DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~Defense Minerals Exploration Administration~~

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 6487

Application
- [x] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] Work Completed analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments.
- [ ] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Bldg. 20, Denver Federal Center
Denver, Colo. 80225
GEOLOGICAL SURVEY

August 4, 1965

Memorandum

To: Chief, Office of Minerals Exploration
Geological Survey
Washington, D. C. 20240

From: Acting Field Officer, OME, Region III

Subject: Application for OME aid (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Claims
San Miguel County, Colorado

Attached is the subject application for an exploration program estimated by the Applicant to cost $200,000, $87,000 of which is "further exploration." ?

There are no copies of his letters to the banks. The presentation is so poor I am not sure what the Applicant has in mind. The Longitudinal Section shows four adits on the vein. The Plan Map indicates a dog-leg crosscut to the vein and it would be anybody's guess as to the target of his core drill holes as they are shown on the map. The costs are presented on a per foot basis, are high and include camp costs. Not all of the equipment he lists and amortizes would be used on the project.

Hugh M. Connors

Hugh M. Connors

H.M.C. (8-4-65)
cc: File
Chron

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 6 1965
INITIALS | CODE

MME Form 40
July 1962

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

ORIGINAL COPY
O. M. E.
RECEIVED
AUG 6 1965
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UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

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

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

GOLD LEAF MINING COMPANY
540 White Ave.
Grand Junction
Colorado

OME
DEPARTMENT OF THE INTERIOR
AUG 4 1965
REGION III
DENVER, COLORADO

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER 6488
DATE RECEIVED 8.6.65
REGION 111
DIVISION CODE

BUSINESS ORGANIZATION *(Check one)*

INDIVIDUAL	
CORPORATION	X
PARTNERSHIP	
OTHER *(Specify)*	

STATE IN WHICH FIRM IS ORGANIZED Colorado

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Raymond R.Paruch	1325 N.7th Grand Junction,Colo.	President
Thatcher L.Shaw	1035 Bunting Grd. Jct. Colo.	Vice Pres.
Soren J. Sorensen	620 Lakeshore Dr. Grd.Jct.Col.	Sectyl& Treas
Clarence L.Neilsen	Box 38 Placerville, Colorado	Board Chairma
Phil Klingensmith	Box 38 Placerville, Colorado	Board Direct.

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE
Silver,Gold & Accompanying metals

ESTIMATED COST OF PROJECT
$ 200,000.00

PROPERTY NAME	LOCATION COUNTY	STATE
Silver Eagle Lode Claims	San Miguel	Colorado

GENERAL INSTRUCTIONS

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

CERTIFICATION

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

August 2, 1965
DATED

Raymond R. Paruch
BY *(Signature)*

President
TITLE

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

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

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

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

2. Applicant's Rights in Land:

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

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

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

3. Physical Description:

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

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

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

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

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

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

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

4. Accessibility of Property:

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

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

5. Exploration Work:

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

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

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

6. Experience:

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

7. Estimate of Costs:

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

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

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

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

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

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

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

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

[illegible]T.-DUP. SEC., WASH., D.C. 11879

August 2, 1965

United States
Department Of The Interior
Office of Minerals Exploration
Federal Center
Denver 25, Colorado

Dear Sir:

We are submitting this application with all reports for an OME Loan in the amount of $ 200,000.00.

Our basis for applying for the loan was determined by the geological report of Mr. Jim Younger; the past history of earlier mine operations at the locations indicated by the working levels included in the report and the present development work being performed which substantiates our faith in the mineral potential.

Costs as per detailed report total $ 113,656.00. We have submitted the loan application for $ 200,000.00 with the possibility of further exploration in the amount of $ 80,000.00 before mine operations begin. Should this decision be made, necessary information will be submitted to your office for approval.

The detailed reports were prepared and evaluated on the basis of a composite listing of prices, both from mining companies and supply houses.

Initial development work began last August preparing the access road from Illium to the mine site. This entailed the movement of equipment, road bed building, etc. Presently the drifting is being done on the #4 level indicated on the geologist's map. Approximately 80' of drifting and entrance shoring has been completed towards the main ore-body objective.

Reserve working capital is limited and any favourable indication by your office concerning this application would be of extreme importance in hastening further exploration.

Very truly yours,

Raymond R. Paruch

Raymond R. Paruch
President

Gold Leaf Mining Corporation
540 White Avenue
P.O. Box 1056
Grand Junction, Colorado

Phone 242-0087 (Office)
242-2073 (Home)

OME Loan Application For Gold Leaf Mining Co.

1. FINANCIAL ELIGIBILITY.
   (a). Letters enclosed from: First National Bank Of Grand Junction, Colorado
   Mesa National Bank of Grand Junction, Colorado
   United States Bank of Grand Junction, Colorado

   (b). None
   (c). Cash & Equipment

2. APPLICANT'S RIGHTS IN LAND.
   (a). Lessee with option to purchase.
      1. Copy of lease enclosed.
      2. No liens or encumbrances.
      3. Recorded in BOOK #312 PAGE 50-51-52 in San Miguel County, Colorado.

   (b). Three Unpatended Claims: BILK RUNNER #1; #2; #3 which are contiguous. These are located in SECTIONS NO. 34 & 35 of T.42 N; R10 W of the New Mexico Prime Meridian.
   The following claims are not to be subject to Government royalty or liens:
   Three Patended Claims: MAGPIE; ALMEDA; SUNLIGHT #38269 and are located in SECTION 34 & 27 of T 42 N; R10W.
   *The BILK RUNNER CLAIM was formerly known as THE MORNING STAR.

   (c). None

3. PHYSICAL DESCRIPTION.
   (a). All maps enclosed.
   (b). $6500.00 (Equipment Repairs; Labor & Operating Expenses).
   (c). Enclosed in Geologist's Report.
   (d). Enclosed in Geologist's Report.
   (e). Enclosed in Geologist's Report.
   (f). Enclosed in Geologist's Report.
   (g). Enclosed in Geologist's Report.

4. ACCESSIBILITY OF PROPERTY.
   (a). Mr. Clarence Neilson
      P.O. Box 38
      Placerville, Colorado

   (b). Shipping: Ridgeway, located 40 miles from the Mine Base.
   (c). Supply: Grand Junction, Colorado located 136 miles from Mine Base.

5. EXPLORATION WORK.
   (a). 1800 Feet of 7' X 7' Drift: See Maps enclosed for details.
      10 Turnarounds 7' X 12' X 18' Deep

   (b). See enclosed Map.
   (c). Immediately: Five Feet Per Day of Drift.

6. EXPERIENCE.
   Mr. Clarence Neilson, who will supervise the work, has been in the mining business for over 33 years. He has worked as miner; shift boss; timberman and lessee in various mines on the Western Slope and has successfully operated a number of uranium contracts. Letters of reference available.

UNITED STATES BANK OF GRAND JUNCTION

GRAND JUNCTION, COLORADO

July 26, 1965

LEROY BACON
EXECUTIVE VICE PRESIDENT

Gold Leaf Mining Company
540 White Avenue
Grand Junction, Colorado

Gentlemen:

Your request for a $200,000.00 loan to be used for mining development has been reviewed and declined by our loan committee.

Yours very truly,

LeRoy Bacon

LeRoy Bacon
Executive Vice President

LB:lf

Mesa National Bank
OF GRAND JUNCTION

WESLEY E. STRAIN
Vice President

P. O. BOX 310 GRAND JUNCTION, COLORADO 81502
PHONE 242-8822
AREA CODE 303

July 27, 1965

Mr. Soren Sorensen
P.O. Box 1056
Grand Junction, Colorado

Dear Mr. Sorensen:

Your loan application for Gold Mining Company for $200,000 has been reviewed and rejected since it is not a bankable loan.

We appreciate your interest in Mesa National Bank and would appreciate an opportunity to serve you in the future.

Very sincerely yours,

Wesley E. Strain
Vice President

WES:kj

FIRST NATIONAL BANK in Grand Junction . . . .

GRAND JUNCTION, COLORADO

R. T. COUNLEY
Vice President

July 26, 1965

Mr. S. J. Sorenson
Gold Leaf Mining Company
540 White
P. O. Box 1056
Grand Junction, Colorado

Dear Mr. Sorenson:

This will acknowledge receipt of your application for a $200,000.00 loan for the purpose of developing certain mining claims held by your company in San Miguel County.

Thank you kindly for the opportunity to consider this application, however, we wish to advise that we will not be able to make this loan to you.

Very truly yours,

R. T. Counley

Vice President

RTC:clf

11:05

A November 24, 1964

312 50-51-52

A G R E E M E N T

Mollie Rae Carver

THIS AGREEMENT, MADE and entered into as of the 1st day of October, A. D. 1964, by and between JOHN MERCH and GOLDIE MERCH of the County of San Miguel, State of Colorado, parties of the first part, and CLARENCE NEILSON and PHILIP KLINGENSMITH, of the County of San Miguel, State of Colorado, parties of the second part, WITNESSETH:

That the first parties, lessors, for and in consideration of the royalties and covenants hereinafter reserved, and by the said second parties, lessees, to be paid, kept and performed, have granted, demised and let, and by these presents do grant, demise and let unto the said lessees, the following described mining property situate in the County of San Miguel, State of Colorado, towit:

Silver Eagle Lode Claims Nos. 1 and 3; Junior Junction Lode; Bilk Runner No. 1, Bilk Runner No. 2 and Bilk Runner No. 3, Morning Star No. 1, Morning Star No. 2, Morning Star No. 3, Morning Star Millsite; Magpie, Alameda and Sunlight, U. S. Patent Number 3608 Mining Claims located in Mount Wilson Mining District, location certificates of which are duly recorded in the County Clerk's office of San Miguel County, Colorado, to which reference is made, together with all and singular the mines, minerals, lodes and veins within the lines of said claims, and their dips and spurs and all dumps, plant, fixtures, improvements, rights, privileges and appurtenances thereunto in anywise belonging, including rail, pipe and cars.

TO HAVE AND TO HOLD said premises and property for a period of ten years from date hereof, unless sooner terminated or forfeited in the manner hereinafter set forth, and subject to the following terms, provisions and covenants, to-wit:

1. Lessees shall pay a flat royalty of ten per cent (10%) of the net returns, to be calculated after the deduction of all smelting and milling charges on all ore marketed. The royalty deducted as hereinbefore provided shall be made at the mill or smelter. Lessees agree to pay fifty per cent (50%) of any high grade ore assaying $1.00 per pound, found in pockets or chimneys in process of exploration.

2. Clarence Neilson is to be the General Superintendent in charge of all operations on the above property.

3. Lessees shall protect and save harmless the lessor from damage on account of injuries to the person or property of other parties caused by the lessee's operations under the lease.

4. Lessee agrees to enter upon said mine, or premises, and work the same mine fashion not less than one hundred (100) shifts per calendar year, in manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the same as a workable mine, and to the special covenants hereinafter reserved. The Patented claims shall be worked and tunnels thereon re-opened when most advantageous.

5. To well and sufficiently timber said mine at all points where proper, in accordance with good mining, and to repair all old timbering wherever it may become necessary. To keep the drifts, shafts, tunnels and other workings thoroughly drained and clear of loose rock and rubbish, unless prevented by extraordinary mi[illegible] casualty, and that they will in all ways comply with the laws concerning mining and all regulations concerning said operation made by the [illegible] of Mines.

6. Lessees agree to pay all pr[illegible]ion taxes, together with unemployment and Social Security taxes [illegible]h may be necessary in said operation, and to carry State Compensation Insurance.

7. Lessees at all times during the term hereof, shall keep notice constantly and conspicuously posted, setting forth the fact that the premises are being leased to and operated by lessees and that the interest of the lessors therein shall not be subject to liens for services or labor rendered or materials or supplies furnished or used on or in connection with the premises or the mining operations of lessees thereon or therein. That said notice shall be in the following form, to-wit:

NOTICE TO ALL EMPLOYEES OF THIS PROPERTY,
AND TO ALL OTHERS WHOM IT MAY CONCERN:

Notice is hereby given that all parties performing labor or furnishing skill, materials, machinery or other fixtures or supplies of any kind in, to and/or upon said property, or any part thereof; that the undersigned, the owners of said property, are not and will not be responsible for any labor performed, or skill, materials, machinery, fixtures, or supplies of any kind, furnished in, to or upon said property or any part thereof, nor shall the interest of said owner be subject to any lien for the same. And all persons are hereby notified that the property aforesaid is being operated by CLARENCE NEILSON and PHILIP KLINGENSMITH, to whom all persons must look for payment.

John Reece - Goldie Reece--Owners.

8. First parties shall file annually at the proper time, the required notice of intention to retain the unpatented claims so as to keep the same valid, and the second parties agree to join in any such notice of intention as may be required, including affidavit of work and labor performed.

9. Second parties, lessees, shall have the right or option to purchase the above described mining claims for a purchase price of Fifty Thousand Dollars ($50,000.00) during the term of this lease, and when said amount is paid, deeds showing good and merchantable title shall be delivered to second parties, or their administrators, executors or assigns.

10. It is understood and agreed that the parties to this agreement are to have a perpetual right to enter upon any or all of said property for the purpose of hunting, fishing, so long as it does not interfere with lessee's operation of the property, including the right to build, maintain and use cabins on said property. Each of the parties to have the right to build and maintain one cabin each for recreational purposes.

11. This agreement shall be binding upon the parties hereto, their heirs, executors and assigns.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals the day and year first above written.

John D. Reed (SEAL)

Goldie M. Reed (SEAL)

Parties of the first part.

Clarence Neilson (SEAL)

Lilly Wingenroth (SEAL)

Parties of the second part.

FOR AND IN CONSIDERATION of the sum of $1.00 and other valuable consideration, in hand paid, we do hereby assign this contract, with the exception of Paragraph 10, to Gold Leaf Mining Company.

Clarence Neilson

Lilly Wingenroth

Lessees.

this is J & Goldies signature on this seal John D. Reed Owner.

