UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
WASHINGTON 25, D. C.

OCT 9 1964

Mr. Harold Downey
D & G Mining Company
Caratunk, Maine

Re: OME-6367 (Molybdenum)
D & G Mining Company
Black Mountain Prospect
Mohave County, Arizona

Dear Mr. Downey:

In reply to your letter of September 30, 1964, denial of the subject application was based on the information submitted, assessed in the light of our experience gained over the years in exploring molybdenum projects, some quite recently. It was concluded that under OME criteria the proposed project bordered more on prospecting or wildcatting than on exploration based on sufficiently favorable geological data.

One can always submit a new application whenever it is believed that results of additional work might change the OME decision. It would not seem that much molybdenite would be leached out of silicified material containing pyrite. Reasons why the molybdenum content will increase with depth because of structure, country rock, etc. should be discussed. Proof of the actual presence of identifiable molybdenite would be most important.

Please be assured that all applications receive our most serious consideration.

Sincerely yours,

George Fumich, Jr.

Acting Director

GCSelfridge/mm (10/8/64)
cc: Director's Reading File
✓Region III w/cy of incoming letter
Docket
120M
Mr. Selfridge

HAROLD DOWNEY

W. ARTHUR GALLA

D & G MINING COMPANY

[redacted]

[redacted]

Saratoga, Maine
September 30, 1964

Office of Minerals Exploration
U. S. Department of the Interior
Washington 25, D. C.

Re: OME - 6367

Gentlemen:

We have your letter of September 16, 1964 refusing our request for financial assistance on the Black Mt. molybdenum prospect.

We would like to know the specific reason or reasons for the refusal. Since several geologists from major mining companies have recommended the prospect and since the Office of Minerals Exploration has not made a field examination, we assume the refusal was not made on a geologic basis.

Please advise if a refusal from OME can be appealed, and if so, could we be given the proper procedure for such an appeal ?

Sincerely,

Harold Downey

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
WASHINGTON 25, D. C.

OME
DEPARTMENT OF THE INTERIOR
SEP 1964
REGION III
DENVER, COLORADO

SEP 17 1964

D & G Mining Company

Caratunk, Maine

Re: OME-6367 (Molybdenum)
D & G Mining Company
Black Mountain Prospect
Mohave County, Arizona

Gentlemen:

Your application for aid in an exploration project and other information available to us in Washington concerning the above-named property have been reviewed.

Careful study of all of the information available to us indicates that the probability of disclosing significant ore reserves on your property is not sufficiently promising to justify Government participation in the proposed exploration. We regret to advise you that under these circumstances your application for exploration assistance is denied.

Sincerely yours,

George Fumich, Jr.

Acting Director

GCSelfridge/gla (9-11-64)
cc to: Director's Reading File
Docket
Region III
Review Committee
Mr. Selfridge

September 8, 1964

D & G Mining Company
Caratunk, Maine

Subject: OME - 6367

Gentlemen:

Your application for exploration assistance, dated August 1, 1964 submitted to our office at Washington, D. C. has been assigned Docket Number OME - 6367.

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

Sincerely yours,

Allen S. Dakan, Chief
Division of Administrative
Management

Copy to Region III with copy
of application

MME Form 40
July 1962

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

EXTRA COPY

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

RECEIVED SEP 8 1964
DATE INITIALS

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.)*

D & G Mining Company
Caratunk, Maine

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER 6367

DATE RECEIVED 9-8-64

REGION III

DIVISION CODE

BUSINESS ORGANIZATION *(Check one)*

INDIVIDUAL
CORPORATION
PARTNERSHIP X
OTHER *(Specify)*

STATE IN WHICH FIRM IS ORGANIZED Arizona

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Harold Downey	Caratunk, Maine	General Partner
W. Arthur Gallan,	1020 Greenwood Ave. Wyncote, Penna.	" "
Ralph A. Fletcher,	Old Bedford Rd. Bedford, N.H.	Limited Partner
Herbert E. Fletcher,	67 High St. Chelmsford, Mass.	" "

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE
Molybdenum

ESTIMATED COST OF PROJECT
$ 20,453.50

PROPERTY NAME	LOCATION COUNTY	STATE
Black Mountain Prospect	Mohave	Arizona

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.

8/1/64
DATED

Harold Downey
BY *(Signature)*

General Partner
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 openings *for each item of work.* Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

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

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

6. Experience:

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

7. Estimate of Costs:

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

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

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

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

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

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

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

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

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

1. (a) See supplemental sheets. [1(a), 1(b)]

   (b) Not applicable

   (c) The limited partners of D & G Mining Co. will finance the applicant's share of the cost.

2. (a) All claims have been located and recorded in Mohave County, Arizona under the name of Harold Downey acting as an agent for the D & G Mining Co. There are no liens or mortgages on any of the claims.

   (b) Claims are located in T 27 N, R 21 W, Mohave County, Arizona. Sections in this township are unsurveyed but the claims are approximately located in what would be sections 9, 10, 15, 16. Claims are recorded at the county seat, Kingman, in Book 5-S, pages 235-274. Claims are known as Sam Nos. 1-20 and the property as a whole is known as the Black Mountain prospect.

   (c) Not applicable

3. (a) In the fall of 1960, Bear Creek Mining Co., while doing an aerial reconnaissance survey in Arizona, observed a very slight color anomaly in the area east of the Pope Mine in Mohave County. A ground follow-up showed there existed an area of anomalous molybdenum values coinciding with intense alteration (silicification) of the rocks in the area. In the spring of 1962 an induced potential survey of the anomaly was undertaken by Bear Creek. Results of this survey are unavailable but in verbal communications with some of Bear Creek's personnel it has been learned that the survey showed either a large area of low sulfide content or perhaps linear zones of a higher content. As a consequence of this survey no further work was done by Bear Creek. This applicant feels that the area was being evaluated as a copper prospect rather than for molybdenum by Bear Creek and this was the reason no further work was done by them.

   In the spring of 1963, D & G Mining Co. in conjunction with a regional exploration program in Mohave County, did more geochemical sampling in the area. This sampling consisted of soils and stream sediments. Results were of sufficient interest to induce D & G to stake claims covering the most anomalous area.

   Throughout 1963 and to mid 1964 several major mining companies were approached by D & G in an effort to induce one of them to undertake a diamond drilling program on the anomaly. Several of these companies made extensive geological and geochemical examinations to

3.(a) (cont.)

supplement the D & G data but results and interpretations of this work are largely unavailable.

In March and April, 1964, D & G undertook a magnetometer survey and did further geochemical sampling on the claims. Some location pits were deepened and sampled and the access road was improved.

(b) The applicant had an interest in all work done except that done by Bear Creek Mining Co.

(c) Not applicable

(d) " "

(e) Most of the rock in the area is older Precambrian granite-gneiss-schist complex which is usually referred to as "schist" by D & G. A few hundred feet south of and paralleling the main east-west wash there is found a granitic textured rock which is thought by some to be an intrusive. Actual classification of this rock is very difficult because of the pervasive silicification throughout it and the surrounding "schist".

Structure in the area is not evident except for predominantly east-west high angle jointing.

The most striking visual feature of the anomaly is the intensity of the silicification which can be seen as both veining and pervasive "flooding". The veining is of the stockwork variety rather than a system. Some sericitization also occurs but is more spotty than the silica alteration. Clay alteration is virtually absent.

Visual evidence of mineralization at the surface is confined to limonites; jarosite and hematite on fractures and filling casts. Some fresh pyrite can be found in rock blown from location pits but no molybdenite has been seen. An analysis of the limonites by Duval Corp. (see supplemental sheet #10) shows the hematites carrying about twice as much Mo as the jarosites. Overall sulfide content appears low- probably no greater than 2 % and is generally greater in the "schist" than the granitic "intrusive"(?).

(f) The applicant feels there is a chance of finding a large low grade molybdenum deposit in the area. This feeling is based on the fact that relatively little is known about the oxidation and leaching of molybdenite under the various conditions of rock type, pH of the rock, climatic effects, etc. It seems that in the past, molybdenite has been thought of as one of the more stable sulfides and that if it did oxidize and/or leach the effect would not occur to any appreciable depth. Recent findings, particularly at Questa, N.M., have

3.(f). (cont.)

shown that the grade of molybdenum in a rock cannot necessarily be determined from surface sampling. Some research work done by the University of Arizona, Colorado School of Mines and others indicates that a high iron content in a rock will tend to hold the Mo values constant or even enhance them by a scavenging effect. In the case of the Black Mt. prospect where the iron content is low, what differences in Mo values, if any, might be found from the oxide to sulfide zones ? The applicant feels that diamond drilling is the only means of providing the answer.

