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BULLION MOUNTAIN MINING LTD.

Report on Mining Properties

Keno Hill Area
Yukon Territory

by

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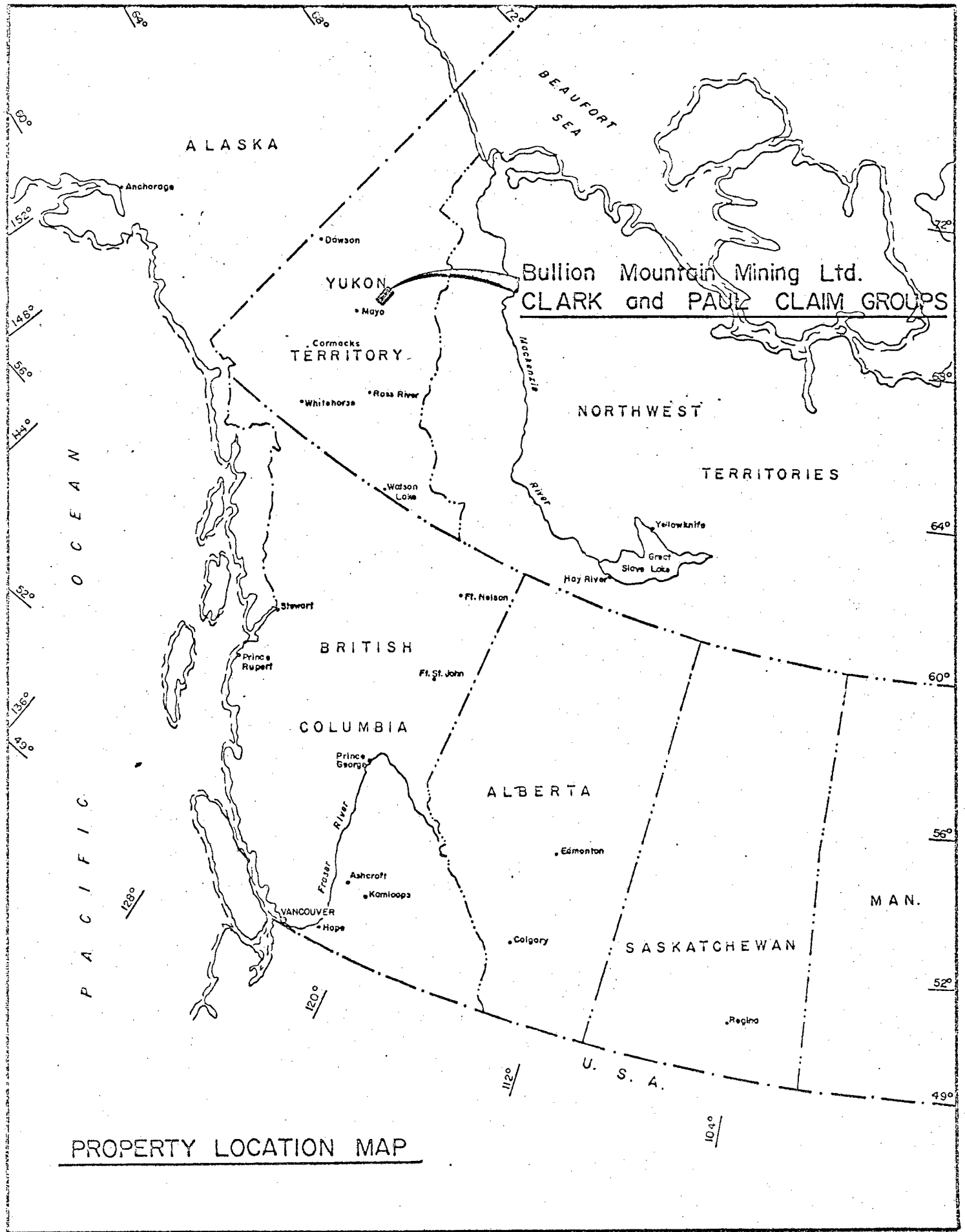
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PROPERTY LOCATION MAP

BULLION MOUNTAIN MINING LTD.

Mining Properties - Keno Hill Area
Yukon Territory

1. Introduction

This report describes the exploration work done on the company's properties during the period 1970-74. The writer has not had the opportunity of visiting the properties up to the time of writing. The report is based on a 3-month period of intensive study of company records; particularly drill logs, geological, geophysical and geochemical data, involving the preparation of detailed plans and sections.

Part I deals with the wholly owned Clark Property. Part II describes the Paul Claims held under option from Falconbridge Nickel Mines Ltd.

Valuable assistance in the preparation of this report has been rendered by Mr. George A. Whatley, President, Bullion Mountain Mining Ltd., in providing the essential data and by Mr. Morris M. Menzies, P.Eng. by constructive criticism of the text.

2. Summary - Part I

The Clark Property of Bullion Mountain Mining Ltd. is located 18 air miles N.N.E. of Keno Hill, Yukon Territory and covers an area of about 21 square miles.

It is accessible by 16 miles of tractor road from the all-weather road to McQuesten Lakes, or by a 50-mile helicopter flight from Mayo.

The claims were acquired outright in 1970 following a prospector's discovery of a lead-zinc gossan zone at an elevation of 3400 feet, 1½ miles south of Clark Lakes.

The Clark mineral deposit consists of lead-zinc-silver mineralization associated with pyrite and various carbonate minerals replacing fold structures in limestone where the folds have been transected by "vein faults" of the Keno Hill type.

Trenching, diamond drilling and underground work have provided information on which to estimate reserves of "drill indicated" and geologically "inferred" ore totalling 360,000 tons, having an average grade of 7.44 ounces silver per ton, 5.64% lead and 4.60% zinc.

Additional work is required to test the minability of the "drill-indicated" reserves, to confirm and extend the "inferred" reserves and to explore for new ore in a large area known to have the same favourable environment.

The cost of the proposed 1975 programme on the Clark Property is estimated at \$237,700.

3. Summary - Part II Paul Group

By expenditures totalling \$320,000 to August 31, 1979, Bullion Mountain Mining Ltd. can earn a 60% interest in the Paul Group.

These claims contain an old showing described in government reports. A limited drilling programme in 1974 has demonstrated a potential exceeding 2000 tons per vertical foot of material grading 12% zinc, 1.64% lead and 2.25 ounces of silver per ton.

The proposed programme for 1975 includes 5000 feet of diamond drilling at an estimated cost of \$106,500.

4. Combined Cost Summary

Clark	\$237,700
Paul	106,500
Joint Helicopter Support	<u>5,800</u>
Total	<u>\$350,000</u>

<u>CLAIM NAME</u>	<u>GRANT NUMBER</u>	<u>EXPIRY DATE</u>
Clark No. 1 to 3	Y6933-35	1 Jan 84
4	Y6936	1 Jan 83
5 to 7	Y26564-66	1 Jan 82
8 to 12	Y26567-71	1 Jan 83
13 to 16	Y26572-75	1 Jan 87
17 to 20	Y26576-79	1 Jan 83
21 to 26	Y26580-85	1 Jan 82
27 to 28	Y26586-87	1 Jan 86
29	Y26588	1 Jan 82
30	Y26589	1 Jan 86
31	Y26590	1 Jan 82
32	Y26591	1 Jan 86
33 to 35	Y26592-94	1 Jan 83
36 to 37	Y26595-96	1 Jan 88
38	Y26597	1 Jan 84
39 to 44	Y33455-60	1 Jan 83
45 to 46	Y33461-62	1 Jan 82
47 to 54	Y33463-70	1 Jan 83
55 to 70	Y33515-30	1 Jan 83
71 to 86	Y33531-46	1 Jan 83
Priority 1	Y14564	1 Jan 82
2	Y14565	1 Jan 81
3	Y14566	1 Jan 82
4	Y14567	1 Jan 81
5	Y14568	1 Jan 82
6	Y14569	1 Jan 81
7	Y14570	1 Jan 82
8	Y14571	1 Jan 81
9	Y14572	1 Jan 82
10	Y14573	1 Jan 81
11	Y14574	1 Jan 82
12	Y14575	1 Jan 81
13	Y14576	1 Jan 82
14	Y14577	1 Jan 81
15 to 26	Y14578-89	1 Jan 82
27 to 28	Y14590-91	1 Jan 81
29 to 64	Y14592-27	1 Jan 82
Quest 1 to 14	Y57264-77	1 Jan 81
33-112	Y57287	1 Jan 81
113-169	Y57358-14	1 Jan 81
170-175	Y57415-20	1 Jan 81
Judy No. 1 to 16	Y55835-50	1 Jan 82
Nat No. 1 to 2	Y55867-68	1 Jan 82
George No. 1 to 2	Y56230-31	1 Jan 82
Randy No. 1 to 4	Y56232-35	1 Jan 82
5	Y56236	1 Jan 81
6 to 8	Y56237-39	1 Jan 82
Spec No. 1 to 8	Y56240-47	1 Jan 80
Paul No. 1 to 8	Y56420-27	
Y.Q.M.L. No. 500 to 507		15 Aug 77

List supplied by Mining Recorder, Mayo February 19, 1975

BULLION MOUNTAIN MINING LTD.

PART I

1. Property

The Clark property of Bullion Mountain Mining Ltd. consists of 337 located mineral claims and 6 fractional claims. All are fully owned and all are in good standing to 1978 or later. (Table 1.)

2. Location and Access (Ref. N.T.S. 106 D/2, 106 D/3)
64°07' N, 135°00' W. El. 3400' A.S.L.

The Clark mineral deposit is located 18 miles N 35° E of Keno Hill and 48 air miles northeast of Mayo at an elevation of 3400 feet. Road access is from Elsa (8 miles west of Keno Hill) by 13 miles of all-weather road to McQuesten Lakes, thence by 15 miles of winter road in the McQuesten Lake-Scougale Creek Valley, to the Bullion Mountain campsite. An alternate high-level road intended for summer use, but requiring some repairs and maintenance, has been built from the McQuesten Lake road to the Clark workings with a branch road extending south to the optioned Paul showing.

3. Historical Summary

3.1 Exploration history of the Keno Hill District as described by Boyle (1) is summarized as follows:

- 1887 - earliest recorded prospecting.
- 1898-1903 - discoveries of placer gold in Mayo-Keno area.
- 1906-1915 - gold-tungsten placers at Dublin Gulch.
- 1906 - silver-lead discovery on Galena Creek (Silver King Veins) shipping ore 1913-19.
- 1919 - Keno Hill discoveries of high grade silver-lead ore.
- 1920-1921 - first shipments high grade ore.
- 1920-1941 - operations under Treadwell-Yukon Company.
- 1941-1946 - operations suspended.
- 1958 - properties acquired by United Keno Hill Mines Ltd.

"The Keno Hill-Galena Hill lodes are the richest silver deposits in Canada, and rank with the great silver-lead deposits of the world. These deposits up to 1960 produced more than 110 million ounces of silver, 353 million pounds of lead, 164 million pounds of zinc, and 1.8 million pounds of cadmium. In value this production amounted to more than \$139 million, in addition to which about two million dollars worth of gold has been won from the placers of the area.

Despite the fact that the deposits of the Keno Hill-Galena Hill area have been known and exploited since the turn of the century, the mineralized belt is far from being exhausted. It will long remain one of Canada's principal sources of silver, as well as of lead, zinc, cadmium, and some gold and tungsten."

(Boyle, p. 2)

During 1974 United Keno operated 6 mines to supply its concentrator at Elsa. 1973 production was 94,819 tons of ore grading 34.99 oz. silver, 4.04% lead and 0.92% zinc. 1974 production of silver is expected to be about 3 million ounces.

3.2 Bullion Mountain, Clark Deposit

- 1964 - stream sediment sampling by the Geological Survey of Canada (Map 27-1964) shows a single anomalous sample (20 p.p.m. heavy metals) at the confluence of a small stream with a creek draining northward to Clark Lakes. Prospecting lead to the discovery of the gossan outcrop of the Clark deposit.
- 1970-1972 - Bullion Mountain Mining Ltd. acquired the Clark Claims and did extensive work on them.
- 1972 - the property was optioned to Scurry-Rainbow Oil Limited.
- 1973 - Scurry-Rainbow drove a 1500 foot adit, did additional surface and underground drilling.
- 1974 - Scurry-Rainbow dropped option but retained 10% assessable interest in property.



4. Description of Work to Date

4.1 Access and Drill Roads - approximately 35 miles
Trenching - extensive bulldozer trenching in
permafrost in vicinity of mineral
showings and over geochemical/geo-
physical anomalies.

4.2 Diamond Drilling:

<u>Type</u>	<u>Core</u>	<u>Hole Nos.</u>	<u>No. Holes</u>	<u>Total Feet</u>
a) Winkie	7/8" (?)	H1-H23	23	1,202
b) B.M.M. Wireline	NQ	W1-W52	65	21,207
c) Underground	AQ	W54-W64	7	1,093
Total: Clark Property			95	23,502

4.3 Geochemical Survey

Line Miles	21
Soil Samples	659
Lead Determinations	648
Zinc Determinations	659

4.4 Geophysical Surveys

4.4.1 Induced Polarization Surveys
Area 1/2 mile x 1/4 mile

4.4.2 Gravity Survey
Line Miles = 4
Area about 1 mile x 2000'

4.4.3 Aeromagnetic Survey (Regional) G.S.C.

4.5 Underground Work: Adit at Portal Elevation 3302'

Crosscut to Ore Zone	830'
Drive along Ore Zone	630'
Drifting	40'
Total	1500'

5. Results of Work to Date

5.1 Mechanical

Bulldozer trenching of the discovery gossan zone over an area of 50 feet by 200 feet has revealed 3 steep vein faults cutting quartzite and containing various carbonates and galena. The underlying limestone is irregularly replaced between these faults with pyrite, galena, sphalerite, carbonates and their weathered equivalents. (Malcolm 4, p.5)

Drilling here has indicated a generally flat-lying zone immediately below the flat quartzite stratum, somewhat in the nature of a "Saddle Reef" with mineralization continuing down the north limb of an overturned anticlinal fold. Average thickness of the flat ore zone is about 35 feet.

Drilling and underground work to the west and southwest shows that the mineralization diverges from this contact and assumes an overall trend of S45°W as a series of bulges or lenses having individual strikes of S80°W to S60°W and very steep southeasterly dips. This pattern is tentatively attributed to drag folding associated with strong shear movements along the south upright limb of the anticlinal fold. Maximum pre-ore dilation was probably achieved in the area of intersection of such drag folds with regional N20°E to N40°E fault sets.

The 3300-level adit followed the general trend of the mineralization for 630 feet and crossed the zone diagonally at 0 + 120' to 0 + 165' and again at 0 + 500' to 0 + 530'. A few rounds were taken on the latter, but otherwise there was no attempt to drift in ore.

Of 6 flat holes drilled from the adit, W-59 and W-61 intersected ore, W-55 and W-58 did not test the ore horizon, W-64 (and possibly W-54) cut weak mineralization between lenses. The single inclined hole W-57 cut good mineralization 125 feet below the level. In brief, ore grade exposures and drill intersections have been obtained over a strike length of 675 feet and a vertical range of 330 feet, with both strike and dip extensions undetermined. True thickness of the steeply dipping ore is variable, but is conservatively estimated at an average of 13 feet.

5.2 Geochemical

The area is not ideally suited to geochemical techniques because of permafrost conditions, glacial deposits and irregular development of organic soils. Nevertheless the sampling to date has been useful in indicating the sub-outcrop areas of limestone versus quartzite and the broad trend of lead-zinc mineralization.

Soils over limestone have background values of about 80 p.p.m. zinc and 20 p.p.m. lead, whereas the background values over quartzite are about 40 p.p.m. zinc and 14 p.p.m. lead. However, the values over quartzite appear to vary with the thickness of quartzite overlying the limestone and also the location and frequency of fracturing in the quartzite which may have permitted upward "leakage" from the limestone.

Several modest soil anomalies about 1 mile west of the principal workings have been partially tested by bulldozer trenching and by diamond drilling.

Although this work encountered only minor lead-zinc mineralization, a detailed plot of the geochemical data and drill holes indicate^s that additional work here would be justified.

5.3 Geophysical

5.3.1 The Induced Polarization survey, though of limited coverage, has shown close correspondence with geological mapping in delineating the known limestone-quartzite contacts and has proven useful in outlining a probable area of thin quartzite (or no quartzite) cover southwest of the present workings. (Drill holes W-48 and W-49 have confirmed this.)

Interpretation of I.P. results with respect to valuable mineralization in this environment is difficult because of:

- a) Widespread graphite and pyrrhotite throughout the limestone, and

- b) The lack of sphalerite response to this method.

5.3.2 Magnetic Surveys

The aeromagnetic maps of the G.S.C. Nos. 3387G and 3394G show very low magnetic relief in the area under discussion (about 100 gammas, total field).

The relatively steep magnetic gradient in the southwest part of the property probably reflects the abundance of "greenstone" sills in map unit (1) compared with their apparent absence in map units (3) and (4) - (Plate 2).

The cause of the similar steep gradient in the north part of the property is unknown.

5.3.3 Gravity Survey

During May and June of 1972 a Bouger gravity survey was carried out on the Clark Property by personnel of Teledyne Exploration Ltd. and Airborne Geophysical Surveys, Ltd. with interpretation by R.B. Galeski, P.Geoph. (7) whose findings are quoted herewith:

" Conclusions and Recommendations

1. The large central positive ("A") of the area has not been adequately isolated because of the limited areal extent of the survey.
2. Veins of mineralized material known to exist in the area have not yielded readily recognizable gravity anomalies because:
 - (a) leaching has lowered the average density, or
 - (b) they are too thin to build up a sufficient mass concentration.
3. The "A" anomaly should be tested again with a vertical hole to 600'. Suggested location is at 5S on line 10W.

4. The "C" anomaly should be tested with a 45° slant hole to a drill depth of 150'. This could be done by drilling south from 12+50S on line 0 or by drilling north from 14S on line 0. "

It is the present writer's opinion that further correlation of geological and geochemical information with the gravity data should be attempted before selecting drill targets related to gravity features.

6. General Geology (Plate 3)

Regional geology has been described in the various G.S.C. publications listed under "References" on page 45 . G.S.C. Bulletin III contains an extensive bibliography of the relevant literature.

