GROUP 43 - MARY MINE GENERAL 121

HUGHES TOOL CO. 121
MINING PAPERS
GROUP 43. MARY MINE. GENERAL

4390 60000315

60000315(4390)

PROPERTY MAP

GORDON MINE

PLAN OF MAIN MINE WORKINGS

SODA CLAIM

PHOTOGRAPHS

MILL

CAMP BUILDINGS

MAIN SHAFT

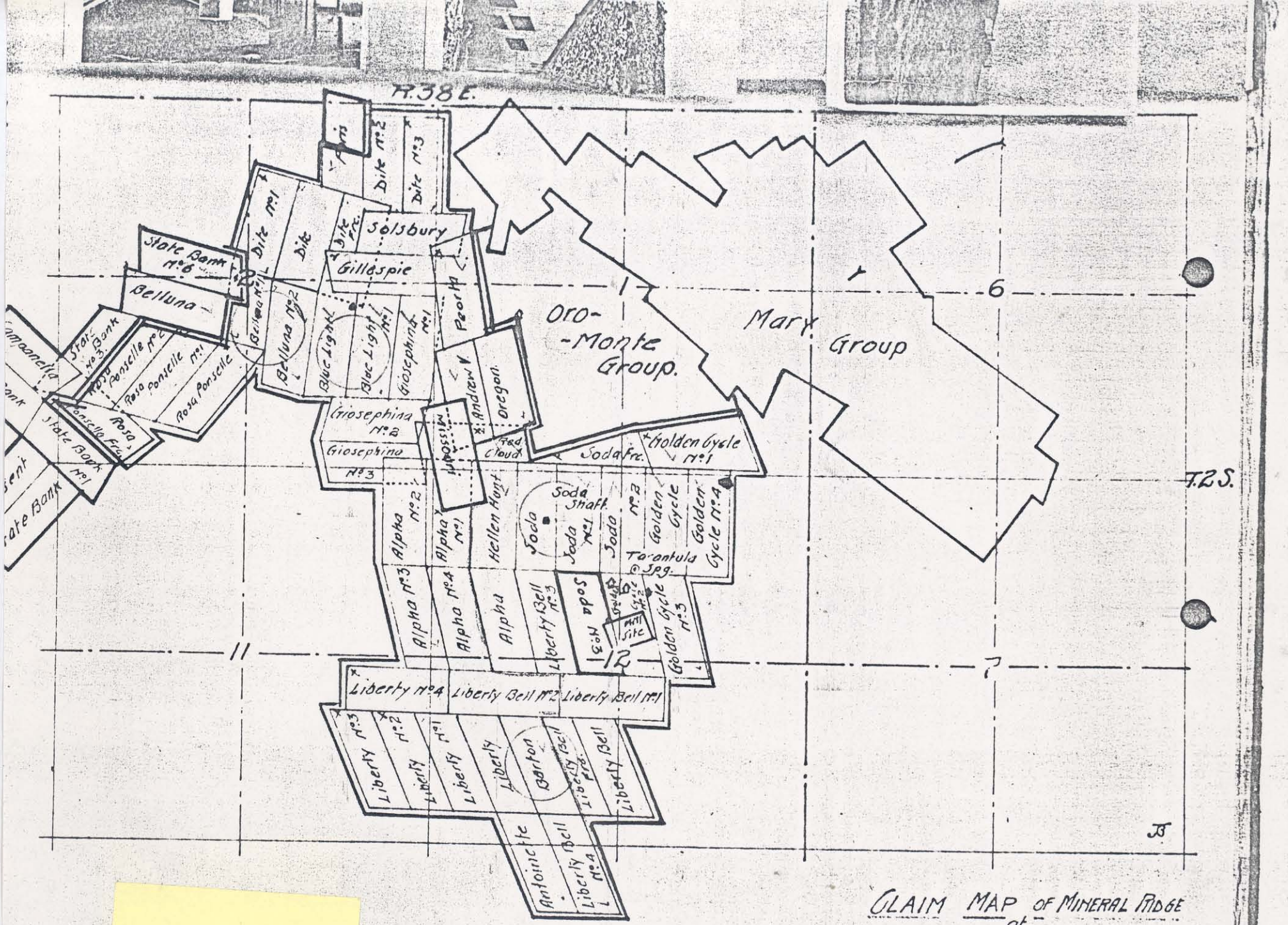
-----oOo-----

MAP

OF

BARTON MINE

WORKINGS



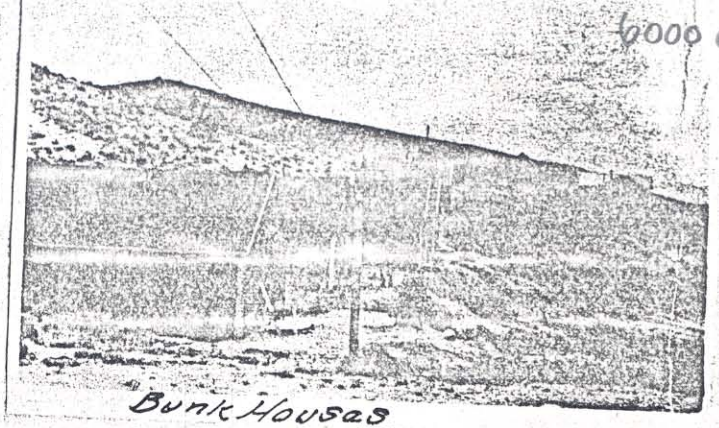
CLAIM MAP OF MINERAL RIDGE at GORDON MINES INC'S PROPERTY IN ESMERALDA CO. NEVADA.

Claim Map

0000 0315 (4329)

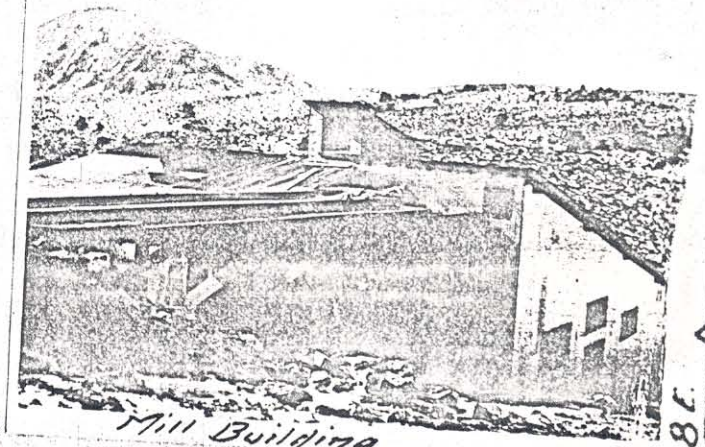
6000 0315 (4390')

Shaft - Mill - Mess Hall - Shop

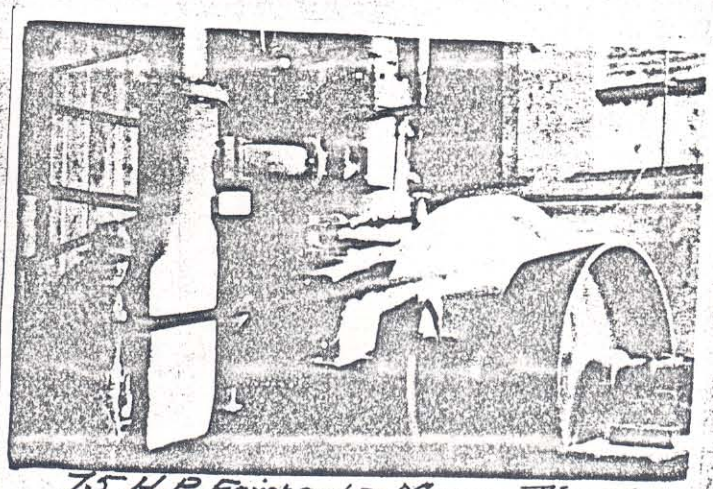


Bunk Houses

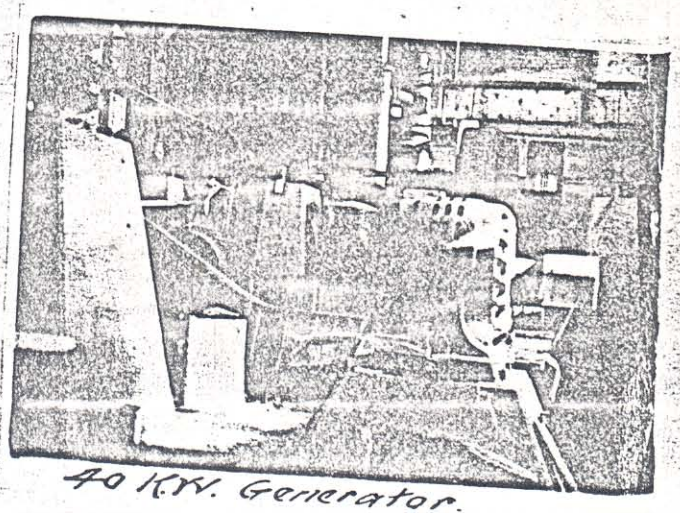
OFFICE - MESS HALL Kitchen
AUXILIARY COMPRESSOR



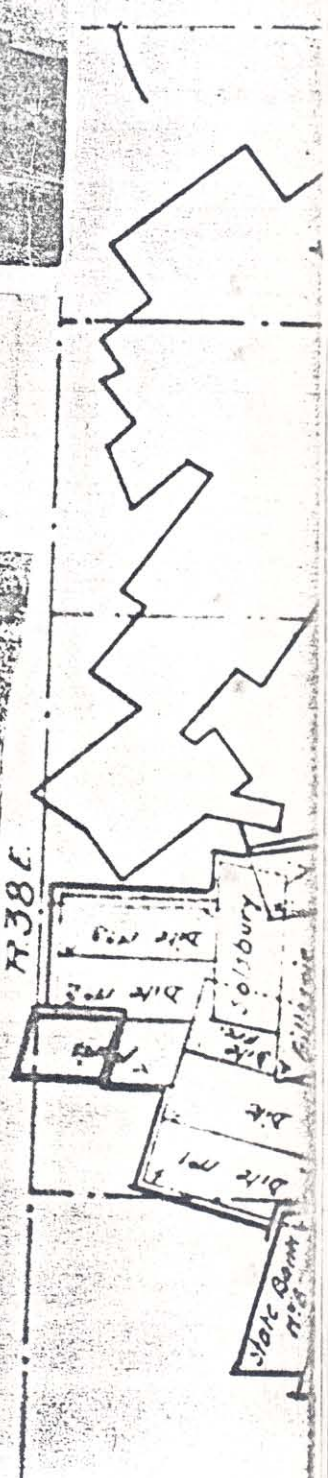
Mill Building



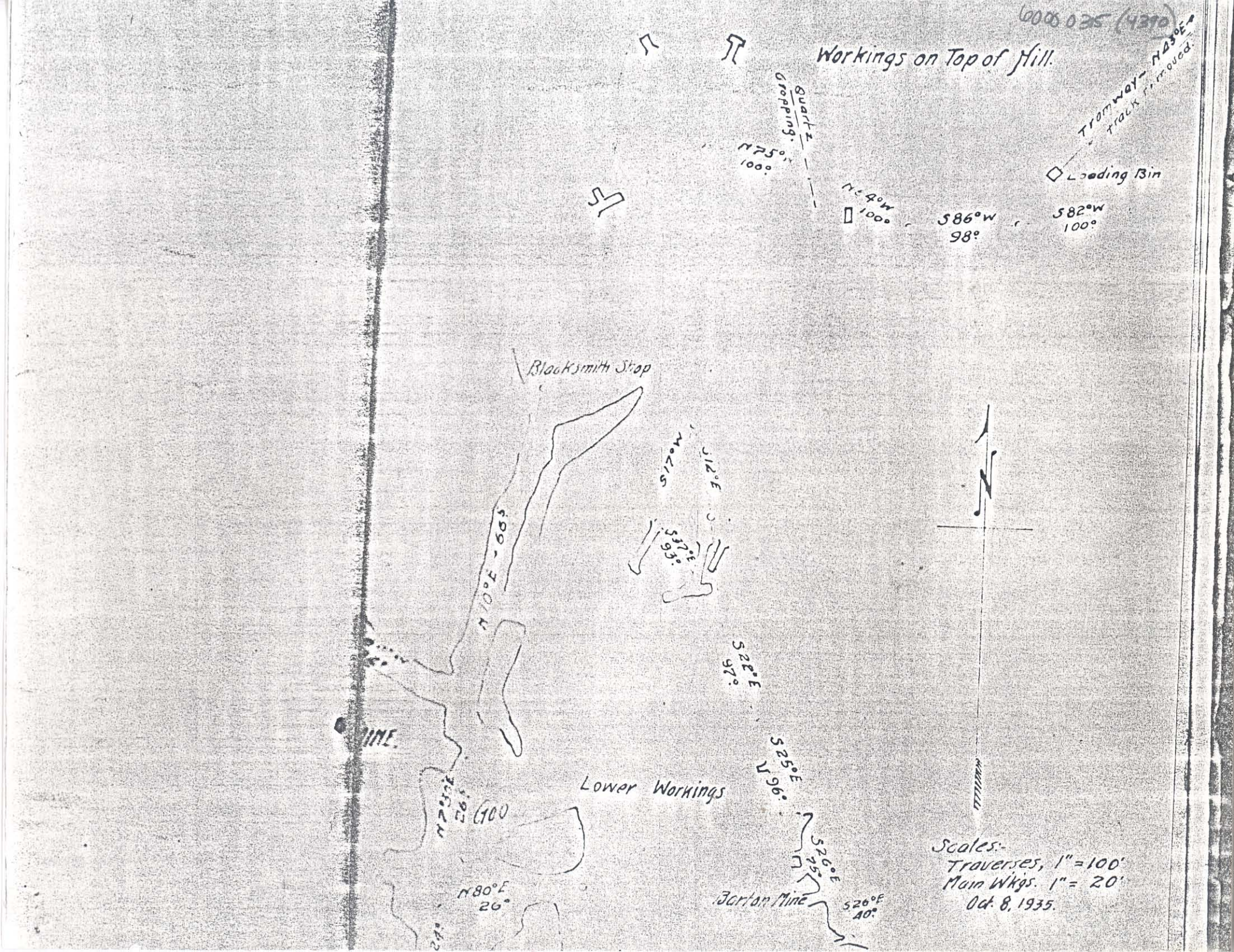
75 H.P. Fairbanks Morse Diesel



40 K.W. Generator.



6000 035 (4370)



60000315 (4390) 16-S

summa

Internal Communication

Date: November 26, 1974

To: Dave J. Gribbin

From: Paul M. Skinner, Chief Metallurgist

Subject: Preliminary Report on the Mary Mine Leach No.1

A 500-pound sample of mine run Mary ore was placed in a tub and leaching started. The sodium cyanide was kept at 2.0 pound per ton of solution and a pH of 10.5 was maintained with caustic soda.

After three days the pregnant solution had built up to 7.2 ppm., at which time I put in a carbon column to continuously strip the pregnant solution. After 19 days of leaching the pregnant and the barren solutions were both the same, .008 ppm. I then took the carbon column off and circulated the solution for 2 more days and found that there was no more build-up of gold in the solution. I therefore concluded that the leach was completed.

The sample was then washed with water and a 100-pound sample was split out and assayed.

The assays were as follows:

head .128 oz. Au
tail .031 oz. Au

$$\frac{.031}{.128} \times 100 = 24.2\% = 75.8\% \text{ total gold recovery}$$

head .280 oz. Ag
tail .032 oz. Ag

$$\frac{.032}{.280} \times 100 = 11.4\% = 88.6\% \text{ total recovery}$$

Conclusions:

The results of this preliminary test show that the Mary ore is amenable to heap leaching. A recovery of 75% on mine run ore is excellent.

I am, however, in the process of running a test on material which has been crushed to -3/8 inch to see if an even better recovery can be gotten.

I am very pleased with these preliminary results and I feel that the Mary ore can be leached at a good profit.

Paul M. Skinner

Paul M. Skinner
Chief Metallurgist

Dist: PMK
WS
Lutz
Maybine File

ICT

Sent to Cozart 7-2-75

19___ - 19___

6000 0315 (4390)

STATEMENT OF TAXABLE PROPERTY WITHIN ESMERALDA COUNTY, NEVADA

Avoid arbitrary assessed valuation by completing this statement and filing with Assessor at once. Must be returned within 15 days! 361.265 N.R.S.

cc: Vegas, MM file V. SAM

Real Estate, Patented Mines or Town Lots

	SEC. LOT	TWP. BLK.	RG.	ACRES	COST PER ACRE OR LOT	OWNER'S VALUATION	ASSESSOR'S VALUATION
See attached description Esmeralda County copy of Roll #1107							
IMPROVEMENTS:						$	
Please note: There is no personal property on property at present							

ITEMS	AGE	COST INSTALLED	VALUE TODAY	ITEMS	VALUE
MERCHANDISE (AVERAGE LAST 12 MONTH) INVENTORY				T.V.	

NOTICE TO ALL TAXPAYERS

All taxpayers are by the Revised Statutes of Nevada to annually make and deliver to the Assessor a statement under oath setting forth specifically all property owned by such person or in his possession.

Accordingly you are required by law to fill out this Declaration of Personal Property and to deliver it to the office of the Assessor within fifteen days, making oath thereto.

If any person, after demand made by the Assessor, neglects or refuses to give, under oath, the Statement herein provided for or to comply with the other requirements of this title, the Assessor must make an estimate of the value of the property of such person; and the value so fixed by the Assessor must not be reduced by the Board of Equalization.

Your assistance and cooperation will be appreciated.

STATE OF NEVADA
COUNTY OF ESMERALDA } SS.

L. G. COZART,
County Assessor,
Goldfield, Nevada.

I hereby swear and affirm that this statement together with any accompanying schedules, is made in good faith, and is, to the best of my knowledge and belief, true, correct and complete, together with any statements currently filed includes all property owned, possessed, or controlled by me, in the County of Esmeralda, State of Nevada.

tchell, Richard T.

Date 7-2-75

Signed Walt Simmons Agent

Mailing Address P. O. Box 1126, Tonopah, Nev. 89049

6000 0315 (4390)

Esmeralda County, Nevada - 1974-1975

ROLL

STATE, COUNTY AND SPECIAL TAXES

№ 1107

DESCRIPTION OF PROPERTY	LOT SEC.	BLK TWP.	RANGE	ACRES	VALUATION
Parcel 05-231-2:					$
SE¼ of	8	2S	38E		160
NE¼ of NE¼	17	2S	38E		40
200 acres Special land @ $49					9,800
SILVER PEAK DISTRICT					
Survey No. 60 Sentinel					500
Survey No. 1738 Nevada					500
Survey No. 48 Valient					500
Survey No. 1739 Deplex					500
Survey No. 1742 Brooklyn					500
Survey No. 49 New York					500
Survey No. 50 Chieftain					500
Survey No. 46 First Southern Extension of the Crowning Glory					500
Survey No. 43 Western Soldier					500
★ NOTICE TO TAXPAYERS ON REVERSE SIDE					

	DISTRICT	VALUATION	RATE	AMOUNT
RST INSTALLMENT ..... $	General County	32,300	3.90	1,259,70
ECOND INSTALLMENT ..... $	STATE AND COUNTY			
	LIVESTOCK			
HIRD INSTALLMENT ..... $	BEEF PROMOTION			
OURTH INSTALLMENT ..... $	SHEEP TAX			
AID IN FULL ..... $				
Y WHOM PAID:			TOTAL	$1,259.70

Assessed to:

Mitchell, Richard T.
5026 Central Avenue
St. Petersburg, Florida 33707

BRING OR SEND THIS NOTICE WHEN MAKING PAYMENT.

6000 0315 (4390)

Claim List

rvey No. 1741 Manser	
rvey No. 37B Vanderbilt Millsite	500
rvey No. 42 Last Chance	500
rvey No. 1740 Bangor	500
rvey No. 59 Defiance	500
rvey No. 1736 Antelope Mine	500
vey No. 61 Golden Gate	500
vey No. 47 Drinkwater	500
vey No. 45 Crowning Glory	500
vey No. 44 Glory	500
vey No. 66 Blair	500
vey No. 65A Crown	500
vey No. 65B Crown Millsite	500
vey No. 64 Mary	500
vey No. 1927 Elizabeth	500
vey No. 3068 Mohawk	500
vey No. 3068 Mohawk No. 1	500
vey No. 3068 Mohawk No. 2	500
vey No. 3068 Savage	500
vey No. 3068 Oro Fino	500
vey No. 3068 Sapphire	500
vey No. 3068 Poor	500
vey No. 3068 Snow Drift	500
vey No. 3068 Ophir	500
vey No. 3068 Mary Extension	500
vey No. 3068 Summit	500
vey No. 3068 Canyon Crest	500
vey No. 3068 April	500
vey No.	500
R DISTRICT	
vey No. 3507 Horned Toad	
vey No. 3507 Spider	500
ey No. 3507 Scorpion	500
ey No. 3507 Lizard	500
ey No. 3507 Cactus	500
ey No. 3507 Rattlesnake	500
ey No. 3507 Gnat	500
ey No. 3507 Pittsburg	500
	500

6000 0315 (4390)

WILLIAM C. McLEAN, JR.
ATTORNEY AT LAW
707 FLORIDA AVENUE
P. O. BOX 21
TAMPA, FLORIDA 33601

TELEPHONE 223-4785

June 24, 1975

Summa Corporation
Post Office Box 309
Las Vegas, Nevada 89101

Attention: Francis M. Fillerup

Dear Mr. Fillerup:

Recently I received from Dick Mitchell the 1974-1975 Esmeralda County Tax Assessment in the amount of $1,259.70. I enclose this Notice since I understand Summa Corporation is obligated for payment of these taxes under Paragraph Sixteen of our Mining Lease dated March 1, 1975.

I also enclose an additional Notice sent by the Esmeralda County Tax Assessor requiring all taxpayers to complete a declaration of personal property within fifteen days after demandtherefor.

I shall appreciate your acknowledging receipt of these enclosures and that Summa Corporation will complete the required Declaration and pay the taxes currently owed.

Sincerely yours,

WILLIAM C. McLEAN, JR.

WCMJR/kls

Enclosures

cc: Mr. Dick Mitchell

6000 035 (4390)

GORDON MINE

SILVER PEAK MINING DISTRICT,

ESMERALDA COUNTY,

NEVADA.

50979 -
Cert item

Los Angeles, Calif.
August - 15 - 1939.

Mr. R. H. Gordon,
356 So. Wetherly Drive,
Beverly Hills, Calif.

Dear Mr. Gordon:

Pursuant to your request that I should examine your mine holdings in the Silver Peak Mining District, Esmeralda County, Nevada, and render a report thereon, I herewith submit the accompanying condensed statement of the facts determined, together with conclusions and recommendations considered advisable in conducting future exploration, development and mining operations.

In evaluation of the property, careful consideration has been given to ore occurrance, character and value of the same, and the geological, metallurgical and economic factors having direct bearing upon the development of a profitable mining enterprise.

The geology of the district in general, and the area immediate to the property holdings, is discussed briefly, because there is but little that today might be added to the wealth of detailed information contained in the United States Geological Survey Bulletin, No. 55, by Mr. J. E. Spurr, which is comprehensive and complete.

In my general inspection of the property I was afforded opportunity to study the several reports by other engineers, consult the mine maps, records and other data, and compare the same with my own findings and conclusions. A number of pictures were taken, which serve to make plain the conditions, and with maps and excerpts from Governmental publications and private reports are made a part of this report.

In my opinion the property holdings must be credited with high potential value, and I know of no sound reasons, geological, economic or otherwise for believing that very largely expanded exploration, development and mining operations, if directed by competent engineering advice, and under good business management, should not return the necessary capital investment within a reasonable length of time, and result in the building of a profitable mining enterprise.

Very truly yours

Tallmadge Kyner, E. M.,
1256 West 7th. Street,
Los Angeles, Calif.

REPORT

On

GORDON MINE.

Location:

The mine property holdings herein discussed are situate in the Silver Peak Mining District, Esmeralda County, Nevada. The district is approximately fifty miles Southwest from Tonopah, about twenty-five miles West from Goldfield, and some twenty miles South from Blair Junction, a station on the Tonopah and Goldfield Railroad; the nearest railroad shipping point. The elevation is approximately 7,200 feet above sea level, and the district is easily accessible by automobile or truck over paved highways and good improved roads. Reference to any good map of the State of Nevada will afford understanding of the location of the district and its environs.

Property:

The Gordon Mine holdings comprise fifty-seven (57) full and fractional lode mining claims covering an area of about 1,066 acres. Six of the claims are patented, survey and application for patent has been made on five others, and the balance, now held by performance of annual assessment work and expenditure, warrant survey and application for patent. The muniments of title, with abstract of same, show that the property holdings, as a whole, are free and clear of any serious title defects, and, so I have been advised, there are no outstanding obligations which might serve as basis for liens. Refference to the map attached hereto will afford full perfect understanding of the location

of the various claims, and the relative position of the group regarding other mines and mine holdings in the immediate district. The Oro Monte Group, formerly known as the Valcalda Mine, adjoins the Gordon Mine on the North and East, the Mary Group, now owned and being operated on a substantial scale by the Black Mammoth Company, lies about 1,200 feet Northeast.

History:

The history of the Silver Peak, or Mineral Ridge District, as it is sometimes termed, dates back to about the year of 1864, which identifies it as one of the oldest mining districts in the State of Nevada. It is reported that the first discoveries were silver-bearing ore deposits, which were worked for a time in desultory way, but were abandoned before much had been accomplished. Some two years later, the area again became moderately active, a 30-stamp mill was built to treat the gold-bearing ores discovered in the Blair, or Drinkwater (Mary) Group, the Valcalda and other discoveries. Fairly active mining and milling operations continued for about two years, but for various reasons were suspended, and the district remained practically inactive until in the early eighties, when operations were resumed, but upon no large scale, continuing until about 1893, when, because of difficulties of transportation, high costs, and litigation, which continued until after the turn of the century, operations were greatly restricted, and little accomplished. Discovery of the rich ore deposits of Tonopah and Goldfield brought about renewed interest in the Silver Peak Area, with intensive search and wide-spread prospecting. The Tonopah and Goldfield Railroad was constructed, and a branch line was extended to the town of Blair in the Silver Peak District. It is claimed that during the history of the district production

of between $12,000,000.00 and $15,000,000, but the estimates were no doubt based upon fragmental and uncertain records, and admit of no certainty. Within recent years, and especially because of the enhanced value of gold, together with better mining and milling facilities, and the investment of necessary capital, the mines of the district are being operated on a substantial and profitable scale.

The history of the Gordon Mine, in particular, dates back to the early discoveries in the district, but is vague and of no particular interest or consequence; except that it is known that production was made from some of the claims, the ore mined by hand methods, packed out on mules and milled at Silver Peak. No well-authenticated records are now available that show what the production may have been. That the ores must have been of good grade must be accepted, for the costs of mining, packing and milling, together with loss in extraction compelled the handling of better than average grade ore.

Since 1933, when the present group holdings were acquired, mining and milling operations have been practically continuous, although all too limited; prospecting of the ground has disclosed or indicated a large potential resource of pay grade ore; ore occurrance obtaining upon practically every claim, and in mineable quantities, where opened.

Geology:

The predominating rocks of the Silver Peak District in general, and of the geological horizon immediate to the mine holdings here discussed, comprise a thick series of Paleozoic sediments characterized by limestones, schists and relatively unimportant quartzites; all, classified as within the Cambrian

and Ordovician periods. The ore deposits occur as lenticular masses and fissure fillings in the Paleozoic sedimentary rocks. Genetically they are related very closely to the eruptive and intrusive granitic rocks which have alaskitic or pegmatitic the phases. Ore deposition and enrichment was probably concurrent; the result of circulating hydro-thermal emanation from the consolidating granitic magma. So far it has not been established that any decided enrichment of the ores by oxidation followed, but was probably original. The gold content of the ores occurs very largely in a finely disseminated, free state, and to a very subordinate extent in auriferous sulphides; galena, arsenopyrite and pyrite.