7. ESTIMATE OF COSTS.

(a). None

(b). Personal Services: (Labor)

SERVICE	COST/FOOT	X	TOTAL DRIFT	=	TOTAL COST	SUB-TOTAL
(1) Miners	$ 9.00		2100	=	$18,900.00	
(2) Mine Supervision	7.00		"	=	14,700.00	
(3) Eng. & Geological	1.00		"	=	2,100.00	
					$35,700.00	

(c). Operating Materials & Supplies

MATERIALS	DRIFT COST/FOOT	X	TOTAL DRIFT	=	TOTAL COST	SUB-TOTAL
(1) Powder (120 Cases) @ $41.80/100# Case	$ 2.40		2100	=	$ 5,040.00	+5016 23!
(2) Caps (125 Cases) @ $4.50/100	.32		"		672.00	
(3) Fuse 10-3000' Rolls @ $2.25/100 Ft. Roll	.36		"		756.00	
(4) Steel Rod (400 Rods) @ $14.60/Rod	2.92		"		5,840.00	
(5). Bits (1295) @ $3.25/Bit	2.00		"		4,200.00	
(6) Water Pipe & Fittings ($26.00 /100')	.26		"		546.00	
(7) Air Pipe & Fittings ($100.00/100')	1.00		"		2,100.00	
(8) Fuel & Lubrication (Various Grades)	2.15		"		4,715.00	
(9) Timber (Various Sizes)	.25		"		525.00	
(10) Assay Work ($3.50 each)	.50		"		1,050.00	
(11) Core Drilling (600 Feet)	1.40		"		2,400.00	
(12) Small tools & Equipment under $50.00	2.00		"		4,200.00	
(13) Misc. Expenses	2.00		"		4,200.00	
(14) Camp Costs	2.00		"		4,200.00	
					$40,444.00	

(d). Operating equipment ($50.00 or more) furnished by Gold Leaf Mining Co.

Unit #	Equipment Identification	Fair Market Price	Sub-Total
(1)	1 Compressor, 210 Jaeger Butane powered	$ 2000.00	
(2)	1 Compressor 365 Gardner-Denver	4000.00	
(3)	1 Butane Tank 1000 Gal. capacity	300.00	
(4)	2 Diesel Tanks 260 Gal. capacity	200.00	
(5)	1 Front End Loader Caterpillar (D 2, 1 yard capacity dipper)	2000.00	
(6)	1 Bulldozer, Allis Chalmers HD 5	5000.00	
(7)	2 Scoot Crete, 1½ ton capacity Duetz Diesel powered shuttlebuggies	3000.00	
(8)	1 JR 38 Jackhammer with telescopic leg	500.00	
(9)	1 Swede Jackhammer with standard leg	500.00	
(10)	1 Ingersall-Rand 38 Stopper	500.00	
(11)	1 Slusher, Joy 211 double-drum	500.00	
(12)	1 Diamond drill, Joy 7	750.00	
(13)	1 Welder, Lincoln 200 amp.	400.00	
(14)	1 Welder, Doxon acetylene	300.00	
(15)	3 Unite - Air Receiver Tanks	250.00	
(16)	1 Unit - 2KW Light Plant	200.00	
(17)	1 Unit - Oliver ½ Yard Front End Loader	2500.00	
(18)	1 Unit - Cleveland Jackhammer with leg	500.00	
(19)	1 Unit - 30 KW Light Plant	3000.00	
	Total	$ 26400.00	

$ 26,400.00 x 1/600 / 110 ft.drift/mo. = $ 4.00/ft. x 2100 ft. $ 8400.00

— 5 ft per mo of 22 days working hrs if set up

(e). Initial Rehabilitation & Repairs

(1)	Repair of D-2 Cat. Lifting Cylinder	400.00	
(2)	General Repairs to all equipment listed	600.00	
	$ .47/foot Total		$ 1000.00

(f). New Buildings, Fixtures & Installations

(1)	Powder House 7'x6'x6' Metal Fabrication	750.00	
(2)	Assembly of Quonset Hut for living quarters, repair shop and winter storage of equipment	1000.00	
	Total		$ 1750.00

(g). Miscellaneous

(1)	Repairs & Maintenance of equipment	$ 6.00/Ft.x2100 =	$12,600.00
(2)	Accounting & Bookkeeping	1.00/Ft.x " =	2,100.00
(3)	Workmen's Compensation	.47/Ft.x " =	987.00
(4)	Employee's Liability	.67/Ft.x " =	1,414.00
(5)	Vehicle expense		

Furnished by men at an average cost of .15¢ / mile

(1). 1952 International, 2½ Ton Dump Truck.
(2). 1954 Dodge Power Wagon.
(3). 1954, 4 Speed ½ Ton Pickup.
(4). 1959, 4 Wheel-Drive ½ Ton Pickup.

$ 4.41/Ft.x 2100 =$ 9,261.00 $ 17,101.00

Cost/foot $ 54.12 — ? Grand Total..... 113,656.00

PRELIMINARY REPORT

on the

BILK RUNNER GROUP
MOUNT WILSON MINING DISTRICT
SAN MIGUEL COUNTY
COLORADO

by

James A. Younger

SUMMARY

Three claims, the Bilk Runner #1; #2; and #3; have been staked along the strike of the Morning Star Vein and the Foot Wall Vein structures. Both of the veins are totally within the northeastern portion of the Mount Wilson stock. The stock is composed of granograbbro. The granogabbro does not appear to have any textural or mineralogical change that can be associated with the vein structures. The stock has two prominent sets of joints. It appears that the one set, which has a strike of S 70 W, is the oldest, strongest, and contains all of the known mineralization on the claims. Sulphide mineralization appears to have been preceeded by an alteration of the granograbbro adjacent to the joints. The end result of the alteration appears to be the total destruction of the feldspars and ferromagnesian minerals with the subsequent formation of unidentified clay minerals and limonite.

Structures within the veins indicate that the quartz-sulphide mineralization was introduced into open joint sets. The common minerals within the veins are: quartz, pyrite, galena, tetrahedrite, sphalerite, arsenopyrite, and siderite. All of the assays taken of the vein material show varying amounts of gold, but it could not be determined how the gold occurs within the vein.

Although no positive reserves remain on either the Morning Star Vein or the Foot Wall Vein, it appears very possible that additional exploration on either vein, but expecially the Morning Star Vein, could produce sizeable silver-lead reserves. An exploration program consisting of drifting and underground diamond drilling should effectively test the potential reserve yielding areas.

INTRODUCTION

The report is intended to relay all of the important facts about the geology of the area surrounding the Morning Star Vein, Mount Wilson Mining District, San Miguel County, Colorado. The mine area is approximately seven (7) miles southwest of Ilium, Colorado via unimproved dirt and gravel road. (See Map) Geologic data was gathered during several visits to the property. All geologic features on and adjacent to the claims of the group were mapped, and are found on the geology map which accompanies the report. Included with the report are: An index map showing the location of the property, a 200 scale map showing the claims and existing workings, a geology map of the group, and a longitudinal section of the Morning Star Vein.

GEOLOGY

The claim group is staked over a portion of the Mount Wilson stock, which is composed of granogabbro.[1]) A complete petrographic description of the granogabbro mentioned in the reference above lists the major minerals as being: sodic laboradorite, orthoclase, quartz, and augite. Many of the major minerals are reported to have been altered to other minerals, but the alteration is not too evident in the area of the claims. The northeast edge of the Mount Wilson Stock lies about 1,200 feet to the north of the claim group. The stock intrudes the Mancos Shale of Upper Cretaceous age at that location, and created a "baked" zone with the Mancos Shale. The "baked" zone extends for varying distances away from contact into the shale.

There are two (2) sets of prominent joints which occur within the stock. One set of joints strikes about S 70 W and dips steeply to the northwest. The second set has a strike of about N 50 W and usually has a vertical dip. The southwest striking set appears to be offset by the northwest trending set, and therefore is older. It appears that the oldest set contains the mineralization on the Bilk Runner Group. Several miles to the southwest of the Bilk Runner Group, a similar striking set of joints are mineralized in the Silver Pick Mine area. The second set of joints does not display any mineralization, but in areas adjacent to mineralization, an intense alteration is frequently associated with the younger set. There appears to have been minor random movement along some of the joints, resulting in slickensided surfaces throughout the mine area.

Most of the mining activity on the group has been conducted along the Morning Star Vein. The vein appears to follow one or more of the joints belonging to the older set. A very limited area of the Morning Star Vein is accessible for examination, but material from the various mine dumps indicates that the area examined on the 03 Level is typical of the entire Morning Star Vein. The vein has a strike of S 73 W and dips steeply to the northwest at 77°.

The vein, especially in portions that have been mined, is accompanied by an alteration of the adjoining granogabbro. The alteration occurs on both walls of the joints. The alteration appears to be a break-down of the feldspars and ferromagnesian minerals into various clay minerals and limonite. No attempt was made to determine the exact nature of the alteration because of the limited facilities available. The alteration appears to have preceeded the sulphide-quartz mineralization. The amount

1) Bush, A.L., Marsh, O.T., Taylor, R.B., 1960, Areal Geology of the Little Cone Quadrangle Colorado U. S. Geological Survey Bulletin 1082-G

of alteration associated with any particular joint varies from a paper thin layer up to a zone twelve (12) inches thick. It appears that the joints which have been mineralized usually have the greatest amount of alteration associated with them. Therefore, alteration could be used as a guide to mineralization during exploration.

The sulphide-quartz mineralization appears to have been introduced after the alteration into open spaced joints. Many portions of the vein display a crustification parallel to the edge of the vein. Locally the central portion of the vein contains vugs which are lined with quartz crystals. The quartz consequently has a comb structure.

The crustified portions of the vein give a good indication of the paragenetic sequence with the Morning Star Vein. A generalized paragenetic sequence appears to be: quartz, pyrite, arsenopyrite, galena, sphalerite, tetrahedrite, and siderite. Quartz persisted throughout the period of mineralization as is demonstrated by the quartz crystals growing into the vugs as well as being on the outer edge of the vein. Pyrite appears also to have been common throughout most of the period of mineralization, but stopped before the final introduction of quartz. Production records from the mine indicate that the ratio of silver to lead has been about 0.5 ounces of silver to 1 percent lead. It would appear that most of the silver is in solid solution within the galena, but a portion of it is no doubt found in the tetrahedrite. The records also report a high assay value for gold. No free gold was observed in the samples, and it could not be determined in what form, or with what minerals, the gold occurred.

The Foot Wall Vein is very poorly exposed on the outcrop approximately one hundred and fifty feet (150) south of the Morning Star Vein at the same elevation as the #3 Level. On the outcrop, it appears that the vein alteration and mineralogy are very similar to the Morning Star Vein. The vein does appear to have a higher percentage of sphalerite and arsenopyrite than the Morning Star Vein, but this may be a very local feature. The vein has a strike parallel to the Morning Star Vein, but dips nerely vertically.

Other veins may exist parallel to the Morning Star and Foot Wall Veins, but they do not outcrop.

PAST DEVELOPMENT AND PRODUCTION

The Morning Star Vein has been developed by three levels of unknown length. The longitudinal section of the vein shows the portions of the vein which presently are accessible. The size of the dumps for the three levels indicates that development on each level was probably in excess of five hundred (500) feet per level. The total tonnage shipped from the mine is unknown, but assays for the ore shipped early in the century are as follows:

Year	%Lead	oz. Ag	oz. Au
1907	50.0	30.0	4.98
1908	60.0	30.0	5.00
1909	42.4	23.0	6.58
Avg.	51.1	23.77	5.522
Total	162.52	29.89	274.45

None of the old workings would be available for mining without extensive rehabilitation.

Av Val

RESERVES

No positive or indicated reserves are presently known on the property. There are several areas which potentially could yield positive reserves and will be termed areas of inferred reserves. Mr. H. E. McKinstry give the following definition of Inferred ore:

> "Inferred ore is ore for which quantitative estimates are based largely on broad knowledge of the geologic character of the deposit andfor which there are few, if any, samples ore measurements. The estimates are based on an assumed continuity or repetition for which there is geologic evidence; this evidence may include comparison with deposits of similar type."(2)

These areas are: 1) The downward extension of the Morning Star Vein; 2) The Foot Wall Vein; and 3) The Morning Star Vein above the #3 Level southwest of the old workings. The first mentioned area has the greatest potential for developing a block of positive reserves. It is definitely known that production did come from above the #3 level on the Morning Star Vein, and nothing was observed on that level which would indicate that the silver-lead mineralization was restricted to the area above the #3 level. Almost nothing is known of the last two areas mentioned, and they could not be evaluated without further exploration.

It is very possible that some of the material used for "gob" within the old stopes could be milled to yield a silver-lead concentrate. It would be necessary to rehabilitate the old drifts and conduct a sample program in the areas to determine whether this was economically feasible.

RECOMMENDATIONS

I would recommend that if an exploration program is initiated on the property to establish positive reserves of silver-lead ore, the following

2) McKinstry, H.E. Mining Geology

priority be given to such a program:

1. Test the downward extension of the Morning Star Vein on the #4 level.
2. Where possible, explore the Foot Wall Vein by drifting and underground diamond drilling in conjunction with the exploration of the Morning Star Vein.
3. Test the hanging wall of the Morning Star Vein to determine whether any veins exist in that block of ground.
4. Rehabilitate the #3 Level tunnel to prepare for possible exploration of the Morning Star Vein to the southwest of the old workings. If reserves were located on the #4 level of the Morning Star Vein, the #3 Level would assist mining on the new level by improving ventilation and mine access.

A map is included with the report which outlines a basic exploration program which incorporates recommendations #1, #2, and #3.