The immediate map area is underlain by folded sedimentary strata of Precambrian and/or Early Palaeozoic age. These strata have been intruded by granitic stocks, porphyry dikes and "greenstone" sills of Mesozoic age. The relationships are described by L. H. Green in G.S.C. Paper 58-4 entitled "McQuesten Lake and Scougale Creek Map - Areas" which is reproduced in full herewith. (It should be read with reference to Plate 3).

LEGEND

- JURASSIC OR LATER**
- MESOZOIC**
- 8 Quartz porphyry
 - 7 Granodiorite, minor granite (present in McQuesten Lake map-area only)
- PALAEZOIC**
- 6 Greenstone, G₁, serpentinized greenstone
- ORDOVICIAN TO DEVONIAN**
- 5 Massive cream-coloured dolomite, minor limestone and limestone conglomerate (present in Scougate Creek map-area only)
- PRECAMBRIAN**
- PALAEZOIC**
- YUKON GROUP (1-4)**
- 1 Peltilly quartzites, phyllitic quartzites, varicoloured slates and phyllites, minor limestone and chert
 - 2 Grey and blue-grey massive quartzite, minor graphitic phyllite, phyllitic quartzite, and quartz-muscovite schist; 2a, phyllitic quartzite, quartz-muscovite schist, minor graphitic phyllite and limestone
 - 3 Thinly bedded and phyllitic quartzites, graphitic phyllite, quartz-mica schist
- Heavily drift-covered area
- Geological boundary (defined, approximate, assumed)
- Bedding (direction of dip known, upper side of bed unknown)
- Fault (defined, approximate, assumed)
- Foliation (inclined or relation to bedding unknown)
- Lineament (visible from air photographs)
- Glacial striae
- Kame moraine
- Kame terraces and ice-marginal stream channels
- Limonite cemented conglomerate
- Mineral prospect or occurrence (lead, Pb; silver, Ag) Pb, Ag X

Geology by L. H. Green, 1957

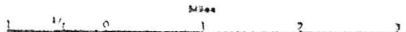
- Trail or portage
- Intermittent stream
- Contours (interval 500 feet)
- Height in feet above mean sea-level

Approximate magnetic declination 34° 29' East



MAP 8-1958
TO ACCOMPANY PAPER 58-4
McQUESTEN LAKE
YUKON TERRITORY

B.M.M. PLATE 3
BULLION MOUNTAIN MINING LTD.
Geology and Property Location



G. S. C. Paper 58-4

MCQUESTEN LAKE AND SCOUGALE CREEK MAP-AREAS
YUKON TERRITORY

The southern boundary of the map-areas is just over 6 miles north of the village of Keno Hill, which is connected with Mayo Landing by gravel roads. Float-equipped aircraft based at Dawson and Whitehorse can operate from the Stewart River at Mayo Landing. The trails shown originate at Keno Hill and are suitable for use by pack-horses.

Mountain groups separated by wide connecting valleys are characteristic of the area. These lie near the margin of the Yukon Plateau, and the upland surface is visible only in Davidson Range and near the western margin of McQuesten Lake map-area. The large open valleys were produced in Pleistocene time by ice flowing from the east towards the south and west. Conspicuous kame terraces and ice marginal stream channels are common along the sides of the major valleys at elevations up to 5,000 feet. Some of these features may indicate the highest elevation attained by the ice of the last advance, but many appear to represent periods when the level was relatively stable during the thinning of the ice.

Much of the area is underlain by a thick assemblage of quartzite, phyllitic quartzite, schist, graphitic phyllite, and minor limestone that has been tentatively assigned to the Yukon group (1, 2, 3 and 4). The rocks of this group are divided on the basis of lithology into map-units that are believed to be arranged in order of age, but repetitions of rock types within and between the map-units may be due to structural complexities.

In Patterson and Davidson Ranges, map-unit 1 is characterized by thinly bedded, grey to black quartzites, phyllitic quartzites and graphitic phyllites. Minor amounts of quartz-muscovite and quartz chlorite schist are also present. Greenstone sills (6, 6a) are far more numerous in unit 1 than in other map-units.

Map-unit 2 is well exposed in Patterson and Davidson Ranges. It is the most competent of the sedimentary rocks and forms most of the higher ridges. Individual beds of massive quartzite are up to 6 feet thick but are commonly on the order of 1 foot. In Davidson Range many of the quartzite bands over 1 foot thick may contain sufficient muscovite to produce partings 2 to 3 inches apart. The percentage of muscovite required to produce such a parting is extremely small and the development of the parting may indicate a difference in structural and metamorphic conditions in this part of the area rather than a fundamental difference in composition from the massive quartzites elsewhere.

The quartzite beds are separated by bands of graphitic phyllite most of which are only a few inches thick. In the southeast part of Scougale Creek map-area, map-unit 2a, consisting principally of phyllitic quartzite, has been differentiated from the massive quartzite of map-unit 2. Similar units might be differentiated in the northwest corner of the map-area if sufficient information were available. In Davidson Range, map-unit 2 appears to be interbedded with map-unit 1 rather than overlying it as in the southeast corner. The rocks (2) are very similar lithologically in the two areas, but map-unit 2 in Davidson Range may represent a lower zone. If so this lower zone extends southeast from East McQuesten River to Davidson Range and the upper in an arc from Mount Haldane to Mayo Lake and Patterson Range. Only the eastern end of the latter arc would lie within the map-areas.

Southwest of the zone of numerous limestone bodies (4), map-unit 3 consists of massive greenish grey to light buff quartzites, phyllitic quartzites, commonly chloritic, and lesser amounts of black, green, and maroon slates. The quartzites commonly contain grains of quartz up to 4 mm. in size but generally less than 1 mm., which contrast with the fine-grained matrix. Throughout most of the map-unit the original bedding appears to have been almost totally destroyed and only a crude foliation remains. Northwest of the limestone zone map-unit 3 is characterized by black graphitic phyllite, thin-bedded grey quartzite, and dark grey to black, thinly bedded chert, as well as minor amounts of chloritic phyllite and pebbly quartzite. No structural discordance was observed between the two lithologies. West of McQuesten Lake, the predominant rock types of map-unit 3 include massive pebbly quartzite, buff to green phyllitic quartzite, chloritic and graphitic phyllite and bands of grey limestone. The rocks in this area have been correlated with the remainder of map-unit 3 on the basis of lithology.

The limestones (4) display a wide range of colour including blue-grey, grey, black, and white. They commonly show some degree of banding produced by layers of contrasting colours a few millimetres apart. Individual limestone lenses commonly thin and disappear to be replaced by similar limestones in overlying or underlying horizons.

Rocks of map-unit 5 outcrop in the northeast corner of Scougale Creek map-area. The base of the unit consists of a limestone conglomerate with pebbles and boulders up to 1 foot, but commonly less than 1 inch, in diameter in a matrix of fine-grained, buff weathering, grey limestone. Most of the pebbles are limestone but a few are of phyllitic material similar to that of the underlying Yukon group. Aside from this conglomerate and a few bands of buff weathering intraformational conglomerate, the remainder of map-unit 5 is composed of light grey to white weath-

ering, cream-coloured dolomite. A small pod of limestone immediately to the north of Scougale Creek map-area yielded fossils of Silurian to Devonian age. Map-unit 5 is believed to coincide with the southern-most band of limestone mapped by Cockfield (1925, p. 6A) in the Beaver River area.

Numerous sill-like bodies of greenstone (6, 6a) have intruded map-unit 1 and to a lesser extent map-units 2 to 4. In the southeastern part of Scougale Creek map-area a few more basic sills (6a) have been altered to serpentine and carbonate. The original composition of the greenstones is believed to have been hornblende and plagioclase, much of which has subsequently been altered to secondary amphiboles, and albite and epidote respectively. The larger bodies show much of their original texture whereas the thinner bodies have developed a foliation in the secondary minerals parallel to the foliation of the enclosing sediments. Most of the greenstone bodies are lens-shaped, but a few in Davidson Range appear to be much more continuous.

The granodiorite (7) is medium grained and equigranular. Biotite is the common mafic mineral although lesser amounts of hornblende were observed. The small bodies on the south side of Davidson Range are somewhat finer grained and contain muscovite and minor hornblende rather than biotite.

A few thin sill-like bodies of quartz porphyry (8) are present. They consist of fine-grained quartz and alkali feldspar with phenocrysts of quartz and more rarely feldspar. In one case, where one of these intrusions could be followed for some distance, it was found alternately to parallel the bedding and to cut it at a low angle.

The largest structural feature in the map-area is a big isoclinal fold, outlined by the quartzites (2) and the greenstones (6), in the centre of Davidson Range. The axis of this fold has a bearing of S55°W and plunges 20°SW. In addition to this major feature a number of smaller features suggest that the area has had a complex structural history. Several of the larger greenstone bodies terminate in isoclinal folds and it has been possible to trace the bedding around the noses of these structures. Outstanding examples of these structures are shown by the greenstone sills exposed in the cirque approximately 2 miles northwest of Mount Patterson and the large greenstone sill east of the lake on Cameron Gulch of Scougale Creek. Small complex isoclinal folds are common in the massive quartzites (2). In many of these folds thinner beds of quartzite, commonly 2 to 3 inches thick, have been deformed plastically into isoclinal folds whose axial planes are parallel to the bedding. In folds of this type individual beds may be repeated many times in a single outcrop. The axes of these folds plunge

southwest in Davidson Range and southeast in Patterson Range. In addition, the rocks of map-units 1 to 3 show a strong foliation. This foliation is frequently parallel to the bedding but in many cases it was observed to cross the bedding at an angle thus cutting the original beds into discontinuous segments. This foliation has also been developed in some of the thinner greenstone sills. Both the minor folds and the foliation are indicative of extensive movement parallel to the bedding of the type that might be expected in areas that have undergone complex isoclinal folding. Complex structures might account for apparent thickening of map-units and repetitions of similar lithologies.

In addition to the above features lineations, shown by wrinkles on the bedding planes and crumples in the less competent members, are common. These commonly plunge to the southeast and they may be related to the large open anticline that has been mapped (Bostock, 1947; Green, 1957; Kindle, 1955) to the south of the map-areas.

In the northeastern part of Scougale Creek map-area, map-unit 1 is believed to have been thrust upon map-units 3 and 4. In the northwestern part of McQuesten Lake map-area, map-unit 3 appears to overlie map-unit 2 conformably. However, a great deal of local deformation was observed near this contact and the possibility of a major fault can not be excluded.

Numerous occurrences of iron-cemented conglomerate are shown on the map. The conglomerate contains pebbles and boulders of the adjacent country rock in a limonitic matrix. These bodies are commonly of very local extent and few exceed 200 feet in diameter. Exceptions to this are found in Philip Gulch of Scougale Creek and the creek southwest of Mount Cameron where extensive deposits of conglomerate have formed in the creek bottom. The source of the iron was not observed for any of the conglomerates but the location of most of the bodies near the base of a slope suggests that they were formed by solutions carrying iron derived by the oxidation of iron sulphides higher up the slopes. The sulphides may be present as lenses or disseminated through the country rock.

A number of showings containing silver, lead, and zinc have been investigated in Davidson Range. The most important of these are on Stand-to Hill, Rambier Hill, and at the head of Alverson Gulch off Scougale Creek. Little work has been done on any of these properties since they were described by Cockfield (1921, pp. 4A-6A). All are mineralized with galena, sphalerite, and minor chalcopyrite. The gangue is siderite, commonly altered to limonite and manganese oxides, and minor quartz. The silver content of the ores from these properties appears to be lower than those of Keno and Galena Hills. The highest silver to lead ratio (Paul Showing)

obtained by Cockfield (1922, p. 6A) in Davidson Range was 1.33 oz. of silver per 1 per cent of lead as contrasted to assays from Keno and Galena Hills which are commonly at least 3 to 4 oz. of silver per 1 per cent lead. This difference in the silver content may be related to the fact that in Davidson Range most of the copper occurs as chalcopyrite whereas in the Keno and Galena Hill areas it occurs as argentiferous tetrahedrite or freibergite.

The massive quartzites of map-unit 2 and the adjacent sediments are probably the most likely rocks to contain mineral deposits. The quartzites of Davidson Range have been prospected in the past, but there is very little evidence of prospecting elsewhere within the map-area.

REFERENCES

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Cockfield, W. E.

- 1922: Silver-Lead Deposits of Davidson Mountains, Mayo District, Yukon; Geol. Surv., Canada, Sum. Rept. 1921, pt. A, pp. 1A-6A.
- 1925: Upper Beaver River Area, Mayo District, Yukon; Geol. Surv., Canada, Sum. Rept. 1924, pt. A pp. 1A - 18A.

Green, L. H.

- 1957: Mayo Lake, Yukon Territory; Geol. Surv., Canada, Map 5-1956.

Kindle, E. D.

- 1955: Keno Hill, Yukon Territory; Geol. Surv., Canada, Paper 55-12 (prelim. map).

NOTE: The Clark Showing is not mentioned in the foregoing as it was not discovered until 1968.

7. Local Geology

Reference: Plate 3, parts of G.S.C. Maps 1268A
and 1269A
Company Maps: 1 inch to 400 feet and
1 inch to 50 feet.

7.1 General

Outcrop mapping and drilling data have been supplemented by air photo studies. Geochemical and geophysical surveys have aided the structural interpretation, mainly by providing the approximate location of the sub-overburden trace of the limestone-quartzite contact in the northern part of the property.

7.2 Lithology

The various rock types shown on the property maps and described in drill logs are as follows:

(Upper) Quartzite Member - (Green, Map Unit 3)

- i) Quartzite, light to dark, fine to gritty.
- ii) Chlorite schist-local disseminated magnetic.
- iii) Sericite schist and biotite-sericite schist.
- iv) Intermediate types.

(Lower) Limestone - (Green, Map Unit 4)

- i) Massive black limestone
- ii) Graphitic limestone breccia - usually with disseminated pyrrhotite.
- iii) Graphitic schist.

7.3 Lead-Zinc Mineralization

7.3.1 "Vein Fault" Fillings:

Malcolm (3) describes three "vein faults" cutting quartzite in the stripped area of the mineralized zone. These strike N20E to N30E, are from 2 to 20 feet wide and are filled with carbonates and galena. These answer the description of the vein faults in which the Keno Hill-Galena Hill ores occur.

It is understood that there has been no sustained attempt to explore for these "vein faults" in quartzite terrain on the Bullion Mountain property to date.

7.3.2 Replacements in Limestone

All of the ore which has been indicated on the property to date consists of irregular replacement of "graphitic limestone breccia" by sphalerite and galena, various carbonate minerals such as calcite, siderite and rodochrosite; with varying amounts of pyrite. The generally uniform silver-lead ratios of 1.2:1 to 1.4:1 suggest that most of the silver is bound up with the galena. Small amounts of chalcopyrite have also been noted.

7.4 Structure

Reference to the 50 scale plans and sections shows the ore-bearing limestone to be flanked by quartzite in an overturned asymmetrical anticlinal fold. The quartzite-limestone contact of the south limb dips southerly at 35 degrees while that of the north (overturned) limb dips about 60 degrees southerly.

Geochemical and geophysical evidence suggest additional close folding to the south of the overturned anticline with the probability of a second anticlinal axis within 1500 feet of the first. The fold axes appear to have a general strike of about N70°W. The indirect evidence provided by drag-folds and shear zones suggests that the axial planes dip 70° to 80° southward.

The limestones have yielded incompetently by the development of intricate crumpling, drag-folding and brecciation. The brittle quartzites have been intensely fractured, at least near the limestone contact, and exhibit angular segmented dislocations.

Numerous shear zones are reported in the drill logs but are difficult to correlate.

Fault F-1, a normal fault, striking N20°E, appears to have dropped the fold crest down to the east a vertical distance of about 50 feet and to have produced left hand separation of the outcrop trace in the order of 200 feet.

Fault F-2 appears to have had a similar but smaller effect.

7.5 Structural Control of Ore Deposition

Sections 300E to 500E show the near-surface ore-body to occupy the crest of the overturned anticline, immediately below the quartzite, and in the vicinity of a set of 5 or more northeasterly striking faults.

Sections 250E to 150E show the ore at or near the same contact on the north limb.

Sections 100E to 200W show the ore to be migrating rapidly toward the contact on the south limb of the anticline in a series of sinuous lenses. Reference to the 50 scale plans shows this migratory trend to coincide approximately with one of the "vein-faults" exposed by trenching at 0 + 150E and striking S30°W. This fault has not been identified in underground mapping, at least as a through-going fault, and may in fact consist of a series of discontinuous tension fractures or, alternatively, it may have been closed by continued post-mineral compression.

Thus, it appears that the emplacement of the known ore was controlled by the intersection of north-easterly-striking fracture sets with low pressure (dilatant) areas developed at fold crests and in drag-folds within the limestone. It is thereby inferred that the "vein-fault" - type fractures were the conduits to suitable depositional sites in the limestone.

The foregoing hypothesis is borrowed from Boyle's explanation for the emplacement of the Keno Hill ores (G.S.C. Bulletin III) with some modifications. The Keno Hill orebodies achieve their maximum development in the thick-bedded quartzites, whereas the known ore of the Bullion Mountain property is largely confined to limestone which is practically absent in the Keno Hill workings.

7.6 Ore Genesis

Reference is again made to Boyle (p. 214-220) for the development of a reasonable working hypothesis

viz; that the sediments (in this case the carbonaceous limestones) were themselves the source of the metals and that these migrated to low pressure areas by diffusion, during the Cretaceous orogeny. Boyle's hypothesis may not have universal acceptance but is preferred to one involving a direct magmatic source for the metals.

If it can be assumed that the soil content of zinc and lead on the Bullion Mountain property is equivalent to that in the underlying rock, then it can be calculated that a cubic mile of the carbonaceous limestone would contain about 1.5 million tons of zinc and about 0.5 million tons of lead. It is therefore postulated that the Bullion Mountain lead-zinc-silver orebodies derived their metals from the carbonaceous (now graphitic) limestones in their immediate vicinity.

8. Ore Reserves

Two categories have been calculated, "Drill Indicated" and "Inferred", totalling some 360,000 short tons. The "Drill Indicated" reserves will require additional definition drilling and (in part) underground development before they can be classed as "Proven Reserves".

