[illegible] supplementary report that deals specif- [illegible] Dewey claims, part of the subject group, [illegible] and located at Garnet, Montana. Also [illegible] is [illegible] additional maps (Maps 4, 4A-D) illustrating the geology in detail [illegible] the two claims and a proposed supplementary drilling program designed to explore for additional ore on these two particular claims.

This report, and the maps that go with it, are in addition to those that accompanied the original application. The exploration outlined in the earlier submittal is designed primarily to explore the plunging anticline, at Garnet, for bedded, or replacement, ore on its flanks and crest, along with fissure ore on the Lead King and Grant and Hartford vein structures, as projected to the west. Eleven holes were laid out for this purpose.

The five additional holes shown and described in the supplemental maps and report, referred to in the first paragraph above, have a more specific and limited purpose. They have been designed to explore for ore in possible downward, and also faulted, extensions of the vein structures exposed and developed in the old workings of the Nancy Hanks and Dewey mines proper.

It is requested that proposed holes 2, 3, 4 and 5 (shown on Maps 4, 4A-D) be considered as additional holes proposed under the captioned application and that they be added to the original drilling program laid out, which involved holes "a" through "k", or substituted for any of the eleven holes of the original application that may be disallowed, or deleted.

Since the additional holes are in the same area, will face the same conditions of geology and terrain, it is assumed that the unit costs developed for the drilling of holes "a" through "k" of the original application will apply, to the additional holes 2,3, 4 and 5 now being added.

Very truly yours,

RECEIVED
MAY 25 1965
OMS

American Mining Company

Joe G. Irving

by Joe G. Irving, Representative

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NANCY HANKS -- DEWEY CLAIMS
OF THE
AMERICAN MINING COMPANY
GARNET, GRANITE CO., MONTANA

A SUGGESTED PRELIMINARY EXPLORATION PROGRAM

The Garnet area has produced about $10,000,000 in placer gold, primarily from Bear Creek and its tributaries. The placers were among the richest in Montana. In addition, the production from the lode mines of the district totalled $3,600,000, about ninety percent of the value of which was in gold. Some of the ore produced was extremely high grade.

The two principal government publications dealing with the mines and geology of the area, and to which many references will be made are:

> Ore Deposits of the N.W. part of the Garnet Range, Montana, by J. T. Pardee, U.S.G.S. Bulletin 660-F, 1917
>
> Geology of the Garnet-Bearmouth Area, Western Montana, Montana Bureau of Mines & Geology Memoir No. 39, by Kauffman & Earll, 1963

INTRODUCTORY STATEMENT

This report will be devoted to a discussion of a preliminary exploration program for the Nancy Hanks and Dewey claims at Garnet, Montana, as distinct from a broader exploration program previously laid out for a larger area within the district. The latter program was submitted to the Office of Minerals Exploration in January, 1965, (Docket No. OME-6410) by the American Mining Company,

and involves some bulldozing and eleven drill holes, ranging in depth to 1,000 feet. This program, including 7,225 or more feet of drilling was designed primarily to explore a favorably situated anticlinal structure for possible bedded, or fissure, ore well beyond the limits of past development work or exploration.

The program suggested and described in the present report, for the Nancy Hanks and Dewey claims, involves a smaller area and is more specific in purpose. A set of five maps (Maps 4, 4A-D) accompany this report and illustrate the objectives which include exploration for:

1. Productive veins and oreshoots, within the so-called Nancy Hanks-Dewey-Shamrock fissure zone, below known bottom levels. This belt of mineralization seems to be composed of a number of separate veins, which appear to occur in an en echelon relationship.

2. Parallel veins within the footwall, or hangingwall, of veins revealed in present workings. There is strong evidence that such parallel veins exist, and some were not exposed in past development work.

3. The faulted continuation of the rich Nancy Hanks oreshoot, which was apparently cut off by a heavy fault, on the 100 level.

4. The faulted extension of the rich Tiger-Lowry vein, also mapped as having been cut off by a heavy fault in the Tiger-Lowry incline. This vein occurs in altered, crystalline, magnesian limestone and seems to have followed the bedding. The drill holes laid out to search for its extension will probe the area for parallel, or other, replacements in this most favorable host rock.

5. The downward continuation of the ore reportedly mined above the 100 level, off the Minnie Palmer shaft.

GEOLOGIC SETTING

The geologic features of the general area are extensively covered in the two government publications cited above. The geology of a more restricted area, together with the mining history and past production, were taken up in some detail in a report on the Copper Cliff Mining District, by Joe G. Irving, written in 1963. The Copper Cliff District is only six miles west of Garnet and the report referred to, which was submitted to the American Mining Company, devoted considerable space to the general geology of the entire area.

A still more detailed discussion of the geology at Garnet, particularly the structural geology, stratigraphy and ore occurrence, accompanied MME Form-40 sent in with the application for O.M.E. exploration aid, mentioned above. This application was also accompanied by a set of detailed surface

geological maps and cross sections.

In view of the availability of the two private reports, just mentioned, along with the government references cited, the present report will discuss primarily the veins, oreshoots and fault problems revealed in the Shamrock, Dewey and Nancy Hanks workings, and the exploration proposed.

A brief account of the major structural features of the district, however, would seem a pre-requisite for fully understanding the detailed discussions to follow, and is herewith submitted in compressed form.

MAJOR STRUCTURAL FEATURES OF THE AREA

From a broad structural viewpoint, the Garnet district is near the intersection of two regional tectonic breaks of major importance. These are the so-called Montana lineament which is an extension of the Lewis and Clark belt of tear faults, and one of the main strands of the Cordilleran thrust zone.

The Lewis and Clark line is represented near Missoula by the Clark Fork displacement; the thrust faulting near Garnet is believed to be an extension of the Philipsburg-Deer Lodge Valley thrust arc. The igneous stocks, at Philipsburg and Garnet, seem to be associated with this thrust faulting.

In the Garnet district itself the dominant feature of local structure, however, is a sharp, northwest-trending and plunging anticline which has been intruded-on its northeasterly flank-by the granodiorite of the Garnet stock, or chonolith. Exposed in the fold are sedimentary rocks, ranging in age from

pre-Cambrian to middle Paleozoic. Included are the usually favorable intercalated shales and magnesian limestones of Cambrian age. Considerable faulting is evident. Most of the faults near the Nancy Hanks and Dewey mines are believed to be normal.

GENERAL ORE OCCURRENCE

The ore occurs as fissure veins, cutting the granodiorite near its margin, and as bedded replacements in the sedimentary formations, possibly following bedding-plane faulting. Some crosscutting fissures occur also in the stratified rocks.

Tonnagewise, the greatest production has come from the veins that follow the bedding in the quartzites that form the core of the anticline. The highest grade ore, however, has been found in the relatively flat-lying fissures within the granodiorite, near its margin, and in one case in the crystalline and altered limestone near the granodiorite contact. It was from the latter environment that a shipment was made (the richest recorded) that averaged $22\frac{1}{2}$ ounces in gold and 25 ounces in silver per ton.

It is felt that the prospects are good for bedded replacement ore in the favorable limestones, and limestone-shale series, that make up the flanks of the anticline and form its crest in the western part of the camp. This setting, and the possibility of ore being found within it, is the major objective of the exploration program that was laid out in the O.M.E. application

submitted in January.

STRUCTURAL CONTROL OF ORE DEPOSITION

In attempting to establish the major elements of structure that have influenced and controlled ore deposition, one searches first for that structure, or condition, that may have served as the main ore inlet from below. There is not much doubt that the intrusive itself, as now exposed, was not the immediate source of the ore solutions. The point of origin of the ore fluids was instead a more deeply buried source from which the ore solutions travelled upward, along conduits and channelways that were open at the time. Some of these channelways, in their upper reaches, were openings in the already solidified granodiorite mass. These conduits, and the primary ore inlet itself, are probably closely related, in a secondary manner at any rate, to the main break along which the granodiorite itself was emplaced.

The surface expression of the Garnet stock, if one examines the larger state geologic maps, is seen to be an elongated mass with a northeasterly trend. Its long dimension is approximately 12 miles, and its average width is perhaps $2\frac{1}{2}$ to 3 miles. At its southwest end, the intrusive curves tongue-like around to the east, and its extreme tip-as displayed there by the surface geology - consists of at least two southeasterly-jutting fingers that in general follow the "grain of the country", or the trend of the folded sedimentary rocks. There is an igneous "outlier" at the Top O' Deep area, two miles to the east, that is probably part of the northermost of the two apophyses and is undoubtedly connected to the main mass below the present surface.

Major conduits for deep-seated solutions are commonly associated with tongues of intrusive rock that jut out from the main mass. Often, contact metamorphic deposits -- such as characterize some of the prospects in the Top O' Deep area -- have proved to be alteration halos associated with such main channelways. Both the intrusive and intruded rocks, at such an irregular igneous contact at the end of a narrow intrusive body, are very likely to be shattered and broken up by faults, by complex fracture systems and to contain irregular, large-scale breccias. Such a broken mass would have great permeability and would allow magma fractions and ore solutions to ascend. And, as shrinkage continued, such permeability could be maintained over long periods of time.

A number of dikes, mostly granitic or aplitic, and one of opposite-end composition, are present close to the irregular intrusive contact discussed above. Some of these dikes follow the bedding, which tends to support the belief that bedding-plane faulting has taken place.

The anticline that characterizes the Garnet district plunges sharply downward to the northwest, from a point about two miles southeast of camp to a point northwest of camp, where it abuts and has been intruded by the granodiorite stock. See Memoir 39 and U.S.G.S. Bulletin No. 660-F*

If the claim map of the district, along with Plate VI, of Bulletin 660-F, be examined, it will be noted that the great bulk of the patented claims and

* Previously cited

productive mines of the district are confined to the northeast flank, or the crest, of that section of the anticline that plunges to the northwest. Those that are not located on the anticline itself are in the intrusive, at its contact with the anticline's northeast flank -- in the same down-plunging section. This fact is significant.

It seems evident that the upper channelways for the ore solutions comprised two main types of openings:

1. Bedding plane openings along the northeast flank and probably the crest, of the northwest-plunging anticline, and
2. The obviously sheared, shattered and crackled granodiorite adjacent to its contact with the intruded sediments.

Other types of opening that should be kept in mind are possible, if not probable, crosscutting and longitudinal fractures such as one would expect to find within such a tight fold. Also to be considered as possible channelways are the shale-limestone contacts within the fold, particularly in warps, or at (or near) the crest. These contacts, because of the relatively impervious nature of the shale, could serve as inverted troughs along which the ore solutions could have been guided upward.

The exploration work outlined in the previously submitted O.M.E. application is primarily aimed at finding bedded and fissure ore in the northeast flank and crest of the plunging anticline discussed above. The five drill holes suggested in this supplementary report are devoted to exploration on the

Nancy Hanks and Dewey claims only. They are designed to find faulted extensions of ore cut off above, or additional oreshoots in a vein system that forms an irregular mineralized zone in the fractured areas bordering the intrusive contact.

DISCUSSION OF THE SPECIFIC EXPLORATION RECOMMENDATIONS

A set of five maps, three of them containing cross sections, will be referred to often in the discussion to follow. Plan Map 4 is a composite one, showing surface and underground geology. Plan Map 4-A shows veins and faults projected to elevation 5700', which is from 340' to 420' below the present rolling surface. The proposed drill holes are best shown, in relation to the geologic data and projections, on the several cross sections, contained on Maps 4-B, C and D.

1. SHAMROCK - EAST DEWEY AREA

As shown on Map 4, several veins have been developed in the Shamrock mine, which adjoins the Dewey claim on the east. They strike northeasterly and are relatively flat-lying. They are wholly enclosed in the granodiorite, whose contact with the altered limestone is about 60' to the south of the collar of the Shamrock shaft. Total production from the Shamrock mine is placed by Pardee* at more than $100,000, and by J.P. Rowe** in Mining World, October 15, 1910, page 707, at nearly $200,000.

* Previously cited.
** "History and Geology of the Garnet District, Montana", by J.P. Rowe, Mining World, October 15, 1910.

If Section 4a-a' is studied, in conjunction with plan Map 4, it will be seen that at least three veins are exposed in the Shamrock mine and their positions, relative to each other, have been complicated by faulting. All veins have been stoped to varying extents, which have been determined partly by fault cut offs. Stoping is shown from the bottom (350) level to the surface and, if Map 4-A is examined, it will be noted that the stoped area forms a belt up to 200' in width, over a length of 350', measured on the dip.

On the bottom level, a structure which is designated as "Vein D" (probably the same as Vein A, above the 240 level), has been stoped for a length of 90'. As mapped, this vein would appear to have a true width of $2\frac{1}{2}$ to 3 feet. A vein structure that is definitely distinct from the others is "Vein C", appearing first on the west side of the 150 level, where it was stoped for a length of 70'. It would be cut off in its upward extension by the Shamrock Fault, and also on the 300 level by the footwall branch of the main Dewey mine faulting. See Section 4a-a' and Map 4.

The only reference that could be found to the tenor of the Shamrock ore is that by Rowe** who, in describing the Shamrock mine, refers to -- "ore carrying$30 to $40 in gold in the oxides and up to $200 or more in the sulphides". And, further on, referring to the current operation, he mentions -- "a very good output of high grade ore". This was, of course, at the old price of gold.

** Previously cited.

In the absence of shipment records, or reliable assay maps, the ore in the Shamrock lower levels will be assumed to be of the same general grade as that found in the adjoining Dewey, to be discussed later.

Both Vein D, which was stoped on the bottom level, and Vein C which was stoped above, have been projected to elevation 5700' and appear on Map 4-A and Section 4a-a' as objectives of the drilling laid out. The northeasterly extension of the Dewey vein would also be cut in this exploration work.

It will be observed that the Shamrock veins, when projected to elevation 5700', fall partly into Dewey ground and partly into what might be a sliver of open ground in between the Dewey and Shamrock claims. It is planned to stake a claim, this spring, to cover this piece of open ground. As far as extra lateral rights are concerned, it would seem that with all the faulting shown it would be most difficult to prove the apex of any one of the fault segments.

2. THE DEWEY MINE

As can be seen on Sections 4b-b' and 4c-c', it is probable that two veins exist in the Dewey mine proper. The upper, or hangingwall, vein has been developed to a depth of about 325' vertically below the surface, and about 500' down the dip. It was stoped from the bottom (No. 7.) level to the surface. The stoping above No. 2 level is quite irregular, owing to the fact that the vein in this region is cut up by faulting. (Maps 4 and Sections 4b-b' and 4c-c')

The veins of the Dewey mine strike easterly to northeasterly, are entirely within the granodiorite and are accompanied by the faulting shown on the

various maps. Total production from the Dewey mine, as separate from the adjoining Nancy Hanks property, to which connections have been made on two levels, is reliably estimated at $150,000 - at old price for gold - two-thirds of which, according to Pardee, was in the 1915-16 period.

The second vein inferred to be in the Dewey mine is believed to be in the footwall of structure that has been developed down to the No. 7 level. Its possible presence is indicated by projecting westerly Vein C in the Shamrock mine, and by the analysis that has led to the conclusion that there may be two veins, similarly situated, in the Nancy Hanks mine on the west. See Section 4e-e' and plan Map 4-A.

Regarding the average grade of Dewey mine production, Pardee* states, on page 181, --- "The ore extracted so far has contained on the average a little more than 3½ ounces of gold, 6½ ounces of silver and 2% copper to the ton." He also mentions that --- "Considered together, the lenses that have been worked in the Dewey form an irregular oreshoot that extends from a point near the surface down 400' and an unknown distance farther." It ranges from 80' to 130' in width** and has a slightly westward pitch."

A mine examination report, written by D.M. Pitt (E.M.) in 1917, indicates that the oreshoot on the main Dewey vein was 135' long, on the No. 7 level. This was the bottom level at the time of Pitt's examination. His report contained twelve samples taken along the length of this oreshoot. When averaged, these twelve samples showed the vein to have been 2.54' wide,

* previously cited
** Pardee is referring here to the strike length of the oreshoot

containing 1.5 ounces in gold, 4.0 ounces in silver and 1.1% copper. He also sampled broken ore on the surface and in bins, ready for shipment and representing about 410 tons. This material, according to his samples, averaged 1.63 ounces in gold, 6.05 ounces in silver and 2.1% copper.

A later report, dated August 7, 1934 by L.C. Torrey, mining engineer, asserts that further drifting to the west had been done on the No. 7 level, since the Pitt report, and that the oreshoot was actually 250' long. Torrey's report also implied that there was a No. 8 level. Pitt's report did mention a 50-foot winze, sunk below the No. 7 level, and if there is a No. 8 level it was probably driven off the bottom of this winze. While Pitt's report seems to be well supported with samples, and several sketches, it is not known how much reliability can be attached to the Torrey report.

Dewey vein projections to elevation 5700' are shown on Map 4-A. Noted on this map also, is the stoping actually measured on the No. 5 level. In two parts this stoping has a combined length of 135', which compares favorably with the length of the oreshoot on the No. 7 level, as shown in the Pitt report. In estimating the tenor of future ore that may be found below the bottom Dewey level, the average obtained by Pitt of the twelve samples taken on the No. 7 level will be used.

3. NANCY HANKS MINE

This was the most famous mine[1/] of the Garnet district. It had a sustained output of high grade ore for an appreciable period of time. Recorded produc-

1/ Not the largest producer. The Mussigbrod properties (Lead King and Red Cloud Mine) produced considerably more.

tion is reliably placed at $400,000; and estimated total production, exclusive of the adjoining Dewey mine and the ore produced from the Tiger-Lowry incline is put at at about $450,000. These figures are at the old gold price. Included in the above totals is about $50,000 produced in the early 'thirties when a final, but unsuccessful, attempt to find the faulted so-called "red ore" shoot was made. The "red ore" shoot, cut off on the 100 level, provided at least fifty percent of the recorded production, much of it from above the 65 level.

According to Pardee[1], the rich strike was made in 1896 and during the following three years the mine produced shipping ore continuously, and thereafter intermittently until 1907. Pardee further says, on page 182, ---"The value of the ore ranged from about $40 to $200 or more a ton, but most shipments did not vary greatly from $92 a ton, the average.[2]"

Speaking of the bonanza portion of the vein, Pardee states ---"The red ore shoot extended from a point near the surface to the 65 level on a slope of 25 degrees, and is said to have yielded gold at the rate of $200[2] or more, to the ton." The body is described as being 165' long, 1' to 3' thick and raking slightly westward. Except for occasional limestone inclusions, the wall rock was granodiorite. The vein had a strike of about north 80 degrees east and its outcrop is marked by surface cuts and depressions caused by raises and near surface stoping from below. This is shown on Map 4.

Pardee's Plate VII shows stoping down to the 100 level. All reports state that the ore was cut off on the 100 level by a steep, heavy east-west fault, and the faulted extension of the vein was never found. The impression is gained that the stoping below the 65 level and above the 100 level, near the shaft, was

1/ previously cited
2/ at the old price for gold

somewhat irregular -- probably because the vein was broken in this area by footwall strands of the big fault that cut it off completely below. A sketch that accompanied a mine examination report, made in 1919, shows some stoping, 140' west of the shaft, below the 100 level. This sketch shows the fault cut off also, but here it is shown as having taken place below the 100 level.

The Nancy Hanks workings, as obtained from old maps, which pretty well agree with each other, are shown on Maps 4 and 4-A. The old map actually used, with some small additions from other sources, is probably quite reliable as it contained numbered survey stations.

No reliable geologic notes are available of the Nancy Hanks underground geology and one must rely on the various descriptions given for the size and grade of the oreshoot, and the faulting that cut it off. "Drag ore" is spoken of in several accounts as having been encountered in some of the winzes below the 100 level at the east end of the mine, and in the winze sunk below the No. 2 level at the west end of the property. One old sketch shows the vein cut off by what is called a "heavy mud gouge". Another indicates that 40 sacks of ore were recovered from the 40-foot winze, sunk below the No. 2 level -- presumably on drag ore. This is shown best, along with other geologic data obtained and deduced from all the information available, on Sections 4d-d', 4e-e' and plan Maps 4 and 4-A.

Further comments on the high grade nature of the Nancy Hanks ore, at this point, seem warranted because its richness provides a good deal of the

justification of further exploration in depth, for not only the Nancy Hanks vein but also those in the adjoining mines. The veins were relatively narrow and the oreshoots of modest length. But they were high grade. Submitted in this connection are the following:

a. A report by a T. Bryant, October, 1898, contains twenty samples, taken in the stopes on the Nancy Hanks vein above the 100 level. The width, as shown by four of the samples, averaged 2.6'. The rest were not accompanied by widths. The average of the twenty samples listed indicated a grade of -- 4.7 ounces of gold, 12.9 ounces of silver and 3.0% copper.

b. J.P. Rowe[1/], on page 706, speaking of the Nancy Hanks mine, states-- "The granite vein runs in widths of up to 13', but is generally 2 to 5' wide. The ore in the granite has given $188 a ton, but generally from $140 to $172. [2/]"

c. Pardee[1/], on page 184, referring to the grade of Nancy Hanks ore again, states --"In general the copper was 3 or 4 percent, the silver about 10 ounces to the ton, and gold about 4 ounces".

Sections 4d-d' and 4e-e', about 130' apart, cross through the Nancy Hanks mine. If one examines them, it will be seen that the faulted extension of the Nancy Hanks vein is postulated as being below the 40-foot winze under the No. 2 level, having been dropped down by a normal fault. Reliability is placed on the report that forty sacks of ore (presumably drag ore) were obtained from this winze.

1/ Previously cited
2/ At the old price of gold

How far below the bottom of the winze the vein might be is, of course, a question. But there is some evidence, from a study of this fault in the adjoining property, that its movement is very probably normal and that the throw might be of the order of 200' to 250'. If this analysis is correct, there are two veins in the Nancy Hanks mine. The Dewey vein which is shown in the hangingwall of the postulated position of the faulted Nancy Hanks vein has been projected into the cross sections, from the reported position of the east face of the drift on the Dewey No. 7 level.

The drill hole laid out to explore the Nancy Hanks situation, on the north side of the fault, is designed to prospect the area for both of the veins shown on Sections 4d-d' and 4e-e'.

4. TIGER-LOWRY VEIN

The Tiger-Lowry vein strikes about north 40 degrees east, dips 30 degrees to the northwest and lies in an area of crystalline limestone, about 300' south of the granodiorite contact. The vein crops out near the south side line of the Nancy Hanks claim. It is developed mainly in the so-called Tiger-Lowry incline, which was sunk on a 20 to 30 degree angle to a slope distance of about 330'. The bottom of the incline is about 120' vertically below the collar of the shaft.

An offset segment of the vein was developed in the Ryan incline, to the southwest, and the vein was also developed and stoped in the Whim shaft, to the northeast. This is shown on Map 4. When the faulted segments, mentioned

above, are restored the vein appears to have been developed in the Tiger and Ryan inclines alone for a distance of over 180'. Pardee's Plate VII shows a stope length of about 210' and his sketch shows irregular stoping from the bottom of the Tiger incline to the surface, at the collar of the Whim shaft. Pardee mentions the ore terminating at a depth of about 90' at a broken zone, or fault, having a northeast trend.

The Tiger-Lowry vein and oreshoot are further described in old report by Hugh McLeod, dated March 30, 1907, in which he says the ore is in altered limestone and consists of -- "mineralized seams in bedding planes".

The Tiger-Lowry incline and the adjoining Ryan and Whim shafts, together with the nearby Iverson incline, were examined by two mining geologists, in 1919, and a geologic map made by them of these workings is available. This geologic information is shown on Map 4 accompanying this report. If studied, it will be apparent that the ore was cut off by a large, east-west trending, steeply dipping fault on the lower levels of the Tiger incline.

Further study of the structural situation presented will call attention to the strong probability that the vein developed and stoped in the Iverson incline is the faulted extension of the Tiger-Lowry vein. The faults cutting off the veins in both workings are obviously the same structure. They dip steeply to the north and are probably normal in movement. Such a movement on the fault, where it cuts off the vein at its northeast end in the Tiger-Lowry incline, would (if the vein were dropped only 50' or 60' vertically) cause it

to be shifted about 200' easterly, on the north side of the fault, and place it to where it appears to have been moved in the Iverson incline. This relatinnship is shown on Map 4 and on Sections 4d-d' and 4e-e'.

No samples, or complete shipment records, are available of the ore produced from the Tiger-Lowry vein. But production, which is said to have included the highest grade shipment made from the camp, is estimated at $40,000. Pardee[1/] states, on page 187, that one shipment from the property averaged 22½ ounces in gold and 25 ounces in silver a ton, and that the ore was oxidized and similar to that of the red ore shoot of the Nancy Hanks mine.

With further reference to the grade of the shipments produced from this mine Rowe[1/] on page 706, says -- "Some of the ore in the limestone ran as high as $570 a ton and that one carload of the ore shipped from the veins in the limestone netted $15,000. Several carloads of the ore shipped from these veins ran $400 a ton". These figures are based on the old price for gold. Rowe is speaking here of the veins on the Nancy Hanks claim that occurred in the limestone, as distinct from the "red ore" shoot that occurred in the granodiorite to the north. He is obviously referring to the veins that were stoped in the Tiger-Lowry, Whim and Iverson workings. An inspection of the geologic notes available indicates that this high grade ore, while admittedly narrow, probably averaged 1½ to 2' in width.

If the Tiger-Lowry and Iverson structures are faulted segments of the same vein, then, the total length stoped is even greater than the 210' shown on

1/ Previously cited

Pardee's sketch. Such an ore-bearing structure -- particularly in view of the high grade nature of the ore produced which more than offsets its apparent narrow width -- would appear to be a worthwhile exploration target. This would seem particularly so, in addition, because its probable downward extension lies in the altered limestone that comprises the 300-foot wide fault block between the Nancy Hanks and Tiger workings. The formation here is believed to be the magnesian Hasmark limestone which is well known as an excellent host rock for ore in Montana.

The following points should also be made: The Tiger-Lowry vein is a replacement along bedding planes. Its strike and dip conforms in general with the attitude of the limestones of this local area. And, there is always a chance that, under the perhaps more favorable structural conditions that may exist within this fault block, the width and size of any additional ore found might be appreciably larger. Parallel veins and replacements could also be encountered.

A projection of the postulated offset position of the Tiger-Lowry vein, north of the fault which is assumed to be normal, down to elevation 5800', is shown on Map 4-A. Cross Sections 4d-d' and 4e-e' illustrate this situation also and show the locations of the two proposed drill holes designed to explore this area.

The apex of the vein developed in the Tiger-Lowry incline is apparently on the Tiger claim. But it is the Iverson vein, north of the fault, that is projected down and this structure apexes within the Nancy Hanks claim. In view of this fact, no problem of extra lateral rights seems to be present.

ECONOMIC CONSIDERATIONS

The grade of much of the ore previously mined on the veins discussed in this report has been very high -- some of it sensational. It may well be that downward extensions, if found, may reveal ore of an equally high grade nature. In addition, the oreshoots -- particularly in the limestone area -- could be larger rather than smaller than those developed above. However, for the purposes of this report, and in order to make some kind of a rough estimate in this closing section of the possible tonnages and grades of ore that might be revealed in the drilling, it is proposed that:

a. The grade and width of the ore shown on the bottom level of the Dewey mine, by the 12 samples obtained from the Pitt[1/] report, be used and applied to the downward extensions of all of the veins discussed. This width and grade was -- 2.5' of 1.5 ounces in gold, 4.0 ounces in silver and 1.1% copper.

b. The stope lengths revealed on the various bottom levels, further modified in some cases, be used in calculating possible tonnages.

c. A final safety factor, severely cutting down the tonnages so arrived at, be applied as shown below.

Using the data, then, discussed immediately above, the following appear to be the possibilities, if the drilling disclosed ore on each of the structures

1/ Previously cited

commensurate in size and grade with that mined in the old workings:

Mine, or Locality	Vein	Dimensions of Possible Ore, using stope lengths above, and distances on dip from elevation 5700' to lowest workings, or fault cut offs.	Maximum tons, so calculated
East Dewey	Vein D	90' x 2.5' x 200' on the dip	3,450
East Dewey	Vein C	60' x 2.5' x 160' on the dip	1,850
Dewey Mine proper	Main V.	135' x 2.5' x 85' 2/ on the dip	2,200
Nancy Hanks	N.H.V.	140' x 2.5' x 160' on the dip	4,300
Tiger-Lowry	T-L Vein	100 3/ x 2.5' x 225 3/ on the dip	4,300
Total			16,100
Discounted 40%, as safety factor, and rounded----------			10,000

The rough calculations shown in the foregoing tabulation suggest that, if the exploration work were successful, perhaps 10,000 tons of relatively high grade ore might be indicated above elevation 5700'. The Tiger-Lowry vein was projected only to elevation 5800', for reasons of its location relative to possible subsequent development work. If projected down to elevation 5700' an increased tonnage, of course, would result. This figure is the estimate arrived at, after applying safety factors at several points and a final discount of 40 percent on the tons calculated. It takes no account of possible parallel veins, or replacements in the limestone that may be disclosed by the drilling. Nor, does it allow for possible ore on the Dewey vein, in Nancy Hanks ground,

2/ Assuming a possible No. 8 level
3/ A much longer stope length is indicated on old maps, and the distance on dip has been cut down

farther to the west. No ore is included either that may be found below the Minnie Palmer shaft workings.

Ore that averages 1.5 ounces gold, 4.0 ounces silver and 1.1% copper, at the present prices for gold and silver, and assuming that about twenty pounds of copper would be recovered, would have a value of about $55.00 a ton, after certain probable smelter charges and deductions had been made. If mining costs, including hauling and freight, are assumed at $30.00 a ton, roughly $25.00 a ton would be left for amortization of exploration and development costs -- including those for a surface plant -- and for profit.

If ore is disclosed in the drilling on the several veins, in sufficient amounts to justify development, a centrally located shaft, 400 feet deep, together with about 1,000' of waste development work, could be designed to make the ore above elevation 5700', or the "400 level", available for mining.

It will be assumed that a simple, but adequate, minimum-sized, two-compartment shaft could be put down for $150 to $200 a foot. And, that total exploration and development expense, including some used surface plant equipment -- perhaps some of it rented -- could be held to a figure of $135,000 to $150,000. On this basis, 10,000 tons, carrying an amortization charge of $15 a ton, would return the capital investment and leave perhaps $10 a ton profit on the ore mined above the '400 level'.

Without going into a detailed cost analysis, at this point, it would seem that sinking another 100', with previous expenditures returned and if justified by

the grade and tonnages encountered on the 400 level, would result in a substantial profit, with only a moderate extension of the ores downward.

On the basis of the above analysis, the drilling campaign set forth which is estimated to cost about $11,500, seems justified. This would seem especially so since, with any kind of "miners luck" which one could have in this sensationally high grade camp, the amount of ore disclosed might greatly exceed the estimates made. In the favorable limestones of the Tiger-Lowry area, this could happen.

Needless to say, any price increase in gold would greatly enhance the profit situation.

Respectfully submitted,

Joe G. Irving
(Certified Professional Geologist)

AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER
115
AIPG
I. G. IRVING
CERTIFIED PROFESSIONAL GEOLOGIST

April 14, 1965

MME Form 9
Rev. Mar. 59

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

OFFICIAL DOCKET FILE

Contract No. 14-23- 2207 Docket No. MME-6410

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [x] Cost Audits Report of (cost) Review Dec. 1966
- [x] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work-Completed Analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semiannual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab) Recd. 6/9/67
- [x] Interim Field Team Reports
- [x] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports
- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. 2 : Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

52615

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/13/67	Kirkemo	120
		110
		220

AIRMAIL

American Mining Company
700 Securities Building
Seattle, Washington 98101

AUG 8 1967

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Gentlemen:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of possible production under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the operator to keep and preserve certain records for the periods indicated.

We appreciate your interest and participation in the OME exploration program.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Mr. Kirkemo
120M
Budget & Finance

cc: J. G. Haviland and Jean P. Haviland
822 Missouri Avenue, Deer Lodge, Montana 59722

Bellows-Graham, Ind.
1854 Harrison Avenue
Butte, Montana 59701

23263

UNITED STATES DEPARTMENT OF THE INTERIOR

OFFICE OF SURVEY AND REVIEW
AUDIT OPERATIONS
WASHINGTON, D.C.

Report of Review - Contract 2207
Docket No. OME-6410 (Gold)
American Mining Company (Operator)
Nancy Hanks, et al., Claims
Granite County, Montana

Report Issued: December 1966

An examination of the disbursement records in the Branch of Budget and Finance, Administrative Division, U.S. Geological Survey and a review of the Office of Minerals Exploration contract files pertaining to the subject minerals exploration project was made at Washington, D.C., on December 5, 1966.

The Operator has claimed and the Field Officer, OME, Region III, Spokane, Washington, has approved the following costs of work performed as eligible for 50 percent participation by the Government under terms of the contract:

Item Actual Costs		Amount
Category (1) Independent Contracts		
Mobilization and demobilization of bulldozer		$ 182.00
Bulldozing - D8 dozer 61½ hours @ $20/hr.		1,230.00
Mobilization and demobilization of one surface drill unit		300.00
Core drilling (2,805 ft. of AQWL)		
Overburden @ $5.50/ft.	102 ft.	561.00
To 500 ft. @ $5.25/ft.	2,503 ft.	13,140.75
500-1,000 ft. @ $5.75/ft.	200 ft.	1,150.00
TOTAL CATEGORY (1)		$16,563.75
Category (2) Personal Services		
Outside consultant - 17½ days @ $50/day		$ 875.00
Category (3) Operating Materials and Supplies		
Cardboard core boxes - 261 @ $0.85/ea.		221.85
Category (7) Miscellaneous		
Per diem, outside consultant - 17½ days @ $15/day		262.50
Assays for gold - 30 @ $1.50/ea.		45.00
TOTAL ACTUAL COSTS		$17,968.10

Fixed-Unit Costs	
Office expense - 2½ mos. @ $50/mo.	$ 125.00
Incidental allowance for each foot of drilling completed - 2,805 ft. @ $0.04/ft.	1/ 111.20
TOTAL CLAIMED AND APPROVED COSTS	$18,204.30

1/ Should be $112.20.

After correction of the above-noted error in extension, the claimed and approved costs amount to $18,205.30. The Government's participation on the 50 percent basis provided by the contract amount to $9,102.65 of which $8,894.66 has been paid to the Operator. The difference of $207.99 is comprised of the following:

Amount withheld from settlement pending audit and receipt of Operator's final report	$200.00
Computation error noted above - Govt. ppn 50%	.50
10 assays for gold @ $1.50 each disallowed by Field Officer prior to Amendment No. 3 - Govt. ppn. 50%	7.50
Overpayment due to fractions in computing payments	(.01)
Net balance	$207.99

C. E. Fisher

C. E. Fisher, Auditor

Reviewed by:

Dwight D. Savage

Dwight D. Savage, Office of Survey and Review

Government's copy

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

TERMINATION AGREEMENT

It is agreed this 3rd day of November, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," parties to that certain Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, hereinafter called the "Contract," that:

1. Effective August 31, 1966, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs incurred prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing to the Government three copies of a final report (in addition to the final monthly report) which shall include a geological and engineering evaluation of the results of the work performed under the Contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the related costs thereof.

4. All rights of the Government respecting certification of possible production, percentage royalty and liens to secure the payment thereof, reports (including preservation of the Operator's records), accounts, audits, and the right to recover any overpayment are hereby preserved.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract except as otherwise provided in this termination agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By Douglas R. Robinson

Title President

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Government's Copy

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 3

It is agreed this 2nd day of September, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, is further amended effective the date of the contract as follows:

In Exhibit A:

1. Under the heading General Provisions, the fifth paragraph is revised to read as follows:

"Significantly mineralized core shall be split and one split assayed for gold, silver, lead, or copper, or a combination of these elements as warranted. Whenever the core recovery is found to be less than 60 percent, a split of the corresponding retained sludge and a split of such core as may have been recovered shall be assayed separately and the assay results combined according to standard practice to represent a single sample. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to source and location. The stored core and the sludge samples shall be made available for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored core and samples."

2. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

150 assays @ $1.50/assay $225.00

Assays for silver,

150 assays @ $1.50/assay 225.00

3. Under the heading Estimated Costs of the Work, Stage II, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Kirkemo 9/1/66

Assays for gold,

70 assays @ $1.50/assay $105.00

Assays for silver,

70 assays @ $1.50/assay 105.00

4. Under the heading Estimated Costs of the Work, Stage III, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

100 assays @ $1.50/assay $150.00

Assays for silver

100 assays @ $1.50/assay 150.00

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

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AMERICAN MINING COMPANY

By Douglas A. Robinson

Title President

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Government's Copy

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 2

It is agreed this 28th day of March, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, is further amended effective the date of the contract as follows:

In Exhibit A:

1. Under the heading General Provisions, the first paragraph is revised to read as follows:

"Trenching, access roads, and preparation of drill sites shall be done with a Caterpillar D-7 or D-8 bulldozer or equivalent units of any other make." OK

2. Under the heading Description of the Work, Stage I, Phase 2, the paragraph is revised to read as follows:

"(Nancy Hanks project) The work shall consist of preparing three drill sites by bulldozing at sites g, j, and 2 approximately as shown on Map 2, the exact locations to be determined from the results of Trenches 5 and 6, and shall consist also of core drilling Holes g - 150', j - 500', and 2 - 350 to 500'." OK

3. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (1) Independent Contracts, the second specification is revised to read:

"Bulldozing 1,000 ft. of access road, 2,000 ft. of trenching, and 9 drill sites $1,200.00"

OK

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

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AMERICAN MINING COMPANY

By Douglas A. Robinson

Title PRESIDENT

Government's Copy

AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 1

It is agreed this 15th day of October, 1965, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, is amended effective the date of the contract as follows:

In Article 1(a) of the contract:

(a) The time fixed on or before which the Operator shall begin work is changed from October 1, 1965, to June 15, 1966.

(b) The time fixed for the completion of the work is changed from twelve (12) to twenty-three (23) months from the date of the contract.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By James H. Sutton

Title President

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Government's Copy

MME Form 50
June 1963

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR *
~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

EXPLORATION CONTRACT
(Long Form)

Docket No.	Commodity	Contract No.	County	State
OME -6410	Gold	14-23-090- 2207	Granite	Montana

It is agreed AUG 2 0 1965 (Date), between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and

American Mining Company, a Washington corporation

whose mailing address is 700 Securities Building, Seattle 1, Washington, hereinafter called the "Operator," as follows:

ARTICLE 1. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before October 1, 1965 (June 15, 1966 (Date)), and, subject to the provisions of Article 9 and Exhibit A, shall either have completed the work within 12 (23) months from the date of the contract or shall have incurred allowable costs (see Article 6) in a sum not less than the total cost set forth in Exhibit A. am #1

(b) The total allowable cost of the work set forth in Exhibit A is $ 61,880.00. The Government will contribute 50 percent of the allowable costs as they are incurred, in a total sum not in excess of $ 30,940.00 in accordance with the provisions of Articles 3, 4, 5, and 6. "Costs incurred" means costs that have been paid or have become due and payable, or that the Government determines have become obligations.

(c) Interest computation.--Simple interest at the rate of 6 ¼ percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

(d) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

See Annex I

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the lien agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

See Annex I

* U. S. Geological Survey

(c) The Operator shall preserve and maintain his right, title, or interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 7 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(b) Independent contracts.--To the extent that the allowable costs are estimated in Exhibit A with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed (see Article 6(a), Category (1)). Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract, the Government will participate in payments to the independent contractor only as to work performed in accordance with the provisions of this exploration contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) Government may inspect.--The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract and production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.-- The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(b), but all payments by the Government are provisional only, subject to audit. Until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. Reports, accounts, audits.--(a) Operator's records.--The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) Monthly reports.--The Operator shall provide the Government with four copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; and

(3) a narrative report of the work performed during the reporting period, including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground.

(Forms for reporting under (1) and (2) above will be provided by the Government; however, the original of the Operator's Monthly Voucher shall be supported by documentary evidence, such as certified copies or transcripts of payrolls and invoices, for all costs claimed under Article 6 (a) (1).)

(c) Final report.--Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with three copies of a final report (in addition to the final monthly report). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the related costs.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production.

(e) Compliance with requirements.--If the Government determines that any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the preparation or completion of the same with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 6. Costs.--(a) Allowable costs.--The allowable costs of the work to which the Government will contribute are limited to:

(1) the necessary, reasonable, and direct actual costs that are estimated in Exhibit A by categories as specified in this article; and

(2) fixed costs for units of work to be performed (per foot, per hour, etc.) agreed upon in lieu of actual costs and set forth in Exhibit A.

The Government will not contribute to costs under any category or subcategory omitted from the estimate of costs in Exhibit A. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost; any excess over a fixed unit cost; and any excess over the total allowable cost of the work are not allowable. The Operator shall incur such excesses for his own account without contribution by the Government, but the Operator is not obligated to incur more than his agreed percentage of the total allowable cost of the work.

Any category or subcategory or element thereof not designated as a maximum in this article or in Exhibit A may be exceeded, provided that the total allowable cost of the work, which is a maximum, is not exceeded.

CATEGORY (1)--INDEPENDENT CONTRACTS.--(See Article 3(b)). The total of this category and the average unit cost estimated for each type of work to be performed under an independent contract are maximums.

CATEGORY (2)--PERSONAL SERVICES.

Subcategory (a)--Supervision and Technical Services--All elements of this subcategory (number of supervisors, technicians, outside consultants, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)--Labor.

CATEGORY (3)--OPERATING MATERIALS AND SUPPLIES.--Includes such items as drill bits and steel, explosives, fuel, pipe, power, timber, rail, and small tools costing less than $50 each.

CATEGORY (4)--OPERATING EQUIPMENT.

Subcategory (a)--Rental.--The number of each rented item [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)--Purchases.--The total of this subcategory is a maximum.

Subcategory (c)--Depreciation.--All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)--INITIAL REHABILITATION AND REPAIRS.--Costs of items listed under this category include all requirements, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The total of this category is a maximum.

Subcategory (a)--Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).--The total of this subcategory is a maximum.

Subcategory (b)--Initial rehabilitation and repairs of operating equipment.--The total of this subcategory is a maximum.

CATEGORY (6)--NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).--Costs of items listed under this category include all requirements, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The total of this category is a maximum.

CATEGORY (7)--MISCELLANEOUS.--Includes requirements and costs that do not fall within any of the first six categories, such as repairs other than initial and maintenance of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, and communications.

(b) Nonallowable costs.--In addition to the limitations imposed by paragraph (a) of this Article 6 the Government will not contribute to the following costs:

(1) Costs of the land, such as rental, depreciation, depletion, or other costs of acquiring, owning, or holding possession;

(2) Indirect costs, such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) Previous work performed or costs incurred before the date of this contract; and

(4) Deferred payments.--Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods, unless the purchase agreement is approved by the Government in writing.

(c) Reductions in costs.--The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original total cost. The provision does not apply to receipts from production which are subject to the Government's royalty under the provisions of Article 7.

ARTICLE 7. Repayment by Operator.--(a) Certification.-- If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retains his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certicifation of possible production--from the date of the contract until the lapse of the time within which the government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract, or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, metal or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business and shown as deductions on the buyer's settlement sheets (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable by the buyer to a carrier (not the Operator or producer)), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. No costs of the Operator or Producer are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be.

(d) Unsold production.--If any production (ore, concentrate, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrate, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination or the market value, whichever is greater.

(e) Lien for payment.--To secure the payment of royalty (see Article 7(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) Notice to purchasers.--The Operator or producer shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Government, and this estimate shall be final and binding upon the Operator or producer.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(h) Government not obligated to buy.--Nothing in this contract shall be contrued as imposing any obligation on the Government to purchase any minerals and metals mined or produced from the land.

ARTICLE 8. Interests in purchased property.--(a) Title and ownership.--All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions although title thereto shall be taken in the name of the Operator.

(b) Preservation of property.--Until the final disposal of any property in which the Government has an interest, the Operator shall preserve and protect same for the best interest of the Government, and any reasonable and necessary cost thereof will be treated as an allowable cost of the exploration. After the completion of the work, termination of the Government's obligation to contribute, or when such property is not being used for the work, the Operator shall not use it elsewhere without the written consent of the Government and without paying a reasonable rental to be fixed by the Government for its proportionate interest.

(c) Disposal of property.--Upon the completion of the work, termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, sale to others, purchase by the Operator, or sale or transfer to the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government, the Operator shall not sell at any price any item of property that cost more than $500, and shall not sell at less than 25 percent of the purchase price any item of property that cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or offers. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, explosives, pipe, or rail), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item, the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the exploration.

(d) Default of the Operator re disposal.--If within 90 days after the completion of the work, termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may:

(1) in writing extend the time within which the Operator must dispose of or liquidate the property;

(2) by written notice to the Operator, place upon such property what it determines to be a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; and

(3) enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 9. Termination of the Government's obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is not justified, the Government may give the Operator written notice thereof, and thereupon:

(1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

(b) If the Government determines that the Operator is in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon:

(1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 9 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 13.

ARTICLE 10. Notices to be given by the Government may be delivered to the Operator, or may be sent by certified mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 11. Officials not to benefit.--No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 12. Nondiscrimination in Employment. The provisions respecting nondiscrimination in employment which are required by section 301 of Executive Order 10925, dated March 6, 1961 as amended and supplemented are attached hereto as Exhibit B and are hereby incorporated in and made a part of this contract.

ARTICLE 13. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, [redacted], who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, [redacted]*, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, [redacted]*, a written appeal addressed to the Secretary of the Interior. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, [redacted]*," as used herein includes his duly authorized representative.

ARTICLE 14. Work Hours Act of 1962 - Overtime Compensation.--This contract, to the extent that it is of a character specified in the Work Hours Act of 1962 (Public Law 87-581, 76 Stat. 357-360) and is not covered by the Walsh-Healey Public Contracts Act (41 U.S.C. 35-45), is subject to the following provisions and to all other provisions and exceptions of said Work Hours Act of 1962.

(a) Overtime requirements.--No Operator or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic to be employed on such work in excess of eight hours in any calendar day or in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate of not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any such calendar day or in excess of forty hours in any such workweek, as the case may be.

(b) Violations; liability for unpaid wages; liquidated damages.--In the event of any violation of the clause set forth in subparagraph (a) of this paragraph, the Operator and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Operator and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for

* U. S. Geological Survey

liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph (a) of this paragraph, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (a) of this paragraph.

(c) Withholding for unpaid wages and liquidated damages.--The Office of Minerals Exploration may withhold or cause to be withheld, from any moneys payable on account of work performed by the Operator or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Operator or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b) of this paragraph.

ARTICLE 15. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 16. Changes and added provisions.--

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)
AMERICAN MINING COMPANY
By James F. Charlton

By Arthur A. Baker
Acting Director
U. S. Geological Survey

Title President

I, T. E. Dahl (Name), certify that I am the _____ secretary of the corporation named as Operator herein; that James F. Charlton (Name), who signed this contract on behalf of the Operator, was then President (Title) of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Long
App'd. Sol. Off.
Sulbridge
Johnson
Cup

T E Dahl

[CORPORATE SEAL]

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

ANNEX I

The land, including all rights pertaining thereto, referred to in Article 2 of the contract consists of six (6) patented and five (5) unpatented lode mining claims in secs. 3 and 4, T. 12 N., R. 14 W., MPM, Garnet (unorganized) mining district, Granite County, Montana. The outer boundary of the claims is outlined in green on Map 2 entitled "Ownership and Geological Map, Garnet District . . ." attached hereto and made part hereof.

The patented claims are as follows:

Claim	U. S. Patent Survey No.
Crescent group	
Bulls Eye	4651
Gold Bug	9407
Crescent	4510
Nancy Hanks group	
Nancy Hanks	5635
Dewey	9833
Midnight	9833

The unpatented claims are recorded in the Office of the County Clerk, Philipsburg, Granite County, Montana, as follows:

Claim	Book	Page
Garnet group		
Garnet No. 1	24	56
Garnet No. 3	24	60
Garnet No. 7	24	68
Garnet No. 8	24	70
Garnet No. 12	24	225

The Operator is in possession of the Crescent group of patented claims by virtue of a "Grant Deed and Assignment" executed July 24, 1965, by James F. Charlton of a "Purchase and Sale Agreement" dated June 12, 1963, granted to Robert M. Bielenberg and James F. Charlton by James G. Haviland and Jean P. Haviland, his wife, owners of the claims. Robert M. Beilenberg and Mary Brome Bielenberg, husband and wife, in a "Grant Deed" dated July 21, 1965, conveyed all their interest in said claims to James F. Charlton. Alice M. Charlton in a "Grant Deed and Assignment" dated July 23, 1965 conveyed all her interest in said claims to James F. Charlton.

A Lien and Subordination Agreements executed September 1964 by the owners of the Crescent group of claims is attached hereto and made part hereof.

The Operator is in possession of the Nancy Hanks group of patented claims by virtue of an "Assignment of Rights" executed June 5, 1964, by James F. Charlton and Alice M. Charlton, his wife, transferring (1) all rights and interests of any sort they may ever have in the stock of Bellows-Graham, Inc., a Montana corporation, owner of said claims pursuant to the terms of a certain "Agreement" dated August 23, 1962, between H. A. Bellows and James F. Charlton, and a "Letter of Instructions Escrow No. 3713" dated January 8, 1963, and (2) all rights and interests of any sort in said "Agreement" and "Letter of Instructions".

A Lien and Subordination Agreements executed January 19, 1965, by the owner of the Nancy Hanks group of claims is attached hereto and made part hereof.

The Operator is in possession of the Garnet group of unpatented claims by virtue of "Grant Deeds" executed June 5 and August 10, 1964, by James F. Charlton and Alice M. Charlton, his wife, locators of said claims.

To accompany application of American MiningCo., 700-Securities Bldg., Seattle, Wn.

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GOVERNMENT USE ONLY	
Operator	
Docket No. OME –	
Contract No. 14-23-090 –	2207
Contract Date	AUG 2 0 1965

LIEN AND SUBORDINATION AGREEMENTS[1]

To the United States of America:

That certain land in the County of Granite, State of Montana, described as follows:[2] Gold Bug Quartz Lode Mining Claim, Survey No. 9407, Crescent Quartz Lode Mining Claim, Survey No. 4510, and the Bull's Eye Quartz Lode Mining Claim, Survey No. 4651, all located in Section 3, Township 12 North, Range 14 West, M.P. M.

hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Washington corporation[3],

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same.[4]

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated_____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this ____ day of September, 19 64.

J D Haviland	(Seal)	822 Missouri Avenue Deer Lodge, Montana	(Street) (City & State)
Jean P. Haviland	(Seal)	~~Jean P. Haviland~~ 822 Missouri Avenue ~~Deer Lodge, Montana~~	(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____
(Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 – 2207
Contract Date AUG 2 0 1965

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of Granite, State of Montana,

described as follows: 2/ Nancy Hanks Lode Mining Claim Survey No. 5365;

Dewey and Midnight Lode Mining Claims, Survey No. 9833

hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Washington corporation 3/

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same. 4/

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated_____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 19th day of January, 1965.

BELLOWS-GRAHAM, INC. (Seal)	1854 Harrison Avenue Butte, Montana	(Street) (City & State)
Gordon B. Graham (Seal) President	15 Randolph Avenue Randolph, Vermont	(Street) (City & State)
Dean F. Brayton (Seal) Secretary	1001 Walker Bank Bldg. Salt Lake City, Utah 84111	(Street) (City & State)
(Seal)		(Street) (City & State)
(Seal)		(Street) (City & State)
(Seal)		(Street) (City & State)

I, DEAN F. BRAYTON (Name), certify that I am the Secretary (Title—Secretary, etc.) of the corporation named herein; that Gordon B. Graham (Name), who signed this agreement was then President (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Dean F. Brayton
(Corporate Seal)

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

EXHIBIT A

The purpose of this project is to explore by trenching and by core drilling from prepared surface drill sites for gold-bearing ore bodies occurring in veins and/or replacement deposits in, along, or cutting across folded strata of carbonate rocks, shale, and quartzite of Precambrain-Middle Paleozoic age or in granitic rocks that cut the strata.

General Provisions

Trenching, access roads, and preparation of drill sites shall be done with a Caterpillar D-8 bulldozer or equivalent unit of any other make. D-7 and # 2

All core drill holes shall be started not less than AQWL size (approximately 1-1/16") and may be reduced as hole conditions require to not less than EX standard size (approximately 7/8").

Facilities shall be provided for recovering drill sludge, and such sludge shall be retained when drilling in significantly mineralized ground.

The drill core shall be stored in boxes identified as to hole number with markers in the core section indicating the depths represented.

Significantly mineralized core shall be split and one split assayed for gold and silver and for lead and copper as warranted. Whenever the core recovery is found to be less than 60 percent, a split of the corresponding retained sludge and a split of such core as may have been recovered shall be assayed separately and the assay results combined according to standard practice to represent a single sample. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to source and location. The stored core and the sludge samples shall be made available for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored core and samples.

All drill holes shall be logged, and copies of the logs of completed holes together with plans and sections showing assays shall be furnished monthly to the Government.

No drilling or trenching shall be done within 100 feet of the exterior boundaries of the land outlined on the maps previously referred to.

The Operator shall provide such supervision, labor, and technical services as may be required to complete the work in a satisfactory manner.

The location, direction, and extent of each work item shall be subject to Government approval. The work shall be divided into three stages. The Operator shall complete all of Stage I and as much of Stages II and III as authorized by the Government. Approval of Stages II and III shall be dependent upon favorable results having been obtained in the preceding stage and shall have prior authorization of the Government confirmed in writing.

Description of the Work

Stage I

The work under Stage I shall be subdivided into two phases, 1 and 2.

Phase 1. The initial work under this phase shall consist of bulldozing six trenches, Nos. 1 through 6, approximately in the locations shown and at the bearings and lengths indicated on Map 2. The objectives of each trench are as follows:

Trench		Objective
1	Outcrop of G & H vein	
2	Do	and the Woolsey-Missoula contact
3	Do	and the Meagher-Woolsey contact
4	Do	, the Pilgrim-Park shale, and Park shale-Meagher contacts
5	Outcrop of Nancy Hanks	vein and granodiorite dike in the Pilgrim Formation
6.	Outcrop of Tiger vein	and the same contacts as in Trench 4

After completion of the trenches, six drill sites shall be prepared by bulldozing and six holes, a., b, c, e, f, and i, shall be drilled in locations that depend upon the results of the trenching. If Trenches 1-4, inclusive, show that the G & H vein crosses the bedding, it may be assumed that the LK vein does also. In order to explore both veins at different depths in two traverse planes, drill stations shall be prepared and holes a, b, c, e, f, and i shall be drilled from the approximate locations shown on Map 2. The attitude and depth of each hole shall be approximately as follows:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	S. 50° W.	-80°	500	LK vein; possibly others
b	S. 50° W.	-80°	650	LK vein, possibly replacement deposit from G & H vein
c	S. 50° W.	-80°	750	G & H and LK veins; possibly others
e	S. 50° W.	-80°	210	G & H vein; Meagher-Woolsey contact
f	S. 50° W.	-70°	250	G & H vein, Meagher-Woolsey contact
i	S. 37° E.	-50°	500	G & H vein; Meagher-Woolsey and Woolsey-Missoula contact

Alternatively, if Trenches 1-4, inclusive, do not expose the G & H vein, it should be considered as indication that the G & H vein does not cross the bedding but may form replacement bodies along or near the crest of the plunging anticline. In order to explore this possibility thoroughly, Holes a, b, and c shall each be moved 150 feet northeasterly along the line of Section C-C' from the locations shown on Map 2. Drill stations shall be prepared and Holes a, b, c, e, f, and i shall be drilled. The attitude and depth of each hole shall be approximately as follows:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	--	Vertical	250	Woolsey-Missoula contact and well into Missoula
b	S. 50° W.	-80°	250	Same as above
c	S. 50° W.	-70°	300	Same as above
e	S. 50° W.	-80°	350	Meagher-Woolsey contact; well into Woolsey
f	S. 50° W.	-70°	350	Same as e
i	S. 37° E.	-50°	700	Meagher-Woolsey contact, Woolsey-Missoula contact; well into Missoula

Phase 2. (Nancy Hanks project) The work shall consist of preparing three drill sites by bulldozing at sites g, j, and 2 approximately as shown on Map 2, the exact locations to be determined from the results of Trenches 5 and 6, and shall consist also of core drilling Holes g - 150', j - 500', and 2 - 350 to 500' depending upon Hole e.

Stage II

The work under Stage II will consist of preparing drill stations by bulldozing at sites d, h, k, and l shown on Map 2, and of core drilling three or four holes depending upon the results of preceding holes as follows:

d. - depends upon showings in Hole a, 600', S. 38 E., -50° or may be omitted

h. - depends upon showings in Hole e, 400 to 650', S. 36 E., -80°

k. - depends upon showings in Hole c, 450', S. 5 W., -80°

l. - depends upon showings in Hole 2, 350', N. 32 E., -85°

Stage III

The work under Stage III will consist of "offset" core drilling at sites to be determined by the results of the work under Stages I and II, but the total shall not exceed 3,000 feet of drilling. No hole drilled in Stage III is to be closer than 100 feet to any other hole drilled under this project. Details concerning the work are to be submitted to the Government prior to any commencement thereof.

Estimated Costs of the Work

Stage I

Actual Costs

Category (1) Independent Contracts

Mobilization and demobilization, one bulldozer 16 hrs. @ $20.00/hr.	$ 320.00	
Bulldozing 1,000 ft. of access road, 2,000 ft. of trenching, and 6 drill sites	1,200.00	
D-8, 60 hrs. @ $20.00/hr. or D-7, 75 hrs. @ $16.00/hr.		
Mobilization and demobilization, one surface drill unit	300.00	
Core drilling, 4,010 ft. maximum	21,200.00	

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500'	5.25	$4.80/ft.
500' - 1,000'	5.75	5.30

Cementing and redrilling and/or reaming and casing, 150 hrs. @ $11.50/hr.	1,725.00	
Cement, 80 sacks @ $6.00/sack	480.00	
Casing left in hole[1/], 100 ft. @ $1.80/ft.	180.00	
Tropari surveys, 3 days @ $65.00/day	195.00	
		$25,600.00

Category (2) Personal Services

None except:

Subcategory (a) Supervision and Technical Services

Outside consultant, 20 days @ $50.00/day	$ 1,000.00

Category (3) Operating Materials and Supplies

None except:

Cardboard core boxes, 400 @ $0.85/box		$ 340.00

Category (7) Miscellaneous

None except:

Per diem, outside consultant, 20 days @ $15.00/day	$ 300.00	
Assays for gold and silver 150 assays @ $3.00/assay	450.00	
Assays for lead 80 assays @ $2.00/assay	160.00	
Assays for copper 80 assays @ $1.75/assay	140.00	$ 1,050.00
Total Actual Costs Stage I		$27,990.00

Fixed Unit Costs[2/]

Office expenses, 4 months @ $50.00/mo.	$ 200.00	
Incidental allowance for each foot of drilling completed, 4,010 feet @ $0.04/ft. (rounded)	160.00	
Total Fixed Unit Costs Stage I		$ 360.00
Total Estimated Costs Stage I		$28,350.00

Stage II

Actual Costs

Category (1) Independent Contracts

Bulldozing 500 ft. of access road and 4 drill sites	$ 160.00

D-8, 8 hrs. @ $20.00/hr. or
D-7, 10 hrs. @ $16.00/hr.

Core drilling, 2,050 ft. maximum			$10,700.00	
Depth	AQWL	EX		
Overburden	$5.50/ft.			
Bottom of overburden to 500'	5.25	$4.80/ft.		
500' - 1,000'	5.75	5.30		
Cementing and redrilling and/or reaming and casing, 80 hrs. @ $11.50/hr.			920.00	
Cement, 40 sacks @ $6.00/sack			240.00	
Casing left in hole[1/], 50 ft. @ $1.80/ft.			90.00	
Tropari surveys, 2 days @ $65.00/day			130.00	
				$12,240.00

Category (2) Personal Services

None except:

Subcategory (a) Supervision and Technical Services

Outside consultant, 10 days @ $50.00/day	$ 500.00

Category (3) Operating Materials and Supplies

None except:

Cardboard core boxes, 200 @ $0.85/box	$ 170.00

Category (7) Miscellaneous

None except:

Per diem, outside consultant, 10 days @ $15.00/day	$ 150.00	
Assays for gold and silver 70 assays @ $3.00/assay	210.00	
Assays for lead 40 assays @ $2.00/assay	80.00	
Assays for copper 40 assays @ $1.75/assay	70.00	
		$ 510.00
Total Actual Costs Stage II		$13,420.00

Fixed Unit Costs[2/]

Office expense, 2 months @ $50.00/mo.	$ 100.00	
Incidental allowance for each foot of drilling completed, 2,050 ft. @ $0.04/ft. (rounded)	80.00	
Total Fixed Unit Costs Stage II		$ 180.00
Total Estimated Costs of Stage II		$13,600.00

Stage III

Actual Costs

Category (1) Independent Contracts

Bulldozing access roads and drill sites			$ 160.00	
D-8, 8 hrs. @ $20.00/hr. or D-7, 10 hrs. @ $16.00/hr.				
Core drilling, 3,000 ft. maximum			$15,900.00	
Depth	AQWL	EX		
Overburden	$5.50/ft.			
Bottom of overburden to 500'	5.25	$4.80/ft.		
500' - 1,000'	5.75	5.30		
Cementing and redrilling and/or reaming and casing, 100 hrs. @ $11.50/hr.			$ 1,150.00	
Cement, 60 sacks @ $6.00/sack			360.00	
Casing left in hole[1/], 75 ft. @ $1.80/ft.			135.00	
Tropari surveys, 2 days @ $65.00/day			130.00	$17,835.00

Category (2) Personal Services

None Except:

Subcategory (a) Supervision and Technical Services

Outside consultant, 15 days @ $50.00/day	$ 750.00	

Category (3) Operating Materials and Supplies

None except:

Cardboard core boxes, 294 @ $0.85/box	$ 250.00	

Category (7) Miscellaneous

None except:

Per diem, outside consultant 15 days @ $15.00/day	$ 225.00		
Assays for gold and silver 100 assays @ $3.00/assay		300.00	am # 3
Assays for lead 80 assays @ $2.00/assay		160.00	
Assays for copper 80 assays @ $1.75/assay		140.00	$ 825.00
Total Actual Costs Stage III			$19,660.00

Fixed Unit Costs[2/]

Office expenses, 3 months @ $50.00/mo.	$ 150.00	
Incidental allowance for each foot of drilling completed, 3,000 ft. @ $0.04/ft.	120.00	
Total Fixed Unit Costs Stage III		$ 270.00
Total Estimated Costs Stage III		$19,930.00

SUMMARY

Total Estimated Costs of Stage I	$28,350.00
Total Estimated Costs of Stage II	$13,600.00
Total Estimated Costs of Stage III	$19,930.00
Total Estimated Costs of the Work	$61,880.00
Government Participation @ 50%	$30,940.00

1/ The Government will not contribute to the cost of casing left in a hole at the request of the Operator.

2/ Includes all costs whatsoever that would otherwise be allowable costs under Categories (2) through (7).

EXHIBIT B

NONDISCRIMINATION IN EMPLOYMENT

(Section 301, Executive Order 10925, March 6, 1961, as amended)

'During the performance of this contract, the contractor agrees as follows:

'(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited, to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

'(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

'(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

'(4) The contractor will comply with all provisions of Executive Order No. 10925 of March 6, 1961, as amended, and of the rules, regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

'(5) The contractor will furnish all information and reports required by Executive Order No. 10925 of March 6, 1961, as amended, and by the rules, regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Committee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

'(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order or by rule, regulation, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

'(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to section 303 of Executive Order No. 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.'"

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ESCROW NO. 3713 DUPLICATE

OFFICIAL COPY O. M. E. RECEIVED AUG 5 1965

INITIALS	CODE
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LETTER OF INSTRUCTIONS

Date January 8th, 1963

Walker Bank & Trust Company
Escrow Department
~~Salt Lake City, Utah~~

Gentlemen:

The undersigned hereby deliver to you the papers, instruments, money and/or property hereinafter described, to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth, to which the undersigned hereby agrees:

PAPERS, INSTRUMENTS, MONEY and/or PROPERTY DEPOSITED:

1. Stock certificates for all outstanding stock in Bellows-Graham Inc., a Montana Corporation, being

Cert. No.	Name	No. Shares
12	Gordon B. Graham	29,000
13	Dean F. Brayton	1
14	H. A. Bellows	10,999
	Total shares outstanding	40,000

All endorsed for transfer to James F. Charlton, with resignations.

2. Stubs constituting Bellows-Graham Inc. stock book, with all previous certificates, except Nos. 7 and 8 which were reported lost on June 22, 1957, cancelled and attached to the proper stub.

3. Agreement of Indemnity as to Certificates 7 and 8 by Mrs. J. W. Graham and Gordon B. Graham to Bellows-Graham Inc. as to any loss or damage hereafter sustained by it by the transfer of the shares represented by certificates Nos. 7 and 8 without the production and cancellation of same.

4. Minute Book of Bellows-Graham Inc. containing Articles of Incorporation and Amendment, By-Laws and Minutes; also Miscellaneous other papers incident to Company Minutes.

5. Corporate Seal of Bellows-Graham Inc.

6. Tax Receipts, showing all property taxes paid to date.

7. Certificate of Good Standing by Montana Board of Equalization as to Bellows-Graham Inc.

8. Executed Contract dated as of August 23rd, 1962 between H. A. Bellows, First Party, as Seller and James F. Charlton, Second Party as Buyer of the 40,000 shares of stock in Bellows-Graham Inc. represented by certificates Nos. 12, 13 and 14 listed in paragraph 1 above.

9. Any insurance policies secured by Second Party pursuant to paragraph 5 of said Agreement; also tax receipts and copies of Reports and Returns incident to maintaining Bellows-Graham Inc. as a corporation in good standing in the State of Montana.

TR-51-1S

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INSTRUCTIONS:

1. For the purposes of this Escrow, the aforesaid E. A. Bellows First Party, shall be designated by the term "Seller, when used herein and the aforesaid James F. Charlton, Second Party, shall be designated by the term "Buyer" when used herein.

II. The aforesaid Agreement, paragraph 8 above, is delivered to you for the purposes of information only. You shall be under no obligation nor liability whatsoever to construe nor to enforce it nor any of its terms whatsoever.

III. You shall make immediate delivery to Buyer of the aforesaid Stock Certificates, papers and property if, as and when said Buyer shall cause to be paid to you pursuant to this escrow, the full sum of Six Thousand Six Hundred Dollars ($6,600.00) less $300.00 allowance as provided by paragraph 2 of said Agreement, No. 8 above, without interest, as follows:

(A) The sum of Seven Hundred Dollars ($700.00) simultaneously with the deposit of this Escrow with you.

(B) The sum of One Hundred Dollars ($100.00), or more, on or before the 8 day of each succeeding month thereafter until full payment of Six Thousand Three Hundred ($6,300.00) shall have been made.

IV. All funds received by you from Buyer for Account of Seller shall be by you:

( ) Remitted to Seller by Cashier's check.

( ) Deposited to Savings Account No. _____ at _____

( ) Deposited to Checking Account of _____

at _____.

(X) Paid to Brayton, Lowe & Hurley, Attorneys, for distribution as directed by Seller.

V. In the event Buyer shall fail to pay any aforesaid installment promptly when due, or within 30 days thereafter, then upon Seller's demand, you shall deliver to said Seller the aforesaid ~~Deed, Abstract of Title, Water Stock~~, Stock Certificates, Papers and property whereupon your duties, responsibilities and liability, of every kind and character, under the terms of this escrow shall cease and terminate.

VI. ~~The costs incident to revenue stamps for the deed shall be chargeable against Seller. You shall deduct the amount thereof from the last installment received by you.~~

VII. You shall be under no obligation to notify Buyer of the due date nor of the delinquency of any installment payable under the terms of this escrow, nor of any default whatsoever. You shall advise Seller promptly of the receipt by you of each installment, the application of the same ~~with respect to interest and principal~~ and the deposit or other disposition of the monies embraced within such installment.

VIII. Compensation of Walker Bank & Trust Company for its services under this escrow shall be as follows:

(a) An annual sum, payable in advance of $20.00 for each year, or fraction thereof, of the tenure of this escrow payable by Buyer; and

(b) A collection charge at the rate of one tenth of one percent (1/10 of 1%) of the amount of each installment paid to said Walker Bank & Trust Company pursuant to the terms of this escrow. There shall be a minimum charge of One Dollar ($1.00) on each such installment payable by Seller; and

(c) No additional charge for the payment, distribution or deposit by Walker Bank & Trust Company of any installment collected by it except in instances where said Walker Bank & Trust Company shall be required to partition an installment after collection. In each such instance said Walker Bank & Trust Company shall be entitled to a disbursement charge at the rate of fifty cents (50¢) for each check or draft issued by it and/or for each deposit made by it in distribution of such partitioned installment to be deducted from said disbursement; and

(d) Reasonable further compensation for any additional or extraordinary services.

IX. No notice of assignment nor assignment of interest by any party to this escrow shall be binding upon Walker Bank & Trust Company, unless and until there shall have been paid to said Walker Bank & Trust Company, the sum of Twenty Five Dollars ($25.00) by each Assignor and the further sum of Twenty Five Dollars ($25.00) by each Assignee.

X. Walker Bank & Trust Company shall have a first lien upon the property and papers held by it hereunder for its compensation and for any costs, liability, expense and/or counsel fees it may incur.

THE UNDERSIGNED HEREBY FURTHER UNDERSTAND AND AGREE AS FOLLOWS:

1. Walker Bank & Trust Company (hereinafter called the "bank"), is not a party to, or bound by any agreement which may be evidenced by or arise out of the foregoing instructions.

2. The bank acts hereunder as a depositary only, and is not responsible, or liable in any manner whatever for the sufficiency, correctness, genuineness or validity of any instrument deposited with it hereunder, or with respect to the form or execution of the same, or the identity, authority, or rights of any person executing or depositing the same.

3. The bank shall not be required to take or be bound by notice of any default of any person, or to take any action with respect to such default involving any expense or liability, unless notice in writing is given an officer of the bank of such default by the undersigned or any of them, and unless it is indemnified in a manner satisfactory to it against any such expense or liability.

4. The bank shall be protected in acting upon any notice, request, waiver, consent, receipt or other paper or document believed by the bank to be genuine and to be signed by the proper party or parties.

5. The bank shall not be liable for any error of judgment or for any act done or step taken or omitted by it in good faith, or for any mistake of fact or law, or for anything which it may do or refrain from doing in connection herewith, except its own willful misconduct.

6. The bank shall not be answerable for the default or misconduct of any agent, attorney or employee appointed by it if such agent, attorney or employee shall have been selected with reasonable care.

7. The bank may advise with legal counsel in the event of any dispute or question as to the construction of the foregoing instructions, or the bank's duties thereunder and the bank shall incur no liability and shall be fully protected in acting in accordance with the opinion and instructions of such counsel.

8. In the event of any disagreement between the undersigned or any of them, and/or the person or persons named in the foregoing instructions, and/or any other person, resulting in adverse claims and demands being made in connection with or for any papers, money, or property involved herein or affected hereby, the bank shall be entitled at its option to refuse to comply with any such claim or demand, so long as such disagreement shall continue, and in so refusing the bank may make no delivery or other disposition of any money, papers or property involved herein or affected hereby and in so doing the bank shall not be or become liable to the undersigned or any of them or to any person named in the foregoing instructions for its failure or refusal to comply with such conflicting or adverse demands; and the bank shall be entitled to continue so to refrain and refuse so to act until:

(1) The rights of the adverse claimants have been finally adjudicated in a court assuming and having jurisdiction of the parties and the money, papers and property involved herein or affected hereby; and/or

(2) All differences shall have been adjusted by agreement and the bank shall have been notified thereof in writing signed by all of the persons interested.

BUYERS:	SELLERS:
Name James F. Charlton	Name H. A. Bellows
Address James F. Charlton 2633 SW. 164th Street	Address H. A. Bellows 246 Central Street
Name Seattle 11, Washington	Name Springfield 5, Massachusetts
Address	Address

Walker Bank & Trust Company hereby acknowledges receipt of the letter of instructions of which the foregoing is a copy and of the papers, money or property therein referred to and agrees to hold and dispose of the same in accordance with said instructions and upon the terms and conditions above set forth.

Dated at Salt Lake City, Utah, this 8th day of January, 1963.

WALKER BANK & TRUST COMPANY,

By George Zeikus
Authorized Signature

TR-51-3

GRANT DEED AND ASSIGNMENT

I, ALICE M. CHARLTON, hereinafter called Charlton, in consideration of love and affection, grant, assign, transfer and convey to JAMES F. CHARLTON all the realty and other rights and interests described as follows:

1. Thirty-two patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14, West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUDE Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONNIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided ½ interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the foregoing being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in the Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

2. All rights and interests of any sort created in Charlton by that certain "Purchase and Sale Agreement" dated 12 June 1963 wherein James G. Haviland and Jean P. Haviland, his wife, sell to James F. Charlton and Robert M. Bielenberg said patented Lode Mining Claims described above and by those certain Grant Deeds dated 27 July 1962 and dated _____ 1965, given by said Robert M. Bielenberg to James F. Charlton and assigning and transferring to James F. Charlton all rights and interest of any sort created in said Robert M. Bielenberg by said "Purchase and Sale Agreement" dated 12 June 1963, and all rights and interest of any sort owned by Robert

M. Bielenberg in the thirty-two patented Lode Mining Claims above described.

WITNESS my hand this 23rd day of July, 1965.

Alice M. Charlton

Alice M. Charlton

STATE OF WASHINGTON
COUNTY OF KING

On this 23rd day of July, 1965, before me, the undersigned, a Notary Public for the State of Washington, personally appeared ALICE M. CHARLTON, Known to me to be the individual whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate first written above.

Gina Dolan

Notary Public for the State of Washington
Residing at Seattle

GRANT DEED AND ASSIGNMENT

I, JAMES F. CHARLTON, a single man, hereinafter called Charlton, in consideration of One Dollar now paid and other valuable consideration, grant, assign, transfer, and convey to AMERICAN MINING COMPANY, a corporation, all the realty and other rights and interests described as follows:

1. Thirty-two patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10, and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 NOrth, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONNIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided 1/2 interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M

All of the foregoing being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in the Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

2. All rights and interests of any sort created in Charlton by that certain "Purchase and Sale Agreement" dated 12 June 1963 wherein James G. Haviland and Jean P. Haviland, his wife, sell to James F. Charlton and Robert M. Bielenberg said patented Lode Mining Claims described above and by those certain Grant Deeds dated 27 July 1962 and dated 21 July 1965 1965 given by said Robert M. Bielenberg to James F. Charlton and assigning and transferring to James F. Charlton all rights and interest of any sort created in said Robert M. Bielenberg by said "Purchase and Sale Agreement" dated 12 June 1963, and all rights and interest of any sort owned by Robert M. Bielenberg in

the thirty-two patented Lode Mining Claims above described.

WITNESS our hands this 24th day of July, 1965.

James F. Charlton

STATE OF WASHINGTON:
: ss.
COUNTY OF KING :

On this 24th day of July, 1965, before me, the undersigned, a Notary Public in and for said county and state, duly commissioned and sworn and residing therein, personally appeared JAMES F. CHARLTON, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged to me that he signed the same as his free and voluntary act and deed, for the uses and purposes therein set forth.

GIVEN under my hand and official seal the day and year in this certificate first above written.

Notary Public in and for the State of Washington, residing at Seattle
My Commission expires 12-6-68

GRANT DEED

THIS INDENTURE, made this 21st day of July, 1965, by and between ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, Parties of the First Part, and JAMES F. CHARLTON, Party of the Second Part,

WITNESSETH:

That the Parties of the First Part, for the consideration of the sum of One Dollar and other valuable consideration the receipt of which is hereby acknowledged and for the purpose of supplementing a previous Grant Deed dated 27 July 1962 from Parties of the First Party to Party of the Second Part and thereby clearing title to the below described realty in Party of the Second Part, have granted and conveyed and do hereby grant, convey, and assign unto Party of the Second Party and to his heirs and assigns all of the following described property, including all interest of any sort therein created in Parties of the First Party by the "Purchase and Sale Agreement" dated 12 June 1963 between James G. Haviland and Jean P. Haviland as Sellers and Robert M. Bielenberg and James F. Charlton as Buyers, consisting of thirty-two patented Lode Mining Claims, situated in Granite County and Powell County, Montana, described as follows, to wit:

The CRESCENT Quarty Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 3616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim Survey No. 5454, embracing a pprtion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M..

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

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The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

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PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the above being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

Together with, all and singular, the tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining as usually had and enjoyed, including all dips, spurs and angles and all ores and minerals beneath the surface or on the surface, and including the surface of said premises, together with the right to mine for and extract the same.

TO HAVE AND TO HOLD, all and singular, the above described premises, together with the appurtenances, unto the said Party of the Second Part , and to his heirs and assigns, forever.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto subscribed their names the day and year in this instrument first above written.

Robert M. Bielenberg
Robert M. Bielenberg

Mary Brome Bielenberg
Mary Brome Bielenberg
Parties of the First Part

STATE OF MONTANA :
: ss.
COUNTY OF :

On this 21st day of July, 1965, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, known to me to be the persons whose names are subscribed to the above and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this certificate first above written.

Shane Patrick
Notary Public for the State of Montana
Residing at Helena
My Commission expires 11-1-65

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

AMERICAN MINING COMPANY, INC.

BALANCE SHEET--JUNE 30, 1965

(Not Audited by Independent Public Accountants)

AMERICAN MINING COMPANY, INC.

BALANCE SHEET--JUNE 30, 1965

(Not Audited by Independent Public Accountants)

A S S E T S

CURRENT ASSETS:		
Cash on hand and in bank		$ 29,776.61
Accounts receivable		6,577.76
Prepaid rent		3,680.00
Total current assets		$ 39,034.37
CLAIMS		82,000.00
LAND		290,500.00
INVESTMENTS		74,000.00
EQUIPMENT		3,079.28
ORGANIZATION EXPENSE		2,012.16
Total assets		$429,599.61

L I A B I L I T I E S

CURRENT LIABILITIES:		
Loans payable, due within one year		$ 9,410.60
Contracts payable, due within one year		9,490.00
Total current liabilities		$ 19,060.60
LONG-TERM PAYABLES:		
Loans payable	$11,592.90	
Contracts payable	20,927.76	
	32,520.36	
Less- Current portion shown above	10,868.00	21,652.36
CAPITAL STOCK		423,263.20
DEFICIT		(16,207.82)
Total liabilities and net worth		$429,599.61

J E Dahl
Sec. Treas.

One

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 21 1965
INITIALS CODE
120

Florence Hotel,
Missoula, Montana
June 11, 1965

Mr. Don R. MacLaren,
Acting Field Officer, Region 11,
Office of Minerals Exploration,
South 157 Howard Street,
Spokane, Washington.

Re: O. M. E. -6410 (Gold)
American Mining Co.
Nancy Hanks et al., Claims
Granite Co., Montana

Dear Mr. MacLaren:

Enclosed are five "bids" on the proposed bulldozing at Garnet, as described in the subject application.

These bids are all from "little fellows"—that is, owner-operators, and do not include bids that might be obtained from contacting the larger regular contractors who are listed in the classified pages of the local phone book. They would be uniformly much higher than the bids obtained from the small independents.

My procedure in getting these—on post cards—was to contact the possible bidder on the phone and tell him of the nature and extent of the work. Since most of them are not too well organized in a business sense, and to insure getting some kind of a reply, I told them I would send them stamped, self-addressed cards, and all they had to do was to insert the rate per hour and the size dozer they would use, or had.

You will note that the bids range from $12.00 per hour to $24.00 per hour, and that the lowest bid was from a man who had only a D-6. Our application calls for, or suggests, a D-7 at least.

One man—with a D-7 will do the work if he is available at the time for $16.00 per hour. There is a good deal of doubt as to the availability of these dozer men, especially since the work we are talking about depends on government approval of the project and the chances, as I understand it, is that such approval may not come until mid July. We have had Hanson do work for us before and have found him satisfactory. His rate is $20.00 per hour, which is also the rate quoted by another. I would suggest that you use the $20.00 rate, as that is what we will probably have to pay, if and when the work is done. for what?

I am in the Hotel Florence now, but sometime between the 15th and 20th of June will move into a rented house—the telephone number of which I do not know yet, as I have to apply for it. So, if you are planning to come over here, which you indicated as probable, you had better notify me in advance—using a post office box I have, in the event I have left the hotel. My box number is P. O. Box 606, Missoula

Montana.

We strongly hope that we will hear from the government in the near future regarding the extent of the approval that is going to be given to our application and I am looking forward to seeing you over here, or in Spokane if that proves to be necessary.

Very truly yours,

/s/ Joe G. Irving

Joe G. Irving,
Representative for
American Mining Co.

RECEIVED
JUN 14 [illegible]

Dear Mr. Irving

With reference to the bulldozing, at Garnet, which we discussed over the phone, my rate is :

Using a D-8 size and type dozer, my charge is $20.00 per hour.

Signed /s/ Dwa Reber

Duward Reber
712 Bancroft,
Missoula, Mont

June 3, 1965

Dear Mr. Irving

With reference to the bulldozing, up at Garnet, Montana, that we discussed over the phone, my rates are:

Using a 14A-D8 type and size dozer, the rate is $24.00 per hour

Signed _____

James Baker
Potomac, Mont.

2

Dear Mr. Irving:

With reference to the bulldozing work you mentioned, at Cornet, consisting of seven cuts exposing bedrock, and possibly some other work, the cuts totalling about 2150' of trench, I can quote the following charges, as rated: (Assuming that I would be free to do the work, at the time)

Using my International TD-18, which is the equivalent of a DC-7, my charges would be at the rate of $16.00 per hour.

Signed-/s/ Raymond H. Healy (?)
Roy Hen[illegible]
Hill[illegible]

Don: - We have used this man before - I think his bid is representative - Joe

Dear Mr. Irving:

With reference to the bulldozing work you mentioned, at Cornet, totalling about seven cuts, [illegible] of trench, that will expose the bedrock, and eleven drill station sites, with about 2000' of simple, but adequate access roads (for drill equipment trucks to go over). I wish to quote the following rate:

Using a TD-24, which is larger than a DC-8, my charges will be at the rate of $20.00 per hour

Plus moving cost of equipment — how much?

Signed-/s/ Lloyd C. Hanson

3

Dear Mr. [illegible]

[illegible]

[illegible] rate [illegible]. I w[illegible] [illegible]rie, for [illegible]

[illegible] $12.00 per [illegible]

[illegible] Lyman Speckman

[illegible]

AMERICAN MINING COMPANY

GRANT DEED

THIS INDENTURE, Made this 27th day of July, 1962, by and between ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, whose Post Office address is Avon, Montana, PARTIES OF THE FIRST PART, and JAMES F. CHARLTON, whose Post Office address is 2633 S.W. 164th Place, Seattle 66, Washington, PARTY OF THE SECOND PART,

W I T N E S S E T H :

That the PARTIES OF THE FIRST PART, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00), lawful money of the United States of America, and other good and valuable consideration, to them in hand paid, the receipt whereof is hereby acknowledged, have granted and conveyed, and by prese presents do grant and convey, unto the PARTY OF THE SECOND PART, and to his heirs and assigns, all of the following-described property, consisting of thirty-two (32) patented Lode Mining Claims, situated in Granite County and Powell County, Montana, described as follows, to-wit:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

see covering letter of Applicant
rec'd. 5/5/65

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 3616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

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The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M., in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided one-half (1/2) interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.,

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The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.,

The two above being situated in the County of Powell, State of Montana.

Together with, all and singular, the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining as usually had and enjoyed, including all dips, spurs and angles and all ores and minerals beneath the surface or on the surface, and including the surface of said premises, together with the right to mine for and extract the same.

TO HAVE AND TO HOLD, all and singular, the above-described premises, together with the appurtenances, unto the said PARTY OF THE SECOND PART, and to his heirs and assigns, forever.

IN WITNESS WHEREOF, the PARTIES OF THE FIRST PART have hereunto subscribed their names the day and year in this instrument first above wirtten.

Robert M Bielenberg
Robert M. Bielenberg

Mary Brome Bielenberg
Mary Brome Bielenberg

PARTIES OF THE FIRST PART.

STATE OF MONTANA)
County of Powell) ss.

On this 27 day of July, 1962, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, known to me to be the persons whose names are subscribed to the above and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this certificate first above written.

Norbert Mannix
Notary Public for the State of Montana
Residing at Avon
My Commission expires Sept 7, 1964.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204

January 28, 1965

OFFICIAL COPY
O. M. E.
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FEB 1 1965
INITIALS | CODE

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: Transmittal of application
American Mining Company (Gold)
Nancy Hanks et al. Claims
Granite County, Montana

Enclosed is a copy of a well prepared application for aid to explore a promising gold area by bulldozing of trenches and diamond drilling, as Stage I, 11 holes totaling 7,225 feet; and as Stage II, 3,000 feet of offset drilling. From about 1895 to 1962, total production from veins in the district is reported to be more than $3,500,000.

The applicant's letters to the banks are missing, and there is no Lien and Subordination Agreement covering Charlton's transfer of the claims to the applicant company. As the claims were exchanged for stock in the company, I am not sure whether the agreement is necessary. I have, therefore, not written the applicant for either the letters or the agreement.

The proposed drill holes will explore the potential ore zones pretty conclusively, and the applicant has given a clear description of the objective of each hole. However, I am not so sure the trenching is necessary, as most of the objectives of the various proposed trenches will be tested by the drilling and none of the drilling is considered to be dependent upon the trenching. For example:

Guide for location of cut 2

Cut 1 is not necessary if the vein extends to cut 2, and by itself will not mean much even if it exposes the vein, as no drilling is proposed in the immediate vicinity.

To trace direction of contact, Guide for holes?

Cut 2 is proposed to cut the westerly extension of the Grant-Westford vein and a formational contact, but here again there is no drilling proposed in the immediate vicinity. If holes a, b, c, and/or k do not cut the vein, cut 2 would not give much valuable information even if it did cut the vein.

Trace contact Guide for Cut 4

Cut 3 has the same general objective as cut 2, but holes d and i will explore the same contacts, and hole e will explore the vein.

Guide for Holes?

Cut 4 is proposed to cut two contacts, but holes h and i will explore the same contacts.

For attitude and loc. of vein, fault, contact

Cut 5 is proposed to cut three contacts, but the same area will be explored by hole g.

Loc. contact

Cut 6 has essentially the same objectives as cut 4, but holes k and i will explore the same contacts and vein.

For ore and loc. contacts

Cut 7 does not seem too important, and hole h will explore the same area and contacts.

Finally, because in the past replacement bodies have been found in the bedding and only one or two beds will be cut by the dozer work, the cuts would give little if any evidence of flat-lying replacement bodies unless the latter crop out. Any alteration along contacts or within beds should be disclosed by the drilling.

It is therefore recommended that the proposed trenching be denied. O.K.

The locations of the drill sites and the bearing and dip of the holes are based on geologic reasoning that the combination of beds favorable for replacement, faults and known mineralized fractures and veins, and nearby intrusive masses offers a good environment for the formation of ore deposits. None of the old producing mines are accessible, but according to reports ore occurs in fissure veins cutting granodiorite and bedded rocks and as bedded replacements.

It is recommended that the proposed drilling of 11 holes under Stage I and 3,000 feet of offset drilling under Stage II be approved.

The applicant's cost estimates are well broken down. However, they do not appear to be based on any of the bids submitted and are probably a bit high.

right

D. R. MacLaren

D. R. MacLaren

Enclosure

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE
~~MAin 3-7916~~
MAin 4 5416

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 29 1965
INITIALS CODE
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120

JAMES F. CHARLTON
GENERAL MANAGER

March 26, 1965

Re: OME-6410 (Gold) American Mining Company Nancy Hanks et al, claims Granite County, Montana.

Mr. George C. Selfridge, Chief
Division of Exploration Operations
United States Department of Interior
Office of Minerals Exploration
Washington 25, D. C.

1st corr dated June 3, 1964

Dear Mr. Selfridge:

Enclosed is a corrected copy of the Grant Deed relative to Garnet Claims 10 thru 17 from James F. Charlton and Alice M. Charlton, his wife to American Mining Company.

Our attorney discovered an error on the original Grant Deed which has been corrected by this instrument.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton

James F. Charlton, President

Encl.

ed

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE
MAIN ~~XXXXX~~ 4-5416

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JAMES F. CHARLTON
GENERAL MANAGER

March 10, 1965

Re: OME-6410 (Gold) American Mining Company Nancy Hanks et al., claims Granite County, Montana

Mr. George C. Selfridge, Chief
Division of Exploration Operations
United States Department of Interior
Office of Minerals Exploration
Washington 25, D. C.

Dear Sir:

In reference to your letter of February 15, 1965, the following are enclosed:

1. Copies of Grant Deed dated June 5, 1964, which covers Garnet No. 12 claim in addition to others.

2. Copies of the letter written by American Mining Company to the Southside Bank of Missoula and Peoples National Bank of Washington dated September 21, 1964, requesting financial assistance.

3. Copies of the bid from the Boyles Bros. dated November 16, 1964.

In reference to the instrument signed by Robert M. Bielenberg as requested in item one of your letter this will be forwarded to you within the next few days.

If any additional information is required, it will be sent upon request.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton, President

le
encls

GRANT DEED

WE, JAMES F. CHARLTON and ALICE M. CHARLTON, his wife, inconsideration of One Dollar ($1.00) now paid and other valuable consideration, grant to AMERICAN MINING COMPANY, a Washington Corporation, all the real property situated in Granite County, State of Montana, described as follows:

8 unpatented Quartz Lode mining claims in the First Chance, or Garnet (unorganized) Mining District, Granite County, Montana, said claims being in Sections 3, 4, 9 and 10, Township 12 North, Range 14 West, and being specifically described as follows:

Name of Claim	Granite County Clerk's File Number on Certificate of Location
Garnet No. 10	78386
Garnet No. 11	78387
Garnet No. 12	78388
Garnet No. 13	78389
Garnet No. 14	78390
Garnet No. 15	78391
Garnet No. 16	78392
Garnet No. 17	78393

WITNESSETH OUR HANDS this 10th day of August, 1964.

James F. Charlton

James F. Charlton

Alice M. Charlton

Alice M. Charlton, by James F. Charlton, her Attorney in Fact

James F. Charlton

STATE OF Washington

COUNTY OF King

On this 10th day of August, A.D. 1964, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared James F. Charlton to me known to be the individual described in and who executed the foregoing instrument for himself and as attorney in fact of Alice M. Charlton also therein described, and acknowledged to me that he signed and sealed the same as his voluntary act and deed and as the free and voluntary act and deed of the said Alice M. Charlton for the uses and purposes therein mentioned, and on oath stated that the power of attorney authorizing the execution of this instrument has not been revoked and that the said Alice M. Charlton is now living.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Kent Allen Whitfield

Notary Public in and for the State of Washington, residing at Seattle.

MAin 4 5416

September 21, 1964

Peoples National Bank
Third Avenue Branch
Seattle, Washington

Attention: Mr. Mike Mastro

Dear Mr. Mastro:

The American Mining Company is planning on exploration programs on mining properties which it owns at Garnet, Montana. The project will include approximately 5,250 feet of diamond drilling, bulldozing, together with geological and engineering work.

It is estimated that the total project will cost between $55,000.00 and $60,000.00.

The primary objective will be to explore the possible location of ore bodies containing a potential high gold ore content.

We are interested in securing a loan of $30,000.00 and would appreciate you advising us under what conditions and circumstances your bank would make such a mining exploration loan.

We will appreciate being advised at your earliest convenience.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton, President

ed

MAin 4 5416

September 21, 1964

Southside National Bank
Missoula,
Montana

Attention: Mr. Don Nolan:

Dear Sir:

The American Mining Company is planning on exploration programs on mining properties which it owns at Garnet, Montana. The project will include approximately 5,250 feet of diamond drilling, bulldozing, together with geological and engineering work.

It is estimated that the total project will cost between $55,000.00 and $60,000.00.

The primary objective will be to explore the possible location of ore bodies containing a potential high gold ore content.

We are interested in securing a loan of $30,000.00 and would appreciate you advising us under what conditions and circumstances your bank would make such a mining exploration loan.

We will appreciate being advised at your earliest convenience.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton, President

ed

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE MAin 4 5416

Certified Mail #434312
Return Receipt Requested

JAMES F. CHARLTON
GENERAL MANAGER

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 1 65
INITIATOR

January 25, 1965

Re: Application for Mining Loan by
American Mining Company

Mr. Don MacLaren
Acting Field Officer, Region 11
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington

Dear Sir:

In reference to the above application submitted to your office on January 11, 1965, by American Mining Company, the submittal letter attached to the application noted that there was one missing document -- "The Lien and Subordinaction Agreement" on three of the claims covered by the loan application, being the Nancy Hanks, Dewey and Midnight. (received)

Attached are six copies of the Lien and Subordination Agreement properly executed by the President and Secretary of Bellows-Graham, Inc. These copies, to the best of our knowledge, fully complete the loan application.

Should you need any additional information we will be pleased to furnish it on your request.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton

James F. Charlton, President

RECEIVED
Cert. Mail
JAN 27 1965
O.M.E.
SPOKANE, WASHINGTON

Encls.

CC: Joe Irving, w/encl

ed

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE MAin 4 5416
~~XXXXXXXXX~~

JAMES F. CHARLTON
GENERAL MANAGER

January 11, 1965

Mr. Don MacLaren
Acting Field Officer, Region II
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington

Dear Sir:

Attached are two complete sets of an application for the exploration loan as discussed with Mr. Joe Irving.

The application, I believe, is complete in all aspects including sets of detailed maps. The only missing document is the Lien and Subordination Agreement on three of the claims -- Nancy Hanks, Dewey and Midnight claims. We have been advised that this document will arrive shortly and will be immediately forwarded to you with copies for inclusion with this application.

It was Mr. Irving's feeling that the application should be forwarded to you without this agreement so that you could be reviewing it.

If you have any questions or should you need additional data or information, it would expedite matters if you would direct correspondence to:

Mr. Joe G. Irving
2957 South Highland
Las Vegas, Nevada 89104

If convenient, I would appreciate receiving a copy.

We will look forward to hearing from you regarding this application.

RECEIVED
Cert. Mail
JAN 18 1965
R. R.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton, President

CC: Joe G. Irving

ed

MME Form 40
July 1962

RECEIVED
R.R.R.
JAN 28 1965
Issued
SPOKANE, WASHINGTON

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Budget Bureau No. 42-R1368
Approval expires Dec. 31, 1963

OFFICIAL COPY
M. E.
RECEIVED
1 1965
INITIALS CODE

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85-701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

American Mining Company,
700 - Securities Bldg.
Seattle 1, Washington

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER 6410

DATE RECEIVED 2/1/65

REGION 1

DIVISION CODE

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [ ]
- CORPORATION [X]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED Washington*

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
James F. Charlton,	700 - Securities Bldg, Seattle, Wn.--	Pres.
David Best,	814-2nd Ave., Seattle, Washington-	Vice Pres.
Ted Dahl,	1904-3rd Ave., Seattle, Washington-	Sec-Treas.

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE
Gold (some silver in ore)

ESTIMATED COST OF PROJECT
$

PROPERTY NAME	LOCATION COUNTY	STATE
Various Claims (See Exhibit A)	Granite	Montana

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior, Washington 25, D. C., or with the nearest OME Field Office.*

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

American Mining Company

January 6, 1965
DATED

James F. Charlton
BY (Signature)

T E Dahl Sec.
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

* Also qualified in Montana

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a).

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property, state name and address of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work*. Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and cost of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i.e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

INT.-DUP. SEC., WASH., D.C.11879

To Accompany application of American Mining Co., 700-Securities Bldg., Seattle 1, Wn.

EXHIBIT A
(Property)

PROPERTY

1. PATENTED MINING CLAIMS, held under Purchase and Sale Agreement, dated June 12, 1963, between James G. and Jean P. Haviland, sellers, of Deer Lodge, Montana, and James F. Charlton, purchaser, of Seattle, Washington, who has in turn assigned the purchase contract to the American Mining Company:

also Robert M. Bartlberg

Claim Name	Patent No.	Sec.	T.	R.	County	State
Bulls Eye	4651	3	12N	14W-MPM	Granite	Montana
Gold Bug	9407	3	"	" "	"	"
Crescent	4510	3	"	" "	"	"

2. PATENTED MINING CLAIMS, held by Purchase Agreement, dated August 23, 1962, with H. A. Bellows, 246 Central St., Springfield, Mass., in which the outstanding capital stock of Bellows-Graham, Inc, the owner of the three patented mining claims listed below, is being sold and transferred to James F. Charlton, of Seattle, Washington, who in turn has assigned the Purchase Contract to the American Mining Company.

Claim Name	Patent No.	Sec.	T.	R.	County	State
Nancy Hanks	5635	3	12N	14W-MPM	Granite	Montana
Dewey	9833	3	"	" "	"	"
Midnight	9833	3	"	" "	"	"

3. The Following Unpatented Mining Claims, all in sections 3 and 4, T.12N, R.14W, Granite County, Montana, located by James F. Charlton, of Seattle, Washington, and assigned to the American Mining Company:

Claim Name	Book and Page Number	County	State
Garnet No. 1	Page 56, Book 24 of Lode Locations, Records of Granite Co., Mont.	Granite	Montana
Garnet No. 3	Page 60 " " "	"	"
Garnet No. 7	Page 68 " " "	"	"
Garnet No. 8	Page 70 " " "	"	"
Garnet No. 12	Page 225 " " "	"	"

To accompany application of American Mining Company, 700-Securities Bldg., Seattle, Wn.

Item 1. Financial Eligibility

a. See attached letters from Southland National Bank of Missoula, Montana, dated, September 25, 1964, in which the request for a loan of $30,000.00 to be used in mining exploration--unless secured by improved real property, or other marketable assets--was turned down.

See also letter from Peoples National Bank of Washington, Third Avenue Branch, dated September 25, 1964, in which the loan suggested ($30,000.00 was aked for, to be used in mining exploration) by the American Mining Co. was turned down.

b. There are no affiliated, parent or controlling companies, or organizations connected with the American Mining Co.

c. The applicant's share of the cost of the exploration work will be furnished by cash.

Item 2. Applicant's Rights in Land

a. Applicant's interest in the patented mining claims, listed in Exhibit A is based on Purchase Contracts between the owners and James F. Charlton, President of the American Mining Co. These contracts, copies of which are attached, have been assigned to the American Mining Company by James F. Charlton. See copies of the Assignments.

Applicant's interest in the unpatented lode mining claims listed in Exhibit A is based on the right of location. These claims were located during the period-8/30/62 - 9/2/62-in the cases of the Garnet Nos. 1, 3, 7 and 8 unpatented lode mining claims, and on 6/20/64, in the case of the Garnet No. 12 unpatented lode mining claim, and all have been assigned to The American Mining Company, by James F. Charlton. See copies of the Assignments.

The applicant is aware of no liens, mortgages or other encumbrances on the land.

b. See legal descriptions of the patented claims, including patent survey number, section, township, range, county and state set forth in Exhibit A. See book and page number and official place where recorded, in the cases of the unpatented claims, also set forth in Exhibit A.

c. See Lien and Subordination Agreements (five copies of each) on MME, Form 52 attached, for the patented claims listed in Exhibit A, which are being acquired under Purchase Contracts.

Item 3. Physical Description

a. There is at present no mining, or exploration, activity being conducted on the land described in this application. Evidence of past mining operations, and of exploration work, are shown on Maps 2,3 and 4 accompanying this application.

No usable, modern production facilities are at hand, or available, on the property.

b. Not applicable

To accompany appl[illegible]tion of -American Mining Co.-7[illegible] Securities Bldg., Seattle, Wn.

Item 3 Physical Description (cont.)

c. Production Records etc. Currently, there is no production coming from the Garnet district.

The applicant has been able to obtain no actual company records of production made by the individual properties of the area. But the total production of the district has been pretty well established, and is set forth in several authoritative publications. These also contain estimates, for certain periods, of the production of many individual mines.

In the absence of actual smelter or mill returns, references from the above-mentioned sources will be quoted to provide an indication of the nature and grade of the ore produced from the district in the past. These references will be quoted at some length because the past production was unusually high grade, and this has an obvious bearing on the application being submitted.

In the discussions to follow, not only in this sub-section, but also under (f) and in Item 5, the fundamental reference that will be quoted is - U.S.G.S. Bull. No. 660-F, 1918, by J. T. Pardee, entitled--"Ore Deposits of the Northwestrn Part of the Garnet Range, Montana". This reference will hereinafter be referred to as "Pardee". Also quoted will be Montana Bureau of Mines and Geology Memoir #39, June, 1963, entitled--"Geology of the Garnet-Bearmouth Area, Western Montana", to be hereinafter referred to as 'Memoir 39'.

Placer production from the district began in 1865, and organized lode mining about thirty years later.

Total production, through 1916, as given by Pardee, pg.160, is shown below:

Placer gold from Bear Creek 1/	$5,000,000
Lode production from Garnet mines	1,500,000

In Memoir 39, pages 28-29, speaking of lode mining, it is pointed out that----"In the 44 years since Pardee's visit the district's production more than doubled, bringing the total to more than $3,500,000.----"

Concerning the properties listed in the subject application, the following comments and references on past production, and its tenor, are herewith submitted:

The Crescent and Bulls Eye patented claims: A past production of some importance, but of unknown quantity, must be credited to these claims, which adjoin the extensively developed Lead King claim on its west, and contain within their boundaries the westerly extensions of the successive Lead King levels that were driven. Above these extensions, in Crescent and Bulls Eye ground, some stoping is evident. (See Map 3)

These claims were part of the So-called "Crescent-Lead King-Red Cloud Group" (also known as the Mussigbrod Mine) which was mined as a unit by various operators.

On page 190, Pardee indicates that the Crescent, Lead King and Red Cloud mines are on a single vein, which he refers to as the Red Cloud vein, and that this vein has been more extensively and systematically developed than others in the district. See Map 2 for workings to the east not shown on

1/ Total placer production, including Elk Cr., is estimated up to $10,000,000

To accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn.

Item 3c (continued)

Map 3. Pardee also specifically refers to production from the Crescent claim. Private reports by Company engineers point out that the Crescent claim contains the apex of the Lead King, and blocks of ore--as a result of an examination of the mine, made in 1919--were shown extending under the Crescent and Bulls Eye claims.

Pardee, on page 190, estimates total production of the Red Cloud vein, through 1916, at $500,000, and states that 97% of the value was in gold. Production since 1916 was particularly heavy from the district during the 1934-42 period when it totalled approximately $1,435,000, according to Table 5, page 29 of Memoir 39. A great deal of this production came from the Crescent-lead King-Red Cloud vein, and it seems reasonable to assume that total production from the workings on this structure has probably approached $1,000,000.

Regarding the nature and tenor of the ore, Pardee states, on page 191--"The Red Cloud vein is known to persist a half mile along the strike and at least 800 feet on the dip". And, he says further--"Its thickness ranges from a mere seam to 3 or 4 feet, considerable portions averaging 2 feet or more." 1420 inch $

Giving some indication of grade, Pardee (referring to Red Cloud workings on the east side of First Chance gulch) says, on page 193---"On the average the ore contained 90% of silica, 4% of iron, 3% of sulphur, small amounts of copper andlead, and 1 ounce in gold and one and a half ounces in silver to the ton." He further states, referring to the Lead King workings west of the gulch---"The ore taken from the Lead King workings is reported to have been somewhat richer than that milled from the Red Cloud".

On page 194, referring to Adit No. 4 on the Lead King claim, Pardee says--"Above Adit No. 4 was a shoot of oxidized ore, 250 feet long, said to have yielded $35.00 a ton, and in places near the surface much more." Material of this grade, at $20.00-gold, obviously contained 1 and 3/4 ounces gold per ton. 20.59 35 1.698 1.69 35 $59.15/ton

A further indication of the tenor of the ore from the Lead King and Crescent claims is afforded by J. P. Rowe, writing in the Mining World, October 10, 1910, whereinhe states, on page 706---"Shipping ore unsorted averages $30-to $70 in gold. Sorted ore up to $200. Pockets of native gold were found in the Crescent claim containing as much as $760". (Values mentioned, ofcourse, are at the old gold price)

Since some of the exploration work proposed is based on the possibility of the Grant & Hartford-Magone & Anderson fissure zone (which is parallel to the Lead King structure and about 800' north of it) making ore in the Bulls Eye, Gold Bug and Garnet No. 8 claims (see Maps 2 & 3) a comment on the nature of the past production from these properties is warranted.

Pardee, onpage 188, estimates production fromthe Grant & Hartford claim at $30,000 prior to 1910. He states--"Oxidized ore from the small stopes above the mainlevel is said to have contained 1½ to 5 ounces in gold." On page 188, he estimates Magone & Anderson production, throughl916, at about $300,000, and speaking of the grade of more thanhalf of this production, he states--"Incomplete records show about 2600 tons are shipped that is said to have averaged $60.00 a ton" (Old price of gold again) Additional production since Pardee's visit, probably brought the total Grant & Hartford-Magone & Anderson output to something near, or over, $500,000.

To accompany application of American Mining Co., 700 SEcurities Bldg., Seattle, Wn

Item 3c (continued)

The Nancy Hank and Dewey Mines: The Nancy Hanks orebody was the real bonanza of the camp. Pardee refers to its production as follows: On page 182, speaking of the Nancy Hanks mine, he says--"Incomplete records of production, which include some ore taken from the Dewey prior to 1915, aggregate nearly $300,000." "Nine-tenths of this sum (or more) was in gold and the remainder in copper and silver. The value of the ore ranged from about $40 to $200 or more a ton, but most of the shipments did not vary greatly from $92, the average." At the old price for gold, this indicates a grade of about 4 oz/ton in gold.

On pages 182-183, Pardee states--"Most of the Nancy Hanks production came from stopes west of the old shaft. The locally celebrated "red ore" shoot--is said to have yielded gold at the rate of $200 or more a ton. At least half of the production of the mine is estimated to have come from this shoot, which is described as a tabular body, 165 feet long and 1 to 3 feet thick." On page 183, it is said---"Smelter returns from carload lots of Nancy Hanks ore give the history of the mine ina general way from 1897 to 1903. For a time the ore ran about 8 ounces of gold to a ton."

While the above references have been lengthy, it has been thought necessary to set them forth in order to give a proper picture of the grade of the ore inthis abnormally high grade gold camp. How reported?

d. Ore Reserves. There are no available records of known ore reserves on any of the properties submitted in this application.

Item 3e

e. Geologic Features of the Property and Mineralization:

The area is situated in west central Montana and is physiographically part of the Northern Rocky Mountain Province. One of the principal characteristics of the general terrain is its roughness.

From a broad structural viewpoint, the region is located at the general boundary between the highly folded and faulted Paleozoic and Mesozoic structures to the south, and the open folding and overthrust faulting of the predominantly pre-Cambrian terrain to the north. It is also near the intersection of two regional tectonic structures: the so-called Montana lineament, and the line of the Flathead and Bitteroot Valleys--part of the Rocky Mountain Trench.

The Montana lineament refers to the zone of large, high-angle faults, which trend north 55 to 70 degrees west and are well shown in an area about thirty miles north of the northern end of the Idaho batholith. In the vicinity of Superior, Montana, the lineament is the expression of several parallel faults, of which the Osburn is best known. Near Missoula, it is represented by the Clark Fork displacement--interpreted to be a steep normal fault.

Points along or close to this broad zone of crustal weakness have been locales for igneous intrusion, extrusion and attendant mineralization. This zone is sometimes referred to as the Transverse Igneous Belt, and contains a series of well-known stocks and batholiths, including the intrusives at Philipsburg and Garnet.

The structure, however, of the restricted area with which this account is concerned is primarily that of a sharp, northwest-trending anticline which, at Garnet, has been intruded on its northeasterly flank by the granodiorite of

the Garnet stock. Exposed in the fold are sedimentary rocks ranging in age from pre-Cambrian to middle Paleozoic. See maps 3,5,6,7 & 8, and Pardee's Plates V1, 1X and Figure 21 (pages 172, 188 & 191)

In the core of the anticline, the quartzites of the Missoula Group, which are upper Belt Series, are revealed and they contain several of the most important veins of the district. The anticline plunges sharply downward to the northwest, and appears to be truncated and offset by branches of the Bear Creek fault, a strong, northerly-trending break.

Overlying the quartzites are limestones and shales of Cambrian age which, in the immediate area, constitute the surface exposures on the nose and adjoining flanks of the plunging anticline.

With the exception of the Nancy Hanks, Dewey and Shamrock group of mines, which are in the granodiorite close to its margin, the great bulk of the mines of the disrtrict with any important past production occur in the pre-Cambrian quartzite. And, these producers lie on the northeast flank, or near the crest, of the anticline.

Only superficial prospecting --in the form of shallow workings--has taken place in the favorable magnesian limestones, and limestone-shale series, that overly the quartzite. These overlying strata, with a history in Montana of being excellent host rocks for ore, are the Woolsey, Meagher and Pilgrim formations, which are the equivalent of the Silver Hill and famous Hasmark limestone of the nearby Philipsburg district.

The mineralization, whose value is in gold to an extent exceeding ninety percent, is apparently of a moderate to high temperature type. Its typical mineralogic assemblage includes a gangue composed of quartz, barite, ankerite and calcite carrying auriferous pyrite, chalcopyrite and some tetrahedrite. Near the contact, the mineralization of the area falls into the high temperature category.

The ore occurs as fissure veins cutting the granodiorite (and also the bedded rocks) and as bedded replacements in the sedimentary formations, possibly following bedding plane faulting. Some true contact metamorphic deposits are found in adjoining areas.

