-104.6		"	.01	0.6	88
104.6-109.5	4.9	Dacite Ash Tuff						
109.5-111.0	1.5	Dacite Dike						
111.0-111.6	0.6	Dacite Ash Tuff						
111.6-113.1	1.5	Dacite Dike						

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-4

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Ag oz/t		Core Samples Length	No.
113.1-116.8	3.7	Maroon Argillic Tuff							M	
116.8-117.7	0.9	Amygoaloidal Andesite Dike								
117.7-122.9	5.2	Maroon Argillic Tuff	117.7-120.8		<.01		.01		3.1	16389
			120.8-122.9		"		<.01		2.1	90
122.9-125.3	2.4	Dacite Ash Tuff								
125.3-126.9	1.6	Andesite Dike								
126.9-136.9	10.0	Trachyandesite Dike								
136.9-139.1	2.2	Dacite Ash Tuff								
139.1-147.9	8.8	Maroon Argillic Tuff								
147.9-149.1	1.2	Dacite Ash Tuff								
149.1-154.6	5.5	Dacite Ash/Oust Tuff								
154.6-158.6	4.0	Maroon Argillic Tuff								

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE June 16 19 80

Length 523' (159.5) Location Goosly

Bearing 080^{0} 27N 15W Hole No. 80-5

Dip -55^{0} Start June 14

Stop June 15

Logged By G. H. Scott

Depth	Core	Formation		Missing Core	Assays Cu %		Assays Ag oz/t		Core Samples Length	Core Samples No.
0 - 6.1		Overburden							M	
6.1-8.8	2.7	Chloritized Dacite Lapilli Tuff/Breccia								
8.8-10.1	1.3	Dacite Dike								
10.1-31.4	21.3	Chloritize Dacite Lapilli Tuff/Breccia								
			18.3-21.3		.01		<.01		3.0	16391
31.4-36.9	5.5	Dacite Lapilli Tuff/Flow	21.3-22.9		"		"		1.6	92
			22.9-25.9		"		.01		3.0	93
36.9-40.3	3.4	Dacite Dike	25.9-29.0		"		<.01		3.1	94
			29.0-30.5		"		"		1.5	95
40.3-45.1	4.8	Autobrecciated Dacite	41.2-44.2		.03		"		3.0	16501
45.1-46.0	0.9	Fractured Dacite								
46.0-48.9	2.9	Dacite Breccia	46.0-48.8		.01		<.01		2.8	16502
48.9-54.3	5.4	Andesite Dike								
54.3-63.7	9.4	Dacite Lapilli Tuff-Flow								
63.7-68.3	4.6	Autobrecciated Dacite Flow Tuff								
68.3-83.3	15.0	Dacite Lapilli Tuff/Breccia								
83.3-94.5	11.2	Dacite Lapilli Tuff Flow								

SILVER STANDARD MINES LTD.

DIAMOND DRILL-HOLE LOG

DATE 19

Length

Location

Bearing

Hole No. 80-5

Dip

Start

Stop

Logged By

Depth	Core	Formation		Missing Core	Assays Cu %		Assays Ag oz/t		Core Samples Length	Core Samples No.
94.5-115.9	21.4	Dacite Lapilli Tuff							M	
115.9-121.7	5.8	Andesite Dike								
121.7-126.0	4.3	Dacite Lapilli Tuff								
126.0-130.2	4.2	Chloritized and Sericitized Ash Tuff								
130.2-133.6	3.4	Sheared Ash Tuff	130.2-133.6		<.01		<.01		3.4	16503
133.6-136.0	2.4	Sheared Dacite Ash and Lapilli Tuff								
136.0-152.8	16.8	Dacite Lapilli/Ash Tuff								
152.8-154.2	1.4	Andesite Dike								
154.2-159.5	5.3	Porphyritic Quartz Latite								

APPENDIX E

STATEMENT OF COST

1980

April 30	Consulting Services, Somex Ventures Ltd.		260.00
June 23	Bulkley Concrete, 400 ft. ½" rebar (core rack)		124.80
24	J. T. Thomas, Diamond Drilling Ltd.		
	3,058 feet BQ wireline		68,910.00
	Mobilization & Demobilization		3,000.00
	Man & Machine Hours		9,240.00
	Materials used, lost, or damaged		6,864.55
	Tractor Rental		5,550.00
25	J. T. Thomas, Diamond Drilling, Smithers, B.C.		
	Accommodation & Meals; Pleasant Valley Motel (Johnson, Amours, Guay, Desrocher, Butler, Gusselin, Ginger)		1,802.95
July 2	Holt Engineering, Exploration & Mine Development		
	Site visitatior, transportation, consulting fees		579.29
8	Pacific Western, passenger		87.50
June (mo.)	Tel	8.13	
	Accommodation	32.20	
	Transportation	9.50	
	Engineering & Supervision	1,620.80	
	Sampling & Assaying	878.40	
	Truck & Car Expense	25.00	
	Geochemical	206.96	
	Wages, head off	712.74	
	Engineering & Supervision, head off	1,783.73	
	Rent	300.00	
	Office Services	565.66	
			6,143.12
July 4	Geologist fees, G. H. Scott		
	May 29 - June 27	5,400.00	
	Expenses	1,081.12	
			6,480.12
7	Chemex Labs Ltd., assaying		441.00
Aug. 1	Geologist fees, G. H. Scott		900.00
June 2	Pleasant Valley Motel		
	Watson (June 5-20), Dunn (June 12)		614.15
25	Superior Reproductions		37.57
29	Pacific Western, passenger		87.50
July (mo.)	Truck & Car Expense		288.90
	Accommodation		159.99
			$111,571.44

