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(27)
Item 40

AMERICAN

Nevada - El Dorado Mines

ZINC CO.,

WALTER G.

SWART FILES,

NEVADA

FOLDER 366

G. A. DUNCAN,
MINING ENGINEER.

File Under

Subject

Nelson, Nevada, July 8th 1911.

Mr W.G. Swart,
1118 Foster Bldg,
Denver, Colo.

Dear Mr Swart:-

I am in receipt of your letter of July 6th asking for maps and report of the property offered for sale by The Nevada-Eldorado Mines Co., which I inclose herewith.

You will see that the accompanying report covers only the Flagstaff Group. When we had Mr Amsden examine and report, it was our intention to sell only that portion of our property; holding the remainder for future development and operation. I explained to you why it has been decided to sell all of our holdings here, and have drawn a red line on the large map herewith inclosing the area we now propose to convey; a total of about 530 acres, all surveyed and of perfect title, 320 acres of which are patented.

I have no report, made by a disinterested engineer, covering the 12 claims now offered for sale in addition to those treated of in Mr Amsden's report.

We are now adding 8 patented, and 4 unpatented claims; 4 strong veins showing good ore shoots developed to a depth of 50 feet, with several veins undeveloped, but showing ore of milling grade on the surface.

We are now offering an added 3000 feet ~~in~~ ^{along} the great main fracture vein, making a total of 8000 feet along the main fracture of this section, which main fracture is both the water course and mineralizing channel of the region.

The new area offered contains a better location for a mill than is the point mentioned in Mr Amsden's report, and at this central location it is probable that a strong flow of water will be developed, in addition to that now furnished by the Flagstaff shaft.

Known ore shoots lie both east and west of the one opened by our Flagstaff shaft, in the main fracture vein. Our west drift from the Flagstaff shaft has not opened the ground beneath the strongest out-crop that shows along the main fracture, and its departing veins, showing good on the surface, have not been prospected.

From The Lucky Jim there were taken, in the early days of milling at the Colorado River, \$125000.00, from shallow workings. The Rambler, some what developed, shows ten feet of \$9.00 ore, and promises a long shoot, this being a vein north of the main fracture, while the Rover vein, north of the Rambler, developed by a drift about 200 feet long from the bottom of a 50 foot shaft, shows a vein 3 feet 6 inches wide carrying from \$8.00 to \$12.00 per ton.

The Yellow Ned carries 3 feet of \$15.00 ore at a depth of 50 feet.

Shallow openings near the junction of the Old John and the Lone Cabin disclose a strong vein, 6 feet of which carries \$10.00 per ton, and an equally good vein in grade, ~~but~~ and strength is opened by shallow cuts on the White Star claim.

There is a strong vein running the length of the Annex claim, and the Central claim carries the apex of the main fracture as far as it is uncovered to the eastward.

There seems to be a basis of hope for cheap horse power for this section, and for low cost of transportation to Needles, in the dam proposed 40 miles below us on the river. If the dam is built as planned, we will have a lake at the east end of Eldorado Canon.

We hold pleasant memories of your short visit with us, and unite in cordial regards to you.

Yours sincerely,

G. A. Duncan.

C O P Y.

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Mining Engineer.

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Yours sincerely,

(Signed) C. A. Duncan.

THE NEVADA-ELDORADO MINES COMPANY.

The Flagstaff Group of Lode Mining Claims, owned by the above company, is situated in Eldorado Mining District, in the southeastern part of Clark County, Nevada; six miles west of the Colorado River, 22 miles north of Searchlight, Nevada, where terminates a branch of the Santa Fe Railway System, and about 30 miles east of Jean Station on the San Pedro, Los Angeles and Salt Lake Railway.

Eldorado Mining District.

This District has been favorably known to the mining public for many years through the successful operations of the Southwest Mining Company, (now controlled by the Joseph Wharton Estate) whose Techatticup and Savage claims, adjoining the Flagstaff Group on the north, have produced from surface--oxidized ore, \$550,000.00.

This ore was treated in the Company's mill at the mouth of Eldorado Canon on the Colorado River. The process employed consisted of dry crushing by stamps and amalgamation in pans, which beside being very expensive, was wasteful; the tailings accumulated, having an assay value of \$10.00 per ton, were afterward successfully cyanided. The surface ores from the various properties having been extracted, and the complex ores, which came in with depth in the veins not proving amenable to the amalgamation process then in vogue, operations in this district were almost suspended, and, in common with the rest of Nevada, the industry languished for a number of years until the remarkable discoveries in Tonopah and Goldfield attracted the attention of mining men whose intelligence and energy have accomplished notable results in almost every old district in the State.

LODE CLAIMS.

The Falstaff Group consists of 19 claims, about 325 acres, all surveyed and properly marked on the ground by a Deputy U. S. Surveyor. The work for securing patents for eleven of these claims is now well advanced. The titles to all the claims are perfect, all and every formality of the customs of the District and Mining Laws of the State and United States have been strictly observed.

The property was purchased by the present owners in 1907 with the purpose of selling after development has been carried to the extent of their financial ability, which point has now been reached.

The Flagstaff claim is of principal importance, the greatest amount of work having been done there. (For a complete list and location of the claims see accompanying blue print at back of this report).

GEOLOGY AND VEIN CHARACTERISTICS.

The rocks of the District and of this property especially are of igneous origin, chiefly Diorite, with intrusions of Andesite, Diabase and Rhyolite, all much altered. Along the east and west main fracture of the region, which is marked by Eldorado Canon which cuts lengthwise through the Flagstaff claim, the rocks are peridotitic which in the vein has been altered to serpentine. The region has been very generally, but not extensively faulted and slickensides abound. The veins have a generally east and west course and dip toward the north. The outcrops of most of the veins consist of calcite or calc spar, hence are locally called "Spar" veins. There are about four miles of spar veins cropping on the property, varying in width from 2 to 8 feet and at various places showing workable ore on the surface. None of these veins have been opened, all of

the work having been concentrated on the Flagstaff vein. The Techatticup and Savage claims, a part of the Joseph Wharton Estate, lying north and approximately parallel to the Flagstaff vein, afford the only instances of the development of the spar veins. These veins have a width of about 3-1/2 feet, and, as previously stated, have a record of \$550,000.00 produced from the surface, or oxidized ores. The shaft on the Techatticup vein is 750 feet deep, and in sinking the line was found to be more and more replaced by silica with a corresponding increase in gold and silver content. The productiveness of these calcite veins, similar to those outcropping on 18 of the 19 Flagstaff claims, justifies the belief that important orebodies will be encountered in the latter when they receive the attention and development which their surface showings in numerous places ^{alone} would warrant.

The Flagstaff vein, while not strictly speaking a spar vein, carries a great amount of lime in its ore. It outcrops in and along an andesite dike which may be traced on the surface for more than 6,000 feet. It follows the main fracture above mentioned through the Yankee Blade, Arapahoe, Flagstaff, Monterrey and Monterey Extension claims, and on the east it passes into adjoining property where a very important orebody is opened. The outcrop on the Flagstaff is bold and shows a good milling grade of ore for 18 feet in width where it forms one wall of Eldorado Canon. The course of the vein is South 60° East and it varies in width from 10 to 40 feet dipping toward the northeast at 40°, under a mountain that separates the Flagstaff from the Techatticup vein, about 1500 feet distant. The Techatticup appears to be a spur from the main

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fracture, the junction probably lying somewhere in the Monterey Extension claim. The andesite dike constitutes the lode, the ore being the altered and mineralized andesite carrying a complex sulphide of iron, lead, copper and zinc.

DEVELOPMENT.

The main workings consist of a 500 foot shaft sunk about the center of the south side line of the Flagstaff claim. The first level is at 200 foot depth, running easterly 300 feet and westerly 241 feet. (Unless otherwise stated all elevations are measured on the dip of the vein.) At 300 feet there is a level running easterly 300 feet and westerly 45 feet. At 470 feet there is a level running easterly 300 feet. The incline starts in the vein at the surface where the values are low with gradually increasing assays until the 200 foot level is reached (at an actual depth of 220 feet). See accompanying assays sheet showing locations of samples and their values. There is also attached to the back of this report a second assay sheet showing a plan of the 200 foot level upon which is shown the location and assay values of samples taken by another engineer who spent several days in very thoroughly sampling the property. In both instances large samples were cut across the dip of the vein and reduced to a convenient size for handling in the assay office.)

It is readily understood that the drifting in a large vein like this one having a width of from 10 to 40 feet, cannot properly expose its ore unless frequent cross-cutting is done; and a study of the sinuous course of the drifts as shown on the survey map makes it evident that the drift at 200 feet does not, at all points, disclose the best parts of the vein; for instance, in starting this

level toward the east the values were low, but later in shooting out a sump to hold water for domestic purposes, off toward the hanging-wall ore of good milling grade was found. Evidently the location of that portion of the east drift on 200 near the shaft accounts for the low results obtained there as shown on the assay sheets.

The Macgregor shaft is situated 300 feet east of the main incline and goes down in the vein, making connections with the 200 foot and 300 foot levels. This shaft is situated in the Eldorado Canon wash and its collar is considerably lower than the collar of the main shaft.

The vein is exposed by 541 feet of drifting and several cross-outs at the 200 foot level, is a highly altered and mineralized andesite dike enclosed in Diorite. The footwall is better defined than the hanging wall and is accompanied by a serpentine gouge or selvege. While the greatest alteration and heaviest mineralisation has evidently taken place along the footwall side of the dike, occasionally the best values are found nearer the hanging-wall, suggesting that the mineralizing agent has circulated along lines of least resistance occasionally meandering through the dike but mostly favoring the foot-wall side.

The vein makes considerable water, the flow from the shaft amounts to about 15,000 gallons in 24 hours, excepting for a while during the driest season when it falls to 11,000 gallons. It has been noticed that where the vein is softened and saturated with moisture the values are lower, the drier and harder portions of the vein invariably assay much better. This suggests leaching with iron concentrations at places favorable for redeposition at a depth,

no doubt, considerably below the present deepest workings. This idea is strengthened by the evidence of leaching to be seen in many places in the District along the outcrops of the veins, and the fact that the vein carries some manganese which, in decomposition with the sulphides is known to be a ready solvent for the precious metals.

Those portions of the 200 foot level west of the shaft, not marked on the assay sheets are through ground below the normal in hardness, and wet, giving assays from \$2.00 to \$4.00 per ton, with the exception of 30 feet of its length along a harder section where good width and normal values are found; west of the latter section the vein is softer and carries more water, and the values, so far as exposed by the drift, are below milling grade; passing this last condition, the present face of the west drift is in hard dry andesite such as elsewhere precedes the finding of good ore after passing through a poor place in the vein, with the exception that this body of andesite is of much greater mass both along the strike of the vein and as shown in crosscut, than has heretofore been opened in the Drift. This west drift is approaching a point under the vein outcrop where the largest exposure of quartz in this section is seen, and a point in the Flagstaff vein that is favorable for developing the greatest body of ore. At a point 375 feet east of the main shaft and 25 feet east of the Macgregor shaft (shown on the assay sheet) the vein outcrop passes out of sight under the sand wash forming the bottom of Eldorado Canon, and reappears on its true vein strike 800 feet to the eastward on the Yankee Blade claim, where the outcrop for 10 feet in width assays \$7.00 per ton.

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An unusual but highly important characteristic of the Flagstaff vein is that its highest values appear to invariably occur in the widest portions of the vein and orebody.

The assay sheet shows that below the 200 foot level there is a material falling in the assay value of the ore exposed by the main shaft, while the Macgregor shaft shows the values to carry down to the 300 foot level, with no appreciable diminution.

In discussing the conditions found below the 200 foot level, the Company's Manager, Mr. G. A. Duncan, who is an engineer of wide practical experience, made the following statement, viz:

"In sinking below the 200 foot level we followed a zone of breccia, as the line of least resistance, believing that it closely accompanied the ore, the assays secured as we progressed reinforcing that belief. The opening of the levels at 300 and 470 feet was unwisely done before sufficient work had been performed at 200 feet to thoroughly inform the management as to the vein characterisation.

At 300 and 470 feet levels were run along the parting in which the shaft was sunk below the 200 foot level, in values of varying grade, usually not in pay ore, the work not disclosing the strongly-marked footwall, the andesite dike, and the very large body of pay ore which it was found later, are the features of the vein as opened at 200 feet."

The most usual way in which a vein or ore-shoot is lost is by getting off into either wall in sinking or drifting through faulted or crushed formation. A careful examination of the 200 foot level reveals no disturbing feature that could account for the break in the ore somewhere between the 200 and 300 foot levels, but in the Macgregor shaft just above its connection with the 300 foot level, are to be seen two cross fractures, evidently fault planes, which are easily identified in the 300 foot level, and dip strongly toward the main shaft. It seems hardly probable that this faulting can be responsible for the poor showing in the 300 foot level, but it unquestionably has considerable

influence on the 470 foot level as will later be explained.

Inspection of the assay sheet shows that in the main shaft, between the 2nd and 3rd levels, the values hold above milling grade for about half the distance, after which they fall, rising again in the 3rd level for a short distance each way from the shaft. A careful study of the shaft and level at this point justifies the belief that about half way between the levels the vein is lost, being left in the hanging wall, and that it was cut through by the east drift which was continued under the vein and in the footwall, sometimes approaching very near it, so that the occasional good assays were obtained from leachings from the vein.

The uniformly good values next to the shaft at the 3rd level are no doubt from the vein which is exposed there for a short distance only. There is every reason for the belief that with a comparatively small amount of work the vein may be shown up on this level to as good advantage as in the level above.

The situation on the 470 foot level is somewhat more complicated by the presence of the disturbing fault which by reason of its dip must be reckoned with here, the result being that the vein is pushed into the hanging wall, which will necessitate cross-cutting from the present workings before the vein will be exposed on this level. The rocks ~~has~~ below the second level are softer and contain more water which has altered the character and appearance of them and might render it difficult to locate the vein on the lowest level were it not for the information to be gained by tracing the fault planes to the surface where everything is explained by the outcrop of an intrusion which, for a comparatively short distance, has thrown the vein into the hanging-wall, causing it to assume a curve, after which it resumes

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its normal course and dip, with ore of good milling grade.

ORE IN SIGHT.

With regard to the ore in sight, ready to be stoped, the owners through their Manager, Mr. Duncan, make the following claims:

"Summing the experience and assays secured in progress of development in the Flagstaff shaft the writer makes the assertion that the work there done has made accessible, and ready for stoping, 40,000 tons of ore having an average value of \$7.50 in gold and \$4.50 in silver, a total of \$12.00 per ton; that the average width of ore is 10 feet; that the widest ore and vein widths carry the best ores; and that a recovery of 80% can be made in concentrating, putting 40 tons into one. The concentrated product will impose no zinc penalty, and will contain some lead and a small amount of copper."

A careful study of the assay sheets reveals the fact that the ore exposed may properly be divided into "ore in sight" and "ore probably in sight", the latter, however, while being of considerable importance as having a strong bearing on the future of the mine, is not taken into account in estimating its present worth. With regard to the probable average width of the crebody when broken, while the lack of crosscuts prevents accurate measurements, sufficient information is available to justify the claim of 10 feet made by Mr. Duncan, and this figure will be used in the following calculations:

The average value of the ore in the different blocks and the dimensions of the blocks are estimated as follows: block No. 1, exposed and sampled on three sides under ground, and partly exposed by its bold outcrop, where for a width of 18 feet it samples \$9.00 per ton, is bounded by the main shaft, the Macgregor shaft, and the 2nd level. Its length along the level is 300 feet, and its height may be safely assumed to be 160 feet, which gives $300 \times 160 \times 10 = 480,000$ cubic feet, which allowing 15 cubic feet for a ton, equals

55,925 tons. As the average of all samples taken from the three exposed sides, intervals of less than 12 feet, is \$11.65, and the large outcrop averages for 12 feet \$9.00 per ton the conservative figure of \$10.00 per ton is adopted in estimating this block of ore, giving a gross sum of \$559,250.00. Block No. 2, lying between the two shafts and under the 2nd level, is exposed on top by the 200 foot level for 300 feet, on the east by the Macgregor shaft where the values are good for 100 feet in height, and by the main shaft where normal values hold for 60 feet below the 2nd level. In this block of ore which is 22 100 feet high at one end, 50 feet at the other end, and averages 75 feet in height, we have $300 \times 75 \times 10 = 225,000$ cubic feet, or 17,500 tons.

The average values obtained from this block are \$12.80 which justify adopting \$12.00 as the value per ton, and we have 17,500 tons at \$12.00, which equals \$210,000 for the gross value of this block. Blocks one and two, being exposed on three sides are considered to be sufficiently well proven as to class as ore in sight ready to stop. Block No. 3, lying west of the shaft and extending from level No. 3 to upper limit of Block No. 1, while it is exposed on two sides and out through near the center, is not classed as "ore in sight", but as probable ore in sight. This block is 260 feet high and estimated at 50 feet wide, and we have $260 \times 50 \times 10 = 130,000$ cubic feet, or 10,000 tons which valued at \$10.00 per ton amounts to \$100,000.00. Block No. 4, lying west of the Macgregor shaft and above the 3rd level, is 260 feet high by an estimated width of 50 feet, giving a block of ore $260 \times 50 \times 10 = 130,000$ cubic feet, or 10,000 tons estimated at \$12.00 per ton, amounts to \$120,000.00. As this block is not exposed on at least three sides, it is classed as

ore probably in sight.

Recapitulating the foregoing estimates we have:

Ore In Sight.

Block No. one,	36,923 tons @ \$10.00 equals	\$ 369,230.00
" " two	17,508 " @ \$12.00 "	210,096.00
Totals	54,431 "	\$ 579,326.00

Probable Ore In Sight.