For a comprehensive and broad-scale picture of the general geology of the region, refer to Pardee's Plate V1, in U.S.G.S. Bull. 660-F, and Plate 1 accompanying Memoir 39. For a much more detailed presentation of the geology of the area in the immediate vicinity of Garnet, refer to maps 2,3,5,6 and 7 accompanying this application. These include surface geological maps and cross sections showing structure, stratigraphy and actual and possible ore occurrence.

Item 3f Reasons for Expecting to Find Ore

The fundamental objective of the exploration program laid out is to find ore in the crest, or nose, of the northwest-trending, plunging anticline. This structure, together with the granodiorite intrusive, are the dominant structural features of this famous, high grade gold district. Not only is it hoped that ore will be found in the favorable limestones and limestone-shale series, which comprise the surface exposures in the nose of the anticline, but also, that additional ore will be found in the underlying quartzite which is the environment of several of the most important mines of the camp.

Two of the district's important fissure systems project into the crest of the plunging anticline. These are the Lead King and Grant& Hartford veins. And, the drilling laid out will penetrate the fold, along its crest and upper flanks,

at distances ranging from 400' to 1800' northwest of the northwest faces of the many levels in the productive Lead King mine. The holes are somewhat farther ahead of the workings in the Grant & Hartford mine whose development was not carried as far to the northwest. See Map 3. ie. ore bodies projected

The nose of the plunging anticline, as expressed by the areal geology, is close to the granodiorite stock and has, in fact, been intruded by it. Because of the additional fracturing in this part of the fold, that probably would result from the intrusion, an additional favorable feature is present.

The dolomitic limestones and limestone-shale series that crop out in the nose of the fold are lower Cambrian in age, and these formations which are the equivalent of the Silver Hill and Hasmark of nearby Philipsburg, are considered to be the best sedimentary host rocks for ore in Montana.* It therefore seems a reasonable expectation that bedded replacement ore, in addition to cross-cutting fissure ore may be found in this favorable structural and lithologic environment. As shown on Map 3, ore and mineralization in the limestones of this area has actually been found on the Free Coinage and the Garnet Nos. 1 and 8 claims. And, the vein quartz found on the dumps of shallow workings, on Garnet No. 8, is practically on the crest of the fold, and could represent "mineralization leaks" from something more important below.

A minor objective of the proposed work (see hole g, Section 4-4', Map 6) is to probe for the possible faulted extensions of the Nancy Hanks and Tiger veins, in the faulted blocks near the granodiorite-limestone contact.

Returning to the major objective the following additional discussion, and reference to the literature, intended to support and further clarify certain aspects of the project seems necessary and pertinent.

A seemingly almost perfect structural environment for replacement ore in the bedding exists in this important but long neglected district. Favorable dolomitic limestones, and particularly limestones containing impermeable shale members, have been folded into a sharp anticline. This structure has been intruded by a small stock, possibly a cupola, or a larger mass being apically exposed by erosion. In addition, the district has an interesting and relatively important production of high grade gold ore.

Most of the ore found to date has occurred in fissures that not only lie in the bedding, but also crosscut the formations in places. Several of the most important ore bodies are found in the relatively inert quartzitic rocks but the limestones and limestone-shale series above the quartzite have not been prospected, except most superficially.

As Perry (cited below) speaking of some of the important Montana districts wherein stratigraphic control by Cambrian formations is evident, states ----"An occurrence of fissures, plunging anticlines and igneous intrusions--- would seem to have been the most ideal combination." Writing further, he adds----"A shale bed on a steeply plunging anticline would form an inverted trough for ascending solutions which would tend to concentrate along the crest of the fold beneath the shale." Such unusually favorable conditions, as described above, are found at Garnet.

In the specific exploration program laid out, we are assuming possible ore in the crest and upper flanks of the anticline that arrived there through channelways that may have been the productive Grant & Hartford and Lead King fissure zones in their northwesterly projection. Or, the channelways could have been other similar, but not yet uncovered, fissures that might lie ahead of the Grant & Hartford and Lead King veins-to the northwest--in perhaps, an en echelon

(*see top pf next page for reference -*)

* Perry, E. S.-"Stratigraphic Control of Ore Bodies in Montana", E & M.J., Vol. 146, No. 10, October, 1945

development.

Pardee states at several places that the Lead King and Grant & Hartford veins lie in the bedding. And, his cross section, on page 191, exhibiting these veins in the quartzite exposed on the slopes of First Chance gulch, show them extending up the flanks of the anticline toward its crest, which in this section has been eroded away. Whether or not the veins had occupied the bedding, at the top of the fold before erosion had removed them, is a question. to be answered by the proposed work

If one studies the surveys of the now inaccessible Lead King workings shown on Map 3 (which surveys were taken from Pardee's Plate 1X, page 188) in conjunction with the structure revealed by the areal geology and the actual attitudes mapped in the field, near the portals, it is apparent that: If the directions of the various adit levels, which were obviously drifts, are correct, then, the Lead King fissure is patently crossing the bedding in the crest of the anticline and not lying within it. This is important.

It is on this evidence of cross cutting fissures in the anticline's crest, discussed immediately above, that the Lead King and Grant & Hartford veins are shown, on Map 3 and in the various cross sections, as extending in a cross cutting manner to the northwest into the higher formations of the fold. In this event, these veins (and other postulated veins, similar to them to the northwest but not yet exposed) could have served as channelways for ore deposition in the limestones ahead, above the quartzites. The inverted trough of the anticline itself, and minor warps on its flanks, could also have provided the channelways and the structural control of the ore bodies expected.

Item 4 Accessibility of Property

Arrangements may be made, by O.M.E. representatives, to see the property by contacting Joe G. Irving, 2957 So. Highland, Las Vegas, Nevada, Tel.-735-4447.

The property may be reached by turning off Highway 10, at Bearmouth, which is about eleven miles west of Drummond, Montana, and following the good mountain road which extends northerly up Bear Creek for about ten miles to the old mining town of Garnet.

All of the important mine workings are caved and therefore inaccessible.

Item 5(a) Exploration Work (Fully described, as suggested on the Form)

A total of 2175 feet of bulldozing, involving seven cuts which are to be 8' to 10' wide and to expose bedrock, is proposed. A total of 7225 feet of AX diamond drilling—involving 11 holes—is also proposed. An additional 3000 feet of drilling is suggested, the exact depths and locations to be determined on the basis of the findings in the initial holes. This additional 3000 feet of hole, including their locations, directions and depths, to be subject to O. M. E. approval.

The proposed exploration work is shown on Map 2, with regard to its relationship to property lines, and on Map 3 with regard to geology and nearby workings. In addition the eleven drill holes are shown in cross section, together

with the inferred geology, on Maps 5, 6 and 7.

Eleven drill station sites, and eleven access roads to them, totalling 2000 feet simple bulldozed road is to be constructed. These roads are shown in dotted purple lines, leading from existing roads to the drill staions, on Map 2.

A brief tabulation of the proposed work, giving individual footages, sizes of opening and objectives, follows below:

A. Bulldozer Cuts (Grant & Hartford, and Lead King veins, abbreviated as G&H, L.K.)

Cut No.	Location, also see Maps 2 & 3	Dimensions, (all to bedrock)	Objectives See Map 3
1	Gold Bug and Bulls Eye Claims	9'x 500'	To expose G & H vein, 650' nw of last workings, if it extends that far, and/or other possible vein structures parallel or otherwise to L. K. vein. Also to provide geologic data.
2	Bulls Eye claim	9'x 300'	To expose G & H vein, 500' nw of Cut 1, if it extends that far, and/or other possible vein structures, and to supply data on the geology, particularly the quartzite-C_w contact, as inferred.
3	Garnet No. 8 claim	9'x 450'	To expose G & H o.c. 850' nw of Cut 2 if the structure extends that far, and/or other vein structures (such as might account for mineralization shown in cuts 150' to nw) and to provide geologic data, particularly on the C_w-C_m contact, as inferred, near the crest of the fold.
4	Garnet No. 3 claim	9'x 325'	To expose G & H vein o. c. as projected-500' nw of Cut 3, and/or other vein structures. Also to expose inferred shale bed (C_{pk}) near crest of anticline
5	Nancy Hanks claim	9'x 300'	To explore for possible sw extension of Nancy Hanks vein, 125' east of the Minnie Palmer shaft. To expose so-called Nancy Hanks fault, which has been reported to show drag ore in places, and to expose main granodiorite contact and the projected dike in limestone, 75' south of contact. Also, to provide geologic data on nature of the contact and attitude of formations in this area.

To accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn.

A. Bulldozer Cuts (continued)

Cut No.	Location (Maps 2 & 3)	Dimensions (all to bedrock)	Objectives (Also see Map 3)
6	Garnet No.1 claim	9' x 200'	To explore for possible sw extension of Tiger vein, 350' sw of where last seen in Ryan shaft. To expose inferred shale member below the base of C_p and indicated granodiorite dikes--possible structural controls of ore deposition. To provide other geologic data, and possibly veins.
7	Garnet Nos. 1 & 8 claims	9' x 100'	To explore for mineralization that might account for vein quartz (0.6oz Au) on nearby dumps, and to expose projected granodiorite dike. Also to provide geologic data on ne flank of anticline near its nose--See Map 3.

B. Diamond Drilling--AX

The following abbreviations will be used in the descriptions below:

L.K. vein--Lead King vein
G & H Vein-Grant & Hartford vein
C_w---Cambrian Woolsey Fm. Sh + ls

C_m-Cambrian Meagher fm ls (marble)
C_{pk} " Park Sh. fm
C_p " Pilgrim fm do/o

Hole Designation	Location, Maps 2&3	Inclination and Total Depth	Prep.Wk. Requir.	Objectives, Also see Map 3, and Sections
a.	Gold Bug claim	-80 degrees, TD--500'	Drill Stat. Site-15'x30' and 100' of Access road	See Cross Section C-C', Map5. To intersect L.K vein, at elv. approx. 5750', as projected at a point 450' nw of nw faces of L.K. drift adits. Also, to prospect the C_w for bedded deposits in its limy members and/or at the C_w - pC Qtzite contact. Also to explore for bedded ore in the qtzite and/or possible veins in walls of L. K. fissure zone.
b.	Gold Bug claim	-80 degrees TD--700'	Drill Stat. site & 100' Access Road	See cross section C-C', Map 5. Hole b is 425' ne of hole a, and is close to the crest of the anticline. It has essentially the same objectives as hole a. described above. In addition, it is designed to explore for fissure or bedded ore, possibly related to G & H vein, as extended, and for

The LK vein is closer to the crest of the anticline at the contact on the surface than it is in the hole, but there is no saddle reef inferred at the surface. There could be a saddle reef related to the G&H vein (projected), } No

To accompany application of American Mining Co., 700 Securities Bldg., Seattle, Wn

B. Diamond Drilling (cont)

Hole	Location & see Maps 2 &3	Inclination and T.D.	Prep. Wk Required	Objectives--Also see Map 3 and indicated sections
b (cont)				saddle reef type of ore anywhere in the geologic section shown, near the crest of fold.
c.	Garnet No. 7 claim	-80 deg. Td-800'	Drill Stat. site & 300' Access Rd.	See Cross Section C-C', on Map 5. Hole c is 370' NE of hole b, and is near the top of the NE flank of the anticline, near its crest. Its objectives are to intersect the G & H and L.K fissures, zones, as projected and shown in section; and to explore for bedded ore at the preC-C_w contact and other possible favorable horizons above and below.
k.	Garnet No.7 Claim	-80 deg. TD-1000'	Drill Stat. site & 240' Access Rd.	See Cross Section C-C' on Map 5. Hole k is 500' NE of Hole c and is located well over on the flank of the anticline. One of its primary objectives is to explore for ore related to the G & H vein, as projected, 1100' NW of the most northwesterly G & H workings, and several hundred feet lower. Also, to prospect for bedded ore, in the qtzite, on the L. K. vein in its downward projection (assuming a slight NW rake) at considerable depth and about 500' (approx.) down dip below the lowest known workings. The hole also explores for possible bedded ore at the C_w-preC contact, and other possible horizons above and below, on the flank of the anticline and not far from the granodiorite stock.
d.	Garnet No. 8 claim	-50 deg. TD-950'	Drill Stat. site & 50' Access Rd.	See Section 6-6', on Map 7. Hole d is near the axis of the anticline and parallel to it. Its objectives are: To explore for bedded ore at the C_m-C_w contact itself, and at various horizons in these two calcareous formations, along with bedded ore in the preC qtzite below. It will also prospect for fissure ore that may be related to the L.K. vein, as projected to the NW. In addition, the hole is designed to explore the anticline, near its crest, and its various favorable contacts, 250-450' NW of where penetrated by hole a.

To accompany app[illegible]ation of American Mining Co., [illegible] - Securities Bldg., Seattle, Wn

B. Diamond Drilling (cont.)

Hole	Location, & See Maps 2 & 3	Inclination & T. D.	Prep. Wk. Required	Objectives--Also, see Map 3 and indicated sections
e.	Garnet No. 8 Claim	-80 degrees T. D.-350'	Drill Stat. site & 210' Access Rd.	See Cross Section D-D' on Map 6. This short hole, located very close to the crest of the anticline, is designed to explore for bedded ore at C_m-C_w contact and various possible other favorable horizons--ore of the saddle-reef type is a definite prospect. It explores the crest of the fold 500' NW of hole b. It is also designed to intersect the G. & H. fissure, as projected. It will be noted that the hole is in the vicinity of cuts in this area, showing vein quartz on their dumps.
	For evidence of saddle reefs on the crest of this anticline See ? ? ? The applicant is "assuming possible ore in the crest..." ie prospecting			
f.	Garnet No. 8 claim	-70 degrees, TD- 350'	Drill Stat. Site and 220' of Access Rd.	See Cross Section D-D', Map 6. This hole is on the flank of the fold, but fairly near its crest, being about 365' NE of Hole e. It has very similar objectives to those described under hole e.
g.	Nancy Hanks Claim	-80 degrees TD--425'	Drill Stat. Site and 100' of Access Road	See Section 4-4', Map 6. This hole is designed to explore for possible SW extension of Nancy Hanks vein, east of the Minnie Palmer shaft, in a large fault block of ls near the granodiorite contact. It is also to test the area on north side of the fault that cut off the Tiger vein for its faulted extension. The limestone, close to the intrusive will also be penetrated for possible ore in the bedding near the granodiorite.
h.	Garnet No. 3 claim	-54 degrees TD--700'	Drill Stat. Site & 40' Access Rd.	See Section 5-5', Map 7. This hole is collared in C_p not far from crest of anticline, which it parallels. It is designed to probe this part of the structure for bedded ore under a postulated shale bed (C_{pk}), at the C_m-C_w contact and other possible favorable horizons in-between. It will also cut several granodiorite dikes, whose margins could be favorable

prospecting unless cuts 4-46 show shale

prospecting

To accompany appli[illegible]ion of American Mining Co., 70[illegible]ecurities Bldg., Seattle, Wn.

B. Diamond Drilling(Continued)

Hole	Location & See Maps 2 &3	Inclination & T. D.	Prep. Wk. Required	Objectives--Also, see Map 3 and indicated section
				structures for ore localization. Hole will also intersect G & H. vein, as projected, near the top of the fold.
i.	Garnet No. 7 claim	-50 degrees, TD--800'	Drill Stat. Site, and 240' Access Rd.	See Section 4-4', Map 6. This hole is to be collared in C_m, is on the flank of the anticline, between its nose, as expressed by surface geology, and the main granodiorite stock. It is designed to test the contacts C_m-C_w, and the C_w-preC qtzite for bedded ore at these horizons and above and below them. It penetrates several hundred feet into the qtzite, for possibilities there also. Prospecting
j.	Garnet No. 1 claim	-70 degrees TD--600'	Drill Stat Site and 300' of Access Rd.	See Section 5-5', Map 7. This hole is collared in C_p, about 450' north of hole h, and also lies between the nose of the fold and the granodiorite stock. It is designed to prospect the Pilgrim ls, the postulated shale bed that underlies it and several hundred feet of C_m for bedded ore under the shale or at any of the other favorable horizons crossed. It could also cut the G. & H. vein, as projected, and possibly other unknown fissures, of the Tiger vein type, near the granodiorite contact.

prospecting → Pilgrim ls

Prospecting unless Cut 6 shows shale → shale bed

prospecting → unknown fissures

End of Item 5a

Item 5 --Exploration Work (continued)

(b) Access Roads

No access roads to Garnet, or the general area must be built. Only the short and simply constructed (bulldozer work only) access roads to the various drill station sites, as detailed above, need be made.

(c) Start of Work and Progress It is planned to start bulldozing for station site preparation, and access roads to the sites, not later than June 1, 1965, and probably two weeks sooner, depending on snow. The bulldozer would then proceed to the work of bulldozing the seven cuts (for exploration purposes) to bedrock.

It is planned to start actual core drilling not later than June 15, 1965, and probably two weeks sooner depending on snow conditions.

The necessary preliminary dozing for station sites and access roads

should require about a week or so for completion.

The bulldozing of exploration cuts, Nos. 1-7, to bedrock, totalling 2175 linear feet of cut, is estimated to proceed at something like 250' per day. With an allowance made for time required moving in and out, and moving from cut to cut, the bulldozing of the cuts should take about two weeks, on a six-day-a week basis.

The actual drilling progress has been variously estimated in the several drilling contracts at from 1000 to 1500 feet per month, per drill, on a two-shift basis--six days a week. Assuming 1250' per month, as the average advance per drill, the 7225' of hole laid out, plus the 3000' additional feet requested on the basis of O.M.E. approval later, would probably be completed--using two drill rigs--in four and a half months. This allows for some probable necessary reaming and casing, or, cementing and redrilling, and some delay time.

Item 6 Experience

The applicant has had experience in exploration work of this type, and in operating small mines. However, the actual supervision of the entire job will be under Joe G. Irving, who has spent two field seasons studying the district, and has prepared this application---including those parts treating with the geology. Irving's experience and qualifications are set forth in the Personal Data Summary attached. See Exhibit B

Item 7 Estimate of Costs (See Summary-ReCap of Drilling Costs on pages 19 & 20.)

Item 7a Independent Contracts. The costs of the work to be performed, in addition to being presented as derived, will be given in sub-totals and totals for:

(A) The 7225' (11 holes) specifically laid out and shown on the accompanying maps and sections, and

(B) The total of 10,225' of hole proposed, which includes the 3000' of additional offset, or other, hole the approval of which will be requested of the O.M.E. during the program, or near its completion.

Laid out are 11 holes, average depth-656.8', totalling 7225', together with the additional 3000' of hole (probably 5 holes) mentioned above.

Data: Estimated feet per shift per drill-24'; 2 shifts per day; 2 drills on the job working a 6-day week, or 26 days per month. Time required at 2500' per month: For the 7225'-3 months; for the total of 10,225' proposed-4.5 months. Core diameter to be a minimum of AX wireline @ 15/16", perhaps larger.

(1) Mob-demob, collaring holes and straight core drilling

Mobilization and demobilization-------	Footage	Unit Price per foot for interval	Cost of work	Sub-Totals
Mobilization and demobilization-------			$600	
Drilling & casing overburden-assume an average of 10'- 10' x 11 holes	110'	$8.00/ft	880	

To accompany applic[redacted]on of American Mining Co., 70[redacted]curities Bldg., Seattle, Wn.

Item 7a (cont.) Independent Contracts

(1) continued

	Foot-age	Unit Price per ft for interval	Cost of work	Sub-totals
Core Drilling				
For interval 0-250' (involves all 11 holes (see item 5a)	2750'	$5.25	$14,438	
For interval 250-500' (all 11 holes have some footage here (item 5a)	2375'	5.40	12,825	
For interval 500-750' (7 of the 11 holes have some footage here (5a)	1500'	5.75	8,625	
For the interval 750-1000' (4 of the 11 holes have footage here-see item 5a)	600'	6.25	3,750	
Total for straight core drilling-7225' for 7225' of hole			$39,638 $5.49/ft	

Diamond drill contractor bid?

(A)-Total cost (mob-demob,collaring, core drilling) for the 7225' of hole laid out ---------- $41,118
Cost per ft for 7225' of hole (11 holes) ---------- $5.691/ft

charged twice?

(B)-Total cost (mob-demob, collaring, core drilling, for the total of 10,225' of hole proposed (assuming the additional 3000' involved 5 holes to collar and had the same unit cost distribution) ---------- $58,015
Cost per ft for the 10,225' of hole---------- $5.674/ft

(2) Cementing & redrilling, or, Reaming & Casing

(Since there is no experience available for the district, it will be assumed that 15% of the footage drilled will have to be either:
a. cemented and redrilled, or
b. reamed and cased
Estimates of maximum cost possibilities follow:)

ANALYSIS

One Possibility-cementing and redrilling all of the 15% of the footage, or 1084' (15% of 7225)	Amount (hours or ft)	Estimated unit cost, or price	Cost of Item
Cementing 1084' @ 10'/hr- 108.4 hrs			
Waiting on cement, est @ 40.0 "			
Total time cementing &WOC 148.4 "	148.4 hr	$15.00/hr	$2226
Redrilling cement @ 10' per hr	108.4 "		1626
Sacks of lumnite cement (assume 1 sack per 10' of hole)	108.4 s	$7.50 ea.	813
Total cost, if all 1084' cemented & redrilled			$4665 or, $0.646/ft

To accompany applica[redacted]n of American Mining Co., 700-[redacted]urities Bldg., Seattle, Wn.

Item 7a--Independent Contracts (continued)

(2) Cementing& Redrilling, or, Reaming & Coring (continued)

ANALYSIS (continued)	Amount --(ft.) (casing)	Estimated unit cost, or price	Cost of Item	Sub Total
Second possibility--Reaming & Coring all of the 15% of the footage, or 1084 ' (15% x 7225')				
Reaming 1084' @ $3.00/ft.	1084'	$3.00	$3252	
Casing--assume 1/3 of the casing used will be left in the hole and will be paid for @ $2.50/ft.	361'	2.50	803	
Total cost, if all of 1084' must be reamed & cased, and some casing lost			$4055	
And, for 7225' of drilling			$0.561/ft	
Using the maximum cost possibility, ie. that all of the 1084' (15% of total footage) will have to be Cemented & Redrilled, the following costs in this category are submitted as an estimate.				
(A) Total cost for either Cementing & Redrilling, or Reaming & Casing (for 7225' of hole)				$4665
Cost per ft. for 7225' of hole				$0.646
(B) Total cost (on same basis, ie. $0.646/ft) for 10,225' of hole drilled				$6605
Cost per ft. for 10,225' of hole				$0.646
(3) Delay time not caused by driller				
(i) For Surveying--using Tro-pari method, giving azimuth & dip, assume 2hrs/hole For the 11 holes (7225') laid out	22hrs	$10.00/hr	$220	
(ii) Delays due to other causes (est.-24hrs)	24 "	"	240	
(A) Total delay time for 7225' of hole laid out			$460	$460
Cost per ft. for 7225' of hole				$0.063
(B) Total delay time (on same basis-$0.063/ft) if the proposed 10,225' of hole is drilled				$644
Cost per ft. for 10,225' of hole				$0.063
Item 7b Personal Services				
(1) Preparation of drill station Sites, and Access Roads to them (See item 5a; Bulldozer Work) (Estimate 2hrs work per site, @ $15.00/hr) For the 7225' of hole (11 holes) 11 sites x 2hrs	22hrs	$15.00/hr	$330	
Pick up, move to next site-1hr each move	10 "	"	150	

To accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn.

Item 7b Personal Services (continued)

(1) Preparation Drill Station Sites and Access Roads (continued)

	Amount Hrs, or Days	Estimated unit cost or price	Cost of Item	Sub-Totals
Access roads to sites, 2000' of road, @ 1000' per 8-hr day-------	16 hrs	$15.00/ hr	$240	
Moving dozer into camp & out-2 days	16 "	"	240	
(A) Total cost for the 7225' laid out	64		$960	$960
Cost per ft for the 7225' of hole				0.133/ft
(B) Total cost for the 10,225' of hole proposed, on basis of $0.133/ft				$1360
Cost per ft. for the proposed 10,225' of hole				0.133/ft
(2) Consulting engineer's supervisory Services For site and access road preparation. (Engineer must show dozer operator the location, direction and extent of the work and verify its completion) Estimate 1 hour' time for each site and accompanying access road. For the 7225' of hole laid out (11 holes) need 11 hours, or 1 and 3/8 days, at $50.00/day, plus per diem of $15.00	1-3/8 days	$65.00 a day	$89	
(A) Total cost for the 7225' of hole laid out				$89
Cost per ft. for 7225' of hole				0.012/ft
(B) Total cost for the 10,225' of hole proposed; assume 4 to 5 additional holes, and same average access Rd requirements @ $0.012 per ft of hole			$123	$123
Cost per ft for 10,225' of hole				0.012/ft
(3) Consulting geologist for Core Inspection and Logging Assume geologist can inspect and log core @ 350' per day, at a fee of $50.00/day, plus $15.00 per day per diem. For the 7225' of hole laid out, 20.64 days (7225'/350' per day)	20.64 days	$65.00 a day	$1342	
(A) Total cost for the 7225' laid out				$1342
Cost per ft for 7225' of hole				0.186/ft
(B) Total cost on same basis for the 10,225' of hole proposed	29.21 days	"	$1899	$1899
Cost per ft for the 10,225' of hole proposed				0.186/ft

(4) Surveying of holes (see next page)

To accompany applic[illegible]on of American Mining Co., 700[illegible]curities Bldg., Seattle, Wn.

Item 7b-Personal Services (continued)

	Amount Hrs, Days etc	Est. unit Cost, or Price	Cost of Item	Sub-Totals
(4) Surveying of Holes (using Tro-pari method --azimuth & dip- instrument rents for approximately $10.00/day--$50.00 minimum--, and transportation is about $10.00. Assume operator surveys 3 holes per day, or requires 4 days for the 11 holes. Assume operator receives--$50.00/day)				
Rental of instrument & transport			$60.00	
Operator's time & cost	4 days	$50.00/ day	200.00	
(A) Total cost for the 7225' laid out			260	$260
Cost per foot for the 7225' of hole				0.036/ft
(B) Total cost on the same basis, for the 10,225' of drilling proposed				$368
Cost per ft. for the 10,225 ' of hole				0.036

Item 7c Operating materials and Supplies

	Amount	Estimated unit Cost	Cost of Item	Sub-Totals
Cardboard core boxes, estimated to hold core of about 30' of drilling @ $1.00/ box $0.85	241 boxes	$1.00	$241	
(A) Total cost for the 7225' hole laid out				$241
Cost per foot, at 7225'				$0.033/ft
(B) Total cost, same basis, for 10,225' hole proposed				$341
Cost per ft. for the 10,225' proposed				$0.033/ft

10 feet X

Item 7d Operating equipment	None
Item 7e Initial Rehabilitation & Repairs	None
Item 7f New Buildings, fixtures and Installations	None

Item 7g Miscellaneous

	Amount	Est. unit Cost	Cost of Item	Sub-Totals
(1) Assaying--Assume an intersection of mineralization will be met--on an average of about every 50'--that requires assaying for Au and Ag. And, every tenth one, or composites, should be assayed for Pb and Cu.				
7225'/50, or 144 assays for Au & Ag--	144	$2.00	$288	
14 assays for Pb & Cu--	14	4.00	56	
(A) Total est cost of assaying, for the 7225' laid out				$344
At 7225' of hole				$0.048/ft
(B) Total est cost of assaying for the proposed 10,225' of hole, on same basis, ie, every 50'	205 Au-Ag	$2.00	$410	
	21 Pb-Cu	$4.00	84	
Total-10,225' @ 10,225'	226		$494	$494 $0.048/ft.

To accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn.

Item 7g Miscellaneous (continued)

(2) Accounting	Amount (mos.)	Est. unit cost	Cost of Item	Sub-Totals
Assume an accountant's services @ $30.00/day, for one day a month. For the 7225' of hole laid out 7225/2500 equals 3 months	3 mos.	$30.00	$90	
(A) For the 7225' of hole laid out				$90
@ 7225'				$0.012/ft
(B) For the 10,225' hole proposed, 10,225/2500, or 4.1 mos. ~~Rd-te~~	5 mos	$30.00	$150	$150.
@ 10,2258				$0.015/ft

******* End of Detailed Analysis -------

FOR SUMMARY AND RECAP OF DRILLING COSTS
(see pages 19 and 20 following)

also

SEE ESTIMATED COSTS FOR 7 EXPLORATION CUTS, PAGE 21

To accompany applic[illegible]on of American Mining Co., 700[illegible]curities Bldg., Seattle, Wn.

SUMMARY AND RECAP OF DRILLING COSTS

	Cost of Item Round $s	Cost per Foot @7225'	Sub-Totals & Gr. Total
A. For the 7225' laid out, and shown on the plan maps and sections submitted--Total of 11 holes (Items marked "A" from preceeding schedule)			
Independent Contracts (Item 7a, MME Form 40)			
(1) Mob-demob, collaring and Straight Core drilling	$41,118	$5.691	
(2) Cementing & Redrilling, or, Reaming and Casing-(The estimate of cementing and redrilling-higher of two-used here)	4,665	0.646	
(3) Delay time, not caused by driller	460	0.063	
Total estimated costs, independent contracts	$46,243	$6.40	$46,243
Personal Services (Item 7b, MME Form 40)			
(1) Prep. drill station sites & Acc. Rds.	$ 960	$0.133	
(2) Cons. Engineer's supervisory services for sites and access roads	89	0.012	
(3) Consulting geologist for core inspection and logging	1342	0.186	
(4) Surveying holes	260	0.036	
Total estimated cost, personal services	$2,651	0.37	$ 2,651
Operating Materials and Supplies (Item 7c)			
Cardboard core boxes-est 241 @$1.00 ea.	$ 241	0.033	
Total est. cost of Operating Mats & Supp.	$ 241	0.03	$ 241
Operating Equipment (Item 7d-MME Form 40)	None		None
Initial Rehab. & Repairs (Item 7e " ")	None		None
New Bldg.-Fixtures & Installat. (Item 7f ")	None		None
Miscellaneous (Item 7g, MME Form 40)			
(1) Assaying	$ 344	0.048	
(2) Accounting	90	0.012	
Total Estimated Miscellaneous	$ 434	0.06	$ 434
Grand Total Estimated Cost for the 7225' of drilling laid out--involving 11 holes		@ 7225'	$49,569 $6.86/ft.

To accompany applicat[illegible]n of American Mining Co., 700-S[illegible]rities Bldg., Seattle, Wn.

SUMMARY AND RECAP OF DRILLING COSTS (cont.)

	Cost of Item Round $s	Cost per Foot @10,225'	Sub Totals & Gr. Total
B. For the total of 10,225' of drilling proposed, which includes 3000' of additional offset, or other, drilling to be approved later by O.M.E. (Items marked "B" from the preceeding schedule)			
Independent Contracts (Item 7a, MME Form 40)			
(1) Mob-demob, collaring & straight core drilling	$58,015	$5.674	
(2) Cementing & redrilling, or Reaming & Casing-(The estimate of cementing and redrilling-higher of the two-used here)	$ 6,605	$0.646	
(3) Delay time, not caused by driller	$ 644	$0.063	
Total estimated costs, independent contracts	$65,264	$6.38	$65,264
Personal Services (Item 7b, MME Form 40)			
Prep. of drill stat. sites & access Roads	$ 1,360	$0.133	
Cons. Engineer's supervisory services for drill sites and access roads	$ 123	$0.012	
Cons. Geologist-for core inspect. & logging	$ 1,899	$0.186	
Surveying holes	$ 368	$0.036	
Total estimated Personal Services	$ 3,750	$0.37	$ 3,750
Operating Materials & Supplies (Item 7c)			
Cardboard core boxes-est 341 @ $1.00 ea.	$ 341	$0.033	
Total estimated Oper. Materials & Supplies	$ 341	$0.03	$ 341
Operating Equipment (Item 7d-MME Form 40)	None		None
Initial Rehab. & Repairs (Item 7e " ")	None		None
New Bldgs.-Fixtures & Install. (Item 7f ")	None		None
Miscellaneous (Item 7g-MME Form 40)			
(1) Assaying	$ 494	$0.048	
(2) Accounting	$ 150	0.015	
Total Estimated Miscellaneous	$ 644	$0.06	$ 644
Grand Total Estimated Cost, for the 10,225' of hole proposed, which includes 3000' of additional offset, or other, drilling to be approved later by the O. M. E. (Prob. 11 plus 5 more holes)		@ 10,225'	$69,999 $6.85/ft

To accompany applic[illegible]on of American Mining Co., 700[illegible]curities Bldg., Seattle, Wn.

ESTIMATED COST OF THE PROPOSED 7 BULLDOZER CUTS (cont)

These seven bulldozer cuts, shown on Maps 2 and 3, totalling 2175' of exploration work, are designed to expose on the surface, fissure vein extensions--as projected--and possible bedded ore occurrences at favorable sedimentary horizons and contacts, or at igneous-sedimentary contacts.

The work is believed to represent justifiable exploration. Such exploration, on the surface, does not seem to be fundamentally different than probing for these extensions and possible occurrences underground by drilling. See the detailed descriptions and objectives of this work under Item 5a, MME Form 40. Since it is felt that the work outlined is eligible for O. M. E. assistance, the estimated costs are set forth below:

	Amount of Work hrs.	Est. Unit Cost $/hr	Cost of Item (Rounded)	Subtotals & Grand Total
A. Bulldozing 7 exploration cuts, 9' wide to bedrock, using a DC-7 dozer, or its equivalent, at an estimated performance of 240' of cut per 8-hour day.			$	
(1) Moving dozer into camp and out (2 days, or 16hrs @ $15.00/hr	16	$15.00	$ 240	
(2) Picking up and moving from cut to cut--6 moves after first cut @ 1½ hrs each	9	"	$ 135	
(3) Bulldozing 2175' of cut, at aver. rate of 240'/day, or 30'/hr	72.5	"	$1088	
Total for actual bulldozing			$1463	$1463
	@ 2175' of cut			$0.67/ft
B. Consulting engineer-geologist's services				
(1) Showing dozer operator location and direction of the 7 cuts (1hr. per cut, at $50.00 per day, plus $15.00 per diem for expenses, or $65/8--$8.12 per hr.	7 hrs			
(2) Studying and mapping cuts, at 200' per hour, or 2175/200--10.8 hrs	10.8 "			
Total for Con. Engin-Geol. Service -17.8 hrs @$8.12/hr -$145				$ 145
	@ 2175'			$0.07/ft
Total cost of bulldozer work (7 exploration cuts to bedrock)				$1,608
	@ 2175'			$0.74/ft.

To accompany application of American Mining Co.
700-Securities Bldg, Seattle, Wn

Exhibit B.
Re Irving - Experience

PERSONAL DATA SUMMARY

Education, Background and Experience

Name: Joe G. Irving, Mining Geologist

Address: Office - 2957 So. Highland, Las Vegas, Nevada
Residence - 3459 Pueblo Way, Las Vegas, Nevada

==========

EDUCATION

1. Graduated from Erasmus Hall High School, Brooklyn, N.Y., with Board of Regents Diploma. Courses were those of regular high school curriculum leading up to engineering work in college.

2. Attended Columbia College, Columbia University, New York City, for four years, graduating after taking general arts and pre-engineering courses.

   Received Bachelor of Arts Degree in 1924

3. Attended Columbia School of Mines, Columbia University, New York City, for two years of post-graduate work in Mining Engineering and Mining Geology, wrote thesis and received the following additional degrees:

   Bachelor of Science Degree in 1926

   Engineer of Mines Degree in 1927

4. Later, in 1938-40, attended Harvard University, Cambridge, Massachusetts, and spent two more years in post graduate work, studying exclusively Mining and Economic Geology, and completed all courses, requirements and and oral and written examinations for a Doctor's Degree, except for writing a thesis, which for various reasons was never done.

   Received a Master of Arts Degree in Mining and Economic Geology in 1940

EXPERIENCE AND BACKGROUND

Since graduation from Columbia University in 1927, experience as a Professional Mining Geologist, covering a period of thirty-seven years, has included:

1. ANACONDA COPPER COMPANY. Seven and a half years with the Anaconda Copper Mining Company as mining geologist, at the Butte mines, and in doing outside examination and valuation work throughout the West.

   Work during this period included being mine geologist at several of the larger units, in Butte, Montana, with the usual underground and office

duties of mapping, development recommendations and ore calculations. Also included was much field and outside examination work in which many prospects, mines and districts were studied, examined and reported upon throughout the West from British Columbia to West Texas. Numerous reports on this work are on file with the Company. Part of the work was out of the Salt Lake office of the International Smelting & Refining Company, an Anaconda subsidiary.

2. WAR PRODUCTION BOARD. One and a quarter years in Washington, D. C., in 1945-46, with the War Production Board and its successor Agency as engineer-analyst for the Copper Division.

   This work included being Alternate Member of the Quota Committee, and involved the carrying out of the objectives of the Premium Price Plan, as it applied to mining. Quotas were calculated for many companies -- large and small, including some of the largest.

3. ATOMIC ENERGY COMMISSION. Over four years with the Atomic Energy Commission in Grand Junction, Colorado and in Las Vegas, Nevada, as (successively) Geological Engineer, Mining Engineer and Project Engineer. Work during the first three and a half years as Geological Engineer and Mining Engineer included mine appraisal, ore reserve calculations, production and cost analyses, forecasts and other related duties.

4. CO-MANAGER OF NORWICH MINE. Was occupied for six years as co-manager of the Norwich manganese mine at Butte, Montana. This property was selected, acquired and managed by the undersigned and his former partner for six years during which period a production of over 57,000 L.D.T. of manganese ore for the government stockpile was achieved.

   After much negotiation, a General Services Administration loan of $107,000 was obtained and all was repaid in full, including interest. Gross value of ore produced was over one million and five-hundred thousand dollars.

   The activities embraced in this work included almost everything that would go with a mining operation involving from ten to twenty men, both at the mine and in the office. Included were finance, planning, geology, geologic mapping and maps, supplies, trucking, payrolls, reports and much business with the G.S.A. and other government agencies. (As noted elsewhere, some consulting work was done at the same time.)

5. MINE MANAGER - VARIOUS PROPERTIES. Over seven and a half years as manager of small and medium-sized mines (this was in addition to the work described in the paragraph above) and engaged in exploration and development work at various properties.

   This work, among other things, included selecting and organizing from the start three mining exploration ventures - the Quartz Hill, Pyrenees and Spar mines, all located in Montana. All produced some ore. The work entailed all kinds of duties that go with the management of such ventures. Included were organization, financial details, management, geologic work, trucking, supply procurement, planning, payrolls and reports of all kinds.

6. MINING CONSULTANT. During a period covering approximately fourteen years, and including the intervals described in Sections 4 and 5 above and 7 below, did considerable consulting work in the field of mining geology. Such consulting work comprised mostly mine examination, the evaluation of various districts, properties and prospects, and the submittal of specific recommendations.

   In the course of this work a variety of metal deposits were examined throughout the West, some for large clients or major mining companies.

   Also, during this period served as Chairman of a Commission of Three on the Mouat case, in connection with the chromium property near Nye, Montana. This complicated hearing grew out of condemnation proceedings at the start of World War II.

7. THE GALIGHER COMPANY. Two and a quarter years with the Galigher Company of Salt Lake City, Utah as their mining geologist and part-time sales engineer. In this capacity examined a number of properties - brought in by the Company or the undersigned - and also acted as geologist at two Galigher-controlled properties, the Broadway and Toledo mines. These mines were either under development or in production. As sales engineer, visited many mines, mills and plants and became familiar with milling and mill equipment.

8. CIVIL SERVICE RATINGS HELD.

   As Mining Engineer GS-13
   As Mining Geologist GS-12
   As Valuation Engineer (Mining) GS-11

9. SOCIETIES, CLUBS, ORGANIZATIONS, ETC.

   Member of: American Institute of Mining Engineers
   Society of Economic Geologists
   Scientific Society of Sigma Xi
   American Institute of Professional Geologists
   Columbia Alumni Association
   Harvard Alumni Association
   Christ Church Episcopal

   Formerly
   Member of: While in Butte, Montana was a member of
   The Butte Exchange Club and
   The Butte Chamber of Commerce

10. PROFESSIONAL REGISTRATION

   Registered as Professional Engineer in the States of Montana, Utah, Washington and Colorado.

   Registered Professional Geologist in Arizona.

Joe G. Irving

Joe G. Irving
August 4, 1964

To accompany application of American MiningCo.,700-Securities Bldg., Seattle, Wn

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
AND FABRICATION

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS-GEOLOGISTS

3408 East Main Street
Spokane 24, Washington
Phone KE 4-0862

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY 10, UTAH
HUnter 7-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
ST. LOUIS
DENVER
AUBURN, CALIF.

November 30, 1964

Joe G. Irving
Mining Geologist
2957 South Highland
Las Vegas, Nevada

Subject: American Mining Co. at Garnet, Montana

Dear Mr. Irving:

With appologies for my late response to your letter dated 11-18-64 and a copy of our latest bid on the subject contract I'll endeavor to answer your questions.

1. AXWL Core Diameter 1.067" 1 1/16"+ = 1.0625 EX Conv. Core Diameter .875"

2. It would be very doubtful that one drill even on a 3 shift basis could complete the 7,225' to 10,225' program. You will note that our proposal dated 11-16-64 specifies 2 drills on a 2 shift 6 day per week basis.

   My estimate is based on 1,200' per drill per month. A 3rd shift might have to be employed on one or both drills in order to complete the 10,225' program. This decision would be made after reviewing the actual progress being made when you might decide to do the additional drilling.

3. All of the overburden need not be removed. Your imagination of a 15' X 30' (20 x 30) clearing is quite right. You will note that a price is quoted for drilling and casing unconsolidated overburden. Provision should be made at each site for turning the water trucks around.

Please call on us at your convenience should you have any further questions. We would sincerely appreciate your advising us of any decision you may make regarding the project.

Yours truly,
Boyles Bros. Drilling Co.

E. G. Tucker - District Manager

P.S. Please note! Our AXWL Core diameter is larger than some of our competitors! EGT

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
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SHAFT SINKING
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Boyles Bros. DRILLING COMPANY

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3408 East Main Street
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Phone KE 4-0862

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY 10, UTAH
HUnter 7-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
ST. LOUIS
DENVER
AUBURN, CALIF.

October 7, 1964

(Filed below)

American Mining Company
P. O. Box 1893
Seattle 11, Washington

Dear Sirs:

We are pleased to quote the following rates for drilling on your proposed project at Garnet, Montana.

1/ Mobilization and demobilization. Lump sum $450.00

2/ Drilling and casing unconsolidated overburden. Per ft. $12.50/ft

3/ Core drilling in rock formation.

	BX Conv.	AXWL	EX Conv.
0.0 to 250'	7.40 pr ft	6.45 per ft.	6.25 pr ft
250' to 500'	7.70 " "	6.70 " "	6.50 " "
500' to 750'	8.45 " "	7.35 " "	7.00 " "

4/ Reaming: AX f/AX Casing 2.95 pr ft.. BX f/BX Casing 3.25 per ft...

5/ Cementing, waiting for cement to set and drilling out cement. Per hr. $15.00
Plus cost of cement or cement substitutes and/or drilling mud.

6/ Delays for your convenience. Per hour $12.50

7/ Cardboard core boxes, if desired, F.O.B. Salt Lake City, Utah. Each $1.00

Access roads and level drill sites are to be furnished and maintained at no cost to Boyles Brothers Drilling Co..

Our intent would be to move onto the job within 2 weeks after notice to proceed. We would furnish one drill of adequate capacity with sufficient accessory equipment to complete holes to 750' depth. Included would be a truck with drivers to haul water from the supply point to the drill sites. The drill would be operated on a 2 shift 6 day work week. The project would be under the direct supervision of an experienced foreman-driller. Evey effort would be made to complete the job within a four month period.

We sincerely thank you for your interest in our services and cordially invite any inquiries you may have.

Very truly yours,
Boyles Brothers Drilling Company

E. G. Tucker

E. G. Tucker-District Manager

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
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DRILLING COMPANY
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3408 East Main Street
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Phone KE 4-0862

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY 10, UTAH
HUnter 7-7595
BRANCH OFFICES
PHOENIX
RENO
SPOKANE
ST. LOUIS
DENVER
AUBURN, CALIF.

November 16, 1964

American Mining Company
P. O. Box 1893
Seattle 11, Washington

Dear Sirs:

This is in response to your letter dated 11-3-64 noting changes in your planned drilling project at the Garnet properties in Montana. We hereby cancel the terms quoted in our letter of proposal dated 10-7-64 and submit the following for your consideration.

2 drills ?

1. Mobilization and demobilization. Lump sum $750.00

2. Drilling and casing unconsolidated overburden. Per ft. 12.50

3. Core drilling in rock formation.

	BX Conv. core 1 5/8"	AXWL	EX Conv.
0' to 250'	7.40 pr ft	6.45 pr ft	6.25 pr ft
250' to 500'	7.70 " "	6.70 " "	6.50 " "
500' to 750'	8.45 " "	8.95 " "	7.00 " "
750' to 1,000'	8.95 " "	7.45 " "	8.00 " "

4. Reaming: AX for AX Casing 2.95 per ft.. BX for BX Casing 3.25 per ft..

5. Cementing, waiting for cement to set and drilling out cement. Per hour 15.00
Plus cost of cement, cement substitutes and/or drilling mud.

6. Delays for your convenience. Per hour 12.50

7. Cardboard core boxes, if desired, F.O.B. Salt Lake City, Utah. Each $1.00

Access roads and level drill sites are to be furnished and maintained at no cost to Boyles Bros. Drilling Co.

We will move onto the job within 2 weeks after notice to proceed. The job would be equipped with 2 drills of adequate capacity and with accessories to complete holes to depths in the excess of 1,000' depth. The drills would be operated on a 2 shift 6 day per week basis under the direct supervision of a General Drill Foreman. A suitable truck with drivers would be furnished to haul water from the supply point to the drill sites. Every effort would be made to complete the drilling project in it's entirety within a four month period.

Thank you for your continued interest in our services. We cordially invite any further inquiries you may have.

Very truly yours,
Boyles Bros. Drilling Co.

E. G. Tucker

E. G. Tucker - District Manager

To accompany application of American MiningCo., 700-Securities Bldg., Seattle, Wn

PHONE
Su-6-7401

Vivian Bros., Inc.

DIAMOND CORE DRILLING CONTRACTORS

OFFICE AND SHOP
709 WEST CANYON
KELLOGG, IDAHO

MAILING ADDRESS
P. O. BOX 780
KELLOGG, IDAHO

Across the Freeway from the
Airport

September 26, 1964

Mr. James F. Charlton, President
American Mining Co.
Box 1893
Seattle 11, Washington

Dear Sir,

We are amending our bid of September 21, 1964 for the drilling near Garnet, Montana, as a fair weather operation during the spring and summer of 1965, as follows:

Overburden per foot.....$7.75

0' to 350' per foot.....4.95

350' to 700' per foot.....5.90

Cementing hole, $12.00 per hour plus cost of cement

Drilling cement per hour.....12.00

Reaming for casing, 60% of coring price

Mobilization.....250.00

Demobilization.....150.00

Drilling stations and roads to the drilling stations prepared by American Mining Co. at no cost to the drill contractor.

Very truly yours,
Vivian Bros. Inc.

By H.H. Vivian

H.H. Vivian

PHONE
~~8401~~
Su-6-7401

Vivian Bros., Inc.

DIAMOND CORE DRILLING CONTRACTORS

OFFICE AND SHOP
~~209 WEST CAMERON~~
KELLOGG, IDAHO

MAILING ADDRESS
P. O. BOX 780
KELLOGG, IDAHO

Across the Freeway from
the Airport

September 21, 1964

Mr. James F. Charlton, President
American Mining Co.
Box 1893
Seattle, Washington

Recommended for award 9/21/64 Feder

Dear Sir,

The following quote is for drilling about ten holes from the surface at the proposed drilling location near Garnet, Montana.

Overburden per foot.....$8.00

0' to 350' AX and EX
per foot.....$5.50

350' to 700' AX and EX
per foot.....$6.55

Cementing $12.00 per hour plus cost of cement

Drilling cement $12,00 per hour

Reaming for casing 60% of coring price

Mobilization.....$250.00
Demobilization.....$150.00

Drill stations prepared and roads maintained to the drill stations by the mining company with no charge to drill contractor.

We visited Garnet, September 18th, but found no one who could direct us to the drilling area.

Would like to know at your earliest convenience whether or not our bid will be excepted. Thank you.

Yours truly,

R. R. Vivian

Vivian Bros.

To accompany application of American MiningCo., 700-Securities Bldg., Seattle, Wn

Longyear

E. J. LONGYEAR COMPANY
General Offices, 76 South 8th St.
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 9-7631 • CABLE LONGCO

November 10, 1964

American Mining Company
Box 1893
Seattle 11, Washington

Attention Mr. J. F. Charlton, President

PROPOSED EXPLORATORY DRILLING PROGRAM - VICINITY GARNET, MONTANA

Gentlemen:

1. In response to your letter of September 15, 1964, we are pleased to submit below our proposal for the subject drilling project.

2. We understand that the program as now planned will consist of a minimum of 5,225 feet of drilling, in angle holes varying in inclination from -50° to -80°, measured from the horizontal, and ranging up to a maximum of 700 feet in depth; and that the material to be drilled will consist of varying amounts of limestone and shale - some of the shale has been metamorphosed to a garnet rock, some to a hornstone, and most of the limestone is crystalline - and for this drilling a minimum of EX-size core is desired. In addition to the foregoing, it is further understood that you will provide without charge to the Longyear Company (1) bulldozer service as required for preparation and maintenance of access roads and drill sites; and (2) water required for the drilling operations can be obtained approximately 2,500 feet from any proposed drill location.

3. For this project we propose to furnish one Longyear diamond core drill of suitable capacity, together with the necessary accessory equipment and tools, including Longyear AQ wire line core barrel, as required to complete the work as now planned. We further propose to operate the drill a minimum of two shifts per day, six days per week.

AQ

4. We will carry public liability insurance covering personal injury and property damage, and Workmen's Compensation insurance, and also all-risk insurance on the drilling equipment protecting against loss by theft, fire, flood, landslides and other similar hazards. Certificates showing the coverage referred to will be furnished upon request.

5. Based upon conditions as outlined above, we are pleased to quote as follows:

a) Mobilization and demobilization of personnel and drilling equipment.....$300.00 Lump Sum

600 up 2 mos!

b) Overburden drilling in angle holes varying in inclination from a - 50° to - 80°, measured from the horizontal - 0 to 50' in depth.....$ 5.50 per foot

c) Diamond core drilling in angle holes as speci= fied above, employing AQ wire line and/or EX standard tools with minimum of 7/8' diameter core - = EX standard.

Top of ledge to 500 feet in depth.....$ 5.25 per ft.
500 to 1000 feet in depth.....$5.75 per ft.

d) Reaming for casing, if and when required - AX hole to receive AX casing -
0 to 500 feet in depth.....$ 2.25 per ft.
500 to 750 feet in depth.....$ 2.50 per ft.

c) Cementing, waiting for cement to set, and drilling out cement.....$11.50 per hour, per two-man crew, plus cost of materials used.

f) Delays for your convenience or for which you are responsible.....$ 9.95 per hour, with 2-man crew.

6. Drill cores will be turned over to your representative at the individual drill hole locations in core boxes furnished by you.

7. Statements covering the work performed will be prepared as promptly as possible after the first of each month, and payment will be due within 20 days after date of invoice.

8. We appreciate very much the opportunity to consider this work. If awarded the contract, we would be prepared to commence operations approximately June 1, 1965, provided that satisfactory financial arrangements have been made to cover payment of our invoices.

Sincerely,

E. J. LONGYEAR COMPANY

Albin P. Wicklund

Contract Engineer
Contract Drilling Division

APWicklund:bal

ACCEPTED:

AMERICAN MINING COMPANY

By:_____

Date:_____

To accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn.

R. S. McClintock DIAMOND DRILL COMPANY

CONTRACTING • DIAMOND DRILLS AND SUPPLIES • DIAMOND BITS

PHONE TE 8-3588

POST OFFICE BOX 66
W. 418 2ND AVENUE
SPOKANE 10, WASH.

November 5, 1964

OFFICIAL
COPY
O. M. E.
RECEIVED
FEB 1 1965
INITIALS | CO. E

American Mining Company
P. O. Box 1893
Seattle 11, Washington

Attention: Mr. James F. Charlton
President

Gentlemen:

We are pleased to present the enclosed revised bid covering the diamond drilling work at the Garnet properties in Montana.

If we can be of additional service please so advise.

Yours very truly,

R. S. McCLINTOCK DIAMOND DRILL CO.

W. J. Whinnen,
President

WJW:mam
Enclosure

CORE DRILLING AGREEMENT

1. **THIS AGREEMENT**, made and entered into this .....12th day of..... October....., 19.64 by and between... American Mining Co. ..... of 1904 - 3rd Avenue, Seattle, Washington .....the party of the first part and the R. S. McCLINTOCK DIAMOND DRILL CO., of Spokane, Washington, party of the second part,

Witnesseth:

2. In consideration of certain payments hereby agreed to be made by the said first party to the said second party, the said second party hereby agrees to drill, sink or prospect with a diamond core drill from .....Surface..... in or near ..Garnet, Montana..... at site .... to be selected by the said first party, subject to the conditions hereinafter mentioned. It is further agreed by the said first party that the depth of none of the herein specified drill holes shall exceed a depth of ....1000..... feet, and the total amount as guaranteed must be drilled in not more than .twelve..(12). holes.

3. The said second party agrees to use for the above described work ...two..... Diamond Core drills, and men skilled in operating same; to operate the drills., both day and night 6 days per week whenever practicable, and to furnish only such person as the said first party may designate by written order, all core taken out of said prospect hole... Size of core to be approximately ..... inches in diameter. The said first party shall provide suitable boxes if it desires to save the core, and if it also desires may have a man at the drill at all times to remove and take charge of said core. No information whatever regarding the records and results of this drilling is to be given any other party, without the written consent of the said first party.

4. The said first party hereby agrees to pay to said second party the following prices for the herein described drilling.

0' - 50'	Overburden		$ 8.55 per ft.
	CORE	BX	AX
0' - 500'		$8.55	$7.85 per ft.
500' - 750'		$9.30	$8.60 per ft.
750' - 1000'		$10.30	$9.60 per ft.

Party of second part hereby agrees to furnish core boxes @ .95¢ each at option of party of first part.

5. In accordance with this agreement, the said first party hereby guarantees the said second party a minimum total of .7,225.. feet of drilling at the price.. as herein provided in Clause Four.

The said second party shall have the option of withdrawing from this contract after a total of ..7,225.. feet have been drilled under the terms of this agreement.

In the event the said first party should stop the drilling before the guaranteed footage has been drilled, it agrees to pay the said second party half the price per foot for the undrilled balance, in addition to payment at full price for the footage actually drilled.

.....

.....

.....

CORE DRILLING AGREEMENT

6. The party of the first part hereby agrees to furnish the said second party ~~at each of the herein described prospect hole~~.., free of charge, an ample supply of water .at.source... for the proper prosecution of the herein-described work.

.The.party.of.the.second.part.agrees.to.supply.water.from.source.to.each.of....
.herein.described.prospect.holes.either.by.pump.pipeline.or.water.truck.at.no..
.additional.cost.to.party.of.first.part.....
.....
.....
.....
.....
.....

7. The said ~~first~~ second party also agrees to transport the drilling outfit and supplies of the said second party ~~from the nearest railway station or truck carrier~~ to the location of the first prospect hole, and from one hole to another and back to the nearest railway station or truck carrier at the termination of the work under this contract. For Mobilization charge of $485.00 and Demobilization charge of $350.00 per machine.

8. Should the party of the first part fail to perform its part of the contract of furnishing water, Access.Roads..... ..and ~~transportation~~ their maintenance or locate sites, as herein agreed, regardless of cause, or should the party of the first part issue instructions that delay operations for any reason or in any other way interrupt the continuous operation of the said diamond drill, it shall pay the second party the labor expense of drilling crew while idle through such delay, at the rate of

$..80.00.....per shift, consisting of 8 hours, for each shift or part thereof that the operation of the said drill is delayed.

9. It is hereby agreed that should a cavity, or loose and caving material, be encountered at a depth which should prevent successful drilling,the party of the second part does not guarantee to drill or sink said prospect hole.. to any specified depth, but will drill or sink as deep as is practicable under the conditions, and the party of the first part shall pay for every foot actually sunk or drilled.

It is further agreed by both parties hereto that should cavities, soft, broken or caving material be encountered so that the drill hole will not remain open after being bored, and it becomes necessary or advisable to resort to cementing or reaming ~~and~~ casing in order to protect same until the depth desired by said first party is reached, then the said first party agrees to pay the ~~actual~~ cost of doing such reaming, casing and cementing in addition to the price per foot paid for the drilling. as follows

Lumnite.Cement..$6.93.per.sk....Portland.Cement...$1.45.per.sk...Chemicals @ Cost
Cementing.&.Drilling.Cement.@..$12.00.per.hr...Reaming.@..$2.85.per.ft.....
Casing.lost.or.ordered.left.in.place.@.Cost.....

10. The party of the second part agrees to cover its employees with Workman's Compensation Insurance under the State Laws of .....Montana..... and agrees to furnish the first party with insurance certificate as evidence of such coverage. The party of the second part also agrees to cover its employees with Public Liability Insurance in the amounts of $300,000 and $500,000 and property damage in the amount of $100,000.

CORE DRILLING AGREEMENT

FORCE MAJEURE CLAUSE

In case the parties hereto, or either of them, shall be delayed or prevented by acts of nature, fire, flood, war, insurrection, mob violence, requirement or regulation of Government, or any cause whatsoever beyond the control of said parties, or either of them, in performing under the terms of this Contract, no liability for damages or otherwise shall arise by reason of any such delay or prevention of performance, and the obligation to perform shall be suspended until the cause of the disability shall be removed or become inoperative.

11. The payments for the herein-described work are to be made on the first of each month for all invoices rendered for work done up to the 25th day of the previous month.

12. The party of the second part hereby agrees to ship the outfit for the herein described work as directed in spring as weather conditions permit ~~within ..... days~~ from the date of notification of acceptance of this agreement, but the said second party shall not be responsible for delays caused by strikes, railroad accidents or blockades. This proposition is for immediate acceptance, but although accepted does not constitute a contract until approved by an officer of the R. S. McClintock Diamond Drill Co., at its office in Spokane, Washington, U.S.A., and is subject to change or withdrawal until so approved.

It is expressly agreed that there are no promises, agreements or understandings outside of this contract, and that no agent or salesman has any authority to obligate the R. S. McClintock Diamond Drill Co., by any terms, stipulations or conditions not herein expressed. This contract may be altered only by written consent of both parties hereto.

R. S. McCLINTOCK DIAMOND DRILL CO.

By .....

IN WITNESS WHEREOF, the parties hereto have set their hands and seals.

Accepted by

.....

.....

Title .....

Approved by
R. S. McCLINTOCK DIAMOND DRILL CO.

By .....

Date .....

Title President

Post Office Box 307
Parkwater Station
Spokane 6, Washington
N. 1015 Yardley Road
Telephone KE 4-1588

November 20, 1964

Diamond Drill Contracting Co.

Mr. Joe G. Irving
2957 South Highland
Las Vegas, Nevada

Dear Mr. Irving:

In answer to your questions outlined in your letter of November 18, 1964, we offer the following:

1) The job would require two drills on a two-shift six-day a week basis to complete in the time limit you have specified.

2) We would expect to get 1,250 feet of drilling per month per drill on a two shift basis.

3) Our mobilization price of $500.00 also includes demobilization.

It has been our experience in that country that we would be able to start work prior to June 1, so far as the weather conditions are concerned. We would prefer to start as early as possible, if there are no objections.

Sincerely,

DIAMOND DRILL CONTRACTING COMPANY

Lees J. Burrows

Lees J. Burrows
President

LJB/cb

November 6, 1964

Post Office Box 307
Parkwater Station
Spokane 6, Washington
North 1015 Yardley Road
Area Code 509, KE 4-1588

Diamond Drill Contracting Co.

American Mining Company
P. O. Box 1893
Seattle 11, Washington

Attention: Mr. James F. Charlton, President

Gentlemen:

Reference is made to your letter of November 3, 1964, and our quotation dated September 29, 1964, for your drilling project at Garnet, Montana. Kindly attach the following to our quotation:

		Conventional		Wireline	
A.	Core Drilling 750 to 1000'	AX 7.00	EX 6.85	BX 6.75	AX 6.25

All other details of our quotation remain the same.

Sincerely,

DIAMOND DRILL CONTRACTING COMPANY

Lees J. Burrows
President

LJB/cb

Post Office Box 307
Parkwater Station
Spokane 6, Washington
North 1015 Yardley Road
Area Code 509, KE 4-1588

September 29, 1964

Diamond Drill Contracting Co.

American Mining Company
P. O. Box 1893
Seattle 11, Washington

Attention: Mr. James F. Charlton

Gentlemen:

Reference is made to your letter of September 15, 1964, in which you request a quotation on a drilling project at Garnet, Montana. Given below is our quotation for the proposed work. It is understood that our quotation is based on beginning work in Spring 1965:

	Conventional		Wireline	
A. Core Drilling	AX	EX	BX	AX
0-250	6.00	5.00	5.75	5.25
250-500	6.20	5.50	5.60	5.40
500-750	6.45	6.00	6.00	5.60

B. Reaming for casing
BX $3.00/ft.
AX 2.75/ft.
EX 2.50/ft.

casing lost in holes NX $2.92/ft. BX $2.16/ft.

C. Cementing & Redrilling $15.00/hr. plus cost of materials F.O.B. Garnet

D. Delay time (Not caused by us) $15.00/hr.

E. Moving--one hole to another $100.00/ea.

F. Mobilization + Demob. $500.00

For your information the diameter of various core sizes are as follows:

AX (conventional)	1-3/16"
EX (conventional)	13/16"
BX (wireline)	1-5/16"
AX (wireline)	15/16"

If we are the low bidder we would appreciate as much notice as possible to give us time to place competent drillers on your job.

Sincerely,

DIAMOND DRILL CONTRACTING COMPANY

Lees J. Burrows, President

LJB/cb

To accompany application of American Mining Company, 700 Securities Bldg., Seattle, Wn. 98101

ASSIGNMENT OF RIGHTS

The parties hereto are JAMES F. CHARLTON and ALICE M. CHARLTON, his wife, hereinafter jointly referred to as "Charltons", and AMERICAN MINING COMPANY, a Washington corporation, hereinafter referred to as "American".

WHEREAS Charltons have purchased all of the issued and outstanding stock in a certain Montana corporation known as Bellows-Graham, Inc., pursuant to the terms of a certain "Agreement" dated 23 August 1962 (a copy of which is attached hereto as Attachment A and made a part hereof by reference) and the terms of a certain Letter of Instructions, Escrow No. 3713, dated 8 January 1963 (a copy of which is attached hereto as Attachment B and made a part hereof by reference); and

WHEREAS Bellows-Graham, Inc., owns certain mining claims and rights in Montana and American wants to gain control of said claims and rights and evaluates said claims and rights at $73,500 less the $3,800 now owed by Charltons on said claims and rights; and

WHEREAS American and Charltons have previously entered into, along with others, an "Agreement" dated 1 June 1964 wherein Charltons agreed to sell and American agreed to buy said claims and rights, the purchase price to be $73,500 less the amount owed by Charltons at the time of the sale (the date of this instrument) and to be paid in stock in American valued at $1.00 per share (there being only one type of stock in American);

NOW, THEREFORE, for the considerations stated in said "Agreement" dated 1 June 1964 and stated herein, the parties hereto sell, transfer, assign, agree, promise and covenant as follows:

1. Charltons hereby sell, assign, and transfer to American

all rights and interests of any sort that Charltons now own or later acquire in the stock of Bellows-Graham, Inc., and further hereby assign and transfer to American all rights and interests of any sort of Charltons under the "Agreement" and "Letter of Instructions, Escrow No. 3713" attached hereto as Attachments A and B.

2. American hereby promises to issue to James F. Charlton as his separate property 69,700 shares of common stock in American.

3. American hereby promises and agrees to assume all obligations of Charltons under said "Agreement" and "Letter of Instructions, Escrow No. 3713" to include payment of the $3800 indebtedness owed by Charltons.

4. Charltons hereby covenant and agree that their title to the rights and interests created in them under said "Agreement" and "Letter of Instructions, Escrow No. 3713" is not and will not be encumbered except as above noted.

DATED this 5th day of June, 1964.

James F. Charlton

James F. Charlton

Alice M. Charlton

Alice M. Charlton

AMERICAN MINING COMPANY

By James F. Charlton

James F. Charlton, President

Theodore E. Dahl

Theodore E. Dahl, Secretary

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

DB:RB

To accompany application of American Mining Co., 700-Securities Bldg., Seattle , Wn

AGREEMENT

This Agreement made as of the 23rd day of August, 1962, by and between H. A. BELLOWS address 246 Central Street, Springfield, Massachusetts, First Party and JAMES F. CHARLTON address 2633 S.W. 164th Place, Seattle, Washington, Second Party, WITNESSETH: that

WHEREAS, First Party has offered to sell, transfer and deliver to Second Party all of the issued and outstanding capital stock of said Bellows-Graham Inc. for the price and upon the terms and conditions hereinafter set out; which offer Second Party desires to accept; NOW,THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter set out, it is understood and agreed as follows:

1. First Party hereby sells, transfers and delivers into escrow all of the issued and outstanding capital stock of said Bellows-Graham, Inc.; together with pertinent corporate papers, including certificate of incorporation, Minute Book, Stock Book, records, stubs and cancelled certificates together with stock certificates of issued and outstanding stock properly endorsed, Certificate of Good Standing from Montana Board of Equalization and resignation of present directors and officers; which sale and transfer Second Party hereby accepts and agrees to purchase.

2. The purchase price therefor is the sum of $6,600.00) Six Thousand Six Hundred Dollars; and the terms of payment thereof are:

$700.00 when said stock is placed in escrow; allowing to Second Party the sum of $300.00 to repair the shaft on the mining property owned by said Bellows-Graham Inc.

Thereafter $100.00, or more, per month, beginning one month after said escrow is set up until said purchase price is fully paid.

All of said payments to be made into escrow for First Party.

3. Second Party agrees that his purchase of said capital stock was not induced by First Party but is based upon his own independent investigation; and hereby waives any claims against First Party Second Party might otherwise have based on representations made by First Party.

BRAYTON, LOWE & HURLEY
ATTORNEYS AND COUNSELORS
WALKER BANK BUILDING
SALT LAKE CITY, UTAH

4. Second Party agrees that he will conduct no actual mining operations on, nor remove any machinery or equipment from, said property until the purchase price for said stock has been fully paid; that, prior thereto and while said deferred payments are being made, he will pay accruing taxes on said property, accruing corporate license fees, if any, furnishing receipts therefor to the Escrow Holder; and will cooperate with First Party in causing the Bellows-Graham Inc. Annual Reports to be filed with the County Clerk, with certified copy to the Secretary of State, as required by Montana Law. First Party agrees to sign and verify such Annual Reports and have same executed by the directors of Bellows-Graham Inc.

5. Second Party further agrees that he will cause the buildings, machinery and equipment of Bellows-Graham Inc. to be insured in a reputable insurance Company for fire and any other loss obtainable, with loss payable to "Bellows-Graham Inc. and James F. Charlton as their interests may appear"; and pay the premium or premiums thereon during the period covered by the Escrow. The policy of insurance so secured by Second Party shall be placed in and added to said Escrow.

6. The parties agree that Walker Bank & Trust Company of Salt Lake City, Utah, shall be the Holder of said Escrow; and further agree to enter into the Letter of Instructions provided by said Bank and be bound by the terms of same, an executed copy of this Agreement to be furnished said Escrow Holder.

7. This agreement shall enure to the benefit of and be binding upon the heirs, personal representatives and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands as of the date above set out.

H. A. Bellows

H. A. Bellows, ~~Manager of Bellows-Graham Inc.~~
First Party

James F. Charlton

James F. Charlton
Second Party

BRAYTON, LOWE & HURLEY
ATTORNEYS AND COUNSELORS
WALKER BANK BUILDING
SALT LAKE CITY, UTAH

To accompany application of American MiningCo., 700-Securites Bldg., Seattle, Wn

AGREEMENT

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1. First Party hereby sells, transfers and delivers into escrow all of the issued and outstanding capital stock of said Bellows-Graham, Inc.; together with pertinent corporate papers, including certificate of incorporation, Minute Book, Stock Book, records, stubs and cancelled certificates together with stock certificates of issued and outstanding stock properly endorsed, Certificate of Good Standing from Montana Board of Equalization and resignation of present directors and officers; which sale and transfer Second Party hereby accepts and agrees to purchase.

2. The purchase price therefor is the sum of $6,600.00) Six Thousand Six Hundred Dollars; and the terms of payment thereof are:

$700.00 when said stock is placed in escrow; allowing to Second Party the sum of $300.00 to repair the shaft on the mining property owned by said Bellows-Graham Inc.

Thereafter $100.00, or more, per month, beginning one month after said escrow is set up until said purchase price is fully paid.

All of said payments to be made into escrow for First Party.

3. Second Party agrees that his purchase of said capital stock was not induced by First Party but is based upon his own independent investigation; and hereby waives any claims against First Party Second Party might otherwise have based on representations made by First Party.

BRAYTON, LOWE & HURLEY
ATTORNEYS AND COUNSELORS
WALKER BANK BUILDING
SALT LAKE CITY, UTAH

4. Second Party agrees that he will conduct no actual mining operations on, nor remove any machinery or equipment from, said property until the purchase price for said stock has been fully paid; that, prior thereto and while said deferred payments are being made, he will pay accruing taxes on said property, accruing corporate license fees, if any, furnishing receipts therefor to the Escrow Holder; and will cooperate with First Party in causing the Bellows-Graham Inc. Annual Reports to be filed with the County Clerk, with certified copy to the Secretary of State, as required by Montana Law. First Party agrees to sign and verify such Annual Reports and have same executed by the directors of Bellows-Graham Inc.

5. Second Party further agrees that he will cause the buildings, machinery and equipment of Bellows-Graham Inc. to be insured in a reputable insurance Company for fire and any other loss obtainable, with loss payable to "Bellows-Graham Inc. and James F. Charlton as their interests may appear"; and pay the premium or premiums thereon during the period covered by the Escrow. The policy of insurance so secured by Second Party shall be placed in and added to said Escrow.

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7. This agreement shall enure to the benefit of and be binding upon the heirs, personal representatives and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands as of the date above set out.

H A Bellows

H. A. Bellows, ~~Manager of Bellows-Graham Inc.~~
First Party

James F. Charlton

James F. Charlton
Second Party

BRAYTON, LOWE & HURLEY
ATTORNEYS AND COUNSELORS
WALKER BANK BUILDING
SALT LAKE CITY, UTAH

To accompany application of AMERICAN MINING CO. -700 Securities Bldg., Seattle, Wn

PEOPLES NATIONAL BANK OF WASHINGTON
THIRD AVENUE BRANCH · 1903 3RD AVENUE · SEATTLE, WASHINGTON 98101

September 25, 1964

Mr. James F. Charlton, President
AMERICAN MINING COMPANY
700 Securities Building
Seattle, Washington

Dear Mr. Charlton:

Please be advised that your loan request for the American Mining Company has been discussed by our Executive Committee and they have decided that we would not, at this time, be interested in such a loan.

It is our feeling that we would like to confine our lending activities to our local trading area.

We are appreciative of the past business given us and hope that we will, at some future time, have an opportunity to be of assistance to you.

Very truly yours,

M. R. MASTRO
Assistant Vice-President
and Manager

MRM:q

To Accompany application of American Mining Co., 700-Securities Bldg., Seattle, Wn

Southside National Bank
OF MISSOULA, MONT.

D. E. NOLAN, President

AFFILIATED WITH FIRST BANK STOCK CORPORATION

P. O. Box 1446

MISSOULA, MONTANA

JOHN PETERSON, Cashier
A. C. HEINLE, Ass't. Cashier

September 24, 1964

Mr. James F. Charlton, President
American Mining Company
Box 1893
Seattle 11, Washington

Dear Mr. Charlton:

We have your letter regarding the possibilities of obtaining a mining exploration loan of approximately $30,000.00.

Naturally anything as speculative as this would have to be secured by improved real property or other marketable assets of either the company or its principal stockholders. If you were to supply us with a current financial statement of the company and profit and loss statement preferably covering at least the last three years of operation we would be in a better position to give you an intelligent answer on something like this. Also if the security involves personal assets we would like the personal financial statement of the individual or individuals pledging. If the security offered is improved real estate in your area your best contact is a bank or building & loan in your own city.

With this additional information we will be glad to reply at a later date.

Very truly yours,

D. E. Nolan, President

DEN/glg

To accompany application of American Mining Company, 700 Securities Bldg., Seattle, Wn. 98101

GRANT DEED

WE, JAMES F. CHARLTON and ALICE M. CHARLTON, his wife, in consideration of One Dollar now paid and other valuable consideration, grant to AMERICAN MINING COMPANY, a Washington corporation, all the real property situated in Granite County, State of Montana, described as follows:

10 unpatented Quartz Lode Mining Claims in the First Chance, or Garnet (unorganized) Mining District, Granite County, Montana, said Claims being in Sections 3, 4, and 10, Township 12 North, Range 14 West, and being specifically described as:

Name of Claim	Granite County Clerk's File Number on Certificate of Location
Garnet No. 1	65900
Garnet No. 2	65901
Garnet No. 3	65903
Garnet No. 4	65904
Amended Relocated Garnet No. 4	76855
Garnet No. 5	65905
Garnet No. 6	65906
Garnet No. 7	65902
Garnet No. 8	65907
Garnet No. 9	65908

WITNESS OUR HANDS this 5th day of June, 1964.

James F. Charlton

Alice M. Charlton

STATE OF WASHINGTON:
: ss.
COUNTY OF KING :

On this 5 day of June, in the year of 1964, before me, Notary Public in and for the State of Washington, personally

appeared JAMES F. CHARLTON and ALICE M. CHARLTON, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

Kent Allen Whittaker
Notary Public in and for the State
of Washington, residing at Seattle
My Commission expires 3-22-65

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

DB:rb

To accompany application of American Mining Company, 700 Securities Bldg., Seattle, Wn. 98101

GRANT DEED AND ASSIGNMENT

We, JAMES F. CHARLTON and ALICE M. CHARLTON, his wife, hereinafter jointly called Charltons, in consideration of One Dollar now paid and other valuable consideration, grant, assign, transfer, and convey to AMERICAN MINING COMPANY, a corporation, all the realty and other rights and interests described as follows:

1. Thirty-two patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10, and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portinn of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North,Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North,Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided one-half (1/2) interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the foregoing being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in the Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

2. All rights and interests of any sort created in Charltons by that certain "Purchase and Sale Agreement" dated 12 June 1963 wherein James G. Haviland and Jean P. Haviland, his wife, sell to James F. Charlton and Robert M. Bielenberg said patented Lode Mining Claims described above and by that certain Assignment and Deed given by said Robert M. Bielenberg to James F. Charlton and assigning and transferring to James F. Charlton all rights and interests of any sort created in said Robert M. Bielenberg by said "Purchase and Sale Agreement" dated 12 June, 1963, and all rights and interests of any sort owned by Robert M. Bielenberg in the thirty-two patented Lode Mining Claims above described.

WITNESS our hands this 5th day of June, 1964.

James F. Charlton

James F. Charlton

Alice M. Charlton

Alice M. Charlton

STATE OF WASHINGTON:
: ss.
COUNTY OF KING :

On this 5 day of June, 1964, before me, the undersigned, a Notary Public for the State of Washington, personally appeared JAMES F. CHARLTON and ALICE M. CHARLTON, known to me to be the individuals whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate first written above.

Kent Allen Whittaker
Notary Public for the State of Washington, residing at Seattle
My commission expires 3-22-65

To accompany application of American Mining Co, 700 Securities Bldg, Seattle, Wash.

PURCHASE AND SALE AGREEMENT

THIS AGREEMENT made and entered into this 12th day of June, 1963, by and between JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, whose Post Office address is 822 Missouri Avenue, Deer Lodge, Montana, hereinafter called "SELLERS", and ROBERT M. BIELENBERG, whose Post Office address is Avon, Montana, and JAMES F. CHARLTON, whose Post Office Address is 2633 S.W. 164th Place, Seattle 66, Washington, hereinafter called "BUYERS",

W I T N E S S E T H:

1. PROPERTY COVERED:

The Sellers, for the considerations and upon the terms and conditions herein expressed, agree to sell and by Grant Deed to convey to the Buyers merchantable title to the following-described property, and the Buyers agree to purchase said property from the Sellers for such consideration and upon such terms and conditions as are specified herein. Said property consists of thirty-two (32) patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451 embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

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An undivided one-half (½) interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the foregoing being situated in the County of Granite, State of Montana.

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The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

2. PURCHASE PRICE AND PAYMENT:

The purchase price for all of said property is the sum of FIFTEEN THOUSAND ($15,000.00) DOLLARS, payable as follows:

TWO THOUSAND ($2,000.00) DOLLARS contemporaneously with the execution of this agreement, the receipt whereof is hereby acknowledged by the Sellers;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1963;

FIVE HUNDRED ($500.00) DOLLARS on or before March 15, 1964;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1964;

ONE THOUSAND ($1,000.00) DOLLARS on or before March 15, 1965;

ONE THOUSAND ($1,000.00) DOLLARS on or before September 15, 1965;

TWO THOUSAND ($2,000.00) DOLLARS on or before March 15, 1966;

And the balance of SEVEN THOUSAND FIVE HUNDRED ($7,500.00) DOLLARS on or before September 15, 1966.

All payments, excepting the initial payment of TWO THOUSAND ($2,000.00) DOLLARS, shall be made at the FIRST NATIONAL BANK OF BUTTE, Butte, Montana, for the account of the Sellers.

3. ESCROW BANK:

The FIRST NATIONAL BANK OF BUTTE, Butte, Montana, is hereby designated as the Escrow Bank. Promptly upon execution of this agreement, there shall be deposited with said Escrow Bank the following:

1) An executed copy of this agreement;

2) A grant deed properly signed and acknowledged by the Sellers, and entitled to record, conveying said premises to the Buyers.

The Sellers shall pay the opening escrow charge of said bank and the Buyers shall pay all subsequent escrow fees. Said Escrow Bank shall be authorized to deliver all of the documents held in escrow to the Buyers upon full payment of the purchase price upon the occurrance of any of those events specified in subparagraphs "2" and "3" of Paragraph "4" of this agreement, entitled "Abstract and Title". In the event of default in the payment of the purchase price, and upon expiration of the time hereinafter specified for remedying any default, if any default shall not then have been remedied, or upon rescission of the contract as provided in subparagraph "1" of Paragraph "4", said Escrow Bank shall be authorized to deliver all escrow documents to the Sellers. Proper revenue stamps shall be affixed to the deed before delivery to the Buyers and said Escrow Bank shall withhold the cost thereof from the final payment of purchase price.

4. ABSTRACT AND TITLE:

The Sellers warrant to the Buyers a merchantable and unencumbered title to said property, excepting the Hornett and Haparanda claims, as to which it is recognized Sellers have a tax deed title, which Buyers are willing to accept. It is recognized that the Sellers, as of the date of this agreement have a title to only an undivided one-half (½) of the property covered by this agreement excepting the FREE COINAGE Lode Mining Claim, Survey No. 9904, as to which Sellers have only an undivided one-fourth (¼) interest. Sellers covenant that within One Hundred Twenty (120) days from the date of this agreement, Sellers shall obtain all of the title to all of the claims mentioned in this agreement excepting the FREE COINAGE Lode Mining Claim, as to which they shall obtain an additional undivided one-fourth(¼) interest and excepting the fact that title to the Hornett and Haparanda claims will be based on a tax deed. In the event Sellers obtain such additional interest in said claim, the deed or deeds therefor shall be exhibited to Buyers or their agent designated in writing and recorded at Sellers' expense. In the event Sellers fail to obtain said additional title within said One Hundred Twenty (120) day period, Buyers shall be free to take any one of the three alternatives hereinafter specified in this paragraph as available to Buyers in the event of defect in title. Sellers have delivered to Buyers abstracts of title to said premises continued to 1939, which Buyers may retain without charge, unless this contract is rescinded or terminated for default, in which case, said abstracts shall be returned to Sellers without charge for any continuation thereof. As expeditiously as possible after the signing of this agreement, the Buyers at their own expense shall have said abstracts of title to all of said property continued by a licensed and bonded abstractor and, when completed, shall have the same

examined by an attorney of the Buyers' choice, at Buyers' expense. In the event said abstract examination discloses any defect in the merchantability of the title to any of said claims (other than the outstanding one-half (½) interest heretofore mentioned and excepting the fact that the title to the Hornett and Haparanda claims is based on a tax deed) which, in the opinion of counsel for the Buyers can be cured by a suit to quiet title or other proceeding, other than by purchase of some interest in said properties from persons other than the Sellers, a copy of such legal opinion shall be delivered to the Sellers, which legal opinion shall specify such defect or defects. Upon receipt of any such legal opinion disclosing defects in the merchantability of the title to said premises, the Sellers shall promptly take such action at Sellers' expense as may be necessary to cure any such defect and include a copy of any such instrument or copy of any such proceeding as may be necessary to cure said defects in the abstracts of title to said premises, at Sellers' expense, all within nine (9) months of the date of receipt of any legal opinion specifying any such defect. In the event the Sellers shall fail to cure any such defect and include the proceedings or documents pertaining thereto in said abstract or abstracts of title within said nine (9) month period, then and in such event the Buyers may proceed to take such action as may be necessary to clear said title and deduct the cost thereof, including attorneys' fees, from the next payment or payments due on the purchase price of said property. In the event Buyers wish to quiet the title to the Hornett and Haparanda claims , the cost thereof shall be the expense of the Buyers, unless a quiet title suit would not be successful and it would be necessary for the Buyers to purchase some interest in said claims from others, in which case, the Buyers would be entitled to elect one of the remedies hereinafter set forth. In the event Sellers shall fail

to obtain said additional one-half (½) interest within said One Hundred Twenty (120) day period, or in the event a legal opinion upon the examination of said abstracts reveals that there is any other defect in the title to any of said property which cannot be cured, except by purchase of some interest in said property from persons other than the Sellers in this agreement, then, and in such event, the Buyers shall have the right to take any of the following alternatives:

1) Rescind this contract and obtain from the Sellers any payments heretofore made on the purchase price.

2) Purchase any of such outstanding interests from any person holding the same and deduct the amount of such purchase price from the purchase price under this agreement.

3) Reduce the purchase price specified under the terms of this agreement by an amount equal to that portion of the purchase price that the acreage of any mining claim or claims having any such defect of title bears to the total acreage of mining claims covered by this contract. In such event, the Buyers shall deposit with the Escrow Bank a quitclaim deed to the mining claim or claims subject to such defect and, upon payment of the balance due upon the reduced purchase price, shall be entitled to possession of all documents held by the Escrow Bank excepting the quitclaim deed which shall be delivered to the Sellers.

5. TIMBER CONTRACT:

It is understood by the parties hereto that timber on said mining claims is subject to a contract for sale of timber, which contract is dated October 6, 1960, in which C. M. McDONALD, of Missoula, Montana, is the purchaser, a copy of which contract is attached hereto. It is further understood that said contract has been extended by oral agreement to October 5, 1963 and upon the same terms and conditions. Sellers herein and Buyers further agree that the Sellers shall have and be entitled to the proceeds of said timber contract as orally extended, but in consideration therefor, Sellers covenant as follows:

a. Sellers shall not further extend said timber

contract nor make any other or different timber contract or change or modify any of the terms or conditions of the existing contract without Sellers' written consent first obtained, except that the term may be extended to December 5, 1963.

b) Sellers shall, at their own cost and expense, enforce each and every term and condition of said timber contract as extended, for the benefit of Buyers herein, so that in the event the "Contractor" under said timber contract shall breach any term or condition of said timber contract so as to damage said premises or cause any lien or encumbrance thereon, Sellers shall bear all cost and expense of removing any such lien or encumbrance or collecting for any such damage, and the amount recovered for any such damage shall be for the account of Buyers, without reduction for the cost of collecting the same.

c) In the event Sellers shall not enforce the terms and conditions of said timber contract as provided in subparagraph "b)" above, Buyers herein shall have the right to do so, either in their own names or in the names of Sellers, and to deduct all costs and expenses incident thereto from the purchase price of the mining claims covered by this contract and shall be entitled to all damages collected for any damage to said premises.

d) Sellers shall hold Buyers harmless of and from any cost, expense or liability of any kind or nature arising from the existence, operation or performance or in any way connected with said timber contract.

6. RIGHT TO MINE AND POSSESSION:

Upon execution of this agreement by the parties hereto, the Buyers shall have the right to immediate possession of the property, and so long as this agreement is not terminated by default, or by rescission, may explore, drill, sink, construct and operate in and upon any and all of said mining claims such prospect holes, prospect shafts, air, water and hoisting shafts, and mine for and extract all ores and minerals upon and beneath the surface of said premises in any manner they deem expedient.

7. TAXES:

Buyers shall pay all taxes levied and assessed against said properties beginning with the year 1963, including taxes upon any and all structures, improvements and equipment or other property erected, constructed or installed upon or in connection with the operation of said premises.

8. DEFAULT:

The failure of the Buyers to make any payment of the purchase price at the time and in the manner herein specified, or to observe, abide by and perform all other covenants and conditions herein set forth, shall constitute a default, and shall be cause for termination of this agreement as follows:

1) In the event of any such default, Sellers shall mail a written notice by registered mail to the Buyers, with a copy to the Escrow Bank, the Buyers' copy to be addressed to Mr. James F. Charlton, at his address as herein provided, or such other address as the Buyers may specify by written notice to the Sellers and the Escrow Bank, setting forth the particulars of the default, specifying that this agreement shall be terminated at the end of sixty (60) days from the date of mailing of such notice unless such default shall have been cured within such sixty (60) day period. Such notice shall be deemed given and received when a copy thereof has been deposited in the United States Post Office addressed as hereinabove set forth, registered, with return receipt requested, and with proper postage thereon prepaid. In the event any such default is not cured within such sixty (60) day period, this agreement shall be at an end and all rights of the Buyers shall thereupon be terminated and the Sellers shall be entitled to delivery of all escrow documents and shall retain all payments theretofore made as agreed rental for the use and occupation of said property and as one of the considerations of this agreement.

9. SURRENDER OF PROPERTY:

Upon the termination of this agreement for any cause except the full payment of the purchase price, or reduced purchase price

as hereinabove provided, the Buyers shall promptly surrender to the Sellers the premises covered by this agreement, without delay or hindrance, provided that the Sellers shall have a period of ninety (90) days thereafter in which to remove from said premises all machinery, tools and other equipment, including pipe and rail, belonging to the Buyers or placed thereon by the Buyers, and no rentals shall be charged for the storage of any such machinery, tools or equipment so long as they shall be removed from said premises within ninety (90) days from the date of termination of this agreement.

10. ASSIGNMENT:

All of the terms and conditions of this agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto subscribed their names the day and year in this instrument first above written.

James G. Haviland

James G. Haviland

Jean P. Haviland

Jean P. Haviland
SELLERS

Robert M. Bielenberg

James F. Charlton

James F. Charlton
BUYERS

STATE OF MONTANA)
: ss.
County of Powell)

On this 21 day of February, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, personally known to me and to me personally known to be the persons described in and whose names are subscribed to the within and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

Barbara McAmber
Notary Public for the State of Montana
Residing at Deer Lodge Mont.
My Commission expires Sept 27, 1963

(Notarial Seal)

STATE OF MONTANA)
: ss.
County of Silver Bow)

On this 12th day of June, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG, personally known to me and to me personally known to be the person whose name is subscribed and who is described in the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

Tom A. Power Jr.
Notary Public for the State of Montana
Residing at Butte, Montana
My Commission expires Oct. 20, 1963

(Notarial Seal)

STATE OF WASHINGTON)
STATE OF WASHINGTON)
: ss.
County of King)

On this 8th day of April, 1963, before me, the undersigned, a Notary Public for the State of Washington, personally appeared JAMES F. CHARLTON, personally known to me and to me personally known to be the person described in and whose name is subscribed to the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

David W. Jacobe
Notary Public for the State of Washington
Residing at Seattle, Wn.,
My Commission expires July 24 1963

(Notarial Seal)

To accompany application of American Mining Co, Securities Bldg, Seattle, Wn

To accompany application

PURCHASE AND SALE AGREEMENT

THIS AGREEMENT made and entered into this 12th day of June, 1963, by and between JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, whose Post Office address is 822 Missouri Avenue, Deer Lodge, Montana, hereinafter called "SELLERS", and ROBERT M. BIELENBERG, whose Post Office address is Avon, Montana, and JAMES F. CHARLTON, whose Post Office Address is 2633 S.W. 164th Place, Seattle 66, Washington, hereinafter called "BUYERS",

W I T N E S S E T H:

1. PROPERTY COVERED:

The Sellers, for the considerations and upon the terms and conditions herein expressed, agree to sell and by Grant Deed to convey to the Buyers merchantable title to the following-described property, and the Buyers agree to purchase said property from the Sellers for such consideration and upon such terms and conditions as are specified herein. Said property consists of thirty-two (32) patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

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The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

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PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

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2. PURCHASE PRICE AND PAYMENT:

The purchase price for all of said property is the sum of FIFTEEN THOUSAND ($15,000.00) DOLLARS, payable as follows:

TWO THOUSAND ($2,000.00) DOLLARS contemporaneously with the execution of this agreement, the receipt whereof is hereby acknowledged by the Sellers;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1963;

FIVE HUNDRED ($500.00) DOLLARS on or before March 15, 1964;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1964;

ONE THOUSAND ($1,000.00) DOLLARS on or before September 15, 1965;

TWO THOUSAND ($2,000.00) DOLLARS on or before March 15, 1966;

And the balance of SEVEN THOUSAND FIVE HUNDRED ($7,500.00) DOLLARS on or before September 15, 1966.

All payments, excepting the initial payment of TWO THOUSAND ($2,000.00) DOLLARS, shall be made at the FIRST NATIONAL BANK OF BUTTE, Butte, Montana, for the account of the Sellers.

3. ESCROW BANK:

The FIRST NATIONAL BANK OF BUTTE, Butte, Montana, is hereby designated as the Escrow Bank. Promptly upon execution of this agreement, there shall be deposited with said Escrow Bank the following:

1) An executed copy of this agreement;

2) A grant deed properly signed and acknowledged by the Sellers, and entitled to record, conveying said premises to the Buyers.

The Sellers shall pay the opening escrow charge of said bank and the Buyers shall pay all subsequent escrow fees. Said Escrow Bank shall be authorized to deliver all of the documents held in escrow to the Buyers upon full payment of the purchase price upon the occurrance of any of those events specified in subparagraphs "2" and "3" of Paragraph "4" of this agreement, entitled "Abstract and Title". In the event of default in the payment of the purchase price, and upon expiration of the time hereinafter specified for remedying any default, if any default shall not then have been remedied, or upon rescission of the contract as provided in subparagraph "1" of Paragraph "4", said Escrow Bank shall be authorized to deliver all escrow documents to the Sellers. Proper revenue stamps shall be affixed to the deed before delivery to the Buyers and said Escrow Bank shall withhold the cost thereof from the final payment of purchase price.

4. ABSTRACT AND TITLE:

The Sellers warrant to the Buyers a merchantable and unencumbered title to said property, excepting the Hornett and Haparanda claims, as to which it is recognized Sellers have a tax deed title, which Buyers are willing to accept. It is recognized that the Sellers, as of the date of this agreement have a title to only an undivided one-half (½) of the property covered by this agreement excepting the FREE COINAGE Lode Mining Claim, Survey No. 9904, as to which Sellers have only an undivided one-fourth (¼) interest. Sellers covenant that within One Hundred Twenty (120) days from the date of this agreement, Sellers shall obtain all of the title to all of the claims mentioned in this agreement excepting the FREE COINAGE Lode Mining Claim, as to which they shall obtain an additional undivided one-fourth(¼) interest and excepting the fact that title to the Hornett and Haparanda claims will be based on a tax deed. In the event Sellers obtain such additional interest in said claim, the deed or deeds therefor shall be exhibited to Buyers or their agent designated in writing and recorded at Sellers' expense. In the event Sellers fail to obtain said additional title within said One Hundred Twenty (120) day period, Buyers shall be free to take any one of the three alternatives hereinafter specified in this paragraph as available to Buyers in the event of defect in title. Sellers have delivered to Buyers abstracts of title to said premises continued to 1939, which Buyers may retain without charge, unless this contract is rescinded or terminated for default, in which case, said abstracts shall be returned to Sellers without charge for any continuation thereof. As expeditiously as possible after the signing of this agreement, the Buyers at their own expense shall have said abstracts of title to all of said property continued by a licensed and bonded abstractor and, when completed, shall have the same

examined by an attorney of the Buyers' choice, at Buyers' expense. In the event said abstract examination discloses any defect in the merchantability of the title to any of said claims (other than the outstanding one-half (½) interest heretofore mentioned and excepting the fact that the title to the Hornett and Haparanda claims is based on a tax deed) which, in the opinion of counsel for the Buyers can be cured by a suit to quiet title or other proceeding, other than by purchase of some interest in said properties from persons other than the Sellers, a copy of such legal opinion shall be delivered to the Sellers, which legal opinion shall specify such defect or defects. Upon receipt of any such legal opinion disclosing defects in the merchantability of the title to said premises, the Sellers shall promptly take such action at Sellers' expense as may be necessary to cure any such defect and include a copy of any such instrument or copy of any such proceeding as may be necessary to cure said defects in the abstracts of title to said premises, at Sellers' expense, all within nine (9) months of the date of receipt of any legal opinion specifying any such defect. In the event the Sellers shall fail to cure any such defect and include the proceedings or documents pertaining thereto in said abstract or abstracts of title within said nine (9) month period, then and in such event the Buyers may proceed to take such action as may be necessary to clear said title and deduct the cost thereof, including attorneys' fees, from the next payment or payments due on the purchase price of said property. In the event Buyers wish to quiet the title to the Hornett and Haparanda claims , the cost thereof shall be the expense of the Buyers, unless a quiet title suit would not be successful and it would be necessary for the Buyers to purchase some interest in said claims from others, in which case, the Buyers would be entitled to elect one of the remedies hereinafter set forth. In the event Sellers shall fail

to obtain said additional one-half (½) interest within said One Hundred Twenty (120) day period, or in the event a legal opinion upon the examination of said abstracts reveals that there is any other defect in the title to any of said property which cannot be cured, except by purchase of some interest in said property from persons other than the Sellers in this agreement, then, and in such event, the Buyers shall have the right to take any of the following alternatives:

1) Rescind this contract and obtain from the Sellers any payments heretofore made on the purchase price.

2) Purchase any of such outstanding interests from any person holding the same and deduct the amount of such purchase price from the purchase price under this agreement.

3) Reduce the purchase price specified under the terms of this agreement by an amount equal to that portion of the purchase price that the acreage of any mining claim or claims having any such defect of title bears to the total acreage of mining claims covered by this contract. In such event, the Buyers shall deposit with the Escrow Bank a quitclaim deed to the mining claim or claims subject to such defect and, upon payment of the balance due upon the reduced purchase price, shall be entitled to possession of all documents held by the Escrow Bank excepting the quitclaim deed which shall be delivered to the Sellers.

5. TIMBER CONTRACT:

It is understood by the parties hereto that timber on said mining claims is subject to a contract for sale of timber, which contract is dated October 6, 1960, in which C. M. McDONALD, of Missoula, Montana, is the purchaser, a copy of which contract is attached hereto. It is further understood that said contract has been extended by oral agreement to October 5, 1963 and upon the same terms and conditions. Sellers herein and Buyers further agree that the Sellers shall have and be entitled to the proceeds of said timber contract as orally extended, but in consideration therefor, Sellers covenant as follows:

a. Sellers shall not further extend said timber

contract nor make any other or different timber contract or change or modify any of the terms or conditions of the existing contract without Sellers' written consent first obtained, except that the term may be extended to December 5, 1963.

b) Sellers shall, at their own cost and expense, enforce each and every term and condition of said timber contract as extended, for the benefit of Buyers herein, so that in the event the "Contractor" under said timber contract shall breach any term or condition of said timber contract so as to damage said premises or cause any lien or encumbrance thereon, Sellers shall bear all cost and expense of removing any such lien or encumbrance or collecting for any such damage, and the amount recovered for any such damage shall be for the account of Buyers, without reduction for the cost of collecting the same.

c) In the event Sellers shall not enforce the terms and conditions of said timber contract as provided in subparagraph "b)" above, Buyers herein shall have the right to do so, either in their own names or in the names of Sellers, and to deduct all costs and expenses incident thereto from the purchase price of the mining claims covered by this contract and shall be entitled to all damages collected for any damage to said premises.

d) Sellers shall hold Buyers harmless of and from any cost, expense or liability of any kind or nature arising from the existence, operation or performance or in any way connected with said timber contract.

6. RIGHT TO MINE AND POSSESSION:

Upon execution of this agreement by the parties hereto, the Buyers shall have the right to immediate possession of the property, and so long as this agreement is not terminated by default, or by rescission, may explore, drill, sink, construct and operate in and upon any and all of said mining claims such prospect holes, prospect shafts, air, water and hoisting shafts, and mine for and extract all ores and minerals upon and beneath the surface of said premises in any manner they deem expedient.

7. TAXES:

Buyers shall pay all taxes levied and assessed against said properties beginning with the year 1963, including taxes upon any and all structures, improvements and equipment or other property erected, constructed or installed upon or in connection with the operation of said premises.

8. DEFAULT:

The failure of the Buyers to make any payment of the purchase price at the time and in the manner herein specified, or to observe, abide by and perform all other covenants and conditions herein set forth, shall constitute a default, and shall be cause for termination of this agreement as follows:

1) In the event of any such default, Sellers shall mail a written notice by registered mail to the Buyers, with a copy to the Escrow Bank, the Buyers' copy to be addressed to Mr. James F. Charlton, at his address as herein provided, or such other address as the Buyers may specify by written notice to the Sellers and the Escrow Bank, setting forth the particulars of the default, specifying that this agreement shall be terminated at the end of sixty (60) days from the date of mailing of such notice unless such default shall have been cured within such sixty (60) day period. Such notice shall be deemed given and received when a copy thereof has been deposited in the United States Post Office addressed as hereinabove set forth, registered, with return receipt requested, and with proper postage thereon prepaid. In the event any such default is not cured within such sixty (60) day period, this agreement shall be at an end and all rights of the Buyers shall thereupon be terminated and the Sellers shall be entitled to delivery of all escrow documents and shall retain all payments theretofore made as agreed rental for the use and occupation of said property and as one of the considerations of this agreement.

9. SURRENDER OF PROPERTY:

Upon the termination of this agreement for any cause except the full payment of the purchase price, or reduced purchase price

as hereinabove provided, the Buyers shall promptly surrender to the Sellers the premises covered by this agreement, without delay or hindrance, provided that the Sellers shall have a period of ninety (90) days thereafter in which to remove from said premises all machinery, tools and other equipment, including pipe and rail, belonging to the Buyers or placed thereon by the Buyers, and no rentals shall be charged for the storage of any such machinery, tools or equipment so long as they shall be removed from said premises within ninety (90) days from the date of termination of this agreement.

10. ASSIGNMENT:

All of the terms and conditions of this agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto subscribed their names the day and year in this instrument first above written.

James G. Haviland

Jean P. Haviland

James G. Haviland

Jean P. Haviland
SELLERS

Robert M. Bielenberg

James F. Charlton

James F. Charlton
BUYERS

STATE OF MONTANA)
: ss.
County of Powell)

On this 21 day of February, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, personally known to me and to me personally known to be the persons described in and whose names are subscribed to the within and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

Barbara McAlister
Notary Public for the State of Montana
Residing at Deer Lodge Mont.
My Commission expires Sept 27, 1963

(Notarial Seal)

STATE OF MONTANA)
: ss.
County of Silver Bow)

On this 12th day of June, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG, personally known to me and to me personally known to be the person whose name is subscribed and who is described in the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

Tom A. Pope Jr.
Notary Public for the State of Montana
Residing at Butte, Montana
My Commission expires Oct. 20, 1963

(Notarial Seal)

STATE OF WASHINGTON)
: ss.
County of King)

On this 8th day of april, 1963, before me, the undersigned, a Notary Public for the State of Washington, personally appeared JAMES F. CHARLTON, personally known to me and to me personally known to be the person described in and whose name is subscribed to the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

David W. Iniecke
Notary Public for the State of Washington
Residing at Seattle, Wn.,
My Commission expires July 24 1963

(Notarial Seal)

OFFICIAL
COPY
O. M. E.
RECEIVED
FEB 1 1955
INITIALS CC E

FINAL REPORT

of the

American Mining Company
337 Securities Building,
Seattle 1, Washington

Docket No. ----------6410
Contract No.----------2207
Contract Amount-----$61,880.00
Government Participatio-50%
Gold

Nancy Hanks et al Claims,
Granite Co., Montana

Under the captioned contract, eight core drill holes, of AWWL size, totalling 2805' of drilling were put down on the subject property. The exploration work also included six bulldozed cuts, totalling 2280' of trenching. To provide access to the various drill hole sites and trench locations, 2285' of access road were constructed.

The total cost of the work summarized above, including the outside consultant's time and expenses, plus assaying, together with an allowance for office expense was $18,204.30. The government's share of this cost was fifty percent.

This total cost is shown in appropiate breakdown on the final report that was submitted at the completion of the work, in the fall of 1966. A copy of this final report, together with all necessary plan maps, showing the location of the work, sections and sketches to illustrate the geology of the area, and the geologic results of the work done, accompany this final report.

No engineering problems were encountered that prevented the work being carried out properly, or drilling with the approved core sizes. The geology of the explored area, in very brief summary, together with the geologic details exposed by the trenching and drilling, along with an evaluation of the results of the work follows.

GENERAL

The geology of the area explored was described in considerable detail in the original application. It is also expertly described by J. T. Pardee, in USGS Bulletin 660-F. The essential features, however, will be repeated.

Paleozoic and Precambrian rocks which have been intruded by a small stock of granodiorite, of late Cretaceous or Tertiary age, underlie the area involved.

Structurally, the bedded rocks comprise a northwesterly plunging anticline, whose northeast flank has been cut by the granitic intrusive. Some granodiorite sills (some could be dikes) can be seen in the various surface exposures, and many small granitic bodies, most of which appeared to be sills also, were disclosedby the drilling.

The limestones and shales are intensely metamorphosed, near the intrusive contact and out from it for hundreds of feet. This alteration is expressed in the limestones by marbelization and silication, with the development of much garnet and epidote. The shales, near the contact, are highly altered also, usually to a hornstone type of rock.

The general geologic picture is believed to be adequately shown on plan map No. 2, and the various cross sections and hole sections that accompany and are an essential part of this report. Such mineralization as was encountered in the drilling, together with assays, are shown on the hole and trench sketches.

The district had been the scene of considerable relatively high grade gold production, in previous years. Most of this production came from flat-lying, bedded veins in the Precambrian quartzites that occupy the exposed core of the anticline. These quartzitic rocks are overlain by a Lower Cambrian limestone-

OPERATOR'S FIN. REPORT

shale series. The productive bedded veins were found on the northeast flank of the anticline, and extended in one area to near the crest of the structure. Some of the high grade production was derived fromsmall veins in the granodiorite itself, near the contact,and in one case froma vein in the marbelized limestone close to the contact. Such oreshoots in the small veins near the contact were quite limited in size, but were quite high grade, often spectacularly so. The gold mineralization was accompanied by small amounts of copper and silver, but over 90% of the value of the ore derived from its gold content.

The prime objective of six of the eight holes put down, and most of the trenches cut, was to explore for bedded ore inthe supposedly "favorable" limestome shale series that covered the quartzitic rocks along the northwesterly extension of the anticline. The work was laid out to explore these horizons at and near the crest of the anticline, and down some distance from the crest on the northeast flank of the structure in the direction of the granodiorite stock. Two of the drill holes,and two of the trenches also, were designed to cut extensions of the small high grade veins that were found in the granodiorite or the adjoining limestone near the contact.

The locations of all holes and trenches, and their positions with regard to the geology,are shown on plan Map 2. The geologic structure of the areas and sections drilled is further shown on the various cross sections also submitted. Onthese sections which were sent in with the application the geologic conditinns that were expected to be met are laid out. The actual geology encountered (which quite closely approximated that which was projected) is shown in detail together with the mineralization seen, on the fourteen hole andtrench sketches submitted with this final report.

In very brief summary, none of the work done disclosed ore of any commercial grade whatsoever.

The trenching showed a small, discontinuous quartz vein in the bedding of the quartzite (see sketch of Trench 1) somewhat north of the position of the Grant and Hartford vein, as projected from where last exposed, 600' to the east. As shown by the samples taken, the vein was not commercial. The other trenches disclosed no quartz mineralization of consequence, in the bedding at the various favorable contacts or as crosscutting structures. But this work did display areas where the bedded rocks were highly altered (recrystallized and silicated) and, at places, contained considerable iron stain which probably resulted from the oxidation of disseminated pyrite.

Drill holes a, b, e, f and j were all designed to explore the limestones and the limestone-shale contacts (and in several cases the Cambrian-Precambrian contact below) at what were believed to be favorable horizons in the anticline near its crest or on its northeast flank close to the crest. Hole g designed to cut the S.W. extension of the Nancy Hanks Vein and fault zone, disclosed no vein, or vein material. See final Mouth report for details.

If the sketches of the drill holes mentioned above are studied, it will be seen that no bedded ore as such was intersected. Many small granodiorite bodies were cut, apparently sill-like, and all the holes (some more than others) showed scattered and disseminated pyrite in certain areas. The limestones and shales were found to be highly altered. The alteration ranged from simple marbelization of the purer limestones, to intense silication--developing garnet and epidote--in the less pure limestones and in the calcareous shales.

Hole No. 1 was laid out to cut the easterly extension of the Dewey vein, which occurs in the granodiorite, close to the adjoining Shamrock workings where several veins of the same system had been mined. The holesencountered several small vein structures and zones of seams and stringers of quartz and pyrite. All of these intersections were sampled , but none were of ore grade.

Discussion of Results

In summarizing the results of the work done, it can probably be said that the various so-called favorable horizons (comprising several limestone-shale contacts and including the upper contact of the quartzite with the overlying calcareous shale of Cambrian age) were fairly well explored near the crest and along the northeast flank of the plunging anticline, in a limited area along the axis of of the the structure that ranged from 600' to 2000' northwest of the productive workings in the underlying quartzite. But no encouraging evidence of the possible existence of bedded ore in this area, and in the horizons intersected, was found in the drilling done.

Hole No. 1, and a Hole No. 2 put down prior to the execution of the contract, were laid out to probe for extensions of the narrow, but high grade, veins found in the granodiorite in the old Dewey and Nancy Hanks mines. Both holes cut vein structures containing quartz and pyrite, but the material encountered, while gold bearing, was not commercial. Further exploration for this type of ore could be undertaken, but the economic justification for it--in light of the results obtained in these two preliminary holes--is open to question.

Further exploration for bedded ore, of the type and extent found in the Crescent-Lead King- Red Cloud mines, however, seems justified. It could well be that a future search for this type of ore should be concentrated in the quartzite itself, below the known orebodies in this host rock, or to the southeast along the plunging anticline, rather than to the northwest, as was done. If the exploration is designed to explore the area down dip below the known ore bodies, the possibility of a southeast rake should be taken into account, and the holes might be laid out to cut the quartzite nearer to the granodiorite contact, where fracturing and permeability may be greater, thus giving promise of larger oreshoots.

The possibilities of the district should not be consideraed as having been exhausted by the limited exploration work, described in this report, that was done. The mineralization in the area is extensive, and the gulches that drain it produced extraordinary diggings over a very wide area.

A further study is going to be made of the district, particularly along the anticline to the southeast of the Red Cloud and Forth of July and Robert Emmett claims, with thoughts expressed above of finding extensions of the bedded ore that formed in the quartzite.

Respectfully submitted,

Joe G. Irving

American Mining Company

by Douglas A. Johnson, President

Dated: May 18, 1967

RECEIVED
MAY 22 1967
SPOKANE, WASH.

COPY OF FINAL MONTHLY REPORT

MME FORM 60
SEPT. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

For period of:

Docket No. 6410
Contract No.
14-23-090- 2207
Contract Amount $ 61,880.00
Gov't. Participation % 50 $ 30,940.00
Mineral(s) Gold

OPERATOR'S MONTHLY VOUCHER

For Month of 8/16--8/31/66

Operator's Name American Mining Company,
Address 400 - Securities Bldg., Seattle, 1, Washington

COST CATEGORIES	FOR OPERATOR'S USE			FOR GOVERNMENT APPROVAL ONLY		
	MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and	(Includes work, supplies and consultant's time for Hole 1, Stage II)					
(1) Independent Contracts:						
Bulldozing	---	$ 1412.00	$ 1,412.00			
Drifting						
Crosscutting						
Drilling All components incld. Incid. Allow.	$ 3,077.08	12,185.87	15,262.95			
(2) Personal Services:						
Supervision & Technical						
Outside Consultants	$ 125.00	750.00	875.00			
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Cardboard Core Boxes	67.15	154.70	221.85			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Analytical Work Assays	-	45.00	45.00			
Payroll Taxes						
Office expense Employee's Liability Ins.	25.00	100.00	125.00			
Per. Diem-Consult.	37.50	225.00	262.50			
TOTALS	$3,331.73	$14,872.57	$18,204.30			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date October, 1966 Payee

Per Title

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$

Signature
(Authorized Certifying Officer)

Date Vou. No.

