GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
MAV 1-42 MINERAL CLAIMS OF
MAVERICK MOUNTAIN RESOURCES LTD (NPL)
HOWARD PASS AREA, NAHANNI MINING DISTRICT,
NORTHWEST TERRITORIES

Situated 10 miles northeast of Summit Lake
and 160 miles north of Watson Lake, Y.T.
(105-I-6)

62° 25' N. Lat., 129° 04' W. Long.

Submitted by: D.P. Taylor, Geologist
Endorsed by: F. Holcapek, P. Eng., Geologist
Owner: Maverick Mountain Resources Ltd (NPL)
Work Conducted by: Agilis Engineering Ltd.

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

MAV 1-42 MINERAL CLAIM GROUP

of

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

HOWARD PASS, NORTHWEST TERRITORIES

November 7, 1973

Vancouver, B.C.

D.P. Taylor, M.Sc. D.I.C.
Geologist

AGILIS ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS
107 - 325 HOWE STREET, VANCOUVER 1, B.C.

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MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

HOWARD PASS, NORTHWEST TERRITORIES

INTRODUCTION

The MAV mineral claim group of Maverick Mountain Resources Ltd. (NPL), are four miles southeast of Howard Pass, Northwest Territories, where Canex-Placer have announced the discovery of a major lead-zinc deposit.

During August of 1973 geological and geochemical soil and rock surveys were conducted on the property by personnel of Agilis Engineering Ltd. Geological mapping was performed by A.T. Turner, geologist. All work was done under the supervision of the writer.

LOCATION AND ACCESS

The MAV group is located in the Northwest Territories very close to the Yukon Border. The property is four miles southwest of Howard Pass and ten miles northeast of Summit Lake, Yukon Territory, which is 158 miles north of Watson Lake, Y.T.

The property is located:

62^{o} 25' N; 129^{o} 04' W

The winter tote road from the Cantung Road to Howard Pass lies immediately west of the property.

Access to the property at present is via fixed wing float or ski-equipped plane to Summit Lake, and by helicopter to the property. Canex-Placer has an airstrip at Howard Pass for wheel or ski-equipped aircraft.

PHYSIOGRAPHY AND CLIMATE

Most of the property lies on a small plateau east of Howard Pass. The topography is generally open and rolling with steep drop-offs to the north and east. Elevations on the property range from about 4,500 to 6,000 feet above sea level. All but the lower elevations are covered by open caribou moss and grass while below tree line (4,800 feet) occasionally dense stunted spruce and buckbrush are found.

The climate in this area is generally very cold in the winter with six to eight feet of snow. Summers are generally short and mild with the snow-free working season lasting from mid-June to late September.

PROPERTY

The MAV mineral claim group of Maverick Mountain Resources Ltd (NPL) consists of 42 claims staked and recorded in the Nahanni Mining District of the Northwest Territories.

The property is comprised of:

Claims	Record Numbers
MAV 1-42	A49551 - A49592

Field checks by the writer on certain posts confirm that the claims appear to be staked in accordance with the Mineral Act.

REGIONAL GEOLOGY

The regional geological map for this area is the Geological Survey of Canada Map 8-1967 Nahanni, 1 inch = 4 miles sheet.

The basement in the property region is Cambrian and Earlier vari-coloured red-brown weathering slates and phyllites with minor siltstone and quartzite.

This sequence is unconformably overlain by Upper Cambrian and (?) Ordovician limestone, dolomitic siltstone, and silty dolomite, with minor sandy dolomitic and quartzite at the base.

There is a regional unconformity in the Ordovician in the area occasionally containing upper Ordovician and Silurian black graptolitic shale, argillaceous limestone and minor black chert, cherty argillite and dolomite.

Uppermost in the regional sequence is Devonian and (?) Mississippian black shale and argillite, with minor sandstone siltstone and banded chert; often with massive chert pebble conglomerate.

Folding in the area is moderate to intense but is consistently northwesterly trending with strong associated cleavage.

PROPERTY GEOLOGY

Outcrop exposure on the MAV group is very limited. Mapable features are limited to two creeks on the property, and cliffs along the northern flank.