LONGITUDINAL SECTION
OF THE
MORNING STAR VEIN
1" = 100'

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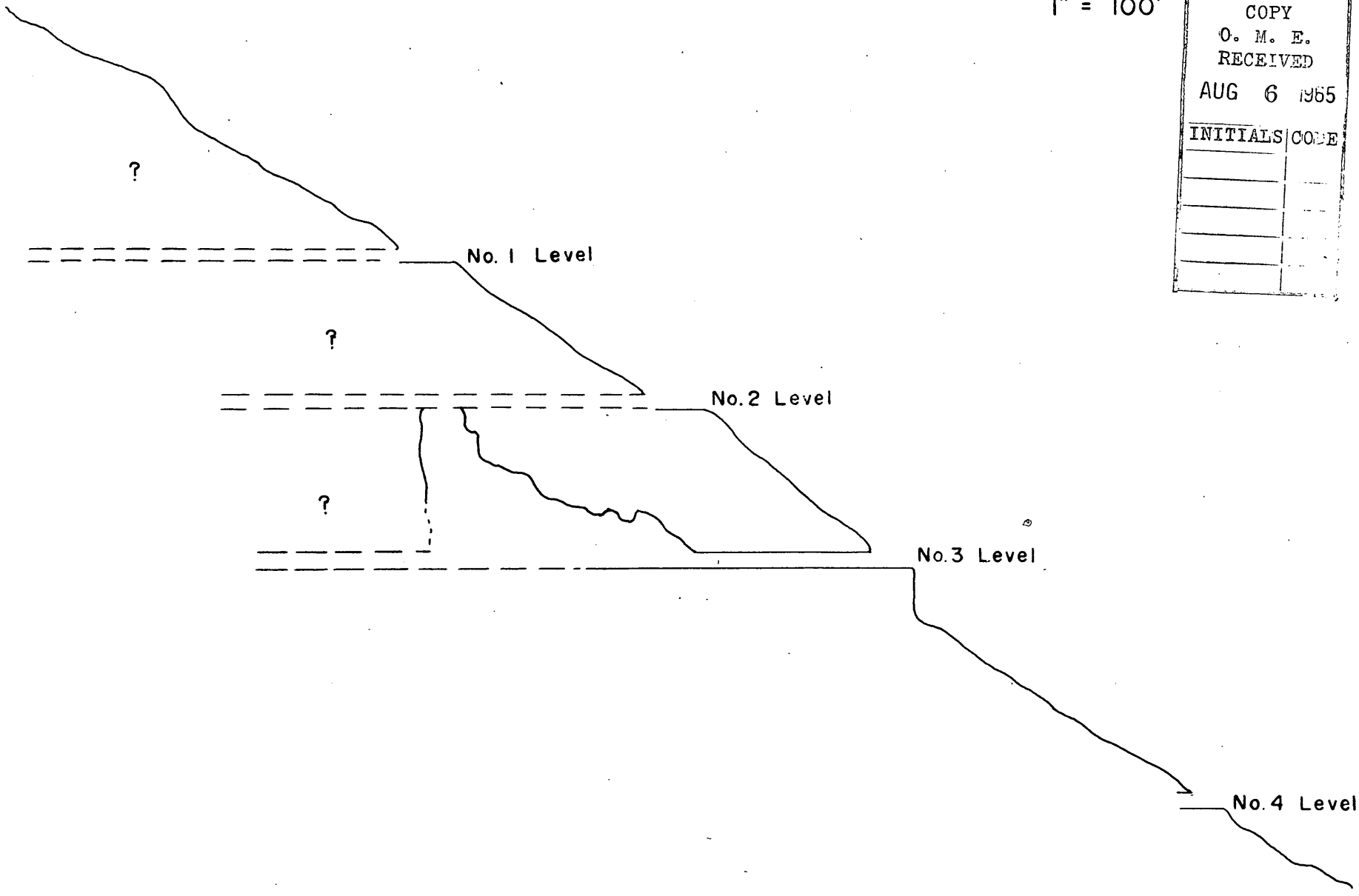

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November 1961
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11/14/66	Kirkbemer	120
11	Johnson	110
11/15	Kielgaard	220
11/15	Howes	
11/15	Jones	
		110
		220

NOV 15 1966

Gold Leaf Mining Company
540 White Avenue
Grand Junction, Colorado

Re: OME-6487 (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Gentlemen:

Careful study of your application for financial assistance in exploring the subject property and of other information available to us indicates that the probability of disclosing significant ore reserves on the property is not sufficiently promising to justify Government participation therein. Accordingly, we must inform you that your application for exploration assistance is denied.

We regret the necessity of taking this action which, however, is taken without prejudice to the property. Should you perform additional work on the property in the future which discloses evidence that could materially change this opinion, we shall be pleased to consider a new application at that time.

We wish to thank you for your interest in the minerals exploration program, and please accept our apology for this delay in reaching a decision on your proposed work.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Region III
OME Reading File
Mr. Peterson

EPeterson/gla 11-14-66
130
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23263

MME Form 7
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Date	Surname	Code
11/14	Peterson	120
11/14/66	Kiobamo	120
	Johnson	110
		220

November 14, 1966

Memorandum

To: File

From: Edward Peterson, Office of Minerals Exploration

Subject: OME-6487 (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Justification for Denial

Although reported past production and sampling of vein material has indicated high-grade silver occurrences in some areas of the subject property, available geologic information suggests that there is little possibility of discovering any significant ore reserves with the proposed work.

Possible geologic evidence supporting an exploration project may exist in old partially caved mine workings; however, no effort had been made by the Applicant to reopen any of these areas to enable the OME representative to examine them.

In the limited areas that were examined the veins are narrow and wall rocks are only slightly altered or mineralized. This indicates that any reserves found would be confined to the veins and thus be limited to minor quantities.

Also, recent sampling of the vein material indicates that the major constituent of the ore is lead which is presently not eligible for Government participation under the OME program. Much of the proposed work appears to be mine development rather than exploration.

I concur with the field examiner and recommend that the application for assistance be denied without prejudice to the property.

Edward Peterson

Edward Peterson

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
Mr. Peterson

EPeterson/gla 11-14-66

23263

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225
Office of Minerals Exploration

November 7, 1966

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O. M. E.
RECEIVED
NOV 7 1966

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: OME-6487 (Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Cy to 130

Transmitted herewith is an original and one copy of a report of examination on the subject property in which a recommendation for denial and supporting data is included.

J. William Hasler
J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: OME6487
Hasler chron
OME chron

UNITED STATES

DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, SECRETARY

U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION III

OME-Docket - 6487 (Silver-Gold)

GOLD LEAF MINING COMPANY

SAN MIGUEL COUNTY

COLORADO

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By

J. William Hasler

Geologist

October 1966

FIELD EXAM RPT.

OME-6487 (Gold-Silver)

Gold Leaf Mining Company

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Past development and production	2
Geology and ore deposits	4
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Veins in upper Bilk Basin	8
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Morning Star mine	9
Reserves	14
Recommendations (by consulting geologist)	15
Recommendations and conclusions	16

TABLE

Table. Production from Morning Star Mine, 1904-1914 ---------- 5

FIGURES

Figure 1. Longitudinal Section of the Morning Star Vein.

Figure 30. From USGS Data

Figure 2. Applicant's Geologic Map af the Morning Star Vein, No. 3 level.

Figure 3. Applicant's Geologic map of the Footwall Vein, Morning Star Mine Area.

Figure 4. Plan Map of Proposed Exploration of the No. 4 Level of the Morning Star and Footwall vein.

Report of Examination of the Morning Star Mine

GOLD LEAF MINING COMPANY

San Miguel County, Colorado

OME-6487

Introduction and summary

The Gold Leaf Mining Company of 540 White Avenue, Grand Junction, Colorado applied to the Office of Minerals Exploration for assistance in minerals exploration on the Bilk Runner claims Nos. 1, 2 and 3 located in Section No. 34 and 35 of T. 42 N., R. 10 W., New Mexico Prime Meridian in San Miguel County, Colorado. The Bilk Runner Claims were formerly known as the Morning Star claims. The applicant applied for a loan of $200,000.00 to explore the Morning Star vein which had some production in the early 1900's, and produced a reported 667 tons of ore that averaged 0.654 oz. Au, 17.9 oz. Ag, and 34.97% Pb.

The application was referred to the field and an examination was made June 17, 1966 by J. W. Hasler accompanied by Messrs. Sorensen, Paruch, Nielson Klingensmith, officials of the applicant company, and Mr. James Younger, their consultant geologist. A heavy work load has prevented the examining geologist from completing the report.

It is concluded that the possibility of discovering significant quantities of gold and silver on the Morning Star vein are not good, as the major constituent of the ore is lead, although silver and gold do occur in moderate amounts. The vein is generally narrow in width and the proposed program is largely one of development. The area is difficult of access especially if a diamond drilling program were to be suggested. If a program were recommended it would be on a much reduced scale than that proposed by the applicant. It is proposed that the application be denied without prejudice.

The property

The Bilk Runner claims No. 1, 2 and 3 are located at an elevation of about 11,000 ± feet above sea level in the Mt. Wilson quadrangles in sections No. 34 and 35 of T. 42 N., R. 10 W. of the New Mexico Prime Meridian, San Miguel County, Colorado. The Bilk Runner claims are recorded in Book 312, Pages 50, 51 and 52 San Miguel County, Colorado. The claims are held by the applicant company in a lease with option to purchase.

The property may be reached by pickup truck, and/or 4-wheel drive vehicles by traveling from Ridgeway, Colorado to Ilium, thence from Ilium over an unimproved dirt and gravel road for 7 miles to the Morning Star Mine.

PAST DEVELOPMENT AND PRODUCTION

The Morning Star Vein has been developed by three levels of unknown length. The longitudinal section of the vein shows the portions of the vein which presently are accessible. The size of the dumps for the three levels indicates that development on each level was probably in excess of five hundred (500) feet per level. The total tonnage shipped from the mine is unknown, but assays for the ore shipped early in the century are as follows: 1/ (Figure 1)

Year	Lead	oz. Ag	oz. Au
1907	50.0	30.0	4.98
1908	60.0	30.0	5.00
1909	42.4	23.0	6.58

Production records compiled by the U. S. Bureau of Mines as having come from the Morning Star Mine from 1904-1914 are shown in the following table.

1/ Applicant's figures.

Production from Morning Star mine, 1904-1914

[Compiled from records of the Statistics Branch, Economic Division, U. S. Bureau of Mines]

Year	Tons ore	Ounces of Gold	Ounces of silver	Copper (pounds)	Lead (pounds)	Total value
1904	200	400.00	6,000	----	23,206	$12,718
1905	75	14.51	3,000	----	47,872	4,362
1906	none					
1907	160	7.98	480	-----	160,000	11,813
1908	120	6.00	303	----	144,000	8,080
1909	12	.79	277	----	10,194	
1910	none					
1911	none					
1912	19	1.84	393	225	16,080	1,041
1913	360	1.80	942	268	34,069	
1914	45	3.88	894	465	31,209	
Total	667	436.00	12,289	958	466,630	

2/ Data obtained from USGS work material for publication on the Mt. Wilson Quadrangles, Colorado by A. L. Bush, C. Bromfield, U. S. Geological Survey.

Geology and Ore Deposits

(From USGS work material on the Mt. Wilson quadrangles by Calvin Bromfield, Al Bush, etc.)

Base and precious metals and coal have been produced commercially in the Mount Wilson quadrangle. The base and precious metal ores have come entirely from veins in the northern half of the quadrangle; the coal deposits are in the Dakota Sandstone and have been mined along the Dolores River in the southwest corner of the quadrangle.

Uraniferous vanadium deposits in the Entrada Sandstone, so common just to the north and northwest of the area (Bush and others, 1959), are not present where the Entrada crops out along the Dolores River but drilling has shown vanadium to be present in subsurface to the east of the area of outcrop.

Vein deposits

Gold, silver, lead, copper, and some zinc have been produced from the vein deposits but the principal values of ore shipments have been in silver and gold. The value of past production in the quadrangle is probably around $3,000,000.

The productive veins are spatially and possibly genetically related to the several discordant intrusive masses that extend westerly in a belt across the northern half of the quadrangle. Within this intrusive belt the veins seem to be restricted to an east-west zone a mile or two in width that crosses the quadrangle from the Ames-Matterhorn area on the east to the Silver Pick-Navajo Basin area on the west. This zone closely approximates a hypothetical axis of intrusion which can be drawn joining the centers of the major igneous mass in the intrusive belt, and the zone itself may reflect the line of apex of concealed intrusive masses.

The bulk of the production from the mineralized zone has come from fissure-veins within the igneous rocks. The rarity of veins in the sedimentary rocks between the outcropping intrusive bodies is probably due to the fact that these rocks are mainly Mancos Shale, which is too incompetent to provide open fissures. In only one mine has production come from the Mancos Shale, but in this case the vein cuts the Mancos immediately adjacent to an intrusive body, and the formation is metamorphosed to a massive hornfels.

Fissures in the area strike westerly, northeasterly, and northwesterly, but most of the veins that have been mined or prospected are along fissures of westerly trend and steep dip. Fissures of this group strike N. 70° E. to N. 70° W. and generally dip greater than 70° to the north or south. This direction of fracturing is conspicuous in most areas of outcrop of the major intrusive masses, both in the Ames-Matterhorn area and in the Wilson Peak stock. It is particularly conspicuous in most areas of outcrop of the major intrusive masses, both in the Ames-Matterhorn area and in the Wilson Peak stock. It is particularly conspicuous in the Wilson Peak stock from upper Bilk Basin west into Navajo Basin where the jointing or fissuring is so closely spaced as to suggest an immense sheeting of the igneous rock.

Less prominent is a northeasterly system of joints or fissures. This trend is particularly well developed in the Wilson Peak stock along the ridge separating Navajo and Silver Pick Basins. The fissures dip steeply, generally to the southeast. Several veins of this trend have been prospected, but substantial production has come only from the Silver Pick vein. Steep dipping northwest-trending joints or fissures, although prominent in the stock have not been found to contain any commercial veins.

Displacements along the mineralized fissures are generally impossible to judge in the massive intrusive rocks. In those cases where it was possible to estimate movement it is generally only a few feet.

The width of the workable veins ranges from about 3 inches to about 5 feet. More commonly the paystreak averages less than 2 feet in width, but the presence of several veinlets in a fissure zone may increase the width of commerical ore.

Two general types of ores can be distinguished in the area--gold ores and silver-lead ores. The two ore types are found in both westerly-trending and northeast-trending fissures, but the known gold ores are restricted to the area near the head of Navajo and Silver Pick Basins and just west of the quadrangle boundary in the adjacent Elk Creek Basin. The only substantial producer of gold ore was the Silver Pick mine.