The ore deposits are lenses of various dimensions, both horizontal and vertical. They appear most abundant along the trend of certain zones in the intruded sedimentary rocks, and are found imbricating, or overlapping. They are in large part true segregated bodies, and terminate by wedging, forking and splitting into branches, which may or may not connect with other lenses, or unite horizontally or vertically to form another body. In the more extensive mine workings it has been conclusively shown that many of the ore-bearing lenses do not come to the present surface, and are only disclosed by exploratory work, and prospecting with diamond drilling. Since only the ore bodies either having surface outcrops or disclosed by mine workings have been exploited, it follows that, in the area covered by the Gordon Mine holdings, in particular, prospecting and exploratory drilling, employing either churn or diamond drills, should disclose other important ore bodies, equally as important as those now known. It is not at all improbable that such work

will disclose a relatively very large ore resource, and afford definite objectives for the prosecuting of extended mine development. The general trend of the ore-bearing zones, North and South, throughout the length of the property are known, and the drilling can be confined to within certain determinable limits.

Economic Conditions:

Power:

The electric power transmission lines of the Nevada-California Power Company serve the district, a sub-station being maintained at Silver Peak. The cost of such power, however, is relatively high, the installation of transmission line is heavy, and it will probably be shown that power for mining and milling operations can best be obtained from installation of Diesel-powered generators; perhaps similar to the 75 H. P. unit now in use in the present mill.

Water:

Recognizing that an adequate, dependable supply of water for milling and domestic purposes is always essential in the operation of a mine in the desert areas, water rights have been secured covering Valcalda and Other Springs, pipe lines and pumping plant installed, and the available supply appears ample to meet demands of a mill of at least 100 tons per day capacity.

Timber:

Other than scattered juniper and pinion pine trees, which are not at all suitable for any purpose other than fuel, there is no lumber or timber in the district or its immediate environs. Oregon or Northern California lumber costs about $60.00 per M. delivered at the mine. Fortunately the need of

timber and lumber for underground purposes is small, and because of the nature of the ore deposits, character of the enclosing rocks, and the mining method practiced, may never be very great.

Transportation:

Comparatively good roads traverse practically all sections of the mine holdings, and little or no work will be required to maintain them. Haulage of ore, concentrates and supplies by trucks is entirely practicable during all seasons, at low rates per ton mile, depending on tonnage handled.

Production:

The records of ore production made from the property prior to 1930, and the returns derived therefrom, are fragmental and unreliable. Governmental statistics and reports, together with some private records indicate that the tonnage produced was comparatively limited, but the average grade of the ore very good; ranging in value between $12.00 and $25.00 per ton (at the then $20.67 per ounce value of gold); with some shipments of ore having much higher value. What the average grade of the ore milled in the early milling plants may have been is not known, and what extraction may have been made is conjectural. Due to the heavy operating costs; no doubt imperfect metallurgical methods and mill practice then obtaining, and other unpropitious conditions, it may be assumed that only ore of around $20.00 per ton or better could be handled at a profit.

Since 1932-33, when the present group holdings were acquired, and since the installation of the present 25-ton capacity mill, the records of production, shipments of crude ore, concentrates and bullion marketed are available.

The following tabulations, compiled from the mine records, and authenticated by available smelter settlement and bullion vouchers, may be accepted as substantially correct and reliable.

Crude Ore: (January 16, 1933 to June 20, 1939)

Dry tons:	Total ounces gold.	Total ounces silver	Total Receipts.	Settlement value per ton.
1,647.68	1,817.90	728.85	$ 36,840.42	$ 22.36
Concentrate: (January 24,1934 to June 23, 1939)				
279.97	2,357.63	852.16	$ 72,534.05	$ 258.39
Bullion: (January 24, 1934 to June 23, 1939)				
	1,747.36	379.02	$ 62,738.80	
Totals:	5,922.89	1,960.03	$ 171,913.27	

The foregoing results serve to show what has been accomplished under limited mining and milling operations, and rather adverse conditions. Production was made principally from the Soda Claim workings, interrupted milling operations, which appear to have left much to be desired in efficiency of general operation of the property.

Also, it will be understood that the average values per ton of crude ore shipped and concentrate marketed, were obtained during the time when the value of gold ranged from $20.67 up to $35.00 per ounce, and the price of silver varied quite as widely.

Ore Resources:

It is apparent that there has never been any well-considered plan of exploration and mine development designed to disclose dependable reserves well ahead of immediate needs. This has been bad policy, and today there is practically no

considerable tonnage ore that may be considered reasonably proven and in sight, in the strict interpretation of the term, "ore in sight". There is indicated, however, a large but indefinite tonnage of probable ore disclosed in the various mine workings throughout the extent of the property, and the probability that extended exploration and prospecting should disclose large ore resources is exceedingly attractive.

The mine sampling records, covering the Soda, Blue Light, Barton and other sections of the property show a wide range in values per ton of ore disclosed; ranging from lows of around $3.00 up to $75.00 and more, but no attempt will be made here to indicate what may be the average, for to do so, under the existing circumstances, would be to place one's self on tenuous grounds, which is not warranted.

Heretofore the principal mining operations have been confined largely to the main workings on the Soda Claim, with subordinate tonnages having been drawn from the Blue Light, Barton and other sections, but it is not now possible to accurately determine what tonnage has been mined from each, because of the faulty and incomplete records of mining and milling operations.

The accompanying maps and photographs showing the several sections of the property will serve to show their relative location, ore-bearing outcrops, and extent of mine development.

Mill:

The ore is in no respect difficult to treat locally, and there appears to be no reason why entirely satisfactory extraction of the contained values: principally gold and silver, together with purely subordinate galena and auriferous pyrite,

cannot be accomplished by employing modern metallurgical methods and mill practice.

The present mill, having a rated capacity of 25 tons per day, is of the "semi-portable", Southwest Engineering Company design and installation, employing amalgamation and flotation only. It is little more than a testing plant and leaves much to be desired. Although it is claimed that 90% or more extraction is maintained, the wide variation in value per ton of the concentrate produced would appear to controvert the statement. This is not intended as reflection on the management, but the writer is of the opinion that installation of some additional equipment, with some changes in mill practice, would result in improved extraction and production of better grade concentrate?

Camp:

The camp facilities and equipment are good, and the housing sufficient to accommodate any immediate need. The accompanying photographs show the several men's quarters, cook-house and dining room, office and warehouse, blacksmith and machine shop, mill and other buildings.

Summary:

Briefly, the summary shows:

Fifty-seven lode mining claims, in a compact group, covering 1,066 acres, more or less, of highly mineralized ground, from which sufficient production has been made to establish the value of the ore deposits.

At least four principal ore-bearing sections known to contain ore deposits of mineable grade, opened to varying depths; none of which exceed 100 feet, and showing no apparent

tendency to diminish in quantity or value of ore within the present depths of mine development. The closely adjoining mines, now operating on large tonnage basis, and at depth of more than 600 feet below the lower level of the Soda Claim workings, may be taken as index of what may reasonably be expected here from adequate prospecting, exploratory work and mine development.

More than sufficient evidence of extensive mineralization beyond the limits of present mine development, together with sufficient prospect and exploratory work accomplished to indicate the presence of undeveloped ore deposits.

Metallurgy and present-day mill treatment of the ore understood, and sufficient production of crude ore, concentrates and bullion to rather conclusively prove that satisfactory results should be obtained from future, and enlarged, operations, if the same are conducted according to competent engineering advice and guidance and good business management.

Respectfully submitted.

Tallmadge Kyner, E. M.
1256 West 7th. Street,
Los Angeles, Calif.

August - 15 - 1939.

60000315 (4390)

Page 1 of 1

Letter of Transmittal.

Tonopah, Nevada.
October 18, 1933.

Mr. R.H.Gordon,
3065 East Ocean Drive,
Long Beach, California.

Dear Sir:

Pursuant to your request, I am submitting herewith report on the property of your Esmeralda Mining and Milling Company, near Silver Peak, Esmeralda County, Nevada. The information contained in this report has been obtained in numerous trips to the property during the period from last February 23 to date.

Conclusions reached are that there is an excellent showing of gold ore, under conditions favorable to economical mining and treatment when enough ore is developed to provide milling facilities on the ground. To this end, detailed recommendations and estimates are made as to plant and development work required to bring the mine to this point.

It is recommended that $50,000 be provided to carry out this campaign. If more convenient to you, portions of this ,such as $2500 at a time, can well be used, to gradually replace the present equipment, and at the same time continue development in the mine.

Yours very truly,

John L. Dynan
Mining Engineer.

6000 0315 (4390)

Part 1

REPORT ON THE PROPERTY OF THE

ESMERALDA MINING AND MILLING COMPANY.

SILVER PEAK MINING DISTRICT. SILVER PEAK, NEVADA.

By John L. Dynan. October 18, 1933.

SITUATION.

The property of the Esmeralda Mining and Milling Company is in the Red Mountain Mining District, which is part of the Silver Peak Mining District, Esmeralda County, Nevada. It is about five miles northwest of the town of Silver Peak, and about 25 miles by automobile road southerly from Blair Junction, the railroad shipping point on the Tonopah and Goldfield Railroad. There is a fair desert road from the property to Blair Junction, the first four miles of which are very steep. From Blair Junction there is a first class highway, forty miles north to Mina, and thirty-two miles south to Tonopah. Both of these towns are important supply centers.

The property is at 7100 feet elevation, on the west slope of Mineral Ridge, just west of the summit. From the mine, the road makes a gentle ascent to the summit, then winds down the eastern slope to the valley at about 4400 feet elevation, and follows the valley north to Blair Junction. The road is sometimes closed by snow for a few days after a severe storm. With this exception the property is easily accessible throughout the year, and the climate permits of year around operation.

PROPERTY.

The property consists of ten mining claims, with a total area of approximately 192 acres. The main workings are on the

Adjoining the Esmeralda on the north is the old Valcalda Mine, now the property of the Oromonte Gold Mining Co. About a half mile northeast of the Esmeralda is the property of the Pittsburg Silver Peak Mining Co., which has been an important producer of gold. It was worked on a small scale from 1864 to 1907, for which period no production figures are available. From 1907 to 1915 the Pittsburg Silver Peak Mining Co. produced on a large scale. Exact figures as to this production are not available, but from best information obtainable it was about $ 10,000,000. From then until the present leasers have worked the mine, and are still producing small tonnages of ore of good grade.

WATER RIGHTS.

In order to assure an adequate water supply, should a mill later be erected, application has been filed according to law with the Nevada State Engineer for the rights to the water from Valcalda Springs. These springs are about four miles west of the Soda claim. To protect surface rights other than those to the water, three mining claims have been located covering the ground adjacent to these springs.

Action by the State Engineer on this application is expected at any time. There was one protest filed against this application but at a hearing in Tonopah before the Deputy State Engineer the protesting party presented no evidence to justify the protest.

It is believed that these springs can be developed so as to furnish enough water for a mill of 100 tons daily capacity. The water would have to be pumped about 700 feet over an intervening summit, and from there would flow by gravity to the property.

GEOLOGY.

Survey. The country consists of schist and limestone, intruded by alaskite, an igneous rock similar to granite. The ore occurs in any of these formations or on contacts between them. It consists of lens shaped bodies of gold bearing quartz, which have separated or segregated from the alaskite while it was molten. All steps of gradation from alaskite to quartz may be observed. These lenses are numerous and of great variety in size. Some of them attain dimensions up to hundreds of feet, and thicknesses up to thirty feet. Lenses often overlap, one starting near where another pinches out, so that considerable prospecting is warranted near a known producing lens.

Mineralogically, the ore is a dense, vitreous, white quartz, containing free gold and gold bearing galena and pyrite.

HISTORY.

Years ago former owners did enough work on the Soda claim to have it patented. This work consisted of tunnels in the schist, and several shallow shafts. It found nothing of value, and the claim was allowed to go to the county for taxes. It was later bought by John Swanson, a prospector who had spent many years in the district and had located a number of adjoining claims. In 1931 he started sinking on a small quartz outcrop at the site of the present main shaft. He soon opened a good width of shipping ore, and in August 1932 sold out to Mr. R.H.Gordon, who organized the present company.

MINE DEVELOPMENT.

The principal development is on the north end of the Soda claim, as shown on the attached property map. Starting near the location monument, at the center of this claim, a quartz vein or lens can be traced northward, by a series of cuts and shafts f
350 feet. In all

At 200 feet north of the location monument is the main shaft, which is a continuation of the work started by Swanson. This shaft is an incline, 52 degrees from the horizontal, and started to follow the dip of a quartz vein about two feet wide. At thirty-five feet the quartz flattened to 25 degrees, and the shaft was continued in the footwall, below the vein, to a depth of 66 feet. However, other quartz masses, perhaps a part of a parallel lens, came in, so that the rock from the shaft still made a low grade ore. In the bottom of the shaft is what appears to be a minor fault. These are frequent in the district and no significance is attached to it.

At 22 feet in the shaft a level was established and drifts run north and south on the vein. Later, to make more head-room the bottom of the north drift was taken up, so that the level, now being continued, is at 35 feet. The attached map, with results of assays thereon, shows all this work. Samples taken at regular ten foot intervals along the east, or bottom side, of the level, indicate a shoot of ore 78 feet long, 4.9 feet wide, of an average grade of $21.91 per ton, figuring gold at $20 per ounce. The north face, at the time of my last visit, was a little too far in the footwall, and will probably get into better ore by turning it toward the east or hanging wall side. The south face was stopped in low-grade, but it will be noted that in the small shaft 140 feet south of the south face the vein assays $88.00 across a width of 1.5 feet.

From the main shaft workings five carloads of ore have been shipped to the smelter. The settlement sheets for these shipments are attached to this report.

The following table is a resume of the shipments.

Table of Smelter Shipments.

Lot No.	Dry Weight	Assay, ounces Gold	Net Returns
1 (Swanson)	50.153 tons	1.435	$ 910.19
1 (Gordon)	45.939 "	1.085	585.99
2 "	48.827 "	1.235	751.87
3 "	49.797 "	1.325	812.01
4 "	51.223 "	1.965	1350.61
Total	245.939		4390.67
Average grade		1.418 ounces Gold per Ton.	

1975 VALUES = $66,420.00

Study of these sheets shows a freight rate of from $4.66 to $6.00 per ton and a smelting charge of from $3.06 to $4.73 per ton. Also there is a charge of $4.75 per ton for the truck haul from the mine to Blair Junction. This makes a charge of from $12.47 to $15.48 against every ton of ore shipped to the smelter, exclusive of costs at the mine. It is evident that the thing to do is to develop the mine to a point where a mill is warranted, so that the ore may be cheaply treated on the ground.

From all the above data and the attached maps it is evident that a vein has been developed for 350 feet in length, with nothing in evidence to prevent it from extending much farther in both directions. Where it has been most intensively developed widths up to eight feet of unusually good grade ore have been exposed. It can not be questioned that this showing deserves active development. What should now be done is to develop the mine to the point where enough ore is reasonably assured to erect a mill for treating it on the ground. This mine can easily develop in a short time so as to warrant a mill of 100 tons per day capacity. An estimate of

would have to be worked out later, after the mine is developed enough to be sure of the character of the ore. It would be either flotation or cyanidation, with amalgamation to catch coarse, free, gold. It is certain, however, from experience in the district, that a milling process can be worked out that will give good recovery of the gold at low cost.

DEVELOPMENT RECOMMENDED.

To put ore in sight as soon as possible the north and south drifts on the 35 foot level should be advanced as rapidly as possible. Also, a winze should be put down on the vein. This can be done by flattening off from the present shaft at the 35 foot point. This winze should be sunk 150 feet on the vein below the 35 foot level, and then a new level should be established. Drifts north and south on the vein should then be run on this new level, for at least 200 feet in each direction, and as much farther as the vein continues.

If a block of ore 400 feet long, 150 feet deep, with an average vein width of five feet, can be thus defined, it will contain 300,000 cubic feet, or 25,000 tons of ore. It is, of course, at this time impossible to make any estimate of what grade of ore to expect in such a block, and it will have to be determined by careful sampling as the work progresses. The better the grade of ore developed, the smaller will be the tonnage required to repay the cost of the mill and plant. If a grade of $16 per ton can be developed, which is not unreasonable in view of the grade shown by present workings and shipments made, and the premium now obtainable on gold, there would be in sight in such a block a profit of about [illegible]

The development of a new level 150 feet lower on the vein should then be carried on while the mill is under construction. All of this recommended development work is shown in dotted lines on the map of the mine workings. It may ultimately be advisable, if results are good, to sink a vertical shaft somewhere in the hanging wall of the vein for a permanent working shaft.

EQUIPMENT NECESSARY.

Equipment now at the mine consists of a portable one-drill air compressor, tugger hoist, jackhammer drill, hand tools for steel sharpening, bucket for hoisting, one mine car on surface, drill steel and hand tools, and two small cabins for the crew.

This equipment is entirely inadequate for carrying out the development which the property warrants. To do the work recommended, the following should be provided. The costs are based largely on getting used equipment, in good condition, locally. Much of it would remain as part of a permanent plant. Some, such as the hoist and compressor, would be replaced if developments warrant bringing in electric power from Silver Peak.

List of Equipment needed for Development Campaign, with Estimate of its Cost.

1-Headframe, 50 feet high, and 36 inch sheave wheel	$ 1250;
1 1-ton self dumping skip and dump tracks.	300.
1 50-ton bin	500.
1 25 Horse Power Gasoline Hoist, and 400 feet ½" cable	1250.
1 Four drill Hot-head Compressor.	2500.
1 Air Receiver 4' by 8', and 4" pipe for air line	200.
1 6000-gallon oil storage tank	250
3 Leyner type [illegible]	

1 Drill sharpener and accessories	$ 750.
1 Oil fired sharpening forge	300..
4 Mine cars, about 18 cubic feet capacity	200.
5 Tons 12-pound rails	150.
1 2000-gallon water storage tank	50.
1 Tank for hauling water	50.
1 Building for Hoist	300.
1 Building for office and store-room	250.
1 Bunk House and equipment for 20 men	1500.
1 Cook House and equipment	1500.
1 Car Mine Timbers and miscellaneous lumber	1500.
2 Machine Bars, 2 arms, 2 clamps, air and water hose; picks, shovels, and miscellaneous small tools	500.
Pipe- 1000 feet each of 2" and ½", and fittings for same, for air and water lines	400.
Total Cost for Preliminary Equipment	15,500.

When this plant is in operation the two drifts and the winze recommended above may all be worked at once. Progress should be 100 feet per month in each drift and 75 feet per month in the winze, or 275 feet per month of development which should cost about $3500. In six months, if the ore continues it should be developed for 400 feet in length on the 55 foot level and for the same length on a new level 150 feet lower on the vein. If the grade and width continue satisfactory it will then be in order to consider erection of a mill.

Funds immediately needed are therefore $15,500 for plant and $21,000 for six months development, or $36,500.

To provide for contingences, I recommend that at this time a fund of $50,000 be provided, and that the work outlined be carried out as quickly as possible.

RIGHT TO DIP OF VEIN.

One other point of great importance to the future of the property must be considered. The property map shows that the vein outcrops in the Soda claim a little less than 300 feet from the east side line of the claim, which is also the boundary of the property. If the vein maintains the 25 degree dip shown in the mine workings it will dip out of the property about 300 feet below the present workings. Any steepening of the dip will increase the distance, on the vein, to the property line.

Under the mining law, the owner of the top or apex of a vein, in proper relation to the end lines of the claim, is entitled to the ownership of the vein between vertical planes through the end lines, even although on its dip the vein may pass beyond the side line beneath the surface owned by another party.

The apex of this vein is beyond question in the Soda claim, since it outcrops plainly thereon. The course of this apex is such, that if continued, it will pass through the north end line of the claim. The Soda claim is senior to any other claim involved. From the facts as now developed, it is my opinion that the Soda claim can establish by litigation the right to follow this vein beneath the surface of adjoining property to the east. Nevertheless, if this ground can be bought for a reasonable price I recommend buying it rather than fighting an apex suit.

Respectfully submitted,

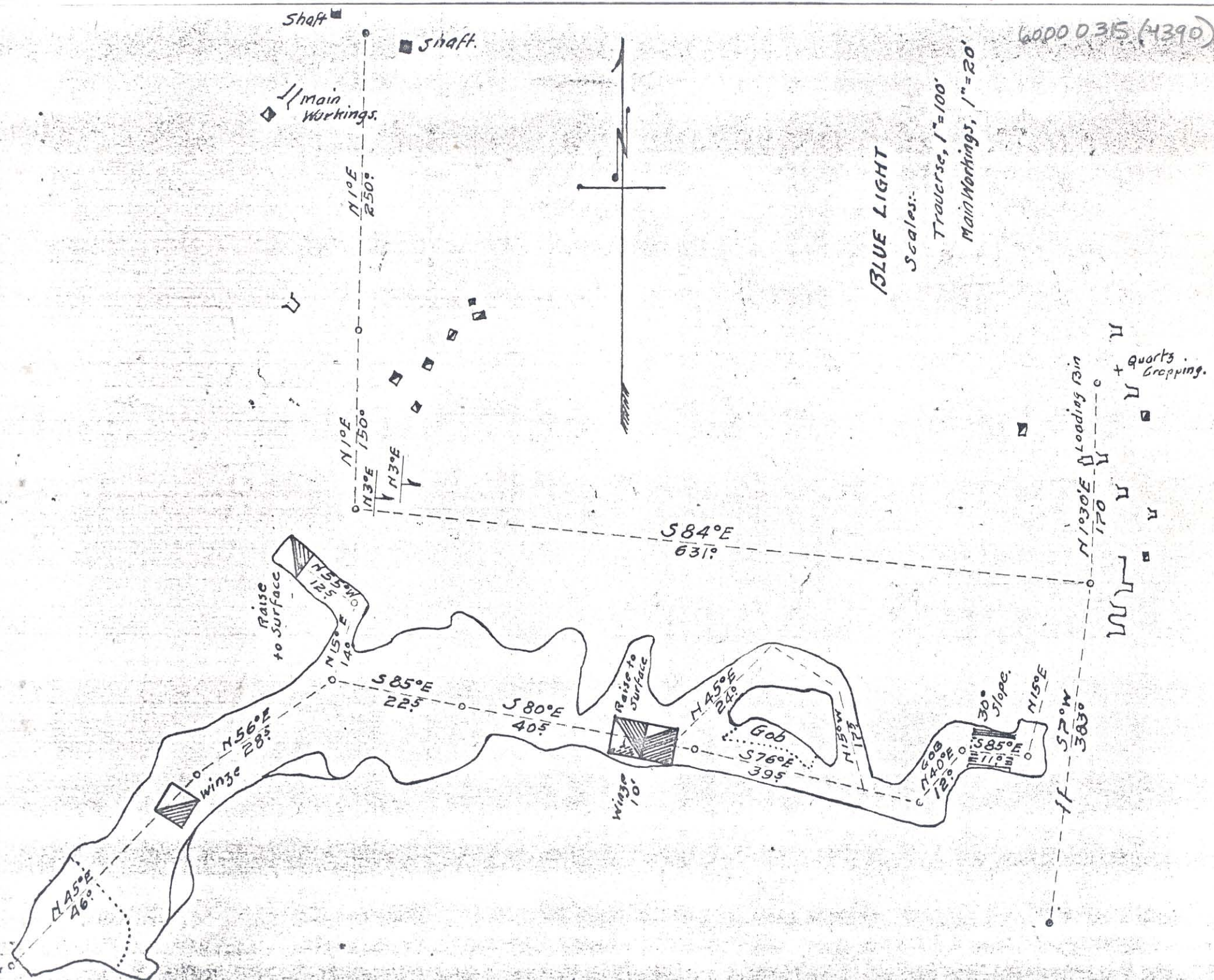
John L. Dyman

Mining Engineer.

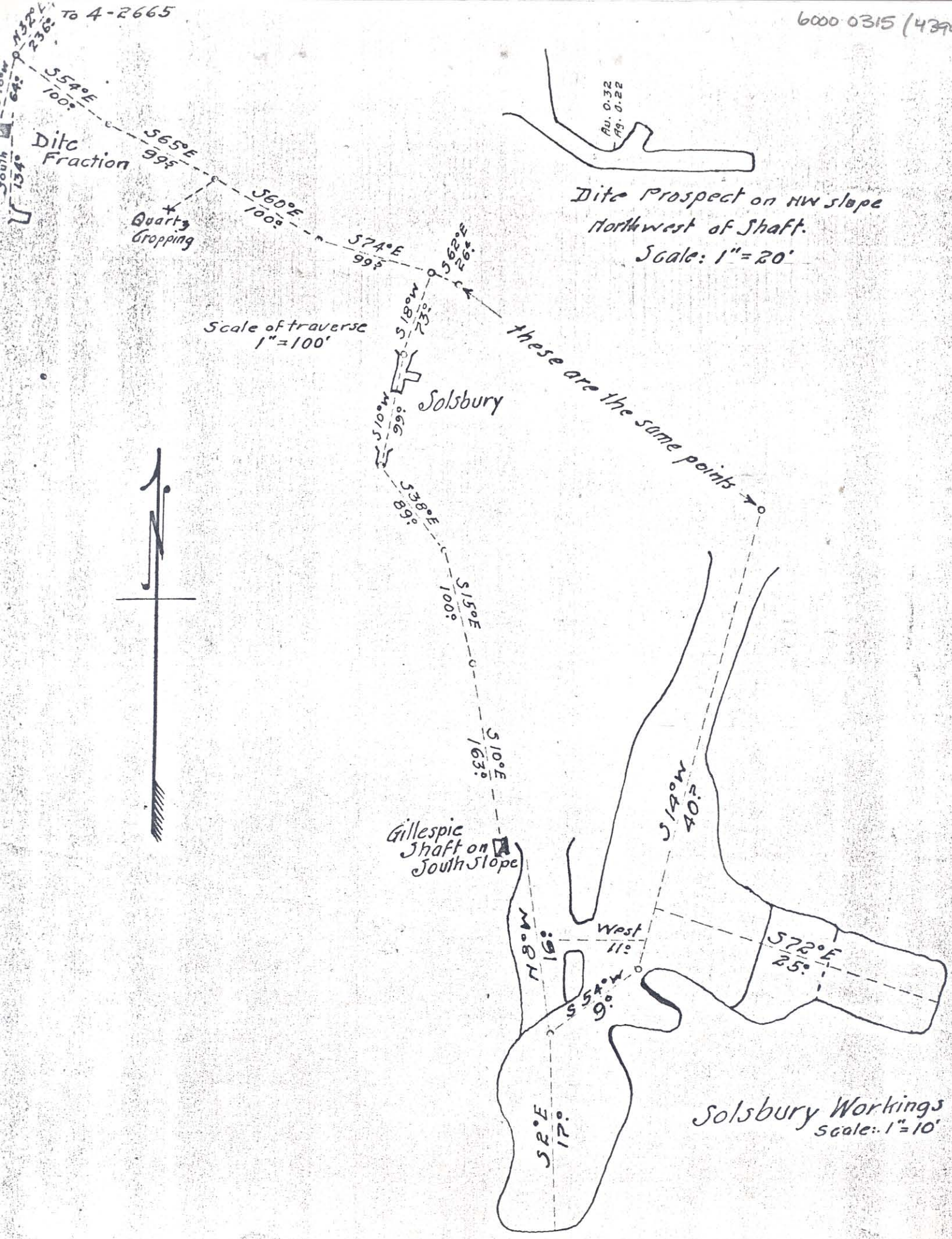
6000 0315 (4390)