Block No. three	10,000 tons @ \$10.00 equals	\$ 100,000.00
" " four	10,000 " @ \$12.00 "	120,000.00
Totals	20,000 "	\$ 220,000.00

ECONOMIC CONDITIONS.

With regard to an adequate supply of water for milling and all other requirements, the shaft at 500 feet depth will probably average the year round about 15,000 gallons in twenty-four hours, and there was a constant increase in flow between the 3rd and 4th levels which justifies the expectation that a considerable addition to the present flow will be developed when the shaft is deepened. On the Macgregor claim No. 8 water comes to the surface under conditions that indicate a considerable flow upon development, and on the Monterey Extension claim during a portion of the year, varying from 6 to 8 months, sufficient elevation to admit of its being conducted to the collar of the ^{Flagstaff} shaft. This water is from a separate source from that supplying the flow in the shaft. Should a greater amount of water be required for the treatment of a larger production of ore an unlimited supply may be obtained by going to the Colorado River 6 miles distant over a smooth 8% grade following the bed of El Colorado Canon.

No timber grows in this region, but an abundance of wood for domestic purposes is secured for \$10.00 per cord delivered in camp, being taken from the Colorado River during flood season by the Indians.

For operating mines and mills, gasoline and distillate are cheap and convenient fuels where the requirements are moderate, but for larger demands California Crude Oil, used for firing steam boilers, or in connection with Producer-Gas Plants, promises horse power at economical figures.

The altitude is somewhat under 3,000 feet, and the climate is mild and dry throughout the year so that no expensive buildings are required. The improvements now consist of the Superintendents 6 room frame house, a large boarding-house tent, bunk tent, Foreman's tent, cook's tent, sleeping tent for night shift, bath-house for men, assay office, and business office, to all of which water is piped from the tanks at the collar of the shaft. At the collar of the working shaft is the following equipment, a 6 H.P. and a 16 H.P. Fairbanks-Morse Gasoline Hoist, a 25 H.P. Fairbanks-Morse Gasoline Engine, a 10 x 10 inch ^{air} compressor, a drill sharpener, a 2-1/2 inch Sullivan drill, a 5 air hammer drills, a supply of both machine and hand steel, 2 forges with tools complete, 7 galvanized iron water tanks, 3 skips, a quantity of rails, piping for both compressed air and ventilation, and water pipe in the shaft and to all the buildings in Camp.

With regard to shipping facilities, and transportation, wagon freight from Searchlight now costs \$10.00 per ton which may be reduced under improved conditions resulting from new roads now building and increased traffic. The nearest Smelter is that of the United States Smelting Refining & Mining Company at Needles, California. Railway freight from Searchlight to that point on ore in car lots varies from \$1.10 to \$6.00 per ton, the charge being based on the grade of ore. On account of its favorable situation within six miles of the Colorado River and the excellent natural road down Eldorado Canon to its mouth,

which is but eighty miles from Needles, it would seem that Flagstaff ore should be floated down the River at a very considerable saving over the cost of the much longer and more expensive wagon and rail haul via of Searchlight and the Rail Road.

The Camp may be reached via the San Pedro, Los Angeles and Sal Lake Rail Road, leaving the train at Hipton, California, where Automobiles from Searchlight meet all trains. A stage, daily except Sunday, leaves Searchlight for Nelson, one and one half miles east of the Camp, and upon arrangement the driver will bring passengers through. One coming by the Santa Fe Route would leave the main line at Goffs, California, and proceed by a branch road, daily except Sunday, to Searchlight where both routes connect with the Nelson Stage. Automobiles bring passengers to Nelson by arrangement. A telephone line connecting Searchlight and the mine in the surrounding region passes through Camp.

CONCLUSION.

The foregoing facts, which may be easily verified, substantially corroborate the claims made by the owners that they have "exposed ready to ship, 40,000 tons of ore of an average value of \$12.00 per ton". The apparent discrepancy between the above statement and the estimate of 84,231 tons worth \$576,925.00 is due to the inclusion in the latter of certain portions of the vein which, while having a tendency to lower the general average value below \$12.00 per ton, carry values sufficiently high to pay a good profit on a large tonnage. To attempt to grade the ore up to \$12.00 per ton at the expense of low grade ore that will pay a satisfactory profit will be wasteful extravagance.

The Flagstaff Group presents all of the essentials for the development of a large mining enterprise, viz; a large acreage in a proven district where entirely similar veins have yielded large returns under crude and wasteful methods now discarded; several thousand feet of veins outcropping, which in numerous places show pay ore at the surface; a partially developed mine with more than half a million dollars worth of ore ready to stop; with an ample water supply, and facilities for operating under the most favorable conditions. The geologic conditions are favorable for permanent and deep mining, since the mineralization occurs in an eruptive andesite dike that has come up from the depths and the unusual length and width of the outcrop indicates a strong and persistent fissure to continue and carry its mineralization to a great depth. The break in the ore on the lower levels is no doubt but temporary and probably not a serious matter, such conditions are of frequent occurrence in eruptive areas; the fault showing in the outcrop of the vein sufficiently accounts for the mixup under ground and affords a key to its solution.

The ore should yield readily to concentration, the rich sulphides will separate freely from the gangue which contains no barite or other objectionable material that would require a complicated method of treatment.

The most practical method of working the property is to erect a concentrating mill at the collar of the main shaft where there is an ideal site that will require very little extra expense for excavations, road making, etc.

A complete up-to-date plant consisting essentially of crushers rolls, pulverizing machinery, and concentrating tables, having a daily capacity of 100 tons, can probably be erected for \$50,000.00, and for such a production the mine equipment will have to be replaced by a heavier hoist and compressor, and additional machine drills, cars, etc., which may call for \$25,000.00.

With such a plant in operation, allowing liberally for mining and milling costs, including losses in treatment and marketing of concentrates, there should be a profit of \$500.00 per day, and the mill should be kept busy for 542 days on the ore now ready to stop.

In addition to the Flagstaff vein there are several parallel veins, before described, which have several important ore-shoots showing on the surface that would be considered promising prospects in any mining region, that add largely to the prospective value of this property.

Respectfully submitted,

(Signed) O. B. Anderson,

H.R.

White Hills, Arizona,

September 15th, 1910.

Assay Sheet, 200 foot Level, Flagstaff Shaft.

May 18th to 19th, 1910.

	Gold.	Silver.	Total.
#4-5ft. ore in Macgregor shaft at east end of 200 foot drift but showing lower portion of the vein not exposed in the drift near the shaft,	\$ 3.45	\$ 2.00	\$ 5.45
#5-7ft. ore in Macgregor shaft, the 4 feet above #4, no walls,	9.72	3.20	12.92
#6-7ft. ore in 200 foot drift, 6 feet W. of Macgregor shaft,	4.88	0.80	5.68
#7-7ft. ore 12ft. W. of #6, no walls	3.58	0.80	4.38
#8-7ft. ore 10ft. W. of #7 " "	2.18	0.80	2.98
#9-7ft. ore 10ft. W. of #8 " "	2.16	1.60	3.76
#10-7ft. ore 10ft. W. of #9 " "	2.58	1.60	4.18
#11-7ft. ore 10ft. W. of #10 " "	5.20	4.00	9.20
#12-7ft. ore 10ft. W. of #11 " "	2.54	2.40	4.94
#13-7ft. ore 10ft. W. of #12 " "	2.44	2.40	4.84
#14-7ft. ore 8ft. W. of #13 " "	5.82	7.20	13.02
#15-12" ore in cross-cut to south, from foot-wall up,	8.52	11.20	19.72
#16-8ft. ore in cross-cut to north, face of north cross-cut, 20 feet from footwall,	14.64	26.40	41.04
#17	12.44	14.40	26.84
#18-6ft. ore east side of north cross-cut,	2.44	10.40	12.84
#19-7ft. ore 8ft. W. of #16, no walls,	3.56	13.60	17.16
#20-7ft. ore 7ft. W. of #19, " "	5.98	16.80	22.78
#21	10.04	18.40	28.44
#21a	8.06	17.60	25.66
#21b	6.26	9.60	15.86
#21c	0.78	2.00	2.78
#22-8ft. ore from footwall up and over roof,	5.68	16.80	22.48
#23-7ft. ore 10ft. W. of #22, no walls,	5.70	8.00	13.70
#24-7ft. ore 10ft. W. of #23 " "	3.18	4.80	7.98
#25-8ft. ore next footwall, in south cross-cut,	19.02	19.20	38.22
#26	4.74	6.40	11.14
#27-7ft. ore wall of drift opposite cross-cut adding 4 feet to width of ore,	1.92	3.20	5.12
#28-7ft. ore 10 ft. W. of #27, no walls,	1.40	4.00	5.40
#29-7ft. ore 12 ft. W. of #28, " "	2.02	7.30	9.32
#30-10" ore 12 ft. W. of #29, " "	1.50	4.00	5.50
#31-7ft. ore 10 ft. W. of #30, " "	4.21	26.40	30.61
#32-7ft. ore 10 ft. W. of #31, " "	1.06	1.60	2.66
#33-7ft. ore 10 ft. W. of #32, " "	1.80	0.40	2.20
#34-7ft. ore opposite R. cross-cut, no walls,	5.90	4.00	9.90
#35	1.00	2.40	3.40
#36-7ft. ore 10ft. W. of #34,	0.84	2.40	3.24
#37-7ft. ore 8ft. W. of main shaft, no walls,	23.00	14.40	37.40
#38-11" ore 9ft. W. of #37, from footwall up,	6.88	4.80	11.68
#39-8ft. ore 8ft. W. of #38, no walls,	8.42	3.20	11.62
#40-8ft. ore 5ft. W. of #39, " "	10.28	4.80	15.08

	Gold.	Silver.	Total.
#41, 7ft. ore 5 ft. W. of #40, no walls.	\$21.82	\$ 11.20	\$ 32.72
#42, 7ft. ore 10 ft. W. of #41, no walls.	5.39	4.00	9.20
#43, 7ft. ore 10ft. W. of #42, takes to cross water course.	5.08	4.80	9.88
#44, 6ft. ore 58 ft. W. of #43, from footwall up, no hanging-wall.	1.24	2.40	3.64
#45, 6ft. ore 10ft. W. of #44,	1.61	1.60	3.21
#46, 7ft. ore 10ft. W. of #45,	8.60	8.00	16.60
#47, 7ft. ore 10ft. W. of #46, on bench,	4.89	2.40	7.29
#48, 7ft. ore 17ft. W. of #47,	1.52	3.20	4.72
#49, west face of drift; in andesite, no walls.	1.16	1.60	2.76
#51, 10ft. ore below #4 and #5, Macgregor shaft,	5.78	4.80	10.58
#52, 10ft. ore below #51, no walls, " "	3.78	4.80	8.58
#53, 10ft. ore below #52, no walls, " "	3.86	5.50	9.46
#54, 10ft. ore below #53, no walls, " "	3.85	6.00	9.85
#57, old stop east from " "	7.36	5.60	12.96

The accompanying plan showing the 200 foot level, together with the main shaft and the Macgregor shaft, will further explain the above series of samples. Where no walls were shown in the drift, the dip of the vein in crossing the drift, exposed 7 feet of the vein width.

THE NEVADA-ELDORADO MINES COMPANY.

The Flagstaff Group of Lode Mining Claims, owned by the above Company, is situated in Eldorado Mining District, in the southeastern part of Clark County, Nevada; six miles west of the Colorado River, 22 miles north of Searchlight, Nevada, where terminates a branch of the Santa Fe Railway System, and about 30 miles east of Jean Station on The San Pedro, Los Angeles and Salt Lake Rail Road.

Eldorado Mining District.

This District has been favorably known to the mining public for many years through the successful operations of The Southwest Mining Company (now controlled by the Joseph Wharton Estate) whose Techatticup and Savage claims, adjoining the Flagstaff Group on the north, have produced from surface, oxidized ore, \$550,000.

This ore was treated in the Company's mill at the mouth of Eldorado Canon on the Colorado River. The process employed consisted of dry crushing by stamps and amalgamation in pans, which beside being very expensive, was wasteful; the tailings accumulated, having an assay value of \$10.00 per ton, were afterward successfully cyanided. The surface ores from the various properties having been extracted, and the complex ores, which came in with depth in the veins not proving amenable to the amalgamation process then in vogue, operations in this District were almost suspended, and, in common with the rest of Nevada, the industry languished for a number of years until the remarkable discoveries at Tonopah and Goldfield attracted the attention of mining men whose intelligence and energy have accomplished notable results in almost every old district in the State.

Lode Claims.

The Flagstaff Group consists of 19 claims, about 323 acres, all surveyed and properly marked on the ground by a Deputy U. S. Surveyor. The work of securing patents for 11 of these claims is now well advanced. The titles to all the claims are perfect, all and every formality of the customs of the District and Mining Laws

of the State and United States having been strictly observed.

The property was purchased by the present owners in 1907 with the purpose of selling after development had been carried to the extent of their financial ability, which point has now been reached.

The Flagstaff claim is of principal importance, the greatest amount of work having been done here. (For a complete list and location of the claims see accompanying blueprint at back of this report)

Geology and Vein Characteristics.

The rocks of the District and of this property especially are of igneous origin, chiefly Diorite, with intrusions of Andesite, Diabase, and Rhyolite, all much altered. Along the east and west main fracture of the region, which is marked by Eldorado Canyon which cuts lengthwise through the Flagstaff claim, the rocks are peridotitic which in the vein has been altered to serpentine. The region has been very generally, but not extensively faulted and slickensides abound. The veins have a generally east and west course and dip toward the north. The outcrops of most of the veins consist of calcite or calc spar, hence are locally called "Spar" veins. There are about four miles of spar veins cropping on the property, varying in width from 2 to 8 feet and at various places showing workable ore on the surface. None of these veins have been opened, all of the work having been concentrated on the Flagstaff vein. The Tschatticup and Savage claims, a part of the Joseph Wharton Estate, lying north of and approximately parallel to the Flagstaff vein, afford the only instances of the development of the spar veins. These veins have a width of about 3½ feet and, as previously stated, have a record of \$550,000 produced from surface, or oxidized ores. The shaft on the Tschatticup vein is 750 feet deep, and in sinking the lime was found to be more and more replaced by silica with a corresponding increase in gold and silver content. The productiveness of these calcite veins, similar to those outcropping on 13 of the 19 Flagstaff claims, justifies the belief that important orebodies will be encountered in the latter when they receive the attention

and development which their surface showings in numerous places alone would warrant.

The Flagstaff vein, while not strictly speaking a spar vein, carries a great amount of lime in its ore. It outcrops in and along an andesite dike which may be traced on the surface for more than 6,000 feet. It follows the main fracture before mentioned through the Yankee Blade, Arapahoe, Flagstaff, Monterey, and Monterey Extension claims, and on the east it passes into adjoining property where a very important orebody is opened. The outcrop on the Flagstaff is bold and shows a good milling grade of ore for 18 feet in width where it forms one wall of Eldorado Canon. The course of the vein is South 60° East and it varies in width from 10 to 40 feet dipping toward the northeast at 40°, under a mountain that separates the Flagstaff from the Techatticup vein, about 1500 feet distant. The Techatticup appears to be a spur from the main fracture, the junction probably lying somewhere in the Monterey Extension claim. The andesite dike constitutes the lode, the ore being the altered and mineralized andesite carrying a complex sulphide of iron, lead, copper and zinc.

Development.

The main workings consist of a 500 foot shaft sunk about the center of the south side line of the Flagstaff claim. The first level is at 200 feet depth, running easterly 300 feet and westerly 241 feet. (Unless otherwise stated all elevations are measured on the dip of the vein) At 300 feet there is a level running easterly 300 feet and westerly 45 feet. At 470 feet there is a level running easterly 300 feet. The incline starts in the vein at the surface where the values are low with gradually increasing assays until the 200 foot level is reached (at an actual depth of 220 feet. See accompanying assay sheet showing location of samples and their values. There is also attached to the back of this report a second assay sheet showing a plan of the 200 foot level upon which is shown the location and assay values of samples taken by another engineer who spent several days in very thoroughly sampling the property. In both instances large samples were out

across the dip of the vein and reduced to a convenient size for handling in the assay office)

It is readily understood that the drifting in a large vein like this one having a width of from 10 to 40 feet, cannot properly expose its ore unless frequent cross-cutting is done; and a study of the sinuous course of the drifts as shown on the survey map makes it evident that the drift at 200 feet does not, at all points, disclose the best part of the vein; for instance, in starting this level toward the east the values were low, but later in shooting out a sump to hold water for domestic purposes, off toward the hanging-wall ore of good milling grade was found. Evidently the location of that portion of the east drift on 200 near the shaft accounts for the low results obtained there as shown on the assay sheets.

The Macgregor shaft is situated 300 feet east of the main incline and goes down in the vein, making connections with the 200 ft. and 300 ft. levels. This shaft is situated in the Eldorado Canon wash and its collar is considerably lower than the collar of the main shaft.

The vein, as exposed by 541 feet of drifting and several cross-cuts at the 200 ft. level, is a highly altered and mineralized Andesite dike enclosed in Diorite. The footwall is better defined than the hanging and is accompanied by a serpentine gouge or selvage. While the greatest alteration and heaviest mineralization has evidently taken place along the footwall side of the dike, occasionally the best values are found nearer the hanging-wall, suggesting that the mineralizing agent has circulated along lines of least resistance occasionally meandering through the dike but mostly favoring the footwall side.

