# REPORT ON GEOCHEMICAL SURVEYS ON THE PEACHLAND PROPERTY OF VEGA MINES LTD. (NPL), OSOYOOS MINING DIVISION, B. C.

82E/13E, 13W

Rohanna 15-13, 21-22, 28-39

KEL 10-17

ZN 1-18

Situated 1.5 miles northwest of Peachland, Osoyoos Mining Division, B. C.

49° 48'N; 119° 44'W

Submitted by: D.P. Taylor, Geologist
Endorsed by: R.H.D. Philp, P. Eng.
Owner: Vega Mines Ltd. (NPL)
Work Conducted by: Vega Mines Ltd. (NPL)

# REPORT ON GEOCHEMICAL SURVEYS
# ON THE
# PEACHLAND PROPERTY OF
# VEGA MINES LTD. (NPL)
# OSOYOOS MINING DIVISION, B.C.

September 20, 1972 Vancouver, B.C.



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

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REPORT ON GEOCHEMICAL SURVEYS

on the

Peachland Property of

Vega Mines Ltd. (NPL)

Osoyoos Mining Division, B. C.

## INTRODUCTION

The Peachland property of Vega Mines Ltd. (NPL) consists of 43 mineral claims situated approximately 1.5 miles north northwest of Peachland, B. C.

Zinc-copper-lead-precious metals mineralisation is reported to have been exposed at various locations within Nicola group rocks on the claim group.

Geochemical surveys have been conducted by Vega Mines personnel on the claim groups during 1972. The writer was asked to assess and report on the results obtained since the report of May, 1972. All geochemical sample results to date are covered by this report.

## LOCATION AND ACCESS

The Peachland Group lies 1.5 miles north of Peachland extending westward from approximately ½ mile west of Okanagan Lake. Access to the southeastern and eastern portion of the claim group is possible by secondary roads from Highway 97, north of Peachland. The property is located at:

$49^{o}$ 48'N; $119^{o}$ 44'W

PHYSIOGRAPHY

Topographic relief is generally moderate on the Peachland group with elevations averaging around 1700 feet above sea level. There are some areas of steep local topography on the property whose elevations range from 1150 feet to 3000 feet.

Light timber cover of pine, spruce and fir, with underbrush near creeks and at lower elevations cover the property.

PROPERTY

The property consists of the following recorded mineral claims:

| Name | Claim | Record Number |
|---|---|---|
| Rohanne | 15-18 | 27928-27931 |
| | 19 | 27997 |
| | 21-22 | 27999-28000 |
| | 29-35 | 28128-28134 |
| | 36-39 | 28283-28286 |
| KEL | 10-17 | 28151-28158 |
| ZN | 1-18 | 28745-28762 |

All claims are recorded in the Osoyoos Mining Division.

Several zinc-copper occurences have been explored by old workings on the property, the most extensive occuring in the vicinity of the central area of the geochemical survey.

## GEOCHEMICAL SURVEY

Samples were collected at 200 foot intervals on north-south flagged grid lines which were established using chain and compass. The lines are 400 feet apart, with three interceding lines at 200 foot intervals between lines 4W and 8E.

The initial grid established and reported on in May, 1972 from lines 16W to 8E has been extended to the west and to the northeast with about 46,000 feet of new grid. All of the new grid has been sampled at 200 x 400 foot spacing.

## FIELD PROCEDURES

Soil samples were collected using a shovel. Samples were taken from 6 to 12 inches of depth and placed in Kraft paper sample bags. Notes were taken at each station regarding the direction and slope of the topography. The slopes were estimated, in most cases overestimated.

The work was done during several weekends over the summer of 1972 by G. E. Decario, A. Cromwell, G. M. Begg and R. Minor, for Vega Mines Ltd. (NPL).

## ANALYSIS

All samples were sent to Crest Laboratories (B.C.) Ltd. All samples had a minus 80 mesh fraction taken for digestion in perchlonic nitric acid. Quantitative analysis was conducted for ppm copper and zinc content by atomic absorbtion.

## RESULTS

Cumulative percent frequency distribution curves for copper and zinc results are included in this report. A total of 355 samples were analysed.

Copper values range from 5ppm to +2000 ppm. The graph curve breaks indicate a background of 35 ppm copper and a low anomalous value of 65 ppm copper. The top 2.5% of copper values are those greater than 170 ppm which are statistically very highly anomalous.

Zinc values range from 14 ppm to 1800 ppm. The graph for zinc values shows a background of about 108 ppm and a low anomalous threshold of 176 ppm. The zinc percent cumulative frequency curve does not have distinctive breaks and the values for background and anomalous samples are approximate. The very high anomalous 2.5% of zinc values are those greater than 400 ppm.

## INTERPRETATION

The anomaly on the older central grid is the strongest and most extensive for both copper and zinc. This anomaly stretches from station 20W, 14N southeasterly past the old workings on line 4W where a 2000 ppm copper is the highest value for copper on the grid. This anomaly stretches over 2000 feet of length and 400 feet of width; it has a good dispersion of lower values around it. There is a possibility of its extension off Vega ground to the northwest and southeast. This anomaly

is the strongest and most extensive found thus far on the claim group for both zinc and copper.