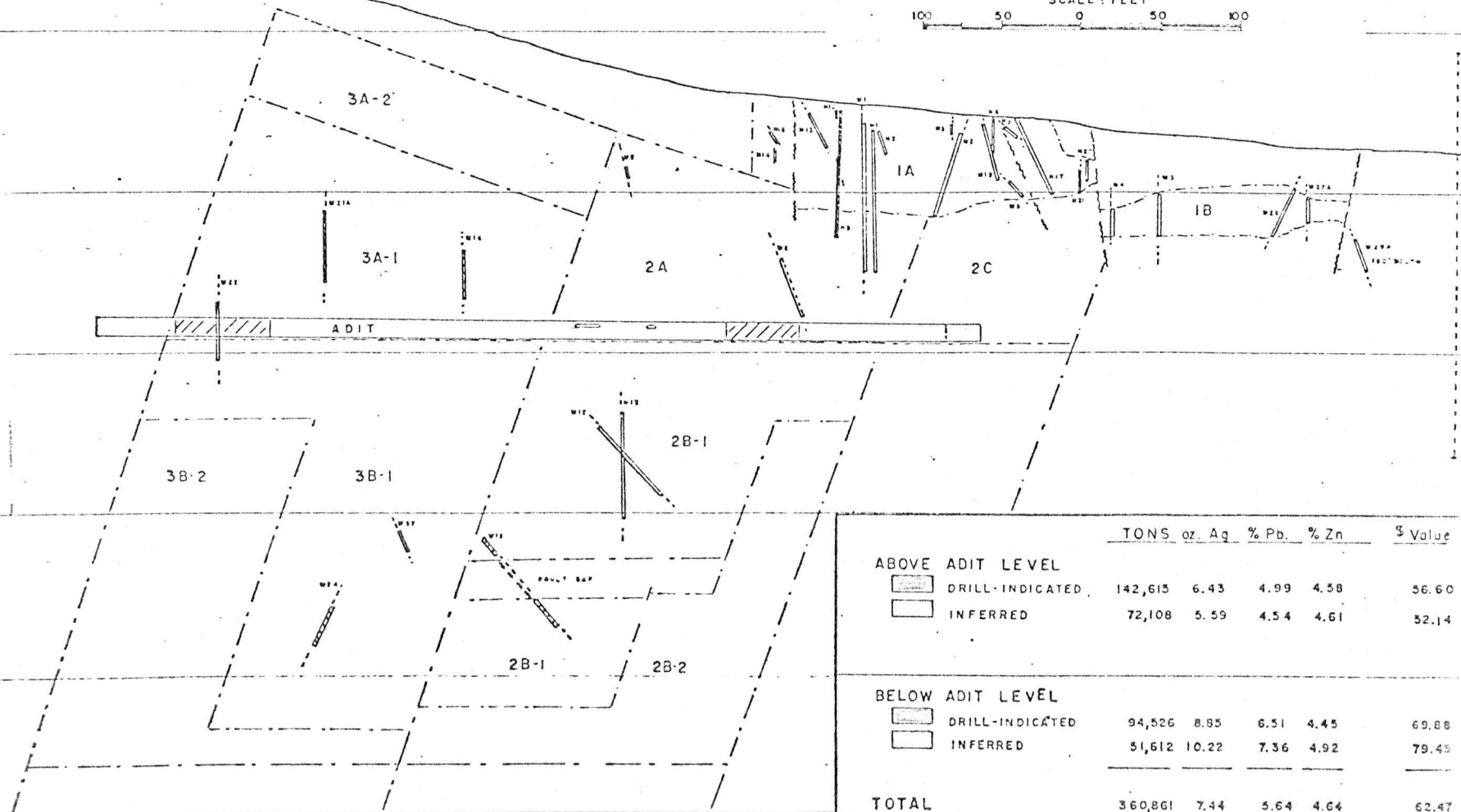
The "Inferred Reserves" are considered to represent reasonable extensions of known ore occurrences based on interpretation of geological structure.

The mechanics of calculating tonnages and average grade are demonstrated in the accompanying tables numbered 2 - 12.

BULLION MOUNTAIN MINING LTD.

ORE RESERVE MAP

SCALE: FEET
100 50 0 50 100



	TONS	oz. Ag	% Pb.	% Zn	\$ Value
ABOVE ADIT LEVEL					
DRILL-INDICATED	142,615	6.43	4.99	4.38	56.60
INFERRED	72,108	5.59	4.54	4.61	52.14
BELOW ADIT LEVEL					
DRILL-INDICATED	94,526	8.95	6.51	4.45	69.88
INFERRED	51,612	10.22	7.36	4.92	79.45
TOTAL	360,861	7.44	5.64	4.64	62.47

BULLION MOUNTAIN MINING LTD.
Grade Calculations
Surface Ore Zone - Block No. 1A

Section	Hole	From	To	Feet	Silver		Lead		Zinc		
					Oz/Ton	Oz.Ft.	%	% x Ft.	%	% x Ft.	
155E	H-13	0	31.5	31.5	0.54	17.01	0.87	27.40	4.25	133.87	
175E	H-12	0	8.0	8.0	5.58	44.64	5.85	46.80	10.56	84.48	
175E	H-8	0	29.0	29.0	3.92	113.68	3.73	108.17	2.96	85.84	
175E	H-9	7	61.	54.0	2.90	156.60	2.91	156.14	5.83	314.82	
160E	Trench	-	-	14.	1.81	25.34	1.70	23.8	2.91	40.74	(Av. of 2)
190E	Trench	-	-	31	10.68	331.08	9.40	291.4	4.60	142.60	(Av. of 2)
190E	W-1	0	45	45	4.00	180.00	6.00	270.00	7.08	318.60	To 3400' El.
190E	H-1	0	41	41	1.20	49.20	1.52	62.32	4.55	186.55	To 3400' El.
190E	H-2	0	22	22	2.05	45.10	2.43	53.46	5.19	114.18	
250E	H-5	0	6.5	6.5	0.72	4.68	1.15	7.46	1.72	11.18	
250E	H-3	0	5.5	5.5	1.36	7.48	2.15	11.82	4.56	25.08	
280E	W-2	26.5	70.0	43.5	1.52	66.12	1.10	47.85	3.36	146.16	
304E	H-6	0	27.0	27.0	6.49	175.30	5.00	135.15	3.93	106.11	
300E	Trench	0	13	13.0	15.70	204.10	15.50	201.50	6.40	83.20	(Sum of 2)
304E	H-19	0	21	21	1.43	30.06	1.14	24.05	3.33	69.92	
310E	H-7	10	21	11	3.50	38.50	2.70	29.70	2.00	22.00	
310E	W-9	42	56.5	14.5	11.5	166.75	9.14	132.53	6.69	97.00	
32SE	H-17	34	79	45	3.52	158.60	3.31	149.15	7.26	326.95	
338E	H-20	10	25	15	2.82	42.30	2.50	37.50	2.00	30.00	
352E	H-21	23	41	18	6.77	121.80	6.50	116.94	6.30	113.38	
Totals	20		495.5		1978.34		1934.14		2452.66		
Average			24.77		3.992		3.903		4.950		

Table 2

BULLION MOUNTAIN MINING LTD.

Grade Calculations
Flat Ore Zone - Block No. 1 B

Section	Hole	From	To	Feet	Silver		Lead		Zinc	
					Oz/Ton	Oz.Ft.	%	% x Ft.	%	% x Ft.
400E	W-3	35.5	63.5	28	1.25	34.96	1.19	33.32	7.08	198.13
410E	W-4	82.0	98.5	16.5	30.82	508.65	17.28	285.10	7.71	127.20
460E	W-28	30	64	34	1.50	51.04	1.51	51.32	7.27	247.24
480E	W-27A	33	46	13	2.60	33.80	2.00	26.00	5.40	70.20
Totals	4			91.5		628.45		395.74		642.77
Average				22.9	6.87		4.32		7.02	

Table 3

BULLION MOUNTAIN MINING LTD.

Grade Calculations

Block 2

Block	Hole	From	To	Feet	Silver		Lead		Zinc		Estimate True Width
					Oz/Ton	Oz.Ft.	%	% x Ft.	%	% x Ft.	
2A	W-8	53	58	5.0	8.88	44.40	7.95	39.75	4.80	24.000	5.0'
2A	W-59	25	58	33.0	1.31	43.23	1.52	50.16	5.22	172.26	10.0'
2A	W-61	21	30	9.0	0.78	7.02	1.01	9.09	7.37	66.33	9.0'
2A	Drift			35.2	3.35	117.916	2.73	96.318	2.49	87,636	8.0'
2A	W-6	169.5	215	15.1	0.14	2.10	0.32	4.80	1.52	22.80	15'
2A	W-1	58	91.5	33.5	3.66	122.61	5.70	190.95	5.52	184.92	30'
2A	H-1	54	90	36	0.47	16.84	0.73	26.48	4.48	161.16	
				166.7'		354.116		417.548		719.106	
					2.12		2.50		4.31		\$31.60/13'
2B	W-15	206	272	66	2.39	157.98	2.28	150.72	1.68	111.00	
2B	W-13	a)	545	555	10	3.92	39.20	3.55	35.50	0.80	8.00
		b)	595	620	25	2.89	72.25	2.89	72.25	3.39	84.75
2B	W-12	364	424	60	3.88	233.20	4.08	244.80	3.85	231.20	
				161	3.12	502.63	3.12	503.27	2.70	434.95	\$31.16
Combined				327.7	2.61	856.746	2.81	920.818	3.52	1154.056	\$31.40

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Table 4

BULLION MOUNTAIN MINING LTD.

Grade Calculations

Blocks 3A, 3B

Block	Hole	From	To	Feet	Silver		Lead		Zinc		Estimated True Width
					Oz/Ton	Oz. Ft.	%	% x Ft.	%	% x Ft.	
<u>3A</u>											
00	W-16	140	170	30	9.62	288.60	8.77	263.10	6.30	189.00	15'
50W	W21-A	164	211	47	23.38	1098.92	16.66	782.92	6.50	305.8	20'
100W	W-22	252	290	38	20.93	795.68	13.7	520.48	6.44	244.8	9'
100W	Drift	Total Samples		65	6.79	441.58	4.76	309.54	3.42	222.42	6.7'
Totals				180		2624.78		1876.04		962.02	
Average				45	14.58		10.42		5.34		13'
<u>3B</u>											
00	W-57	138	154.7	16.7	3.72	62.22	4.55	75.97	11.06	184.65	12'
00	W-24	460	486	26	25.41	660.64	16.22	421.8	5.1	132.6	14'
Totals				42.7		722.86		497.77		317.25	
Average				21.3	16.92		11.66		7.43		13'

Table 5

BULLION MOUNTAIN MINING LTD.

Tonnage Calculations

Surface Ore Zones

Block No. 1A and 1B

Block 1A	Area Indicated	Ore Area Inferred	From Sect.	To Sect.	Length Feet	Tons Indicated	Tons Inferred	Total Tons
175E	800 sq. '	- sq. '	155E	190E	35	2,800	--	2,800
200E	2,400	3,900	190E	225E	35	8,400	13,650	22,050
250E	4,400	4,400	225E	260E	35	15,400	15,400	30,800
280E	4,800	2,400	260E	290E	30	14,400	7,200	21,600
300E	2,400	2,100	290E	310E	20	4,800	4,200	9,000
320E	3,040	1,950	310E	330E	20	6,080	3,900	9,980
340E	2,720	1,500	330E	350E	20	5,440	3,000	8,440
360E	2,000	1,600	350E	370E	20	4,000	3,200	7,200
Sub-Totals						61,320	50,550	111,870
						(Before Adjustments f=10)		
Block 1B								
400E	4,500	1,800	370E	430E	60	27,000	10,800	37,800
440E	480	600	430E	450E	20	960	1,200	2,160
460E	1,000	540	450E	490E	40	4,000	2,160	6,160
Sub-Totals						31,960	14,160	46,120
(Before Adjustments) Total Surface Mining						93,280	64,710	157,990

Silver 4.44 oz.
 Lead 3.97%
 Zinc 5.27%

Averages calculated by weighting all intersections in the zone by sample length; not calculated for individual sections; i.e. not weighted by tonnage blocks.

1
2
3
4

BULLION MOUNTAIN MINING LTD.

Tonnage Calculations -
Underground

A: Above Adit B: Below Adit

Block No.	Length Feet	Height Feet	Width Feet	Volume Cubic Feet	Density Factor (f)	Short Tons		
						Indicated	Inferred	Total
2A	210	100	13	273,000	9.3	29,355		
3A-1	250	120	13	390,000	8.05	48,447		
3A-2	250	50	13	162,500	8.05		20,186	
2C	120	80	13	124,800	9.3		13,420	
Sub-Totals						77,802	33,606	111,408
2B-1	210	50						
2B-1	160	110						
2B-1	120	65	13	466,700	9.3	50,182		
2B-2	210	30						
	90	65						
	50	100	13	22,950	9.3		23,973	
3B-1	250	50						
	130	190	13	483,600	8.05	60,074		
3B-2	120	220						
	130	20	13	377,000	8.05		46,832	
Sub-Totals						110,256	70,805	181,061
(Before Adjustments) Underground Totals						188,058	104,411	292,469

BULLION MOUNTAIN MINING LTD.
Adjustments to Ore Reserve Calculations

Block	Tons	Calculated Grade			Continuity Confidence Factor	Dilution Allowance 15°/ø	Adjusted Grade				Net Value \$
		Oz. Ag.	% Pb.	% Zn			Tons	Oz. Ag.	% Pb.	% Zn.	
	111,870	3.99	3.90	4.95	x .7	x 1.15	90,055	3.47	3.39	4.30	39.37
	46,120	6.87	4.32	7.02	x .6	x 1.15	31,823	5.97	3.76	6.10	57.21
	29,355	2.12	2.50	4.31	x .7	x 1.15	26,630	1.84	2.17	3.75	27.47
-1	50,182	3.12	3.12	2.70	x .8	x 1.15	46,167	2.71	2.71	2.35	27.08
-2	23,973	3.12	3.12	2.70	x .7	x 1.15	19,298	2.71	2.71	2.35	27.08
-1	48,447	14.58	10.42	5.34	x .8	x 1.15	44,571	12.68	9.06	4.64	92.81
-2	20,186	14.58	10.42	5.34	x .6	x 1.15	13,928	12.68	9.06	4.64	92.81
-1	60,074	16.92	11.66	7.43	x .7	x 1.15	48,359	14.71	10.14	6.46	110.77
-2	46,832	16.92	11.66	7.43	x .6	x 1.15	32,314	14.71	10.14	6.46	110.77
	13,420	4.00	4.00	5.00	x .5	x 1.15	7,716	3.48	3.48	4.35	39.84
Total	450,459	8.702	6.561	5.399			360,861	7.44	5.64	4.60	\$62.47
											\$73.03

* Net Value = Estimated Net Recoverable Value

Taking Silver @ \$4.00 per ounce; Lead @ 13½ lb.; Zinc .19¢ lb.

BULLION MOUNTAIN MINING LTD.

Adjusted Drill Indicated Reserves
(Averaging Calculations)

Location	Reserve Block	Net Tons	Adjusted Grade						Net Value Ton
			Silver Oz.	Silver Oz x Tons	Lead %	Lead % x Tons	Zinc %	Zinc % x Tons	
Above	1A	49,362	3.47	171,286	3.39	167,337	4.30	212,256	\$39.37
Adit	1B	22,052	5.97	131,650	3.76	82,915	6.10	134,517	\$57.21
Level	2A	26,630	1.84	48,999	2.17	57,787	3.75	99,862	\$27.47
	3A-1	44,571	12.68	565,160	9.06	403,813	4.64	206,809	\$92.81
Sub-Totals Average		142,615	6.43	917,075	4.99	711,852	4.58	653,444	\$56.60
Below	2B-1	46,167	2.71	125,112	2.71	125,112	2.35	108,492	\$27.08
Adit	3B-1	48,359	14.71	711,361	10.14	490,360	6.46	312,399	\$110.77
Level									
Sub-Totals Average		94,526	8.85	836,473	6.51	615,472	4.45	420,891	\$69.88
Combined		237,141	7.39		5.60		4.53		\$61.89

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Table 9

BULLION MOUNTAIN MINING LTD.

Adjusted Inferred Reserves
(Averaging Calculations)

Location	Reserve Block	Net Tons	Adjusted Grade						Net Value Ton
			Silver Oz.	Silver Oz. x Tons	Lead %	Lead % x Tons	Zinc %	Zinc % x Tons	
Above	1A	40,693	3.47	141,204	3.39	137,949	4.30	174,980	\$39.37
Adit	1B	9,771	5.97	58,333	3.76	36,739	6.10	59,603	\$57.21
Level	2C	7,716	3.48	26,851	3.48	26,851	4.35	33,564	\$39.84
	3A-2	13,928	12.68	176,607	9.06	126,187	4.64	64,626	\$92.81
Sub-Totals Average		72,108	5.59	402,995	4.54	327,726	4.61	332,773	
Below									
Adit	2B-2	19,298	2.71	52,297	2.71	52,297	2.35	45,350	\$27.08
Level	3B-2	32,314	14.71	475,339	10.14	327,664	6.46	208,748	\$110.77
Sub-Totals Average		51,612	10.22	527,636	7.36	379,961	4.92	254,098	\$79.45
COMBINED		123,720	7.52		5.72		4.74		\$63.54

BULLION MOUNTAIN MINING LTD.

Ore Reserves Categories

Cut-Off Value	Above Adit Level				Value	Below Adit Level				Total		
	Tons	Silver	Lead	Zinc		Tons	Silver	Lead	Zinc	Value	Tons	\$/Ton
<u>I Drill Indicated</u>												
\$25.00	142,615	6.43	4.99	4.58	\$56.60	94,526	8.85	6.51	4.45	\$69.88	237,141	\$61.89
\$35.00	115,985	7.48	5.64	4.77	63.27	48,359	14.71	10.14	6.46	110.77	164,344	77.25
\$50.00	66,623	10.46	7.30	5.12	81.00	48,359	14.71	10.14	6.46	110.77	114,982	93.52
<u>II Inferred</u>												
\$25.00	72,108	5.59	4.54	4.61	52.14	51,612	10.22	7.36	4.92	79.45	123,720	63.54
\$35.00	72,108	5.59	4.54	4.61	52.14	32,314	14.71	10.14	6.46	110.77	104,422	70.28
\$50.00	23,699	9.91	6.87	5.24	78.10	32,314	14.71	10.14	6.46	110.77	56,013	96.95
<u>III Combined</u>												
\$25.00	214,723	6.15	4.84	4.59	55.11	146,138	9.33	6.81	4.61	73.22	360,861	62.44
\$35.00	188,093	6.75	5.21	4.71	58.96	80,673	14.71	10.14	6.46	110.77	268,766	74.51
\$50.00	90,322	10.31	7.19	5.15	80.22	80,673	14.71	10.14	6.46	110.77	170,995	94.63

BULLION MOUNTAIN MINING LTD.