<u>CERTIFICATE OF QUALIFICATIONS</u>

I, GRAHAM HOWARD SCOTT, of Richmond, British Columbia do hereby certify that:

1. I hold a B.Sc. (Special) degree in geology from the University of London, Kings College;

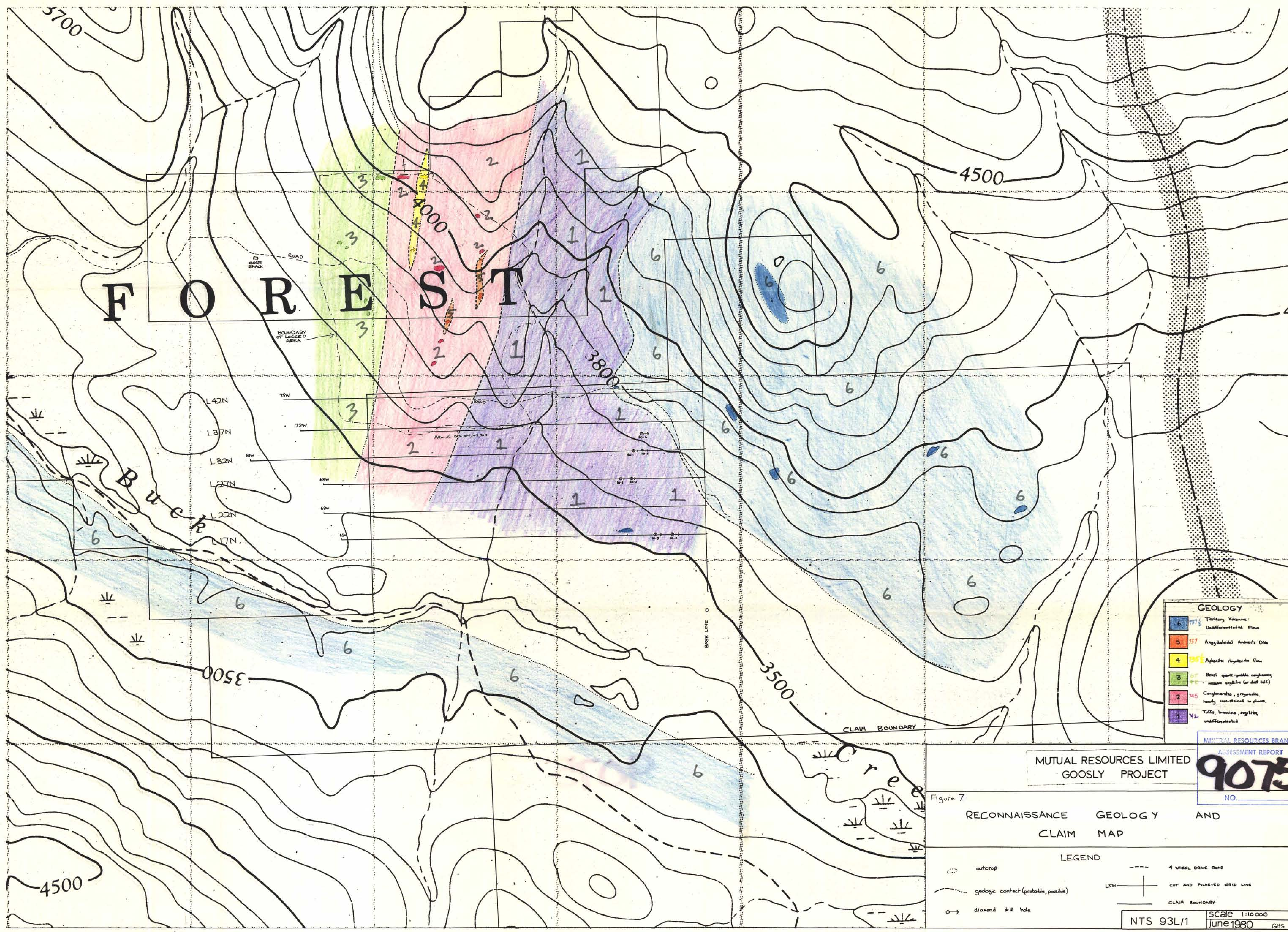
2. I hold an M.A. degree in economic geology from the State University of New York at Buffalo;

3. I am a professional consulting geologist having a business address at 10271 Swinton Crescent, Richmond, British Columbia;

4. I have been practising my profession over a period of ten years in Canada and the United States.

DATED this 31st day of December, 1980.

Graham H. Scott, B.Sc. M.A.


FOREST
Buck Creek
4500
4000
3800
3500
3700
CORE SHACK
ROAD
BOUNDARY OF LOGGED AREA
L42N
L37N
L32N
L27N
L22N
L17N
BASE LINE 0
CLAIM BOUNDARY
GEOLOGY
6 Tertiary Volcanics: Undifferentiated Flow
5 Amygdaloidal Andesite Dike
4 Aphanitic rhyodacite flow
3 Basal quartz-pebble conglomerate, massive argillite (or dust tuff)
2 Conglomerate, greywacke, heavily iron-stained in places.
1 Tuffs, breccias, argillites, undifferentiated
MUTUAL RESOURCES LIMITED
GOOSLY PROJECT
Figure 7
RECONNAISSANCE GEOLOGY AND CLAIM MAP
LEGEND
outcrop
geologic contact (probable, possible)
diamond drill hole
4 WHEEL DRIVE ROAD
CUT AND PICKETED GRID LINE
CLAIM BOUNDARY
NTS 93L/1
scale 1:10000
June 1980
GHS