Claim Map

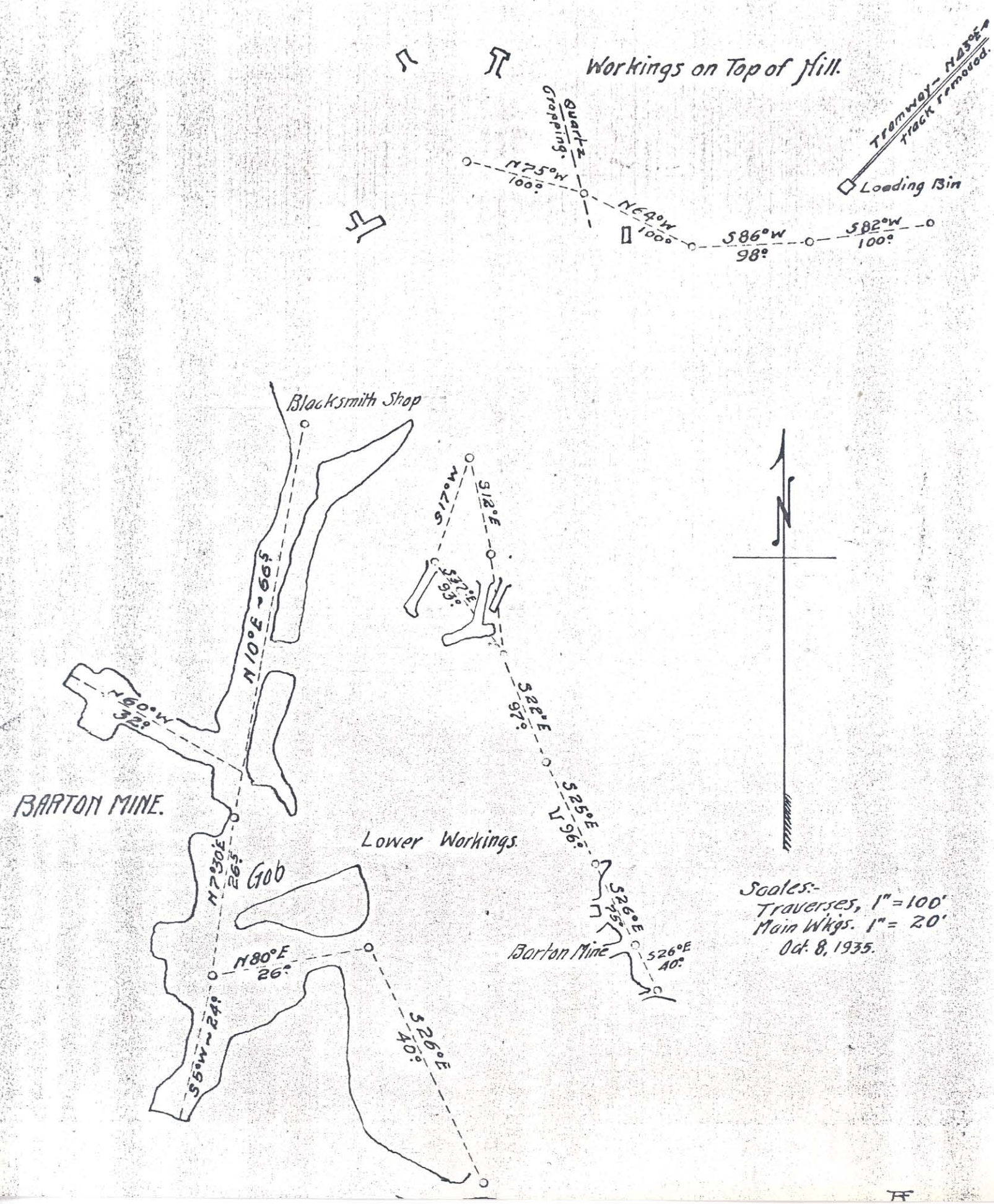
6000035 (4390)



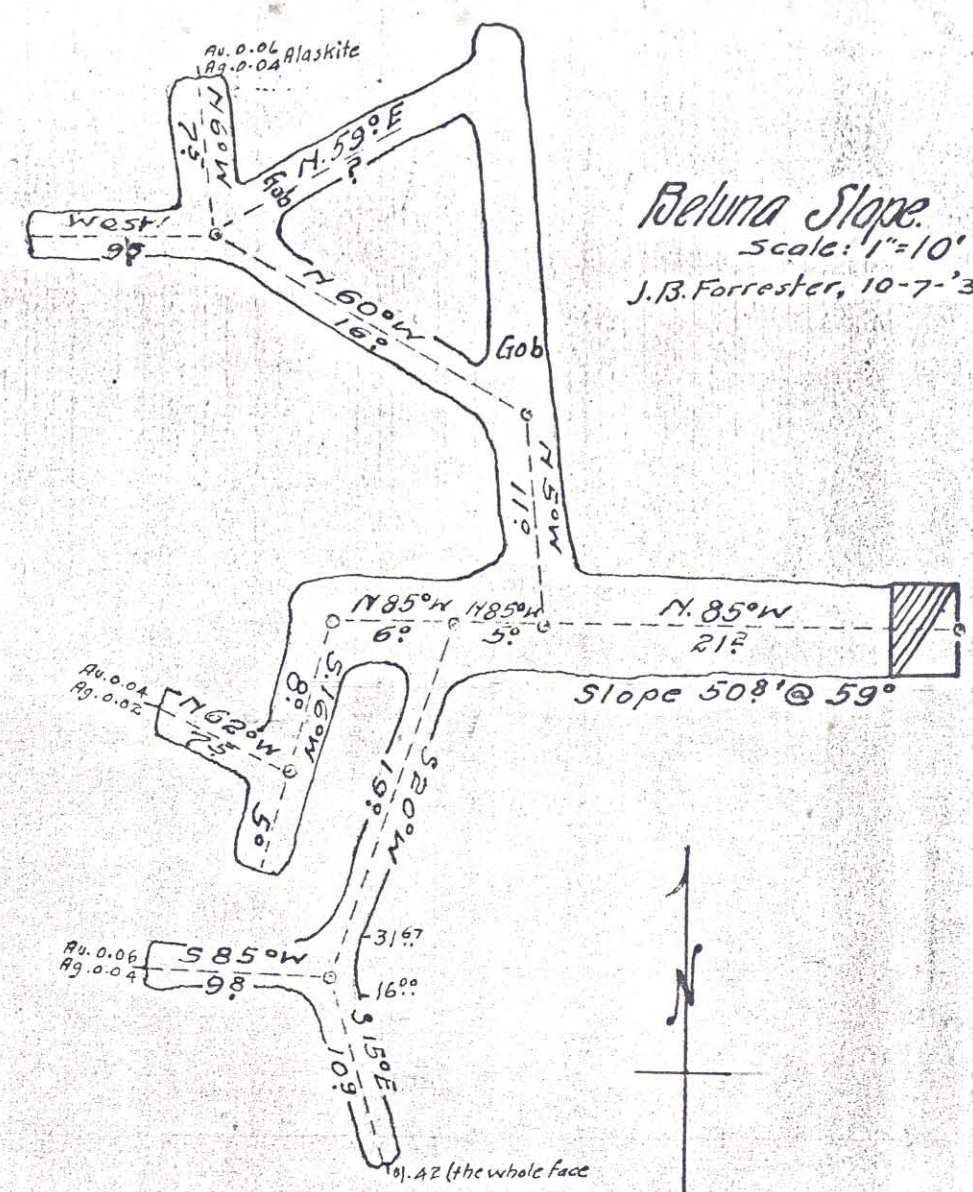
6000 0315 (4390)



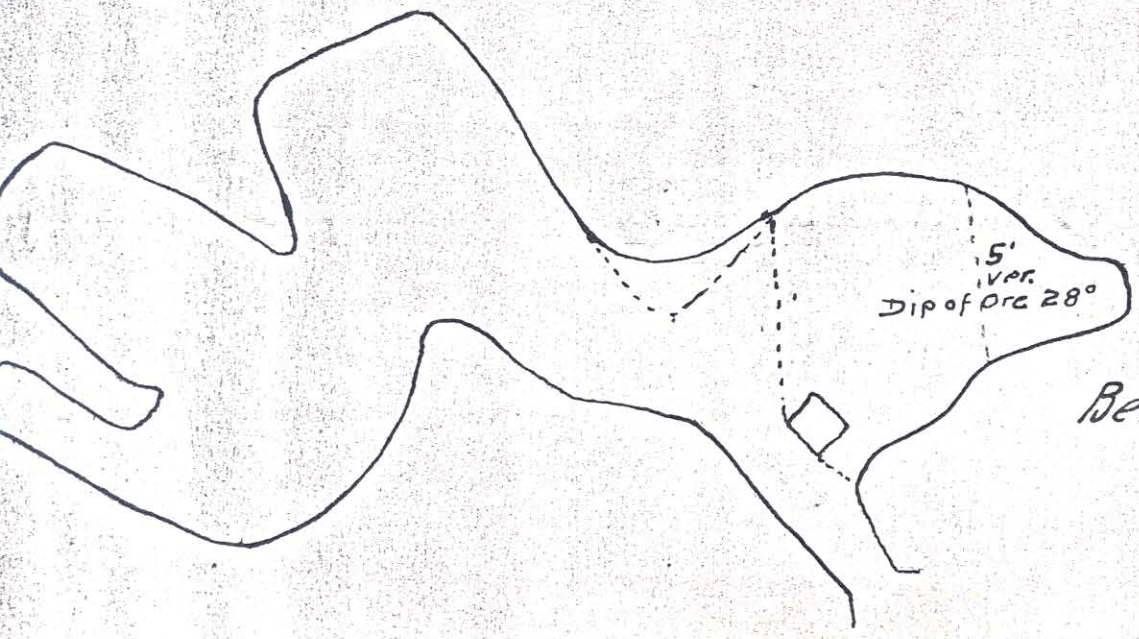
6000 035 (4390)



6000 0315 (4390)



Beluna Slope.
Scale: 1" = 10'
J. B. Forrester, 10-7-'35.



Beluna Glory Hole
Scale: 1" = 10'

GORDON MINES INC. 6000 0315 (4390)

Crude

SMELTER SHIPMENTS

Number	Smelter	Date	Gold per-ton	Silver per-ton	Dry W't Pounds	Net Smelter after Deductions	
1	A.S&R	7-15-31	1.435 -258.30/ton	.35	100.306	$ 910.19 8/12,915.00	Shipped by Swanson
1 -A		1-16-33	1.085	.3	91.878	585.99	
2		6-5-33	1.235	.4	97.654	751.87	
3		7-10-33	1.325	.35	99.594	812.01	
4		9-27-33	1.965	.6	102.446	1330.61	
5		11- 1-33	1.205	.4	104.152	1291.50	
6		11- 1-33	1.825	.6	71.162	845.46	* provisional p'y't
7		11-23-33	1.66	.45	96.870	1805.65	
8		11-29-33	2.04	.6	93.134	2231.24	
9		12- 7-33	1.775	.5	92.814	1976.64	
10		12-14-33	1.535	.5	94.392	1660.02	
11		12-18-33	1.73	.6	95.062	1955.81	
12	U.S.S.	12-27-33	.98	.3	101.282	1040.93	
13		1- 7-34	1.38		105.844	1667.10	
14		1-14-34	.98	.6	97.686	1011.82	
15		1-21-34	1.02		108.500	1186.47	
16		1-26-34	.755		109.164	826.94	
17		2-12-34	.925		95.480	946.29	
18		3- 9-34	.90	.45	99.554	976.79	
19		3-19-34	1.16	.65	99.314	1283.31	
20		4-23-34	.60	.3	98.258	548.20	
21		4-27-34	.3275	.2	103.108	151.26	
22		5- 7-34	.39	.2	106.778	261.55	
23		6- 1-34	1.09	.6	86.226	1057.21	
24		6-14-34	1.395	.55	93.386	1541.24	
25		7- 5-34	.85	1.	88.256	779.07	
26		8-10-34	1.06	.5	99.508	1178.70	
27		9-21	1.07	.2	93.540	1111.24	
28		9-28-34	.805	.5	93.814	756.00	
31		1-14-35	1.265	.65	91.322	1305.07	
32		1-26-35	.79	.35	90.068	709.04	
33		2-12-35	.64	.5	93.456	567.53	
34		3- 2-35	.57	.4	102.984	537.13	

(Note Nos. 31 to 34 incl. shipped to smelter in place of mill-break in water line)

concentrates-
clean up-
part of sponge gold

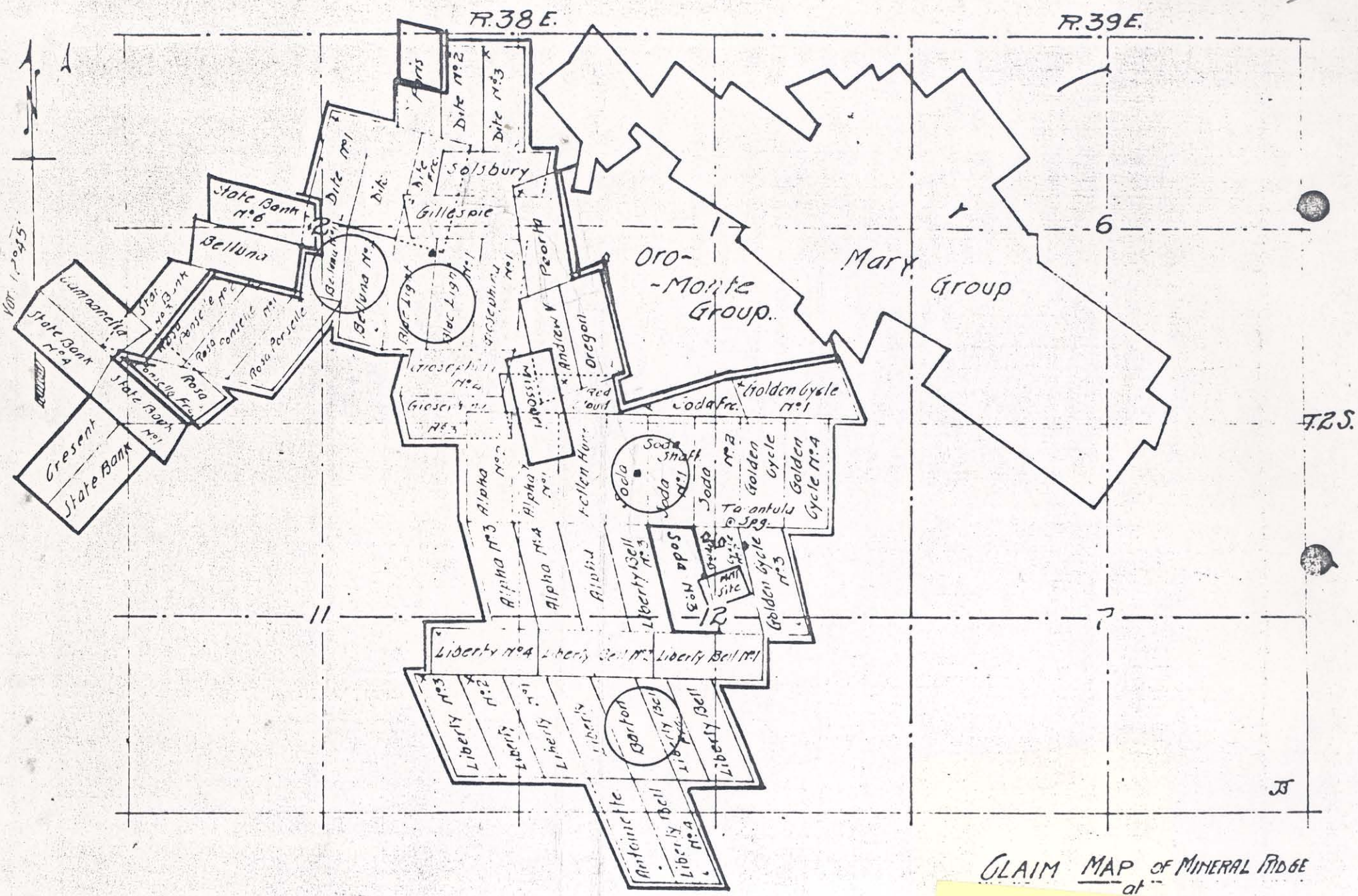
29		12-24-34	66.58	22.4	941	1034.77	
30		1- 7-35	37.49	14.6	1244	757.79	
35		3- 7-35	19.03	6.28	3788	1105.86	
36		3- 8-35	37.20	11.20	828	502.65	
37		3-13-35	24.23	8.8	1817	680.53	
38		3-25-35	30.613	8.88	1168	580.79	
39		3-30-35	11.965	3.8	6060	1073.81	
40		4- 4-35	21.105	7.	2142	688.46	
41		4-13-35	4.89	1.45	9620	585.24	(change to
42		4-22-35	9.60	3.1	8313	1150.86	larger cells
43		4-30-35	5.48	1.	8320	589.48	for course
44		5- 5-35	4.87	1.5	4751	270.38	concentrate)

6000 0315 (4390)

46	5-16-35	7.75	2.	4601	$ 489.37	
47	5-16-35	4.25	1.1	3275	162.07	
48	6-14-35	6.4	1.7	14116	1255.55	
49	6-20-35	.46	.4	98374	313.46	crude
50	6-20-35	4.085	1.5	9494	542.04	
51	7- 1-35	17.82	3.	1537	428.30	
52	7- 1-35	6.65	1.85	4547	445.86	
53	7-22-35	8.05	1.55	3818	459.32	
54	7-22-35	8.16	1.6	7045	632.74	
55	7-22-35	2.50	.65	2092	56.57	
56	8-10-35	5.	1.6	15208	1010.09	
57	8-24-35	34.793	6.78		1172.04	
58	8-24-35	252.40	60.6	4	10.16	
59	8-24-35	799.31	186.90	14	186.13	
60	sheet missing					
61	9-14-35	8.90	2.2	12543	1629.45	
62	9-27-35	10.25	3.3	8378	1282.45	

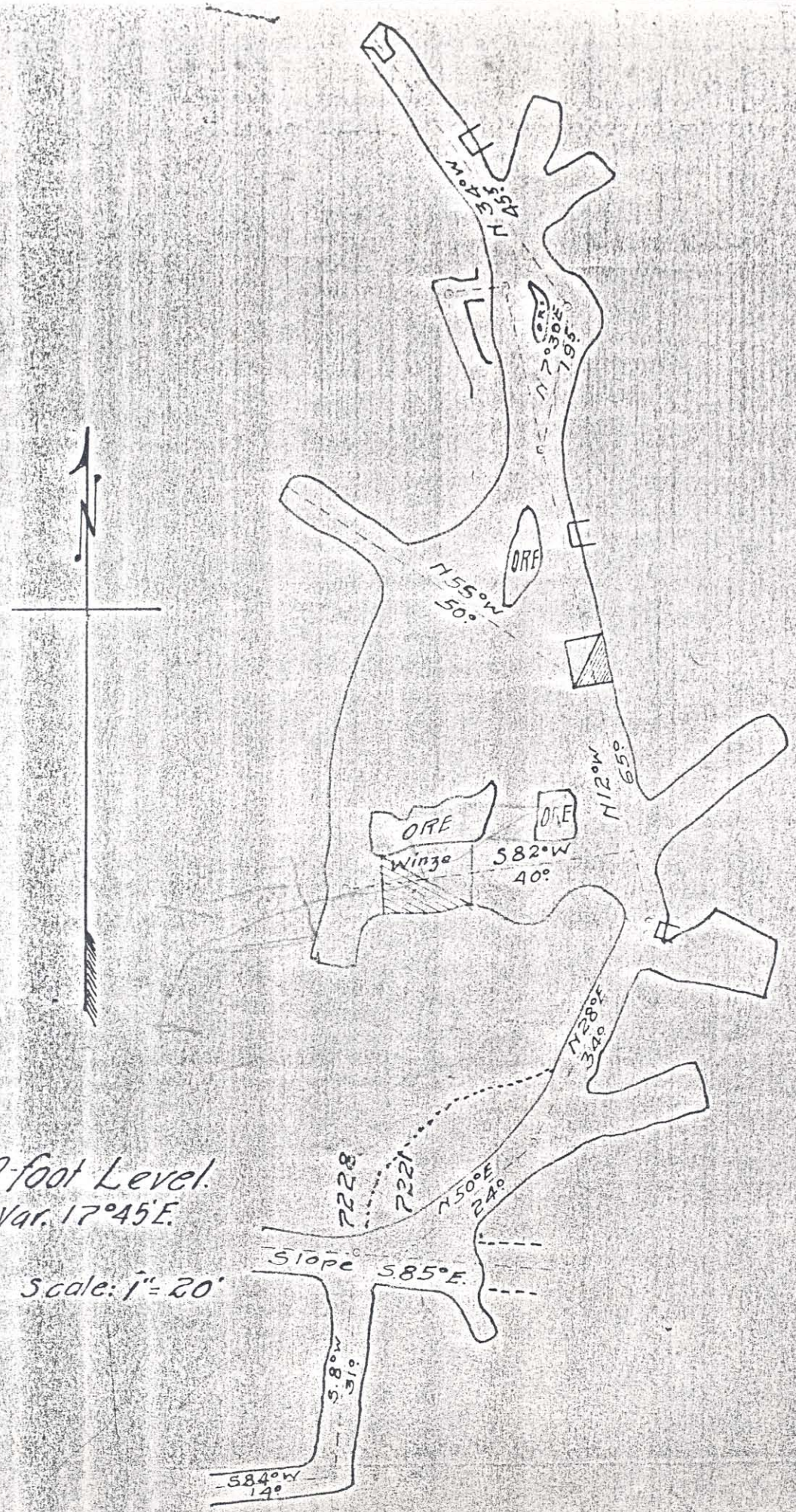
Does not include sponge gold from plates

6000 0315 (4310)



CLAIM MAP OF MINERAL RIDGE
at
PROPERTY IN
NEVADA.

6000 0315 (4390)

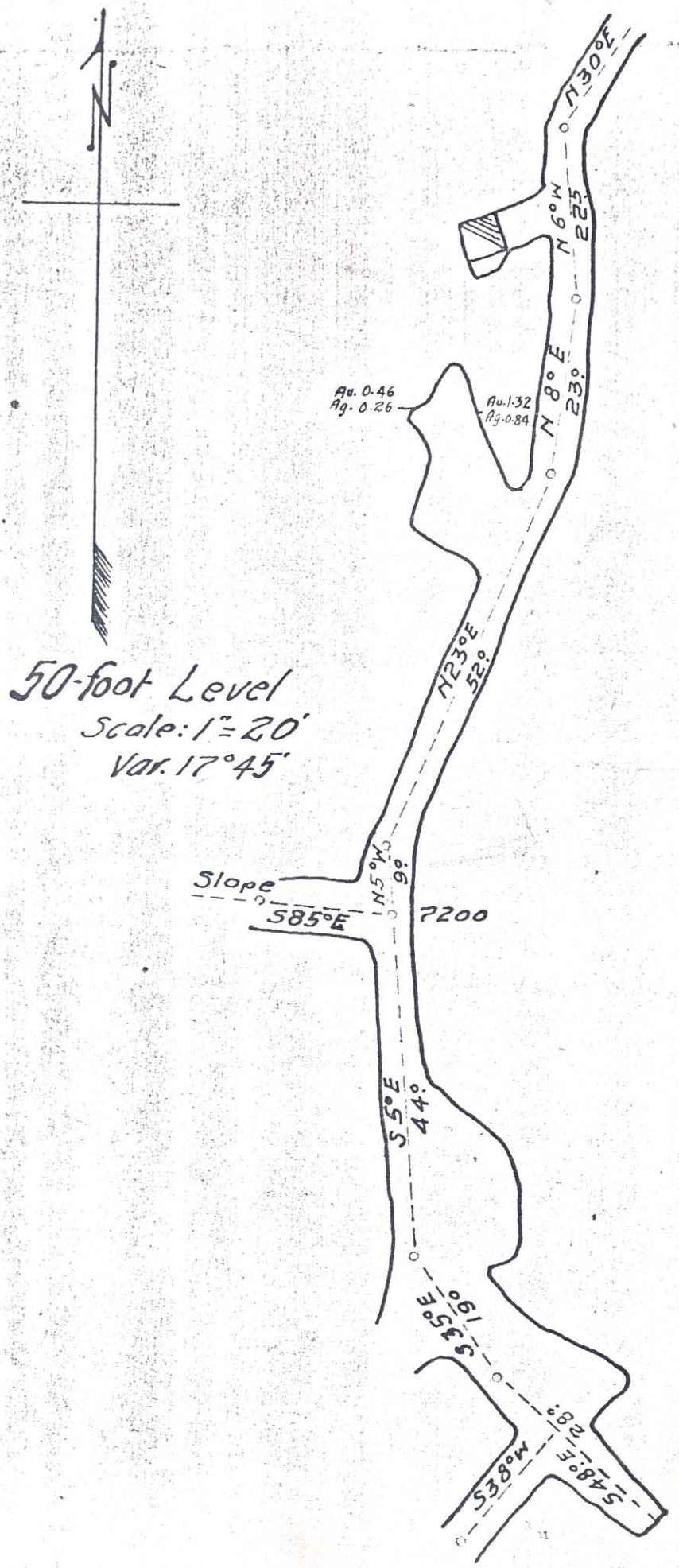


30-foot Level.
Var. 17°45'E.

Scale: 1" = 20'

B

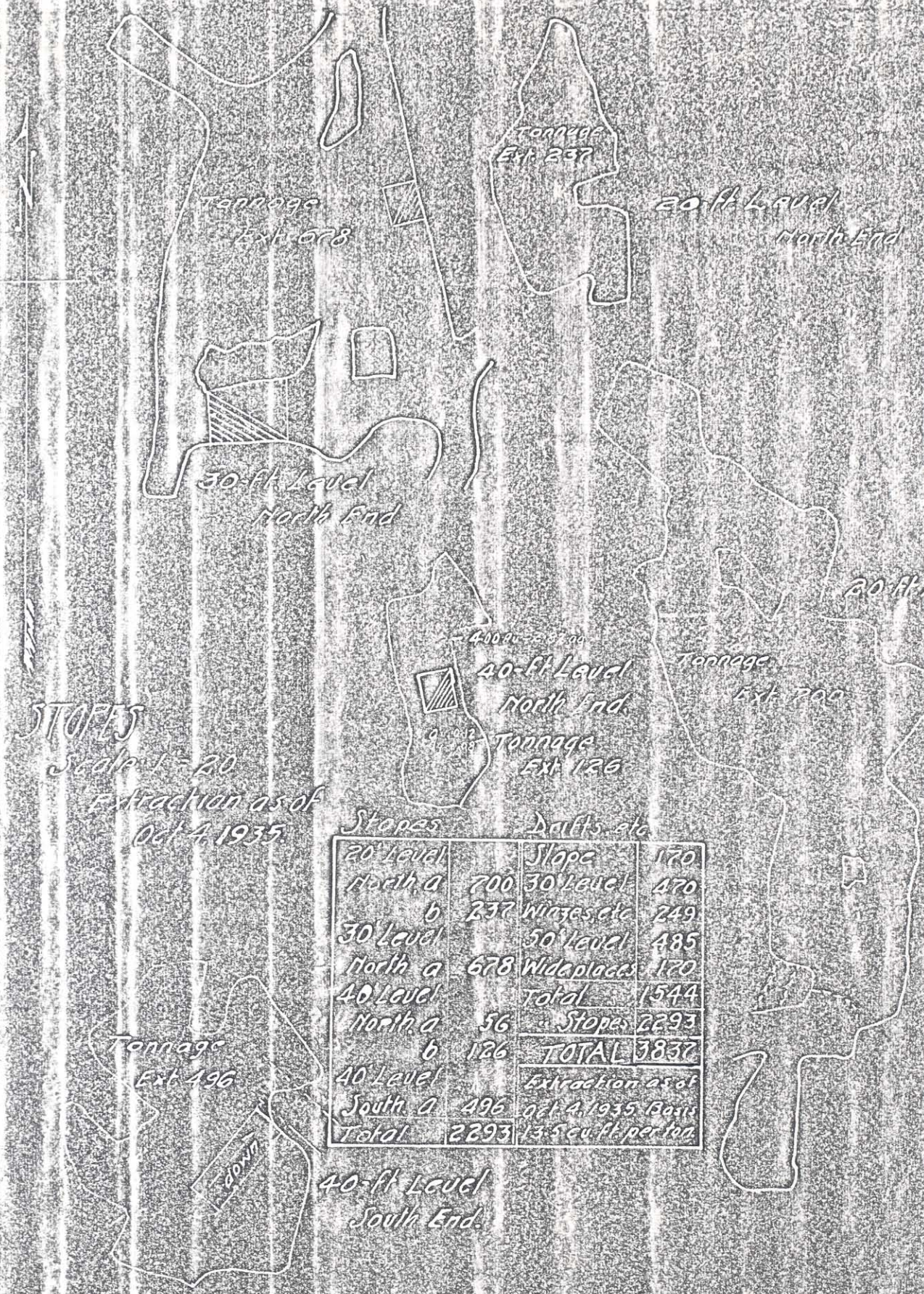
6000 0315 (4390)



50-foot Level
Scale: 1" = 20'
Var. 17°45'

JF

6000 035 (A390)



STOPES
Scale 1" = 20'
Extraction as of
Oct 4, 1935

Stopes		Drifts etc	
20 Level		Slope	170
North a	700	30 Level	470
b	237	Winzes etc	249
30 Level		50 Level	485
North a	678	Wideplaces	170
40 Level		Total	1544
North a	56	Stopes	2293
b	126	TOTAL	3837
40 Level		Extraction as of	
South a	496	Oct 4, 1935 Basis	
Total	2293	13.5 cu ft per ton	

J.B.F.

