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GEOCHEMICAL-ALTERATION STUDY OF CROSS SECTION C MAGGIE CREEK GOLD DEPOSIT SOUTH OF CARLIN GOLD MINE, NEVADA

Report No. 3

by
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November 14, 1980

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Introduction

This is the third in a series of mineralogic-geochemical reports, describing the XRD lithology and correlation of alteration trends across the Maggie Creek gold deposit, south of the Carlin operations, Nevada, in accordance with earlier NEL proposals.[1,2]

In this report, mineralogic and geochemical data are plotted and contoured along Section C (10600N), and compared with results from earlier studies of Section A (8900E)[3] and Section B (10100E)[4] (Figure 1). This concludes the proposed study on alteration-geochemical contouring, which was conducted primarily for mine development purposes, to assist the mine geologists in correlating features of alteration and mineralizing trends. However, one additional report is in preparation to correlate mine lithology with XRD lithology for all three sections. Geologic cross sections have recently been received from Maggie Creek, and will be included with proposed rock type lithology in a later report, to be completed during the coming month.

SUMMARY

On the basis of contouring of alteration and geochemical values in Section C, the following conclusions are made:

1. The Main and West orebodies are mostly steeply dipping and structurally controlled, where gold mineralization is accompanied by an assemblage of characteristic pathfinders, i.e., As, Sb, Zn and Ba, and alteration features, i.e., silicification, decarbonatization, alunitization and argillitization.

2. Mineralized centers in the Main and West orebodies are separated by nearly a thousand feet of barren to weakly mineralized limestone. There is no evidence to indicate that the two orebodies interconnect or could be mined from the same pit.

3. Relatively unaltered barren limestone between the two orebodies shows geochemical and mineralogic features that indicate similar lithology and a gentle northerly regional dip. Dolomite is irregular in distribution, and appears to have been introduced or redistributed.

4. The West orebody is covered with about 20 to 60 feet of flat lying Tertiary lake beds and gravels that contain relatively high amounts of feldspars and montmorillonitic clays. Most of these Tertiary beds have been removed by recent erosion from the surface of the Main orebody. However, an extensive surface capping of alunite overlies the Main orebody, and may serve elsewhere as a guide to major structural intersections where favorable gold mineralization may occur.

5. Anomalous arsenic shows the closest association with gold mineralization. However, barium and antimony outline more closely the vertical structures (fault zones) that apparently served as conduits for hydrothermal solutions. It is believed that these extrinsic pathfinders were relatively stable during the period of deep Tertiary weathering, and have not been appreciably remobilized during oxidation of the deposit.

6. Illite is the major clay mineral in both orebodies, and is associated with relatively minor amounts of montmorillonite and kaolinite. Montmorillonite is minor throughout most of the section, becoming locally abundant in Tertiary lake beds. Small amounts of montmorillonite are distributed through the Paleozoic section as irregular patches, whose origin may be related to deep supergene weathering.

7. Both orebodies tend to narrow at depth below about 300 feet. However, the Main orebody appears to be relatively open at depth, showing sufficient thickness and continuity to suggest additional significant tonnages below the current drilling.

GENERAL BACKGROUND

Early development drilling at Maggie Creek indicated roughly three centers of gold mineralization, which were referred to by Larry Noble[5] as the East, West and North zones or orebodies. The Northern zone of mineralization occurred in more siliceous, "cherty" rocks, and was designated as "siliceous ore." Subsequent drilling and pit design studies have shown that the Northern and Eastern zones of mineralization could be mined as a single open-pit deposit, which is now designated as the Main orebody (Figure 1). The West orebody has been developed as an isolated smaller deposit, occurring as argillitized replacements along steeply dipping fault structures, analogous to gold mineralization in the Main pit at Maggie Creek.

Gold mineralization in both the West and Main orebodies at Maggie Creek is associated with decarbonatization and silicification of silty limestones, similar to Carlin, but also with intense argillic alteration, that has resulted in ore types containing high clay. High clay contents are attributed in part to hydrothermal alteration, but also to deep sub-tropical weathering (600' or more) along an old Tertiary erosional surface.[6] This period of deep weathering favored the oxidation of auriferous pyrite, and resulted in the highly amenable characteristics of the ore. However, conditions were also conducive to the formation of a lateritic-type clay profile, where ore zones locally contain excessive amounts of clay that may cause problems in settling and thickening of mill-grade ore in the Carlin circuit. Distributions of illite, kaolinite and montmorillonitic clays have been contoured across the West and Main orebodies along Sections A, B and C.

Montmorillinite occurs mostly in Tertiary lake beds and gravels that overly the Tertiary erosion surface, but are locally concentrated within sections of mineralized limestone. Tertiary beds tend to thicken along the eastern perimeter of the Main orebody, locally merging with the ore zone. The thickening of the Tertiary beds along the eastern perimeter of the Main orebody, and the high content of montmorillonite (10-50%) within or adjacent to ore at these locations pose potential problems in select mining to avoid inroducing deleterious amounts of montmorillonite into the Carlin circuit.

Mining of mill-grade ore was initiated in July, 1980, from two pits, which were designated as the West pit and the Main pit, shown in Figure 1. The high clay content of ores from both pits, and silicification, mostly in the northern part of the Main orebody, has resulted initially in poor settling and thickening in the Carlin circuit, and lower than anticipated recoveries.

Monomineralic contouring along Sections A, B, and C has contributed much useful information on the distribution of gold mineralization along fault structures and stratiform horizons, as well as potentially deleterious extrinsic elements and clay minerals associated with the ore. One additional section of holes may be required through the Main orebody, possibly through Sections 10000N or 9800N to complete the evaluation of deleterious clay distributions through the eastern portions of the Main ore zone.

DESCRIPTION AND ANALYSIS OF SAMPLES

In this report, Section C along 10600N has been evaluated from geochemical and mineralogic data from available pulp composites from 21 drill holes, i.e., Les 62, 78, 251, 250, 117, 115, 138, 82, 137, 136, 135, 134, 133, 29, 149, 167, 28, 147, 261, 112 and 305. Samples were not available from older holes, M-114 and M-134, nor from recent holes Les 155 and Les 57, and contouring was extrapolated across the interval between Les 147 and 261 along the eastern portion of Section C (see Location Plan Map, Figure 1).

Available pulps were composited into 20-foot continuous intervals from each hole, and analyzed semiquantitatively by XRD-XRF methods. Intensity data from XRD-XRF scans were calculated by computer into semiquantitative geochemical and mineralogic data (Appendices 1 and 2). Gold assays were repoted from Carlin, and are included with XRF data for Ba, Sb, ZrO_2, SrO, Rb_2O, As, Zn, Cu, Ni, Fe, MnO_2 and TiO_2 in Appendix 1.

Semiquantitative mineralogic data for quartz, plagioclase, K-feldspar, calcite, dolomite, illite, kaolinite, montmorillonite and alunite were measured from x-ray diffraction scans and listed in Appendix 2. Barite and hematite were estimated mostly from XRF data for barium and iron, and are included with mineralogic data in Appendix 2.

Geochemical and mineralogic data for Section C have been plotted, contoured and described in the following sections of the report.

FEATURES OF MINERALIZATION AND GEOCHEMICAL PATHFINDERS

Five extrinsic elements, i.e., gold, arsenic, antimony, zinc and barium (Appendix 1) have been plotted and contoured along Section C to compare their distributions with features of gold mineralization and alteration. Contoured distributions ae compared analogous to earlier reports in Figures 2 through 6, and described below:

Gold Distribution

Gold values were contoured at intervals of 0.02, 0.04, 0.10, 0.20, 0.30 and 0.40 oz/ton (Figure 2). Areas within the 0.10 contour are cross-hatched to indicate portions of the orebody of potential mill grade.* Areas outside of the 0.10 and within the 0.04 oz/ton contour are single-hatched to represent higher grade heap leach ore. The outermost unhatched areas within the 0.02 oz/t contour delineate roughly the outer limits of lower grade heap leach ore.

As shown in Figure 2, the West and Main orebodies are completely separated, with only small areas of discontinuous minor mineralization between the two ore zones. In contrast to this, the two major centers of gold mineralization in Section B (along 10100E) were essentially joined by low-grade (heap leach-grade) mineralization,[4] making it possible to combine the East and North zones of mineralization into one open-pit deposit, now called the Main orebody.

Features of gold mineralization in Figure 2 show mostly vertical control, presumably along faults, notably along the Deb and CE faults in the Main orebody on the north, and possibly the Garret fault in the West orebody on the south (Figures 1 and 2).[5] Outward dissemination of gold values into host sediments was most apparent in the Main orebody, and to a lesser extent in the West orebody in Section C.

Highest amounts of mill-grade ore occur in the Main orebody to the north, where two major stratiform (?) zones of northerly dipping mineralization (0.1 oz/t contour) connect with a major structural zone dipping steeply to the south.