The vein makes considerable water, the flow from the shaft amounts to about 15000 gallons in 24 hours, excepting for a while during the driest season when it falls to 11000 gallons. It has been noticed that where the vein is softened and saturated with moisture the values are lower, the drier and harder portions of

the vein invariably assay much better. This suggests leaching with concentrations at places favorable for redeposition at a depth, no doubt, considerably below the present deepest workings. This idea is strengthened by the evidence of leaching to be seen in many places in the District along the outcrops of the veins, and the fact that the vein carries some manganese which, in decomposition with the sulphides is known to be a ready solvent for the precious metals.

These portions of the 200 ft. level west from the shaft, not marked on the assay sheets are through ground below the normal in hardness, and wet, giving assays from \$2.00 to \$4.00 per ton, with the exception of 30 feet of its length along a harder section where good width and normal values are found; west of the latter section the vein is softer and carries more water, and the values, so far as exposed by the drift, are below milling grade; passing this last condition, the present face of the west drift is in hard dry andesite such as elsewhere precedes the finding of good ore after passing through a poor place in the vein, with the exception that this body of andesite is of much greater mass both along the strike of the vein and as shown in crosscut, than has heretofore been opened in the drift. This west drift is ap-

proaching a point under the vein outcrop where the largest exposure of quartz in this section is seen, and a point in the Flagstaff vein that is favorable for developing the greatest body of ore.

At a point 375 feet east of the main shaft and 25 feet east of the Macgregor shaft (shown on the assay sheet) the vein outcrop passes out of sight under the sand wash forming the bottom of Eldorado Canon, and reappears on its true vein strike 800 feet to the eastward on the Yankee Blade claim, where the outcrop for 10 feet in width assays \$7.00 per ton.

An unusual but highly important characteristic of the Flagstaff vein is that its highest values appear to invariably occur in the widest portions of the vein and orebody.

The assay sheet shows that below the 200 ft. level there is a material falling in the assay value of the ore exposed by the main

shaft, while the Macgregor shaft shows the values to carry down to the 300 ft. level with no appreciable diminution.

In discussing the conditions found below the 200 ft. level, ~~was~~ the Company's Manager, Mr. G. A. Duncan, who is an engineer of wide practical experience, ~~has~~ made the following statement, viz:

"In sinking below the 200 ft. level we followed a zone of breccia, as the line of least resistance, believing that it closely accompanied the ore, the assays secured as we progressed reinforcing that belief. The opening of the levels at 300 and 470 feet was unwisely done before sufficient work had been performed at 200 feet to thoroughly inform the management as to the vein characteristics.

At 300 and 470 feet levels were run along the parting in which the shaft was sunk below the 200 ft. level, in values of varying grade, usually not in pay ore, the work not disclosing the strongly-marked footwall, the Andesite dike, and the very large body of pay ore which, it was found later, are the features of the vein as opened at 200 feet."

The most usual way in which a vein or ore-sheet is lost is by getting off into either wall in sinking or drifting through faulted or crushed formation. A careful examination of the 200 ft. level reveals no disturbing feature that could account for the break in the ore somewhere between the 200 and 300 ft. levels, but in the Macgregor shaft just above its connection with the 300 ft. level, are to be seen two cross fractures, evidently fault planes, which are easily identified in the 300 ft. level, and dip strongly toward the main shaft. It seems hardly probable that this faulting can be responsible for the poor showing in the 300 ft. level, but it unquestionably has considerable influence on the 470 ft. level as will be later explained.

Inspection of the assay sheet shows that in the main shaft, between the 2nd. and 3rd. levels, the values held above milling grade for about half the distance, after which they fall, rising again in the 3rd. level for a short distance each way from the shaft. A careful study of the shaft and level at this point justifies the belief that about half way between the levels the vein is lost, being left in the hanging-wall, and that it was cut through by the east drift which was continued under the vein and in the footwall, sometimes approaching very near it, so that the occasional good assays were obtained from leachings from the vein.

The uniformly good values next to the shaft at the 3rd. level are no doubt from the vein which is exposed there for a short distance only. There is every reason for the belief that with a comparatively small amount of work the vein may be shown up on this level to as good advantage as in the level above.

The situation on the 470 ft. level is somewhat more complicated by the presence of the disturbing fault which by reason of its dip must be reckoned with here, the result being that the vein is pushed into the hanging-wall, which will necessitate crosscutting from the present workings before the vein will be exposed on this level. The rocks below the second level are softer and contain more water which has altered the character and appearance of them and might render it difficult to locate the vein on the lowest level were it not for the information to be gained by tracing the fault planes to the surface where everything is explained by the outcrop of an intrusion which, for a comparatively short distance, has thrown the vein into the hanging-wall, causing it to assume a curve, after which it resumes its normal course and dip, with ore of a good milling grade.

Ore in Sight.

With regard to the ore in sight, ready to be stoped, the owners through their Manager, Mr. Duncan, make the following claims,

"Summing the experience and assays secured in progress of development in the Flagstaff shaft, the writer makes the assertion that the work there done has made accessible, and ready for stoping, 40,000 tons of ore having a average value of \$7.50 in gold and \$4.50 in silver, a total of \$12.00 per ton; that the average width of ore is 10 feet; that the widest ore and vein widths carry the best ore; and that a recovery of 80% can be made in concentrating, putting 40 tons into one. The concentrated product will impose no zinc penalty, and will contain some lead and a small amount of copper."

A careful study of the assay sheets reveals the fact that the ore exposed may properly be divided into "ore in sight" and "ore probably in sight", the latter, however, while being of considerable importance as having a strong bearing on the future of the mine, is not taken into account in estimating its present worth.

With regard to the probable average width of the orebody when

broken, while the lack of crosscuts prevents accurate measurements, sufficient information is available to justify the claim of 10 feet made by Mr. Duncan and this figure will be used in the following calculations.

The average value of the ore in the different blocks and the dimensions of the blocks are estimated as follows, block No. 1, exposed and sampled on three sides under ground and partly exposed by its bold outcrop, where for a width of 18 feet it samples \$9.00 per ton, is bounded by the main shaft, the Macgregor shaft, and the 2nd. level. Its length along the level is 300 feet, and its height may be safely assumed to be 160 feet, which gives $300 \times 160 \times 10 = 480,000$ cu. ft. which, allowing 13 cu. ft. for a ton, equals 36,923 tons. As the average of all samples taken from the three exposed sides at intervals of less than 12 feet, is \$11.63, and the large outcrop averages for 18 feet \$9.00 per ton the conservative figure of \$10.00 per ton is adopted in estimating this block of ore, giving a gross sum of \$369,230. Block No. 2, lying between the two shafts and under the 2nd. level, is exposed on ~~the~~ top ~~side~~ by the 200 ft. level for 300 feet ~~long~~, on the east by the Macgregor shaft where the values are good for 100 feet in height, and by the main shaft where normal values hold for 60 feet below the 2nd. level. In this block of ore which is 100 feet high at one end, 50 feet at the other and averages 75 ft. in height, we have $300 \times 75 \times 10 = 225,000$ cu. ft. or 17,308 tons.

The average values obtained from this block are \$12.89 which justify adopting \$12.00 as the value per ton, and we have 17,308 tons at \$12.00 = \$207,696 for the gross value of this block.

Blocks one and two, being exposed on three sides are considered to be sufficiently well proven as to class as ore in sight ready to stop.

Block No. 3, lying west of the shaft and extending from level No. 3 to upper limit of block No. 1, while it is exposed on two sides and cut through near its center, is not classed as "ore in sight" but as probable ore in sight. This block is 260 feet high and estimated at 50 feet wide, and we have $260 \times 50 \times 10 = 130,000$ cu. ft. or 10,000 tons which valued at \$10 per ton

amounts to \$100,000. Block No. 4, lying east of the Macgregor shaft and above the 3rd. level is 260 feet high by an estimated width of 50 feet, giving a block of ore $260 \times 50 \times 10 = 130,000$ cu. ft. or 10,000 tons, estimated at \$12.00 per ton, amounts to \$120,000. As this block is not exposed on at least three sides, it is classed as ore probably in sight.

Recapitulating the foregoing estimates we have,

Ore In Sight.

Block No. one,	36,923 tons @ \$10.00,	= \$369,230.00
" " two,	17,308 " @ \$12.00,	= 207,696.00
Totals,	54,231 "	= \$576,926.00

Probable Ore In Sight.

Block No. three,	10,000 tons @ \$10.00,	= \$100,000.00
" " four,	10,000 " @ \$12.00,	= 120,000.00
Totals,	20,000 "	= \$220,000.00

Economic Conditions.

With regard to an adequate supply of water for milling and all other requirements, the shaft at 500 feet depth will probably average the year round about 13,000 gallons in 24 hours and there was a constant increase in the flow between the 3rd. and 4th. levels which justifies the expectation that a considerable addition to the present flow will be developed when the shaft is deepened. On the Macgregor claim No. 8 water comes to the surface under conditions that indicate a considerable flow upon development, and on the Monterey Extension claim during a portion of the year, varying from 6 to 8 months, sufficient water to fill a 3 inch pipe comes to the surface over a rim-rock in a narrow place in the canon at sufficient elevation to admit of its being conducted to the collar of the Flagstaff shaft. This water is from a separate source from that supplying the flow in the shaft. Should a greater amount of water be required for the treatment of a larger production of ore an unlimited supply may be obtained by going to the Colorado River 6 miles distant over a smooth 6% grade following the bed of Eldorado Canon.

No timber grows in this region, but an abundance of wood for domestic purposes is secured for \$10.00 per cord delivered in

Camp, being taken from the Colorado River during flood season by the Indians. For operating mines and mills, gasoline and distillate are cheap and convenient fuels where the requirements are moderate, but for larger demands California Crude Oil, used for firing steam boilers, or in connection with Producer-Gas Plants, promises horse power at economical figures.

The altitude is somewhat under 3,000 feet, and the climate is mild and dry throughout the year so that no expensive buildings are required. The improvements now consist of the Superintendent's 4 room frame house, a large boarding-house tent, bunk tent, Foreman's tent, cook's tent, sleeping tent for night shift, bath-house for men, assay office, and business office, to all of which water is piped from the tanks at the collar of the shaft. At the collar of the working shaft is the following equipment, a 6 h. p. and a 15 h. p. Fairbanks-Morse Gasoline Hoist, a 25 h. p. Fairbanks-Morse Gasoline Engine, a 10 x 10 inch air compressor, a drill sharpener, a 2 1/2 inch Sullivan drill, 3 air hammer drills, a supply of both machine and hand steel, 2 forges with tools complete, 7 galvanized iron water tanks, 3 skips, a quantity of rails, piping for both compressed air and ventilation, and water pipe in the shaft and to all the buildings in Camp.

With regard to shipping facilities, and transportation, wagon freight from Searchlight now costs \$10.00 per ton which may be reduced under improved conditions resulting from new roads now building and increased traffic. The nearest Smelter is that of the United States Smelting, Refining & Mining Company at Needles, California. Railway freight from Searchlight to that point on ore in car lots varies from \$1.10 to \$6.00 per ton, the charge being based on the grade of the ore. On account of its favorable situation within 5 miles of the Colorado River and the excellent natural road down Eldorado Canon to its mouth, which is but 80 miles above Needles, it would seem that Flagstaff ore should be floated down the River at a very considerable saving over the cost of the much longer and more expensive wagon and rail haul via Searchlight and the Rail Road.

The camp may be reached via The San Pedro, Los Angeles and Salt Lake Rail Road, leaving the train at Nipton, California, where Automobiles from Searchlight meet all trains. A Stage, daily except Sunday, leaves Searchlight for Nelson, one and one half miles east of the camp, and upon arrangement the driver will bring passengers through. One coming by the Santa Fe' Route would leave the main line at Coffe, California and proceed by a branch road, daily except Sunday, to Searchlight where both routes connect with the Nelson Stage. Automobiles bring passengers to Nelson by arrangement. A telephone line connecting Searchlight and the mines in the surrounding region passes through Camp.

Conclusion.

The foregoing facts, which may be easily verified, substantially corroborate the claims made by the owners that they have "exposed ready to stop, 40,000 tons of ore of an average value of \$12.00 per ton". The apparent discrepancy between the above statement and the estimate of 54,231 tons worth \$576,926 is due to the inclusion in the latter of certain portions of the vein which, while having a tendency to lower the general average value below \$12.00 per ton, carry values sufficiently high to pay a good profit on a large tonnage. To attempt to grade the ore up to \$12.00 per ton at the expense of low grade ore that will pay a satisfactory profit will be wasteful extravagance.

The Flagstaff Group presents all of the essentials for the development of a large mining enterprise, viz: a large acreage in a proven district where entirely similar veins have yielded large returns under crude and wasteful methods now discarded; several thousand feet of veins outcropping, which in numerous places show pay ore at the surface; a partially developed mine with more than half a million dollars worth of ore ready to stop; with an ample water supply, and facilities for operating under the most favorable conditions. The geologic conditions are favorable for permanent and deep mining, since the mineralization occurs in an eruptive andesite dike that has come up from the depths and the unusual length and width of the outcrop indicates a strong and

persistant fissure likely to continue and carry its mineralization to great depth. The break in the ore on the lower levels is no doubt but temporary and probably not a serious matter, such conditions are of frequent occurrence in eruptive areas; the fault showing in the outcrop of the vein sufficiently accounts for the mixup under ground and affords a key to its solution.

The ore should yield readily to concentration, the rich sulphides will separate freely from the gangue which contains no barite or other objectionable material that would require a complicated method of treatment.

The most practical method of working the property is to erect a concentrating mill at the collar of the main shaft where there is an ideal site that will require very little extra expense for excavations, road making, &c.

A complete up-to-date plant consisting essentially of crushers, rolls, pulverizing mills, and concentrating tables, having a daily capacity of 100 tons, can probably be erected for \$50,000, and for such a production the mine equipment will have to be replaced by a heavier hoist and compressor, and additional machine drills, cars, &c. which may call for \$25,000 more.

With such a plant in operation, allowing liberally for mining and milling costs, including losses in treatment and marketing of concentrates, there should be a profit of \$500.00 per day, and the mill should be kept busy for 342 days on the ore now ready to stope.

In addition to the Flagstaff vein there are several parallel veins, before described, which have several important ore-shoots showing on the surface that would be considered promising prospects in any mining region, that add largely to the prospective value of this property.

Respectfully submitted,

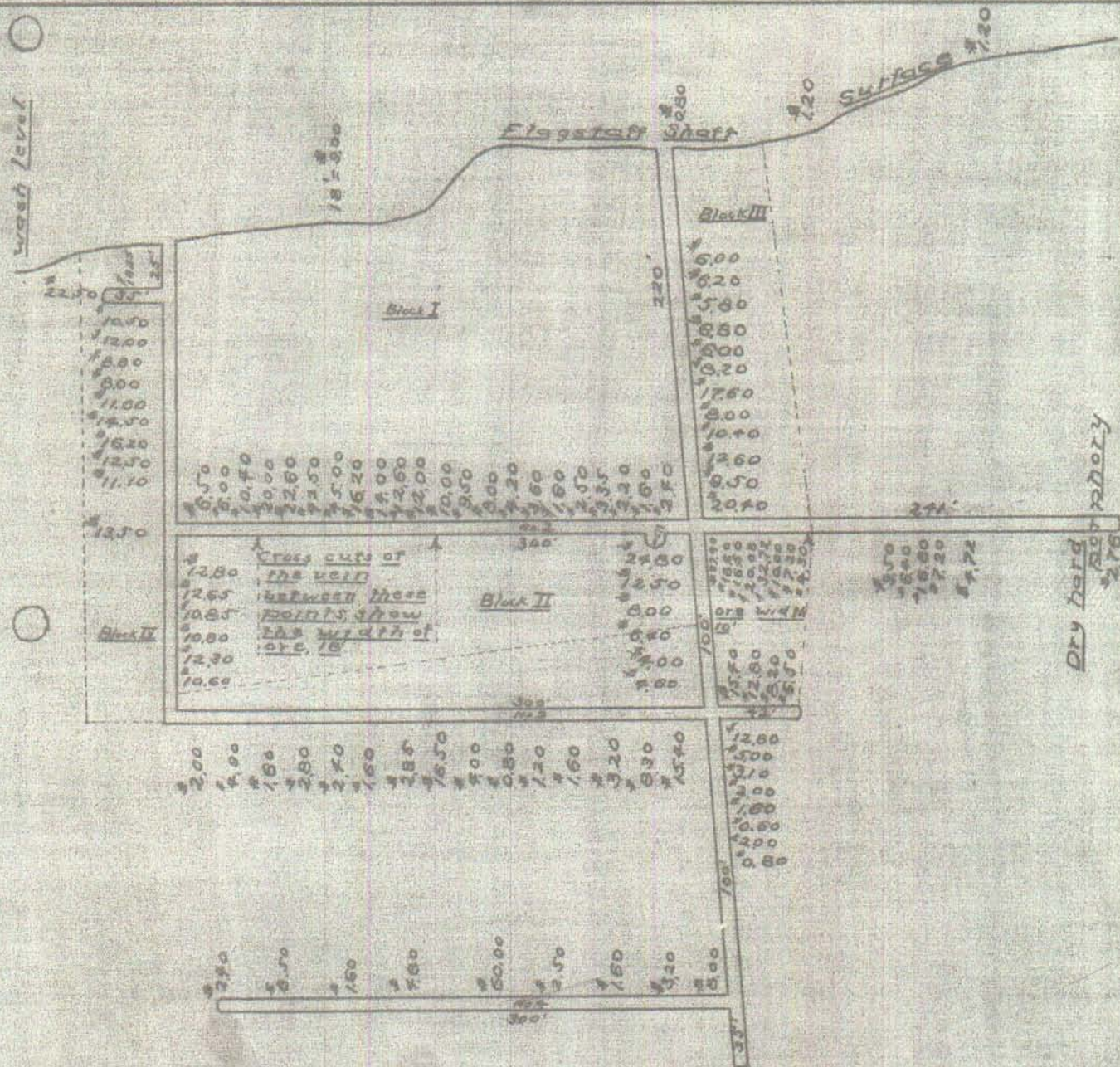
White Hills, Arizona,
September 13th., 1910.