6000 0315 (4390)

Mr. J. P. Hart
Tonopah, Nevada

April 20, 1934

Mr. R. H. Gordon
356 South Wetherly Drive
Beverly Hills, California

Dear Sir:

Complying with your request, I have inspected your property in the Silver Peak district for the purpose of considering the advisability of installing a suitable milling plant in which to recover the precious metals contained in the ores found on the property.

Inasmuch as reports have been previously rendered by conservative engineers, I will not here refer to features other than those directly concerned with the matter above referred to, namely, the advisability of constructing a milling plant on the property. In this connection, however, it is necessary to point out that since the last reports were made, development work on the 32 foot level of the Soda claim has extended the drift to a point 180 feet north east from the main working shaft showing a very good grade of ore.

According to Mr. Brodie, practically all of the ore broken from the above development was shipped direct to the smelters and he has furnished me with shipping receipts for lots number 2 to 19 inclusive. These lots aggregate slightly over 882 tons containing a gold content of 1180.688 ounces, or an average per ton gold content of 1.338 ounces. These shipments were being made between the dates of June 9, 1933, and March 22, 1934, consequently, were being paid for at varying prices for the contained gold, as the price of gold was advancing during this period. Likewise, the per ton charges for freight and treatment for ore of the average grade of the foregoing shipments will approximate $10.25 per ton to which must be added a charge of $4.75 for trucking the ore from the mine to Blair Junction. The charges for these items, therefore, amount to $15.00 per ton based on values and costs at a gold price of $35. per ounce.

In regards to a milling plant, a twenty-five ton per day unit should be the smallest to take under consideration. With a unit of this size a total milling and marketing charge of $6.50 per ton should easily be accomplished. This compared with the $15.00 costs incurred by the shipping to the smelters would leave an $8.50 per ton margin in favor of the mill. A mill of fifty tons daily capacity should effect a saving of $10.50 per ton over the present cost of shipping to the smelters.

As regards the amenability of your ores to local treatment, it can be stated that this question offers no problem. A number of tests already made by the Southwestern Engineering Corporation indicate a recovery of 95% of the gold content by flotation. Also, the ores are identical to those of the Pittsburg Silver Peak Company and these ores yielded a high extraction to cyanide treatment. In fact, either of these methods would effect an additional saving above the smelter returns, as the latter with gold at $35.00 per ounce, are paying for the gold content of the shipments at $31.8183 per ounce which, on the grade of ore being shipped, results in a deduction of over $3.00 per ton or a return of about 91% of the value of the contained gold.

The remaining and most vital point, however, is the question as to whether sufficient ore has been developed to justify the installation of a milling plant at this time. In answer to this question we will first consider the developments from the main shaft of the Soda claim. This shaft started on a surface cropping, encountered commercial ore at a depth of 8 feet under the surface and was continued on ore to a depth of 75 feet following the ore on its dip of 52 degrees from the horizontal. The ore throughout this entire length being of commercial grade.

A drift was then started 32 feet below the collar of this incline shaft and has progressed to a point 180 feet north east from the shaft. Cross cuts east and west at the shaft on the 32 foot level exposed an 18½ foot width of ore. Cross cuts similarly driven at the end of the main drift 180 feet north east of the main shaft show an ore width of 45 feet. These developments, therefore, indicate an average width of 31.7 feet of ore on the 32 foot level. In order to block out a definite quantity of ore and to determine the depth of the ore at the end of the main drift, a winze is now being sunk at that point. This winze is now down 8 feet and still in ore. Drawing an imaginary line from the bottom of this winze to the bottom of the main shaft, which is down 33 feet below the 32 foot level, would give an average depth of 20.5 feet of ore below the level. The height of the drift adds an additional 9½ feet giving a total of 171,180 cubic feet or 14,265 tons. The shipments made in developing the block total 1,032 tons leaving 13,233 tons in place.

In the above tonnage estimate no consideration has been given to the ore between the top of the drift and the surface because this ore is opened up on but two sides. However, it is reasonable to expect an appreciable tonnage of good ore from this portion of the vein. The ore broken in sinking the main shaft from the point 8 feet below the surface, where the ore came in, to the 32 foot level, comprising 96 tons shipped, average 1.26 ounces per ton. This would be the average of the south boundary of this block and the ore shipments from the drift, average 1.338 ounces per ton, for the bottom boundary. This area offers attractive possibilities. Attention should also be called to the fact that the vein has been

opened up along a length of 50 feet by surface trenching and a small shaft at points 200 to 250 feet south of the main shaft showing a width of 1 foot of good mill grade ore at the surface. The ore extracted in sinking this small shaft comprising 35½ tons, was shipped to the smelter and showed a gold content of 1.825 ounces per ton. This portion of the vein totally undeveloped to date, offers good possibilities for large quantities of ore. In all, it would seem conservative to estimate the possible production of that portion of the Soda claim now under development at 40,000 tons.

From the foregoing tonnage estimates and the calculated saving that would be effected by the installation of a mill, namely the 13,233 tons in place on which a saving of $8.50 per ton could be expected by a milling plant, the saving would amount to $112,480. A twenty-five ton per day flotation milling plant and all appurtenances, including repairing the road from mine to mill, could be installed for an amount not to exceed $30,000. which, deducted from the above calculated saving, would leave a net saving of $82,480. in addition to owning the mill. This saving is, of course, over and above profits made in milling of ore.

Further evidence for the justification of a milling plant are found on many other claims and groups of claims in proximity to the Soda claim. Prominent lenses are found cropping on the Helen Hunt, Alpha, Alpha No. 1, Gillespie, Salsbery, Salsbery No. 1, Paris, Dite, Buluna, Rosa Ponsella, Rosa Ponsella No. 1, Rosa Ponsella No.2, State Bank, State Bank No. 1, Blue Light, Blue Light No. 1, Barton and Antoinette claims, and many of the lenses have considerable tonnages of ore of mill grade opened up, thereby affording additional sources of supply for a mill. In the Blue Light No. 1 alone, one of these lenses outcrops on the surface for a distance of 550 feet and several shafts 8 feet to 28 feet in depth have been sunk on this lense and these have exposed a considerable quantity of good mill ore.

In summarizing, I would again refer to the fact that a mill having a daily capacity of 25 tons could be constructed on the property paid for out of the savings from smelter shipments with over an $80,000. margin above the cost of the mill on the ore now opened up in the Soda claim alone; that the Soda claim ore body offers extensive possibilities on further development, as daily developments continue to expand the ore body and is maintaining weekly shipments in 50 ton lots; that there are about 14 other claims with known lenses many of which have been partly developed and show a considerable tonnage of good mill ore which would be treated on a custom basis if a mill was available in the district; water rights in close proximity to the property, ample for milling purposes, have been acquired. It is therefore evident that construction of a milling plant is justified at this time by the present developments.

Respectfully submitted,

J. P. Hart

Mining Engineer

6000 0315 (4390)

June 18, 1934

Los Angeles Curb
Question 5 - (A)

Production Record.

Report of J. P. Hart, Engineer, dated April 20, 1934, copy attached.

Smelter shipment average
from June 9, 1933
to March 22, 1934
Cars 2 to 19 inclusive

Average 1.338 ounces per ton-
882 tons

Ore blocked out
13,233 tons

1.338 ounces gold per ton - $46.83

$46.83 x 13,233 ton equals gross-		619,701.39
deducting 10% loss, tailings & smelter	61,970.14	
deducting $10.00 per ton mine and mill	132,330.00	
		194,300.14
Net -		425,401.25

This does not include ore to south of shaft or ore above 35 foot level or ore from other workings.

Golden River Inc.
Gordon
Pres.

SHIPPED TO AMERICAN SMELTER AND REFINING

Car Load	Gold Per Ton	Silver Per Ton	Dry Weight Pounds
2	1.235	.4	97,654
3	1.325	.35	99,594
4	1.965	.6	102,446
5	1.205	.4	104,152
6	1.825	.6	71,162
7	1.66	.45	96,870
8	2.04	.6	93,134
9	1.775	.5	92,814
10	1.535	.5	94,392
11	1.73	.6	95,062

SHIPPED TO UNITED STATES SMELTER

12	.98	.3	101,282
13	1.38	.5	105,844
14	.98	.6	97,686
15	1.02	.5	108,500
16	.755	.2	109,164
17	.925	.45	95,480
18	.90	.45	99,554
19	1.16	.65	99,314

These shipments are from June 9, 1933 to March 22, 1934 and are covered in the report of S. P. Hart

60000315 (4390)

SILVER PEAK OPERATIONS

SUMMARY of ROYALTIES

Total Royalties as per Statement	$ 12,473.16
Total Payments as per Statement	9,915.93
UNPAID:-	$ 2,557.23

STATEMENT SHOWING PAYMENTS ON AGREEMENT: ALSO ROYALTIES PAID AND APPLIED AGAINST THE QUARTERLY PAYMENTS

Date of Payment	Amount of Payment	Royalty Paid	Balance
March 12, 1936	5,000.00		5,000.00
April 9, "	70,000.00		70,000.00
July 9, "	21,875.00		21,875.00
October 9, "	21,875.00	2,692.56	19,182.44
January 9, 1937	21,875.00	3,253.59	18,621.41
April 9, "	21,875.00	2,126.74	19,748.26
July 9, "	21,875.00	1,843.04	20,031.96 *
	$ 184,375.00	$ 9,915.93	$ 174,459.07

* This payment not made, on account of extension granted.

6000 0315 (4390)

EVALUATION REPORT, DECEMBER 1967

BY

GEOLOGIST VIC HOLLISTER
DUVAL CORPORATION, TUCSON

PAST REPORTS ON THE MARY MINE HAVE GENERALLY DESCRIBED THE MINE'S GEOLOGIC SETTING, PAST PRODUCTION AND LOGISTICS PROBLEMS. THESE REPORTS ALSO POINTED OUT THAT THE FUTURE EXPLOITATION OF THE ORE DEPOSIT COULD LAY EITHER IN A BULK MINING OF THE VEIN SYSTEM BY OPEN PIT OR UNDERGROUND MINING OF DOWN DIP EXTENSIONS BELOW THE OLD STOPES. BOTH POSSIBILITIES COULD BE EVALUATED BEST ON THE BASIS OF OLD GEOLOGIC ASSAY PLANS MADE DURING MINING PRIOR TO APRIL, 1942. COLONEL REEVE HAS BEEN ABLE TO PROVIDE FRAGMENTARY ASSAY AND UNDERGROUND GEOLOGIC MAPS, AND THESE HAVE BEEN INTERPRETED, AND THE SCATTERED ASSAYS PROJECTED TO MAKE THE FOLLOWING EVALUATION.

BULK MINING POTENTIAL

THE UNDERGROUND GEOLOGIC MAPS SUGGEST A ZONE OF VEINING, SHEARING AND ALTERATION TO EXIST FOR A WIDTH OF 100 FEET AND FOR A STRIKE LENGTH OF ABOUT 3000 FT. THE ZONE IS CLOSE ENOUGH TO THE TOPOGRAPHIC SUFRACE FOR 1000 FEET DOWN DIP SO THAT IT COULD BE CONSIDERED A POSSIBLE OPEN PIT TARGET. THIS BLOCK WILL CONTAIN POSSIBLY 24,000,000 TONS. PAST UNDERGROUND MINING IN THIS ZONE HAS REMOVED ALL HIGH GRADE, BUT THIS IS BELIEVED TO HAVE BEEN A RELATIVELY SMALL TONNAGE (NOT EXCEEDING 2,000,000 TONS). THE REMAINING GRADE, AS SUGGESTED BY THE INCOMPLETE ASSAY DATA NOW AVAILABLE, COULD BE .10 OZ. AU, WITH NO SUBSTANTIAL HELP FROM OTHER METALS. THE GRADE HAS BEEN ARRIVED AT BY THE PROCESS OF ARITHMETICALLY SUMMARIZING ALL ASSAYS OF LESS THAN .2 OZ. AU WITHIN THE ZONE WHICH ARE KNOWN FROM THE ASSAY PLANS. IT IS ASSUMED THAT PAST LEASOR OPERATIONS WOULD HAVE MINED ANY ORE CARRYING BETTER THAN .2 OZ. AU. THE ATTACHED ASSAY PLANS SERVE AS THE BASE FOR THIS CALCULATION, AND THE GEOLOGIC MAPS HAVE BEEN FILED DIRECTLY. THE GRADE FIGURE IS A BEST ESTIMATE, AND WOULD HAVE TO BE ESTABLISHED BY A FAIRLY EXTENSIVE DRILLING PROGRAM. IT THEREFORE SHOULD BE CONSIDERED AS AN EXPLORATION TYPE TARGET GOAL. THE BULK MINING OF THIS TARGET WOULD PROBABLY ENTAIL A 3:1 WASTE TO ORE RATIO.

CONSIDERING EVERYTHING, THE PROJECTED GRADE AND TONNAGE ARE NOT COMMERCIAL BELOW $50.00 PER OUNCE FOR GOLD. THE TARGET IS THEREFORE OF NO CURRENT INTEREST.

UNDERGROUND TARGET

THE ASSAY PLANS SUGGEST THAT WHERE ORE OCCURS IT IS OF EXCEPTIONAL GRADE. THE GAP BETWEEN .3 OZ. AU ASSAYS AND 0.7

OZ. ASSAYS IS FILLED BY RELATIVELY FEW SAMPLES, AND THE IMPRESSION IS GAINED THAT THE ORE PREVIOUSLY MINED OCCURRED IN SMALL HIGH GRADE LENSES, SURROUNDED BY FAIRLY EXTENSIVE LOW GRADE MATERIAL. IN UNDERGROUND MINING, THE HIGH GRADE TONNAGE REMAINING IN DOWN DIP EXTENSIONS BELOW OLD STOPES IS BELIEVED TO BE TOO SMALL TO JUSTIFY THE EXPENSE OF DEVELOPING IT. THE HIGH GRADE SHOOTS ARE LESS THAN 100 FEET LONG EACH, AND THOUGH THESE MAY HAVE SUBSTANTIAL DOWN DIP EXTENSIONS, THEY ARE NOT ECONOMIC AT $35. PER OUNCE AU. IF CURRENT LABOR COSTS OF $35. PER DAY ARE ASSUMED, THE UNDERGROUND POTENTIAL IS NOT WORTH CONSIDERING AT LESS THAN $100. PER OUNCE. AN UNDERGROUND GRADE OF .7 OZ. AU NOW HAS A NET VALUE OF ABOUT $18., BUT MINING COSTS WILL DEMAND AT LEAST $50. ROCK.

60000315 (4390)

Susan Tonopah files

RL-7-75-70

Copies. Skinner file
Lutz "
M M file
7-7-75 SM

MEMO

TEST RESULTS OF
MARY MINE ORE

ORE: from: Mary Mine Open Pit

type: Quartz + Alaskite with FeO's and Sulfide

head assay: = .078 oz. Au/ton

PROCEDURE: 50 lbs. of ore was crushed to minus 3/8" diameter and placed in a column with well water from a well in the Mary Mine area. Water had a pH of 6.8. This test had a 9 day leach using 2 lbs/ton NaCN. The pH was maintained at 10.5, test used 65 gms caustic, and 30 gms NaCN.

RESULTS: Tail Assay = .012

1. 84.6% total recovery
2. 5 to 9 days peak of leach time
3. 57% of gold is from (+)1/4", (-)3/8" material
4. One ton ore @ (-)3/8" holds 30 gals. solution in retention.

NOTE

The above information taken from
Paul Skinner notes and dictated to
Robert Lutz on 6-30-75.

ln

cc: R. Lutz
D. Gribbin
W. Mollison
W. Simmons

file: Mary Mine Walt
6000 0315 (4390)

phelps dodge Corporation Western Exploration Office, Drawer 1217, Douglas, Arizona 85607 • (602) 364-8414

May 16, 1975

RECEIVED
SUMMA CORPORATION
LAND DIVISION

MAY 19 1975

Mr. D. J. Gribbin
General Manager
Land Exploration & Mining Division
Summa Corporation
5700-B South Haven
Las Vegas, Nevada 89119

Re: Mary Mine
Mineral Ridge District
Silver Peak Quadrangle (382), NV

Dear Mr. Gribbin:

During our first visit, when we were discussing the potential of the mine dumps at Tonopah, I mentioned that I thought that the Mary mine was interesting. You said then that you were inclined to do any work at this property for the account of Summa.

While in Tonopah in April I got permission from Walt Simmons to visit the Mary mine. I went underground and spent some time on the surface. Copies of assays and petrographic results of the samples taken will be sent to you when they are completed. I find this a very interesting property. It seems to me that the potential falls into three general classes, the old mine dumps, the open pit potential in the Drinkwater mine area, and the underground potential.

Of the three, the dumps can be sampled easily and can probably be cyanide leached, as you are doing at Manhattan. They can also be sampled fairly easily, as has apparently been done on the Mary mine dump. However, the potential of the dumps is fairly small.

The open pit potential at the Drinkwater mine may be quite attractive. There certainly appears to be a substantial potential here, and Simmons' estimate of 3,000,000 tons may be conservative. Sampling problems are considerable because of the many old stopes and workings. It does not appear that heap leaching should be applicable here also.

The geological potential of the possible extensions of the orebody underground may be difficult to establish, and the economic problems posed by present day underground mining costs may make potential reserves uneconomic. Geologically it is intriguing and this aspect of the Mary mine potential merits study.

300 Park Avenue, New York, N. Y. 10022 • (212) 751-3200

Copy - V. F. Allerup, W. Simmons 5-21-75 lk

6000 0315 (4390)

The purpose of this letter is to ascertain your present feelings about the possibility of our participating in a program on this property. I am willing to recommend consideration of any reasonable program. I would think that a joint venture arrangement might be most attractive to Summa. The dumps could be excluded from consideration if you wish. We would be most interested in the open pit potential.

I understand that you have had a couple of operations. I was sorry to hear that you had been ill and hope you are making a good recovery.

Very truly yours,

W. J. Walker
Senior Staff Geologist

WJW:s

6000 0315 (4390)

WILLIAM C. McLEAN, JR.
ATTORNEY AT LAW
707 FLORIDA AVENUE
P. O. BOX 21
TAMPA, FLORIDA 33601

TELEPHONE 223-4785

June 24, 1975

Summa Corporation
Post Office Box 309
Las Vegas, Nevada 89101

Attention: Francis M. Fillerup

Dear Mr. Fillerup:

Recently I received from Dick Mitchell the 1974-1975 Esmeralda County Tax Assessment in the amount of $1,259.70. I enclose this Notice since I understand Summa Corporation is obligated for payment of these taxes under Paragraph Sixteen of our Mining Lease dated March 1, 1975.

I also enclose an additional Notice sent by the Esmeralda County Tax Assessor requiring all taxpayers to complete a declaration of personal property within fifteen days after demandtherefor.

I shall appreciate your acknowledging receipt of these enclosures and that Summa Corporation will complete the required Declaration and pay the taxes currently owed.

Sincerely yours,

WILLIAM C. McLEAN, JR.

WCMJR/kls

Enclosures

cc: Mr. Dick Mitchell

6000 035 (4390)

summa

Internal Communication

Date: July 22, 1975

To: Wally Boundy and Walt Simmons

From: Russ Patterson

Subject: Mary Group

I have checked the records at the courthouse in Goldfield and find the following:

As to the Vale Claim
Loc. Notice filed 1/8/1897
Present Owner: Charles Bennett
No address found.

As to Echo #1, #2, #3 and #4
Loc. Notice filed 9/14/1953
Present Owner (Original Locators): L. L. Vastine, R. W. Baker, W. E. MacBoyle
P. O. Box 526, Goldfield, Nevada.

As to the Vanderbilt Millsite
Loc. Notice filed 12/23/1949
Present Owner: Richard Mitchell (No address available). Note: Taxes applied for by Pittsburg Silver Peak G. M. Co.

As to the Lakeview Claims
Loc. Notices filed 12/2/1966 by James Gavin.
I found no map on file for these claims.

As to the Tarantula Claim
Loc. Notice filed 2/4/1908
Present Owner: Frank Lewis (taxes applied for by Pittsburg Silver Peak G. M. Co.)

As to the Scorpion Claim
Loc. Notice filed 2/4/1908
Present Owner: Robert Mitchell (Taxes applied for by Pittsburg Silver Peak G. M. Co.)

Dist: Dave Gribbin
Mary file ✓

Russ

6000 0315 (4390)

Mr. Thomas Clary
P. O. Box 2513
Globe, Arizona 85501

Mr. Richard T. Mitchell
5222 6th Avenue S.
St. Petersburg, Fla.

Dear Dick:

Your Mary Mine property has a Geologic potential of 25,000,000 tons @ 0.10 oz. per ton gold or the equivalent.e.g, 12,500,000 tons @ 0.20 oz. per ton.

It can be demonstrated that there is 3,000,000 tons of ore @ 0.10 oz. per tone gold or equivalent remaining in the mined out portion of the Mary Mine. This Tonage is in the dumps, pit area and crushed pillars all of which can be leached using leaching Technology perfected in the past few years, metallurgical tests on the Mary ore indicates a, 70 percent extraction is possible by in place leaching or dump leaching minus 6 inch size ore.

Using order of Magnitude figures of $150 per oz. Au, $2.00 per ton operating and mining cost, and 70 percent extraction this 3,000,000 tons has a net value before taxes amounting to $25,500,000. In addition to the 3,000,000 tons in the mined portion of the mine I have sampled veins assaying up to 2.5 oz. Au. Assuming this vein is only 100' vertical, 100' horizonal and is 4' wide in would contain 3,300 tons with a gross value of $1,200,000.

If the full Geologic potential can be proven the property will have a gross value of 25,000,000 tons x $15 = $375,000,000.

My proposal is to start by mining the 3,000,000 tons over a two or three year period. During this period we will be able to become intimately familiar with the property and possible increase the reserves up to the Geologic Potential of 25,000,000 tons. We will also be able to gain a complete knowledge of the metallurgy during this period. Normally a large Corporation will spend this much time doing bench scale tests in the laboratory.

I know several investors which are interested in an arrangement whereby the property owners would get 40 percent of the net cash generated. The investor would get 40 percent for providing $500,000 capital, which would be paid back out of production and I would get 20 percent for my efforts. I have talked to Leo Smith (attorney) and he feels there are several ways to draft an agreement, however his recommendation is for us to get together and work out an arrangement that is best for all concerned.

The following chart shows capital cost and production scheduling for a two months pre-production period and twelve months production period. It will be noted that during this first year I have been conservative using 50 percent extraction and leached only 600,000 tons. I have planned this slow start-up to permit time to gain metallurgial geologic and mining knowledge which will be necessary to optimize the long range mining plans. However it is obvious to me that production will have to at least double in the 2nd year.

This chart should be considered as being a simple tentative order of Magnitude presentation due to the short time I have had to refine the input factors. I am accustomed to making exhaustive economic appraisals on mining properties and I will do the same on the Mary property when sufficient data is available, however at this time it is obvious that the DCF - ROI will be phenomenal.

This chart shows that the first two months will be spent on sampling, assaying, metallurgy studies, water development, sprinkler system and plant construction. The plant will be expanded during the ninth month. Production will be from 100,000 ton dumps leached in 90 day cycles with the first cycle beginning in the 3rd month. Production will double during the 3rd leach cycle or beginning in the 9th month. It is estimated that the first year net before taxes will be $3,300,000. I envision this will increase at least to $6,600,000 in the 2nd year.

Sincerely,

Thomas A. Clary

Thomas A. Clary

TAC/jt

6000 0315 (4390)

YEAR 1 PRODUCTION-COST SCHEDULE

Time in Months	Sept. 1	Oct. 2	Nov. 3	Dec. 4	Jan. 5	Feb. 6	Mar. 7	Apr. 8	May 9	Jun. 10	Jly. 11	Aug. 12	Sept. 13	Oct. 14
Vehicles (2)	8,000													
Sampling	500													
Assaying	1,800													
Metallurgy	5,000													
Dump Prep.	5,000	200,000 Tons 2-Pads												
Water	50,000													
Sprinkler System			10,000											
Charcoal Plant-Chemicals			10,000						Opr. Cost					
Electrolitic Plant		100,000												
Management (6 mo.)	25,000													
Labor (6 mo.) 3 @ 45/dy	25,000													
Pit-Area-Prep.			$100,000			Opr. Cost			Opr. Cost			Opr. Cost		
			100,000 Tons			100,000 Tons			200,000 Tons			200,000 Tons		
Production-Dump Leaching			Dump Pad #1			Dump Pad #2								
			100,000 Tons			100,000 Tons								
Production-Pit Leaching									Opr. Cost			Opr. Cost		
									200,000 Tons			200,000 Tons		
Capital Cost	-430,000					Total Capital Cost $500,000								
Contingency	-70,000													
Gross			825,000			825,000			1,650,000			1,650,000		
Operating Cost			100,000			200,000			450,000			400,000		
Capital Loan Payback			100,000			100,000			150,000			150,000		
Net Before Taxes			625,000			5,25,000			1,050,000			1,100,000		

First Year Net Before Taxes $ 3,300,000

10% bet - cost

9/-

1000.00

Cargo = Cost - mine

580,000 -

.10

50,000 = oz - Au = $7,500,000 -

3000.00 10% = 375.00

4580000 -

270 00

6% - P

2200.

1000 - 110

2200000

32,

Land Exploration
and Mining Division

Post Office Box 309
Las Vegas Nevada 89101
702 739 7441

A Division of
Summa Corporation

labeled ✓

6000 0315 (4390)

52-S
Mary Mine

February 7, 1975

Sam Lionel, Esq.
Lionel, Sawyer, Collins & Wartmen
Suite 800 First National Bank Building
302 East Carson Avenue
Las Vegas, Nevada 89101

Dear Sam:

Enclosed is a copy of a memo to D. J. Gribbin dated today re Mary Mine Group (Mitchell Land Trust Agreement and Lease).

Please direct your attention to items 5 and 6 of said memo and the questions rested therein.

May we have your opinion as to whether we have a problem or not?

Yours Truly,

Russ Patterson

Russ Patterson

RP:sfm
cc: D. J. Gribbin
Walt Simmons

6000 0315 (4390)

51-S

summa

Internal Communication

Date: February 7, 1975

To: D. J. Gribbin

From: Russ Patterson

Subject: Mary Mine Group

Subsequent to my memo of 12-13-74 I examined the lease agreement and the supporting land trust agreement submitted by the lessors and noted the following:

(1) In the first part of the trust agreement it recites "Trans-Western Mining Corporation is about to convey to the trustee...". This was accomplished of record by deed recorded 7-7-73 and is reflected in my memo of 12-13-74.

(2) In "Exhibit A" of the lease the claim "Duplex" is spelled Deplex. I discussed this with Sam Lionel and he said that there is no problem due to the fact that the mineral survey No. is correct, which would control in the face of an obvious typo error.

(3) The lease calls for the taxes to be paid within 60 days of execution of the lease. I will keep track of this and advise as to the current taxes, however some system should be set up to check each year that the taxes are being paid per the lease terms.

(4) I did notice that para #6 of the lease tends to strengthen comment No. 4 in my 12-13-74 memo re the 1958 lease/option.

(5) Under para #23 of the lease is the recital that "This lease shall not be recorded but the parties shall execute and acknowledge a memorandum suitable for recordation."

Query: (A) Has the memorandum been drawn, executed and acknowledged?