Moderately high copper anomalies and isolated spot highs have been found on the more recent geochemical surveys. Isolated very high copper values occur at: station 4E, 2N (320 ppm) with 2 medium high values on line 0 at 4E and 6E; one isolated high is at 6E, 10N; two adjacent very high values are found at 56W, 2N and 60W 4N.

Around the north working at 12E, 40N a moderate anomaly is found associated with very high zinc values, part of a zinc anomaly that extends northward on line 12E.

Zinc anomalies are more numerous than copper. Apart from the anomaly on the north working there is an erratic but extensive anomaly developing on the northeast corner of the grid, with one very high value of 1375ppm at station 28E, 68N.

A poorly defined zinc anomaly is located around very high values at 32W, 8N and 36W 6N, and a spot high sample (500 ppm) is at station 20E 34N; this anomaly appears to have some weak southward extension.

A medium high anomaly has developed on lines 16W and 24W at stations 6N.

The smaller zinc and copper anomalies do not correlate very closely, but there are less copper anomalies than zinc. The zinc anomalies may be important as tracers due to the mobile nature of zinc in groundwaters.

## CONCLUSIONS

A strong and extensive anomaly exists on Rohanne 16 striking northwesterly through the old workings.

Smaller or weaker anomalies for both copper and zinc are found with little correlation between the two elements except at the north working. Zinc may, however, be considered as a potential tracer for copper mineralisation despite the lack of zinc anomalies with the smaller copper anomalies.

## RECOMMENDATIONS

The anomalous areas, and the isolated very high values, should be soil sampled in detail (100 x 100 feet grid) to help define their orientation and extent.

A detailed geological map should be made of the property to give geochemical data a context for correlation and to assist in planning future work.

A magnetometer survey in conjunction with this work, over the entire grid, would assist both the geological mapping and the interpretation of geochemical data, particularly

around known mineralisation.

Some effort should be made to acquire the mineral rights to the northwesterly and southeaterly extensions of the main anomaly.

Subsequent to this work, physical work in the form of hand and/or bulldozer trenching to some depth is recommended to evaluate showing prior to possible subsequent geophysical and drilling work.

Submitted by: D.P. Taylor, Geologist

Endorsed by: R.H.D. Philp, P. Eng.

# CERTIFICATION

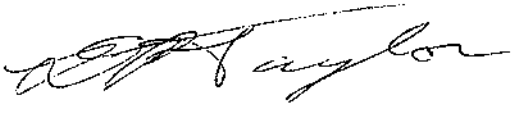
I, David Pelham Taylor of Vancouver, B. C., do hereby certify that:

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, Mineral Exploration, MSc. D.I.C. 1971.

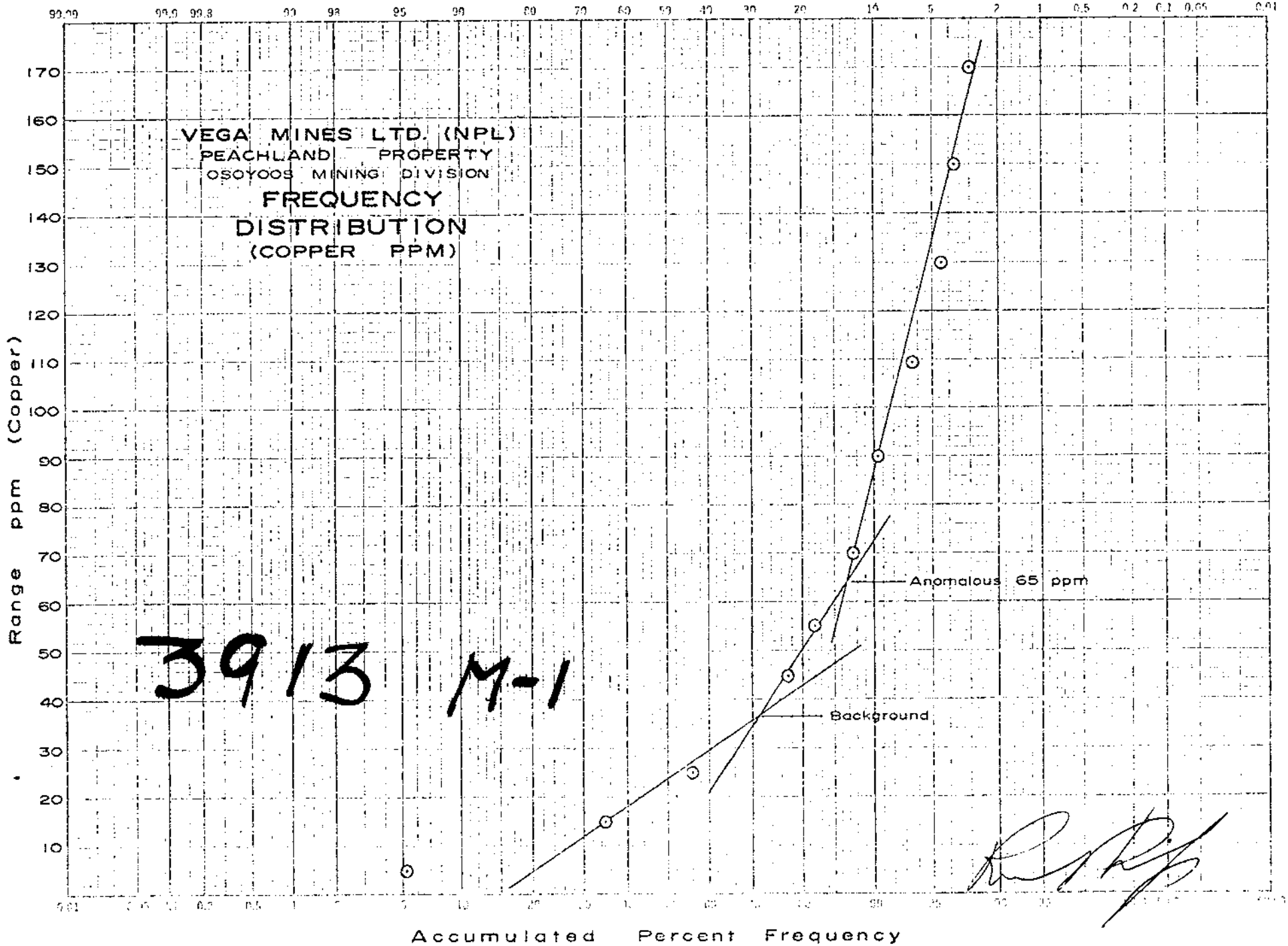
3. I have practised as an exploration geologist in B. C. for four years.