The gold ores are composed predominantly of pyrite and gangue with variable but subordinate amounts of chalcopyrite and arsenopyrite; galena and sphalerite are locally present but inconspicuous. The gangue is white crystalline quartz with some carbonate minerals and in places barite. Gold is reported to be very fine grained and seldom visible to the eye. Higher gold values are generally associated with higher amounts of chalcopyrite and arsenopyrite in the veins. Gold in places occurred in rich pockets or streaks which assayed as much as $150 a ton, but $25 to $50 gold per ton over the width of the narrow paystreaks probably was representative of more ore mined.

The gold ores have been explored through a vertical range of somewhat over 1,000 feet, extending from an altitude of about 12,600 feet to about 13,700 feet. In this vertical distance there was evidently no noteworthy change in character of the ores.

The silver-lead ore deposits are more widely distributed than the gold ore deposits, and include all the known veins between the eastern boundary of the quadrangle and Bilk Creek. Within the quadrangle the principal producers of this type are the San Bernardo and Butterfly mines.

In the silver-lead ores the predominant primary sulfide minerals are galena, sphalerite, and pyrite; although generally subordinate, chalcopyrite and tenantite-tetrahedrite are common and in places are prominent. The common gangue minerals are quartz, calcite, and brown carbonate minerals; lesser amounts of barite and rhodochrosite also occur. The silver-lead ores generally contain less than 0.10 ounces of gold per ton. Silver may assay 40 or more ounces per ton locally, but available production figures from records of the Geological Survey and from Minerals Yearbooks of the Bureau of Mines suggest that the mine-run ore averaged less than 10 ounces of silver per ton.

The silver-lead ores of the area have been explored from an altitude of about 9,600 feet to at least 12,500 feet, a range of nearly 3,000 feet. The lower limit represents that imposed by the bottom of a major valley (with attendant drainage problems) rather than a change in character.

Veins in upper Bilk Basin

A number of veins are found in the upper part of Bilk Basin near the Little Tarn Lake at an altitude of 12,063 feet and west toward the divide between Bilk and Navajo Basins. Several of these have been prospected in a small way by open cuts or short adits. One prospect north of the lake at an altitude of about 12,230 feet was perhaps 200 feet of workings.

The country rock in this area is microgranogabbro, granodiorite, and porphyritic adamellite of the Wilson Peak stock. The igneous rocks are cut by prominent steeply dipping west-trending joints or fissures which in places are so closely spaced as to form sheeted zones. The fissures are in part occupied by veinlets or stringers of sulfides in a quartz and carbonate gangue. The veins are commonly 1 to 3 inches in width, though the vein in the workings north of the tarn lake approaches 2 feet in width. The sulfides are chiefly sphalerite and pyrite with lesser galena in a quartz and carbonate gangue. Purington in his unpublished field notes for 1896 says that hand-picked ore from some of these veins ran about $40 in gold to the ton. There is no record of production, but the amount of ore shipped was obviously quite small, as evidence of only a small amount of "gophering" was noted.

Prominent steep dipping fissures of N. 30° to 45° W. trend in this area are barren.

Mount Wilson mining district

Morning Star mine

The Morning Star mine is on the west side of Bilk Creek, almost due west of Sunshine Mountain (fig. 3). The workings consist of three adits; the lowest is at an altitude of about 10,230 feet, the second is 125 feet higher, and the highest is about 110 feet above the second level. In 1960 the lower level was caved 400 feet from the portal and the upper levels were caved at their portals.

It is not known when the Morning Star vein was located, but presumably sometime in the eighties. The principal production was made from 1904 through 1914 and is given in table 1. There is no record of production since that time. (Figure 30, from USGS data).

The Morning Star vein occupies a fissure which ranges in strike from N. 75° W. to east-west, averaging about N. 85° W., and dips 80° N. to nearly vertical. The country rock of the vein is granodiorite porphyry of the Ames-Black Face type and microgranogabbro. The portal of the lower level is in granodiorite porphyry, but the adit apparently crosses into microgranogabbro about 175 feet from the portal. The contact between microgranogabbro and granodiorite porphyry at the surface passes near the portal of the second level. Where observed, the vein is a maximum of 5 inches wide, but where stoped (now timbered) it apparently was somewhat wider. The ore, as judged from material seen on the dump and in place on the lower level, is composed of galena, pyrite, sphalerite, and minor amounts of chalcopyrite in a gangue of quartz, calcite, and perhaps carbonates of magnesium, iron, and manganese. (Figure 30, from USGS data).

The claim group is staked over a portion of the Mount Wilson stock, which is composed of granogabbro.[1]) A complete petrographic description of the granogabbro mentioned in the reference above lists the major minerals as being: sodic laboradorite, orthoclase, quartz, and augite. Many of the major minerals are reported to have been altered to other minerals, but the alteration is not too evident in the area of the claims. The northeast edge of the Mount Wilson Stock lies about 1,200 feet to the north of the claim group. The stock intrudes the Mancos Shale of Upper Cretaceous age at that location, and created a "baked" zone with the Mancos Shale. The "baked" zone extends for varying distances away from contact into the shale.

There are two (2) sets of prominent joints which occur within the stock. One set of joints strikes about S. 70 W. and dips steeply to the northwest. The second set has a strike of about N. 50 W., and usually has a vertical dip. The southwest striking set appears to be offset by the northwest trending set, and therefore is older. It appears that the oldest set contains the mineralization on the Bilk Runner Group. Several miles to the southwest of the Bilk Runner Group, a similar striking set of joints are mineralized in the Silver Pick Mine area. The second set of joints does not display any mineralization, but in areas adjacent to mineralization, an intense alteration is frequently associated with the younger set. There appears to have been minor random movement along some of the joints, resulting in slickensided surfaces throughout the mine area.

Most of the mining activity on the group has been conducted along the Morning Star Vein. The vein appears to follow one or more of the joints belonging to the older set. A very limited area of the Morning Star Vein is accessible for examination, but material from the various mine dumps indicates that the area examined on the No. 3 level is typical of the entire Morning Star Vein. The vein has a strike of S. 73 W., and dips steeply to the northwest at 77°. (Figure 2)

The vein, especially in portions that have been mined, is accompanied by an alteration of the adjoining granogabbro. The alteration occurs on both walls of the joints. The alteration appears to be a break-down of the feldspars and ferromagnesiam minerals into various clay minerals and limonite. No attempt was made to determine the exact nature of the alteration because of the limited facilities available. The alteration appears to have preceeded the sulphide-quartz mineralization. The amount of alteration

1) Bush, A. L., Marsh, O. T., Taylor, R. B., 1960, Areal Geology of the Little Cone Quadrangle Colorado: U. S. Geological Survey Bulletin 1082-G.

associated with any particular joint varies from a paper thin layer up to a zone twelve (12) inches thick. It appears that the joints which have been mineralized usually have the greatest amount of alteration associated with them. Therefore, alteration could be used as a guide to mineralization during exploration.

The sulphide-quartz mineralization appears to have been introduced after the alteration into open spaced joints. Many portions of the vein display a crustification parallel to the edge of the vein. Locally the central portion of the vein contains vugs which are lined with quartz crystals. The quartz consequently has a comb structure.

The crustified portions of the vein give a good indication of the paragenetic sequence with the Morning Star Vein. A generalized paragenetic sequence appears to be: quartz, pyrite, arsenopyrite, galena, sphalerite, tetrahedrite, and siderite. Quartz persisted throughout the period of mineralization as is demonstrated by the quartz crystals growing into the vugs as well as being on the outer edge of the vein. Pyrite appears also to have been common throughout most of the period of mineralization, but stopped before the final introduction of quartz. Production records from the mine indicate that the ratio of silver to lead has been about 0.5 ounces of silver to 1 percent lead. It would appear that most of the silver is in solid solution within the galena, but a portion of it is no doubt found in the tetrahedrite. The records also report a high assay value for gold. No free gold was observed in the samples, and it could not be determined in what form, or with what minerals, the gold occurred.

The Foot Wall Vein is very poorly exposed on the outcrop approximately one hundred and fifty feet (150) south of the Morning Star Vein at the same elevation as the No. 3 level. On the outcrop, it appears that the vein alteration and mineralogy are very similar to the Morning Star Vein. The vein does appear to have a higher percentage of sphalerite and arsenopyrite than the Morning Star Vein, but this may be a very local feature. The vein has a strike parallel to the Morning Star Vein, but dips nearly vertically. (Figure 3).

Other veins may exist parallel to the Morning Star and Foot Wall Veins, but they do not outcrop.

RESERVES

No positive or indicated reserves are presently known on the property. There are several areas which potentially could yield positive reserves and will be termed areas of inferred reserves.

These areas are: 1) The downward extension of the Morning Star Vein; 2) The Foot Wall Vein; and 3) The Morning Star Vein above the No. 3 level southwest of the old workings. The first mentioned area has the greatest potential for developing a block of positive reserves. It is definitely known that production did come from above the No. 3 level on the Morning Star Vein, and nothing was observed on that level which would indicate that the silver-lead mineralization was restricted to the area above the No. 3 level. Almost nothing is known of the last two areas mentioned, and they could not be evaluated without further exploration.

It is very possible that some of the material used for "gob" within the old stopes could be milled to yield a silver-lead concentrate. It would be necessary to rehabilitate the old drifts and conduct a sample program in the areas to determine whether this was economically feasible.

RECOMMENDATIONS (by consulting geologist)

I would recommend that if an exploration program is initiated on the property to establish positive reserves of silver-lead ore, the following priority be given to such a program:

1. Test the downward extension of the Morning Star Vein on the No. 4 level.
2. Where possible, explore the Foot Wall Vein by drifting and underground diamond drilling in conjunction with the exploration of the Morning Star Vein.
3. Test the hanging wall of the Morning Star Vein to determine whether any veins exist in that block of ground.
4. Rehabilitate the No. 3 level tunnel to prepare for possible exploration of the Morning Star Vein to the southwest of the old workings. If reserves were located on the No. 4 level of the Morning Star Vein, the No. 3 level would assist mining on the new level by improving ventilation and mine access.

A map is included with the report which outlines a basic exploration program which incorporates recommendations No. 1, No. 2, and No. 3. (Figure 4).

Recommendations and Conclusions

The Morning Star mine has had some early day production of apparently very good grade ore as evidenced in the reports of shipments, however, at the time of the field examination no further work had been done in an attempt to reopen the old workings to ascertain the extent of mineralization. The consulting geologist mapped only 180' of drift on the third level tunnel in 1965. The balance of the tunnel was caved. Mr. Bromfield, USGS, some years prior to 1965 mapped in excess of 350 feet of workings most of which was stoped or cribbed.

Work done to date by the applicant was done on a footwall vein that lies 150 feet south of the Morning vein from about the fourth level of the Morning Star Mine. The vein strikes nearly the same as the Morning Star Vein but appears to have a higher percentage of sphalerite and arsenopyrite than the Morning Star vein. Even though reported production and subsequent sampling of the vein material indicates some high grade silver and lead it is felt that the proposed exploration is largely mine development rather than exploration. Production from other mines in the area have been sporadic and largely nonprofitable and the sampling shows the values to be largely in lead which is presently not eligible for government participation under the OME program. The chances of finding even moderate reserves of silver ore are not too good. The mine area is at an elevation of 10,230 feet above sea level and production could be maintained for only a short period during the year. The veins are generally narrow and the wall rocks are not excessively altered or mineralized, which would indicate that the veins would have to remain at a rather high grade

in order to support drifts 7' x 7' as indicated by the applicant. There is no apparent indication why the mining operations ceased. Most of the produced high grade ore may have been mined selectively and had been hand-cobbed. If the vein was faulted or played out along strike it is not now known, as the workings are no longer accessible. It may have been that the reduction in the price of gold and silver caused cessation of the operation.

The neighboring Silver Peak property which operated as late as the 1960's obviously was not a profitable operation and this property had the largest record of production of any in the area, consequently the chances of finding new and undiscovered reserves of silver and lead are not too good without considerable development work. It is therefore recommended that the application be denied without prejudice.

DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
DOCKET-6487

LONGITUDINAL SECTION
OF THE
MORNING STAR VEIN
1" = 100'
(From USGS data)

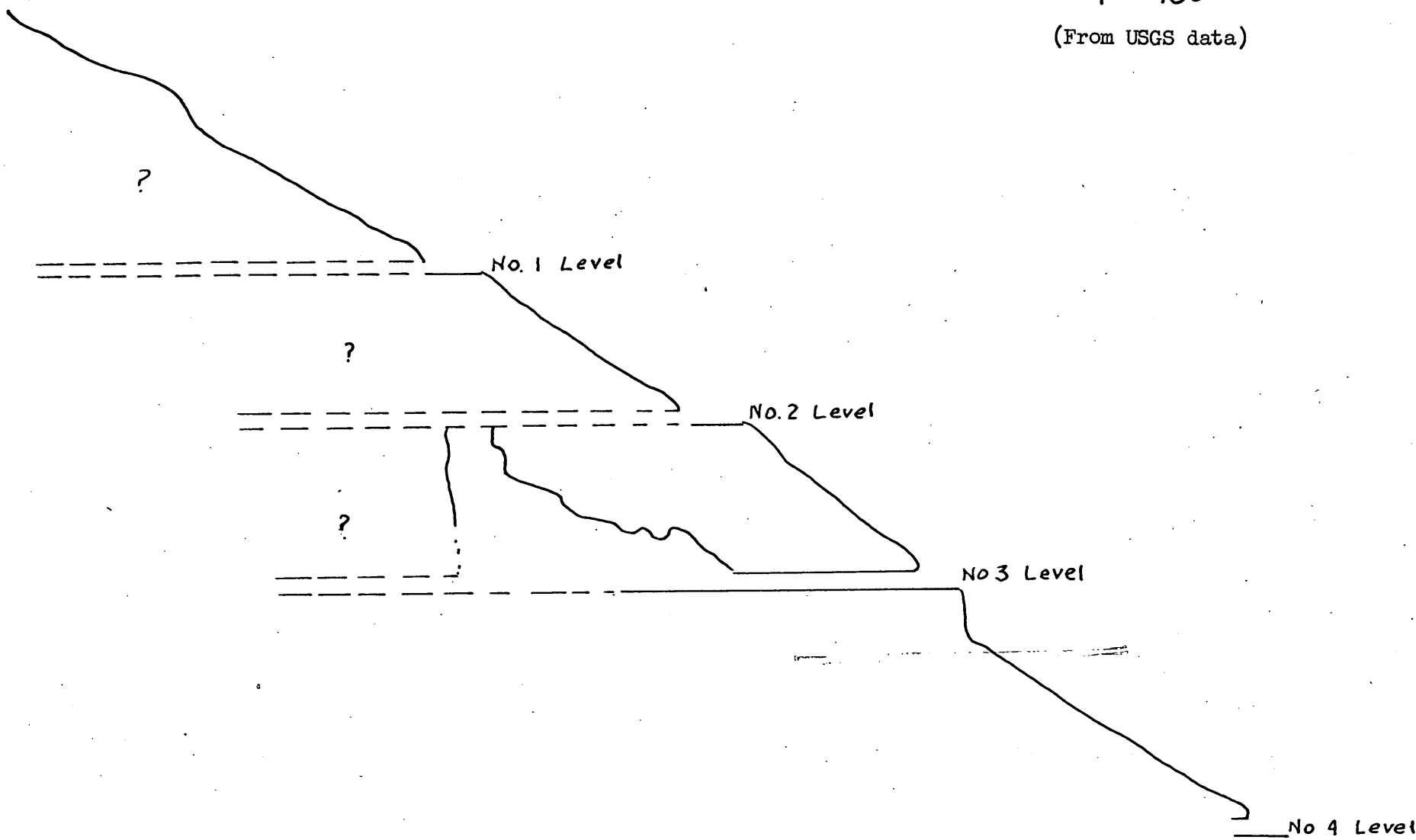

Figure 1

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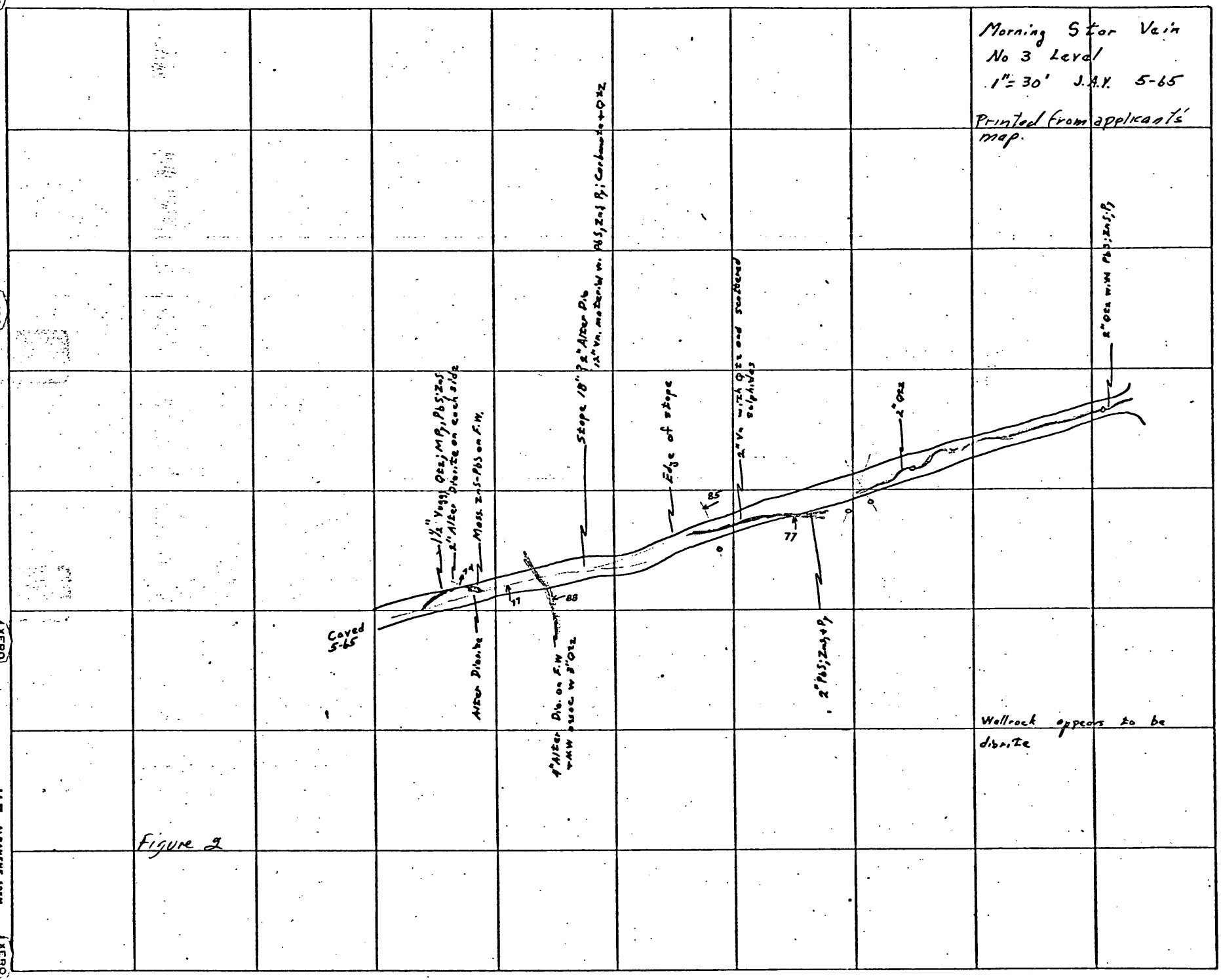
Morning Star Vein
No 3 Level
1" = 30' J.A.Y. 5-65
Printed from applicant's map.
2" Qtz w/ sm Pb S; Zn S; Py
2" Qtz
2" Vn. with Qtz and sericitized sulphides
Edge of stope
85
77
Stope 18" 2" Altered Dio
2" Vn. material w. Pb S; Zn S; Py; Carbonate + Qtz
88
77
4" Altered Dio. on F.W. + M.W. assoc. w 2" Qtz
2" Pb S; Zn S + Py
Altered Diorite
Mass. Zn S - Pb S on F.W.
1½" Vuggy Qtz; M Py, Pb S, Zn S
2" Altered Diorite on each side
Caved 5-65
Wallrock appears to be diorite

Figure 2

ORIGINAL
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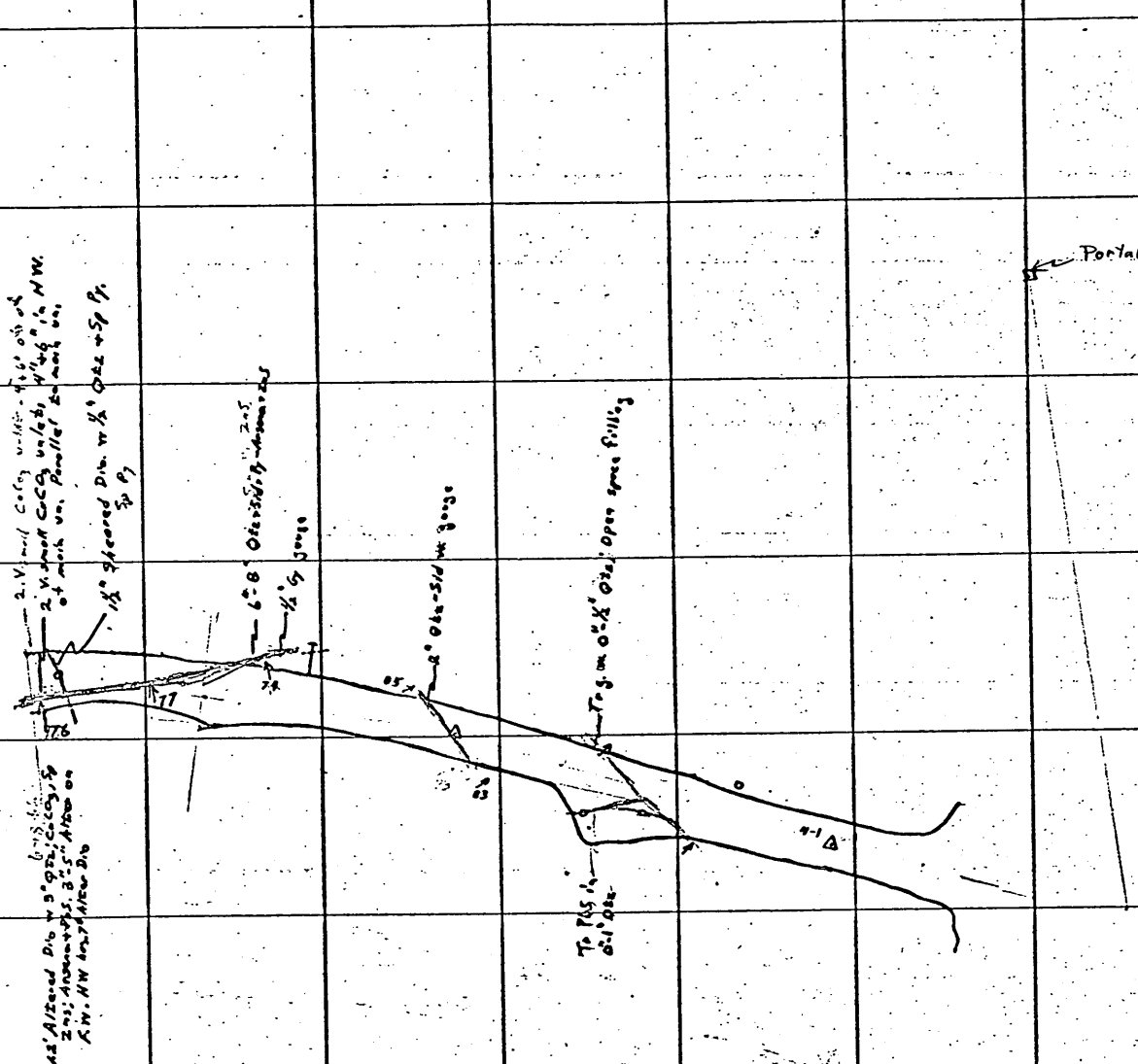
REFERENCE



Footwall Vein
Morning Star Mine
No. 4 Level
1" = 30' JAJ 9-65

From applicant's map

Figure-3

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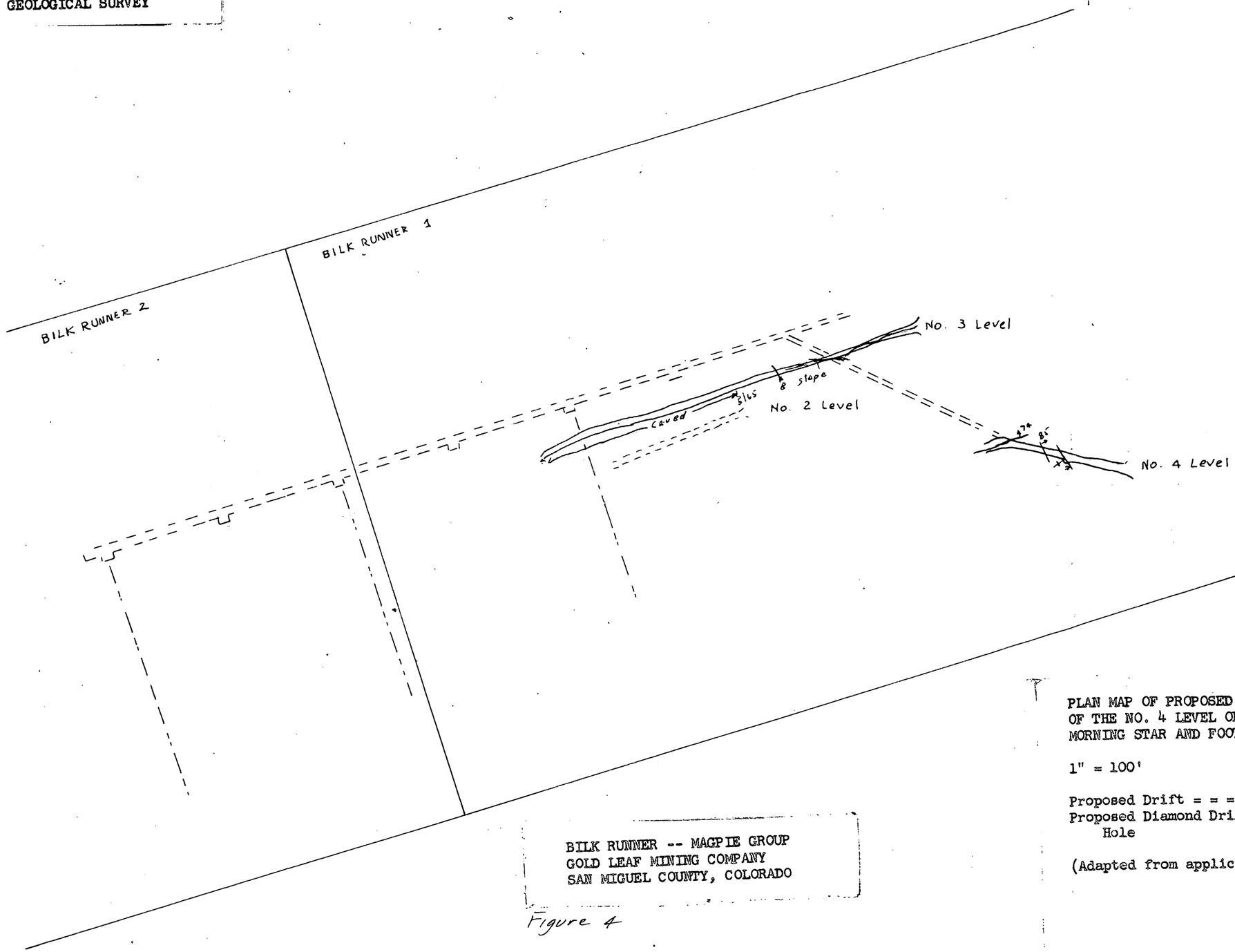
DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
DOCKET 6487