The West orebody consists of a narrow vertical zone of structurally controlled mill-grade ore, associated with a smaller stratiform (?) zone of leach-grade ore dipping gently to the north. A small stratiform zone of leach grade ore occurs roughly midway between the two mineralized centers (Figure 2), but does not appear to be mineable from either the Main or West pits.

The Main orebody is essentially open at depth below ~300 feet where significant thickness of mill-grade ore is indicated at depth below holes Les 57, 155 and M-134.

Arsenic Distribution

Anomalous arsenic correlates closely with gold mineralization at Maggie Creek, as also reported in other Carlin-type occurrences in north-central Nevada. The close relationship of arsenic values with gold described in earlier Sections A and B,[3,4] is also indicated for Section C in this report.

*0.10 oz/t used instead of 0.07 oz/t cutoff for mill-grade ore.

Arsenic values were contoured at intervals of 0.02, 0.04, 0.08 and 0.1% As in Figure 3, and roughly outline the two major zones of gold mineralization described in Figure 2. Anomalous arsenic is widespread in the Main orebody, where structurally controlled zones are indicated mostly by the 0.1% contour (cross-hatched). Stratiform zones of arsenic mineralization are outlined mostly by the 0.04% contour in both the West and Main orebodies (single-hatched).

Slightly anomalous arsenic, indicated by the 0.02% contour, occurs throughout the barren area between the two orebodies, suggesting that arsenic should be an excellent pathfinder for gold outside the immediate zones of economic interest.

Antimony Distribution

Anomalous antimony also correlates closely with gold mineralization, analogous to arsenic, and has been contoured at intervals of 0.01, 0.02, 0.03, 0.05 and 0.1% Sb from semi-quantitative XRF data (Figure 4). The limit of XRF detection for antimony is near 0.01%, and should be confirmed by AA methods for values near or below 0.01%.

Zones of anomalous antimony generally conform to major zones of gold-arsenic mineralization, and outline vertical distributions of antimony in both the West and Main orebodies. At least two vertical zones of anomalous Sb are suggested for the Main orebody (Figure 4).

Highest concentrations of antimony were detected in samples from the vicinity of the West orebody, where sample pulps from Les 115 locally exceed 0.1% Sb.

Zinc Distribution

Anomalous zinc values were contoured at intervals of 0.03, 0.06, 0.1, 0.2, 0.4 and 1.0% Zn (Figure 5). The highest and most extensive distribution of zinc occurs throughout the Main orebody to the north, where values commonly exceed 0.2% zinc, and locally reach 1.0% or more. Zinc is more commonly associated with gold mineralization at Maggie Creek than at Carlin, and was apparently introduced and deposited along the same vertical structures as the gold, but possibly during an earlier period of mineralization, as indicated at Carlin.

Detailed petrographic study of unoxidized ore samples will be required to evaluate the relationship of primary zinc mineralization, presumably sphalerite, to primary gold mineralization in the form of auriferous pyrite. To date, there has been no reported evidence of deleterious amounts of oxide zinc or resulting high cyanide consumption during test work at Danbury.

Barium Distribution

Barium correlates locally with gold mineralization, notably along vertical cross-cutting structures in both the West and Main orebodies (Figure 6). Barium is also anomalous along stratiform lenses where gold values are sparse to essentially absent.

Distributions of barium are believed to represent most accurately the primary structures of the deposit, unaffected by oxidation and redistribution from Tertiary deep weathering. On this basis, there appear to be at least two major fault zones in the Main orebody, one steeply dipping zone (nearly vertical) between Les 261 and 112, and another steep northerly dipping zone cutting through the lower portions of Les 167 and continuing below 147. Only one apparent fault structure occurs between Les 250 and 117 in the West orebody, of relatively narrow width and nearly vertical, dipping steeply to the north.

Stratiform zones of anomalous barium extend through most of the section, dipping gently to the north, but showing local variations in dip near fault structures.

FEATURES OF WALLROCK ALTERATION

Features of wallrock alteration at Maggie Creek show much evidence of vertically controlled structures, as well as stratiform control, analogous to the Bootstrap and Bluestar mines, north of Carlin. Alteration is similar to Carlin, consisting of decarbonatization of host limestones adjacent to fault structures and permeable stratiform horizons, accompanied by mineralization with variable degrees of silicification and argillic replacements.

Estimated values of various mineral phases were contoured, including microcrystalline quartz (silicification), calcite and dolomite, and clay minerals. Semiquantitative percentages of various mineral phases have been calculated from XRD scans with the aid of computer programming, and plotted and contoured by hand.

Decarbonatization

Primary limestones along Section C of the deposit consist mostly of calcite with minor quartz, dolomite and clays, indicating that major changes in mineralogic composition have ocurred in the vicinity of mineralized structures. Most, if not all, of the calcite has been removed from the host limestones in the vicinity of gold mineralization. This is the most prominent and widespread feature of alteration associated with Carlin-type mineralization and is termed "decarbonatization". Decarbonatization is usually accompanied by varying amounts of silicification, argillitization and dolomitization.

Features of decarbonatization are illustrated by contoured plots for calcite (Figure 7), where calcite values are contoured at intervals of 10, 20, 30, 40, 50, 60 and 70%. Two major zones of carbonate depletion are apparent in Section C, corresponding to the Main and West orebodies.

The Main orebody on the north is characterized by two or more "vent" structures, or steeply dipping zones of carbonate removal. These zones of apparent structural control tend to merge into one or more major stratiform zones of decarbonatization delineated by the 10% contour, where much of the Main orebody has been deposited.

The West orebody on the south shows one minor vent zone, delineated mostly by the 20 and 30% contours, and inferred by the 10% contour. Intermediate barren areas between the two "vent" structures consist mostly of limestone defined by the 50 and 60% calcite contours. A very gentle regional dip to the north is indicated by most contours across this section.

Dolomitization

There is increasing evidence from alteration contouring to indicate that much of the dolomite in Maggie Creek sections may have been introduced or redistributed during mineralization. A prevasively high distribution of dolomite has not been detected nor has a continuous unit of high dolomitic limestone been found. Localized zones of high dolomite are irregular in shape, locally cross-cutting, and are commonly associated with features of alteration and mineralization.

The distribution of dolomite in Section C has been contoured at intervals of 5, 10, 20, 30 and 40%, showing an irregular distribution, mostly through the lower horizons of the deposit (Figure 8). Although there are some correlations between dolomite and gold mineralization in the lower portions of the Main and West orebodies, the highest dolomite was detected in barren areas between the two mineralized centers in Section C. The origin and relationship of dolomitic limestones to gold mineralization and the original lithology at Maggie Creek remain in question, requiring additional study for clarification.

Silicification

Contours of silicification, represented by quartz values of 10, 20, 30, 40, 50, 60, 70 and 80%, are shown in Figure 9. Two major zones of silicification, or quartz enrichment, are indicated in Section C, corresponding to the West and Main orebodies.

Highest quartz values are outlined by the 50% contour and have been cross-hatched in Figure 9. Areas enclosed by the 30-% contour have been single-hatched for comparison. An excellent correlation is apparent between silicification and gold mineralization in Section C, as in other sections described previously.

The silica "highs" in both orebodies show a tendency to widen and increase in intensity upward to the surface. Silicification is much more intense and pervasive in the Main orebody, correlating with the higher degree of gold mineralization in this portion of the deposit.

On the basis of silicification, both orebodies appear to be open at depth, below the depth of drilling, with a potential for continued economic mineralization at depth, especially below the Main orebody.

Alunitization

Alunite, defined in Figure 10 by contour intervals of 5, 10, 20 and 30%, shows a high concentration overlying the Main orebody. Highest concentrations (10-20%) commonly occur near surface, and suggest a potential ore guide for major structures associated with gold mineralization.

Distribution of Feldspars

Total amounts of feldspars (plagioclase and K-feldspar) have been plotted and contoured in Figure 11, showing a thin blanket of feldspathic material overlying the Paleozoic limestone section at Maggie Creek. This thin blanket defines the apparent thickness of Tertiary lake and gravel beds that overly the Maggie Creek section. Highest feldspars, defined by the 15% contour, occur to the south at surface, mostly overlying the West orebody. Most of the Tertiary blanket has been removed from the Main orebody to the north. Thickness commonly ranges from about 20' up to 60' or more to the south.

Features of Argillitization

Samples of mill and leach-grade ore from Maggie Creek show an unusually high content of clays, mostly illite, with varying amounts of kaolinite and montmorillonite. Illite is not usually regarded as a deleterious clay in the milling of Carlin-type ores, except where excessively high amounts may interfere with settling and thickening in the Carlin circuit. Locally high amounts of montmorillonite at Maggie Creek may contribute to this problem, and have been delineated in Sections A, B and C through the Maggie Creek deposit, as a possible future guide to select mining of the West and Main pits.