Sampling Methods

Most of the sampling done by D & G was analyzed by the Rocky Mountain Geochemical Laboratories, 233 North Marina Street, Prescott, Arizona. Sixty soil samples taken on claim corners and end centers were analyzed by Union Carbide Nuclear Co., Grand Junction, Colorado. Union Carbide took an additional 35 soil samples, results of which were given to D & G by verbal communication.

Some discrepencies were noted in results when samples were assayed as opposed to being analyzed geochemically. D & G took 59 rock chip samples which were assayed by Duval Corp. Five of these samples were re-run geochemically by Rocky Mt. Labs. The results from Rocky Mt.'s work were two to three times higher than that of Duval's. Since Rocky Mt. Lab is set up for accuracy in the lower limits (1-200 ppm), D & G believes their results to be more valid in this range. In accordance with this belief Duval's rock sample results were increased by 1/3 for puposes of contouring the Molybdenum In Rock map. An additional 5 rock chip samples were taken in the high Mo area for better definition of the anomaly, these analyzed by Rocky Mt. (samples BM R60 - R64).

In April, 1964 some of the location pits were deepened for purposes of assessment work. This was done by drilling six foot holes with a portable gas hammer and then blasted. Samples of cuttings were taken at two foot intervals and analyzed geochemically. Results corresponded well with surface sampling.

4. (a) Arrangements to visit the property can be made with:

Harold Downey
Caratunk, Maine

or

W. Arthur Gallan
7039 Limekiln Pike
Philadelphia 38, Penna.

(b) Kingman, Arizona or Las Vegas, Nevada. 47 miles paved highway from Kingman, three miles unpaved road.

5. (a) The surface sampling done by D & G shows that the higher Mo values correspond well with the better alteration. The locations of two proposed drill holes are picked on this basis. Collar locations and bearings of each hole can be found on the accompanying maps. Angle holes are preferred because of the fact that molybdenum deposits tend to range vertically rather than horizontally. A depth of 750 feet for each hole should be sufficient to test the grade of the sulfide zone. This does not mean, of course, that a hole would be stopped in ore. An angle of 60° from vertical will give an optimum lateral coverage with reasonable depth of penetration. Size of hole to be NX for better sampling and to allow for reduction if necessary.

(b) Approximately one mile of access road will have to be constructed and drill sites will have to be levelled. In addition, the existing access road will need some levelling in spots. All work can be done with a bulldozer of the D-8 class. No blasting will be necessary.

(c) If an OME loan is granted, work will be started as soon as a contract can be negotiated with a drilling company. This would probably be within the first month after an OME grant.

Access road work and drill site preparation can be finished in four eight hour days. Drilling would proceed on a one rig, one 10 hr. shift, six day per week basis. The applicant estimates that drilling would proceed at an average rate of 35 feet per shift. Mobilization and set-up time for both holes should take no more than six days.

Core will be boxed, logged and assayed where necessary by the applicant. Core will be examined as soon as it comes from the hole so there will be no delays on decisions regarding stopping the hole, etc.

6. The applicant will do all supervisory work.

Background and experience as follows:

Harold Downey
B.S., Geological Engineering, University of Arizona, Tucson, Arizona, 1960

Employment:

Bear Creek Mining Co., Tucson, Arizona, 1, 1/2 years; worked mostly on exploration diamond drilling projects in all phases.

6. (cont.)

J. W. Sewall Co., Old Town, Maine, 6 months; work included metals exploration in Maine, groundwater exploration using seismograph, supervising small diamond drilling project on the Maine coast.

D & G Mining Co., 1,1/2 years; regional exploration work in Arizona, Nevada, California, Colorado.

W. Arthur Gallan
B.S., Geological Engineering, Colorado School of Mines, Golden, Colorado, 1956

Employment:

Navajo Indian Tribe, Window Rock, Arizona, 8 months; worked as geologist and safety engineer in uranium mines, mapped and sampled in connection with prospect evaluation.

Pacific Power & Light Co., Portland, Oregon, 8 months; supervised drilling program for coal exploration.

Kuljian Engineering Co., Philadelphia, Penna., 3 months; drilling and soils evaluation.

Bear Creek Mining Co., Tucson, Arizona, 2,1/2 years; metals exploration in southwestern U.S. Work involved mostly prospect evaluation and reconnaissance programs.

D & G Mining Co. same as above for Downey

7. (a) Drilling

Based on bids by three drilling companies, estimated drilling costs will be $9.60 per foot.

1500 ft. NX @ $9.60	$ 14,400.00
Mobilization & demobilization	450.00
Total drilling costs	$ 14,850.00

Access road & drill site preparation

D-8 class bulldozer

32 hrs. @ $20.00	$ 640.00
Transporting bulldozer from and to Kingman, Arizona 4 hrs. @ $14.00	56.00
Total	$ 696.00

Assaying core

Core will be assayed by each ten foot run

300 assays @ $4.50	$ 1,350.00
300 sample preparations @ $ .75	225.00
Total	$ 1,575.00

(b) D & G Mining Co. will keep one general partner present throughout the program to supervise all phases and to log, split, and store core. Cost per day includes expenses.

53 days @ $50.00	$ 2,650.00

(c) Not applicable

(d) D & G will furnish a Jeep to be used for the purpose of transporting core to Tucson for assaying. Total mileage during the program estimated to be 4,550 mi.

4,550 miles @ $ .15	$ 682.50

(e) Not applicable

7. (f) Not applicable

(g) " "

Total cost of program	$ 20,453.50
Amount of OME loan	$ 10,226.75

UNION NATIONAL BANK

LOWELL, MASSACHUSETTS

G. RICHARD GAGNON
ASSISTANT VICE PRESIDENT
PHONE: 458-8411 AREA CODE: 617

August 3, 1964

Supplemental Sheet #1(a)
item 1(a)

D&G Mining Co.
Caratunk, Maine

Mr. R. Lincoln O'Brien
c/o H. E. Fletcher Company
West Chelmsford, Mass.

Re: D & G MINING COMPANY

Dear Mr. O'Brien:

With reference to our recent discussion concerning the possibility of a loan to the above-captioned company, I regret to inform you that we are unable to accommodate you.

The policy of this bank is such that a loan in the amount of $10,200.00 for a period of two years would have to be on a secured basis. Since D & G Mining Company is not in a position to offer adequate collateral, we are unable to make this loan.

I am sorry that we are unable to be of assistance in this matter, but I thank you for giving us an opportunity to discuss it with you.

Very truly yours,

Assistant Vice President

GRG:DMC
Encl.

July 30, 1964

D & G Mining Company
Caratunk, Maine

Gentlemen:

The University Hills Bank regrets to inform you we must refuse your request for a loan. The Loan Committee advises that a loan for $10,000.00 to be repaid in two years must be secured.

This is no reflection on your credit experience, but because your company cannot provide the necessary collateral.

We hope that we may be of service to you at another time.