(B) Is the memorandum to be recorded?
Note: Also see following comments.

(6) Under the trust agreement para #3(a), page 4, headed "Duties of Trustee" it provides that the trustee may lease etc. "when and as directed to do so by Frank C. Mendal, William C. McClean Jr., Irene Denker and Richard T. Mitchell..."

I find no documentary evidence that this provision was complied with. Of course Mr. McClean and Mr. Mitchell were both involved in the negotiation of the lease and can hardly deny their acts, but we have nothing from Mr. Mendal and Ms. Denker.

It has occurred to me that maybe we should acquire a ratification of the lease from Mendal and Denker or if we have a memorandum of the lease executed, then have them join in.

The terms of the trust under para #6(b) (c) (d), pages 6 and 7, would seem to preclude the necessity of a ratification or joinder in a memo by Mendal and Denker, but can we safely make this assumption in view of the limiting language in para #12 (b) page 8 of the trust (especially note the last 4 lines of the para.)

I guess the question that is nagging me is that regardless of any warranties given under the lease that the trustee would have very limited liability if we had a failure of the lease due to Mendal and Denker's possible failure to properly direct the trustee to enter into the lease.

I am sending a copy of this memo to Mr. Sam Lionel with a cover letter asking that he consider and advise.

Regards,

Russ

Russ Patterson

RP:sfm
cc: Sam Lionel, Esq.
Walt Simmons

6000 0315 (4390)

APPORTIONMENT		
FUND	AMOUNT	
State		
General		
County School		
County Road		
Indigent		
Title XIX		
Agricultural Ex.		
Goldfield Town		
Silver Peak Town		
Fish and Game		
Livestock		
Sheep		
Meter Dep.		
Goldfield Utility		
Silver Peak Water		
Range Improvement		
Penalty		
Total		

TREASURER'S RECEIPT

Esmeralda County, Nevada

№ 8085

Received from Richard T. Mitchell

One Thousand Three Hundred Twenty Seven + 38/100 DOLLARS

Fees		
County Licenses		
Cigarette Tax		
Liquor Tax		
Bullion Tax 19		
Table Tax		
Personal Tax		
Gas Tax		
Sales 19		
Tax-roll 19	1163	25
Livestock		
Sheep		
Penalties	164	13
Water		
Meter Dep.		
State		
Total	1327	38

For 1973-74 Unl Tax Roll # 1090

GOLDFIELD, NEVADA

March 25, 1975

Lorna Bird

County Treasurer.

By _____ Deputy.

7-15-75

Mitchell to send Rumma a check for $944.78 for his share of these taxes.

(per W.S)

6000 0315 (4390)

note: hole abandoned due to bad ground conditions - caving gob in opening

DRILL LOG

MARY GOLD PROPERTY

Esmeralda Co., Nevada

DRILL HOLE NO. MC-2
DOLLAR ELEV.
TOTAL DEPTH 50 ft
TYPE DRILL
CASING TO

STARTED 10/1/73 COMP. 10/2/73
INCLINATION -90°
HOLE SIZES NC TO 10 ft
NX 10 ft TO 50 ft
TO
LOGGED BY M. H. Owens

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

DEPTH (ft)	REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
	0 - 14.5 Alaskite			tr	0.13
	6-12 ~ 50% hydrothermal? quartz	5		tr	0.16
		8		tr	0.13
		10		tr	0.13
	14.5-16 limey schist w/ wk Alaskite & quartz along schistosity	14.5		0.001	0.16
	16-18 Alaskite	18		0.001	0.16
	18-22 Calc Schist (3" diorite @ 21.5)	21.5		tr	0.16
	22-26 Alaskite	23.5		tr	0.13
	26 - 42.5 opening, cored few fragments of Alaskite - caving gob in underground working at ledges in open ~ vertical crack	26		tr	0.13
		39.5		tr	0.07
	42.5-50 still in opening cored few Calc Schist fragments	42.5		tr	0.07
	Hole abandoned @ 50'	50	TD 50		

ASSAY GRAPH (oz/ton): Au / Ag; 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35

MINERALIZATION: weak — intense; Fe Ox (G Value); Fe2O3; FeS2 (est. %); MnO2; G 75; MnO2

ALTERATION: wk — int; Chlorite; Arg

6000 0315 (4390)

Diamond Drill Hole MC-2

Assay Log

Interval	Au	Ag	Comments
0-5	tr.	0.13	Hole abandoned at 50 ft.
5-8	tr.	0.16	
8-10	tr.	0.13	
10-14.5	tr.	0.13	
14.5-18	0.001	0.16	
18-21.5	0.001	0.16	
21.5-23.5	tr.	0.16	
23.5-26	tr.	0.13	
26-39.5	tr.	0.13	
39.5-42.5	tr.	0.07	
42.5-50	tr.	0.07	

6000.0315 (4390)

DRILL LOG

MARY GOLD PROPERTY

Esmeralda Co., Nevada

DRILL HOLE NO. MC 3
COLLAR ELEV. _____
TOTAL DEPTH _____
TYPE DRILL core
CASING _____ TO _____

STARTED 10/3/73 COMP. _____
INCLINATION vertical
HOLE SIZES NC TO 10 ft
NX 10 ft TO _____
_____ TO _____
LOGGED BY M.H. Owens

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT

Sample Interval	Assays Au	Assays Ag
4	tr	0.09
7	tr	0.16
10	0.001	0.09
	tr	0.12
15	tr	0.11
18	tr	0.08
20.5	tr	0.14
23	tr	0.09
24.5	tr	0.12
26.5	tr	0.10
30	tr	0.09
35	tr	0.15
40	0.001	0.14
45	tr	0.13
50	tr	0.13
53	tr	0.05
58	0.001	0.14
59	tr	0.11
60	tr	0.11
64	tr	0.11
69	tr	0.02
73.5	tr	0.10
78.5	tr	0.02
83	tr	0.13
86	tr	0.14
89.5	tr	0.09
94	tr	0.17
98		

Remarks
0-15 Calc Schist brown gray, slightly limey w/ minor Alaskite 'migmatites' weakly fractured & minor chloritization
3" diorite @ 16.5
15-16.5 50% dark gray moderately limey Calc Schist & 50% Alaskite
16.5-22.5 Alaskite, very schistose weakly pegmatitic
22.5-24.5 Limey Calc Schist w/ 30% Alaskite
24.5-27.5 Quartz (80%) w/ 20% Limestone along schistosity
27.5-30 limey Calc Schist
30-34 Diorite. few schist inclusions @ 31
34-37 Alaskite micro breccia - healed
37-44 Limestone few Alaskite stringers & 3" Quartz @ 37.5 & 38.5
6" Quartz @ 43.5
44 to 48 mixed Quartz, Limey schist & Alaskite w/ 6" diorite 48-48.5
48.5-53.5 Quartz w/ minor Schist & Alaskite inclusions
53.5-58 Diorite
58-59 Quartz w/ Diorite stringers in fractures
59-60 ~~Diorite~~ Quartz
60-62 Schistose Limestone weakly brecciated
62-69 Quartz
3" Diorite @ 66' 6" schist inclusions @ 68
69-72 Diorite w/ schist, Alaskite, & Quartz inclusions
72-76 Quartz w/ Diorite along fractures
76-79 Diorite w/ ~30% Quartz inclusions
79-82 Quartz w/ few Limestone inclusions
82-86.5 Diorite
86.5-95.5 Quartz
2" Diorite @ 94
95.5-109 Diorite 96-100 ~ 30%-40% Quartz inclusions

Assay Graph (oz/ton): Au 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35; Ag

Mineralization: weak — intense; FeOx (G Value); Fe_2O_3; FeS_2 (est. %); MnO_2

Alteration: wk — int; Chlorite; Arg.

G60 — wkly sch. — G75 — G90 — G20 — G75 — G90 — G75 — G90 — G75-80 — nil — G75-80

½-3%

mixed

mixed

trace

tr

mid

mixed

34-1%

diorite

supergene?

6000 0315 (430)

DRILL LOG

MARY GOLD PROPERTY

Esmeralda Co., Nevada

DRILL HOLE NO. MC-3
COLLAR ELEV.
TOTAL DEPTH
TYPE DRILL
CASING TO

STARTED COMP.
INCLINATION
HOLE SIZES TO
TO
TO
LOGGED BY

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
	103.5		tr	nil
	105		tr	nil
109-113 very limey dk. gray Calc Schist w/ ~20% Alaskite migmatites			tr	0.11
113-116 Diorite	110			
	115		tr	0.13
116-122 very schistose dk gray limestone (2" qtz) ~10% Alaskite 'migmatites'			tr	0.05
	119.5		tr	nil
122-123 non pegmatitic Alaskite	121.5		tr	0.14
123-148 50% Alaskite & 50% vy limey Calc Schist heavy Quartz ('migmatite')			tr	0.12
	126		tr	0.02
	131		↓	↑
	136			
138-139 Quartz			tr	0.08
	140		tr	0.17
	145		tr	0.08
148-163 90% non pegmatitic schistose Alaskite w/ 10% dk gray Calc Schist 154-158 weak breccia zone	150		tr	0.08
	155		tr	0.15
	159.5		tr	0.06
163-176 Alaskite pegmatite w/ ~50% 'bull' quartz	164.5			
	167		↓	↑
			tr	0.09
	172			
3" schist as below			tr	0.16
176-183 70% limey Calc Schist w/ 30% non pegmatitic Alaskite 'migmatites'	177		0.002	0.11
	181.5			
183-186 Alaskite w/ heavy pegmatitic quartz 3" schist			tr	0.09
186-187 brecciated Diorite	186.5			
187-190 Fault zone w/ schist & Alaskite fragments			tr	0.11
	190			
190-198 Diorite quartz inclusions 1" @ 196 11" @ 197			tr	0.11
	192.5		tr	0.12
	195			
198-199.5 Mixed schist & Alaskite pegmatite			0.047	0.07
	200			

ASSAY GRAPH (OZ/TON): Au — Ag; 0.05 0.10 0.15 0.20 0.25 0.30 0.35

MINERALIZATION: weak — intense; FeOx (G value); Fe2O3; FeS2 (est. %); MnO2

ALTERATION: wk — int; Chlorite; Arg

FeOx: 475-80; scattered vy wk - tr FeOx

FeS2: 1/4 - 1%; tr - 1/2 %; traces; 1/2 - 3/4 %; 3/4 - 1%; 1 - 1 1/2 %; 1/2 %; 3/4 - 1%

tr

60000315 (4390)

DRILL LOG

MARY GOLD PROPERTY

Esmeralda Co., Nevada

DRILL HOLE NO. MC-3
ELLAR ELEV.
TAL DEPTH
PE DRILL
SING ____ TO ____

STARTED ____ COMP. ____
INCLINATION ____
HOLE SIZES ____ TO ____
____ ____ TO ____
____ ____ TO ____
LOGGED BY ____

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

REMARKS	Sample Interval	Au	Ag
199.5-202 Quartz	201	0.088	0.30
202-207 Limestone dk gray, vy solidose 204-206.5 ~50% Alaskite	205.5	0.102	0.11
207-211.5 Alaskite	210.5	0.018	0.12
211.5-217.5 Limestone mixed lt. & dk. gray ~10% sand	215.5	0.011	0.13
217.5-221.5 Diorite △ @ lower contact	220	0.341	0.23
221.5-227 Quartz w/ minor K spar pegmatitic.	225	0.005	0.16
227-228 Limestone ~10% Sand	228.5	0.002	0.08
228-242 Alaskite fine grained @ contact becomes very pegmatitic w/ some biotite phenocrysts → chlorite	229.5	0.001	0.17
	234	tr	0.09
	239	0.009	0.08
242-261 50% Calc Schist very limey & contains 30% coarse clastics & 50% very pegmatitic Alaskite w/ some biotite → chlorite phenocrysts	244	tr	0.10
	248.5	tr	0.09
248.5-255 weak breccia zone w/ mod-strong slicks	253.5	tr	0.15
	255.5	tr	0.11
	258	tr 0.001	0.17
261-274 Alaskite very pegmatitic w/ biotite flakes → chlorite. 6" Calc schist @ 270	263	tr	0.13
	268	tr	0.11
274-281.5 calc schist very limey	273	0.027	0.11
	277.5	tr	0.11
	279	tr	0.05
281.5-287 Alaskite very pegmatitic w/ biotite flakes → chlorite	282.5	tr	0.14
287-289.5 Calc schist very limey	287.5	0.002	0.09
289.5-296 Calc schist very limey	292	tr	0.11
296-303 Alaskite very pegmatitic biotite flakes → chlorite	297	tr	0.16
	300	tr	0.10

ASSAY GRAPH (OZ./TON) — Au / Ag — 0.05 0.10 0.15 0.20 0.25 0.30 0.35

MINERALIZATION — weak / intense — FeOx (G value) — Fe_2O_3 — FeS_2 (est. %)

ALTERATION — wk. / int. — Chlorite Arg.

1.4

6000 0315 (4390)

DRILL LOG

MARY GOLD PROPERTY

Esmeralda Co., Nevada

ILL HOLE NO. MC-3
LAR ELEV.
TAL DEPTH
PE DRILL
GING TO

STARTED COMP.
INCLINATION
HOLE SIZES TO
TO
TO
LOGGED BY

GEOLOGIC EXPLANATION

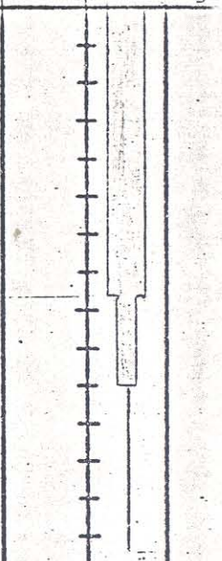
- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
303-306 Calc Schist very limof.	300			
			tr	0.12
	305			
306-329 (TD) Biotite Granite w/ Alaskite pegmatites pegmatites decrease w/ depth			tr	0.03
	310			
			tr	0.07
	315			
			tr	0.08
	319.5			
			tr	0.06
	323.5			
	324.5		tr	0.10
			tr	0.07
329 Total Depth	329			

ASSAY GRAPH (OZ/TON): Au, Ag; 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35

MINERALIZATION: weak — intense; FeOx (G Value); Fe_2O_3; FeS_2 (est. %)

ALTERATIO: Chlorite, Arg



6000 035 (4390)

Diamond Drill Hole MC-3

Assay Log

Interval	Au	Ag	Comments
0-4	tr.	0.09	
4-7	tr.	0.16	
7-10	0.001	0.09	
10-15	tr.	0.12	
15-18	tr.	0.11	
18-20.5	tr.	0.08	
20.5-23	tr.	0.14	
23-24.5	tr.	0.09	
24.5-26.5	tr.	0.12	
26.5-30	tr.	0.10	
30-35	tr.	0.09	
35-40	tr.	0.15	
40-45	0.001	0.14	
45-53	tr.	0.13	
53-58	tr.	0.05	
58-59	0.001	0.14	
59-64	tr.	0.11	
64-69	tr.	0.11	
69-73.5	tr.	0.02	
73.5-78.5	tr.	0.10	
78.5-83	tr.	0.02	
83-86	tr.	0.13	
86-89.5	tr.	0.14	
89.5-94	tr.	0.09	
94-98.5	tr.	0.17	
98.5-103.5	tr.	nil	
103.5-105	tr.	nil	
105-110	tr.	0.11	
110-115	tr.	0.13	
115-119.5	tr.	0.05	
119.5-121.5	tr.	nil	
121.5-126	tr.	0.12	
121.5-126	tr.	0.14	
126-136	tr.	0.02	
136-140	tr.	0.08	
140-145	tr.	0.17	
145-150	tr.	0.08	
150-155	tr.	0.08	
155-159.5	tr.	0.15	
159.5-164.5	tr.	0.06	
164.5-172	tr.	0.09	
172-177	tr.	0.16	195-239 anomalous
177-181.5	0.002	0.11	including 195-220
181.5-186.5	tr.	0.09	25 ft. @ 0.099 oz. Au/ton.
186.5-190	tr.	0.11	
190-192.5	tr.	0.11	
192.5-195	tr.	0.12	
195-200	0.047	0.07	
200-201	0.089	0.30	
201-205.5	0.102	0.11	
205.5-210.5	0.018	0.12	
210.5-215.5	0.011	0.13	
215.5-220	0.341	0.23	
220-225	0.005	0.16	
225-228.5	0.002	0.08	

6000 0315 (4390)

DIAMOND DRILL HOLE MC-3
CONTINUED ASSAY
LOG

INTERVAL	AU	AG	COMMENTS
228.5 - 229.5	0.001	0.17	
229.5 - 234	Trace	0.09	
234 - 239	0.009	0.08	
239 - 244	Trace	0.10	
244 - 248.5	Trace	0.09	
248.5 - 253.5	Trace	0.15	
253.5 - 255.5	Trace	0.11	
255.5 - 258	0.001	0.17	
258 - 263	Trace	0.13	
263 - 268	Trace	0.11	
268 - 273	0.027	0.11	
273 - 277.5	Trace	0.11	
277.5 - 279	Trace	0.05	
279 - 282.5	Trace	0.14	
282.5 - 287.5	0.002	0.09	
287.5 - 292	Trace	0.11	
292 - 297	Trace	0.16	
297 - 300	Trace	0.10	
300 - 305	Trace	0.12	
305 - 310	Trace	0.03	
310 - 315	Trace	0.07	
315 - 319.5	Trace	0.08	
319.5 - 323.5	Trace	0.06	
323.5 - 324.5	Trace	0.10	
324.5 - 329	Trace	0.07	

2 ft. offset of abandoned MC-2

6000 0315 (4390)

DRILL LOG
MARY GOLD PROPERTY
Esmeralda Co., Nevada

DRILL HOLE NO. MC-2A
DOLLAR ELEV.
TOTAL DEPTH 225 ft
TYPE DRILL core
CASING TO

STARTED 10/17/73 COMP. 10/26/73
INCLINATION -90°
HOLE SIZES NC TO 10
NX 10 TO 161
BX 161 TO 245 TD
LOGGED BY M.H. Owens

GEOLOGIC EXPLANATION
- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

DEPTH (ft.)	REMARKS	Sample Interval	Graphic Log	Assays Au	Assays Ag
	0-6 Alaskite ~40% quartz	2.5		tr	0.09
	6-8 Limestone dk. gray, schistose	7.5		tr	0.07
	8-10 Quartz	10		tr	0.11
0	10-16 Calc schist dk. grn. gray	15		tr	0.17
	16-73 Alaskite 16-19 breccia zone	19		tr	0.07
0	16 tr $CaSiO_3 \cdot H_2O$	24		tr	0.08
		28		tr	0.11
0		31		tr	0.09
	33 2" gouge			tr	0.07
	36 Alaskite becomes schistose	37		0.002	0.02
0		39.5			
	42-43 wk. breccia	44.5		0.001	0.09
		47.5		tr	0.06
0				tr	0.09
		52.5		tr	0.06
		56.5			
	58-61 faultzone w/ sft. gouge	60.5		tr	0.12
0		64		tr	0.08
		65.5		tr	0.11
				tr	0.17
0	70-119 faultzone w/ Δ & gouge	70.5			
	73-75 Calc schist dk gray, limey			tr	nil
	75-78 Alaskite	75			
	78-79.5 Calc schist dk. gray			0.001	0.20
0	79.5-~~80~~ 101 Alaskite	79.5			
	82-89 driller reports underground opening		drift ?	tr	0.25
90		90		0.001	0.20
		95		tr	0.18
0		100			

ASSAY GRAPH (OZ/TON): Au ——— Ag - - - - - 0.05 0.10 0.15 0.20 0.25 0.30 0.35

MINERALIZATION (weak — intense): FeOx (G value) G75-80; Fe_2O_3; FeS_2 (est. %); MnO_2; G75

ALTERATIC (wk. — in.): Chlorite; Arg

6000 0315 (4390)

DRILL LOG
MARY GOLD PROPERTY
Esmeralda Co., Nevada

DRILL HOLE NO. MC-2A
DOLLAR ELEV. _____
TOTAL DEPTH _____
TYPE DRILL _____
CASING _____ TO _____

STARTED _____ COMP. _____
INCLINATION _____
HOLE SIZES _____ TO _____
_____ _____ TO _____
_____ _____ TO _____
LOGGED BY _____

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANIT.

DEPTH (ev.)	REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
	101-106 Calc Schist dk gray w/ thin Alaskite sills	100		0.002	0.22
	106-114 Alaskite	105		0.001	0.25
110		109		0.016	0.17
	114-119 Cassan (Alaskite) ~10% FeOx mass	114	FeOx	0.002	0.30
120	119-142 Quartz w/ few alaskite & schist inclusions	119		tr	0.03
		122		0.009	nil
130		129		0.002	0.15
		130.5		0.024	0.09
		132.5		0.061	0.21
		135		0.025	0.15
		137		0.084	0.15
140		140		0.118	0.17
	142-163 Alaskite	142.5		0.066	0.15
150		147.5		0.006	0.19
	153-54 fault	152.5		0.005	0.08
160		157.5		0.014	0.16
	163-164 Alaskite dk gray, f.g.	161		0.036	0.19
	164-165 Diorite	165		2.240	1.6
	165-169 Quartz			2.454	1.18
	169-171 Diorite	169		2.701	1.26
170	171-177 Alaskite schistose w/ ~30% L.S. inclusions			0.032	0.21
		173		0.012	0.09
	177-189 Alaskite w/ ~20% limestone inclusions	178		0.020	0.24
180	181-185 fault	182.5		0.013 0.016	0.14
190	189-194 Alaskite w/ few biotite flakes	187.5		tr	0.19
	194-202 Calc Schist dk gray, limey ~30% alaskite sills	192.5		0.003	0.23
		197		0.016	0.21
200		199.5			

ASSAY GRAPH (OZ/TON): Au / Ag — 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35

MINERALIZATION (weak – intense): FeOx (G value); Fe2O3; FeS2 (est. %); MnO2

ALTERATION (wk.): Chlorite; Arg

G 75; tr; tr; G 0.10; tr; tr; tr; 3/4-1%; 1-1½%; 1-1½%; 1%; 1-1½%; 3/4-1%

6000.0315 (4390)

DRILL LOG
MARY GOLD PROPERTY
Esmeralda Co., Nevada

LL HOLE NO. MC-2A
LAR ELEV.
AL DEPTH
E DRILL
ING TO

STARTED COMP.
INCLINATION
HOLE SIZES TO
TO
TO
LOGGED BY

GEOLOGIC EXPLANATION

- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- Diorite
- Fault
- Limonite
- Hematite
- Pyrite
- BIOTITE GRANITE

REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
202-225 Alaskite w/ biotite flakes	202.5		0.003	0.18
	209.5		0.010	0.04
	214.5		tr	0.23
	219.5		tr	0.10
	224.5		0.008	0.36
225-240 Biotite Granite	229.5		tr	0.08 ~~nil~~
	235		tr ~~0.003~~	nil ~~0.44~~
240- Alaskite-Biotite Granite pegmatite	240		0.003	0.24
	243		tr	0.02
TD 245	245		tr	0.07

ASSAY GRAPH (OZ/TON): Au, Ag; 0.05 0.10 0.15 0.20 0.25 0.30 0.35

MINERALIZATION: weak — intense; Fe_2O_3; FeS_2 (est. %)

ALTERATION: Chlorite; Arg.

6000 0315 (4390)

MC-2A
ASSAY LOG

INTERVAL			Au	Ag	COMMENTS
0	-	2.5	Trace	0.09	
2.5	-	7.5	Trace	0.07	
7.5	-	10	Trace	0.11	
10	-	15	Trace	0.11	
15	-	19	Trace	0.07	
19	-	24	Trace	0.08	
24	-	28	Trace	0.11	
28	-	31	Trace	0.09	
31	-	37	Trace	0.07	
37	-	39.5	0.002	0.02	
39.5	-	44.5	0.001	0.09	
44.5	-	47.5	Trace	0.09	
47.5	-	52.5	Trace	0.09	
52.5	-	56.5	Trace	0.03	
56.5	-	60.5	Trace	0.12	
60.5	-	64	Trace	0.08	
243	-	245	Trace	0.07	

6000 0315 (4390)

Diamond Drill Hole MC-2A

Assay Log

Interval	Au	Ag	Comments
64-65.5	tr.	0.11	0-64 not assayed
65.5-70.5	tr.	0.17	to date.
70.5-75	tr.	nil	
75-79.5	0.001	0.20	
79.5-90	tr.	0.25	
90-95	0.001	0.20	
95-100	tr.	0.18	
100-105	0.002	0.22	100-209.5 anomalous
105-109	0.001	0.25	including 130.5-199.5,
109-114	0.016	0.17	69 ft. @ 0.170 oz. Au/ton
114-119	0.002	0.30	42.5' @ .266 oz au/t
119-122	tr.	0.03	
122-129	0.009	nil	
129-130.5	0.002	0.15	
130.5-132.5	0.024	0.09	
132.5-135	0.061	0.21	
135-137	0.025	0.15	
137-140	0.084	0.15	
140-142.5	0.118	0.17	
142.5-147.5	0.066	0.15	
147.5-152.5	0.006	0.19	
152.5-157.5	0.005	0.08	
157.5-161	0.014	0.16	
161-165	0.036	0.19	
165-169	2.454	1.18	
169-173	0.032	0.21	
173-178	0.012	0.09	
178-184.5	0.020	0.24	
184.5-189.5	0.018	0.14	
189.5-194.5	tr.	0.19	
194.5-197	0.003	0.23	
197-199.5	0.046	0.21	
199.5-204.5	0.003	0.18	
204.5-209.5	0.010	0.04	
209.5-214.5	tr.	0.23	
214.5-219.5	tr.	0.10	
219.5-224.5	0.008	0.36	
224.5-229.5	tr.	0.08	
229.5-235	tr.	nil	
235-240	0.003	0.44	
240-243	tr.	0.02	

6000 0315 (4390)

DRILL LOG
MARY GOLD PROPERTY
Esmeralda Co., Nevada

RILL HOLE NO. MH-E2
LLAR ELEV.
TAL DEPTH 98'
PE DRILL HAMMER
SING 0 TO 42'

STARTED 7/24/73 COMP. 7/31/73
INCLINATION -90°
HOLE SIZES 0 TO 15 FT. 7 3/8"
5 1/4" 15 TO 27 FT.
4 1/2" x 3 7/8" 28 TO 98
LOGGED BY M. OWENS, T. HOOD

GEOLOGIC EXPLANATION
- Calc Schist
- Calcic Marble/Limestone
- Alaskite
- Quartz
- ~~Diorite~~ BIOTITE GRANITE
- Fault
- Limonite
- Hematite
- Pyrite
- COVER

H	REMARKS	Sample Interval	Graphic Log	ASSAYS Au	ASSAYS Ag
5	0 to 10 ft. FILL, WASTE.	0-5		N.A.	N.A.
10		5-10		0.020	0.10
		10-15		0.180	0.10
20		15-20		0.010	0.20
	10 to 50 FT. ALASKITE	20-25		0.015	nil.
30		25-30		0.005	0.10
		30-35		0.005	0.10
40		35-40		tr.	nil.
	FAULT →	40-42		0.005	0.10
		42-45		N.A.	N.A.
50		45-50		tr.	0.20
		50-55		0.010	0.20
60		55-60		0.005	nil.
	50 to 73 LIMESTONE	60-65		tr.	nil.
70	FAULT →	65-70		tr.	nil.
		70-77		0.020	0.20
80	73 to 95 ALASKITE	77-82		0.005	0.20
		82-87		0.005	0.20
90		87-92		tr.	nil.
	95 to 98 BIOTITE GRANITE	92-97		tr.	nil.
100		97-98		tr.	nil.

ASSAY GRAPH (OZ/TON): Au 0.05 0.10 0.15 0.20 0.25 0.30 0.35; Ag 0.10 0.20 0.30

MINERALIZATION (weak – intense): Fe Ox (G Value); Fe2O3; FeS2 (est. %)

ALTERATION (wk. – int.): Chlorite; Arg.