Illite

Illite is the major clay mineral in most of the ore zones at Maggie Creek, and reaches highest concentrations (> 40%) within or adjacent to "vent" structures, associated with gold mineralization (Figure 12). This is also the case for the Main and West zones along Section C. However, relatively high concentrations of illite were also detected in relatively barren areas between the two orebodies, suggesting that they may overly mineralization at depths below the level of current drilling.

Montmorillonite

Montmorillonite values were contoured at intervals of 5, 10 and 20% in Figure 13, and show a general concentration near surface to the south, coincident with the feldspar "blanket", described above. Montmorillonite is usually associated with Tertiary lake beds that overly the Paleozoic section at Maggie Creek.

Small discontinuous zones of minor montmorillonite were defined by alteration contouring through parts of the Paleozoic section, but show no apparent correlation with gold mineralization. They are apparently related to the weathering profile, and may locally be associated with ore zones along the Section C profile.

Special care must be taken to strip the Tertiary section overlying the West orebody in order to avoid contamination of mill-grade ore by montmorillonite. Montmorillonite probably has the poorest settling and thickening properties, and should <u>not</u> be introduced into the Carlin mill circuit.

Kaolinite

Kaolinite values were contoured at intervals of 5, 10 and 15%, and show generally stratigraphic zones of kaolinite distribution with no apparent correlation with mineralization (Figure 14). Much of the kaolinite near surface is probably derived from supergene weathering conditions, associated with low pH from weathering of pyrite.

CONCLUSIONS AND RECOMMENDATIONS

Gold mineralization shows similar features of strong structural control and associated assemblages of pathfinder elements and alteration minerals as earlier completed studies for Sections A and B. Arsenic correlates most closely with gold mineralization, but barium and antimony outline more clearly the vertical structures (fault zones) that apparently served as hydrothermal feeders.

Alteration contouring requires careful comparison of extrinsic geochemical assemblages, as well as alteration minerals. The so-called "vent" structures along fault zones are nearly vertical and relatively narrow in width, requiring detailed integrated evaluation of various sets of data plots before attempting to define their location by contouring. For this reason, the method of alteration-geochemical contouring probably offers the most detailed means to evaluate a newly developing orebody from available drill hole samples.

It is recommended that one additional section of holes (along 10000N or 9800N) through the eastern portion of the Main orebody be evaluated by alteration-geochemical contouring. Sample pulps from about 16 holes are required for XRD-XRF analysis in order to evaluate the boundary between mill-grade ore and highly montmorillonitic zones through this portion of the orebody. Information on the continuity of mill-grade and leach-grade ore and their structural controls would also be obtainable from this section.

This additional section would also provide a needed stratigraphic comparison of calcareous lithologies to the south grading into siliceous lithologies to the north. Evidence from Sections A, B and C show that silicification accompanies gold mineralization, and suggests that the siliceous units to the north may represent silicifcation per se of similar limestone units that occur in the southern portions of the Maggie Creek deposit.

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5. Noble, L., Personal Communication in February, 1980.

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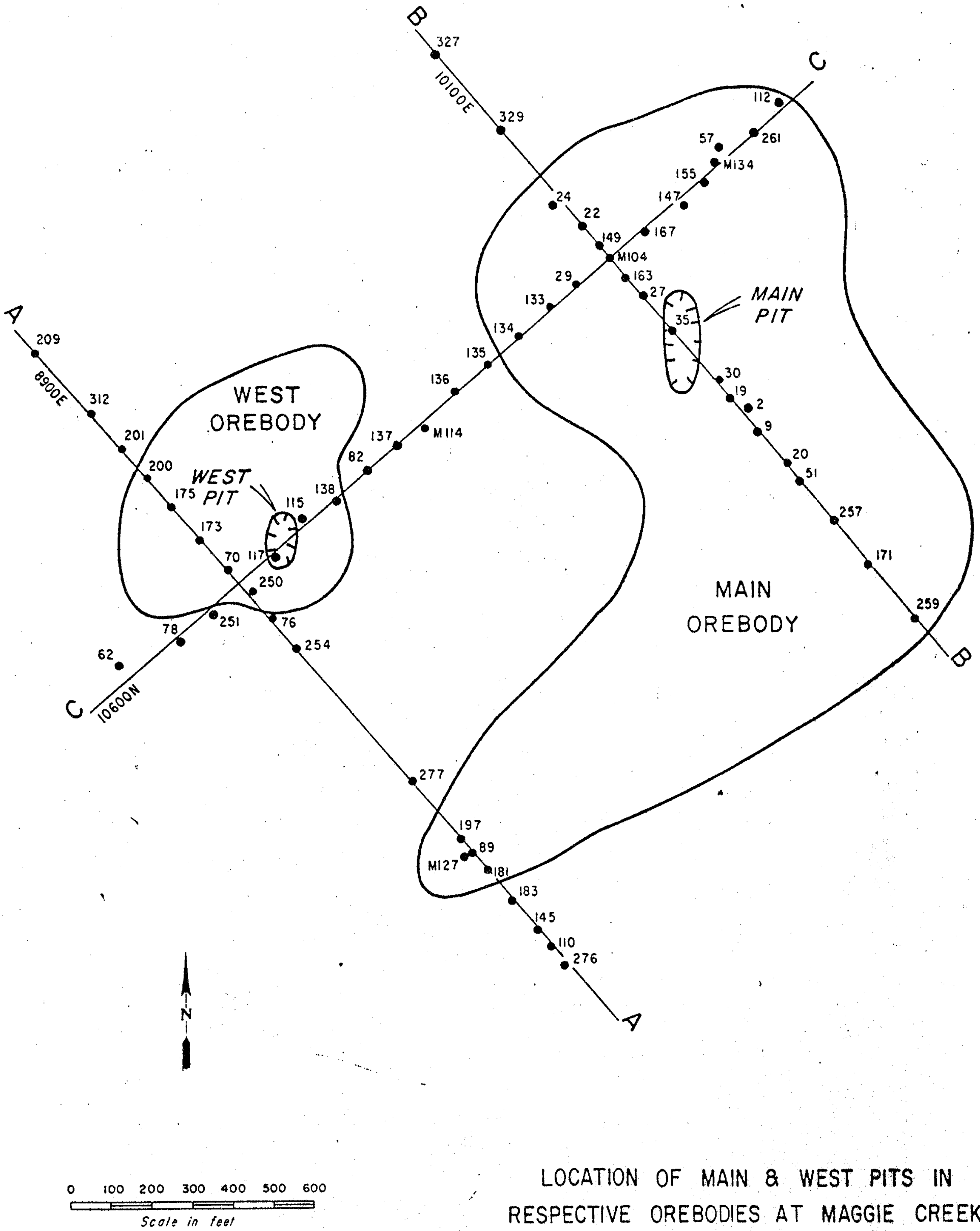