(SEE OTHER SIDE)

MME FORM 61
SEPT. 1959

COPY OF FINAL MONTHLY REPORT

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S PROGRESS REPORT — Period For ~~Month~~ of 8/16--8/31/66 — Docket No. 6410

Operator's Name _____ Contract No. 14-23-090- 2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
Drifting							
Crosscutting							
Raising							
Shafts							
~~Mines~~ Drill mob&demob	job	½	1	$ 300.00			
Other Underground							
Drilling, Core-Diamond 1/	ft	520	2703	14,290.75			
overburden ~~Rotary~~ 1/	ft	32	102	561.00			
Drilling, Non-core-Diamond							
Incid. Allow ~~Rotary~~ 1/	ft	552	2805	111.20			
Churn							
Percussion							
Miscellaneous Off. Expen. 1/	Mo.	½	2½	125.00			
Dozer Mob. & Demob.	Job	--	1	182.00			
Roads and Trails	hrs.	--	10	200.00			
~~Stripping~~ drill sites	"	--	6½	130.00			
Trenching	"	--	45	900.00			
~~Mapping~~ Consultant 1/	days	2½	17½	875.00			
~~Other Consultant Work~~ " per D.	"	2½	17½	262.50			
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
Operating Equipment Purchases Core boxes (tot-261) 1/				221.85			
Analytical Work Gold assays (tot. for job-30)				45.00			
TOTAL TO DATE (per MME Form 60)				$18,204.30			

REMARKS

1/ Includes work and consultant's time and expenses for Hole 1, Stage II, in addition to the completion of Holes J and G, of Stage I

(Continue on back)

REMARKS

(Continue on back)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date October ~~September~~, 1966 Operator _____

Per _____ Title _____

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature _____

Title _____
Government Representative

Date _____

(INSTRUCTIONS ON REVERSE)

American Mining Company,
400 - Securities Building,
Seattle, Washington 98101

OME- 6410----------Gold
Nancy Hanks et al Claims
Granite County, Montana
Contract----------2207

NARRATIVE REPORT

(This narrative report covers the core drilling done by the E. J. Longyear Company, at Garnet, Montana, DURING THE PERIOD AUGUST 16--31, 1966. The footages drilled through overburden, from the bottom of overburden to the bottom of several holes, together with the amount of footage drilled for each of the holes covered, along with the size of the bit used are all shown on the driller's invoice attached.)

GENERAL

A total of 552' of hole was drilled as shown on the Longyear invoice, during the period. This footage comprised 77' in hole J to its completion (Hole J was discussed in the previous report), 125' in Hole G, and 350' in hole No. 1. Total overburden included in the above footage was 52'.

Hole J was covered in the previous report, even though this invoice shows the final footage to the bottom. The legs of Holes G and 1, along with the details of the geology encountered, as well as the exact locations of the holes, together with specifications as modified, are all shown on the accompanying sketches.

If the actual results of the drilling, as shown on the sketches are examined, in connection with the original projections of the geology expected shown on the set of cross sections sent in with the application, it will be seen that (with the exception that the Nancy Hanks vein was not cut, or recognized) the drilling showed up the geology and other structures, about as visualized. The holes will be reported upon now in some detail.

Hole G In the original application, hole G was designed to explore for the possible southwesterly extension of the Nancy Hanks vein, also to test the area, on the north side of the fault that cut off the Tiger vein for its possible faulted extension, and to explore the Pilgrim limestone (considered a very favorable host rock for ore in this region) close to the granodiorite for possible bedded ore. In the ~~application~~ contract, as drawn up, hole G had the modified objective of prospecting only for the Nancy Hanks vein, and its total depth was cut down from 425' to 150'. Subsequently, since Trench 5 did not expose the Nancy Hanks vein , as such, but a silicated zone in the limestone that more or less lined up with the projection of the vein, authorization was given to shift the position of the hole 100' and drill it to a depth of 125', with the dual objective of cutting the Cascade-Nancy Hanks fault zone, and the Nancy Hanks vein itself, as projected.

If the accompanying sketch be examined, it will be seen that the wide and large fault (which was projected to be cut at about 45-50', was undoubtedly encountered in the hole in the first 39' and was reported as overburden. * Overburden in the area is usually reported by the dril contrector as being from 10 to 20' in thickness and this unusual depth of overburden was most likely the crushed up, pulverized fault zone. This is verifiedand supported by the fault, as shown in the nearby trench, where the granite was reduced to a soft earthy material.

* (Reported by the driller on the box as overburden, but not on the invoice)

COPY

The Nancy Hanks vein, projected to be cut at about 100' was not intersected, or recognized as a formal vein structure. The limestone exposed in the hole varied from being unstained and unmineralized marble to a partly, or highly silicated rock, with the development of epidote and garnet, and as shown on the sketch submitted contained a little scattered and disseminated pyrite. The two samples taken of such pyritized zones showed a gold content that ranged from 0.01 to 0.018 ounces, which cannot be called significant mineralization in this area. The hole was most decidedly negative.

Hole No. 1 This hole which was located about 100' east of the most easterly face in the old Dewey mine workings, and also near the adjoining Shamrock claim, where several veins had been mined with an appreciable dollar value, was designed to cut the Dewey vein in its possible easterly extension--possibly in an en echelon type of structure--and also to cut one or more veins seen in the Shamrock mine (old maps were available) that projected down into Dewey ground, in their westerly projection on the other side of the faulting shown. A particular objective, in this connection, was a so-called C vein which seemed to have some potential.

If the sketch showing what was actually encountered is compared with the original projections as submitted, it will be noted that mineralized zones were met about where expected. The material, as sampled however, was not of ore grade and this will be discussed below.

The first vein structure cut, lining up very well for the Dewey vein projection, consisted of about two and a half feet of flat-dipping quartz seams, containing considerable pyrite--and with disseminated pyrite in the adjoining wall rock. Three samples were taken fo the material, exposed from 161.0 to 163.5'. The best assay obtained was that shown in sample No. 136, where a one and a half inch seam ran 0.220 ounces gold. Next, was the one foot sampled at 161'-162' which assayed 0.17 ounces gold. See sketch.

The area in which vein C of the Shamrock mine was expected was a wide mineralized zone, from 243.5' to 261', containing bands and seams of quartz and pyrite--up to 2½" thick--and a good deal of accompanying pyrite as disseminations in the altered granodiorite. Four samples were taken of this mineralized zone; the best results were obtained in sample No. 139, where a five-foot zone assayed 0.105 ounces gold. The sludge of the adjoining five-foot section assayed 0.120 ounces in gold. Two other mineralized zones were met at further depth, and as shown on the sketch of the hole, contained gold but not in commercial quantities.

In summing up the results of hole No. 1, about all one can safely say is that the vein and vein zones, as projected, were merely zones of seams and stringers, rather than strong vein structures, where intersected. And the grade of the material sampled was discouraging.

Joe G. Irving
10/8/66

COPY

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET
MINNEAPOLIS, MINNESOTA 55402

AUGUST 30, 1966

AMERICAN MINING COMPANY
400 SECURITIES BUILDING
SEATTLE 1, WASHINGTON

TERMS: PAYMENT DUE ON OR BEFORE SEPTEMBER 20

INVOICE NO. 86641

FORM 408

EXPLORATORY DRILLING CARRIED OUT DURING AUGUST 16 - 31 IN THE VICINITY OF DRUMMOND, MONTANA AS PER THE TERMS OF OUR AGREEMENT DATED JUNE 1, 1966.

HOLE NO.		FROM	TO	FOOTAGE	RATE	AMOUNT
J	AQWL DIAMOND DRILLING	353	430	77	5.75	442.75
G	OVERBURDEN DRILLING	0	20	20	5.50	110.00
G	AQWL DIAMOND DRILLING	20	125	105	5.75	603.75
1	OVERBURDEN DRILLING	0	12	12	5.50	66.00
1	AQWL DIAMOND DRILLING	12	350	338	5.75	1,943.50
				552		3,166.00
	STANDBY TIME					
	AUGUST 29	4 HOURS		12.00	48.00	
	SUPPLIES USED					
J	36 AX CORE BOXES			1.00	36.00	
G	8 AX CORE BOXES			1.00	8.00	
1	35 AX CORE BOXES			1.00	35.00	79.00
	DEMOBILIZATION					250.00
						$3,543.00

TELEPHONE: OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2957 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

DATE October 5, 1966

(For work done at Garnet, Montana, under OME-6410, Contract 2207)

American Mining Company,
400 - Securities Building
Seattle, 1, Washington

(Bill for outside consultant's work and expenses, under dategories 2 and 7 of the contract, comprising the logging of 532' of core and surveying in and supervising and checking the set up for Hole 1, of Stage II)

For logging the core and studying the geology, as revealed, sampling etc. of Hole J, from 353' to 430'; Hole G from 0 to 125', and Hole No. 1, of Stage II, from start to total depth of 350' Also includes surveying in and supervising set up of Hole No. 1.

2½ days work, at $50.00/day------$125.00

Per diem expenses of outside consultant: 2½ days@ $15.00/da--- 37.50

Total $162.50

$162.50

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/13/67	Kirkemo	120
		110
		220

AIRMAIL

Bellows-Graham, Inc.
1854 Harrison Avenue
Butte, Montana 59701

AUG 8 1967

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Lien and Subordination Agreements executed January 19, 1965, by Gordon B. Graham and Dean F. Brayton, president and secretary, respectively, of your company, under the Office of Minerals Exploration program.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Mr. Kirkemo
120M

GLAult/a 6-13-67

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/13/67	Kirkemo	120
		110
		220

AIRMAIL

AUG 8 1967

Mr. J. G. Haviland
and Mrs. Jean P. Haviland
822 Missouri Avenue
Deer Lodge, Montana 59722

Re: OMX-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. and Mrs. Haviland:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract. This correspondence relates to the Lien and Subordination Agreements, dated September 1964, signed by you under the Office of Minerals Exploration program.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Mr. Kirkemo
120M

GLAult/a 6-13-67

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/13/67	[illegible]	120
		110
		220
		120M

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

An acceptable Operator's final report has been received on the subject exploration project. In a memorandum, dated June 5, 1967, the Field Officer, Region I, requested that the $200.00 withheld pending receipt of this report be released to the Operator. In addition to this sum, the Report of Review issued in December 1966 indicates that $7.99 may be paid to the Operator.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Mr. Kirkemo

HKirkemo/gla 6-12-67

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
June 5, 1967

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 9 1967

INITIALS	CODE
gla	130
	~~110~~
HKO	~~120~~

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed are two copies of an acceptable Operator's final report.

It is recommended that $200.00 being withheld pending receipt of this report be released to the Operator.

D. R. MacLaren

Enclosures

OFFICIAL
COPY
O. M. E.
RECEIVED
JUN 9 1967
INITIALS | CODE
JAMES M. JEARLTON
GENERAL MANAGER

May 17, 1967

Mr. D. R. MacLaren
Field Officer, OME
U.S. Department of the Interior
Office of Minerals Exploration
Geological Survey
South 157 Howard Street
Spokane, Washington 99204

Dear Mr. MacLaren:

I regret that these reports are so late in being submitted to you. The delay came about from Mr. Irving's leave from our service.

The interruption of Mr. Irving's work was entirely the action of American Mining Company and in no way should the delay reflect on Mr. Irving's professional reputation as a geologist.

Very truly yours,

AMERICAN MINING COMPANY

/s/ Douglas A. Robinson

Douglas A. Robinson
President

DAR:cs

Enclosures (5)

United States Department of the Interior

GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION
656 U. S. Court House
W. 920 Riverside Ave.
Spokane, Wash. 99201

January 14, 1971

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: Summary Final Report
OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., claims
Granite County, Montana
Contract No. 2207

OFFICIAL COPY
O. M. E.
RECEIVED
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INTRODUCTION

This report summarizes an OME exploration project for gold ore in veins cutting Precambrian and Paleozoic strata and in granitic rocks near the old mining town of Garnet, some 30 miles east-southeast from Missoula, Montana. The contract, dated August 20, 1965, for a total estimated cost of $61,880.00, of which the Government would contribute 50 percent or $30,940.00, was amended three times. Work, started May 16, 1966, and ended August 31, 1966, consisted of bulldozing 2,285 feet of access road and 2,280 feet of trenches, and diamond core drilling 8 holes with an aggregate length of 2,805 feet. Total cost of the completed work was $18,205.30, of which the Government contributed $9,102.65. The work was unsuccessful in finding new ore bodies and the Operator was notified on August 8, 1967, that, in the absence of a certification of discovery, the Government retained no claim or lien against the property or to any future production therefrom. There was no production during the time of the contract and no royalties were paid to the Government.

OPERATOR

American Mining Company, A Washington Corporation
700 Securities Building
Seattle, Washington 98101

Field
Final Report

Officers included:

President: James F. Charlton, 700 Securities Bldg., Seattle, Washington
Vice-President: David Best, 814 - 2nd Avenue, Seattle, Washington
Sec.-Treas.: Ted Dahl, 1904 - 3rd Avenue, Seattle, Washington

Mr. Joe G. Irving supervised the exploration work and prepared the necessary monthly and final reports.

PROPERTY

The land subject to the contract consists of six patented and five unpatented lode mining claims in secs. 3 and 4, T. 12N., R. 14W., Garnet (unorganized) mining district, Granite County, Montana (Figure 1 - Geologic and claim maps, Nancy Hanks, et al., Group, Sec. 3, T. 12N., R. 14W., Granite County, Montana).

The patented claims are as follows:

Claim	U. S. Patent Survey No.
Crescent group	
Bulls Eye	4651
Gold Bug	9407
Crescent	4510
Nancy Hanks Group	
Nancy Hanks	5365 (incorrectly listed as 5635 on Annex I of the contract)
Dewey	9833
Midnight	9833

The unpatented claims were recorded in the Office of the County Clerk, Philipsburg, Granite County, Montana as follows:

Claim	Book	Page
Garnet Group		
Garnet No. 1	24	56
" No. 3	24	60
" No. 7	24	68

Claim	Book	Page
Garnet Group		
Garnet No. 8	24	70
" No. 12	24	225

The Operator was in possession of the Crescent group of patented claims by virtue of a "Grant Deed and Assignment" executed July 24, 1965, by James F. Charlton of a "Purchase and Sale Agreement" dated June 12, 1963, granted to Robert M. Bielenberg and James F. Charlton by James G. Haviland and Jean P. Haviland, his wife, owners of the claims. Robert M. Bielenberg and Mary Brome Bielenberg, husband and wife, in a "Grant Deed" dated July 21, 1965, conveyed all their interest in said claims to James F. Charlton. Alice M. Charlton in a "Grant Deed and Assignment" dated July 23, 1965, conveyed all her interest in said claims to James F. Charlton.

The Operator was in possession of the Nancy Hanks group of patented claims by virtue of an "Assignment of Rights" executed June 5, 1964, by James F. Charlton and Alice M. Charlton, his wife, transferring (1) all rights and interests of any sort they may ever have in the stock of Bellows-Graham, Inc., a Montana Corporation, owner of said claims pursuant to the terms of a certain "Agreement" dated August 23, 1962, between H. A. Bellows and James F. Charlton, and a "Letter of Instructions Escrow No. 3713" dated January 8, 1963, and (2) all rights and interests of any sort in said "Agreement" and "Letter of Instructions".

The Operator was in possession of the Garnet group of unpatented claims by virtue of "Grant Deeds" executed June 5 and August 10, 1964, by James F. Charlton and Alice M. Charlton, his wife, locators of said claims.

The property may be reached by turning off U. S. Highway 10, at Bearmouth, Montana (some 11 miles west of Drummond), and following the good mountain road which extends northerly along Bear Creek for about 10 miles to the old mining town of Garnet, Montana.

The claims cover an area near the summit of a divide between Elk Creek that flows to the northwest and Bear Creek that flows south to the Clark Fork River. Altitudes range from 6,000 to near 6,200 (see Elevation Mountain, Montana, 7-1/2' quadrangle sheet).

There were several productive mines near Garnet, Montana, that have yielded about $3,500,000. mainly in gold (Kauffman, 1963, p. 28). Old mines on or very near the Operator's land include the Nancy Hanks, Dewey Shamrock, Tiger or Lowry, Cascade, and the Crescent-Lead King-Red Cloud group (figure 1). All the mines were inactive during the period in which OME exploration took place.

GEOLOGY

Gold-bearing veins near Garnet, Montana, are in granodiorite and in metasedimentary rocks adjacent to the granodiorite. The veins are narrow but contained rich ore shoots of auriferous pyrite, chalcopyrite, tetrahedrite, galena, and free gold (Pardee, 1918, p. 160-161). The near-surface oxidized parts of the vein were the source for most of the production. More than 90 percent of the value was from gold.

The metasedimentary rocks range in age from the Precambrian Missoula group to the Red Lion Formation of probably late Cambrian age (figure 1). The Precambrian rocks are predominantly quartzite, and the Cambrian rocks are alternations of slate and limestone.

Igneous rocks include a stock of granodiorite (the Garnet Stock), sills and dikes of granodiorite, and at least one tabular body of aplite. These are probably closely related in origin and age and all have intruded the metasedimentary rocks. There are volcanic rocks, including basalt and andesite, within a few miles of Garnet; these presumably are younger than the intrusive rocks.

The metasedimentary rocks have been folded into a northwesterly plunging anticline that is truncated by the Garnet Stock. Contact metamorphic effects of the intrusive are widespread and garnet-epidote rock is common in the calcareous strata.

The veins are fissure-fillings along fractures or bedding planes. Quartz makes up from 50 to 90 percent of the vein; other minerals include ankerite, calcite, and barite. The veins persist in length and depth for only a few hundred feet and commonly end either at faults or split into several stringers. Widths range from paper thin to 3 or 4 feet; workable parts are 1-3 feet thick (Pardee, 1918, p. 174). There seems to be no apparent reason for some of the veins to follow bedding planes. Most of the faults that cut the veins are normal.

Much of the ore was rich, thus compensating for the narrowness and shortness of the ore shoots. Oxidized ore reportedly contained as much as $500 per ton in gold, and there were large amounts that contained as much as $200 per ton (this in terms of gold at $20.67 an ounce). The average of all the ore shipped was about $60 per ton (Pardee, 1918, p. 175).

The veins in the metasedimentary rocks commonly parallel the bedding and strike northwesterly and dip northeasterly, but in some places dip nearly at right angles to the enclosing beds. The veins in the granodiorite also trend northwesterly and dip flatly to the northeast.

Oxidation extends to a depth of about 75 feet near Garnet (Pardee, 1918, p. 177). Ore in the oxidized zone was two to three times as rich in gold as in the corresponding sulfide ore.

PURPOSE OF PROJECT

The purpose of the project was to explore by trenching and by core drilling from prepared surface drill sites for gold-bearing ore bodies occurring in veins and/or replacement deposits in, along, or cutting across folded strata of carbonate rocks, shale, and quartzite of Precambrian-Middle Paleozoic age or in granitic rocks that cut the strata.

CONTRACT

The contract, No. 2207, dated August 20, 1965, required that work start on or before October 1, 1965, and be completed within 12 months from the contract date. The work was to be divided into three stages as follows:

Stage I

Stage I was subdivided into two phases as follows:

Phase 1 Bulldoze six trenches, whose objectives were as follows:

Trench	Objective
1	Outcrop of G & H vein
2	Outcrop of G & H vein and the Woolsey-Missoula group contact.
3	G & H vein and the Meagher-Woolsey contact.
4	G & H vein and the Pilgrim-Park Shale, and Park Shale-Meagher contacts.
5	Outcrop of Nancy Hanks vein and the grano-diorite dike in the Pilgrim Formation.
6	Outcrop of Tiger vein and the same contacts as in Trench 4.

After completion of the trenches, six drill sites were to be prepared by bulldozing and six holes, a, b, c, e, f, and i, were to be drilled from locations depending on the results of the trenching. The attitude and depth of each hole was to be approximately as follows:

Hole	Bearing	Inclination Degrees	Depth Feet	Targets
a	S. 50°W.	-80	500	LK vein; possible others
b	S. 50°W.	-80	650	LK vein, possibly replacement deposit from G & H vein
c	S. 50°W.	-80	750	G & H and LK veins; possibly others
e	S. 50°W.	-80	210	G & H vein; Meagher-Woolsey contact
f	S. 50°W.	-70	250	G & H vein; Meagher-Woolsey contact
i	S. 37°E.	-50	500	G & H vein; Meagher-Woolsey and Woolsey-Missoula contact

If trenches 1-4 do not expose the G & H vein, holes a, b, and c, shall each be moved 150 feet northeasterly from locations shown on map attached to contract. The attitude and depth of the holes were to be approximately as follows:

Hole	Bearing	Inclination Degrees	Depth Feet	Targets
a	vertical	vertical	250	Woolsey-Missoula contact and well into Missoula
b	S. 50°W.	-80	250	Same as above
c	S. 50°W.	-70	300	Same as above
e	S. 50°W.	-80	350	Meagher-Woolsey contact; well into Woolsey
f	S. 50°W.	-70	350	Same as e
i	S. 37°E.	-50	700	Meagher-Woolsey contact, Woolsey-Missoula contact; well into Missoula

Phase 2 (Nancy Hanks project.) The work was to consist of preparing three drill sites by bulldozing and drilling three holes, 150 feet, 500 feet, and 350 to 500 feet deep, depending on results of hole e.

Stage II

Work under Stage II was to consist of preparing four drill sites and core drilling three or four holes, depending on results of each preceding hole. Aggregate length of hole planned was 1,800 feet.

Stage III

Work under Stage III was to consist of "offset" core drilling at sites determined by the results of the work under Stages I and II, but the total was not to exceed 3,000 feet of drilling. No hole in Stage III was to be any closer than 100 feet to any other hole drilled under the project.

ESTIMATED COSTS OF THE WORK

Stage I

Actual Costs

Mobilization and demobilization, one bulldozer 16 hours at $20/hour	$ 320.00
Bulldozing 1,000 ft. of access road, 2,000 ft. of trenching, and 6 drill sites	1,200.00
D-8, 60 hrs. at $20/hour D-7, 75 hrs. at $16/hour	
Mobilization and demobilization, one surface drill unit	300.00
Core drilling, 4,010 ft. maximum	21,200.00

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500 ft.	5.25/ft.	$4.80/ft.
500 ft. to 1,000 ft.	5.75/ft.	5.30/ft.

Cementing and redrilling, and/or reaming and casing, 150 hours at $11.50/hour	1,725.00
Cement, 80 sacks at $6/sack	480.00
Casing left in hole, 100 ft. at $1.80/ft.	180.00
Tropari surveys, 3 days at $65/day	195.00
	$25,600.00

Outside Consultant, 20 days at $50/day		$ 1,000.00
Cardboard core boxes, 400 at $0.85/box		340.00
Per diem, outside consultant 20 days at $15/day		300.00
Assays for gold and silver 150 assays at $3/assay		450.00
Assays for lead 80 assays at $2/assay		160.00
Assays for copper 80 assays at $1.75/assay		140.00
Total actual costs, Stage I		$27,990.00

Fixed Unit Costs

Office expenses, 4 months at $50/month	$ 200.00	
Incidental allowance for each foot of drilling completed, 4,010 feet at $0.04/ft. (rounded)	160.00	
Total fixed unit costs, Stage I		360.00
Total estimated costs, Stage I		$28,350.00

Stage II

Actual Costs

Bulldozing 500 ft. of access road and 4 drill sites	$ 160.00
D-8, 8 hrs. at $20/hour D-7, 10 hrs. at $16/hour	
Core drilling, 2,050 ft. maximum	10,700.00

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500 ft.	5.25/ft.	$4.80/ft.
500 ft. to 1,000 ft.	5.75/ft.	5.30/ft.

Cementing and redrilling and/or reaming and casing, 80 hours at $11.50/hour	$ 920.00	
Cement, 40 sacks at $6/sack	240.00	
Casing left in hole, 50 ft. at $1.80/ft.	90.00	
Tropari surveys, 2 days at $65/day	130.00	
		$12,240.00
Outside consultant, 10 days at $50/day		500.00
Cardboard core boxes, 200 at $0.85/box		170.00
Per diem, outside consultant 10 days at $15/day		150.00
Assays for gold and silver 70 assays at $3/assay		210.00
Assays for lead 40 assays at $2/assay		80.00
Assays for copper 40 assays at $1.75/assay		70.00
Total actual costs, Stage II		$13,420.00

Fixed Unit Costs

Office expenses, 2 months at $50/month	$ 100.00	
Incidental allowance for each foot of drilling completed, 2,050 feet at $0.04/ft. (rounded)	80.00	
Total fixed unit costs, Stage II		180.00
Total estimated costs of Stage II		$13,600.00

Stage III

Actual Costs

Bulldozing access roads and drill sites	$ 160.00	
D-8, 8 hrs. at $20/hour D-7, 10 hrs. at $16/hour		
Core drilling, 3,000 ft. maximum	15,900.00	

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500 ft.	5.25/ft.	$4.80/ft.
500 ft. to 1,000 ft.	5.75/ft.	5.30/ft.

Cementing and redrilling and/or reaming and casing, 100 hours at $11.50/hour	$ 1,150.00	
Cement, 60 sacks at $6/sack	360.00	
Casing left in hole, 75 ft. at $1.80/ft.	135.00	
Tropari surveys, 2 days at $65/day	130.00	
		$17,835.00
Outside consultant, 15 days at $50/day		750.00
Cardboard core boxes, 294 at $0.85/box		250.00
Per diem, outside consultant 15 days at $15/day		225.00
Assays for gold and silver 100 assays at $3/assay		300.00
Assays for lead 80 assays at $2/assay		160.00
Assays for copper 80 assays at $1.75/assay		140.00
Total actual costs, Stage III		$19,660.00

Fixed Unit Costs

Office expenses, 3 months at $50/month	$ 150.00	
Incidental allowance for each foot of drilling completed, 3,000 feet at $0.04/ft.	120.00	
Total fixed unit costs, Stage III		270.00
Total estimated costs of Stage III		$19,930.00

Total estimated costs of the project	$61,880.00
Government participation at 50 percent	30,940.00

The contract was amended three times as follows:

Amendment No. 1, dated October 15, 1965, changed the starting date for work from October 1, 1965, to June 15, 1965, and changed the time fixed for completion of the work from 12 to 23 months from the date of the contract.

Amendment No. 2, dated March 28, 1966, permitted use of D-7 bulldozer or equivalent make; made slight modifications in description of the Nancy Hanks project, Stage I, Phase 2 of the project; and revised the second specification under Estimated Costs of the Work, Stage I, Actual Costs, to read:

Bulldozing, 1,000 ft. of access road, 2,000 ft. of trenching, and 9 drill sites	$ 1,200.00

Amendment No. 3, dated September 2, 1966, modified the contract to permit assays for gold alone, instead of gold and silver, and made the necessary changes in the Estimated costs of the project so that instead of assays for gold and silver at $3/assay, assays were permitted for gold at $1.50 per assay and silver at $1.50 per assay. There was no change in total amount allowed for assaying for gold and silver in the three stages of the contract.

PROJECT WORK

Project work started May 16, 1966, with surveying of locations for access roads, trenches, and drill sites; the surveying was completed by July 11, 1966. Bulldozing with an International Harvester TD-24 bulldozer started June 20, 1966, and was completed by July 9, 1966. Diamond core drilling started June 19, 1966, and was completed by August 31, 1966. Results were generally negative and only one hole was authorized under Stage II of the contract. The contract was terminated, effective August 31, 1966, by an agreement dated November 3, 1966.

Approved costs of the completed work are as follows:

Mobilization and demobilization of bulldozer	$ 182.00
Bulldozing - 61-1/2 hours at $20/hour	1,230.00
Mobilization and demobilization of one surface drill unit	300.00
Core drilling (2,805 feet of AQWL) Overburden 102 feet at $5.50/ft.	561.00

To 500 feet, 2,503 feet at $5.25/ft.	$13,140.75
500 ft. to 1,000 ft., 200 feet at $5.75/ft.	1,150.00
Outside consultant, 17-1/2 days at $50/day	875.00
Per diem, outside consultant 17-1/2 days at $15/day	262.50
Cardboard core boxes, 261 at $0.85/box	221.85
Assays for gold 30 assays at $1.50/assay	45.00
Office expenses, 2-1/2 months at $50/month	125.00
Incidental allowance for each foot of drilling completed, 2,805 feet at $0.04/ft.	112.20
Total approved costs	$18,205.30
Government's share at 50 percent	9,102.65

The Government retains no equity in any equipment or supplies at the property.

The work was competently supervised and adequately reported.

REPORTS

The Operator submitted an acceptable final report on May 22, 1967.

The Government prepared a Report of Review in December 1966.

No royalty review has been necessary.

PROJECT RESULTS

Contract work included the drilling of 8 core drill holes and bulldozing 6 trenches. The work was unsuccessful in finding positive evidence of minable gold-bearing ore bodies. Geology in the trenches and drill holes is shown on figure 2 (Geology of OME trenches (plan) and OME diamond drill holes (section), Nancy Hanks, et al., group, sec. 3, T. 12N. R. 14W., Granite County, Montana).

Trench No. 1 exposed a narrow (2-inch thick) gold-bearing quartz vein in quartzite of the Missoula group; an assay of this vein yielded 1.32 ounces gold per ton. Diamond drill hole No. 1 cut through several stringers of quartz and pyrite in granodiorite; the richest of these assayed 0.220 ounces gold per ton across 1-1/2 inches.

Some trenches and drill holes found zones of pyritic rock near granodiorite intrusions (sill, dikes, or the Garnet stock). Assays of the pyritic material yielded only very low values in gold (figure 2).

Limestone and calcareous shale near granodiorite is converted to a rock rich in epidote and garnet, the result of contact metamorphism. It is not known if the epidote-garnet rock was tested for the presence of scheelite.

The few thin quartz stringers found by the exploration work might be extensions of ore-bearing veins because Pardee reported that many of the veins ended in a series of stringers or at faults (Pardee, 1918, p. 174). Considerably more exploration would be necessary to establish continuity of the known stringers with ore-bearing veins. Neither the Operator nor the Government believed that further exploration was justified.

CERTIFICATION

The Government notified the Operator on August 8, 1967, that in the absence of a certification of possible production, the Government retained no claim or lien against the property subject to the contract or any future production therefrom.

PRODUCTION AND ROYALTIES

There has been no production from the property since the date of the contract and no royalties are due to the Government.

SUMMARY

The project was designed to test for extensions of formerly productive gold-bearing quartz veins. Some of the veins were in granodiorite and some were subparallel to bedding planes in quartzites and limestones. All of the favorable areas were tested, both by trenching and by core drilling. Results were negative. The work was capably supervised and was adequately reported. Maps and reports submitted by the Operator will add to our knowledge of the geology of the mining area near Garnet, Montana.

REFERENCES CITED

Kauffman, M. E., 1963, Geology of the Garnet-Bearmouth area, western Montana: Montana Bur. Mines and Geol. Mem. No. 39, 40 p.

Pardee, J. T., 1918, Ore deposits of the northwestern part of the Garnet range, Montana: U. S. Geol. Survey Bull. 660-F, p. 159-239.

Willard P. Puffett

Willard P. Puffett

Enclosures:

Fig. 1 - Geologic and claim maps, Nancy Hanks, et al., group, Sec. 3, T. 12N., R. 14W., Granite County, Montana.

Fig. 2 - Geology of OME trenches (plan) and OME diamond drill holes (section), Nancy Hanks, et al., group, Sec. 3, T. 12N., R. 14W., Granite County, Montana.

Enclosures with Operator's final report

DMC

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
March 15, 1967

MAR 17

Mr. Douglas A. Robinson
President
American Mining Company
537 Securities Building
1904 - 3d Avenue
Seattle, Washington 98101

Re: OME-6410 (Gold)
Nancy Banks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

With our letter of January 4, 1967, we sent you a Report of Review, issued December 1966, and advised you that the amount of $200.00 would be withheld pending receipt of an acceptable Operator's final report as required by Article 5(c) of the contract and by item 3 of the Termination Agreement.

Although it is our desire to give an Operator a reasonable length of time to prepare his final report, we cannot keep our books open indefinitely.

Kindly advise us as to when we may expect to receive your final report.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren/mls

cc: OME

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/10/67	Kirkemo	120
		110
		220
		120M

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed is a copy of a letter dated January 4, 1967, from the Field Officer, Region I, transmitting to the Operator a copy of the Report of Review issued December 1966 covering costs under the subject contract. A copy of the report also is enclosed. Please continue to withhold the amount of $200.00 pending receipt of the Operator's final report.

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Mr. Kirkemo

GLAult/a 1-10-67

23263

OME (2)

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
January 4, 1967

Mr. Douglas A. Robinson
President
American Mining Company
337 Securities Building
1904 - 3d Avenue
Seattle, Washington 98101

Re: OME-6410 (Gold)
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

There is enclosed one copy of a Report of Review, issued December 1966, covering costs under the subject contract.

The amount of $200.00 will be withheld pending receipt of an acceptable Operator's final report as required by Article 5(c) of the contract and item 3 of the Termination Agreement.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls

cc: OME(2)
Voucher File
MacLaren

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
12/20	Kirkemo	120
		110
		220
		120M

FRANK E. JOHNSON

DEC 2 0 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Referring to your memorandum of December 8, 1966, enclosed are two copies of a Report of Review, issued December 1966, covering costs under the subject contract.

If you concur in the facts as stated in the report, one copy should be sent to the Operator with any comment you may wish to make. The other copy is for your records. As evidence of your concurrence in the report, two copies of your letter transmitting a copy of the report to the Operator should be furnished this office.

If for any reason you do not concur in the report, both copies should be returned to this office with your comments.

Please note in the Report of Review under Fixed-Unit Costs that office expense shown for 2½ months is in accord with the total approved units for this item shown on the voucher forms for August 1966, whereas the summary of units for office expenses in your memorandum to us, dated December 8, 1966, shows 3.0 months. We believe that the total of 2½ months is the correct figure. This observation is for your information only and does not concern the Operator.

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
130
Mr. Kirkemo

HKirkemo/gla 12-20-66

23263

Form DI-535
(Rev. 8-66)

UNITED STATES
DEPARTMENT OF THE INTERIOR

ROUTING SLIP

Indicate routing order by number—Strike out office when cleared, enter date received and forwarded in space provided.

To		Date		To		Date	
	S	SECRETARY			MR	ASST. SECY.—MINERAL RES.	
	US	UNDER SECRETARY			MCR	Office of Coal Research	
	SO	SOLICITOR			MGE	Office of Geography	
	SOL	Office of the Solicitor			MSF	Office of Min. & Solid Fuels	
	DL	Division of Legislation			MOG	Office of Oil & Gas	
	SA	Office of the Science Adviser			MOI	Oil Import Administration	
	OI	Office of Information			MBM	Bureau of Mines	
	CL	Congressional Liaison Office		X	MGS	Geological Survey Rm 5243 GS Bldg.	
	RP	Resources Program Staff					
	EO	Office for Equal Opportunity			LM	ASST. SECY.—PUBLIC LAND MGT.	
	PA	Office of Program Analysis			LIA	Bureau of Indian Affairs	
	CAB	Board of Contract Appeals			LLM	Bureau of Land Management	
	OW	Office of Water Resources Research			LOT	Office of Territories	
	JCC	Job Corps Coordination			LAR	Alaska Railroad	
	SOAB	Oil Import Appeals Board			LOR	Bur. of Outdoor Recreation	
	AA	ASST. SECY. FOR ADMINISTRATION			PC	ASST. SECY.—WATER POLL. CON.	
	DCCO	Deptl. Corres. Control Office			PFW	Fed. Water Poll. Con. Adm.	
	AMO	Office of Management Operations			WSA	Office of Saline Water	
	ASR	Office of Survey and Review					
	ADB	Office of Budget			WP	ASST. SECY.—WATER & POWER DEV.	
	AMR	Office of Management Research			WBR	Bureau of Reclamation	
	APM	Office of Personnel Management			WBP	Bonneville Power Adm.	
					WSE	Southeastern Power Adm.	
	FW	ASST. SECY. FOR F & W & PARKS			WSW	Southwestern Power Adm.	
	FOC	Off. of Commissioner of F & W			WDE	Defense Electric Power Adm.	
	FCF	Bur. of Commercial Fisheries					
	FSF	Bur. of Sport Fisheries & Wildlife					
	FNP	National Park Service					

Remarks:

90

From: Asst. Director, Contract & Grant Audit - ASR/AO | Phone 33338 | Date 12-9-66

U.S. GOVERNMENT PRINTING OFFICE : 1966—O-909-659 #4

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

DEC 9 1966

Memorandum

To: Director, U.S. Geological Survey

From: Assistant Director, Audit Operations, Contract and Grant Audit, Office of Survey and Review

Subject: Review of Contract 2207
Docket No. OME-6410 (Gold)
American Mining Company (Operator)
Nancy Hanks, et al., Claims
Granite County, Montana

Pursuant to a request dated November 1, 1966, from the Chief, Office of Minerals Exploration, we have made a cost review of Contract 2207, examining the contract and accounting records and files of OME and the Branch of Budget and Finance, U.S. Geological Survey. Four copies of the report of review are attached.

The purpose of this project was to explore by trenching and by core drilling for gold-bearing ore bodies in 6 patented and 5 unpatented lode mining claims in Granite County, Montana. The contract contemplated estimated costs of the work aggregating $61,880 with Government contribution on a 50 percent basis amounting to $30,940. The work was discontinued in August 1966 after costs aggregating $18,205.30 had been incurred. A proposed Termination Agreement offered to the Operator has not yet been executed by him. Neither has the Operator furnished the final report required by the contract terms.

Enclosures

Donald R. Mayer

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
December 8, 1966

OFFICIAL COPY
O. M. E.
DEC 10

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Work under the subject contract was terminated effective August 31, 1966, by an agreement dated November 3, 1966.

The number of units of work completed by the Operator and accepted by the Field Officer as conforming to contract specifications were:

Stage I

Actual Cost

Cat(1)	Bulldozing (D-8 dozer)	60.5 hours
	Diamond drilling (AQWL or larger)	
	Overburden	90.0 feet
	Bottom of overburden to 500'	2,165.0 "
	500' to 1000'	200.0 "
Cat(2)	Outside consultant	12.5 days
Cat(3)	Core boxes	226.0 each
Cat(7)	Per diem	12.5 days
	Assays for gold	15.0 each

Fixed Unit Cost

Office expenses	3.0 months
Incidental allowance for drilling	2,445.0 feet

Stage II

Actual Cost

Cat(1)	Bulldozing (D-8 dozer)	1.0 hour
	Diamond drilling (AQWL or larger)	
	Overburden	12.0 feet
	Bottom of overburden to 500'	338.0 "
Cat(2)	Outside consultant	5.0 days
Cat(3)	Core boxes	35.0 each
Cat(7)	Per diem	5.0 days
	Assays for gold	15.0 each

Fixed Unit Cost

Office expenses	0.5 month
Incidental allowance for drilling	350.0 feet

A final engineering and geological report has not yet been received. In view of a letter dated November 17, 1966, from the Operator's consultant and our reply of November 22, a formal request for a final report is probably not necessary. However, for the record, such a report has been requested in our letter of December 8, 1966.

A Report of Review, in lieu of a final audit, is in order and requested. The original copies of the final (August 1966) MME-60 and MME-61, together with supporting documents were forwarded to your November 20, 1966.

Mr. Fisher
Preparing Review.
AMR
12/12/66

It is recommended that the $200.00 withheld from the Operator's last voucher continue to be withheld pending receipt of his final report.

D. R. MacLaren

OME

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
December 8, 1966

Mr. Douglas A. Robinson
President
American Mining Company
337 Securities Building
1904 - 3rd Avenue
Seattle, Washington 98101

Re: OME-6410 (Gold)
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

Thank you for returning the Termination Agreement. Apparently, our letters of December 6th crossed in the mail. Your attention is directed to Article 5(c) of the contract which defines the requirement for an Operator's Final Report.

We would appreciate receiving this report at an early date.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren/mls

cc: OME
MacLaren

Director's Reading File

Ome

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
December 6, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
DEC 9 1966
INITIALS | COPY
HK

Mr. Douglas A. Robinson
President
American Mining Company
400 Securities Building
1904 - 3d Avenue
Seattle, Washington 98101

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

With our letter of November 14, 1966, we sent you the original and three copies of a proposed Termination Agreement to the above-referenced contract, signed by the Chief, Office of Minerals Exploration, U. S. Geological Survey, for the Government.

If the proposed agreement is satisfactory, please sign all four copies, retain the Operator's copy for your records and return the original and two remaining copies to this office.

If the agreement is not satisfactory to you, please return all four copies unsigned to this office with a statement of your proposed changes for consideration.

Your early attention to this matter will be greatly appreciated.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren/mls

cc: OME
MacLaren

Director's Reading File

TA Received 12/9/66

ME FORM 6 REFERENCE SLIP

REV. 2 OFFICE OF MINERALS EXPLORATION

	DATE	INITIALS
TO: Chief, OME	12/7/66	
1.		
Re: OME-6410 (Gold)		
2. American Mining Company		
Nancy Hanks, et al., Claims		
Granite County, Montana		
3. Contract 2207		
4.		
D. R. MacLaren		
5.		
FROM: Fld. Officer, Reg. I		

COPY RECEIVED DEC 8 1966 INTERIOR

FOR: Check items for action desired

X Action	___ Reply for signature of	___ Surname
___ Approval	___ Investigate	___ Signature
___ Comment	___ Recommendations	___ File
___ Conference	___ Rewrite	
___ Instructions	___ Your information	

REMARKS: Transmittal of Gov't. and Budget and Finance copies of Termination Agreement.

M56300-62

INT.-DUP. SEC., WASH., D.C.

AMERICAN MINING COMPANY

337 Securities Bldg. MAin 4-5816
Seattle, Wash. 98101

JAMES F. CHARLTON
GENERAL MANAGER

December 6, 1966

D. R. MacLaren
Field Officer, OME
U. S. Dept. of Interior
Office of Minerals Exploration
Geological Survey
South 157 Howard St.
Spokane, Washington 99204

Dear Mr. MacLaren:

Enclosed are the original and two copies of the termination agreement of our OME-6410 (Gold) contract with the U. S. Government. The proposed agreement is satisfactory and is consistent with the findings to date. It is our intention, however, to continue our exploration program in the vicinity of the Nancy Hanks with the hope of uncovering new evidence to justify a re-application for Government Assistance.

I hope our performance to date has been good enough to warrant the fine cooperation we have had from your office.

Sincerely,

Douglas A. Robinson,
PRESIDENT

Encl.

cc: Joe Irving

OME

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 25 1966
INFORMATION COPY

GEOLOGICAL SURVEY
No. 157 Howard Street
Spokane, Washington 99204
November 22, 1966

Mr. Joe G. Irving
Mining Geologist
2324 South Highland
Las Vegas, Nevada 89102

Re: OME-0410 (Gold)
American Mining Company
Nancy Banks, et al., Claims
Granite County, Montana
Contract 2207

Dear Joe:

Enclosed is a Termo-Fax copy of page 3 from the standard long form which is a part of Contract 2207. At the top of the page, section (c) of Article 5 states the requirements for an Operator's final report. You will note that five copies of the final report are required in addition to the final monthly report. I cannot alter this contractual agreement.

If you have the tracings from which your original maps were printed for the application, it should not be much of a problem to indicate thereon the locations at which the trenches were actually bulldozed and any contacts or structures which were uncovered. Similarly, the actual locations of the drill hole collars and the line at which each hole projects to a horizontal plane could be easily added. Similarly, if you have the tracings of the sections in the planes of the various holes, you need only run off and color appropriately the necessary number of prints. A narrative briefly describing the geology and setting forth a geological evaluation of the results of the drilling, describing the engineering problems, if any, that permitted or prevented drilling with various core sizes, and a cost summary could probably be amply stated in two or three pages.

Also enclosed are copies of Title 30, booklet, four copies of the application form (two copies to be submitted), and a set of six Lien and Subordination Agreements (the original and four copies to be submitted, the sixth copy is for the executor of the Agreement; the Operator's copy will be with the contract if one is offered.)

Hope to see you at the N.V.M.A. Meetings.

Sincerely yours,

D. R. MacLaren
Field Officer, OME, Region I

Enclosures
cc: Mr. D. A. Robinson
President
American Mining Company, Seattle, Wash.

DRMacLaren/mls
cc: OME w/cpy incoming
Voucher File
MacLaren
Director's Reading File

JOE G. IRVING
MINING GEOLOGIST
2324 SOUTH [illegible]
LAS VEGAS, NEVADA [illegible]
PHONE

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

November [illegible]

Mr. [illegible], Field Chemist,
Office [illegible] Exploration,
Geological Survey,
So. [illegible] Street,
[illegible] 94

Dear Sir:

[illegible] out of Montana, [illegible] in my office again, in [illegible] a note of [illegible] the Butte post office [illegible] be used. The [illegible] working under winter [illegible] weather, [illegible] we were drilling near [illegible], [illegible] what I write about [illegible].

[illegible] the usual and [illegible] under Contract No. [illegible].

[illegible] spelled out exactly what [illegible] in final report [illegible] it had to be, but I do not [illegible] fifteen years ago, and I have forgotten just what is necessary.

[illegible] to include a geologic [illegible] report on the [illegible], assay data and suitable maps. Also, [illegible] work, I believe.

Now, Dan, like everyone else I [illegible] where the time is going to come from, so will you jig up [illegible] description of what is expected and send it to me, preferably [illegible] advice as to how I can [illegible] report down in any way [illegible]

1. [illegible] original maps [illegible], showing the [illegible], as projected, and [illegible] in detailed hole [illegible] hole, show[illegible] encountered, [illegible] greatest [illegible] differ very much from [illegible]. [illegible] questions [illegible] reference to these [illegible] that accompanied our Monthly Reports, and the [illegible] in also, together with the narrative reports al[illegible] sufficient. Or, do I have to send in: (a) a new set [illegible] duplicate, and (b) make some kind of a repetitious cost report, [illegible].

2. Couldn't some kind of a [illegible] condensed general report that told of the general results, [illegible] referred to the maps already sent in, and cost tabul[illegible] be sufficient. Please advise.

I am about to prepare another OME [illegible] for drilling a silver

prospect in Philipsburg, Montana, on a vein that is parallel to the famous Granite-Bimetallic vein and which lies about a mile or so north of it, in the granite and in line with the Cliff Vein, worked in the adjoining sediments.

For the above, I need the usual application forms, subordination of lien forms and whatever else thatis required. Could you send me all the forms, including the master form No. 40, that I will need and indicate how many copies I have to submit. I know five copies of thelien form are needed, and I think five copies of form 40, but only two copies of the maps and other subsidiary material. Please advise on this. And, since I have to have a copy for my own files, together with a copy for the American Mining Company, I will need two "operator's copies, instead of one; this is important—so it looks like seven copies of most of the forms will be needed.

To sum it up, Don, I have requested two things: information on the nature of the final report on Contract 2207; and forms for a new OME application. Would appreciate hearing from you soon. May see you during the Spokane convention time, which I understand is the usual first weekend in December?

Best regards, Don, and thanks for the help and co-operation you gave us on the Garnet job.

Sincerely,

/s/ Joe G. Irving

Joe G. Irving

MME FORM 60
SEPT. 1959

RECEIVED
OCT 17, 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S MONTHLY VOUCHER

For Period of:
For Month of 8/1--8/31/66

Docket No. 6410
Contract No. 14-23-090- 2207
Contract Amount $ 61,880.00
Gov't. Participation % 50 $ 30,940.00
Mineral(s) Gold

Operator's Name American Mining Company.
Address 400 - Securities Bldg., Seattle 1, Washington.

COST CATEGORIES	FOR OPERATOR'S USE: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	FOR GOVERNMENT APPROVAL ONLY: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and (INCLUDES WORK, SUPPLIES AND CONSULTANT'S TIME FOR HOLE 1, STAGE 11)						
(1) Independent Contracts:						
Bulldozing	$ —	$ 1,412.00	$ 1,412.00			
Drifting						
Crosscutting						
Drilling All components includ. Incid. Allow.	3,077.08	12,185.87	15,262.95			
(2) Personal Services:						
Supervision & Technical						
Outside Consultants	125.00	750.00	875.00			
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Cerdbd. Core Boxes	67.15	154.70	221.85			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Analytical Work Assays	—	45.00	45.00			
Payroll Taxes Off. Exp.	25.00	100.00	125.00			
Employee's Liability Ins.						
Per Diem (Consult.)	57.50	225.00	262.50			
TOTALS	$3,331.73	$14,872.57	$18,204.30			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 10/7/66 *Payee American Mining Co

Per Douglas A. Palmer Title President

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: 166587 14X0804
- 200.00 14X6875
$ 1465.87

Signature P E M.
(Authorized Certifying Officer)

Date Nov 7 Vou. No. 3772

(SEE OTHER SIDE)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating an exploration project in accordance with the terms of Contract No. 2207

Signature D R MacKaren Title Field Officer, Region I Date OCT 20 1966

Approved by OME Executive Officer or Alternate:

Signature D R MacKaren Title Field Officer, Region I Date OCT 20 1966

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of three parts.

FIRST, the Operator's Monthly Voucher on MME Form 60 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Progress Report on MME Form 61 is a statistical report of the units and cost of of work performed under the contract.

THIRD, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and ~~four~~ three copies of each of the three sections of this report to the OME regional Executive Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, MME FORM 60

After all applicable spaces are filled in, the Operator or his agent must sign the certification in the lower left corner. Categories (2) through (7) apply to "Actual Cost" contracts only.

Under "Fixed Unit Costs" and Category (1) report, (a) the total fixed unit costs of work performed under contract provisions for contribution by the Government on a basis of "fixed unit costs"; and (b) the claimed costs of work performed on a unit-price basis by independent contractors.

Under Category (2) include the claimed costs of all payrolled and invoiced supervisory, technical, and labor personnel, except the costs for services applicable to Categories (5) and (6).

Under Category (3) include the claimed costs of all project materials and supplies other than those used for work under Categories (5) and (6).

Under Category (4) report claimed rentals on equipment belonging to a third party, claimed payments or obligations for payments on the Operator's purchase of equipment, and claimed depreciation for the use of Operator-owned equipment.

Under Categories (5) and (6) include all claimed costs of labor, supervision, technical services, operating materials and supplies, and all other items used in (5) the initial rehabilitation and repairs of existing buildings, fixtures, installations (exclusive of mine workings), and operating equipment; and (6) the installation or construction of new buildings, fixtures, and fixed improvements (exclusive of mine workings). Do not report these costs under Categories (2), (3), (4), and (7).

Under Category (7) include all miscellaneous claimed costs such as repairs (other than initial) and maintenance of equipment, sampling and analysis, travel, communication, accounting, office expenses, and the Operator's share of payroll taxes and insurance.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, itemized deductions, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as depreciation of Operator-owned equipment, unemployment taxes, and employee's liability insurance. The certification may be stated thus, "Certified True Copy (or Transcript)", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Executive Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

BUDGET & FINANCE OCT 25 10 46 AM '66 RECEIVED GEN. OFFICE COMPTROLLER

0 9 9 0 1

MME FORM 61
SEPT. 1959

RECEIVED
OCT 19, 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S ~~PROGRESS~~ SMA REPORT

Period of
For ~~Month~~ of 8/1/--8/31/66

Docket No. 6410

Operator's Name American Mining Company

Contract No. 14-23-090- 2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
Drifting	(INCLUDES WORK AND CONSULTANT'S TIME FOR HOLE 1, STAGE 11)						
Crosscutting							
Raising							
Shafts							
~~Winzes~~ Drill Mob & Demob.	job	1/2	1	$ 300.00	1/2	1	300.00
Other Underground							
Drilling, Core-Diamond 1/	ft.	520'	2703	14,290.75	520	2703	14,290.75
Overburden Rotary 1/	ft.	32	102	561.00	32	102	561.00
Drilling, Non-core-Diamond							
Incid. Allow. Rotary 1/	ft.	552	2805	111.20	552	2805	111.20
Churn							
Percussion							
1/ Miscellaneous Off. Expen.	No.	1/2	2 1/2	125.00	1/2	2 1/2	125.00
Dozer Mob-demob.	job	-	1	182.00	-	1	182.00
Roads and Trails	hrs.	-	10	200.00	-	10	200.00
~~Shipping~~ Drill sites	hrs.	-	6 1/2	130.00	-	6 1/2	130.00
Trenching	hrs.	-	45	900.00	-	45	900.00
~~Pole Hauling~~ Consultant 1/	days	2 1/2	17 1/2	875.00	2 1/2	17 1/2	875.00
1/ ~~Other Surface Work~~ Per Diem	"	2 1/2	17 1/2	262.50	2 1/2	17 1/2	262.50
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
1/ Operating Equipment Purchases Core Boxes (Tot. 261)				221.85			221.85
1/ Analytical Work (Cold assays (Tot. for job-30)				45.00			45.00
TOTAL TO DATE (per MME Form 60)				$18,204.30			18,204.30

REMARKS

1/ Includes work, consultant's time, and supplies for Hole 1, of Stage 11. (Hole 1, is the only part of Stage 11, that is to be done.)

(Continue on back)

REMARKS

L 2805 ft x $0.04 = $112.20 ∴ claim for $111.20 is mathematical error — can not be corrected by F.O. without increasing claimed Total to Date

1/2 withhold $200 pending receipt of operator's Final Report and Rept of Review

(Continue on back)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 10/17/66 Operator American Mining Co

Per Douglas A. Robinson Title President

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature [illegible]

Title Field Officer, Region I
Government Representative

Date OCT 20 1966

(INSTRUCTIONS ON REVERSE)

REMARKS *(Cont.)*

REMARKS *(Cont.)*

INSTRUCTIONS FOR PREPARING OPERATOR'S PROGRESS REPORT, MME FORM 61

This report is the second of the three parts of the Operator's Monthly Report. Submit the original and ~~four~~ three copies.

The cost for each operation should be the total of all claimed costs attributable to that type of work with two exceptions, namely—operating equipment purchased and analytical work which are stated separately. For example, drifting costs should be the total of all costs chargeable to drifting including supervision, technical services, timbering (if any), etc. Similarly, drilling costs should include the cost of cementing, reaming, core boxes, etc. This procedure of distribution holds whether the contract was written on an actual cost or a unit cost basis, or some combination of the two. Distribute the cost of such general items as supervision, equipment rented, etc. according to relative footages or on some other conventional basis. The item "Initial Rehabilitation and Repairs" covers all rehabilitation and/or repairs other than the rehabilitation of mine workings.

The item titled "Drilling, Non-core Percussion" includes all drilling performed with wagon, jack-hammer, stoper and mounted drills. The several items labelled "Other" are provided to take care of particular exploration operations not specified on this form.

BUDGET & FINANCE
RECEIVED
GEOLOGICAL SURVEY
OCT 29 10 40 AM '66
9 0 9 5 0 1

TELEPHONE OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2957 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

October 5, 1966

(For work done, at Garnet, Montana, under Ref. OXE-6410, Contract 2207)

American Mining Company,

400 - Securities Building,

Seattle 1, Washington

(Bill for outside consultant's work and expenses, under categories 6 and 7 of contract, comprising the logging of 532' of core and surveying in and supervising and checking the set up for Hole 1, of Stage 11.

For logging the core and studying geology, as revealed, sampling etc. of Hole 3, from 355' to 450'; Hole 6, from 0 to 125', and Hole No. 1, of Stage 11 of the contract, from start to total depth of 350'. Also, includes the surveying in, and supervising the set up of Hole No. 1.

2½ days work, at $50.00/day———————$125.00

Per diem expenses for outside consultant,
2½ days at $15.00/day——————— 37.50
Total $162.50

$162.50

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET

MINNEAPOLIS, MINNESOTA 55402

AUGUST 30, 1966

AMERICAN MINING COMPANY
400 SECURITIES BUILDING
SEATTLE 1, WASHINGTON

TERMS: PAYMENT DUE ON OR BEFORE

SEPTEMBER 20

INVOICE NO. 86641

EXPLORATORY DRILLING CARRIED OUT DURING AUGUST 16 - 31 IN THE VICINITY OF DRUMMOND, MONTANA AS PER THE TERMS OF OUR AGREEMENT DATED JUNE 1, 1966.

HOLE NO.		FROM	TO	FOOTAGE	RATE	AMOUNT
J	AQML DIAMOND DRILLING	353	430	77	5.75	442.75
6	OVERBURDEN DRILLING	0	20	20	5.50	110.00
6	AQML DIAMOND DRILLING	20	125	105	5.75	603.75
1	OVERBURDEN DRILLING	0	12	12	5.50	66.00
1	AQML DIAMOND DRILLING	12	350	338	5.75	1,943.50
				552		3,166.00

	STANDBY TIME AUGUST 29	4 HOURS	12.00	40.00	
	SUPPLIES USED				
J	36 AX CORE BOXES		1.00	36.00	
6	8 AX CORE BOXES		1.00	8.00	
1	35 AX CORE BOXES		1.00	35.00	79.00
	DEMOBILIZATION				250.00
					3,543.00

American Mining Company
400 - Securities Bldg.
Seattle, Washington 98101

ONE -6410--------Gold
Nancy Hanks et al Claims,
Granite County, Montana.
Contract ----------2207

NARRATIVE REPORT

(This narrative report covers the core drilling done by the E. J. Longyear Company, at Garnet, Montana, DURING THE PERIOD AUGUST 16-31, 1966, The footages drilled through overburden, from the bottom of the overburden to the bottom of the several holes, together with the amount of footage drilled for each of the holes covered, along with the size of bit used are all shown on the driller's invoice attached.)

GENERAL

A total of 552' of hole was drilled during the period, as shown on the Longyear invoice. This footage comprised 77' in hole J to its completion (Hole J was reported upon in the previous report), 125' in Hole G and 350' in Hole No. 1. Total overburden included in the above footage was 32'.

Hole J was covered in the previous report, even though this invoice shows the final footage to the bottom. The logs of holes G and 1, along with the details of the geology encountered, as well as the exact locations of the holes, together with the specifications, as modified, are shown on the accompanying sketches.

If the actual results of the drilling, as shown on the sketches, are examined in connection with the original projections of the geology expected, shown on the set of cross sections sent in with the application, it will be seen that (with the exception that the Nancy Hanks vein was not cut, or recognized) the drilling showed up the geology and other structures about as visualized. The holes will be reported upon now in some detail:

Hole G. In the original application hole g was designed to explore for the possible southwesterly extension of the Nancy Hanks vein, also to test the area on the north side of the fault that cut off the Tiger Vein, for its possible faulted extension, and to explore the Pilgrim limestone (considered a very favorable host rock for ore in this region) close to the granodiorite for possible bedded ore. In the application as drawn up, hole g had the modified objective prospecting only for the Nancy Hanks vein, and its total depth was cut down from 425' to 150'. Subsequently, since trench No.5 did not expose the Nancy Hanks vein, as such, but a silicated zone in the limestone that more or less lined up with the projection of the vein, authorization was given to shift the position of the hole 100' and drill it to a depth of 125' with the dual objective of cutting the Cascade-Nancy Hanks fault zone, and the Nancy Hanks vein, as projected.

If the accompanying sketch be examined it will be seen that the wide and large fault (which was projected to be cut at about 45-50', was undoubtedly encountered in the hole in the first 39', reported as overburden.* Overburden in the area is usually reported by the drill contractor as being from 10 to 20' in thickness, and this unusual depth of "overburden" was most likely the crushed up, pulverized fault zone. This is verified and supported by the fault as shown in the nearby trench, where the granite was reduced to a soft earthy material.

(* Reported by the driller on the box as overburden, but not on the invoice)

The Nancy Hanks vein, projected to be cut at about 100' was not intersected, or recognized as a formal vein structure. The limestone shown varied from being an unstained and unmineralized marble to a partly, or highly, silicated rock, with the development of epidote and garnet, and as shown contained a little scattered and disseminated pyrite. The two samples taken of such pyritized zones, showed a gold content that ranged from 0.01 to 0.018 ounces--which cannot be called significant mineralization in this area. The hole was most decidedly negative.

Hole No. 1 This hole which was located about 100' east of the most easterly drift face in the old Dewey mine workings, and also near the adjoining Shamrock claim, where several veins had been mined with an appreciative dollar value, was designed to cut the Dewey vein in its possible easterly extension--possibly in an en echelon-type of structure--and also to cut one or more of the veins seen in the Shamrock mine (old maps were available) that projected down into Dewey ground (in the westerly projection) on the other side of the faulting shown. A particular objective, in this connection, was a so-called Vein C which seemed to have some potential.

If the sketch showing what was actually encountered is compared with the original projections, as submitted, it will be noted that mineralized zones were met about where the veins were expected. The material, as sampled, however was not of ore grade, and this will be discussed below.

The first vein structure cut, lining up very well for the Dewey vein extension, consisted of about two and a half feet of flat-dipping quartz seams, containing considerable pyrite--and with disseminated pyrite also in the adjoining wall rock. Three samples were taken of the material exposed from 161' to 163.5' The best assay obtained was that shown in sample No. 136, where a one and a half inch seam ran 0.220 ounces gold. Next was the one foot, sampled at 161-162' which assayed 0.17 ounces gold. See sketch.

The area into which Vein C of the Shamrock was expected was a wide mineralized zone, from 243.5' to 261', containing bands and seams of quartz and pyrite --up to 2½" thick--and a good deal of accompanying pyrite as disseminations in the altered granodiorite. Four samples were taken of this mineralized zone, the best results was obtained in sample No. 139 where a five-foot zone assayed 0.105 ounces gold. The sludge of the adjoining five-foot section assayed 0.120 ounces in gold. Two other mineralized zones were met at further depth, and as shown on the sketch of the hole, contained gold but not in commercial quantities.

In summing up the results of Hole No. 1, about all that can be safely said is that the vein and vein zones as projected were merely zones of seams and stringers, rather than strong vein structures, where intersected. And the grade of the material sampled was discouraging.

Joe G. Irving
10/8/66

RECEIVED
OCT 19, 1966

AMERICAN MINING COMPANY
400 Securities Bldg.
OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1693 SEATTLE 11, WASHINGTON
TELEPHONE
MAIN 2-7916

OFFICIAL COPY

120 M
110
RM 120

[redacted]

September 20, 1966

D. R. MacLaren
U. S. Dept. of Interior
Office of Minerals Exploration
Geological Survey
So. 157 Howard St.
Spokane, Washington 99204

Dear Mr. MacLaren:

Enclosed are the vouchers for the period 8-1-66 through 8-15-66 on Docket No. 6410 for the American Mining Company. I received your check for $2810.80.

Thank you for your expeditious handling of this matter.

Cordially,

Douglas A. Robinson,
President

Attachments

SEP 21 1966

MME FORM 60
SEPT. 1959

RECEIVED
SEP 21 1966
OMB

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OFFICIAL COPY
RECEIVED NOV 18 1966
INITIALS CODE

Docket No. 6410
Contract No. 14-23-098-2207
Contract Amount $ 61,880.00
Gov't. Participation % 50 $ 30,940.00
Mineral(s) Gold

OPERATOR'S MONTHLY VOUCHER

Period of
For ~~Month~~ of 8/1/66 thru 8/15/66

Operator's Name American Mining Co.
Address 400 - Securities Bldg., Seattle, Washington.

COST CATEGORIES	FOR OPERATOR'S USE: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	FOR GOVERNMENT APPROVAL ONLY: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and						
(1) Independent Contracts:						
Bulldozing	—	$ 1,412.00	$ 1,412.00			
Drifting						
Crosscutting						
Drilling All components						
includ. Incid. Allow.	$3670.97	8,514.90	12,185.87			
(2) Personal Services:						
Supervision & Technical						
Outside Consultants	112.50	637.50	750.00			
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Cardbd. core boxes	28.05	126.65	154.70			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Analytical Work assays	30.00	15.00	45.00			
Payroll Taxes						
Employee's Liability Ins.						
Office Expense	25.00	75.00	100.00			
Per Diem Consultant	33.75	191.25	225.00			
TOTALS	$ 3,900.27	$ 10,972.30	$ 14,872.57			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 8/19/66 *Payee American Mining Co

Per Wayne A. Salmon Title President

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1950.14

14X0804

Signature (Authorized Certifying Officer)

Date NOV 7 1966 Vou. No. 3772

(SEE OTHER SIDE)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating an exploration project in accordance with the terms of Contract No. 2207

Signature D.R. MacLaren Title Field Officer, Region I Date OCT 20 1966

Approved by OME Executive Officer or Alternate:

Signature D.R. MacLaren Title Field Officer, Region I Date OCT 20 1966

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of three parts.

FIRST, the Operator's Monthly Voucher on MME Form 60 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Progress Report on MME Form 61 is a statistical report of the units and cost of of work performed under the contract.

THIRD, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and ~~four~~ Three copies of each of the three sections of this report to the OME regional Executive Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, MME FORM 60

After all applicable spaces are filled in, the Operator or his agent must sign the certification in the lower left corner. Categories (2) through (7) apply to "Actual Cost" contracts only.

Under "Fixed Unit Costs" and Category (1) report, (a) the total fixed unit costs of work performed under contract provisions for contribution by the Government on a basis of "fixed unit costs"; and (b) the claimed costs of work performed on a unit-price basis by independent contractors.

Under Category (2) include the claimed costs of all payrolled and invoiced supervisory, technical, and labor personnel, except the costs for services applicable to Categories (5) and (6).

Under Category (3) include the claimed costs of all project materials and supplies other than those used for work under Categories (5) and (6).

Under Category (4) report claimed rentals on equipment belonging to a third party, claimed payments or obligations for payments on the Operator's purchase of equipment, and claimed depreciation for the use of Operator-owned equipment.

Under Categories (5) and (6) include all claimed costs of labor, supervision, technical services, operating materials and supplies, and all other items used in (5) the initial rehabilitation and repairs of existing buildings, fixtures, installations (exclusive of mine workings), and operating equipment; and (6) the installation or construction of new buildings, fixtures, and fixed improvements (exclusive of mine workings). Do not report these costs under Categories (2), (3), (4), and (7).

Under Category (7) include all miscellaneous claimed costs such as repairs (other than initial) and maintenance of equipment, sampling and analysis, travel, communication, accounting, office expenses, and the Operator's share of payroll taxes and insurance.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, itemized deductions, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as depreciation of Operator-owned equipment, unemployment taxes, and employee's liability insurance. The certification may be stated thus, "Certified True Copy (or Transcript)", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Executive Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

MME FORM 61
SEPT. 1959

RECEIVED
SEP 21 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S PROGRESS REPORT For ~~Month~~ Period 8/1/66 thru 8/15/66 Docket No. 6410

Operator's Name American Mining Company Contract No. 14-23-090-2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
Drifting							
Crosscutting							
Raising							
Shafts							
Drill mob.-demob	Job	–	1/2	$ 150.00	–	1/2	150.00
Other Underground							
Drilling, Core-Diamond	Ft.	673	2183	11,560.75	673	2183	11,560.75
Overburden	Ft.	20	70	385.00	20	70	385.00
Drilling, Non-core-Diamond							
Incid. Allow.	Ft.	693	2253	90.12	693	2253	90.12
Churn							
Percussion							
Misc. Offic. Exp.	Mo.	1/2	2	100.00	1/2	2	100.00
Dozer mob.& demob.	Job	—	1	182.00	—	1	182.00
Roads and Trails	hrs.	—	10	200.00	—	10	200.00
drill sites	hrs.	—	6 1/2	130.00	—	6 1/2	130.00
Trenching	hrs.	—	45	900.00	—	45	900.00
Consultant	days	2 1/4	15	750.00	2 1/4	15	750.00
" per diem	"	2 1/4	15	225.00	2 1/4	15	225.00
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
Operating Equipment Purchases Core boxes (Tot.= 182)				154.70			154.70
Analytical Work Gold assays* (total for job= 30)				45.00			45.00
TOTAL TO DATE (per MME Form 60)				$ 14,872.57			14,872.57

REMARKS

* These 30 gold assays are the total for the job; including those of samples taken in holes g and 1, which holes are to be reported subsequently.

(Continue on back)

REMARKS

(Continue on back)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 9/19/66 Operator American Mining Co

Per Douglas A. Coburn Title President

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature D.R. MacKeever

Title Field Officer, Region I
Government Representative

Date OCT 20 1966

(INSTRUCTIONS ON REVERSE)

REMARKS *(Cont.)*

REMARKS *(Cont.)*

INSTRUCTIONS FOR PREPARING OPERATOR'S PROGRESS REPORT, MME FORM 61

This report is the second of the three ~~parts of~~ the Operator's Monthly Report. Submit the original and ~~four~~ three copies.

The cost for each operation should be the total of all claimed costs attributable to that type of work with two exceptions, namely—operating equipment purchased and analytical work which are stated separately. For example, drifting costs should be the total of all costs chargeable to drifting including supervision, technical services, timbering (if any), etc. Similarly, drilling costs should include the cost of cementing, reaming, core boxes, etc. This procedure of distribution holds whether the contract was written on an actual cost or a unit cost basis, or some combination of the two. Distribute the cost of such general items as supervision, equipment rented, etc. according to relative footages or on some other conventional basis. The item "Initial Rehabilitation and Repairs" covers all rehabilitation and/or repairs other than the rehabilitation of mine workings.

The item titled "Drilling, Non-core Percussion" includes all drilling performed with wagon, jack-hammer, stoper and mounted drills. The several items labelled "Other" are provided to take care of particular exploration operations not specified on this form.

INT.DUP.,D.C.59- 27162

American Mining Company,
400 - Securities Building,
Seattle, Washington 59701

OME -6410 ---------- Gold
Nancy Hanks et al Claims,
Granite County, Montana
Contract---2207

NARRATIVE REPORT

(This narrative report covers the core drilling done by the E. J. Longyear Company, at Garnet, Montana, during the period August 1-15,1966. The footages drilled through overburden, from the bottom of the overburden to the bottom of the hole, or to the depth achieved on the Longyear voucher, together withthe amount for each for all holes covered during the period, along with the size of bit used are shown on the driller's invoices attaced)

GENERAL

A total of 693' of hole was drilled during the period, as shown on the Longyear invoices. It consisted of the balance of 340' in hole E, to its bottom, plus 350' in hole J, including 20' of overburden in hole J.

The logs of the holes, or portions thereof drilled, along with the details of the geology exposed, and such samples as were taken, as well as the locations and other specifications of the holes, as modified, are shown on the accompanying sketches.

If the sketches of the holes being reported upon now, showing the geology as actually encountered, are compared with the geology as projected from surface mapping, on the original cross sections that were submitted with the application (two accompany this report) it will be seen that:

1. Hole E started in Meagher limestone and hit the Meagher- Woolsey contact at 97'. As originally projected (see cross section attached) the Woolsey was projected to be encountered at about 110'. The attitude of the beds as expected on the cross section was either flat-lying, or dipping slightly to the northeast, as the hole is near the crest of the anticline. On the accompanying hole sketch, the'bedding" is shown, as drawn, dipping to the southwest, but this is probably not a bedding attitude, as the dip shown was merely the dip of alteration bands, which at the time of making the sketch was thought to represent a banding following original bedding, but on further reflection this does not necessarily have to be the case. On the other hand faulting could have tilted the block, and the plunge is to be taken into account also.

2. Hole J started in Pilgrim limestone, which contained several small granodiorite sills in the first 100', and hit what is believed to be the Park shale at 305.5'. In the accompanying original cross section the Park shale was projected to be encountered at about 220', but it is actually not seen on the surface in this area, and its presence was inferred only from scanty evidence such as shaly material in small amounts on nearby mine dumps, and the general stratigraphy of the area. The hole encounters a small granodiorite sill, at 379', which is close to the position of the one projected on the cross section, which is shown to be expected at about 374'. After going through about 110' of meta shale, silicated shaly limestone etc. the hole then penetrates typical altered Meagher limestone.

BRIEF DETAIL ON THE HOLES

Hole E. The objective of this hole, as modified by the trenching results, was the "Meagher-Woolsey contact, well into the Woolsey". As mentioned on page one, the contact was met, about where it was predicted. No commercial mineralization, or mineralization of any importance was seen at the contact, and in the sections directly above and below it---only some irregular iron stain, along fractures and in spots. The Meagher limestone, an altered, crystalline rock, was medium grained, showed some pitting and small cavities, probably due to "solution effects", and these cavities were often iron stained also.

Below the contact, the Woolsey was met in its various facies. It varied from being a highly metamorphosed "hornstone", to a silicated shaly limestone, or shale, with considerable epidote and garnet, usually in wavy bands and irregular blotches. Here and there there was found some scattered pyrite--leanly distributed, in spots and tiny seams, or on fracture planes. See detail on the accompanying sketch. Nothing was seen in the section revealed that deserved any sampling.

Hole J. The objective of this hole, as set forth in the original application were to explore the Pilgrim limestone, the postulated shale that should underly it (Park shale), and penetrate the Meagher limestone below that for several hundred feet for possible bedded ore. It was also designed to cut the G & H vein, if it proved to cross the bedding, and to explore for veins, of the Tiger type, near the contacts of the several granodiorite sills that were expected.

The trenching indicated that the G & H vein did not cross the bedding, or, if it did, it does not extend too far, and into the region being explored.

The hole, however, was authorized to be put down to 430', in a letter, dated July 11, 1966, with the following objectives: To penetrate the Park shale contact with the overlying Pilgrim limestone, and with the underlying Meagher formation, and to explore for other favorable horizons that may exist in the column being penetrated. The Park shale was entered at a depth of about 305' and its footwall reached at approximately 420'. Several granodiorite sills were also cut---see accompanying hole sketch.

No mineralization, of any importance; not even leanly distributed pyrite, was met. The Pilgrim limestone--actually a white to gray marble--was particularly devoid of any mineralization, but in places was partly silicated, with irregular garnet and epidote. Nothing was seen at the granodiorite sill contacts either.

The Park shale, as a formation, contained beds of shaly limestone, partly silicated calcareous layers and some highly altered shale layers, mostly of a purple-brown color. There was no mistaking the Meagher formation, below the shale, when it was encountered, as it was a relatively massive, whitish, crystalline limestone, and cored well.

Mineralization noted in the Park shale formation included some lean quartz, in a broken zone, at about 350',; an inch and a half of jaspery material that was manganese stained at 292', and a two-inch section of shale, at 417' that contained two ¼-½" seams of quartz and iron oxide. A sample taken of this small exposure assayed only 0.02 ounces gold.

Holes E and J were put down in a favorable stratigraphy, near the crest of the anticline, in a mineralized district, with a past production (normally a distinctly favorable area for further prospectin) and revealed nothing of any importance as far as commercial ore, or even interesting mineralization, is concerned.

Joe G. Irving 9/16/66

TELEPHONE OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2957 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

DATE September 14, 1966

(For work done, at Garnet, Mont., under OME-6410, Contract 2207)

American Mining Company

400 - Securities Bldg.

Seattle, Washington 98101

(Bill for outside consultant's work and expenses, under categories 2 and 3 of contract, comprising the logging of 673' of core, in holes E and J)

For logging core and studying the geology, as revealed, sampling etc. in hole J from 20' to 355'; and in Hole E, from 10' to 350'

2½ days work, at $50.00/per day---$112.50

Per diem expenses for outside consultant:
2½ days, at $15.00/day ———— 33.75
Total $146.25 $146.25

14.25 charged

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET

MINNEA[illegible]NNESOTA [illegible]

8/15/66

American Mining Company
[illegible] Securities Building
Seattle 1, Washington

TERMS: PAYMENT DUE ON OR BEFORE

Invoice No. 8603 — ~~September 5, 1966~~

Exploratory drilling carried out during August [illegible] in the vicinity of Drummond, Montana as per the terms of our agreement dated June 1, 1966.

Hole No.		From	To	Footage	Rate	Amount
[illegible]	AQ-L DIAMOND DRILLING	10	350	340	@ 5.75	1,955.00
[illegible]	[illegible] REDUCED DRILLING	0	20	20	@ 5.50	110.00
[illegible]	AQ-L DIAMOND DRILLING	20	[illegible]	[illegible]	@ 5.75	1,914.75
				693		3,979.75

Supplies Used.

13 Core Boxes	@ 1.00	13.00
		3,992.75

STATEMENT

PHILIPSBURG, MONTANA September 1, 1966 19

M ~~American Mining Company~~

Seattle, Washington

IN ACCOUNT WITH

MONTANA LABORATORY CO.

W. L. DEGENHART

CHEMIST · ASSAYER

ASSAYING AND ANALYTICAL WORK — ORE TESTING AND SAMPLING

Assaying for August, 1966

Garnet Operation

Aug. 3	2 samples: Gold at $1.50 ea (Samples 129-130)	3.00
29	18 samples: Gold at $1.50 ea (Samples 131-147 plus Sludge 136)	27.00
	Total	$30.00

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, August 3, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#129			Trace								
130			.020								

MONTANA LABORATORY COMPANY

By W. L. Degenhart

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, August 29, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#131			.020								
132			.018								
133			.010								
134			.170								
135			.030								
136 Core			.220								

MONTANA LABORATORY COMPANY

By W. L. Dupuchant

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, August 29, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent Ha[illegible]	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#136 Sludge			.035								
137			.080								
138			.100								
139			.105								
140			.030								
141 Sludge			.120								

MONTANA LABORATORY COMPANY

By W. L. Heymann

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, August 29, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#142			.020								
143			.025								
144			.065								
145			.150								
146			.100								
147 Sludge			.010								

MONTANA LABORATORY COMPANY

By W. L. Degenhart

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 14, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 16 1966

Mr. Douglas A. Robinson
President
American Mining Company
400 Securities Building
1904 - 3d Avenue
Seattle, Washington 98101

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

There are enclosed the original and three copies of a proposed Termination Agreement to the referenced contract, signed by the Chief, Office of Minerals Exploration, U. S. Geological Survey, for the Government.

If the proposed agreement is satisfactory, please sign all four copies, retain the Operator's copy for your records, and return the original and two remaining copies to this office.

If the agreement is not satisfactory to you, please return all copies to this office unsigned with your statement of proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

MLSmelser/mls

cc: OME
MacLaren

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/1/66	Kirkemo	
"	Johnson	
11/1/66	Kildsgaard	
11/2	Meyer	

NOV 3 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: GME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed are the original and three copies of a proposed Termination Agreement signed for the Government. Also enclosed is an extra copy for field use.

If the proposed agreement is satisfactory to you and the Operator, all four copies should be signed by an authorized representative of the Operator. Thereafter, please distribute the copies in the usual manner.

If the proposed agreement does not have your approval or that of the Operator, the original and all copies are to be returned to this office together with the proposed changes for consideration.

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Reading File
130

MMerrithew/mm (10/31/66)

23263

~~120~~

~~110~~ 151

DRAFT 10/26/66
HKirkemo/gla

120M

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, hereinafter called the "Contract," that:

1. Effective August 31, 1966, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs incurred prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing to the Government three copies of a final report (in addition to the final monthly report) which shall include a geological and engineering evaluation of the results of the work performed under the Contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the related costs thereof.

4. All rights of the Government respecting certification of possible production, percentage royalty and liens to secure the payment thereof, reports (including preservation of the Operator's

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Assoc. Sol., MR, Rm. 6554~~ Through Room 6042		
2. Mr. Kirkemo, Rm. 4459		
3.		
4.		
5.		
FROM: Chief, OME		

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

FROM SOLICITOR

FROM SOLICITOR

FOR SIGNATURE

FOR SIGNATURE

SOLICITOR

B-65-2050.11

OCT 27 1966

RECEIVED

OCT 27 1966

INTERIOR DEPT.

Division of Mineral Resources

General Legal Services

INT.-DUP. SEC., WASH., D.C.

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records), accounts, audits, and the right to recover any overpayment are hereby preserved.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract except as otherwise provided in this termination agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By_____

Title_____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
October 21, 1966

OFFICIAL
COPY
O. M. E.
RECEIVED
OCT 24 1966
INITIALS | CODE
gla | 120 M
| 110
RWD | 120 S

AIRMAIL

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Our Work Authorization of August 10, 1966, addressed to Joe G. Irving, the Operator's Consulting Geologist, summarized the generally discouraging results obtained from Stage I drill holes a, b, c, f, i, and 2, and authorized the drilling of Stage II, hole 1. Since then, Stage I holes g and j, drilled from sites and to specifications modified by a Work Authorization dated July 14, 1966, hole e, and Stage II, hole 1, have been completed with equally discouraging results.

Hole e.--Hole e was started in Meagher beds, crossing the Meagher-Woolsey contact at 97 feet and continued for 253 feet into the Woolsey. No mineralization of sufficient significance to warrant sampling was encountered.

Hole g.--This hole apparently started in or a few feet above the Nancy Hanks-Cascade fault zone which, by projection, was not expected until a depth of 40-50 feet. There was no evidence that the Nancy Hanks vein, expected to be cut at about 100 feet, was present. Two samples of weakly pyritized zones were taken, the better one assaying only 0.018 ounce gold per ton over a width of a foot; the other, taken over a width of 6 feet assayed 0.01 ounce gold per ton.

Hole j.--Started in Pilgrim limestone; this hole cut the Pilgrim-Park shale contact at about 305 feet and the Park shale-Meagher limestone contact at about 420 feet, and bottomed in the limestone at 450 feet. Although showing streaks or irregular zones containing garnet and epidote, the Pilgrim limestone contained essentially no pyrite or other sulfides, even near or at contacts of granodiorite sills. The Park shale contained some barren quartz at 350 feet, an inch or so of manganese-stained jasperoidal material at 292 feet, and a 2-inch shale bed with two small seams of quartz and iron oxide at 417 feet. A sample of the quartz seams assayed 0.02 ounce gold per ton.

Hole 1.--This hole was drilled to a depth of 350 feet in granodiorite. Between 160-163.5 feet three samples were taken from a zone of quartz and iron-oxide stringers. Respectively, they assayed 0.17 ounce gold per ton over a width of 12 inches, 0.22 ounce over a width of 1.5 inches, and 0.03 ounce over 12 inches; the average grade for the full 25.5 inches is 0.107 ounce gold per ton. Two samples, taken of similar vein material between 289.25-293.5 feet, assayed, respectively, 0.15 ounce gold per ton over a width of 1.75 feet and 0.10 ounce over a width of 2.5 feet; the average grade for the full 4.25 feet is 0.121 ounce gold per ton. Seven mineralized zones between the two just mentioned were sampled. They ranged in grade 0.02 ounce gold per ton over a width of 2.5 feet to 0.105 ounce over a width of 5 feet.

Ten holes, two of them drilled at the Operator's expense, have explored the most promising areas of potential ore deposition on these claims and have all been unsuccessful in locating anything of interest. No further drilling will be authorized. The Operator has completed all of Stage I and the only Stage II work authorized. It is recommended that a Termination Agreement be prepared. There will be no recommendation for a Certification of Discovery.

D. R. MacLaren

D. R. MacLaren

Purpose of A. Field Office should request audit after receipt of final report.

Follow usual procedure 10/20/66 MacLaren

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
October 21, 1966

AIRMAIL

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

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D. R. MacLaren

Ona

P. O. Box 1451,

September 14, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 19 1966
INITIALS | CODE
HK | 110

Mr. Don MacLaren,
Office of Minerals Exploration,
U. S. Geological Survey,
South 157 Howard Street,
Spokane, Washington.

Re: OME-6410,
American Min. Co.
Contract 2207.

Dear Don:

As you suggested I will report the last hole drilled, at Garnet, which was hole No. 1, separately as a Stage 11 operation, which means, I assume, making out separate forms Nos 60 and 61.

Could you have your office send me five additional forms 60 and 61, and I will then have enough including copies for me and the Seattle office, to finish the job.

Regards.

Sincerely,

Joe G. Irving

Joe G. Irving

P. S. Mail the forms to the P. O. box shown above.

SEP 15 1966

3
One (2)

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
400 Securities Bldg. TELEPHONE
Seattle, Wash. MAIN 2-[illegible] MA 4-5126

JAMES F. CHARLTON
SECRETARY-TREASURER

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 16 1966
INITIALS CODE
JEO
HK

September 28, 1966

D. R. MacLaren
Field Officer, OME
U.S. Dept. of Interior
Office of Minerals Exploration
So. 157 Howard St.
Spokane, Washington

Dear Mr. MacLaren:

Enclosed are the signed copies of the amendment you submitted to me September 2nd. Both Mr. Irving and I have reviewed this amendment and find it most satisfactory.

Thank you.

Sincerely,

(s) Douglas A. Robinson
Douglas A. Robinson

MME FORM 6 REFERENCE SLIP
REV. 59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, OME	9/14/66	
2. Re: OME-6410 (Gold) American Mining Company		
3. Nancy Hanks, et al., Claims Granite County, Montana		
4. Contract 2207		
5. D. R. MacLaren		
FROM: Fld. Officer, Reg. I		

FOR: Check items for action desired

X Action ____ Reply for signature of ____
____ Approval ____ Investigate ____ Surname
____ Comment ____ Recommendations ____ Signature
____ Conference ____ Rewrite ____ File
____ Instructions ____ Your information

REMARKS:

Transmittal of Gov't. and Budget and Finance copies of Amendment No. 3.

INT.-DUP. SEC., WASH., D.C.

M56300-62

NME FORM 60
SEPT. 1959

RECEIVED
SEP 6 1966
OLE

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OFFICIAL COPY O. M. E. RECEIVED OCT 13 1966

INITIALS | CODE

Docket No. 6410
Contract No. 14-23-090 2207

OPERATOR'S MONTHLY VOUCHER

Period For ~~Month~~ of 7/16--7/31/1966

Contract Amount $ 61,880.00
Gov't. Participation % 50 $ 30,940.00
Mineral(s) Gold

Operator's Name American Mining Company
Address 400 - Securities Bldg., Seattle 1, Washington

COST CATEGORIES	FOR OPERATOR'S USE: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	FOR GOVERNMENT APPROVAL ONLY: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and	$					
(1) Independent Contracts:						
Bulldozing	—	$ 1412.00	$ 1412.00			
Drifting						
Crosscutting						
(Drilling All components including Mob-demob & Incident. Allow.)	3231.90	5283.00	8514.90			
(2) Personal Services:						
Supervision & Technical						
Outside Consultants	112.50	525.00	637.50			
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Cardb'd Core Boxes	49.30	77.35	126.65			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Analytical Work Assays	—	15.00	15.00			
Payroll Taxes						
Employee's Liability Ins.						
Office Expense	25.00	50.00	75.00			
Per Diem-Consultant	33.75	157.50	191.25			
TOTALS	$3,452.45	$7,519.85	$10,972.30			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 9/1/66 *Payee American Mining Co

Per [signature] Title President

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1726.23

Signature [signature] 14X0804
(Authorized Certifying Officer)

Date SEP 14 1966 Vou. No. 2226

(SEE OTHER SIDE)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating an exploration project in accordance with the terms of Contract No. 2207

Signature [illegible] Title Field Officer, Region I Date SEP 7 1966

Approved by OME Executive Officer or Alternate:

Signature [illegible] Title Field Officer, Region I Date SEP 7 1966

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of three parts.

FIRST, the Operator's Monthly Voucher on MME Form 60 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Progress Report on MME Form 61 is a statistical report of the units and cost of of work performed under the contract.

THIRD, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and ~~four~~ three copies of each of the three sections of this report to the OME regional Executive Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, MME FORM 60

After all applicable spaces are filled in, the Operator or his agent must sign the certification in the lower left corner. Categories (2) through (7) apply to "Actual Cost" contracts only.

Under "Fixed Unit Costs" and Category (1) report, (a) the total fixed unit costs of work performed under contract provisions for contribution by the Government on a basis of "fixed unit costs"; and (b) the claimed costs of work performed on a unit-price basis by independent contractors.

Under Category (2) include the claimed costs of all payrolled and invoiced supervisory, technical, and labor personnel, except the costs for services applicable to Categories (5) and (6).

Under Category (3) include the claimed costs of all project materials and supplies other than those used for work under Categories (5) and (6).

Under Category (4) report claimed rentals on equipment belonging to a third party, claimed payments or obligations for payments on the Operator's purchase of equipment, and claimed depreciation for the use of Operator-owned equipment.

Under Categories (5) and (6) include all claimed costs of labor, supervision, technical services, operating materials and supplies, and all other items used in (5) the initial rehabilitation and repairs of existing buildings, fixtures, installations (exclusive of mine workings), and operating equipment; and (6) the installation or construction of new buildings, fixtures, and fixed improvements (exclusive of mine workings). Do not report these costs under Categories (2), (3), (4), and (7).

Under Category (7) include all miscellaneous claimed costs such as repairs (other than initial) and maintenance of equipment, sampling and analysis, travel, communication, accounting, office expenses, and the Operator's share of payroll taxes and insurance.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, itemized deductions, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as depreciation of Operator-owned equipment, unemployment taxes, and employee's liability insurance. The certification may be stated thus, "Certified True Copy (or Transcript)", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Executive Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

RECEIVED 1966 SEP 7 PM 12 OPERATIONS SURVEY

E 71890

MME FORM 61
SEPT. 1959

RECEIVED
SEP 6 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S PROGRESS REPORT — For Period of 7/16-7/31/1966 — Docket No. 6410

Operator's Name American Mining Company — Contract No. 14-23-090-2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
Drifting							
Crosscutting							
Raising							
Shafts							
~~xxxx~~ Drill Mobil.							
~~xxxxxxxxxxxx~~ & Demob.	job	—	½	$ 150.00	—	½	150.00
Drilling, Core-Diamond	ft.	590	1510	8027.50	590	1510	8,027.50
Overburden ~~Rotary~~	ft.	20	50	275.00	20	50	275.00
Drilling, Non-core-Diamond							
Inciden. Allow ~~Rotary~~	ft.	610	1560	62.40	610	1560	62.40
Churn							
Percussion							
Office ~~Miscellaneous~~ expense	mo.	½	1½	75.00	½	1½	75.00
Dozer Mob & Demob	job	—	1	182.00	—	1	182.00
Roads and Trails	hrs.	—	10	200.00	—	10	200.00
~~xxxxxx~~ Drill sites ~~Stripping~~	hrs.	—	6½	130.00	—	6½	130.00
Trenching	hrs.		45	900.00	—	45	900.00
~~xxxxxxx~~ Consultant ~~Test Mining~~	days	2¼	12-3/4	637.50	2¼	12¾	637.50
~~xxxxxxxxxx~~ Per Diem ~~Other Surface Work~~	days	2¼	12-3/4	191.25	2¼	12¾	191.25
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
Operating Equipment Purchases 149 (tot) core boxes				126.65			126.65
Analytical Work Gold assays*-(Tot. of 10)				15.00			— 10
TOTAL TO DATE (per MME Form 60)				$ 10,972.30			$ 10,957.30

REMARKS
*Two additional assays were taken, but no bill yet, will report next mo.

(Continue on back)

REMARKS
11 10 samples assayed for gold only. Will be reinstated after pending Amendment No 3 is executed by operator

(Continue on back)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 9/1/66 Operator American Mining Co

Per Douglas A. Johnson Title President

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature D D Jackson

Title Field Officer, Region 1
Government Representative

Date SEP 7 1966

(INSTRUCTIONS ON REVERSE)

INSTRUCTIONS FOR PREPARING OPERATOR'S PROGRESS REPORT, MME FORM 61

This report is the second of the three ~~parts~~ of the Operator's Monthly Report. Submit the original and ~~four~~ three copies.

The cost for each operation should be the total of all claimed costs attributable to that type of work with two exceptions, namely—operating equipment purchased and analytical work which are stated separately. For example, drifting costs should be the total of all costs chargeable to drifting including supervision, technical services, timbering (if any), etc. Similarly, drilling costs should include the cost of cementing, reaming, core boxes, etc. This procedure of distribution holds whether the contract was written on an actual cost or a unit cost basis, or some combination of the two. Distribute the cost of such general items as supervision, equipment rented, etc. according to relative footages or on some other conventional basis. The item "Initial Rehabilitation and Repairs" covers all rehabilitation and/or repairs other than the rehabilitation of mine workings.

The item titled "Drilling, Non-core Percussion" includes all drilling performed with wagon, jack-hammer, stoper and mounted drills. The several items labelled "Other" are provided to take care of particular exploration operations not specified on this form.

TELEPHONE OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2957 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

(For work done, at Garnet, Montana, under OMB-6410; Contract 2207)

DATE August 15, 1966

American Mining Company,
400 - Securities Bldg.
Seattle 1, Washington

(Bill for Outside Consultant's work and services, under categories 2 & 3 of the contract--comprising logging 590' of core, holes f, a, b;

For logging core, and examining geology revealed, sampling etc, in hole f, from 290' to 590', and in the 500' comprising holes a and b. 2½ days at $50.00 per day---$112.50		
For diem expenses for the outside consultant--- 2½ days, at $25.00 per day	$62.75	
Total	$175.25	$175.25

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET
MINNEAPOLIS, MINNESOTA 55402

July 30, 1966

American Mining Company
400 Securities Building
Seattle 1, Washington

TERMS: PAYMENT DUE ON OR BEFORE
August 30, 1966

Invoice No. 76617

FORM 408

Exploratory drilling carried out during July 16-30 in the vicinity of Drummond, Montana as per the terms of our Agreement dated June 1, 1966.

Hole No.		From	To	Footage	Rate	Amount
F	AQNL DIAMOND DRILLING	250	350	100	@ 5.75	575.00
A	OVERBURDEN DRILLING	0	10	10	@ 5.50	55.00
A	AQNL DIAMOND DRILLING	10	250	240	@ 5.75	1,380.00
B	OVERBURDEN DRILLING	0	10	10	@ 5.50	55.00
B	AQNL DIAMOND DRILLING	10	250	240	@ 5.75	1,380.00
E	NQNL DIAMOND DRILLING	0	10	10	@ 5.75	57.50
				610		3,502.50

Standby Time

A	July 25	4 Hours		
F	July 18	4½ Hours (Re-entry time)		
		8½ Hours	@ 12.00	102.00

Supplies Used

1 - 100# Drill Mud	@ 4.50	4.50	
58 - Core Boxes	@ 1.00	58.00	62.50
			3,667.00

American Mining Company
400 - Securities Bldg.
Seattle 1, Washington

OMB- 6410-------Gold
Nancy Hanks et al Claims
Granite County, Montana
Contract 2207

NARRATIVE REPORT

(This narrative report covers the core drilling done by E. J. Longyear Company, at Garnet, Montana, during the period July 16-30, 1966. The footages drilled through overburden, from the bottom of the overburden, to the bottom of the hole, together with the amounts of each for all holes drilled during the period covered, along with the size of bit used, are shown on the driller's invoices attached.)

GENERAL

A total of 610' of hole was drilled during the period, as shown on the Longyear invoice. It consisted of the balance of 100' in hole F, to its bottom (the geology of this hole to its final depth was covered, along with sketches, in the previous report) and the total distances required by holes A and B. Also, included was the start of hole E, which will be covered in the following report.

The logs of the holes and the detailed geology exposed are shown on the accompanying sketches, as well as the locations of the holes, as modified, and other details pertaining to their specifications.

If the sketches of the holes, showing the geology as actually encountered, are compared with the geology as projected on the original cross sections submitted with the application, it will be seen that:

1. Hole A did not reach the Missoula-Woolsey contact, which owing to probable faulting, or possibly other structural reasons, is probably fifty feet or so lower. However, the hole revealed no significant mineralization—even near the small granodiorite sill—and it is not thought that much was missed by the hole being bottomed a little ahead of its objective—particularly when the negative results of all the other, and the nearby holes (hole B in particular) are considered.

2. Hole B did cut the Missoula-Woolsey contact, about 70' lower than it was shown on the original cross section. No significant mineralization was encountered in this hole either—at the Missoula contact , or at the several structural features and contacts above.

BRIEF DETAIL ON THE HOLES

Hole A The objective of this hole, as modified by the trenching results was The Missoula-Woolsey contact and some penetration of the Missoula formation. As mentioned above, the contact was not reached (it was, however, in nearby hole B) but no mineralization of interest was met either. The first 197 feet of the hole revealed only meta shaly limestones, shales, hornstones, and occasional beds of relatively pure limestone characteristic of the Woolsey formation. All of these facies were highly altered, in the form of silication of the garnet-epidote type. At ~~[illegible]~~ 197' a small sill of granodiorite was

met, and a small amount of lenaly disseminated pyrite, and a few tiny seams, were noted just above the intrusive. A sample (No. 129, at 179-179.8') was taken of the strongest "mineralization", and only a trace in gold was found. Below the little sill, silicated crystalline limes, shaly limestone --all showing wavy, irregular bands of garnet and epidote was seen to the bottom of the hole, at 250'. No further pyrite was noted.

Hole B The objective of this hole, as modified by the trenching results was --"the Missoula-Woolsey contact, and well into the Missoula". The hole did reveal the Missoula contact, but the contact showed a relatively thick granodiorite sill above the Missoula quartzite instead of the meta shaly limestones of the Woolsey. As a matter of fact three granodiorite sills were exposed in the hole and it is apparent thatthe intrusives occupy a section that was originally Woolsey which has been replaced, or forced upward by the intrusions. Outside of a little sparsely disseminated pyrite (assayed only 0.02 oz gold) that was noticed just above a small bed of included shale and shaly limestone, engulfed by the granodiortie, the hole showed no mineralization of any importance. The contacts of the several granodiorite sills, and the adjacent sedimentary rocks, were not sharp, but were of the "frozen" type, accompanied by no selvage or clay. The igneous rocks were of variable texture--usually fine grained at the contacts--and showed some sericite and chlorite alteration, in places. Inother places the rock was quite fresh and unaltered. Some spilitic facies were seen.

Both holes (A and B) were designed to cut the anticline at or near its crest, and no mineralization of any real importance or interest was seen in this area which is normally considered a most favorable place for hoping to encounter ore.

Joe G. Irving
August 30, 1966

RECEIVED
SEP 6 1966
OMB

OFFICIAL
COPY
O. M. E.
RECEIVED
SEP 8 1966
INITIALS | CODE
~~120~~ M
110
HK ~~220~~ K

GEOLOGICAL SURVEY
Co. 157 Howard Street
Spokane, Washington 99204
September 6, 1966

American Mining Company
400 - Securities Building
1904 - 3d Avenue
Seattle, Washington

Re: OME-6410 (Gold)
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Gentlemen:

Enclosed are the original and three copies of a proposed Amendment No. 3 (2 pages) to the subject contract, signed for the Government by the Chief, Office of Minerals Exploration.

If the proposed amendment is satisfactory to you, please sign all four copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

cc: Mr. Joe G. Irving
Mining Geologist
Butte, Montana

OME
MacLaren
Voucher File

Director's Reading File

MLSmelser/mls

MME FORM 60
SEPT. 1959

RECEIVED
AUG 15 1966
OME

RECEIVED
SEP 8 1966

INITIALS CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Docket No. 6410
Contract No. 14-23-090 2207

OPERATOR'S MONTHLY VOUCHER

For Period
For Month of 6/15/66 - 7/15/66

Note: Excludes trenching, which was previously reported separately

Contract Amount $ ~~61,880.00~~
Gov't. Participation % 50 $ ~~30,940.00~~
Mineral(s) gold

Operator's Name American Mining Company
Address 400 Securities Bldg., Seattle 1, Washington.

COST CATEGORIES	FOR OPERATOR'S USE: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	FOR GOVERNMENT APPROVAL ONLY: MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and						
(1) Independent Contracts:						
Bulldozing X		$ 1412.00	$ 1412.00			
Drifting						
Crosscutting						
Drilling Overburden	$ 165.00	—	165.00			
" From " to 500'	3780.00	—	3780.00			
" Over 500'	1150.00	—	1150.00			
(2) Personal Services:						
Supervision & Technical X	162.50	362.50	525.00			
Outside Consultants						
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Cardbd. Core Boxes	77.35	—	77.35			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
gold Analytical Work assays	12.00	3.00	15.00			
Payroll Taxes						
Employee's Liability Ins.						
Per Diem-Outside Consult.	48.75	108.75	157.50			
Fixed (Office Expense	50.00	—	50.00			
Unit (Incid. Allow -0.04/'	38.00	—	38.00			
Costs(						
TOTALS	$ 5633.60	$1886.25	$ 7519.85			
	5993.60		7864.75			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 8/10/66 *Payee American Mining Co

Per Wm. A. Robinson Title President

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 7810.20

Signature 14X0804
(Authorized Certifying Officer)

Date SEP 8 1966 Vou. No. 2074

(SEE OTHER SIDE)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating an exploration project in accordance with the terms of Contract No. 2207

Signature [illegible] Title Field Officer, Region I Date AUG 19 1966

Approved by OME Executive Officer or Alternate:

Signature [illegible] Title Field Officer, Region I Date AUG 19 1966

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of three parts.

FIRST, the Operator's Monthly Voucher on MME Form 60 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Progress Report on MME Form 61 is a statistical report of the units and cost of of work performed under the contract.

THIRD, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and ~~four~~ three copies of each of the three sections of this report to the OME regional Executive Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, MME FORM 60

After all applicable spaces are filled in, the Operator or his agent must sign the certification in the lower left corner. Categories (2) through (7) apply to "Actual Cost" contracts only.

Under "Fixed Unit Costs" and Category (1) report, (a) the total fixed unit costs of work performed under contract provisions for contribution by the Government on a basis of "fixed unit costs"; and (b) the claimed costs of work performed on a unit-price basis by independent contractors.

Under Category (2) include the claimed costs of all payrolled and invoiced supervisory, technical, and labor personnel, except the costs for services applicable to Categories (5) and (6).

Under Category (3) include the claimed costs of all project materials and supplies other than those used for work under Categories (5) and (6).

Under Category (4) report claimed rentals on equipment belonging to a third party, claimed payments or obligations for payments on the Operator's purchase of equipment, and claimed depreciation for the use of Operator-owned equipment.

Under Categories (5) and (6) include all claimed costs of labor, supervision, technical services, operating materials and supplies, and all other items used in (5) the initial rehabilitation and repairs of existing buildings, fixtures, installations (exclusive of mine workings), and operating equipment; and (6) the installation or construction of new buildings, fixtures, and fixed improvements (exclusive of mine workings). Do not report these costs under Categories (2), (3), (4), and (7).

Under Category (7) include all miscellaneous claimed costs such as repairs (other than initial) and maintenance of equipment, sampling and analysis, travel, communication, accounting, office expenses, and the Operator's share of payroll taxes and insurance.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, itemized deductions, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as depreciation of Operator-owned equipment, unemployment taxes, and employee's liability insurance. The certification may be stated thus, "Certified True Copy (or Transcript)", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Executive Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

MME FORM 61
SEPT. 1959

RECEIVED
AUG 15 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S PROGRESS REPORT

For ~~Month~~ Perood of 6/15/66--7/15/66 (Does not cover the trenching (which was reported previously)

Docket No. 6410

Operator's Name American Mining Co.

Contract No. 14-23-090-2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
OPERATING SUPPLIES		-	-	-			
~~Bits~~ Cement							
~~Casing~~ Core Boxes		91	91	$ 77.35	91	91	77.35
Raising							
Shafts							
Winzes							
Other Underground							
1/ Drilling, Core-Diamond 3/		30'	30'	165.00	30	30	165.00
In holes ~~Rotary~~ 4/		720'	720'	3780.00	720	720	3,780.00
f & i 2/		200'	200'	1150.00	200	200	1,150.00
Drilling, ~~Rotary Diamond~~ 5/							
Mobilization — Rotary		1 move	1 move in	150.00	1/2	1/2	150.00
Churn							
Percussion							
Miscellaneous Outside							11
consultant, log. core		3½	10½	682.50	3¼	10½	682.50
Roads and Trails Access Rd	)	—	2885'	) Lumped in con	1 12	1 12	182.00
~~Supply~~ Drill hole sites	)	—	7	) tract—Total	61½ 13	61½ 13	1230.00
Trenching	)		2280'	) is $1412.00			
* Office Exp. and Incid		1 mo	same	88.00	* 1 mo	1 mo 14	50.00
* ~~Fixed~~ Allowance		* 950'			950	950 12	38.00
* ~~Assays~~ Au. Assays		8	10	15.00			— 14
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
Operating Equipment Purchases							
Analytical Work							
TOTAL TO DATE (per MME Form 60)				$7519.85			7,504.85

REMARKS * Suppose you would want these items in (one mo. office exp. @ $50.00/mo, and 950' of drilling @ $0.04/ft (fixed unit costs) to make total check with that of Form 60 Please advise if these totals do not have to so check?

1/ The core drilling, done by Longyear was of BXBW, or AQWL core size, both 1 and 1/16" or more.

2/ The drilling being reported here is 250' in hole f, and 700' in hole i; hole f is being re-entered and will go to 350'

(Continue on back) (see over)

REMARKS 11 includes consultant's time and his per diem - Total $65/day

12 Mobilization and demobilization of dozer as invoiced but not approved in May-June MME-61

13 Correcting 60 hrs approved in May-June MME 61. 61½ hrs invoiced is now approved as proper

(Continue on back) (over)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 8/10/66 Operator American Mining Co

Per Douglas A. Lehman Title President

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature [illegible]

Title Field Officer, Region II
Government Representative

Date AUG 19 1966

(INSTRUCTIONS ON REVERSE)

REMARKS (Cont.)

3/ In overburden @ $5.50/ft

4/ Drilling from bottom of overburden to 500' @ $5.25/ft

5/ Drilling below 500' @ $5.75/ ft/

REMARKS (Cont.)

14 Office expense;

15 Incidental drilling allowance

16 10 samples assayed for gold only not approved. Will be reinstated when pending Amend. is executed

INSTRUCTIONS FOR PREPARING OPERATOR'S PROGRESS REPORT, MME FORM 61

This report is the second of the three parts of the Operator's Monthly Report. Submit the original and ~~four~~ three copies.

The cost for each operation should be the total of all claimed costs attributable to that type of work with two exceptions, namely—operating equipment purchased and analytical work which are stated separately. For example, drifting costs should be the total of all costs chargeable to drifting including supervision, technical services, timbering (if any), etc. Similarly, drilling costs should include the cost of cementing, reaming, core boxes, etc. This procedure of distribution holds whether the contract was written on an actual cost or a unit cost basis, or some combination of the two. Distribute the cost of such general items as supervision, equipment rented, etc. according to relative footages or on some other conventional basis. The item "Initial Rehabilitation and Repairs" covers all rehabilitation and/or repairs other than the rehabilitation of mine workings.

The item titled "Drilling, Non-core Percussion" includes all drilling performed with wagon, jack-hammer, stoper and mounted drills. The several items labelled "Other" are provided to take care of particular exploration operations not specified on this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
U. S. Geological Survey
Branch of Budget and Finance
Washington, D. C. 20242

ADMINISTRATIVE SUSPENSION STATEMENT

Name and Address of Payee: American Mining Company
400 Securities Bldg.
Seattle 1, Wash.

Amount Claimed:	Differences (Explained Below)	Amount Approved
$5,633.60	$12.00	$5,621.60 $2,810.80 Govt. Share
Bu. Voucher No.	**Payee's Invoice No.**	**Period**
	OME # 6410 Contract # 2207	6/15/66 - 7/15/66

EXPLANATION

Gold assays not covered by contract $12.00

Any reclaim for items deducted must be supported by the original of this statement and submitted to the office shown above.

E. Gibson
Branch of Budget and Finance

TELEPHONE OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2067 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

(For work done, at Garnet, Montana, under OMI-6410; contract 2207)

DATE August 4, 1966 196

American Mining Company,
400 - Securities Bldg.
Seattle 1, Washington

(Bill for Outside Consultant's services, under Categories 2 & 3, of the contract—comprising the logging of about 979' core

Dates	
Logging of core started 6/24, and was continued on intermittently from that time through 7/15 for the core examined	For logging core and examining the geology revealed etc. of Hole 1 to depth of 279'; and hole 2 to depth of 700'. ½ days at $50.00 per day— $162.50 Per Diem expenses for the Outside Consultant ½ days at $25.00 per day— 12.75 [illegible] $211.25 [illegible]

STATEMENT

PHILIPSBURG, MONTANA August 1, 1966 19

M American Mining Company

Seattle, Washington

IN ACCOUNT WITH

MONTANA LABORATORY CO.

W. L. DEGENHART

CHEMIST ASSAYER

ASSAYING AND ANALYTICAL WORK — ORE TESTING AND SAMPLING

Assaying for July, 1966

[illegible]

[illegible] 10.50

[illegible] 1 [illegible] at $1.50 ea (Sample 12) Gamut and [illegible] 1.50

Total $12.00

+7% Bill $ .00 Personal Submitted

Total 15.00

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET
MINNEAPOLIS, MINNESOTA 55402

July 15, 1966

American Mining Company
400 Securities Building
Seattle 1, Washington

TERMS: PAYMENT DUE ON OR BEFORE

Invoice No. 76603 — August 4, 1966

FORM 400

Drilling carried out during July 1 thru 15, 1966 as per our Agreement dated June 1, 1966.

Hole No.		From	To	Footage	Rate	Amount
I	AXWL DIAMOND DRILLING	106	500	394	@ 5.75	2,265.50
I	AXWL DIAMOND DRILLING	500	700	200	@ 6.25	1,250.00
				594		3,515.50
	Standby Time					
F	Re-Entry 3 Hours				@ 12.00	36.00
	Supplies Used					
68	AI Core Barrel 10'				@ 1.00	68.00
						$3,619.50

INVOICE

E. J. LONGYEAR COMPANY

Diamond Core Drilling

Foundation Testing and Grouting Contractors

76 SOUTH 8TH STREET
MINNEAPOLIS, MINNESOTA 55402

June 30, 1966

American Mining Company
400 Securities Building
Seattle 1, Washington

TERMS: PAYMENT DUE ON OR BEFORE

Invoice No. 66658 — August 4, 1966

FORM 408

Exploratory drilling carried out during the month of June, 1966 in the vicinity of Drummond, Montana as per the terms of our Agreement dated June 1, 1966.