Ore Reserve Summary

	<u>Tons</u>	<u>Ag.</u>	<u>Pb.</u>	<u>Zn.</u>	<u>Value *</u>
Gross	450,459	8.70	6.56	5.46	\$73.03
Net**	360,861	7.44	5.64	4.60	\$62.47
<u>Drill Indicated</u>					
Above Adit Level	142,615	6.43	4.99	4.58	\$56.60
Below Adit Level	94,526	8.85	6.51	4.45	\$69.88
<u>Inferred</u>					
Above Adit Level	72,108	5.59	4.54	4.61	\$52.14
Below Adit Level	51,612	10.22	7.36	4.92	\$79.45
Total Net	360,861	7.44	5.64	4.60	\$62.47

*Value Net Recoverable Value per Ton based on Silver @ \$4.00 per oz., Lead @ 13½¢ lb., Zinc @ 19¢ lb.

** Net after applying various confidence factors to individual blocks plus overall 15% dilution factor.

9. Exploration Procedures

Future exploration should be guided by experience to date and by the hypothesis developed for structural control. However, because folding in the limestones appears to be ubiquitous, the search is narrowed down to identifying those fractures which show evidence of containing or transporting lead-zinc mineralization. At present, the northeasterly-striking fractures appear to be most favourable but fractures of other orientations should not be overlooked.

Thus the general procedure should be:

- a) identifying air photo lineaments on the ground,
- b) searching along them by hand prospecting for visible metallic mineralization,
- c) doing localized, detailed soil and rock geochemistry,
- d) checking selected areas with detailed gravity surveys and,
- f) trenching and/or percussion drill sampling,
- g) diamond drilling.

10. Recommendations

Future work should have two major objectives:

- a) development: confirming mineable tonnage and grade of known mineralization and extending ore zones,
- b) exploration: for new occurrences.

10.1 Development: 1975 (See Tables 13A, 13B)

a)	11 surface drill holes totalling	1870'	
	follow-up allowance	<u>1500'</u>	3370'
b)	14 underground drill holes totalling	1510'	
	follow-up allowance	<u>1000'</u>	2510'
	Total Development Drilling		<u>5880'</u>
	(Say 6000')		

- c) Contingent on results of a) and b) consider 500 feet of development drifting to confirm drilling results to provide new drill stations and to provide material for metallurgical testing and possible revenue.

10.2 Explorations: 1975

- a) Geological mapping 3-4 weeks,
- b) Concurrent detailed prospecting - 2 men for 6-8 weeks,
- c) Detailed selective soil and rock sampling,
- d) Bulldozer trenching,
- e) Diamond drilling if warranted; say 2000 feet.

11.

BULLION MOUNTAIN MINING LTD.

Cost Estimate - Part I

Clark Property - 1975

Diamond Drilling:

6000 feet @ \$15.00	\$90,000	
Mobilization	4,000	
Core Storage, assaying	<u>3,000</u>	\$ 97,000

Roads*, Trenching:

40 days @ \$400.00	16,000	16,000
--------------------	--------	--------

*Federal assistance to be applied for.

Camp:

Installation	5,000	
Maintenance and Supply	<u>7,500</u>	12,500

Wages and Fees:

Geologist 90 days @ \$75.00	6,750	
Cook 90 days @ \$50.00	4,500	
2 Geologist-prospectors 180 days @ \$60.00	10,800	
Payroll Costs 12%	2,650	
Supervisory and Geological Fees	<u>9,000</u>	33,700

Vehicles:

1 - 4 wheel drive	7,500	
1 - tracked vehicle	<u>16,500</u>	
	24,000	
Less re-sale value	<u>14,000</u>	10,000

Underground:

Drive 500 feet @ \$125.00	62,500	
Mobilization	<u>5,000</u>	67,500

Geophysical Surveys	7,500	7,500
Travel, Communications		<u>2,500</u>

Sub-Total: 246,700

Less 30% Operating to Paul Option Program 30,000

216,700

Add: 70% of Management and Administration 21,000

TOTAL - Clark Group \$237,700

BULLION MOUNTAIN MINING LTD.

Report on Mining Properties

Part II - Paul Option

II.1. General:

Under the terms of an option agreement with Falconbridge Nickel Mines Ltd. dated May 6, 1974 the company has earned the right to acquire a 60% interest in 8 mineral claims held under mineral leases and known as the "Paul Group". These claims adjoin the company's Clark Group and cover a lead-zinc-silver occurrence on which some work was done in the past.

Some drilling on this showing is reported to have been done by Scurry-Rainbow in 1973, but no records of this have been made available for this report.

In 1974, Bullion Mountain Mining Ltd. drilled a series of 7 diamond drill holes which are described herein. Based on the results of the 1974 drilling it is proposed to continue exploration of the Paul zone in 1975 by expending approximately \$106,000 on drilling and geological mapping.

II.2 Property:

<u>Lease No.</u>	<u>Claim Name</u>	<u>Claim No.</u>	<u>Expiry Date</u>
500	Paul No. 1	56420	August 15, 1977
501	Paul No. 2	56421	do
502	Paul No. 3	56422	do
503	Paul No. 4	56423	do
504	Paul No. 5	56424	do
505	Paul No. 6	56425	do
506	Paul No. 7	56426	do
507	Paul No. 8	56427	do

The option agreement requires that Bullion spends \$20,000 on or before August 31, 1975
(about \$40,000 spent in 1974)
plus \$100,000 on or before August 31, 1977
plus \$200,000 on or before August 31, 1979.

II.3 Access:

The claims are accessible by about 4 miles of tractor road from the main Clark workings. Air distance from Elsa is about 15 miles and from Mayo about 45 miles.

II.4 Geology:

The claims are underlain by Map Units 3 and 4 as described in Part I of this report and in their southern portion by Map Unit 1 (Plate 3).

An early description of the showing is reproduced herewith from G.S.C. Memoir 364

G.S.C. Memoir 364

NASH CREEK, LARSEN CREEK, AND DAWSON MAP-AREAS

(3) Paul Group (Mount Cameron) Property (64°05'N, 135°00½'W)

References. Cockfield (1920b, p. 5*; 1922, pp. 1-6*). } Re-printed Bostock 1957
G.S.C. Memoir 204 }

The Paul Group, described as the Mount Cameron property by Cockfield (1922), is held by Falconbridge Nickel Mines, Limited. The group is on the plateau north of Mount Cameron in Nash Creek map-area. No work other than a claim survey appears to have been done on the property in recent years.

The mineralization occurs along a strong fault trending N 27° E that displaces the east side of a limestone band about 400 feet to the north. The limestone, which occurs in unit 3, has an apparent surface width of 800 feet. The fault has been traced 950 feet in a series of trenches, and two adits, now caved, have been driven on it. An iron-cemented conglomerate, similar to those observed elsewhere in the area, occurs in a small creek on trend with the line of trenches and some 250 feet beyond the last trench.

The vein material exposed on the dump and in the trenches consists of siderite, now altered to limonite and hydrous manganese oxides, quartz crystals, galena, sphalerite, and chalcopryrite. Galena occurs in thin streaks following fractures, and the sphalerite and chalcopryrite commonly occur in the siderite as small blebs up to ½ inch in size. The heaviest mineralization, mainly siderite replacing limestone, appears to be confined to about 400 feet along the fault where both walls are in limestone. Scattered ore minerals were noted along the entire length of the fault workings. The width of the mineralized body is not obvious from the present exposures but Cockfield (1922, p. 6A) reports it to be 50 feet.

Assays of a picked sample from the dump and of a similar specimen taken by Cockfield (1922, p. 6A) are as follows:

	Gold (oz./ton)	Silver (oz./ton)	Lead (%)	Zinc (%)	Copper (%)	Antimony (%)
GC7-78*	0.005	40.48	40.9	10.75	0.28	0.09
Cockfield†	Nil	76.00	56.83			

*Assay by Mines Branch, Department of Energy, Mines and Resources.
†1922.

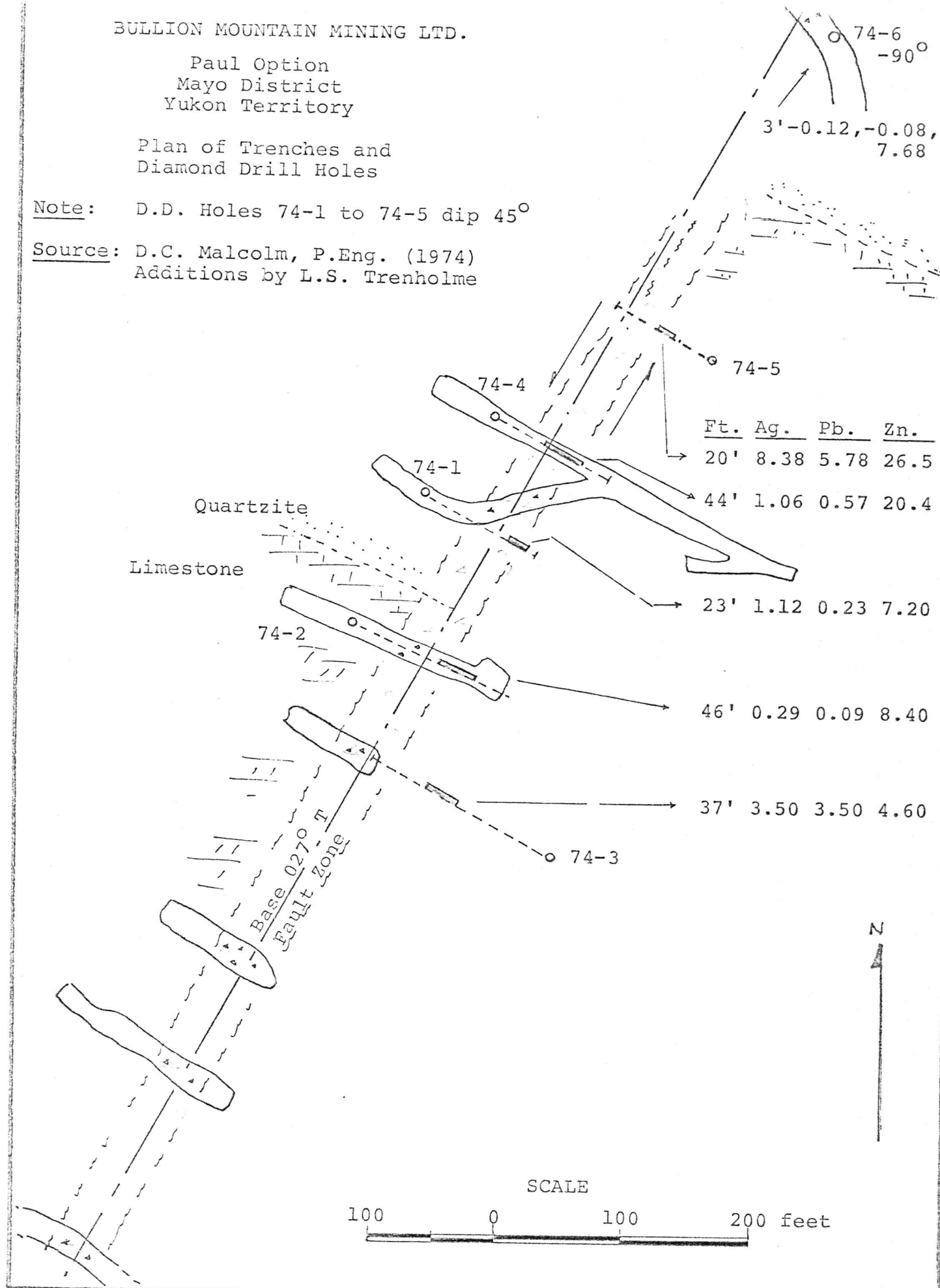
BULLION MOUNTAIN MINING LTD.

Paul Option
 Mayo District
 Yukon Territory

Plan of Trenches and
 Diamond Drill Holes

Note: D.D. Holes 74-1 to 74-5 dip 45°

Source: D.C. Malcolm, P.Eng. (1974)
 Additions by L.S. Trenholme



The results of the 1974 drilling by Bullion Mountain Mining Ltd. are shown on Plate 5 which shows the location of holes 74-1 to 74-6, inclusive. Hole 74-7 was apparently drilled some distance west of the zone and is reported to have cut some mineralization, but this requires checking. The 1974 intersections are listed as follows:

<u>Hole</u>	<u>Bearing</u>	<u>Dip</u>	<u>Sampled Sections</u>		<u>Feet</u>	<u>Oz.Ag.</u>	<u>%Pb</u>	<u>%Zn</u>
			<u>From</u>	<u>To</u>				
74-1	S63°E	45°	107	130	23	1.12	0.23	7.20
74-2	S63°E	45°	104	150	46	0.29	0.09	8.40
74-3	N63°W	45°	123	160	37	3.50	3.50	4.60
74-4	S63°E	45°	66	110	44	1.06	0.57	20.40
74-5	N63°W	45°	49	69	20	8.38	5.78	26.50
74-6	---	90°	96	99	3	0.12	0.08	7.68

Because the zone appears to be nearly vertical, the results of D.D.H. W-6 may not be relevant. The weighted average of D.D.H.'s W-1 to W-5 inclusive is 2.25 oz. silver per ton, 1.64% lead and 12.64% zinc across average sample length of 34 feet. The estimated average true width is 24 feet.

II.5 Recommendations:

During the work program proposed for the 1975 season the following procedure is recommended.

- a) Survey drill hole collars and re-log core;
- b) Geological mapping of vicinity;
- c) Consider geochemical and geophysical surveys;
- d) Based on above; do 5000 feet of diamond drilling; say 10 holes of 500 feet each.

II.6 Cost Estimate - Paul Group Program 1975

Diamond Drilling		
5000 feet @ \$15.00		\$75,000
General Operating Expense		
	(30%)	22,500
Share of Overhead:	(30%)	9,000
		<u>9,000</u>
TOTAL:		<u>\$106,500</u>

Table 13A

BULLION MOUNTAIN MINING LTD.

Proposed Diamond Drilling - Clark Zone

A. Surface Drilling

No.	Objective	Section	Collar	El.	Bear	Dip	Depth
P-1	East Zone	600E	55N	3,495	N	67°	140'
P-2	Do Same	600E	55N	3,495	0	90°	160'
P-3	Subject P-1-P-2	600E	60S	3,545	?	?	240'
P-4	Subject P-1-P-2	700E	?	?	?	?	200'
P-5	Subject P-1-P-2	500E	30N	3,505	?	90° (?)	175'
P-6	F-2 Zone	450E	30N	3,503	N	57°	300'
P-7	F-2 Zone	400E	150N	3,435	N	65°	90'
P-8	F-2 + N Zone	300E	20N	3,472	N	50°	220'
P-9	F-2 Zone	300E	20N	3,472	N	80°	140'
P-10	F-2 Zone	250E	30N	3,470	-	90°	125'
P-11	F-2 Zone	200E	40N	3,470	-	90°	80'
Total:							1,870'

Table 13B

B. Adit Underground Drilling

AP-1	X-C			3,315	AZ150°	0°	200'
AP-2	X-C			3,315	AZ128°	0°	160'
AP-3	X-C			3,320	AZ180°	+45°	70'
AP-4	Drift	0 + 50'SW		3,315	AX158°	0°	50'
AP-5	Drift	Collar 00 N Wall		3,315	N35°W	0°	75'
AP-6					S35E	0°	60'
AP-7	Drift Stub X-C	0 + 20E			Due E	0°	50'
AP-8	Drift Stub X-C	0 + 00			Due S	0°	85'
AP-9	Drift Stub X-C	0 + 00			North	+45°	90'
AP-10	Drift Collar	W-64			S25E	0°	60'
AP-11	S End Adit				AZ335°	+40°	90'
AP-12	S End Adit				---	-40°	90'
AP-13	S End Adit				AZ265°	0°	200'
AP-14	Stub OPP	W-59			AZ110°	0°	225'
Total:							1,510'

12. Conclusions:

It is the writer's opinion that completion of the programs now proposed for the Clark and Paul properties of Bullion Mountain Mining Ltd. will provide most of the information required to determine their economic viability.

Additionally, there is an excellent chance of extending the known reserves and of discovering large new reserves of silver-lead-zinc ores.

Respectfully submitted,

L. S. Trenholme

L. S. Trenholme, M.Sc. P.Eng.
for M. M. Menzies Consultants Ltd.

Vancouver, B. C.
February 26, 1975

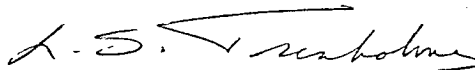
R. S.

13. Certificate of Qualifications:

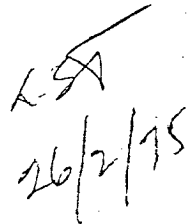
The undersigned certifies that:

- 1) He is a graduate geologist (B.Sc., Sask. 1936, M.Sc., McGill 1939) and has practised his profession in mining and exploration geology continuously since graduation (except 1942-45),
- 2) He is a member in good standing of The Association of Professional Engineers of the Province of British Columbia,
- 3) The report on the properties of Bullion Mountain Mining Limited submitted herewith is based on an intensive study of available data relating to past work on the said properties and on various government reports relevant thereto, and
- 4) He does not now have, and does not expect to receive, any shares of stock in Bullion Mountain Mining Limited, or any other financial interest in the company or its properties excepting only such shares as may be allotted in lieu of cash payment for the preparation of this report, its related maps or any future geological services.