Apart from a small exposure of Cambrian and Earlier thin-bedded bluish grey shale containing barren quartz veins on the eastern flank of the claims, the entire outcrop exposure on the property is Upper Cambrian, thin bedded limestone to the north and calcareous shale to the south.

The distribution of Upper Cambrian outcrop allows a reliable conclusion to be drawn that this is the only sequence underlying the property, apart from the small section of older shale in the eastern flank.

Due to rock creep reliable dip readings could not be taken. However, both cleavage and bedding strikes are consistently between 125^{o} - 135^{o}. Cleavage dips are generally steeply northerly to vertical.

The property is believed to be, on regional consideration, located close to the axis of a major anticline which strikes at about 130^{o} and extends into Howard Pass.

The limestone and calcareous shale units are stratigraphically just below the mineralized horizons found at Howard Pass. No mineralization was noted on the property apart from very minor occurrences of disseminated pyrite in limestone and Cambrian shale on the western part of the claims.

GEOCHEMICAL SURVEY

A total of 938 soil samples were collected on the MAV group. Sample lines were established on an east-west grid with lines 400 feet apart. Samples were taken at stations every 200 feet along the lines.

Samples were collected from 8 - 12 inches depth using mattocks and were placed in referenced kraft paper bags, the bags being provided by the laboratory. Soil development on the property is moderately good with a vaguely defined "B" horizon developed in most areas.

ANALYSIS

All samples were shipped to Core Laboratories Ltd., at 325 Howe Street, Vancouver, B.C.

A minus 80 mesh fraction was taken from each dried sample and digested for 2½ hours in hot nitric acid. Quantitative analysis was performed by atomic absorption methods.

RESULTS

The results for lead and zinc were tabulated and statistically analysed. Results for the 938 samples were plotted as cumulative frequency percent on arithmetic probability paper and the parameters derived are:

	Range (ppm)	Background (ppm)	Anomalous (ppm)
Zn	5 - 1200	100	200
Pb	<1- 150	27	37

Regionally the results are fairly low, generally speaking in the Howard Pass area anomalous values of about 350 ppm zinc

and 42-45 ppm lead are found.

INTERPRETATION

The geology mapped on the MAV mineral group is too low in the stratigraphy to be related to the mineralization of Canex-Placer's deposit in Howard Pass.

No distinctive anomalous areas have been outlined in a fairly comprehensive reconnaissance geochemical soil sample survey. There is a general rise for both lead and zinc in results obtained as one moves northward on the property, but values do not reach levels that can regionally be considered relevant. Anomalous values obtained tend to be dispersed and discontinuous.

CONCLUSIONS

The Upper Cambrian and earlier sequences exposed on the MAV group are stratigraphically too low to be of relative regional interest.

A comprehensive regional geochemical survey has produced little to be of encouragement in the search for economic lead-zinc mineralization. No targets for more detailed geochemical surveys have been defined.

RECOMMENDATIONS

Geological and geochemical surveys conducted in August, 1973 have failed to define any areas for follow-up work in the search for economic lead or zinc mineralization on the MAV group.

No further work can be recommended on the MAV group at this time.

Respectfully submitted,

D.P. Taylor, M.Sc., D.I.C.
Geologist

Endorsed by: F. Holcapek, P.Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. HOLCAPEK

Vancouver, B.C.
November 1, 1973

CERTIFICATION

I, David Pelham Taylor, of Vancouver, British Columbia, do hereby certify that:

1. I am an exploration geologist, residing at 2097 West 6th Avenue, Vancouver, B.C.

2. I am a graduate of the Royal School of Mines London University, (M.Sc., D.I.C. 1971).

3. I have practised as an exploration geologist in British Columbia for five years.

4. I am registered as an Engineer-in-Training with The Association of Professional Engineers of the Province of British Columbia.

5. The work subject of this report was conducted by myself and a crew under my supervision.

D.P. Taylor, M.Sc., D.I.C.

Vancouver, B.C.
November 7, 1973

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)
MAV CLAIMS HOWARD PASS AREA
NAHANNI MINING DISTRICT, N.W.T.