Hole No.		From	To	Footage	Rate	Amount
F	OVERBURDEN DRILLING	0	20	20	@ 5.50	110.00
F	NXW DIAMOND DRILLING	20	40	20	@ 5.75	115.00
F	AQWL DIAMOND DRILLING	40	250	210	@ 5.[illegible]	1,207.50
I	OVERBURDEN DRILLING	0	10	10	@ 5.50	55.00
I	NXW DIAMOND DRILLING	10	20	10	@ 5.75	57.50
I	NXW DIAMOND DRILLING	20	29	9	@ 5.75	51.75
I	AQWL DIAMOND DRILLING	29	106	77	@ 5.75	442.75
				356		2,[illegible]
	Mobilization					250.00
	Sampling Sand					
23	Core Boxes				@ 1.00	23.00
3	Sack [illegible]				@ 4.50	13.50
						2,[illegible]

American Mining Company
[illegible] - Securities Building,
Seattle 1, Washington

OME - 6410 -----(Gold)
Nancy Hanks et al Claims,
Granite Co,, Montana
Contract 2207

NARRATIVE REPORT

(This report covers the core drilling, which started June 19, 1966, from the day it started through July 15, 1966. It doesnot include the trenching, some of which was going on during the same period, but allof which was reported upon in the last report recently submitted)

GENERAL

The drilling was done by the E. J. Longyear Company (see invoices), and the holes were drilled either BXBW (near the top) or AQWL, both of which bit sizes produce a core greater than 1 and 1/16" in diameter. Work during the period was confined to two holes (holes "f" and "i"). A total of 950' of hole was drilled, including that put down in overburden. Hole "i" was completed, to a depth, as modified, of 700'; hole "f" was put down only 250', during the period covered by this report, but was later re-entered and drilled to a depth of 350', which isthe required distance of the hole, as modified.

The logs of the holes, andthe detailed geology shown [redacted] ying sketches. If these sketches, showing the geology as actually encountered, are compared with the geology as projected on the several cross sections that were submitted with the original application, it will be noted that the formation contacts (between the Meagher andWoolsey in hole f, and between the Meagher-Woolsey, and Woolsey and Missoula, in hole "i") were met very close to where they had been projected. And, these projections were based on the mapping of the surface geology only. Maps 10 and 11, which show the cross sections referred to, which were modified slightly since sending the original ones in, will illustrate this point. Enclosed are one copy each of Maps 10 and 11.

Brief Detail on Holes

Hole "f" The objective of this hole, as modified by the trenching results, was to cut the Meagher-Woolsey contact and go well into the Woolsey; the purpose being to disclose any bedded ore, or mineralization that might occur at these favorable contacts. As the accompanying sketch will show, the Meagher was exposed to a depth of 148' and this was followed by about 60' of "granodiorite" (probably a sill) that separates the overlying Meagher from the Woolsey which was encountered just below the intrusive. The hole remained in the Woolsey--which was the typical series of alternating shales, calcareous shales and shaly limestone (some fairly pure limestone also) all more or less altered (silicated--garnet, epidote etc) --to the bottom, at 350'. Aswill be seen, two more granodiorite sills were exposed, in the Woolsey. If the notes on mineralization and assays are referred to, it will be noted that no mineralization of significance (only disseminated and scatterred pyrite) was met.

Hole"i" The objective of this hole, as modified by the trenching, was to expose the Meagher-Woolsey contact, and also the Woolsey-Missoula contact and to go well into the Missoula. As shown on the sketch, the Meagher-Woolsey contact was met at about 111', and the Woolsey-Missoula contact cut at about 408'. The hole continues on down in the Missoula for almost 300' more. Five granodiorite bodies (undoubtedly sills) were encountered as shown--the thickest one seems to have been intruded between the Woolsey and Missoula formations.

It has been noted that the contacts between formations, particularly between limestone and shale, are often where the granodiorite bodies are seen. There is not much doubt that the intrusion is sill-like. If the notes and log accompanying hole "i" are studied, it will be noted that the contacts of the granodiorite are reported as being tight and "frozen", and often display a "dip" that is more or less the same asthe dip of the enclosing sedimentary rock. There is never any clay, or selvage, at these contacts, and sometimes the contact is not very sharp--but has a gradational appearance. The igneous rock--termed for the purpose of these reports as "granodiorite" is actually a hornblende-feldspar rock of variable texture--ranging from granitic to felsitic. It is often very fine-grained at the contact--perhaps a chilling effect. Under the microscope the rock may well be determined as being a granodiorite. It is a rock without visible quartz, except where it is seen (occasionally) in its aplitic facies.

The sketch and notes on hole "i" will show that pyrite was met at numerous points, and some of the areas showing more than usual pyrite were sampled and assayed. All of the five samples taken of material from this hole showed only a trace in gold. In summation it might be said that the geology was checkedout fairly nicely by the hole, but no ore --and for that matter, no mineralization--of any significance was met. And this hole was put down in the flank of the plunging anticline, only about 600' from the granodiorite stock, and in a sedimentary series that was made up of what is considered in this area very favorable host rock for ore. These comments apply to hole "f" also.

Joe G. Irving
August 9, 1966

RECEIVED
AUG 15 1966

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, July 28, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#128		Trace									

MONTANA LABORATORY COMPANY

By W. T. Dequehant

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, July 19, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#121			Trace								
122			.010								
123			Trace								
124			Trace								
125			Trace								
126			Trace								
127			Trace								

MONTANA LABORATORY COMPANY

By W. L. Desjardins

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
9/1/66	Kirkham	120
"	Johnson	110
9/7	Coe	220
9/7	Meyer	
		170

AIRMAIL

SEP 2 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed are the original and three copies of a proposed Amendment No. 3 (2 pages) to the subject contract, signed for the Government. An extra copy is also enclosed for field use.

If the proposed amendment is satisfactory to you and the Operator, all four copies should be signed by an authorized representative of the Operator and distributed in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator, the original and all copies are to be returned to this office together with the proposed changes for consideration.

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Reading File
130

MMerrithew/mm (9/1/66)

23263

DRAFT
FEJohnson/bih/gla
8-11-66

Docket copy

110

120 HIK

120M

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 3

It is agreed this _____ day of _____, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, is further amended effective the date of the contract as follows:

In Exhibit A:

1. Under the heading General Provisions, the fifth paragraph is revised to read as follows:

"Significantly mineralized core shall be split and one split assayed for gold, silver, lead, or copper, or a combination of these elements as warranted. Whenever the core recovery is found to be less than 60 percent, a split of the corresponding retained sludge and a split of such core as may have been recovered shall be assayed separately and the assay results combined ~~corrding~~ according to standard practice to represent a single sample. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to source and location. The stored core and the sludge samples shall be made available for Government inspection and possible use. With prior Government approval, the

Operator may dispose of the stored core and samples."

2. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

150 assays @ $1.50/assay $225.00

Assays for silver,

150 assays @ $1.50/assay 225.00

3. Under the heading Estimated Costs of the Work, Stage II, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

70 assays @ $1.50/assay $105.00

Assays for silver,

70 assays @ $1.50/assay 105.00

4. Under the heading Estimated Costs of the Work, Stage III, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

100 assays @ $1.50/assay $150.00

Assays for silver,

100 assays @ $1.50/assay 150.00

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the

Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By_____

Title_____

Operator may dispose of the stored core and samples."

2. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold,

150 assays @ $1.50/assay $225.00

Assays for silver,

150 assays @ $1.50/assay 225.00

3. Under the heading Estimated Costs of the Work, Stage II, Actual Costs, Category (7) Miscellaneous, the ~~third~~ second specification is revised to read:

Assays for gold,

70 ~~150~~ assays @ $1.50/assay ~~$225.00~~ 105.00

Assays for silver,

70 ~~150~~ assays @ $1.50/assay ~~225.00~~ 105.00

4. Under the heading Estimated Costs of the Work, Stage III, Actual Costs, Category (7) Miscellaneous, the ~~fourth~~ second specification is revised to read:

Assays for gold,

100 ~~150~~ assays @ $1.50/assay ~~$225.00~~ 150.00

Assays for silver,

100 ~~150~~ assays @ $1.50/assay ~~225.00~~ 150.00

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the

draft
FEJohnson/bih

HK

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

AMENDMENT No. ~~2~~ 3

It is agreed this _____ day of _____, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, is further amended effective the date of the contract as follows:

In Exhibit A:

1. Under the heading General Provisions, the fifth paragraph is revised to read as follows:

"Significantly mineralized ~~ore~~ core shall be split and one split assayed for gold, silver, lead, or copper, or a ~~concentration~~ combination of these elements as warranted. Whenever the core recovery is found to be less than 60 percent, a split of the corresponding retained sludge and a split of such core as may have been recovered shall be assayed separately and the assay results combined according to standard practice to represent a single sample. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to source and location. The stored core and the sludge samples shall be made available for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored core and samples."

2. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (7) Miscellaneous, the second specification is revised to read:

Assays for gold ~~75~~ 150 assays @ $1.50/assay	$225.00
Assays for silver ~~75~~ 150 assays @ $1.50/assay	$225.00

3. Under the heading Estimated Costs of the Work, Stage II, Actual Costs, Category (7) Miscellaneous, the ~~third~~ specification is revised to read:

Assays for gold 150 ~~75~~ assays @ $1.50/assay	$225.00
Assays for silver 150 ~~75~~ assays @ $1.50/assay	$225.00

4. Under the heading "Estimated Costs of the Work, Stage III, Actual Costs, Category (7) Miscellaneous, the fourth specification is revised to read:

Assays for gold 150 ~~75~~ assays @ $1.50/assay	$225.00
Assays for silver 150 ~~75~~ assays @ $1.50/assay	$225.00

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount ~~of~~ which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By _____

Title _____

1 - M & D

file: [illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of the Secretary
Washington

Order No. 2508, Amendment No. 33

Subject: Delegation of authority - Bureau of Indian Affairs

Section 30 of Order No. 2508, as amended (20 F.R. 3834, 5106; 21 F.R. 7027, 7655; 24 F.R. 272), is further amended by addition of a new subparagraph to read as follows:

Sec. 30 Authority under specific acts.

(a) * * *

(10) August 28, 1958 (P.L. 85-801; 72 Stat. 968).

Fred A. Seaton
Secretary of the Interior

January 13, 1960

67529-60

UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
August 30, 1966

OFFICIAL
COPY
O. M. E.
RECEIVED
SEP 1 1966
INITIALS CODE
120 ME
KJ 110
HR 120K

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Interim Inspection Report
OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

The property was visited August 18, 1966. Only Fred Current, Driller, and Jack Newsome, Driller's Helper, were present. Since the last inspection which was made June 24, 1966, holes f, a, b, e, i, and j have been completed; hole g had just been started and was down through 20 feet of overburden.

All core, except for the last 20 feet from hole j, was stored in a locked building. As Joe Irving and his field assistant, the only ones who have a key, were not present, the core could not be seen. The logs of all holes except "j" were prepared by Irving and accompanied the Operator's Narrative Report for the period June 5 - July 5, 1966. According to the driller, the core from hole j was no more encouraging than that from the other holes. A subsequent telephone conversation with Irving confirmed this. A summary appraisal of the results of the drilling of all but hole j is given in a Work Authorization dated August 10, 1966.

Unless the results obtained in holes g and l are much more spectacular than any so far indicated, no further drilling will be authorized.

D R MacLaren
D. R. MacLaren

Distribution:
OME(Orig.&1)
Docket
MacLaren

OMC/21

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
August 22, 1966

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 24 1966
ORIGINAL COPY

Mr. Joe G. Irving
Mining Geologist
American Mining Company
P. O. Box 1451
Butte, Montana 59701

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Joe:

In the two monthly reports previously submitted the MME Form 60, narrative report, drill logs, sketches, etc., have been well prepared. However, the MME Form 61 has been somewhat confusing, not only to us to process but also, judging from the footnotes, for you to prepare. Mostly, the confusion is in the way you have reported the dozer work. To clarify things and relieve you from having to add so many footnotes and remarks I am enclosing a sample copy of the MME Form 61 as it should have been filled out with your last report in order to conform more properly with the cost items specified in the contract and with the invoices.

You will note in Article 6 of the contract that in Category 1, the total of the category and the average unit cost estimated for each type of work to be performed are maximums. Since the $1,412.00 total claimed for dozing (mobilization and demobilization, access roads, trenching, and drill site preparation) is less than the $1,520.00 allowed, the 61½ hours supported by the dozer invoice is believed to be acceptable, at least pending a final audit at the close of the contract. On the MME Form 61 the different operations comprising the dozer costs are entered separately but on the MME Form 60 they are combined, as you have shown them, into a total for bulldozing.

Similarly, on the MME Form 61, drill mobilization and demobilization, which is one unit, is shown as one-half "unit this month." The other half should be added when the drilling is completed and the drill has left the property. All drilling through overburden, all core drilling from the bottom of the overburden, and the incidental allowance for drilling, are shown as seperate items on the MME Form 61, but can be shown as a total drilling cost on MME Form 60. The

footages drilled through overburden, from the bottom of overburden to 500 feet, from 500 to 1,000 feet, as well as the amounts of each for all holes drilled during the period, and the size of bit used should be shown, as they have been, in the driller's invoice. If cementing and redrilling or reaming and casing are to be claimed, they should be entered as separate items on the MME Form 61. On the MME Form 60 all components of drilling should be combined into a total sum for drilling.

An amendment is being prepared to permit OME participation in the cost of assaying for gold only, so continue to include assaying costs as you have in the past.

If you will follow this format in preparing future monthly reports, it will facilitate processing for us and will obviate the need for footnotes for you.

Sorry we missed connections when I visited the property on August 18, but I never really know when I will get on a going project until the day before, and I realize you have other jobs to do also.

Let's hope for better luck next time.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls

cc: OME(2)
Voucher File
MacLaren

Director's Reading File

Mre (2)

AMERICAN MINING COMPANY

[redacted]

[redacted]
100 Securities Bldg
1904 3rd Ave.
Seattle, Wash.
MAin [redacted]
4-5416

[redacted]

OFFICIAL COPY

Augus[illegible]

Mr. Don R. McLaren, Field Officer
Region 1, Office of Minerals Explorat[illegible]
U. S. Geological Survey
South 157 Howard Street
Spokane, Washington

Dear Mr. MacLaren:

Enclosed are four copies of the Operator's [illegible] Voucher under Docket No. 641[illegible].

I was sorry to miss you last month [illegible] your office in Spokane for I was looking forward to meeting you. However, your assistant was very helpful to [illegible]. I will stop again on my next visit to Spokane.

Cordially,

Douglas A. Robinson,
President

Enclosures

MME FORM 60
SEPT. 1959

RECEIVED
JUL 29 1966
OMG

OFFICIAL COPY
RECEIVED
AUG 1 1966
UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

1st copy

Docket No. 6410-OME
Contract No.
14-23-090- 2207
Contract Amount $ 61,880.00
Gov't. Participation % 50 $ 30,940.00
Mineral(s)

OPERATOR'S MONTHLY VOUCHER

(For bulldozing & related Engin. Costs only, Stage I)

For ~~Month~~ Period of 5/16/66 thru 7/9/66

Operator's Name American Mining Company,
Address 400 - Securities Building, Seattle 1, Washington

COST CATEGORIES	FOR OPERATOR'S USE			FOR GOVERNMENT APPROVAL ONLY		
	MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE	MONTHLY TOTAL	PREVIOUSLY REPORTED	TOTALS TO DATE
Fixed Unit Costs and						
(1) Independent Contracts:						
Bulldozing	$ 1,412.00	none	$ 1,412.00			1,412.00
Drifting						
Crosscutting						
Drilling Drilling started 6/19, but will be reported next rpt.						
(2) Personal Services:						
Supervision & Technical						
Outside Consultants 7½ day	$ 362.50	none	$ 362.50			362.50
Labor						
(3) Operating Mat'l. & Supplies:						
Timber						
Explosives						
Pipe						
Rail						
Core boxes to be vouchered next r'pt.						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehab. & Repairs:						
Buildings, Fixtures, etc.						
Operating Equipment						
(6) New Buildings, Fixtures, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Analytical Work Assays	$ 3.00	none	$ 3.00			
Payroll Taxes						
Employee's Liability Ins.						
Per diem (7½ da.) for outside consult. @$15/da.	$ 108.75	none	$ 108.75			108.75
Fixed Unit (next R'pt)						
TOTALS	$ 1,886.25	none	$ 1,886.25			1,883.25

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 7/29/66 *Payee American Mining Company

Per Douglas A. Robinson Title President

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 941.62

Signature 14X0804
(Authorized Certifying Officer)

Date AUG 18 1966 Vou. No. 1485

(SEE OTHER SIDE)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating an exploration project in accordance with the terms of Contract No. 2207

Signature [illegible] Title Field Officer, Region I Date AUG 1 1966

Approved by OME Executive Officer or Alternate:

Signature [illegible] Title Field Officer, Region I Date AUG 1 1966

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of three parts.

FIRST, the Operator's Monthly Voucher on MME Form 60 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Progress Report on MME Form 61 is a statistical report of the units and cost of of work performed under the contract.

THIRD, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and ~~four~~ three copies of each of the three sections of this report to the OME regional Executive Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, MME FORM 60

After all applicable spaces are filled in, the Operator or his agent must sign the certification in the lower left corner. Categories (2) through (7) apply to "Actual Cost" contracts only.

Under "Fixed Unit Costs" and Category (1) report, (a) the total fixed unit costs of work performed under contract provisions for contribution by the Government on a basis of "fixed unit costs"; and (b) the claimed costs of work performed on a unit-price basis by independent contractors.

Under Category (2) include the claimed costs of all payrolled and invoiced supervisory, technical, and labor personnel, except the costs for services applicable to Categories (5) and (6).

Under Category (3) include the claimed costs of all project materials and supplies other than those used for work under Categories (5) and (6).

Under Category (4) report claimed rentals on equipment belonging to a third party, claimed payments or obligations for payments on the Operator's purchase of equipment, and claimed depreciation for the use of Operator-owned equipment.

Under Categories (5) and (6) include all claimed costs of labor, supervision, technical services, operating materials and supplies, and all other items used in (5) the initial rehabilitation and repairs of existing buildings, fixtures, installations (exclusive of mine workings), and operating equipment; and (6) the installation or construction of new buildings, fixtures, and fixed improvements (exclusive of mine workings). Do not report these costs under Categories (2), (3), (4), and (7).

Under Category (7) include all miscellaneous claimed costs such as repairs (other than initial) and maintenance of equipment, sampling and analysis, travel, communication, accounting, office expenses, and the Operator's share of payroll taxes and insurance.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, itemized deductions, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as depreciation of Operator-owned equipment, unemployment taxes, and employee's liability insurance. The certification may be stated thus, "Certified True Copy (or Transcript)", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Executive Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

U 49156

MME FORM 61
SEPT. 1959

RECEIVED
JUL 29 1966

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OPERATOR'S PROGRESS REPORT (For Bulldozing & Related Eng. Costs only) For ~~Month~~ of Period 5/16/66 thru 7/9/66 Docket No. OME 6410-Gold

Operator's Name AMERICAN MINING COMPANY Contract No. 14-23-090-2207

OPERATION	UNITS	FOR OPERATOR'S USE: UNITS THIS MONTH	UNITS TO DATE	COSTS TO DATE	FOR GOVERNMENT USE: APPROVED UNITS THIS MONTH	APPROVED UNITS TO DATE	APPROVED COSTS TO DATE
Drifting							
Crosscutting							
Raising							
Shafts							
Winzes							
Other Underground							
Drilling, Core-Diamond							
Rotary							
Drilling, Non-core-Diamond							
Rotary							
Churn							
Percussion							
Miscellaneous Outside Consultant, Stage 1*		7¼	7½ days	$ 471.25	7¼	7¼	362.50 12
Access. Rd		2885'	2885'	(Lumped	7¼	7¼	108.75
Roads and Trails				) together in	8½	8½	1,230.00 13
Stripping Trenching		2280'	2280'	) contract 1/	60hrs	60hrs	1200.00
Trenching Drill hole				) Total is			
Test Pitting sites		7	7	) $ 1412.00 2/			
Other Surface Work Bulldozer mobilization and demobilization				182.00			182.00
Initial Rehabilitation and Repairs							
Rehabilitation of Mine Workings							
New Buildings, Fixtures, etc.							
Operating Equipment Purchases							— 14
Analytical Work Two assays for gold, Trench 1				3.00			
TOTAL TO DATE (per MME Form 60)				$1,886.25			1,671.25 15 $1,883.75

REMARKS

* Work which excludes logging of drill core, which will be accounted for in next report, includes time at $50.00 per day, plus per diem expenses @ $15.00 per day, for outside consultant, in connection with surveying, mapping of access roads, trenches sites etc.

1/ See detailed breakdown of bulldozing time, accompanying Lloyd Hanson's statement.

2/ The above bulldozing work comprises that which is

(Continue on back) (over)

REMARKS

14 Consultants fee @ $50/day
12 " per diem @ $15/day
13 1,000ft access road and 2000ft trenching specified in Cat. 1 are only estimates based on scaling distances from map, and are subject to variation due to topography — total for this item

(Continue on back) (over)

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 7/29/66 Operator American Mining Co

Per Douglas A. Johnson Title President

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U.S. Code, Title 18, Sec. 1001.)

I certify that the information above is complete and accurate to the best of my knowledge and belief.

Signature D. A. Seabaugh

Title Field Officer, Region I
Government Representative

Date AUG 1 1966

(INSTRUCTIONS ON REVERSE)

REMARKS (Cont.)

is specified in Stage 1 of the contract, which allowed a total of 1,000' of access road and 2,000' of trenching, plus the preparation of nine drill hole sites. Holes 2 and 6 (two of the nine allowed) were done last year, prior to the effective date of the contract, and will not be repeated. So, the total cost of $1,412.00 for bulldozing represents all that will be charged against the $1,520.00 ($1200 plus 320) allowed for bulldozing in Stage 1 of the contract.

A TD-24 (Internation Harvester) which is larger than a D-8, was used at a cost of $20.00 per hour to a total of 61½ hours, plus a move in and out cost expressed in dollars, as shown.

Note: Core drilling was actually started on 6/19/66, and this work, plus the outside consultant's time logging cores etc, will be reported in next report, as -- at the time of making up this report, no invoices had been received from the drilling (Longyear) contractor.

REMARKS (Cont.)

[3 Cont,

is approved on the basis of 60 hrs @ $20/hr because TD-18 is a larger machine than a D-8

4) 2 samples assayed for gold only - contract specifies gold and silver. May be reimbursed if assayed for silver or if contract is amended to permit assay for gold only

5) Dozer invoice shows $182 for mobilization and demobilization, but this item is not specifically included. If it can be accepted on this voucher Total to date approved will be $1,853.25 and the total approved for Cat. 1 will be $1,328.00 or $84.00 less than claimed

INSTRUCTIONS FOR PREPARING OPERATOR'S PROGRESS REPORT, MME FORM 61

This report is the second of the three ~~parts of~~ the Operator's Monthly Report. Submit the original and ~~four~~ three copies.

The cost for each operation should be the total of all claimed costs attributable to that type of work with two exceptions, namely—operating equipment purchased and analytical work which are stated separately. For example, drifting costs should be the total of all costs chargeable to drifting including supervision, technical services, timbering (if any), etc. Similarly, drilling costs should include the cost of cementing, reaming, core boxes, etc. This procedure of distribution holds whether the contract was written on an actual cost or a unit cost basis, or some combination of the two. Distribute the cost of such general items as supervision, equipment rented, etc. according to relative footages or on some other conventional basis. The item "Initial Rehabilitation and Repairs" covers all rehabilitation and/or repairs other than the rehabilitation of mine workings.

The item titled "Drilling, Non-core Percussion" includes all drilling performed with wagon, jack-hammer, stoper and mounted drills. The several items labelled "Other" are provided to take care of particular exploration operations not specified on this form.

[illegible]

[illegible]

American Mining Company
400 Securities Bldg.
Seattle 1, Washington

$1,886.25	$3.00	$1,883.25 941.62 Govt. Share
	CMB #6410 Contract # 2207	5/16/66 thru 7/9/66

Assays for Gold not covered by contract $3.00

Any recovery for items deducted [illegible] be supported by the original or [illegible] and submitted to the [illegible] above.

E. Gibson

Bureau of Budget and Finance

TELEPHONE: OFFICE 735-4447
HOME 735-0446
AREA CODE 702

JOE G. IRVING
MINING GEOLOGIST
2957 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102

(For work at Garnet, Montana, under O.M.E.-6410; contract 2207)

DATE July 23, 6, 196__

American Mining Company,
400 - Securities Building,
Seattle 1, Washington

(Bill for services, under categories 2 & 3, Stage 1 of Contract)
(Outside Consultant Services)

5/16/66 - 6/23/66	For surveying in access roads, trench sites and directions, drill hole sites, and some supervision. The work was done intermittently, during the period 5/16/66-6/23/66 4 days @ $50.00 per day--------$200.00	
6/24/66-7/11/66	For geologic mapping of Trenches 1-6, a total of 2280' of trench: 3½ days @ $50.00 per day--------$162.50	
	Total for engin. & geol. wk-- 07½ da. $362.50	$362.50
	Per diem expenes for outside consultant- 7½ days @ $15.00 per day------ $108.75	$108.75
	Total	$471.25

Note: Core drilling was started 6/19/66, and the outside consultant devoted some time to logging cores, during the period covered above, but this time will be covered when drilling invoices are received etc.

STATEMENT

PHILIPSBURG, MONTANA July 18, 1966 19 ___

M American Mining Company

Seattle, Washington

IN ACCOUNT WITH

MONTANA LABORATORY CO.

W. L. DEGENHART

CHEMIST ASSAYER

ASSAYING AND ANALYTICAL WORK ORE TESTING AND SAMPLING

Assaying July 6, 1966 Joe G. Irving

2 Samples: Gold at $1.50 ea Nos 118 & 119	3.00
Total	$3.00

STATEMENT

LLOYD C. HANSON

DIRT MOVING — CAT AND SCRAPER WORK

Phone 549-4981 Route 1, Orchard Homes

Missoula, Montana, 19

M American Mining Company

400- Securities Bldg.

Seattle 1, Washington

Delaneys 7/9-66

Bulldozing at Garnet, Montana	6/20-7/9-66
(1) Tranches 1-6	45 hrs.
(2) Access Roads	
(a) To Tranches	3 hrs.
(b) To Drill Sites	7 hrs.
(3) Clearing 7 Sites	6½ "
Total Hrs.	61½ @ 20.00 hr.
	$1,230.00
Moving on & off job	182.00
Total	$1,412.00

See Detailed Breakdown on,
Following 2 Copies

Detailed Breakdown

Corrections by J.G.I.

Sheet No. 1

American Mining Company
Seattle, Washington
Security Building

Date	Place		Hours
6/22-6/23-6/24	Trench	# 1	~~12½~~ 11½
6/20-6/21-6/22-7/1	"	# 2	10½
6/28-6/29	"	# 3	8
7/1	"	# 4	6
7/8	"	# 5	6
7/8	"	# 6	3
	Total hours on trenches		~~46~~ 45 hrs.
	Access roads to trench		
6/22	Trench	# 1	1½
6/20	"	# 2	1
	"	# 3	no road needed
	"	# 4	no road needed
	"	# 5	½ h, ~~no road needed~~
	"	# 6	no road needed
	Total hrs. on roads to trenches		~~2½~~ 3
	Access road to drill sites		
7/9	Site	# B	1
6/29	"	# E	3
6/22	"	# F	1
7/9	"	# J	½
6/24	"	I	1½
Total hrs. on roads to drill sites			~~6½~~ 7

Detailed Breakdown

Sheet No. 2

Clearing on Drill

6/24	" site	#1	1
6/29	"	#E	2
7/9	"	#J	½
7/9	"	#G	1
7/9	"	#B	1
6/22	"	#F	1
	Total hrs. on site clearing		6½ hrs.
	Total hrs. on all work		61½hrs.

Rate per. hr. for T.D.24-241 Series $20.00	$1230.00
Moving Cat off & on job	182.00
	$1412.00

American Mining Company
700 - Securities Bldg.
Seattle 1, Washington

CME-6410——(Gold)
Nancy Hanks et al Claims
Granite County, Montana
Contract 2207

NARRATIVE REPORT

(This report covers the surveying, bulldozing of access roads, trenches and drill hole sites, and also the Outside Consultant's time for engineering and geologic work, for the work outlined in Stage 1 (Phases 1 and 2) excepting the actual drilling which will be covered in a subsequent report.)

GENERAL

The following are the starting and finishing dates of the various activities covered:

Activity	Date started	Date finished
Surveying of access roads, trench sites and directions, and drill hole sites-& Mapping Consultants time)	May 16, 1966	July 11, 1966
Bulldozing of roads, sites and trenches	June 20, 1966	July 9, 1966
Core drilling (No invoices received on drilling yet, will report on this later)	June 19, 1966	

Time required, and submitted for the various activities is:

All bulldozing, roads, trenches and sites ———————— 61½ hours
(Plus a move in and out charge, stated in dollars)

Consultant's time, for surveying, and mapping. Includes surveying hole positions, site positions, trench positions, and directions, and access roads required—also mapping the geology of trenches 1-6. 7½ days

Statistics on total footage of trench and access road:

Total access road to Trenches 1 & 2 combined———950'
Access road to Trench 3————————————100'
(Time for trench access roads-3hrs.)
Access road to drill hole b site————————160'
Access road to " " e " ————————675'
Access road to drill hole f site————————425'
Access road to drill hole j site————————475'
Access road to drill hole i site———————— 25'
Access road to drill hole g site———————— 75'
(No access road was required for site a, and sites c and 2 were done last year, prior to the contract) (Time required for site access roads was 7hrs.)

Total access road put in-2885' 10 Hours

Statistics on drill hole site clearing:

Sites for drill holes f, i, e, h, g and j were cleared; (Sites for holes 2 and c were done last year, prior to the contract, and site for hole a required no work)

Time required for clearing the six sites was ——————6hrs.

Statistics on Trenches bulldozed:

Six trenches (Trenches 1-6) were bulldozed, for a total of 2260' of trench, as follows:

Trench 1	510'
Trench 2	310'
Trench 3	500'
Trench 4	340'
Trench 5	410'
Trench 6	210'
Total trenching	2260'

——Time required— 4½hrs.

Grand Total Bulldozer Time 61½hrs —61½hrs.

Type of Equipment used, and Miscellaneous Data:

The Bulldozer, owned by Lloyd Hanson, of Missoula, Montana, was an International Harvester TD-24, which is larger than a D-8.

Sampling: Only one small vein was exposed in the trenching, and this was assayed (2 samples) for gold only, the silver content of the ore at Garnet is negligible. The assaying was done by the Montana Laboratories (Roy Degenhart) of Philipsburg, Montana. Exposed in several trenches were garnetized, epidotized zones in limestone, usually accompanied by some iron stain, but no 'mineralization' significant enough, in this category was noted that would justify sampling, at this time.

BACKUP DATA FOR INSPECTOR:

a. The locations of all access roads, trenches and drill hole sites are shown on the large map entitled—"Map 2-100-scale" four copies of which accompany this report. Also, each Trench is shown, with detailed geology, on separate sketches also submitted, and these sketches show the location of the northerly end of each trench (for easy reference on the large map) with relation to several claim corners.
(ACCORDING TO INSTRUCTIONS RECEIVED THE LARGE MAP WILL NOT BE SENT IN WITH EACH OF THIS REPORT, BUT SMALLER SKETCHES of the various drill holes— WILL BE SUBMITTED, WITH ANY EXCEPTIONS RELATING TO THE LARGER MAP GIVEN)

b. Statements, in duplicate, of the bills received from the bulldozer contractor, assayer and Outside Consultant, for their time and costs will be submitted and in fact, accompany this report.

BRIEF DISCUSSION OF RESULTS OF TRENCHES

TRENCHES 1-4 had for their primary objective the exposure of the Grant and Hartford vein, in its possible westerly extension, if

it proved to be a crosscutting structure and cut across the beds as it entered the upper flanks and crest of the plunging anticline. It had been observed—from the direction of the workings on the nearby and parallel Lead King vein, as shown in Pardee's USGS Bulletin 660-F—that this possibility existed.

No vein that definitely cut across the bedding was seen. Moreover, no vein was seen, at all, in Trenches 2, 3 and 4. In Trench 1, a small vein was noted (which incidentally was located about where the projection of the G & H vein was placed) but it definitely conformed with the bedding and was, in additon, a rather unimpressive structure. It appears, then, that the G & H vein does not cross the bedding, into the crest of the anticline, certainly not as a strong structure. It is recognized, however, that faulting, could have offset the structure. At any rate, some of the drill holes that were based on the possibility of encountering the G & H vein, as projected westerly acrossthe structure, will be modified as spelled out in the contract, because of these findings.

Other objectives for Trenches 1-4 were: In the case of trench 2, the exposure of the Woolsey-Missoula contact. As shown on the accompany sketch, the Missoula-Woolsey contact was exposed in trench 2, and the shale of the Woolsey was seen to be highly altered, somewhat iron-stained, and exhibited a small granodiorite (sill) near its contact with the underlying Missoula quartzite. Mention is made here, at this point, that trench 1 was entirely in the Missoula formation.

Trench 3 hadthe additional objective of exposing the Meagher-Woolsey contact, near the crest of the fold and fairly close to some minor mineralization that was noted nearby. The Meagher-Woolsey contact, about as projected, was exposed, but no formal vein structure, crosscutting, or bedded was seen. the shale near the Meagher limestone was highly altered, and contained, in places considerable garnet and epidote.

Trench 4, in addition to exploring for the G & H vein, as projected, had for its objective the exposure of the Park shale, which was inferred to be present in this area, and its contact with the underlying Meagher, and overlying Pilgrim formations. Only the massive Meagher limestone was exposed. This contained considerable irregular calcite (probably calcite of recrystallization) but no quartz, or other vein material characteristic of the mineralization of the area. It will be noted, as shown on the large map of the areal geology, that several faults are projected into the area of this cut. Also, as far as the Park shale is concerned, it will also be noted that it does show up, pretty much as projected, in trench 6, a few hundred feet to the northeast.

Trench 5 had a number of objectives: These were to explore for the Haney Hanks vein in its southwesterly projection, to reveal the big Haney Hanks fault, which was sind to have drag ore in it, to expose the main granodiorite contact and that of a parallel dike to the south, and to provide other geologic information.

TTrench 5 did not reveal the Haney Hanks vein, as much, but did show the large fault, and the two granite contacts. In line with the Haney Hanks vein projection, however, a wide area of intensely altered (garnet-epidote etc) and highly colored, soft earthy material--once a limestone--was exposed. The general attitude of the unaltered limestone was also seen, about as mapped and predicted, in the south end of the cut. An conclusion drawn from this cut is that whatever vein was found in the nearby Minnie Palmer shaft, either does not extend westerly, or has been lost in the heavy faulting of the Haney Hanks fault. No drag ore was seen.

Trench 6 had several objectives: One was to prospect for the southwesterly extension of the Tiger vein, last exposed 250' to the east, where there was a possibility that the ore in it was "making" under the Park shale; and also to expose the Park shale-Pilgrim limestone contact, along with projected granodiorite dikes to see if ore might be found at these favorable contacts.

The cut (No. 6) did expose the Park shale, whose position all along had been only inferred, and its contact not only with the Pilgrim limestone, but also with a granodiorite dike (or sill; probably a sill). Also seen was the contact of the Park shale, with the underlying Meagher limestone.

The Tiger vein was not exposed, and there was no mineralization at the several contacts mentioned above.

The geology of all the cuts discussed above is shown in considerable detail on the six sketches submitted with this brief report.

Joe G. Irving
July 20, 1966

RECEIVED

JUL 29 1966

MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, July 6, 1966

The Following Analyses Were Made For American Mining Company

Garnet	Per Cent H_2O	Ozs. Silver Per Ton	Ozs. Gold Per Ton	$ Gold Per Ton	Per Cent Copper	Per Cent Mn. Dioxide	Per Cent Iron	Per Cent Lead	Per Cent Manganese	Per Cent Silica	Per Cent Zinc
#118	In Trench	No 1	0.070								
119	See Sketch		1.320								

MONTANA LABORATORY COMPANY

By W. L. Dupuchert

Maps accompanying
Operator's vouchers filed in
envelope back of docket.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/11		110
8/12/66	Sikorsky	120
		220
		120M

AUG 12 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Reference is made to your memorandum of August 1, 1966, and the enclosed original and two copies of the Operator's Progress Report and Vouchers for the period May 16 to July 9, inclusive.

We have reviewed the Operator's report and vouchers as requested. Our comments on the points raised in your memorandum follow:

1. and 2. As the work performed appears to conform substantially with the intent and purpose of the contract, it can be accepted in accordance with your indicated approval.

3. As only the total for Independent Contracts and the average unit cost estimated for each type of work performed under this category are maximums, the item bulldozing - 61½ hours at $20.00, for a total of $1,230.00, may be accepted. You state that a TD-18 dozer was used instead of a D-8 as specified in the contract. The Operator on page 2 of his narrative report indicates that an International Harvester TD-24 dozer was used. As both a TD-18 or TD-24 are larger than a D-8, either one may be accepted as meeting the contract requirement.

4. You state that the charge of $182.00 for mobilization and demobilization is not specifically mentioned in the Progress Report, and have not approved it although a proper claim. The documentation supports the claim for the item. On page 1 of the narrative report, under the item "Time required, and submitted for various activities is:" the Operator states, "(Plus a move in and out charge, stated in dollars)". We agree with you that the claim for this item is proper and should be approved.

5. We agree with your deletion of the item for assays. An amendment to the contract should be made for separate assays for gold and silver, as you have recommended. Accordingly, an amendment to the contract will be prepared.

23263

The Operator's consultant, Joe Irving, should be requested to prepare the monthly vouchers and reports in accordance with standard procedure. They should be submitted at the end of each month for work performed during the month. Each item listed on a voucher should correspond to the item as shown on the contract.

FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
Branch of Budget and Finance
OME Reading File
130

FEJohnson/bih/gla 8-11-66

Explanation of
Operator's voucher

OME-6410
American Mining Company
Contract 2207

Voucher - 5/16/66 - 7/9/66

Allowable costs -

Independent Contractor

Mobilization and demobilization (bulldozer)	$ 182.00
Bulldozing, trenches, access roads and drill sites, 61½ hrs. @ $20.00/hr.	1,230.00
Total-	$1,412.00
Personal services Outside consultant, 7½ days @ $50.00/day	$ 362.50
Miscellaneous - Per diem, outside consultant 7½ days @ $15.00/day	$ 108.75
Total allowable costs -	$1,883.25

Omehl

GEOLOGICAL SURVEY
Rm. 137 Howard Street
Spokane, Washington 99204
August 10, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 12 1966

Mr. Joe G. Irving
Mining Geologist
American Mining Company
P. O. Box 1451
Butte, Montana 59701

Re: Work Authorization
OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Joe:

This is in reply to your letters of August 4, 5, and 8, 1966, relative to the which, if any, of the Stage II holes will be authorized. I can well appreciate your desire to have as little stand-by time as possible, and thank you for getting the data in so promptly.

The third paragraph of your August 4th letter indicates some confusion as to the holes provided by Phase 2, Stage I, and those provided by Stage II. Holes g, j, and f, which have been or are being drilled comprise the former. Holes d, h, k, and l comprise Stage II. Whether their drilling will be approved depends entirely upon the results obtained in the Stage I work as follows:

Hole d depends upon showings in hole a

Hole h depends upon showings in hole c

Hole k depends upon showings in hole c

Hole l depends upon showings in hole 2

Although, as you know, the Government cannot contribute to the costs of drilling holes c and 2, the information gained by these holes can be used in determining whether holes K and l will be approved. In other words, holes c and 2 will be considered as meeting the requirements of Stage I specifications without redrilling hole c, but because it and hole 2 were drilled prior to the date of the contract they cannot be accepted for Government contribution to their cost. The showings in holes a, c, and c have not been very encouraging

and those in hole 2 only a little more so. The results of the drilling so far completed may be summarized as follows:

Hole a.--Apparently, the best showing was between the depths of 179 and 180 feet in scattered pyrite in "partly silicated coarse grained limestone" of the Woolsey formation where sample no. 129 assayed only trace gold over a width of 0.8 foot. The contact between the Woolsey and the Missoula quartzite was not reached.

Hole b.--Apparently, the best showing was between depths of 177 and 178.5 feet in altered, iron-stained crystalline limestone of the Woolsey formation containing some pyrite, where sample no. 130 assayed 0.02 ounce ($0.70) gold per ton over a width of 1.5 feet. The hole crossed the Woolsey-Missoula contact and continued about 30 feet into quartzite interfingered with streaks of granodiorite showing no significant occurrence of pyrite.

Hole c.--Started in Woolsey rocks the hole crossed the Woolsey-Missoula contact, penetrating the latter for some 650 feet. In the area of the Woolsey-Missoula contact, mostly in the former, between depths of 108 and 213 feet, 6 samples each assayed only trace gold per ton. The hole should have indicated the presence of the G and H vein, regardless of whether it crossed or followed the bedding, but apparently failed to do so unless the trace gold in the 108-213 interval is so interpreted. This interpretation is difficult to accept in view of the extreme overall width of the interval and the uniformly low grade of each core segment sampled. The best showing in this hole is between depths of 747 and 753 feet where 4 samples assayed, respectively, 0.15, 0.035, 0.02, and 0.01 ounce gold per ton, each sample representing 1.5 feet. However, the first two samples which are the highest in grade and represent a minimum mining width of 3 feet have an average grade of only 0.093 ounce or $3.25 gold per ton.

Hole d.--All I have on this hole is the statement in your letter of August 5 that the hole was drilled to a depth of 350 feet showing no mineralization of any significance, noting only occasional areas of very lean pyrite disseminations. (The log of this hole, just received, appears to confirm the preceding summary.)

Hole f.--The hole started in Meagher limestone, crossed the Meagher-Woolsey contact, and penetrated about 140 feet of the Woolsey rocks. A sill of granodiorite about 60 feet thick obscures the Meagher-Woolsey contact, and a smaller sill lies within the Woolsey. Sample no. 121 taken from 165.5 to 166 feet near the top of the first sill assayed trace gold. Sample no. 122 taken from 195 to 195.5 feet, near the bottom of the sill, assayed 0.01 ounce of $0.35 per ton gold. Sample no. 123 taken from 249 to 250 feet near or in a thin seam of granodiorite in Woolsey rocks assayed trace gold.

Hole i.--The hole crosses the Meagher-Woolsey and the Woolsey-Missoula contacts, penetrating about 270 feet in the Missoula quartzite. Two granodiorite sills were cut in the Woolsey and two in the Missoula. Apparently, the most promising area was in the upper part of the Woolsey where 4 samples were taken. Sample no. 124, from 110 to 115 feet, sample no. 125, from 128 to 129.5 feet, sample no. 126, from 176.1 to 176.8 feet, and sample no. 127, from 176.9 to 178 feet, all assayed trace gold. Near the bottom of the hole sample no. 128, taken from 694.6 to 696.7 feet just above a granodiorite sill in the Missoula quartzite also assayed trace gold.

Collectively these 6 holes have explored, along 2 parallel lines, areas near the Meagher-Woolsey contact and well into the Woolsey formation (holes e, f, and i); areas near the Woolsey-Missoula contact and into the Missoula quartzite (b, c, and i). Hole a did not get to the Woolsey-Missoula contact, and 6 of 7 samples taken near this contact in holes b and c assayed only a trace gold. A sample taken in hole b about 40 feet above the contact assayed only 0.02 ounce gold over a width of 1.5 feet. If the vein near the bottom of hole c is indeed the Lead King vein, the indicated grade of only $3.25 gold per ton is not very encouraging. In view of these overall poor showings, deepening hole a some 50 feet to explore the area of the Woolsey-Missoula contact, and up to 350 feet to explore the Lead King(?) vein cannot be justified for OMM participation. Considering the same poor showings, the Stage II drilling of holes d, h, and k cannot be approved.

The contract specifies that the drilling of hole 2 shall depend upon the results of hole 1, which certainly were not too spectacular. From a depth of about 190 feet to 335 feet many mineralized streaks were crossed. Nine samples were taken, presumably of the more promising core segments. Of these 5, ranging in width from 2 inches to 5 feet, assayed but a trace gold, 2, each over a width of 6 inches, assayed 0.003 and 0.005 ounce gold per ton, respectively; and 2, assaying 0.01 ounce gold per ton were taken, 1 over a width of 5 inches and the other over a width of 18 inches. From a depth of 492 to 494 feet, a sample of 1.5 feet of core assayed 0.24 ounce gold and 0.7 ounce silver per ton, indicating a vein 2 feet wide worth $9.30 per ton. A sample of 0.9 feet of core representing the next foot of vein assayed 0.02 ounce gold and 0.2 ounce silver per ton. The value over a 3-foot width is $6.29 per ton. Whether this vein is a faulted continuation of the Nancy Hanks or some other vein, the assays indicate that the values continue down dip in the granite.

With the understanding that holes j and g must be completed first, authorization is hereby given to drill Stage II, hole 1, only, as specified on page 4 of Exhibit A of the contract.

The question of substitute holes is covered by item 6 on page 2 of my letter of May 9, 1966. As of now, no additional holes can be justified for OMK assistance, but of course the results of holes j and/or g might furnish such justification.

Sincerely yours,

D. R. MacLaren
Field Officer, OMK
Region I

cc: Mr. D. A. Robinson
American Mining Company
400 Securities Building
Seattle, Washington 98101

OMK(2) w/cys incoming corr.
(only 1 copy of sketches)
Voucher File
MacLaren

Director's Reading File

DRMacLaren/mls

JOE G. IRVING
MINING GEOLOGIST
3334 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89109
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

P. O. Box 1451,
Butte, Montana
August 8, 1964

Mr. Don R. MacLaren, Field Officer,
Region 1, Office of Minerals Exploration,
U. S. Geological Survey,
South 157 Howard Street, Spokane, Wash.

Re: OME -6410- (Gold)
American Min. Co.
Nancy Hanks et al
Granite Co., Mont.
Contract 2287

Dear Don:

Enclosed are the sketches and logs pertaining to hole "e" which was completed, at Garnet, last Friday. I ran out Sunday to log the core and made the sketches this morning to get them to you in a hurry so that you may have them in connection with the request for decisions and rulings on the remaining holes in the contract.

Hole "j" is started now and down a few feet, and hole "g" will follow. As mentioned in my two recent letters they could well be finished with the holes that have been approved by the end of this week. Then it is a question of how many more holes will be drilled.

Sincerely,

/s/ Joe G. Irving
Joe G. Irving

P. S. Please reply to the Butte address shown.

Copy to: Seattle office of AME

RECEIVED
AUG 1 1964

JOE G. IRVING
MINING GEOLOGIST
2334 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

P. O. Box 1451,
Butte, Montana
August 5, 1966

Mr. Don R. MacLaren, Field Officer,
Region 1, Office of Minerals Exploration,
U. S. Geological Survey,
So. 157 Howard Street, Spokane, Washington

Re: OMB-6410 (Gold)
American Mining Company,
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207

Dear Don:

This is a supplement to my letter to you dated August 4th, in which I discuss holes a, b, f and i which had been completed.

My assistant called last night and told me that hole e had been completed, with the driller making extraordinary progress, and was set up ready to begin hole j, which he will start today.

Mick said that hole e, which was put down at the position shown, both on the plan Map 2-100 scale, and on the Cross Section D-D' on Map 10, to a depth of 550', showed no mineralization of any significance. Only occasional areas of very lean and pyrite disseminations were seen. The hole which started in massive whitish crystalline limestone, got into the garnetized shaly limestone of the Wooley formation and remained in that formation until the bottom, at 550'. I am going out tomorrow to check these findings and log the hole.

My letter of August 4th pointed out that the progress being made was so swift that we would be faced with decisions soon, and if it were at all possible, I wanted to avoid paying standby time, to Longyear while awaiting rules on what to do next. So, this note regarding hole e, even though not accompanied by logs or sketches, is more or less self explanatory. Will call you on the phone regarding hole j, early next week, or by mid week if I have not heard from you by then.

Sincerely,

/s/ Joe G. Irving

Joe G. Irving

JOE G. IRVING
MINING GEOLOGIST
2334 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE _____

P. O. Box 1451,
Butte, Montana
August 4, 1966

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

Mr. D. R. MacLaren, Field Officer,
Region 1, Office of Minerals Exploration,
U. S. Geological Survey,
So. 157 Howard Street, Spokane, Washington.

Re: [illegible]410 (Gold)
[illegible] Mining Co.
[illegible] Banks et al Claims,
[illegible] Co., Montana
[illegible]

Dear Don:

The drilling at Garnet, on the [illegible] is proceeding at an unusually fast pace [illegible] this is in [illegible] of the drilling, on another property--at Basin--where [illegible] indeed) and a letter to you at this point concerning [illegible] aspects of the contract is definitely necessary.

Holes a, b, f, i have been [illegible] and logs enclosed) and hole "e" started August 1, and [illegible] time you get this letter. Since holes [illegible] and 2 were [illegible] one is at all enthusiastic about drilling them over--[illegible] them a hundred and fifty feet, or less--this leaves [illegible] be finished as part of Stage 1, Phase 1 of the contract. [illegible] then remains to be done, then, in Phase 1. And, the way [illegible] this will not take very long--a matter of days rather than [illegible]

So, rulings and decisions have to [illegible] holes d, h, k and l that comprise Phase II of the contract, [illegible] of Stage 1. Also, something has to be decided about the two [illegible] holes (hole L for hole c and hole 6 for hole 2, discussed in my letter of March 16, 1966.--these are shown on Map 2-100 scale, which you have [illegible]

In line with the above, specifically [illegible] like to know what is the ruling going to be on:

a. What holes in Stage II a[illegible] I realize that you will probably [illegible] holes j and g before making a decision [illegible] the findings in those holes, if [illegible] up--as we do not wish to have a drill wait [illegible] time charged against us, if this is [illegible]

b. What is the ruling concern[illegible] substitute holes (holes L for c, and 6 for [illegible] in my letter of March 16th? You have sketches [illegible] hole c, as drilled, and also hole 2, in the originally proposed positions.

c. This question is not really [illegible] above, but I have been asked to inquire [illegible]

Amendment No. 1 to the contract sets the time for the completion of the work at 24 months from the date of the contract. Since the date of the contract was October 20, 1965, this must mean that we have until September 19, 1967 to finish the job.

In viewof the fact that the drilling is going swiftly and the fact that we are also drilling at Basin (not an CMK contract) and this drilling is going slowly, and simply must be finished before the snow falls, we have thought that it might be prudent to stop the drilling, at some logical point, at Garnet, this next month, or even in late August, and bring the other drill over to Basin. Perhaps we could pause, at the end of Stage 1, and continue whatever might be left to do next spring and summer, completing it before the final date for completion, that is September 20, 1967. Is this a possibility as far asthe government's attitude is concerned? Would appreciate a specific ruling on this, if one is necessary.

Sincerely,

/s/ Joe G. Irving

Joe G. Irving
P. O. Box 1451,
Butte, Montana

P. S. Please reply to me direct, at the Butte addres shown, or send me a copy of your reply, if your letter is addressed to the Seattle office of the American Mining Company.

Copy sent to:

D. A. Robinson, Amer. Min. Co.
400 Securities Bldg.
Seattle 1, Wash.

Enclosures: Sketches, logs & location sheets of hole, a, b & c

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
August 1, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 5 1966
INITIALS | CODE
gla | 120
| 110
| 120
HR | 120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed are the original and two copies of this Operator's first Progress Report and Voucher for the period May 16 to July 9, 1966, inclusive. I would appreciate your checking the Progress Report before forwarding it to Budget and Finance.

Although the manner in which the Progress Report has been prepared is a bit irregular, the supporting documentation leaves little doubt as to what the Operator means. Accordingly, I have processed the Progress Report in accordance with the terms of the contract based upon the documentary support and have explained each item with footnotes. I would think there should be no problem in paying for the items I have accepted, but there may be some reason of which I am not aware that would make it impossible.

There are points, however, that may require further clarification and possibly an amendment to the contract. These are:

1. On the large map (Map 2, 1" = 100') starting from an old road at a distance of about 350 feet east of Cut 6 a purple line marked "Access Rd to hole e" makes one ask why could not the old road passing DDH f have been used? When I was on the property June 24, hole f was being drilled. This road was pretty much overgrown with scrub timber, was steep, and was about to enter a boglike area. It is my belief that these and topographic considerations probably made a new road less costly and more feasible. The dashed portions of the purple line are not included in the 675 feet claimed.

2. About 600 feet farther east along the same old road, another old road, not shown on this map, leads southerly to DDH c. Part of this road south of DDH c is shown by dashed purple line and is not charged to the DDH b, Trench 2, and Trench 1 access road nor is the unshown portion between DDH c and the old east-west road.

3. Under Stage I, Actual Costs, page 5 of Exhibit A, if the specified 1,000 feet of access road and 2,000 feet of trenching must be considered as maxima, they should be deleted. (See note 3 on the MME Form 61, Progress Report.) For the amount of access road, trenching, and drill station preparation completed, 60 hours is ample control of cost for this item. I see no reason for an amendment to permit the TD-18 dozer as it is slightly larger than a D-8.

4. Although the charge of $182.00 for mobilization and demobilization is not specifically mentioned in the Progress Report, it is included indirectly by reference to Lloyd Hansen's invoice and is included in the $1,412.00 claimed for dozing work. I thought it best, pending an Administrative decision, to include it only in a footnote. It is certainly a proper claim.

5. The application proposes:

144 assays for Au and Ag at $2.00

14 assays for Pb and Cu at $4.00

Accordingly, the contract provided assaying for gold and silver, but provided for lead and copper assays separately. On page 2 of the Operator's Narrative Report he says that two samples were assayed for gold only because the silver content at Garnet is negligible. Ore from the nearby Red Cloud mine is reported to have contained 1 ounce gold and 1.5 ounces silver per ton and in the available information no other mine is given any specific silver value. Tetrahedrite has been described from some of the mines in the area and therefore provision to assay for silver should be retained, but there is no benefit to the Government to insist that each sample assayed for gold must also be assayed for silver. It is recommended that Category 7 in each stage be revised to permit a number of silver assays equivalent to the number of gold assays to be run and that the cost per assay be $1.50 for each metal.

D. R. MacLaren

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
August 8, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 10 1966
INTERIM COPY

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Interim Inspection Report
OME-6410 (Gold)
American Mining Company, Inc.
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

The project was visited June 24, 1966. The work was inspected and contract matters were discussed with Mr. Joe G. Irving, consultant for the Operator.

Hole f was being drilled and was down to a depth of 205 feet. Core recovery had been good to that depth, but no mineralized segments had been cut.

Trench 2 had been completed, but no definite vein structure had been exposed. However, some garnetized limestone and highly altered shale beds were cut. They are some distance north of the approximate position of the G and H vein as projected; therefore, it is doubtful that they represent a halo above the vein if it had cut across the bedding but died out before reaching the surface.

Trench 1 was being dozed and a quartz vein was exposed in the bottom of the trench. In the west wall or uphill side of the trench, the quartz pinched out about 3 feet above the trench bottom suggesting a lens rather than a strong vein. The apparent strike and dip are N. 75° E. and 42° N. A sample chipped and grabbed from various exposures of the quartz assayed 0.07 ounce gold per ton.

D. R. MacLaren

D. R. MacLaren

Distribution:
OME(Orig.&1)
Docket
MacLaren

One (2)

GEOLOGICAL SURVEY
Sc. 157 Howard Street
Spokane, Washington 99204
July 11, 1966

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O. M. B.
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120B

Mr. Joe G. Irving
Mining Geologist
American Mining Company, Inc.
P. O. Box 1451
Butte, Montana

Re: Work Authorization
OMB-6410 (Gold)
American Mining Company, Inc.
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Joe:

Although a small vein was found in trench 1, it lies, as we saw on June 24, essentially parallel to the bedding and is about 50 feet north of the projected location of the G and H vein if the latter cuts across the bedding. In trench 2 garnetized limestone and highly altered shale beds are about the same distance north of the G and H projection. In trench 3, highly altered limestone with garnet and epidote is about 75 feet north of the G and H projection, and in trench 4, some calcite streaks are about 100 feet north of the G and H projection. Although it is possible that these occurrences might represent the upper limit of the G and H penetration, it is doubtful because of the lack of any quartz except in trench 1. This could represent a small lens or veinlet that split away from the main vein, crossed a few beds, then followed the bedding to the surface. The complete lack of pyrite, such as was found in the hole c drilled prior to the contract, is considered as further evidence that the G and H vein has not crossed the bedding near the crest of the anticline. Whether or not it continued around the crest and formed a saddle reef type of ore deposit can only be determined by diamond drilling.

In view of the above, authorization is given to drill holes a, b, c, e, f, and i at the locations specified on page 3, at the bearings and inclinations and to the depths specified at the top of page 4, Exhibit A. Although hole c was drilled prior to the date of the contract and is not subject to Government contribution, whether or not it will be accepted as meeting the contract requirement as to

location will depend somewhat upon the results of holes a and b. The results obtained from hole c by itself cannot be considered as justifying hole k should we get as far as Stage II.

Sincerely yours,

D. E. MacLaren
Field Officer, DME
Region I

cc: Mr. D. A. Robinson, President
American Mining Company, Inc.
400 Securities Building
Seattle, Washington 98101

DME(2) w/cys incoming
Voucher File
MacLaren

Director's Reading File

JOE G. IRVING
MINING GEOLOGIST
2324 SOUTH HIGHWAY
LAS VEGAS NEVADA
PHONE

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

P. O. Box
Butte, Montana

CONSEL IN EXPLORATION
AND DEVELOPMENT

July 9, 1966

Mr. Don R. MacLaren, Field Officer,
Office of Minerals Exploration, Region 1,
United States Geological Survey,
South 157 Howard Street, Spokane, Washington.

Subject: OME -6410 (Gold [illegible] Mine Co.
Nancy Hanks et al Claims,
Granite County, [illegible] 2207)

Dear Don:

As mentioned in my telephone [illegible] trenches 3,4 and 2 showed no vein crossing the formations, [illegible] for that matter. Trench 1, which you saw, showed a small [illegible] weak vein structure, that was eight to ten inches wide at the [illegible] cut end only a few inches wide on the cut's west wall. And, as [illegible] noted the vein did not cross the bedding, but was enclosed [illegible] conformably.

Incidentally, I took samples of [illegible] bottom of the cut and also on the west wall and the assay results are shown on the accompanying sketch. As a matter of fact, I am enclosing four sketches, asyou suggested, for "prior approval" of the course suggested in the contract, in the event no vein was disclosed in trenches 1-4, cutting across the bedding. These sketches also show the position of the trenches relative to claim corners, shown on "Map 2-100-scale", several copies of which you have in your office. The sketches are in pencil, and will be inked in before sending copies of them that must accompany the vouchers, which will be sent in soon.

You will note:

a. Sketch of Trench one shows the workings to be entirely in the pre-Cambrian quartzite and discloses only the small vein structure mentioned above, in the bedding.

b. Sketch of Trench 2 shows the cut to have only the limestone-shale beds of the Wodsey formation, and their contact with the underlying pre-Cambrian. A narrow granite sill is seen intruding one of the shale beds and a little to the north of this intrusion there is considerable alteration and [illegible] staining in the shale and shaly limeston. But, no vein, as such, is seen either in the bedding, or crossing it. This cut is about 700' west of trench 1 and covers the projection of the Grant & Hartford vein, as projected from workings to the east, as does Trench 1 and trenches 3 and 4. The little vein seen in trench 1 either remains in the bedding, if it does not die out, or never reached trench 2, if if broke away from the bedding and crossed it in its possible projection west.

c. Trench 3, disclosed the Wodsey [illegible] and the Meagher

formation, but no vein whatsoever [illegible] Meagher contact, as predicted on the original maps. A little [illegible] "recrystallization" and blindly formed during the process that [illegible] to a marble is seen, in irregular seams and patches [illegible] in the bedding or crossing it.

d. Trench 4 shows only coarsely [illegible] of the Meagher formation but no vein. Only some calcite [illegible] little masses are seen, whose probable origin are the same as mentioned above.

To sum up, the four trenches that were [illegible] cover the possible westerly extension of the Grant & Hartford vein, if it proved to cross the bedding and extend that far) did not show up anything that could be properly called the extension of the G & H fissure.

In view of these facts, then, the positions [illegible] as a, b, c, e, f and i--along with other specifications pertaining to them--will have to follow the specifications set forth on page 4 of the contract, rather than those laid out on page 3, where their specifications were based [illegible] the possibility of the G & H vein crossing the bedding (see paragraph [illegible]) and it is herewith requested that prior approval be given, as soon as possible, to follow the instructions relating to these holes set forth [illegible].

It would be helpful if this approval were [illegible] as soon as possible, because hole i is now being put down and [illegible] reached over 400'. You will note that hole i was to go down 500' [illegible] depending on the conditions found. It now looks like it is to [illegible]. It would be cost saving if we were to get this approval before [illegible] 500', because in this event we would not have to stop the [illegible] word, and pay for standby time.

The approval, in one form or another, [illegible] sent to me in the field. My address is P.O. Box 1451, Butte, Montana. I am staying at the City Center Motel, 641 West Park, Butte, Montana, and the [illegible] number here is 406-792-0401. A message could be left here that I would get in [illegible] as I return from Garnet, or Basin.

Sincerely,

/s/ Joe G. Irving

Joe G. Irving

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O. L. R.
RECEIVED
JUL 18 1966

INITIALS	CODE
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	110
HR	120K

GEOLOGICAL SURVEY
So. 137 Howard Street
Spokane, Washington 99204
July 14, 1966

Mr. Joe G. Irving
Mining Geologist
American Mining Company
P. O. Box 1451
Butte, Montana

Re: Work Authorization
CMC-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 9207

Dear Joe:

The targets proposed for hole g were the Tiger vein and the Nancy Hanks vein. The apex rights of that portion of the Tiger vein that might be cut by this hole are clearly within the Tiger claim. Even if the Tiger vein is offset by the fault near the collar of the Ohio shaft, the offset portion is east of the west end line of the Tiger claim projected. Therefore, this target was at no time considered as acceptable.

As for the Nancy Hanks vein, apparently it could not be traced on the surface for more than 100 feet or so southwesterly from the Meager-Granodiorite contact. If it did continue beyond the proposed plane of hole g, that hole as proposed would have cut the vein at a depth of about 50 feet (80 feet in the indicated plane of the vein). The purpose of trench 5 was to see if the Nancy Hanks vein extended that far. If so, authorization would be given to drill hole g starting about 100 feet to the northwest of its indicated location, along the line of section 4-4'.

Although trench 5 has not exposed the Nancy Hanks vein as such, it has exposed a zone some 30 feet wide containing "somewhat silicated crystalline limestone with garnet and epidote" that is directly in line with and contains the projection of the Nancy Hanks vein. To explore this potential vein zone, authorization is given to drill hole g from a station about 100 feet N. 38° W. from the location shown on Map 2 accompanying the application. The hole should be drilled on a bearing of S. 55° E. at -60° to a depth of not more than 125 feet. From your section 4-4' this should cut the Cascade-Nancy Hanks fault between 70 and 80 feet and the vein at about 100 feet. The extra 25 feet should be sufficient allowance for changes in the dip of the vein and for normal errors in projections.

The targets proposed for hole J were the base of the Park shale and the G and H vein if it should cross the bedding. The results of trenches 1, 2, 3, and 4 indicate that the G and H vein did not cross the bedding and is therefore no longer a potential target. Although part of the base of the Park shale apexes on the Tiger claim, it crosses the west end line about 190 feet above the proposed drill target. Authorization is given to drill hole J from the location shown on Map 2 accompanying the application. The bearing and inclination shall be S. 39° E. and -70°. As the G and H vein is no longer a potential target, this hole may be drilled to a depth of not more than 430 feet and should cross the footwall of the Park Shale at about 390 to 400 feet.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

cc: Mr. D. A. Robinson
American Mining Company
400 Securities Building
Seattle, Washington 98101

✓ OME(2) w/cys incoming
Voucher File
MacLaren
DRMacLaren/mls
Director's Reading File

JOE G. IRVING
MINING GEOLOGIST
3334 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

July 13, 1966
P. O. Box 1441,
Butte, Montana

Mr. Don R. MacLaren,
Field Officer, OME, Region 1,
U. S. Geological Survey,
S. 157 Howard Street,
Spokane, Washington 99204

OME-0410 (Gold)
AMER. Min. Company,
Nancy Hanks et al Claims,
Granite, Co., Montana
Contract 2207

Dear Don:

On page 4 of the subject contract it is stated that three drill sites are to be bulldozed as drill hole sites g, j and 2, approximately as shown on Map 8, the exact locations to be determined from the results of Trenches 5 and 6.

Enclosed are the geological sketches of trenches 5 and 6. Comparing the actual geology, as found in the trenches, to that projected and shown on Ma2 (100-scale), I note: (see also cross sections)

a. In the case of Trench 5, no very great difference in the core geology to be encountered by hole g, except that the Nancy Hanks vein, as projected, does not show up, as such in the trench. If my original application is referred to, it will be seen that the objectives of hole g, as set forth, were not limited to the southwesterly extension of the Nancy Hanks vein.

b. In the case of trench 6, the geology is essentially as drawn, and projected on Map 2 (100-scale and Cross Section 5B-B'. The Park shale, which was put in by deduction largely, was actually found and not far off from the position shown. The application set forth the several objectives of hole j, and if the trench sketch, plan map and cross section are studied, it does look like most of the objectives are afforded by the geology shown in Trench 6, in conjunction with other information shown on the various other maps.

Could your office now give us instructions as to the exact locations, of holes g and j, as provided for on page 4 of the contract. As previously mentioned, I fail to see how hole 2, which was put down last year, is in any way affected by the geology of Trenches 5 or 6, except that perhaps, it was desirable to see the large Nancy Hanks fault in the position shown, on the maps submitted, and this is obviously shown by the geology of Trench 5, as I am sure you will agree.

Sincerely,

Joe G. Irving

P. S. Send reply to the Butte address shown

cpy

one

JOE G. IRVING
MINING GEOLOGIST
2324 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION AND DEVELOPMENT

May 23, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 26 1966
MAILING CODE
~~110 M~~
~~110~~
PM 1208

Mr. D. R. MacLaren,
Field Officer, OME,
Region 1,
So. 157 Howard Street,
Spokane, Washington 99204

Re: OME-6410 (Gold)
American Mining Co., Inc.
Nancy Hanks et al Claims,
Granite County, Montana
Contract 2207

Dear Mr. MacLaren:

This will serve as official notice that work has started on the subject contract. And, as pointed out in your letter of May 2, 1966 to the American Mining Company, if no voucher is to be submitted for any month, a narrative report (original and one copy) is still required, this letter will serve also as such a report.

The work done during May (and no further work is contemplated between now and the end of the month) consisted of surveying in trench and drill sites.

Specifically, survey lines were carried from known points shown on Map 2 to the various trench sites and stakes were then set showing the directions of the several trenches and their total length. One drill site was also surveyed in.

The work mentioned above was started on May 16th, 1966 by the undersighed, who spent almost seven hours on the property; and continued on May 19th, 1966, by the undersigned with the assistance of a helper.

No voucher will be submitted for this work, at this time, because of the limited time spent, but the work will be accounted for in the regular report—entitled, "Operator's Monthly Voucher Report" that will be submitted covering the work performed in June.

We plan to start bulldozing on, or about, June 10th, and have instructed Longyear Company to have their drill on the property not much later than June 25, 1966.

RECEIVED
MAY 24 1966
OMA

Sincerely yours,

Joe G. Irving

Joe G. Irving, Consultant
(For the American Mining Company)

Copy to: D. A. Robinson, American Min. Co.

One
Don

JOE G. IRVING
MINING GEOLOGIST
2004 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89109
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

May 11, 1966

COUNSEL IN EXPLORATION
AND DEVELOPMENT

OFFICIAL
COPY
O. N. S.
RECEIVED
MAY 18 1966

Mr. D. R. MacLaren, Field Officer,
Office of Minerals Exploration, Region 1,
Geological Survey, So. 157 Howard St.
Spokane, Washington 99204

SUBJECT: CME-6410 (Go[illegible]) [illegible] Co.
Nancy [illegible]
Granite Co., [illegible]

TO MK
HK 120 K

Dear Don:

Thanks for your letter of [illegible], [illegible] everything has been explain[illegible] [illegible] forms for reporting, sent to me fr[illegible] [illegible] had recently sent them.

I do not think we will d[illegible] official statement about the exact [illegible] of [illegible] of the work started, for May, 196[illegible]. [illegible] of events—I overlook sendi[illegible] [illegible] that I have already started the orga[illegible] [illegible] the help I will need and made other arr[illegible]. But, I personally plan to start the actual surveying in [illegible] the drill hole sites, and access roads to them, [illegible] about May 22nd. I have already been up to the property, [illegible] survey.

In answer to your question [illegible] your letter of May 9th, the road to Garnet is well marked and well [illegible]. It merely turns off the main Drummond-Missoula highway, about [illegible] of Drummond, and makes a right turn up Bear Gulch which is [illegible] county-maintained road and [illegible] good shape. When one arrives at Garnet—[illegible] old mining [illegible] about ten miles [illegible] the road from the main highway, the camp [illegible] roads and trails, most of which will lead [illegible] sites, are well shown on Map 2 (100-scale) a copy of which [illegible].

Don, have your office make note [illegible] post office address, which is:

Joe G. I[illegible]
P. O. Box [illegible],
Butte, M[illegible]

Sincerely yours,

Joe G. Irving

One

OFFICIAL COPY
C. M. E.
RECEIVED
MAY 1 1966
CODE
120
RG 110
HK 120

GEOLOGICAL SURVEY
So. 137 Howard Street
Spokane, Washington 99204
May 9, 1966

Mr. Joe G. Irving
Mining Geologist
General Delivery
Butte, Montana

Re: OME-6410 (Gold)
American Mining Company, Inc.
Nancy Hanks, et al., Claims
Granite County, Montana

Dear Joe:

This will acknowledge receipt of your letter of May 3, 1966. I have been aware of your relationship with the American Mining Company since we discussed the matter during one of your earlier visits to Spokane.

I am sorry that I was tied up with an auditor from Washington, D. C., and was unable to see you when you passed through Spokane on May 2, but hope I was able to clarify to your satisfaction the questions you asked during our telephone conversation.

To summarize the points raised during our last talk and in recent correspondence, and in the hope of generally clarifying the terms and the intent of the contract, in summary:

1. All of Stage I shall be completed.

2. Stage II work depends upon the results of Stage I and requires prior authorization of the Government confirmed in writing. Although prior authorization can be given orally by telephone, it cannot be given until we have received suitable maps, sections, drill logs, and sample assays covering the Stage I work.

3. Similarly, Stage III work depends upon the results of Stage II.

4. Under Stage I the locations, attitudes, and depths of holes a, b, c, e, f, and i depend upon the results of trenches 1-4, inclusive, and the locations of holes g and j depend upon the results of trenches 5 and 6. Although the location of hole 2 should not be dependent upon the results of either trench 5 or 6, the fact that it was drilled prior to the date of the contract makes clarification of this specification by another amendment entirely academic as this

hole could not now be approved. Other than survey work necessary to show the location of trenches and drill holes on a map, geologic mapping of the trenches, sampling and assaying appropriate parts of the trenches and drill holes, and logs with sections of the drill holes, etc., constitute all the work authorized under Stage I.

5. Only after receiving all the pertinent data acquired under Stage I can prior approval be given for any Stage II work. Under this stage any or all of holes d, h, k, and i may be approved, some possibly from slightly different locations and at different attitudes and depths than now specified in the contract, or none may be approved. Rather than hold up the drill crew, you may find it expedient, upon the completion of Stage I to start drilling one or another of the Stage II holes, but until approval is given and confirmed in writing such drilling will be at the Operator's risk of having to pay for the hole or holes so started. Authorization will not be given retroactively simply because a hole may have been completed. If based on the results of Stage I, a Stage II hole would have been approved, retroactive approval might be given. Holes d, h, k, and i are the only holes that might be approved under Stage II, but any or all of them might not be approved, depending upon the results of Stage I.

6. In the event that Stage I and Stage II holes suggest the soundness of additional holes, their number, collar location, attitude, and depth may be given prior approval confirmed in writing. At this point, but not before, the question of substitute holes can be taken up.

I hope that this detailed rehash of the contract obligations and limitations clarifies any questions you may have as to the necessity of completing the contract a stage at a time, and the need to keep the data coming in so that decisions that must be made between each stage can be reached with a minimum of delay.

Much of your mapping will be done piecemeal and in order to avoid the cost of continually posting, printing, and mailing such bulky maps as your Map 2 (1" = 200') or Map 3 (1" = 100'), I suggest that you map each trench on standard field or underground mapping sheets (8½" x 11") and send in prints of these. However, if you do this, since the coordinate lines on Maps 2 and 3 are not numbered, it will be necessary to identify at least two claim boundaries or claim corners on each sheet so that I can plot them on our office copy. The 1" = 100' scale would probably be the more satisfactory one. For informational purposes only, two prints of each map will suffice, but for vouchers, one print of each map should accompany the original and each copy of the MMZ Form 61, "Operator's Progress Report."

The application describes the route to follow in order to reach Garnet. Is the route from Garnet to the property marked?

Sincerely yours,

D. R MacLaren
Field Officer, OME
Region I

cc: Mr. D. A. Robinson, President
American Mining Company
400 Securities Building
Seattle, Washington 98101

OME w/cy incoming
MacLaren

DRMacLaren/mls

Director's Reading File

Copy for Don & me

JOE G. IRVING
MINING GEOLOGIST
2324 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

May 3, 1966

Mr. Don R. MacLaren, Field Officer,
O.M.E., Region 1,
U. S. Geological Survey,
So. 157 Howard St., Spokane, Washington

Re: OME-6410-(Gold)
American Mining Co.
NANCY HANKS et al
Granite Co., Montana
Contract 2207

Dear Don:

This is to formally notify your office that work is being started on the captioned contract. I am now engaged in arranging for bulldozing, which will probably take a little time, as most of the dozer men are pretty busy--and practically all of them are charging more per hour than the contract allows. However, this will be taken care of and then I am going to start surveying in the sites (both trench sites and drill sites) and access roads myself. All of this will be started long before the deadline date to start the work, which was set at June 15, 1966.

There is, however, something else I wish to take up----although it might, and should be, totally unnecessary. It is my relationship with the American Mining Company.

While talking to you on the phone, Monday, May 2nd, you mentioned not once, but twice, that you had talked to "my boss" relative to a certain matter. It was probably just an expression on your part, but in case there is any doubt whatsoever about my relationship with the American Mining Company, I wish to set the matter straight for the record, right now.

I am an independent consulting geologist, with an office of my own. My work for the past several years, for the American Mining Company, has been on a consulting basis, where I got paid an agreed-upon fee for my time, whether it was by the hour, by the day, or by a longer period. On top of that I received all expenses while in the field.

This summer, since I am to supervise the OME-sponsored drilling, at Garnet, and this is obviously a full time "job", I will devote all of my time--throughout the summer--taking care of this work. But, my time is being paid for on a consulting basis, and since it is a program that will involve several months time, the fee I am charging for the work is on a monthly basis--but would be pro-rated if by any chance I had to leave the job for a short period. In view of the fact that it will take months to complete and I will obviously not devote time to any other work, they are taking care of all my expenses throughout the summer, as would be expected. It is a consulting job and is on no other basis. I have no stock in the company and occupy no position other than management consult-

ant. I am not an officer of the company. I am a consultant hired to manage the present exploration activity of the company, and the fee that I receive, while expressed as a monthly one--is also on a daily basis, as is evidenced by time put in for fractions of a month.

I write this, at this time, as you have undoubtedly suspected, because as American Mining Company's consultant, I will be submitting my time as set forth in the captioned contract, in accordance with the terms of the contract.

Very truly yours,

Joe G. Irving

Joe G. Irving

RECEIVED

MAY 5 1968

OME

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
May 2, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 4 1966

Mr. D. A. Robinson, President
American Mining Company
400 Securities Building
Seattle, Washington 98101

Re: OME-6410 (Gold)
American Mining Company, Inc.
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Robinson:

We are enclosing a three-month supply of Operator's Monthly Voucher and Progress Report, MME Forms 60 and 61. The original and three copies of the completed report forms as well as the narrative, maps, assays, and all technical data, should be submitted for each month in which costs have been incurred under the contract. However, in the event that you do not wish to submit a voucher for any month, the narrative report for the work done in that month is required. Delay in processing can be avoided if reports are submitted promptly to this office.

Also enclosed are three copies of Standard Form 38, entitled "Notice of Nondiscrimination in Employment." In accordance with Executive Order 10925, which is Exhibit B of your contract, you should complete one copy and send it to any labor union that may be involved in your OME contract work and should post one or more copies in conspicuous places available to employees or applicants for employment. The enclosed poster should be kept exhibited in a conspicuous place available to both employees and applicants for employment.

We would appreciate your advising us when the OME contract work has started.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

MLSmelser/mls
cc: OME
MacLaren
Director's Reading File

Mre

AMERICAN MINING COMPANY

[redacted]

400 Securities Bldg.
Seattle, Wash. 98101

5/3/66 120 MOM
HK 120

D. K. MacLaren
Field Officer, [illegible]
Region 1
U. S. Department of the Interior
Office of Mineral Exploration
Geological Survey
So. 15[illegible] Howard Street
Spokane, Wash. [illegible]

Re: OME-0[illegible]
American [illegible]
Nancy [illegible], [illegible]
Granite [illegible], [illegible]
Contract [illegible]

Dear Mr. MacLaren:

Thank you for your consideration and assistance in obtaining the enclosed amendment on OME loan [illegible] for the Nancy Hanks.

I will pass to J. Irving your words of advice about contract compliance that you discussed with me by telephone last Monday.

Cordially,

D. A. Robinson, President
American Mining Company

Encl.

MME FORM 6
REV. 2-59

REFERENCE SLIP
OFFICE OF MINERALS EXPLORATION

TO: Chief, OME

	DATE	INITIALS
1. Re: OME-6410 (Gold) American Mining Company Nancy Hanks, et al., Claims Granite County, Montana ~~Contract 2207~~	4/28/66	
2.		
3.		
4.		
5. D. R. MacLaren		

FROM: D. R. MacLaren
Fld. Officer, Reg. I

FOR: Check items for action desired

X Action
___ Approval
___ Comment
___ Conference
___ Instructions
___ Reply for signature of
___ Investigate
___ Recommendations
___ Rewrite
___ Your information
___ Surname
___ Signature
___ File

5/3 170 Sup
170 [illegible]
[illegible]

REMARKS:

Transmittal of Gov't. and Fiscal Section's copies of Amendment No. 2.

INT.-DUP. SEC., WASH., D.C.

M56300-62

Orme

JOE B. IRVING
MINING GEOLOGIST
2004 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89109
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

April 6, 1[illegible]

COUNSEL IN EXPLORATION
AND DEVELOPMENT

Mr. D. R. MacLaren,
Filed Officer, CME, Section 1,
Geological Survey,
No. 157 Howard Street,
Spokane, Washington 99204

Re: CME-410 (Gold)
American Min. Co.
Nancy Hanks et al
Granite Co., Montana
C[illegible] 2207

Dear Don:

A copy of yo[illegible] to proposed Amendment No. 2 to the subject cont[illegible] The amendment itself has not arrived, but I assume i[illegible] Andif I notice any other changes, I wi[illegible] Company in the matter.

Th[illegible] y request that the[illegible] the additional holes [illegible] the contract, but that [illegible]

I [illegible] f hole c can vary [illegible] dim the first six trenches [illegible]

I [illegible] the location of hole 2, [illegible] of trenches Nos. 6 and 5. [illegible] p before, but had overlooked. I will [illegible] it below.

Ph[illegible] points out that their [illegible] of trenches 5 and 6. [illegible] that holes [illegible] the results [illegible] of trench[illegible] 6, but, it is not clear [illegible] e it will not be to you [illegible] how hole 2 can be, or [illegible] dependent on the trenches mentioned.

If you will [illegible] having the Section [illegible] on it, which shows the geology and position of hole 2, you will see immediately that the objective of hole 2 is the intersection of the faulted and presumably downward extension of the Nancy Hanks vein on the north, or hangingwall, side of the large Nancy Hanks fault. And, the two trenches (5 and 6) are set up to prospect for the following: Out 5 is several hundred feet east of the position of hole 2 and is designed to prospect for the outcrop of the Nancy Hanks vein (and a granodiorite dike) in the Pilgrim formation, south of the Nancy Hanks fault, on it footwall side. In other words it is designed to explore for the westerly extension of the Nancy Hanks vein, on the same side of the fault, as is its outcrop above the old stoping, and not for its faulted extension on the northside of the fault. See page two of contract. Likewise, Out 6, which is east of Hole 2,

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO: Chief, OME	DATE	INITIALS
1.	4/11/66	
Re: OME-6410 (Gold)		
2. American Mining Company		
Nancy Hanks, et al., Claims		
3. Granite County, Montana		
Contract 2207		
4.		
5. D. R. MacLaren		
FROM: Field Officer, Reg. I		

OFFICIAL COPY O. M. E. RECEIVED APR 18 1966 MAIL ROOM CODE

FOR: Check items for action desired

____ Action ____ Reply for signature of

____ Approval ____ Investigate HK Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions X Your information

REMARKS: Attached is a Thermo-Fax copy of a letter dated 4/6/66 received from the company geologist. Due to lack of time for thorough analysis, I am sending it on for your information, and as soon as I complete the exam. rept. I am writing, will check it over carefully.

INT.-DUP. SEC., WASH., D.C. M56300-62

has no connection with the Nancy Hanks ve[illegible] not designed to disclose it north of the Nancy Hanks f[illegible] --[illegible] fault 900' to the north--but is designed to explore for the [illegible] vein and the same contacts as in trench 4. this is all shown [illegible], [illegible] Map 2.

To summarize the discussion above: [illegible] appear to have no connection with, or relation to, the [illegible] for the down-thrown segment of the Nancy Hanks vein, north of [illegible] fault, which is the the objective of hole 2, as shown on [illegible], on Map 4-D.

If you agree, then, this might be [illegible] amendment to the being discussed--that is, the clarification, or re-[illegible], of the paragraph on page 4 of the contract that [illegible] Phase 2, Stage 1, where it states that hole 2 is dependent upon Trench [illegible].

The other matters discussed i[illegible] of your letter are fully understood and state d[illegible] I agree.

I will be [illegible] for the north [illegible] half weeks and plan to stop for [illegible] in Spokane and see [illegible] the general form and procedures to be fol[illegible] monthly reports. Looking forward to seeing you, [illegible] April.

Very [illegible],

(s) Joe G. Irving

[illegible] Irving

P.S. Pardon my three-fingered typing please!

RECEIVED
APR 7 [illegible]

GEOLOGICAL SURVEY
So 157 Howard Street
Spokane, Washington 99204
April 4, 1966

Mr James F Charlton
President
American Mining Company
700 Securities Building
1904 - 3d Avenue
Seattle, Washington 98101

JM 110
~~120 M~~
HK 120

Re: OMF-6410 (Gold)
American Mining Company
Nancy Hanks, et al , Claims
Granite County, Montana
Contract 2207

Dear Mr Charlton:

Enclosed are the original and three copies of a proposed Amendment No 2 (2 pages) to the subject contract signed for the Government

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration

The proposed amendment is for the purpose of clarifying the wording in Exhibit A of the contract as requested by Mr Joe Irving during a visit to the Spokane office on October 20, 1965, and in his letter of January 28, 1966

The request in Mr Irving's letter of March 16, 1966, for two substitute holes because holes c and 2 have already been drilled cannot be considered at this time Exhibit A, Description of the Work, Stage I, Phase 1, specifies that the location of hole c among others will vary as much as 150 feet depending upon what is disclosed by first bulldozing 6 trenches Similarly, Stage I, Phase 2, specifies that the location of hole 2, among others, is to be determined from the results of trenches 5 and 6 It is possible that the information disclosed by the trenches, after they have been excavated as specified in Exhibit A, may indicate that the locations of either or both of these holes do in fact conform to the contract specifications

Only in this event could they be approved as contract work. Otherwise, it may be necessary to drill holes c and 2 at other locations that more nearly meet the contract specifications.

Mr. Irving also requested orally that the word "prior" in the phrase "prior approval" at the end of the fourth paragraph on page 2, Exhibit A, be deleted. Approval of any of the work provisionally set up in Stages II and III so definitely depends upon the results of Stage I work that we must have the information gained by Stage I trenching and drilling before we can approve any additional work. However, if each trench is mapped geologically and sampled, where sampling may be indicated, as it is completed and the information is sent to this office promptly, the required prior authorization could, if justified, be given by telephone thus reducing the "waiting" time.

As the locations of Stage I holes depend entirely upon the information gained by the trenching, and as all work is subject to Government approval, it is important that the premises upon which the alternative locations of holes a, b, c, e, f, and i, as well as the exact locations of holes g, j, and 2 be observed.

Should Stages I and II indicate areas in which additional drilling is desirable or warranted, Stage III has been provided. Possibly, by this time there might be sufficiently good reason to authorize either or both of the "alternate" holes requested in Mr. Irving's letter of March 16, 1966.

The above attempt to clarify further the meaning of the contract terms is not to be taken as assurance that any particular work under Stages II and III will be approved, as approval for each succeeding stage will depend entirely upon the results of the prior ones.

Sincerely yours,

D. R. MacLaren
Field Officer, ONE
Region I

Enclosures
cc: Mr. Joe Irving
2324 South Highland
Las Vegas, Nevada 89102

DRMacLaren/mls
cc: ONE
MacLaren
Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/1	Kirkemo	120
		110
4/4	Cal	220
		120M

APR 4 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Maney Hanks, et al., Claims
Granite County, Montana
Contract 1207

Referring to your memorandum of March 29, 1966, and Mr. Irving's letter of March 16 to you, we are in complete agreement with your recommendation not to amend the contract at this time. We understand that Mr. Irving requests an amendment allowing alternate holes 4 and 6 in lieu of holes 1 and 2, respectively.

We fail to understand why the Operator had not previously reported to the Government the fact that holes 1 and 2 were drilled last summer, particularly since proposed Amendment No. 2 forwarded to you on March 28, 1966, included hole 2, and you had conferences with him in recent months. We find no dates for the drilling of these holes. If they were drilled prior to August 20, 1965, the date of the contract, no precontract expenses can be allowed under the contract. If the drilling contractor's records show that they were drilled subsequent to August 20, costs of drilling these two holes might be allowable costs under the contract if the results of trenching shows that the Government would have approved their locations.

We assume that you do not think the new data will alter the plan for trenching as specified in the contract, but if there is reason to do so, you will have time to recommend revisions.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
120
Mr. Kirkemo

HKirkemo/gla 4-1-66

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
March 29, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 31 1966
INTERPRETATION
HB 110
120
HK 120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Enclosed is a copy of a letter dated March 16, 1965, from Joe G. Irving, acting for the applicant, and seven maps designated Map 2 - 100-scale, Map 4, Supplementary Map 4-D, Map 4-G, Supplementary Map 5, Map 8, and Map 16. In summary, Irving now tells us that holes c and 2 were drilled during 1965 at the locations and according to the specifications set forth in the contract except that hole c was drilled to a depth 850 feet instead of the specified 750 feet and that hole 2 was drilled to a depth of 600 feet instead of the specified 400 feet. He then requests that the contract be amended to drill hole L in lieu of hole c and hole 6 in lieu of hole 2.

Maps in Folder #2

The contract accepted by the Operator was returned with his letter of September 24, 1965, at which time he requested a postponement of the starting date to June 15, 1966, because it then appeared that winter would set in before a dozer contractor could be required. This was approved and Amendment No. 1 was accepted and returned by the Operator with his letter of October 28, 1965. In neither of these letters was any mention made that holes c and 2 had been drilled.

acquired

My memorandum of November 9, 1965, outlined a discussion in the Spokane office with Mr. Irving during which no mention was made of drilling, or of the intention to drill, holes c and 2 prior to the preliminary trenching which is required in Exhibit A of the contract in order to determine the sites from which the holes may be drilled. Your reply of November 19, 1965, advised that it would be better not to delete the word "prior" and that, although other items mentioned did not require an amendment, for clarification for the benefit of the number of new people involved an amendment would be prepared.

In a letter dated January 28, 1966, Irving pointed out in his item 3 that there is something wrong in the wording near the end of the specifications in Exhibit A, Description of the Work, page 4, under Stage I. This is discussed in my memorandum of February 1, 1966, and it is pointed out that this paragraph should probably be clarified and that at least the final phrase "depending upon Hole e" should be deleted.

No amendment for any of the above items has been received. Amdt. mailed 3/28/66

To return to the enclosed letter of March 16, 1966, I can see no reason to authorize the "substitute" holes at this time. Under the terms of the contract, the location of hole c depends upon the results of the trenching which has not yet been started. The hole by itself hardly warrants offset drilling, which might be done under Stage III, at least not at the present time. The best showing is from a depth of 747 to 748.5 feet where a sample indicated a 4-foot vein that assayed 0.15 ounce gold per ton. The hole gives no information as to whether the vein follows the folded bedding or cuts across the bedding near the crest of the anticline. Log shows 4' vein?

The exact location of hole 2, according to the contract, is to be determined by the results of trenches 5 and 6, which have not yet been started, and only if it should indicate strong mineralization in the vein projected from the Dewey lower level, was it to be extended to the faulted portion of the Dewey vein or to a depth of 500 feet, whichever came first. This is described in my report but is not clear in the Stage I, Phase 2, specifications as mentioned in my February 1, 1966 memorandum. In the area of the vein projected from the Dewey lower level the best mineralization cut by hole 2 is 6 inches that assayed 0.005 ounce gold per ton. At 550 feet this hole yielded 1.5 feet of core that assayed 0.24 ounce gold per ton, but no copper assay is included. According to Pardee, copper shows a general increase with depth.

During Irving's visit to Spokane on October 20, 1965, he was told that the required prior authorization could be given by telephone and subsequently confirmed in writing providing that we had received the logs and sample assays from trenches and/or drill holes on which the contract predicated such approval.

The staged arrangement of the contract was recommended as a cautious approach to a slightly long-shot project that had a fair chance of finding ore "somewhere" depending upon the guidance to further work provided by the trenching. As no trenching has as yet been done, I fail to see how the results of the two holes already drilled have changed the advisability of the cautious stage-by-stage approach proposed by OME and accepted by the Operator. After completion of

Stages I and II the results might warrant drilling these two holes.

Therefore, it is recommended that, after the completion of Stage I trenching, if it is determined that hole c would have been authorized at the location from which it has been drilled, the Operator may be reimbursed for it insofar as it does not exceed the contract specifications. If it would have been authorized from a different site, it should be drilled from that site and the present hole c shall be for the Operator's sole account. It is further recommended that the substitution of hole L for the contract hole c be ruled out at this time. If the results of holes a, b, c, e, f, and i collectively justify offset drilling that might include hole L, that hole can then be approved under Stage III.

Because of Pardee's description of the Dewey vein, summarized in the last paragraph on page 4 and the top of page 5 of my report, hole 2 was suggested, only if it were not considered to be too much of a long shot, and was not a strong recommendation. (See last paragraph under Phase 2 on page 7 of my report.) The results of hole 2 indicate that it would probably not have been approved beyond a depth of 350 feet. The fact that it was drilled to a depth of 600 feet and at 492-495 feet produced 1.5 feet of core containing 0.24 ounce gold might justify drilling hole 9 as an alternate contract hole, but before this can be decided, Stages I and II should be completed. If you concur with this thinking, it is recommended that approval of alternate hole 6 be withheld until possible offset drilling under Stage III is considered to be justified.

The reason for withholding approval at this time of the two alternate holes requested by Irving is based principally on the above. However, I am also partly somewhat concerned that if Irving feels that he can get approval for alternate holes drilled before approval of specific prerequisite items of work have been completed or before the presently required preliminary stages have been carried out, we will be spending most of the season writing amendments.

An amendment to include the items referred to in your memorandum of November 19, 1965, and in my memorandum of February 1, 1966, is recommended, but I do not recommend that the amendment should provide for the alternate holes requested in Irving's letter of March 16, 1966.

D. R. MacLaren

D. R. MacLaren

Enclosures

Copy for OME

JOE G. IRVING
MINING GEOLOGIST
2324 SOUTH HIGHLAND
LAS VEGAS, NEVADA 89102
PHONE _____

GEOLOGICAL INVESTIGATIONS
MINE EXAMINATION AND VALUATION

COUNSEL IN EXPLORATION
AND DEVELOPMENT

March 16, 1966,

Mr. Don R. MacLaren,
Field Officer, OME, Region 1,
Geological Survey,
So. -157 Howard Street,
Spokane, Washington 99204

Re: OME-6410 (Gold)
American Mining Co.
Nancy Hanks et al Claims
Granite Co., Montana
CONTRACT - 2207

Subject: Request to substitute two newly proposed drill holes for holes c and 2, approved in the contract, but which were put down in the Summer of 1965

Dear Don:

The subject contract, among other things, appears to approve of the drilling, in Stage 1, the following core drill holes:

Stage 1, Phase 1: Holes a, b, c, e, f and i.
Stage 1, Phase 2: Holes g, j and 2.

A total of nine holes, apparently to be put down without further authorization from the OME, are the holes shown above in Stage 1. The positions of some of the holes in Phase 1, along with certain other specifications, are dependent upon the results of the trenching which has been approved and which is to precede the drilling.

Other holes, provided for in Stages 2 and 3, are dependent in varying ways on the results obtained in certain holes in Stage 1, and will require prior authorization, before drilling, from the Government --in writing.

Two of the approved holes provided for in Stage 1--holes c and 2--were put down by the American Mining Company, without government aid, in the Summer of 1965. Hole c was drilled, from the position shown on Map 2, which was one of the original set of maps submitted, and it followed the other specifications shown in the application, but was drilled to a depth of 850', instead of the 750' specified.

Similarly, Hole 2 was also put down, where shown on Map 2, but this vertical hole was drilled to a depth of 600', instead of the 400' approved.

It is requested that the American Mining Company be allowed to substitute two other Holes for the two approved holes, already drilled. In order to back up this request, show the geology and objectives of the two substitute holes, a new set of supplemental maps have been prepared and accompany this letter.

Additional geologic information, obtained by further study during the 1965 field season, and obtained also from the two holes that were drilled, permitted some very minor modifications of the geology and structure of the area to be made. These slight modifications have been incorporated into the new set of supplementary maps herewith submitted.

These supplementary maps include the following:

a. Supplementary Map 5 which sets forth the geologic findings, and such assays as were taken, in Hole c. This information is posted on Section c-c', shown on Map 5, which is identical to the Section c-c' shown on the original Map 5 submitted, except that on it has been posted the geology found in Hole c.

b. Supplementary Map 4-D, which sets forth the geologic findings, and such assays as were taken, in Hole 2. This information is shown on Section 4e-e', on Supplementary Map 4-D, which section is identical to the Section 4e-e' shown on the original Map 4-G, but here also has been posted the geology found in Hole 2.

The new, and modified, maps being submitted are:

1. Map 2-On 100-Scale. This map covers the pertinent area shown on the 200-scale Map 2, originally submitted, but for purposes of simplicity, clarity and usage in the field most contour lines, geologic notes and other data have been left out. It shows, however, the geology as slightly modified, the locations of all drill holes set forth in the original application, and as now modified by the OME, and the revised specifications of these holes, where they have been changed by the contract.

Shown on this map also are the new holes L and 6, which are presented as substitute holes for holes c and 2 respectively which have already been drilled.

Copies of this map will be used in the field and will be sent in, as the map requirement that will accompnay the reports as they are submitted.

2. Map 8. This map, not previously submitted, will be seen to show geologic projections down to a horizontal plane--at elevation 5800--which plane is at a depth that ranges up to more than 400' below various points below the present surface. Map 8 is submitted to aid in the study of the geologic structure and vein projections.

3. Map 4 (Uncolored) This is the original Map 4 sent in, and is submitted again to show the surface relationship between Hole 2, which was drilled, and substitute Hole 6.

4. Map 16. This new map, showing Section L-L', is submitted to illustrate the projected geology, and objectives, of Hole L which is proposed as a substitute for Hole c (already drilled). Hole L lies about 650' to the southeast of Hole c, and this relationship, plus the surface geology, is shown on Map 2-100-Scale.

5. Map 4-G This map, showing Section 4g-g', which runs through the east end of the Dewey claim, in the Dewey-Shamrock area, is submitted to show the geology and objectives in connection with Hole No. 6 which is a substitute for the already drilled Hole No 2. It will be noted that on Section 4g-g' some of the mineralized structures displayed in Hole No. 2 as being in the hanging and footwall of the main Dewey vein (see Supplementary Map 4-D) are platted on Section 4g-g', so as to point out the possibility of such structures existing in the Hole 6 area, in addition to the main veins of the Dewey and Shamrock workings, which are, of course, the prime objectives of the work.

A study of Supplementary Map 4-D, on which is displayed the the geology exposed by Hole No. 2 (drilled in 1965), reveals that a structure that is probably the downthrown segment of the Nancy Hanks vein was cut in the hole, at 492'. The vein, as shown by the assays obtained, was lean, however, where cut, and at this depth the cost of further exploration or development would seem to be unjustified. Had the vein encountered been extremely high grade (as was the original Nancy Hanks "Red Oreshoot") additional drilling in this immediate area would probably be warranted.

The geology of Hole c, as shown on Supplentary Map 5, is quite interesting. When studied, it should be kept in mind that this hole penetrates ground more than 600' west of the western edge of the Lead King oreshoot, and approximately 1,100' farther to the west than the last ore seen in the G and H vein. Proposed Hole L is much "closer in" toward these workings, as is shown on Map 2-100-Scale. And the various objectives of the hole, which appear to be quite attractive, are shown in detail, along with the general geology, on Section L-L', on newly made Map 16.

A vein structure assaying 0.15 ounces gold over a width of 18" was cut at a depth of 747' in Hole c. This width and grade does not represent anything that could remotely be considered commercial ore, but the vein is possibly the downward and westerly extension of the Lead King vein as projected. But it is, as stated, about 600' west of the Lead King oreshoot.

The Woolsey-Missoula contact, as shown in hole c, which is also about where the G & H vein was to be met--as projected--is also shown to have some weak mineralization in the form of pyrite seams and disseminations. To be noted also, is the fact that seven granodiorite bodies (possibly sills) were encountered in Hole c, and the vein intersected at 747' was at a granodiorite contact.

Pardee, in U. S. G. S. Bulletin No. 660-F, mentions a granodiorite dike as being in the hangingwall of the Lead King vein. The G & H vein, as projected on the surface and as shown on Map 2-100-scale, lies close to a granodiorite dike or sill also.

Proposed substitute Hole L is laid out 150' west of some old caved workings on the Bulls Eye claim that may have exposed the westerly extension of the G & H vein. A study of the location, geologic environment and objectives of proposed Hole L, as shown on Map 2-100-Scale, and on Section L-L' on Map 16, would seem to justify its being put down.

We respectfully request that our proposal to substitute Hole No 6 for Hole 2, and Hole L for Hole c will be given serious consideration. It is fully understood, in the case of Hole L, that it will be subject to

the same possible revised specifications, depending on the trenching, as are set forth for Hole c in the contract.

Sincerely yours,

Joe G. Irving

Joe G. Irving
(Acting for American Min. Co.)

RECEIVED
MAR 28 1966
OME

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/24/66	Kobamo	
"	Johnson	
3/25	Kierzgaard	
3/25	Jewett	
3/25	Dyer	
3/28	cal	210
		120

MAR 3 0 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Banks, et al., Claims
Granite County, Montana
Contract 1207

Enclosed are the original and three copies of a proposed Amendment No. 2 (2 pages) to the subject contract signed for the Government. An extra copy of the proposed amendment is enclosed for field use.

If the proposed amendment is satisfactory to you and the Operator, all four copies should be signed by an authorized representative of the Operator. Thereafter, please distribute the copies in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator, the original and all copies are to be returned to this office together with the proposed changes for consideration.

FRANK E. JOHNSON
Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Reading File
120
MMerrithew/mm (3/24/66)

23263

AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 2

It is agreed this _____ day of _____, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, as amended, is further amended effective the date of the contract as follows:

In Exhibit A:

1. Under the heading General Provisions, the first paragraph is revised to read as follows:

"Trenching, access roads, and preparation of drill sites shall be done with a Caterpillar D-7 or D-8 bulldozer or equivalent units of any other make."

2. Under the heading Description of the Work, Stage I, Phase 2, the paragraph is revised to read as follows:

"(Nancy Hanks project) The work shall consist of preparing three drill sites by bulldozing at sites g, j, and 2 approximately as shown on Map 2, the exact locations to be determined from the results of Trenches 5 and 6, and shall consist also of core drilling Holes g - 150', j - 500', and 2 - 350 to 500'."

MME FORM 6 REFERENCE SLIP

REV. 2- OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Associate Solicitor, 6042~~		
2. Harold Kirkemo, 4450	3/22/66	HK
3.		
4.		
5.		
FROM: Harold Kirkemo	3/17/66	

FOR: Check items for action desired

X Action ____ Reply for signature of ____

X Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INTERIOR DEPT.
MAR 18 1966
SOLICITOR

B-65-20510,11

FROM SOLICITOR
MAR 22 1966
FOR SIGNATURE

INT.-DUP. SEC., WASH., D.C. M56300-62

3. Under the heading Estimated Costs of the Work, Stage I, Actual Costs, Category (1) Independent Contracts, the second specification is revised to read:

"Bulldozing 1,000 ft. of access road, 2000 ft. of trenching, and 9 drill sites $1,200.00"

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By _____

Title _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
February 1, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 8 1966
MINERALS CODE
120
HK 120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

The enclosed Thermo-Fax copy of a letter dated January 28, 1966, from Joe G. Irving, consultant for the subject Operator, is pretty much self-explanatory.

The first two items which he questions were the subject of my memorandum of November 9, 1965, and yours of November 19, 1965.

Regarding the third item, apparently the words "depending upon Hole e" ending the specifications for Phase 2 is one of those nonpertinent things that slip in unnoticed. In the Recommendation Section of my report on this proposal it is pointed out that whether or not Hole g is to be drilled depends upon whether or not Trench 5 exposes the Nancy Hanks vein; whether or not Hole j is to be drilled depends upon whether or not Trench 6 exposes the Tiger vein or vein mineralization along either contact of the Park Shale; and that Hole 2 should be drilled to a depth of 350 feet and only if it showed strong mineralization in the vein projected from the Dewey lower level, could it be extended to the faulted segment of the Dewey vein or to a depth of 500 feet, whichever comes first.

The fact that the location and attitudes of most of the drill holes will vary with what is disclosed in the trenches, and even in some of the other drill holes, has made this Exhibit A a difficult one to write up. However, whether or not you wish to include the above conditions relative to drilling these three holes, the final phrase of Phase 2 should be deleted.

D. R. MacLaren

D. R. MacLaren

Enclosure

[illegible]
[illegible], [illegible]
[illegible], [illegible] 59102

Mr. Don R. MacLaren,
Acting Field Officer, CMX
Office of Minerals Exploration,
South 157 Howard Street,
Spokane, Washington 99204

Re: OME-6410 (Gold)
American Mining Co.
Nancy Hanks et al claims
Granite Co., Montana

Dear Don:

When I last saw you about three months ago, we went over the contract for the proposed work on the subject claims and discussed several things —all fairly minor in nature—that had to be cleared up. At the time, answers were found immediately to all but two of the items brought up, and you said you would look into them and advise me. Since then, I think I have a third thing that appears to be an error, probably typographic.

1. Stage I (Phases 1 and 2) seems to provide for nine holes, and hence nine drill sites. Six sites are for the holes in Phase 1, and three sites for those in Phase 2. However the estimated costs of the work, for all of Stage I, which is detailed on pages 5 and6 of the contract, refer to, and apparently provide for, only six drill sites. See top of page 5. What did you find out about this?

2. On page 1, of Exhibit A accompanying the contract, in the first paragraph under General Provisions, it is stated that the trenching, access roads and preparation of the drill sites shall be done with a Catapiller D-8 bulldozer or equivalent unit of any other make. But, under the cost estimates, for Stage I, on page 5, a D-8, or a D-7 appear to be allowed. I intend to employ a D-7 for the work, which is —in my opinion—perfectly adequate. Will you check up and see if the statement on page 1 of Exhibit A of the contract, which says that a D-8 shall be used is in error. As stated, I plan to use a D-7, but will have to have clearance on this point from your office.

3. The third matter is one of obscurity, or just a plain typographic error or an error of transposition: On page 4, under Phase 2 of Stage I, the ending clause of the one paragraph involved reads—"and shall consist also of core drilling holes g-150', j - 500', and g-250' to 500', depending upon hole e.

There is an error here somewhere, because Hole 2, which is designed to probe for the down-faulted extension of the Nancy Hanks vein, has nothing to do with Hole e, which is 1,000' feet away and is located in the ankerite, rather than the granite which is the environment of the Nancy Hanks vein. The stated objective of hole e is the G & H vein and the Meagher-Beesley contact, and neither, otherwise, have any bearing on how deep hole 2 should be looking for the faulted extension of the Nancy Hanks vein. I am sure this is a typographic error. It may be that the depth of hole e is dependent upon the results of some previously drilled hole, but I don't know which.

Sincerely,

/s/ Joe G. Irving
Joe G. Irving

P.S. Hole 2 shown on 40-scale map 2, h-4 and h-80

P.P.S. If your reply is addressed to the Seattle office of Amer. Min. Co., be sure I get a copy down here.

MAY 31 1966

Bme

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
February 1, 1966

Air Mail

Mr. Joe G. Irving
Mining Geologist
2957 So. Highland
Las Vegas, Nevada 89102

~~120 HK~~
120
HK

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Dear Joe:

Thank you for spotting the obscure reference to Hole e in Phase 2. Something is certainly wrong.

I have been advised that an amendment will be prepared relative to the first two items you mention, and that the word "Prior" in the phrase "prior approval" cannot be dropped. I will request that the wording of Phase 2 also be corrected.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren/mls

cc: OME
MacLaren

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	130
11/19	Johnson	110
11/19	CHE	220
		120

NOV 1 9 1965

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2297

Referring to your memorandum of November 9, 1965, we believe it best that the word "prior" be not deleted from the contract. The succeeding stages definitely depend upon the results of prior stages, and we should have that information. The Applicant can do as you have already discussed with Joe Irving, its consultant.

In regard to Item 2, it would not be necessary to amend the contract to prepare 9 drill sites as the 6 designated in the costs is not a maximum. The 6 could be considered as a typographical error.

Approved

Probably an amendment would not be necessary with regard to the bulldozer but because so many new people are involved, for clarification, we shall amend the contract for the D-7 in the General Provisions. At the same time, we will also change the 6 drill sites to 9 in the Actual Costs item.

(signed) FRANK E. JOHNSON

Frank E. Johnson

GCSelfridge/mm (11/19/65)
cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge (2)

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 9, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 12 1965
INITIAL | CODE
120
120
FED 110

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Joe Irving, consultant for the subject Operator, visited the Spokane Office October 20, 1965, and raised several questions regarding the contract specifications and costs, some of which may require an amendment. As Amendment No. 1 was received the following day, preparation of this memorandum was put off.

1. Exhibit A, General Provisions, page 2, final phrase in the fourth paragraph: ". . . shall have prior authorization . . ." Irving's question: "Can the prior authorization be conditional to avoid keeping a drill crew idle until assay data and appraisal of drilling results are available?" I told him that prior authorization could be given by telephone only after receipt of assays, logs, and other pertinent data on which the authorization could be based but that he could proceed at the Operator's risk that authorization might not be given. Will it be necessary to delete the work "prior" in this situation?

correct

Offer to do this and have prior approval

2. Exhibit A, Description of the Work, page 2: Stage I allows 6 drill holes under Phase 1 and 3 drill holes under Phase 2, but under Estimated Costs of the Work, page 5, Actual Costs, Category (1) Independent Contracts provides for only 6 drill sites. Can nine drill sites be prepared without an amendment?

3. Exhibit A, General Provisions, page 1, specifies a D-8 dozer or equivalent unit, but on page 5 under Estimated Costs of the Work, Actual Costs, Category (1) Independent Contracts, provision is properly made for either a D-8 or a D-7. Is an amendment to the General Provisions' section necessary? Possibly ?

D. R. MacLaren
D. R. MacLaren
mcs

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/1	Johnson	
	Savage	✓
11-2	Weeks	
11/2	Smith	
11-3	Hayes	
		1200

NOV 4 1965

Hon. Thomas G. Morris
House of Representatives
Washington, D. C. 20515

Dear Mr. Morris:

Your letter of October 21, 1965, to Mr. Frank C. Mannett, Acting Director, U. S. Bureau of Mines, concerning a contract for financial assistance in minerals exploration recently granted to the American Mining Company of Seattle, Washington, has been referred to the Geological Survey.

The information requested concerning this contract is given below:

Total amount of contract $61,880.00
Government Participation $30,940.00
Purpose: To explore the Crescent, Nancy Hanks, and Garnet groups of claims in Granite County, Montana, for gold-bearing ore bodies occurring in veins in granite and as replacement deposits in sedimentary rocks.

This contract was granted under the program of financial assistance for minerals exploration authorized by P. L. 85-701 and the regulations issued pursuant thereto (copies enclosed). We also are enclosing a copy of the pamphlet "Exploration Assistance" which more fully explains the program, and a set of forms for applying for exploration assistance.

If you desire additional information about the program, we shall be glad to have you call on us.

Sincerely yours,

Arthur A. Baker

Acting Director

Enclosures

FEJohnson/gla (11-1-65)
cc to: General Files
Division File
Director's Chron
Economic Geology File
OME File 6410
OME Reading File
OME Region I w/cys incoming letters

23263

October 29, 1965

Hon. Thomas G. Morris
House of Representatives
Washington, D. C. 20515

Dear Mr. Morris:

We acknowledge your letter of October 21, addressed to Acting Director Frank C. Mammott, concerning a $30,390.00 loan to the American Mining Company of Seattle, Washington.

We are forwarding your letter to the Office of Minerals Exploration which is the agency in the Department of the Interior which handles requests for exploration loans.