LOCATION OF MAIN & WEST PITS IN RESPECTIVE OREBODIES AT MAGGIE CREEK

Figure 1

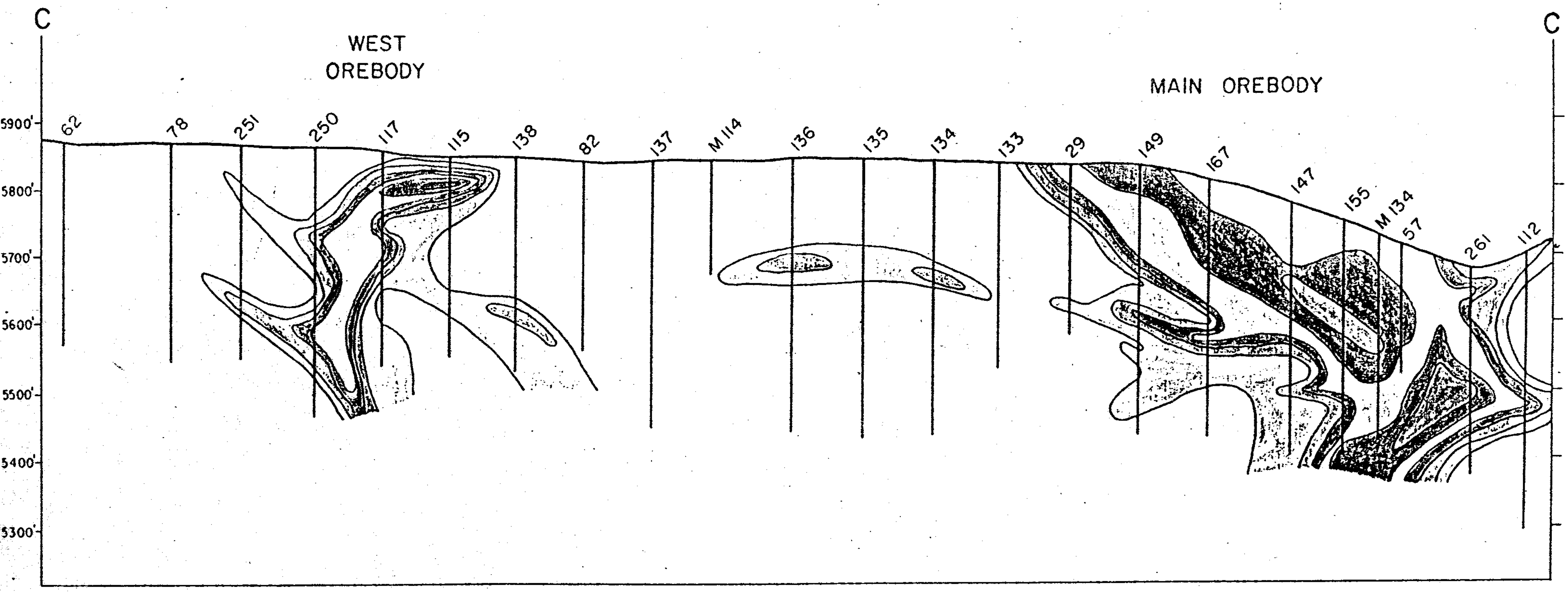
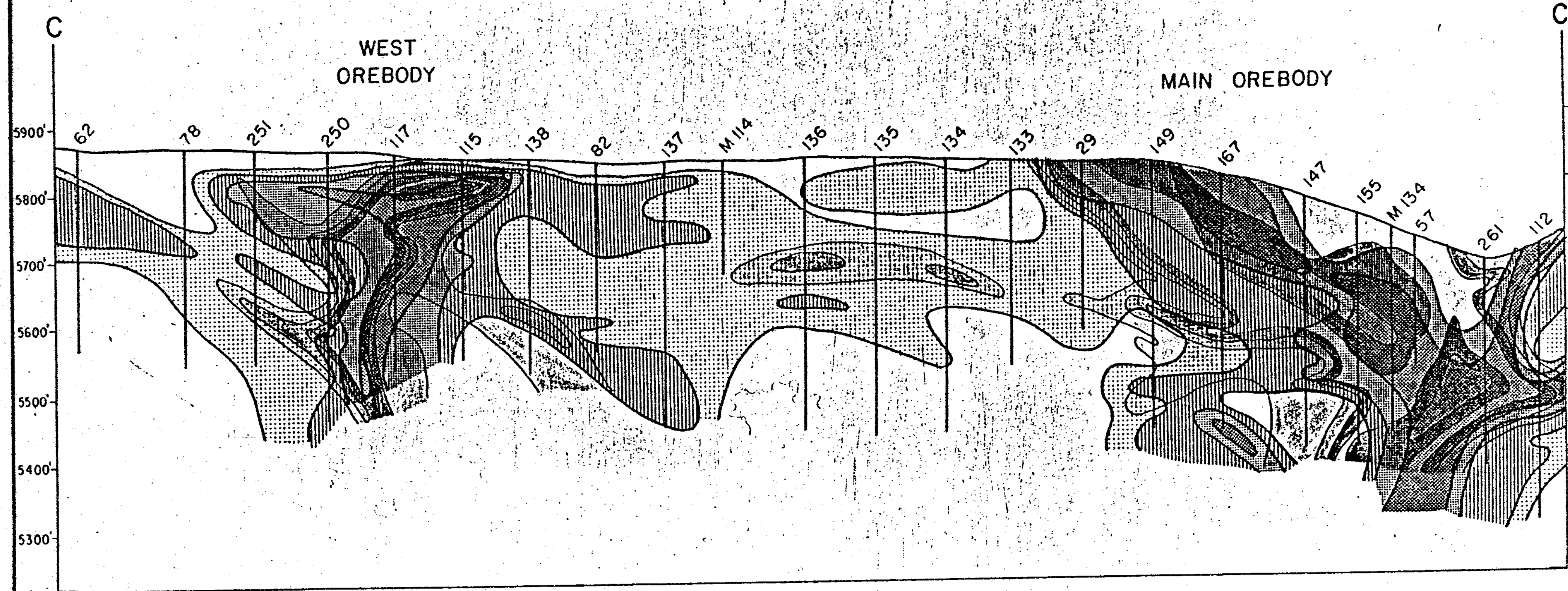


Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

- 0.020–0.039 oz./ton Au
- 0.040–0.079 oz./ton Au
- 0.080–0.099 oz./ton Au
- 0.10 – 0.19 oz./ton Au
- 0.20 – 0.29 oz./ton Au
- 0.30 – 0.39 oz./ton Au



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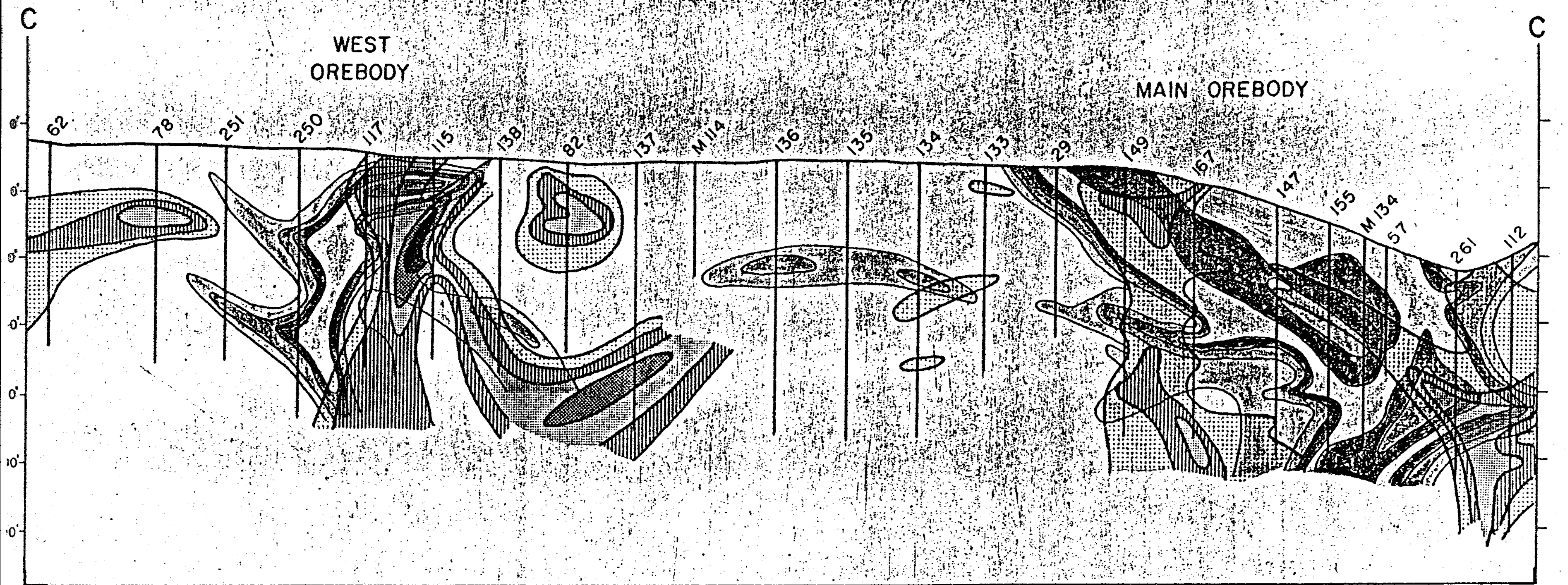
- 0.30–0.39 oz./ton Au
- ≥ 0.40 oz./ton Au