GEOCHEM (Zinc)
FREQUENCY DISTRIBUTION GRAPH

RANGE (PPM)

0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475

Anomalous 200 ppm

Background 100 ppm

99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01

0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99

CUMULATIVE PERCENT FREQUENCY

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)
MAV CLAIMS HOWARD PASS AREA
NAHANNI MINING DISTRICT, N.W.T.
GEOCHEM (Lead)
FREQUENCY DISTRIBUTION GRAPH

RANGE (PPM)

0 5 10 15 20 25 30 35 40 45 50 55

Anomalous 37 ppm

Background 27 ppm

99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01

0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99

CUMULATIVE PERCENT FREQUENCY

YUKON TERRITORY

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

MAV CLAIMS HOWARD PASS AREA

NAHANNI MINING DISTRICT, N.W.T.

PROPERTY LOCATION MAP

SCALE IN MILES

50 0 50 100 150

AGILIS ENGINEERING LTD. SEPTEMBER, 1973

140°00' 136°00' 132°00' 128°00' 124°00' 120°00'

68°00' 64°00' 60°00'

MACKENZIE BAY

FRANKLIN BAY

Inuvik

Arctic Red River

MACKENZIE R.

N.W.T. / Y.T.

ALASKA U.S.A. YUKON

PEEL R.

Norman Wells

Fort Norman

Dawson

Keno Hill

Mayo

Stewart River

YUKON R.

PELLY R.

Ross River

Snag

Carmacks

Kluane

Whitehorse

Carcross

Teslin

S. NAHANNI R.

Fort Simpson

Fort Liard N.W.T.

BRITISH COLUMBIA

129°15' 129°00'

62°30' 62°15'

Y.T. N.W.T.