PLAN MAP OF PROPOSED EXPLORATION
OF THE NO. 4 LEVEL OF THE
MORNING STAR AND FOOT WALL VEINS

1" = 100'

Proposed Drift = = = =
Proposed Diamond Drill _ _ _ _ _ _
Hole

(Adapted from applicant's map)

BILK RUNNER -- MAGPIE GROUP
GOLD LEAF MINING COMPANY
SAN MIGUEL COUNTY, COLORADO

Figure 4

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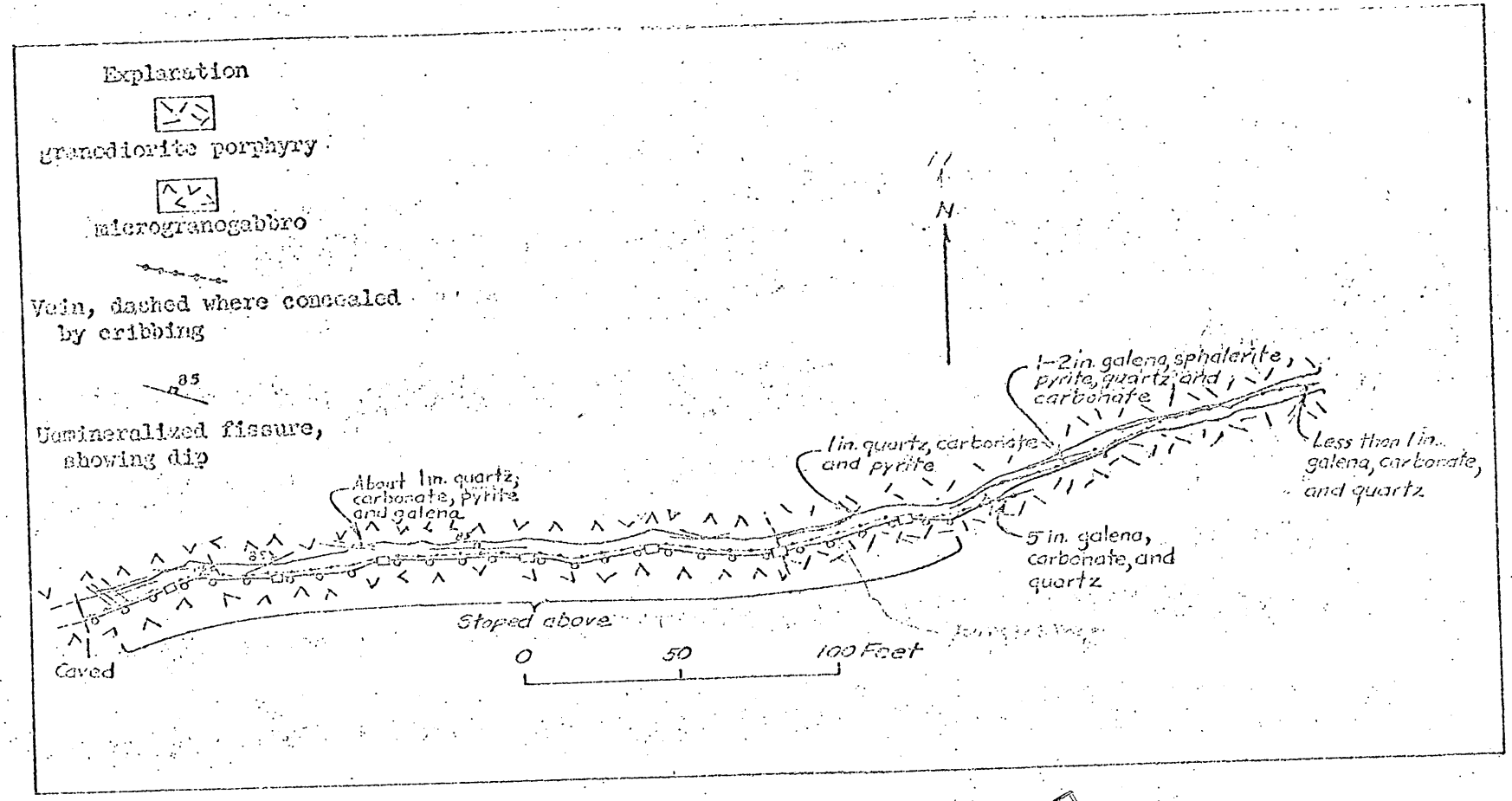

Figure 30.--Plan of the third or haulage level of the Morning Star mine.

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U. S. Geological Survey - Denver Federal Center
Building 25 - Room 2284
Denver, Colorado 80225

June 27, 1966

Mr. James Younger
P. O. Box 36
Uravan, Colorado 81436

Re: OME-6487 Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Dear Mr. Younger:

Thank you for sending the copies of your field notes as well as the survey plat on the Almeda, Magpie and Sunlight Claims.

I should like also to obtain copies of your notes regarding the increase on prices, footage, etc. that were submitted somewhere between the time of your submittal to the subject applicant and their submitting of data to Washington as well as your correspondence to them inquiring as to why the increase in costs. I merely want the latter data to complete my files.

Could you provide me with a plan map on about 1" = 100' scale showing the present position of No. 4 tunnel with respect to the No. 3 tunnel and workings, and show on it the proposed crosscut from the new No. 4 workings to its intersection with the vein below, just off the end or supposed end of the stoped area, then show a proposed drift for a total of 800 feet along the Morning Star vein. Then include three of the diamond drill holes at 200 and 400 and 600 foot intervals to test the probable extension of the footwall vein.

Your cost figures itemized under Stage I and II do not appear out of line, however, there may be some question in Washington's thinking regarding a drift as large as 7' x 7', the usual size drift is 5' x 7', for exploratory work, however, if the trackless method you propose is just as suitable as the 7' x 7' size drift might be justified.

Mr. Paruch and Mr. Sorenson were discussing the possibility of obtaining another contractor to do the work. If this is forthcoming, would they use a more conventional method of mining, that is, 5' x 7' drifts, with tracks, etc, etc. Any suggestions you might offer will be greatly appreciated.

I thoroughly enjoyed my trip to the Morning Star vein and especially appreciated your presence as well as a knowledgable review of the work accomplished to date, and your appraisal thereof. It was good talking over Bunker Hill days even though our times spent there were quite some distance apart.

I have had some of the boys take a look at the elongated mineral which you think is arsenopyrite and some feel it is as good a guess as any, and others won't confirm it for certain, consequently I'm getting some further work done on it and will let you know the outcome later. One guess was it is one of the Bismuth minerals.

Sincerely yours,

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME
OME chron
Hasler chron
OME-6487

MME Form 7
(2/63)

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Date	Surname	Code
11/19	[illegible]	110
	[illegible]	620
11/22	[illegible]	220
		120 M

Memorandum

To: OME Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: Re: OME-6487 (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

A copy of the applicant's letter of November 3, 1965, and enclosures, submitted as a revision of its original application for exploration assistance are enclosed. The total cost of the proposed work still appears to be high with respect to the potential of the property based upon the extent of previous work and past production records.

Although the application has not furnished all the information requested in our letter of August 18, 1965, we are referring the application to you for review and a field examination, if deemed advisable, and a report thereon with recommendations.

The results of the three samples shown on the enclosed claim map show good silver assays but high lead content. These results do not confirm the high gold content of the past production reported in the "Preliminary Report" by Mr. James H. Younger.

In the revised application Mr. Younger proposes three stages of work. The first stage appears to be more in the nature of development rather than exploration to reach an area immediately below old stopes. The second stage proposes drifting along the vein without any specific target areas. There is lack of evidence of veins continuing beyond the stoped area. Also, the zone of alteration mentioned by Mr. Younger in his "Preliminary Report" as being a favorable indication has not been found along the strike of the vein, according to Mr. Younger's statement in the revised application.

If an examination is made and the property appears to have possibilities for further exploration, perhaps a few drill holes strategically placed would be sufficient exploration. However, if the property appears to have greater potential than presently indicated, a different approach might be more appropriate.

In the event you can recommend a program agreeable to the applicant, Lien and Subordination Agreements would be required from the owners, which the applicant states can be obtained. Also, we would require copies of new correspondence with the banks in accordance with the OME Regulations, covering a loan request in the amount of the Government Participation estimate in the second proposal, or in lieu thereof, a copy of recent financial statement of the applicant.

The above comments are given to you only to inform you of our thoughts in this matter and are not to be construed as limiting the scope of your examination or recommendations.

(signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

FEJohnson/bih
10/19/65

cc to: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
OME Mr. Selfridge

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/19	Johnson	110
	Selmdy	120
		220

NOV 22 1965

Mr. Raymond R. Paruch
President
Gold Leaf Mining Company
P. O. Box 1056
Grand Junction, Colorado

Re: OME-6487 (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Dear Mr. Paruch:

This is with reference to your letter of November 3, 1965, and enclosures relating to the subject application for exploration assistance.

We are referring your application to Mr. J. W. Hasler, OME Field Officer, Region III, Building 20, Denver Federal Center, Denver, Colorado 80225, for his review and consideration. If Mr. Hasler needs additional information, he will contact you.

Sincerely yours,

(signed) FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

FEJohnson/bih
10/19/65

cc to: Director's reading file
Division file
Economic Geology file
OME file
OME reading file
OME Region III

23263

November 3, 1965

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OME-6487 I

United States
Department Of The Interior
Office of Mineral Exploration
Bldg 20 Denver Federal Center
Denver, Colorado 80225
Mr. Frank E. Johnson, Chief

Dear Mr. Johnson:

In response to your letter dated August 18, 1965 and to OME-6487 I have obtained the following information for your examination.

First, Mr. James A. Younger has submitted additional assay reports on the map which include the latest assay received from the Midvale Smelter, ie, Sample #2 on October 4, 1965.

Allow me to include a verbatim quote of his letter dated October 20, 1965.

"Dear Mr. Paruch:

This is in reply to some of the questions raised in your application for an OME loan on the Bilk Rummer claims in the Mount Wilson Mining District.

I am enclosing a map showing the locations of all samples which I feel are represenative of a significant geologic feature on the property. One of the major problems in sampling the property is the inaccessibility of the old workings, and the failure of the major stopping areas to outcrop. I have omitted several assays which I feel are not representative. I suggest that you also send a copy of the U.S. Bureau of Mines report of ore shipments for the years 1907, 1908, and 1909.

Approximately forty percent of the area around the Morning Star Vein consists of exposed diorite outcrop. This is true of the area along the strike of the Morning Star Vein. As is shown in the longitudinal section of the Morning Star Vein in my report, the area of past production doesn't outcrop. The zone of alteration which was mentioned in the report doesn't extend more than 24" away from the vein, and is not found along the strike of the vein. The small veinlets which have been observed on the outcrop, and in the mine workings do not have the alteration associated with them. The claims have been examined for alteration patterns unsuccessfully.

The suggestion of Mr. F.E. Johnson of the OME to surface diamond drill the claims has considerable merit. This method of exploration could be used to test the extreme northeast end of both the Morning Star and Foot Wall Veins. However, to adequately test the two structures at some distance from the outcrop would be extreme costly due to the topography of the area, the lateral extent of the claims, the expense of drill site preparation, and the difficult conditions of drilling the highly fractured diorite. All of the drill contractors approached to drill in thearea have quoted extremely high per foot costs.

I feel that if a represenative of the OME were to visit the property, the logic of the proposed methods of exploration which have been proposed would be made clear.

I have been very encouraged on my recent trip to the mine by the continuity and the mineral content of the Foot Wall Vein."

In reference to your letter of October 18th, paragraph 5, information was related only to the Bilk Runner Claims due to insufficent exploratory history of said claims included in the lease.

A photocopy of an actual record received from the Denver Office in reference to past mining history is the only available information that we have been able to obtain concerning these claims.
*Bilk Runner & Morning Star are synonymous.

Secondly the total estimated cost of exploration has been reevaluated and the new copy discloses the comparative changes that have been made.

We do have the assurance from Mr. John & Mrs. Goldie Reese that Lien & Subordination Agreements will be approved for an OME Loan.

Copies of loan application letters to the bank were not included. Mr. Soren Sorensen, the Secretary-Treasurer of Gold Leaf Mining contacted the various banks in person.

I trust that this letter will clarify the information requested.

Sincerely,

Raymond R. Paruch

Raymond R. Paruch
President Gold Leaf Mining Co.
OME-6487
P.O. BOX 1056
Grand Junction, Colorado

Colorado | County: San Miguel | District: Mt. Wilson

Mine Location:

Mine P. O.:

Morning Star

Inquiry Address: Ophir.

Company or Operator: Morning Star M. Co
Picket, Geo. B. Mgr.

Owner: Henry H. Arnold Pres
Boston Mass
031 Old South Bldg

Development: Tunnel 2000'

Reduction Plant:

Disposition of Product: O+C.

Character of Deposit:

References or Remarks:

9 300' Xcut. 500' Tunnel
10

YEAR	GOLD—Fine Ounces	SILVER—Fine Ounces	COPPER—Pounds	LEAD—Pounds	ZINC—Pounds
1907	798	4800		160000	
8	600	3600		144000	
9	79	277		10194	

YEAR	CRUDE ORE—Tons	CONCENTRATES—Tons	TOTAL VALUE
1905			
1906			
1907	160		11813
1908	120		8880
1909	12		
	292		

5. EXPLORATION WORK

(a) The exploration program will be broken down into three stages:

Stage I To consist of cross cutting from the present heading to intersect the downward projection of the Morning Star Vein. The cross-cut will consist of an 7'x7' drift untimbered and trackless. The advance is expected to be 5' per shift. Because of the equipment being used in the mucking and transportation portions of the mining cycle, a minimum of one turn-around (7'x12'x18') will have to be constructed. Total length of the cross-cut will be 250'.