Figure 3. MAGGIE CREEK SECTION C
% DISTRIBUTION OF ARSENIC

- 0.02–0.039 % As
- 0.04–0.079 % As
- 0.08–0.099 % As
- ≥ 0.10 % As



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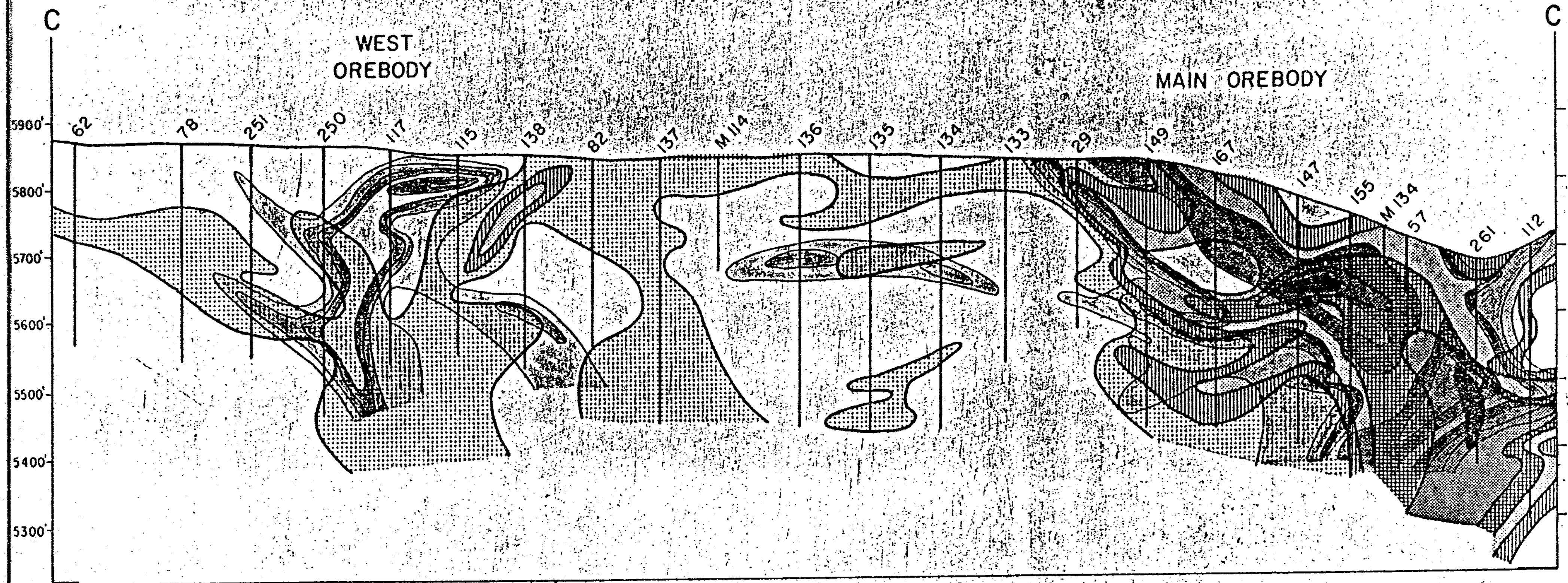
- 0.30– 0.39 oz./ton Au
- > 0.40 oz./ton Au

Figure 4. MAGGIE CREEK SECTION C
% DISTRIBUTION OF ANTIMONY

- 0.01–0.019 % Sb
- 0.02–0.029 % Sb
- 0.03–0.049 % Sb
- 0.05–0.099 % Sb
- ≥ 0.10 % Sb



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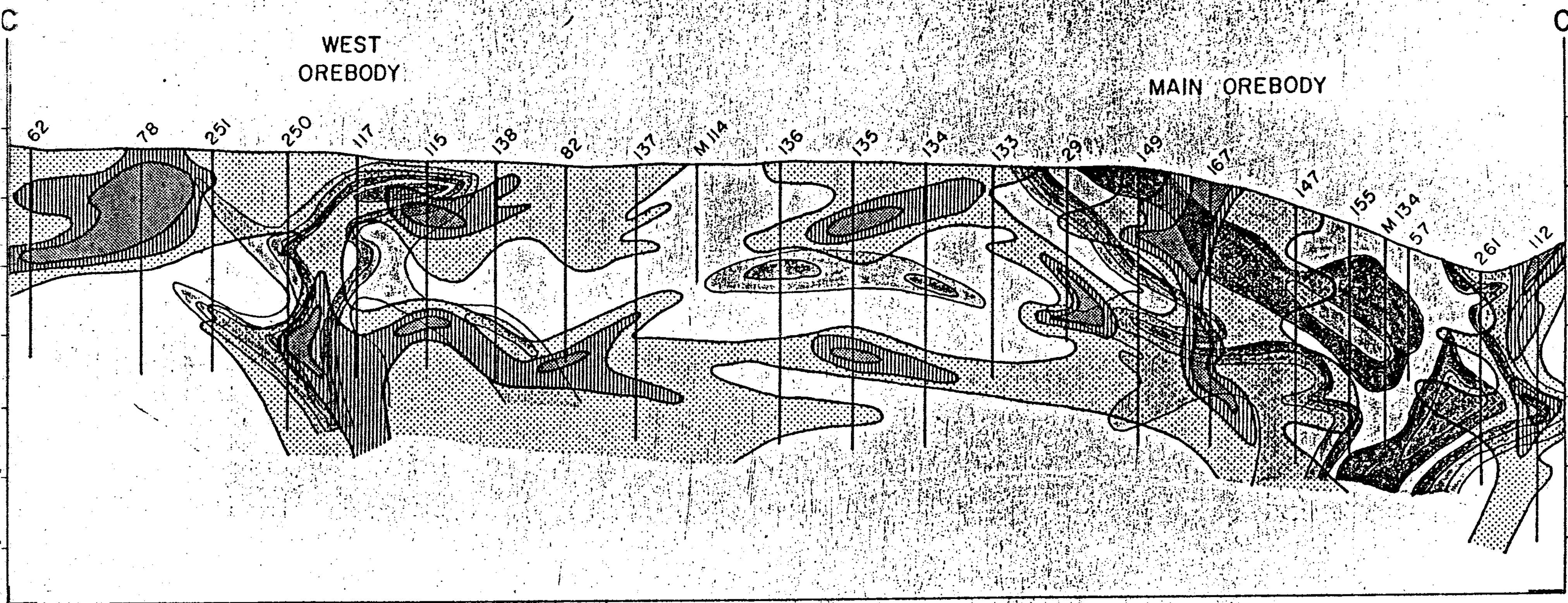
- ≥ 0.40 oz./ton Au

Figure 5. MAGGIE CREEK SECTION C
% DISTRIBUTION OF ZINC

- 0.03–0.059 % Zn
- 0.06–0.099 % Zn
- 0.10–0.19 % Zn
- 0.20–0.39 % Zn
- 0.40–0.99 % Zn
- ≥1.00 % Zn



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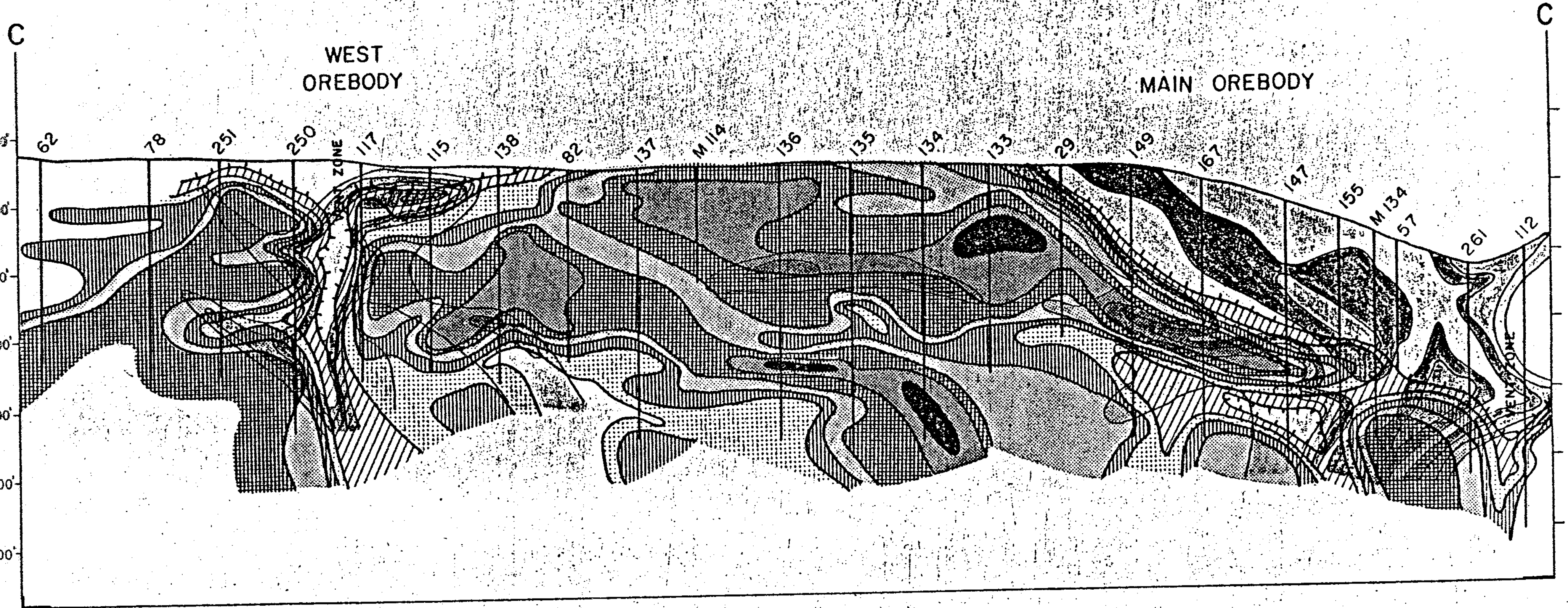
- 0.30–0.39 oz./ton Au
- ≥ 0.40 oz./ton Au