Sincerely yours,

CHARLES W. MERRILL
Chief, Division of Minerals

cc:
Office of Minerals Exploration

THOMAS G. MORRIS
[illegible]

[illegible]
[illegible]

[illegible]
[illegible]
Telephone [illegible]

APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON AGRICULTURE

Congress of the United States
House of Representatives
Washington, D.C. 20515

C. M. Merrill

October 21, 1965

Mr. Frank C. Mennott
Acting Director
Bureau of Mines
Department of the Interior
Interior Building
Washington, D. C., 20240

Dear Mr. Mennott:

It has come to my attention that a $30,390.00 loan was granted to the American Mining Company of Seattle, Washington, recently for certain prospecting work to be performed on the old Nancy Hanks, Crescent and Granite claims of Granite County, Montana.

It will be appreciated if you will send to me the details of the loan and provide an analysis of the Public Law that makes such a loan possible.

Sincerely yours,

TGM:peh

THOMAS G. MORRIS

One

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE
~~XXXXXXX~~
MAin 4 5416

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 1 1965
INITIALS | CODE

JAMES F. CHARLTON
GENERAL MANAGER

October 28, 1965

Re: O.M.E. - 6410 Gold, Nancy Hanks Claims
Granite County, Montana, Contract 2207

Mr. D. R. MacLaren, Acting Field Officer
O.M.E. Region 1
U. S. Geologcal Survey
South 157th Howard Street
Spokane, Washington 99204

Dear Mr. MacLaren:

In accordance with your letter of October [illegible] original and copies of the proposed Amendment No. 1 to the subject contract which has been executed by American Mining Company. We will retain the Operator's copy for our files.

We wish to express our appreciation to you for your assistance and look forward to an early commencement under the terms of this contract.

Sincerely,

AMERICAN MINING COMPANY

/s/ James F. Charlton

James F. Charlton, President

enc.

ed

MME FORM 6 REFERENCE SLIP

REV. 2- OFFICE OF MINERALS EXPLORATION

TO: Chief, OME

		DATE	INITIALS
1.		10/29/65	
2.			
3.			
4.	M.L. Smelser		
5.	M.L. Smelser for D. R. MacLaren		

FROM: Field Officer, Reg. I

INITIALS CODE

OFFICIAL COPY O. M. E. RECEIVED NOV 1 1965

FOR: Check items for action desired

X Action ____ Reply for signature of

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

120 M

120

REMARKS: OME-6410 (Gold)
American Mining Co.
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Transmittal of Gov't., Audit, and Fiscal Section's copy of Amendment No. 1, signed by the president of the above-cited company.

INT.-DUP. SEC., WASH., D.C. M56300-59

OME

GEOLOGICAL SURVEY
So 157 Howard Street
Spokane, Washington 99204
October 21, 1965

Mr. James F. Charlton
President
American Mining Company
700 - Securities Building
Seattle, Washington

120 m
120

Re: OME-6410 (Gold)
Nancy Banks, et al., Claims
Granite County, Montana
Contract 2207

Dear Mr. Charlton:

Pursuant to your request of September 24, 1965, enclosed are the original and four copies of a proposed Amendment No. 1 (one page) to the subject contract, signed for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

MLSmelser/mls

cc: OME
MacLaren

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/12	Selfridge	130
"	Johnson	110
		220
11/14	Kirkgaard	
10/14	Troom	
10/14	Jones	
10/15	Kupp	110
10/15	Case	220
		120M

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Pursuant to the Operator's request of September 24, 1965, enclosed are the original and four copies of a proposed Amendment No. 1 (one page) to the subject contract, signed for the Government. An extra copy of the proposed amendment is enclosed for field use.

If the proposed amendment is satisfactory to you and the Operator, all five copies should be signed by an authorized representative of the Operator. Thereafter, please distribute the copies in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office together with the proposed changes for consideration.

(signed) FRANK E. JOHNSON
Frank E. Johnson

Enclosures

GCSelfridge/gla (10-12-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge (2)

23263

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	
10/12	Johnson	
11/14	Kilbgaard	
10/14	Toohey	
10/14	Smith	

October 12, 1965

Memorandum

To: The File

From: Assistant Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207
Justification for Amendment No. 1

As the subject contract was received by the Operator late in the season and the work therein could not have been completed this year, the contract was amended setting the starting date ahead until next season.

George C. Selfridge

George C. Selfridge

GCSelfridge/gla (10-12-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge

8623

DRAFT
10/1/65
GCSelfridge/gla

Docket copy

AMERICAN MINING COMPANY
OME-6410

AMENDMENT NO. 1

It is agreed this _____ day of _____, 1965, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and American Mining Company, hereinafter called the "Operator," that Exploration Contract 2207 (OME-6410), dated August 20, 1965, is amended effective the date of the contract as follows:

1. The time fixed by the contract on or before which the Operator shall begin work is changed from October 1, 1965, to June 15, 1966.

2. The time fixed by the contract for the completion of the work is changed from twelve (12) to twenty-three (23) months from the date of the contract.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Chief, Office of Minerals Exploration
U. S. Geological Survey

AMERICAN MINING COMPANY

By_____

Title_____

September 27, 1965

File

Mr. Johnson:

Mary Smeltzer called over FTS to say that Contract 2207 was received today in their office, signed by the Operator.

OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

(For some reason, Region I office has been asked not to use teletype, and Mr. MacLaren decided that they would use FTS to convey this information.)

Grace

Two [illegible] office
one (2)

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 1, WASHINGTON
TELEPHONE
MAIn 4 5416

JAMES F. CHARLTON
GENERAL MANAGER

September 24, 1965

Re: OME-0410 (Gold) American Mining Company
Nancy Hanks, et al. Claims Granite County
Montana

Mr. D. R. MacLaren,
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington, 99204

Dear Mr. MacLaren:

Enclosed are the original and four copies of the contract for the subject claims, properly signed and attested to by the President and Secretary of American Mining Company.

The acceptance of the contract is made with the request that the Office of Minerals Exploration consider the peculiar problem presently faced by the American Mining Company with regard to the lateness of the season. You must recognize that mining activities in the western Montana area virtually halts approximately the middle of October. Since this contract is signed with an anticipated starting date of October 1 and since it was not received until the 9th of September, it has been impossible for us to arrange a contract with a satisfactory bulldozer contractor in time to start work by the first of October. It appears that before a contract can be made winter will have set in thereby forstalling any activity until sometime next spring.

Therefore, we would like to request that your office grant an extention permitting us to start activities by a date no later than June 15, 1966. This will give us adequate time to arrange the necessary contracts to proceed with the work on an orderly basis.

Your consideration of this request will be greatly appreciated.

Sincerely yours,

AMERICAN MINING COMPANY

(5) James F. Charlton

James F. Charlton, President

MME FORM 6
REV. 2

REFERENCE SLIP
OFFICE OF MINERALS EXPLORATION

TO: Chief, OME

	DATE	INITIALS
1.	9/27/65	
2. ~~120~~		
3. 120M		
4.		
5. D. R. MacLaren		

FROM: Field Officer, Reg. I

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 29 1965
~~INITIALS CODE~~
120 M
of 120
Surname
Signature
File

FOR: Check items for action desired

X Action
Approval
Comment
Conference
Instructions
Reply for signature
Investigate
Recommendations
Rewrite
Your information

REMARKS: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana
Contract 2207

Transmittal of the Gov't., Audit, and Fiscal Section's copies of the above-cited contract signed by James F. Charlton, President. Also enclosed are two Thermo-Fax copies of a letter dated 9/24/65 requesting an amendment thereto.

INT.-DUP. SEC., WASH., D.C.

M56300-62

OMe

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 9 1965

INITIALS	CODE
	120M
	120

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
September 7, 1965

Mr. James F. Charlton
President
American Mining Company
700 - Securities Building
Seattle, Washington

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana

Dear Mr. Charlton:

Enclosed are the original and four copies of a proposed contract for the subject claims. The contract consists of MME Form 50 (7 pages), Annex I (2 pages), 2 Lien and Subordination Agreements, Exhibit A (10 pages), Exhibit B (1 page), and 1 map. All copies have been signed by the Acting Director, U. S. Geological Survey, for the Government. The date for commencement of the work has been inserted.

You or whoever will be in charge of carrying out the project work under this contract are urged to read carefully all the specifications set forth in Exhibit A. Without prior Government approval subsequently confirmed in writing, the Government may refuse to contribute to the cost of any work that does not conform to those specifications. Your attention is specifically directed to Article 12 and Exhibit B. Appropriate forms to meet the compliance requirements will be sent with forms for reporting monthly progress and vouchering.

If the terms and conditions are satisfactory, sign all copies, keep the Operator's copy, and return the other copies to this office.

If any part of the proposed contract is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

The 6¼ percent interest accrues from the date on which the individual payments are made by the Government and like the principal is payable from royalty on production.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

MLSmelser:mls

cc: OME
Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	120
8/17	Johnson	110
		220
8/17	Kiyg	
8/18	Baines	
		110
8/20	cal	220
		120 m

AUG 2 0 1965

Memorandum

To: Acting Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana

Enclosed are the original and four copies of a proposed contract for the subject claims. The contract consists of MME Form 50 (7 pages), Annex I (2 pages), 2 Lien and Subordination Agreements, Exhibit A (10 pages), Exhibit B (1 page), and one map. An extra copy of the contract is also enclosed for field use. All copies have been signed by the Acting Director, U. S. Geological Survey, for the Government. The date for commencement of the work has been inserted.

If the proposed contract is satisfactory to you and the Applicant, all five copies should be signed by an authorized representative of the Applicant. Thereafter, please distribute the copies in the usual manner.

Please advise the Applicant that the 6½ percent interest accrues from the dates on which the individual payments are made by the Government and like the principal is repayable from royalty on production.

If any part of the proposed contract does not have your approval or that of the Applicant and cannot be altered within your delegated authority, the original and all copies are to be returned to this office together with the proposed changes for consideration.

(signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME File
Mr. Selfridge (2)

OME Reading File

MMerrithew/mm
8/17/65

23263

MME FORM 6 REFERENCE SLIP

REV. 2 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Associate Solicitor 6042		
2. Mr. Selfridge 4459		
3.		
4.		
5.		

RECEIVED
AUG 6 1965
Division of Mineral Resources
and General Legal Services

INTERIOR DEPT.
AUG 6 - 1965
SOLICITOR

FROM: George C. Selfridge 8/6/65

FOR: Check items for action desired

____ Action ____ Reply for signature of ____
____ Approval ____ Investigate ____ Surname
____ Comment ____ Recommendations ____ Signature
____ Conference ____ Rewrite ____ File
____ Instructions ____ Your information

REMARKS:

Seemingly, we have now received all of the legal documents necessary to final draft the proposed contract. Receipt of these documents will entail some revision of Annex I as now drafted.

AUG 9 1965
FROM SOLICITOR
FOR SIGNATURE

G.C.S.

INT.-DUP. SEC., WASH., D.C. M56300-62

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE
~~MAin 2-2912~~
MAin 4 5416

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 4 1965
INITIALS | CODE
120
120
JAMES F. CHARLTON
GENERAL MANAGER

August 2, 1965

Re: OME-6410 (Gold) American Mining Company
Nancy Hanks, et al., Claims Granite County,
Montana.

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
United States Department of the Interior
Washington 25, D.C.

Dear Mr. Johnson:

left file docket

Enclosed is a Grant Deed from Mr. Bielenberg to Mr. Charlton, as well as a Grant Deed from Mrs. Charlton to Mr. Charlton; and finally a Grant Deed from Charlton to American Mining Company.

Additionally enclosed is a copy of a recent financial statement completed by the Arthur Andersen and Company.

With the letter you have now received, a copy of which is enclosed, from Mr. Dean Brayton of Bellows Graham, Inc., I believe all of the requests for additional information have been satisfied.

Sincerely yours,

AMERICAN MINING COMPANY

T. E. Dahl

T. E. Dahl, Secretary

Copy sent to R-E 8/4/65 jm

Enc.

ed

FORM 6 REFERENCE SLIP

REV. 9 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Associate Solicitor 6042		
2. Mr. Selfridge 4457		
3.		
4.		
5.		
FROM: G. C. Selfridge	7/15/65	

FOR: Check items for action desired

X Action	____ Reply for signature of ____	
X Approval	____ Investigate	____ Surname
____ Comment	____ Recommendations	____ Signature
____ Conference	____ Rewrite	____ File
____ Instructions	Your information	

REMARKS:

B-65-2050.11

RECEIVED
JUL 15 1965
Division of Mineral Resources
and General Legal Services

INTERIOR DEPT.
JUL 15 1965
SOLICITOR

INT.-DUP. SEC., WASH., D.C. M56300-62

LAW OFFICES
BRAYTON, LOWE & HURLEY
WALKER BANK BUILDING
SALT LAKE CITY 11, UTAH

DEAN F. BRAYTON
JOHN W. LOWE
ANDREW R. HURLEY
FRANK E. DISTON

STEPHENS, BRAYTON & LOWE
1926-1960
FRANK B. STEPHENS
1855-1940
WILLIAM J. LOWE
1881-1948

July 19, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 21 1965
INITIALS CODE
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120

Mr. Frank E. Johnson, Chief,
Office of Minerals Exploration
United States Department of Interior
Washington 25, D. C.

Dear Mr. Johnson:

Re: Your OME-6410 (Gold)

At the request of American Mining Company, a corporation of the State of Washington, I am sending you this letter as Secretary of Bellows-Graham, Inc., a corporation of Montana, to the effect that Paragraph 4 of the Agreement of August 23, 1962, between H. A. Bellows on behalf of all stockholders of Bellows-Graham, Inc., and James F. Charlton was not intended to prevent exploration on the property of Bellows-Graham, Inc., in the State of Montana; as described in the Lien and Subordinate Agreement issued by Bellows- Graham, Inc., to the United States Department of the Interior on January 19, 1965.

Dean F Brayton
Secretary of Bellows-Graham, Inc.,
a Montana Corporation.

DFB/mh

Copy sent to R-I 8/4/65 m

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Sellwood	✓
7/16	Johnson	110
7/16	Cue	220
		1207M

JUL 16 1965

AIRMAIL

Mr. James F. Charlton
President
American Mining Company
700 - Securities Building
Seattle 1, Washington

Re: GME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana

Dear Mr. Charlton:

Legal review of the documents submitted under the subject application has raised the following questions.

The Grant Deed of July 27, 1962, between the Bielenbergs and Charlton involving the Crescent, Bull's Eye, and Gold Bug claims predates the Purchase and Sale Agreement dated June 12, 1963, granted to Robert M. Bielenberg and James F. Charlton. Under this condition, Robert M. Bielenberg would still have an interest in the claims. With regard to the Nancy Hanks, Dewey, and Midnight claims, we should have a copy of the Letter of Instructions, Escrow No. 3713, mentioned as Exhibit B in the Assignment of Rights dated June 5, 1964, between the Charltons and American Mining Company. In the Agreement of August 23, 1962, between N. A. Ballows and James F. Charlton, mention is made in Item 4. that the Second Party agrees that he will conduct no actual mining operations on, etc., until the purchase price for said stock has been fully paid. We should have a document indicating that such has been done as the stipulation could be construed as also including exploration.

Will you please also submit a recent financial statement of the American Mining Company.

23263

Submittal of this information should not be construed as a commitment by the Government to grant an exploration contract.

Sincerely yours,

(signed) FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of Minerals Exploration

GCSelfridge/mm (7/16/65)
cc: Director's Reading File
Division File
Economic Geology File
OME Reading File
OME File
Region I
Mr. Selfridge

Docket Copy

MME Form 50
June 1963

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR *
[redacted]

EXPLORATION CONTRACT
(Long Form)

Docket No.	Commodity	Contract No.	County	State
OME-6410	Gold	14-23-090-	Granite	Montana

It is agreed _____ (Date), between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and

American Mining Company, a Washington corporation

_____,

whose mailing address is 700 Securities Building, Seattle 1, Washington, hereinafter called the "Operator," as follows:

ARTICLE 1. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before _____ (Date), and, subject to the provisions of Article 9 and Exhibit A, shall either have completed the work within 12 months from the date of the contract or shall have incurred allowable costs (see Article 6) in a sum not less than the total cost set forth in Exhibit A.

(b) The total allowable cost of the work set forth in Exhibit A is $61,880.00. The Government will contribute 50 percent of the allowable costs as they are incurred, in a total sum not in excess of $30,940.00 in accordance with the provisions of Articles 3, 4, 5, and 6. "Costs incurred" means costs that have been paid or have become due and payable, or that the Government determines have become obligations.

(c) Interest computation.--Simple interest at the rate of _____ percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

(d) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

See Annex I

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the lien agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

See Annex I

* U. S. Geological Survey

(c) The Operator shall preserve and maintain his right, title, or interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 7 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(b) Independent contracts.--To the extent that the allowable costs are estimated in Exhibit A with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed (see Article 6(a), Category (1)). Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract, the Government will participate in payments to the independent contractor only as to work performed in accordance with the provisions of this exploration contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) Government may inspect.--The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract and production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.-- The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(b), but all payments by the Government are provisional only, subject to audit. Until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. Reports, accounts, audits.--(a) Operator's records.--The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) Monthly reports.--The Operator shall provide the Government with four copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; and

(3) a narrative report of the work performed during the reporting period, including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground.

(Forms for reporting under (1) and (2) above will be provided by the Government; however, the original of the Operator's Monthly Voucher shall be supported by documentary evidence, such as certified copies or transcripts of payrolls and invoices, for all costs claimed under Article 6 (a) (1).)

(c) Final report.--Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with three copies of a final report (in addition to the final monthly report). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the related costs.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production.

(e) Compliance with requirements.--If the Government determines that any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the preparation or completion of the same with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 6. Costs.--(a) Allowable costs.--The allowable costs of the work to which the Government will contribute are limited to:

(1) the necessary, reasonable, and direct actual costs that are estimated in Exhibit A by categories as specified in this article; and

(2) fixed costs for units of work to be performed (per foot, per hour, etc.) agreed upon in lieu of actual costs and set forth in Exhibit A.

The Government will not contribute to costs under any category or subcategory omitted from the estimate of costs in Exhibit A. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost; any excess over a fixed unit cost; and any excess over the total allowable cost of the work are not allowable. The Operator shall incur such excesses for his own account without contribution by the Government, but the Operator is not obligated to incur more than his agreed percentage of the total allowable cost of the work.

Any category or subcategory or element thereof not designated as a maximum in this article or in Exhibit A may be exceeded, provided that the total allowable cost of the work, which is a maximum, is not exceeded.

CATEGORY (1)--INDEPENDENT CONTRACTS.--(See Article 3(b)). The total of this category and the average unit cost estimated for each type of work to be performed under an independent contract are maximums.

CATEGORY (2)--PERSONAL SERVICES.

Subcategory (a)--Supervision and Technical Services--All elements of this subcategory (number of supervisors, technicians, outside consultants, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)--Labor.

CATEGORY (3)--OPERATING MATERIALS AND SUPPLIES.--Includes such items as drill bits and steel, explosives, fuel, pipe, power, timber, rail, and small tools costing less than $50 each.

CATEGORY (4)--OPERATING EQUIPMENT.

Subcategory (a)--Rental.--The number of each rented item [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)--Purchases.--The total of this subcategory is a maximum.

Subcategory (c)--Depreciation.--All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)--INITIAL REHABILITATION AND REPAIRS.--Costs of items listed under this category include all requirements, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The total of this category is a maximum.

Subcategory (a)--Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).--The total of this subcategory is a maximum.

Subcategory (b)--Initial rehabilitation and repairs of operating equipment.--The total of this subcategory is a maximum.

CATEGORY (6)--NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).--Costs of items listed under this category include all requirements, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The total of this category is a maximum.

CATEGORY (7)--MISCELLANEOUS.--Includes requirements and costs that do not fall within any of the first six categories, such as repairs other than initial and maintenance of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, and communications.

(b) Nonallowable costs.--In addition to the limitations imposed by paragraph (a) of this Article 6 the Government will not contribute to the following costs:

(1) Costs of the land, such as rental, depreciation, depletion, or other costs of acquiring, owning, or holding possession;

(2) Indirect costs, such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) Previous work performed or costs incurred before the date of this contract; and

(4) Deferred payments.--Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods, unless the purchase agreement is approved by the Government in writing.

(c) Reductions in costs.--The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original total cost. The provision does not apply to receipts from production which are subject to the Government's royalty under the provisions of Article 7.

ARTICLE 7. Repayment by Operator.--(a) Certification.-- If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retains his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certicifation of possible production--from the date of the contract until the lapse of the time within which the government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract, or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, metal or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business and shown as deductions on the buyer's settlement sheets (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable by the buyer to a carrier (not the Operator or producer)), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. No costs of the Operator or Producer are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be.

(d) Unsold production.--If any production (ore, concentrate, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrate, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination or the market value, whichever is greater.

(b) If the Government determines that the Operator is in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon:

(1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 9 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 13.

ARTICLE 10. Notices to be given by the Government may be delivered to the Operator, or may be sent by certified mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 11. Officials not to benefit.--No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 12. Nondiscrimination in Employment. The provisions respecting nondiscrimination in employment which are required by section 301 of Executive Order 10925, dated March 6, 1961 as amended and supplemented are attached hereto as Exhibit B and are hereby incorporated in and made a part of this contract.

ARTICLE 13. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, [redacted]* who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, [redacted]*, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, [redacted], a written appeal addressed to the Secretary of the Interior. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, [redacted]*" as used herein includes his duly authorized representative.

ARTICLE 14. Work Hours Act of 1962 - Overtime Compensation.--This contract, to the extent that it is of a character specified in the Work Hours Act of 1962 (Public Law 87-581, 76 Stat. 357-360) and is not covered by the Walsh-Healey Public Contracts Act (41 U.S.C. 35-45), is subject to the following provisions and to all other provisions and exceptions of said Work Hours Act of 1962.

(a) Overtime requirements.--No Operator or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic to be employed on such work in excess of eight hours in any calendar day or in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate of not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any such calendar day or in excess of forty hours in any such workweek, as the case may be.

(b) Violations; liability for unpaid wages; liquidated damages.--In the event of any violation of the clause set forth in subparagraph (a) of this paragraph, the Operator and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Operator and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for

*** U. S. Geological Survey**

(e) Lien for payment.--To secure the payment of royalty (see Article 7(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) Notice to purchasers.--The Operator or producer shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Government, and this estimate shall be final and binding upon the Operator or producer.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(h) Government not obligated to buy.--Nothing in this contract shall be contrued as imposing any obligation on the Government to purchase any minerals and metals mined or produced from the land.

ARTICLE 8. Interests in purchased property.--(a) Title and ownership.--All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions although title thereto shall be taken in the name of the Operator.

(b) Preservation of property.--Until the final disposal of any property in which the Government has an interest, the Operator shall preserve and protect same for the best interest of the Government, and any reasonable and necessary cost thereof will be treated as an allowable cost of the exploration. After the completion of the work, termination of the Government's obligation to contribute, or when such property is not being used for the work, the Operator shall not use it elsewhere without the written consent of the Government and without paying a reasonable rental to be fixed by the Government for its proportionate interest.

(c) Disposal of property.--Upon the completion of the work, termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, sale to others, purchase by the Operator, or sale or transfer to the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government, the Operator shall not sell at any price any item of property that cost more than $500, and shall not sell at less than 25 percent of the purchase price any item of property that cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or offers. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, explosives, pipe, or rail), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item, the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the exploration.

(d) Default of the Operator re disposal.--If within 90 days after the completion of the work, termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may:

(1) in writing extend the time within which the Operator must dispose of or liquidate the property;

(2) by written notice to the Operator, place upon such property what it determines to be a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; and

(3) enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 9. Termination of the Government's obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is not justified, the Government may give the Operator written notice thereof, and thereupon:

(1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to final accounting and reporting; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph (a) of this paragraph, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (a) of this paragraph.

(c) Withholding for unpaid wages and liquidated damages.--The Office of Minerals Exploration may withhold or cause to be withheld, from any moneys payable on account of work performed by the Operator or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Operator or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b) of this paragraph.

ARTICLE 15. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 16. Changes and added provisions.--

_____

_____

_____

_____

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

AMERICAN MINING COMPANY

By_____

By_____

Acting Director
U. S. Geological Survey

Title_____

_____

I,_____, certify that I am the
(Name)

_____ secretary of the corporation named as Operator herein; that

_____, who signed this contract on behalf of the Operator, was then
(Name)

_____of said corporation; that said contract was duly signed for
(Title)

and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

Docket Copy

DRAFT RMSmith/mm
7/13/65

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OME-6410

ANNEX I

The land, including all rights pertaining thereto, referred to in Article 2 of the contract consists of six (6) patented and five (5) unpatented lode mining claims in secs. 3 and 4, T. 12 N., R. 14 W., MPM, Garnet (unorganized) mining district, Granite County, Montana. The outer boundary of the claims is outlined in green on Map 2 entitled "Ownership and Geological Map, Garnet District . . ." attached hereto and made part hereof.

The patented claims are as follows:

Claim	U.S. Patent Survey No.
Crescent group	
Bulls Eye	4651
Gold Bug	9407
Crescent	4510
Nancy Hanks group	
Nancy Hanks	5635
Dewey	9833
Midnight	9833

The unpatented claims are recorded in the office of the County Clerk, Philipsburg, Granite County, Montana, as follows:

Claim	Book	Page
Garnet group		
Garnet No. 1	24	56
Garnet No. 3	24	60
Garnet No. 7	24	68
Garnet No. 8	24	70
Garnet No. 12	24	225

The Operator is in possession of the Crescent group of patented claims by virtue of a "Grant Deed and Assignment" executed June 5, 1964, by James F. Charlton and Alice M. Charlton, his wife, of a "Purchase and Sale Agreement" dated June 12, 1963, granted to Robert M. Bielenberg and James F. Charlton by James G. Haviland and Jean F. Haviland, his wife, owners of the claims. Robert M. Bielenberg and Mary Brene Bielenberg, husband and wife, in a "Grant Deed" dated July 27, 1962, conveyed all their interest in said claims to James F. Charlton. (Note--date seemingly is a typographical error.)

A Lien and Subordination Agreements executed September 1964 by the owners of the Crescent group of claims is attached hereto and made part hereof.

The Operator is in possession of the Nancy Hanks group of patented claims by virtue of an Assignment of Rights executed June 5, 1964,

by James F. Charlton and Alice M. Charlton, his wife, transferring (1) all rights and interests of any sort they may ever have in the stock of Bellows-Graham, Inc., a Montana corporation, owner of said claims pursuant to the terms of a certain "Agreement" dated August 23, 1962, between H. A. Bellows and James F. Charlton, and a "Letter of Instructions Escrow No. XXXX 3713" dated January 8, 1963, and (2) all rights and interests of any sort in said "Agreement" and "Letter of Instructions."

A Lien and Subordination Agreements executed January 19, 1965, by the owner of the Nancy Hanks group of claims is attached hereto and made part hereof.

The Operator is in possession of the Garnet group of unpatented claims by virtue of "Grant Deeds" executed June 5 and August 10, 1964, by James F. Charlton and Alice M. Charlton, his wife, locaters of said claims.

Docket Copy

DRAFT
RMSmith 7/13/65

EXPLORATION CONTRACT
AMERICAN MINING COMPANY
OMR-6410

EXHIBIT A

The purpose of this project is to explore by trenching and by core drilling from prepared surface drill sites for gold-bearing ore bodies occurring in veins and/or replacement deposits in, along, or cutting across folded strata of carbonate rocks, shale, and quartzite of Precambrian-Middle Paleozoic age or in granitic rocks that cut the strata.

General Provisions

Trenching, access roads, and preparation of drill sites shall be done with a Caterpillar D-8 bulldozer or equivalent unit of any other make.

All core drill holes shall be started not less than AQWL size (approximately 1-1/16") and may be reduced as hole conditions require to not less than EX standard size (approximately 7/8").

Facilities shall be provided for recovering drill sludge, and such sludge shall be retained when drilling in significantly mineralized ground.

The drill core shall be stored in boxes identified as to hole number with markers in the core section indicating the depths represented.

Significantly mineralized core shall be split and one split assayed for gold and silver and for lead and copper as warranted. Whenever the core recovery is found to be less than 60 percent, a split of the corresponding retained sludge and a split of such core as may have been recovered shall be assayed separately and the assay results combined according to standard practice to represent a single sample. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to source and location. The stored core and the sludge samples shall be made available for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored core and samples.

All drill holes shall be logged, and copies of the logs of completed holes together with plans and sections showing assays shall be furnished monthly to the Government.

No drilling or trenching shall be done within 100 feet of the exterior boundaries of the land outlined on the maps previously referred to.

The Operator shall provide such supervision, labor, and technical services as may be required to complete the work in a satisfactory manner.

The location, direction, and extent of each work item shall be subject to Government approval. The work shall be divided into

three stages. The Operator shall complete all of Stage I and as much of Stages II and III as authorized by the Government. Approval of Stages II and III shall be dependent upon favorable results having been obtained in the preceding stage and shall have prior authorization of the Government confirmed in writing.

Description of the Work
Stage I

The work under Stage I shall be subdivided into two phases, 1 and 2.

Phase 1. The initial work under this phase shall consist of bulldozing six trenches, Nos. 1 through 6, approximately in the locations shown and at the bearings and lengths indicated on Map 2. The objectives of each trench are as follows:

Trench	Objective
1	Outcrop of G & H vein
2	Do and the Woolsey-Missoula contact
3	Do and the Meagher-Woolsey contact
4	Do, the Pilgrim-Park shale, and Park-shale-Meagher contacts
5	Outcrop of Nancy Hanks vein and granodiorite dike in the Pilgrim Formation
6	Outcrop of Tiger vein and the same contacts as in Trench 4

After completion of the trenches, six drill sites shall be prepared by bulldozing and six holes, a, b, c, e, f, and i, shall be drilled in locations that depend upon the results of the trenching. If Trenches 1-4, inclusive, show that the G & H vein crosses the bedding, it may be assumed that the LK vein does also. In order to explore both

veins at different depths in two traverses planes, drill stations shall be prepared and holes a, b, c, e, f, and i shall be drilled from the approximate locations shown on Map 2. The attitude and depth of each hole shall be approximately as follows:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	S. 50° W.	-80°	500	LK vein; possibly others
b	S. 50° W.	-80°	650	LK vein; possibly replacement deposit from G & H vein
c	S. 50° W.	-80°	750	G & H and LK veins; possibly others
e	S. 50° W.	-80°	210	G & H vein; Meagher-Woolsey contact
f	S. 50° W.	-70°	250	G & H vein; Meagher-Woolsey contact
i	S. 37° E.	-50°	500	G & H vein; Meagher-Woolsey and Woolsey-Missoula contact

Alternatively, if Trenches 1-4, inclusive, do not expose the G & H vein, it should be considered as indication that the G & H vein does not cross the bedding but may form replacement bodies along or near the crest of the plunging anticline. In order to explore this possibility thoroughly, Holes a, b, and c shall each be moved 150 feet northeasterly along the line of Section C-C' from the locations shown on Map ~~2~~ 2. Drill stations shall be prepared and Holes a, b, c, e, f, and i shall be drilled. The attitude and depth of each hole shall be approximately as follows:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	--	Vertical	250	Woolsey-Missoula contact and well into Missoula
b	S. 50° W.	-80°	250	Same as above
c	S. 50° W.	-70°	300	Same as above
e	S. 50° W.	-80°	350	Meagher-Woolsey contact; well into Woolsey.
f	S. 50° W.	-70°	350	Same as e
i	S. 37° E.	-50°	700	Meagher-Woolsey contact, Woolsey-Missoula contact; well into Missoula

Phase 2. (Nancy Hanks project) The work shall consist of preparing three drill sites by bulldozing at sites g, j, and 2 approximately as shown on Map 2, the exact locations to be determined from the results of Trenches 5 and 6, and shall consist also of core drilling Holes g - 150', j - 500', and 2 - 350 to 500' depending upon Hole e.

Stage II

The work under Stage II will consist of preparing drill stations by bulldozing at sites d, h, k, and l shown on Map 2, and of core drilling three or four holes depending upon the results of preceding holes as follows:

d. - depends upon showings in Hole a, 600', S. 38 E., -50° or may be omitted

h. - " " " " " e, 400 - 650', S. 36 E., -80°

k. - " " " " " c, 450', S. 5 W., -80°

l. - " " " " " 2, 350', N. 32 E., -85°

Stage III

The work under Stage III will consist of "offset" core drilling at sites to be determined by the results of the work under Stages I and II, but the total shall not exceed 3,000 feet of drilling. No hole drilled in Stage III is to be closer than 100 feet to any other hole drilled under this project. Details concerning the work are to be submitted to the Government prior to any commencement thereof.

Estimated Costs of the Work

Stage I

Actual Costs

Category (1) Independent Contracts

Mobilization and demobilization, one bulldozer 16 hrs. @ $20.00/hr.	$ 320.00
Bulldozing 1,000 ft. of access road, 2,000 ft. of trenching, and 6 drill sites	1,200.00
D-8, 60 hrs. @ $20.00/hr. or D-7, 75 hrs. @ $16.00/hr.	
Mobilization and demobilization, one surface drill unit	300,00
Core drilling, 4,010 ft. maximum	21,200.00

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500'	5.25	$4.80/ft.
500' - 1,000'	5.75	5.30

Cementing and redrilling and/or reaming and casing, 150 hrs. @ $11.50/hr.	1,725.00	
Cement, 80 sacks @ $6.00/sack	480.00	
Casing left in hole 1/, 100 ft. @ $1.80/ft.	180.00	
Tropari surveys, 3 days @ $65.00/day	195.00	
		$25,600.00

Category (2) Personal Services

None expect:

Subcategory (a) Supervision and Technical Services

Outside consultant, 20 days @ $50.00/day	$ 1,000.00

Category (3) Operating Materials and Supplies

None expect:

Cardboard core boxes, 400 @ $0.85/box	$ 340.00

Category (7) Miscellaneous

None expect:

Per diem, outside consultant, 20 days @ $15.00/day	$ 300.00	
Assays for gold and silver 150 assays @ $3.00/assay	450.00	
Assays for lead 80 assays @ $2.00/assay	160.00	
Assays for copper 80 assays @ $1.75/assay	140.00	
		$ 1,050.00
Total Actual Costs Stage I		$27,990.00

Fixed Unit Costs 2/

Office expenses, 4 months @ $50.00/mo.	$ 200.00	
Incidental allowance for each foot of drilling completed, 4,010 feet @ $0.04/ft. (rounded)	160.00	
Total Fixed Unit Costs Stage I		$ 360.00
Total Estimated Costs of Stage I		$28,350.00

Stage II

Actual Costs

Category (1) Independent Contracts

Bulldozing 500 ft. of access road and 4 drill sites	$ 160.00	
D-8, 8 hrs. @ $20.00/hr or D-7, 10 hrs. @ $16.00/hr.		
Core drilling, 2,050 ft. maximum	10,700.00	

Depth	AQWL	EX
Overburden	$5.50/ft.	
Bottom of overburden to 500'	5.25	$4.80/ft.
500' - 1,000'	5.75	5.30

Cementing and redrilling and/or reaming and casing, 80 hrs. @ $11.50/hr.	920.00	
Cement, 40 sacks @ $6.00/sack	240.00	
Casing left in hole 1/, 50 ft. @ $1.80/ft.	90.00	
Tropari surveys, 2 days @ $65.00/day	130.00	
		$12,240.00

Category (2) Personal Services

None except:

Subcategory (a) Supervision and Technical Services

Outside consultant, 10 days @ $50.00/day		$ 500.00

Category (3) Operating Materials and Supplies

None except:

Cardboard core boxes, 200 @ $0.85/box		$ 170.00

Category (7) Miscellaneous

None except:

Per diem, outside consultant,		
10 days @ $15.00/day	$ 150.00	
Assays for gold and silver		
70 assays @ $3.00/assay	210.00	
Assays for lead		
40 assays @ $2.00/assay	80.00	
Assays for copper		
40 assays @ $1.75/assay	70.00	
Total Actual Costs Stage II 2/		$ 510.00
		$13,420.00

Fixed Unit Costs

Office expense, 2 months @ $50.00/mo.	$100.00	
Incidental allowance for each foot of drilling completed, 2,050 ft. @ $0.04/ft. (rounded)	80.00	
Total Fixed Unit Costs Stage II		$ 180.00
Total Estimated Costs of Stage II		$13,600.00

Stage III

Actual Costs

Category (1) Independent Contracts

Bulldozing access roads and drill sites		$ 160.00	
D-8, 8 hrs. @ $20.00/hr or			
D-7, 10 hrs. @ $16.00/hr.			
Core drilling, 3,000 ft.		$15,000.00	
Depth	**AQWL**	**EX**	
Overburden	$5.50/ft.		
Bottom of overburden to 500'	5.25	$4.80/ft.	
500' - 1,000'	5.75	5.30	
Cementing and redrilling and/or reaming and casing, 100 hrs. @ $11.50/hr.		1,150.00	
Cement, 60 sacks @ $6.00/sack		360.00	
Casing left in hole 1/, 75 ft. @ $1.80/ft.		135.00	
Tropari surveys, 2 days @ $65.00/day		130.00	
			$17,835.00

Category (2) Personal Services

None except:

Subcategory (a) Supervision and Technical Services

Outside consultant, 15 days @ $50.00/day	$ ~~500.00~~ 750.00	

Category (3) Operating Materials and Supplies

None except:

Cardboard core boxes, 294 @ $0.85/box	$ 250.00	

Category (7) Miscellaneous

None except:

Per diem, outside consultant		
15 days @ $15.00/day	$ 225.00	
Assays for gold and silver		
100 assays @ $3.00/assay	300.00	
Assays for lead		
80 assays @ $2.00/assay	160.00	
Assays for copper		
80 assays @ $1.75/assay	140.00	$
		$ 825.00
Total Actual Costs Stage III		$19,660.00

Fixed Unit Costs 2/

Office expenses, 3 months @ $50.00/mo.	$ 150.00	
Incidental allowance for each foot of drilling completed, 3,000 ft. @ $0.04/ft.	120.00	
Total Fixed Unit Costs Stage III		$ 270.00
Total Estimated Costs Stage III		$19,930.00

SUMMARY

Total Estimated Costs of Stage I	$28,350.00
" " " " II	$13,600.00
" " " " III	$19,930.00
Total Estimated Costs of the Work	$61,880.00
Government Participation @ 50%	$30,940.00

1/ The Government will not contribute to the cost of casing left in a hole at the request of the Operator.

2/ Includes all costs whatsoever that would otherwise be allowable costs under Categories (2) through (7).

OME (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
June 28, 1965

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Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: OME-6410 (Gold and Silver)
American Mining Company
Garnet, et al., Claims
Granite County, Montana

On May 25, 1965, Joe G. Irving, Consulting Mining Geologist, and Ted Dahl, treasurer of the applicant company, visited the Spokane office. Four hours were spent reviewing the application and a supplement thereto, and each point in your memorandum of May 14 was discussed in some detail. It was not the intention of the applicant to present at that time the supplemental application, a copy of which with maps was forwarded to you May 27, 1965. However, when it appeared that possibly some of the drill holes originally proposed might be denied, he decided to submit it as offering possible substitute holes. The applicant was rather concerned lest presenting the new proposal now might delay processing of the application. I felt that the more detailed maps of this faulted area would be most helpful and assured him that both proposals could be considered as a unit.

Summary of geologic setting.--The Garnet district is near the intersection of two major tectonic breaks, the Montana lineament which is an extension of the Lewis and Clark belt of tear faults, and a zone of thrust faults believed to be an extension of the Philipsburg-Deer Lodge-Valley thrust arc. In the district folded sedimentary rocks of Precambrian to middle Paleozoic age have been intruded by granediorite of the Garnet stock. In the area of proposed exploration the sedimentary rocks form an anticline that trends and plunges to the northwest. In the northern part of the area on the Midnight, Dewey, and parts of Nancy Hanks, Garnet No. 1 and Garnet No. 2 claims is granediorite, the contact having a general east-west trend. Dikes of granediorite have also cut across the bedding of the sediments. There has been considerable faulting, particularly near the contact between the granediorite and the sedimentary rocks. Ore deposits have been found and mined from true fissure veins in the granediorite and in the sediments near the contact. Farther from the contact, bedding plane replacement deposits

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FIELD EXAM. REPT.

have been found and mined. In U. S. Geological Survey Bulletin 660, p. 178-195, Pardee gives a brief description of 15 mines in the district and the production from some of them through 1917. The following table includes only those mines with a reported production of $30,000 or more. The First Chance Mining Company produced principally from the Red Cloud and Lead King mines and less extensively from the Crescent, Fairview, Fourth of July, and others. In the table the total production from this group of mines is shown as coming from the Lead King-Red Cloud.

	Production old price	New Price	Remarks
Nancy Hanks	$300,000	$525,000	90% Au, vein in granodiorite and dolomitic lms. inclusions near contact.
Dewey (1915-16)	100,000	175,000	90% Au, vein in granodiorite. Prod. prior to 1915 included with Nancy Hanks. Vein strike N.75°E., dip 35° N.
Shamrock	100,000	175,000	Vein in granodiorite. Strike NE; dip 32° NW.
Magone & Anderson	300,000	525,000	Less than 1% Au. Bedding plane vein; strike N. of W.; dip 30° N.
Lead King-Red Cloud	350,000	612,500	Bedding plane vein in quartzite and schist and small dikes of granodiorite porphyry. Strike N. 50°-70° W., dip 25°-35° NE. 1 oz. Au and 1.5 oz. Ag per ton; small amounts Cu and Pb.
Tiger (Lowery)	40,000	70,000	Vein in re-xllized lms., garnet rock, hornstone. Strike NNE, dip low angle W. Ore said to be cut off at 90 ft. depth by NE-trending fault.
Grant & Hartford	30,000	52,500	Bedding plane vein strikes E-W, dip 30° N. in quartzite and schist except where it crosses dike of granodiorite, where it is a fissure.

There was additional production worth a few thousands of dollars from at least eight other mines during the period 1867-1916, and from a few mines during the period 1917-1955, but the records, particularly of the earlier period, are sketchy. From the table it is suggested that something more than $500,000 worth of ore came from veins in the granodiorite or near the contact and more than $720,000 worth came from bedding plane veins in the sedimentary beds; this is at the old price for gold and silver. At present prices the total production would be in the order of $875,000 and $1,260,000, respectively.

G & H-LK project.--Because of the presence of many faults, most of them with small displacement, it is possible that the interbed openings in which the ore was deposited are actually fault planes. If this is true, there will come a place at which, because of the folding, the fault which caused the openings will leave the bedding plane and cut across the overlying beds, and will continue not only upward through overlying beds but laterally to the northwest. If the bedding openings are not the result of faulting, then there could well be developed along the anticlinal crests replacement deposits. The association of chalcopyrite, galena, and tetrahedrite in most of the mines suggests that the deposits are mesothermal and the gold occurs most commonly in pyrite or its oxidation products. It is doubtful that any anticlinal replacement deposits could be classified as typical saddle reef deposits. or they are pre-folding

On map 3 accompanying the original application the projected positions of the G & H and the LK veins are predicated on the assumption that the veins will eventually start to cut across the bedding; on the sections these veins have been projected to fit each alternative.

Referring to map 3 and sections C, D, and 4, if Trenches 1, 2, 3, and 4 indicate that the G & H vein does cross the bedding somewhere near the projected position shown on the map, they would be useful to adjust the proposed locations and possibly bearings, declinations, and depths of holes a, b, c, d, e, f, i, j, and k. However, if the trenches do not cut the vein extension, holes a, b, c, d, k, and possibly i, e, f, h, and j should still be drilled, some of them from slightly different locations, to explore the plunging crest and northerly limb of the anticline. It was for this reason that I suggested dropping these trenches. As you point out, the cost of trenching relative to the proposed total cost of Stage I is slight and as the trenches may result in some valuable information I withdraw my suggestion that trenches 1-6, inclusive, be dropped. I see no particular value of trench 7 as a guide to drilling. However, the Exhibit A of a possible contract should be broad enough to permit drilling the crest and limbs of the anticline if the trenches do not show the presence of the H & K vein.

Nancy Hanks-Tiger project.--The first question in this area is whether that portion of the Tiger vein it is proposed to explore apexes on the Tiger claim or at the offsetting fault shown on map 4 and sections 4 C-C', 4 D-D', and 4 E-E' (supplemental application). On map 4 the Tiger vein near the north side line of the Tiger claim appears to have been faulted about 200 feet westerly, the offset portion being the Iverson vein. The Tiger vein extended westerly crosses the west end line of the Tiger claim roughly 160 feet southerly from NW corner no. 3. If I understand correctly, extralateral rights stop at a vertical plane through the end lines and that part of the Tiger vein that is the target for hole g without question apexes on the Tiger claim, not controlled by the applicant, probably regardless of whether the target is a faulted segment. (See also section 4.) The same thing would seem to apply to supplemental holes 3 and 4 (map 4). Should trench 5 pick up the extension of the Nancy Hanks vein, hole g might be moved to a location from which it would take a bigger bite of that vein. Section 4 indicates that the Nancy Hanks vein might be cut by hole g at a depth of 50 feet with only 80 feet of backs in the plane of the vein.

Referring to map 3 and section 5, hole j has as targets possible ore at the base of the Park Shale and the G & H vein if it cuts across the bedding. No part of the G & H vein would apex on the Tiger claim but part of the Park shale does. The horizontal distance from the collar of hole j to the Tiger west end line, measured along the bearing of the hole, is about 250 feet. Plotting the trace of the end line from the location of hole j shown on section 5 indicates that the base of the shale will be cut more than 100 feet west of the end line and that, if there is a vein at this horizon, it will have about 190 feet of backs before it crosses the west end line into the Tiger claim. Therefore, it appears that these targets are not affected by extralateral rights, but whether the hole should be drilled depends upon what may be disclosed by trench 6 and, as far as the G & K is concerned, by trench 4. The same would apply to hole h for the first 400 feet; the remainder of this hole would depend upon what is disclosed along the Meagher-Woolsey contact in trench 3 and hole e.

There remain for consideration supplemental holes 1 and 2. (See supplemental map 4, secs. 4a and 4e.) These holes are intended to probe for the downward faulted continuation of the Shamrock and Dewey veins in granodiorite. Of the Dewey vein, Pardee says on p. 178: "It shows no signs of failing at depth on the slope of 400 feet and probably extends a long distance along the strike" and on page 181: "Copper ranges between 0.5 and 4 percent, being somewhat erratic locally but showing a general increase with depth;" on page 183: "Recent developments in the Dewey, however, give strong encouragement for deeper exploration along the whole vein system." In his description of the Shamrock mine, Pardee says, in part, on page 186: "A branching vein . .

has produced ore similar to that of the Dewey. It is clearly a continuation of the same belt of fractures to which Dewey belongs, although the particular vein worked in each is probably not the same. To the northeast the Shamrock vein, like the Dewey, on the 400 level east, shows a tendency to 'stringer out'." Although the faulting might place these two holes in the category of legitimate exploration, the flat dip and discontinuity of the veins, and their tendency to "stringer out" suggest that they are pretty long shots. Also, copper might become the principal commodity. However, as a substitute for supplemental holes 3 and 4, and possibly hole g, I would not object to drilling hole 2. Hole 1 should not be drilled with Government funds unless hole 2 is exceptionally successful.

RECOMMENDATIONS

In view of the above considerations, a three-stage program, not very different from the one outlined in your memorandum of May 14, 1965, is recommended. I have included more holes than you have in Stage I, because I do not feel that holes a, b, and c, if not successful, can conclusively rule out holes e, f, and i.

Stage I, Phase 1.--The location and attitude as well as the advisability of drilling certain of the proposed holes will depend to considerable extent upon whether the G & H and LK veins eventually cut across the bedding, whether part of the Tiger vein apexes on land controlled by the company, and whether the Nancy Hanks vein crosses a major fault and continues in sedimentary rocks. It is therefore recommended that Trenches 1-6, inclusive, be bulldozed at the approximate locations, bearings, and lengths shown on map 3 accompanying the application. The objectives of each trench are:

Trench	Objectives
1	Outcrop of G & H vein.
2	Do and the Woolsey-Missoula contact.
3	Do and the Meagher-Woolsey contact.
4	Do, the Pilgrim-Park Shale, and Park Shale-Meagher contacts.
5	Outcrop of Nancy Hanks vein and granodiorite dike in the Pilgrim Formation.
6	Outcrop of Tiger vein and the same contacts as in Trench 4

If Trenches 1-4, inclusive, show that the G & H vein crosses the bedding, it may be assumed that the LK vein does also. In order to explore both veins at different depths in two transverse planes, it is recommended that drill stations be prepared and holes a, b, c, e, f, and i be drilled from the approximate locations shown on map 3. The recommended attitude and depth of each hole is:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	S. 50° W.	-80°	500	LK vein; possibly others.
b	S. 50° W.	-80°	650	LK vein; possibly replacement deposit from G & H vein.
c	S. 50° W.	-80°	750	G & H and LK veins; possibly others.
e	S. 50° W.	-80°	210	G & H vein; Meagher-Woolsey contact.
f	S. 50° W.	-70°	250	G & H vein; Meagher-Woolsey contact.
i	S. 37° E.	-50°	500	G & H vein; Meagher-Woolsey and Woolsey-Missoula contact.
			2860	

If Trenches 1-4, inclusive, do not expose the G & H vein, it should be considered as indication that the G & H vein does not cross the bedding but may form replacement bodies along or near the crest of the plunging anticline. In order to explore this possibility thoroughly, holes a, b, and c should each be moved 150 feet northeasterly along the line of section C-C' from the locations shown on map 3. Drill stations should be prepared and holes a, b, c, e, f, and i should be drilled. The recommended attitude and depth of each hole is:

Hole	Bearing	Inclination	Depth (feet)	Targets
a	--	Vertical	250	Woolsey-Missoula contact and well into Missoula.
b	S. 50° W.	-80°	250	Same as above.
c	S. 50° W.	-70°	300	Same as above.
e	S. 50° W.	-80°	350	Meagher-Woolsey contact; well into Woolsey.
f	S. 50° W.	-70°	350	Same as e.
i	S. 37° E.	-50°	700	Meagher-Woolsey contact, Woolsey-Missoula contact; well into Missoula.
			2200	

Total 2860

Phase 2.--If Trench 5 exposes Nancy Hanks vein, move location of hole g as shown on map 3 about 100 feet N. 38° W. along line of section 4-4', prepare a drill station, and drill hole g bearing S. 38° E., -70° to a
150 depth of 150 feet to explore Nancy Hanks vein about 170 feet below its outcrop measured in the plane of the vein.

If Trench 6 exposes Tiger vein or shows vein mineralization along either contact of the Park Shale, drill hole j, bearing S. 38° E., -70° to a
500 depth of 500 feet to explore well into the Meagher limestone.

Only if it is not considered to be too much of a long shot, is it suggested that hole 2 be drilled vertically to a depth of 350 feet from the approximate location shown on the applicant's map 4. However, should the vein projected from the Dewey lower level (applicant's section 4a-a') be found to be strongly mineralized, the hole could be continued
500 to the faulted Nancy Hanks vein or to a depth of 500 feet, whichever occurred first. This is not a strong recommendation.

Total 4010

Stage II.--Stage II holes shall depend upon the results of Stage I trenching and drilling. If these indicate that the mineral deposits follow the bedding across the nose of the anticline and if hole a cuts strong mineralization, hole d may be drilled bearing S. 38° E. at -50°
600 to a depth of 600 feet from the approximate location shown on the applicant's map 3. If hole e cuts strong mineralization, hole h may be
650 drilled bearing S. 36° E. at -80° to a depth of 650 feet. However, if Stage I trenches and drilling indicate that the veins cross the bedding, hole d shall not be drilled, and hole h may be drilled to a depth of only 400 feet.

If hole c cuts strong mineralization, hole k may be drilled bearing
450 S. 50 W. at -80 to a depth of 450 feet from the approximate location shown on applicant's map 3.

If hole 2 is included and cuts exceptionally strong and high-grade silver values, hole 1 may be drilled bearing N. 32° E. at -85° to a
350 depth of 350 feet.

Total 2050

Stage III.--Offset drilling may be done at sites to be determined by the results of Stage I and Stage II drilling, but the total drilling in this stage may not exceed 3,000 feet.

The "few remaining questions" at the end of your May 14th memorandum were discussed with Joe Irving during his visit to the Spokane office May 25th.

Irving stated that at Quartz Hill the Pilgrim Limestone Formation (see description under Geologic Legend on map 3) was drilled with standard EX bit and that core recovery was excellent. It would therefore appear that AX or AQWL will be large enough to get adequate core recovery, and no problem is expected if it is found necessary or desirable to reduce to EX standard bit.

The intention of the applicant is to contract the drilling to Longyear. A comparison of the various bids submitted indicates that the over-all costs bid by this company are the lowest. Bids for dozing were submitted by five operators. It is not certain which one will be contracted but, if he is available at the time, the applicant favors Lloyd Hanson.

Longyear's bid is $11.50 per hour for "waiting on cement." When the applicant's cost estimate was made, Irving was not sure what this item would cost.

A check by telephone with Boyle Brothers in Spokane indicated a fair charge for AX casing left in the hole is $1.80 per foot. It probably would be feasible to hire a full-time geologist-supervisor at a rate of $700 per month, but the cost will be more than twice that of a consultant. Based on an assumption that only the minimum amount of drilling recommended for Stage I, 1,760 feet, will be drilled; that the rate of drilling will be 24 feet per shift, 2 shifts or 2 drills per day, 26 days per month; time required will be: 73.3, say 74 days for 1 shift or 1 drill per day = 36.6, say 37 days for 2 shifts or 2 drills per day or 1.5 months. Laying out trenches and drill stations, mapping and sampling trenches would require only about 3 days' work, so include that in 1.5 months for drilling. The minimum cost for a geologist-supervisor on a full-time basis would be $1,050.00.

12.00
1.5 | 1760

Referring to page 16 of the application, Irving, who is the company's geologist and would be the consultant, estimates that one man can log and sample 350 feet of core per day. Time required for 1,760 feet of core would be 5 days plus 3 days for trench and drill station layout and trench sampling, or 8 days at $65.00 per day would cost $520.00.

If the total minimum of 5,960 feet should be drilled, the time required would be 5 months and the cost for a full-time man would be $3,500.00 compared to the cost of $1,300.00 on a consultant basis (20 days at $65/day). The total maximum drilling, for which the estimated costs must be provided, would require 8 months' drilling time and would cost $5,600.00 for a full-time man compared to $1,950.00 on a consulting basis. As Irving will be on the job in any case, it is recommended that this cost be provided for on the basis of an incidental allowance that will total $3,800.00 (the approximate mean between $5,600.00 and $1,950.00) plus $726.00 (9,500 x 90% recovery, 855 boxes at $0.85) for core boxes.

12.00
5 | 5960

?

COSTS

Due to the various conditions that may be found to exist, it is possible that not all of the recommended holes will be drilled. The maximum and minimum feet of recommended drilling, including holes 2 and 1, are:

Stage	Maximum (feet)	Minimum (feet)
I	4,018 [4,450]	1,760
II	2,050	1,200
III	3,000	3,000
Total	9,500 9,060	5,960

As it is impossible to estimate at this time which holes may not be drilled or the depth to which many of them will be drilled, drilling costs will be based upon the maximum amount recommended.

Estimated Cost of Project

Actual Costs

Category (1) Independent Contracts

Bulldozing:

2000 ft of trenches, 2000 ft of access road, and preparation of 11 drill stations

D-8 or equivalent - $20/hr
D-7 " " - $16/hr

100 hrs at $20/hr		$ 2,000.00

Diamond drilling:

Mobilization and demobilization to first station and from last	$ 300.00	
10 moves, 4 hrs ea at $5.25/hr	210.00	
Diamond drilling AQWL (1-1/16" core) and EX standard (7/8" core)--unit price for EX core in parentheses		
Overburden--110 ft at $5.50/ft	605.00	
From bottom of overburden--500-ft depths		
8200 ft at $5.25 ($4.80)	43,050.00	
500-1000-ft depths:		
1300 ft at $5.75 ($5.30)	7,475.00	
Cementing and redrilling or reaming and casing at $11.50/hr or $2.50/ft	3,562.00	
140 sacks lumnite cement at $6	840.00	
Misc. Surveying 11 holes at $23 each	253.00	$56,295.00

Fixed Unit Costs[1]

Incidental allowance for each foot of drilling		
9500 ft at $0.48/ft	$ 4,560.00	
Assaying samples from trenches and drill holes		
250 assays for gold and silver at $3 ea	750.00	
add $ 25 (drill samples only) for lead and copper at $4 ea	100.00	$ 5,410.00
Estimated Total Cost of Project		$63,705.00
Government Participation at 50%		$31,852.50

1/ Includes all costs whatsoever, such as supervision, labor, equipment, core boxes, etc., that would otherwise be allowable under categories (2) through (7) of the contract.

D. R. MacLaren

D. R. MacLaren

Distribution:

OME(2)
USGS(SRO)
Docket
MacLaren

JOE G. IRVING
MINING GEOLOGIST

~~1957 W. HIGHLAND~~
~~LAS VEGAS, NEVADA~~

Florence Hotel,
Missoula, Montana
May 20, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 25 1965
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120

Mr. George C. Selfridge, Chief,
Division of Exploration Operations,
Office of Minerals Exploration,
Department of Interior,
Washington 25, D. C.

Re: OME-6410 (Gold)
American Mining Co.
Nancy Hanks et al claims
Granite Co., Montana

Dear Mr. Selfridge:

In the letter sent to you yesterday, pertaining to the captioned subject and devoted to a discussion of core sizes, it was intended also to ~~to~~ mention what is a small error in our cost estimates. This reference was inadvertently left out, and will be covered in this supplementary letter.

On page 17 of our original application, in a discussion of costs, under item 7c--Operating Materials and Supplies--we estimated cardboard core boxes, that would hold 30'? of core, at one dollar per box. On this basis, 241 boxes would be needed for the 7225' of drilling planned. And, a cost item of $241 was inserted in the estimate, which would be the equivalent of $0.033/ ft.

In some recent Longyear correspondence (we plan to give the contract to the E. J. Longyear Company) we noted that they have core boxes (cardboard) of 10-foot capacity at a price of $0.85 per box. This is a box of only ten foot capacity, as distinct from my estimate of boxes of 30-foot capacity.

On the basis of this more factual information, a total of 723 boxes will be needed, which--at $0.85 per box--would represent a total cost of $615 instead of the $241 originally inserted.

If the figure $615 be substituted for the $241 submitted on page 17, under item 7c, the cost for boxes becomes $0.085 per foot, instead of $0.033.

On page 19, under Summary and Recap of Drilling Costs, if the new figures be inserted under Operating Materials and Supplies, the total cost (for 7225' of hole) becomes $49,943 instead of $49,569, and the total unit cost beomes $6.91 per ft, instead of $6.86. Similar changes on page 20, which is the summary if 10,225' of hole are drilled instead of 7225', raise the total to $70,528 instead of $69,999, and the unit cost to $6.90 per ft, instead of $6.85 per ft.

We request that the O. M. E. take these corrected estimates into account as the application is processed.

Very truly yours,

Joe G. Irving

Joe G. Irving

Cc to: Don MacLaren and Amer. Min. Co.

MME FORM 6
REV. -59

REFERENCE SLIP

OFFICE OF MINERALS EXPLORATI

	DATE	INITIALS
TO: Chief, Div. of Exploration Operations	5/27/65	

1. Re: OME-6410 (Gold)
2. American Mining Company
3. Nancy Hanks, et al., Claims
   Granite County, Montana
4.
5. D. R. MacLaren

FROM: Acting Fld. Officer, Reg. I

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JUN 1 1965

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FOR: Check items for action desired

___ Action	___ Reply for signature	___ Surname
___ Approval	___ Investigate	___ Signature
___ Comment	___ Recommendations	___ File
___ Conference	___ Rewrite	
___ Instructions	X Your information	

REMARKS: Delivered by Joe Irving on 5/22/65. He Spent 4 hours reviewing this and original program in the light of your 5/14 memorandum. Complete report in preparation.

5-Maps filed in Folder #2

M56300-62

INT.-DUP. SEC., WASH., D.C.

JOE G. IRVING
MINING GEOLOGIST

~~2957 SO. HIGHLAND~~
~~LAS VEGAS, NEVADA~~

Florence Hotel,
Missoula, Montana
May 19, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
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Mr. George C. Selfridge, Chief
Division of Exploration Operations,
Office of Minerals Exploration,
Department of Interior,
Washington 25, D. C.

Re: OME-6410 (Gold)
American Mining Co.
Nancy Hanks et al., Claims
Granite County, Montana

Dear Mr. Selfridge:

In the captioned application for exploration assistance, which I prepared for the American Mining Company, it is stated that the core diameter is to be a minimum of AX wire line, or 15/16". This is set forth on page 13 of the submittal, under item 7a, independent contracts.

I am in Montana now, at the above address, occupied with certain things that should be done, of a preliminary nature, and awaiting final word from the O. M. E. on the exploration proposal you are now processing. I noted the stated minimum core diameter while reviewing the application in connection with our decision to award the drilling contract to the E. J. Longyear Company.

If Longyear's letters of November 10 and 24, 1964 be referred to, it will be seen that they propose drilling with AQ wire line --"which takes a 1 and 1/16" core diameter". See second paragraph of the November 25th letter. They go on to say, however, in the next paragraph--"If for some unforeseen reason we would have to drill EX size, we would obtain a 7/8" core diameter. Our AX wire line core diameter size is 15/16 inches". The possibility of being forced to resort to EX size core (7/8") is also stated in Longyear's November 10th letter, on the top of page two.

Contract should specify EX or 7/8"

Since it is stated in the application that minimum core diameter is to be 15/16", it is felt that the possibility of some of the core being EX size (which is 1/16" smaller) as implied in the Longyear letters, should be taken into account by the O. M. E. in their processing of this application, and their hoped-for approval of it.

In other words, since we plan to give the contract to Longyear we would, ofcourse, find it awkward to be held, by O. M. E., to a minimum 15/16" core size if Longyear found it necessary to drill some of any, or all, holes with EX tools.

Sincerely yours,

Joe G. Irving

Joe G. Irving

Copies to:
American Mining Company, and
Mr. Don MacLaren, O. M. E., in Spokane, Wn.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/14	R M Smith	120
	Jellerage	130
5/14	J Gordon	110
		100
		220
		120M

MAY 14 1965

Mr. James F. Charlton
President
American Mining Company
700 - Securities Building
Seattle 1, Washington

Re: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana

Dear Mr. Charlton:

Thank you for your recent letter enclosing a copy of the Grant Deed from Robert M. Bielenberg and Mary Erome Bielenberg to James F. Charlton.

The application is now being referred to Mr. D. R. MacLaren, Acting Field Officer, Office of Minerals Exploration, Region I, South 157 Howard Street, Spokane, Washington 99204.

The Regional Office will notify you in case additional information concerning the application is needed.

Sincerely yours,

George Fumich, Jr.

5/14

I believe case can be made, possibly, we should have funds and data in view of Reply of Sec'y Comm'r Mechanical Board of Mineral, Mons. We should discuss

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/13	RM Smith	120
	Selfridge	130
5/14	[illegible]	110
	[illegible]	100
5/14	cae	220
		120M

Memorandum

MAY 14 1965

To: Acting Field Officer, Region I

From: Chief, Division of Exploration Operations

Subject: OMK-6410 (Gold)
American Mining Company
Nancy Hanks, et al., Claims
Granite County, Montana

The subject application is referred to Region I for review, a field examination if deemed advisable, and recommendations. We received on May 5 the final document from the Applicant to complete the application, and we have your preliminary review of January 28 in which you recommend denial of the proposed trenching and approval of the drilling.

We concur in your reasoning that the proposed trenches will show very little that will not be revealed by the drilling, but from the information available to us it appears that the results of the trenching may influence the location of the holes, if not actually eliminate some of them. Inasmuch as the trenching costs only $1,463.00 of the proposed $51,177.00 in Stage I, it may be the best way to get the preliminary geologic guides needed for the proposed drilling.

Our review indicates that the proposed project is carefully planned and is based on reasoned geological inferences, but that part of the work in Stage I is dependent upon favorable results in other parts. For this reason, a modified staging of the work may be desirable.

In addition, a small part of the proposed work has no specific target and is prospecting rather than exploration. As this part of the work could not be included in a contract, it is itemized below but deleted from the discussion of a modified project.

DD Hole i: The last 300 feet of this hole is prospecting for "possibilities" in quartzite, but none are actually inferred. The first 300 feet is discussed later.

DD Hole j: There are no targets in the Pilgrim limestone so the upper part of the hole is prospecting. The possibility of cutting "unknown fissures of the Tiger Vein type" is also prospecting. The only target in this hole is the ore inferred at the base of the "postulated shale bed," which will be tested by Cut 6 and DD Hole h. This hole may or may not be eligible. Apex of target vein is not on Applicant's land.

23263

In order to facilitate the discussion of this many-faceted application, the proposed work is separated below into two projects: the Nancy Hanks-Tiger project, and the G&H-LK project.

Nancy Hanks-Tiger project. Although the Applicant considers this to be a subsidiary project, it appears to us to be the more likely to discover ore. We have no comments on the proposed work except that the exact location and inclination of DD Hole g might be changed depending upon the results of Cut 5. Therefore, the trenching should precede the drilling.

G&H-LK project. The locations of all of the DD holes are derived from the projected positions of the G&H and LK veins, and from the projected positions of contacts. All of the projections are subject to correction as the work proceeds. Least reliable of all the projections is that of the G&H vein, because it may follow the bedding or it may cut across the bedding, yet its position is a determinant for many of the holes. Its position and the nature of its continuation should be the first step in the proposed project. Cuts 1, 2, 3, and 4 are designed to reveal its position progressively along the strike.

Somewhat more reliable are the projected positions of the five stratigraphic horizons that are inferred to be favorable, but one of these -- the Park shale -- is only postulated. Cuts 4 and 6 are designed to reveal its position.

Cut No. 7 is to explore for ore at the surface as well as to reveal the location of a dike (or sill) which otherwise is only an incidental target in DD Hole h.

If we assume for the moment that all of the trenching is unsuccessful in revealing indications of ore, then only a few of the proposed holes may be warranted. On this basis, the following stages are suggested for your consideration and, if you concur, for discussion with the Applicant.

Stage I
(To be completed)

Phase 1. Nancy Hanks-Tiger project
Cut 5
DD Hole g

Phase 2. G&H-LK project
Cuts 1, 2, 3, 4, 6, and 7
DD Holes a, b, d, i, possibly d and h

Stage II
(Dependent upon Phase 2)

DD Holes d and h (if excluded from Phase 2)
DD Hole k (dependent upon holes a, b, e)
e (" " holes b and d?)
f (" " hole e)
h (" " Cut 6, hole d)
j (" " Cut 6, hole h)

Stage III

"Offset" drilling at sites to be determined by the results of Stage II - 3,000 feet.

We would appreciate your comments on the evidence for the probability of high-temperature gold-quartz saddle reefs in this area, and also on the small number of samples to be assayed for lead and copper.

We have a few remaining questions pertaining to specifications and costs:

Is AX wire line large enough to get adequate core recovery in these rocks?

What size bulldozer is to be used?

Who are the independent contractors?

The Applicant estimates a cost of $15.00 per hour for "waiting on cement" which is higher than bid price.

AX casing at $2.50 per foot is high.

No full-time supervision is provided for the project, but a consultant is retained to log the core. Would it be feasible to hire a full-time geologist-supervisor on a monthly salary?

George C. Selfridge (gla)

Enclosures

RMSmith/gla (5-13-65)
cc to: Director's Reading File
Docket
Review Committee

AMERICAN MINING COMPANY

OFFICE 1904 THIRD AVENUE SEATTLE 1, WASHINGTON
MAILING ADDRESS BOX 1893 SEATTLE 11, WASHINGTON
TELEPHONE
~~MANXXXXS~~
MAin 4 5416

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JAMES F. CHARLTON
GENERAL MANAGER

Re: OME-6410 (Gold)
American Mining Company,
Nancy Hanks et al., Claims
Granite County, Montana

Mr. George C. Selfridge, Chief
Division of Exploration Operations
United States Department of Interior
Office of Minerals Exploration
Washington 25, D.C.

Dear Sir:

left hand side

Attached please find a copy of the Grant Deed from Robert M. Bielenberg and Mary Brome Bielenberg, to James F. Charlton, wherein Mr. Bielenberg conveyed all of his rights, title and interest in the Crescent, Bull's Eye and Gold Bug Claims which are part of the above referred to application.

We regret the delay in getting this document to you. Mr. Bielenberg has been out of the state and it was necessary to obtain his copy.

The above Deed has been sent to Montana for recording. This Grant Deed is the final document which you have requested to complete our loan application. We will appreciate being advised by you of the present status of this application as we are anxious to proceed with our exploration program.

Sincerely yours,

AMERICAN MINING COMPANY

James F. Charlton

James F. Charlton, President

CC: Joe G. Irving

Encl.

ed

Certified Mail #660429
Return Receipt Requested

4:57 p.m.
May 3, 1954

Mr. Selfridge: The following gentleman phoned and asked that you to return his call tomorrow:

Ted
~~Chet~~ Dahl
American Mining Company, Seattle
Call Operator 70, Seattle
Main 4-5416

after completing the call, I found this application pending. Perhaps he is calling about it.

gla

5/4/65
1:45 PM
OME-6410
Amer. Min. Co.

Mr. Selfridge -

Returned telephone call of Ted Dahl -

He said Bielenberg document being mailed today.

Joe Irving going up to property today. They expect to do some drilling on their own, starting about June 1. Wanted to know how long until decision made. I told him if an examination was made we probably would make a decision by July 1.

Advised that we were very shorthanded.

FEJohnson

Form 7
63)

OFFICIAL FILE COPY

Date	Surname	Code
4/12	Murphy	120
	Selfridge	120
4/12	[illegible]	110
	[illegible]	100
4/12	CAC	120
		120

APR 1 2 1965

Mr. James F. Charlton
President
American Mining Company
Box 1893
Seattle 11, Washington

Re: GGK-6410 (Guld)
American Mining Company
Nancy Hanks et al., Claims
Granite County, Montana

Dear Mr. Charlton:

In reference to your letter of March 10, 1965, will you kindly forward a copy of the instrument signed by Mr. Bielenberg as soon as possible.

Sincerely yours,

George C. Selfridge (gla)

George C. Selfridge, Chief
Division of Exploration Operations

FMMurphy/mm (4/12/65)
cc: Director's Reading File
Region I
Docket

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/12	Murphy	120 m
2/15	[illegible]	120
"	[illegible]	110
1	[illegible]	100
2/15	[illegible]	220
		120 m

FEB 1 5 1965

American Mining Company
700 Securities Bldg.
Seattle 1, Washington

Murphy - All material received except - 2. - Filed left side JMM

Re: GME-4410 (Gold)
American Mining Company
Nancy Hanks et al., Claims
Granite County, Montana

Gentlemen:

To continue the processing of your application for assistance in exploring the subject claims, this office needs the following additional information.

1. In the Grant Deed and Assignment, dated June 5, 1964, wherein Mr. and Mrs. J. F. Charlton conveyed the Crescent, Bull's Eye, and Gold Bug patented lode mining claims to your company, Item 2 mentions that a certain Assignment and Deed to these claims among others were transferred to James F. Charlton with all rights and interests by Robert M. Sielemberg. Please submit a copy of this instrument.

2. In the Grant Deed, dated June 5, 1964, wherein Mr. and Mrs. Charlton conveyed the unpatented Garnet claims to your company, ten (10) claims are mentioned; however, Garnet No. 12 claim listed in the application is not included. Will you kindly clarify this discrepancy.

3. With reference to information submitted under Item 1.a. Financial Eligibility of your application, we have received copies of the bank letters; however, we also require copies of your letters to the banks.

4. In the drilling bids submitted, we note in red pencil on Boyles Bros. October 7, 1964, bid, "Cancelled - see new bid dated 11/16/64." This bid was not included in your application. Therefore, please submit two copies of the new bid.

Submittal of the requested additional information should not be construed as a commitment by the Government for an exploration contract.

FMMurphy/mm 2/12/65
cc: Director's Reading File
Region I
Docket

Sincerely yours,

George C. Selfridge
mm

George C. Selfridge, Chief
Division of Exploration Operations

23263

MME Form 7
(2/63)

Marion: retype [illegible] item 2. [illegible]

OFFICIAL FILE COPY

Date	Surname	Code
2/3	Murphy	120 M
	JCS	120
		110
		100
		220
		120 M
		140

American Mining Company
700 Securities Bldg.
Seattle 1, Washington

B-65-2050.11

INTERIOR DEPT.
FEB 5 - 1965 ← see Memo below
SOLICITOR

Re: GMG-4610 (Gold)
American Mining Company
Nancy Hanks et al. Claims
Granite County, Montana

Gentlemen:

To continue the processing of your application for assistance in exploring the subject claims, this office needs the following additional information.

1. In the Grant Deed and Assignment, dated June 5, 1964, wherein Mr. and Mrs. J. F. Charlton conveyed the Crescent, Bull's Eye, and Gold Bug patented lode mining claims to your company, Item 2 mentions that a certain Assignment and Deed to these claims among others were transferred to James F. Charlton with all rights and interests by Robert M. Bielenberg. Please submit a copy of this instrument.

see legal's memo below

~~a. With reference to the Agreement, dated August 23, 1962, wherein [illegible] transfers all of the issued and outstanding capital stock of Bellevue Mining, Inc. to James F. Charlton, no mention is made of the conveying of rights to the patented lode mining claims, Nancy Hanks, Petey, and Midnight. Will you kindly submit a copy of the instrument showing that James F. Charlton also has been granted rights to these claims.~~

2. ~~b.~~ In the Grant Deed, dated June 5, 1964, wherein Mr. and Mrs. Charlton conveys the unpatented Garnet claims to your company, ten (10) claims are mentioned; however, Garnet No. 12 claim listed in the application is not included. Will you kindly clarify this discrepancy.

3. ~~c.~~ With reference to information submitted under Item 1.e. Financial Eligibility of your application, we have received copies of the bank letters; however, we also require copies of your letters to the banks.

RECEIVED
FEB 5 1964
Division of Mineral Resources
and General Legal Services

23263

4 [illegible]. In the drilling bids submitted, we note in red pencil on Boyles Bros. October 7, 1964, bid, "Cancelled - see new bid dated 11/16/64." This bid was not included in your application. Therefore, please submit two copies of the new bid.

Submittal of the requested additional information should not be construed as a commitment by the Government for an exploration contract.

Sincerely yours,

George C. Selfridge, Chief
Division of Exploration Operations

FMMurphy/mm (2/3/65)
cc: Director's Reading File
Region I
Docket

OME-6410 (Gold)
American Mining Company
Nancy Hanks et al. Claims
Granite County, Montana

Summary of application

The purpose of the proposed project is to explore by

	Stage I		Stage II		Total
Trenching, bulldozer	7 cuts, 2175 l.ft.	hrs. $1,463 @$15	none		$1,463
Access roads to drill sites	11 sites, 2,000 l.ft.	32 hrs. 480	4 or 5?	$ 200	680
Preparation of " "	11 sites	32 hrs. 480	5 sites	200	680
Core-drilling AX WL	11 holes, 7225 ft.	46,243	5 holes, 3,000'	19,021	65,264
Surveying holes	11 holes - Tropari	260	5 holes	108	368
Core boxes	241 boxes (30') @$1.00	241	100 boxes	100	341
Assaying	144 Au Ag, 14 Pb Cu	344	61 @$2, 7 @$4	150	494
Consulting		1,576		446	2,022
Accounting		90		60	150
But no full time supervision		$ 51,177 ✓		20,285 ✓	71,462 ✓

partly
for gold-bearing ore bodies in the faulted continuations of the Nancy Hanks and Tiger veins; but primarily

for gold-bearing ore bodies in quartz veins that cut the bedding, in replaced limestone along the bedding, and in saddle reefs along the crest of ~~the Garnet~~ a plunging anticline, particularly where projected continuations of the veins intersect favorable stratigraphic horizons in or near the crest of the anticline in pre-Cambrian quartzite (Pilcher) and in the successively overlying Cambrian shale (Woolsey), marbleized limestone (Meagher), shale (Park), and dolomitic limestone (Pilgrim) near the Garnet granodiorite stock.

The largest mines in the district are the Grant-and-Hartford and the Lead King, both of which are (along quartz veins) in quartzite, but other favorable horizons, ~~are inferred to be~~ both stratigraphic and structural, are inferred. Other stratigraphic horizons are the following contacts:

1. quartzite with overlying shale
2. limestone beds within the shale
3. shale with overlying marble
4. marble with overlying shale
5. shale with overlying dolomite.

Other structural horizons are: ~~inferred~~

3. in the crest of the anticline
4. along bedding planes in quartzite
5. along granodiorite dikes
   1. along continuations of the G&H vein and the L.K. vein projected across the bedding
   or 2. along the continuation of the G&H vein projected along the bedding

END of summary

Analysis of proposed items of work

OME-6410

Cuts 1, 2, 3, 4

Grant and Hartford vein projected west from mine workings in quartzite through overlying shale (Woolsey) into overlying ~~limestone and~~ marble (Meagher limestone). (Bulldozer cuts 1–4) Ore is inferred in the limestones ahead of (above) the quartzite, both in the Woolsey shale and in the Meagher limestone, but not necessarily on the surface.

~~also to locate Park shale unit as a guide for trench t~~

These cuts test the validity of projecting the G & H vein across the bedding rather than along it. Each cut is a guide for the next cut, and cuts 2, 3, and 4 are to locate contacts which are guides for the exact locations of DD Holes b, h, and possibly a.

Cut 5

Nancy Hanks vein and fault projected west from mine workings in granodiorite into overlying dolomite (Pilgrim). Ore may be inferred along vein, and "Drag Ore" along fault, but the principal purpose of Cut 5 is to locate contacts and find attitudes of formations, as a guide for DD Hole g.

Cut 6

Tiger vein projected southwest from Ryan Incline in Meagher limestone along the strike of the overlying Park shale. Ore is inferred along the vein and possibly other veins, but the principal objective is to locate the Park shale unit, a projected granodiorite dike, and the Tiger fracture zone as all of these are structural controls of ore localization and are needed as a guide for DD Hole j.

Cut 7

Unnamed vein where a sample of quartz on dump assayed 0.6 oz Au. Attitude of vein is unknown but one is inferred to be in vein a surface along granodiorite dike in marble projected northeast from unnamed shaft and pit. Will also provide data on attitudes of beds in crest of anticline which may influence location of hole h.

DD Hole a

Lead King Vein projected west from mine workings in quartzite through overlying shale into overlying marble. ore is suspected along the vein zone in the quartzite ~~and at its contact with shale~~, and also along the bedding of quartzite and along limy members of the shale

Ore is inferred along the contact of the quartzite with the shale above its intersection with the vein, for addition,

Cut 3 might influence the location of this hole, but not likely.

Hole a is a guide for offset holes.

This is a mediocre bet

DD Hole b

Grant and Hartford vein projected east of anticline where it nearly parallels the bedding. Ore is inferred along the vein or along the bedding at the contact, or as a from mine workings in quartzite into overlying shale near the

saddle reefs anywhere in the quartzite or shale between the G&H vein and the LK vein.

Possible saddle reefs would more likely be associated with the G&H vein in the upper part of the hole, and with the LK vein in the lower part.

Trenches 2 & 3 might influence its location

This is a good bet

DD Hole C

Grant and Hartford vein projected near quartzite-shale contact ~~and~~ and also Lead King vein (near crest of anticline) projected in quartzite. Ore is inferred along veins and along bedding especially near contact.

The crest of the anticline is not ~~so~~ accurately located but holes a, b, and c should locate it. Saddle reefs at the crest might be found by any of the three holes.

DD Hole k

G&H vein projected 1100', LK vein proj. 500' W.
Same veins and settings as hole c, except closer to the granodiorite stock, farther from the crest of the anticline, and 500 feet down dip from lowest known workings on the LK vein.

If a, b, and c are unsuccessful, this hole would seem to be unnecessary, or in any case to need more justification

DD Hole d

Crest of anticline at two contacts: ~~of~~ marble with underlying shale, shale with underlying quartzite; and at any horizon in any of the three formations. Also near Lead King vein projected 1000 feet in quartzite from mine workings

Qu is inferred at favorable contacts on the crest of the anticline

Would seem to be dependent on ~~a and~~ b

DD Hole e

Same target as Holes b and d but 500 feet NW along crest of anticline from b; and 250 feet across anticline from d,

Ore in Saddle reefs in marble are inferred from quartz in pits between holes e and d. Other reefs

except that hole stops short of Lead King Vein

are inferred along contact of shale with overlying marble and in limestone members of the shale

evidence of saddle reefs:

Vein quartz on dumps is alleged to be

DD Hole f

Same objective as Hole e but 365 feet across the crest of the anticline.

Would seem to be dependent upon results of Hole e

D. D. Hole g

Nancy Hanks vein projected 300 feet southwest from Dewey stopes in granodiorite into Pilgrim(?) dolomitic limestone. Also faulted continuation of the Tiger vein 200 feet down dip from mine workings which are in marbles along contact with overlying Park shale unit.

DD Hole 8

Crest of anticline at two contacts:— Park shale (location possible) with underlying marble, and marble with underlying shale. Ore is inferred along both contacts and is suspected along two dikes or sills of granodiorite in the marble. The G & H vein projected 2500 feet is inferred to be a feeder channel.

Cuts 4 and 6 are guides to the location of the shale, which is only "postulated."

Upper target is dependent upon shale in cut 6. Lower target has no validity unless the crest of the anticline is an ore channel, which will be tested by Hole d, and others?

Hole is dependent on — —

Middle target (dikes) is prospecting - depend on validity of lower target.

DD Hole i

Two contacts, marble-shale and shale-quartzite are more inclusive target area than holes c and k, but about 300 feet distant. Ore is inferred along both contacts. The G & H vein projected ~~to~~ either along or across the bedding would be cut by this hole.

Same contacts as hole d, but opposite limb.

The bottom 300 feet of the hole is to test the "possibilities." No target is inferred.

DD Hole j

Same target as hole h, but 400 feet down dip. Ore is inferred along contact of Park shale with underlying marble, and along the G&H vein projected across the bedding. There are no targets in the Pilgrim limestone, ~~and~~ The shale is postulated and a target is dependent on the results of Cut 6.
Hole is dependent upon results of h
Apex of target vein is not on Applicants land.

Stage II

3000 feet of core drilling in unspecified "offset" locations to be determined by the results of Stage I

IN REPLY REFER TO:
B-65-2050.11

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

February 10, 1965

Memorandum

To: Chief, Division of Exploration Operations
Office of Minerals Exploration

From: Assistant Solicitor
Oil and Gas and Minerals Exploration

Subject: OME-6410 (Gold)
American Mining Company
Nancy Hanks, et al. Claims
Granite County, Montana

Pursuant to your request of February 4, 1965, we have reviewed your letter to the American Mining Company. Item No. 2 should be deleted from the letter. The Agreement dated August 23, 1962 between H. A. Bellows and James F. Charlton conveyed all the issued and outstanding capital stock of Bellows-Graham, Inc. to Mr. Charlton. Bellows-Graham, Inc. owned the mining claims Nancy Hanks, Dewey and Midnight. Accordingly, Mr. Charlton acquired Bellows-Graham, Inc.'s interest in the claims.

Robert W. Long

Robert W. Long
Assistant Solicitor
Oil and Gas and Minerals
Exploration

Enclosure

February 1, 1965

American Mining Company
700 - Securities Building
Seattle 1, Washington

Subject: OME - 6410

Gentlemen:

Your application for exploration assistance, dated January 6, 1965 submitted to our office at Spokane, Washington has been assigned Docket Number OME - 6410.

Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

George C. Selfridge, Chief
Division of Exploration
Operations

Copy to Region I

Maps accompanying Operator's Reports

Trench 1

American Min. Co.

OME-6410-(Gold)
Nancy Hanks et al Claims
Granite Co. Montana.
Contract 2207
1" = 100'

Sketch Showing Geology of Trench No 1
1" = 100'

N. end of Trench No 1, as shown located on opposite Sketch

Argillac. Qtzite

Samp# 118 - a grab sample of pieces of Qtz from 8"-18" vein, exposed in bot. of cut 0.8' = 0.07 oz Au.

1½-3" of Qtz vein in bedding. Iron-stained, cellular & vuggy. Samp #119 = 2" of 1.32 oz Au

8"-12" white Qtz vein, apparently in bedding of the Qtzite. Mostly barren-looking Qtz, but few spots, cellular & Fe stain

a more massive Qtzite but contains some thin argillaceous layers

Thin bedded, shaly Qtzite

Zone (2-3') showing a few 1/32" vuggy discontinuos Qtz seams in bedding, in a rock that is mainly a laminated, sandy Qtzite, with mica on bedding planes

Mostly more massive Qtzite, with a "spotting" referred to by miners as "birds eye" and said to be by Pardee "Knots of Cordierite" (Some iron staining)

Laminated, sandy gray Qtzite, some iron staining & some soft sandy and not quartzitic layers - Rock thru here is "blocky"; bedding not distinct.

gray-tan, sandy Qtzite, some layers & beds are spotted (see above)

Pre-Cambrian Missoula Gp (pЄm)

dominantly a sandy, spotted Qtzite

micaceous on bed planes, shows a widespread iron staining. No vein exposed here

Hill slopes 20"

Hill slopes 30"

77 27 30 35 25-30 30

Sketch to Show Location of Trench No 1 on "Map 2-100 Scale"

Garnet 5853 -

Joe & Irving

1 4 2 5 3

Trench No 1
N. end of cut, related to claim cors.

Gold Bug 9407
Grant & Hartford 7327

This is from "Map 2-100-Scale"
1" = 100'

Hole No 1 - (See Location Sheet attache)

American Mining Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' - Joe G. Irving

Cross Section (Looking N32E)
Showing old Hole No. 1
N-32 E. - 85° - TD-350

Assays and/or Notes on Mineralization

Rock Type, Alteration etc

0-12' overburden

12.1-161' fractured, slightly alt. gr. diorite, with a few thin 'limy' inclusions. and narrow Qtz. Seams, iron stained

161.1-163' Zone of flat-dipping Qtz seams with FeS_2; and some dissem. FeS_2 adjacent.

163.1-240' Slightly alt. gr. diorite, few narrow Qtz. FeS_2 Seams. (See across)

240.1-279.5' Mineralized, alt. gr. dior, with scattered FeS_2 dissems. & seams throughout.

279.6-293' Min. gr. dior. slightly chloritized with zones containing bands & seams of Qtz. FeS_2 and irreg. dissems. FeS_2 (6" of gouge @ 279')

293.1-350' Relatively fresh gr. diorite; some slight chloritic alt; few spots FeS_2

Hole No 1.

Hole entirely in gr. diorite with varying amounts of alteration & sericitic & chloritic type

350

Dowey Vein 160-163.5

1.0' band of Small Qtz. FeS_2 Seams 160-161
(Sam No. 134 - 1.0' - 0.17 oz Au)

1.0 - Highly min. Gr. diorite 162-163'
Sam - 135 - 1.0' - 0.030 oz Au

1½" seam @ 163½'. Sam #136c - 0.220 Au

Sludge 159-163 Sam. 136s - 0.035 "

Band (0.9') of ½" seams Qtz. FeS_2
(Sam 137 - 0.9' - 0.080 oz Au

Zone of Shamrock Vein C 252-261

1.5' (243.5-245) Qtz. freqs. - Seams FeS_2 etc
(Sam 138 - 1.5' - 0.100 oz Au

5.0' section (252-257) bands of Qtz. FeS_2 & FeS_2 dissems. (Sam 139 - 0.105 oz Au

257-261 - 4-ft zone of Qtz. FeS_2 Seams
(Sample #140 - 4.0' - 0.03 Au; Sludge 256-261
In Sam #141 - assayed - 0.120 oz Au)

275-277½ - Seams of Qtz in min gr. dior.
over 2½ ft zone - Sam #142 - 0.020 Au

280.5-281.5' - 1.0' of seams iron (#143) - 0.025 "
286.5-288.7' - 2.3' of " " (#144) 0.065 "

definite Vein Zone

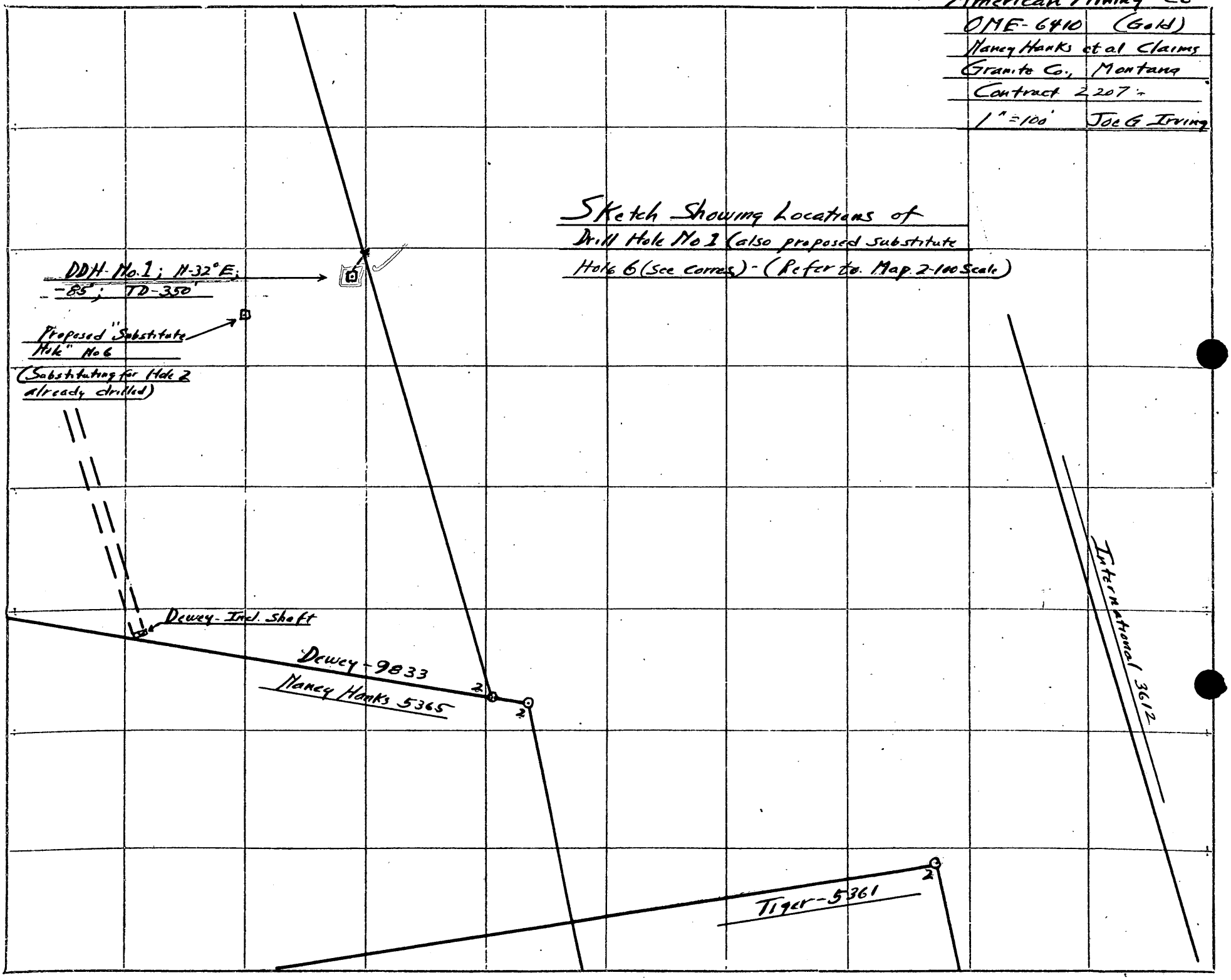
289.25-291 Min. Zone & Vein mat in gouge
(Sam 145 - 1.75' - assayed - 0.150 oz Au

291-293.5' Bands of Qtz. FeS_2 (up to 2½") alternating with min. gr. diorite
(Sam #146 - 2.5' - assayed 0.100 oz Au

Note: Core was dropped & lost for interval 343-250 (bot. of hole) in un min. gr. dior. but sludge assayed only 0.010 oz Au Samp #147

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' Joe G Irving

Sketch Showing Locations of
Drill Hole No 2 (also proposed substitute
Hole 6 (see corres) - (Refer to Map 2-100 Scale)



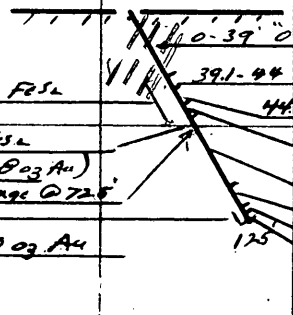
Hole "g" (See Location Sheet attached)
(as modified)

American Mining Co.
OME 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' Jac G Irving

Cross Section Looking N.E.
Showing dd hole "g"
S 38° E; -60°; TD-125'
(as modified)

Assays and/or Notes on Mineralization

Rock Type Alteration etc



0-39' "Overburden" - undoubtedly passed thru the big Nancy Hanks fault - with this much "overburden" Reported (See original Proj. attached)

39.1-44 - white aplite & "aplitic grano-diorite"

44.1-53 gray alt. Xline ls; Some devel. of mica on fractures

53.1-59 unstained white marble; greyish Xline ls - 59-61.5'

61.6- to 104 Partly silicated gray Xline ls; blanched & blotched with garnet-epidote; Some $CaCO_3$ & FeS_2

104.1-114' white coarse-grained marble

114.1-119' Highly silicated Xline ls; No FeS_2

119.1-125 A fine to med grained white & gray marble with some dissem. FeS_2 and FeS_2 coatings on fracture planes; Some Calcite blebs

Some sparingly dissem. FeS_2

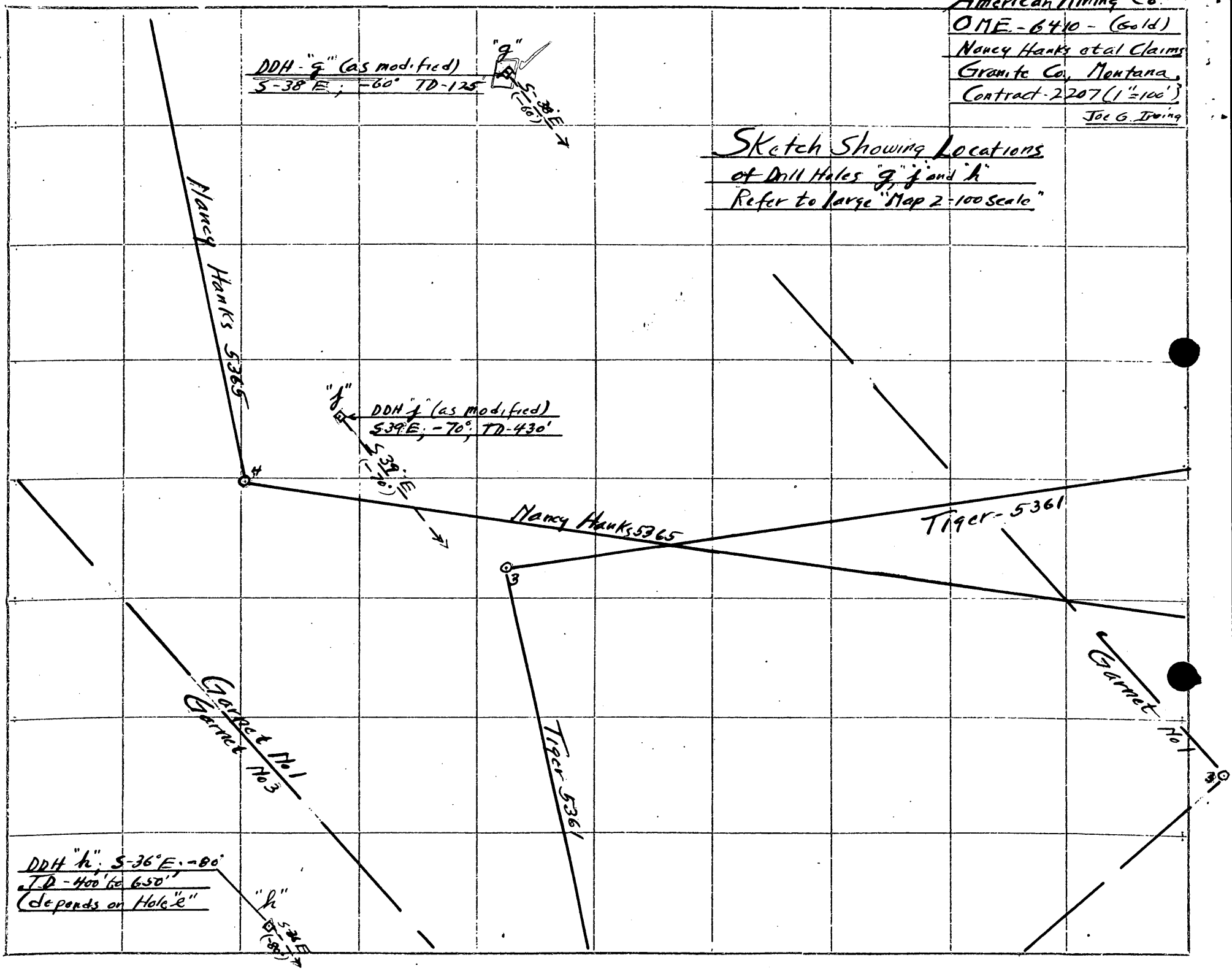
8" Xline Sil. ls; Some FeS_2
(Sample #132 (69-70') - 0.018 oz Au)
Gouge @ 72.5'

Some FeS_2 119-125
(Sample #133 - 6' of 0.010 oz Au

Note The hole from appearance of Xl. ls. seems to be in the Pilgrim fm. below the aplite

American Mining Co.
OME-6410 - (Gold)
Nancy Hanks otal Claims
Granite Co, Montana
Contract-2207 (1" = 100')
Joe G. Irving

Sketch Showing Locations
of Drill Holes "g", "j" and "h"
Refer to large "Map 2 - 100 scale"



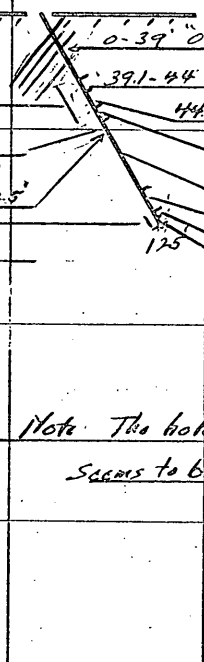
Hole "g" (See Location Sheet attached)
(as modified)

American Mining Co.
OME 6410 - (Gold)
Nancy Hanks et al. Claims
Granite Co., Montana
Contract 2207.
1" = 100' Jac G Irving

Cross Section (Looking NE)
Showing dd hole "g"
S 38° E; -60°; T.D. - 125'
(as modified)

Assays and/or Notes on Mineralization

Rock Type Alteration etc



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104.1-114' white coarse-grained marble

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(Sample #132 (69-70') - 0.018 oz Au)
gouge @ 72.5'

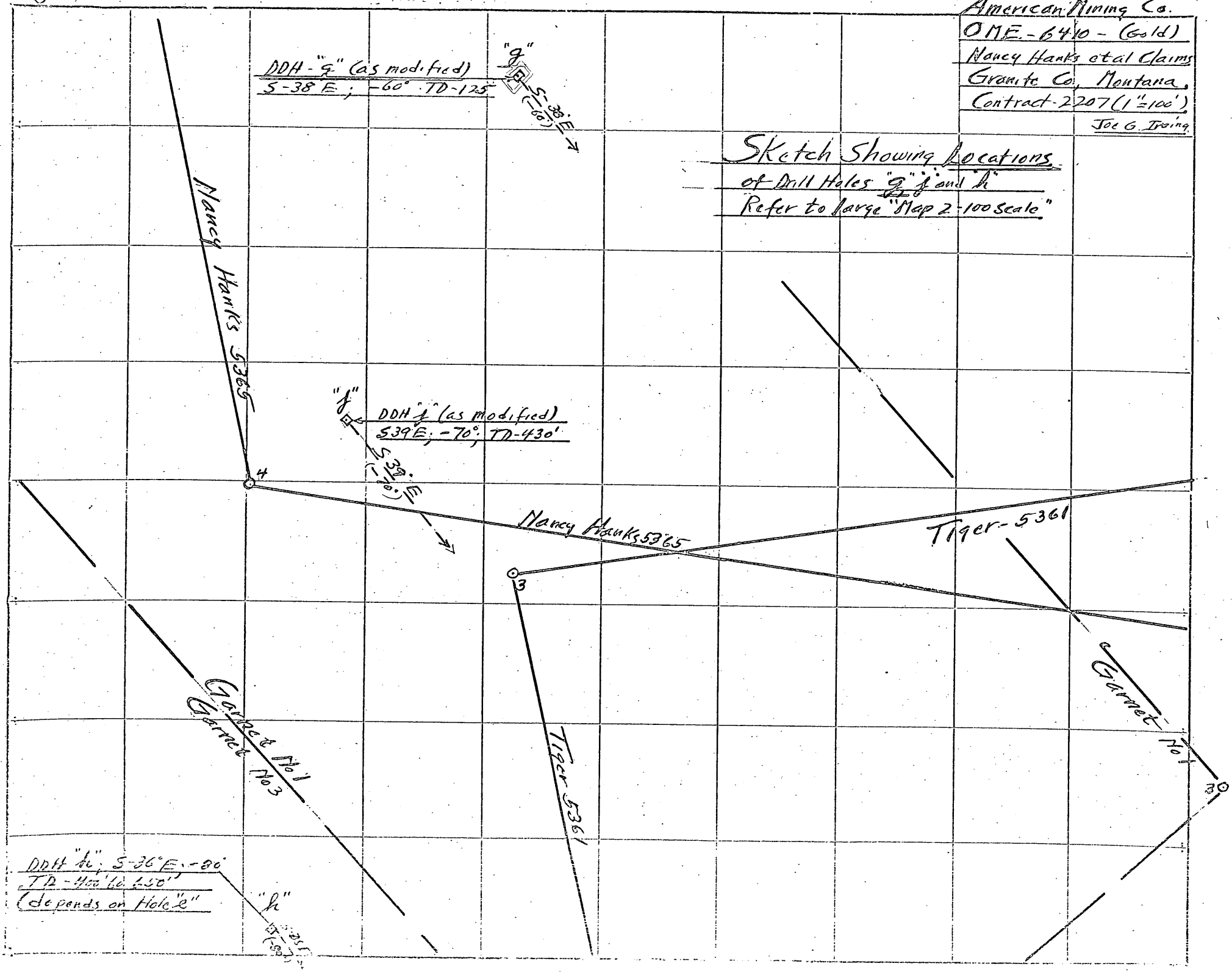
Some FeS_2 119-125
(Sample #133 - 6' of 0.010 oz Au

Note: The hole from appearance of Xl. ls. Seems to be in the Pilgrim fm, below the aplite

American Mining Co.
OME-6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract-2207 (1"=100')
Joe G. Irving

Sketch Showing Locations of Drill Holes "g", "j" and "h"

Refer to large "Map 2-100 Scale"



Hole No 1 - (See Location Sheet attache)

American Mining Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' - Joe G. Irving

Cross Section (Looking N32E)
Showing old Hole No 1
N-32 E - -85° TD-350

Assays and/or Notes on Mineralization

Rock Type, Alteration etc

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293.1-350' Relatively fresh gr. diorite; some slight chloritic alt; few spots FeS_2

Hole entirely in gr. diorite with varying amounts of alteration of sericitic & chloritic type.

Hole No 1.

350

Dewey Vein 160-163.5'

1.0' band of small Qtz. FeS_2 Seams 160-161.
(Sam No. 134 - 1.0' - 0.17 oz Au)

1.0 - Highly min. Gr. diorite 162-163'
Sam - 135 - 1.0' - 0.030 oz Au

1½" seam @ 163½' - Sam - 135c - 0.220 Au

Sludge 159-163. Sam. 136S - 0.035 "

Band (0.9') of ½" seams Qtz. FeS_2
(Sam 137 - 0.9' - 0.080 oz Au

Zone of Shear Vein C 252-261

1.5' (243.5-243) Qtz. frags. - Seams FeS_2 etc
(Sam 138 - 1.5' - 0.100 oz Au

5.0' Section (252-257) bands of Qtz. FeS_2 & FeS_2 dissems. (Sam 139 - 0.105 oz Au

257-261 - 4-ft zone of Qtz. FeS_2 seams
(Sample #140 - 4.0' - 0.03 Au; Sludge 256-261
In Sam #141 - assayed - 0.120 oz Au)

275-277½ - Seams of Qtz in min gr dior.
over 2½ ft zone - Sam #142 - 0.020 Au

280.5-281.5' - 1.0' of seams ran (#143) - 0.025 "

286.5-288.7' - 2.3' of " " (#144) 0.065 "

Quartz Vein Zone

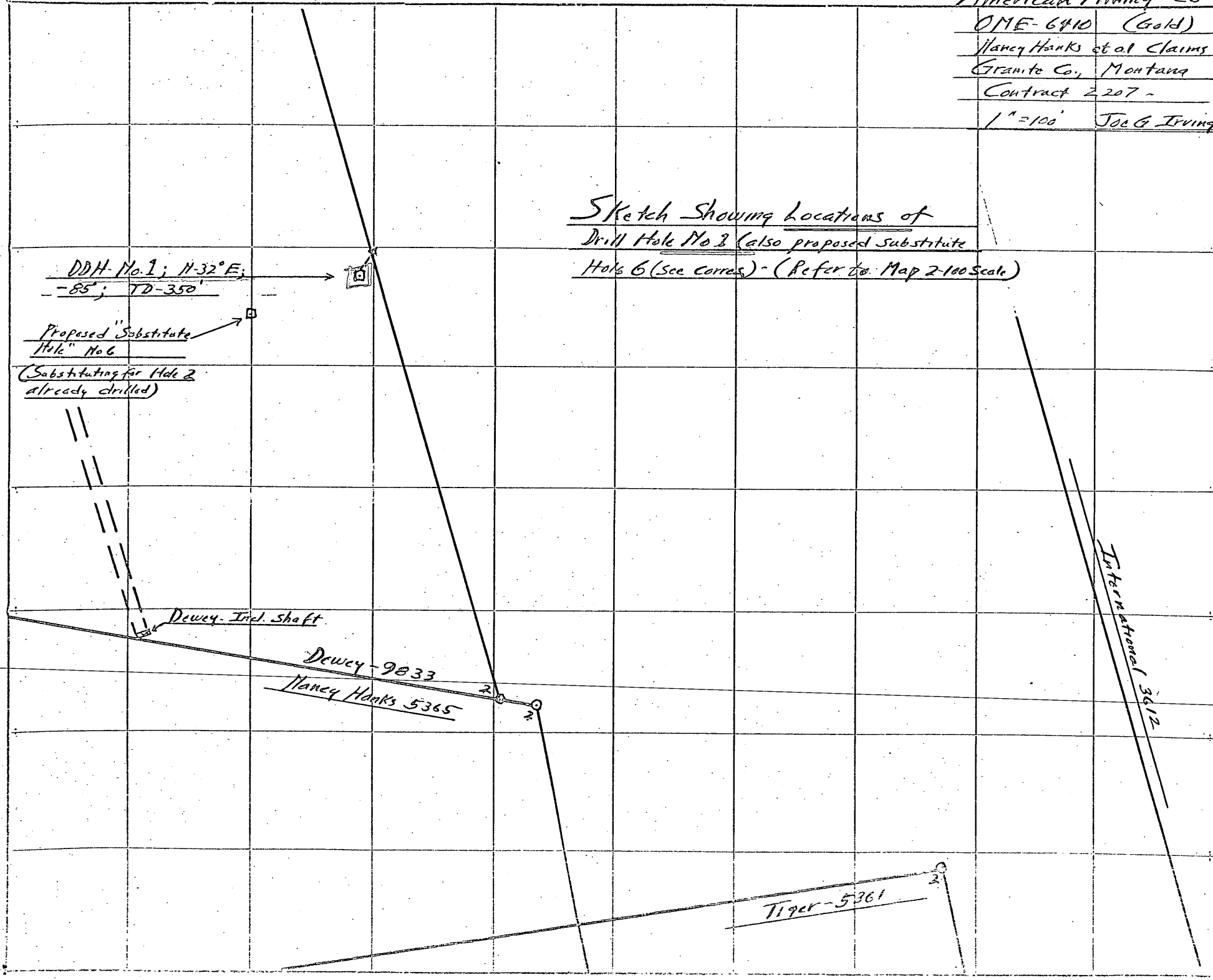
289.25-291 Min. Zone & Vein met in gouge
(Sam 145 - 1.75 - assayed - 0.150 oz Au

291-293.5' Bands of Qtz. FeS_2 (up to 2½" alternating with min. gr. diorite
(Sam #146 - 2.5' - assayed 0.100 oz Au

Note: Core was dropped & lost for interval 343-350 (bot. of hole)

American Mining Co
OME-6410 (Gold)
Haney Hanks et al Claims
Granite Co., Montana
Contract 2207-
1" = 100' Joe G Irving

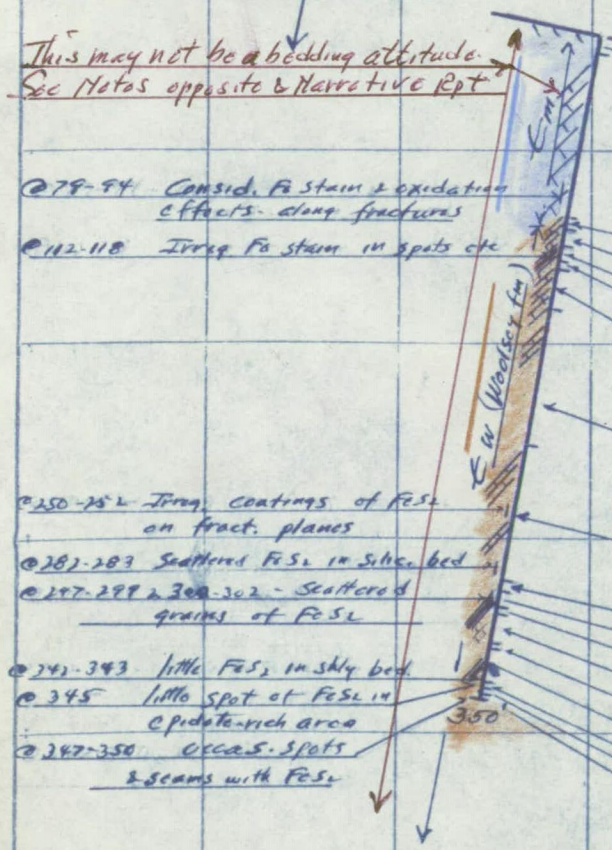
Sketch Showing Locations of
Drill Hole No 2 (also proposed substitute
Hole 6 (See Corres) - (Refer to Map 2-100 Scale)



Hole "2" (see Location Sheet attached)

American Mining Co
OME 6410 (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' — Joe G Irving

Cross Section (looking N.W.) Showing old hole "2" (3-50" W; -80°; TD-350' (as modified)



Assays and/or Notes on Mineralization etc

This may not be a bedding attitude. See Notes opposite & Narrative Rpt

@ 78-84 Consid. Fe stain & oxidation effects along fractures

@ 112-118 Irreg Fe stain in spots etc

@ 250-252 Irreg. coatings of FeS_2 on fract. planes

@ 282-283 Scattered FeS_2 in silic. bed

@ 297-299 & 300-302 - Scattered grains of FeS_2

@ 341-343 little FeS_2 in shly bed

@ 345 little spot of FeS_2 in epidote-rich area

@ 347-350 Occas. spots & seams with FeS_2

Rock Type, alteration etc

0-10 overburden

10-97 - a whitish-grey, med grain. Xline ls, displaying pitting & solution cavities throughout, cavities usually Fe stained, pitting follows steep lines that dip about 55°-60°

97.1-103 - a silicated Xline argillac. ls; showing irreg, wavy bands & blotches of garnet-epidote alteration that appears to dip about 55-60°

103.1-112 Purplish-brown "hornstone type" of alt. calcareous shale (garnet)

112.1-118 lighter colored alt. calcareous shale (garnet-epidote) No effer. with HCl

118.1-123.5 altered shaly ls; irreg. bands of garnet etc.