Dated at Vancouver, British Columbia
February 26, 1975

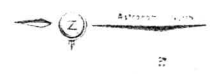


L. S. Trenholme.



14. References:

1. Boyle, R.W. G.S.C. Bulletin III, 1965, "Geology, Geochemistry and Origin of the Lead-Zinc-Silver Deposits of the Keno Hill-Galena Hill Area, Yukon Territory" (This bulletin contains an extensive bibliography of regional information)
2. Green, L.H. G.S.C. Memoir 364, 1972 "Geology of Nash Creek, Larsen Creek, and Dawson Map Areas, Yukon Territory"
3. Malcolm, D.C., P.Eng. 1971, "Summary Report, November 15, 1971"
4. Malcolm, D.C., P.Eng. September 12, 1972, "Clark Claims, Yukon Territory"
5. Malcolm, D.C., P.Eng., February 27, 1974 "Summary Report on Clark and Paul Deposits"
6. Lewis, Michael J. and Fominoff, Peter J. for Seigel Associates Limited, August 25, 1972, "Report on Induced Polarization Survey, Keno-Mayo District, Yukon Territory on behalf of Scurry-Rainbow Oil Limited"
7. Galeski, Robert B. June, 1972 "Clark Lake Area, Yukon Territory, Gravity Interpretation" (Airborne Geophysical Surveys Ltd.)
8. National Air Photo Library, Ottawa
Photos at Scale 1:50,000
Line R 20623, Nos. 75,76,77



ELEVATION
FEET

3700

3600

3500

3400







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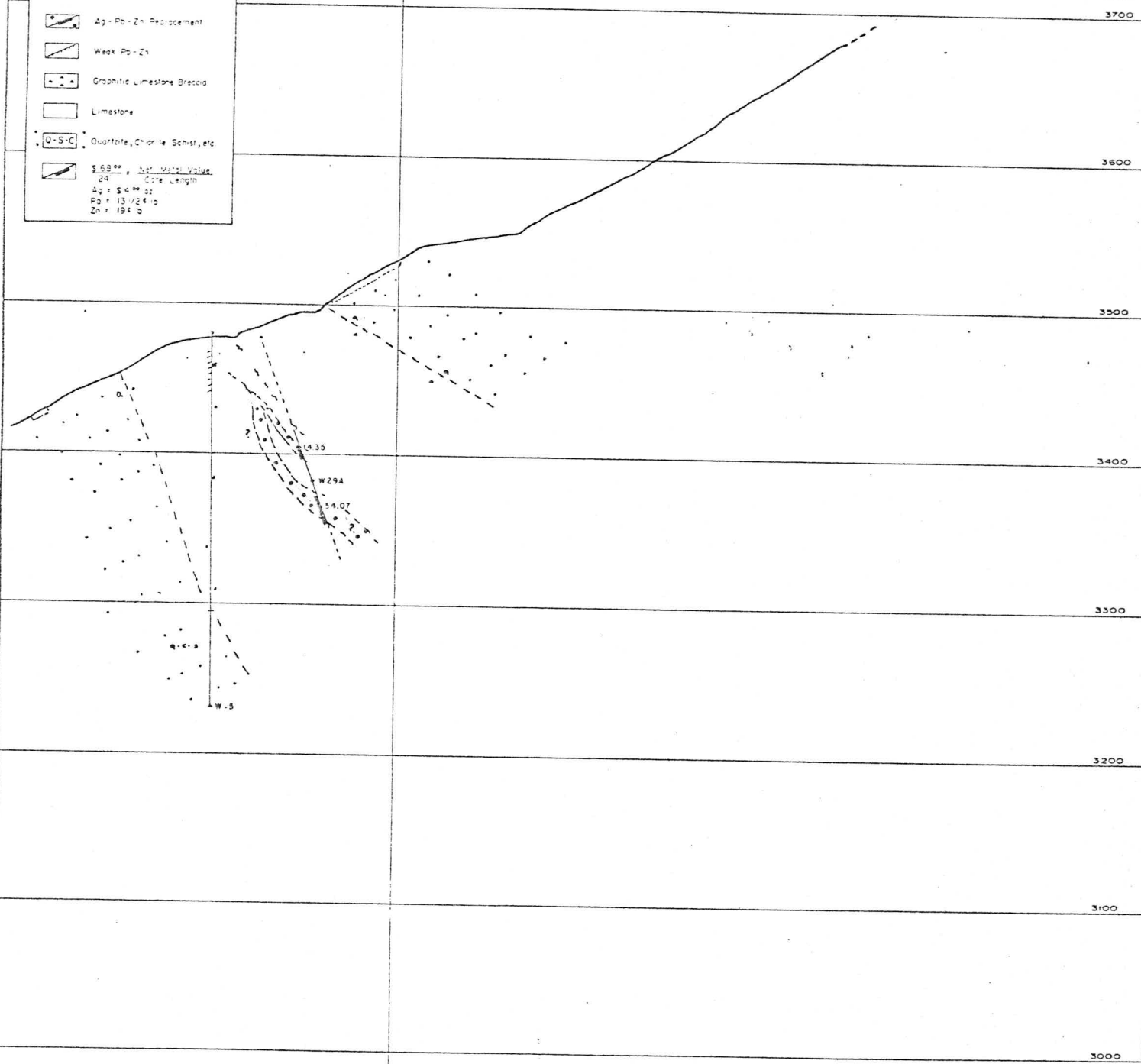
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3100

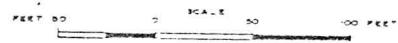
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LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Quartzite, Chlorite Schist, etc.
-  \$58.00 Det. Metal Value
24 Core Length
Ag = 54.99 lb
Pb = 13.724 lb
Zn = 194 lb



BULLION MOUNTAIN MINING LTD.
CLARK ZONE



SECTION 600 E

ELEVATION
FEET

3700

3600

3500

3400







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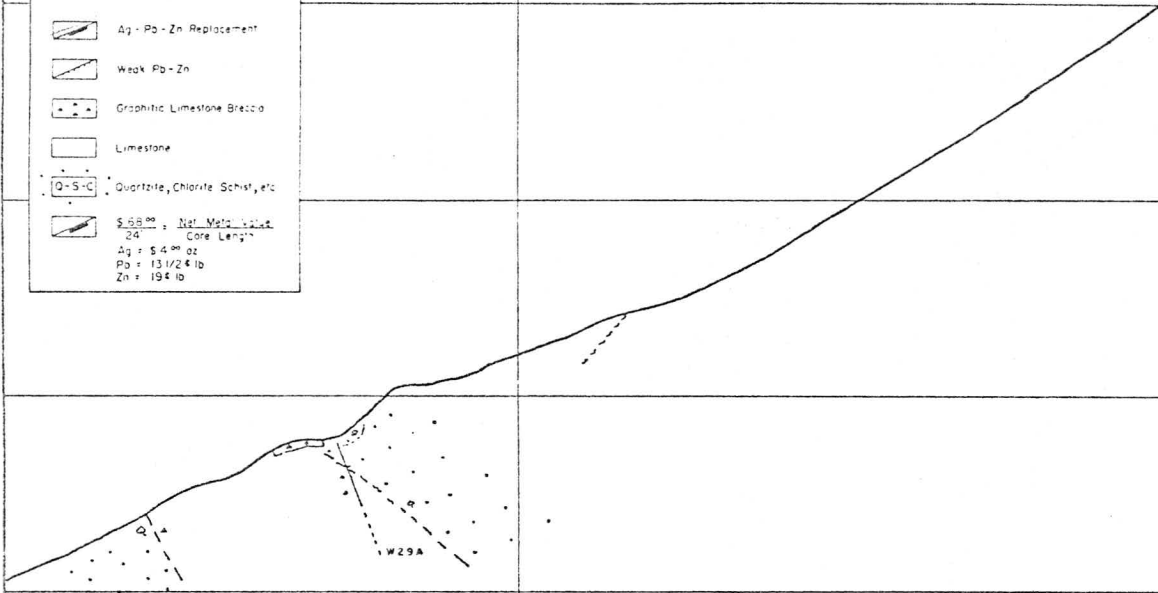
3200

3100

3000

LEGEND

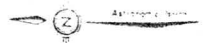
-  Ag - Pb - Zn Replacement
-  Weak Pb - Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Quartzite, Chlorite Schist, etc
-  $\frac{\$68.00}{24} = \frac{\text{Net Metal Value}}{\text{Core Length}}$
Ag = 5.4 oz
Pb = 13 1/2 lb
Zn = 194 lb



BULLION MOUNTAIN MINING LTD.
CLARK ZONE



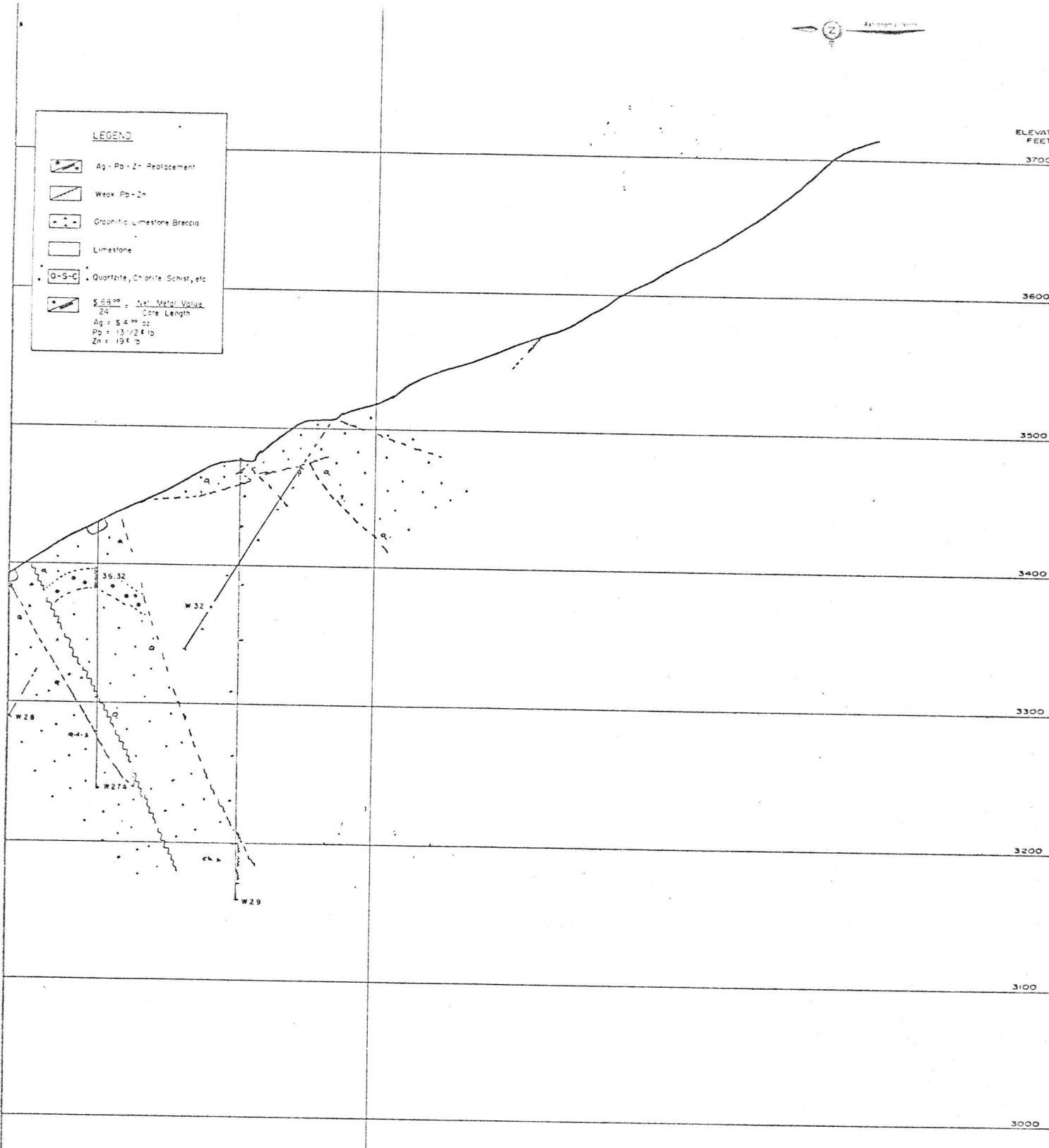
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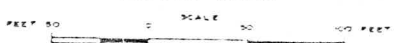
LEGEND

- Ag-Pb-Zn Replacement
- Weak Pb-Zn
- Graphitic Limestone Breccia
- Limestone
- Quartzite, Chlorite Schist, etc.
- Core Log

5.58% Ag Metal Value
 24' Core Length
 Ag: 5.4%
 Pb: 13.72%
 Zn: 19.4%









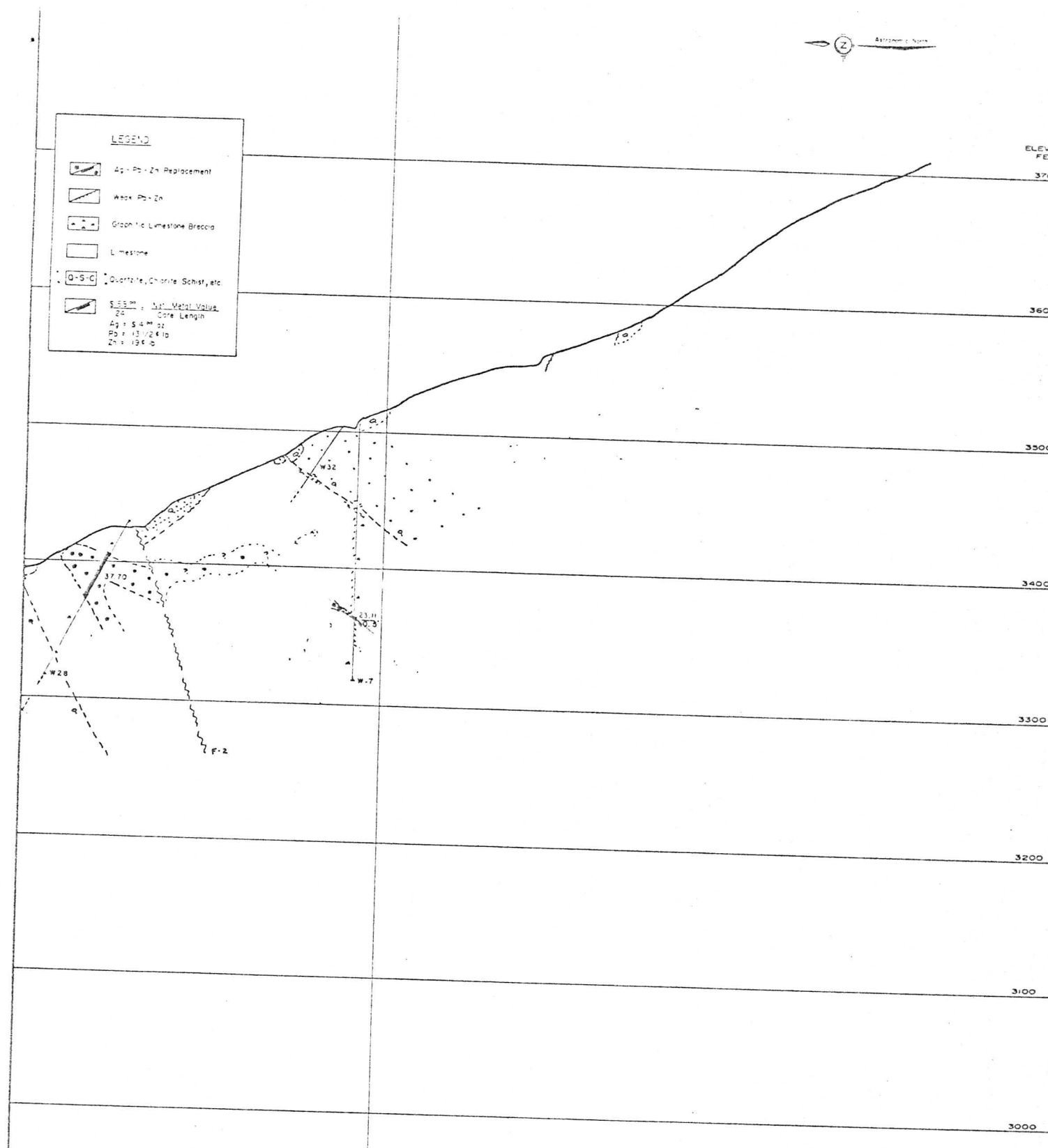
BULLION MOUNTAIN MINING LTD.
CLARK ZONE



SECTION 500 E

LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Granitic Limestone Breccia
-  Limestone
-  Quartzite, Chlorite Schist, etc.
-  555M : Core Length
 Ag : 5.4 M oz
 Pb : 13 1/2 K lb
 Zn : 13 K lb