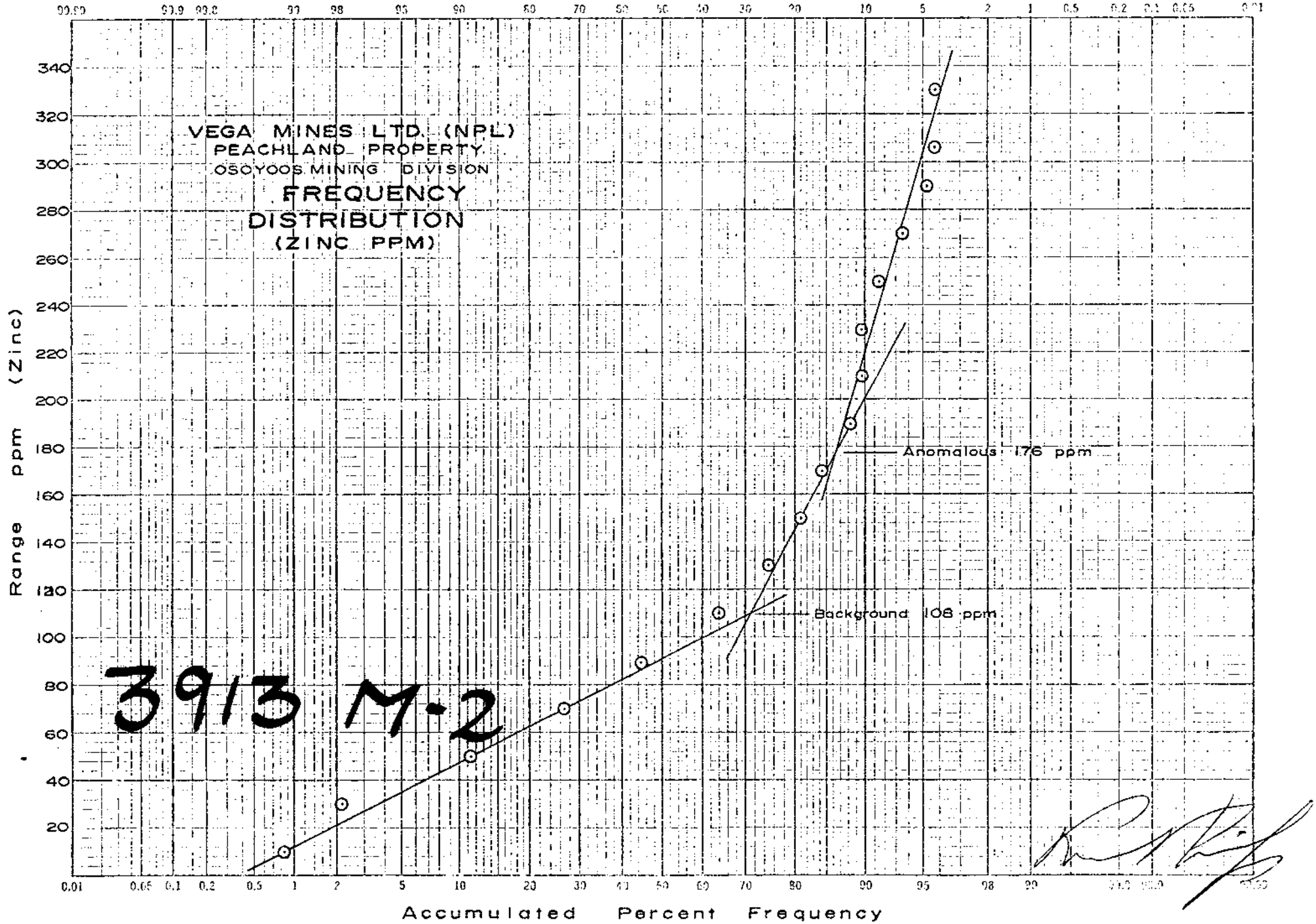
4. I have not visited the property subject of this report, but have written it at the request of Mr. G. Begg of Vega Mines Ltd. (NPL) who made all pertinent data available to me.