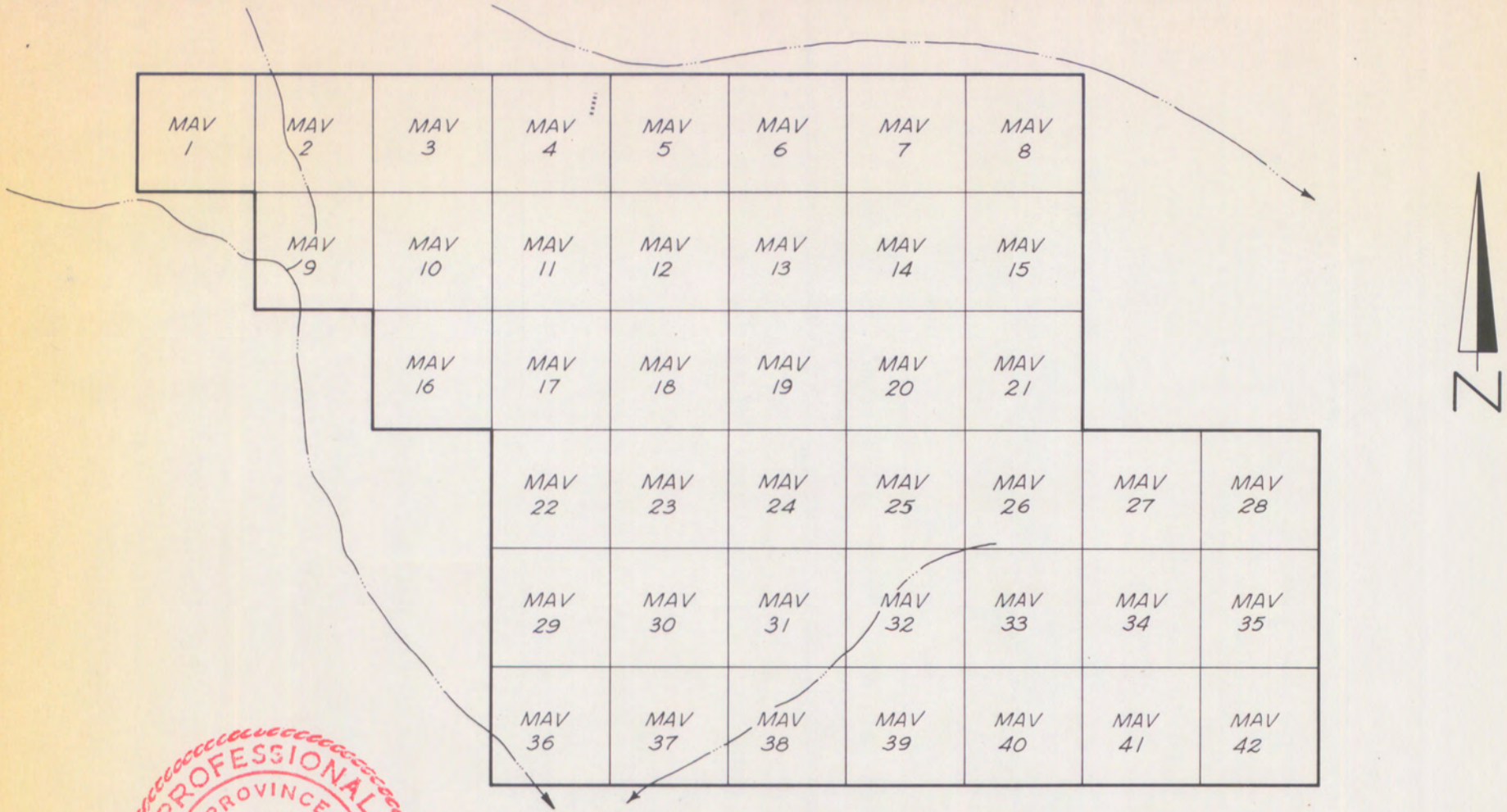
SUMMIT LAKE

MAV GROUP

N

SCALE: 1" = 4 MI.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA



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MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

MAV CLAIMS HOWARD PASS AREA

NAHANNI MINING DISTRICT, N.W.T.

CLAIM SKETCH

SCALE: 1" = 2000 ft.

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88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W B.L. 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E

16N 12N 8N 4N 0 4S 8S 12S 16S 20S 24S 28S 32S 36S 40S 44S 48S 52S 56S

N

14 15
20 21

20 21
25 26

25 26
32 33

29 30
36 37

31 32
35 39

34 35
41 42

barren qtz. veins

LEGEND

- Claim post
- Creek
- Outcrop
- Cleavage attitude, joint attitude
- Assumed contact
- Thin-bedded limestones and calcareous shales
- Thin-bedded bluish-grey shales

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

MAV CLAIMS HOWARD PASS AREA

NAHANNI MINING DISTRICT, N.W.T.

GEOLOGY

SCALE IN FEET

400 0 400 800 1200

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

B.L.

88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 0 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E

16N
12N
8N
4N
0
4S
8S
12S
16S
20S
24S
28S
32S
36S
40S
44S
48S
52S
56S

N

LEGEND

■ Claim post

Creek

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

MAV CLAIMS HOWARD PASS AREA

NAHANNI MINING DISTRICT, N.W.T.

GEOCHEMICAL SURVEY

LEAD (PPM)

SCALE IN FEET

400 0 400 800 1200

AGILIS ENGINEERING LTD. SEPTEMBER, 1973

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

B.L.

88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 0 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E

16N — 291 205 132 305 241 149 179 319 300 234 151 365 70 260 343 218 147 188 151 86 60 73 76 49 85 68 45 53 52 37 48 28 38 107 107 140 146 146 124 28 23 123 71 80 43 128 35 33

12N — 555 194 242 310 256 108 154 341 307 232 220 251 427 185 95 144 142 89 82 151 75 45 81 52 57 53 42 44 56 52 64 50 27 116 206 122 118 45 143 22 237 122 144 116 56 58 136 145

8N — 214 107 482 202 198 354 315 168 348 438 411 560 427 219 146 84 72 127 114 120 200 89 85 29 70 35 45 52 55 57 94 102 236 56 130 164 159 102 158 46 47 39 47

4N — 614 539 213 110 134 156 395 317 206 277 245 82 283 77 164 94 184 142 183 189 98 74 81 68 60 114 77 101 101 87 66 53 31 71 108 86 48 111 102 121 67 101 46 114 98 108 151 107 64 38 95