Cost of Cross-Cut			
Labor	$16.91 / Ft.		
Material	12.72 / Ft.		
(e,f,g)	7.03		
	$36.66	x 250'	$9,165.00
1 Turn-around Cost based on the cost per cubic foot in a drift.			
$0.655/ cubic foot	x 1512		990.36
			$10,155.36

Stage II To consist of 1150' of drift similar in dimensions and description as the cross-cut of Stage I. The cost per foot will be slightly higher due to the added cost of assaying while drifting on the vein. Ten turn-arounds will be required along the length of the drift. The advance should be 5' per shift, or an equivalent number of cubic feet removed from a turn-around. A

Cost of Drift			
Labor	$16.91		
Material	13.42		
(e,f,g)	7.03		
	$37.36	x 1150'	$42,964.00
10 turn-arounds			
$0.655/cubic foot	x 1512	x 10	9903.60
			52,867.60

Stage III To consist of 800' of diamond drilling from two locations along the lenghh of the Stage II drift to evaluate the economic potential of the Foot Wall Vein. The drilling will be done under contract and will be EX core, There will be two locations with two holes per location, average length of the hole will be 200'

Contract Service	800'x $7.00/ft.	$5600.00
Air and Water $15.00/day, drilling to completed in 22 days. 15.00 x 22		330.00
Geology and Engineering 32 hours at $8.00 per hour		256.00
Mine Superintendent, ½ months salary		350.00
Assaying, $3.50 per assay for Pb,Ag,Au 3.50 x 8 holes x 4 assays		112.00
		$6648.00

GRAND TOTAL $69,670.96

7 (b) Personal Services: (Labor)

Stage 1 and 2		Cost per Foot
Miners, 2 per shift, $22.00/shift/man. Based on 5' of advance per shift.		$ 8.80
Mine Supervision, one man, Mine Superintendent to be retained at $700.00 per month.		6.36
Engineering and Geology to be done by contract, and average of 24 hours per month, at $8.00/hr.		1.75
Total Labor		$ 16.91

(c) Operating Materials and Supplies
Stage 1 and 2 Reported on a per foot basis

Dynamite, $22.00/ 100 lbs:		
Use, 1/5 of a box per round.		$ 0.88
Ammonium Nitrate Prills, $6.00/100 lbs.		
Use, 90 lbs per round.		1.08
Fuse: $37.80/3000' roll:		
Use, 147' per round.		1.11
Blasting Caps, $27.85/1000:		
Use: 20/round		0.11
Bits, Western Rock Drill Bit, $4.80 Each		
Use, 1.5 bits per round		1.44
Drill Steel, $20.00 each.		
Use: 1 piece each four (4) rounds.		1.00
Pipe, water, with fittings, 1" galvanized $ 28.00/100'		0.28
Pipe, air, with fittings. 3" Vitcalic couplings. $100.00/100'		1.00
Fuel and Lubricants:		
60 gal. of butance at $0.18/gal./round to operate main compressor	0.96	
4 gal. of #1 diesel @ $0.21/gal. to operate muching and transportation equipment.	0.17	
General lubricants and drill oil.	0.05	
		1.18
Equipment Rental, Total value is $30,012.00 x 1/60 ÷ 110'		4.55
Small tools, $125.00		0.09
		$ 12.72/ft.

Assays for the drift portion of Stage 2 An assay for Pb, Ag, Au for each 5' of advance costs $3.50	0.70
	$ 13.42

(c) Operating materials & supplies

Unit#	Equipment Identification	Value
1.	Air Hose (250')	175.00
2.	Water Hose (250')	75.00
3.	4 Shovels	16.00
4.	6 Picks	17.50
5.	4 Double Jacks	12.00
6.	2 Single Jacks	22.00
7.	2 Axes	3.00
8.	2 Cross-cut saws	2.50
9.	1 Prill Gun	20.00
10.	1 Forge	15.00
11.	1 Forge Blower	---
12.	2 Bit knockers	44.00
13.	2 "Jack" Tank	40.00
14.	8 Mine Lamps	120.00
15.	8 Lamp chargers	120.00
	Sub Total	562.00

(d) Operating equipment ($[illegible].00 or more) furnished by Gold Leaf Mining Company.

Number	Equipment Identification	Fair Market Value
1.	1 Compressor, 365 Gardner-Denver	$4,000.00
2.	1 Compressor, 210 Jaeger, Butane	2,000.00
3.	1 Butane Tank, 1000 gal. Capacity	300.00
4.	2 Diesel Tank, 260 gal. Capacity	200.00
5.	1 Front End Loader, D 2 Caterpiller,	2,000.00
6.	1 Front End Loader, ½ yard Oliver	2,500.00
7.	1 Bull Dozer, Allis Chalmers HD 5	5,000.00
8.	2 Scoot Crete, 1½ ton cap. diesel	3,000.00
9.	1 JR 38 Jackhammer with telescopic leg	500.00
10.	1 Swede Jackhammer with standard leg	500.00
11.	1 Cleveland Jackhammer with standard leg	500.00
12.	3 Air Receiver tanks	250.00
13.	1 Welder, Lincoln 200 amp.	400.00
14.	1 Welder, Doxon acetylene	300.00
15.	1 30 KW Light Plant	3,000.00
16.	1 Dump Truck, 2½ ton, 1952 International	3,000.00
17.	1 Power Wagon, Dodge, 1954	2,000.00
	TOTAL VALUE	$29,450.00

(e) Initial Rehabilitation and Repairs

1.	Repair of D-2 Cat. Lifting Cylinder	400.00
2.	General Repairs to all equipment listed	300.00
	Total	700.00

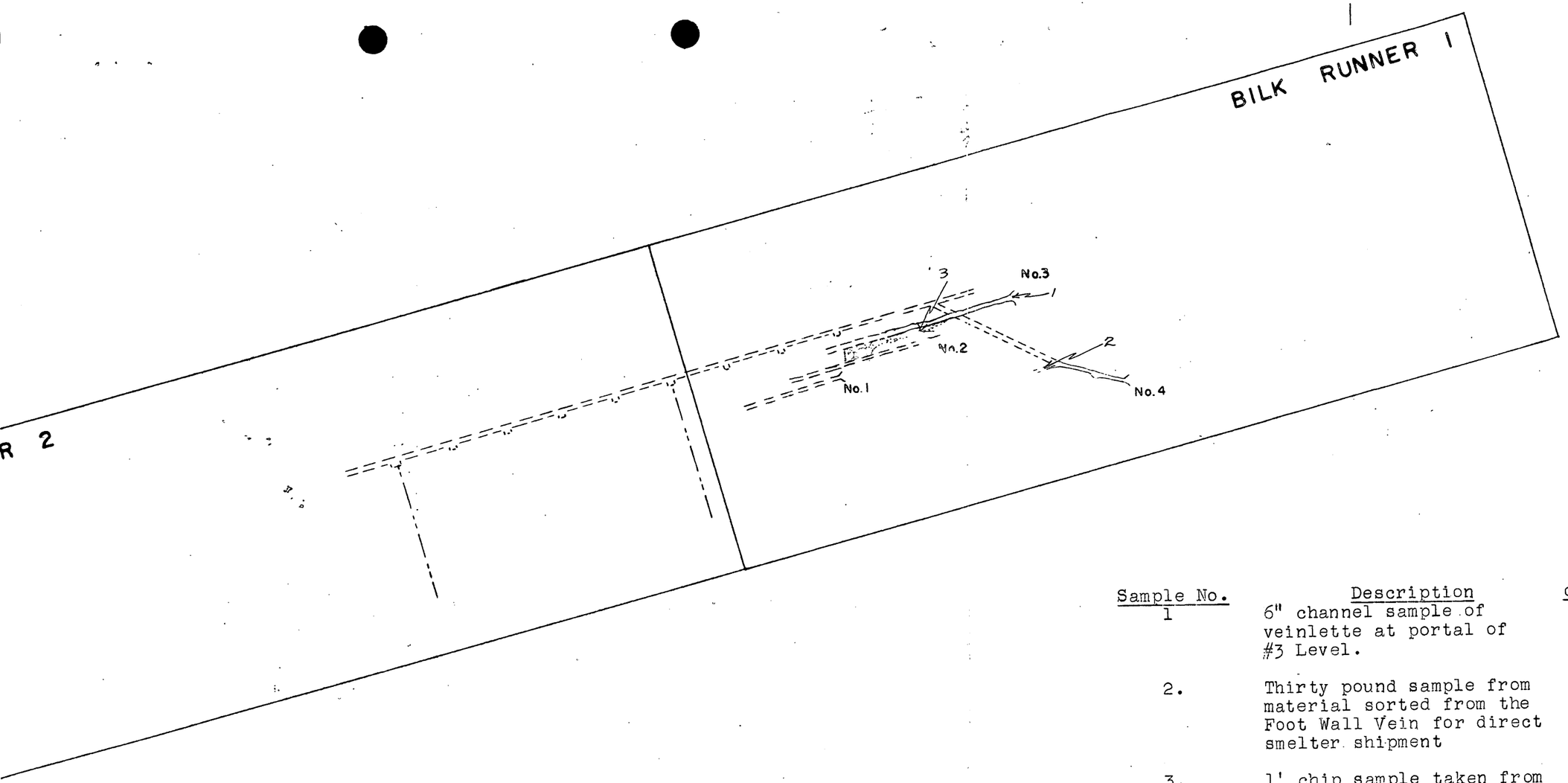
(f) New Buildings, Fixtures, and Installations

1.	Powder House 7'x6'x6'	200.00
2.	Assembly of Quonset Hut for living quarters, repair shop and winter storage of equipment	1,000.00
	Total	$1,200.00

(g) Miscellaneous

1.	Repairs & Maintenance of equipment, Estimated at 2% of the total value of the rented equipment per month. $389.00 ÷ 110' = $353 /ft.		$4942.00
2.	Accounting and Bookkeeping, Estimated by	$1.00/Ft	1400.00
3.	Workmen's Compensation	$0.47/Ft.	658.00
4.	Employee Liability	$0.67/Ft.	938.00
			$7,938.00

9838 = 7.03/ft



Sample No.	Description	oz Au	oz. Ag	% Pb
1	6" channel sample of veinlette at portal of #3 Level.	0.10	12.4	25.6
2.	Thirty pound sample from material sorted from the Foot Wall Vein for direct smelter shipment	0.04	60.6	18.6
3.	1' chip sample taken from along the edge of an old stope above the #3 Level	0.65	26.5	15.6

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MME Form 7
(2/63)

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Date	Surname	Code
8/18	[illegible]	110
	On leave	120
8/18	[illegible]	220
		120M

AUG 18 1965

Gold Leaf Mining Company
540 White Avenue
Grand Junction, Colorado

Re: OML-6487 (Gold-Silver)
Gold Leaf Mining Company
Silver Eagle Lode Claims
San Miguel County, Colorado

Gentlemen:

A review of the subject application does not reveal sufficient information to enable us to determine the merits of your proposed exploration.

Evidence of the occurrence of gold and silver on the property other than unsupported statements concerning the assays of past production is lacking. Assays of representative samples taken of the veins exposed in the presently accessible workings should be furnished.

The information submitted does not indicate possible continuity of the veins or mineralization beyond the present workings. Open cuts or trenches should be dug, if possible, at reasonable distances apart along the strikes of the veins and the results of representative samples of any mineralization in the veins exposed should be submitted. Also, areas of alteration along the veins should be indicated, as in his report Mr. James H. Younger stated that such areas are favorable to mineralization.

Because of the inference, from reading Mr. Younger's report, of parallel veins occurring on the property and the lack of outcrops, possibly a surface diamond drilling program should be considered if exploration of the property is warranted.

Some clarification is needed concerning the property involved. The copy of the lease and option agreement, dated October 1, 1964, submitted with the application covers nine claims and a mill site, but the maps show only the three Bilk Runner claims and three patented claims which you state are not to be subject to a Government lien for royalty payments. You should include a map showing the other claims covered by the lease and option and their relation

to the Bilk Runner claims. In this connection, Lien and Subordination Agreements will be required from John Reese and Goldie Reese and from Clarence Neilson and Phillip Klingensmith if a contract can be granted.

Your cost estimates for this type of operation appear to be excessive. You should state the number of people to be employed for each type of work and their respective wage rates per hour. Supervision and engineering compensation should be stated as monthly salaries. The rate of advance expected per shift should also be indicated. Only such equipment as would actually be used for the exploration work should be listed and the fair market value of such equipment given. Details of what "camp costs" are intended and why they are necessary should be given.

Copies of your letters to the banks requesting a loan for the exploration were not included in the application. These papers are required to be furnished under the OME Regulations.

This request for additional information should not be considered that a contract will be granted. As soon as it is received, however, we will be in a position to continue the processing of your application.