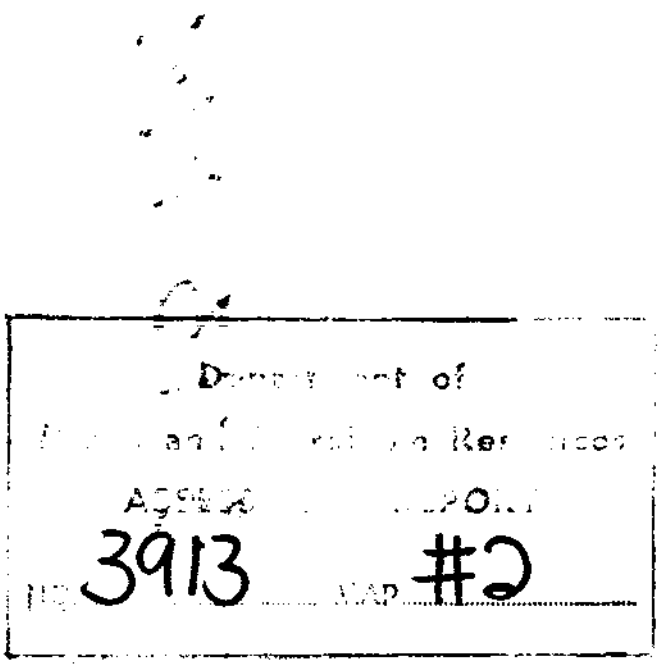
D.P. Taylor, MSc. D.I.C.

September 20, 1972 Vancouver, B. C.






3913 M-2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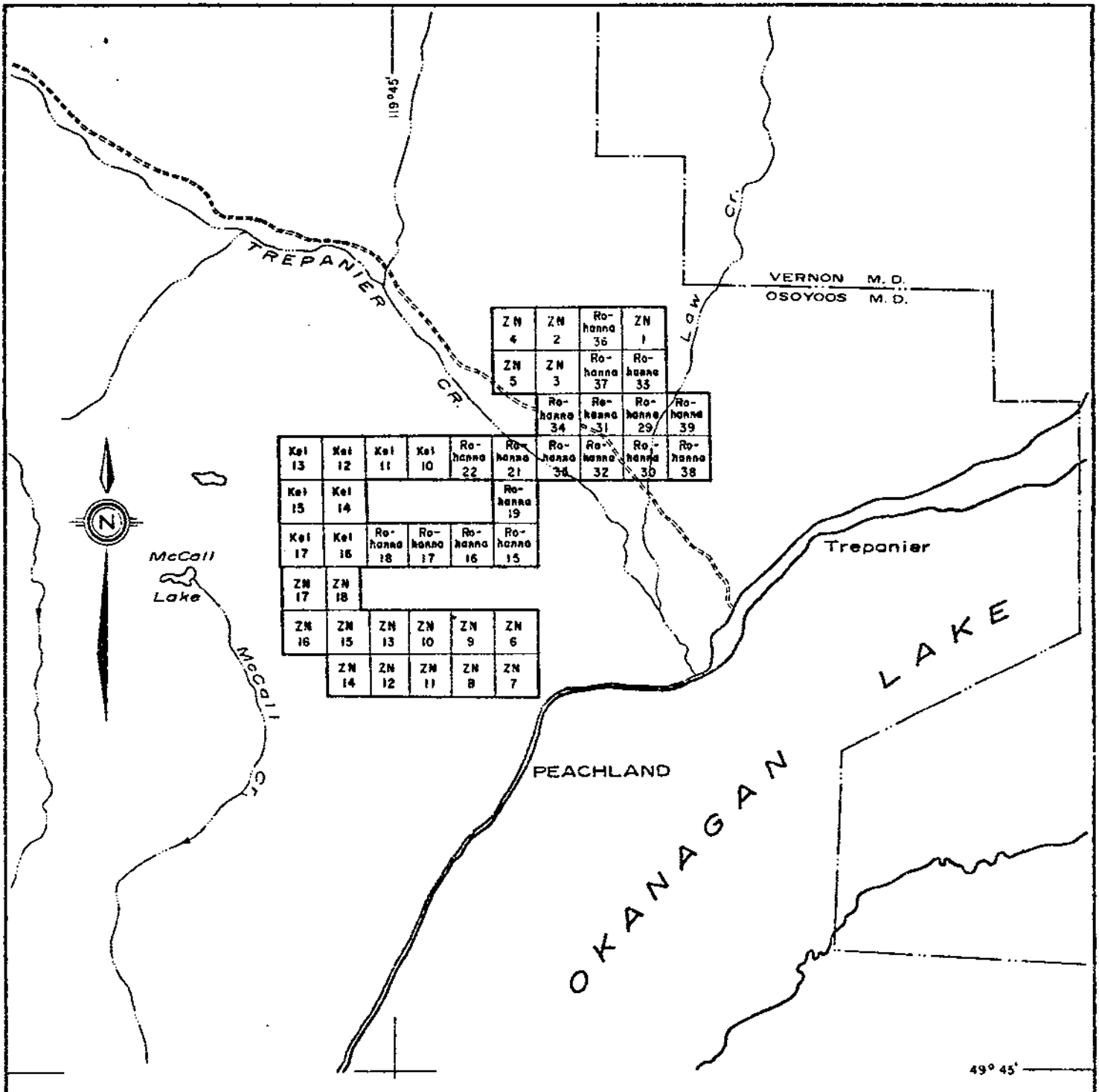
AGENCY REPORT
3913 #2