123.6-144 Silicated Xline ls; bands & spots of garnet-epidote - Slow effervescence

144.1-217 a silicated, calcareous rock (prob. was a shaly ls) containing a garnet-epidote alt. in bands throughout. Some areas effervesce

217.1-288 Silicated Xline ls, with irreg bands & blotches garnet-epidote; has some chlor.-serp. develop. on fractures; some scattered FeS_2; (a siliceous bed 282-283)

288.1-292 alt. shale - a gray, dense siliceous, garnetized rock

292.1-302 Partly silicated Xline ls; few specks of FeS_2

302.1-304 - altered, garnetized shaly ls, layer

304.1-321 Slightly silicated (little garnet) Xline ls. effervesces+

321.1-323 dark gray, alt shaly ls - silicated

323.1-341 Coarse grain, whitish, slightly silicated Xline ls.

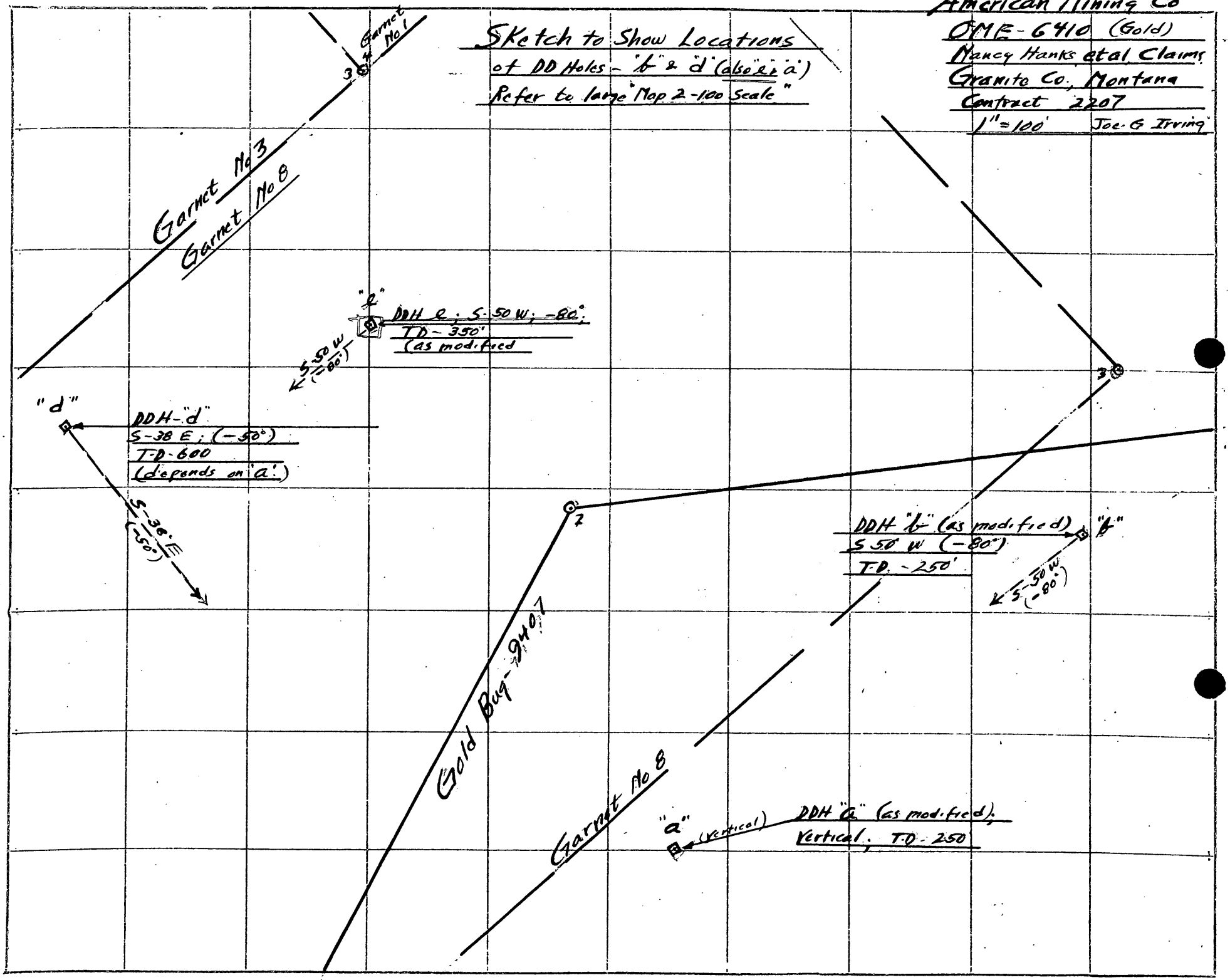
341.1-343 shaly bed, contains sprinkling of FeS_2

343.1-346 Somewhat silicated, Xline ls - FeS_2 in epidote-rich area.

346.1-350 Slightly silicated Xline ls - some irreg gar-epid bands; and FeS_2

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' Joe G Irving

Sketch to Show Locations
of DD Holes - "b" & "d" (also "e" & "a")
Refer to large "Map 2-100 Scale"



Hole #: (See Location Sheet attached)

OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract No. 2207
1" = 100' — Joe G. Irving

Rock Type, Alteration etc

Hole #1 — Type

0 – 21	overburden
21 – 32	Pk. fresh, varietal textured qtz diorite
32 – 49	white and gray xline ls; no Fe stain
49 – 52	Silicated gray ls (garnet-epidote bands etc)
52 – 65	altered, disintegrated partly silicated xline ls; much evidence of solution effects.
65 – 79	Pk. fresh, variable tex. qtz diorite; crush. zone & gouge 78-79'
79 – 95	Meta calc. shale; dk gray, no effers; little qtz dior still @ 86-87'
95 – 103	Partly silicated gray xline ls; some many qtz-carb. bands; occ. FeOx stains & CaCO3 seams.
103 – 194	Light gray to whitish, med to coarse grain xline ls; some garnet-epidote spots & bands; occas. iron stain, pits & sol. cavities.
194 – 272	Plum, med. to coarse grained white marble; a few orange-red stains on few broken areas.
272 – 276	Slightly silicated ls; few solution cavities, iron stained – some mica.
276 – 282.5	White marble – slight silication
282.5 – 305.5	Somewhat silicated xline ls; a few garnet bands etc.
305.5 – 309	Banded silicated xline ls; some iron stain along bding seams.
309 – 310.5	alb. shly ls; thin bands & lamminations; some Fe stain
310.5 – 312	Crushed zone, gouge in alb. brown stained ls.
312 – 320	Partly silicated xline ls; faint garnet banding & blotches.
320 – 326	Silicated xline ls; garnet in bands; epidote @ 323-326 & 332-334'
326 – 336	Coarsely xline ls – some irreg iron staining
336 – 343	gray-brown alb. shly ls & shale; No FeS2 (poor core recov)
343 – 354	No core
354 – 359.5	Por n; pieces of hornstone & white xline ls – No FeS2
359.5 – 361	Silicated xline ls (garnet-epid); little still of andesite at 359-360'
361 – 382	Meta shale, highly altered; some epidote-garnet; (white ls band @ 371-373)
382 – 397	gray-white xline ls
397 – 400	Meta shale; purple-brown, with xline ls layer @ 403-404'
400 – 405.5	Med grain, white xline ls
405.5 – 412	Meta shale (purple-brown); a 2" section contains a little Py & FeOx in seams.
412 – 418	Partly silicated xline ls; some iron stain, solution cavities (poor core recov)
418 – 423	White xline ls; med grained; some iron stain & sol. cavities. (Good core)
423 – 430	

1½" of manganese stained Quartz mica

Broken zone; two pieces of barren leading @ 347-35.6'; No FeS2

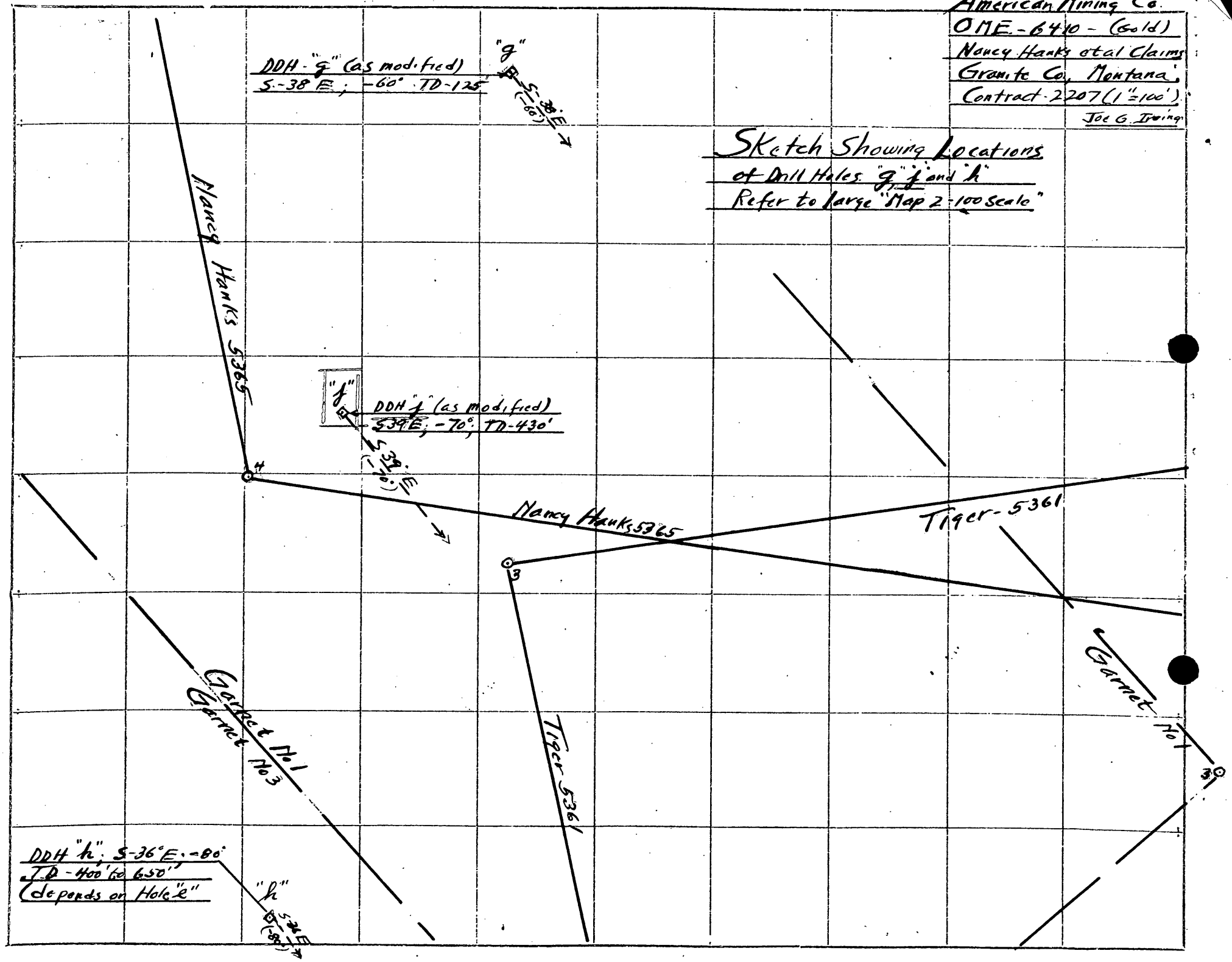
2" section of shale with two ⅛" seams Sp/Py

Sample No 181 – 2' – @ .02 oz Au

American Mining Co.
OME-6440 - (Gold)
Nancy Hanks etal Claims
Granite Co, Montana
Contract 2207 (1" = 100')
Joe G. Irving

Sketch Showing Locations of Drill Holes "g", "j" and "h"

Refer to large "Map 2 - 100 Scale"

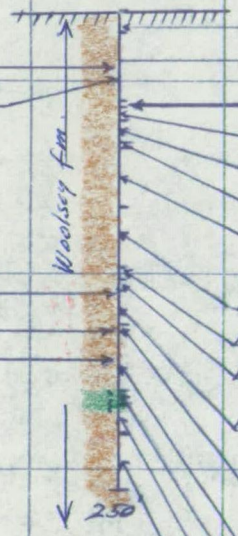


Hole "a" (See Location Sheet attached)

1" = 100'

American Mining Co
OME-6410 (Gold)
Nancy Hanks et al-Claims
Granite Co., Montana
Contract - 2207
1" = 100' Joe G. Irving

Cross Section looking West showing Drill hole "a"; Vertical, TD-250'



Assays and/or Notes on Mineralization

@ 28-29' - broken zone, iron stained

@ 34.5' fracturing, with Fe staining

@ 145' Tiny seam, containing some FeS_2

@ 164-167' - occasional grains of FeS_2

@ 179-186' - a little scattered FeS_2 - over 9"

(Samp # 129 - 179-179.8' - Tr-Au.

Rock Type, Alteration etc

0-10' over burden

10-46' gray, X-line ls; 1' of meta sh. @ 10-11'; highly crushed (to sand) 36-44'

46.1-48' crushed meta shly ls; crushed to a brownish sand.

48.1-56' Partly silicated X-line ls; shows irreg. bands of garnet alteration

56.1-68.5' Highly silicated (gar-epid) X line ls

68.1-70' a 'hornstone' - meta shly ls.

70.1-101 Partly silicated X-line ls; irreg. bands of garnet-epid & some irreg. $CaCO_3$ seams & scattered spots of FeOx.

101.1-133 Siliceous meta sh and shly ls - a hornstone-like ft of gar-epid ls @ 106'

133.1-138 Partly silicated X-line ls - some wavy bands garnet alteration.

138.1-145 - Gray, dense, siliceous meta sh & shly ls; occas. spots of FeS_2

145.1-164 Partly silicated X-line ls, with bands & blotches of garnet-epidote and some chlor. & serp. on fracture planes

164.1-167 altered shly ls - showing garnet & few spots of FeS_2

167.1-197 Partly silicated, coarse gr. X line ls but in places (183-192) it is almost a 100% garnet-epidote RK, and here shows com. FeS_2

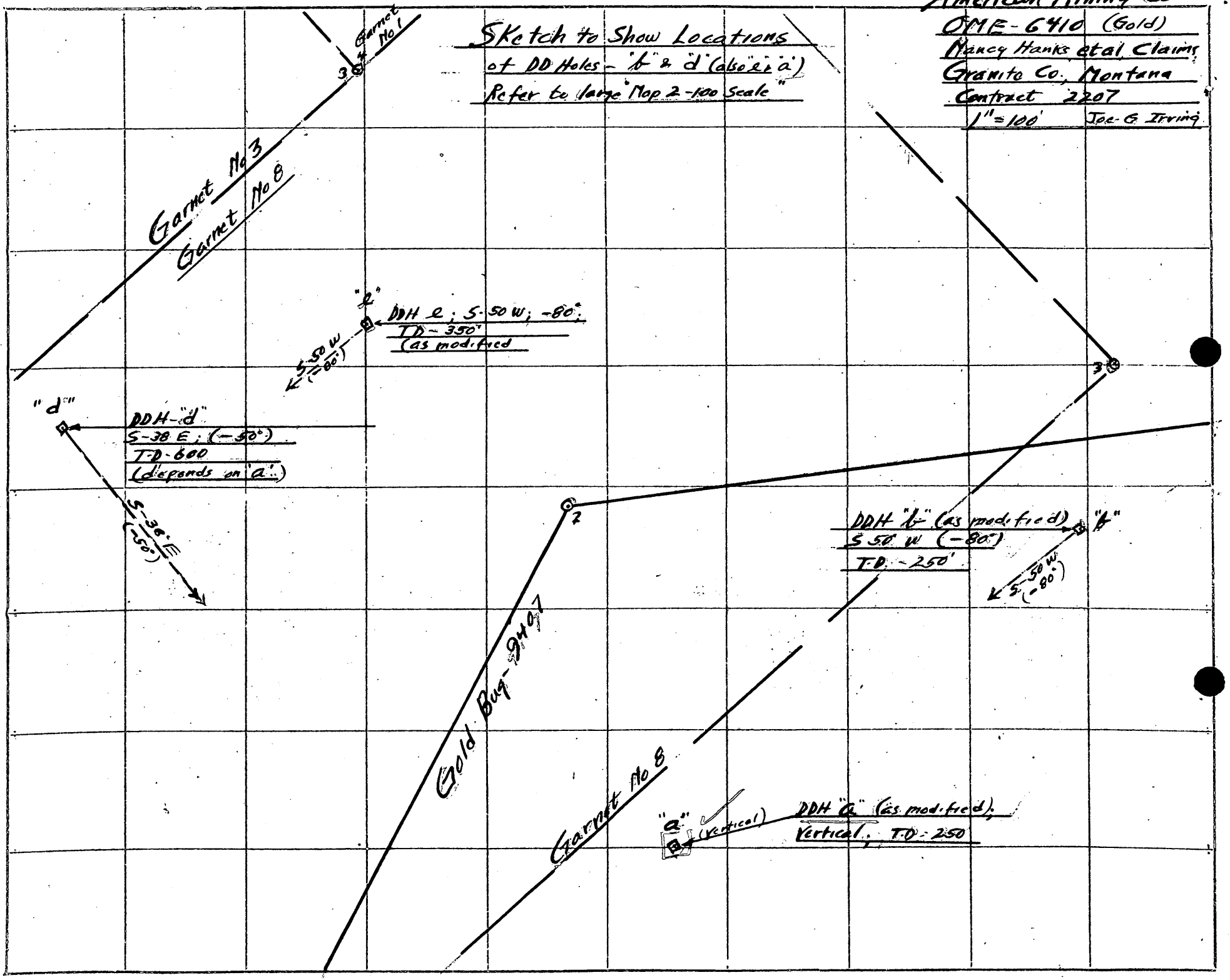
197.1-205 "granodiorite", with irreg. 'frozen' contacts; an inclusion of silicated ls @ 202-204; aplitic facies 204-205.

205.1-219 Partly silicated med. gr. X-line ls, showing irreg. wavy bands & blotches of garnet-epidote alt. & some serp. & chlorite developed on fracture planes.

219.1-250. - Altered shly ls - Rock is now partly silicated with garnet-epidote, irreg bands that dip 45° ±

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' Joe G. Irving

Sketch to Show Locations
of DD Holes - "b" & "d" (also "e" & "a")
Refer to large "Map 2-100 Scale"



Hole "b" (See Location Sheet attached)
1" = 100'

American Mining Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' Joe G. Irving

Cross Section (Looking NW) Showing d. drill hole "b" S 56° W; -80° TD-250'

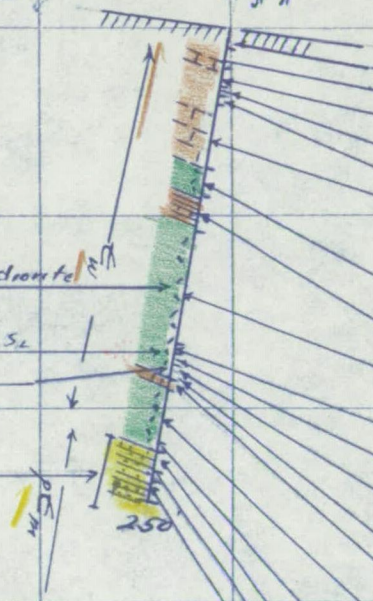
Assays and/or Notes on Mineralization

@ 135-136 - Some iron staining in grano diorite

@ 166-170 Some sparse dissems. of FeS_2

@ 177-178.5 - FeS_2 in pitted, iron stains. ls.
(Samp #130 - 1.5' - 0.020 Au)

221-250 No FeS_2 of any signif. seen

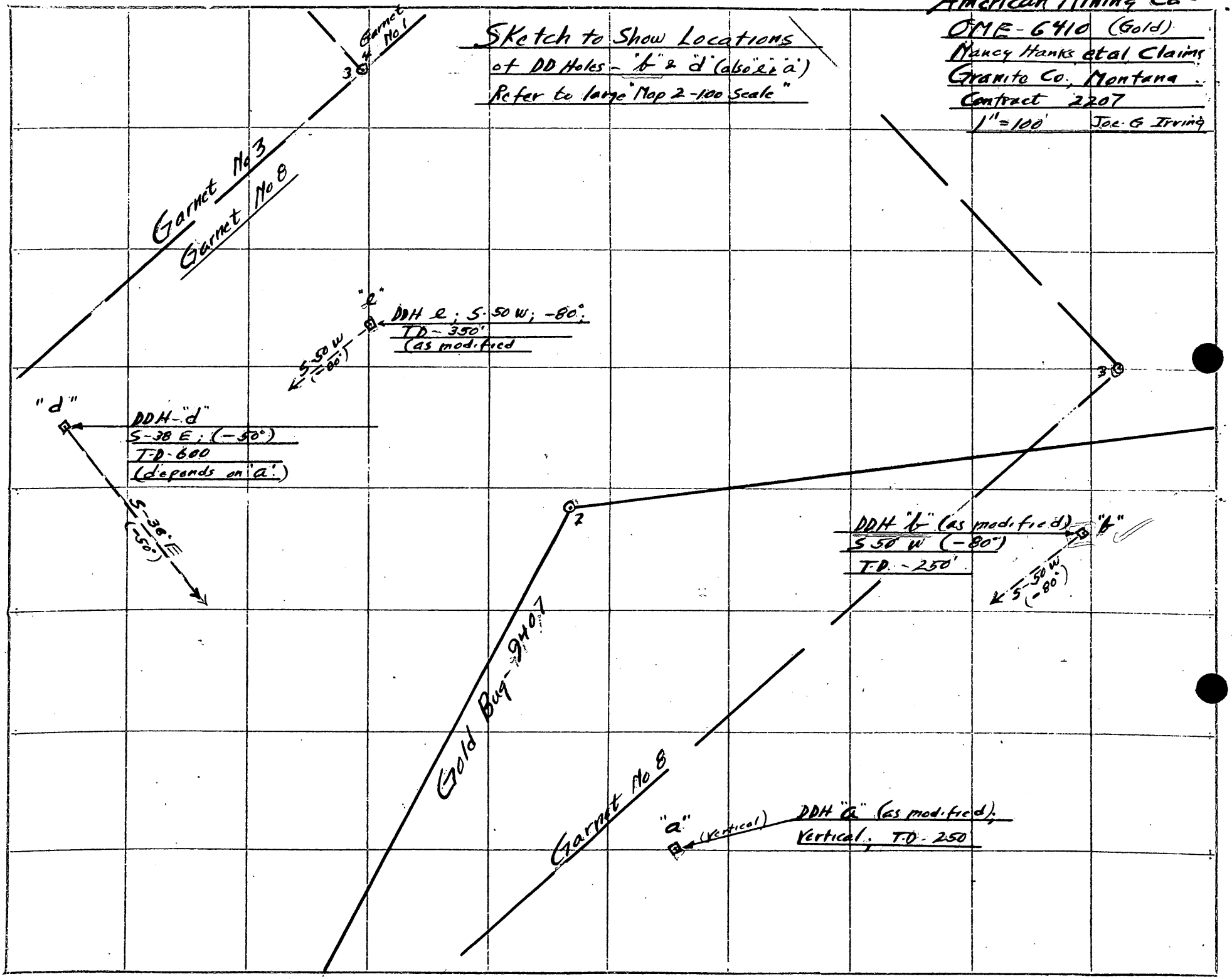


Rock Type alteration etc

0-10' overburden
10-18 - alt. white xline ls; fractured, broken
18.1-30 " xline ls - no core recov.; only a 'crushed sand'
30.1-33 alt. ls - with garnet bands
33.1-37 " " " " " and some shale layers.
37.1-73.5 Highly silicated xline ls; showing irreg. wavy bands of gar.-epid. alteration; @ 65-73.5 almost 100% garnet-epidote rock; some sol. pitting and Fe & Mn stains.
73.6-87 - light col. variable textured slightly alt. granodior (sill?)
87.1-105 - gray meta shale (a hornstone) some layers calcareous
105.1-166 - granodior, variable texture, some ser & chlor. alteration a crushed zone @ 115-119; Fe stains 135-136; aplitic 163-166
166.1-170 gray, dense meta shly ls - some specks FeS_2
170.1-176 - Med grain, gray-white xline ls; some pitting & Fe stains.
176.1-178.5 alt. iron-stain. xline ls - some FeS_2
178.6-181.5 meta shale
181.6-192.5 Med. grained, gray xline alt. ls
192.6-218 Grano-diorite (prob. a sill) variable texture aplitic @ 192-195; rel. fresh @ 195-205; Slightl. alt. 205-218'
218.1-221 Broken zone, showing mixed Qtzite-gr. dior. pieces
221.1-233 gray Quartzite, broken with little 'fingers' gr. dior.
233.1-239 gray Qtzite, little fingers of gr. dior. @ 237-39
239.1-250 gray Qtzite, both laminated & spotted facies.

American Mining Co.
OME-6410 (Gold)
Nancy Hanks etal Claims
Granite Co., Montana
Contract 2207
1" = 100'
Joe G Irving

Sketch to Show Locations
of DD Holes - "b" & "d" (also "e" & "a")
Refer to large "Map 2-100 Scale"



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Hole "F" (See location Sheet attached)

1" = 100'

American Mining Co
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' — Joe G Irving

Cross Section (looking NW) Showing drill hole "F" (S50°W; -70°; TD-350')

Assays and/or Notes on Mineralization

@43' FeOx spots after FeS2
@68' Calcite lined sol. cavity, spots of FeOx
@76-76.5' epidote - MnOx stains, etc
@90.5' broken zone, with few seams CaCO3
@100-100.5' Vuggy seam, with CaCO3 & FeOx
@107-108.5 Iron stain on fractures & sol. cavs
@129' Fractured zone with MnOx spots & stains.
@142-149' Irreg. iron staining.
@165.5-166' Seams & dissems. FeS2 in gneiss Sam. No 121 = Trace Au.
@195-198' Aplite band, some FeS2 & (MoS2?)
@195-195.5' (Sam. #122 - 0.01 Au
@248-250 Sam. #123 - 1.0' - Tr. Au

350

Rock Type, alteration etc

0-20' overburden
20-142' gray, whitish, coarsely xline ls; Some Fe stains on fractures; Some solution pitting, with little CaCO3 of recrystall.; a little epidote-garnet alteration. Streaking (Resid bedding?) dips 40°±
142-148' — Coarse xline ls, with irreg. wavy bands and areas of epidote-garnet alteration
149-158' "granodiorite" (a Hb-Feld Rk) with variable texture; fin. grained, "frozen" light contact, prob. a sill.
159-159.5' a band of xline ls (frozen contact)
159.5-210.5' a Hb-Feld Rk (granodiorite) (No bio or qtz seen) of variable texture - from coarse to felsitic; dip of seams and crude flow lines - 40-45°; some dark, fin. grained (igneous?) inclusions @ 172-250'
210.5-243' Highly altered, xline ls, with wavy bands, rich in garnet-epidote some calcite seams & blebs
244-250' Fin. grained granodiorite (Coarse text. band @245-246' - some Fe stain.
251-265' Meta. shaly ls - a hornstone-like rock, with garnet-type of alt.
266-284.5' Silicated xline ls - irreg. wavy bands and areas of garnet-epid. alteration Some iron stain; No FeS2 noted
284.5-289' Coarse, relatively fresh granodiorite, frozen contacts; dip about 40-45°
289-290.5' One foot of meta shale
290.5'-301' Partly silicated ls - garnet bands
302-304.5' Meta shale
304.5-358' Somewhat silicated ls - No FeS2 (Sandy meta shale @ 338-339')
Some sparse bands of garnet-epidote alteration

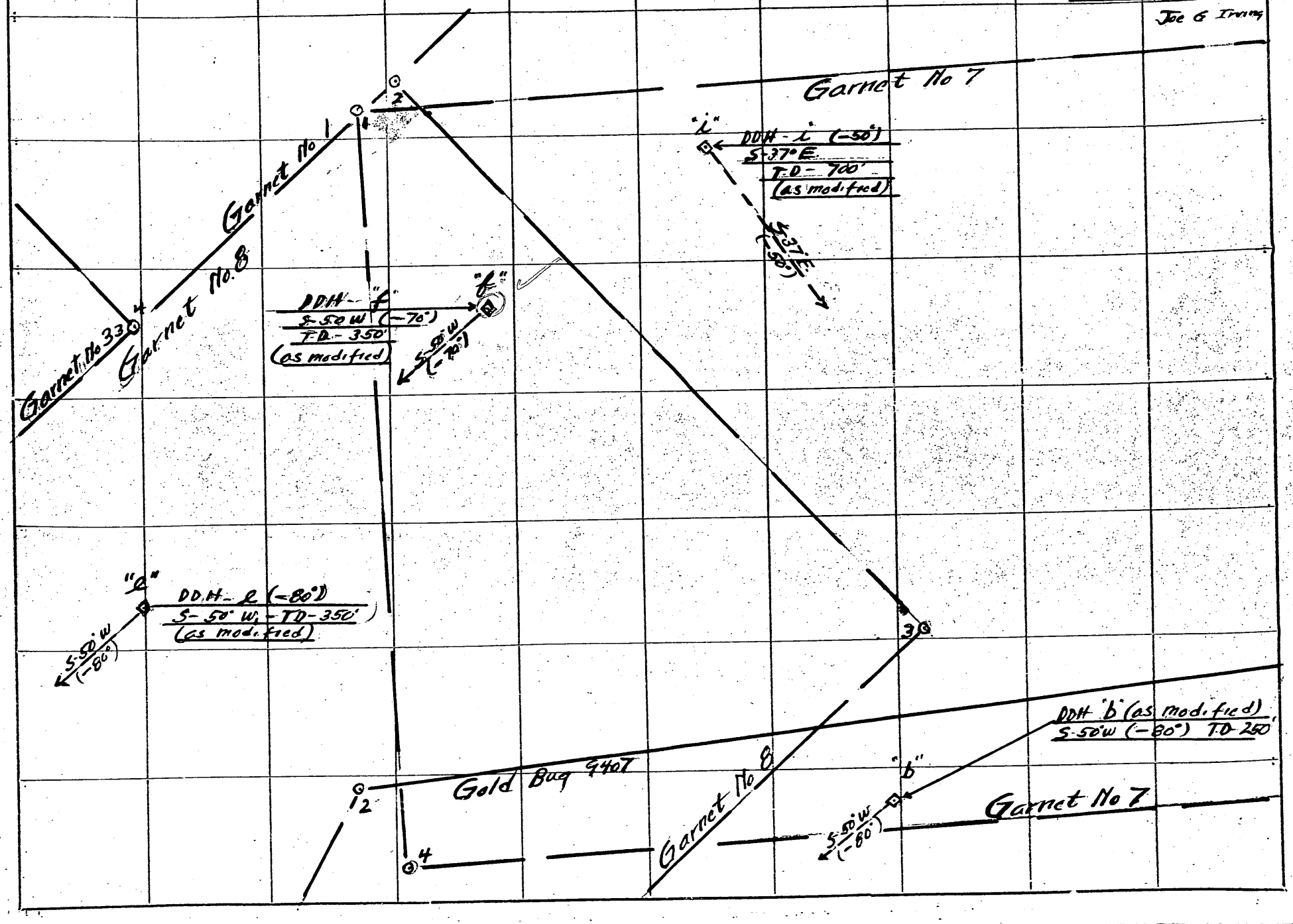
Maugher ls Fm
Woolsey Fm

12 copies

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al. Claims
Granite Co. Montana
Contract 2207
1" = 100'
Joe G Irving

Sketch to Show Locations of Drill Holes b, e, f and i

Refer to Large "Map 2-100-scale"



6 copies

Hole "i" (See Location Sheet attached) (1" = 100')

American Mining Co
OME - 6410 (Gold)
Nancy Hanks et al claims
Granite Co. Montana
Contract - 2207
1" = 100'
Joe G Irving

Cross Section looking NE showing Hole "i" S37E 50° 701'

Rock Type, alteration etc

Assays and/or Notes on Mineralization

0-29 overburden
30-76' gray to whitish, med gram. x-line ls; some solution openings along old bed. planes; some spotty Fe staining
77-81. granodiorite, probably a sill, somewhat altered in spots
82-101 - x-line ls; some Fe & Mn staining; @ 98' 1.5" Fe stain. aplite; broken zone @ 98.5-101 with clay & Jasper mat.
102-111 - whitish x-line somewhat iron-stained ls.
112-138 - Silicated x-line ls; wavy bands of garnet alteration; prob. along old bedding; some Qtz seams and silicified bands. Scattered FeS_2 dissems, throughout, also FeS_2 seams and coatings -
139-176 - gray blotchy & irreg. banded (garnet) x-line ls; some sparse FeS_2, iron stained solution cavities -
176.1'-176.8 - narrow, dark fin. grained igneous RK, containing cons. FeS_2; 176.9-181 x-line ls, silicated ls - some FeS_2
182-187.5 Oolitic layer; some FeS_2
187.6-257.5 - gray-white irreg. banded (garnet-epidote) partly silicated ls; occasional grain FeS_2 & darker bands
257.6-261 - Silicated, Sily ls - irreg brown bands of garnet alteration.
262-291.3 - a partly silicated (garnet-epidote) x-line ls - very little FeS_2 seen -
291.4-302.5' - a fine gr. igneous rock (granodiorite?) frozen contacts - Sill-like (small Sil. ls inclusions @ 291 & 291)
302.6 - 311 - a banded, siliceous "hornstone" (alt. Sily ls); some FeS_2 dissems. @ 309-311
312-319 Somewhat silicated x-line ls (gar-epid. bands); sparse FeS_2 dissems. & occas. gr. dior. "Sill-lets"
319-355 - a fine gr. siliceous sed. RK (meta-sh) with some FeS_2 and little 'fingers' of fin. gr. igneous RK
356-368 - Silicated (Garnetized) x-line ls; two little 6" "Sill-lets" of granodiorite in section -
368-377 - a coarse gr. Hb-Feld RK (granodiorite) with frozen contact dipping 55°±
378-406 Variable text. gr. dior. (& x-line ls inclus.; @ 378-379.) ; little FeS_2 @ 380-382' 406
407-408.4 - garnetized ls; with little Sill (3") gr. dior. @ 408.4'
408.5-422 meta calc. shale, contains little 'fingers' of gr. dior; a little FeS_2
422-494.5 laminated, gray Quartzite - some spotted variety; some mica on fracture planes; fractured @ 475'; 6" aplitic gr. dior. @ 492.5'
494.6-510 - granodiorite, with tight, frozen contact dipping 35°±
511-688.4' laminated Qtzite; some mica on fractures & bedding planes; a few sparsely dist. areas showing spots of FeS_2
688.5-694.5 - light col. gr. diorite, variable text., frozen contact
694.6-696.7 - Two feet of alt. x-line ls. (gar-epid); little FeS_2
696.8-700 gr. dior, variable texture, slightly chloritized.

Sam. #124 (110-115') - Tr. Au
Sam. #125 (128-132.5) - Tr. Au
Sam. #126 (176.1-176.8) - Tr Au
" #127 (178.9-178) - Tr. Au
@ 309-311 - dissem. FeS_2
@ 352-323 - little areas with FeS_2
@ 432 - little FeS_2 in 6" gr. dior. "Sill-let"
@ 563-64' - a few spots of FeS_2 on fract. planes
@ 638-39 - Fractured area, with a little FeS_2
@ 650-51 " " " " "
@ 694.6-696.7 - 2' of altered x-line ls - some FeS_2 (Samp. #128 - Tr Au)

Sm
Ew
Ew
Ew

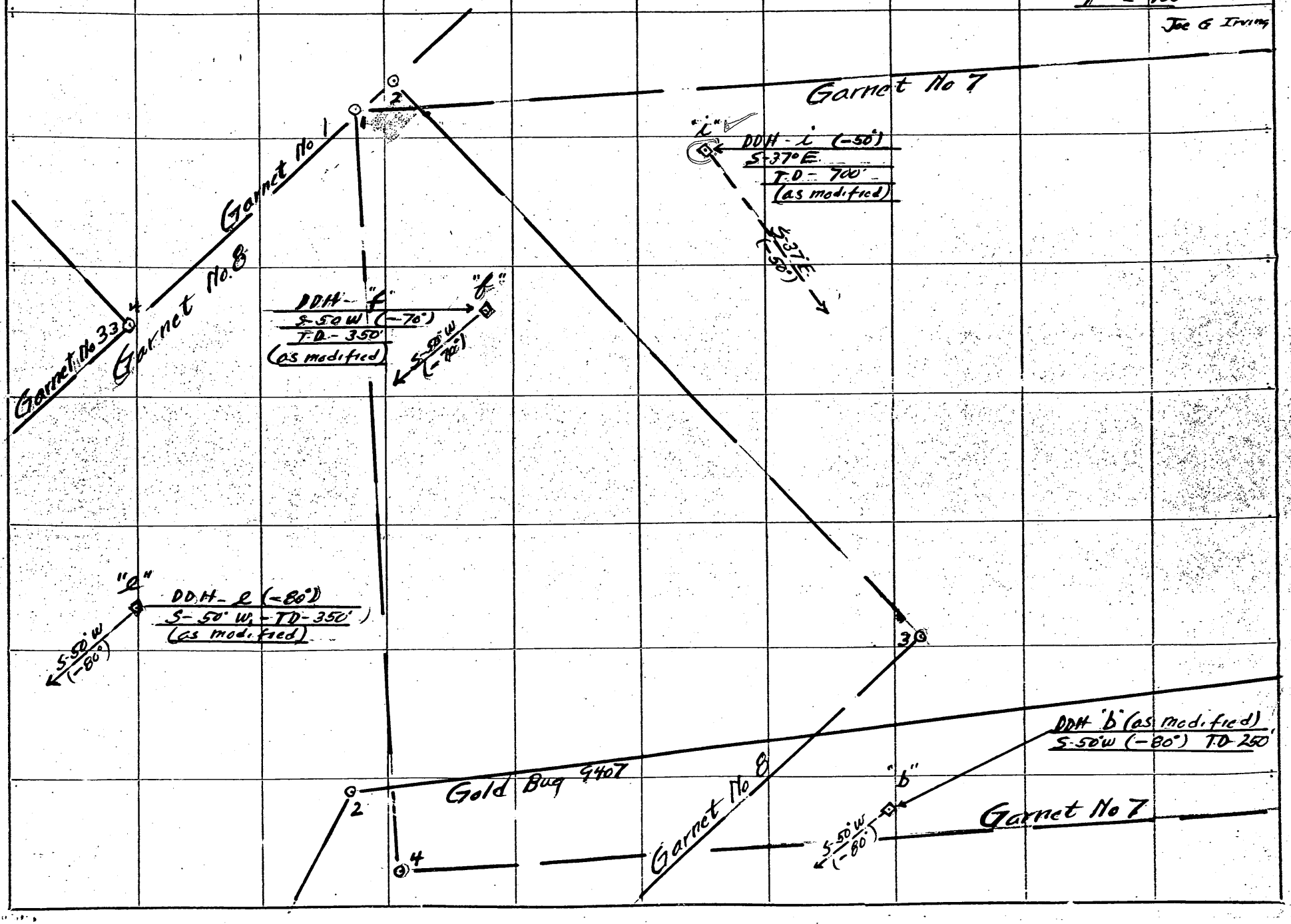
12 copies

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al. Claims
Granite Co. Montana
Contract 2207
1" = 100'

Joe G Irving

Sketch to Show Locations of Drill Hole b, e, f and i

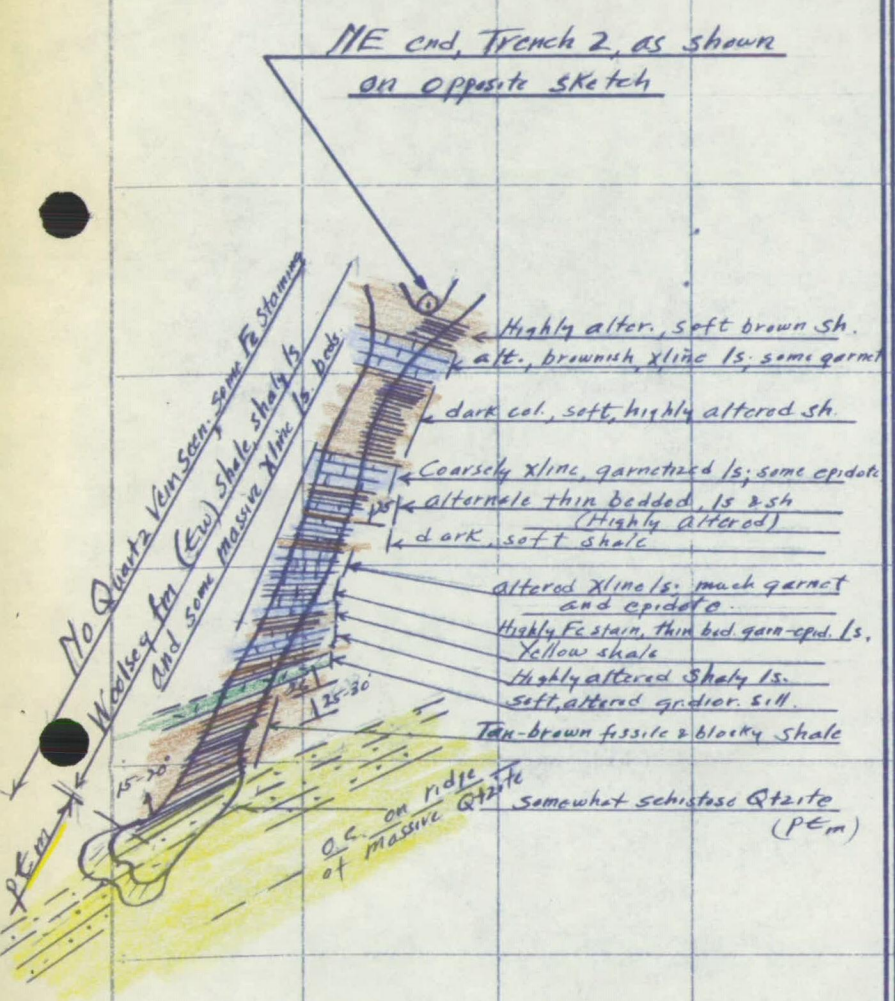
Refer to Large "Map 2-100-Scale"



Trench 2

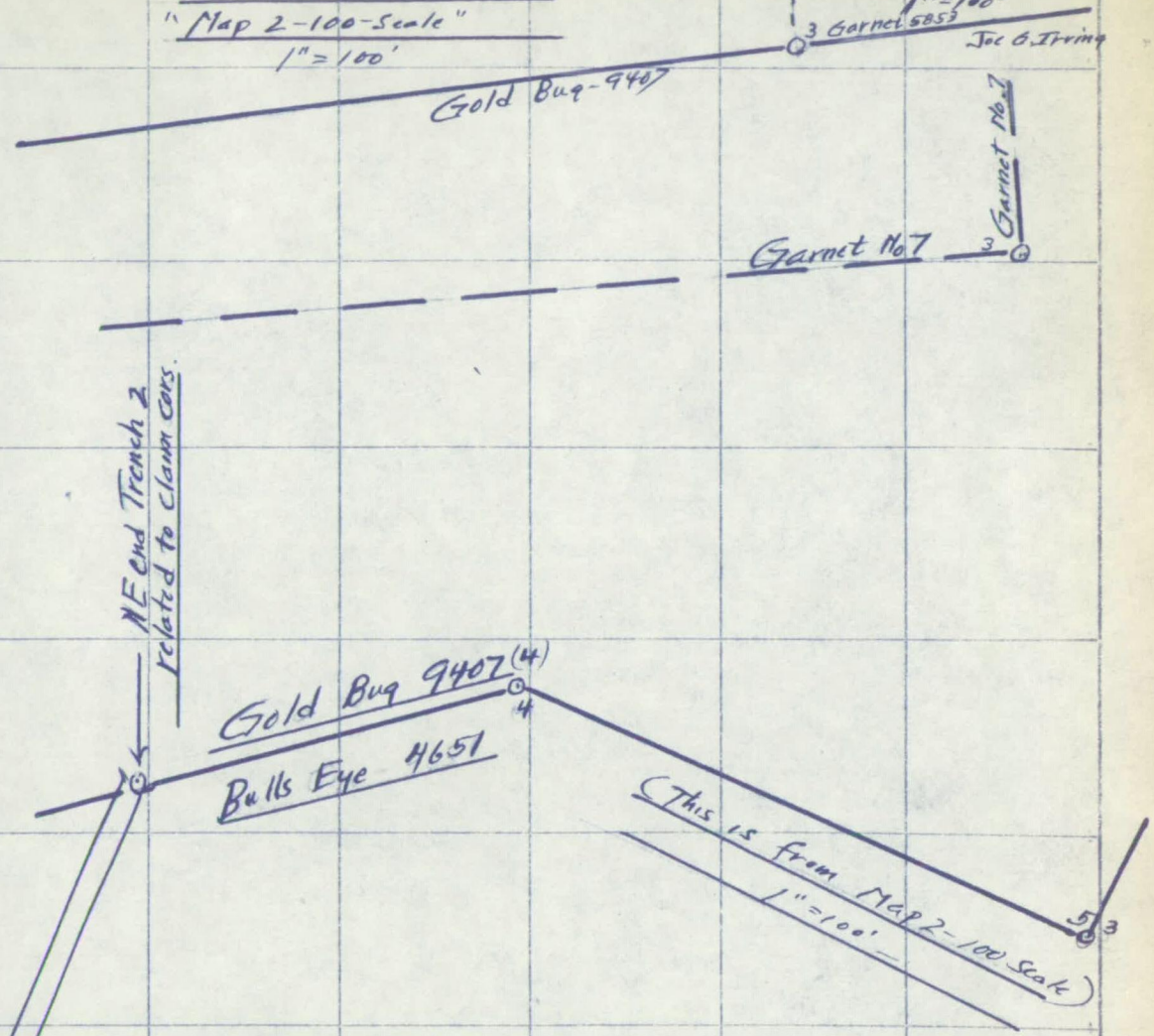
American Mining Co
OME-6410 (Gold)
Nancy Hanks etal claims
Granite Co, Montana
Contract-2207
1" = 100'

Sketch Showing Geology, Trench 2
1" = 100'



(310' of Trench)

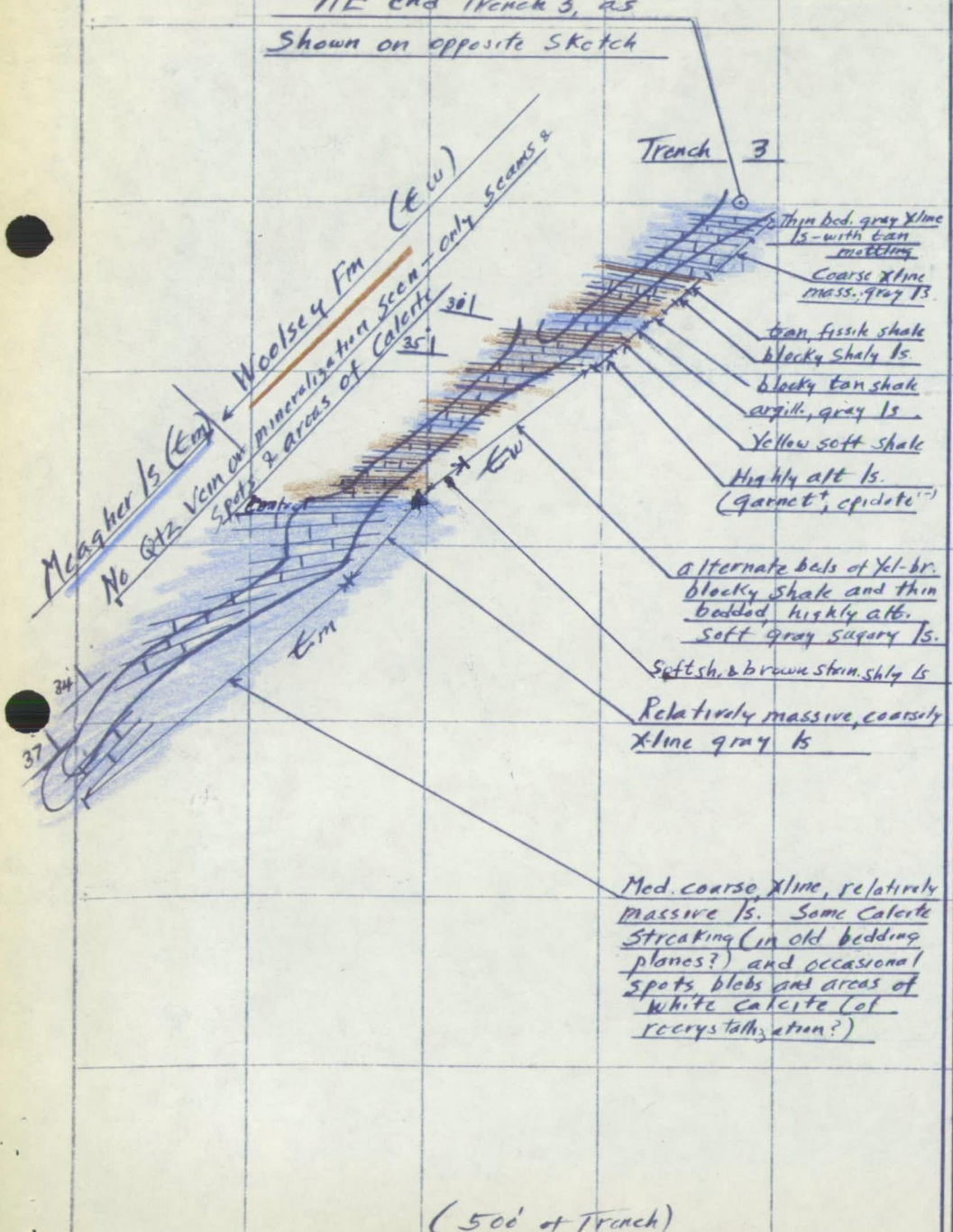
Sketch Showing Position of Trench 2, relative to claim corners - see "Map 2-100-Scale"
1" = 100'



Trench 3

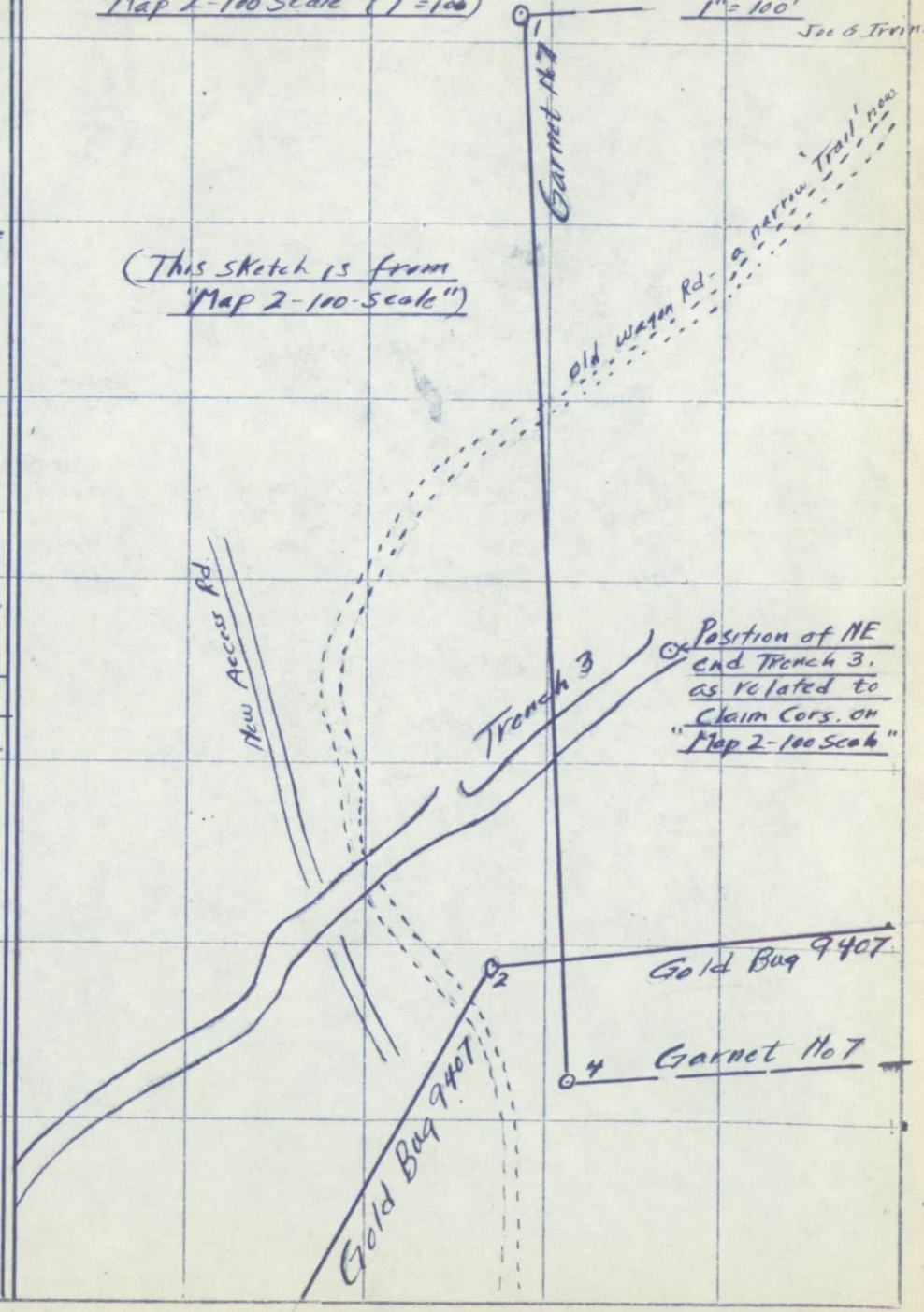
American Min. Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract - 2207
1" = 100'
Joe & Irving

Sketch Showing Geology of Trench 3
1" = 100'



Sketch Showing Position of Trench 3, relative to Claim Cors. Shown on "Map 2-100 Scale" (1" = 100')

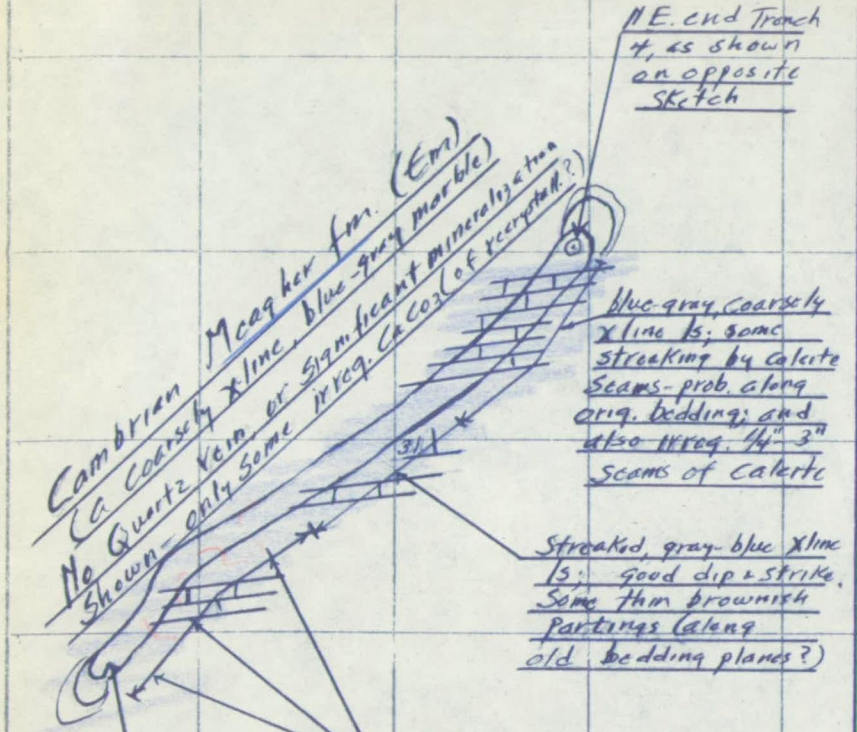
(This sketch is from "Map 2-100-Scale")



Trench 4

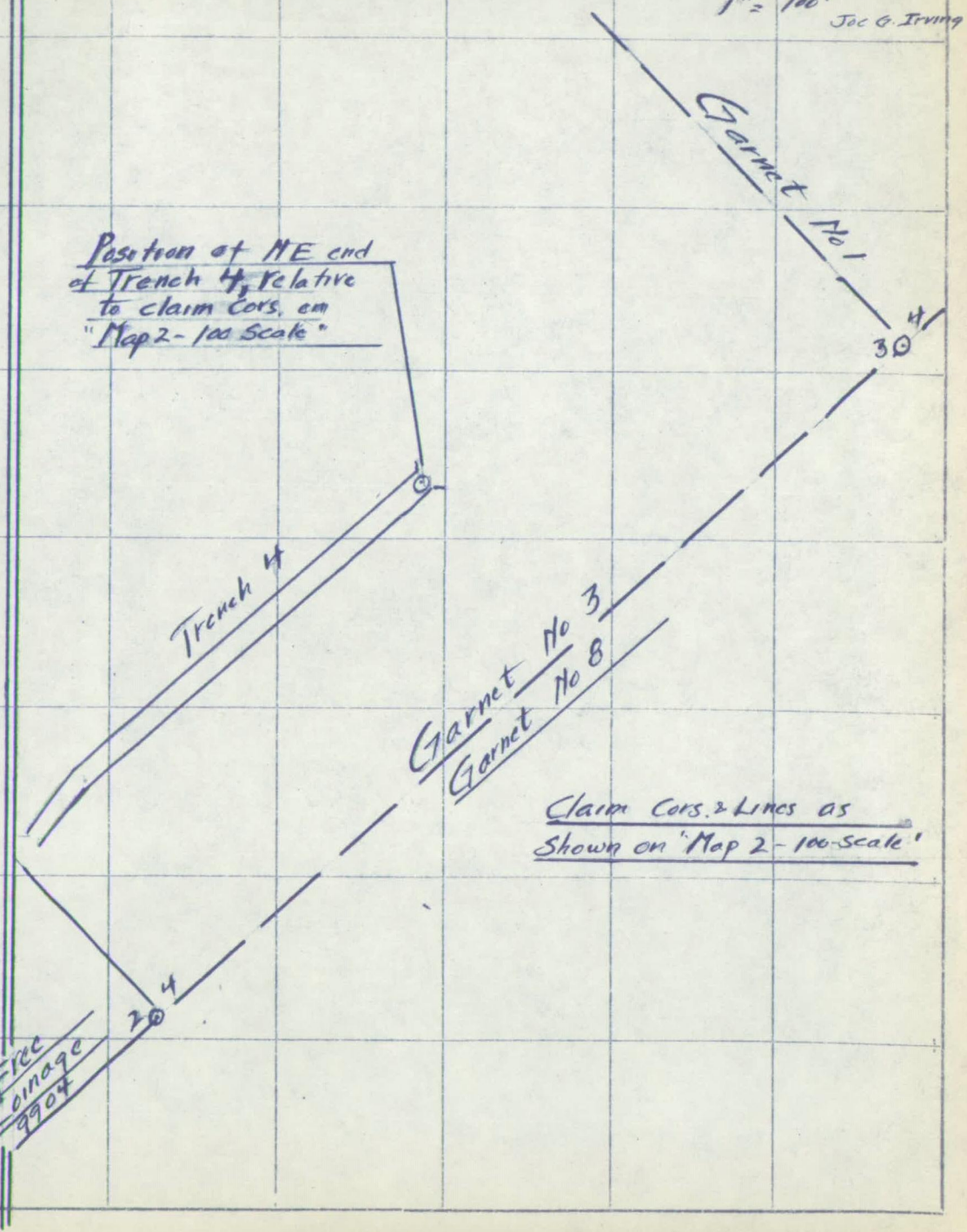
American Mining Co
OME-6410 (Gold)
Nancy Hanks et al. Claims
Granite Co. Montana
Contract 2207
1" = 100'
Joe G. Irving

Sketch Showing Geology, Trench 4



(34' of Trench)

Sketch Showing Position of Trench 4, relative to Claim Corners (See "Map 2-100-scale")

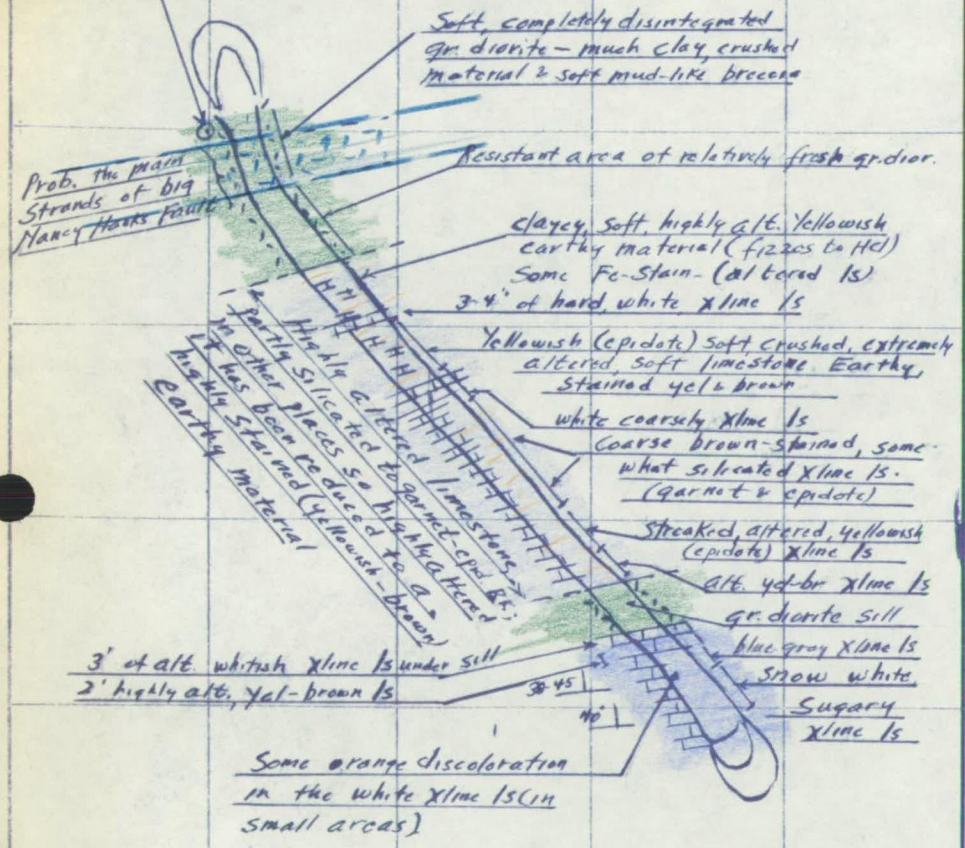


Trench 5

American Mining Co
O.M.E.-6410 (Gold)
Nancy Hanks et al claims
Granite Co. Montana
1" = 100' (Contract 2207)

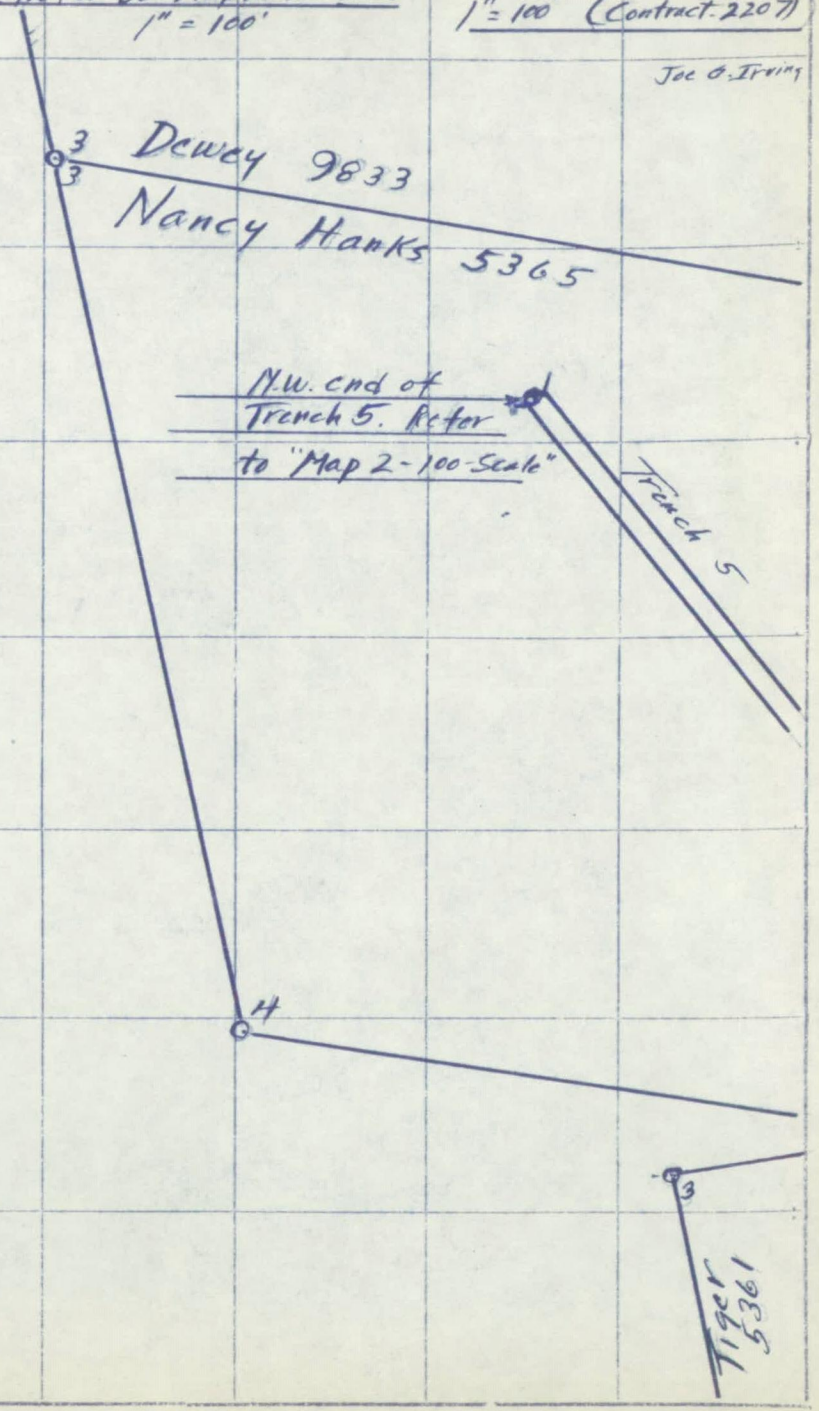
Joe O. Irving

Sketch Showing Geology of Trench 5
1" = 100'



(410' of Trench I)

Sketch to Show Location of Trench 5
Refer to "Map 2-100-Scale"
1" = 100'



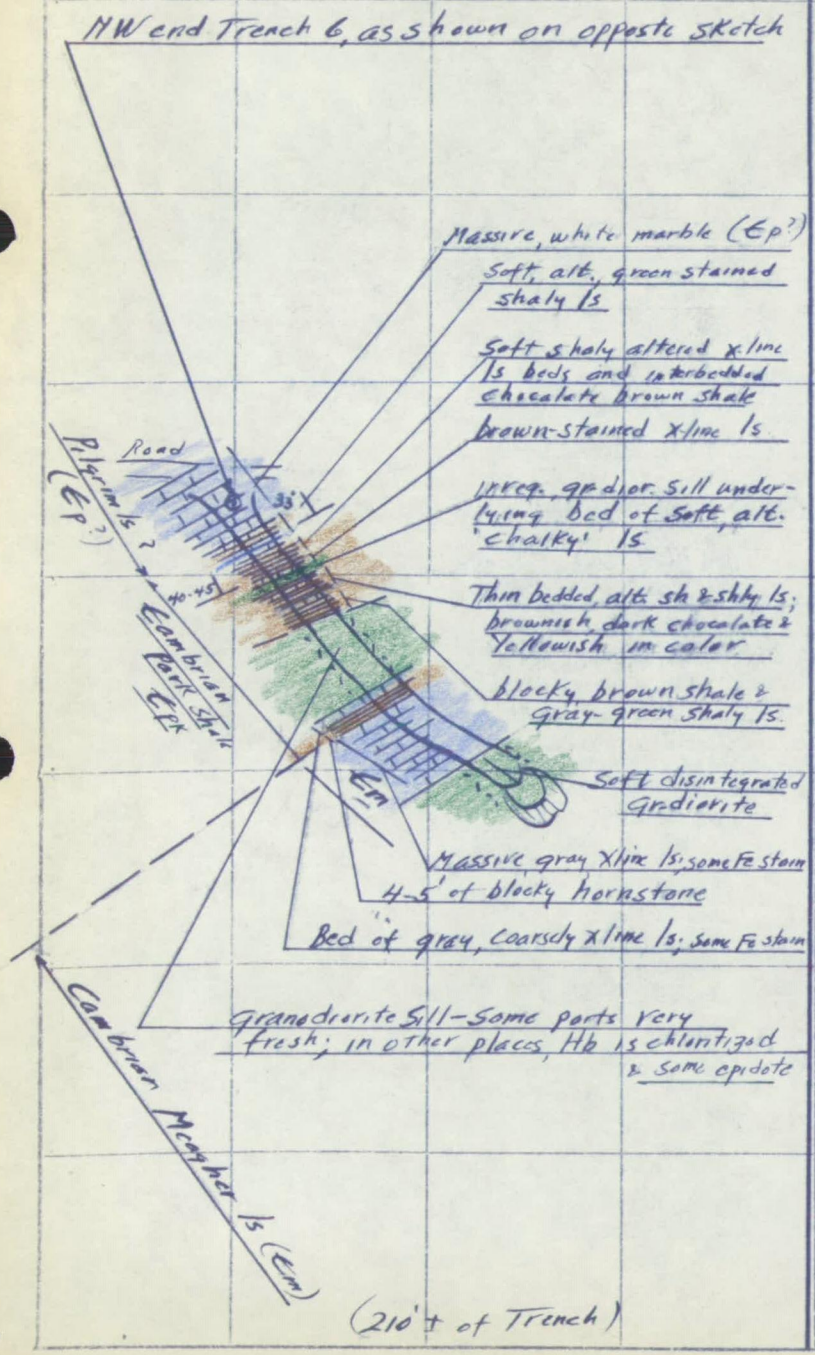
Trench 6

American Mining Co.

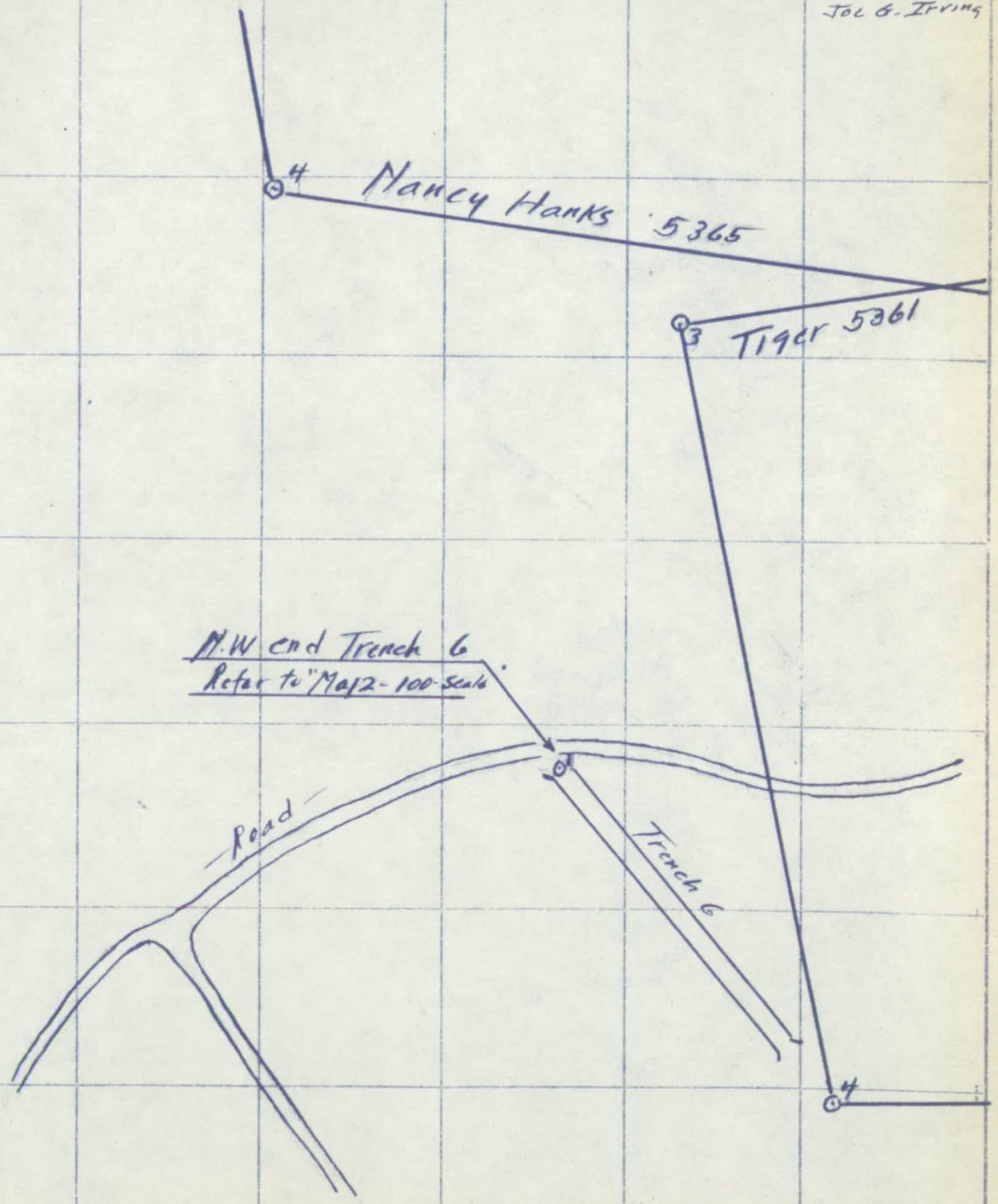
OMF-6410 (Gold)
Nancy Hanks et al claims
Granite Co., Montana
1" = 100' (Contact 2207)

Joe G. Irving

Sketch Showing Geology of Trench 6
1" = 100



Sketch Showing Location of Trench 6. Refer to "Map 2-100-scale"
1" = 100'



Hole a (See Location Sheet attached)
1" = 100'

American Mining Co
OME-6410 (Gold)
Nancy Hanks et al-Claims
Granite Co., Montana
Contract - 2207
1" = 100' Joe G. Irving

Cross Section looking West showing Drill hole "a"; Vertical TD=250

Assays and/or Notes on Mineralization

@28-29' — broken zone, iron stained
@34.5' fracturing, with Fe staining

@145' Tiny seam, containing some FeS_2
@164-167' - Occasional grains of FeS_2
@179-180' - a little scattered FeS_2 - over 9"
(Samp# 129 - 179-179.8' - Tr-Au.

Elt. E.W. Vertical

250

1E Qtzite probably 50'± below bottom of hole

Rock Type, alteration etc

0-10' - overburden
10-46' gray X-line ls; 1' of meta sh. @10-11; highly crushed (a sand) 36-44'
46.1-48' crushed meta shly ls; crushed to a brownish sand.
48.1-56' Partly silicated X-line ls; shows irreg. bands of garnet alteration
56.1-68.5' Highly silicated (gar-epid) X line ls
68.1-70' a 'hornstone' - meta shly ls.
70.1-101 Partly silicated X-line ls; irreg. bands of garnet-epid & some irreg. $CaCO_3$ seams & scattered spots of FeOx.
101.1-133 Siliceous meta sh and shly ls - a hornstone - some fr. of gar-epid ls @ 106'
133.1-138 Partly silicated X-line ls - some wavy bands garnet alteration.
138.1-145 - Gray, dense, siliceous meta. sh & shly ls; occas. spots of FeS_2
145.1-164 Partly silicated X-line ls, with bands & blotches of garnet-epidote and some chlor. & serp. on fracture planes
164.1-167 Altered shly ls - showing garnet & few spots of FeS_2
167.1-197 Partly silicated, coarse gr. X line ls but in places (183-192) it is almost a 100% garnet-epidote RK, and here shows cons. FeS_2
197.1-205 'granodiorite', with irreg. 'frozen' contacts; an inclusion of silicated ls @ 202-204; aplitic facies 204-205.
205.1-219 Partly silicated med. gr. X-line ls, showing irreg. wavy bands & blotches of garnet-epidote alt. & some serp. & chlorite developed on fracture planes.
219.1-250. - Altered shly ls - Rock is now partly silicated with garnet-epidote, irreg bands that dip 45°±

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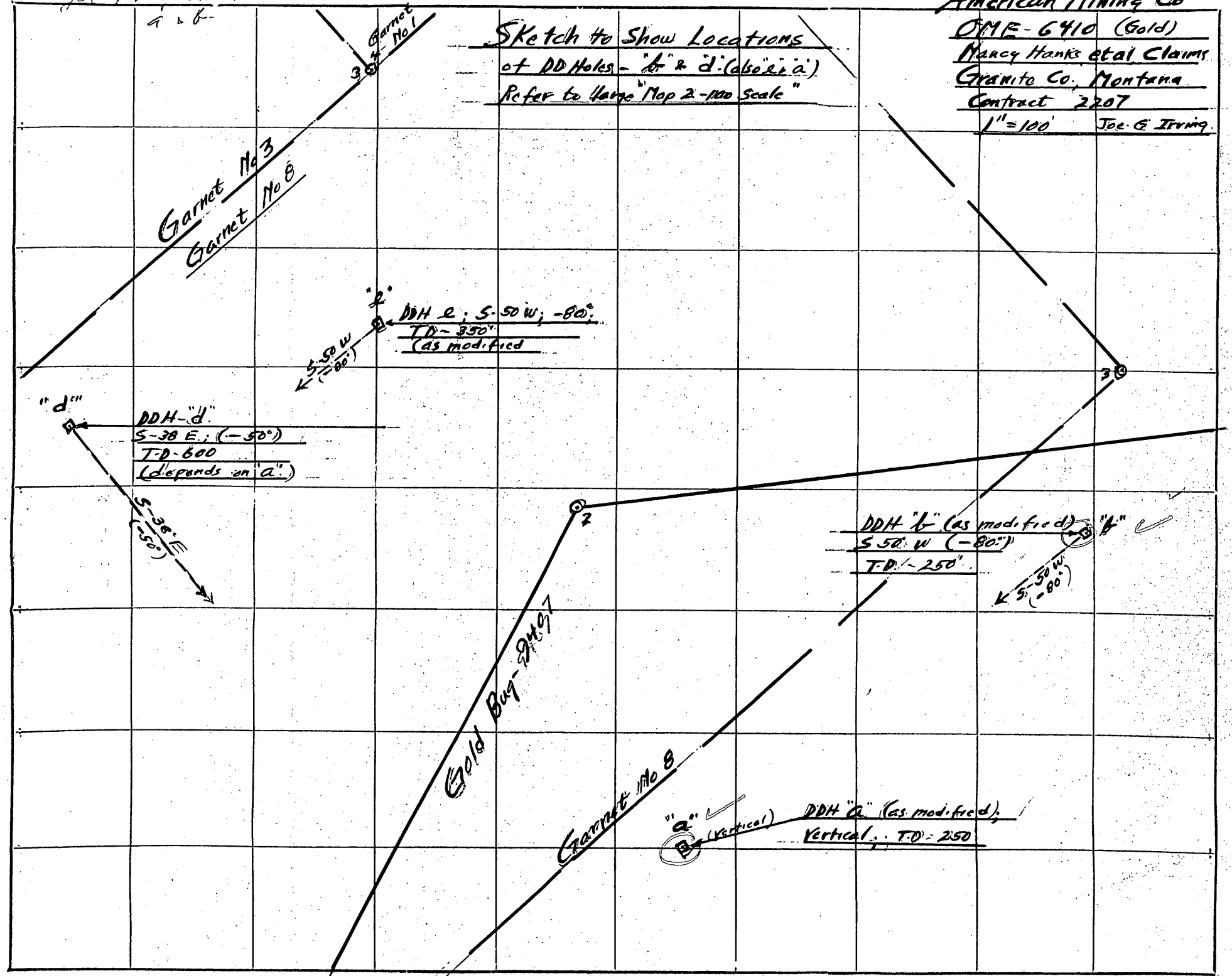
Sec 13 - Chrome
a & b

American Mining Co
OMF-6410 (Gold)
Nancy Hanks et al Claims
Granite Co. Montana
Contract 2207
1" = 100' Joe G. Irving

Sketch to Show Locations
of DD Holes - "b" & "d" (also "e" & "a")
Refer to large "Map 2 - 100 Scale"



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Hole "b" (See Location Sheet attached)

1" = 100'

American Mining Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' Joe G. Irving

to Hole "a" sheet

Cross Section (Looking NW) Showing drill hole "b" S 50° W. -80' TD-250'

Assays and/or Notes on Mineralization

@ 135-136 - Some iron staining in grano diorite

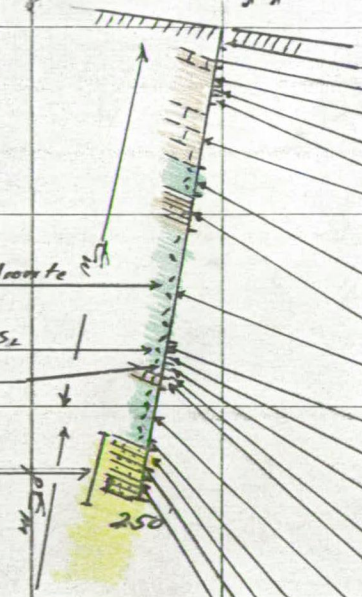
@ 166-170 Some sparse dissems. of FeS_2

@ 177-178.5 - FeS_2 in pitted, iron stain. ls.
(Samp #130 - 15' - 0.020 Au

201-250 No FeS_2 of any signif. seen

Rock Type alteration etc

0-10' overburden
10-18 - alt. white X line ls; fractured, broken
18.1-30 " X line ls - no core recov; only a 'crushed sand'
30.1-33 alt. ls - with garnet bands
33.1-37 " " " " " and some shale layers.
37.1-73.5 Highly Silicated X line ls; showing irreg. wavy bands of gar-epid. alteration; @ 65-73.5 almost 100% garnet-epidote rock; some sol. pitting and Fe^2 Mn stains.
73.6-87 - light col. variable textured slightly alt grano dior (sill?)
87.1-105 - gray meta shale (a hornstone) some layers calcareous
105.1-116 - grano dior, variable texture, some ser & chlor. alteration a crushed zone @ 115-119; Fe stains 135-136; aplite 163-166
116.1-170 gray, dense meta shly ls - some specks FeS_2
170.1-176 - Med grain, gray-white X line ls; some pitting & Fe stains.
176.1-178.5 alt, iron-stain. X line ls - some FeS_2
178.6-181.5 meta shale
181.6-192.5 Med. grained, gray X line alt. ls -
193.6-218 Grano-diorite (Rob. a sill) variable texture aplite @ 192-195; rel. fresh @ 195-205; slight alt. 205-218'
218.1-221 Broken zone, showing mixed Qtzite-gr. dior. pieces
221.1-233 gray Quartzite, broken with little 'fingers' gr. dior.
233.1-239 gray Qtzite, little 'fingers' of gr. dior. @ 237-39.
239.1-250 gray Qtzite, both laminated & spotted facies.



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Hole 2 (see location sheet attached)

American Mining Co
OME 6410 (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' — Joe G Irving

Cross Section (looking N.W.) Showing drill hole "2" (S-50°-W; -80°; 7"-350' (as modified)

Assays and/or Notes on Mineralization etc

@79-84 Consid. Fe stain & oxidation effects along fractures

@112-118 Irreg Fe stain in spots etc

@250-252 Irreg coatings of FeS2 on fract. planes

@282-283 Scattered FeS2 in silic. bed

@297-299 & 300-302 - Scattered grains of FeS2

@341-343 little FeS2 in shly bed.

@345 little spot of FeS2 in epidote-rich area

@347-350 occas. spots & seams with FeS2

Rock Type, alteration etc

0-10 overburden

10-97 - a whitish-gray, med grain. Xline ls; displaying pitting & solution cavities throughout; cavities usually Fe stained; pitting follows steep lines that dip about 55-60°

97.1-103 - a silicated Xline amphlac. ls; showing irreg, wavy bands & blotches of garnet-epidote alteration that appears to dip about 55-60°

103.1-112 Purplish-Brown "hornstone type" of alt. calcareous shale (garnet)

112.1-118 lighter colored alt. calcareous shale (garnet-epidote) No effer. with HCl

118.1-123.5 altered shaly ls; irreg bands of garnet etc.

123.6-144 Silicated Xline ls; bands & spots of garnet-epidote - slow effervescence

144.1-217 a silicated calcareous rock (prob. was a shaly ls) containing a garnet-epidote alt. in bands throughout. Some areas effervesce

217.1-288 Silicated Xline ls, with irreg bands & blotches garnet-epidote; has some chlor-serp develop. on fractures; some scattered FeS2; (a siliceous bed 282-283)

288.1-292 alt. shale - a gray, dense siliceous, garnetized rock

292.1-302 Partly silicated Xline ls; few specks of FeS2

302.1-304 - altered, garnetized shaly ls, layer

304.1-321 Slightly silicated (little garnet) Xline ls. effervesces+

321.1-323 dark gray, alt. shaly ls - silicated

323.1-341 Coarse grain; whitish, slightly silicated Xline ls.

341.1-343 shaly bed; contains sprinkling of FeS2

343.1-346 Somewhat silicated, Xline ls - FeS2 in epidote-rich area.

346.1-350 Slightly silicated Xline ls - some irreg gar-epid bands; and FeS2

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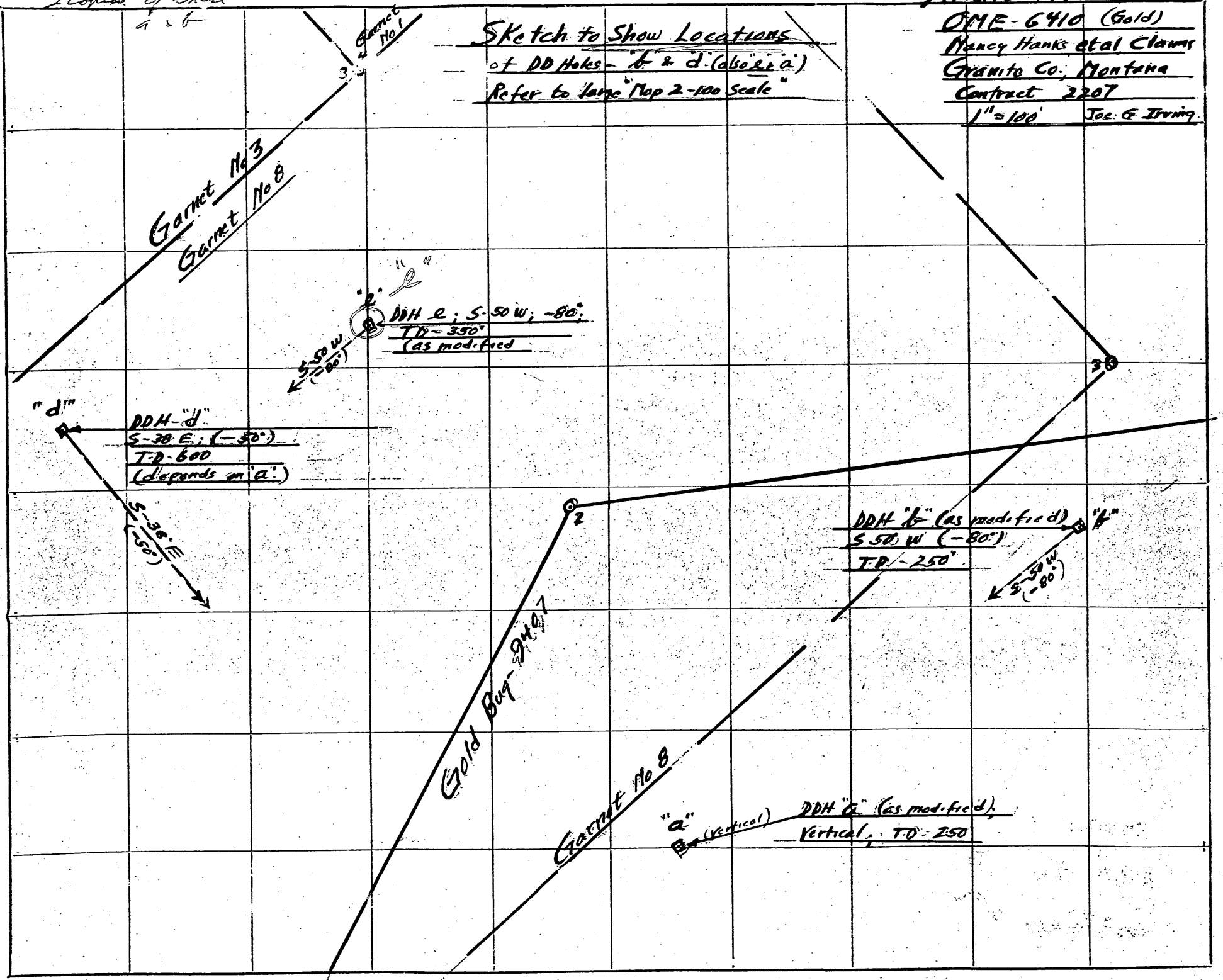
2 copies of these
a & b

American Mining Co
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract 2207
1" = 100' Joe. G. Irving

Sketch to Show Locations
of DD Holes - "b" & "d" (also "e" & "a")
Refer to large "Map 2 - 100 Scale"



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Hole "f" (See location Sheet attached)

1" = 100'

American Mining Co
OME-6410 (Gold)
Nancy Hanks et al Claims
Granite Co. Montana
Contract 2207
1" = 100' — Joe G Irving

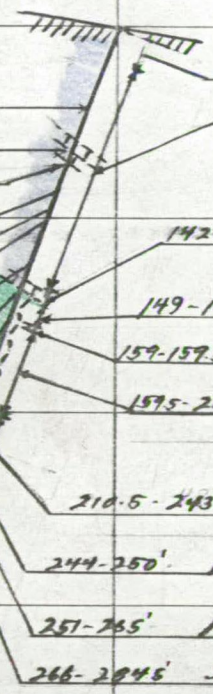
Cross Section (Looking NW) Showing d.drill hole "f" (S50W; -70°; TD-350')

Assays and/or Notes on Mineralization

@ 43' FeOx spots after FeS2
@ 68' Calcite filmed Sol. cavity; spots of FeOx
@ 76-76.5' epidote-MnOx stains, etc
@ 90.5' broken zone, with few seams CaCO3
@ 100-100.5' Vuggy seams, with CaCO3 & FeOx
@ 107-108.5 Iron stain on fractures & Sol. Cavs
@ 129' Fractured zone with MnOx spots & stains
@ 143-149' Irreg. iron staining.
@ 165.5-166' Seams & disseminated FeS2 in gneiss Sam. No 128 = Trace Au.
@ 195-198' Aplite band, some FeS2 & (MoS2?)
@ 195-195.5' (Sam. # 122 - 0.01 Au)
@ 244-250 Sam. # 123 - 1.0' - Tr. Au

Rock Type, alteration etc

0-20' overburden
20-141' - gray-whitish, coarsely xline ls; Some Fe stains on fractures; Some Solution pitting, with little CaCO3 of recrystall.; a little epidote-garnet alteration. Streaking (Resid. bedding?) dips 40°±
142-148' - Coarse xline ls, with irreg, wavy, bands and areas of epidote-garnet alteration
149-158' "granodiorite" (a Hb-Feld Rk) with variable texture; fin. grained, "frozen" tight contact, prob. a sill.
159-159.5' a band of xline ls (frozen contact)
159.5-210.5' a Hb-Feld Rk (granodiorite) (No. 120 or 122 Sec) of variable texture - from coarse to felsitic; dip of seams and crude flow lines. 40-45°; Some dark, fin. grained (igneous?) inclusions @ 198-200'
210.5-243' Highly altered, xline ls, with wavy bands, rich in garnet-epidote Some Calcite seams & blebs
244-250' Fin. grained 'granodiorite' (coarse text. band @ 245-246' - Some Fe stain.
251-265' Meta. shaly ls - a hornstone-like rock, with garnet-type of alt.
266-284.5' Silicated xline ls - irreg. wavy bands and areas of garnet-epid. alteration Some iron stain; No FeS2 noted
284.5-289' Coarse, relatively fresh granodiorite, frozen contacts; dip about 40-45°
289-290.5' One foot of meta shale
290.5-301' Partly silicated ls - garnet bands
302-304.5' Meta shale
304.5-350' Somewhat silicated ls - No FeS2 (Sandy meta shale @ 338-339) Some sparse bands of garnet-epidote alteration



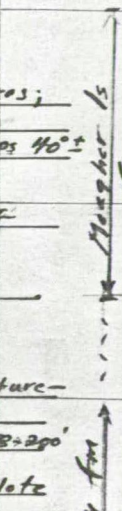


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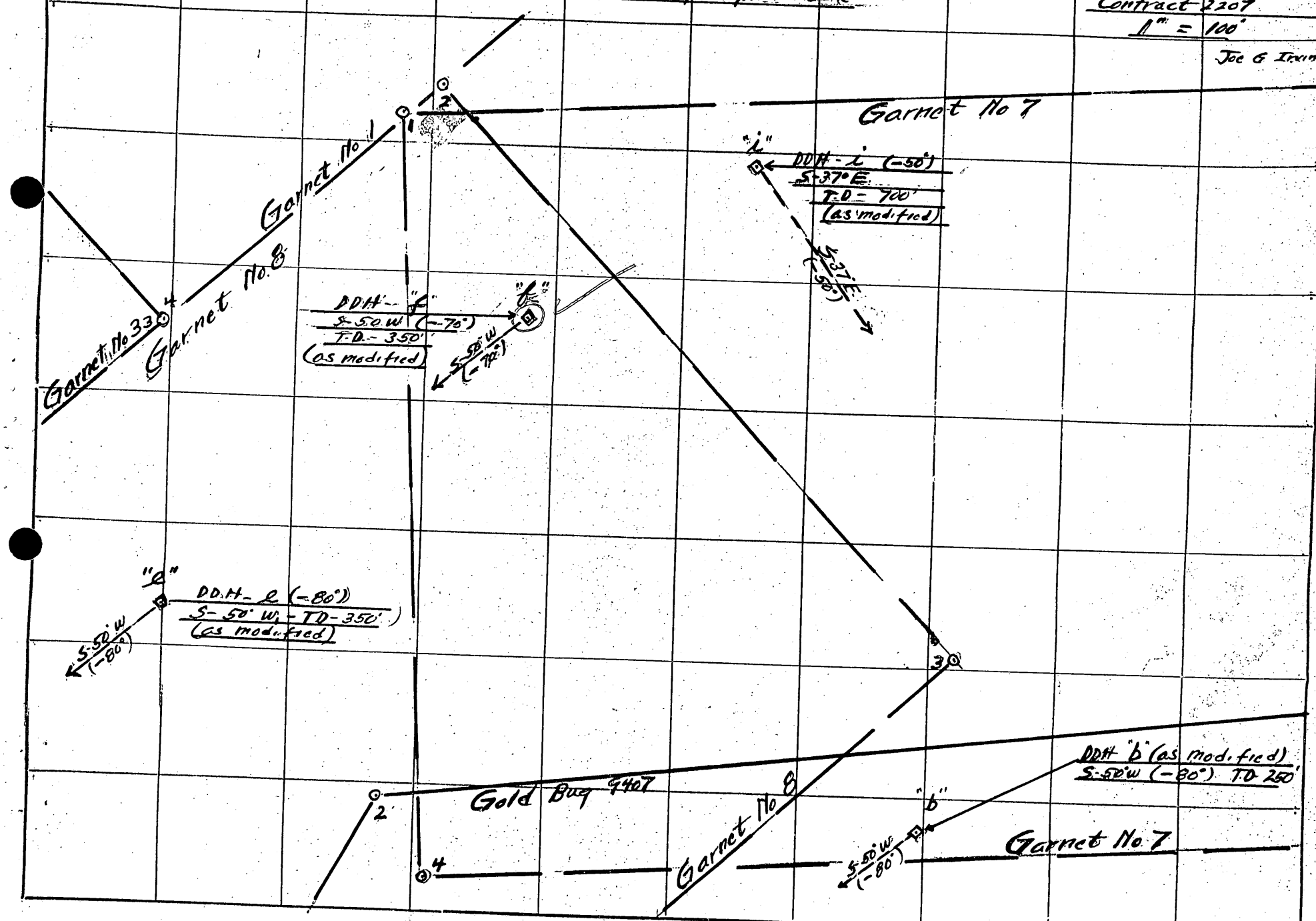
fig 2

American Mining Co.
OME-6410 (Gold)
Nancy Hanks et al. Claims
Granite Co. Montana
Contract 2207
1" = 100'

Joe G Irving

Sketch to Show Locations
of Drill Hole b, e, f and i
Refer to Large "Map 2-100-scale"



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Hole "L" (See Location Sheet attached) (1" = 100')

American Mining Co
OME - 6410 (Gold)
Nancy Hanks et al claims
Granite Co. Montana
Contract - 2207
1" = 100'
Joe G Irving

Cross Section looking NE showing Hole "L" S-37E -90° -700'

Rock Type, alteration etc

Assays and/or Notes on Mineralization

0-29 overburden

30-76' gray to whitish, med gram. X-line ls; some solution openings along old bed. planes; some spotty Fe staining

77-81. granodiorite, probably a sill, somewhat altered in spots

82-101 - X-line ls; some Fe & Mn staining; @ 98' is 2" Fe stain. aplite; broken zone @ 98.5-101 with clay & Jasper mat.

102-111 - whitish X-line somewhat iron-stained ls.

112-138 - Silicated X-line ls; wavy bands of garnet alteration; prob. along old bedding; some Qtz seams and silicified bands. Scattered FeS_2 dissems, throughout, also FeS_2 seams and coatings -

Samp. #124 (110-115') - Tr. Au

Samp. #125 (128-132.5) - Tr. Au

139-176 - gray blotchy & irreg. banded (garnet) X-line ls; some sparse FeS_2; iron stained solution centres -

Samp. #126 (174.1-176.8) - Tr Au

176.1-176.8 - narrow, dark fin. gram igneous RK, containing cons. FeS_2; 176.9-181 X-line ls, silicated ls - some FeS_2

Samp. #127 (176.9-178) - Tr. Au

182-187.5 Olzitic layer; some FeS_2

187.6-251.5 - gray-white, irreg. banded (garnet-epidote) partly silicated ls; occasional grain FeS_2 & darker bands

251.6-261 - Silicated, Sily ls - irreg brown bands of garnet alteration

262-291.3 - a partly silicated (garnet-epidote) X-line ls - very little FeS_2 seen -

291.4-302.5' - a fin. gr. igneous rock (granodiorite?) frozen contacts - Sill-like (@ small Sil. ls inclusion @ 291 & 301)

302.6-311 - a banded, siliceous "hornstone" (alt. sily ls); some FeS_2 dissems. @ 309-311

@ 309-311 - dissem. FeS_2

312-318 Somewhat silicated X-line ls (gar-epid bands); sparse FeS_2 dissems & occas. gr. dior. "Sill-lets"

@ 352-323 - little areas with FeS_2

348-355 - a fin gr. siliceous sed. RK (meta. sh) with some FeS_2 and little 'fingers' of fin. gr. igneous RK

356-368 - Silicated (Garnetized) X-line ls; two little 6" "Sill-lets" of granodiorite in section -

365-377 - a coarse gr. Hb-Feld RK ('granodiorite') with frozen contact dipping 55°±

@ 422 - little FeS_2 in 6" gr. dior. "Sill-let"

@ 378-406 variable text. gr. dior. (a X-line ls inclus. @ 378-379.) ; little FeS_2 @ 380-406'

407-408.4 - garnetized ls; with little Sill (5") gr. dior. @ 408.4'

408.5-422 meta calc. shale, contains little 'fingers' of gr. dior.; little FeS_2

423-494.5 laminated, gray Quartzite - some spotted variety, some mica on fracture planes; fractured @ 475; 6" aplitic gr. dior. @ 492.5'

@ 563-64' - a few spots of FeS_2 on fract. planes

494.6-510 - granodiorite, with tight, frozen contact dipping 35°±

511-688.4' laminated Qtzite; some mica on fractures & bedding planes, a few sparsely dist. areas showing spots of FeS_2

@ 638-39 - Fractured area, with a little FeS_2

@ 650-51 " " " " "

688.5-694.5 - light col. gr. diorite, variable text.; frozen contact

694.6-696.7 - Two feet of alt. X-line ls. (gar-epid); little FeS_2

@ 694.6-696.7 - 2' of altered X-line ls - some FeS_2 (Samp. #128 - Tr Au)

696.8-700 gr. dior, variable texture, slightly chloritized.

0-114 McAphee ls

Em

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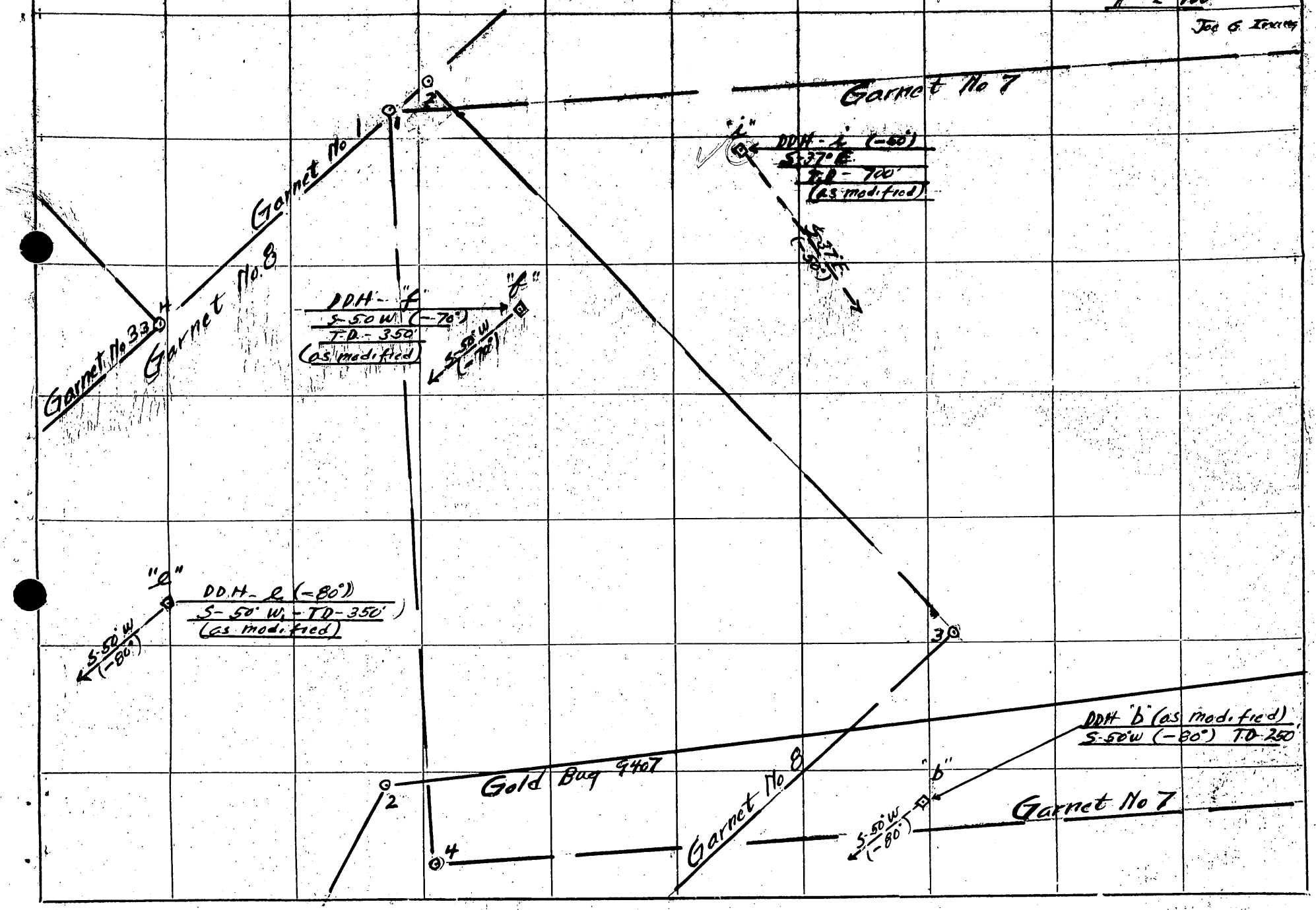
Showing location of Drill Holes
of Drill Holes b, e, f and i
Refer to Large "Map 2-100 scale"

Anaconda Co.
OME 6410
Mining Rights of

Tracy Harris et al. Claims
Granite Co. Montana
Contract 2207
1" = 100'

Joe G. Irving



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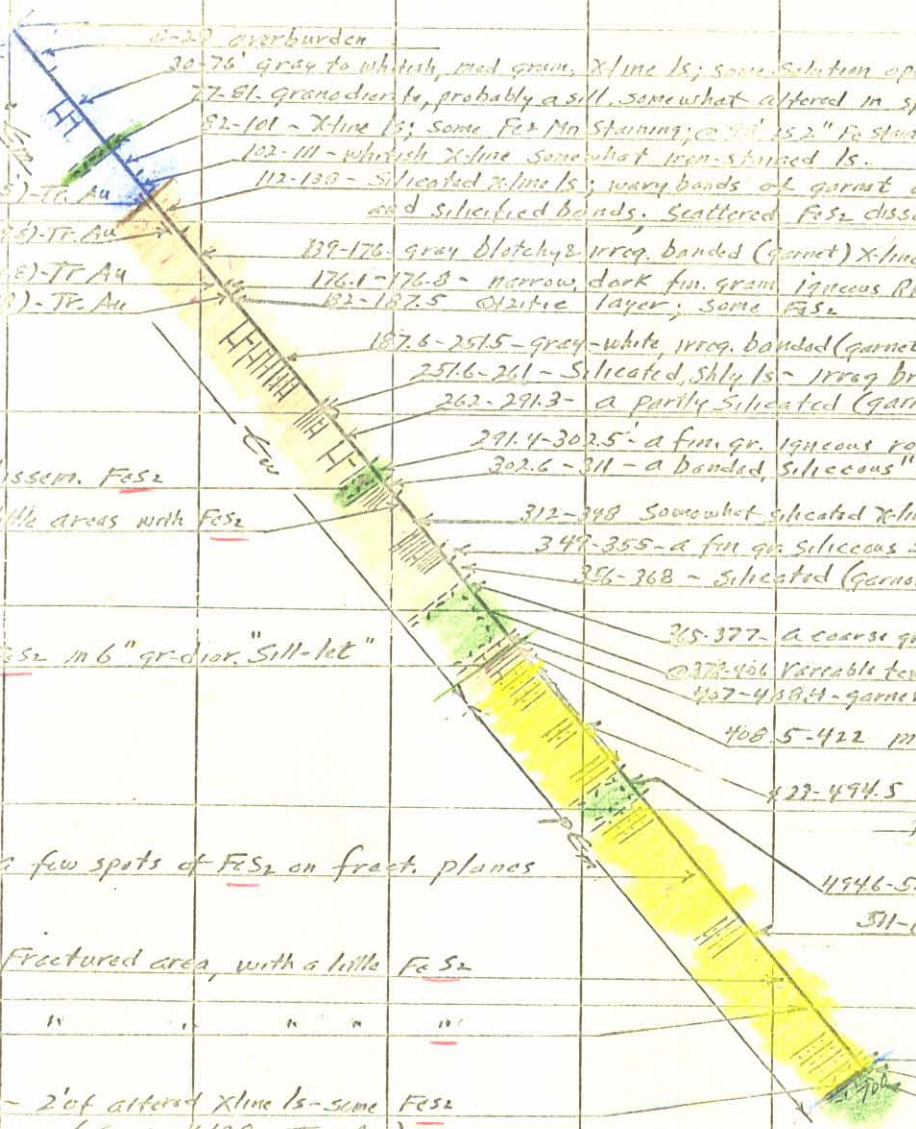
Hole 2 (See Location Sheet attached) (1" = 100')

American Mining Co
OME - 6410 (Gold)
Nancy Hanks et al claims
Granite Co. Montana
Contract - 2207
1" = 100'
Joe G. Irving

Cross Section Looking NE Section Hole 2

Rock Type, Alteration etc

Assays and Notes on Mineralization



0-20 overburden

20-76' gray to whitish, med. grain, X-line ls; some solution openings along old bed. planes; some spots Fe staining

77-81 - granodiorite, probably a sill, somewhat altered in spots

82-101 - X-line ls; some Fe & Mn staining; @ 98' 1/2" Fe stain. aplite; broken zone @ 98.5-101 with clay & Jasper mat.