Sincerely yours,

(signed) FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

FEJohnson/bih/gla (8-18-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
OME Region III

August 6, 1965

Gold Leaf Mining Company
540 White Avenue
Grand Junction, Colorado

Subject: OME -6487

Gentlemen:

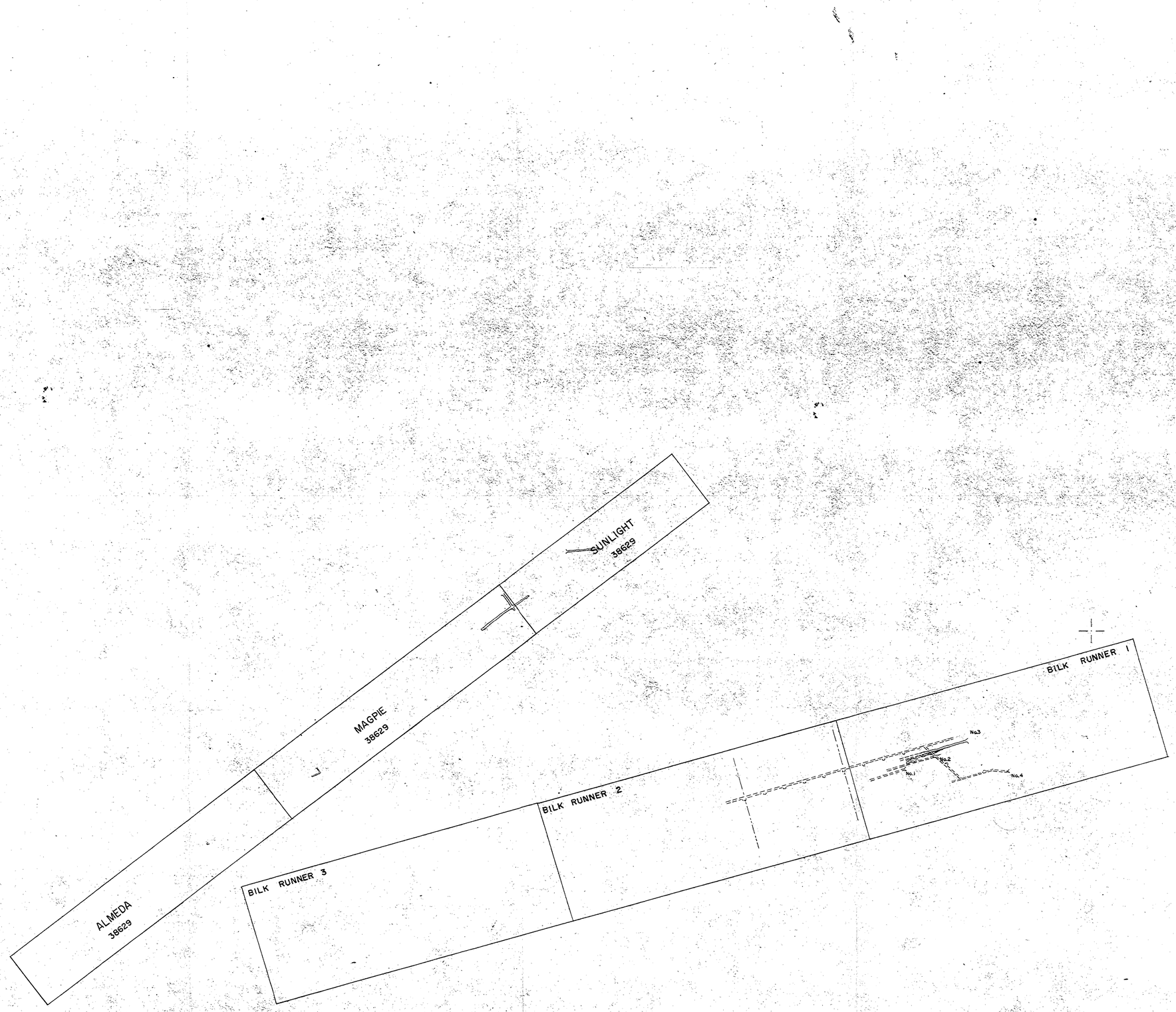
Your application for exploration assistance, dated August 2, 1965, submitted to our office at Denver, Colorado, has been assigned Docket Number OME - 6487.

Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region III



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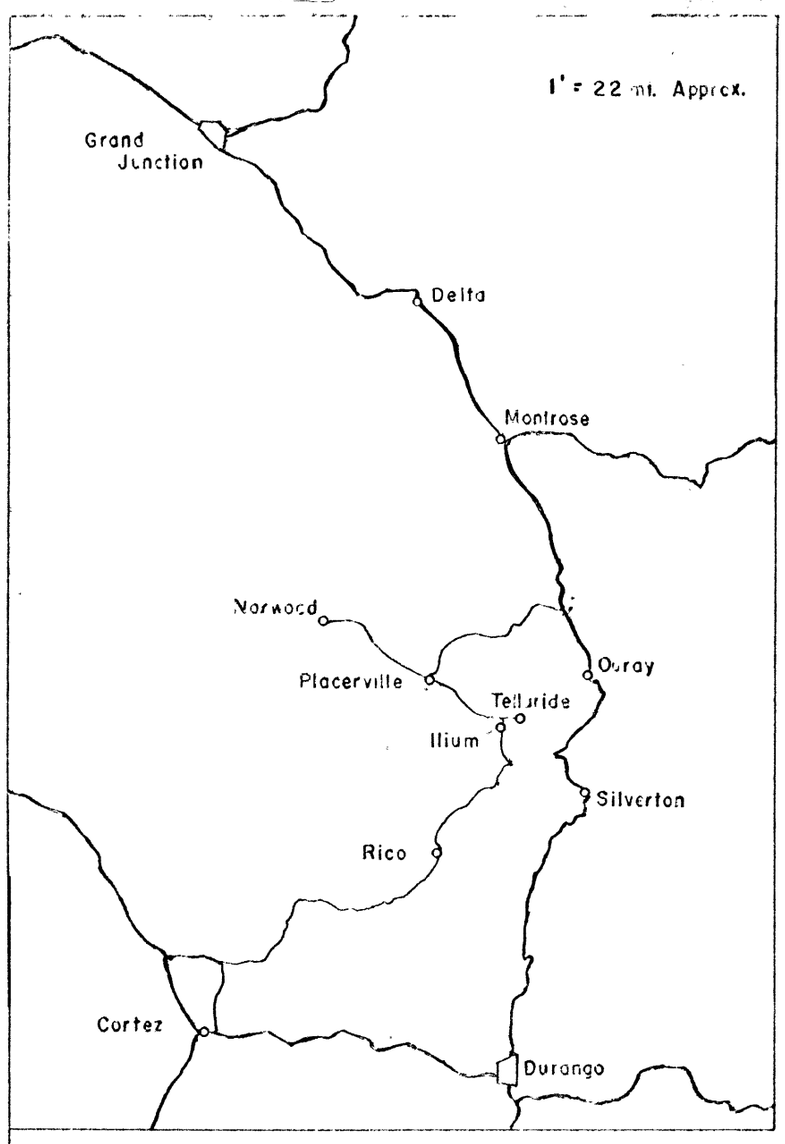
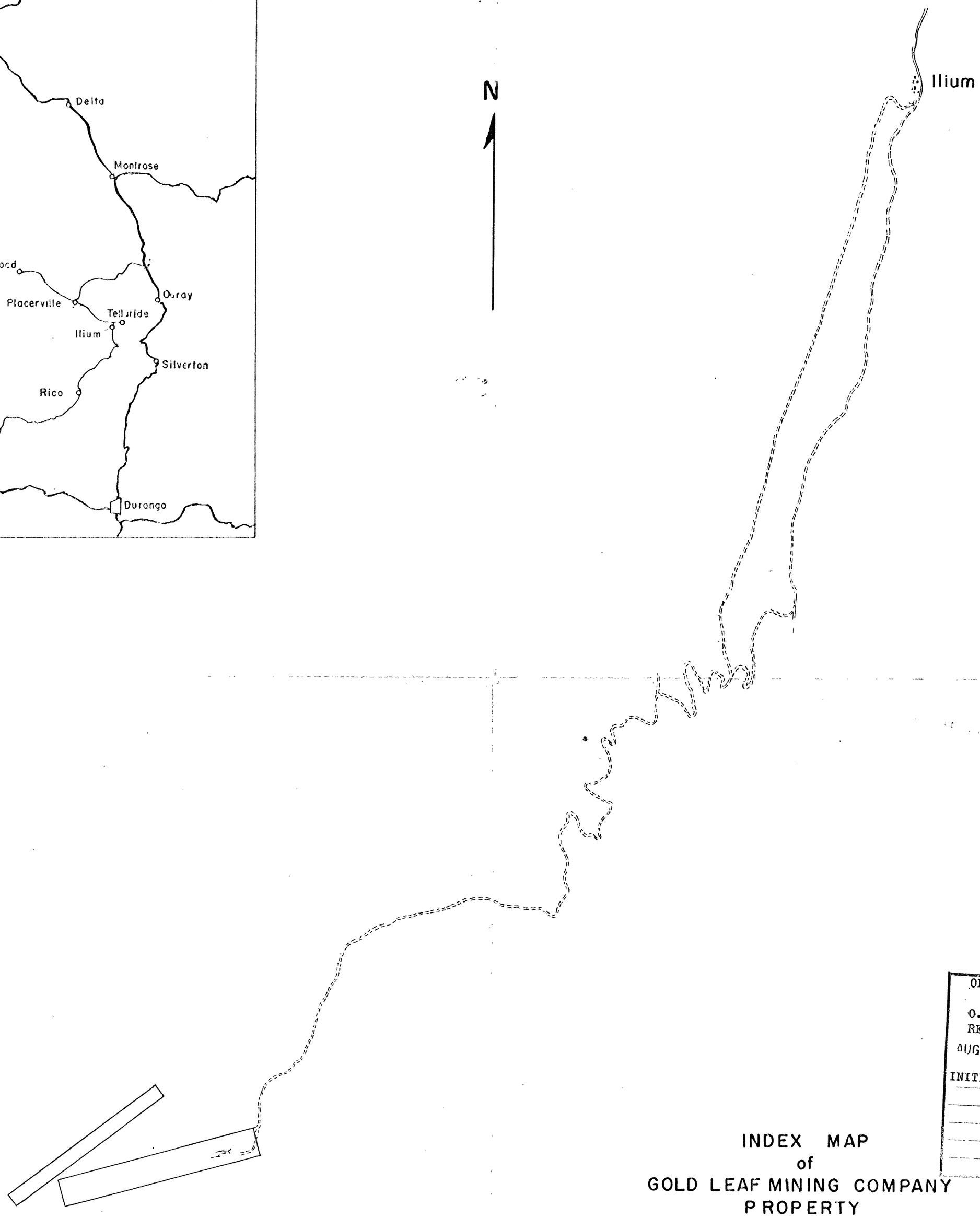
Plan Map of Proposed Exploration at the No. 4 Level of the Morning Star and Foot Wall Veins

==== Drift

—·—·— Diamond Drill Hole

BILK RUNNER — MAGPIE GROUP
GOLD LEAF MINING COMPANY
SAN MIGUEL COUNTY, COLORADO
1" = 200'





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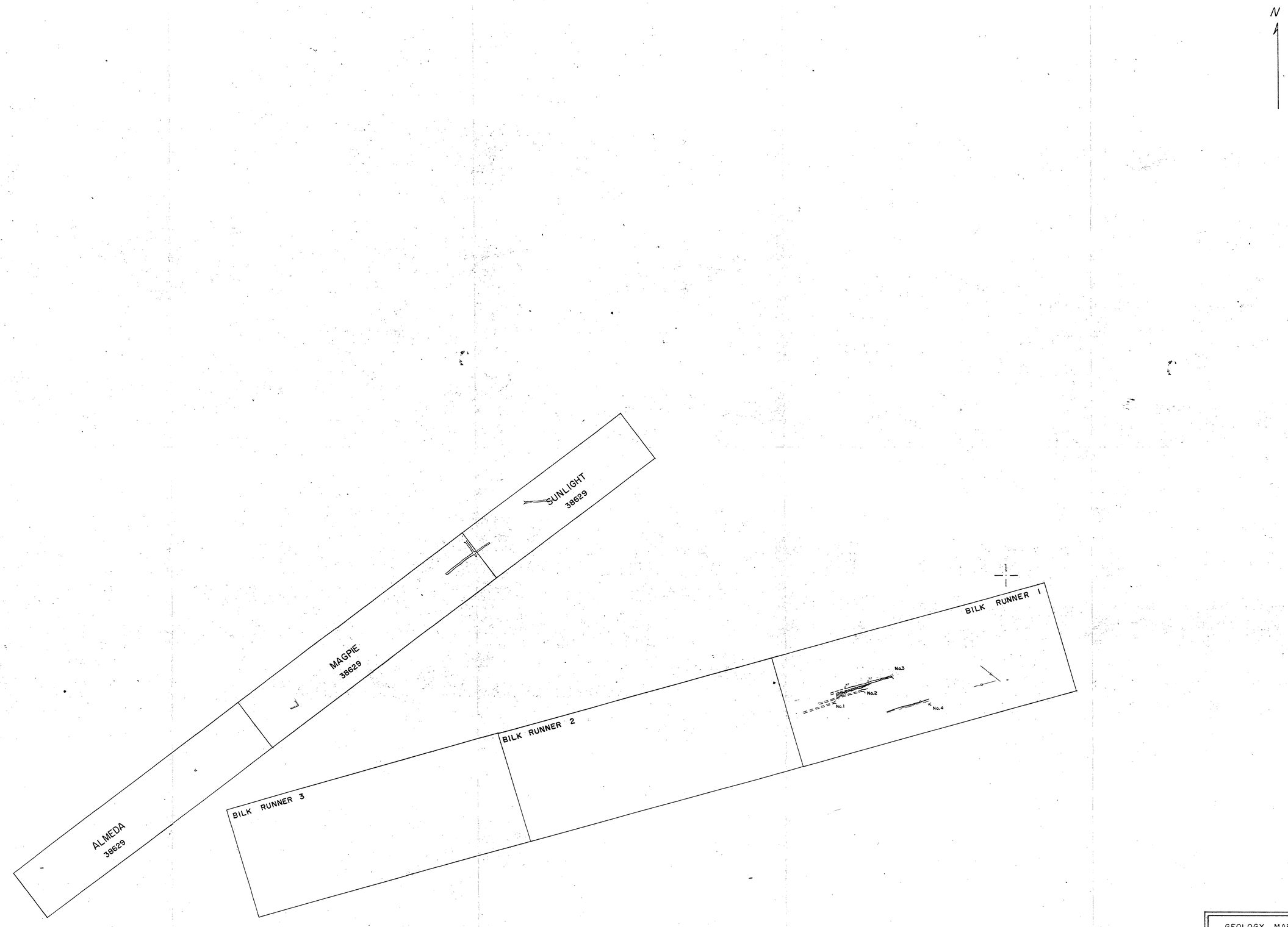
INDEX MAP
of
GOLD LEAF MINING COMPANY
PROPERTY
MT. WILSON MINING DISTRICT
SAN MIGUEL COUNTY, COLORADO

0 1 Mile



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GEOLOGY MAP

BILK RUNNER — MAGPIE GROUP
GOLD LEAF MINING COMPANY
SAN MIGUEL COUNTY, COLORADO
1" = 200'