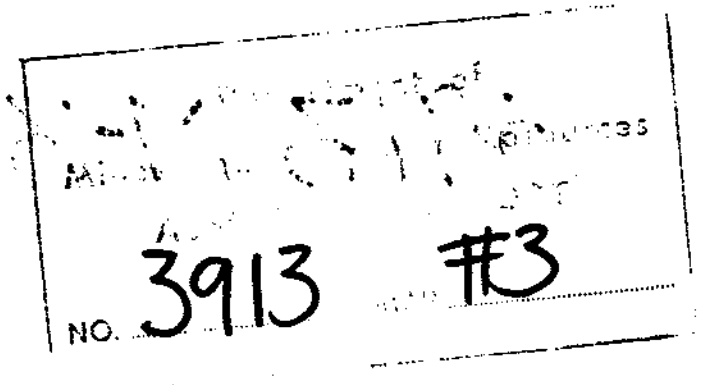

NOTE: Traced from Dept. of Mines and Petroleum Resources mineral claim maps 82E/13E & 13W. Location of claims may be inaccurate.

3913 M-3

VEGA MINES LTD. (NPL)
PEACHLAND AREA B.C.
OSOYOOS MINING DIVISION

# CLAIM LOCATION MAP

SCALE — 1" = 4500 FT APPROX.


NO. 3913 #3

July 12, 1972

Vega Mines Ltd., (N.P.L.)
1250 - 505 Burrard Street,
Vancouver, B.C.

Lab 844G — Geochemical analysis for copper and zinc

Mesh Size: - 80 and - 100
Analytical Method: Atomic Absorption
Digestion Method: $HClO_4 + HNO_3$

| Sample Marked: | | Copper ppm | Zinc ppm |
|---|---|---|---|
| S 180 | | 18 | 100 |
| 181 | | 20 | 56 |
| 182 | | 16 | 104 |
| 183 | | 12 | 58 |
| 184 | rock | 49 | 68 |
| 185 | | 8 | 92 |
| 186 | | 16 | 62 |
| 187 | rock | 22 | 124 |
| 188 | | 580 | 136 |
| 189 | | 75 | 114 |
| 190 | | 21 | 72 |
| 191 | | 52 | 82 |
| 192 | | 25 | 84 |
| 193 | | 28 | 106 |
| 194 | | 28 | 152 |
| 195 | rock | 18 | 72 |
| 196 | | 20 | 30 |
| 197 | | 13 | 14 |
| 198 | rock | 11 | 116 |
| 199 | | 17 | 122 |
| 200 | rock | 44 | 118 |
| 201 | | 23 | 90 |
| 202 | rock | 10 | 48 |
| 203 | rock | 8 | 48 |
| 204 | rock | 24 | 50 |
| 205 | rock | 11 | 52 |
| 206 | rock | 8 | 58 |
| 207 | rock | 11 | 40 |
| S 208 | rock | 6 | 48 |
| S 209 | rock | 7 | 60 |
| 210 | rock | 6 | 90 |
| 211 | rock | 8 | 66 |
| 212 | rock | 9 | 62 |
| 213 | | 8 | 80 |
| 214 | | 10 | 104 |
| 215 | rock | 11 | 70 |
| 216 | | 10 | 120 |
| 217 | rock | 5 | 92 |
| 218 | rock | 10 | 58 |
| 219 | rock | 128 | 130 |
| 220 | rock | 9 | 54 |
| 221 | rock | 11 | 68 |
| 222 | rock | 34 | 78 |
| 223 | rock | 34 | 62 |
| 224 | | 20 | 72 |
| 225 | | 26 | 66 |
| 226 | rock | 18 | 62 |
| 227 | | 22 | 66 |
| S 228 | | 20 | 60 |

Yours truly,
CREST LABORATORIES (B.C.) LTD.,
F.C. Burgess
F.C. Burgess
Chief Assayer




LEGEND

- Sample location
- Downward slope of ground in degrees
- Flat ground
- Claim post
- Shaft or tunnel
- Pond

- 110 – 174 ppm
- 175 – 239 ppm
- 240 – 400 ppm
- > 400 ppm



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VEGA MINES LTD. (NPL)
PEACHLAND PROPERTY
OSOYOOS MINING DIVISION

# GEOCHEMICAL SURVEY

## ZINC (ppm)

SCALE IN FEET
400 0 400 800 1200

SEPTEMBER 1970

May 25, 1972

Armstrong, Brawner, Speton & Philips,
1250 - 505 Burrard Street,
Vancouver, B.C.