Yours very truly,

Mary Kuhns

MARY KUHNS,
Assistant Vice-President

MK:br

D & G Mining Co.
Caratunk, Maine

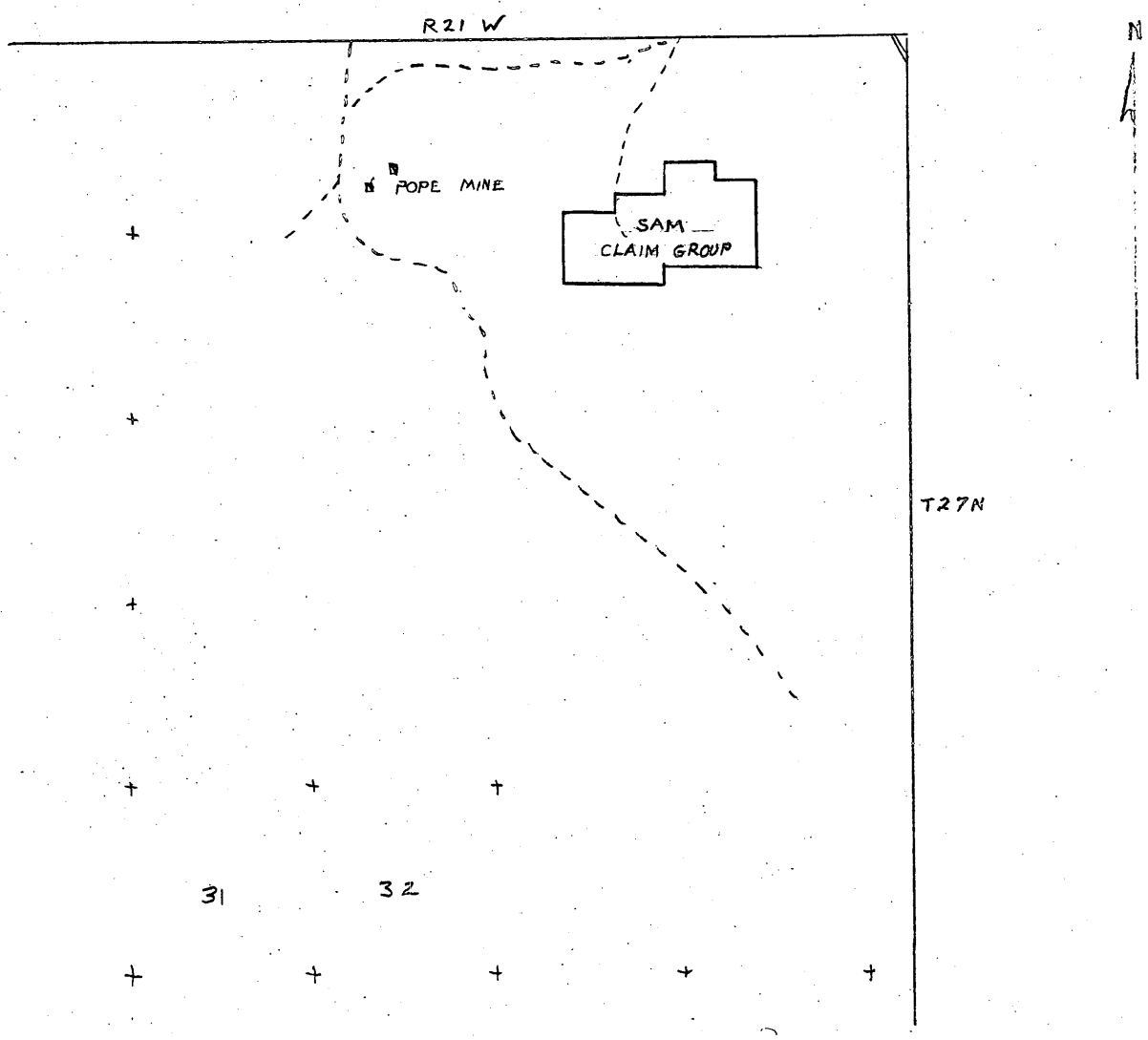
Supplemental Sheet #1(b)
item 1(a)

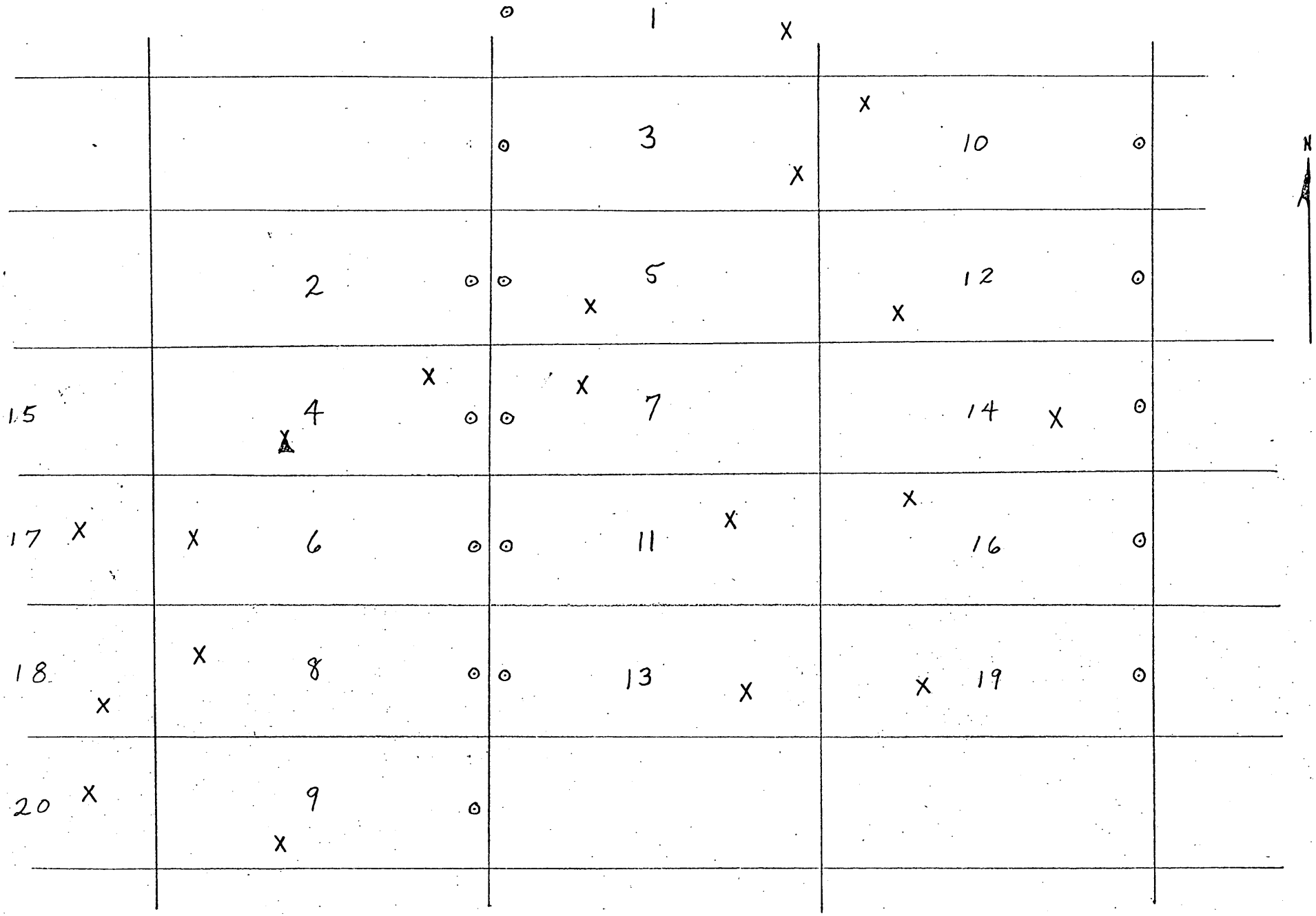
Supplemental Sheet # 1

item 2 (b)

D & G Mining Company
Caratunk, Maine

Overlay to be used with Mt. Perkins, Arizona 15 minute quadrangle topographic map showing location of "SAM" claim group