O. B. Arnsden
ME

Nevada-Eldorado Mines Company, Nelson, Clark Co., Nevada.

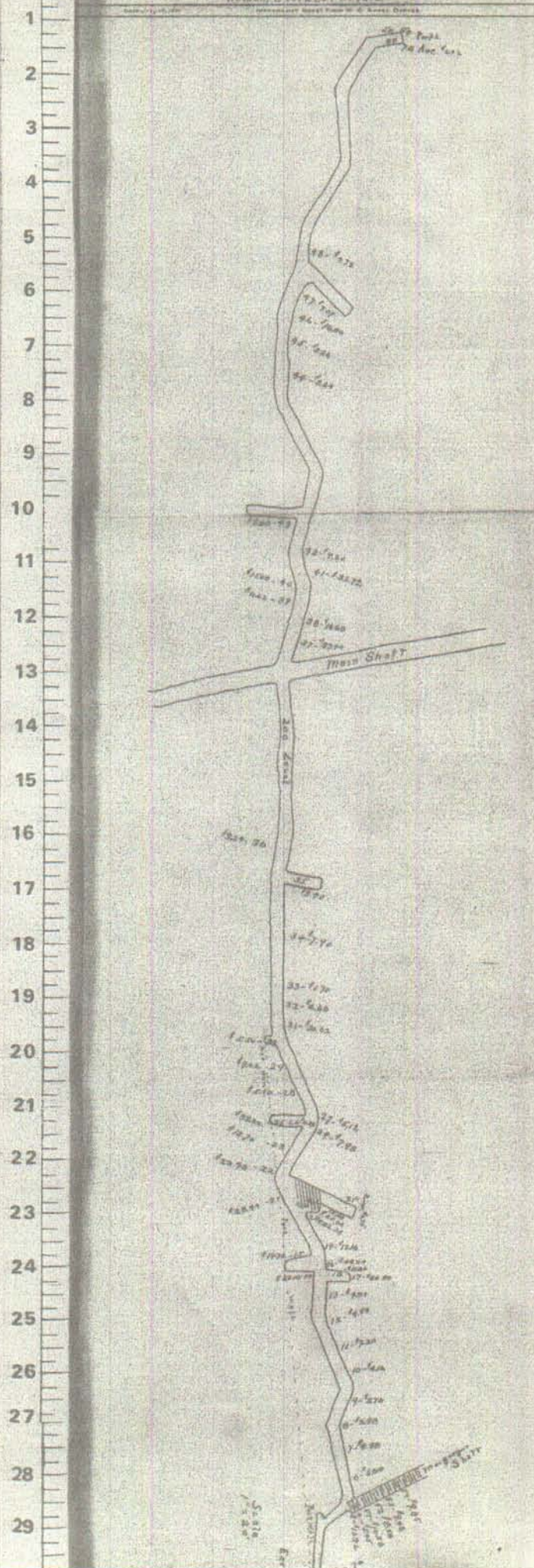
Date July 13, 1911

Information Sheet From W. G. Swart, Denver



Assay sheet of openings in Flagstaff vein covering ore widths from 5' to 20', Average width 10', Scale 1" = 80'

Page 1 of 1



Date July 24th, 1911.

Information Sheet Form W. G. Swart, Denver.

Sheet No. 149.

On the 24th of June, 1911, I reached Nelson, Nevada, for the purpose of looking over the Victor-Queen Bee property, owned by G. A. Ellis, on which you have information sheets. A few days before in Los Angeles, G. E. Finney showed me a report, by the owner, on the Nevada-Eldorado. Finney said that even if we were not interested in his property, the owner, Gustavus A. Duncan, was an exceedingly good engineer who would know all about the Ellis and other properties and would be the best possible man to see. This I found to be true. Duncan was formerly manager of the several sampling works operated by the Boston & Colorado Smelting Company, at various Colorado points. He has also been in charge of several mining operations for the Guggenheims, etc. His close and accurate knowledge saved me a great deal of time.

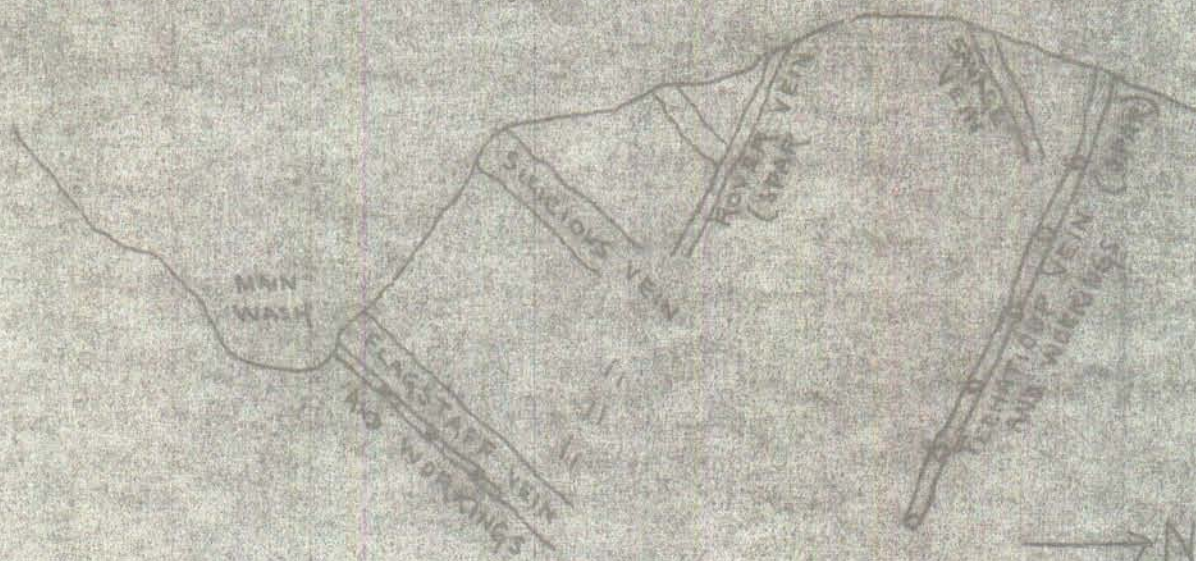
I could find nothing worth touching in the Victor-Queen Bee, but I did find three properties in Eldorado Canon, close together, with considerable ore blocked out, which look much more like mines than anything I have seen for a year. These three are, in order of importance:

- 1-The Nevada-Eldorado (Flagstaff)
- 2-The Eldorado Crown (Bergman)
- 3-The San Juan Group (Alford)

I am attaching hereto a report on the Nevada-Eldorado by O. B. Janssen, an engineer whom I do not know personally, but about whom I have made extensive inquiry, finding his reputation good. To most of the report I am willing to agree, so far as I can do so without having taken any samples myself. There are however some things that I look at in a different light and as they are important I will refer to them.

On page two of his attached report he says the veins dip to the north. There are two well defined sets of veins here. The smaller "spar" veins like the Pachaticup, Rover and Crown, dip to the south. The larger lower grade veins, like the Flagstaff dip to the north. An ideal cross section thro' this part of the district would look something like this.

Sheet No. 2.



VEINS DIPPING TO SOUTH ARE NARROW
 PERSISTENT AND HIGH GRADE, WITH SPAR.
 THOSE DIPPING TO NORTH ARE MUCH
 WIDER, QUARTZ VEINS, LOWER
 GRADE. PERSISTENCY UNKNOWN.

Sheet No. 5.

The bearing of this on the situation is seen when you consider the apparent cutting off of the ore at 250 feet in the main Flagstaff Shaft. If it is cut off--which I very much doubt--it is simply displaced by one of these more persistent South dipping veins.

The Flagstaff is in my opinion not a vein proper, in the sense that the Rover and Techatticup are veins, with two well defined walls.

The large North dipping veins like the Flagstaff have but one wall--the feet wall as a rule--the mineralization extending off to varying distances on the hanging side of this crevice.

That the ore is not cut off, in the sense that the values cease or play out with depth, is proven by the Techatticup workings close by which go down to 750 feet, and are still in good ore. These veins are not at all like those at Rayolite, and Pioneer, Nevada, which bottomed at 200 to 300 feet but, carrying sulphides of lead, zinc and copper as they do and lying in altered andesite and diorite, as they do, they may be expected to persist to a considerable depth.

In other words taking both the vein system and the ore character into account, I do not believe this mine has been bottomed, but that the Flagstaff will still be in commercial gold ore at 1000 feet.

This is for the future however. Coming down to the present showing there is a good mine already in sight, regardless of depth. The upper 250 feet of the mine shows ore ten feet wide by 300 feet long by 180 feet high, assaying better than \$10.00 gold and silver. One end of this 300 foot shoot is still in the same sort of ore. There are plenty of indications that there are three other similar shoots on the property and possibly more. These are not well developed but all show some ore, and indicate a long ore zone wide enough to make it well worth going after, even if only 200 feet deep.

I have been over the mine maps and assays, and you will find two sampling plans attached, one showing a value of about \$12.00 per ton, for a width of ten feet, the other \$15.00 per ton for a width of 9 feet. If these assays can be checked, and I believe they can, then there is from 40,000 to 50,000 tons of \$12.00 ore pretty well blocked out that can be mined for \$1.75 and cyanided for \$2.35, leaving on an 80% recovery, a margin of \$5.50 per ton, or a net value for the property of \$200,000.00 to \$275,000.00. No account is taken of ore in sight at other points on the property, of which there is considerable, as already mentioned, nor of the fact that there appears to be more than enough galena in the ore to pay for concentration either before or after cyaniding. On the other hand, no account is taken of cost of equipping the property, which would be considerable.

DATE July 24th, 1918.

INFORMATION TAKEN FROM W. D. QUART, DENVER.

SHEET NO. 149.

Sheet No. 4.

Duncan got a few of his Colorado friends to go in with him to develop this mine to sell. They have put their own money in and have put a lot of good ore in sight. They are now ready to sell. They ask \$300,000.00 for the property. They want 10% down after examination, balance on reasonable terms. I spent a good deal of time with Duncan, and have sounded his Colorado partners. I am pretty well satisfied that the property can be bought for less than \$300,000.00 if a thorough and careful examination shows it to be worth less than that figure, which of course it will, and if the deal is handled right.

I am certain of this because Duncan told me he could get better terms for us if we would take some of his personal stock holdings. His backers all have regular incomes. Duncan has to depend on this property, hence is the man needing money the most. By fixing him up we can get what we want from the others.

It might even be possible to come in for a controlling interest, allowing the present owners to stay in if they desire. Duncan is the largest single stockholder, but is sick of the desert. He has a wife and three children living at the mine with him. The children ought to be in school and in better surroundings, and he will do almost anything to gain this. Duncan is a mighty fine fellow about 50 years old, well educated, experienced, clear headed and reasonable, and when the time comes for making a real deal, can be counted on to be fair and clean.

This property has been presented to A. P. Anderson and S. W. Mudd, both of whom had it looked over in a preliminary way. Both objected to the price but Mudd's letter is a very open bid for further negotiations. At that time Duncan offered only the Flagstaff group at the \$300,000.00 price. He now offers the Yellow Ned and other claims as shown on the claim map, in addition with no raise in price. This includes several claims recently purchased from the Wharton Estate for some \$50,000.00 to protect apex and water rights.

I have taken considerable time in going over these maps, reports, calculations, etc., and in looking up Duncan's partners. I believe there is a big mine here, with the prize well in sight and with a decidedly promising future. I will recommend to you that arrangements be made to examine at once. If it stands up it is the mine we are looking for. I would prefer McDaniel to Disbrow for this piece of work, and as McDaniel wires me he is to be in Jean, Nevada, thirty miles from Nelson, this week I hope arrangements can be made for immediate action. Kindly let me know by wire if interested, as I must notify Mr. Duncan that we will want the option to examine which he promised to give me when ready.

NEVADA BENGARD MINES COMPANY

NELSON, CLARK COUNTY, NEVADA

Date July 24th 1911

Information Sheet from W. B. Swart, Deane

Sheet No. 129

Sheet No. 3

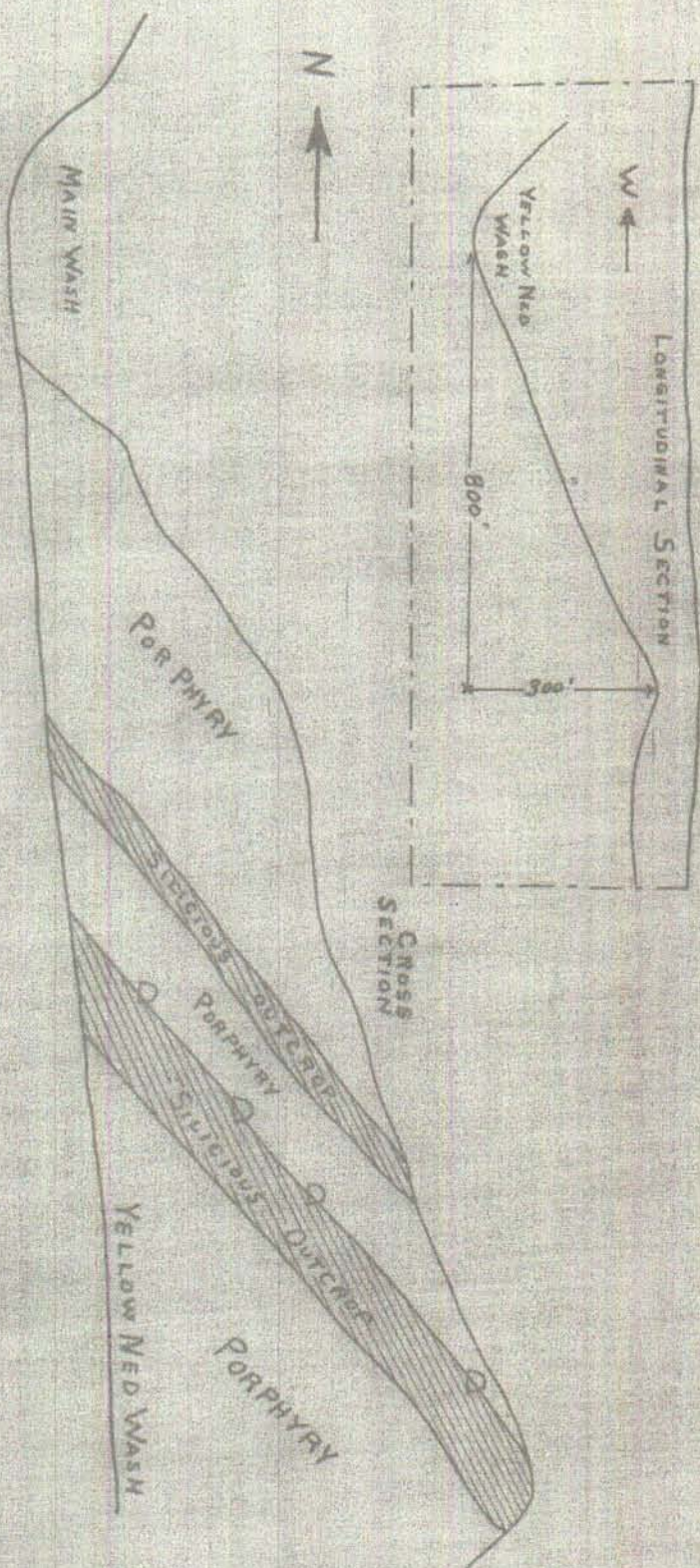
I am appending copies of sketches from my note book showing various bodies of probable ore not counted in the main estimate, etc.

Similar report will follow shortly on the two other groups mentioned above. I am waiting for certain maps and assay plans on the Eldorado Group, which Mr. Deane is trying to get for me. The three properties naturally belong together and there is other ground that should be and can be included, if anything is done.

Yours very truly,

W. B. SWART

SKETCH OF YELLOW NED WORKINGS NEVADA-ELDORADO MINES, NELSON, NEVADA, 1911.