Figure 6. MAGGIE CREEK SECTION C
% DISTRIBUTION OF BARIUM

- 0.20–0.49 % Ba
- 0.50–0.99 % Ba
- ≥1.00 % Ba



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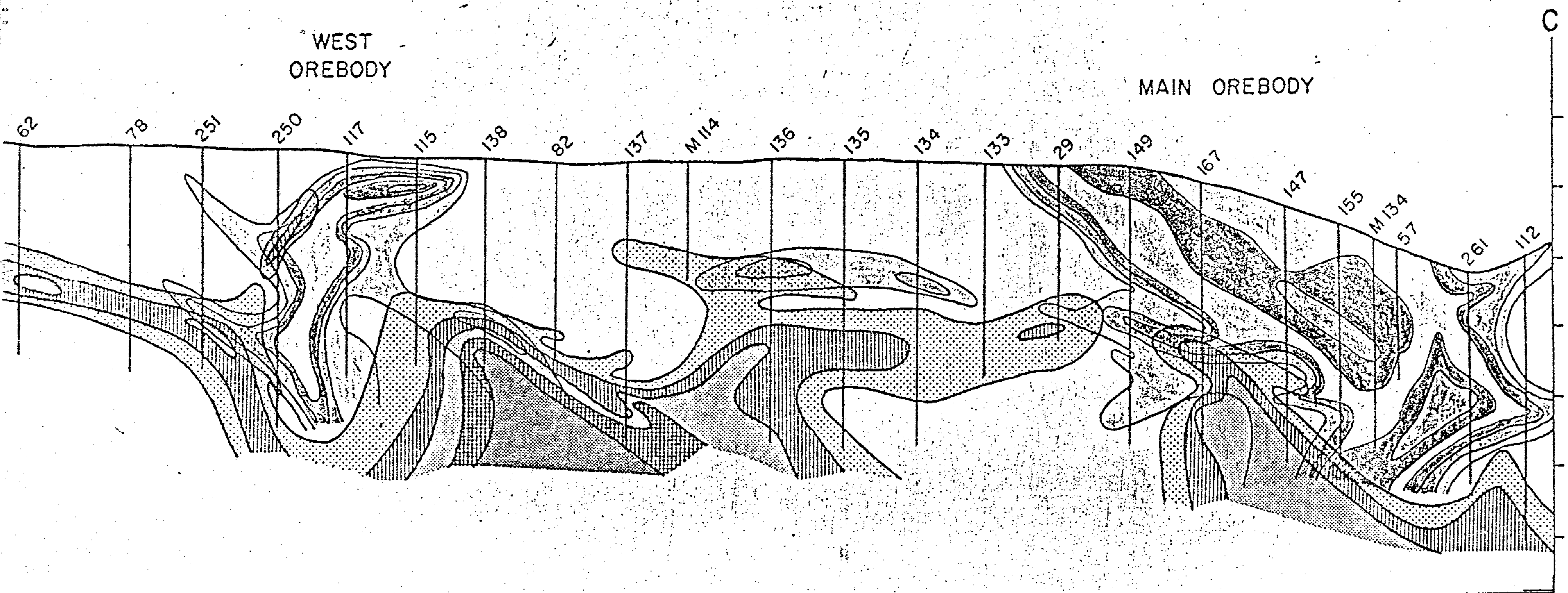
- ≥ 0.40 oz./ton Au

Figure 7. MAGGIE CREEK SECTION C
% DISTRIBUTION OF CALCITE

- 10.0 – 19.9 % calcite
- 20.0 – 29.9 % calcite
- 30.0 – 39.9 % calcite
- 40.0 – 49.0 % calcite
- 50.0 – 59.9 % calcite
- 60.0 – 69.9 % calcite
- ≥ 70.0 % calcite



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- 0.30 – 0.39 oz./ton Au
- ≥ 0.40 oz./ton Au

Figure 8. MAGGIE CREEK SECTION C
% DISTRIBUTION OF DOLOMITE

- 5.0 – 9.9 % dolomite
- 10.0 – 19.9 % dolomite
- 20.0 – 29.9 % dolomite
- 30.0 – 39.9 % dolomite
- ≥ 40.0 % dolomite

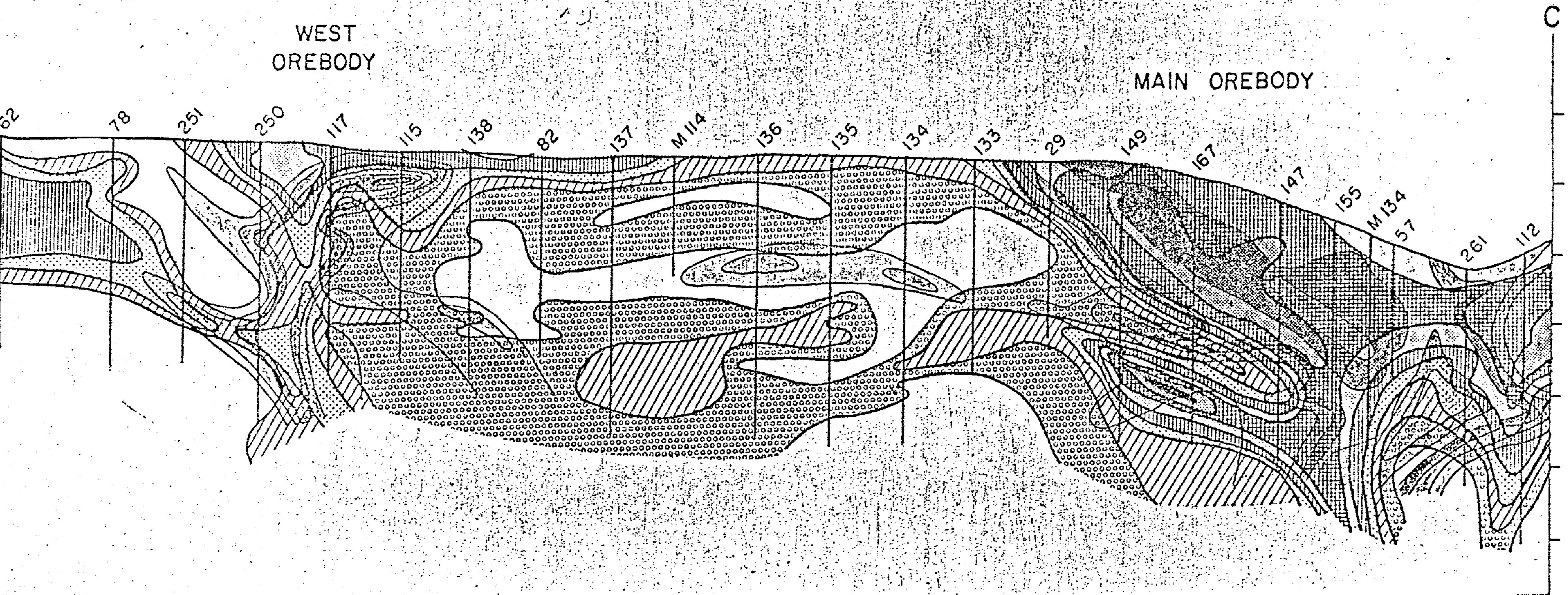

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Figure 9. MAGGIE CREEK SECTION C
% DISTRIBUTION OF QUARTZ

- 10.0 – 19.9 % qtz.
- 20.0 – 29.9 % qtz.
- 30.0 – 39.9 % qtz.
- 40.0 – 40.9 % qtz.
- 50.0 – 59.9 % qtz.
- 60.0 – 69.9 % qtz.
- 70.0 – 79.9 % qtz.
- ≥ 80.0 % qtz.