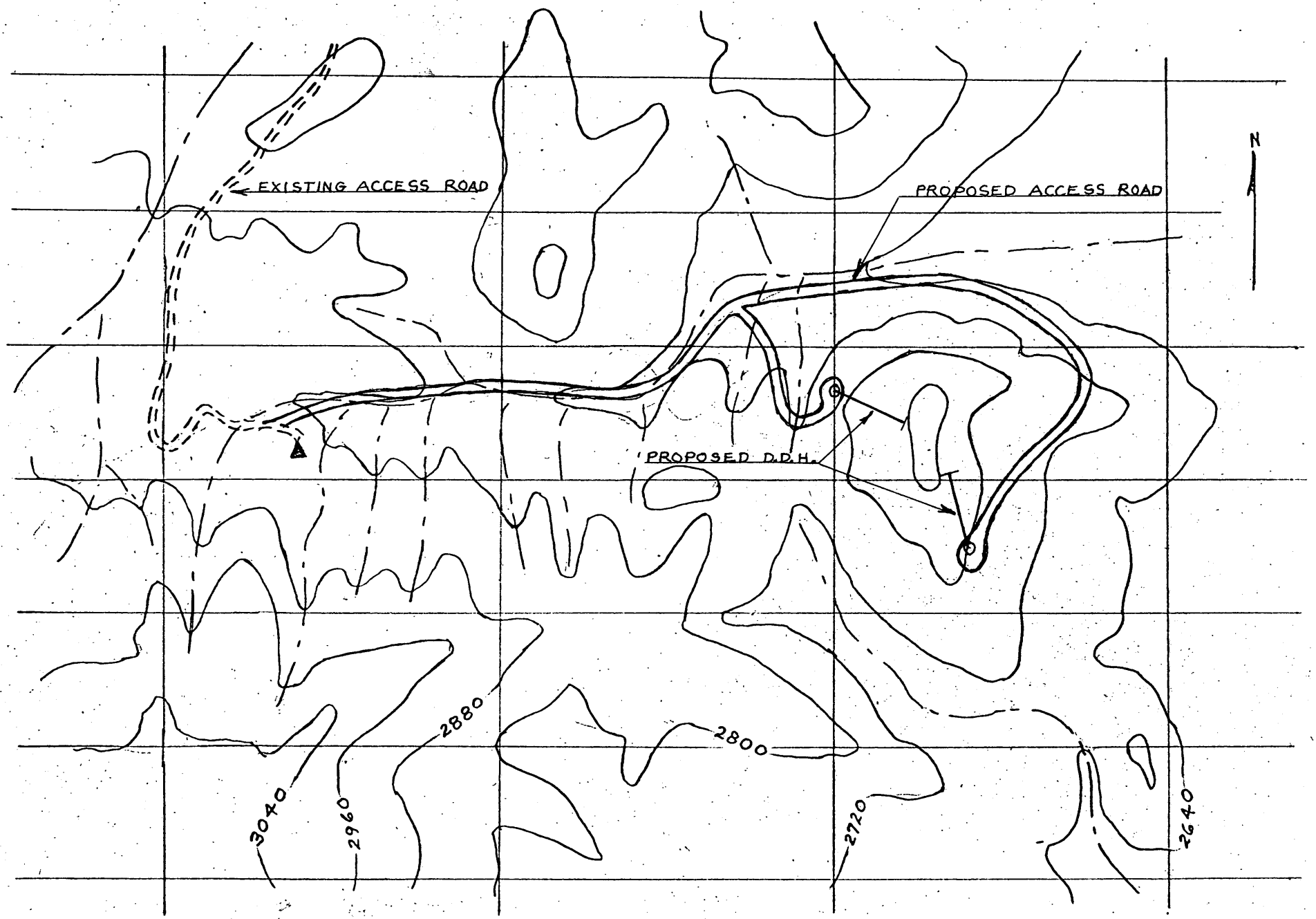
D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 2
item 2 (b)

⊙ DISCOVERY MONUMENT

X LOCATION PIT

D + G MINING CO.
BLACK MT. PROSPECT
MAP SHOWING CLAIM NOS., DISCOVERY MONUMENTS AND LOCATION PITS
SCALE: 1" = 600'



D & G Mining Co.
Caratunk, Maine

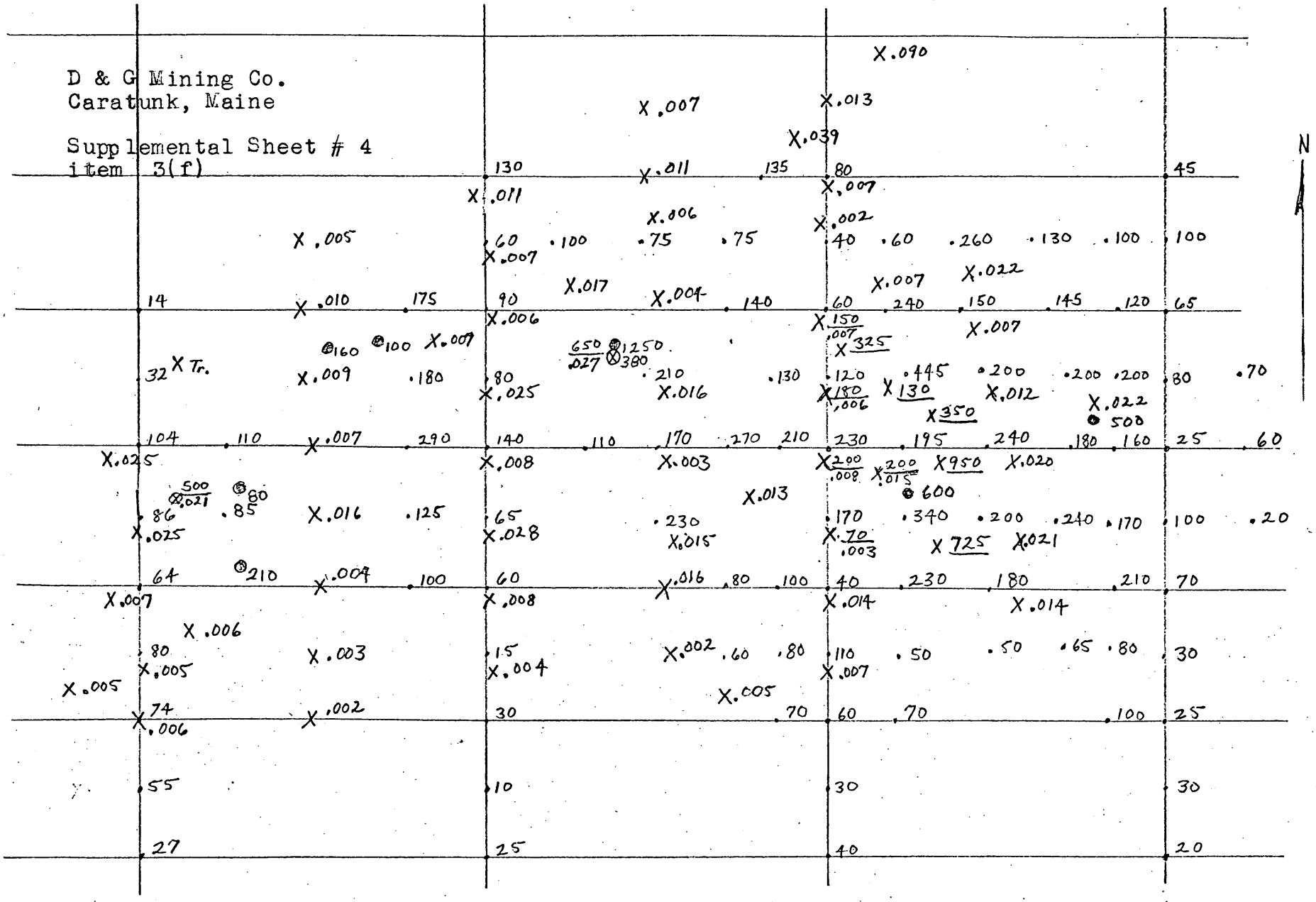
Supplemental Sheet # 3
items 5 (b), 7 (a)

CONTOUR INTERVAL - 80'
SCALE : 1" = 600'

D + G MINING CO.
BLACK MT. PROSPECT
TOPOGRAPHIC MAP

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 4
item 3(f)



• 180 = PPM Mo IN SOIL (ANALYSES BY UNION CARBIDE CO.)