BULLION MOUNTAIN MINING LTD.
 CLARK ZONE

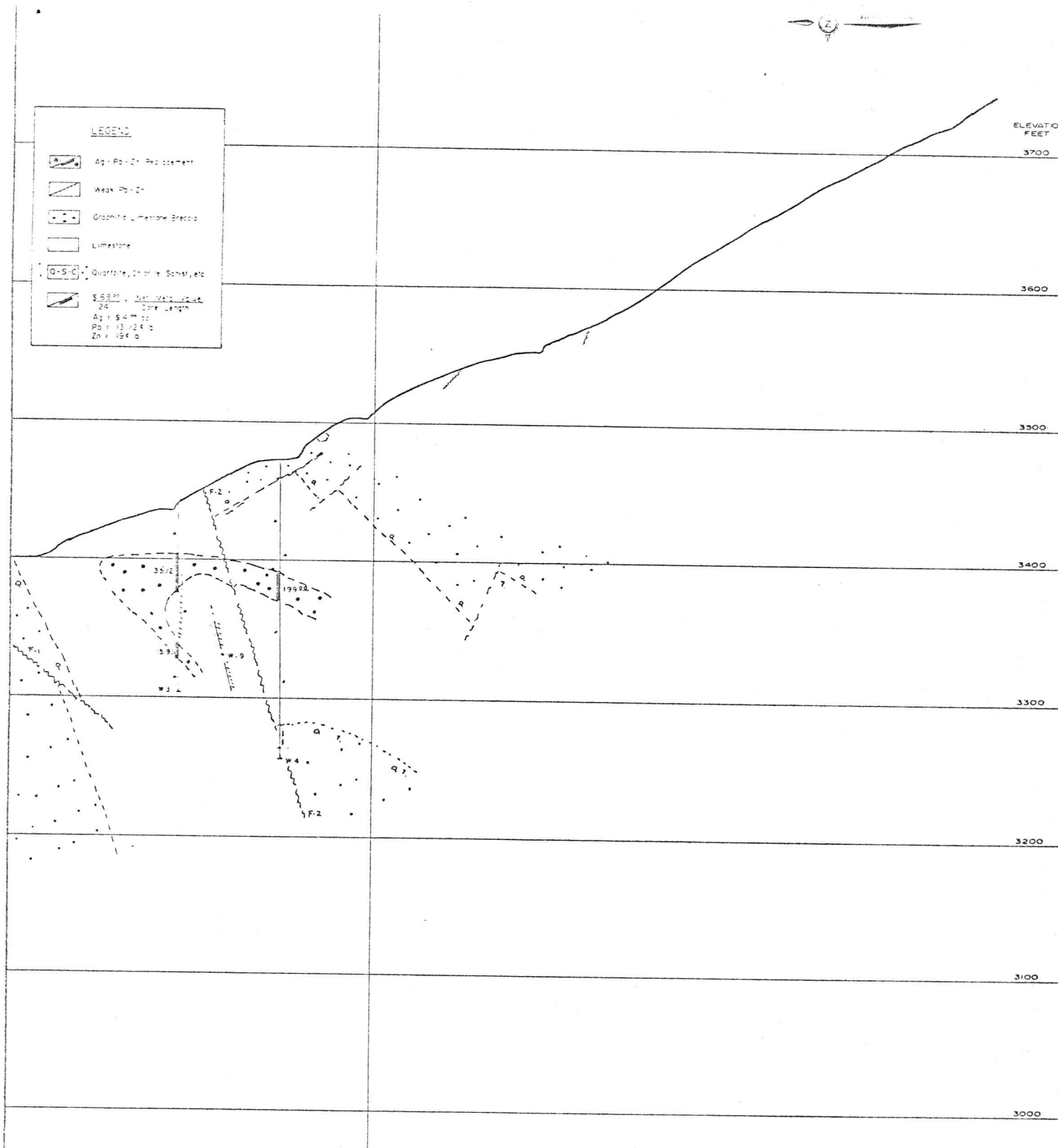


SECTION 450 E

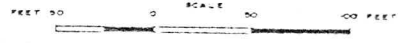


LEGEND

- Ag-Pb-Zn-As cement
- Weak Pb-Zn
- Graphitic Limestone Breccia
- Limestone
- Quartzite, Chlorite Schist, etc.
- S.G.P. - Non-apatite zone
 24' Core length
 Ag : 5.4%
 Pb : 13.2%
 Zn : 19.6%



BULLION MOUNTAIN MINING LTD.
CLARK ZONE

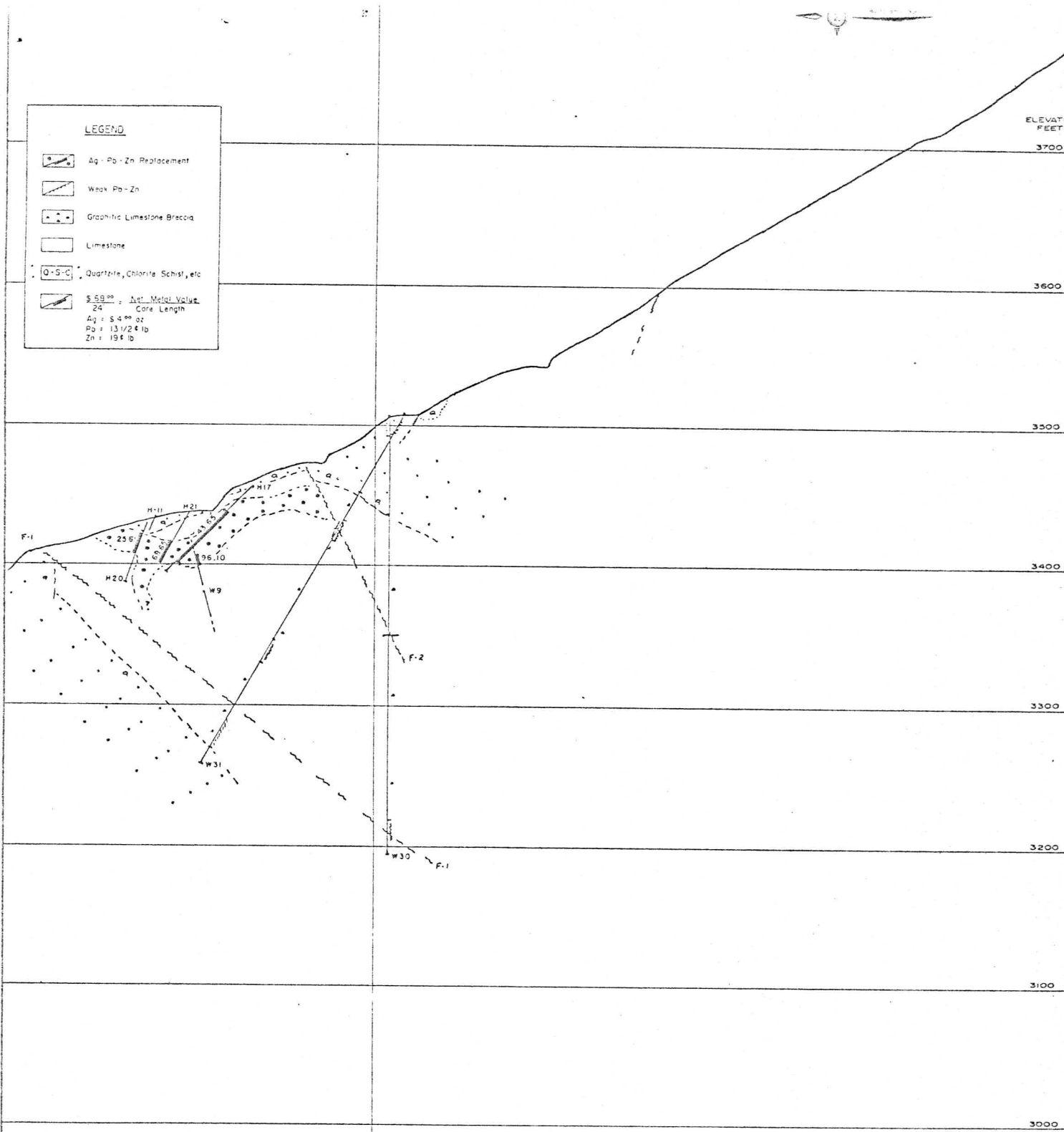


SECTION 400 E



LEGEND

- Ag-Pb-Zn Replacement
- Weak Pb-Zn
- Graphitic Limestone Breccia
- Limestone
- Quartzite, Chlorite Schist, etc
- | | |
|----------------|------------------|
| \$ 59.00 | Avg. Metal Value |
| 24 | Core Length |
| Ag : 5.4 gm | |
| Pb : 13 1/2 lb | |
| Zn : 19 lb | |









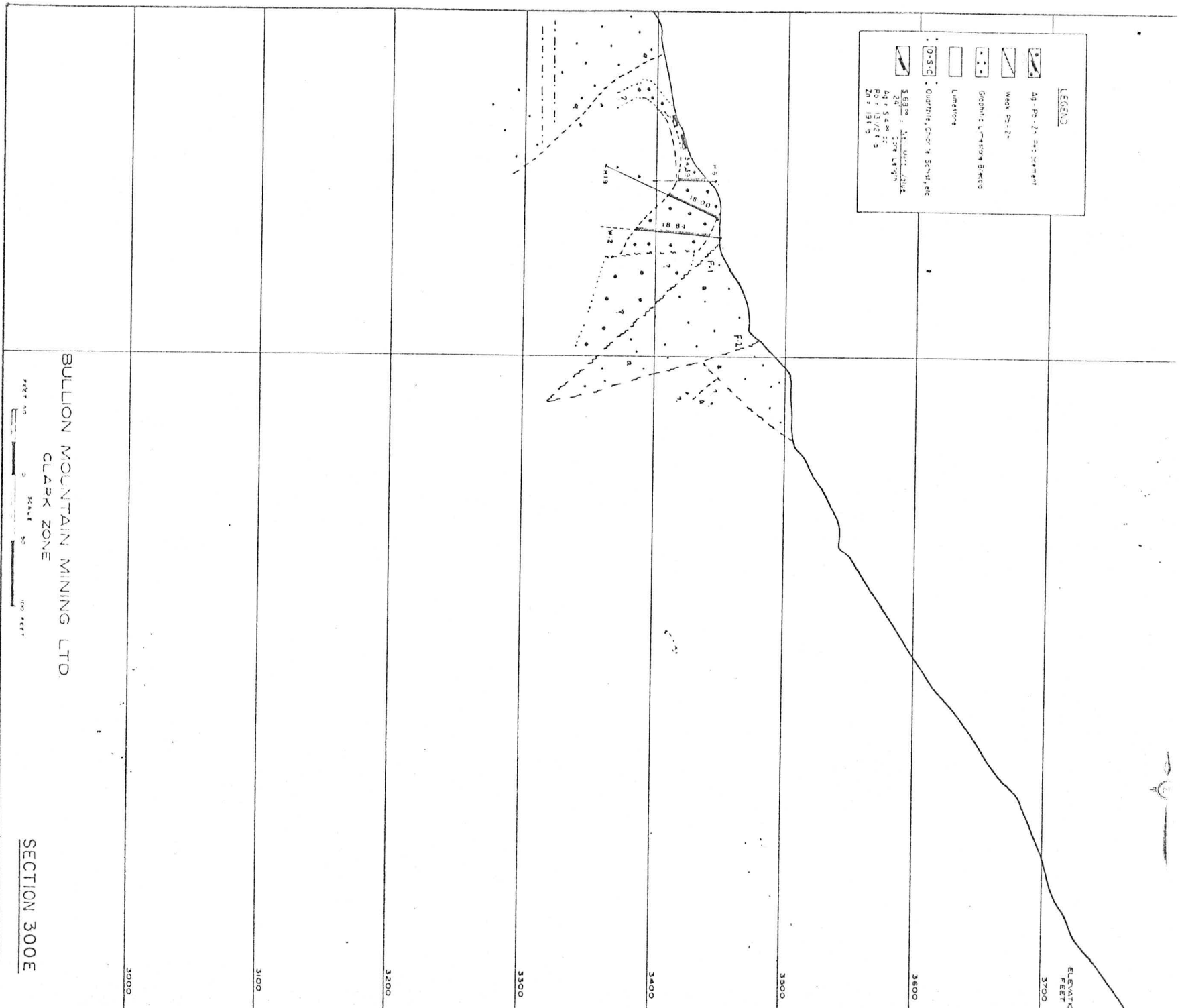
BULLION MOUNTAIN MINING LTD.
CLARK ZONE



SECTION 350 E

LEGEND

-  Ag-Pb-Zn-Fe-Sn-Mn
 -  Mn-Pb-Zn
 -  Graphite-Limestone-Silica
 -  Limestone
 -  0-5°C
 -  Quarries, Open Pits, etc.
- Scale: 1:25,000
Date: 12/15/65
Author: J.E.S.
Revised: 12/15/65
Zn: 1915



BULLION MOUNTAIN MINING LTD.
CLARK ZONE

Scale 1" = 200 Feet

SECTION 300E

ELEVATION
FEET

3700

3600

3500

3400

3300







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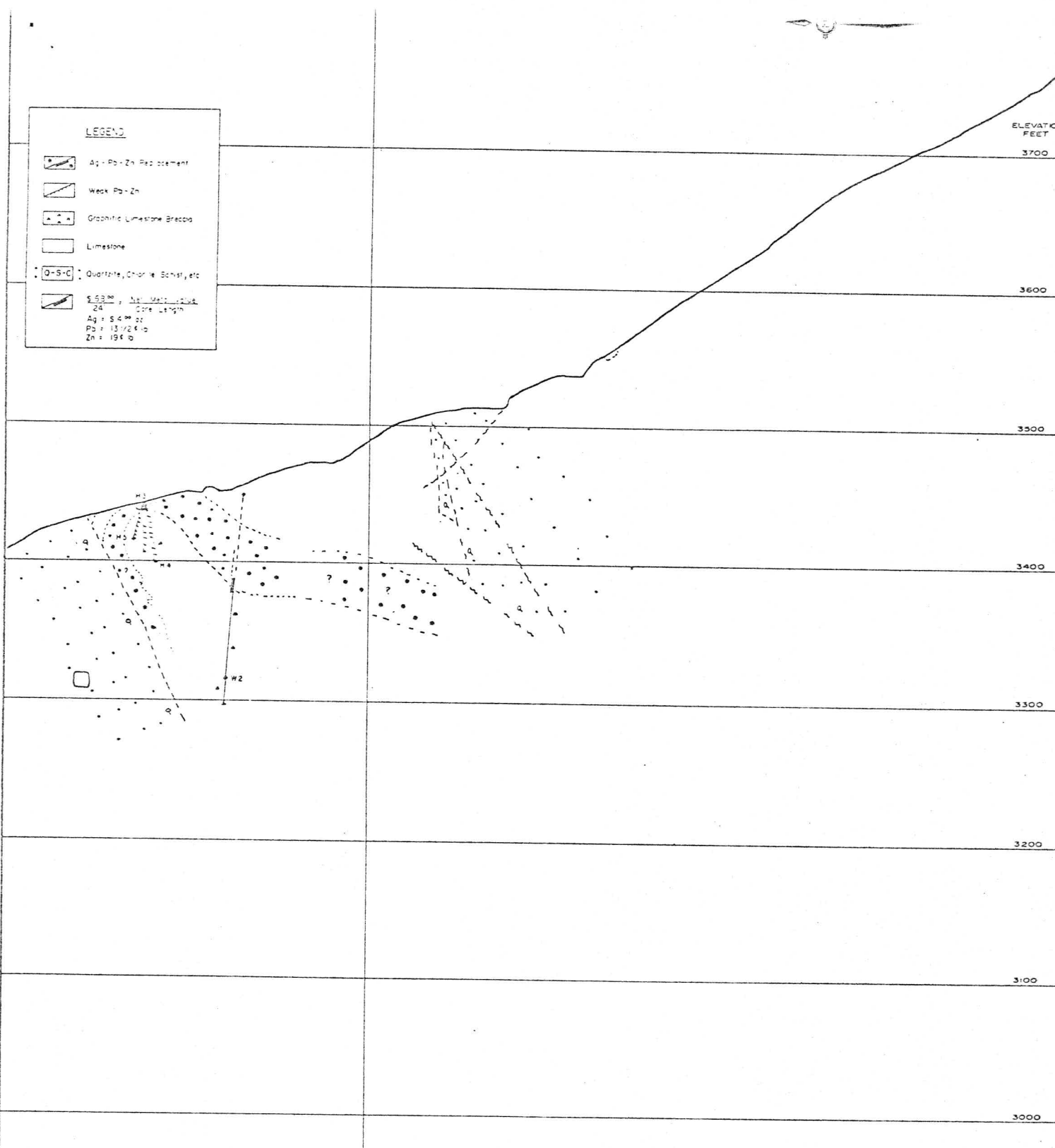
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LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Q-S-C: Quartzite, Chlorite Schist, etc
-  \$52.00 = Net Metal Value
24 = Ore Weight

Ag = \$4.00 lb
Pb = \$13.00 lb
Zn = \$19.00 lb



ELEVATION
FEET
3700

3600

3500

3400

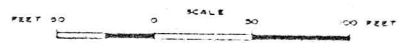
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3200

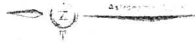
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3000

BULLION MOUNTAIN MINING LTD
CLARK ZONE



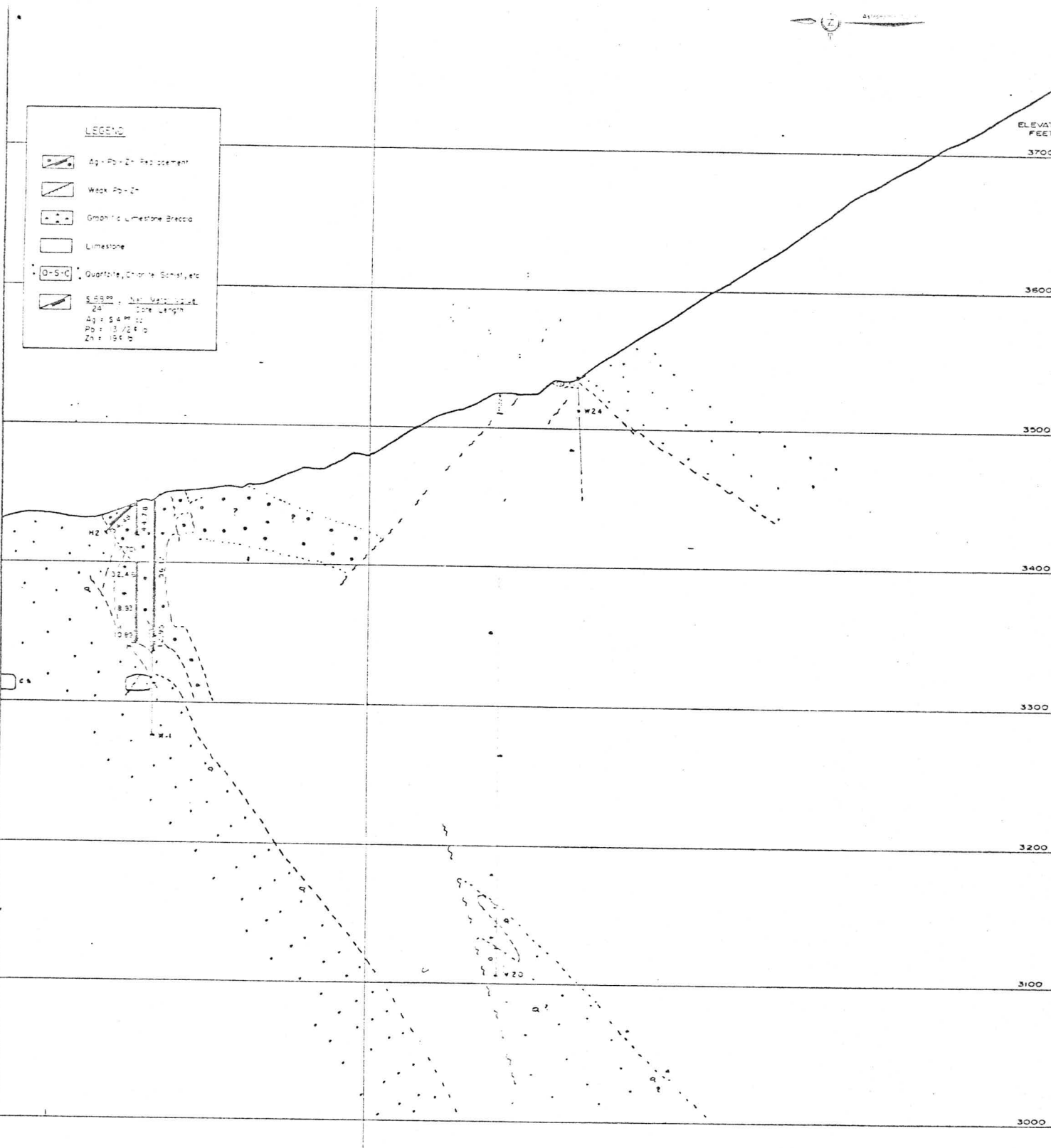
SECTION 250E



LEGEND

- Ag-Pb-Zn Replacement
- Weak Pb-Zn
- Graphitic Limestone Breccia
- Limestone
- Quartzite, Chlorite Schist, etc.
- S.S.P.P. (See Map Sheet 24) Core Length