102-111 - whitish X-line somewhat iron-stained ls.

112-138 - Silicated X-line ls; wavy bands of garnet alteration; prob. along old bedding; some Qtz seams and silicified bands. Scattered FeS_2 dissems. thruout, also FeS_2 seams and coatings -

0-111 Member ls

Sem. #124 (110-115') - Tr. Au

Sam. #125 (123-128.5) - Tr. Au

139-176 - gray blotchy & irreg. banded (garnet) X-line ls; some sparse FeS_2; iron stained solution centres -

Sam. #126 (171.1-176.8) - Tr Au

176.1-176.8 - narrow, dark fin. gram. igneous RK, containing cons. FeS_2; 176.9-181 X-line ls, silicated ls - some FeS_2

" #127 (176.9-178) - Tr. Au

182-187.5 Qtzite layer; some FeS_2

187.6-251.5 - grey-white, irreg. banded (garnet-epidote) partly silicated ls; occasional grain FeS_2 & darker bands

251.6-261 - Silicated, shly ls - irreg brown bands of garnet alteration.

262-291.3 - a partly silicated (garnet-epidote) X-line ls - very little FeS_2 seen -

291.4-302.5' - a fin. gr. igneous rock (granodiorite ?) frozen contacts - sill-like (Sil. ls inclosions @ 291 & 301)

@ 309-311 - dissem. FeS_2

302.6-311 - a banded, siliceous "hornstone" (alt. shly ls); some FeS_2 dissems. @ 309-311

@ 322-323 - little areas with FeS_2

312-348 somewhat silicated X-line ls (gar-epid bands); sparse FeS_2 dissems & occas. gr. dior. "sill-lets"

349-355 - a fin. gr. siliceous sed. RK (meta. sh) with some FeS_2 and little 'fingers' of fin. gr. igneous RK

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365-377 - a coarse gr. Hb-Feld RK (granodiorite) with frozen contact dipping 55°±

@ 422 - little FeS_2 in 6" gr. dior. "Sill-let"

@ 378-406 variable text. gr. dior. (a X-line ls inclus. @ 378-379); little FeS_2 @ 380-406'

407-408.4 - garnetized ls; with little sill (5") gr. dior. @ 408.4'

408.5-422 meta. calc. shale, contains little 'fingers' of gr. dior.; little FeS_2

422-494.5 laminated, gray Quartzite - some spotted variety; some mica on fracture planes; fractured @ 475; 6" aplitic gr. dior. @ 492.5' -

@ 563-64' - a few spots of FeS_2 on fract. planes

494.6-510 - granodiorite, with tight, frozen contact dipping 35°±

511-608.4' laminated Qtzite; some mica on fractures & bedding planes, a few sparsely dist. areas showing spots of FeS_2

@ 638-39 - Fractured area, with a little FeS_2

@ 650-51 " " " " "

608.5-694.5 - light col. gr. diorite, variable text.; frozen contacts

694.6-696.7 - Two feet of alt. X-line ls. (gar-epid); little FeS_2

@ 694.6-696.7 - 2' of altered X-line ls - some FeS_2 (Samp. #128 - Tr Au)

696.8-700 gr. dior, variable texture, slightly chloritized.

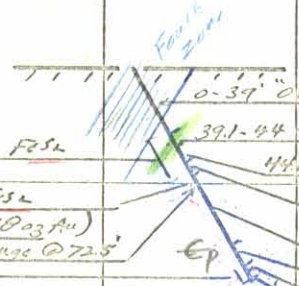
Hole "q" (See Location Sheet attached)
(as modified)

American Mining Co.
OME 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co, Montana
Contract 2207
1" = 100' Jas G Irving

Cross Section (Looking N.E.)
Showing old hole "q"
S 38° E; -60°; T.D. - 125'
(as modified)

Assays and/or Notes on Mineralization

Rock Type Alteration etc



0-39' "Overburden" - undoubtedly passed thru the Big Nancy Hanks fault - with this much "overburden" Reported (See original Pros. attached)

39.1-44 - white aplite & "aplite grano-diorite"

Some sparingly dissem. FeS_2

44.1-53 gray, alt. Xline ls; Some devel. of mica on fractures.

8' Xline Sil. ls; Some FeS_2
(Sample #132 (69-70') - 0.018 oz Au)
Gouge @ 72.5'

53.1-59. unstained white marble; greyish Xline ls - 59-61.5'

61.6- to 104 Partly silicated, gray Xline ls; Banded & blotched with garnet-epidote; Some $CaCO_3$; FeS_2

Some FeS_2 119-125

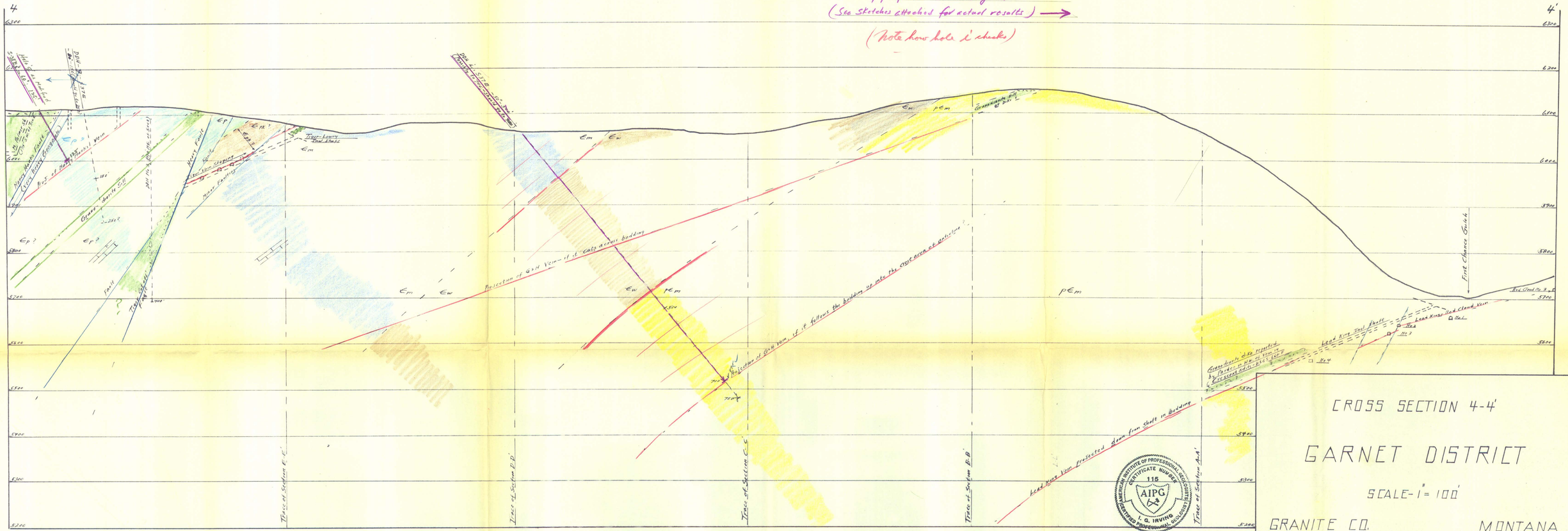
104.1-114' white coarse-grained marble

(Sample #133 - 6' of 0.010 oz Au

114.1-119' Highly silicated Xline ls; No FeS_2

119.1-125 A fine to med grained white & gray marble, with some dissem. FeS_2 and FeS_2 coatings on fractures planes; Some Calcite blebs

Note The hole from appearance of Xl. ls. seems to be in the Pilgrim fm, below the aplite



CROSS SECTION 4-4'

GARNET DISTRICT

SCALE-1" = 100'

GRANITE CO. MONTANA

Joe G Irving
Jan 1968

Map 11

Hole f (See location Sheet attached) American Mining Co

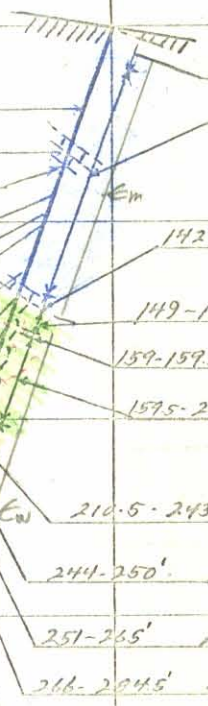
1" = 100'

Hole f

OME-6410 (Gold)
Maney Hanks et al claims
Granite, Co, Montana
Contract 3207
1" = 100' — Joe G Irving

Cross Section (looking NW) showing drill hole "f" (S50°W; -70°; TD-350')

Assays and/or Notes on Mineralization	Rock Type, alteration etc
@ 43' Fe ox spots after FeS_2	0-20' overburden
@ 68' Calcite lined sol. cavity; spots of Fe ox	20-141' - gray-whitish, coarsely xline ls; Some Fe stains on fractures; Some Solution pitting, with little $CaCO_3$ of recrystalli.; a little epidote-garnet alteration. Streaking (Resid. bedding?) dips 40°±
@ 76-76.5' epidote-Mn ox stains, etc	
@ 90.5' broken zone, with few seams $CaCO_3$	
@ 100-100.5' Vuggy seams, with $CaCO_3$ & Fe ox	142-148' — Coarse xline ls, with irreg. wavy bands and areas of epidote-garnet alteration
@ 107-108.5 Iron stain on fractures & Sol. cav.	149-158' "granodiorite" (a Hb-Feld Rk) with variable texture; fin. grained, "frozen" tight contact, prob. a sill.
@ 129' Fractured zone with Mn ox spots & stains	159-159.5' a band of xline ls (frozen contact)
	159.5-210.5' a Hb-Feld Rk (granodiorite) (No bio or qtz seen) of variable texture - from coarse to felsitic; dip of seams and crude flow lines. 40-45°; Some dark, fin. grained (igneous?) inclusions @ 193-200'
@ 148-149' Irreg. iron staining.	
@ 165.5-166' Seams & dissems. FeS_2, in gradual Sam. No 121 = Trace Au.	210.5-243' Highly altered, xline ls, with wavy bands, rich in garnet-epidote Some Calcite seams & blebs
@ 195-198' Aplite band; some FeS_2 & (MoS_2?)	244-250' Fin. grained 'granodiorite' (Coarse text. band @ 245-246' - some Fe stain.
@ 195-195.5' (See #122 - 0.01 Au	251-265' Meta. shaly ls - a hornstone-like rock, with garnet type of alt.
@ 249-250 Sam #123 - 1.0' - Tr. Au	266-284.5' Silicated xline ls - irreg. wavy bands and areas of garnet-epid. alteration Some iron stain; No FeS_2 noted
	284.5-289' Coarse, relatively fresh granodiorite, frozen contacts; dip about 40-45°
	289-292.5' One foot of meta shale
	292.5-302' Fairly silicated ls - garnet bands
	302-304.5' Meta shale
	304.5-350' Somewhat silicated ls - No FeS_2 (Sandy meta shale @ 338-339) Some sparse bands of garnet-epidote alteration



Meagher ls — Em

Woolsey fm — Ew

Hole "2" (see location sheet attached)

American Mining Co
OME 6410 (Gold)
Nancy Hanks et al Claims
Granite Co; Montana
Contract 2207
1" = 100' — Tie & Trimg.

Cross Section (looking N.W.) Showing drill hole "2" (5-50" W; -80°; TD - 350' (as modified)

Assays and/or Notes on Mineralization etc

@78-84 Consid. Fe stain & oxidation effects - along fractures

@112-118 Irreg. Fe stain in spots etc

@250-252 Irreg. coatings of FeS_2 on fract. planes

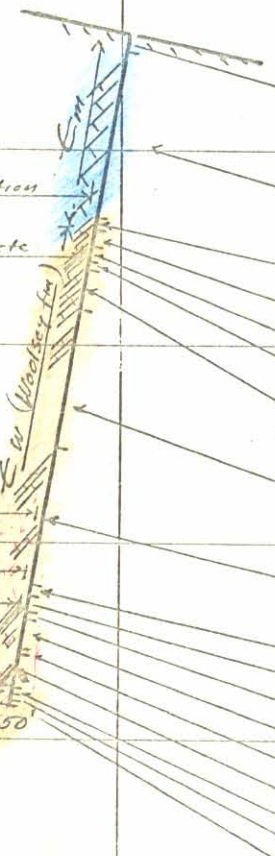
@282-283 Scattered FeS_2 in silic. bed

@297-299 & 300-302 - Scattered grains of FeS_2

@343-343 little FeS_2 in shly bed.

@345 little spot of FeS_2 in epidote-rich area

@347-350 occas. spots & seams with FeS_2



Rock Type, alteration etc

0-10 overburden

10-97 - a whitish-gray, med grain., Xline ls; displaying pitting & solution cavities throughout; cavities usually Fe stained; pitting follows steep lines that dip about 55-60°

97.1-103 - a silicated Xline argillac. ls; showing irreg., wavy bands & blotches of garnet-epidote alteration that appears to dip about 55-60° ±

103.1-112' Purplish-brown "hornstone type" of alt. calcareous shale (garnet)

112.1-118 lighter colored alt. calcareous shale (garnet-epidote) No effer. with HCl

118.1-123.5 altered shaly ls; irreg. bands of garnet etc.

123.6-144 Silicated Xline ls; bands & spots of garnet-epidote - slows effervescence -

144.1-217 a silicated, calcareous rock (prob. was a shaly ls) containing a garnet-epidote alt. in bands thruout. Some areas effervesce

217.1-288 Silicated Xline ls, with irreg bands & blotches garnet-epidote; has some chlor-serp develop. on fractures; some scattered FeS_2; (a siliceous bed 282-283)

288.1-292 alt. shale - a gray, dense siliceous, garnetized rock

292.1-302 Partly silicated Xline ls; few specks of FeS_2

302.1-304 - altered, garnetized shaly ls. layer

304.1-321 Slightly silicated (little garnet) Xline ls. effervesces+

321.1-323 dark gray, alt. shaly ls - silicated

323.1-341 Coarse grain, whitish, slightly silicated Xline ls.

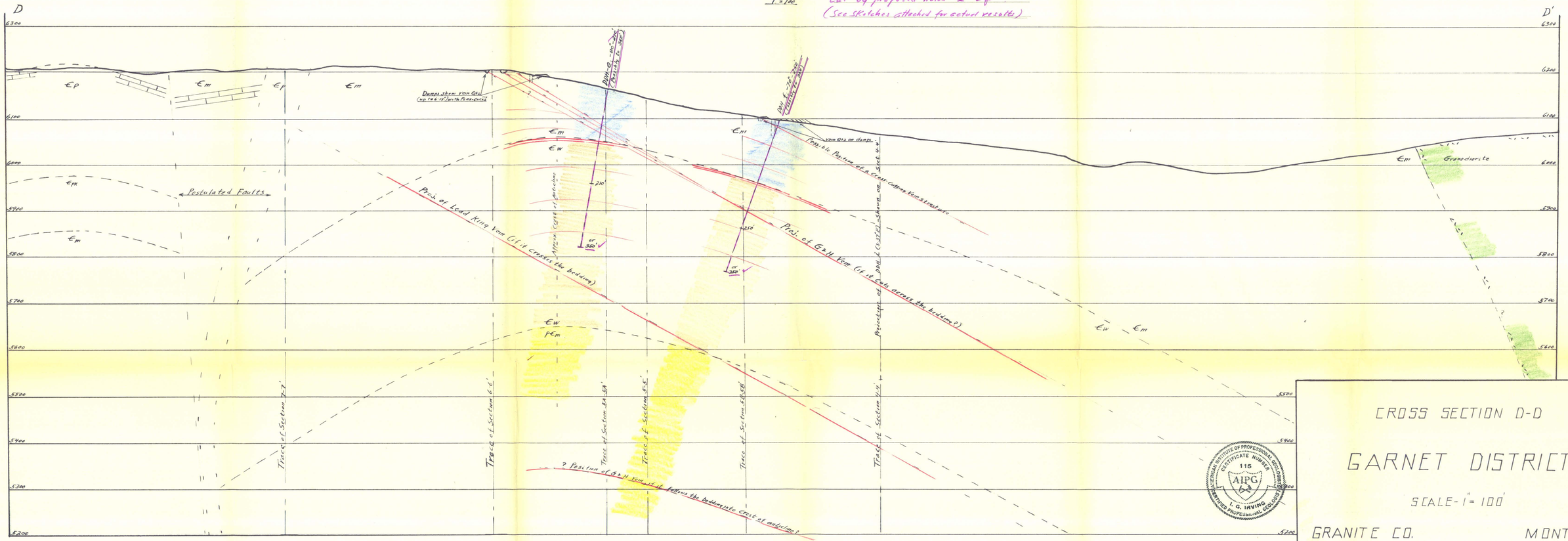
341.1-343 shaly bed; contains sprinkling of FeS_2

343.1-346 Somewhat silicated, Xline ls - FeS_2 in epidote-rich area

346.1-350 Slightly silicated Xline ls - some irreg gar-epid bands; and FeS_2

Section D-D'
Looking NW
1"=100'

Copy of original map submitted, showing geology & structures expected to be cut by proposed holes 'e' & 'f'. (See sketches attached for actual results)



CROSS SECTION D-D

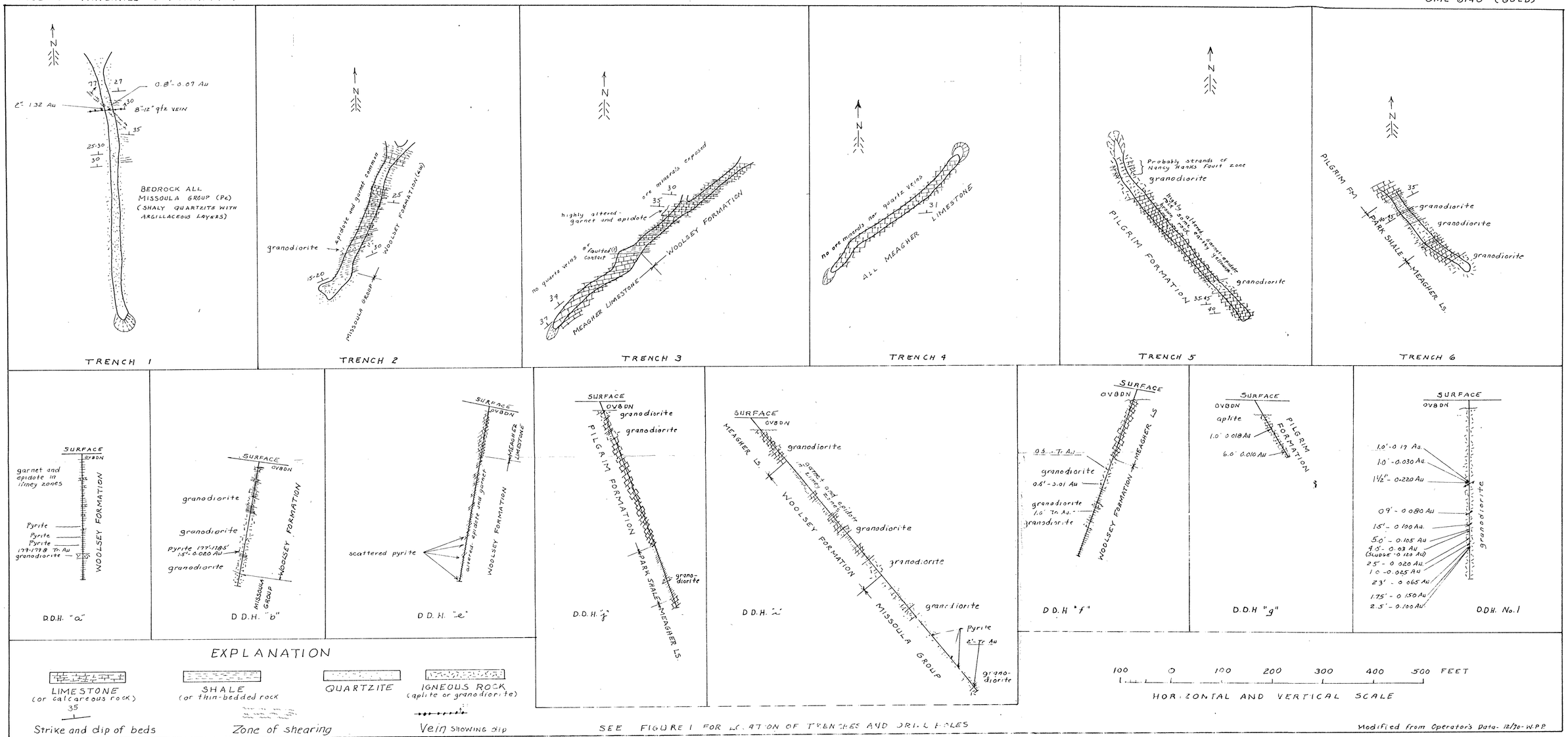
GARNET DISTRICT

SCALE-1"=100'

GRANITE CO. MONTANA

Joe O. Irving
Jan 1948

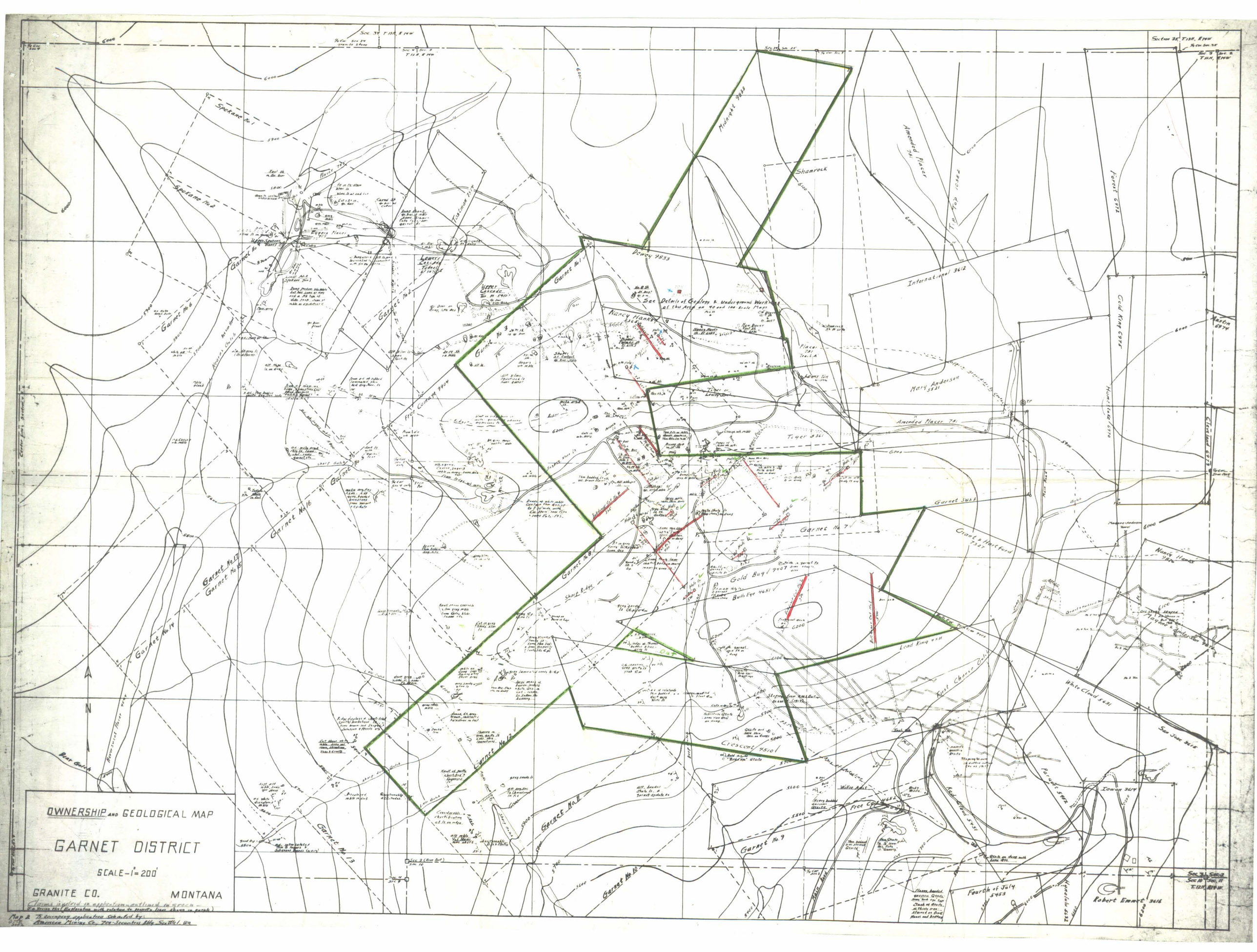
Map 10



SEE FIGURE 1 FOR LOCATION OF TRENCHES AND DRILL HOLES

Modified from Operator's Data- 12/70- W.P.P.

FIGURE 2- GEOLOGY OF OME TRENCHES (PLAN) AND OME DIAMOND DRILL HOLES (SECTION), NANCY HANKS, et. al, GROUP, SEC. 3, T. 12 N., R. 14 W., GRANITE COUNTY, MONTANA


OWNERSHIP AND GEOLOGICAL MAP
GARNET DISTRICT
SCALE - 1" = 200'
GRANITE CO. MONTANA
Claims included in application outlined in green.
(To show the Exploration with relation to property lines shown in purple)
Map 2 To accompany application to be submitted by:
American Mining Co. 700 Securities Bldg. Seattle, Wn.
Spokane No. 1
Spokane No. 2
Garnet No. 6
Garnet No. 2
Garnet No. 1
Garnet No. 3
Garnet No. 16
Garnet No. 17
Garnet No. 15
Garnet No. 14
Garnet No. 13
Garnet No. 12
Garnet No. 11
Garnet No. 10
Garnet No. 9
Garnet No. 8
Garnet No. 7
Garnet 3653
Midnight 9838
Shamrock
Amended Placer 781
Dewey 9833
International 3612
Forest 6972
Gold King 6975
Nancy Hanks
See Details of Geology & Underground Work at this Area on 40 and 100 Scale Maps
Placer 781 Tract A
Mary Anderson 3521
Amended Placer 781
Tiger 8361
Lower Tom
Free Coinage 9904
Gold Bug 9407
Bull's Eye 4651
Grant & Hartford 7327
Lead King 4511
Crescent 4510
Free Coin 4652
Fourth of July 5453
Robert Emmet 3616
Iowa 3614
Sea Foam 3616
White Cloud 5631
First Chance Gulch
Sharp Ridge
Bear Gulch
Kosters Gulch
Section 35, T.13N., R.14W.
Sec. 3, T.12N., R.14W.

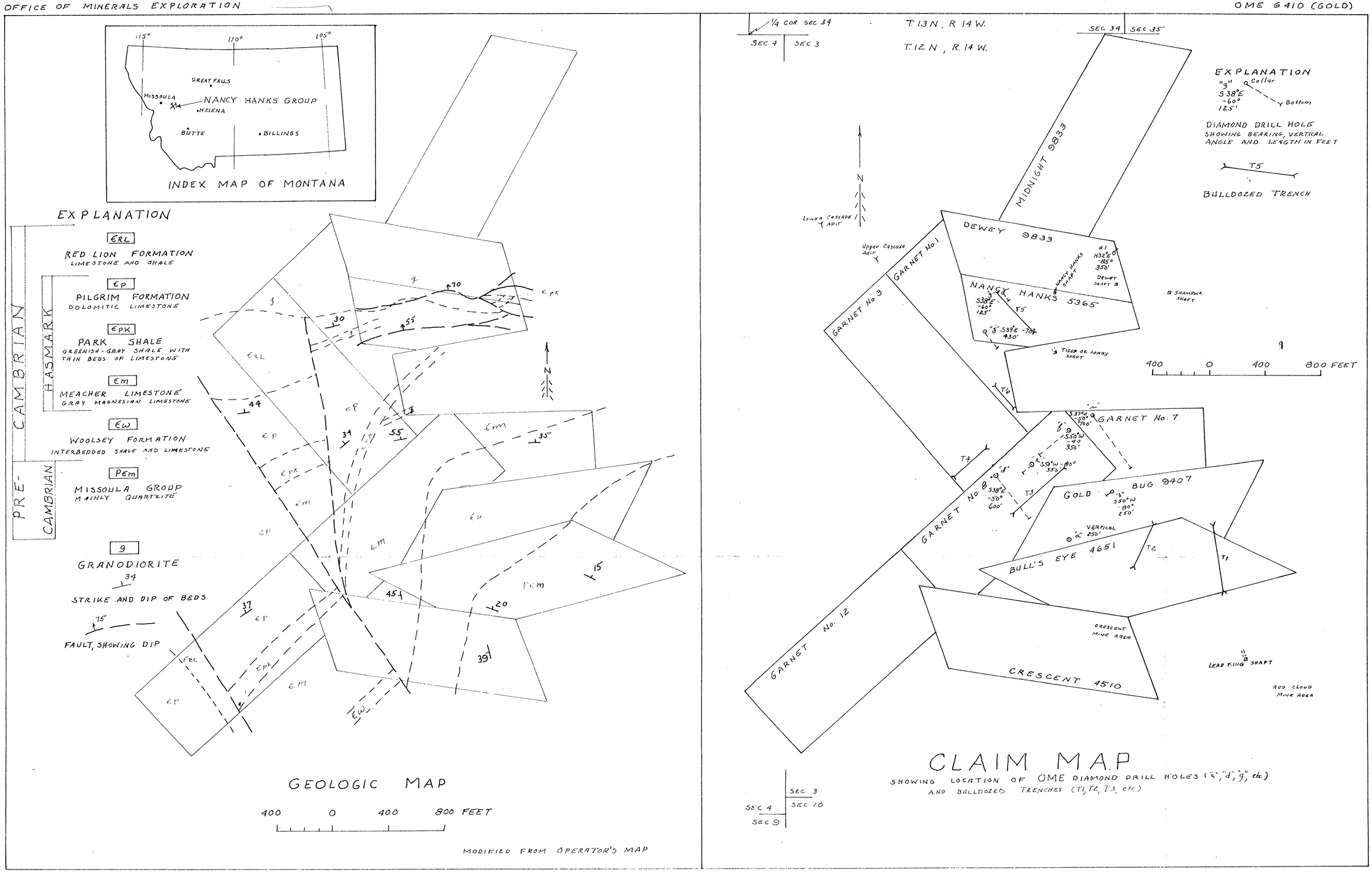


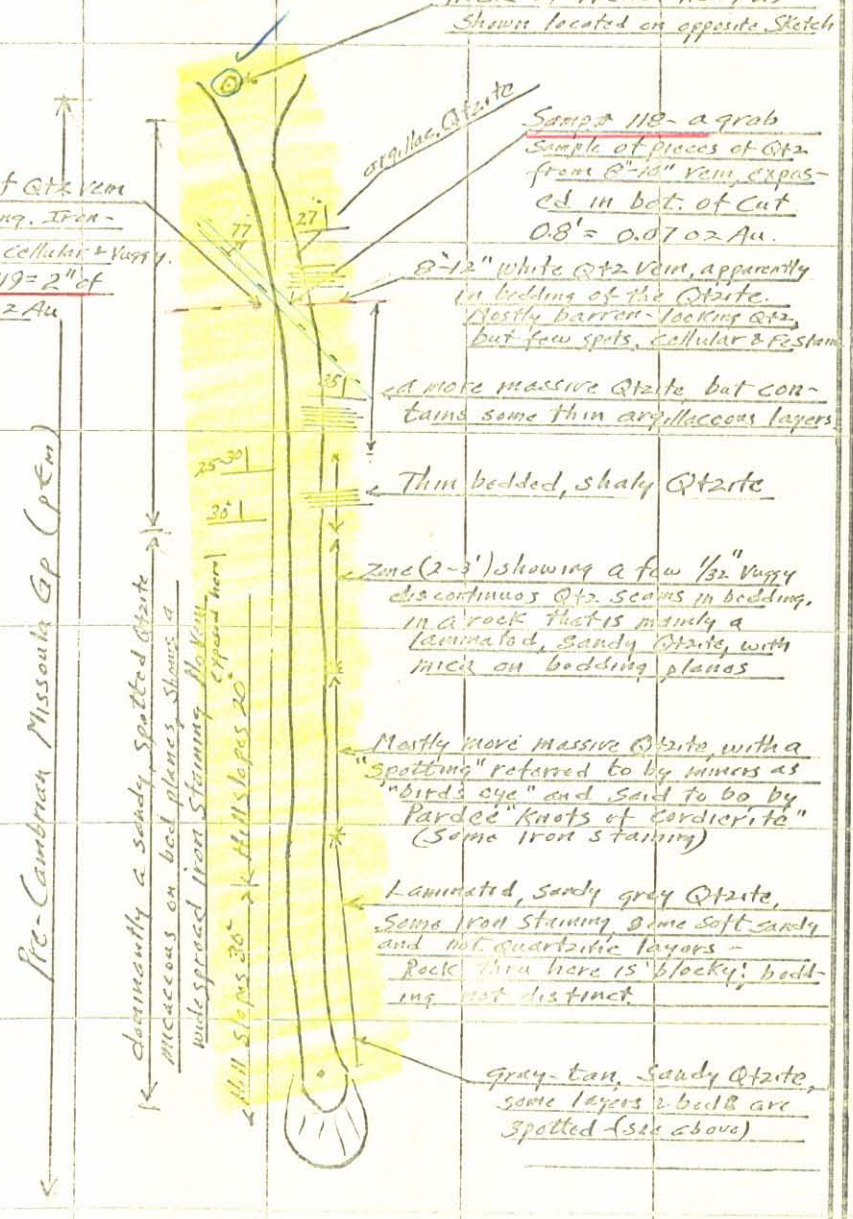
FIGURE 1- GEOLOGIC AND CLAIM MAPS, NANCY HANKS, et. al., GROUP, SEC. 3, T. 12N., R. 14W., GRANITE COUNTY, MONTANA

Trench 1

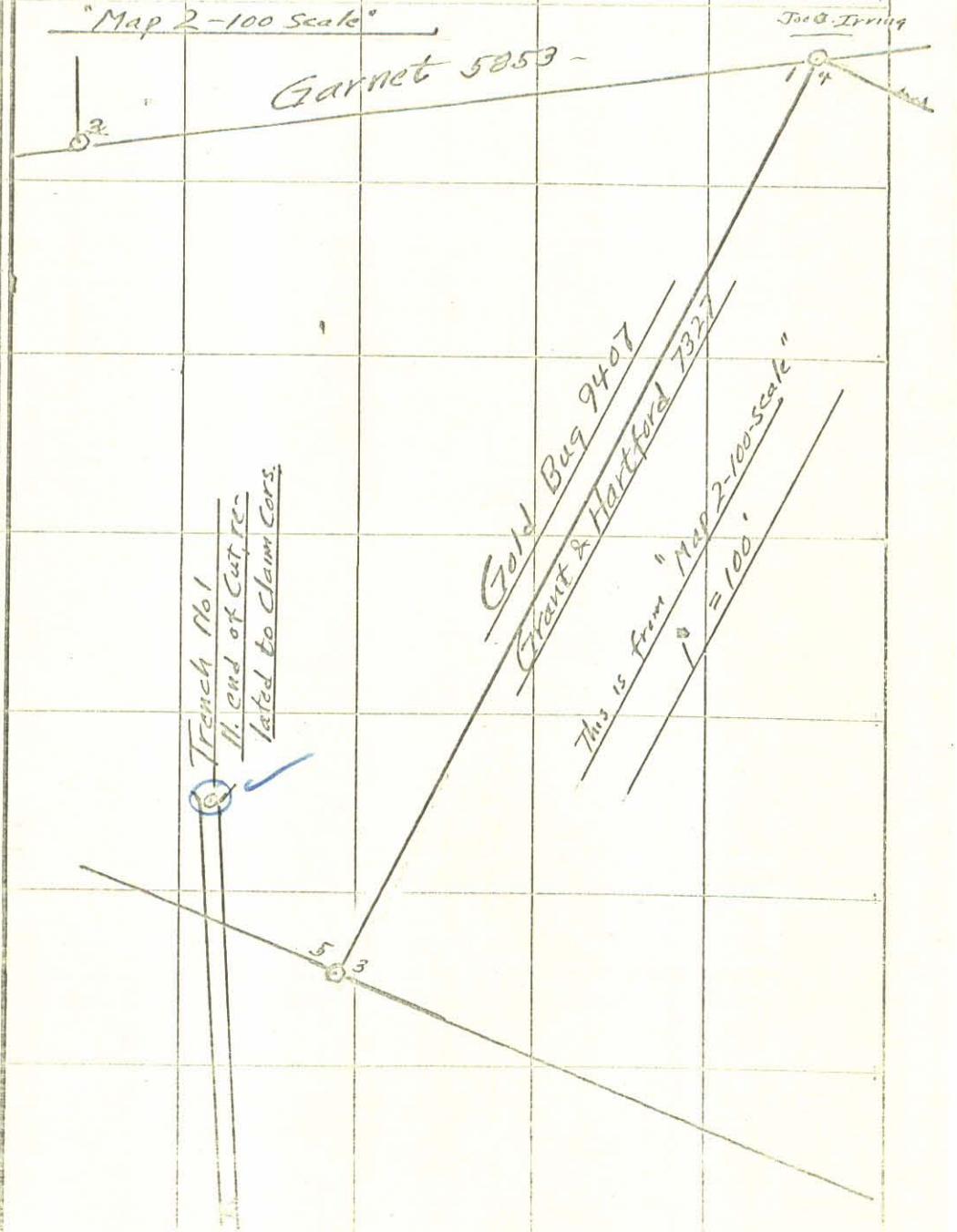
American Min. Co.

OME-6710-(Gold)
Nancy Hanks et al Claims
Granite Co. Montana
Contract 2207
1" = 100'

Sketch Showing Geology of Trench No 1
1" = 100'



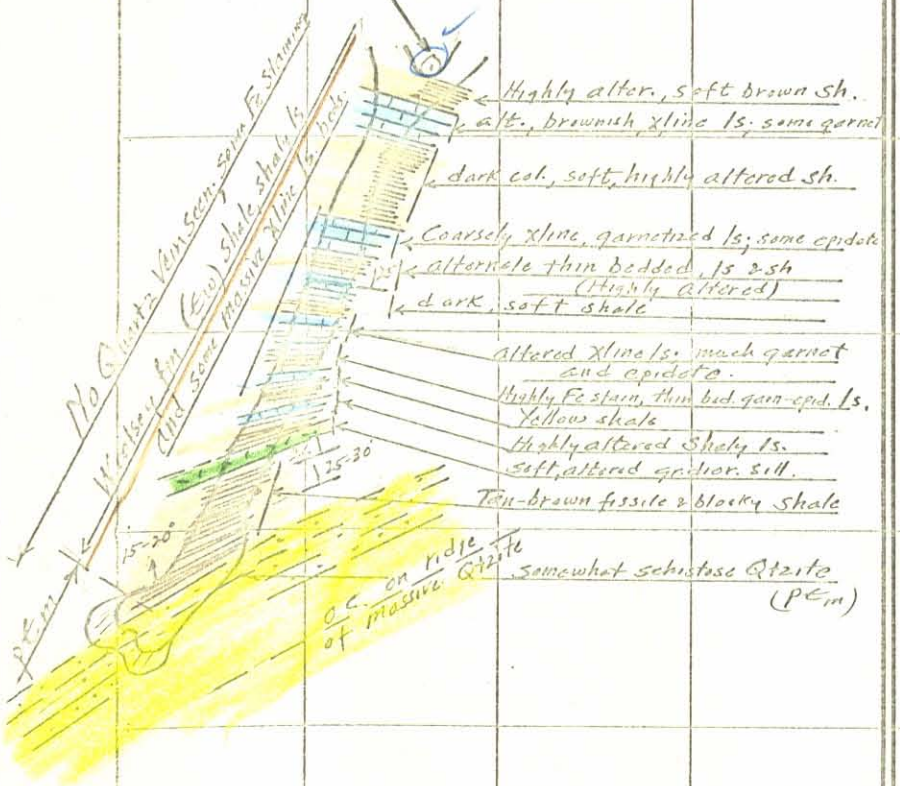
Sketch to Show Location of Trench No 1 on "Map 2-100 Scale"



Trench 2

Sketch Showing Geology, Trench 2
1" = 100'

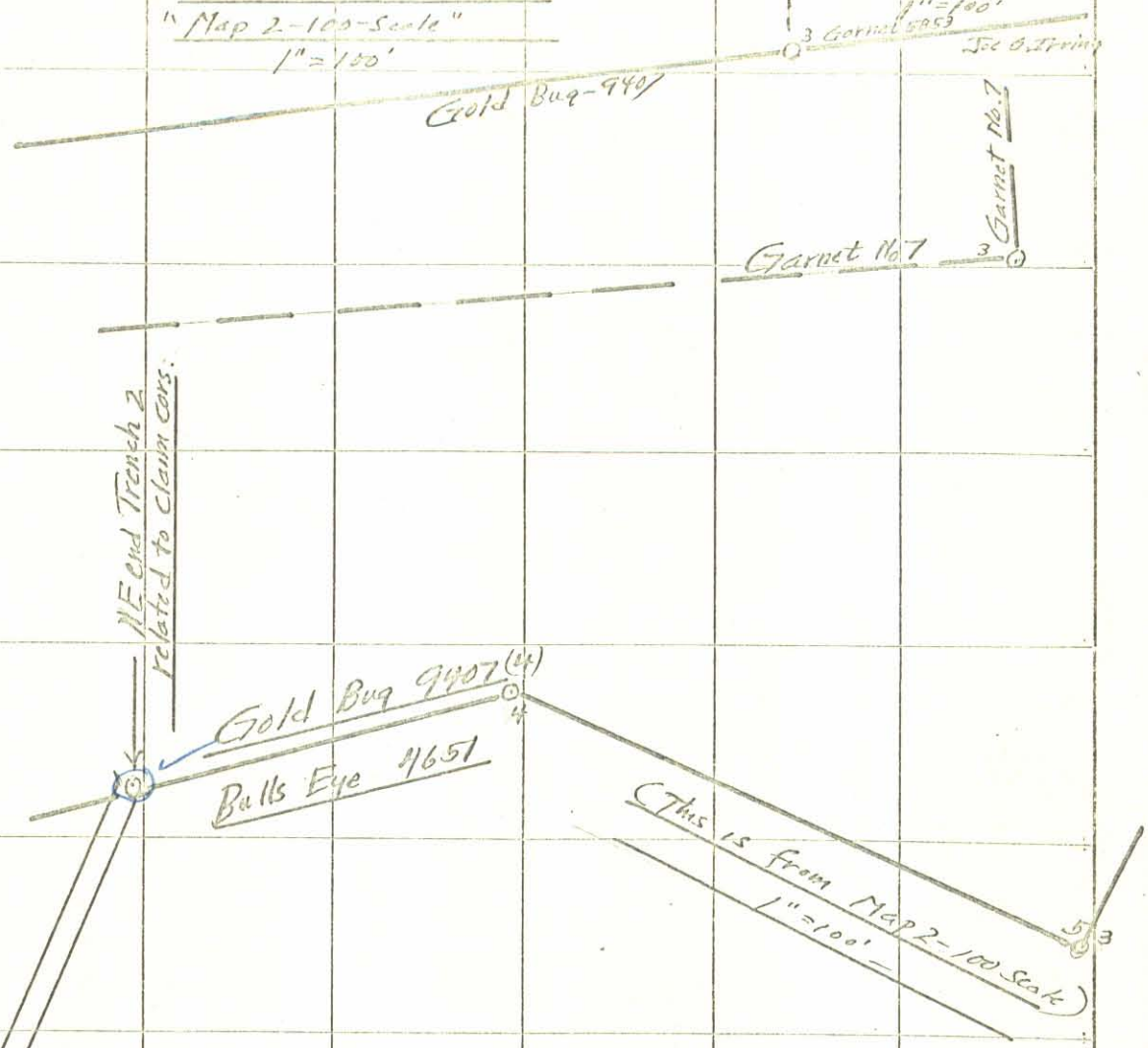
NE end, Trench 2, as shown on opposite sketch



(316' of Trench)

Sketch Showing Positing of Trench 2, relative to claim corners - see "Map 2-100-Scale" 1" = 100'

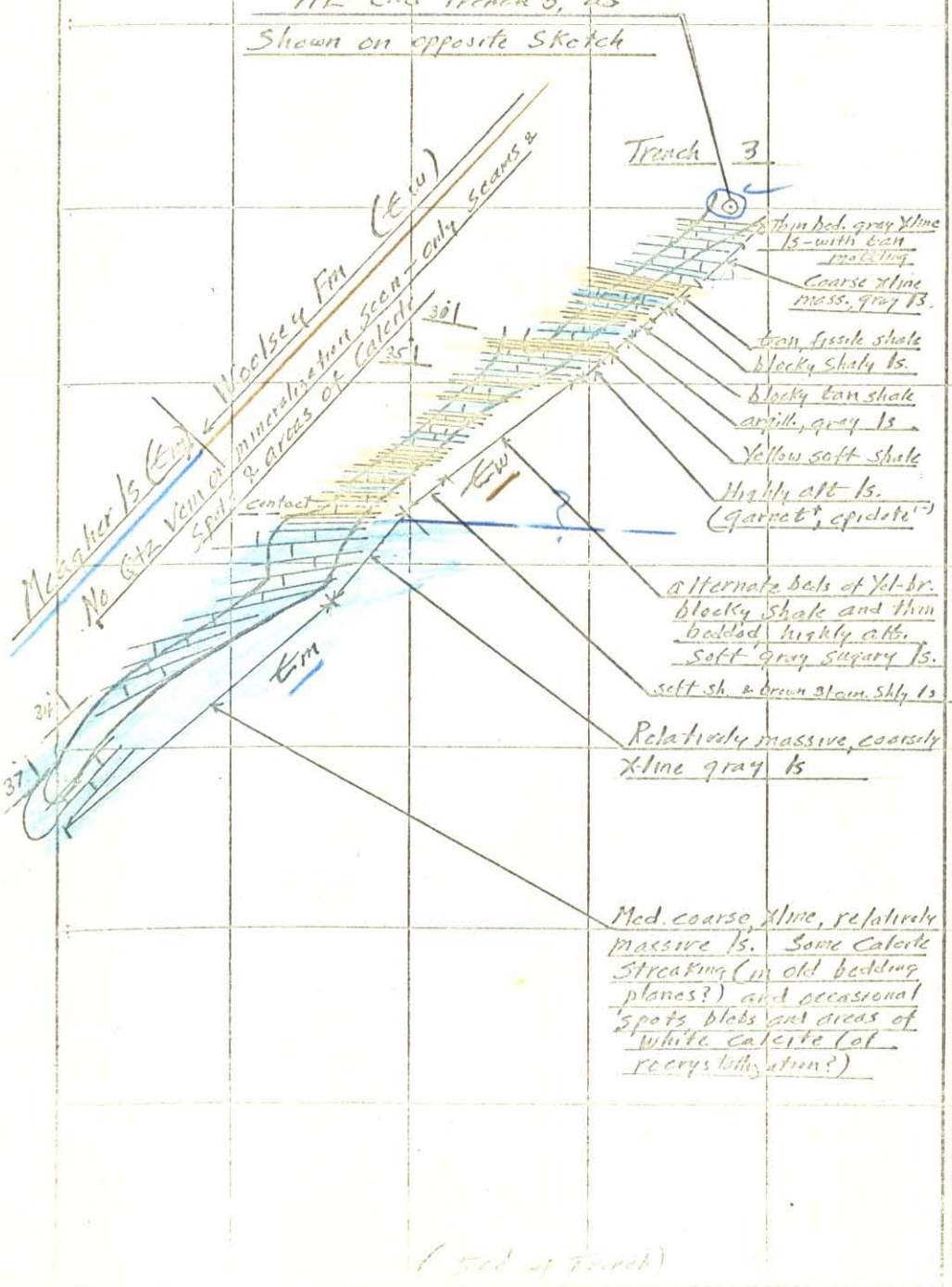
American Mining Co
OME - 6418 (Gold)
Haney Hanks et al claims
Granite Co, Montana
Contract - 2201
1" = 100'



Trench 3

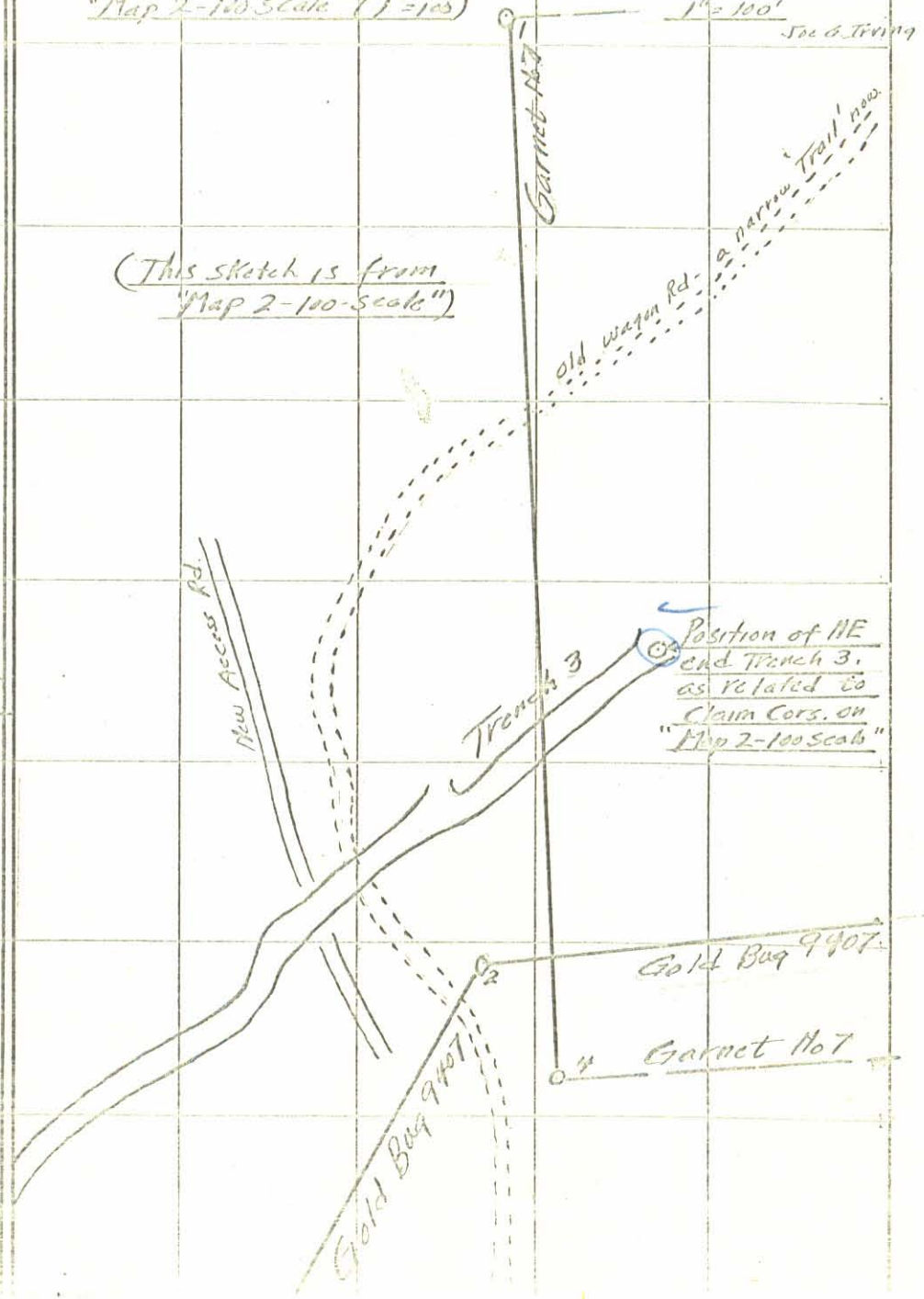
American Min. Co.
ONE - 6410 - (Gold)
Money Hunks et al Claims
Granite Co., Montana
Contract - 2207
1" = 100'

Sketch Showing Geology of Trench 3
1" = 100'



Sketch Showing Position of Trench 3, relative to Claim Cors. Shown on "Map 2-100 Scale" (1" = 100')

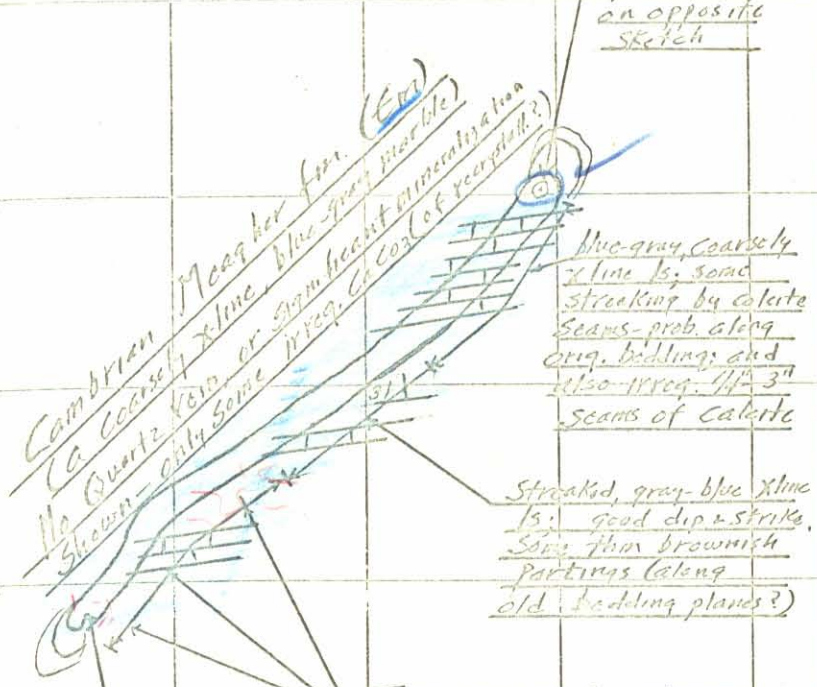
(This sketch is from "Map 2-100-Scale")



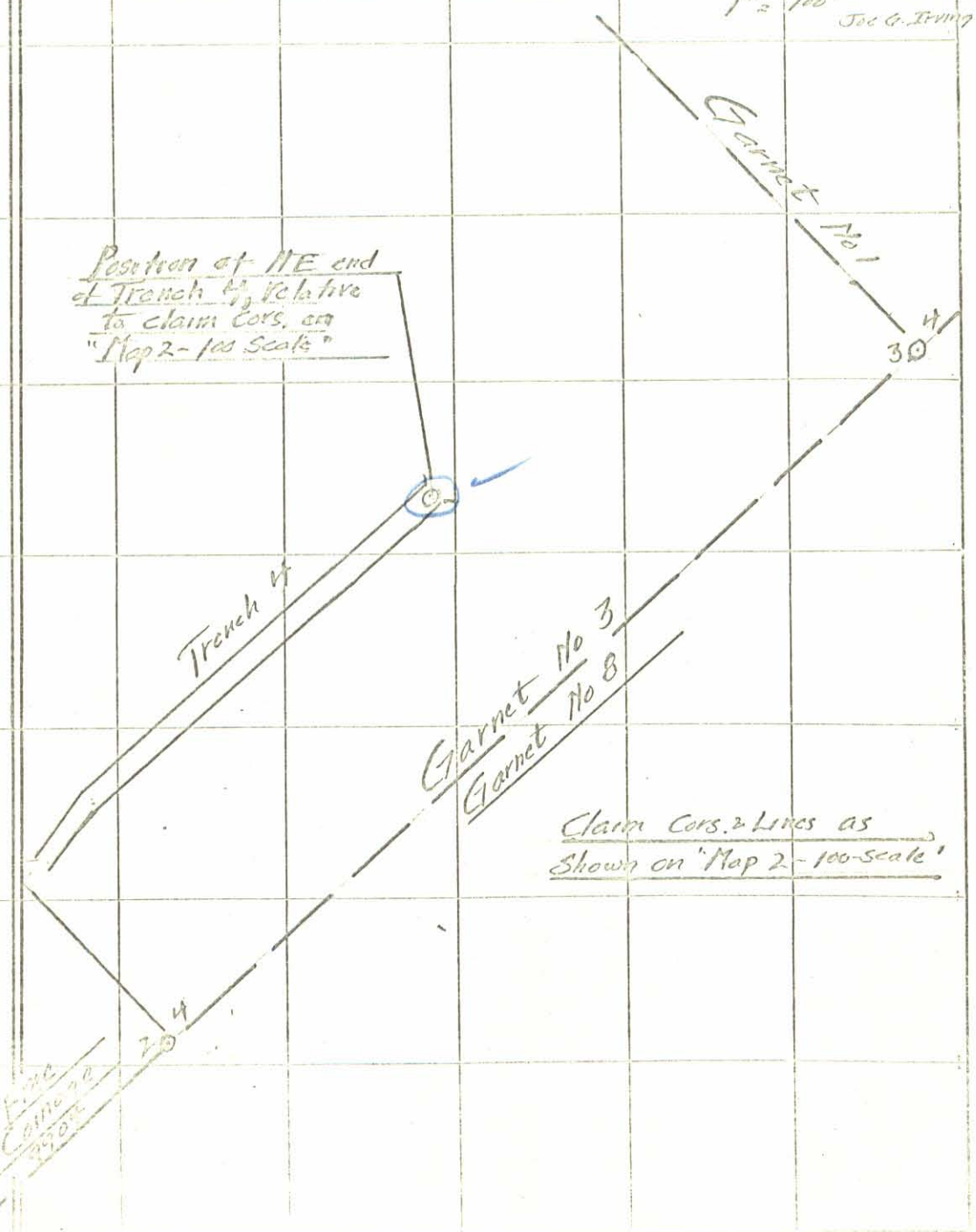
Trench 4

American Mining Co
OME-6430 (Gold)
Nancy Hanks et al. Claims
Granite Co., Montana
Contract 2207
1" = 100'
Joe G. Irving

Sketch Showing Geology, Trench 4



Sketch Showing Position of Trench 4, relative to Claim Corners (See "Map 2 - 100-scale")

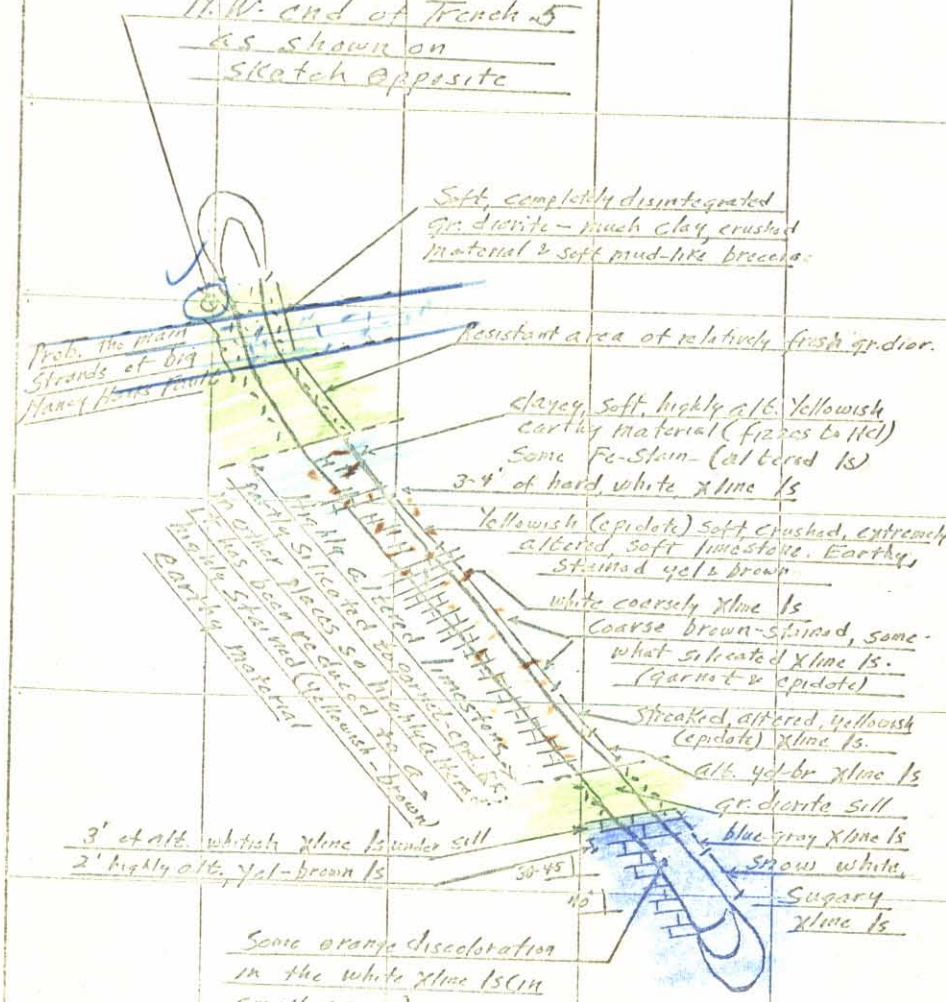


Trench 5

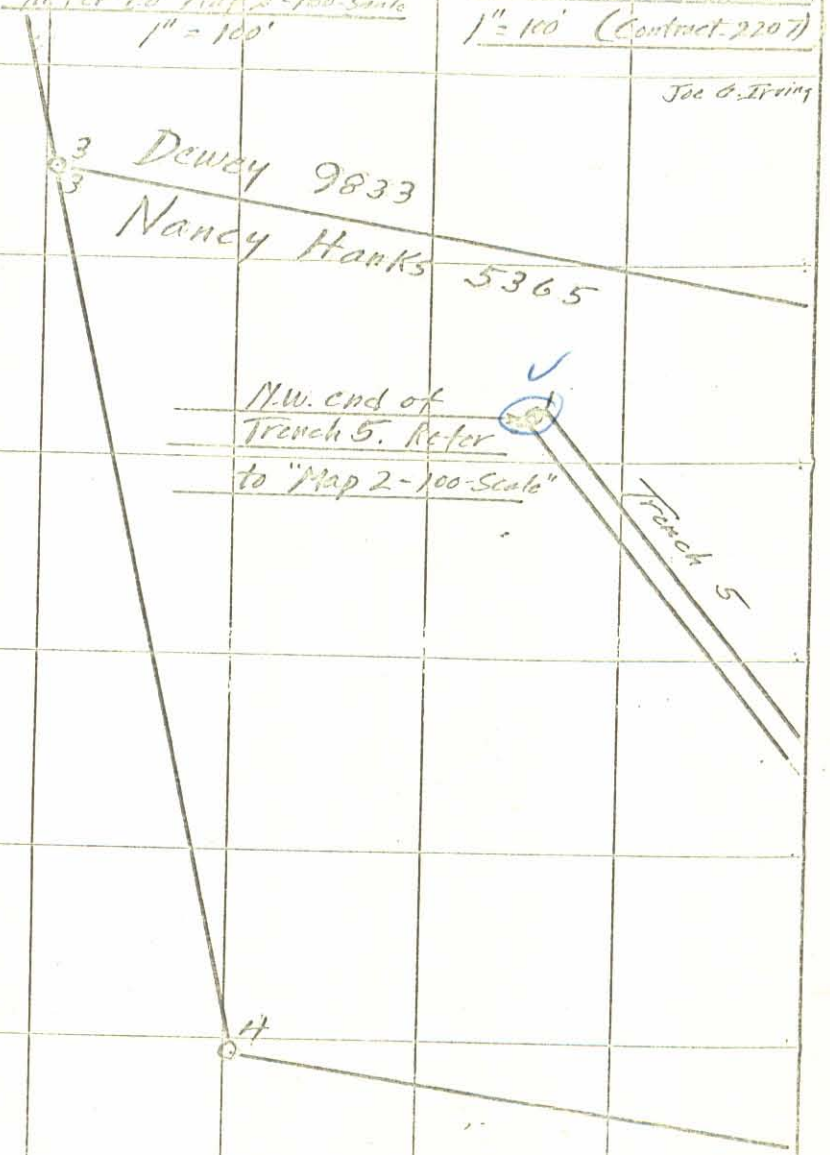
American Mining Co
OME-6410 (Col.1)
Nancy Hanks et al claims
Granite Co. Montana
1" = 100' (Contract 2207)

Joe O. Irving

Sketch Showing Geology of Trench 5
1" = 100'



Sketch to Show Location of Trench 5
Refer to "Map 2-100-Scale"
1" = 100'

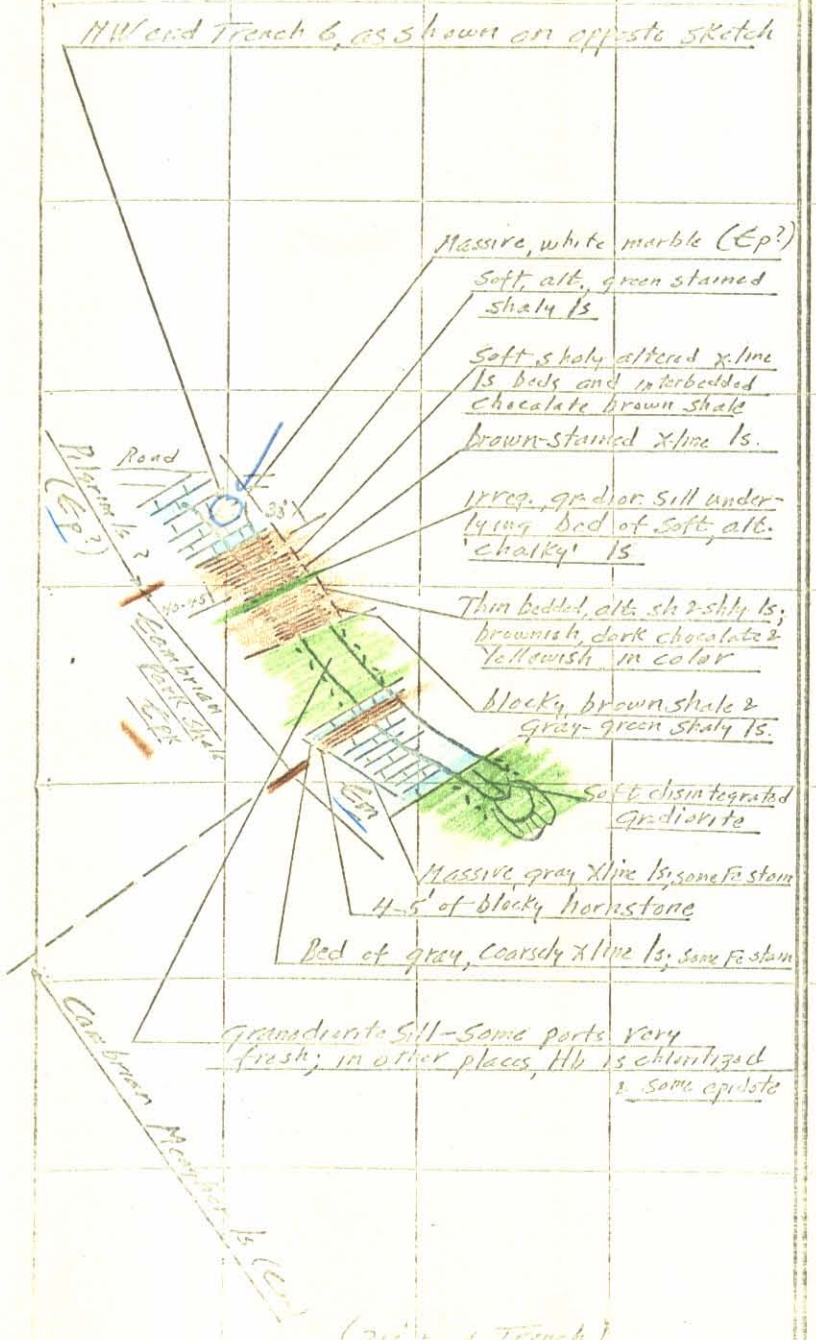


Trench 6

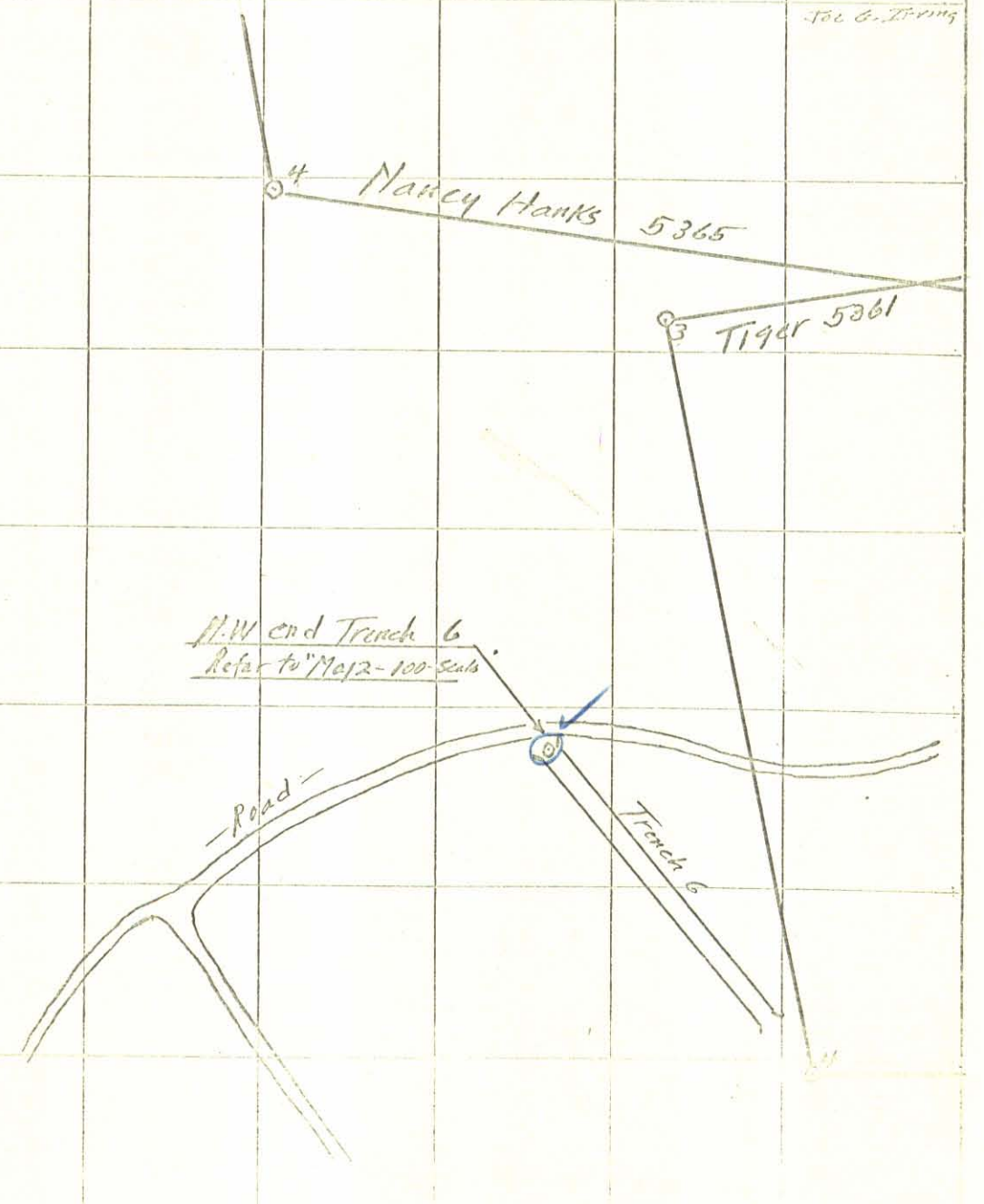
American Mining Co.

OMF-6410 (Gold)
Nancy Hanks et al claims
Granite Co., Montana
1" = 100' (Contact 2207)

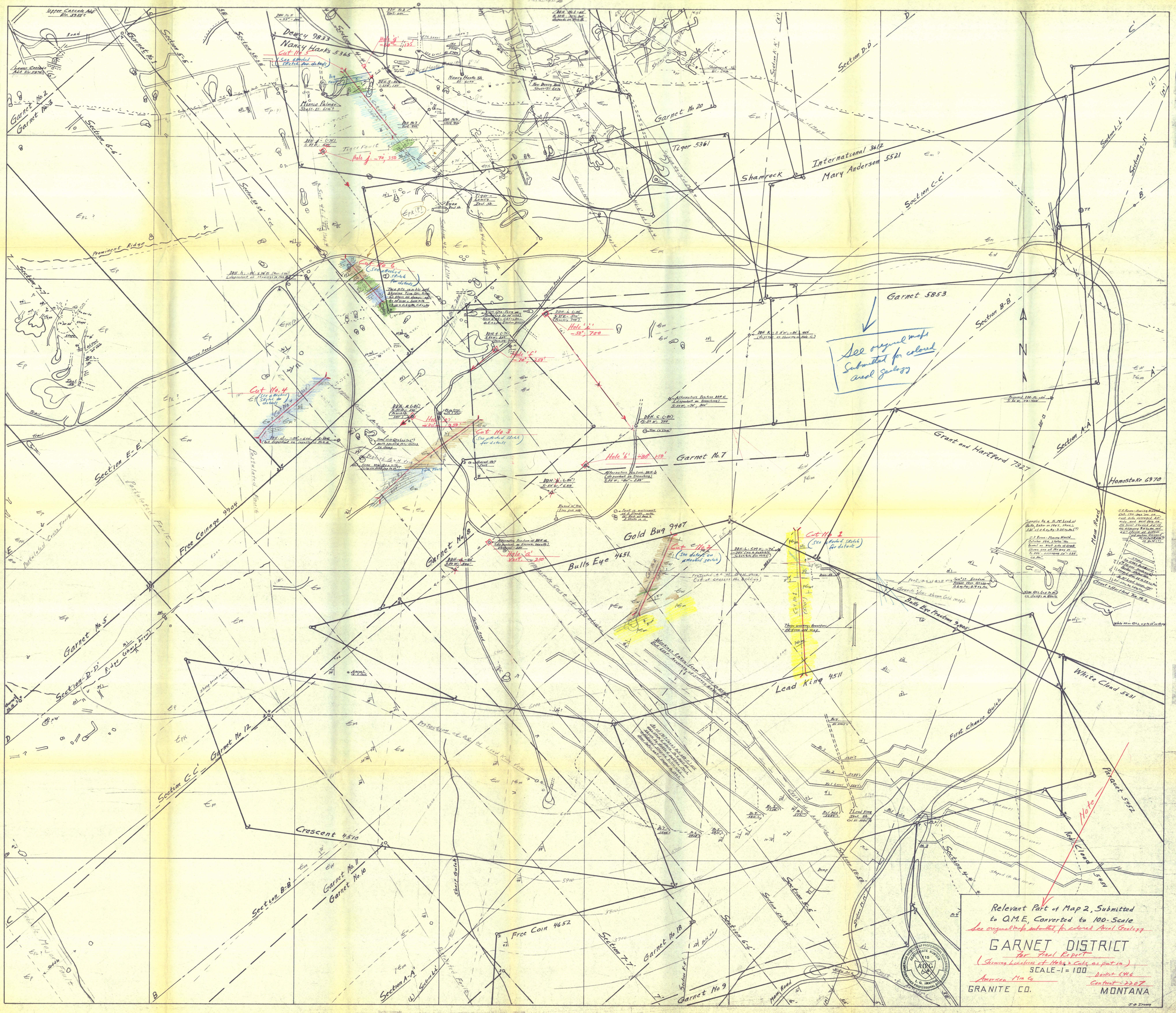
Sketch Showing Geology of Trench 6
1" = 100



Sketch Showing Location of Trench 6. Refer to "Map 2-100-scale"
1" = 100'



Section M-M'
Section L-L'
T.P.
B-B'
C-C'
(M')
(L')
Em
Ew

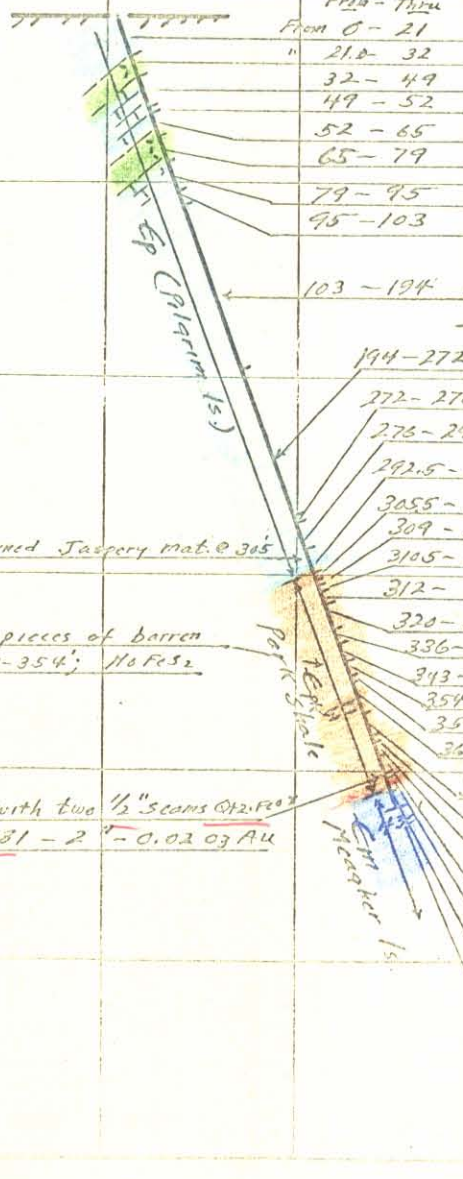

Relevant Part of Map 2, Submitted to O.M.E, Converted to 100-Scale
See original map submitted for colored Areal Geology
GARNET DISTRICT
For Final Report
(Showing Locations of Holes & Cuts as put in)
SCALE-1=100
American Min Co
Project C46
Contract 2207
GRANITE CO.
MONTANA
Garnet 5853
See original map submitted for colored Areal Geology
Nancy Hanks 5365
Tiger 5361
International 3612
Mary Anderson 5521
Shamrock
Garnet No 20
Garnet No 7
Grant and Hartford 7327
Homestake 6970
Free Coinage 9904
Gold Bug 9407
Bulls Eye 4651
Bulls Eye Fraction 9485
Lead King 4511
White Cloud 5631
Red Cloud 5451
Crescent 4510
Free Coin 4652
Garnet No 5
Garnet No 9
Garnet No 11
Garnet No 10
Garnet No 12
Garnet No 18
Section A-A'
Section B-B'
Section C-C'
Section D-D'
Section E-E'
Section 6-6'
Section 7-7'
Section 8-8'
Section 9-9'
Section 10-10'
Section 11-11'
Section 12-12'
Section 13-13'
Section 14-14'
Section 15-15'
Section 16-16'
Section 17-17'
Section 18-18'
Section 19-19'
Section 20-20'
Section 21-21'
Section 22-22'
Section 23-23'
Section 24-24'
Section 25-25'
Section

Hole "J" (See Location Sheet attached)

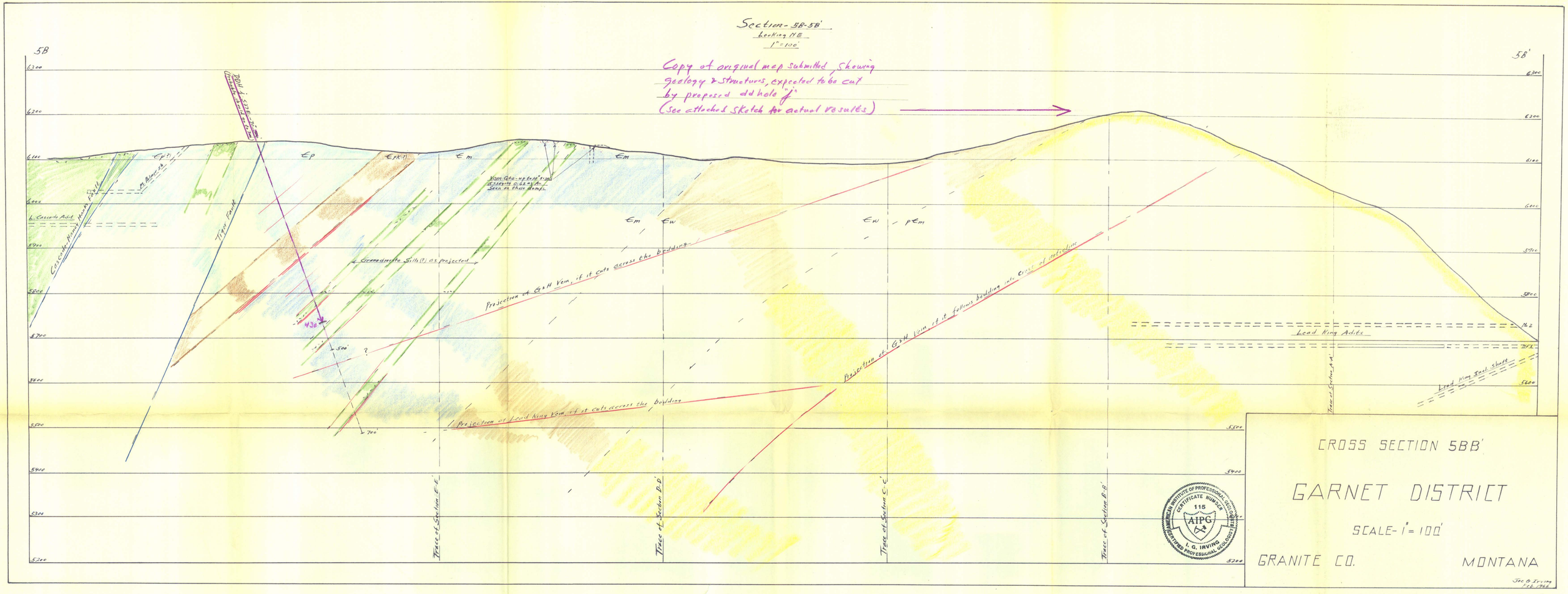
American Mining Co.

OME-6910 (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
Contract No. 2207
1" = 100' — Joe G. Irving

Cross Section (Looking N.E.)
Showing drill hole "J"
539-E -70°, TD-430'



Assays and/or Notes on Mineralization	From - Thru	Rock Type, Alteration etc
	From 0 - 21	overburden
	" 21.0 - 32	Rd. fresh, variable textured gr. diorite
	32 - 49	White and gray, xline ls; No Fe stain
	49 - 52	Silicated gray ls (garnet-epidote bands etc)
	52 - 65	altered, disintegrated, partly silicated xline ls; much evidence of solution effects.
	65 - 79	Rd. fresh, variable text. gr-diorite; crush. zone & gouge 78-79'
	79 - 95	Meta calc. shale; dk gray; no efferv.; little gr. dior. sill @ 80-81'
	95 - 103	Partly silicated gray xline ls; some wavy gar.-epid. bands; irreg. FeOx stains & CaCO3 seams.
	103 - 194	Light gray to whitish, med. to coarse gram. xline ls; some garnet-epidote spots & bands; occas. iron stain, pits & sol. cavities.
	194 - 272	Plain, med. to coarse grained, white marble; a few orange-red stains on few broken areas.
	272 - 276	Slightly silicated ls; few solution cavities iron stained - some mica.
	276 - 292.5'	white marble - slight silication
	292.5 - 305.5	somewhat silicated xline ls; a few garnet bands etc.
	305.5 - 309	Banded, silicated, xline ls; some iron stain along tiny seams.
1½" of manganese stained Jaspery mat. @ 305'	309 - 310.5'	alt. shly ls; thin bands & laminations, some Fe stain
	310.5 - 312	Crushed zone, gouge in alt. brown-stained ls.
	312 - 320	Partly silicated xline ls; faint garnet banding & blotches.
	320 - 336	Silicated xline ls; garnet in bands; epidote @ 325-326 & 332-334'.
Broken zone; few pieces of barren looking Qtz. @ 347-354'; No FeS2	336 - 343	Coarsly xline ls; - some irreg iron staining
	343 - 354	gray-brown alt. shly ls & shale; No FeS2 (poor core recov.)
	354 - 359.5'	No core -
	359.5 - 361	Poor " ; pieces of hornstone & white xline ls - No FeS2
	361 - 382	Silicated, xline ls (garnet-epid); little sill of gr. dior. at 379-380'
2" section of shale with two ½" seams Qtz. FeOx Sample No 181 - 2" - 0.02 oz Au	382 - 397	Meta shale, highly altered; some epidote-garnet; (white ls band @ 391-393)
	397 - 400	gray-white xline ls.
	400 - 405.5	Meta shale; purple-brown, with xline ls layer @ 403-404'
	405.5 - 412	Med. gram., white xline ls
	412 - 418	Meta shale (purple-brown); a 2" section contains a little Qtz. FeOx in seams.
	418 - 423	Partly silicated xline ls; few iron stains, solution cavities (poor core recov)
	423 - 430	white xline ls; med. grained; some iron stain & sol. cavities - (good core)



CROSS SECTION 5BB'

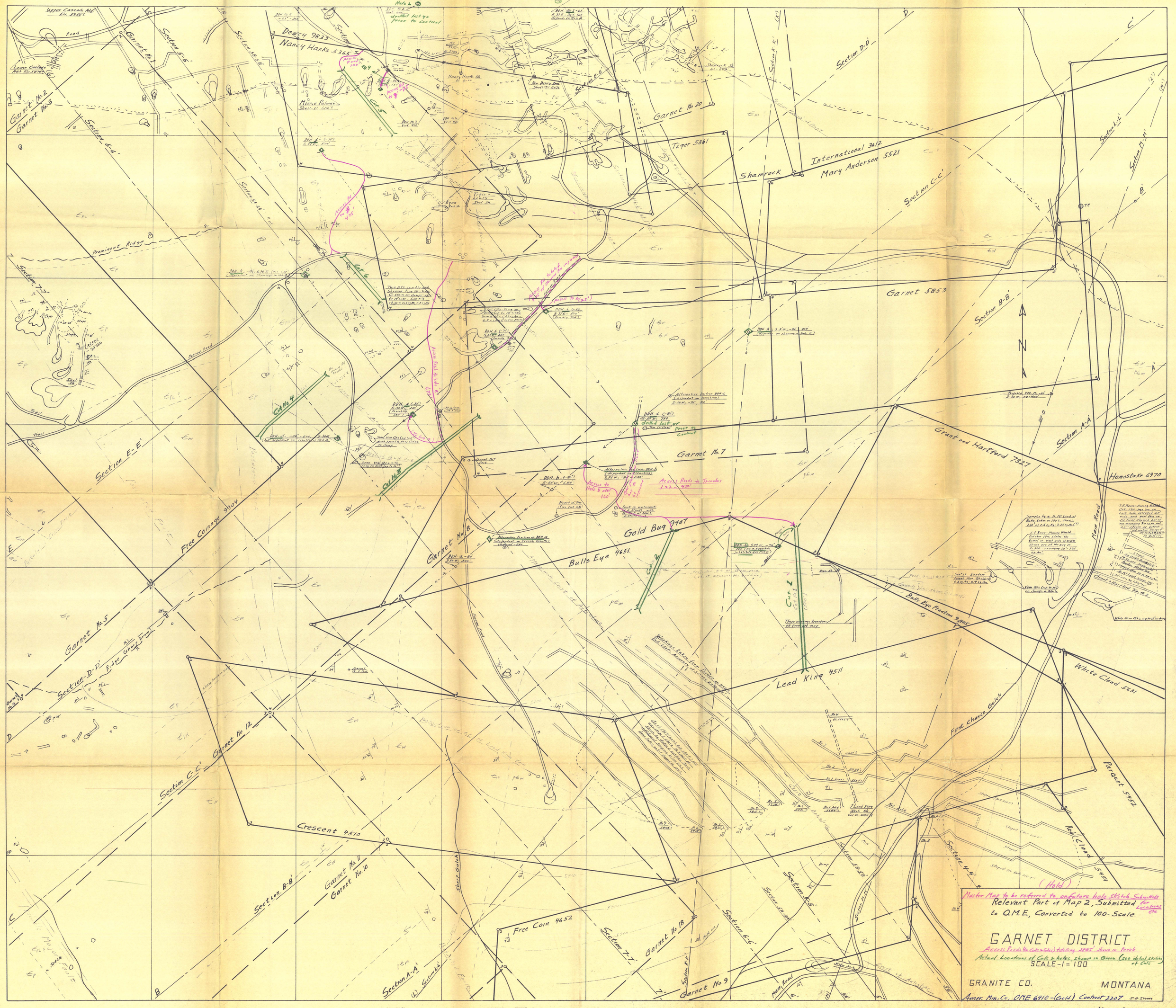
GARNET DISTRICT

SCALE- 1" = 100'

GRANITE CO. MONTANA

Jac G. Irving
Feb. 1966

Map 13


Master Map to be referred to on future hole sketch submittals
Relevant Part of Map 2, Submitted for Locations etc to O.M.E, Converted to 100-Scale
GARNET DISTRICT
Access Roads (& Cuts & Sites) to drilling DDH's shown in Purple
Actual Locations of Cuts & holes, shown in Green (See detail sketches of Cuts)
SCALE - 1 = 100
GRANITE CO.
MONTANA
Amer. Min. Co. OME 6410-(Gold) Contract 2207
Map 2 (on 100-Scale)
Upper Cascade Adit
Garnet No. 1
Garnet No. 2
Garnet No. 5
Section G-G'
Section H-H'
Section E-E'
Section F-F'
Section D-D'
Section C-C'
Section B-B'
Section A-A'
Section L-L'
Section M-M'
Prominent Ridge
Dewey 9833
Nancy Hanks 5365
Marine Palmer
Garnet No. 20
Tiger 5361
Shamrock
International 3612
Mary Anderson 5521
Garnet 5853
Garnet No. 7
Grant and Hartford 7327
Homestake 6970
Free Coinage 9904
Gold Bug 9407
Bulls Eye 4651
Bulls Eye Fraction 9485
Garnet No. 8
Garnet No. 5
Garnet No. 12
Lead King 4511
White Cloud 5631
First Chance Gulch
Parquet 5452
Crescent 4510
Garnet No. 11
Garnet No. 10
Free Coin 4652
Garnet No. 18
Garnet No. 9
Sharp Gulch
Main Road
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Hole a (see Section Sheet attached)

1" = 100'

American Smelting Co.
OMF - 8410 (cont)
Nancy Hanks of -1 claim
Granite Co., Montana
Contract 2207
1" = 100' Joe G. Irving

Cross Section looking West showing D.D. Drill hole "a"; Vert. exag. 2:1

Assays and/or Notes on Mineralization

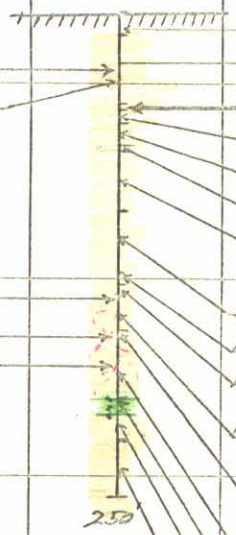
@ 28-29' - broken zone, iron stained

@ 34.5' fracturing, with Fe staining

@ 145' Tiny seam, containing some FeS_2

@ 144-167' - occasional grains of FeS_2

@ 179-186' - a little scattered FeS_2 - over 9"
(Samp # 129 - 179-179.8' - Tr - Au.



Rock Type, alteration etc

0-10' - over burden

10-46' grey, X-line ls; 1' of meta sh. @ 10-11; highly crushed (a sand) 36-44'

46.1-48' crushed meta shly ls; crushed to a brownish sand.

48.1-56' Partly silicated X-line ls; shows irreg. bands of garnet alterat.

56.1-68.5' Highly silicated (gar-epid) X-line ls

68.1-70' a 'hornstone' - meta shly ls.

70.1-101 Partly silicated X-line ls; irreg. bands of garnet-epid & some irreg. $CaCO_3$ - seams & scattered spots of $FeCO_3$.

101.1-133 Siliceous meta sh. and shly ls - a hornstone (one ft. of gar-epid ls @ 106')

133.1-138 Partly silicated X-line ls - some wavy bands garnet alteration.

138.1-145 - Gray, dense, siliceous meta. sh & shly ls; occas. spots of FeS_2

145.1-164 Partly silicated X-line ls, with bands & blotches of garnet-epidote and some chlor. & serp. on fracture planes

164.1-167 Altered shly ls - showing garnet & few spots of FeS_2

167.1-197 Partly silicated, coarse gr. X-line ls but in places (183-192) it is almost a 100% garnet-epidote RK. and here shows cons. FeS_2

197.1-205'' granodiorite, with irreg. 'frozen' contacts; an inclusion of silicated ls @ 202-204; aplitic facies 204-205.

205.1-219 Partly silicated med. gr. X-line ls, showing irreg. wavy bands & blotches of garnet-epidote alt. & some serp. & chloride developed on fracture planes.

219.1-250. - Altered shly ls - Rock is now partly silicated with garnet-epidote, irreg. bands that dip 45° ±

Hole "b" (See Location Sheet attached)

1" = 100'

American Mining Co.

OME - 6410 - (Gold)

Nancy Hanks et al Claims

Granite Co. Montana

Contract 2207

1" = 100' Joe G. Irving

Cross Section (Looking NW) Showing drill hole "b" S.56°W. -80° TD-250'

Assays and/or Notes on Mineralization

Rock Type alteration etc

0-10' overburden

10-18 - alt. white X-line ls; fractured, broken

18.1-30 " X-line ls - no core recov; only a 'crushed sand'

30.1-33 alt. ls - with garnet bands

33.1-37 " " " " " and some shale layers.

37.1-73.5 Highly silicated X-line ls; showing irreg. wavy bands of gar-epid. alteration; @ 65-73.5 almost 100% garnet-epidote rock; some sol. pitting and Fe-Mn stains.

@ 135-136 - Some iron staining in grano diorite

73.6-87 - light col. variable textured slightly alt grano dior (sill?)

87.1-105 - gray meta shale (a hornstone) some layers calcareous

@ 166-170 Some sparse dissems. of FeS2

105.1-166 - grano dior., variable texture, some Ser & chlor. alteration a crushed zone @ 115-119; Fe stains 135-136; aplitic 163-166

@ 177-178.5 - FeS2 in pitted, iron stain. ls.

(Samp #130 - 1.5' - 0.020 Au

166.1-170 gray, dense meta shly ls - some specks FeS2

170.1-176 - Med grain, gray-white X-line ls; some pitting & Fe stain.

176.1-178.5 alt. iron-stain. X line ls - some FeS2

178.6-181.5 meta shale

221-250 No FeS2 of any signif. seen

181.6-192.5 Med. grained, gray X-line alt. ls

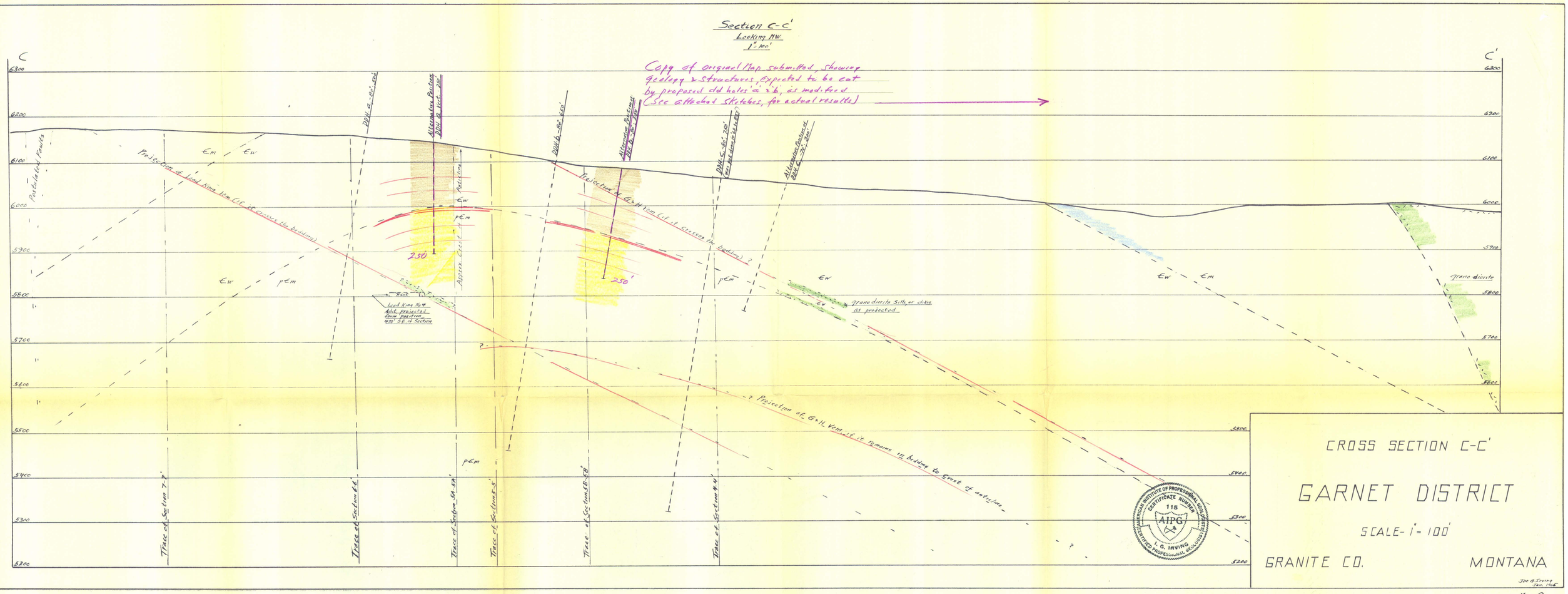
192.6-218 grano-diorite (Prob. a sill) variable texture aplitic @ 192-195; rel. fresh @ 195-205; slight. alt. 205-218'

218.1-221 broken zone, showing mixed Qtzite-gr. dior. pieces

221.1-233 gray Quartzite, broken with little 'fingers' gr. dior.

233.1-237 gray Qtzite, little 'fingers' of gr. dior. @ 237-37.

237.1-250 gray Qtzite, both laminated & spotted facies.



CROSS SECTION C-C'

GARNET DISTRICT

SCALE- 1" = 100'

GRANITE CO. MONTANA

Joe G. Irving
Jan. 1966

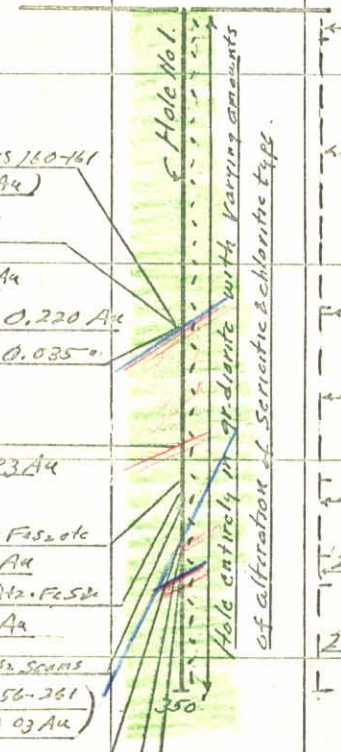
Map 9

Hole No 1 - (See Location Sheet attache)

American Mining Co.
OME - 6410 - (Gold)
Nancy Hanks et al Claims
Granite Co., Montana
~~Contract~~ 2207
1" = 100' - Joe G. Irving

Cross Section (Looking N32E)
Showing adj Hole No. 2
N-32 E. - 65' - TD-350

Assays and/or Notes on Mineralization	Rock Type, Alteration etc
	0-12' overburden
1.0' band of Small Qtz. FeS. Seams 160-161 (Sam No. 134 - 1.0' - 0.17 oz Au)	12.1 - 161' fractured, slightly alt. gr. diorite, with a few thin 'limy' inclusions. and narrow Qtz. Seams, iron stained
1.0 - Highly min. Gr. diorite 162-163' Sam - 135 - 1.0' - 0.030 oz Au	
1½" seam @ 163½' - Sam - 136c - 0.220 Au	161.1-163' Zone of flat-dipping Qtz. seams with FeS_2; and some dissem. FeS_2 adjacent.
Sludge 159-163 Sam. 136S - 0.035"	163.1 - 240' Slightly alt. gr. diorite; few narrow Qtz. FeS_2 Seams (see across)
Band (0.9') of ½" Seams Qtz. FeS_2 (Sam 137 - 0.9' - 0.090 oz Au	
1.5' (243.5-245) Qtz frags. - Seams FeS_2 etc (Sam 138 - 1.5' - 0.100 oz Au	240.1-279.5' Mineralized, alt. gr. dior, with scattered FeS_2 dissems. & seams throughout.
5.0' section (252-257) bands of Qtz. FeS_2 FeS_2 dissems. (Sam 139 - 0.105 oz Au	279.6-293' Min. gr. dior. slightly chloritized with zones containing bands & seams of Qtz. FeS_2 and irreg. dissems. FeS_2 (6" of gouge @ 279')
257-261 - 4-ft zone of Qtz. FeS_2 Seams (Sample #140 - 4.0' - 0.03 Au; Sludge 256-261 in Sam# 141 - assayed - 0.120 oz Au)	293.1 - 350' Relatively fresh gr. diorite; some slight chloritic alt; few spots FeS_2
275-277½ - Seams of Qtz in min gr dior. over 2½ ft zone - Sam# 142 - 0.020 Au	
280.5-281.5' - 1.0' of seams Fen (#143) - 0.025"	
288.5-288.7' - 2.3' of " " (#144) 0.065"	
289.25-291 Min. Zone & Vein mat. in gouge (Sam 145 - 1.75' - assayed - 0.150 oz Au	
291-293.5' Bands of Qtz. FeS_2 (up to 2½") alternating with min. gr. diorite (Sam #146 - 2.5' - assayed 0.100 oz Au	
Note: Core was dropped & lost for 250 (bot. of hole)	



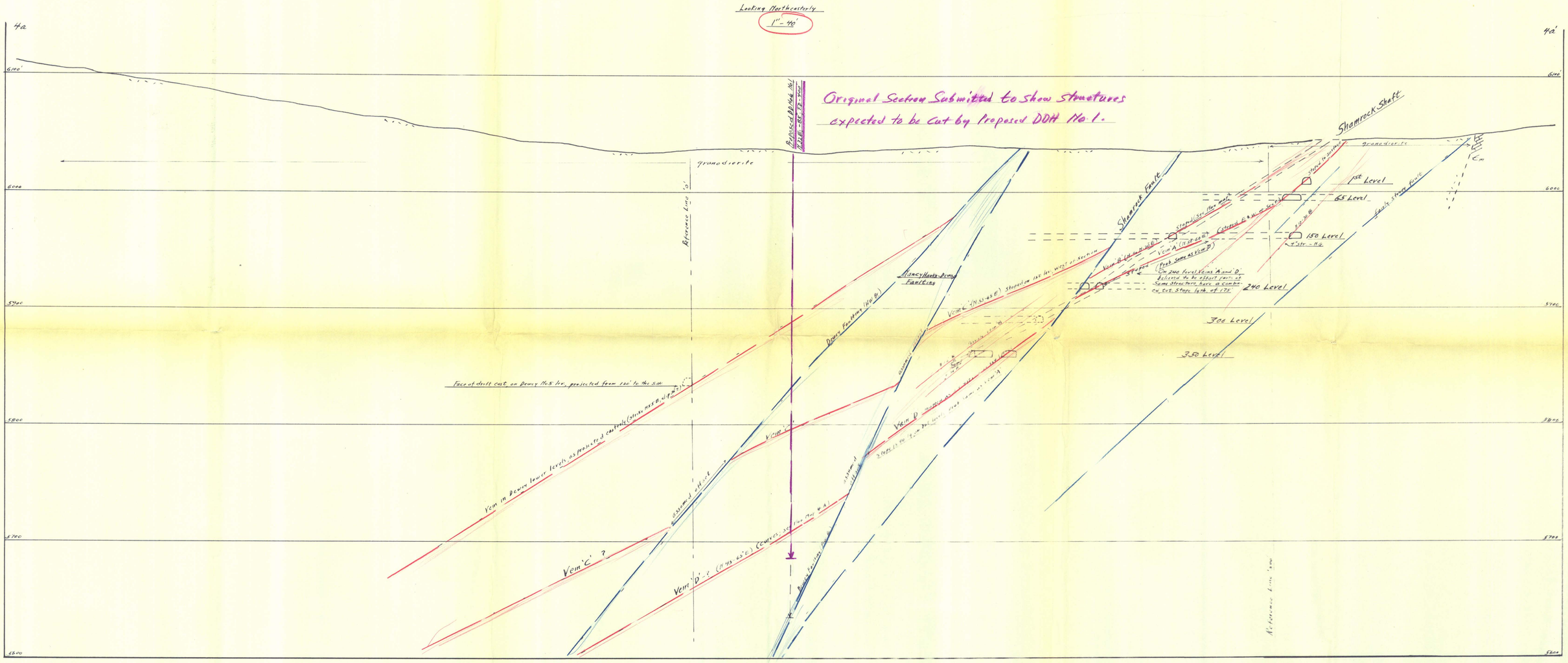
Dowey Vein 160-163.5'

Zone of Shamrock Vein C 252-261

Section 4a-a'

Looking Northeasterly

1" = 40'



Section 4b-b'

Looking Northeasterly

1" = 40'

CROSS SECTIONS

NANCY HANKS-DEWEY-SHAMROCK MINES

GARNET DISTRICT

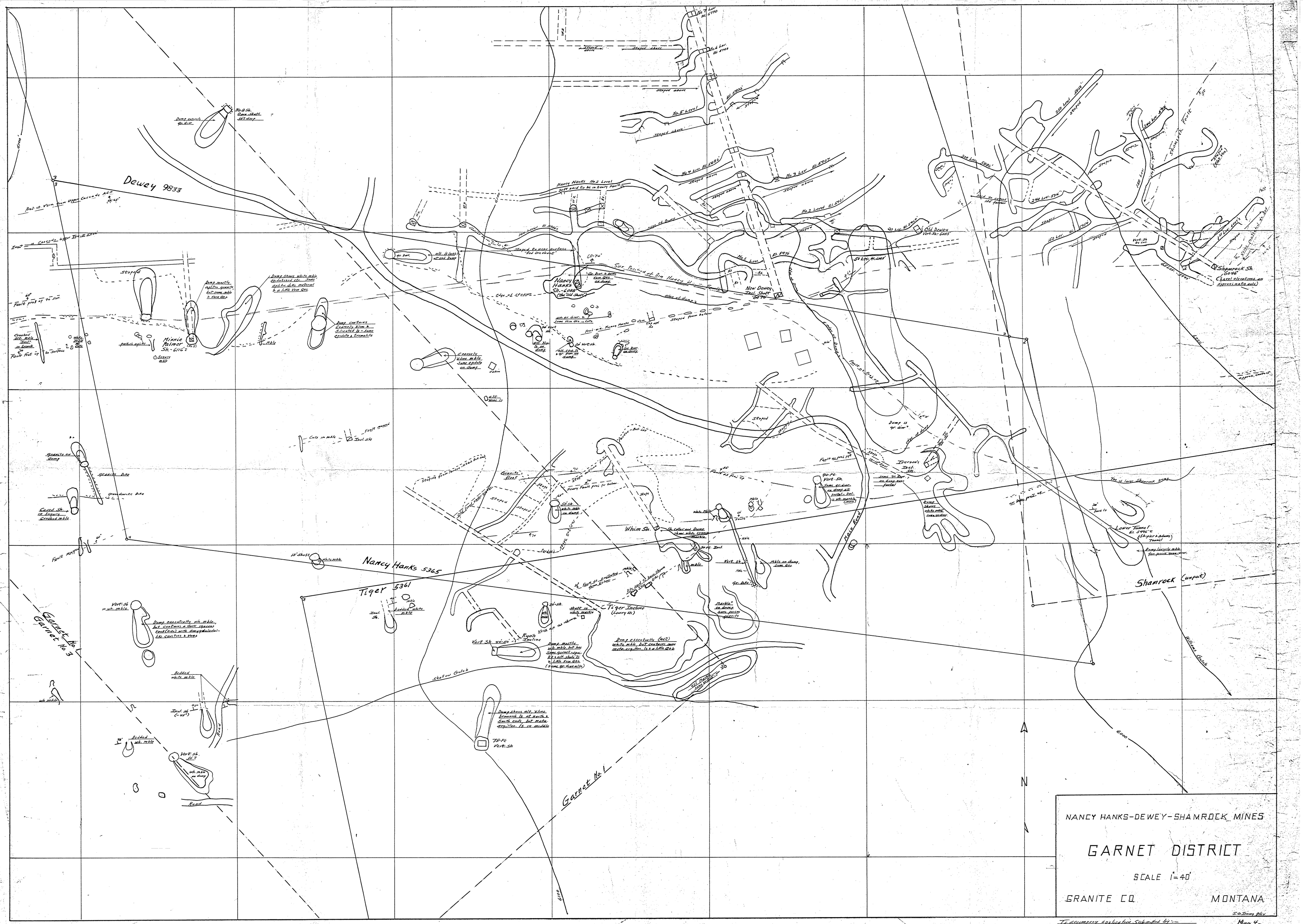
SCALE 1"=40'

GRANITE CO. MONTANA

AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER 115
AIPG
T. G. IRVING
CERTIFIED PROFESSIONAL GEOLOGIST

Jos G. Irving

Map 4-B



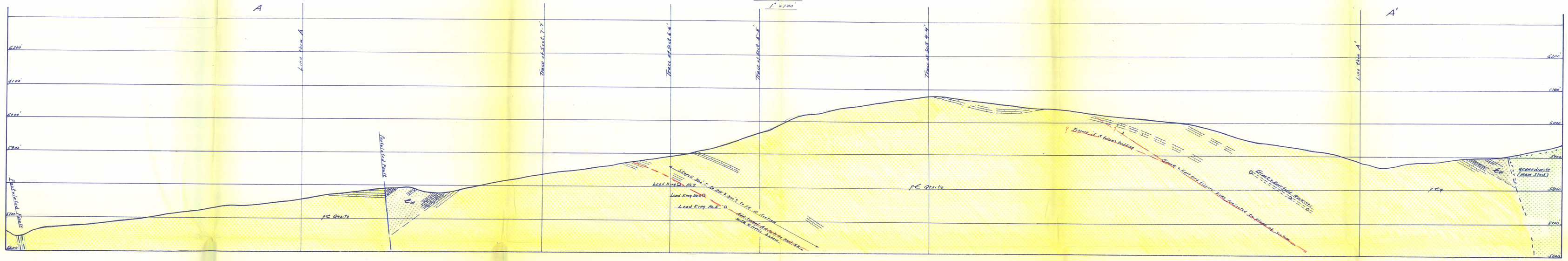
To accompany application submitted by:—
American Mining Co., 700-Securities Bldg. Seattle, Wash.