Lab 801G — Geochemical analysis for copper and zinc

Mesh Size: - 80
Analytical Method: Atomic Absorption
Digestion Method: $HClO_4 + HNO_3$

| Sample Marked: | Copper ppm | Zinc ppm | Sample Marked: | Copper ppm | Zinc ppm |
|---|---|---|---|---|---|
| S - 91 | 130 | 190 | S - 120 | 30 | 128 |
| 92 | 140 | 295 | 121 | 48 | 108 |
| 93 | 30 | 110 | 122 | 24 | 114 |
| 94 | 34 | 105 | 123 | 26 | 88 |
| 95 | 92 | 270 | 124 | 29 | 114 |
| 96 | 42 | 140 | 125 | 14 | 102 |
| 97 | 46 | 110 | 126 | 14 | 134 |
| 98 | 52 | 95 | 127 | 24 | 690 |
| 99 | 104 | 200 | 128 | 34 | 94 |
| 100 | 44 | 90 | 129 | 21 | 66 |
| 101 | 78 | 95 | 130 | 38 | 88 |
| 102 | 104 | 265 | 131 | 128 | 78 |
| 103 | 28 | 150 | 132 | 76 | 98 |
| 104 | 76 | 125 | 133 | 80 | 100 |
| 105 | 42 | 175 | 134 | 16 | 102 |
| 106 | 42 | 160 | 135 | 74 | 280 |
| 107 | 32 | 145 | 136 | 30 | 44 |
| 108 | 28 | 135 | 137 | 24 | 120 |
| 109 | 30 | 115 | 138 | 40 | 142 |
| 110 | 26 | 125 | S - 139 | 21 | 20 |
| 111 | 24 | 135 | | | |
| 112 | 24 | 95 | | | |
| 113 | 52 | 85 | | | |
| 114 | 120 | 85 | | | |
| 115 | 36 | 70 | | | |
| 116 | 40 | 70 | | | |
| 117 | 19 | 55 | | | |
| 118 | 38 | 130 | | | |
| S-1 119 | 24 | 530 | | | |

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| Sample Marked: | Copper ppm | Zinc ppm | Sample Marked: | Copper ppm | Zinc ppm |
|---|---|---|---|---|---|
| S - 91 | 130 | 190 | S - 120 | 30 | 128 |
| 92 | 140 | 295 | 121 | 48 | 108 |
| 93 | 30 | 110 | 122 | 24 | 114 |
| 94 | 34 | 105 | 123 | 26 | 88 |
| 95 | 92 | 270 | 124 | 29 | 114 |
| 96 | 42 | 140 | 125 | 14 | 102 |
| 97 | 46 | 110 | 126 | 14 | 134 |
| 98 | 52 | 95 | 127 | 24 | 690 |
| 99 | 104 | 200 | 128 | 34 | 94 |
| 100 | 44 | 90 | 129 | 21 | 66 |
| 101 | 78 | 95 | 130 | 38 | 88 |
| 102 | 104 | 265 | 131 | 128 | 78 |
| 103 | 28 | 150 | 132 | 76 | 98 |
| 104 | 76 | 125 | 133 | 80 | 100 |
| 105 | 42 | 175 | 134 | 16 | 182 |
| 106 | 42 | 160 | 135 | 74 | 280 |
| 107 | 32 | 145 | 136 | 30 | 44 |
| 108 | 28 | 135 | 137 | 24 | 120 |
| 109 | 30 | 115 | 138 | 40 | 142 |
| 110 | 26 | 125 | S - 139 | 21 | 20 |
| 111 | 24 | 135 | | | |
| 112 | 24 | 95 | | | |
| 113 | 52 | 85 | | | |
| 114 | 120 | 85 | | | |
| 115 | 36 | 70 | | | |
| 116 | 40 | 70 | | | |
| 117 | 19 | 55 | | | |
| 118 | 38 | 130 | | | |
| S-1 119 | 24 | 530 | | | |

Yours truly,
CREST LABORATORIES (B.C.) LTD.,

F.C. Burgess
Chief Assayer

June 27, 1972

Vega Mines Ltd., (N.P.L.)
1250 - 505 Burrard Street,
Vancouver, B.C.

