MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/1	Johnson	110
		220

November 1, 1966

Memorandum

To: The File

From: Assistant Chief, Office of Minerals Exploration

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Mr. William Hasler, OME Field Officer, Region III, reported to me by phone yesterday that a representative of the Molybdenum Corporation of America recently stated that reserves at the Questa property were on the order of 3 billion tons of ore containing an average of 3 pounds molybdenum per ton (0.25% MoS_2) or 9 billion pounds of contained molybdenum.

The company's estimate of reserves as of June 1960, which was published in Mining Engineering, January 1961, totalled 260 million tons of ore containing an average of 3 pounds molybdenum per ton (0.25% MoS_2) or 760 million pounds of contained molybdenum. This was essentially the same estimate reported in the Operator's final report on the subject contract.

The new estimate represents about a 4-fold increase in molybdenum reserves, and no doubt results from extensive exploration and development work associated with bringing the property into full scale production.

Harold Kirkemo

Harold Kirkemo

cc: Director's Reading File
Division File
Economic Geology File
Kirkemo
Region III
DMEA Docket
OME Reading File

HKirkemo/mm (11/1/66)

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
		220

AUG 17 1966

Molybdenum Corporation of America
280 Park Avenue
New York, N. Y. 10017

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Gentlemen:

Thank you for your letter of August 3, 1966, transmitting your check in the amount of $148,376.76 completing the repayment of The Government's contribution of $200,339.57 to the costs of exploration under the subject contract.

We congratulate you on the success you have achieved in bringing the project at the Questa mine into production.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

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

FEJohnson/bih 8/17/66

23263

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

August 3, 1966

Mr. William Hasler
Field Officer OME
Region III
U.S. Bureau of Mines
Federal Center
Denver, Colorado

Dear Mr. Hasler:

Enclosed is our check in the amount of $148,376.76, this being the sixth and final repayment of royalty under the DMEA loan, Contract Idm-E-1094.- 4568

A statement of the royalty calculation is also enclosed, based on second quarter processing of concentrates from the Questa Mine. As you will note, the royalty calculation exceeds the loan balance.

Very truly yours,

George A. Matthews
Assistant Controller

GAM:cc
Encls.

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N.Y. 10017

August 3, 1966

Field Officer, OME
Region III
U.S. Bureau of Mines
Federal Center
Denver, Colorado

Re: Contract Idm - E - 1094
ROYALTY REPAYMENT OF DMEA LOAN

Questa Mine production shipped and used in the three month period ended June 30, 1966.

3,190,943	Lbs. MoS_2
X .5994	
1,912,651	Lbs. Mo
97.7	Recovery
1,868,660	Lbs. Mo in Oxide
X 1.74	
$3,251,468.40	Value of Mo in Mo Oxide
X .05	
$ 162,573.42	Royalty Calculation
$ 148,376.76	Balance of Loan

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

George A. Matthews
Assistant Controller

GAM:cc

Chief OME

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

June 6, 1966

Mr. William Hasler
Field Officer OME
Region III
U.S. Bureau of Mines
Federal Center
Denver, Colorado

Dear Mr. Hasler:

Enclosed herewith is our check in the amount of $50,782.86, this being the fifth repayment of royalty under the DMEA loan, Contract Idm - E - 1094.

A statement of the calculations of royalty is also enclosed. The calculations were based on first quarter direct sales and processing of concentrates from the Questa Mine.

It is expected that next quarter royalties will repay the DMEA loan in full.

Very truly yours,

George A. Matthews
Assistant Controller

GAM:cc
Encl.

REMITTANCE ADVICE

MOLYBDENUM CORPORATION OF AMERICA

VOUCHER NO. 52510

DATE	INVOICE NO.	PURCHASES	DEDUCTIONS		BALANCE
6/6/66					$50,782.86
Royalty Repayment of D M E A Loan					

DETACH AT PERFORATION BEFORE DEPOSITING CHECK

5

MOLYBDENUM CORPORATION OF AMERICA
NEW YORK, N. Y.

1-103
210

BANKERS TRUST COMPANY
PARK AVENUE AT 46TH ST.
NEW YORK

DATE	CHECK NO.	GROSS	DISCOUNT	AMOUNT OF CHECK
6/6/66	55510	50,782.86		$50,782.86

EXACTLY ⑈50782 AND 86 CTS ⑈

PAY TO THE ORDER OF

Field Officer, O.M.E., Region 111
Denver Federal Center
Denver 25, Colorado

MOLYBDENUM CORPORATION OF AMERICA

PRESIDENT

TREASURER

⑆0210⑈0103⑆01⑈4061700 5⑈

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N.Y. 10017

June 6, 1966

Field Officer, OME
Region III
U.S. Bureau of Mines
Federal Center
Denver, Colorado

Re: Contract Idm - E - 1094
ROYALTY REPAYMENT OF DMEA LOAN

Questa Mine production shipped and used in the three month period ended March 31, 1966.