Map 4
MRE-Sept-1942

Section A-A'

Looking NW

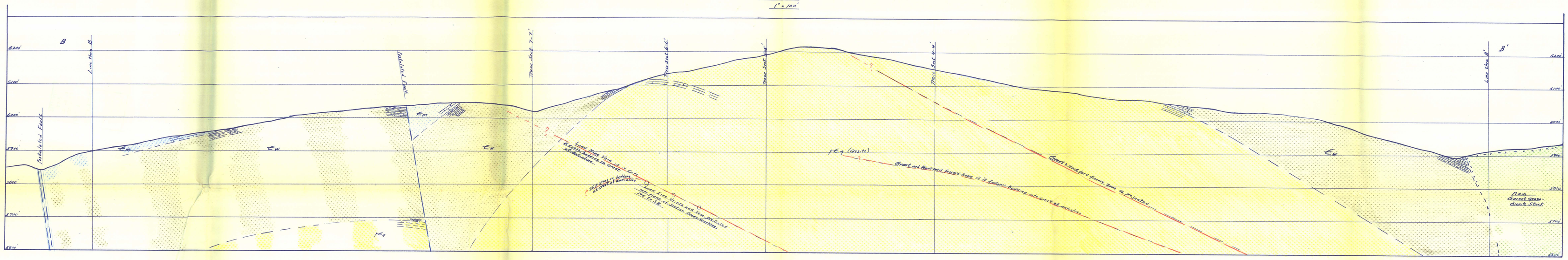
1" = 100'



Section B-B'

Looking NW

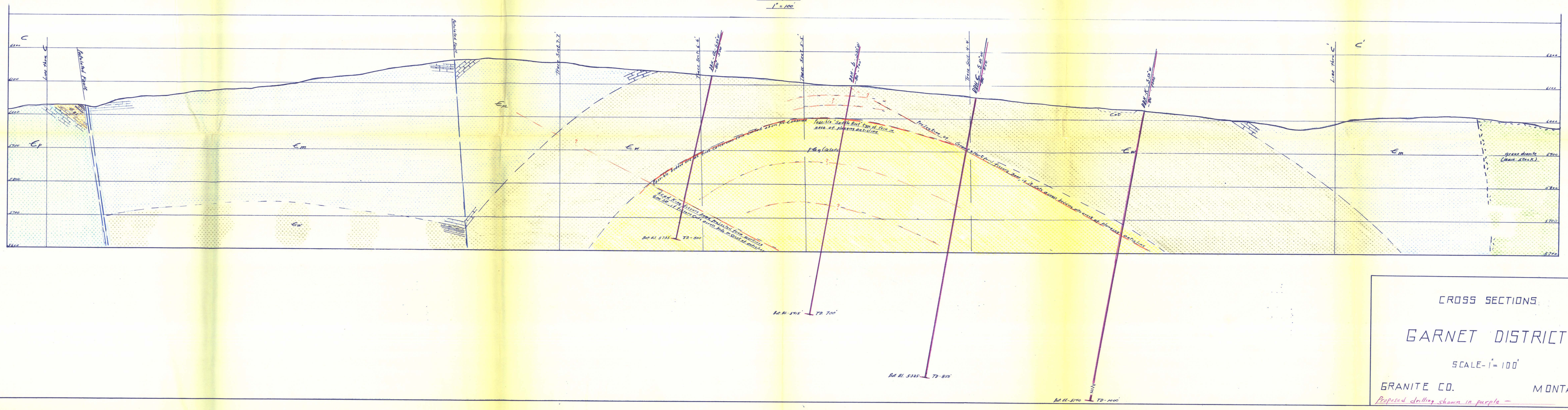
1" = 100'



Section C-C'

Looking NW

1" = 100'



CROSS SECTIONS

GARNET DISTRICT

SCALE-1" = 100'

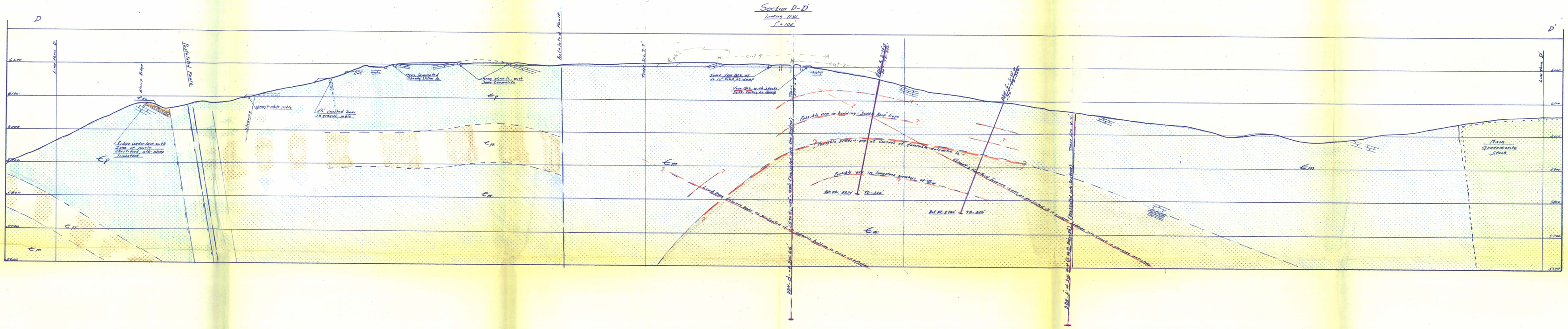
GRANITE CO. MONTANA

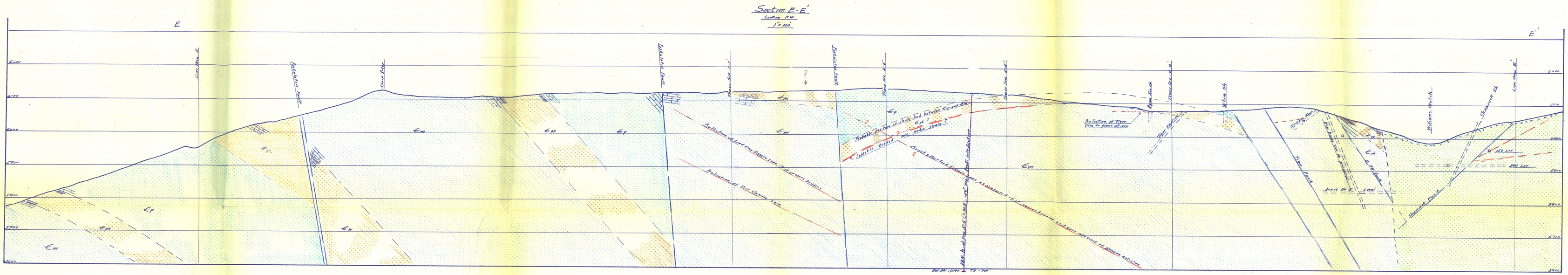
Proposed drilling shown in purple —

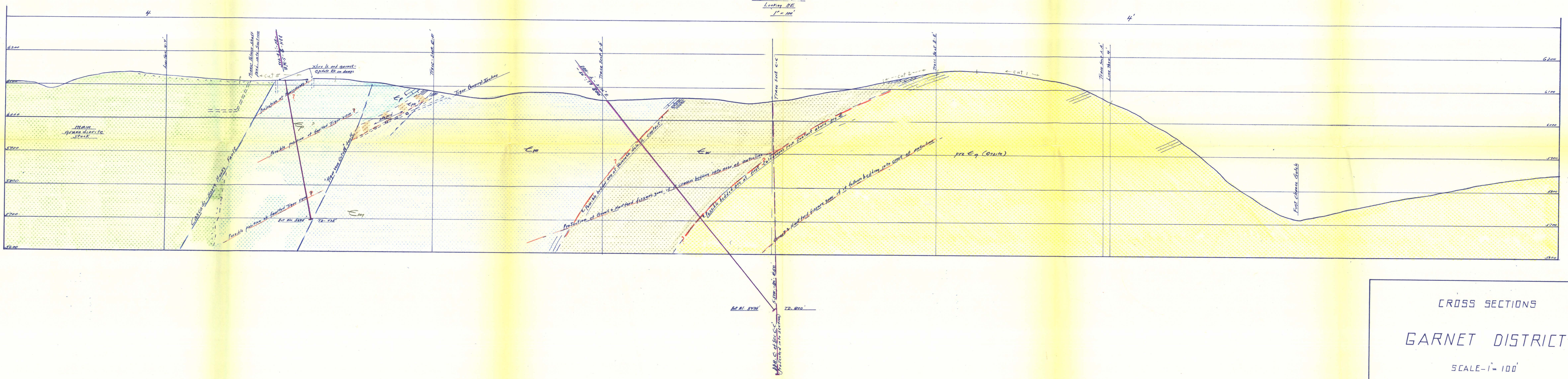
J.D. Drum 4/64

Map 5

To accompany application submitted by:
American Mining Co., 700 Securities Bldg, Seattle 1, Wash.







CROSS SECTIONS

GARNET DISTRICT

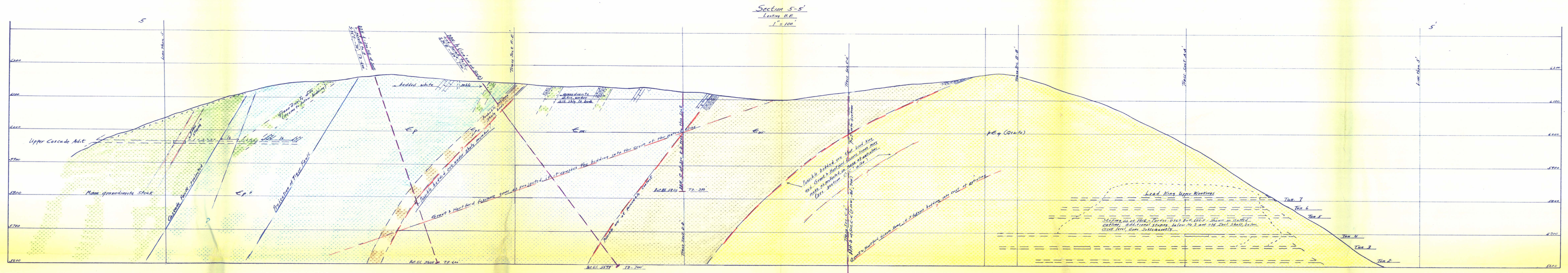
SCALE-1" = 100'

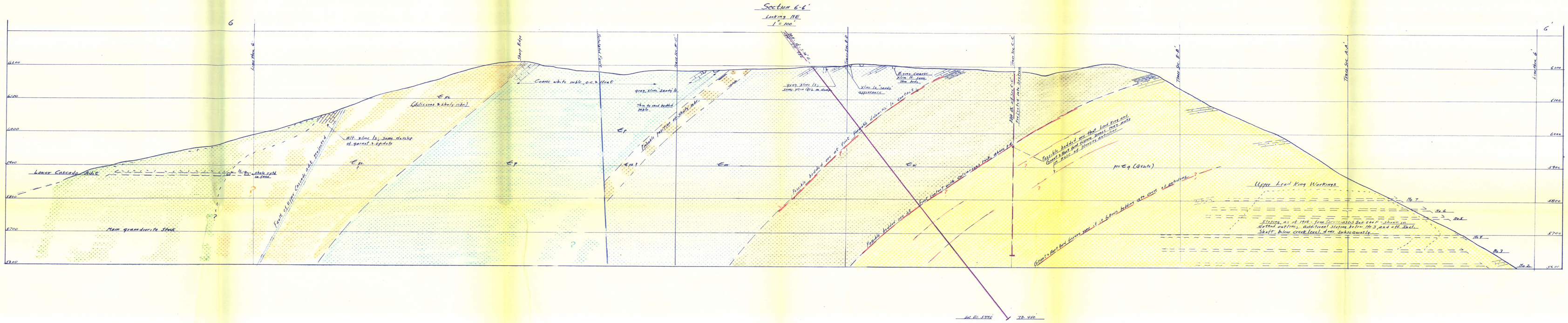
GRANITE CO. MONTANA

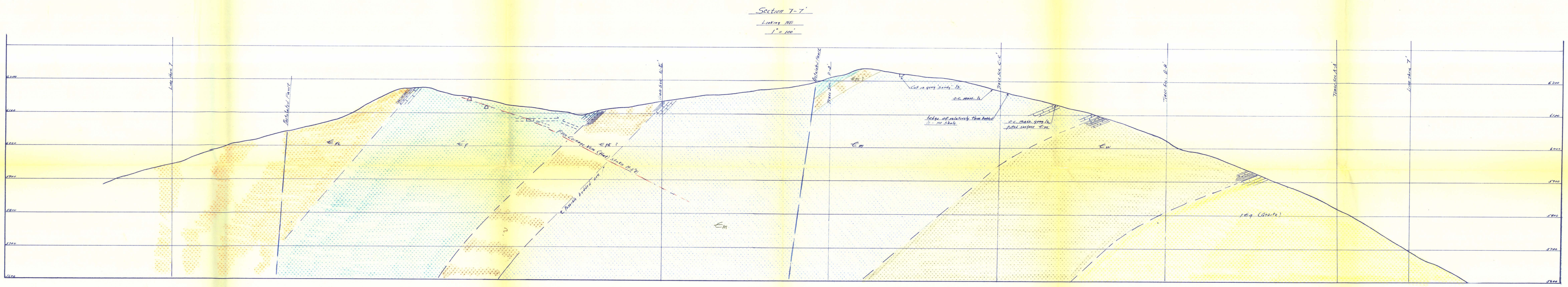
Proposed drilling shown in purple

To accompany application Submitted by:
American Mining Co., 700 Securities Bldg Seattle, Wash

Map 6
(ONE OF 2)







CROSS SECTIONS

GARNET DISTRICT

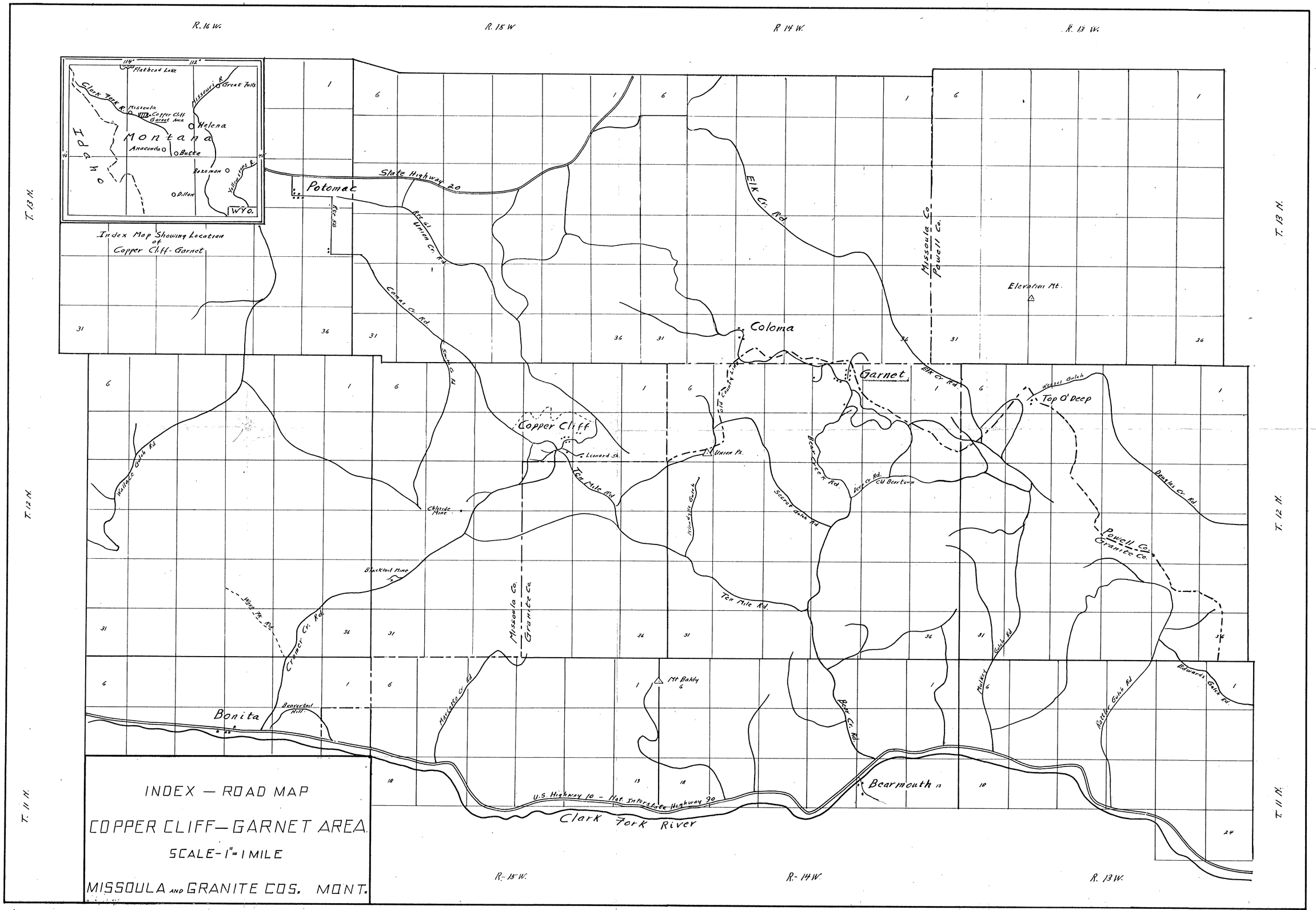
SCALE-1" = 100'

GRANITE CO. MONTANA

Proposed drilling shown in purple
(See Cross Sections on Maps 5 & 6 for most of the holes)

To accompany application of: American Mining Co.
700-Securities Bldg, Seattle 1, Wash

Map 7



Map 1
(O.M.E. Set No. 2)

To accompany application Submitted by:
American Mining Co.-700 Securities Bldg, Seattle 1, Wn.

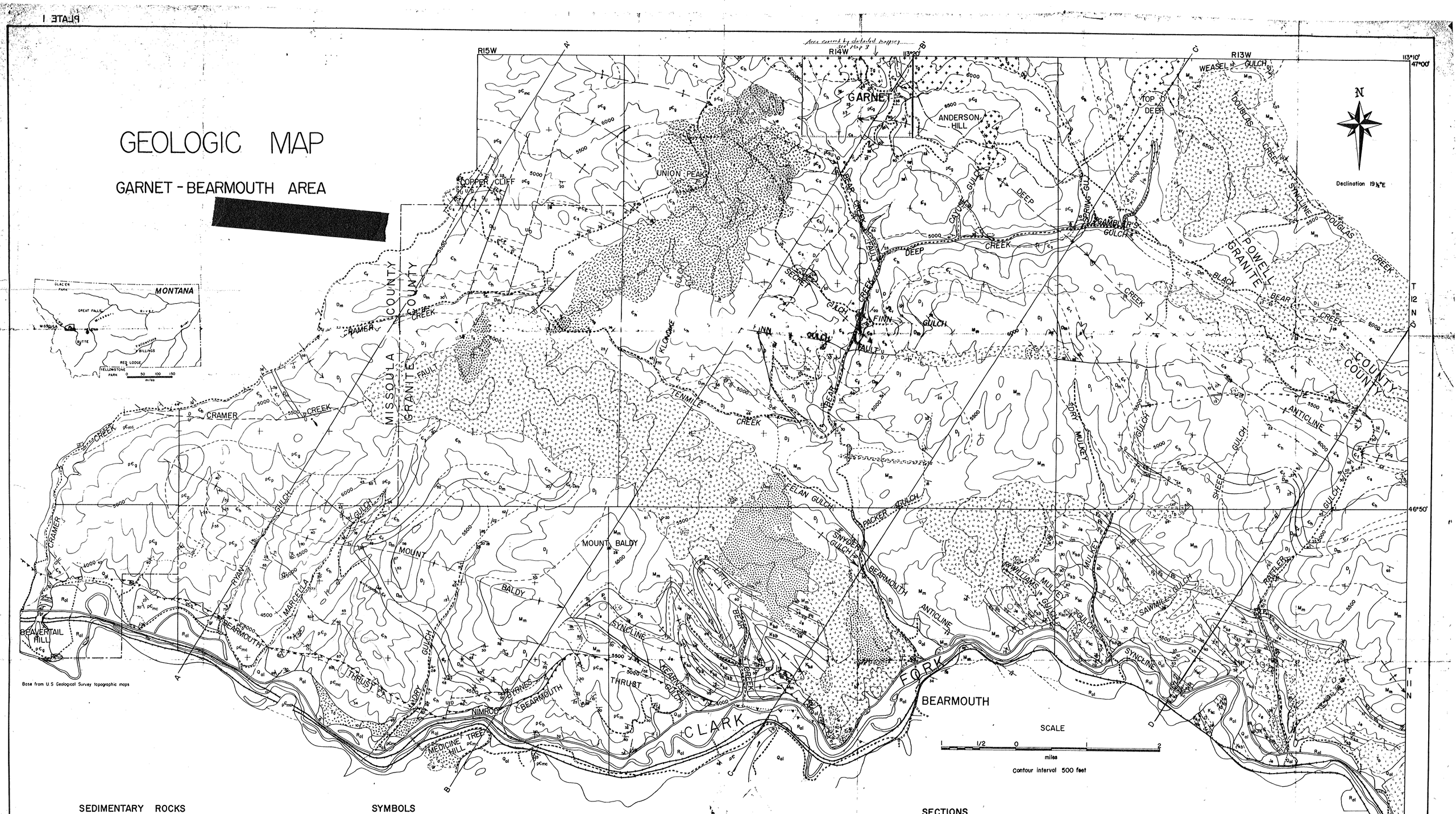
Map 1

PLATE I

GEOLOGIC MAP

GARNET - BEARMOUTH AREA

[redacted]



SEDIMENTARY ROCKS

CENOZOIC

Recent	R_{al}	Alluvium, colluvium, floodplains, etc.
Pleistocene	Q_{al}	Glaciofluvial gravels
Pleistocene or Pliocene	T_{gr}	Gravels capping erosion surfaces
Miocene - Oligocene	T_v	Volcanic rich sediments

MESOZOIC

Upper Cretaceous	K_c	Colorado [redacted]
	K_d	[redacted] group
Lower Cretaceous	K_{kd}	Kootenai fm: Upper calcareous mbr
	K_{kc}	Upper clastic mbr
	K_{kb}	Lower calcareous mbr
	K_{ka}	Lower clastic mbr
Jurassic	J_m	Morrison fm (restricted)
	J_e	Ellis group (Swift fm, Rierdon fm, Sawtooth fm)

PALEOZOIC

Permian	P_p	Phosphoria fm
Pennsylvanian	P_q	Quadrant fm
	P_a	Amsden fm
Mississippian	M_m	Madison group
Devonian	D_j	Jefferson fm (Three Forks fm? at top)
	D_m	Maywood fm

Cambrian

ϵ_r	Red Lion fm
ϵ_h	Hasmark fm
ϵ_s	Silver Hill fm
ϵ_f	Flathead fm

PRECAMBRIAN

$p\epsilon_p$	Pilcher fm
$p\epsilon_g$	Garnet Range fm
$p\epsilon_{mc}$	McNamara fm
$p\epsilon_b$	Bonner fm
$p\epsilon_m$	Miller Peak fm

IGNEOUS ROCKS

T_r	Rhyolite
T_b	Basalt, andesite
T_d	[redacted] Trachyte (?)
T_g	Granodiorite stocks, dikes and sills
	Basic dikes, sills

SYMBOLS

FOLDS – Arrow indicates direction of plunge

(Overturned) ANTICLINE — (Overturned) SYNCLINE

FAULTS – Established – Inferred – Concealed

THRUST - Points on upthrown side

NORMAL — U D

REVERSE – Hachures on upthrown side

STRIKE SLIP

CONTACTS — Established Inferred Concealed

ATTITUDES

STRIKE AND DIP OF SEDIMENTS 23

VERTICAL

OVERTURNED 65

STRIKE AND DIP OF JOINTS 45

FOLIATION 42

TOPOGRAPHY

STREAMS — Permanent Intermittent

LAKES

CULTURE

ROADS — Surfaced Gravel Jeep trail

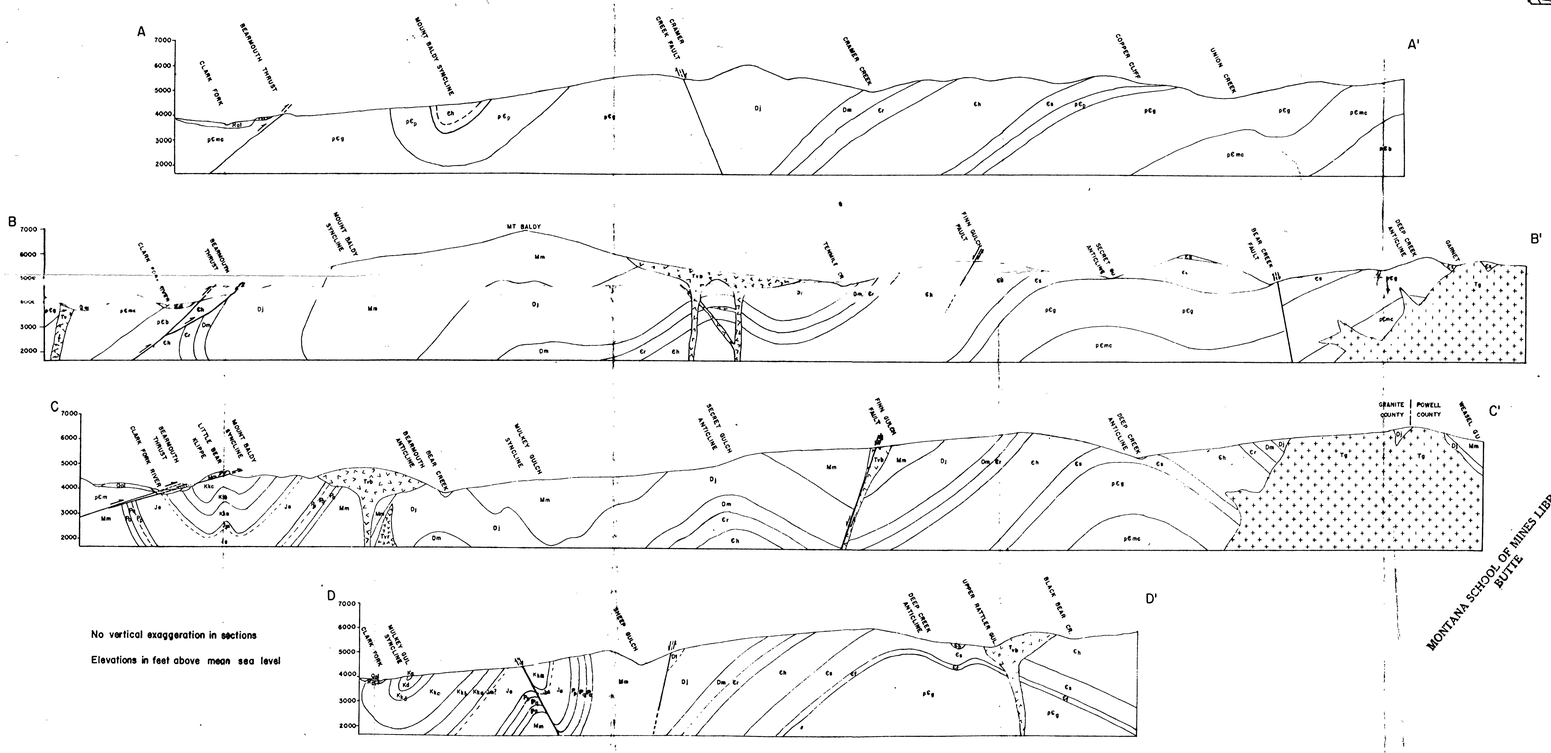
RAILROADS

GEOLOGY BY: M. E. Kauffman

assisted by: W. S. Ford - 1957

V. R. Broz - 1958

SECTIONS



No vertical exaggeration in sections

Elevations in feet above mean sea level

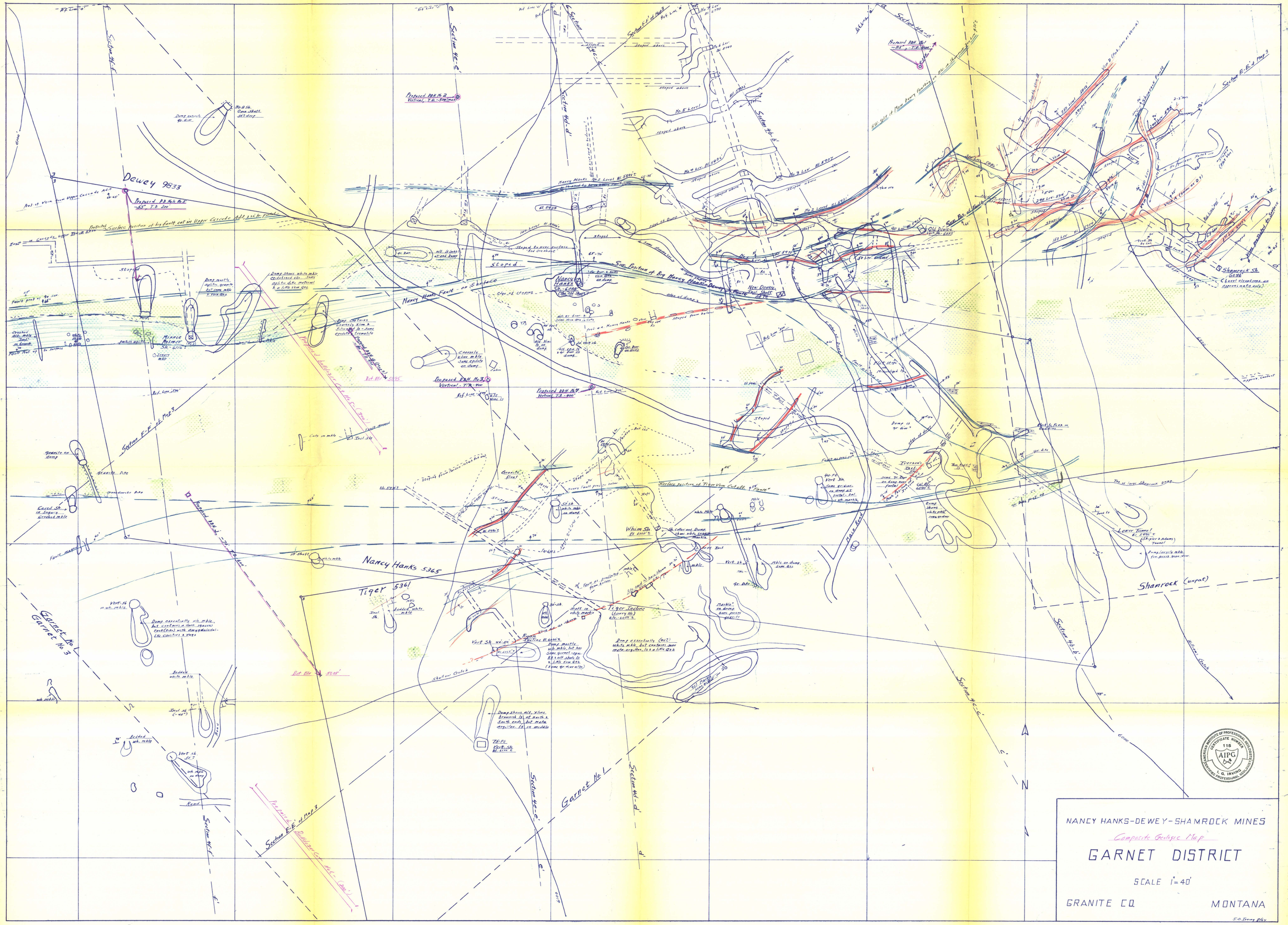
MONTANA SCHOOL OF MINES LIBRARY BUTTE

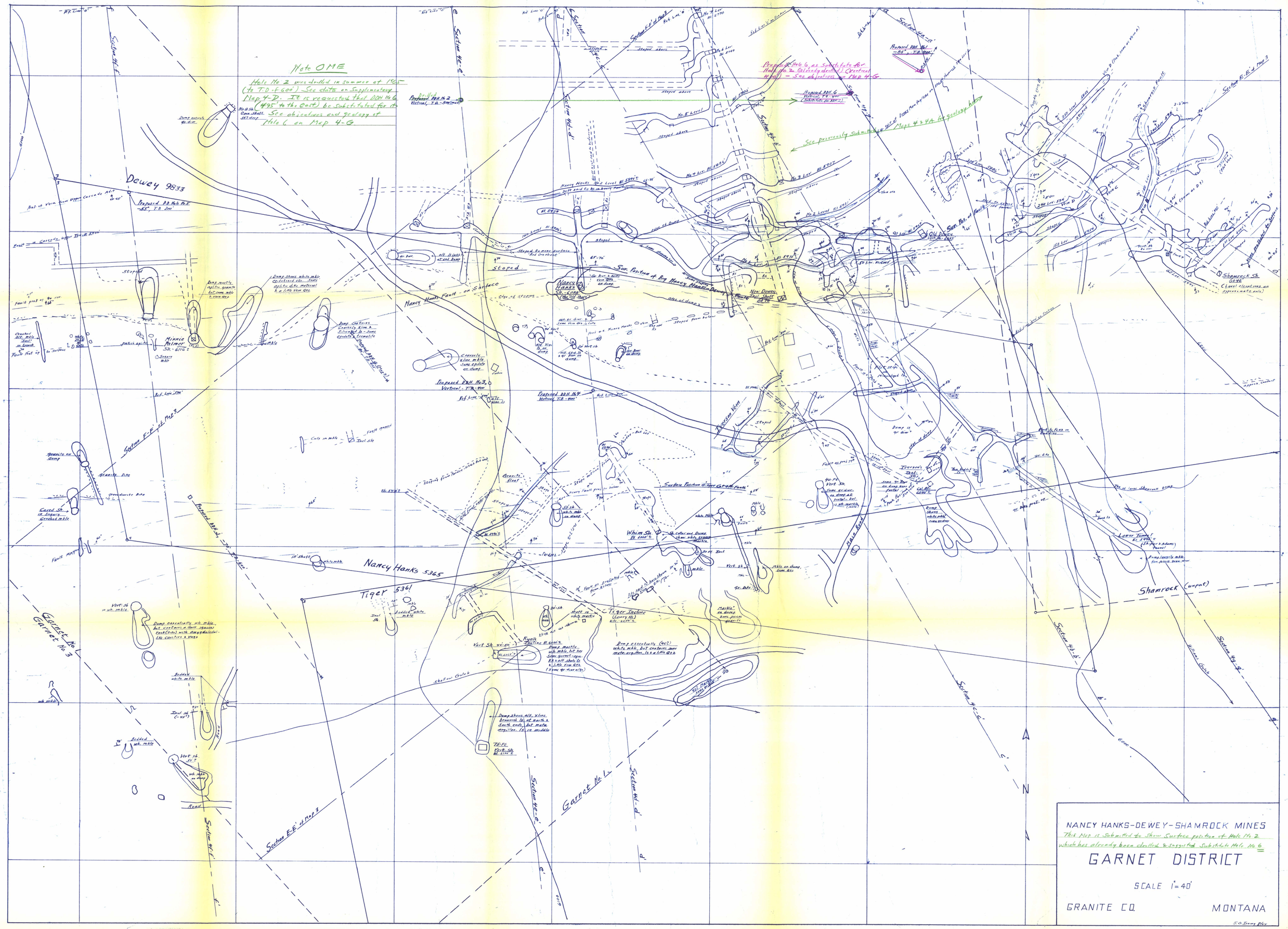
MARVIN E. KAUFFMAN PRINCETON UNIVERSITY 1969

To accompany application submitted by: American Mining Co. 700 Securities Bldg, Seattle 1, Wn

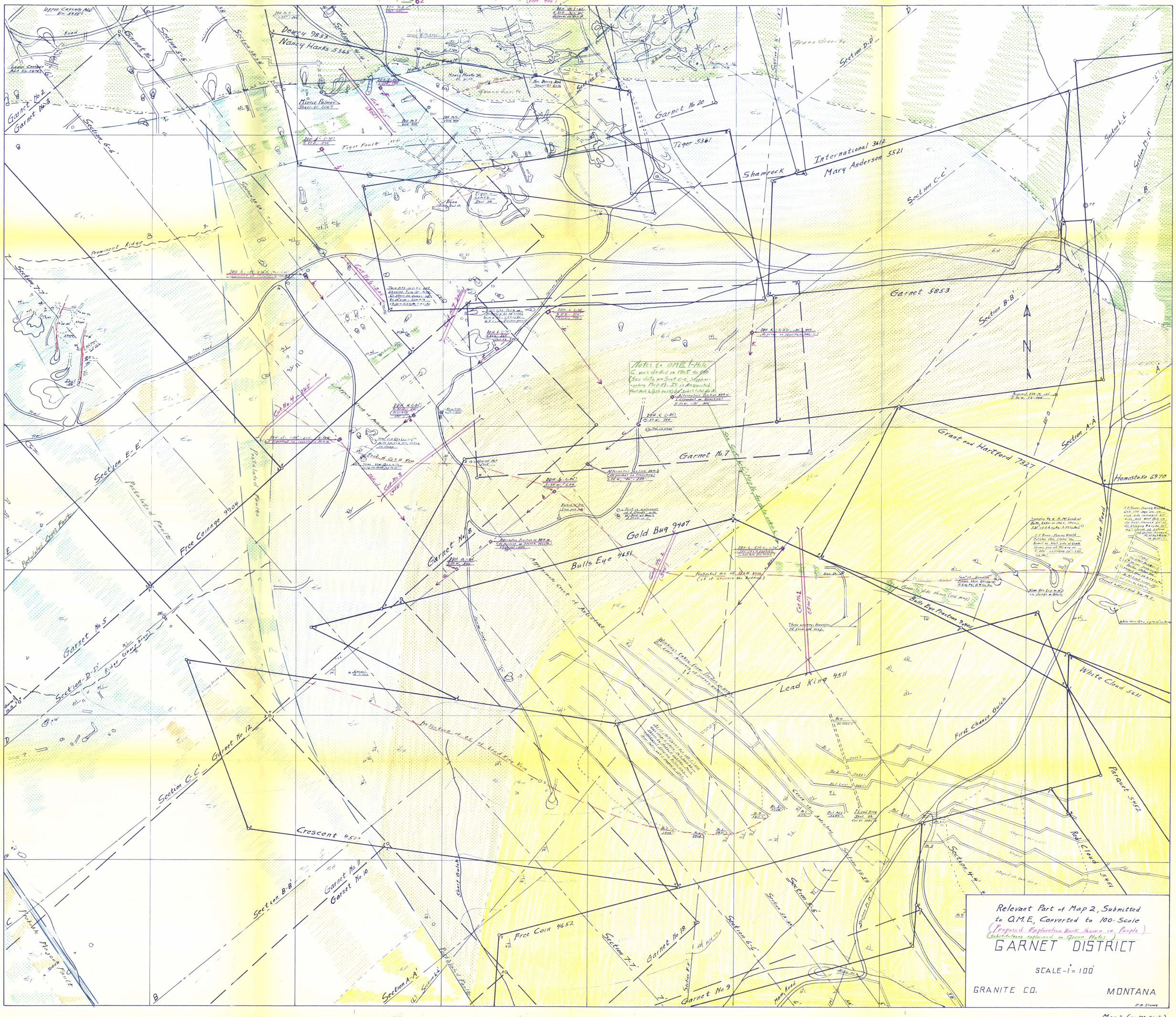
Map 8

ONE sheet

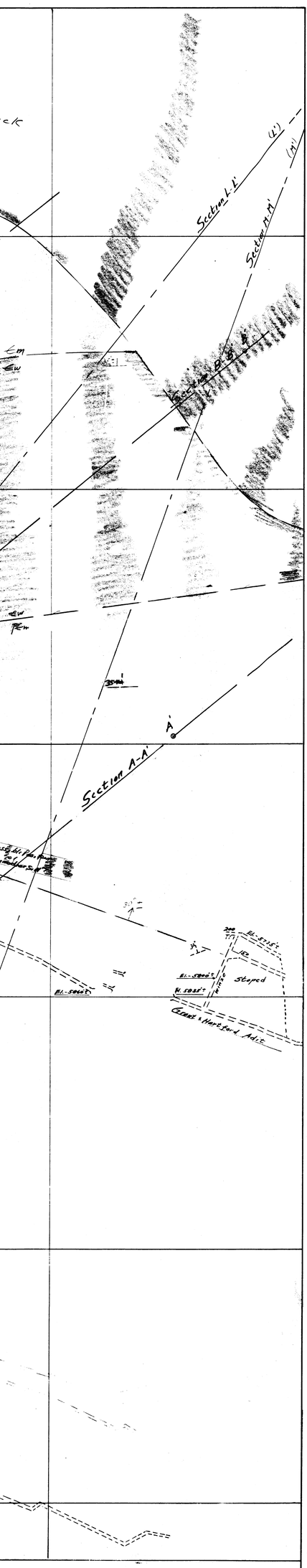

NANCY HANKS-DEWEY-SHAMROCK MINES
Composite Geologic Map
GARNET DISTRICT
SCALE 1"=40'
GRANITE CO.
MONTANA
Map 4
Dewey 9833
Nancy Hanks 5365
Tiger 5361
Shamrock (unpat)
Garnet No 1
Garnet No 3
Section F-F' of Map 3
Section H-H'
Section K-K'
Section L-L'
Section M-M'
Section E-E' of Map 3
Proposed DDH No 2 Vertical, T.D. 500 feet
Proposed DDH No 3 Vertical - T.D. 900
Proposed DDH No 4 Vertical, T.D. 900
Proposed DDH No 1 85° T.D. 900
Nancy Hanks Fault on Surface
Site Position of Big Nancy Hanks-Dewey Fault
Surface position of Tiger View Cutoff Fault
Surface position of big fault cut in Upper Cascade Adit
Nancy Hanks No 2 Level El 5391±
Nancy Hanks No 3 Level El 5292±
Nancy Hanks No 4 Level El 5092±
No 5 Level El 5790
No 6 Level El 5790
No 7 Level El 5790
No 8 Level El 5790
No E Level
Stoped above
Stoped
Old Dewey Shaft No 2 East
New Dewey Vertical Shaft
Shamrock Sh. 5098
Lower Tunnel El 5190±
Whim Sh. El 5200±
Tiger Incline
Ryan Incline
Shallow Gulch
Wheelbarrow Gulch
Miners Road
Granite on dump
Granite Dike
Greenstone Dike
Cased Sh. in Argillite Crushed mble
Fault matrix
Vert. Sh. in wh. mble
Dump essentially wh. mble, but contains a dark (greenish) rock (dike) with dark gyrodolomite-like crystals & veins
Bedded white mble
Vert. Sh. 50'±
Dump essentially wh. mble, but contains some argillite, 15 to 1 of argillite to mble
Dump shows wh. & some argillite
Dump shows white mble, crystallized calc. spar, apatite, dike material & a little vein qtz
Dump mostly wh. mble, but has some garnet-rock, RR & soft shale & a little vein qtz. (2 pieces of marble)
Dump shows wh. & some argillite, 15 to 1 of argillite to mble
Dump shows wh. & some argillite, 15 to 1 of argillite to mble
Dump shows wh. & some argillite, 15 to 1 of argillite to mble
Dump essentially (90%) white mble, but contains some mble-argillite, 15 to 1 of argillite qtz
Dump shows wh. & some argillite, 15 to 1 of argillite to mble
Dump shows wh. & some argillite, 15 to 1 of argillite to mble
Dump shows wh. & some argillite, 15 to 1 of argillite to mble


Note OME
Hole No 2 was drilled in summer of 1965 (to T.D. +600) See data on Supplementary Map 4-D. It is requested that DDH No 6 (495' to the East) be substituted for its Open shaft See objectives and geology of Hole 6 on Map 4-G
Proposed DDH No 6 as Substitute for Hole No 2 (already drilled) (Vertical) (495' East of Hole No 2) - See objectives on Map 4-G
See previously Submitted Map 4-D & Sections of Drill Run Profiles on Map 4-D & Maps 4-3 & 4-4 for geology here
Dewey 9833
Nancy Hanks 5365
Tiger 5361
Shamrock (unpat)
Garnet No 1
Garnet No 3
Section E-E' of Map 3
Section H-H'
Section H-a'
Section H-b'
Section H-c'
Section H-d'
Section H-e'
Section H-f'
Section H-g'
Section F-F' of Map 3
Section E-E' of Map 3
Section F-F' of Map 3
Section E-E' of Map 3
Nancy Hanks Fault on Surface
Surface Position of Tiger Contact
Surface Position of Big Nancy Hanks-Dewey
Surface Position of Fault
Minnie Palmer Sh. 6716
Nancy Hanks Sh. 6708
Old Dewey Sh. 6676
New Dewey Main Shaft 6676
Shamrock Sh. 6676
Whim Sh. El 5000
Tiger Incline
Kyan Incline
Lower Tunnel El 5500
Shallow Gulch
Hillman Gulch
Proposed DDH No 1
Proposed DDH No 2 Vertical, T.D. 500'
Proposed DDH No 3, Vertical, T.D. 400'
Proposed DDH No 4 Vertical T.D. 400'
Proposed DDH No 5 T.D. 400'
Road
Granite Dike
Granite on dump
Dump consists of white mble, but contains a few rock (lists) with dmg & basical-like cavities & vugs
Dump essentially (90%) white mble, but contains some mafic augites, 1 to 2 little qtz
Dump mostly white mble but has some garnet-aqu. RR & a little qtz & little iron qtz. (some qtz diorite)
Dump shows alt. xline brownish lst at north & south ends, but mafic augites, lst in middle
Dump shows white mble calcareous etc. Some aplite dike material & a little iron qtz
Dump mostly aplite granite but some mble & some qtz
Dump contains Crystals Kyanite & Silicified lst - some epidote & tremolite
Dump essentially white mble, but contains a few rock (lists) with dmg & basical-like cavities & vugs
Marble on dump, some qtz
Dump shows white mble some garnet
Dump essentially white mble
Dump essentially white mble, but contains a few rock (lists) with dmg & basical-like cavities & vugs
Dump consists of white mble
Dump shows white mble
Dump consists of white mble
Dump consists of white mble
Dump consists of

Note: To OME: Hole No 2 was put down in 1905 to 600' (See data on Supplimentary Map 4-D) It is requested that Hole 6 (495' to east) be substituted for it (See data on Hole 6, on Map 4-6 for data on proposed No 6)



Map 2 (on 100-scale)



OJECTIONS TO ELEV. 5800'

(A horizontal plane where distance below present surface ranges up to more than 400')

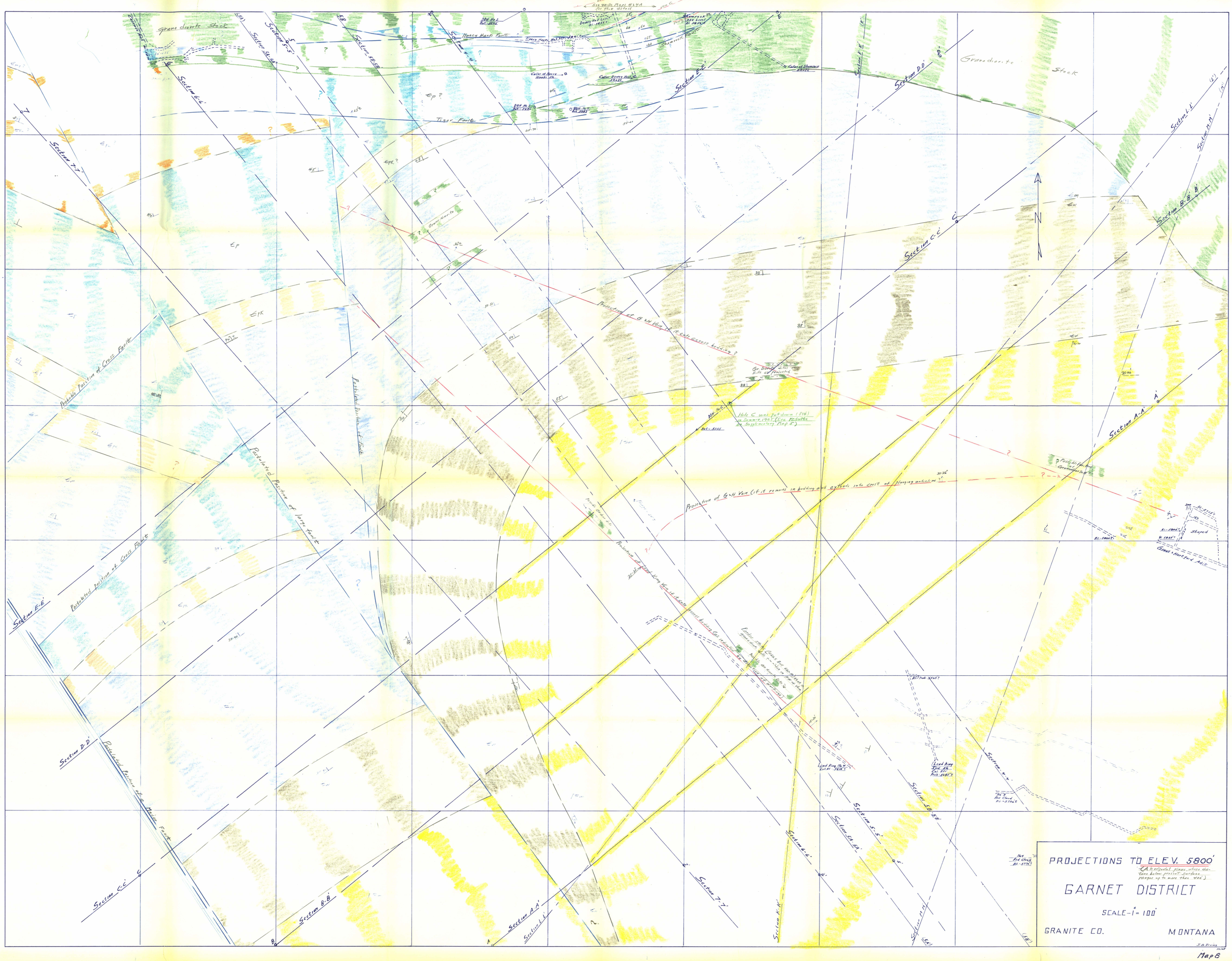
GARNET DISTRICT

SCALE-1" = 100'

NITE CO. MONTANA

J. G. Irving

Map 8



PROJECTIONS TO ELEV. 5800'

(A horizontal plane whose distance below present surface ranges up to more than 400')

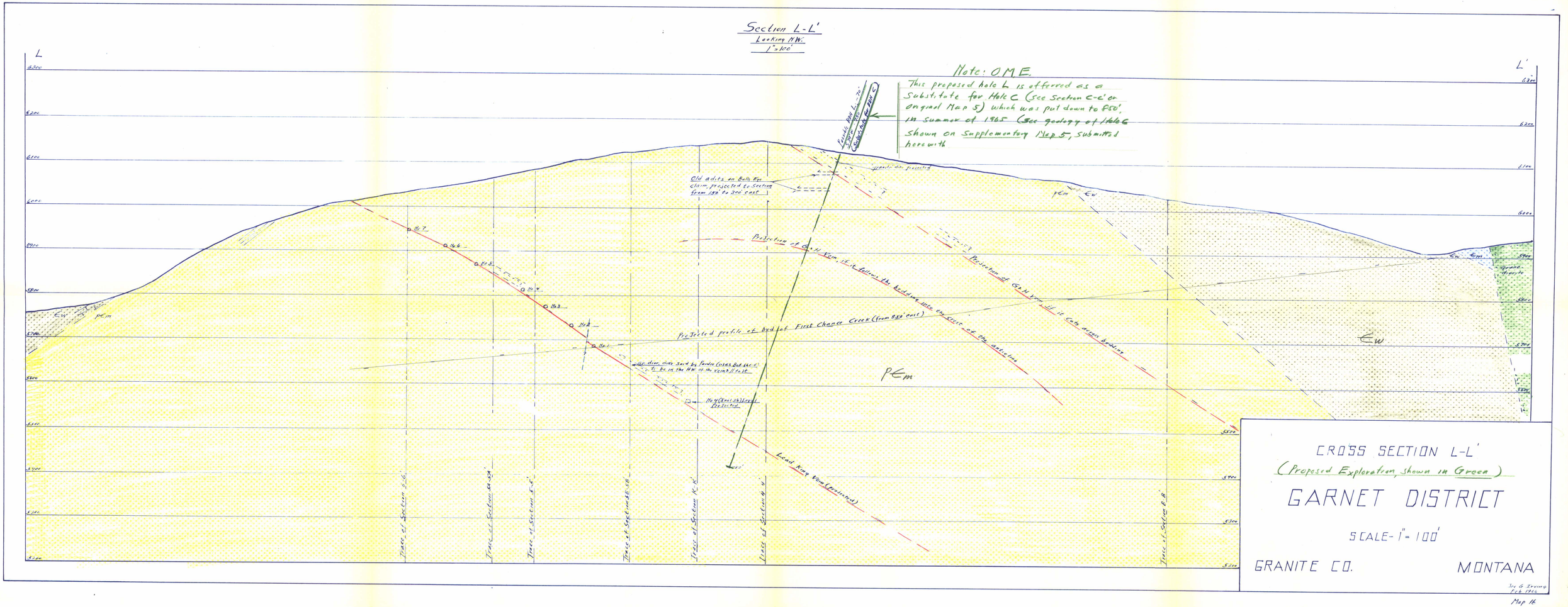
GARNET DISTRICT

SCALE - 1" = 100'

GRANITE CO. MONTANA

J.D. Davies

Map 8



CROSS SECTION L-L'

(Proposed Exploration, shown in Green)

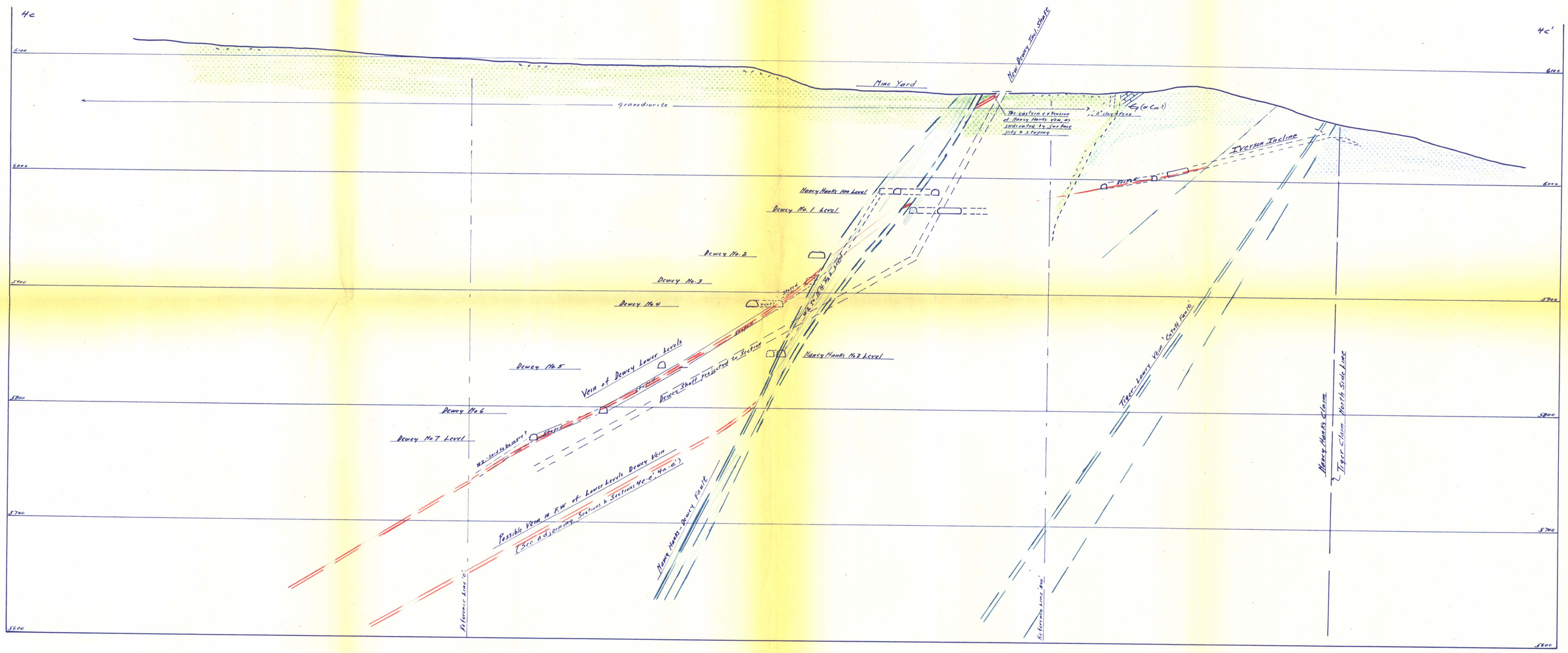
GARNET DISTRICT

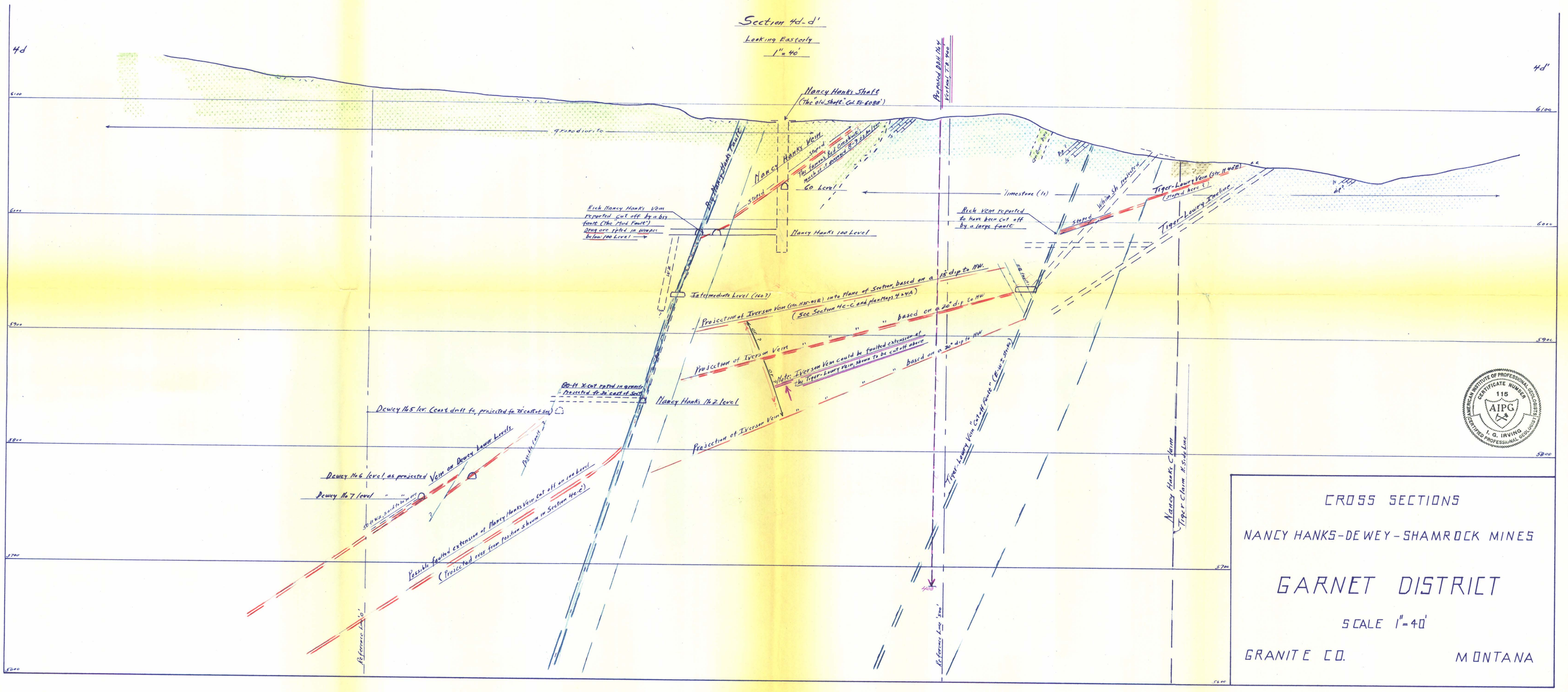
SCALE-1" = 100'

GRANITE CO. MONTANA

Ivy G. Irving
Feb 1966

Map 16





CROSS SECTIONS

NANCY HANKS-DEWEY-SHAMROCK MINES

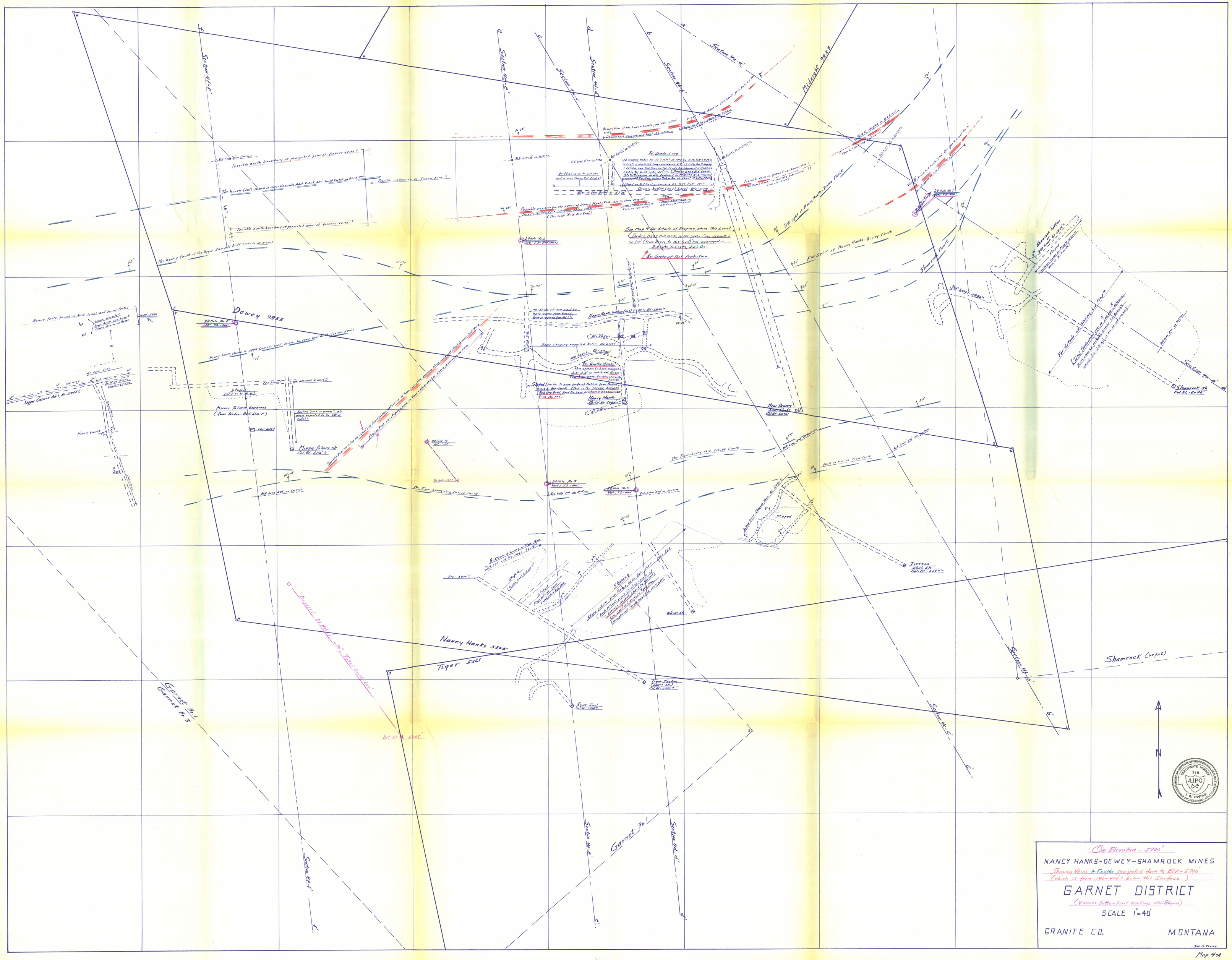
GARNET DISTRICT

SCALE 1" = 40'

GRANITE CO. MONTANA

Joe G. Irving

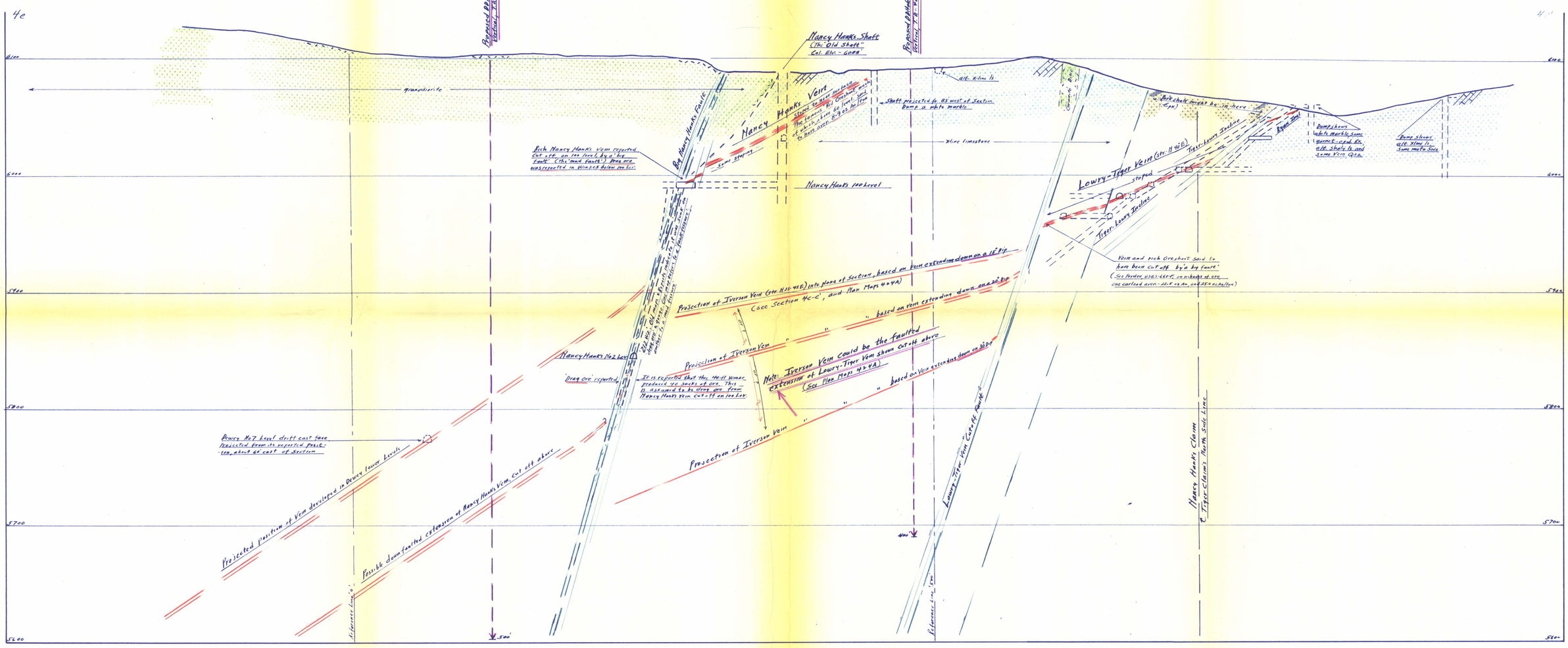
Map 4-C


On Elevation – 5700'
NANCY HANKS-DEWEY-SHAMROCK MINES
Showing Veins & Faults projected down to Elv. – 5700'
(which is from 340 – 420' ± below the Surface)
GARNET DISTRICT
(Various Bottom-Level Workings also Shown)
SCALE 1" = 40'
GRANITE CO.
MONTANA
Map 4A
Dewey 9833
Nancy Hanks 5365
Tiger 5361
Shamrock (unpat)
Garnet No. 1
Garnet No. 3
Upper Cascade Adit El. 5950'
Shamrock Sh. Col. El. – 6046'
Iversen Incl. Sh. Col. El. – 6000'
Section 46-a'
Section 46-b'
Section 46-c'
Section 46-d'
Section 46-e'
Section 46-f'
Section 46-g'
Section 46-h'
Section 46-i'
Section 46-j'
Section 46-k'
Section 46-l'
Section 46-m'
Section 46-n'
Section 46-o'
Section 46-p'
Section 46-q'
Section 46-r'
Section 46-s'
Section 46-t'
Section 46-u'
Section 46-v'
Section 46-w'
Section 46-x'
Section 46-y'
Section 46-z'
Section 46-aa'
Section 46-bb'
Section 46-cc'
Section 46-dd'
Section 46-ee'
Section 46-ff'
Section 46-gg'
Section 46-hh'
Section 46-ii'
Section 46-jj'
Section 46-kk'
Section 46-ll'
Section 46-mm'
Section 46-nn'
Section 46-oo'
Section 46-pp'
Section 46-qq'
Section 46-rr'
Section 46-ss'
Section 46-tt'
Section 46-uu'
Section 46-vv'
Section 46-ww'
Section 46-xx'
Section 46-yy'
Section 46-zz'
Section 46-aaa'
Section 46-bbb'
Section 46-ccc'
Section 46-ddd'
Section 46-eee'
Section 46-fff'
Section 46-ggg'
Section 46-hhh'
Section 46-iii'
Section 46-jjj'
Section 46-kkk'
Section 46-lll'
Section 46-mmm'
Section 46-nnn'
Section 46-ooo'
Section 46-ppp'
Section 46-qqq'
Section 46-rrr'
Section 46-sss'
Section 46-ttt'
Section 46-uuu'
Section 46-vvv'
Section 46-www'
Section 46-xxx'
Section 46-yyy'
Section 46-zzz'
Section 46-aaaa'
Section 46-bbbb'
Section 46-cccc'
Section 46-dddd'
Section 46-eeee'
Section 46-ffff'
Section 46-gggg'
Section 46-hhhh'
Section 46-iiii'
Section 46-jjjj'
Section 46-kkkk'
Section 46-llll'
Section 46-mmmm'
Section 46-nnnn'
Section 46-oooo'
Section 46-pppp'
Section 46-qqqq'
Section 46-rrrr'
Section 46-ssss'
Section 46-tttt'
Section 46-uuuu'
Section 46-vvvv'
Section 46-wwww'
Section 46-xxxx'
Section 46-yyyy'
Section 46-zzzz'
Section 46-aaaaa'
Section 46-bbbbb'
Section 46-ccccc'
Section 46-ddddd'
Section 46-eeeee'
Section 46-fffff'
Section 46-ggggg'
Section 46-hhhhh'
Section 46-iiiii'
Section 46-jjjjj'
Section 46-kkkkk'
Section 46-lllll'
Section 46-mmmmm'
Section 46-nnnnn'
Section 46-ooooo'
Section 46-ppppp'
Section 46-qqqqq'
Section 46-rrrrr'
Section 46-sssss'
Section 46-ttttt'
Section 46-uuuuu'
Section 46-vvvvv'
Section 46-wwwww'
Section 46-xxxxx'
Section 46-yyyyy'
Section 46-zzzzz'
Section 46-aaaaaa'
Section 46-bbbbbb'
Section 46-cccccc'
Section 46-dddddd'
Section 46-eeeeee'
Section 46-ffffff'
Section 46-gggggg'
Section 46-hhhhhh'
Section 46-iiiiii'
Section 46-jjjjjj'
Section 46-kkkkkk'
Section 46-llllll'
Section 46-mmmmmm'
Section 46-nnnnnn'
Section 46-oooooo'
Section 46-pppppp'
Section 46-qqqqqq'
Section 46-rrrrrr'
Section 46-ssssss'
Section 46-tttttt'
Section 46-uuuuuu'
Section 46-vvvvvv'
Section 46-wwwwww'
Section 46-xxxxxx'
Section 46-yyyyyy'
Section 46-zzzzzz'
Section 46-aaaaaaa'
Section 46-bbbbbbb'
Section 46-ccccccc'
Section 46-ddddddd'
Section 46-eeeeeee'
Section 46-fffffff'
Section 46-ggggggg'
Section 46-hhhhhhh'
Section 46-iiiiiii'
Section 46-jjjjjjj'
Section 46-kkkkkkk'
Section 46-lllllll'
Section 46-mmmmmmm'
Section 46-nnnnnnn'
Section 46-ooooooo'
Section 46-pppppppp'
Section 46-qqqqqqqq'
Section 46-rrrrrrrr'
Section 46-ssssssss'
Section 46-tttttttt'
Section 46-uuuuuuuu'
Section 46-vvvvvvvv'
Section 46-wwwwwwww'
Section 46-xxxxxxxx'
Section 46-yyyyyyyy'
Section 46-zzzzzzzz'
Section 46-aaaaaaaa'
Section 46-bbbbbbbb'
Section 46-cccccccc'
Section 46-dddddddd'
Section 46-eeeeeeee'
Section 46-ffffffff'
Section 46-gggggggg'
Section 46-hhhhhhhh'
Section 46-iiiiiiii'
Section 46-jjjjjjjj'
Section 46-kkkkkkkk'
Section 46-llllllll'
Section 46-mmmmmmmm'
Section 46-nnnnnnnn'
Section 46-o

Section 4e-e'

Looking easterly

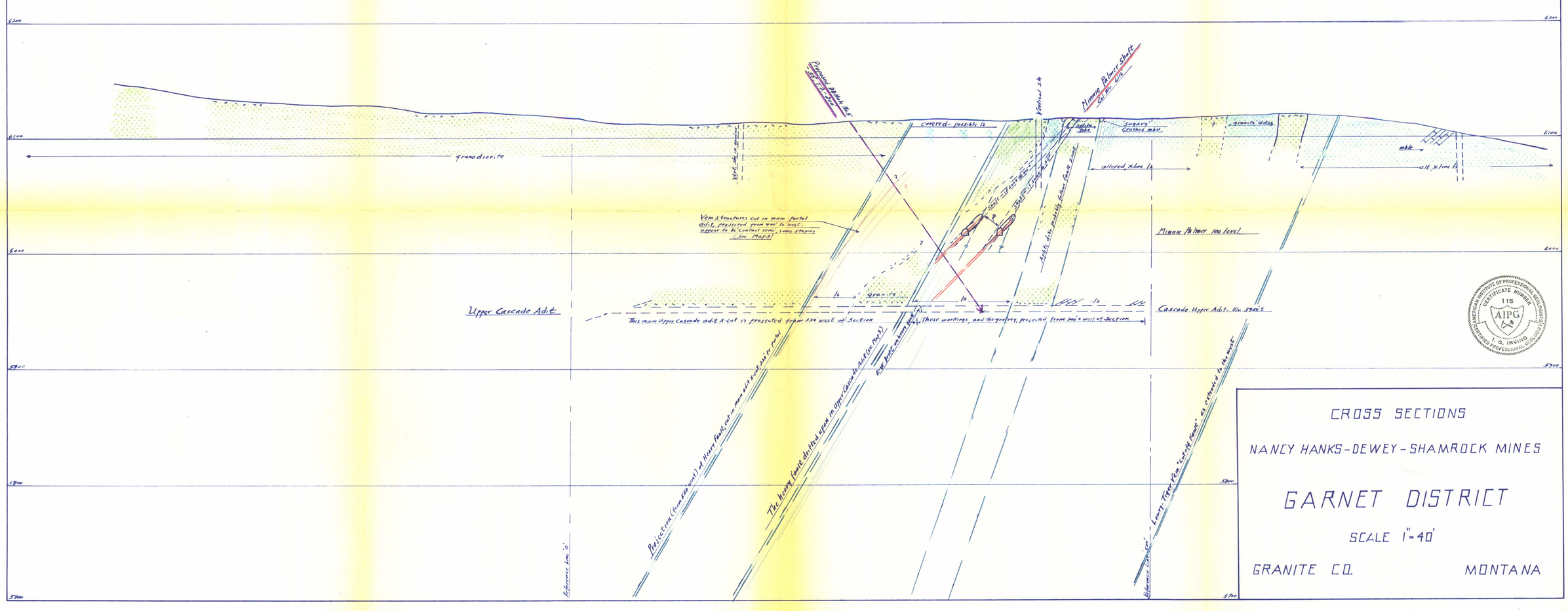
1" = 40'



Section 4f-f'

Looking Easterly

1" = 40'



CROSS SECTIONS

NANCY HANKS-DEWEY-SHAMROCK MINES

GARNET DISTRICT

SCALE 1"=40'

GRANITE CO. MONTANA

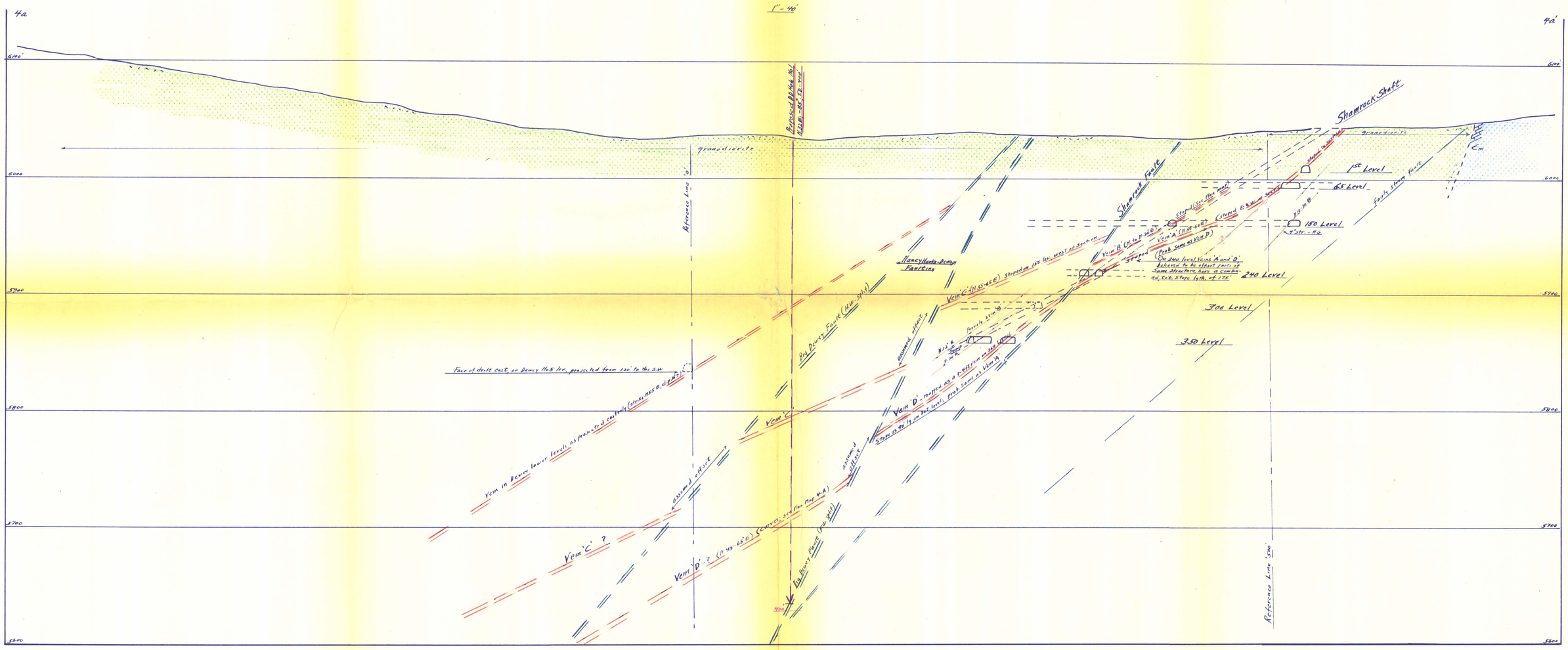
Joe G. Irving

Map 4-D

Section 4a-a'

Looking Northeasterly

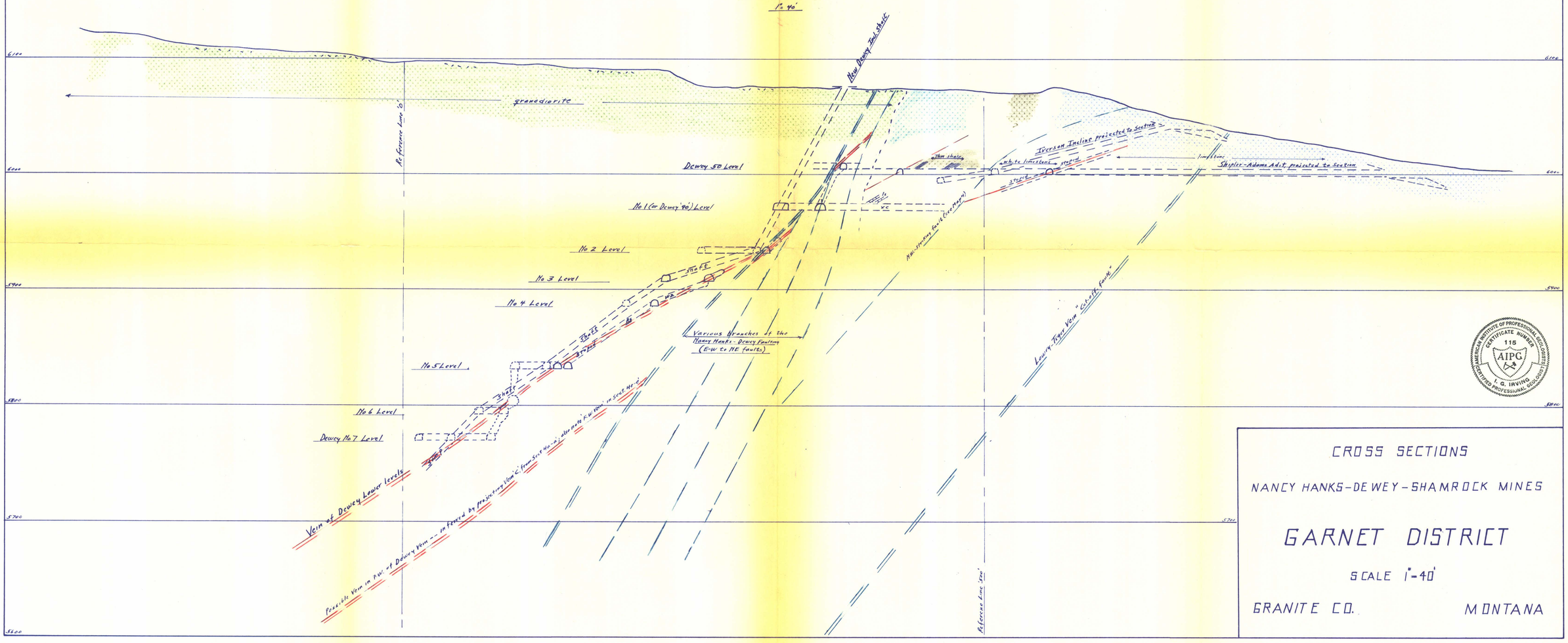
1" = 40'



Section 4b-b'

Looking Northeasterly

1" = 40'



CROSS SECTIONS

NANCY HANKS-DEWEY-SHAMROCK MINES

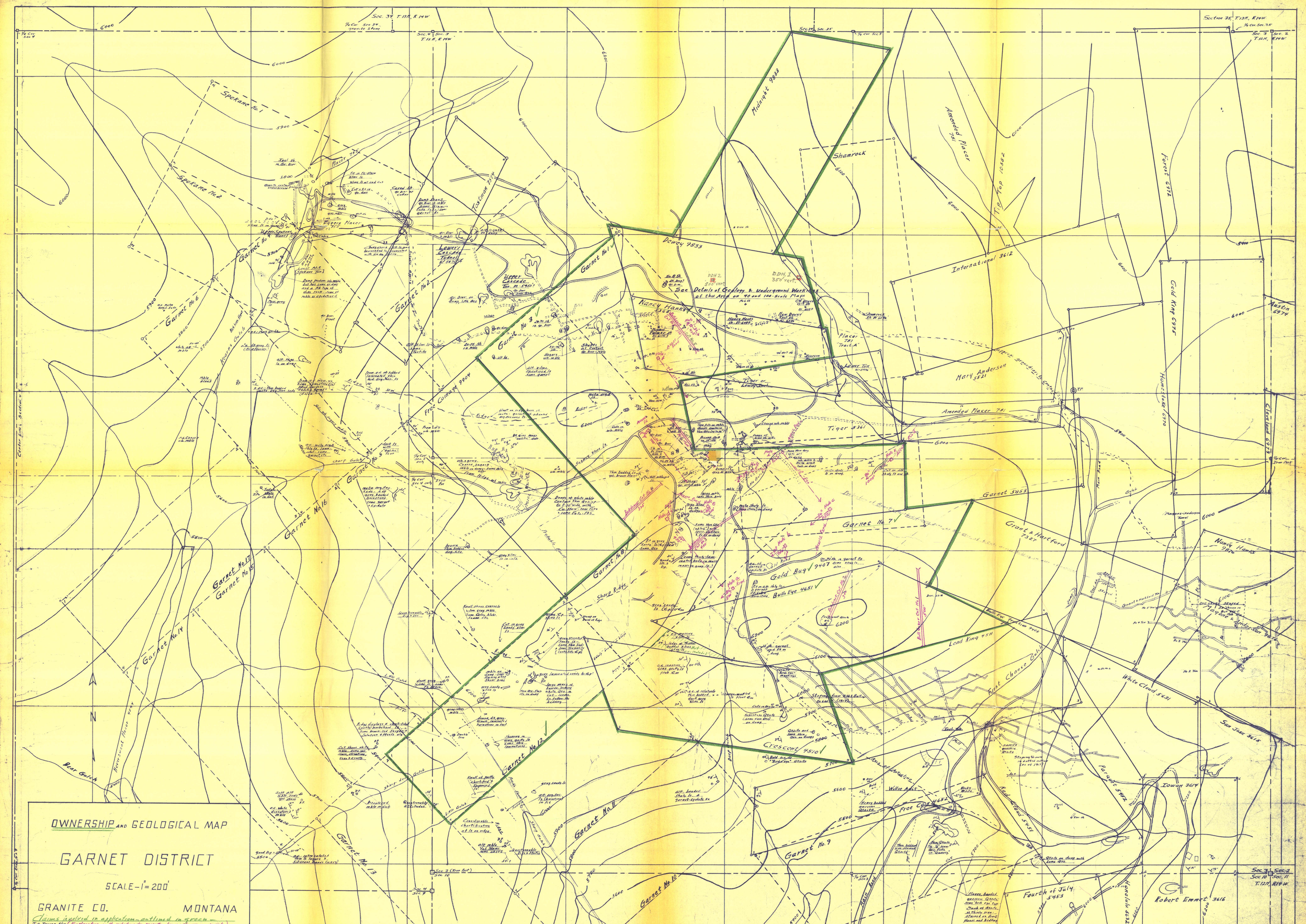
GARNET DISTRICT

SCALE 1"=40'

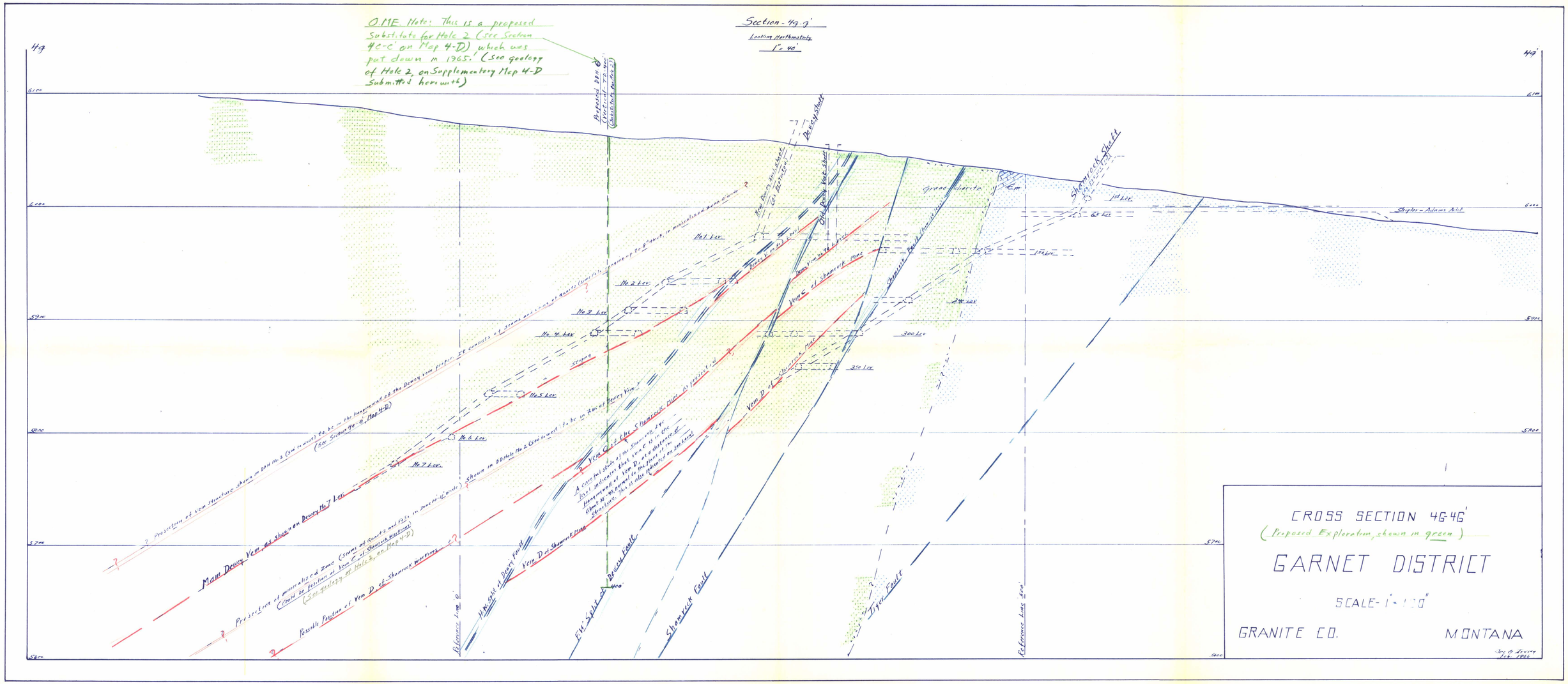
GRANITE CO. MONTANA

Joe G. Irving

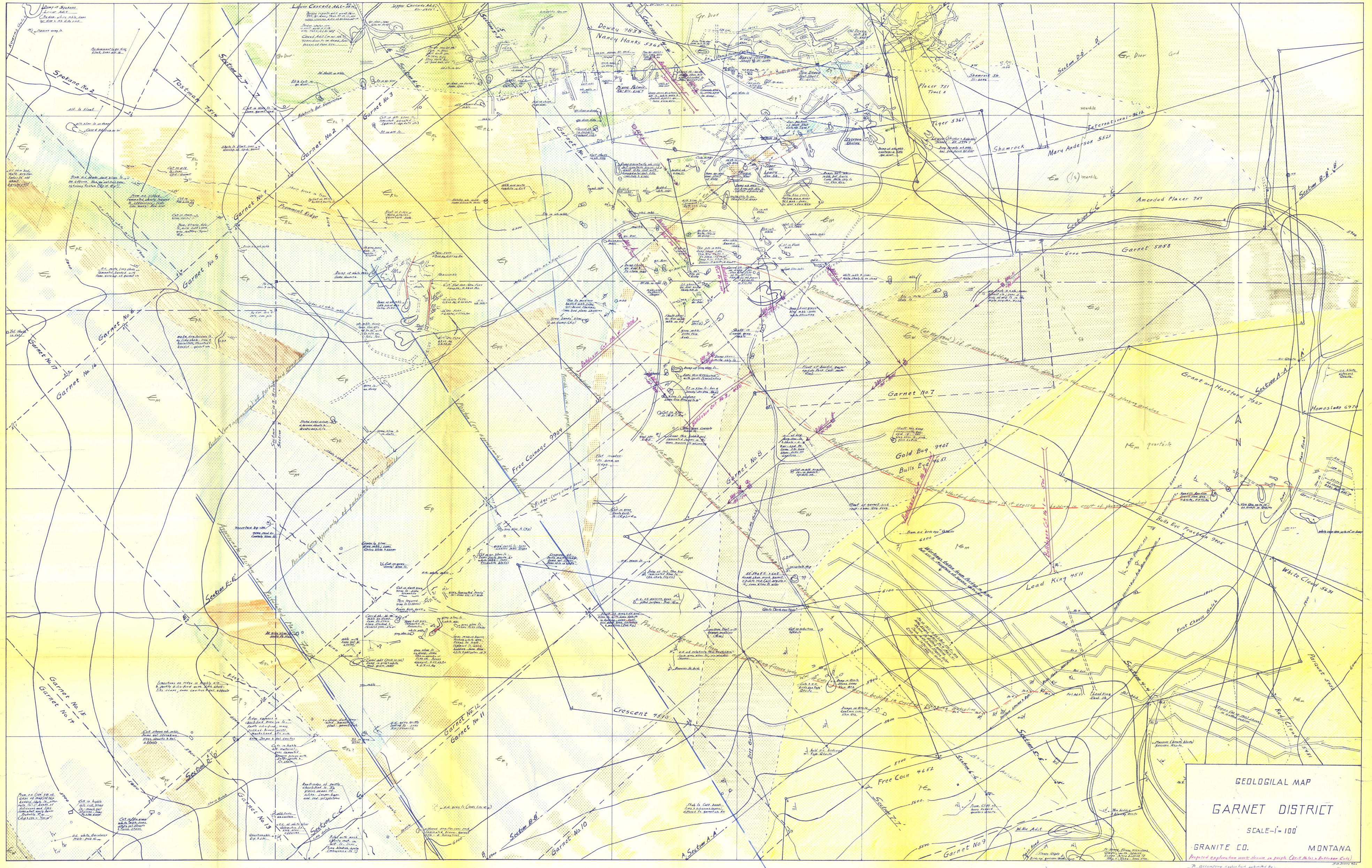
Map 4-B



Map 2 To accompany application Submitted by:
Amercan Mining Co., 700 Securities Bldg Seattle, Wn.


O.M.E. Note: This is a proposed Substitute for Hole 2 (see Section 4E-C on Map 4-D) which was put down in 1965. (See geology of Hole 2, on Supplementary Map 4-D Submitted herewith)
Section - 4G-G'
Looking Northwestly
1" = 40'
4G
4G'
Proposed Drill Hole
Old Dewey Vein Shaft
Shamrock Shaft
Shipler - Adams Mill
Granite
Em
1st Lev.
2d Lev.
No 1 Lev.
No 2 Lev.
No 3 Lev.
No 4 Lev.
No 5 Lev.
No 6 Lev.
No 7 Lev.
Stope
Vein C of Shamrock Mine
Vein D of Shamrock Mine
Main Dewey Vein as shown on Dewey No 7 Lev.
Projection of Vein Structure shown in DDH No 2 (Cross-cut) to be in the Hangingwall of the Dewey Vein proper. It consists of a stringer and zone of quartz (Garnet?) mineralized zone
(See Section 4E-E' Map 4-D)
Projection of mineralized zone (Stringer of Quartz and FeS2 in Dark Hornfels) (Could be position of Vein C of Shamrock Mine)
(See geology of Hole 2, on Map 4-D)
Possible Position of Vein D of Shamrock workings
Shown in DDH No 2 (Cross-cut) to be in the Dewey Vein
A conceptual sketch of the Shamrock Vein Structure, based on the fact indicated that Vein C is in the Hangingwall of Vein D, and a distance of about 40 feet to the plane of the Shamrock Fault. This is also indicated on section
Hangingwall of Dewey Fault
Fw Split of Dewey Fault
Shamrock Fault
Tyler Fault
Reference Line 0'
Reference Line 600'
400'
CROSS SECTION 4G-4G'
(Proposed Exploration, shown in green)
GARNET DISTRICT
SCALE- 1" = 100'
GRANITE CO.
MONTANA
Joy G. Irving
Feb. 1966

Map 4-G


GEOLOGILAL MAP
GARNET DISTRICT
SCALE-1"= 100'
GRANITE CO. MONTANA
Proposed exploration work shown in purple (Bert Metz & Bettinger Co.)
Lower Cascade Adit-Sec.
Upper Cascade Adit
Spokane No 2
Tostmark 7514
Section F-F'
Section E-E'
Section D-D'
Section B-B'
Section A-A'
Section C-C'
Section G-G'
Section H-H'
Section I-I'
Section J-J'
Section K-K'
Garnet No 1
Garnet No 2
Garnet No 3
Garnet No 4
Garnet No 5
Garnet No 6
Garnet No 7
Garnet No 8
Garnet No 9
Garnet No 10
Garnet No 11
Garnet No 12
Garnet No 13
Garnet No 14
Garnet No 15
Garnet No 17
Garnet No 18
Garnet 5838
Dowey 4833
Nancy Hanks 5365
Mark Twain
Prominent Ridge
Free Coinage 9904
Gold Bug 9407
Bulls Eye 4651
Bulls Eye Fraction 9405
Lead King 4511
Crescent 4510
Free Coin 4652
White Adit
Tiger 5361
Shamrock
Mary Anderson 5521
Amended Placer 751
Placer 751 Tract A
Grant and Hartford 7627
Homestake 6979
White Clouds 5621
First Chance Gulch
Projected Sales-pass
Projection of Grant & Hartford fissure zone (Cat Elk Zone)
Gr. Dior
Grd
Goss
marble
quartzite
Ep
Em
Ek
Ew

Map 3
(2/18 sh)

GEOLOGIC LEGEND

Cambrian

Hasmark

Silver Hill

Red Lion Fm: Upper member is limestone, with abundant siliceous and argillaceous laminae; lower member (Dry Creek Shale) consists of dark shale and siltstone--wavy banding of siliceous layers is characteristic. Thickness in area, approximately 325'

Pilgrim Fm: A dominantly dolomitic, massive, light gray, sandy appearing limestone. Some parts display a marked oolitic texture, other parts mottled with irregular light and dark gray markings and blotches . The rock is altered and highly marbleized at and near the granodiorite contact. It displays some tremolite and a decidedly crystalline nature farther out. The apparent thickness in the Garnet area is about 350-400'.

Park Shale: A generally greenish-gray shale, commonly calcareous, and in places has intercalated thin limestone beds. Considerably metamorphosed in the area, with the development of garnet and epidote. Apparent thickness at Garnet--about 90-110'.

Meagher Limestone: A dominantly gray, medium bedded magnesian limestone; often mottled--in lower part especially--with characteristic orange-brown markings, some facies oolitic. The upper part has a sandy and gritty appearance. The formation is highly altered at and near the granodiorite contact. Here is has been converted to a gray or white marble, and often contains much garnet and epidote. Apparent thickness, at Garnet--450 to 525'.

Woolsey Fm. Interbedded green-gray shale, especially at top and base, but containing in middle part medium bedded limestone members, some parts of which display orange and brown mottling, similar to that seen in the Meagher limestone. The rock is highly altered at and near the granodiorite contact to a garnet-epidote rock and in places a dense hornstone. Apparent thickness at Garnet--about 275'.

Flathead Quartzite: Not positively identified in the area.

Missoula Group: This group is the top of the pre-Cambrian Belt series in the area. The upper part (the Pilcher quartzite) is reddish, cross-bedded and often argillaceous at its top. The underlying Garnet Range quartzite is characteristically light brown, generally medium bedded to massive, widely fractured, and contains abundant detrital mica. At Garnet, some of the more massive beds display a peculiar spotting which has given rise to the local name of "birds eye" quartzite. Thichness--2500 to 3500'

Granodiorite: The main Garnet stock and associated dikes etc; included in the color scheme is some granite and granc-aplite.

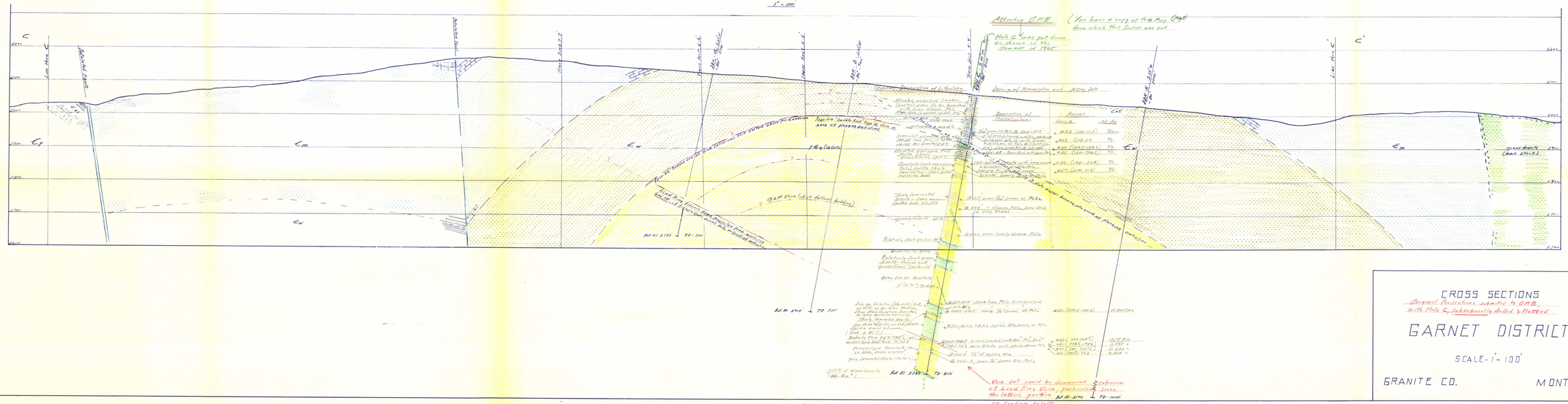
Faults, shears etc:

Veins: Both bedded and cross-cutting.

Formation Contacts: Shown dotted, because in most places they are approximate only.

Contour interval: 100'

Section C–C'
Looking NW
1" = 100'



Supplementary Map 5

Attention: O.ME
Hole 2 was put down to T.D-600' in summer of 1965

← O.ME. has a copy of Map 4-D from which this Section was cut

Note:
This is the Original Section, with the Projections made, at that time, on which now, Hole 2 (subsequently drilled) has been Plotted.

Section 4c-c'

Looking easterly
1" = 40'

4c

General Description of Lithology, Faults etc —
orange = aplite material

Proposed Drill Hole #2 Vertical, T.D. 600'

Proposed Drill Hole #3 Vertical, T.D. 400'

Description of Mineralization & Assays

Description of Mineral — oz Au, oz Ag, % Zn

Nancy Hanks Shaft (The Old Shaft) Col. Elev. - 6088

Nancy Hanks Vein
Stopes to near surface. The Vein is 3-5' thick and, at which, has a level, and is here 0-3' in Section

Shaft projection is 85 west of Section
Dump is white marble

alt. Xlme ls

Dark Shale

Fork shale might be in here (Cpr)

granodiorite

Relatively Fresh granodiorite

@ 5+62 - 12" crush on & Aplite

39 TR Au

Rich Nancy Hanks Vein reported Cut off on 100 level, by a "big fault" (the "mud fault") Prog ore was reported in winze 3 below 100 Lev.

Big Nancy Hanks Fault

Some Stoping

zinc limestone

Nancy Hanks 100 level

Lowry-Tiger Vein (Str. N 45°E)

stoped

Tiger-Lowry Incline

Tiger-Lowry Incline

Rope Stop

Dump shows lots of marble, some garnet - good Bk, old shafts & wind, some Vein Qtz.

Dump Shows Qtz Xlme ls, Some meta Sediments

Relatively fresh Gr. diorite

Altered granodiorite — some chlorite, sericite, alt. and aplite seams (Cdpr 15-20)

Considerable alteration and a 1" aplite str. at 187-192

1" aplite

Broken core 198-200

Assays etc

Sam No — oz Au

Sam # 35 — Tr Au

2 aug 2" aplite & Qtz @ 204

2" Qtz Vein 209.2-210'

Three 1/2" Qtz. & some

2" of white Qtz.

39 TR Au

Projection of Iverson Vein (Str. N 35°-45°E) into plane of Section, based on Vein extending down on a 15° Dip

(see Section 4c-c', and Plan Maps 4 & 4A)

" based on Vein extending down on a 20° Dip

" " " "

Projection of Iverson Vein

Note: Iverson Vein could be the faulted extension of Lowry-Tiger Vein shown cut off above (See Plan Maps 4 & 4A)

" based on Vein extending down on 30° Dip

" " " "

Alt. Granodiorite (Sericitic)
& mineralization (See assays)
Iron-stained aplite 240.5-241.5
2" Fractured gouge 244-246
@ 241-249 - mostly calcareous gouge (Fizzes with HCl) but some aplite Fractured & some Jasper

Alt. Granodiorite (Sericitic)
Some calcareous gouge
Calcite Fizz and Calcite
252-290

Alt. Gr. diorite

Mineralized Zone above 60' above Dewey Vein Position

See 5" aplite seams

2 aug of 1" Qtz seams 282-283

gouge with Calcite Fizz

gouge not as Fizzy

Prog ore reported

#43 (6" @ 0.005 Au)

#44 - 6" @ 0.004 Au

#45.5 TR Au

It is reported that the "44-11 winze produced 70 sacks of ore. This is assumed to be done on from Nancy Hanks Vein cut-off on 100 Lev.

(Sludge 294-299 = 0.006 Au)

Broken core, some seams Fels. Calcs (324-334)

Dewey #67 Level drift cost face (Projected from its reported position, about 60' east of Section

"aplite Qtz.

@ aug - broken Zone, some Fels. 324-339

12-18" mineralized (332-334)

12" of strong Fels. & Qtz. & alt. 333-334

See New Section of Dewey-Shamrock area (Map 4-G), where proposed drill hole #6, explores these possibilities, along with the primary objectives, which are the main veins in these workings

Projected position of Vein developed in Dewey Lower Level

Seams of Qtz. Fe OX @ 257' 260-265' - 1.5" of Qtz. Fels. seams (2-3" broken gouge & Fe stained Qtz. @ 263 1/2')

Mineralized Zone above 40' below Dewey Vein Position

15" of Mineralization 35' below Dewey Vein Position

@ 421 1" of Qtz. Fels. & some

Possible down faulted extension of Nancy Hanks Vein, cut off above

Sam # — oz Au

47 (330-339) 0.01 Au

+ 50 (18") 0.01 Au

48 - sludge 317-334' - 0.002 Au

49 " 324-332' - 0.015 Au

Sam # — Assays

#26 (493-494) — 0.2% Pb; 0.7 Ag (1.5' of core)

#27 (494-495) — 0.02 " " 0.2 " (0.9' ")

#28 (495-496) — TR Au

Sludge 490-496 - 0.03 Au, 0.2 Ag, 11.1 Cu.

(Possibly the Nancy Hanks Vein)

Vein Material

@ 493-494 Mostly min. Gr. diorite, minor Qtz. & Calcareous Gouge, Some Fels. and a gouge space at @ 493.5-494.5 (Note 3)

@ 494-495.5 Alt. Gr. diorite, some Qtz.-Fels.

@ 495-496 diorite & Fels.

@ 496-512 alt. gr. diorite

(Possibly the Nancy Hanks Vein)

Lowry-Tiger Vein Cut off Fault

Nancy Hanks Claim
Tiger Claim's North Side Line

Iverson Line

Alternate Line 'C'

Alternate Line 'D'

Alternate Line 'E'

Alternate Line 'F'

Alternate Line 'G'

Alternate Line 'H'

5700 @ 600

5%'s - 600: crushed Rk
some chlorite, sericite
Possible pyrite
(Possibly N.W. of Nancy Hanks Fault)

Supplementary — Map 4-D

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