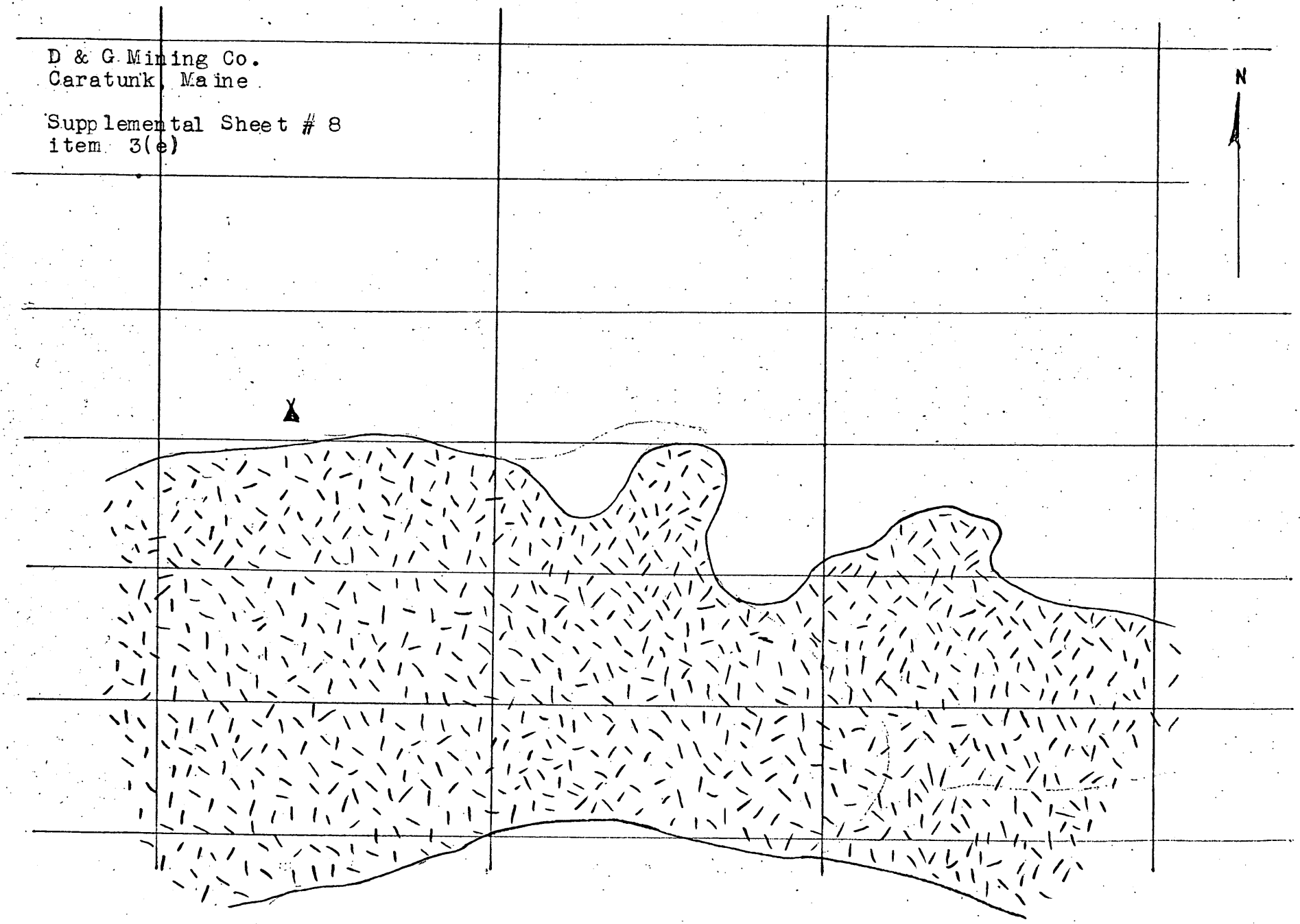
X $\frac{200}{.018}$ = PPM Mo IN ROCK (ANAL. BY ROCKY MT. LAB) / % Mo IN ROCK (ANAL. BY DUVAL CORP)

⊗ 150 = PPM Mo IN ROCK (ANAL. BY OTHERS)

D+G MINING CO.
BLACK MT. PROSPECT
MAP SHOWING MOLYBDENUM VALUES IN SOILS + ROCKS
SCALE 1" = 600'

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 8
item 3(e)



PRECAMBRIAN SCHIST

GRANITIC INTRUSIVE (?)
(AGE UNDETERMINED)

D+G MINING CO.
BLACK MT. PROSPECT
MAP SHOWING GRANITIC INTRUSIVE (?)
SCALE: 1" = 600'

ROCKY MOUNTAIN GEOCHEMICAL LABORATORIES

233 North Marina Street Phone: 445-4393

PRESCOTT, ARIZONA

ANALYTICAL REPORT

Date January 23, 1963

Client Messrs. Gallan & Downey
D & G Mining Company
P.O. Box 176
Cortaro, Arizona

Report on 191 samples (163 sediments & 28 rock).

Sample Data Sheet of 1-18-63 Submitted by Gallan & Downey Date 1-17-63

Analysis Copper & Molybdenum

Remarks All analyses by colorimetric methods.

cc: Encl.
File

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 9

item 3(a) (preliminary stream & sediment sampling by D & G - BM only)

All values are reported in parts per million unless specified otherwise. A minus sign (-) is to be read "less than" and a plus sign (+) "greater than". Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

Field No.	Copper	Molybdenum
GW-101	25	-1
GW102	20	-1
GW-103	20	1
GW-104	20	1
GW-106	30	1
BM-5	260	20
BM-6	150	18
BM-7	120	27
BM-8	135	21
BM-9	175	23
BM-10	120	22
BM-11	100	25
BM-12	120	47
BM-13	145	47
BM-15A	360	200
BM-15B	170	106
BM-16	330	31
BM-17	205	35
BM-18	340	44
BM-19	190	22
BM-20	75	10
BM-21	25	2
BM-23	35	2
BM-24	30	2
BM-25	30	1

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 10
item 3(e)

DUVAL CORPORATION

POST OFFICE BOX 11277 TUCSON ARIZONA

June 6, 1963

D & G Mining Co.,
P. O. Box 8751,
University Park Station,
Denver 10, Colorado.

Dear Harry & Art:

Following are the results of the samples taken on the Gins & Sams Black Mtn #1 (re-cut by Art) Mo: 0.017 Au, Ag: nil
Outcrop chips Jarositic Mo: 0.007 Au, Ag: nil
Outcrop chips Hematitic Mo: 0.014 Au, Ag: nil
Outcrop chips Mixed Jaro & Hem Mo: 0.019 Au, Ag: nil

The last three samples are from no particular location - just random specimens I picked up here and there. I suppose the last two are from the large location pit down the wash where we broke rocks looking for pyrite and molybdenite. It was surprising that the jarosite-bearing samples only ran 70 ppm but hematitic double that. So now where is it and what is it? Know of any moly-silicates?

Would appreciate the photo when Harry returns. Even if our own gets here would like to plot the claims on it from yours. The order of May 8th hasn't been received yet so we can probably assume that there will be the full 30 days waiting period on your area ordered the 21st.

I plotted, contoured and colored your soil samples and they show a strong open-ended anomaly going to the east northeast. We are anxious to get back up to the claims but Jack is swamped for the next week or more.

Yours very truly,

DUVAL CORPORATION

Donn

Donn M. Clippinger
Senior Geologist

DMC:eos

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 11
item 3(f)

UNION CARBIDE

UNION CARBIDE NUCLEAR COMPANY

DIVISION OF UNION CARBIDE CORPORATION

~~220 NORTH ARLINGTON AVENUE, RENO, NEVADA • FAIRVIEW 3-0663~~

Box 230, Dickinson, North Dakota

7/7/63

D & G Mining Company
Box 8751
University Park Station
Denver 10, Colo.

Dear Art & Harry:

I am sorry for the delay in answering your letter, but my mail has been a little slow in catching up with me. As you can see, I didn't make it to Colorado and it doesn't look as though I will this year.

As you know, practically all of my sampling was in the northeast part of the area. I took 35 samples and the Mo values ranged from 46 - 944 p.p.m. All but 7 of them were over 100 p.p.m. and quite a few were over 200 p.p.m. In general the values of my samples were higher and more consistent than yours. I suspect the reason for this is that my samples were not sieved. The entire sample was pulverized so that there was probably a more complete extraction of the molybdenum. I have not received the returns on my latest samples, some of which were duplicates of the ones you took.

Since the property is being offered to other companies, and since we are still interested ourselves, I do not feel that it would be in our best interest to reveal all of the details of my sample results at this time. In other words, any one else who might be interested

should not have the ~~[illegible]~~ benefit of our sampling as long as we are still interested.

I don't know how much longer I will be stuck in this part of the Country. I hope that I will be able to leave before next fall.

Yours truly

J.E. Morgan

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet #12
item 3(a)

BEAR CREEK MINING COMPANY

SOUTHWEST DISTRICT

2601 NORTH FIRST AVENUE

TUCSON, ARIZONA

MAIN 4-5547

June 10, 1963

D&G Mining Company
Box 8751
University Station
Denver 10, Colorado

Dear Art,

I finally sent in the samples I picked up at Black Mountain and got the results back. I would say the results are pretty good, since the rock was fairly clean except for that in the exploration pit where the Johnsons got their two samples. I was fairly surprised by the moly in the first sample, from the granite (QUARTZ MONZONITE) west of your camp.

Location	Rock	Cd	Mo
600' ~~west~~ south camp	granite	113	210
200' " "	Qtz vein stockwork	87	80
800' southeast	metamorphics and granite dike(?)	50	160
1000' ~~south~~east	pit-silicified schist	250	100
1500' ~~south~~east	pit-schist & granite, limonite, quartz veins	307	648

Denys Poyner tells me he has broken off negotiations with Pima; probably his downpayment was too steep. Has anyone contacted you yet? I don't know where I'll be after the end of this month. I asked Tom the other day but apparently nobody has made any plans. Good luck.

Sincerely,

Pete

Peter H. Kirwin

Trace Analysis | Geochemical Surveys

ROCKY MOUNTAIN GEOCHEMICAL LABORATORIES

233 North Marina Street
Phone: 445-4393
PRESCOTT, ARIZONA

ANALYTICAL REPORT

Date 5/16/63

D & G Mining Co.
Caratunk, Maine

Page

Client D & G

Supplemental Sheet # 13
item 3(a)

Report on BM moly prospects:

Sample Data Sheet of

Submitted by

Date

Analysis

Remarks 2 rock samples taken by E. Johnson on 2ND claim pit at site of sample taken for Gold assay.