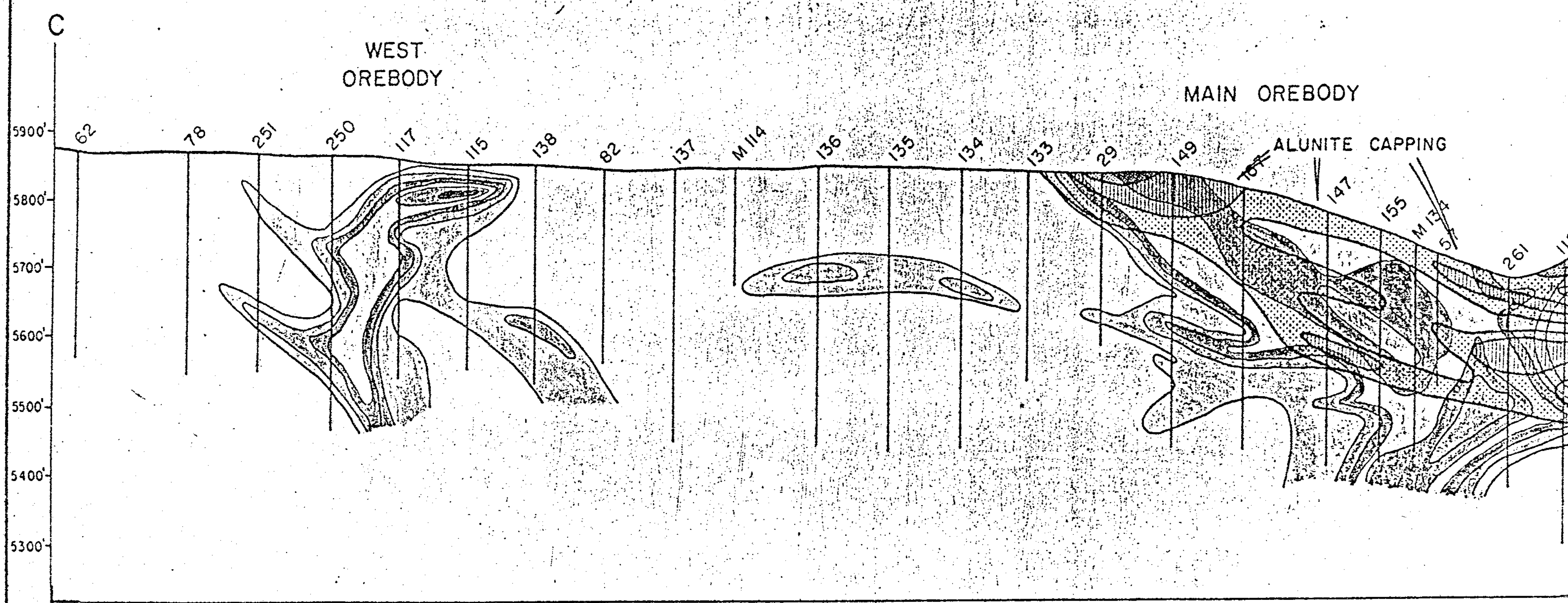

Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

- 0.020–0.039 oz./ton Au
- 0.040–0.079 oz./ton Au
- 0.080–0.099 oz./ton Au
- 0.10–0.19 oz./ton Au
- 0.20–0.29 oz./ton Au
- 0.30–0.39 oz./ton Au
- ≥0.40 oz./ton Au

Figure 10. MAGGIE CREEK SECTION C
% DISTRIBUTION OF ALUNITE

- 5.0 – 9.9 % alunite
- 10.0 – 19.9 % alunite
- 20.0–29.9 % alunite
- ≥ 30.0 % alunite

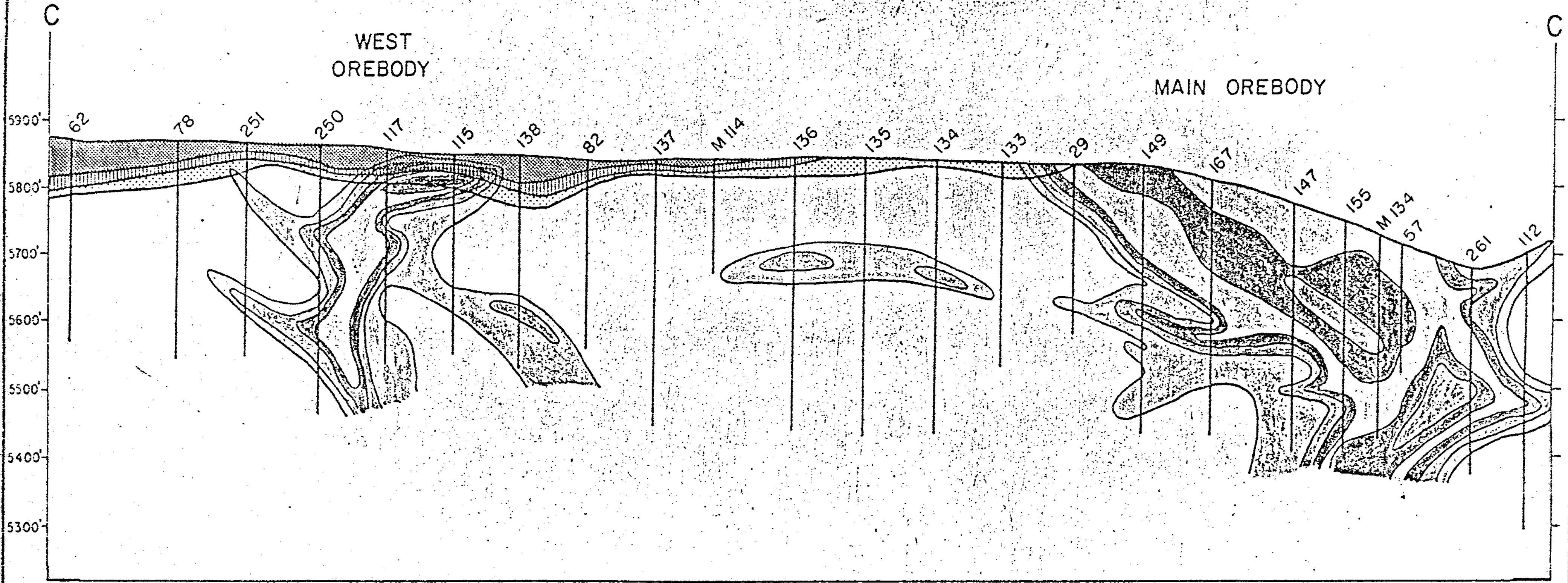

Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

- 0.020–0.039 oz./ton Au
- 0.040–0.079 oz./ton Au
- 0.080–0.099 oz./ton Au
- 0.10 – 0.19 oz./ton Au
- 0.20– 0.29 oz./ton Au
- 0.30– 0.39 oz./ton Au
- > 0.40 oz./ton Au

Figure 11. MAGGIE CREEK SECTION C
% DISTRIBUTION OF FELDSPARS

- 5.0 – 9.9 % feldspars
- 10.0 – 14.9 % feldspars
- ≥ 15.0 % feldspars

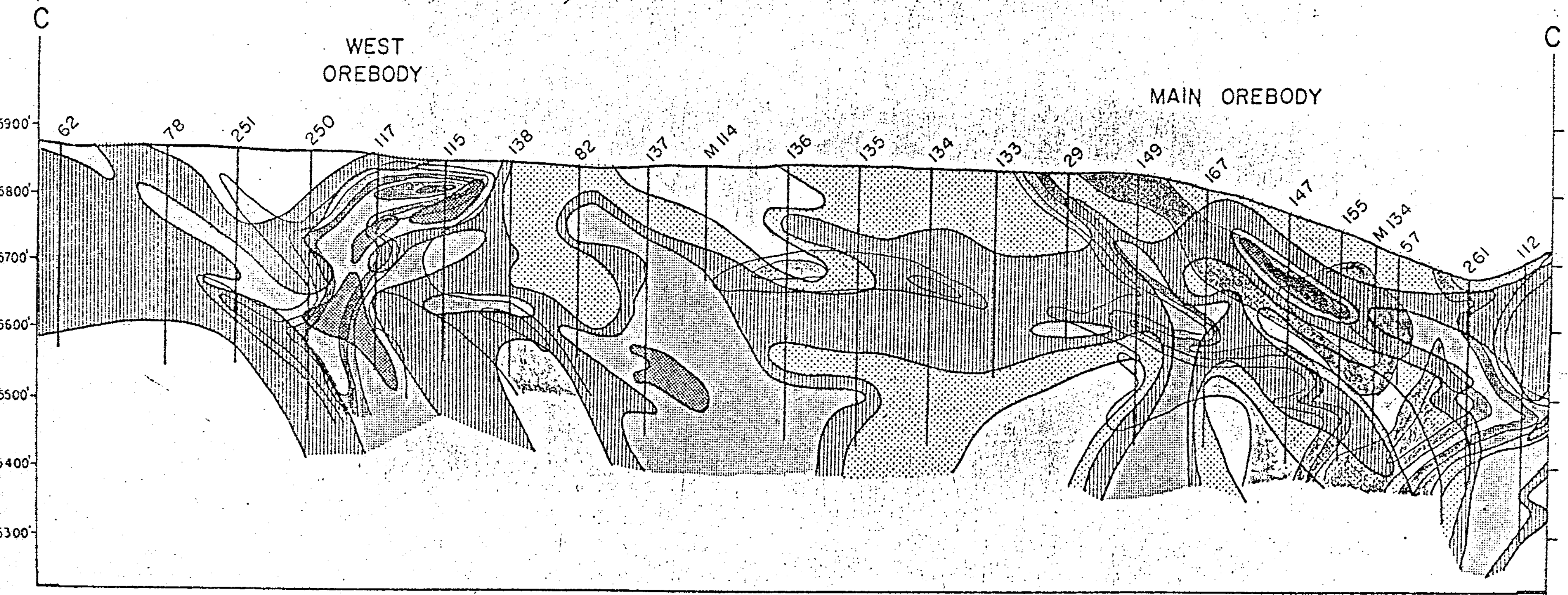

Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

- 0.020 – 0.039 oz./ton Au
- 0.040 – 0.079 oz./ton Au
- 0.080 – 0.099 oz./ton Au
- 0.10 – 0.19 oz./ton Au
- 0.20 – 0.29 oz./ton Au
- 0.30 – 0.39 oz./ton Au
- >0.40 oz./ton Au