Lab 832G

Geochemical analysis for copper and zinc

Mesh Size: - 80 and - 100
Analytical Method: Atomic Absorption
Digestion Method: $HClO_4 + HNO_3$

| Sample Marked: | Copper ppm | Zinc ppm | Sample Marked: | Copper ppm | Zinc ppm |
|---|---|---|---|---|---|
| S 140 | 24 | 125 | S 158 | 20 | 110 |
| 141 | 14 | 205 | 159 | 36 | 95 |
| 142 | 26 | 95 | 160 | 32 | 115 |
| 143 | 64 | 70 | 161 | 18 | 100 |
| 144 | 14 | 45 | 162 | 26 | 180 |
| 145 | 24 | 95 | 163 | 24 | 115 |
| 146 rock | 136 | 130 | 164 | 56 | 135 |
| 147 | 40 | 120 | 165 | 18 | 75 |
| 148 | 14 | 35 | 166 | 20 | 135 |
| 149 rock | 22 | 65 | 167 | 20 | 90 |
| 150 | 14 | 55 | 168 | 26 | 120 |
| 151 | 20 | 100 | 169 rock | 74 | 95 |
| 152 | 16 | 55 | 170 | 275 | 170 |
| 153 | 20 | 130 | 171 | 28 | 120 |
| 154 | 14 | 135 | 172 | 18 | 120 |
| 155 | 20 | 110 | 173 | 16 | 115 |
| 156 | 46 | 260 | 174 | 44 | 90 |
| 157 | 58 | 165 | 175 | 94 | 245 |
| | | | 176 | 14 | 125 |
| | | | 177 | 18 | 80 |
| | | | 178 | 12 | 115 |
| | | | S 179 | 14 | 90 |

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June 27, 1972

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1250 - 505 Burrard Street,
Vancouver, B.C.

Lab 832G — Geochemical analysis for copper and zinc

Mesh Size: - 80 and - 100
Analytical Method: Atomic Absorption
Digestion Method: $HClO_4$ + $HNO_3$

| Sample Marked: | Copper ppm | Zinc ppm | Sample Marked: | Copper ppm | Zinc ppm |
|---|---|---|---|---|---|
| S 140 | 24 | 125 | S 158 | 20 | 110 |
| 141 | 14 | 205 | 159 | 36 | 95 |
| 142 | 26 | 95 | 160 | 32 | 115 |
| 143 | 64 | 70 | 161 | 18 | 100 |
| 144 | 14 | 45 | 162 | 26 | 180 |
| 145 | 24 | 95 | 163 | 24 | 115 |
| 146 rock | 136 | 130 | 164 | 56 | 135 |
| 147 | 40 | 120 | 165 | 18 | 75 |
| 148 | 14 | 35 | 166 | 20 | 135 |
| 149 rock | 22 | 65 | 167 | 20 | 90 |
| 150 | 14 | 55 | 168 | 26 | 120 |
| 151 | 20 | 100 | 169 rock | 74 | 95 |
| 152 | 16 | 55 | 170 | 275 | 170 |
| 153 | 20 | 130 | 171 | 28 | 120 |
| 154 | 14 | 135 | 172 | 18 | 120 |
| 155 | 20 | 110 | 173 | 16 | 115 |
| 156 | 46 | 260 | 174 | 44 | 90 |
| 157 | 58 | 165 | 175 | 94 | 245 |
| | | | 176 | 14 | 125 |
| | | | 177 | 18 | 80 |
| | | | 178 | 12 | 115 |
| | | | S 179 | 14 | 90 |

Yours truly,
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July 12, 1972

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Lab 844G — Geochemical analysis for copper and zinc

Mesh Size: - 80 and - 100
Analytical Method: Atomic Absorption
Digestion Method: $HClO_4 + HNO_3$

| Sample Marked: | | Copper ppm | Zinc ppm |
|---|---|---|---|
| S 180 | | 18 | 100 |
| 181 | | 20 | 56 |
| 182 | | 16 | 104 |
| 183 | | 12 | 58 |
| 184 | rock | 49 | 68 |
| 185 | | 8 | 92 |
| 186 | | 16 | 62 |
| 187 | rock | 22 | 124 |
| 188 | | 580 | 136 |
| 189 | | 75 | 114 |
| 190 | | 21 | 72 |
| 191 | | 52 | 82 |
| 192 | | 25 | 84 |
| 193 | | 28 | 106 |
| 194 | | 28 | 152 |
| 195 | rock | 18 | 72 |
| 196 | | 20 | 30 |
| 197 | | 13 | 14 |
| 198 | rock | 11 | 116 |
| 199 | | 17 | 122 |
| 200 | rock | 44 | 118 |
| 201 | | 23 | 90 |
| 202 | rock | 10 | 48 |
| 203 | rock | 8 | 48 |
| 204 | rock | 24 | 50 |
| 205 | rock | 11 | 52 |
| 206 | rock | 8 | 58 |
| 207 | rock | 11 | 40 |
| S 208 | rock | 6 | 48 |
| S 209 | rock | 7 | 60 |
| 210 | rock | 6 | 90 |
| 211 | rock | 8 | 66 |
| 212 | rock | 9 | 62 |
| 213 | | 8 | 80 |
| 214 | | 10 | 104 |
| 215 | rock | 11 | 70 |
| 216 | | 10 | 120 |
| 217 | rock | 5 | 92 |
| 218 | rock | 10 | 58 |
| 219 | rock | 128 | 130 |
| 220 | rock | 9 | 54 |
| 221 | rock | 11 | 68 |
| 222 | rock | 34 | 78 |
| 223 | rock | 34 | 62 |
| 224 | | 20 | 72 |
| 225 | | 26 | 66 |
| 226 | rock | 18 | 62 |
| 227 | | 22 | 66 |
| S 228 | | 20 | 60 |