	Copper	Zinc	Lead	Molybdenum	Silver
BM - A	620	15	-5	380	-1
BM - B	820	30	35	1,250	2

All in parts per million.

Thanks again for the hospitality —

Received the sweater — Thanks.

Ed

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D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 14
item 3(f)

DUVAL SULPHUR & POTASH COMPANY

ESPERANZA COPPER DIVISION

CERTIFICATE OF ASSAY

BEAKER NOS.	MARKS, ETC.	SAMPLE GMS.	% Mo	Sample #	% Mo		
						Verbal	comment.
	BM-1		.005	15	.004	To	D+G
	4		.006	16	.003	by	J. Fidel,
	7		.021	17	.002	Duval	Corp.
	23		.007	18	.004		
	27		.017	19	.008		
	34		.027	20	.028		
	38		.005	21	.008		
	41		.013	22	.025		
	42		.015	24	.006		
	46		.007	25	.007		
	50		.029	26	.011		
	52		.010	28	.007		
	54		.022	29	.011		
	2		.006	30	.006		
	3		.005	31	.004		
	5		.007	33	.016		
	6		.025	34	.003		
	8		.004	35	.015		
	9		Trace	36	.016		
	10		.005	37	.002		
	11		.010	39	.007		
	12		.009	40	.014		
	13		.007	43	.003		
	14		.016	44	.008		
				45	.006		
				47	.007		
				48	.002		
				49	.007		
				51	.013		
				53	.022		
		58	.021	54	.007		
		59	.014	55	.012		
				57	.020		

FORM 311 M.L.

ROCKY MOUNTAIN GEOCHEMICAL LABORATORIES

233 North Marina Street Phone: 445-4393

PRESCOTT, ARIZONA

ANALYTICAL REPORT

Date January 24, 1964

D & G Mining Co.
Caratunk, Maine

Client D & G Mining Co.
P.O. Box 2024
Prescott, Arizona

Supplemental Sheet # 15
item 3(f)

Report on 12 samples (11 rock, 1 soil)

Sample Data Sheet of (none) Submitted by H. Down~~ing~~ey Date 1-22-64

Analysis Copper, Molybdenum ------ Molybdenum on the soil

Remarks Colorimetric methods.
cc: encl.
file

Field No.	Copper	Molybdenum	Field No.	Copper	Molybdenum
BM R-42	55	200	BM R-61	130	950
BM R-43	145	70	BM R-62	75	350
BM R-44	45	200	BM R-63	75	130
BM R-45	95	180	BM R-64	85	325
BM R-47	95	150	~~A R-36~~	15	8
BM R-60	75	725	~~A~~ -36 (soil)		7

not BM

E A Johnson
E. A. Johnson

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ROCKY MOUNTAIN GEOCHEMICAL LABORATORIES

233 North Marina Street Phone: 445-4393

PRESCOTT, ARIZONA

ANALYTICAL REPORT

Date April 22, 1964

Client D & G Mining Co.
P.O. Box 2024
Prescott, Arizona

Report on 19 drill samples

Sample Data Sheet of (none) Submitted by H. Down~~ing~~ey Date 4-17-64

Analysis Copper, Molybdenum (Thoes exceeding 500 ppm to be re-run.)

Remarks Colorimetric methods.
Samples returned.

cc: encl.
file

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 16
items 3(a), 3(f)

All values are reported in parts per million unless specified otherwise. A minus sign (—) is to be read "less than" and a plus sign (+) "greater than". Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

Field No.	Copper	Molybdenum	
4-0-2	525	160	
4-2-4	290	28	
4-4-6	215	57	
6-0-2	75	+400	(rerun) 575
6-2-4	105	160	
6-4-6	135	220	
7-0-2	340	300	
7-2-4	375	+400	(rerun) 625
7-4-6	350	240	
11-0-2	45	190	
11-2-4	50	230	
11-4-6	55	225	
16-0-2	30	180	
16-2-4	25	130	
16-4-6	35	90	
17-C	230	195	
19-0-2	50	80	
19-2-4	45	85	
19-4-6	35	60	

E A Johnson

E. A. Johnson

R. S. McClintock DIAMOND DRILL COMPANY

CONTRACTING • DIAMOND DRILLS AND SUPPLIES • DIAMOND BITS

PHONE TE 8-3588

POST OFFICE BOX 66
W. 418 2ND AVENUE
SPOKANE 10, WASH.

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 17
item 7(a)

May 8, 1964

D & G Mining Company
P.O. Box 2024
Prescott, Arizona 86301

Attn: Messrs. Harold Downey & W. Arthur Gallan

Gentlemen:

We wish to submit our proposal for diamond drilling on your property about forty seven miles north of Kingman, Arizona.

It is understood that the drilling is for 1500 feet of NX hole, either two holes of 750' depth or three 500' depth holes.

We propose to furnish personnel, diamond core drill, diamond bits and shells, water, rods, casing, pumps and all accessories necessary to perform this work with the exception of core boxes and sample containers for the following prices. Excepted items will be furnished at cost if you desire.

NX Core Drilling	0' - 750'	$11.55 per foot

Contractor agrees to mobilize and demobilize his equipment for the lump sum of $450.00.

A charge of $8.00 per hour will be made for standby, road building or delays not attributable to contractor or breakdown of his equipment.

In the event of loose or caving material, water courses or any conditions encountered which tend to make drilling impractical without the use of casing or cement, an additional charge of $3.50 per foot for reaming casing or cementing will be made.

Our employees will be covered by Workman's Compensation to comply with the State Act and the job will be covered by public liability insurance in the amounts of $300,000 and $500,000 and property damage in the amount of $100,000.

JOY MANUFACTURING COMPANY
900 WOODLAND AVENUE
MICHIGAN CITY, INDIANA

April 28, 1964

AIR MAIL

D & G Mining Company
P. O. Box 2024
Prescott, Arizona

Gentlemen:

We have been informed by Mr. Arthur Eklund, our Supervisor of drilling operations at Tucson, Arizona, that you are contemplating on drilling a minimum of 1500 feet of hole in the Kingman, Arizona area, and that you would like to have a turnkey price from us covering this proposed drilling so that you can arrange for a Federal loan.

We understand that there will be either two 750-foot holes or three 500-foot holes at an angle of 60° from the vertical, and that the formation will be a hard granite and schist.

We estimate the price for the drilling from 0 to 500 feet in any one drill hole at $7.50 per foot, and from 500 to 750 feet in any one hole at $8.00 per foot. The drilling will be with NX wireline fittings which will produce 2" diameter cores.

The above prices include any possible reaming, casing or cementing, as well as drilling mud, core boxes and water hauling.

The above are tentative prices and, should you be successful in having your loan approved and you are ready to proceed with the drilling, we will at that time have Mr. Eklund examine the location of the proposed drilling and will quote firm prices with other conditions at that time.

Yours very truly,

JOY MANUFACTURING COMPANY

W. J. Pilarski, Manager
Contract Drill Division

WJP/et

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet #18
item 7(a)

E. J. LONGYEAR COMPANY
General Offices, 76 South 8th St.
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 9-7631 • CABLE LONGCO

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet #19
item 7(a)

308 East Pima Street
Phoenix, Arizona 85004
May 7, 1964

D & G Mining Company
Post Office Box 2024
Prescott, Arizona 86301

SUBJECT: ESTIMATE COVERING CORE DRILLING PROGRAM, MOHAVE COUNTY, ARIZONA

Gentlemen:

This is in response to your recent request for estimation of cost which would cover your contemplated core drilling program and would be used for the purpose of applying for an O.M.E. government loan.

It is understood that the prices outlined below are estimates only and that if the drilling materializes, we will be permitted to examine the area and submit a firm proposal covering the work.

Our estimations are based on the following information supplied by you:

A) Location: Approximately 47 miles northwest of Kingman, Arizona, one mile west of paved Route 93.

B) Rock types: Granite and schist, very hard and silicious but tight with little shearing.

C) Size of hole: NX with possible reduction to BX.

D) Angle of holes: 60^0 or steeper.

E) Depth of holes: 750 feet maximum.

F) Number of holes: 2 to 3

G) Minimum footage guaranteed: 1,500 feet

H) Water haul: Approximately 5 miles, 3 on highway, 2 on gravel road. Cost of water at source to be furnished by you.