Figure 12. MAGGIE CREEK SECTION C
% DISTRIBUTION OF ILLITE

- 10.0 – 19.9 % illite
- 20.0 – 29.9 % illite
- 30.0 – 39.9 % illite
- 40.0 – 49.9 % illite
- ≥ 50.0 % illite

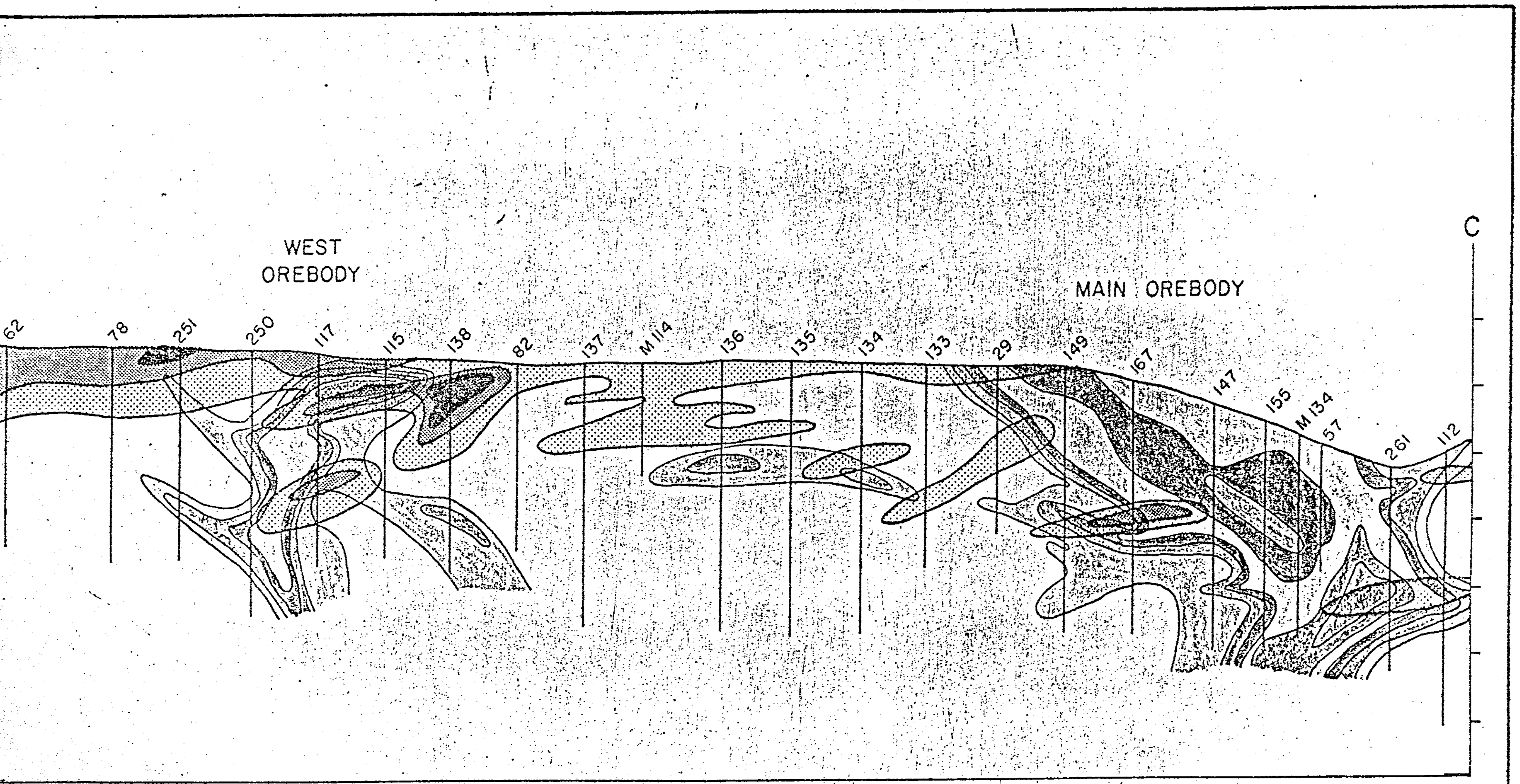

Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

- 0.020 – 0.039 oz./ton Au
- 0.040 – 0.079 oz./ton Au
- 0.080 – 0.099 oz./ton Au
- 0.10 – 0.19 oz./ton Au
- 0.20 – 0.29 oz./ton Au
- 0.30 – 0.39 oz./ton Au
- ≥ 0.40 oz./ton Au

Figure 13. MAGGIE CREEK SECTION C
% DISTRIBUTION OF MONTMORILLONITE

- 5.0 – 9.9 % mont.
- 10.0 – 19.9 % mont.
- ≥ 20.0 % mont.

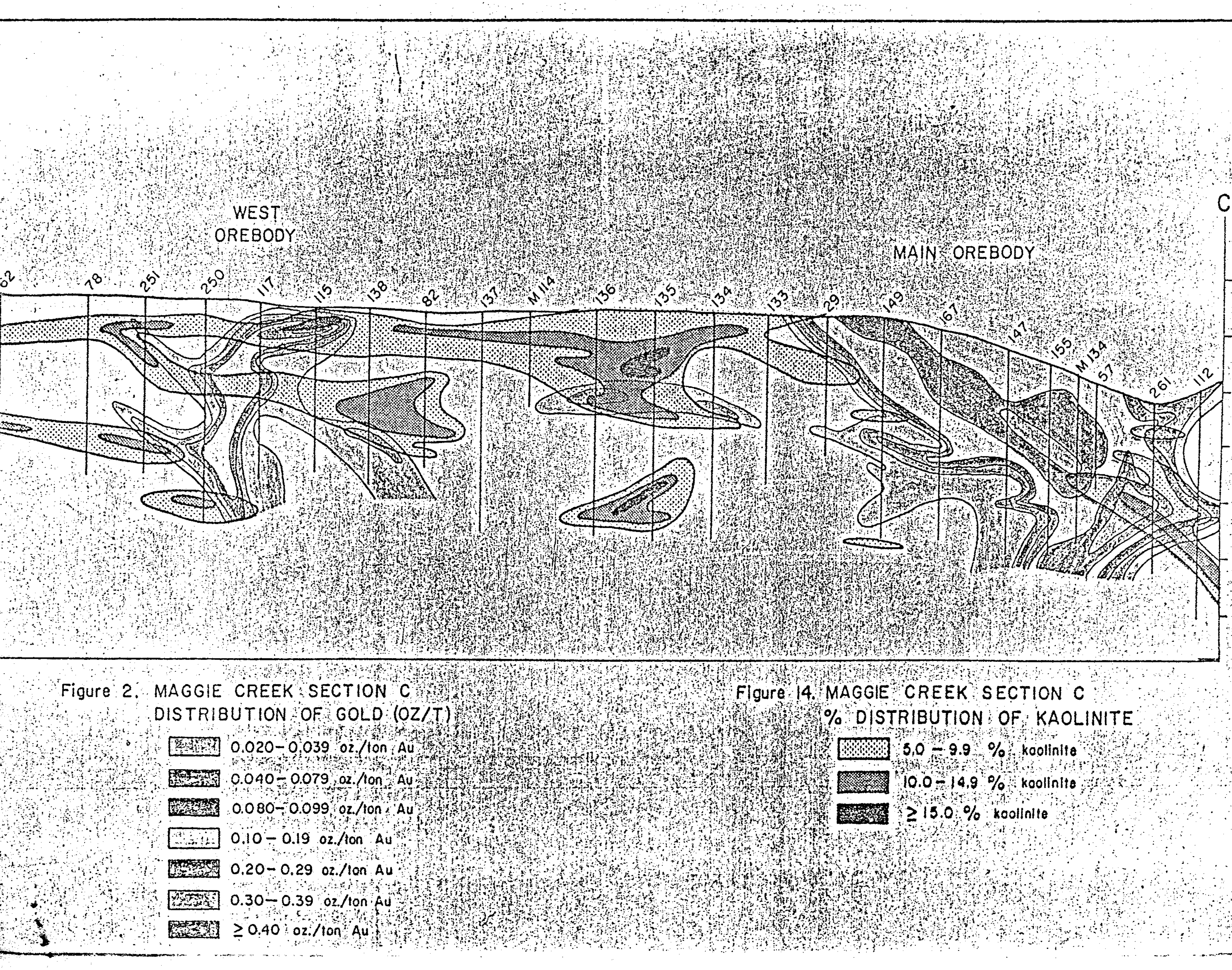

Figure 2. MAGGIE CREEK SECTION C
DISTRIBUTION OF GOLD (OZ/T)

Figure 14. MAGGIE CREEK SECTION C
% DISTRIBUTION OF KAOLINITE