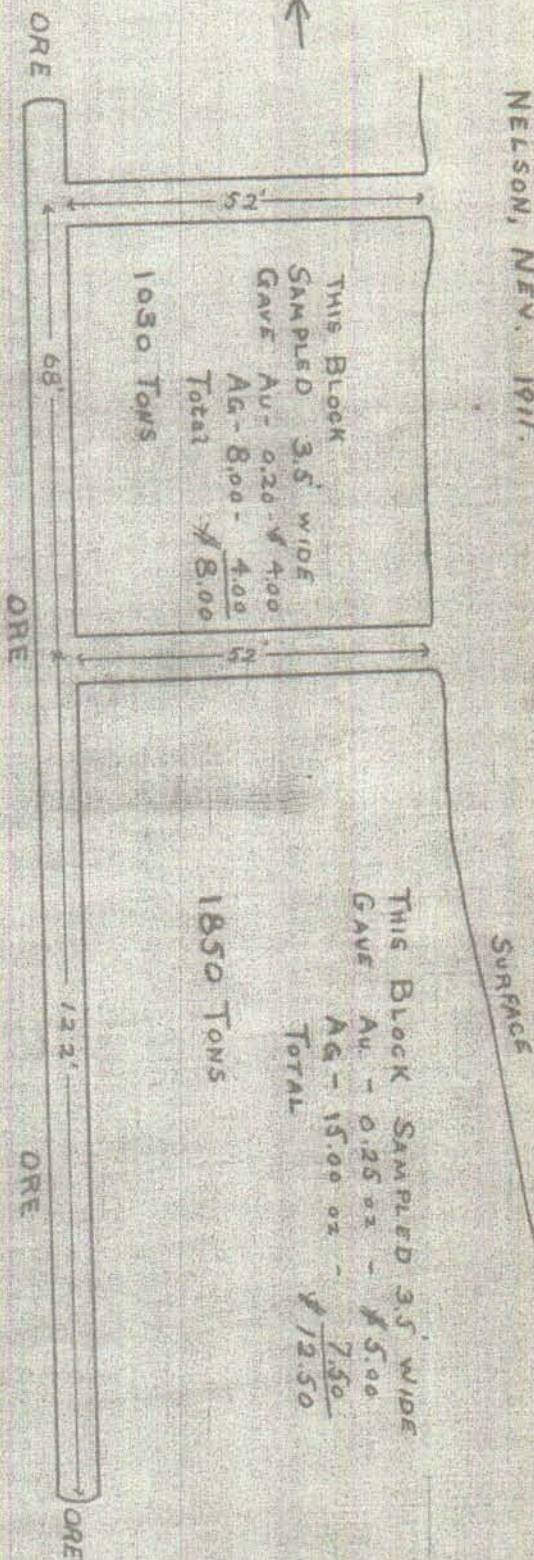


Silicious Outcrops Very Conspicuous. They may be altered dikes.
Probably 500 feet of work done at various places as shown, all in ore.
Ore is from 3 ft. thick up to 20 ft. Assays said to be
from \$6.00 to \$20.00. It looks good. It is easy to figure.
\$100,000 in this showing if it has the values claimed.

NEVADA-ELDORADO MINES.

DATE JULY 28, 1911 INFORMATION SHEET FROM W. G. SWART DEVEN SHEET NO. 149

SKETCH OF ROVER WORKINGS
NEVADA - ELDORADO MINES
NELSON, NEV. 1911.

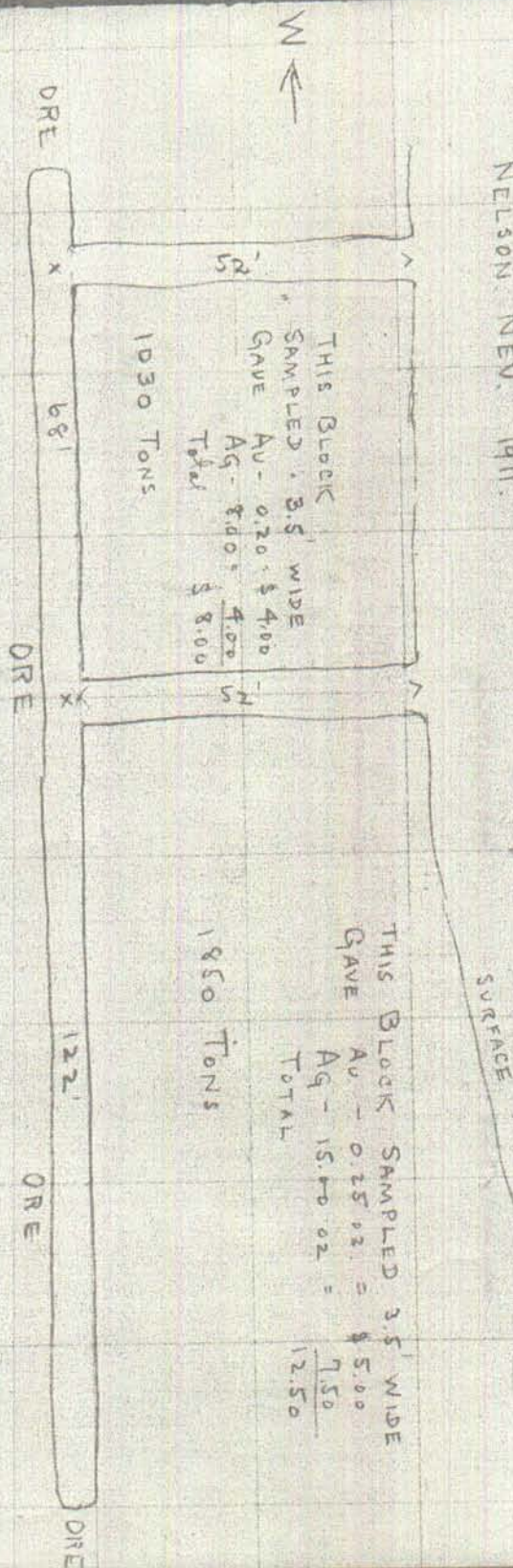


THIS VEIN DIPS TO THE SOUTH
THE BOTTOM LEVEL IS ALL IN ORE INCLUDING BOTH FACES.

NEVADA-ELDORADO MINES.

DATE July 29, 1911 INFORMATION SHEET FROM W. G. SWART, DENVER. SHEET NO. 149

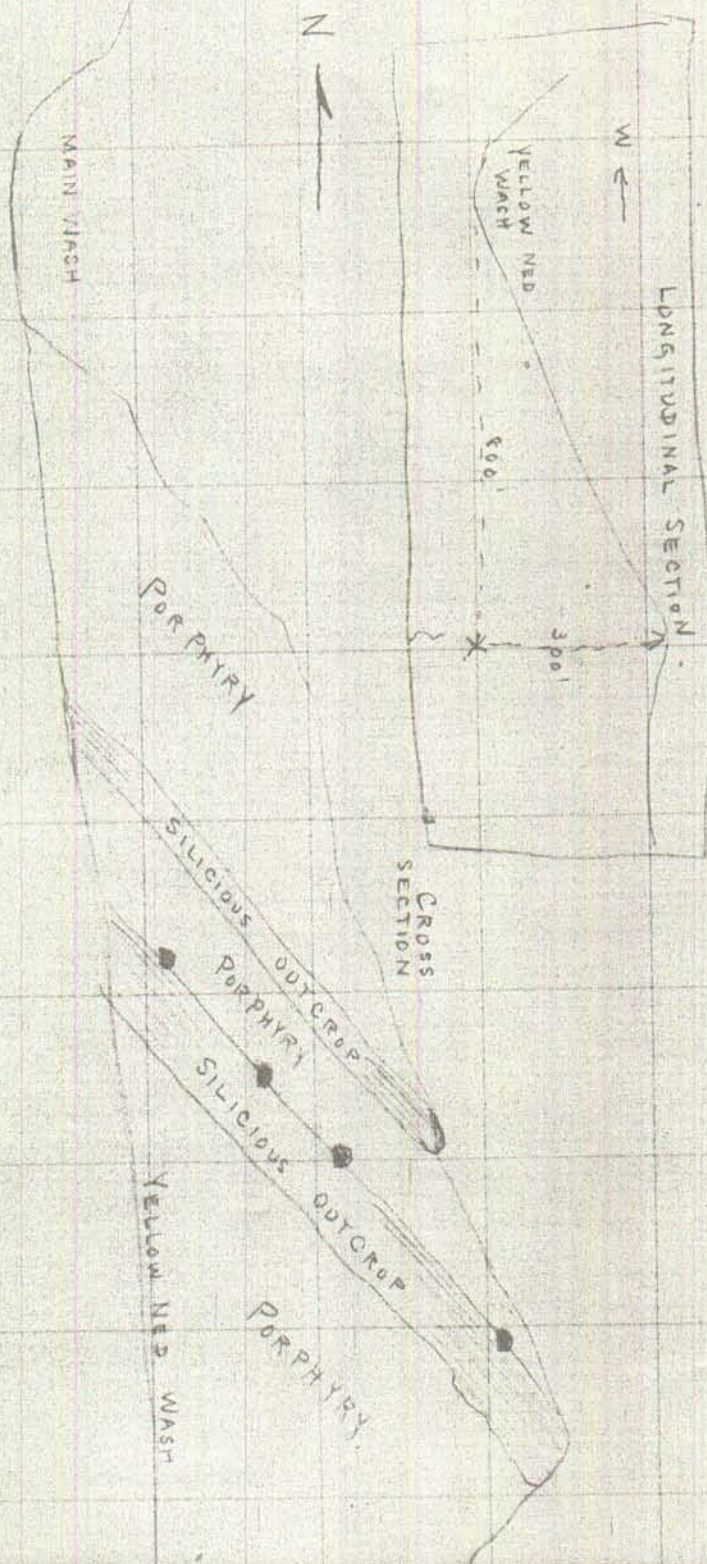
SKETCH OF ROVER WORKINGS
NEVADA - ELDO RADO MINES,
NELSON, NEV. 1911.



THIS VEIN DIPS TO THE SOUTH.
THE BOTTOM LEVEL IS ALL IN ORE, INCLUDING BOTH FACES.

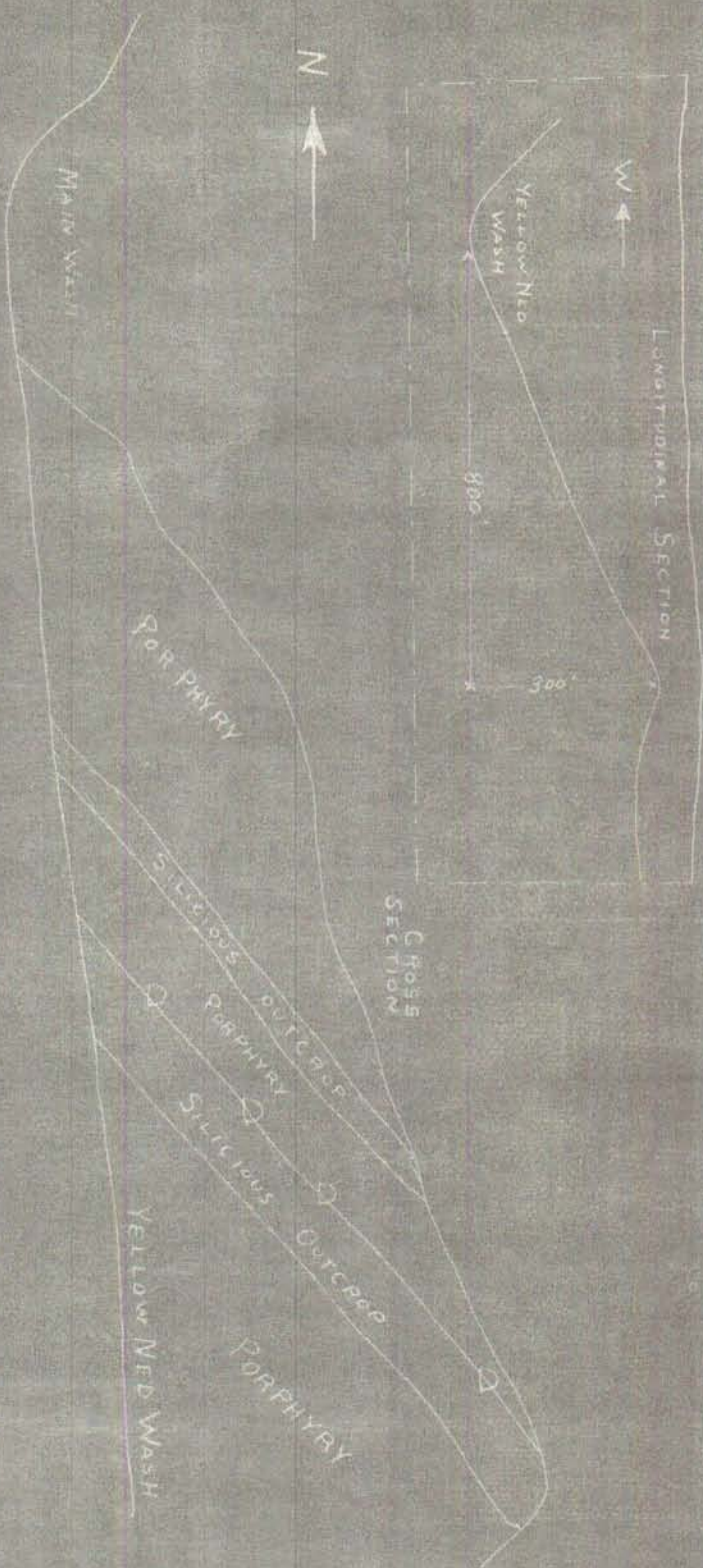
July 20 - 1911

SKETCH OF YELLOW NED WORKINGS
 NENADA-ELDORADO MINES
 NELSON, NEVADA 1911.



SILICIOUS OUTCROPS VERY CONSPICUOUS. THEY MAY BE ALTERED DIKES.
 PROBABLY 500 FEET OF WORK DONE AT VARIOUS PLACES AS SHOWN, ALL IN ORE.
 ORE IS FROM 3 FT. THICK UP TO 20 FT. ASSAYS SAID TO BE
 FROM \$6.00 TO \$20.00. IT LOOKS GOOD. IT IS EASY TO FIGURE
 \$100,000 IN THIS SHOWING, IF IT HAS THE VALUES CLAIMED.

SKETCH OF YELLOW NED WORKINGS
NEVADA-ELDORADO MINES
NELSON, NEVADA, 1911



SILICIOUS OUTCROPS VERY CONSPICUOUS THEY MAY BE ALIGNED LINES
PROBABLY 500 FEET OF WORK DONE AT VARIOUS PLACES AS SHOWN, ALL IN ORE
ONE IS FROM 3 FT. THICK UP TO 20 FT. ASSAYS SAID TO BE
FROM \$600 TO \$2000. IT LOOKS GOOD IT IS EASY TO FIGURE
\$100,000 IN THIS SHOWING IF IT HAS THE VALUES CLAIMED

NEVADA-ELDORADO MINES

File Under	<i>EAC</i>
Subject	<i>Eldorado Canon</i>

Denver, Colo., August 15th, 1911.

Mr. Edward A. Clark,
Boston,

Dear Mr. Clark:-

I have a letter from McDaniel to-day giving his impressions of the Duncan property in Eldorado Canon, which Disbrow is now examining. McDaniel thinks the examination is going to show about \$150,000 net in sight in the main workings, with good chance for more ore laterally. McDaniel got down into the bottom of the mine, which I could not do, and says there is not much down there. Duncan told me this was so, and I wrote it to you, stating however, that as the geology looked, and as I drew it for you, there was a strong chance that this ore was not bottomed, but had simply been displaced. In any event, it is not there, which makes the bottom of the mine a development game pure and simple. MacDaniel thinks, as I did, that the Bergman property is a pretty game, but too small to take over alone. If we can make a deal with Duncan, then we will want the Bergman property also. Disbrow's assays will shortly tell the tale. I have every reason to believe that when results are out, we will be able to make a very reasonable deal with Duncan, which was my idea from the start. This I have already written you. I am hoping the assays check up well, for if they do this will be a game worth keeping after.

Yours Very Truly,

Copy to A.F.H.

W. G. SWART

STATEMENT

On the Physical Conditions and Values at the
Flagstaff Mine of the Nevada Eldorado Mining
Company located in Clark County Nevada, near
Duncan, N.E. of Searchlight about 24 miles.

W.F. Disbrow.
Aug 27 '11

VALUE OF THE ORE.

Values in East 200 Foot Level within Limits of Blocks.

<u>Numbers of the Samples Combined</u>	<u>Their Total Width</u>	<u>Their Average Value</u>	<u>Foot Dollars</u>
22A, 22B	8.0	\$ 9.24	74.00
21A	5.0	7.30	36.50
20B	5.0	10.20	51.00
19B	5.5	5.60	30.80
17A, 16A, 16B	20.0	13.50	270.00
15A, 15B, 15C, 15D	15.5	18.20	282.00
11A, 11C	8.5	24.10	204.80
9A, 9B	8.5	5.95	50.75
Average	9.5	\$13.00	1000.00

Values in West 200 Foot Level within Limits of Blocks.

27A, 27B	6.5	19.40	126.00
28A	3.0	6.45	19.35
29A	3.5	9.55	33.42
30A, 30B	8.0	5.20	41.60
32	5.0	7.40	37.00
33	7.0	9.05	63.35
Average	5.5	\$ 9.70	320.72

Values in Mc Gregor Shaft within Limits of Blocks.

24	5.50	4.40	24.20
25	4.2	4.10	17.22
26	3.0	11.50	34.50
Average	4.2	\$ 6.00	76.00

Note;-Gold figured @ \$20.00 per oz and Silver @ 50¢ per oz.

Note;-All other samples taken are below cost of production which is estimated at \$4.50 per ton.

Value per ton of Block "A", "In Sight";

Taken as the value of "East 200 Ft. Level within Limits of Blocks" Average width 9.5 feet. Average Value \$13.00

Note;-The Mc Gregor Shaft should be sampled for the other side of this block, but owing to obstacles, and its irregularity, such samples would be unsatisfactory. Therefore the term "In Sight" should here be taken with much reservation.

Value per ton of Block "A", "Probable";

Taken as the value of Block "A" "In Sight"; and given the same width.

Note;-This is also an extremely doubtful proceeding.