I) Personnel and equipment: one drill on a one shift basis, six days per week.

Based upon the information outlined above, we estimate the following prices will prevail:

a) Mobilization and demobilization of personnel and drilling equipment.....$435.00 Lump Sum

b) Overburden drilling and setting casing to ledge -

0 to 50 feet in depth.....$5.95 per foot

c) Diamond core drilling, in angle holes 60° or steeper, as measured from the horizontal -

	standard sizes - prices per foot	
Depths	NX	BX
Ledge to 500 feet....	$7.35	$7.10
500 to 750 feet.....	$7.85	$7.60

d) Reaming, where applicable.....$5.00 per foot

e) Cementing operations, if required and where applicable.....$12.50 per hour with two-man crew, plus cost of materials consumed.

f) Delays or standby time requested by you or for which you are responsible.....$12.00 per hour with two-man crew.

g) Water truck service: truck rental.....$125.00 per month plus $0.10 per mile traveled while engaged in water hauling activity.

If water must be obtained from a more distant source or for some other reason it becomes necessary to hire a full time water truck driver, a charge of $3.00 per hour will be made to cover the resultant additional labor and payroll tax expense.

No charge for hauling will be made if the normal two-man crew supplies the water without subjecting the drilling to excessive delays.

h) Core boxes, cardboard type, capacity 10 feet of core, with covers.....NX or BX size $0.95 each

i) Suitable access roads for traveling with standard trucks and the leveling of drill sites will be performed by you.

j) All drill mud, mud additives, cement or hole plugging material consumed in the program will be invoiced at cost, f.o.b. jobsite.

We trust the above information on prices will be sufficient for your needs in applying for your O.M.E. Loan. If you should require further information on your programs' anticipated cost from us, please advise and we would be happy to furnish it.

If your program materializes and you should wish to proceed with your drilling plans, we would appreciate the opportunity to examine the drilling area and submit to you a firm proposal covering the work.

item 7(a)

Effective August 1, 1963

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
Registered Assayers

Main Office and Laboratory
1700 ~~1800~~ West Grant Road
Tucson, Arizona

Mailing Address: Box 5934
Tucson, Arizona 85703
Telephone 622-4836

COMMON ORES

Element	Reported as % of	Special	Standard
Gold	Au	$1.75	$3.00
Silver	Ag	1.50	2.75
Gold & Silver	Au Ag	3.00	5.25
Lead	Pb	2.00	3.50
Copper	Cu	1.50	2.50
Copper, Oxide	Cu Ox	1.75	2.75
Zinc	Zn	2.50	3.75
Iron	Fe	2.50	4.00
Manganese	Mn		4.00
Molybdenum	Mo	3.00	5.25
Mercury	Hg		5.50
Silica	SiO_2		7.50
Sulphur	S	2.50	4.00
Tungsten	WO_3		7.00
Uranium	U_3O_8		8.00

Bullions

Gold	Au	3.50
Silver	Ag	3.25
Gold & Silver	Au Ag	5.50
Copper	Cu	3.00

Gold & Silver reported as ounces per 2000 lb. ton

STANDARD ANALYSIS WILL BE MADE
UNLESS OTHERWISE SPECIFIED

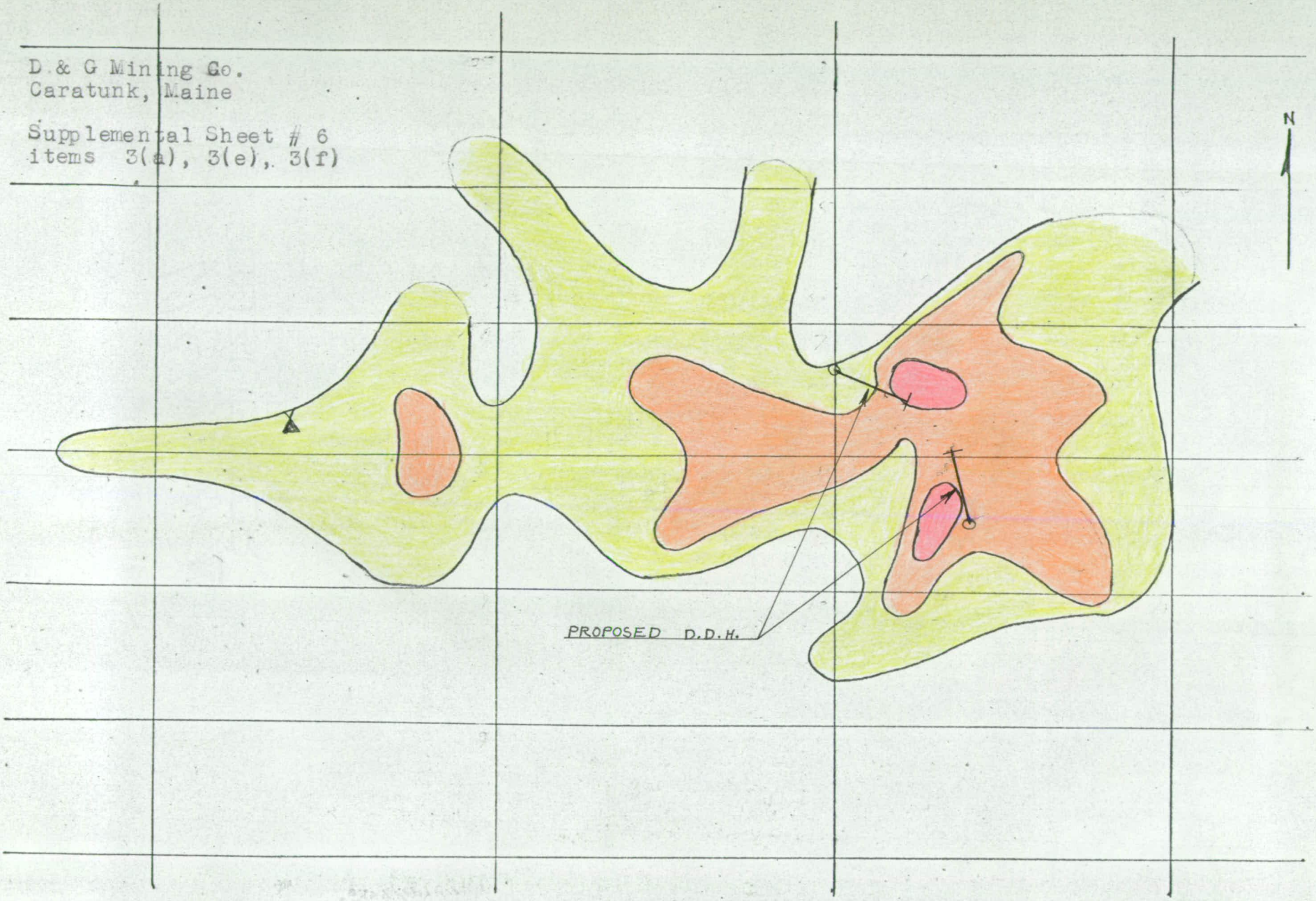
MISCELLANEOUS SERVICES

Crushing, Splitting & Pulverizing each sample	25 lbs.	$ .75
Drying each	25 lbs.	.75
Compositing, .15 per sample minimum		.75
Moisture determination		2.00
Pulps held 90 days		No charge
Rejects held only by request		No charge

A complete schedule of fees may be had on request.