G-70 to 80

FeS2 1/4 to 1 1/2 %; 7%; tr.; 1 1/2 %; 1/4 %

60000 0315 (4390)

Hammer Drill Hole MHE-2

Assay Log

Interval	Au	Ag	Comments
0-5	no sample		
5-10	0.020	0.10	
10-15	0.180	0.10	10-87 anomalous
15-20	0.010	0.20	including 10-15
20-25	0.015	nil	@ 0.180 oz. Au/ton.
25-30	0.005	0.10	
30-35	0.005	0.10	
35-40	tr.	nil	
40-42	0.005	0.10	
42-45	no sample		
45-50	tr.	0.20	
50-55	0.010	0.20	
55-60	0.005	nil	
60-65	tr.	nil	
65-70	tr.	nil	
70-77	0.020	0.20	
77-82	0.005	0.20	
82-87	0.005	0.20	
87-92	tr.	nil	
92-97	tr.	nil	
97-98	tr.	nil	

GROUP 43, Mary Mine - Cooper Aerial Surveying

HUGHES TOOL CO. 122
MINING PAPERS
GROUP 43, MARY MINE, COOPER AERIAL

60000315 (4390)

6000 0315 (4390)

Land Exploration
and Mining Division

Post Office Box 1126
Tonopah Nevada 89049
702 482 3584

A Division of
Summa Corporation

Mary Mine file

August 27, 1975

Mr. George Glendenning
Cooper Aerial Surveying
1692 West Grant Road
Tuscon, Arizona 85705

Dear George:

Enclosed please find two copies of the sketch of coordinates and elevations of the panels at Mary Mine for mapping purposes.

If you have any questions please let me know.

Sincerely,

Wallace T. Boundy

Wallace T. Boundy
Assistant Superintendent

WTB:sfm
Enclosures (2)

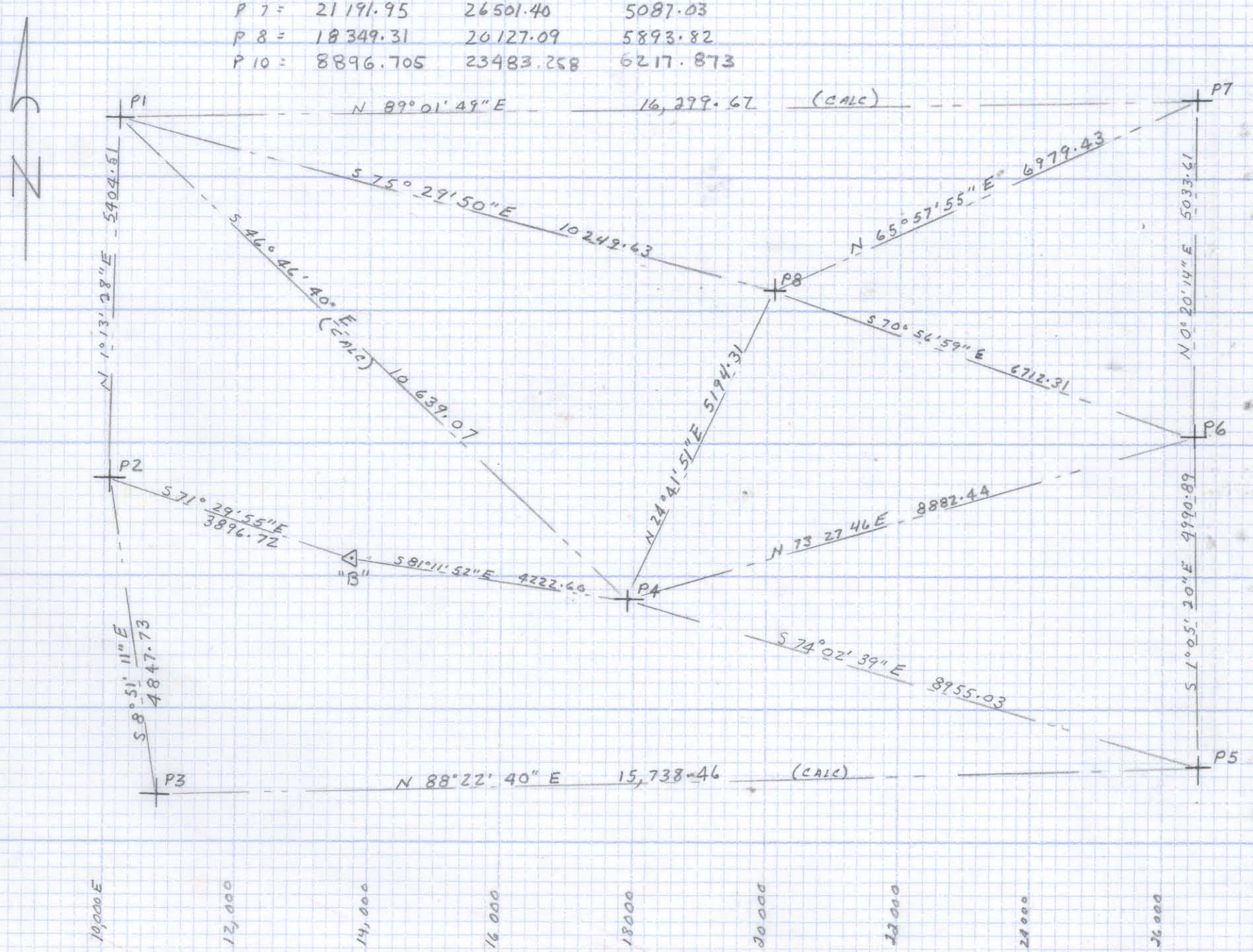
Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MAYY MINE
August 1975

WB

SCALE 1" = 2000'



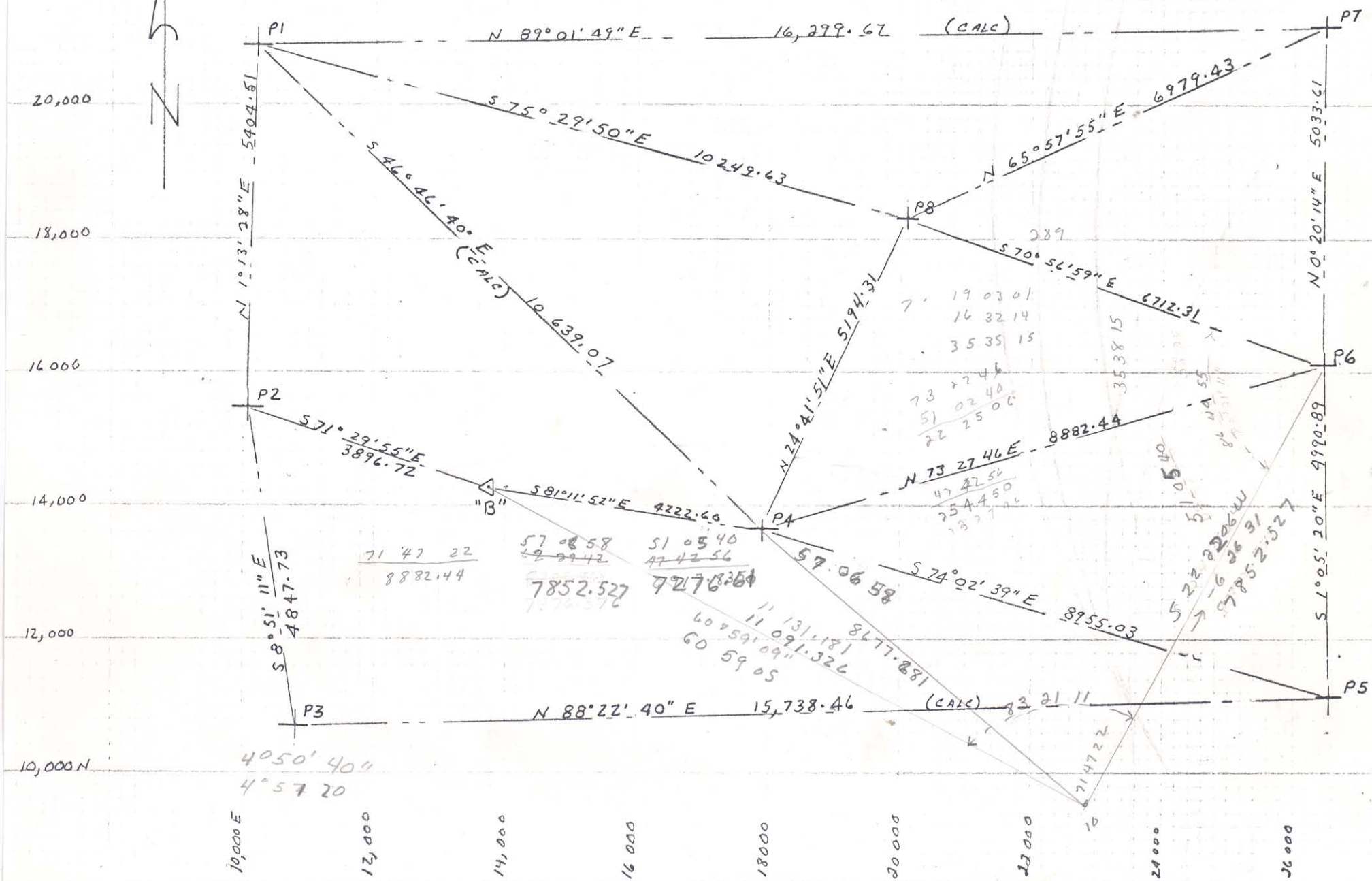
6000 0 315 (4390)

panels - P1-P8

P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Panelling for Aerial purposes.
△ NET - MARY MINE
August 1975

SCALE 1" = 2000'



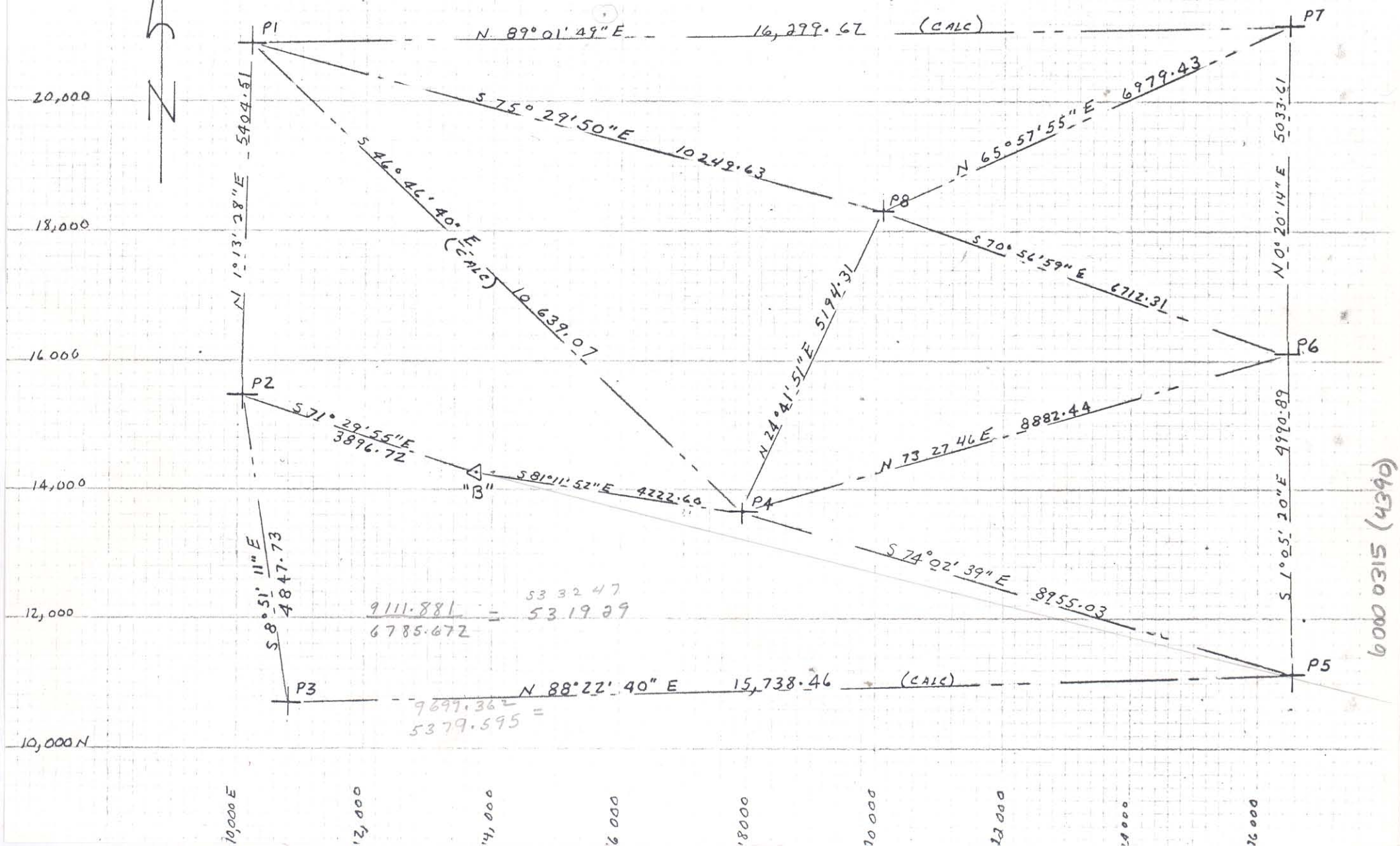
Panels - P1-P8
602 884 7580

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

WLB

SCALE 1" = 2000'



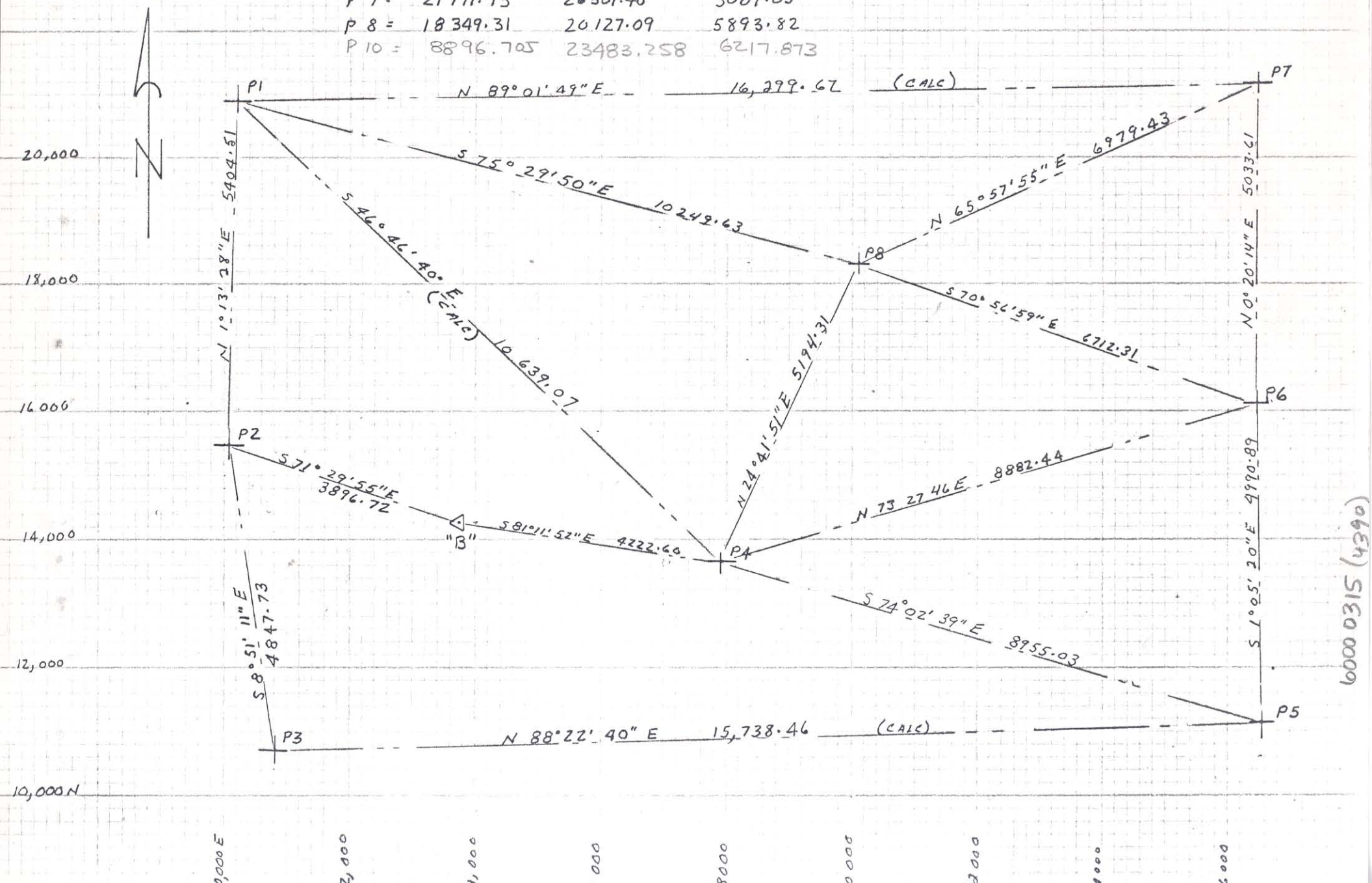
6000 0315 (4360)

Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

SCALE 1" = 2000'



6000 0315 (4390)

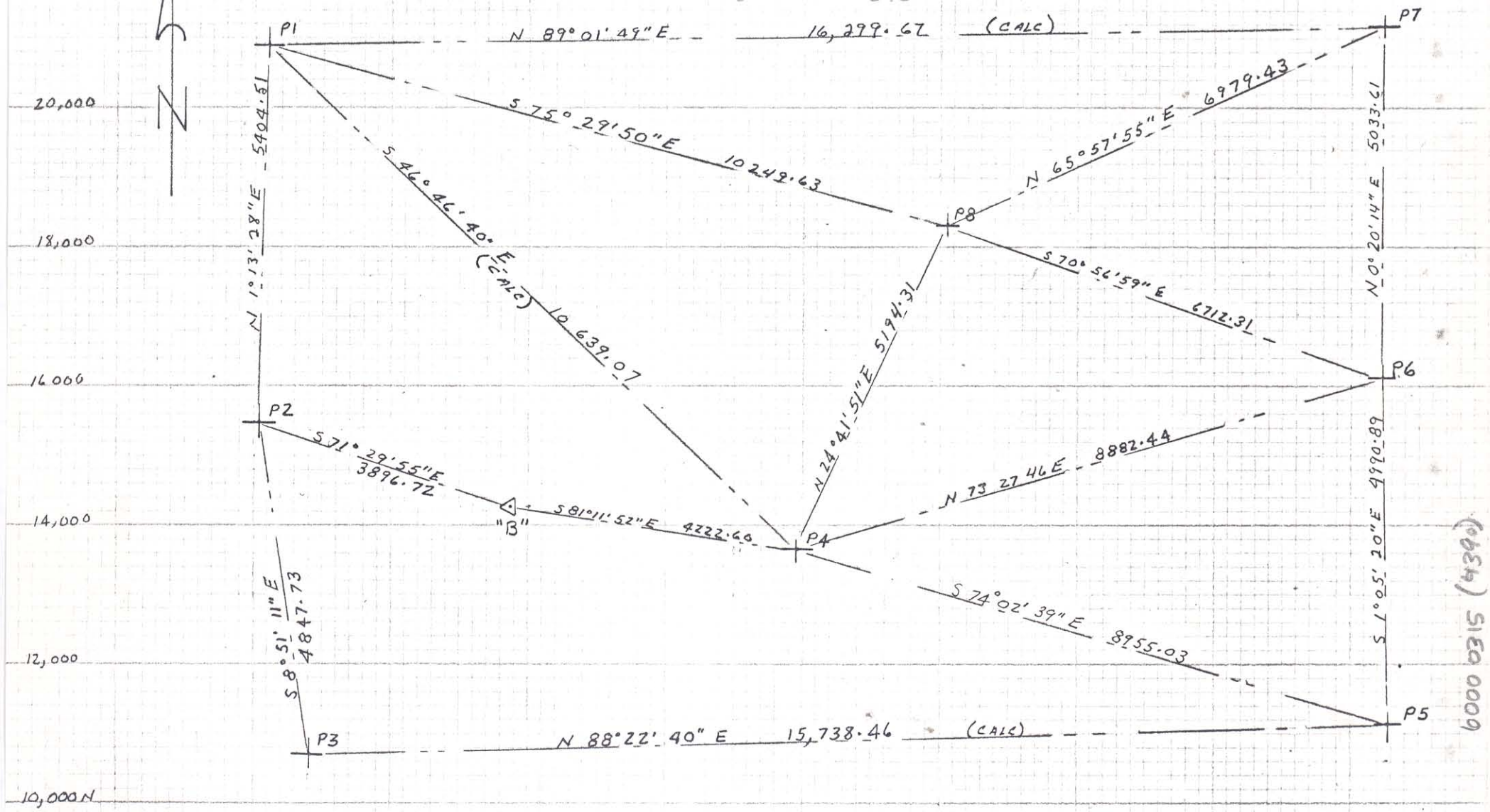
Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

WJB

SCALE 1" = 2000'



6000 SIEA 0009 (4324)

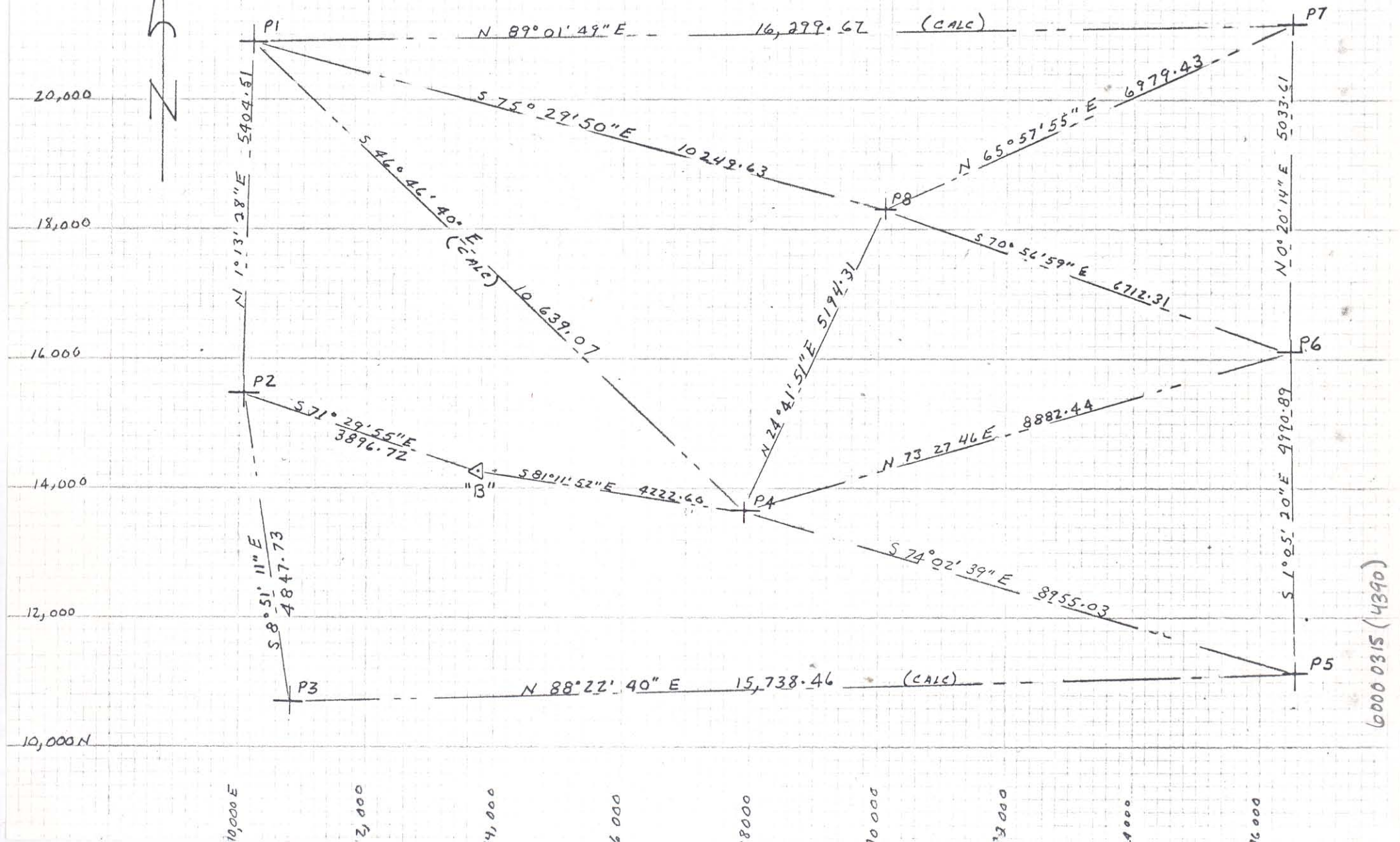
Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

WJB

SCALE 1" = 2000'



6000 0315 (4390)

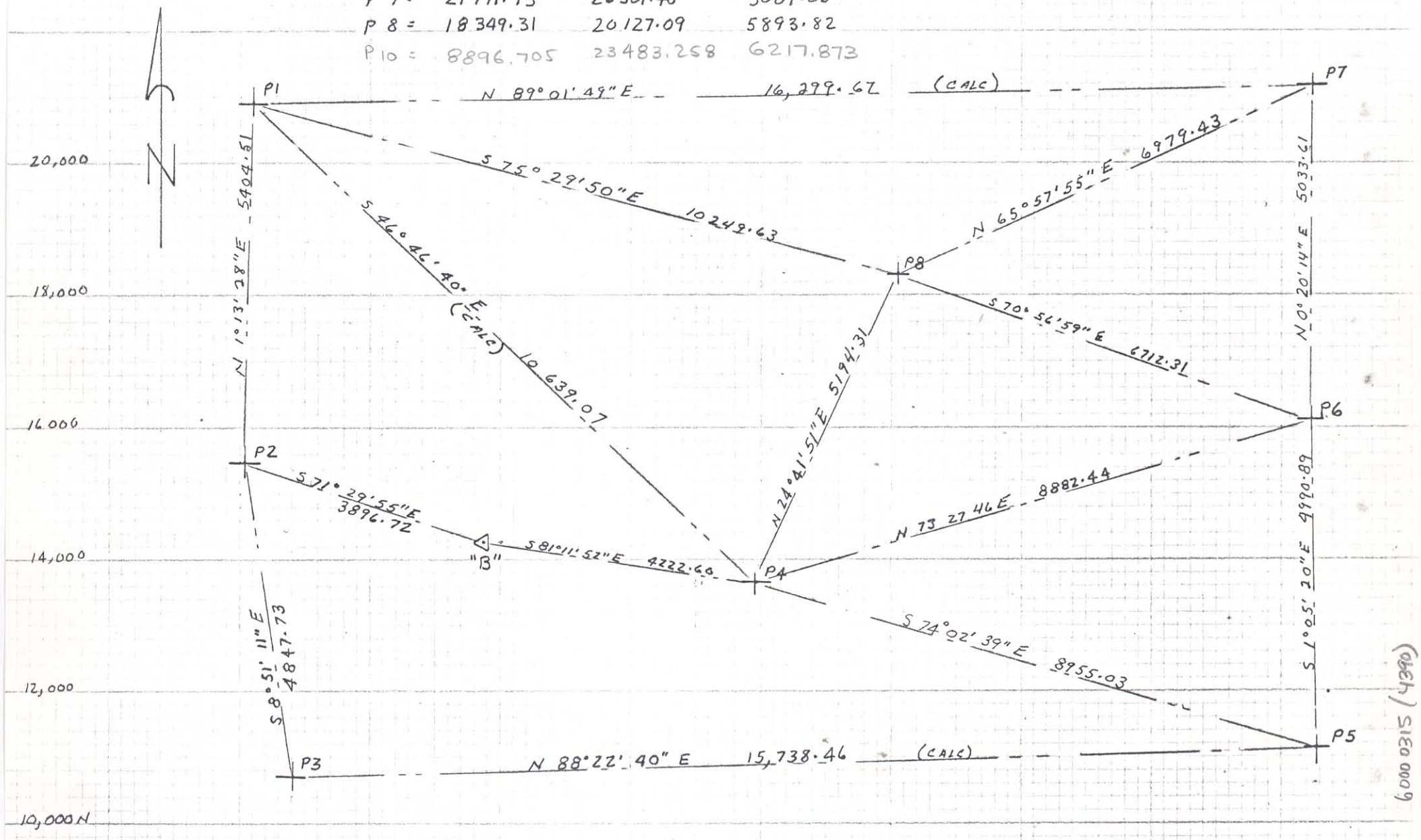
Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