Yours truly,
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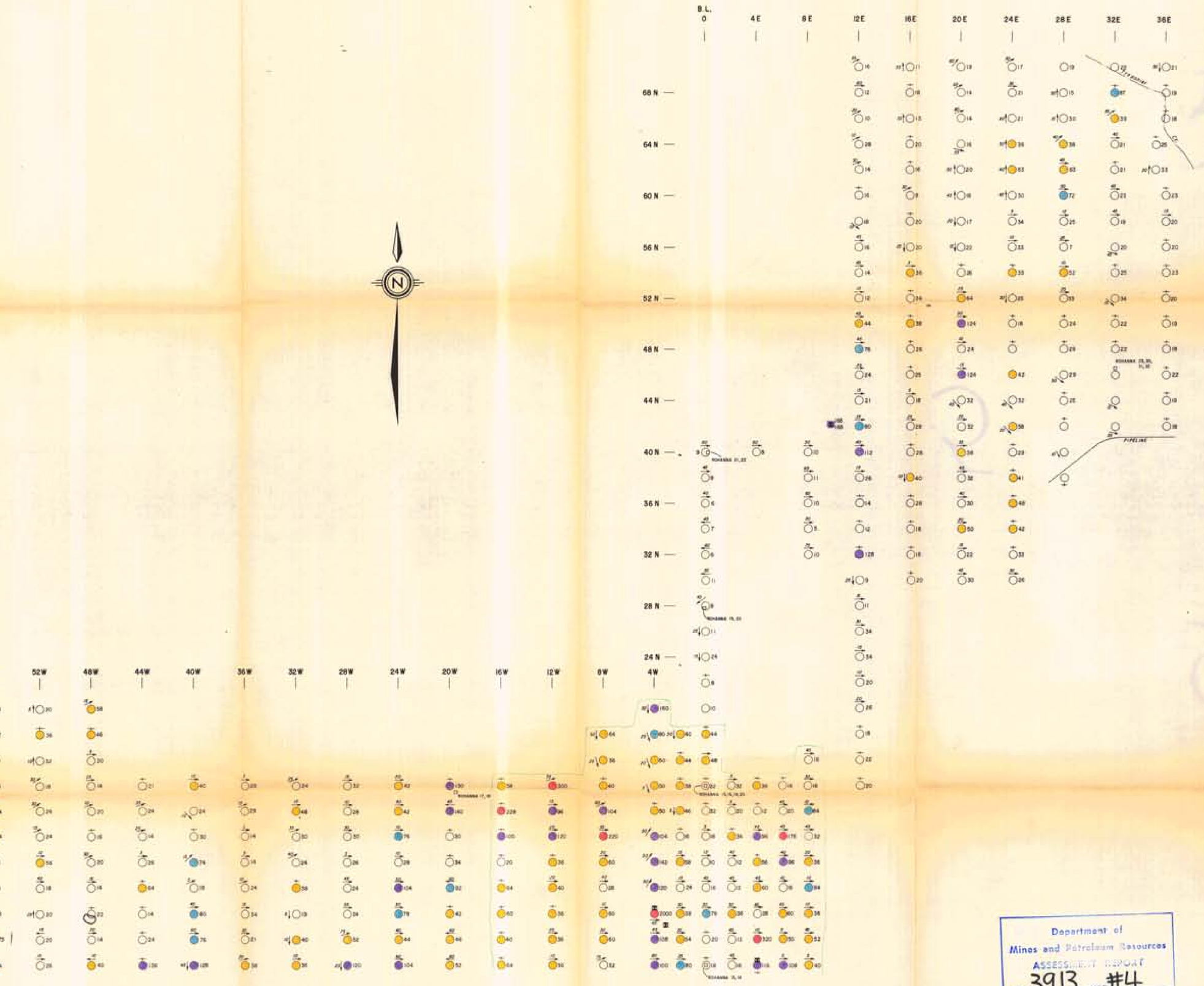
F.C. Burgess
Chief Assayer






LEGEND

- Sample location
- Downward slope of ground in degrees
- Flat ground
- Claim post
- Shaft or tunnel
- Pond

- 35 - 65 ppm
- 66 - 95 ppm
- 96 - 170 ppm
- ≥ 170 ppm



AGILIS EXPLORATION SERVICES LTD.

VEGA MINES LTD. (NPL)
PEACHLAND PROPERTY
OSOYOOS MINING DIVISION

# GEOCHEMICAL SURVEY
## COPPER (ppm)

SCALE IN FEET
400 0 400 800 1200

SEPTEMBER '72