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 6
items 3(a), 3(e), 3(f)



100-200 PPM

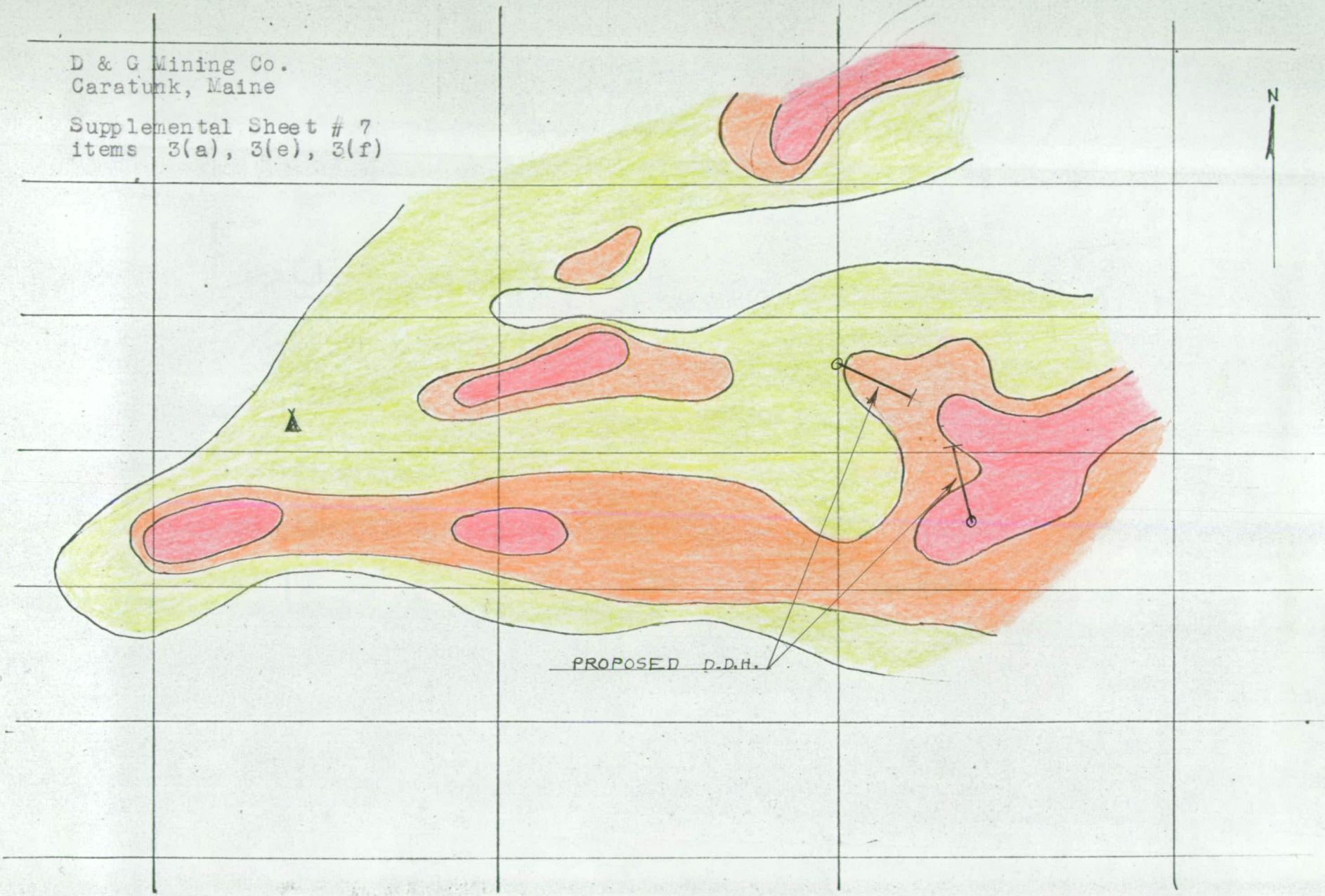
200-300 PPM

GREATER THAN 300 PPM

D+G MINING CO.
BLACK MT. PROSPECT
MOLYBDENUM IN SOIL
SCALE: 1" = 600'

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 7
items 3(a), 3(e), 3(f)



100-200 PPM

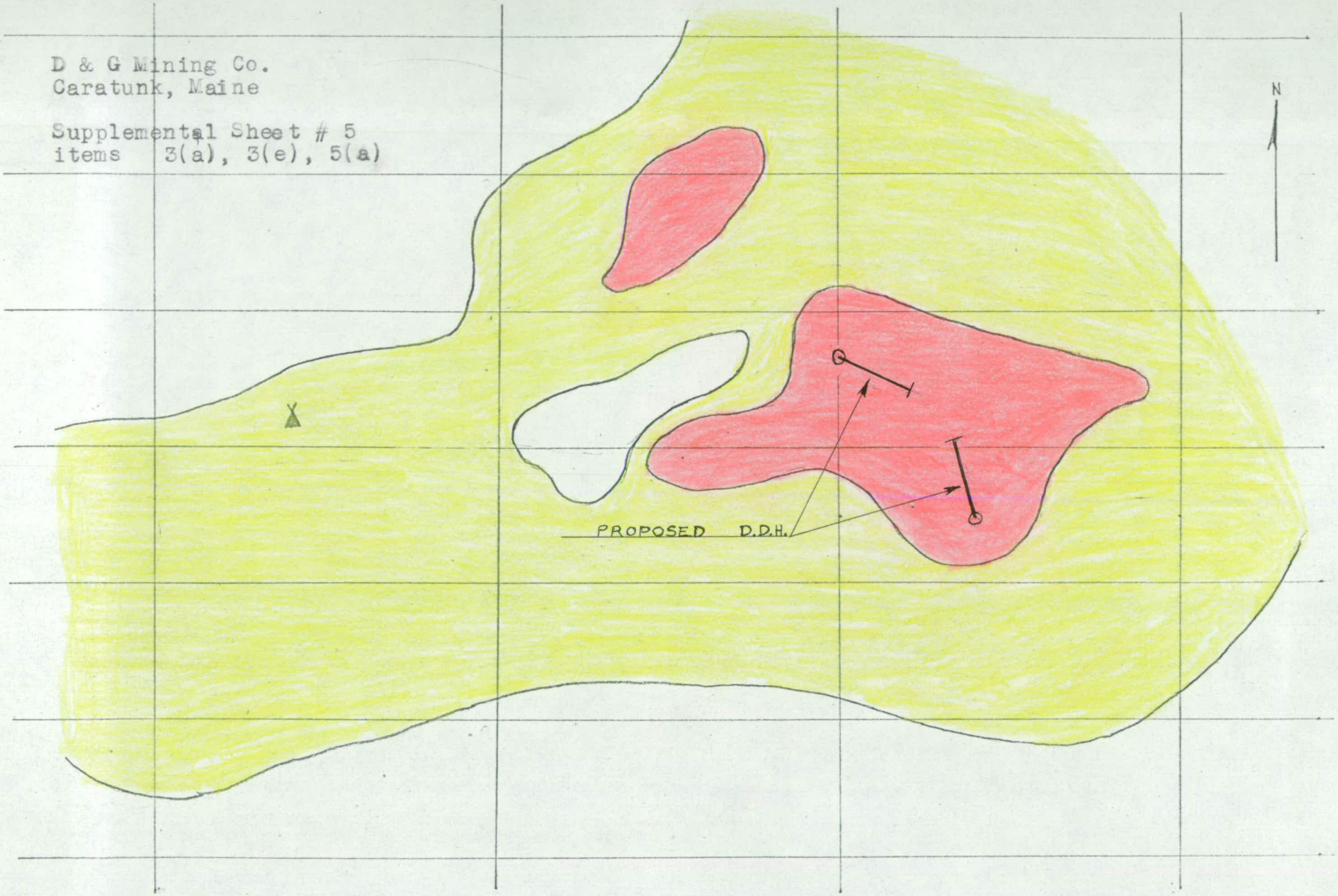
200-300 PPM

GREATER THAN 300 PPM

D+G MINING CO.
BLACK MT. PROSPECT
MOLYBDENUM IN ROCK
SCALE 1" = 600'

D & G Mining Co.
Caratunk, Maine

Supplemental Sheet # 5
items 3(a), 3(e), 5(a)



ALTERATION IS PREDOMINANTLY
SILICIFICATION WITH SOME SERICITATION

SLIGHT TO MODERATE

INTENSE

D+G MINING CO.
BLACK MT. PROSPECT
ALTERATION MAP
SCALE: 1"=600'

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MT. PERKINS QUADRANGLE
ARIZONA–NEVADA
15 MINUTE SERIES (TOPOGRAPHIC)

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1954. Field check 1959

Polyconic projection. 1927 North American datum
10,000-foot grids based on Arizona coordinate system, west zone and Nevada coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue

Dashed land lines indicate approximate locations
Land lines unsurveyed in Ts. 27 and 28 S.–R. 66 E., and parts of T. 25 N.–R. 22 W. and Ts. 26 and 27 N.–R. 21 W.

TRUE NORTH
MAGNETIC NORTH
15½°
APPROXIMATE MEAN DECLINATION, 1959

SCALE 1:62500

1 ½ 0 1 2 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 80 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ARIZONA
QUADRANGLE LOCATION

ROAD CLASSIFICATION

Medium-duty — Light-duty

Unimproved dirt

U. S. Route — State Route

The west half of this area also covered by 1:24 000-scale maps of Fire Mountain and Mt. Davis, 7.5 minute quadrangles, surveyed 1959

MT. PERKINS, ARIZ.–NEV.
N3530—W11430/15

1959