VALUE OF THE ORE
(Continued)

Value per ton of Block "B" "In Sight"

Taken as the average of "Values in East 200 Ft. Level within Limits of Blocks" and the "Values in Mc Gregor Shaft within Limits of Blocks"

Sum of Widths in Mc Gregor Sh.	Avg Value Mc G. Sh.	Ft. \$McG. Sh.
12.70	\$6.00	75.22

Averaging these with each sample on "East 200 Ft. Level within Limits of Blocks"

22A, 22B	8.0ft	\$ 8.24	74.00
McG. Sh.	12.7	6.00	75.92
Slice 1 Avg.	20.7	7.25	149.92
21A	5.0	7.30	36.50
McG. Sh.	12.7	6.00	75.92
Slice 2 Avg.	17.70	6.35	112.42
20 B	5.0	10.20	51.00
McG. Sh.	12.7	6.00	75.92
Slice 3 Avg.	17.70	7.15	126.92
19.B	5.5	5.6	30.80
McG. Sh.	12.7	6.0	75.92
Slice 4 Avg.	18.20	5.85	106.72
17A, 16A, 16B	20.0	13.50	270.85
McG. Sh.	12.7	6.0	75.92
Slice 5 Avg.	32.70	10.60	346.77
15A, B, C, D,	15.5	18.20	282.00
McG. Sh.	12.7	6.0	75.92
Slice 6	28.2	12.70	357.92
11A, 11C	8.5	24.10	204.80
McG. Sh.	12.7	6.0	75.92
Slice 7	21.2	13.20	280.72
9A, 9B,	8.5	5.95	50.75
McG. Sh.	12.7	6.0	75.92
Slice 8	21.2	5.95	126.67

VALUE OF THE ORE.

(Continued)

Value per ton of Block "B" "In Sight" (Continued)

The average width of each slice is the width of the sample on the 200 Level averaged with the 3 Mc Gregor Shaft samples.

Slice	Av Width	Av Value.	Ft \$
1	<u>20.7</u> 4	\$ 7.25	37.8
2	<u>17.70</u> 4	6.35	28.1
3	<u>17.70</u> 4	7.15	31.6
4	<u>18.20</u> 4	5.85	26.6
5	<u>32.70</u> 4	10.60	86.6
6	<u>28.20</u> 4	12.70	88.5
7	<u>21.20</u> 4	13.20	70.0
8	<u>21.20</u> 4	5.95	31.6
Avge. of Block 5.5 ft.		<u>\$ 9.20</u>	<u>401.8</u>

Value per ton of Block "B" "Probable"

Taken as the value of Block "B" "In Sight"
Note;—This is optimistic.

Value per ton of Block "C" "Possible"

On account of lagging, and on account of the fact that the vein is not cut by entire Shaft it seems advisable to neglect low grade samples 40 and 41 in the Shaft—as the ore must go somewhere—, and to use "Values in West 200 Ft. level within Limits of Blocks", making due allowance for waste in figuring tonnage. Average width 5.5 feet, average value \$9.70

Value per ton of Block "D" "Probable"

Taken the same as Block "C" "Possible."

Value of Undeveloped Ground

Is purely speculative as will be seen upon consulting maps.

TONNAGE OF ORE.

Block	Gross Tons Rock	Estd % over \$4.50 per Ton	Net Tons Ore.
"A" In Sight	4930	64	3150
"A" Probable	4930	64	3150
"B" In Sight	1900	61	1160
"B" Probable	1900	61	1160
"C" Possible	3800	50	1900
"D" Probable	1270	60	760

SUMMARY OF TONNAGE AND VALUES.

Ore In Sight;	Block	Tons	Gross Val per Ton	Gross Val less whg cost \$4.5	Net Profit Total.
	"A"	3150	\$13.00	\$8.50	\$26,775.00
	"B"	1160	9.20	4.70	5,450.00
					\$32,225.00
Probable Ore;	"A"	3150	\$13.00	\$8.50	\$26,775.00
	"B"	1160	9.20	4.70	5,450.00
	"D"	760	9.70	5.20	3,950.00
					\$36,175.00
Possible Ore;	"C"	1900	9.70	5.20	\$ 9,880.00
					\$ 9,880.00

RESUME.

	Tons	Net per Ton	Net Profit.
Ore In Sight	4310	\$ 7.50	\$32,225.00
Probable Ore	5070	7.10	\$36,175.00
Possible Ore	11900	5.20	\$ 9,880.00

LIST OF SAMPLES SHOWING ASSAY AND VALUE.

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>Total Value (See Note)</u>
5A	.02	.3	.55
5B	.02	.3	.55
5C	tr	.2	.10
5D	.04	1.6	1.80
5E	.02	.4	.60
7A	.03	.4	.80
7B	.03	1.3	1.25
8A	.02	.5	.65
8B	.02	.8	.80
9A	.19	1.80	4.70
9B	.22	6.0	7.40
10A	.10	1.30	2.65
10B	.19	.7	4.15
11A	.20	1.60	4.80
11B	.16	.5	3.25
11C	1.04	33.6	37.60
11D	.12	2.0	3.40
15A	.23	1.6	5.40
15B	.27	20.1	15.45
15C	.44	10.1	13.85
15D	1.14	21.1	33.35
16A	.54	13.3	17.45
16B	.51	11.8	15.90
17A	.31	4.9	8.65
1			
18A	.03	.9	1.05
18B	.08	1.80	2.50
19A	.09	2.3	2.95
19B	.20	3.2	5.60
20A	.06	1.7	2.05
20B	.18	13.2	10.20
21A	.18	7.4	7.30
21B	.04	.8	1.10
22A	.30	14.3	13.15
22B	.19	6.2	6.90
23	.04	1.40	1.50

LIST OF SAMPLES SHOWING ASSAY AND VALUE.
(Continued)

<u>Sample No.</u>	<u>Oz. Gold.</u>	<u>Oz. Silver.</u>	<u>Total Value.</u>
24A	.04	3.3	2.45
24B	.15	6.8	6.40
25	.12	3.40	4.10
26	.31	10.6	11.50
27A	.28	11.1	11.15
27B	.48	30.2	24.70
28A	.16	6.5	6.45
28B	.10	2.5	3.25
29A	.32	6.3	9.55
29B	.12	3.5	4.15
30A	.19	2.5	5.05
30B	.18	3.40	5.30
31A	.07	.6	1.70
31B	tr	.6	.30
32	.30	2.8	7.40
33	.26	7.7	9.05
34A	.14	3.6	4.60
34B	.02	.8	.80
35	tr	.4	.20
36	tr	.4	.20
37	tr	.3	.15
38	tr	.3	.15
39	.02	1.8	1.30
40	.01	.2	.30

LIST OF SAMPLES SHOWING ASSAY AND VALUE
(Continued)

<u>Sample No.</u>	<u>Oz Gold.</u>	<u>Oz. Silver</u>	<u>Total Value.</u>
41	.02	.4	.60
42	.11	.9	2.65
43	.14	2.8	4.20
44	.07	.6	1.70
45	.04	.4	1.00
46AA	.01	.9	.65
46B	.01	.9	.65
46C	.04	2.2	2.40
47A	.04	.3	.95
47B	.10	3.3	3.65
47C	.05	.8	1.40

NOTE:-

Gold value calculated at \$20.00 per Oz., and silver at 50 ¢
per oz.



PHYSICAL CONDITIONS;

The Eldorado Canon District in general consists of a series of flows of porphyry which have been tilted and dip to the northeast at an angle of roughly 35 degrees. The Flagstaff vein coincides in dip with one of these tilted flows but the character of the rock in the vein differs from that of the foot and hanging wall countries. The hanging wall portion is a rather soft blocky porphyry, dark in color and very fine grained. The hanging wall itself is not defined. In fact there is nothing that could properly be called a hanging wall. The vein rock is a gray colored porphyry having a quartz ground mass with phenocrysts of both orthoclase and plagioclase feldspars. It has been called a quartz monzonite. The foot wall is well defined and has a gouge indicating a slip along the flow beds. The foot wall country rock is a breccia of considerable thickness and contains both rounded and angular fragments, indicating that it is in itself a breccia which has been further affected by the slip along the foot wall.

EXTENT OF THE VEIN ;

west

Going along the West 200 Foot Level there is a point where the values are diminishing. No reason is found for this as conditions on the surface are not indicative of any change in the formation, nor is any such change shown in the level itself.

Going east along the East 200 Foot Level from the Shaft a zone of low grade ore is encountered which is shown on maps. After passing this zone the values are good to the Mc Gregor shaft.

Passing down the Mc Gregor Shaft, a pinch is encountered at the top of the vertical portion above the 300 Level



as shown on maps. At this point a fault is near and the argument has been advanced by the owners that this pinch is due to the fault. Very good. Let us go west along the 300 foot level from the bottom of the McGregor Shaft and get away from this fault and its influence. The vein has not widened out any. The foot wall is there and calcite stringers are seen. It is undoubtedly the vein. The values are not even claimed to be good. We are just as far away from the fault as in portions of the 200 East where the values are good. Something has happened to the vein in a horizontal direction, as neither the 300 or the 400 foot levels are claimed to be worth stoping.

The conditions in the shaft with respect to the vein are shown on cross sections accompanying. It is only fair to state that the owners claim that grab samples and cuts from the roof of the shaft assay well at times and that there are indications that there may be an ore body above the 200 foot level where the shaft has left the vein. This cannot be said, however of the shaft below the 200 foot level. It is in the vein part of the way and in part of the vein all the way down to the 300 level, and the values are poor. The foot wall was encountered in a small cross cut driven 24 feet above the 300 level. The values are discouraging.

ENRICHMENT OF THE VEIN:

Many channels are afforded by the numerous cross fractures in the porphyry, for the downward descent of surface waters. Evidence is not wanting that such waters have dissolved, by means of some of their contents the sulphides above the 200 foot

level. It is a very reasonable proposition that redeposition has occurred at or near the 200 Level. If no other evidence of this were present it would be inferred because of the fact that this is the zone where the best values appear and that no workable values occur below it. At any rate, it seems to be the practical thing to assume in this case. Certainly we cannot assume that after two poor levels below the 200 something is going to happen to make more ore below the 400, although such might be the case.

THE FAULT ON THE EAST END OF 300 LEVEL AND THE EAST EXTENSION OF VEIN;

About 4000 feet from the main shaft about S 60 E are the Yellow Ned workings. These are claimed to be the extension of the main ledge and a shaft in the wash shows values but is now under water. This latter is also on this strike. Without going into detail it can be said that at least the Yellow Ned does not exhibit the same vein characteristics as the Flagstaff, and with regard to the outcrop near the shaft in the wash it is probably an entirely different contact than that of the Flagstaff vein.

The Flagstaff vein is undoubtedly faulted and if such is the case it is naturally probable that it is displaced from its regular strike and not that it has been faulted back again somewhere in the middle of the wash in order to make it line up with the shaft in the wash and the Yellow Ned Workings.

A faulting to the N.E. is seen on the surface where the fault on the 300 level should outcrop. Such a fault would make the Rambler vein a continuation of the Flagstaff, but as there so many veins in the country around Eldorado Canon, it was considered better to take the Flagstaff main workings as a type of this deposit rather than doing much surface work on its extensions



as this would be unsatisfactory and uncertain owing to the lack of workings on any of the possible extensions of the Flagstaff vein.

OTHER VEINS;

at least
It should be understood that there are two distinct types of ore deposit to be seen in this district. One dips with the flow beds of the porphyry. This is characteristic of the Rambler and Flagstaff veins.

The other deposit is distinguished by the fact that it cuts through the flow beds and has a nearly vertical dip. Such veins are the Techatticup and Savage, Rover and others.

The veins of the latter class have furnished the producers of the District.

THE DISTRICT IN GENERAL. COSTS AND CONDITIONS

For these data reference is made to a report by Walter Brown E.M. of Searchlight on the Eldorado Crown which is elaborate and accurate and refers to the above. This report is forwarded herewith.

W. T. Linde

G. A. DUNCAN,
MINING ENGINEER.

file

let

Nelson, Nevada, September 9th, 1911.

Mr W. C. Swart,

1118 Foster Building,

Denver, Colorado.

File Label

G. A. Duncan
El Dorado

Dear Mr Swart:-

Your letter of September 7th has just reached me, and, naturally, I am not elated.

The portion of your letter which says you will go over the matter with Disbrow as soon as opportunity offers, and perhaps make me an offer for the property, let me certainly hear from you again in the case, please and interests me, and I shall anxiously await the coming of that letter.

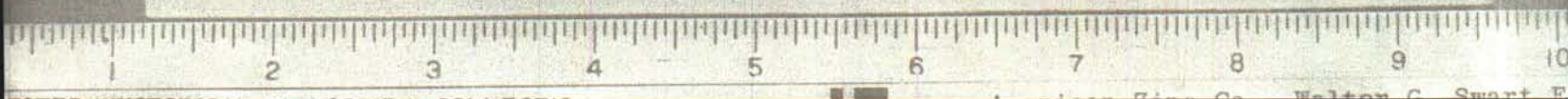
In estimating the worth of the property, I think some value should be credited to the Yellow Ned group, the The Rever Group, and the four claims that lie between, and extend the holding along the main fracture of this section more than 3000'.

I appreciate the frankness and kindness of this letter from you, and I hope you will, as soon as possible, tell me the best price you are willing to pay for this property.

With sincere regards, I am

Very truly yours,

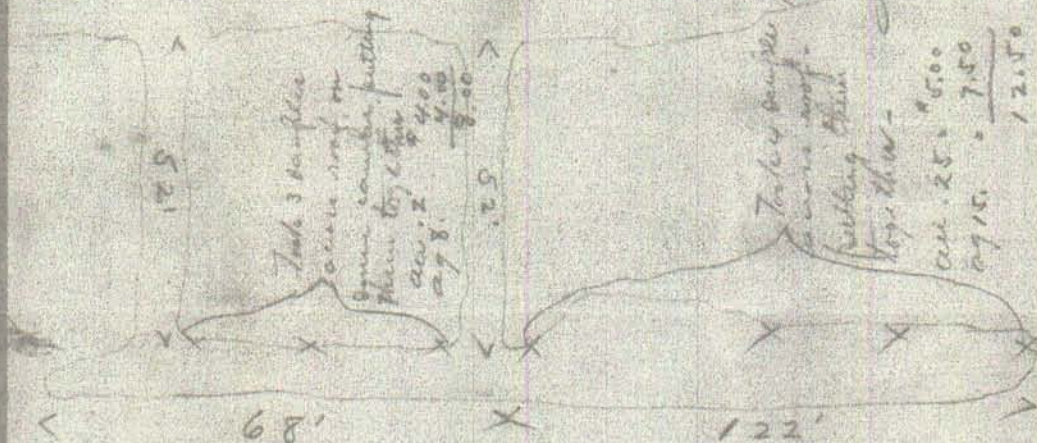
G. A. Duncan.



Rover

Surface

Red



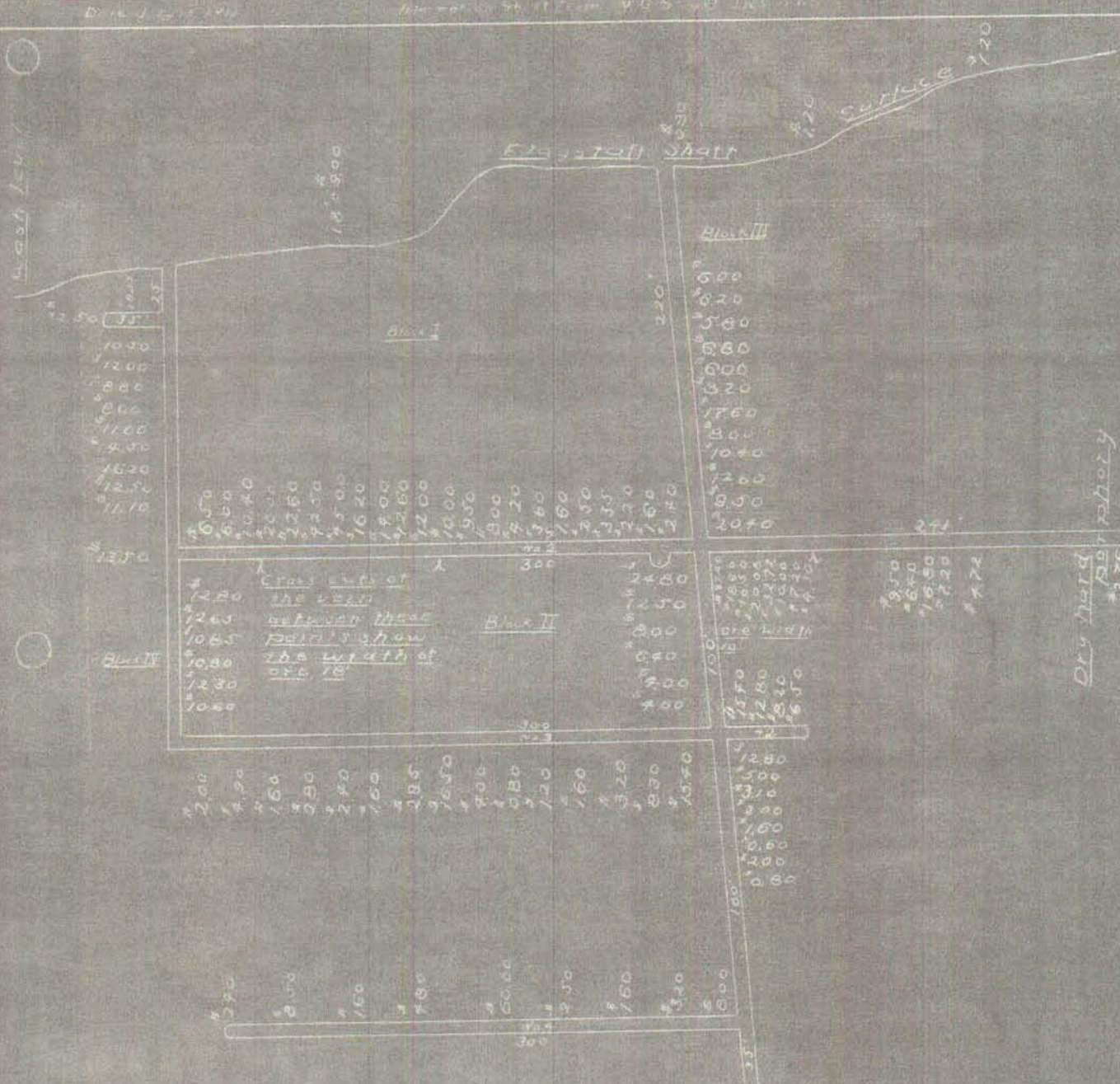
Nevada Eldorado Mines

Nelson

Rev.