0 — 22 86 104 144 84 64 65 73 46 111 87 79 56 94 59 58 60 132 99 40 87 . 69 96 108 106 85 105 75 74 89 114 88 85 87 110 71 93 68 98 79 114 94

4S — 346 260 65 108 177 124 164 72 87 50 95 171 113 95 158 50 46 44 44 40 61 99 81 85 95 115 101 90 87 105 56 76 42 88 116 71 136 126 129 118 80 90

8S — 665 31 244 400 219 162 502 212 108 111 116 49 114 82 96 111 150 150 95 115 107 70 109 118 113 93 65 112 124 89 76 89 65 83 52 114 111 113 89 168 79 70 62

12S — 146 1200 98 180 296 94 32 184 156 58 132 209 97 252 102 126 82 102 162 86 108 121 65 148 76 122 168 111 106 79 89 87 83 52 . 42 91 89 71 75 56 84 71 157 206 135 65 108 110 88 73 90 91 110 155 142 199 87 66 125

16S — 179 107 55 73 100 169 107 140 10 281 94 258 92 72 51 36 138 78 94 74 51 46 70 64 54 107 114 99 75 72 54 60 69 52 91 72 71 82 92 97 70 91 84 92 253 159 101 109 71 111 108 96 96

20S — 97 187 340 66 148 10 59 68 58 76 65 78 88 79 78 61 141 81 102 67 81 54 62 79 67 71 54 69 68 75 101 150 95 73 71 62 98 89 82 101 64 92 151 215 106 61 96 73 61 103 125 151

24S — 82 111 158 151 46 18 62 112 59 90 93 68 5 91 88 90 110 86 33 63 63 70 43 55 60 47 19 71 58 60 28 43 63 138 . 136 55 57 73 74 85 106 106 99 129 123 57 93 77 65 909 123

28S — 218 196 244 157 94 204 103 122 104 55 88 66 63 102 60 81 86 102 97 116 63 72 66 80 45 68 42 70 30 76 25 72 50 70 128 104 93 120 155 56 46 71 85 76 104 116 118 138 181 207

32S — 134 96 102 60 161 100 40 110 105 107 81 98 127 89 154 70 70 73 88 81 70 80 78 60 76 38 28 85 78 95 92 90 65 114 62 51 69 53 57 61 53 56 61 95 82 78 85 101 . 308 71

36S — 77 115 168 145 87 100 89 127 88 95 98 93 81 107 82 108 72 102 103 78 63 72 83 74 45 77 82 82 71 56 106 62 88 72 42 90 69 62 58 63 61 78 86 101 73 59 72 63 69 54 96

40S — 55 75 117 88 71 19 16 88 70 9 98 117 75 45 52 41 74 84 78 70 66 45 130 73 114 135 77 84 90 68 92 66 64 84 76 45 69 58 54 55 52 78 10 62 74 89 47 66 50 60 59

44S — 275 170 82 116 102 74 32 66 28 20 10 56 100 61 53 64 50 59 122 108 73 93 84 64 76 61 64 42 36 50 55 42 56 63 19 55 28 66 75 68 57 69 47 44 61 104 97 69 64 105

48S — 86 850 540 145 102 62 69 60 20 158 53 67 66 39 48 126 111 77 94 105 68 42 74 66 41 34 18 40 66 54 65 50 65 18 81 75 69 90 72 58 73 52 61 72 76 52 31 33 58 124 71 73

52S — 107 40 18 56 74 64 58 112 62 102 98 118 76 98 70 56 82 35 64 59 58 52 20 73 53 76 13 64 44 54 46 64 40 40 42 58 48 55 67 45 45 58 74 80 45 128

56S — 192 83 96 56 148 134 152 102 104 31 73 63 52 52 60 44 103 74 80 69 73 60 37 66 69 32 48 63 46 64 48 53 58 62 43 66 64 25 85 42 108 30 72 66 101 85 86

N

LEGEND

■ Claim post

Creek

MAVERICK MOUNTAIN RESOURCES LTD. (NPL)

MAV CLAIMS HOWARD PASS AREA

NAHANNI MINING DISTRICT, N.W.T.

GEOCHEMICAL SURVEY

ZINC (PPM)

SCALE IN FEET

400 0 400 800 1200

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