Ag = 5.4 M oz
Pb = 3.2 M lb
Zn = 15.4 M








BULLION MOUNTAIN MINING LTD.
CLARK ZONE

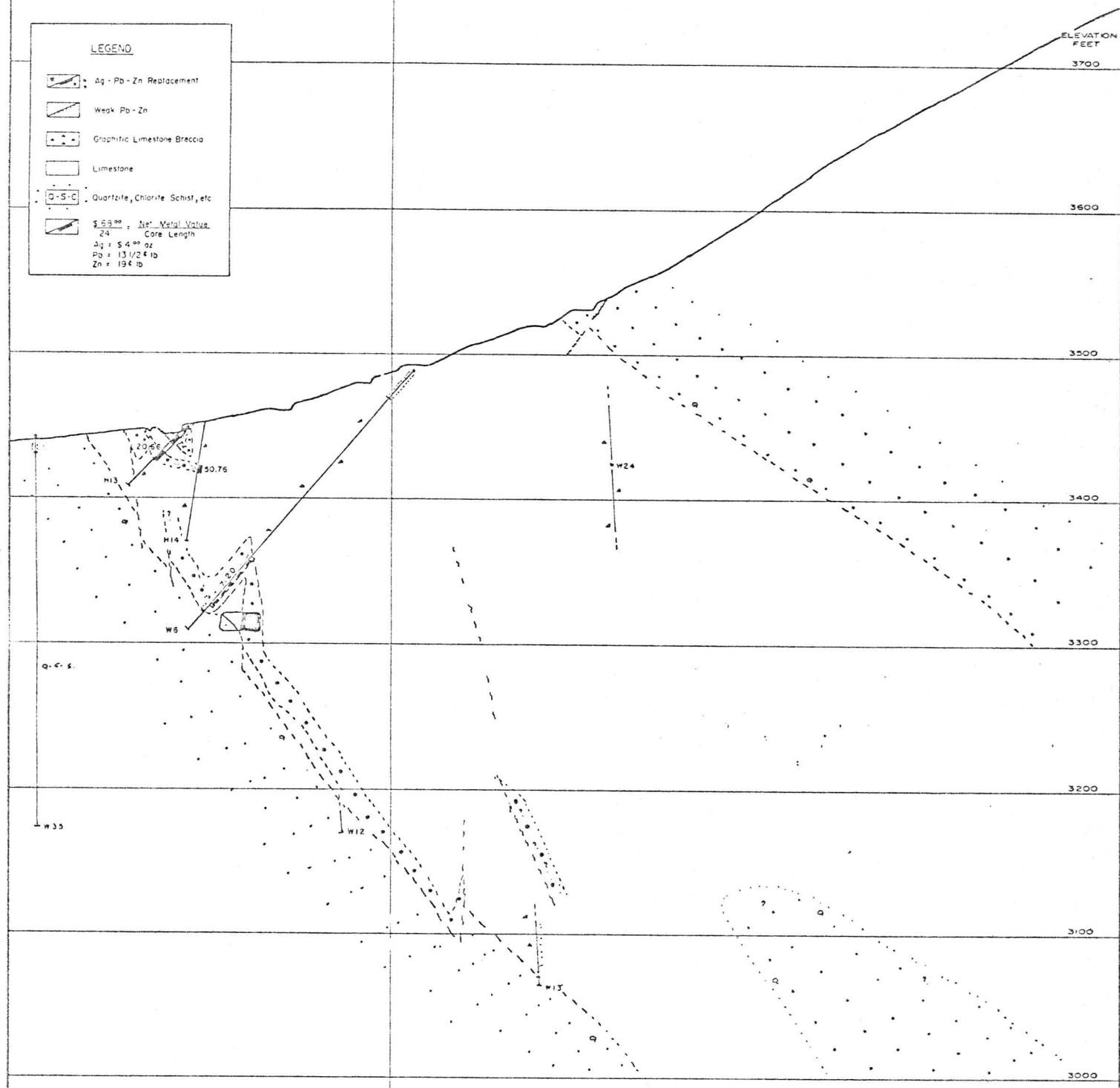
FEET 50 100 SCALE 1:50,000

SECTION 200 E

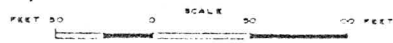


LEGEND

-  Ag - Pb - Zn Replacement
 -  Weak Pb - Zn
 -  Graphitic Limestone Breccia
 -  Limestone
 -  Quartzite, Chlorite Schist, etc.
- $\$59.00 = \text{Net Metal Value}$
 24
 Core Length
 Ag = 5.40 oz
 Pb = 13 1/2 lb
 Zn = 19 lb









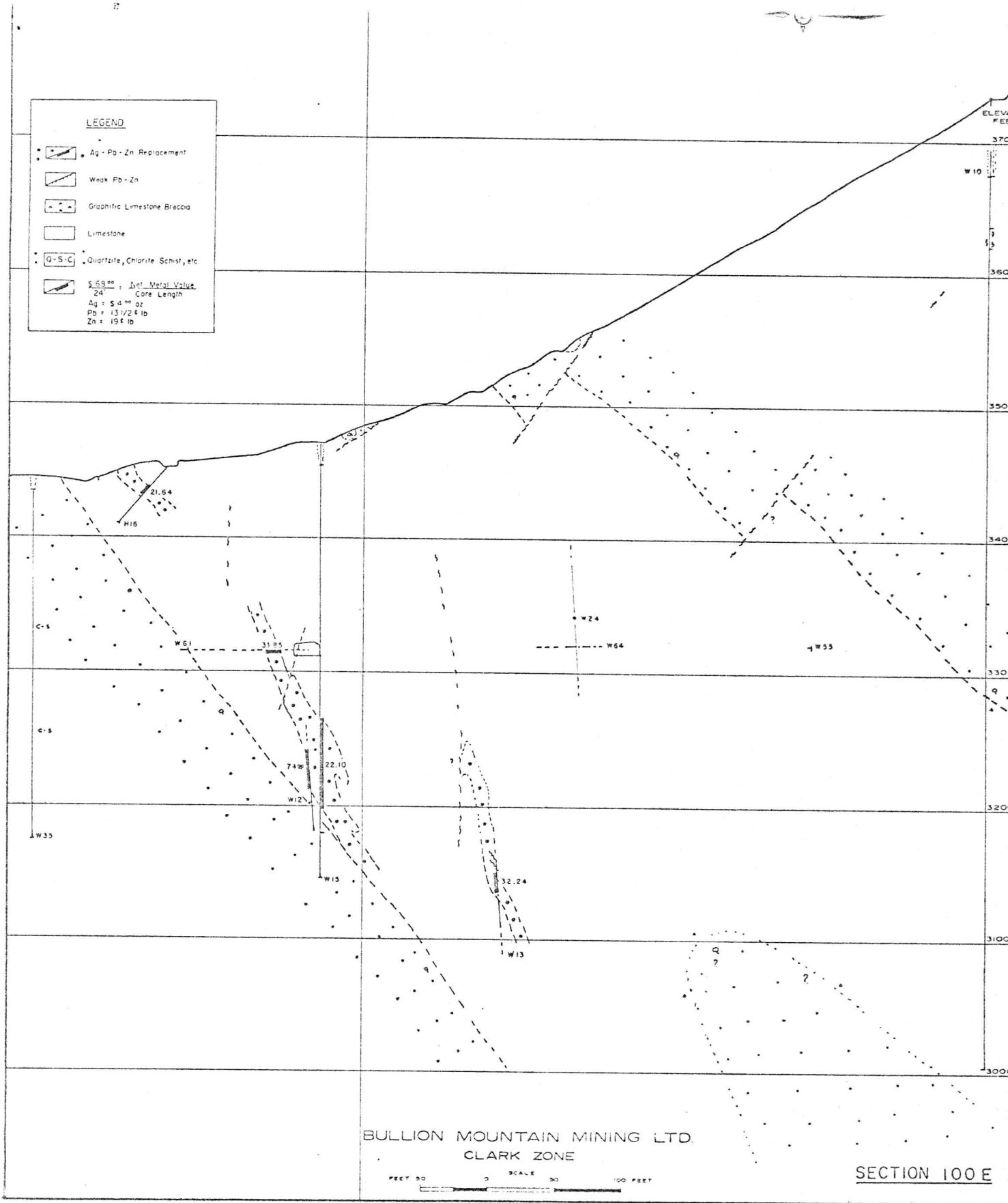
BULLION MOUNTAIN MINING LTD
 CLARK ZONE



SECTION 150 E

LEGEND

-  Ag - Pb - Zn Replacement
-  Weak Pb - Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Q-S-C Quartzite, Chlorite Schist, etc.
-  \$6.69/m : Def. Metal Value
24' Core Length
Ag = 5.4 oz
Pb = 13 1/2 lb
Zn = 194 lb



BULLION MOUNTAIN MINING LTD.
CLARK ZONE

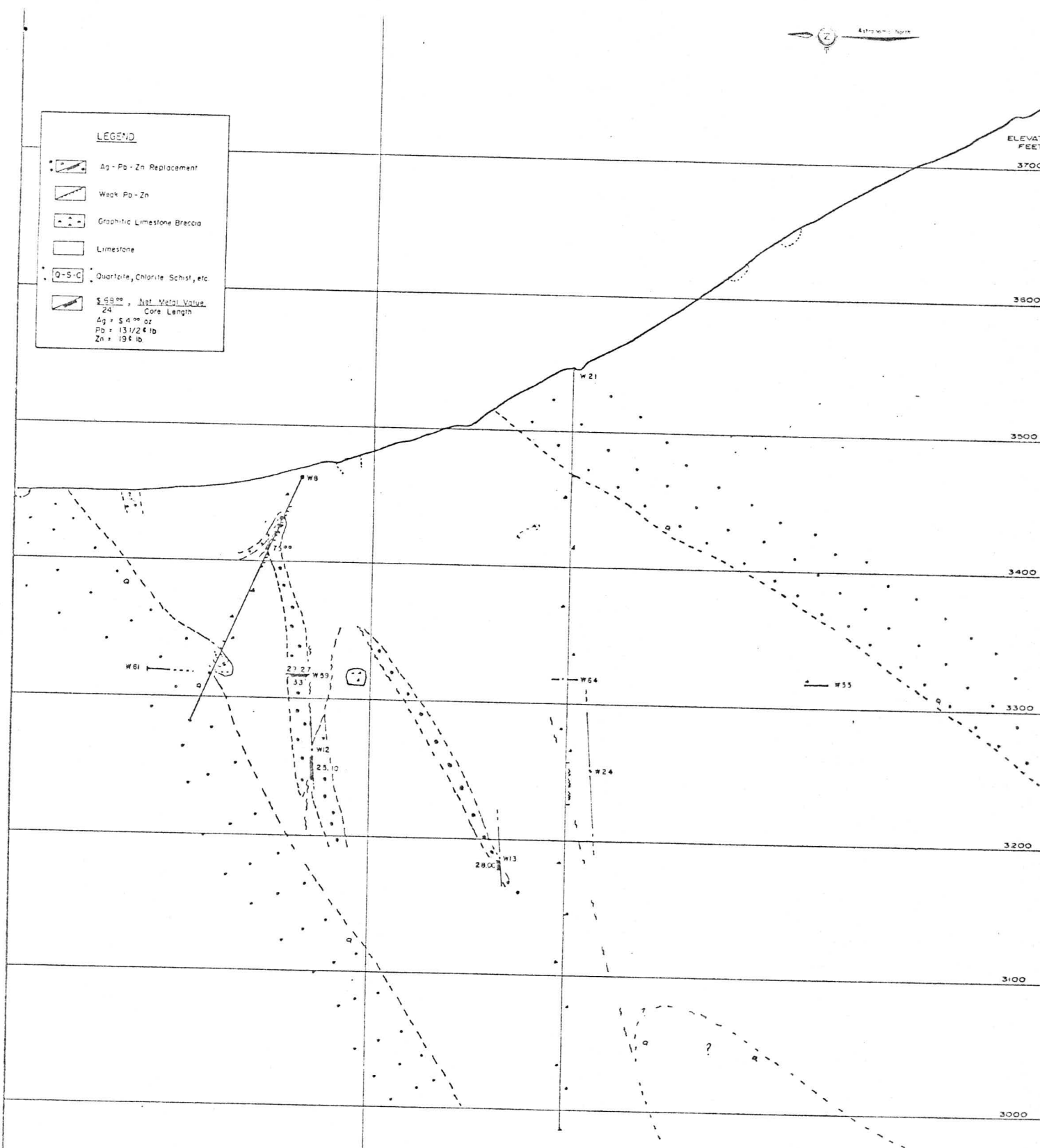
FEET 0 50 100 SCALE

SECTION 100 E



LEGEND

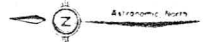
- Ag - Pb - Zn Replacement
- Weak Pb - Zn
- Graphitic Limestone Breccia
- Limestone
- Quartzite, Chlorite Schist, etc.
- \$5.98, Asst. Metal Values
24 Core Length
Ag = 5.4 oz
Pb = 13 1/2 lb
Zn = 194 lb









BULLION MOUNTAIN MINING LTD.
CLARK ZONE

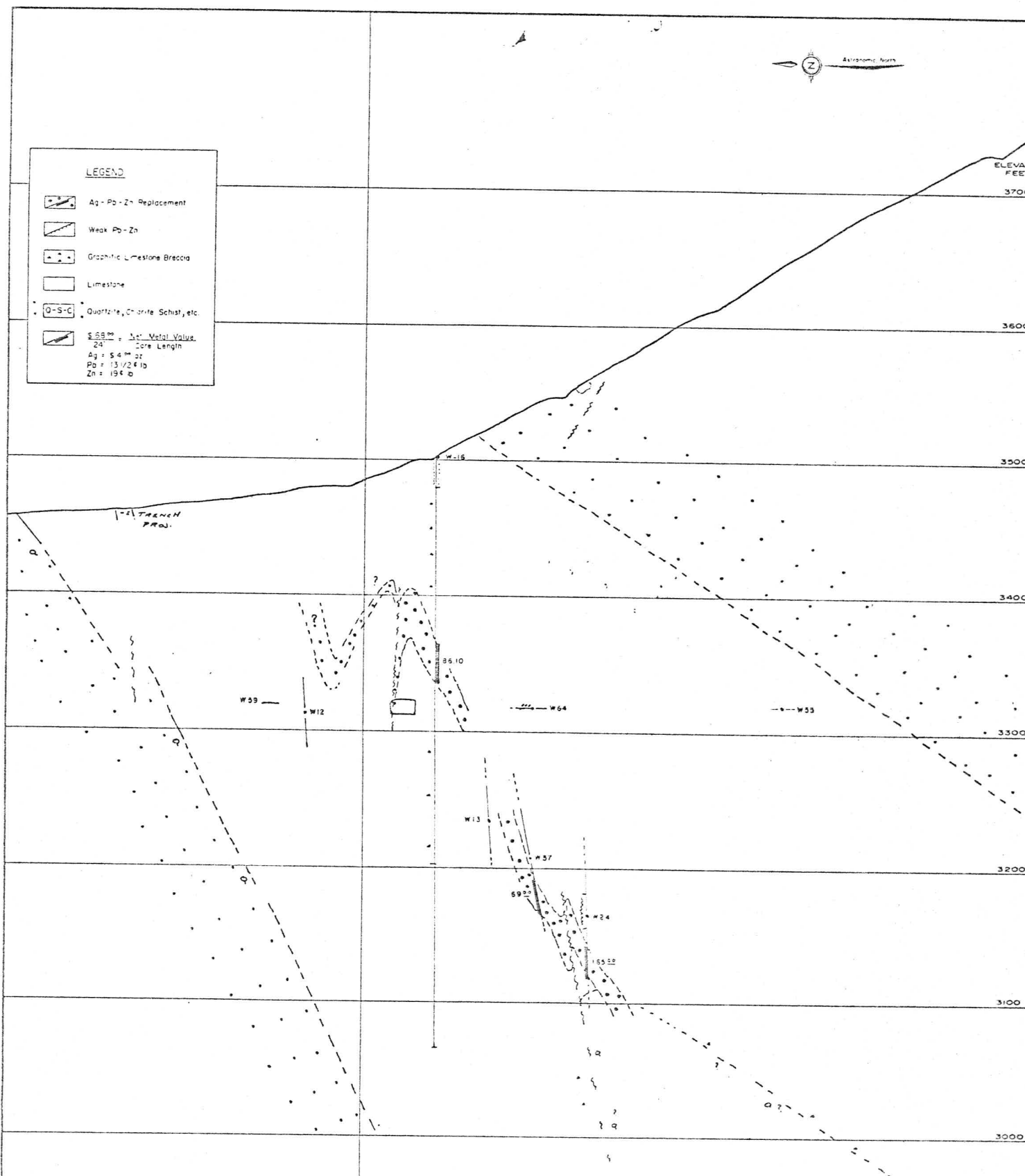


SECTION 50 E

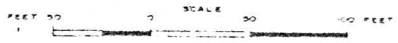


LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Q-S-C Quartzite, Chlorite Schist, etc.
-  \$58.00 - 1st Metal Value
24' - Core Length
Ag = 5.4% or
Pb = 13 1/2% or
Zn = 19.4%