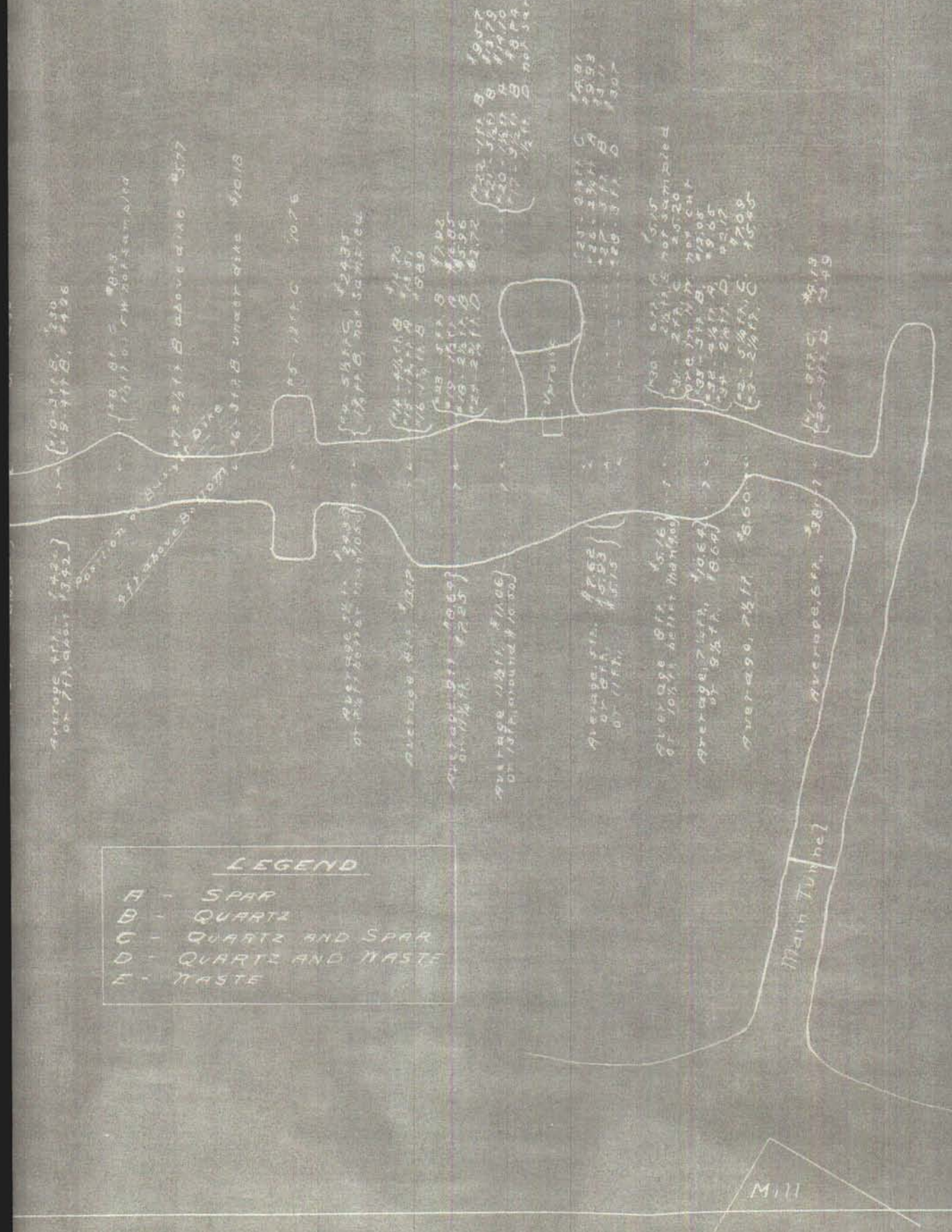
Nevada-Eldorado Mines Company

Nelson, Clark Co., Nevada

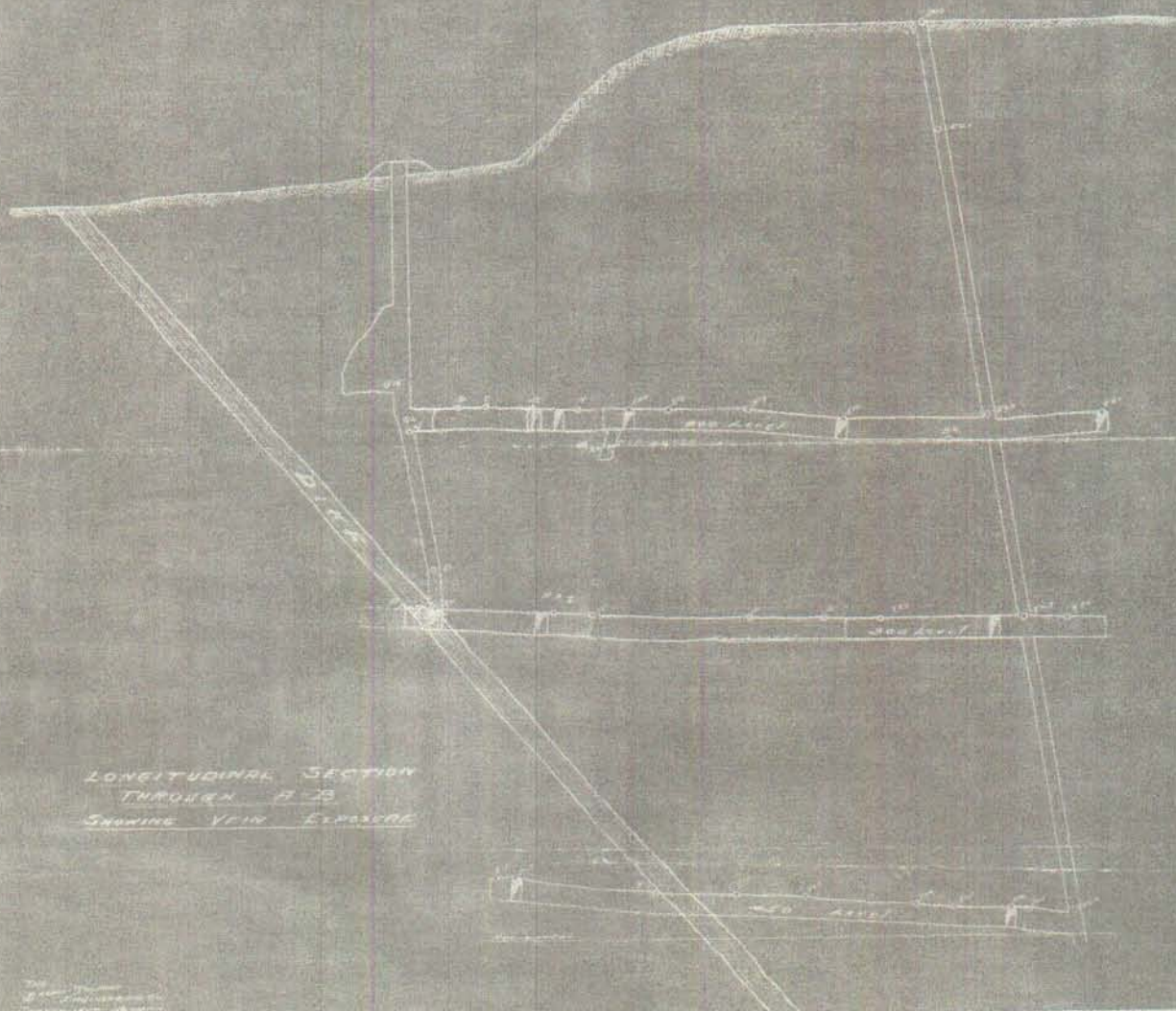
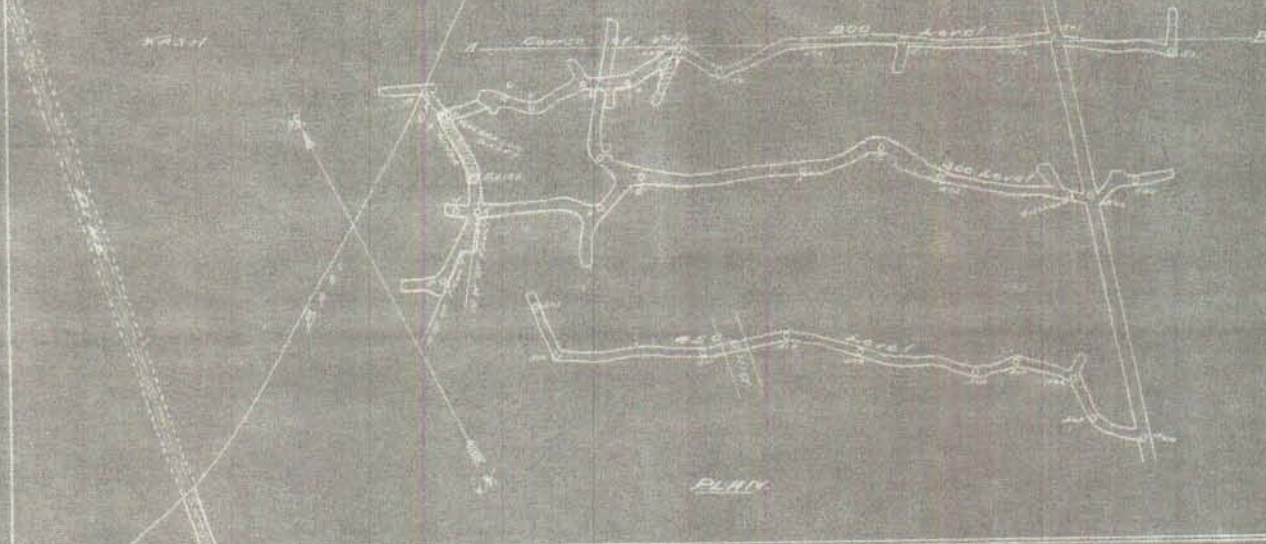


*Assay sheet of openings in Flagstaff vein covering are
widths from 5 to 20. Average width 10
Scale 1" = 30'*

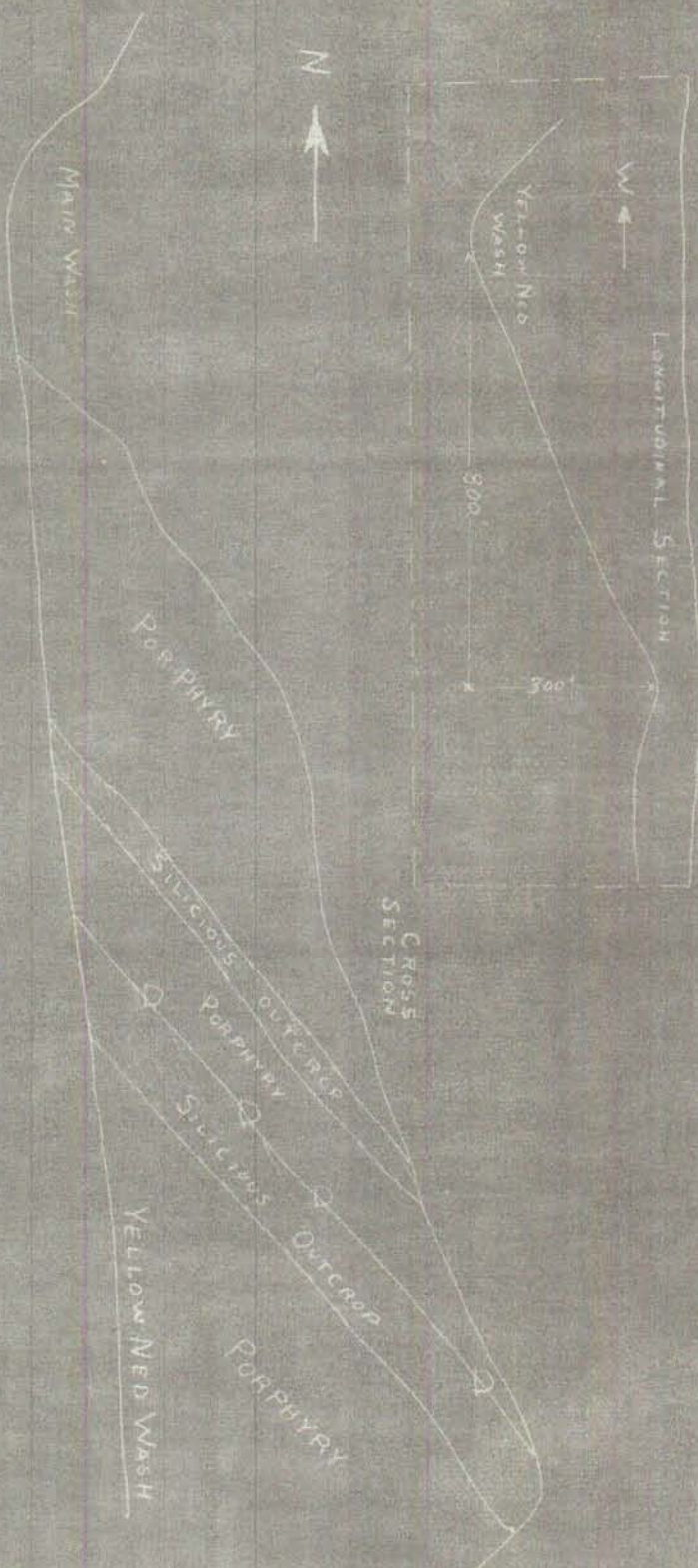
ASSAY PLAN
SEEN MAIN TUNNEL
RADO MINING DISTRICT
ARK COUNTY, NEVADA
SCALE, 1 IN. = 10 FT.



MAP
OF
UNDERGROUND WORKINGS
OF THE
FLAGSTAFF MINE
CLARK COUNTY, ILLINOIS
Scale 500' = 1 in.



SKETCH OF YELLOW NED WORKINGS
NEVADA-EL DORADO MINES
NELSON, NEVADA, 1911



SILICIOUS OUTCROPS VERY CONSPICUOUS. THEY MAY BE ALTERED DICES.
PROBABLY 500 FEET OF WORK DONE AT VARIOUS PLACES AS SHOWN. ALL IN ORE.
ONE IS FROM 3 FT THICK UP TO 20 FT. ASSAYS SAID TO BE
FROM 8600 TO 22000. IT LOOKS GOOD. IT IS EASY TO FIGURE
\$100,000 IN THIS SHOWING IF IT HAS THE VALUES CLAIMED.

NEVADA-ELDORADO MINES

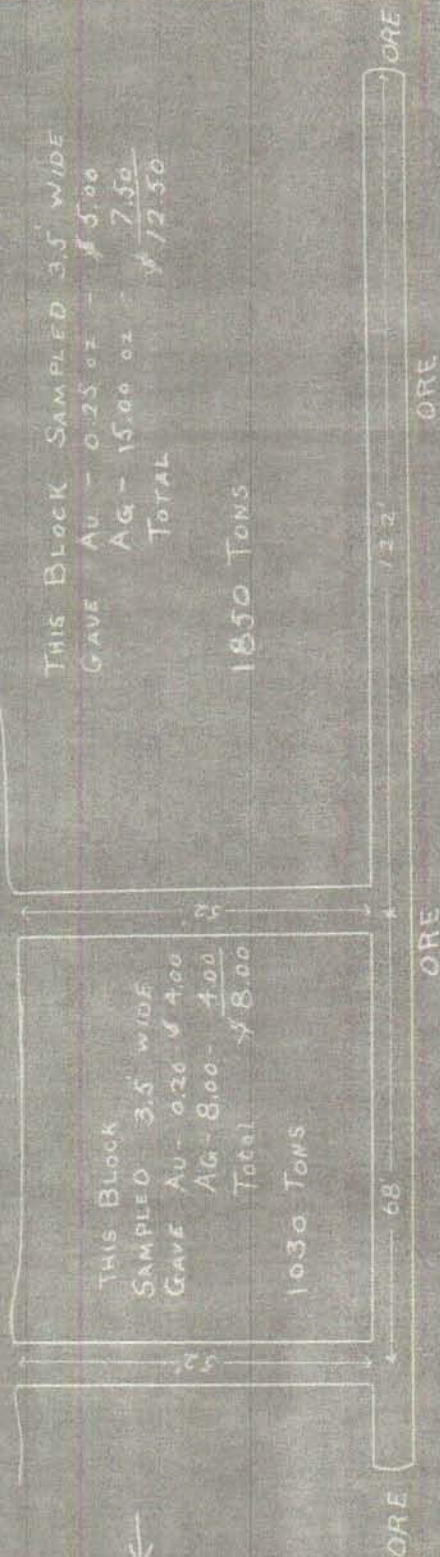
DATE July 29, 1911

INFORMATION SHEET FROM W. G. SWART, DENVER

SHEET NO. 149

SKETCH OF ROYER WORKINGS
NEVADA-ELDORADO MINES
NELSON, NEV. 1911.