WJB

SCALE 1" = 2000'



(464) 5160 0315 0009

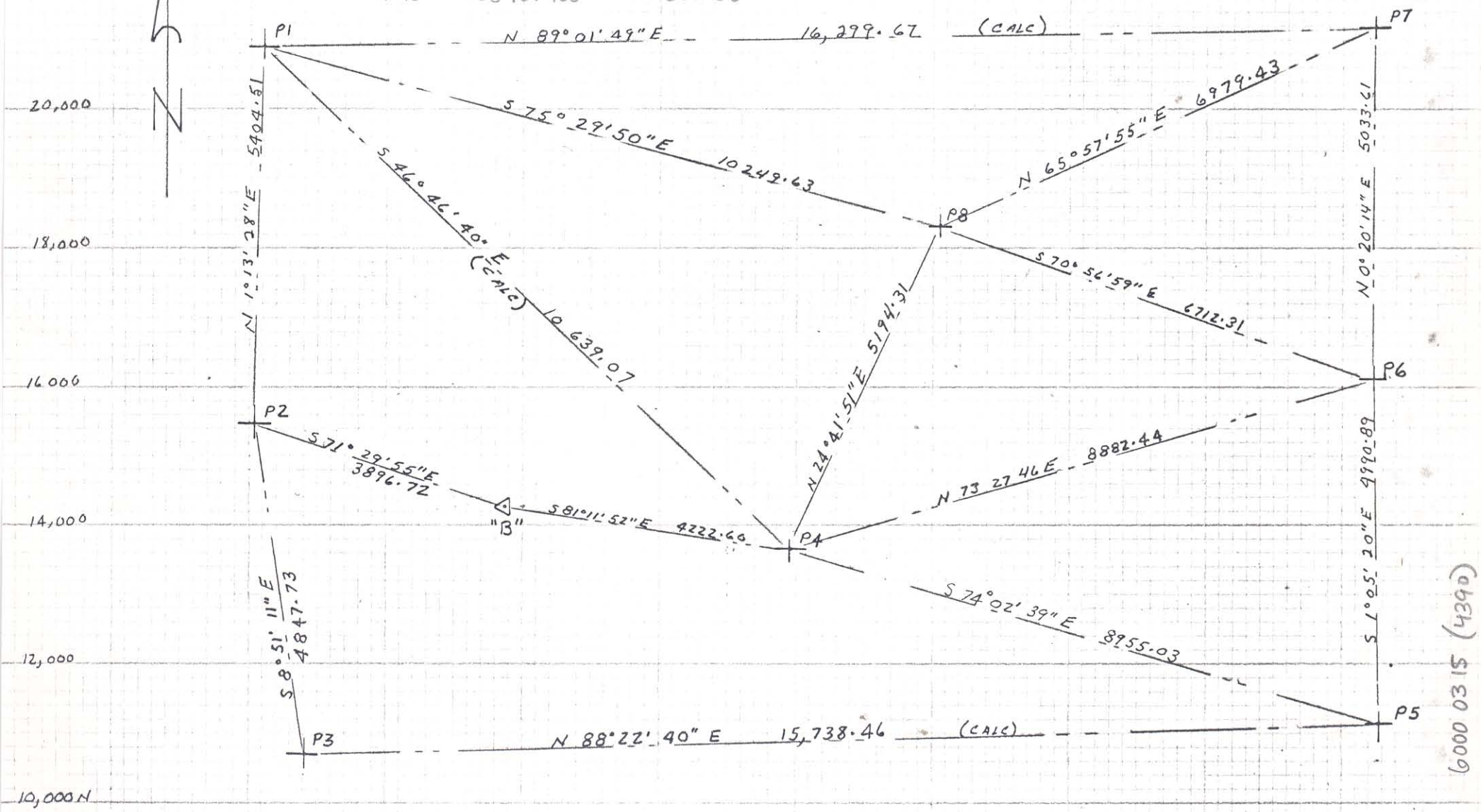
Panels - P1-P8

	N	E	ELEV.
P1 =	20 916.12	10 204.06	7348.2
P2 =	15 512.84	10 088.57	7520.98
P3 =	10 722.86	10 834.64	7335.07
P4 =	13 630.14	17 956.76	6558.42
P5 =	11 168.44	26 566.79	5621.70
P6 =	16 158.38	26471.61	5331.25
P7 =	21 191.95	26501.40	5087.03
P8 =	18 349.31	20 127.09	5893.82
P10 =	8896.705	23483.258	6217.873

Paneling for Aerial purposes.
△ NET - MARY MINE
August 1975

WLB

SCALE 1" = 2000'



6000 0315 (4360)

6000 0315 (4390)

Land Exploration and Mining Division

Post Office Box 1126
Tonopah Nevada 89049
702 482 3584

A Division of
Summa Corporation

September 17, 1975

Cooper Aerial Surveying
1692 West Grant Road
Tuscon, Arizona 85705

Attention: Mr. Denny

Re: Recent Set Mary Mine Photos

Dear Sir:

I have photo-identified and surveyed a point within the green circle on the southeast corner of photo 1-4 of the black and white set sent to me.

You will find a needle point within the purple circle that I put on the photo and I am going to call you and give you the coordinates and elevation of this point. Please call me if any additional information is needed as we are quite anxious to get our maps.

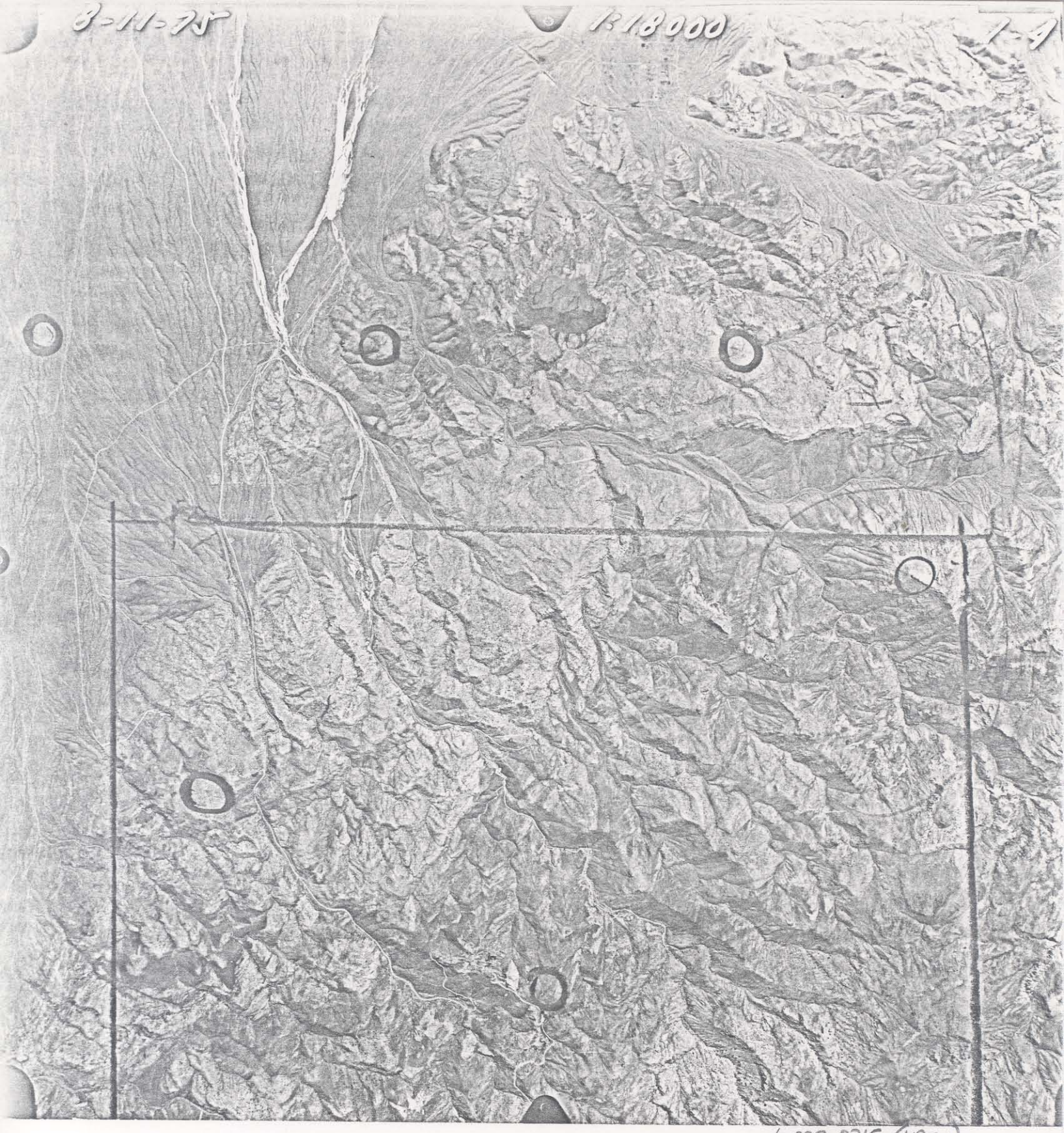
Sincerely,

Wallace T. Boundy SCM

Wallace T. Boundy
Assistant Superintendent

WTB:sfm
Enclosure

8-11-75 R18000 1-4



6000 0315 (4390)

6000 0315 (4390)

Land Exploration
and Mining Division

Post Office Box 1126
Tonopah Nevada 89049

A Division of
Summa Corporation

Mary Anne File

July 10, 1975

Cooper Aerial Surveying
1692 West Grant Road
Tuscon, Arizona 85703

Attention: Mr. George Glendenning

Dear Mr. Glendenning:

Attached is a Xerox copy of the Silver Peak Quadrangle. Outlined in red you will find the area we discussed for aerial mapping.

Sincerely,

Wallace T. Boundy SFM

Wallace T. Boundy
Assistant Superintendent

WTB:sfm
Att.

GROUP 43 - Mary Mine Maps 123

HUGHES TOOL CO. 123
MINING PAPERS
GROUP 43, MARY MINE - MAPS

6006 0315 (4390)

6000 0315 (4390)

DRAVO

Somma Corporation
Attention: Mr. Walt Simmons

September 19, 1975
Page Two

Walt, I will be happy to forward a formal proposal with commercial terms along these lines on your request. Please advise if you wish such a proposal.

Thank you for an enjoyable visit, and I look forward to visiting you and Fred again soon. Our regards to Dave.

Sincerely,

H. J. McGarr
Project Engineer

HJM/jlg

6000 0315 (4390

Telephone Call 4/24/75 from Joe Hart, P. O. Box 144, Dyer, Nevada 89010 572-3285

Mr. Hart has 5 reports, including his own, plus maps, relative to adjacent property to Mary Mine which he will be happy to give Summa Corp. if Summa has a legitimate interest in Mary Mine.

He says William C. Reeve of Salt Lake City and Ken and Willard Flake have been "bugging" him for this info, but since he considers them promoters and "flakes true to their name", he would not give his info to them.

Property with which his reports deal, on which he holds an option, is at south side of fault zone, 3000 feet from the Mary Mine, and was formerly called the "Gordon Property". The present owner is Mrs. Paul Dudley (Helen Curtis Gordon Dudley), he says.

Since 1970, Mr. Hart, a geologist by training, has been head of mining in Dyer for Anchor Weight Pipeline Company out of Houston, Texas. Before that he did some work for Anderson (former Hughes superintendent) who was interested in Hart building a mill at Millers. He also mentioned having looked into Kelly milling equipment with D. J. Gribbin in or around Beatty some years ago.

sfm 4/24/75

Orig. to Russ Patterson
cc: WS, DJG, Mary Mine File

6000 0315 (4390)

Dravo

Dravo Corporation
One Park Central
Denver, CO 80202
303-892-6972
Telex: 45-930

Nicholas S. Lynn

Project Engineer
Denver Operations Office
Engineering Construction Div.

Dravo

Dravo Corporation
One Park Central
Denver, CO 80202
303-892-6972

H. J. McGarr

Project Engineer
Denver Operations Office

Susie
We may or may not be doing business with these people. They were in L.V. to see Mr. Galbraith two weeks ago

File: May Mine

M.M. file
6000 0315 (4390)

DRAVO

RECEIVED
SUMMA CORPORATION
MINING DIVISION

SEP 22 1975

September 19, 1975

Summa Corporation
5700 B South Haven Street
Las Vegas, Nevada 89119

Attention: Mr. Walt Simmons

Dear Walt:

In compliance with your request, the following is suggested as an approach to the Mary Mine Project.

Phase I, Dravo prepare a study of the available data, and develop a scope of work in accordance with the existing data and project objectives.

It is entirely possible that certain test work may be required in order to firm the scope of work required.

Phase II, Dravo prepare request for proposal package for Summa Corporation to issue to selected qualified firms.

From our conversation, and visit to the area, it appears necessary to accomplish a study of your available information, and formally prepare the scope of work required. At this time, I do not feel it is possible for Summa Corporation to issue a scope of work in sufficient detail to enable any professional firm to prepare a meaningful proposal in terms of time or costs. It is extremely difficult to establish a scope of work defining the objectives of a project unless the comparative data regarding alternatives is available.

It appears to me to require close study of all your available data by such personnel as our mining engineers in cooperation with your exploration personnel, and our process engineers with your process personnel.

Once a scope of work is developed that adequately defines the task to be accomplished, professional engineering firms can prepare meaningful proposals to accomplish those objectives.

Dravo proposes to accomplish the task of Phase I and II under a cost plus arrangement, inasmuch as the required effort is unknown.

6000 0315 (43 of 9)

27. Composite S.E. Sec. 1" = 20.
(central area only) 3000 - 4000 N
5000 - 7000 E.

3 linen - 1 blank
1 DDH - no assays
samples - assays
1 some geology & DDH w/ assays (only half map)

---

28. SE. (?) sec - topo map - n.g. linen
1" = 50 -

---

29 SE Sec - claim line & some stope's & drifts
1" = 40

---

30 1" = 100' Composite - NW & SE.
1" - 200' composite - NW & SE.

N LAS
VEGAS

6000 0315 (439 2)

MARY GOLD PROJECT 0 ~~XX~~
pit area 1" = 200' all mylar

8

IN
LAS VEGAS

ASSAY / geochemical overlay
planned drilling
intrapolation overlay
mineralization overlay
alteration overlay
geology overlay
NW composite (base for above?)
Assay & geochem overlay (large) others
may be overlayed on this

6000 0315 (4390)

SE Sec. Mary Mine Level Maps
1" = 50' drawn by G.S. Kennedy, 1974 2250 N - 3750 N 6000 E - 7500 E

20

Upper Mohawk & lower mohawk	P
Chiatovich Level / Wasson level (?)	P
Upper Elizabeth level	P
Lower Elizabeth level	P
Composite of S.E. Sec.	Linen

Level maps w/ geology. - SE Sec. 1" = 50'

21

Mary level	
B level	
Elizabeth level	
Mohawk - upper elizabeth	
April level	

22. Diamond Drill Hole Plan 1" = 50'
also neg, reduc. & print 1" = 200'

Mohawk - Last Chance Sec. 1" = 40'

23.

Composite Map of Workings	- Linen
Geology of Sec.	- Linen (coloured)

6000 0315

S.E. Sec. Cross-sections 1" = 200
#15, 21, 26, 36, 48, 53,
24 Sept 1939.

25 S.E. Sec: Structure Pattern (Diagramatic)
1" = 50', 1939
2500 N - 4500 N
5500 E - 8000 E

S.E. Sec. Progress Maps 1" = 50'
~~1937~~ 2250 - 4000 N
6000 - 7500 E

1937 - sampling & assays
N.D. - some sampling & $ values - no clue as price of gold used to figure value - Shirley - Chiatovich lease line
1938 - no values - linen
26-A 1938 - thru Nov. - no values - linen
1938 - no values - paper (2 copies)
n.D. - some assays (Whiteley assays
1937 - DDH data 1-22 assays
cut samples 1-181 - assays
nd - no data
Nd - a bit of geol.

40-41 & 42 - samples & assays
1941 - DDH - L
26 B 1938 (?) - no data P.
1939 - assays on samples, + drillings - L
amt of ore produced & grades
nd - no data P.
1936 - no data
nd - no data

6000 0315 (4390)

N.W. Grid 3250 N – 4800 N
3250 E – 5800 E.

Mary Mine Maps

(1) NW PORTION MARY MINE
WORKING LEVEL MAPS (LIDDELL & HUGHES, DATE UKN)

REPRODUCIBLES IN LAS VEGAS

NO GEOL. 1" = 50'

SHOVEL LEVEL	SEP	P
DRINKWATER LEVEL	SEP	P
WASSON LEVEL	SEP	P
HEAD HOUSE LEVEL	SEP	P
CROPPINGS LEVEL	SEP	P (1 print w/ some coloured geol.)
INTERMEDIATE LEVEL	SEP	P
MARY TUNNEL LEVEL	SEP	P

---

(2) NW PORTION BLACK MAMMOTH CONS. MIN. CO.
WORKING LEVEL MAPS w/ SOME ASSAYS
TRACED 1974 By G.S. KENNEDY AFTER SURVEY & MAP By TIBBALS & LIDDELL
1" = 50' (some give x-sec lines)

WASSON LEVEL & LOWER WASSON LEVEL	P.
HEADHOUSE LEVEL & OUTCROP LEVEL	P
SHOVEL LEVEL	P
DRINKWATER LEVEL	P
INTERMEDIATE LEVEL	P

(4) N.W. PORTION – COMPOSITE 1" = 20' NO DATE
fairly complete 3 paper 1 sepia

(3) PROGRESS MAPS N.W. PORTION
BLACK MAMMOTH CONS. MINING CO.
1" = 50'
1940 – sketchy w/ some drill holes (proposed?)
1941 –
1941-42 (one of most current)

60000315 (4390)

N.W. PORTION - COMPOSITE WORKINGS MAPS 1" = 50

Bl. Mam. Cons. Min. Co

10

1 paper, good print (#109)
1 paper - faint w/ samples, drill holes & assays (1937)
1 linen - shows faults & 1940 resampling
1 linen - old (some faults & drill holes)
1 paper - 1937 stope & drift assays (good)
1 repro - " " " " "

PLAN DIAMOND DRILL HOLES NW. (1939?)

7

1" = 50 - linen
1" = 200 reduct. w/ mylar, reg & print.

9

CROSS SEC. NW. PORT.
Sec. 6 Thru 22. 1" = 50'

11

Composite Mine Workings - N.W (extreme) Sec
1" = 20' 3900 N - 5000 N
3000 E - 4000 E
1 linen - 1 print

4000 N - 5000 N - 1 print (coloured levels)
4000 E - 5000 E. sample locations

3500 N - 4500 N - 1 print (coloured levels)
5000 E - 6000 E - sample locations

6000 0315 (439c)

(5) TOPOGRAPHIC BASE MAP 1" = 200 OXY Occidental Minerals Corp.
w/ PUMPS, road & pit
2 mylars, 2 prints, 1 sepia

---

(6) OXY

IN LAS VEGAS

WASSON DUMP 1" = 20'
WASSON DUMP GRID OVERLAY 1" = 20
W " " ASSAY & ISOGRADE OVERLAY 1" = 20'

WASSON TUNNEL - GEOL. MAP & MINE WORKINGS
" " geochem. overlay

DRIFT on stope level NW of flat raise grizzly - geochem overlay 1" = 20
" " " " " " " " - geol map & mine workings
SE " " " " " " " "
SE - geochem overlay

DRIFT on headhouse level NW. of flat raise - geol map & mine workings 1" = 20
" " " " " " " - geochem overlay - 1" = 20'
" " " " near top of flat raise - geol & mine wkgs 1" = 20'
- geochem overlay - 1" = 20'

MARY TUNNEL PORTAL - BASEMAP AT. 1" = 20'
MARY DUMP - SAMPLE GRID OVERLAY "
" " - ASSAY & ISOGRADE OVERLAY "

HUGHES SERIES 124
MINING PAPERS
GROUP 43, Silver Peak Mary Mine

GROUP 43 - Silver Peak/Mary Mine
124

6000 0315 (4390)

6000 0315 (4390)

Call to Ty Segsen 12/9/74

MARCONA
1 MARITIME PLAZA
S.F. Ca. 94111
W. Norman Sims

MARCONAFLO - CONTINUOUS LEACHING
C.S.M estimates Cu leach cost at 8¢/# Cu.

C.S.M. Research
Bert Mariacher
Casy Davis

6000 0315 (4390)

MARY MINE PROJECT

HAULAGE ROAD

As plotted on topog sheet (4" = 1 mile) 11/22/74

10,800 feet in length

Elev Sta. 0+00 5640'

Elev Sta 108+00 6720'

10% Grade

Applying factors estimated from the average cut and fill of 4 typical x-sections throughout the 10,800 foot length of road the following cubic yardage appears probable.

30,000 yd^3 cut

45,000 yd^3 fill

6000 0315 (4390)

Nov. 23, 1974

VISITED MARY MINE AND PROPOSED LEACH PAD AREA AT FOOT OF ECHO CANYON IN COMPANY OF ELTON PARSONS. LOOKED AT PROPOSED HAULAGE ROAD SITE ALSO. MR PARSONS MADE THE FOLLOWING "GUESSTAMATES" OFF THE TOP OF HIS HEAD:

COST OF ROAD CONSTRUCTION BETWEEN $250,000 AND $400,000

COST OF PLACING 1 TON OF CRUSHED ORE ON LEACH PAD $3.00

WATER IS THE CRITICAL FACTOR AND SHOULD BE NUMBER ONE PRIORITY IF A "GO AHEAD" DECISION IS MADE.

SOURCE OF ELECTRIC POWER WILL PROBABLY DETERMINE LOCATION OF A CRUSHING PLANT.

6000 0315 (4390)

Nov. 25, 1974

STAFF MEETING

Present: D.G., W.S., W.B., B.L., F.S., P.S., N.W., L.H.

MARY MINE

102,800 Tons .178 oz

110,000 " .042 MARY DUMP

50,000 " .120 WASSON

Obtain 50 gal H_2O sample from windmill

Will need a steel 4"

6000 0315 (4390)

SILVER PEAK

CONTRACTORS

Parson's Construction	- Silver Peak	- 702 - 937-2247
Robert L. Helms	- HARRY DORISCHETTI Reno	- 359 - 1720
Harvey Honeywell	- Wellington	- 465 - 2324
Byars Construction	- Reno	- 786 - 3120
Wells Cargo	- Reno	329 - 0061
M.K.	Boise	

11-8

(1) Helms (Harry Dorischetti) called me - I'm to call back Monday or Tuesday after I have a better idea of what I want.

11-15

(2) Visited Mary Mine in company of Harry Dorischetti and Jerry Helms to get an estimate on cost of a 100,000 Ton pad. They will call Monday A.M.

(3) "

A. Cone to canyon mouth $4,500.

B. Mouth of canyon to Mary Mine

Mary Mine to top of hill 180,000 yds.

$3.00

C. Mining (on construction scale - Better with a mining cost) $4.21 /Ton

d. Pad construction 33,000 yds to shape

65,000 $1.03/yd

If we have to crush we will have a problem with availability of a crusher. I would prefer one of the "SEMI PORTABLE" Jobs.

6000 0315 (4390)

Estimated Cost of 100,000 Ton Pad at Mary Mine: (Source: Harry Dorischetti, Robert L. Helms Contractors following inspection trip to mine site)

1st Pad

1. Grading access road from Highway 47 to mouth of Eagle Canyon:	$4,500
2. Widen road from mouth of Eagle Canyon to Mary Mine: yards @ $3.00/yd.	
3. Widen road from Mary Mine to top of hill: 180,000 yds @ $3.00/yd	540,000
4. Mining: 100,000 tons @ $4.21	421,000
5. Pad Construction: 65,000 yds @ $1.03/yd	67,000
Total contractor:	$1,032,500

6. Water System:
7. Carbon Plant:

6000 0315 (4390)

STANDARD CONDITIONS OF SALE

DELIVERY

Delivery of materials shall be made F.O.B. point of shipment unless otherwise specified. The company shall not be liable for any loss or damage, or both, incurred after loading at point of shipment and having obtained a clean Bill of Lading from the assigned carrier.

Shipping dates are approximate and date from receipt of order together with information necessary to proceed.

The company shall not be liable for delay in delivery, or failure to manufacture due to causes beyond its reasonable control, such as acts of God, acts of the Purchaser, acts of civil or military authority, priorities, strikes, floods, epidemics, war, and inability due to causes beyond its reasonable control. In the event of any such delay, the date of delivery shall be extended for a period equal to the time lost by reason of the delay; in no event shall Company be liable for consequential damage of any nature.

PRICES

Prices quoted do not include sales, use, excise or similar taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise or other similar tax applicable shall be paid by the Purchaser, or in lieu thereof, the Purchaser shall provide the Company with a tax exemption certificate acceptable to the taxing authority.

Prices quoted are for prompt acceptance, and will in no case exceed an acceptance limit of 30 days from the date of quotation, at which time they are subject to revision, unless otherwise stated herein. Quoted prices are upon quantities shown and any variation shall entitle us to revise or withdraw the original bid.

The Company reserves the right to reject any orders placed where the quoted price is obviously incorrect due to typographical, or any other error made by an employee, or agent of the Company.

TERMS

Acceptance of order and terms of payment are subject to Company's credit approval. The Company's normal terms are: 2%–10th or 25th; Net–30 days from date of invoice unless otherwise stated in the quotation. A service charge of 1½% per month is levied on delinquent accounts.

CANCELLATION AND/OR RETURN OF MATERIALS

Cancellation of orders once placed with the Company can be made only with the Company's consent. No returns may be made without written authority.

GENERAL

No waiver, alteration, or modification of any of the provisions shall be binding unless in writing and signed by a duly authorized representative of the Company.

QUOTATION

CENTRAL PIPE & SUPPLY CO.
and
Affiliates

TO
Summa Corporation
PO Box 1126
Tonopah Nevada

YOUR QUOTE
OUR QUOTE
DATE 12/6/74

DELIVERY TO Same

FAC. SHPT.
STOCK SHPT.
FAC. SOURCE

Attention: Mr. Larry Hayes

QUANTITY	DESCRIPTION	Unit Price	UNIT	EXTENSION
1	26,400 ft. 4" Blk. Pipe PE x 156 Wall x DR/L	1.72	ft.	45,408.00
2	26.400 ft. 6" " " PE x 125 Wall x DR/L	2.99	ft.	78,936.00
3				
4	4" Pipe is limited service, but would be satisfactory			
5	for service up to prox. 5/600 p.s.i.			
6				
7	660 4" Victaulic Couplings Gustin Bacon #100	5.59	ea.	3689.40
8	OR 4" " " " " #105	5.05	ea.	3333.00
9				
10	660 6" " " " " #100	10.18	ea.	6718.00
11	OR 6" " " " " #105	8.78	ea.	5794.80
12				
13	Victaulic Grooving 4" x 156 Wall	.06	ft.	1584.00
14	" " 6" x 125 Wall	.07	ea.	1848.00
15				
16				
17	~~Pipe - FOB California~~			
18	~~Couplings FOB Destination~~			
19				
20				
21				
22	TERMS 2% discount on invoices			
23	dated 1st 15th on 25th Inst. When	PRICE IN EFFECT AT		
24	dated 16th - 31st on 10th prox.	TIME OF SHIPMENT		
25	net 30 days.			
26				
27				
28				

TERMS

F.O.B. See Above

SHIPMENT FROM

[ ] With full freight allowed

About 3 to 4 weeks.