BULLION MOUNTAIN MINING LTD.
CLARK ZONE

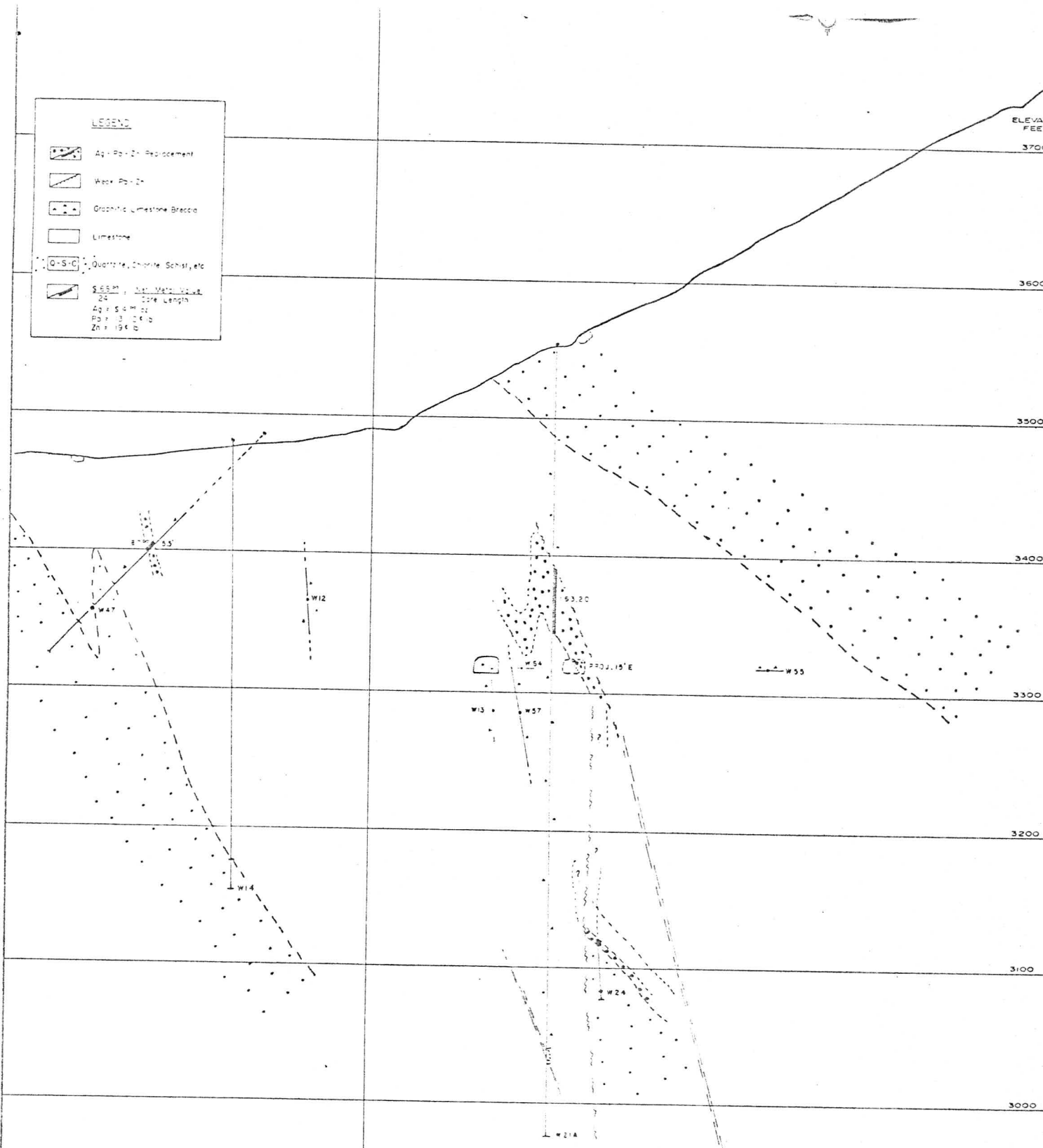


SECTION 00

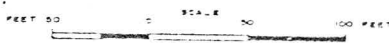
LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Q-S-C: Quartzite, Chlorite Schist, etc
-  S.S.M. - See Map 100 ft. core length

Ag = 5.4 m oz
Pb = 3.6 m oz
Zn = 19.4 m oz








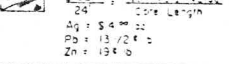
BULLION MOUNTAIN MINING LTD.
CLARK ZONE



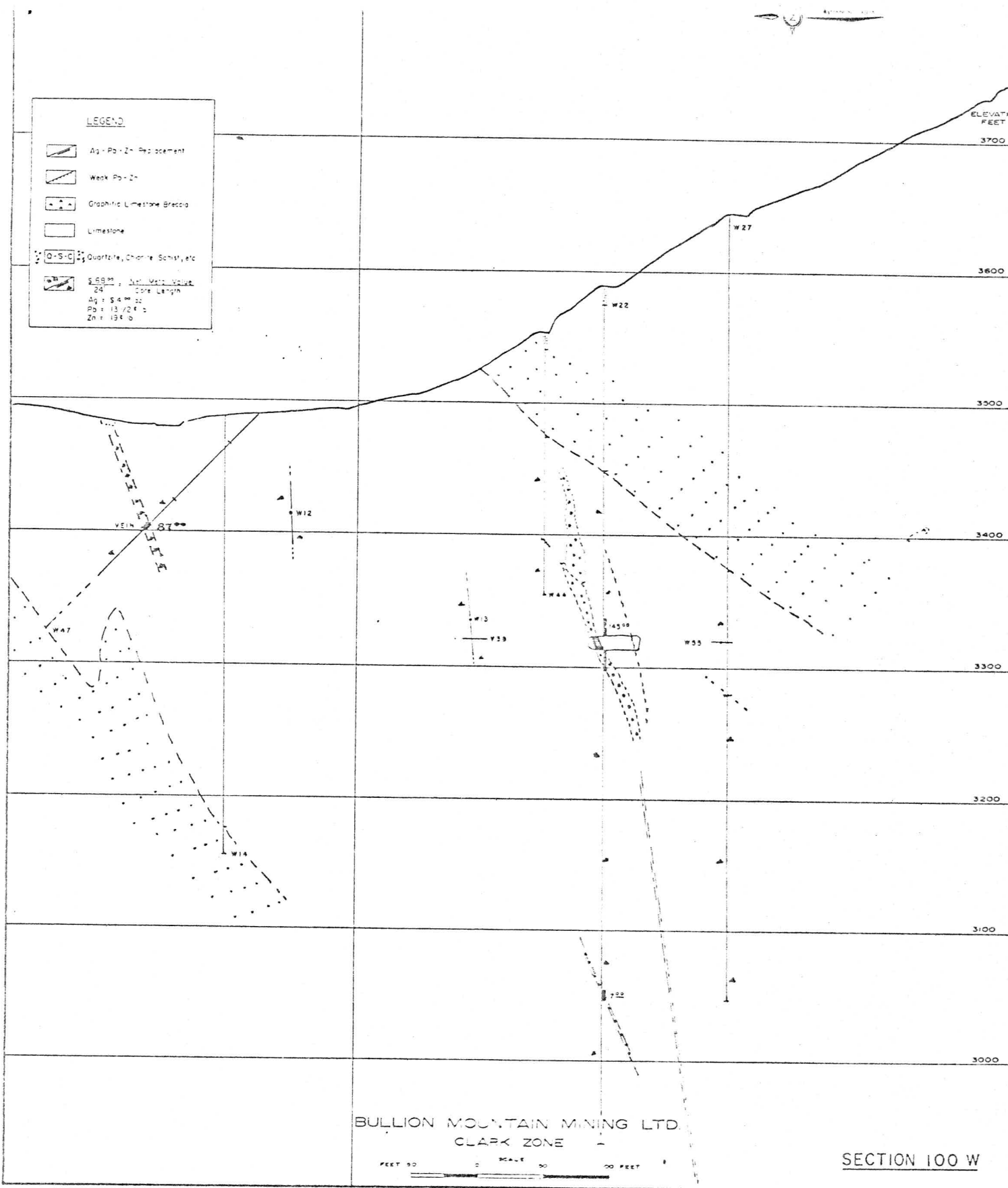
SECTION 50W



LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Zn
-  Graphitic Limestone Breccia
-  Limestone
-  Quartzite, Chlorite Schist, etc
- 

5.58 pp = Net Metall. Value
 24 = Core Length
 Ag = 5.4 pp
 Pb = 13 / 2 lb
 Zn = 13.4 lb









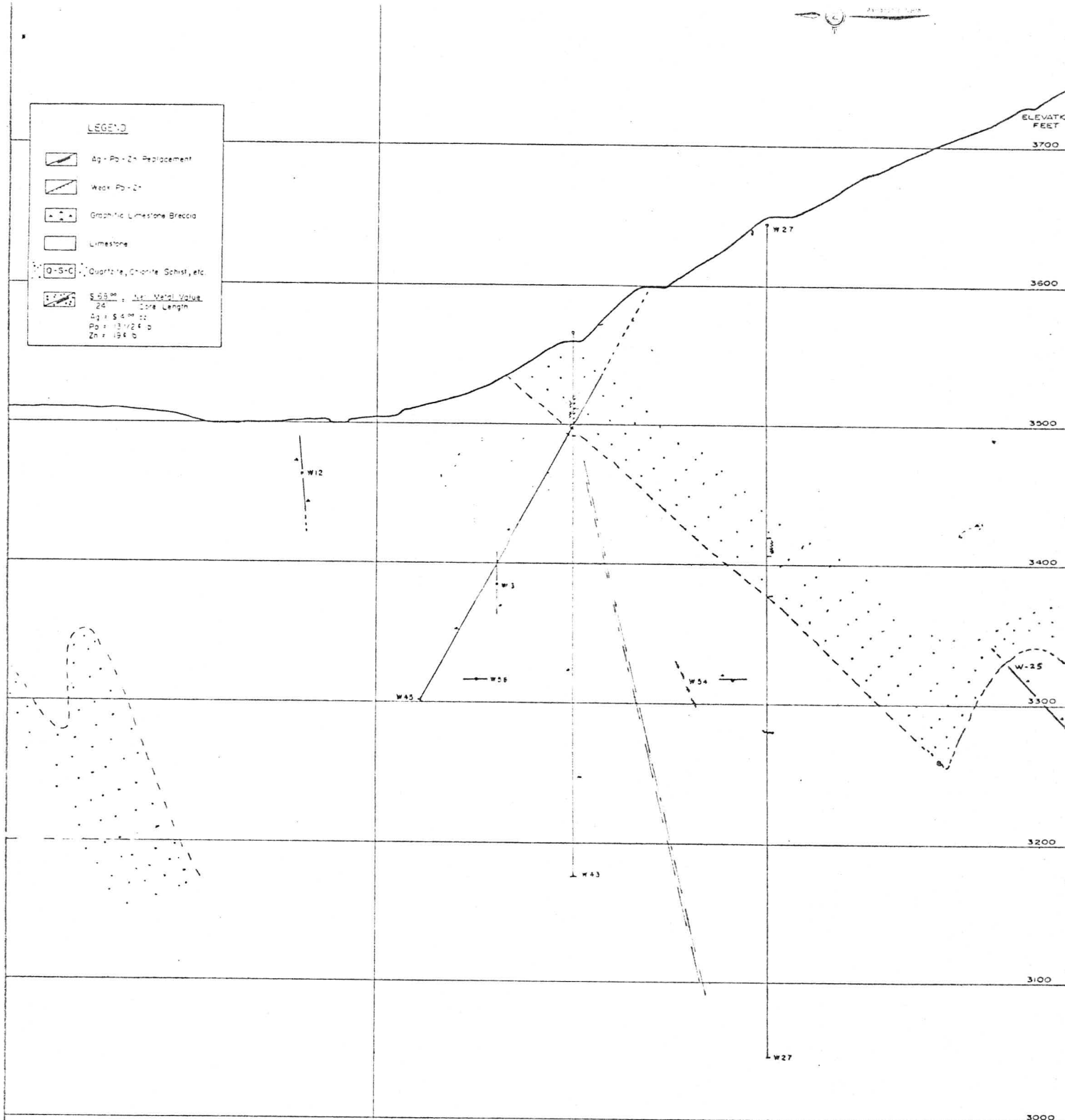
BULLION MOUNTAIN MINING LTD.
 CLARK ZONE

FEET 0 50 100 SCALE 50 100 FEET

SECTION 100 W

LEGEND

-  Ag-Pb-Zn Replacement
-  Weak Pb-Cr
-  Graphitic Limestone Breccia
-  Limestone
-  Quartzite, Granite, Schist, etc.
-  S 5.5m $\frac{1}{2}$ Core Length
Zn 194 lb



BULLION MOUNTAIN MINING LTD.
CLARK ZONE



SECTION 150 W

Clark Lake Area
Yukon Territory
Gravity Interpretation

for

Bullion Mt. Mining

by

Robert E. Galeski, P. Geoph.

Airborne Geophysical Surveys, Ltd.
June, 1972

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Introduction

In May, 1972 Airborne Geophysical Surveys Ltd. agreed to supply a meteman, a rodman, a LaCoste and Romberg gravity meter, basic computations and an interpretation of acquired data to Teledyne Exploration Ltd. for a gravity survey near Mayo, Yukon Territory, on behalf of Bullion Mt. Mining. In addition, a gravity supervisor was put on the project for its duration. Teledyne supplied a surveyor and survey equipment. Personnel are listed below:

Supervisor (A.G.S.)	M. McCombe
Meter operator (A.G.S.)	B. Slater
Surveyor (Teledyne)	J. Chop
Rodman (A.G.S.)	D. Hart
Meter: LaCoste & Romberg unit G-232 (A.G.S.)	
Survey equipment (Teledyne)	

The crew left Calgary on 18 May, 1972. Project was completed and the crew returned to Calgary on 7 June, 1972. Calculations and a Bouguer map were made in the field using 0.060 elevation correction factor and standard latitude correction procedures. These have been reviewed and re-drafted, and the map is described in this report. In addition, a residual map has been constructed.

Approximately 432 stations were surveyed and metered during the course of the 1972 programme.

Work in 1972 was run on lines generally at 200' intervals with a station spacing of 50'. Data obtained in 1971 were integrated with these.

Good survey control made it possible to apply excellent B and C circle terrain corrections to about 20% of the Bouguer values. The corrections proved to be roughly equal for all stations, and they did not change configuration. Therefore, since there were insufficient data to apply them to all stations, they were not applied to any as they appear on the Bouguer map.

Bouguer Map

The Bouguer map indicates a strongly developed, easterly plunging nose which dominates the area. A line run to the southwest for regional control was essentially flat. Line 10W, run farther northward off the flank of the nose than any other line, indicated continuing northward gradient to its extremity. A narrow zone of local closure extends between 4W and 10W some 100'-200' north of the base line. Gradients of 0.4 mgal./100' are common on the flanks of the dominant nose. On line 10W a gradient of 0.8 mgal./100' exists between 4N and 5N. Gradients of this magnitude are very rare. They indicate strong density contrasts at relatively shallow depth.

Residual Map

The small areal extent of the survey compared to the large size of the easterly plunging nose made the establishment of a regional to isolate that feature a questionable procedure. Because of a lessening of gradient near the north end of line 10W, that portion of the line was assumed to be regional. Regional is less questionable in the southwest and southeast portions of the prospect. Established under the questionable conditions outlined above, the regional removed from the Bouguer map is indicated by the heavy contours superimposed on the residual map included in this report.

The residual is a contoured plot of difference values between Bouguer and regional. It is designed to isolate near-surface features from those at great depth caused by changes in rock type. A local positive, 1.5 mgals. in amplitude, exists through the central part of the area. It is labelled "A" in the general area of highest values (between lines 6W and 11W, 2S and 5S). Causative mass is over 2000' long (E-W direction) and about 1000' wide. Calculated maximum depth is 450'. Nature of the material causing this positive is unknown except that it is

higher density than surrounding materials. It is reported that a hole drilled near 3' south on line 6W to 500' found no change in rock type. There is some local distortion noted on the gravity results in this vicinity. This suggests the possibility of local faulting here which may have resulted in a small graben being present at the drill site. This large feature is worthy of another test.

On the north flank of the "A" anomaly is a narrow positive of significant closure labelled "B". Amplitude is 0.7 mgal with apex between lines 4W and 6W at 1+50 N. This is interpreted to be caused by a narrow band (35'-70') of very heavy material or a wider band (100' - 150') of moderately heavy material at near-vertical (some north dip ?) orientation with top at 100' or less.

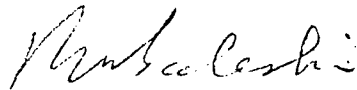
A similar positive extends between lines 0 and 6W at about 13 + 50S. This has been labelled "C". Causative mass appears to be vertical with top at 50' or less and thickness 20' - 50'.

Other small local positive closures and noses exist. These may be due to very small local accumulations of near surface heavier materials or to near surface weathering effects.

Conclusions and Recommendations

1. The large central positive ("A") of the area has not been adequately isolated because of the limited areal extent of the survey.
2. Veins of mineralized material known to exist in the area have not yielded readily recognizable gravity anomalies because:
 - (a) leaching has lowered the average density,
 - or
 - (b) they are too thin to build up a sufficient mass concentration.
3. The "A" anomaly should be tested again with a vertical hole to 600'. Suggested location is at 5S on line 10W.
4. The "C" anomaly should be tested with a 45° slant hole to a drill depth of 150'. This could be done by drilling south from 12+50S on line 0 or by drilling north from 14S on line 0.

Respectfully submitted,



Robert B. Galeski, P. Geoph.