SURFACE



THIS VEIN DIPS TO THE SOUTH
THE BOTTOM LEVEL IS ALL IN ORE INCLUDING BOTH FACES

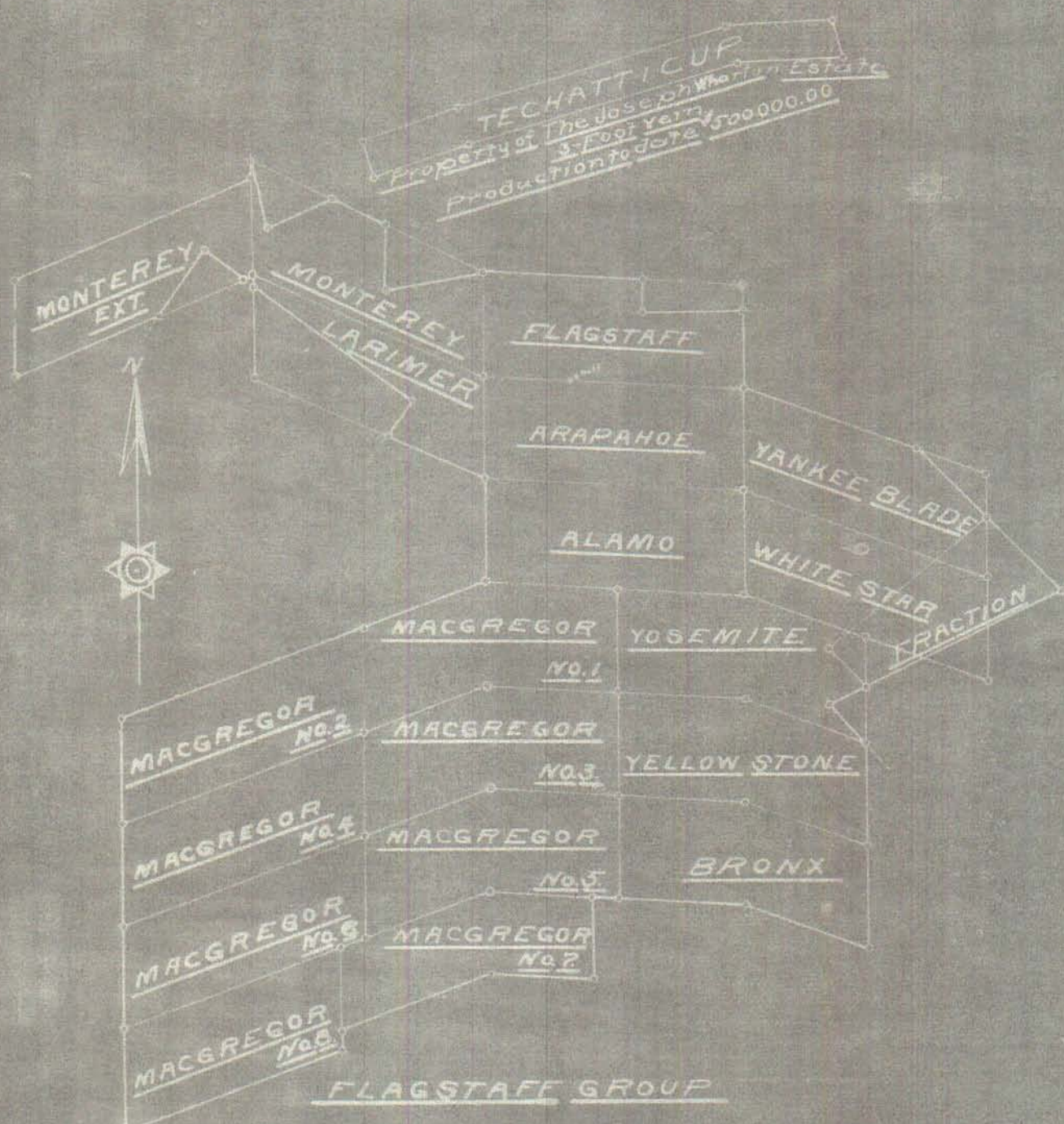
MAIN SHAFT.

From records while sinking in foot wall from surface to level at 200'

252	25' down, 4' cut into vein above shaft,	Au \$2.40-Ag \$3.00-\$5.40
50'	down, 222 10' upraise into vein showed	Au\$2.80-Ag3.30-----6.10
110'	" pieces chipped from roof of shaft, the bottom of the vein	Au\$10.00-Ag\$9.10--19.10
135'	" drill-hole put up 2-1/2' into vein	Au\$ 5.60-Ag\$.50-- 6.10
150'	" chips out of bottom of vein,	Au\$ 5.60-Ag\$9.76--15.36
185'	" 1' of gray rock next above foot wall	Au\$ 1.60-Ag\$1.95-- 3.55
185'	" chips cut from quartz just above the 1'	Au\$29.60-Ag\$13.65-23.25
190'	" chips cut from quartz, roof of shaft,	Au\$ 1.60-Ag\$25.34-26.94
	Lost gold by spitting in parting cup.	
200'	" 600 lbs sample taken from cars and quartered down, when breaking from shaft westward in commencing west drift.	Au\$13.20-Ag\$36.40-49.60

Main Shaft, below 200

14'	below 200, sample from cars excluding what high grade I saw	Au\$ 2.40-Ag\$ 2.60- 5.00
18'	" " face at bottom,	Au\$ 4.20-Ag\$ 4.30- 8.50
30'	" " " "	Au\$ 1.60-Ag\$ 1.30- 2.90
34'	" " " "	Au\$ 1.20-Ag\$ 5.95- 7.15
36'	" " " "	Au\$ 1.60-Ag\$ 3.25- 4.85
70'	" " " "	Au\$ 1.60-Ag\$ 2.60- 4.20
75'	" " got a sample of one foot of top of the vein proper, which is below the shaft, below the 200' level	Au\$12.00-Ag\$56.55-68.55
75'	" " From same place, small pieces of zinc separated,	Au\$ 4.00-Ag\$ 1.95- 5.95
88'	" " bottom of shaft, more of vein now showing in shaft,	Au\$ 9.60-Ag\$ 6.40-16.00
908	" " bottom of shaft,	Au\$ 6.40-Ag\$ 9.15-15.55
93'	" " all the material broken by round was quartered down, after being broken up for sampling,	Au\$ 3.20-Ag\$ 5.20- 8.40
98'	" " all the material broken by round	Au\$ 4.00-Ag\$ 4.55- 8.55
100'	" " when cutting station at 300', samples taken from all cars	Au\$ 4.00-Ag\$ 5.20- 9.20
	At starting of #3 east, the 6' from hanging wall down,	Au\$ 4.40-Ag\$11.10-15.50
	At starting of #3 west, 6' sample,	Au\$ 4.80-Ag\$ 9.75-14.55
	The 4' next below the above 6' taken at #3 west	Au\$ 3.20-Ag\$ 7.15-10.35
	#3 west, just west of the exposure of foot wall sampled 8' of vein,	Au\$ 2.40-Ag\$ 3.20- 5.60
	#3 west, 12' in from shaft, face 5' sample	Au\$ 1.60-Ag\$ 4.40- 6.00
	#3 west, about 222 20' in from shaft, face 6'	Au\$ 1.60-Ag\$ 5.50- 7.10
	#3 west, about 30' from shaft, face 6'	Au\$ 1.60-Ag\$ 3.40- 5.00
	#3 west, near present face, before last round ,	Au\$ 2.80-Ag\$ 3.00- 5.80
	#3 EAST, samples from towards foot wall in cross cut near shaft,	Au\$ 3.60-Ag\$ 4.00- 7.60
	#3 east, about 12' in from shaft, face of drift, the lower 4' showing in face,	Au\$.80-Ag\$ 1.40- 2.20
	The 3' showing above the 4',	Au\$ 2.40-Ag\$ 4.54- 6.94
	#3 east about 15' east of shaft, 6' face,	Au\$ 2.40-Ag\$ 5.85- 8.23
	#3 east 25' in from shaft, face sample,	Au\$ 4.00-Ag\$ 2.75- 6.75
	#3 east 35' in from shaft, 6' face of drift,	Au\$ 3.20-Ag\$ 3.57- 6.77
	Then, going east, comes broken country, with occasional small bunches of ore pieces 1008 in from shaft assaying	Au\$49.60-Ag\$162.50-212.10



THE NEVADA-ELDORADO MINES CO.
Scale 1 inch = 800 feet

Assay Sheet, 200 ft. Level, Flagstaff Shaft.

May 15th. to 19th., 1910.

Gold, Silver, Total

#4,	5 ft. ore in Macgregor shaft at east end of 200 ft. drift, but showing lower portion of the vein not exposed in the drift near the shaft,	\$3.45,	\$2.00,	\$5.45
#5,	7 " " in Macgregor shaft, the 4 feet above #4, no walls,	6.70,	3.20,	12.92
#6,	7 " " in 200 ft. drift, 6 ft. W. of Macgregor shaft,	4.88,	0.80,	5.68
#7,	7 " " 18 ft. W. of #6, no walls,	5.50,	0.80,	4.38
#8,	7 " " 10 ft. W. of #7, " "	2.18,	0.80,	3.98
#9,	7 " " 10 ft. W. of #8, " "	2.16,	1.60,	3.76
#10,	7 " " 10 ft. W. of #9, " "	2.56,	1.60,	4.16
#11,	7 " " 10 ft. W. of #10, " "	3.20,	4.00,	7.20
#12,	7 " " 10 ft. W. of #11, " "	2.54,	2.40,	4.94
#13,	7 " " 10 ft. W. of #12, " "	2.44,	2.40,	4.84
#14,	7 " " 8 ft. W. of #13, " "	3.82,	7.20,	13.02
#15,	1 " " in cross-cut to south, from footwall up,	8.50,	11.50,	19.75
#16,	1 " " in cross-cut to north,	15.04,	26.40,	43.04
#17,	face of north cross-cut, 20 feet from footwall,	12.44,	14.40,	26.84
#18,	5 " " east side of north cross-cut,	9.44,	10.40,	19.84
#19,	7 " " 2 ft. W. of #18, no walls,	3.56,	13.60,	17.16
#20,	7 " " 2 ft. W. of #19, " "	5.08,	16.80,	22.78
#21,	10 ft. W. of #20, opposite winze and north cross-cut,	10.04,	18.40,	28.44
#21a,	in winze, up footwall 5 feet,	8.36,	17.60,	25.96
#21b,	the 5 feet above #21a in winze,	6.86,	7.80,	15.66
#21c,	the 7 ft. above #21b in winze,	0.75,	2.00,	2.75
#22,	5 " " from footwall up and over roof,	5.60,	16.80,	22.48
#23,	7 " " 10 ft. W. of #22, no walls,	5.70,	8.00,	13.70
#24,	7 " " 10 ft. W. of #23, " "	3.18,	4.80,	7.98
#25,	5 " " next footwall, in south cross-cut,	12.02,	19.20,	31.22
#26,	the 9 feet above #25,	4.74,	6.40,	11.14
#27,	7 " " wall of drift opposite cross-cut, adding 4 feet to width of ore,	1.92,	3.20,	5.12
#28,	7 " " 10 ft. W. of #27, no walls,	1.40,	4.00,	5.40

					Gold, Silver, Total
#29,	7 ft. ore	12 ft. W. of #28,	no walls,		\$2.02, \$7.20, \$9.22
#30,	10 "	" " 12 ft. W. of #29,	" "		1.50, 4.00, 5.50
#31,	7 "	" " 10 ft. W. of #30,	" "		4.21, 26.40, 30.61
#32,	7 "	" " 10 ft. W. of #31,	" "		1.06, 1.60, 2.66
#33,	7 "	" " 10 ft. W. of #32,	" "		1.30, 0.40, 1.70
#34,	7 "	" " opposite N. cross-cut,"	" "		3.90, 4.00, 7.90
#35,		" " in north cross-cut,			1.00, 2.40, 3.40
#36,	7 "	" " 10 ft. W. of #34,			0.84, 2.40, 3.24
#37,	7 "	" " 8 ft. W. of main shaft,"	" "		23.00, 14.40, 37.40
#38,	11 "	" " 9 ft. W. of #37, from footwall up,			6.68, 4.80, 11.68
#39,	8 "	" " 5 ft. W. of #38,	no walls,		8.42, 3.20, 11.62
#40,	8 "	" " 5 ft. W. of #39,	" "		10.22, 4.80, 15.08
#41,	7 "	" " 5 ft. W. of #40,	" "		21.52, 11.20, 32.72
#42,	7 "	" " 10 ft. W. of #41,	" "		5.20, 4.00, 9.20
#43,	7 "	" " 10 ft. W. of #42, takes to cross water course,			5.08, 4.80, 9.88
#44,	6 "	" " 58 ft. W. of #43, from footwall up, no hanging-wall,			1.24, 2.40, 3.64
#45,	6 "	" " 10 ft. W. of #44,			1.61, 1.60, 3.21
#46,	7 "	" " 10 ft. W. of #45,			8.80, 8.00, 16.80
#47,	7 "	" " 10 ft. W. of #46, on bench,			4.89, 2.40, 7.29
#48,	7 "	" " 17 ft. W. of #47,			1.52, 3.20, 4.72
#49,		" " west face of drift, in andesite, no walls,			1.16, 1.60, 2.76
#51,	10 "	" " below #4 and #5, Macgregor shaft,			5.78, 4.80, 10.58
#52,	10 "	" " " #51, no walls,	" "		3.78, 4.80, 8.58
#53,	10 "	" " " #52, " " " "	" "		3.86, 5.60, 9.46
#54,	10 "	" " " #52, " " " "	" "		3.85, 6.00, 9.85
#57,		" " old stope east from " "			7.36, 5.60, 12.96

The accompanying plan, showing the 200 ft. level, together with the main shaft and the Macgregor shaft, will further explain the above series of samples. Where no walls were shown in the drift, the dip of the vein in crossing the drift, exposed 7 ft. of the vein width.

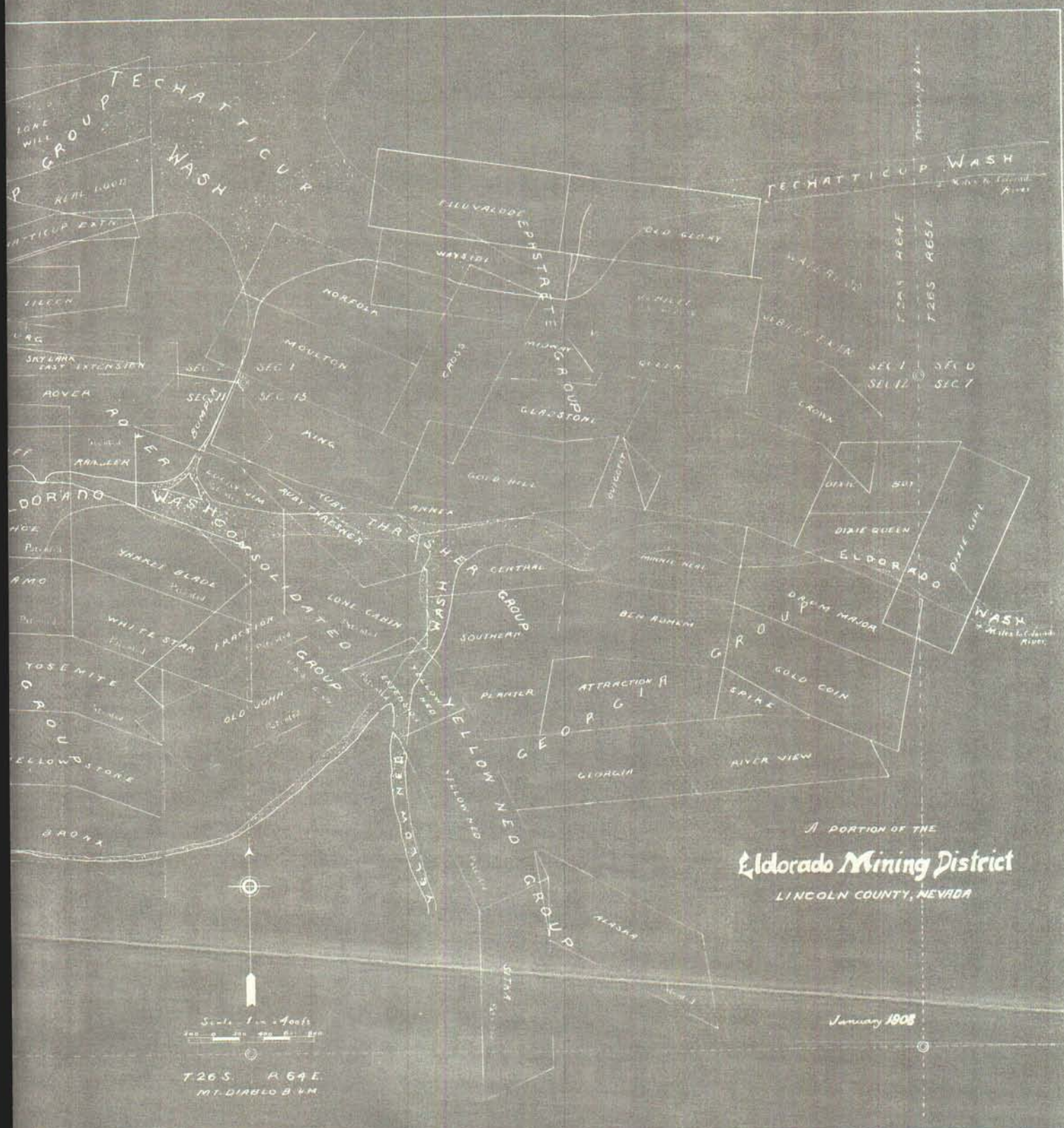
Report
Nevada-Eldorado Mining Co
by
O. B. Amsden M. E.

G. H. Duncan
Nelson
Nevada.



Eldorado Mining District
LINCOLN COUNTY, NEVADA
UNCOVERED AND MAPPED BY
Stone and Brown, Inc.
U.S. GEOLOGICAL SURVEY
1908

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