[ ] No freight allowance

SPECIAL CONDITIONS

The office checked below has submitted this quote

Central Pipe & Supply Co. [ ]
3601 E. 39th AVE.
DENVER, COLORADO 80205
(303) 399-6000

Central Pipe & Supply Co. of Utah [X]
780 W. LAYTON AVE.
SALT LAKE CITY, UTAH 84104
(801) 486-0041

Wyoming Central Pipe & Supply Co. [ ]
1913 ELK STREET
ROCK SPRINGS, WYOMING 82901
(307) 362-3775

Pueblo Pipe & Supply Co. [ ]
P. O. BOX 497
PUEBLO, COLORADO 81001
(303) 545-8400

Thank you for the opportunity to quote. We would very much appreciate an order for this material.

By R. S. Gates

6000 0315 (4390)

STANDARD CONDITIONS OF SALE

DELIVERY

Delivery of materials shall be made F.O.B. point of shipment unless otherwise specified. The company shall not be liable for any loss or damage, or both, incurred after loading at point of shipment and having obtained a clean Bill of Lading from the assigned carrier.

Shipping dates are approximate and date from receipt of order together with information necessary to proceed.

The company shall not be liable for delay in delivery, or failure to manufacture due to causes beyond its reasonable control, such as acts of God, acts of the Purchaser, acts of civil or military authority, priorities, strikes, floods, epidemics, war, and inability due to causes beyond its reasonable control. In the event of any such delay, the date of delivery shall be extended for a period equal to the time lost by reason of the delay; in no event shall Company be liable for consequential damage of any nature.

PRICES

Prices quoted do not include sales, use, excise or similar taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise or other similar tax applicable shall be paid by the Purchaser, or in lieu thereof, the Purchaser shall provide the Company with a tax exemption certificate acceptable to the taxing authority.

Prices quoted are for prompt acceptance, and will in no case exceed an acceptance limit of 30 days from the date of quotation, at which time they are subject to revision, unless otherwise stated herein. Quoted prices are upon quantities shown and any variation shall entitle us to revise or withdraw the original bid.

The Company reserves the right to reject any orders placed where the quoted price is obviously incorrect due to typographical, or any other error made by an employee, or agent of the Company.

TERMS

Acceptance of order and terms of payment are subject to Company's credit approval. The Company's normal terms are: 2%–10th or 25th; Net–30 days from date of invoice unless otherwise stated in the quotation. A service charge of 1½% per month is levied on delinquent accounts.

CANCELLATION AND/OR RETURN OF MATERIALS

Cancellation of orders once placed with the Company can be made only with the Company's consent. No returns may be made without written authority.

GENERAL

No waiver, alteration, or modification of any of the provisions shall be binding unless in writing and signed by a duly authorized representative of the Company.

QUOTATION

CENTRAL PIPE & SUPPLY CO.
and
Affiliates

TO
Summa Corporation
PO Box 1126
Tonopah, Nevada

YOUR QUOTE
OUR QUOTE
DATE 12/6/74

DELIVERY TO

FAC. SHPT.
STOCK SHPT.
FAC. SOURCE

QUANTITY	DESCRIPTION	Unit Price	UNIT	EXTENSION
1 10,000 ft.	4" Blk Pipe PE x 120 Wall x DR/L includ. rubber lining	7.38	ft.	73,800.00
2 10,000 ft.	6" Blk Pipe PE x 125 Wall x DR/L " " "	10.14	ft.	101,400.00
3 10,000 ft.	6" Std. Blk. Pipe PE x 280 Wall x DR/L " "	14.64	ft.	146,400.00
4				
5	Victaulic Grooving 4" x 120 Wall	.06	ft.	600.00
6	" " 6" x 125 Wall	.07	ft.	700.00
7	" " 6" x 280 Wall	.17	ft.	1700.00
8 250	4" Victaulic Couplings - Gustin Bacon #100	5.59	ea.	1397.50
9	OR 4" " " " " #105	5.05	ea.	1262.50
10 250	6" " " " " #100	10.18	ea.	2545.00
11	OR 6" " " " " #105	8.78	ea.	2195.00
12				
13	4" Pipe - FOB California			
14	6" Pipe - FOB Salt Lake City			
15	Couplings " Destination			
16				
17				
18				
19				
20				
21				
22				
23				
24	TERMS 2% discount on invoices dated 1st 15th on 25th Inst. When dated 16th - 31st on 10th prox. net 30 days.			
25				
26				
27				
28				

PRICE IN EFFECT AT TIME OF SHIPMENT

TERMS

F.O.B. See Above

SHIPMENT FROM

[ ] With full freight allowed

About 3 to 4 weeks.

[ ] No freight allowance

SPECIAL CONDITIONS

The office checked below has submitted this quote

Central Pipe & Supply Co. [ ]
3601 E. 39th AVE.
DENVER, COLORADO 80205
(303) 399-6000

Central Pipe & Supply Co. of Utah [X]
780 W. LAYTON AVE.
SALT LAKE CITY, UTAH 84104
(801) 486-0041

Wyoming Central Pipe & Supply Co. [ ]
1913 ELK STREET
ROCK SPRINGS, WYOMING 82901
(307) 362-3775

Pueblo Pipe & Supply Co. [ ]
P. O. BOX 497
PUEBLO, COLORADO 81001
(303) 545-8400

Thank you for the opportunity to quote. We would very much appreciate an order for this material.

By R L Gates

GROUP 43 - Mary Mine Pit Sampling 125

HUGHES TOOL CO. 125
MINING PAPERS
GROUP 43, MARY MINE - PIT SAMPLING

6000 0315 (4390)

6000 0315 (4390)

FRED

NATIONAL

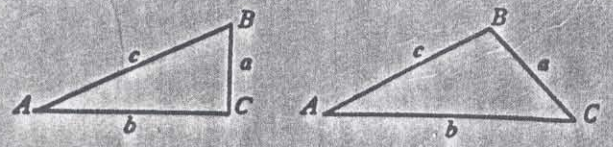
Nancy Mine
Pit Sampling
descriptions

430
FIELD BOOK

TELEDYNE
NATIONAL TRACING PAPER

6000 0315 (4390)

FORMULAE FOR SOLVING RIGHT TRIANGLES



$\text{Sin}\, A = \frac{a}{c} = \text{Cos}\, B$, $\text{Cot}\, A = \frac{b}{a} = \text{Tag}\, B$

$\text{Cos}\, A = \frac{b}{c} = \text{Sin}\, B$ $\text{Sec}\, A = \frac{c}{b} = \text{Cosec}\, B$

$\text{Tan}\, A = \frac{a}{b} = \text{Cot}\, B$ $\text{Cosec}\, A = \frac{c}{a} = \text{Sec}\, B$

Given	Required	Solution
A, c	B, a, b	$B = 90° - A, a = C \sin A, b = C \cos A.$
A, b	B, a, c	$B = 90° - A, a = b \tan A, C = \frac{b}{\cos A}.$
A, a	B, b, c	$B = 90° - A, b = a \cot A, C = \frac{a}{\sin A}.$
a, c	A, B, b	$\sin A = \frac{a}{c}, \cos B = \frac{a}{c}, b = \sqrt{(c+a)(c-a)}$
a, b	A, B, c	$\tan A = \frac{a}{b}, \cot B = \frac{a}{b}, c = \sqrt{a^2 + b^2}$

FORMULAE FOR SOLVING OBLIQUE TRIANGLES

Given	Required	Solution
A, a, b	B, c	$\sin B = \frac{b \sin A}{a}, c = \frac{a \sin C}{\sin A}$
A, B, a	b	$b = \frac{a \sin B}{\sin A}$
a, b, C	A, c	$A + B = 180° - C, C = \frac{a \sin C}{\sin A}$
a, b, c	Area	side $\frac{a+b+c}{2}$, area $= \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	area $= \frac{bc \sin A}{2}$
A, B, C, a	Area	area $= \frac{a^2 \sin B \sin C}{2 \sin A}$

MM-FS-1 vein material
Highly fractured minor
sulphide 5' vein channel
S 40 W 10' from sta 6

MM-FS-2 same & 15' up
hill 4' vein channel.
more sulphides - started
by MM-LZ-6 grab sample
strike N 10° W dip 34° E

MM-FS-3 20' S 40 W
of 6 material above
vein. Mostly alaskite
some schist. small qtz
veins. 5' sample

MM-FS-4 N 10° E 24'
from (7) alaskite below
the vein minor lim.
3' sample

6000 0315 (4390)

MM-FS-5 - Vein material above FS-4 - Material is in fault zone. vein split with alt. Aplite in middle 5' zone

MM-FS-6 Material in vein above altered zone mostly qtz ~~no~~ minor sulphides. -4' zone

MM-FS-7 25' ~~N~~ S 65°W station (7) Altered zone of contact between Al. & schist. abun. FeOx 4' zone. 20' below vein

MM-FS-8 S15°W 72' from sta 8 top of qtz vein some Sulphides. 4' zone

MM-FS-9 below 8. 5' zone with more Sulphides. ~~some~~ abun. FeOx

6000 0315 (4390)

MM-FS-10 - below 9
below vien alt country
little al. some some
qtz veins. much FeOx
4' zone

MM-FS-11 right above
stat 9!3 qtz vien with
some pyrite several FeOx &
MgO zones 5' zone

MM-FS-12 below 11
on vien more sulphides
some gypsum 4' zone

MM-FS-13 Matrix
above vien alusk. and
parallel qtz vien 3' zone

MM-FS-14 - slickenside
below vien - gougy altered
wall rock.
strike N30 W dip 37E
4' zone

6000 0315 (4390)

MM-FS-15 above and south of station 14 6' section of massive qtz vein no sulp.. vein grades into qtz breccia and then altered alaskite

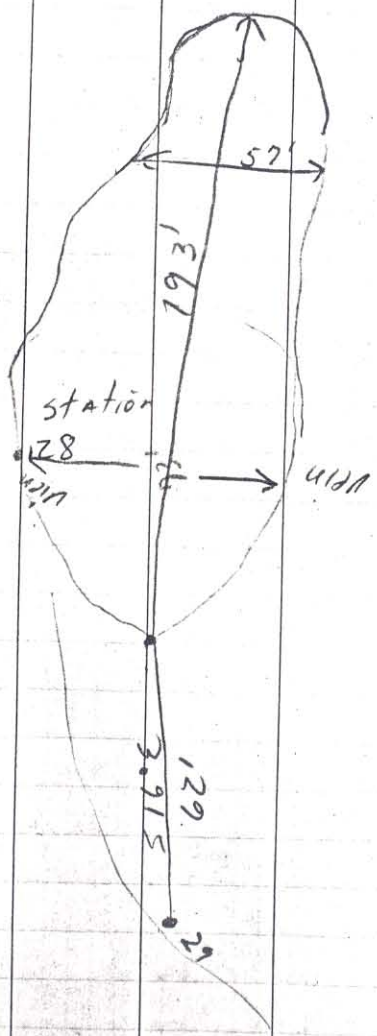
MM-FS-16 altered alaskite above vein with qtz vein within 3/2' section. 30' south of station 14

MM-FS-17 40' S40°W from sta 15 vein material very poor looking no sul. little Fe oxs 4' zone

MM-FS-18 5' wide zone above vein. Alt. alask. with minor qtz veining N52°W 54' 18

60000315 (4390)

Piece of vein missing
S16°E 62' From st. 29



MM-FS-19 due West 52' From station 29 Ore vein next to Occ #31 in Adtkinse portal south wall 5' zone

MM-FS-20 - same as above vein material mixture of schist & alask. North wall. 4½' zone

MM-FS-21 same 10' inside portal below vein. mostly

MM-FS-22 material above vein right below sta 28 alt alaskite. 4' zone

MM FS-23 below FS-22 in vein. Top of vein down 4' Vein is split and has pieces of country rock in it approx 12' vein

6000 0315 (4390)

MM-FS-24- below 23
4' more ft of same

MM-FS-26- 4' more
vein better material
inside stope below
stat. 28 couldn't get
below vein

MM-FS-25 -54' S20E
of sta 28. in Pit wall
above vein oil schist.
4' sample

MM-FS-27 below FS 25
in vein material some
sulphides abund Lim
6' section

MM-FS-28 S 30°W 115'
from station 28
material above main vein
and below small
vein 3' zone with
minor qtz

6000 0315 (4390)

S45°W	99					MM-FS-29	Above 28
S70°E	71					2' subsid vein qtz	
						with Lim and no sulphides	
						MM-FS-30	above 29
						3' zone alt n/Asketic	
						MM-FS-31	Below 28 in
						qtz vein some sul. with	
						small spec's free gold.	
						6' section	vein
						MM-FS-32	S45°W 99'
						from sta 27 on pillar	(disect)
						of view ~~sam~~ bottom	
						foot has massive sul.	
						Lim green stain ~~inside~~	found
						strike 0°N dip 70°E	stope
						MM-FS-33 -	13' further
						in side stope.	mixture
						of schist & alasite	very poor
						Appearance	(3' sect)

6000 0315 (4390)

MM-FS-33 - 20' East of 31 above vein 2' sect. mixture schist & alask.

MM-FS-34 N 70° W S 70° E 71' from sta. 27. material above vein mixture alaskite & schist. 3' section

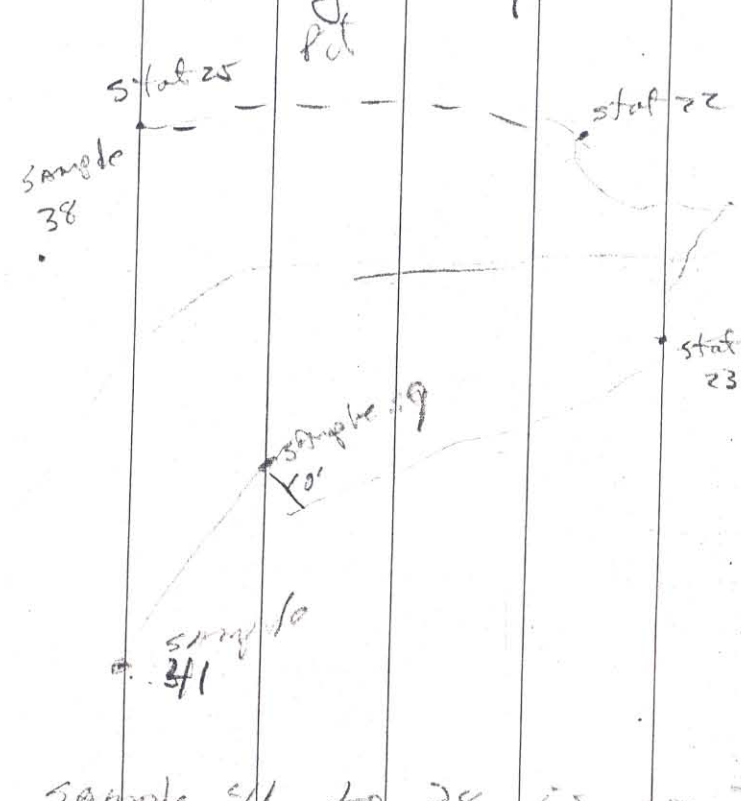
MM-FS-35 Vein material below 34 in some sulphide alond. lim. 3' zone

MM-FS-36 3' vein material N 64° W 57' From sta 25 Faulted and pinches out laterally. small vein above main vein

MM-FS-37 slightly altered schist material 3' zone above vein

6000 0315 (4390)

Valley description



Sample 41 to 38 is azimuth N 75° W

MM-FS-38 58° E 50'
From 25 3' of qtz vein
rep. upper vein

MM-FS-39 S 65° W ~~N 65° E~~ 84'
From sta 24 2' vein
material highly oxidized
has a crust of gossan.

MM-FS-40 18' South
in pit wall above vein
in alt. alaskite 3' zone

MM-FS-41 S 22° W 105'
From 24 1½' vein material
pinching out to altered
country rock.

MM-FS-42 2' country
rock above vein mix
of sch. and alaskite

MM FS-43 3' fault
zone hand sample
of gouge.

6000 0315 (4390)

mm-FS-44 - N 45° E 126'
from sta. 3 vein material
gt abund maroon lim.
mix of slask. 3' zone

mm-FS-45 material above
vein. fairly massive schist
little lim. 3 zone

mm-FS-46 material below
vein. highly altered
slask. in places completely
gone to clay. ~~up~~ stoped
down on this material
4' zone.

mm-FS-47 - 3' zone
of ore vein above main
~~to~~ vein
S 66° W 47' from
~~stop~~ station 9
strike N 48° W dip 65° E

6000 0315 (4390)

MM-FS-48 - At 10 N50°W 29'
vein material abundant
lim. 5' zone.

MM-FS-49 below N50°W 16½'
From sta 10. mixture of
sch. and Al. slightly
altered. 3' zone.

MM-FS-50 2' zone above
vein Al. & Schist. 30'
from (49) same &

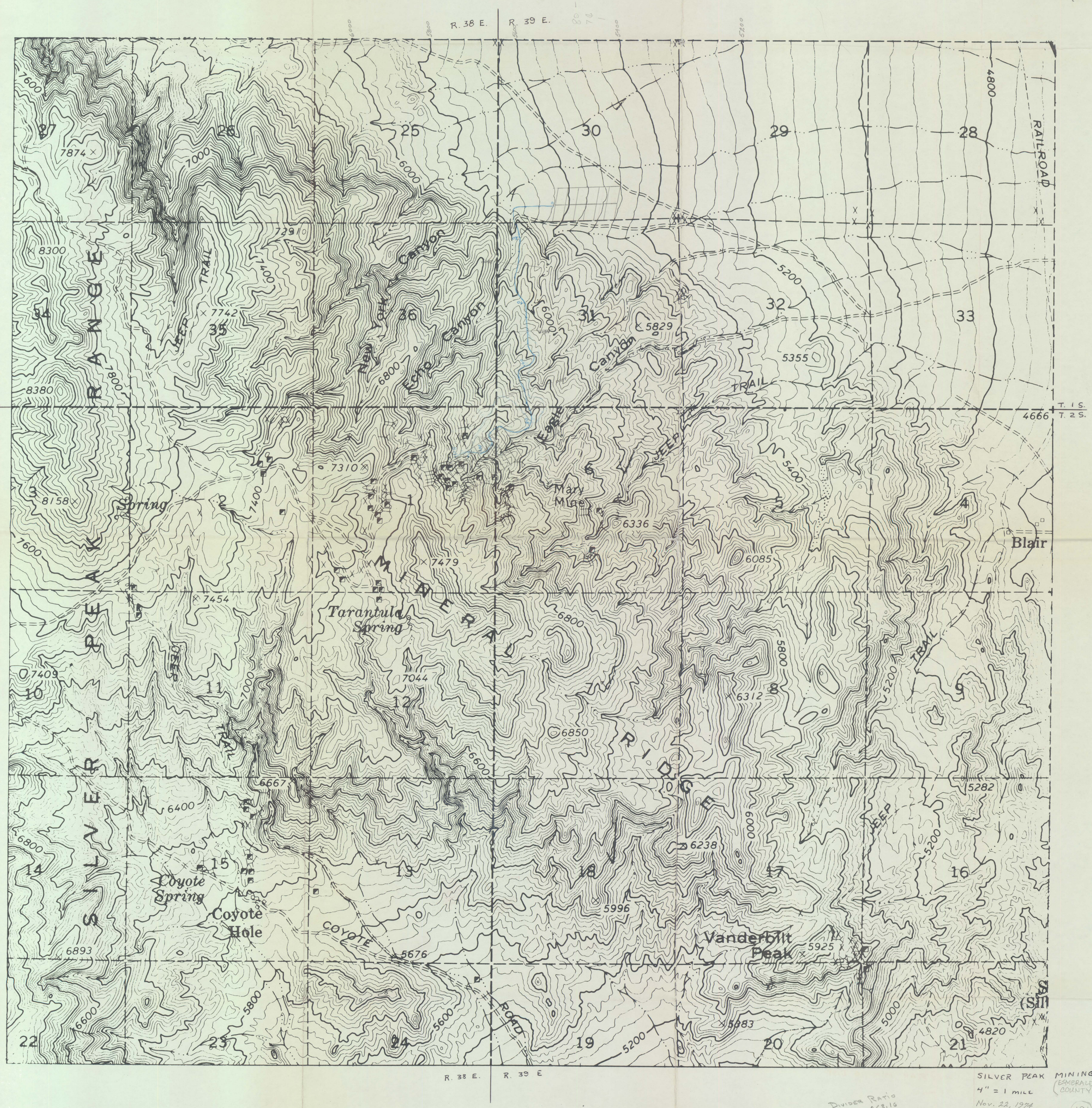
MM-FS-51 N30°W 15' inside
portal to Chapple workings
from sta 11. Qtz vein
5' wide with moderate sulphides.

MM-FS-52 - above 51. 4'
zone of altered wlaskite
& fault gouge. minor
qtz veining in wall rock
|| to main vein

6000 0315 (4390)

MM-FS-53 5' zone below
vein 2' sch 1½ qtz vein
parallel to main vein.
1½ alaskite.

6000 0315 A (4390)



SILVER PEAK MINING DIST
(ESMERALDA COUNTY)
4" = 1 mile
Nov. 22, 1974
L.G.H.

DIVIDER RATIO
263.16

101

Estimate of Revenue Return from Operation of Mary Gold Mine, Esmeralda County, Nevada

6000 0315B (4390)

ESTIMATED

ITEMS	SUBPROJECTS	YEARS	CONSTRUCTION COSTS	MINING COSTS	CHEMICAL COSTS	LABOR COSTS	TOTAL OPERATIONAL COSTS	TONS OF ORE PROCESSED	OUNCES GOLD RECOVERED	GOLD VALUE @ $170 PER OUNCE	ANNUAL ROYALTY	PROJECT NET PROFIT	CUMULATIV NET PROFIT
A	CONSTRUCTION COSTS:		FIRST YEAR A, C, D, H SUBSEQUENT C, H	(annual) B	(annual) E (5% annual increase)	(annual) F, G (5% annual increase)	(annual)	(TONS)	(0.10 ounces gold per ton ore - bullion	(Gross earnings)	(6% of gross income)	(annual)	
	TRAMWAY $1,500,000												
	CONVEYORS 200,000												
	ACCESSORIES 1,300,000												
	$3,000,000	1	$5,300,000	$3,000,000	$1,100,000	$250,000	$9,650,000	1,000,000	100,000	$17,000,000	$1,020,000	$6,330,000	$6,330,00
B	MINING COSTS (annually)												
	$3.00/ton = $2,000,000	2	2,000,000	3,000,000	1,150,000	260,000	6,410,000	1,000,000	100,000	17,000,000	1,020,000	9,570,000	15,900,00
C	PAD CONSTRUCTION (annually)												
	$0.65 × 1,000,000 sq. ft. = $650,000	3	2,000,000	3,000,000	1,210,000	270,000	6,480,000	1,000,000	100,000	17,000,000	1,020,000	9,500,000	25,400,00
		4	3,000,000 (Replace Cable)	3,000,000	1,270,000	280,000	7,550,000	1,000,000	100,000	17,000,000	1,020,000	8,430,000	33,830,00
D	MILL CONSTRUCTION												
	4-3 TANK SERIES @ $75,000 each = $300,000	5	$2,000,000	$3,000,000	$1,330,000	$290,000	$6,620,000	1,000,000	100,000	$17,000,000	$1,020,000	$9,360,000	$43,190,00
		6	2,000,000	3,000,000	1,390,000	300,000	6,690,000	1,000,000	100,000	17,000,000	1,020,000	9,290,000	52,480,00
E	CHEMICALS (annually)												
	CARBON $ 20,000												
	NaCN 720,000	7	3,000,000 (Replace Cable)	3,000,000	1,460,000	310,000	7,770,000	1,000,000	100,000	17,000,000	1,020,000	8,210,000	60,690,00
	NaOH 360,000												
	$1,100,000	8	2,000,000	3,000,000	1,530,000	320,000	6,850,000	1,000,000	100,000	17,000,000	1,020,000	9,130,000	69,820,00
F	OPERATIONAL LABOR (annually)	9	$2,000,000	$3,000,000	$1,600,000	$330,000	$6,930,000	1,000,000	100,000	$17,000,000	$1,020,000	$9,050,000	$78,870,00
	MILLMEN $75,000												
	PAD & TRAM 125,000	10	3,000,000 (Replace Cable)	3,000,000	1,680,000	340,000	8,020,000	1,000,000	100,000	17,000,000	1,020,000	7,960,000	86,830,00
	$200,000	11	2,000,000	3,000,000	1,580,000	350,000	6,930,000	900,000	90,000	15,300,000	918,000	7,452,000	94,282,00
G	SUPERVISION (annually)												
	MINING ENGINEER $27,500	12	2,000,000	3,000,000	1,480,000	360,000	6,840,000	800,000	80,000	13,600,000	816,000	5,944,000	100,226,00
	GEOLOGIST 22,500												
	$50,000	13	$2,000,000	$3,000,000	$1,360,000	$370,000	$6,730,000	700,000	70,000	$11,900,000	$714,000	$4,456,000	$104,682,00
H	MAINTENANCE (annually)												
	ALL PHASES $1,350,000	14	2,000,000	3,000,000	1,220,000	400,000	6,620,000	600,000	60,000	10,200,000	612,000	2,968,000	107,650,00
		15	2,000,000	3,000,000	1,060,000	420,000	6,480,000	500,000	50,000	8,500,000	510,000	1,510,000	109,160,00
		16	2,000,000	3,000,000	1,110,000	440,000	6,550,000	500,000	50,000	8,500,000	510,000	1,440,000	110,600,00
			$38,000,000	$48,000,000	$21,530,000	$5,292,000	$113,120,000	14,000,000 TONS	1,400,000 OZ.	$238,000,000	$14,280,000	$110,600,000	

D.G. 2/18/75

File

6006 0315C(4390)

Estimate of Revenue Return from Mary Gold Mine, Esmeralda County, Nevada

During Initial Year of Operations

PROJECT	ESTIMATED DATE OF COMPLETION
TRAMWAY	3rd MONTH
EXTRACTION MILL	3rd MONTH
LEACH PAD	3rd MONTH

ESTIMATED

MONTHS	CONSTRUCTION COSTS	MINING COSTS	CHEMICAL COSTS	LABOR COSTS	TOTAL OPERATIONAL COSTS	TONS OF ORE PROCESSED (TONS)	OUNCES GOLD RECOVERED (Bullion)	GOLD VALUE @ $ 170 PER OUNCE	ROYALTY PAYMENT (6% of Gross Value)	PROJECTED NET REVENUE	CUMULATIVE NET REVENUE
1	$ 750,000				$ 750,000					($ 750,000)	($ 750,000)
2	800,000				800,000					(800,000)	(1,550,000)
3	800,000	250,000		21,000	1,071,000	83,000	8,300	1,411,000	85,000	255,000	(1,295,000)
4	$ 1,280,000	$ 250,000	$ 275,000	$ 21,000	$ 1,826,000	83,000	8,300	$ 1,411,000	$ 85,000	($ 500,000)	($ 1,795,000)
5	170,000	250,000		21,000	441,000	83,000	8,300	1,411,000	85,000	885,000	(910,000)
6	170,000	250,000		21,000	441,000	83,000	8,300	1,411,000	85,000	885,000	(25,000)
7	170,000	250,000	275,000	21,000	716,000	83,000	8,300	1,411,000	85,000	610,000	585,000
8	$ 170,000	$ 250,000		$ 21,000	$ 441,000	83,000	8,300	$ 1,411,000	$ 85,000	$ 885,000	$ 1,470,000
9	170,000	250,000		21,000	441,000	83,000	8,300	1,411,000	85,000	885,000	2,355,000
10	170,000	250,000	275,000	21,000	716,000	83,000	8,300	1,411,000	85,000	610,000	2,965,000
11	170,000	250,000		21,000	441,000	84,000	8,400	1,428,000	85,000	902,000	3,867,000
12	$ 160,000	$ 250,000		$ 21,000	$ 431,000	84,000	8,400	$ 1,428,000	$ 85,000	$ 912,000	$ 4,779,000
13	160,000	250,000	275,000	20,000	705,000	84,000	8,400	1,428,000	85,000	638,000	5,417,000
14	160,000	250,000		20,000	430,000	84,000	8,400	1,428,000	85,000	913,000	6,330,000
	$ 5,300,000	$ 3,000,000	$ 1,100,000	$ 250,000	$ 9,650,000	1,000,000 TONS	100,000 oz.	$ 17,000,000	$ 1,020,000	$ 6,330,000	

D.G. 2/18/75