996,750	Lbs. MoS_2
X .5994	
597,452	Lbs. Mo
97.7	Recovery
583,711	Lbs. Mo in Mo Oxide
X 1.74	
$1,015,657.14	Value of Mo in Mo Oxide
X .05	
$ 50,782.86	Royalty Due

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

George A. Matthews
Assistant Controller

IN REPLY REFER TO:

90

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

May 18, 1966

Molybdenum Corporation of America
280 Park Avenue
New York, N. Y. 10017

OFFICIAL COPY
O. N. E.
RECEIVED
JUN 10 1966

INITIALS	CODE
6/10 M	~~120 M~~
	120
	~~[illegible]~~
HK	120 K
HMA	120 S
	320

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Gentlemen:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **April 26, 1965**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [ ] No [X]

2. Since **April 26, 1965**, has there been any production from the land subject to the contract? Yes [X] No [ ]

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.
   As of 4/30/66

	Quantity	Value
Metallurg, Inc.	51,163 lbs. Mo	$79,303
Washington, Pa. (our plant)	1,164,827	2,329,654

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since **April 26, 1965**, has any production been transported through workings (see **Annex II** of contract)? Yes [ ] No [X]

   If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by: George A. Matthews, Jr.

Name George A. Matthews Jr. Title Assistant Controller

Address 280 Park Avenue Date June 6, 1966

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

OFFICIAL
COPY
O. M. E.
RECEIVED
FEB 8 1966
INITIALS | CODE
FEJ | 110
120 TW
120
220

February 4, 1966

Mr. Frank E. Johnson,
Chief-Office of Mineral Exploration (OME)
Department of Interior Building
Washington, D. C. 20240

Re: DMEA Contract No. Idm. E-1094
DMEA Docket No. 4568

Dear Mr. Johnson:

Following Mr. Kuntz's visit to your office on Wednesday of this week, he has asked me to advise you that we have now located a copy of the Molybdenum Corporation final report to DMEA and, hence, we need not bother you with a request to reproduce a copy.

Yours very truly,

J. C. Bennett
Vice President and Secretary

JCB:vd

Bldg. 20, Denver Federal Center
Denver, Colo. 80225

May 18, 1965

Molybdenum Corporation of America
280 Park Avenue
New York, N. Y. 10017

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E 1094

120 m
120
220

Gentlemen:

Attached is a copy of the Report of Royalty Review dated May 4, 1965, covering the subject contract.

Yours very truly,

ORIGINAL SIGNED BY

Hugh M. Connors
Acting Field Officer, OME
Region III

H. M. C. (5-18-65)
cc: G. C. Selfridge
C. E. Fisher
E 4568
Chron

Bldg. 20, Denver Federal Center
Denver, Colo. 80225

May 18, 1965

Memorandum

To: Fiscal Section
Office of Management Operations
Office of the Secretary
Department of the Interior
Washington, D. C. 20240

From: Acting Field Officer, OME, Region III

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E 1094

Attached is the original of a Report of Royalty Review dated May 4, 1965, covering the subject contract.

ORIGINAL SIGNED BY
Hugh M. Connors

H. M. C. (5-18-65)
cc: O. C. Selfridge
C. E. Fisher
E 4568
Chron

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

KENNETH A. WALKER
TREASURER

January 27, 1965

Field Officer, O.M.E.
Region III
Building 20
Denver Federal Center
Denver 25, Colorado

Dear Sir:

We enclose herewith our check in the amount of $240.90, this being the fourth repayment of royalty under the DMEA loan, Contract Idm-E-1094.

A statement of the calculations of royalty is also enclosed.

Very truly yours,

Kenneth A. Walker
Treasurer

KAW:cc
Encls.

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

January 27, 1965

Field Officer, O.M.E.
Region III
Building 20
Denver Federal Center
Denver 25, Colorado

Re: Contract Idm-E-1094
ROYALTY REPAYMENT OF DMEA LOAN

Shipment from Questa Mine to our Washington, Pa. Plant in December, 1964.

4,728	Lbs. MoS_2
X.5994	
2,834	Lbs. Mo.
97.7	Recovery
2,769	Lbs. Mo. in Mo. Oxide
X1.74	
$4,818.06	Value of Mo. in Mo. Oxide
X.05	
$ 240.90	Royalty Due

ama

E-1094

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

Kenneth A. Walker
Treasurer

KAW:cc

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

DMEA 4568

December 14, 1964

Field Officer, O.M.E.
Region III
Building 20
Denver Federal Center
Denver 25, Colorado

Re: Contract Idm-E-1094
ROYALTY REPAYMENT OF DMEA LOAN

Shipment from Questa Mine to our Washington, Pa. plant on September 1, 1964.

6,030	Lbs. MoS_2
X 6	
3,618	Lbs. Mo.
97.7%	Recovery
3,535	Lbs. Mo. in Mo. Oxide
X 1.74	
$6,150.90	Value of Mo. in Mo. Oxide
X 5%	
$ 307.50	Royalty Due

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

Kenneth A. Walker
Treasurer

KAW:cc

ME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		220

DEC 22 1964

Memorandum

To: Acting Field Officer, Region III

From: Contract Administration and Audit Division /s/ C. E. Fisher

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Returned herewith is the original of a letter dated December 14, 1964, from Molybdenum Corporation of America which was received in duplicate with your Abstract of Remittances 64-12-3.

Please forward a copy of the calculation of royalty referred to in the letter to complete the Washington office records.

Enclosure

CEFisher/ama 12-22-64

cc:
Docket
Director's Reading File
CA & A Division

23263

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N.Y. 10017

KENNETH A. WALKER
TREASURER

December 14, 1964

Field Officer, O.M.E.
Region III
Building 20
Denver Federal Center
Denver 25, Colorado

Dear Sir:

We enclose herewith our check in the amount of $307.50, this being the third repayment of royalty under the DMEA loan, Contract Idm-E-1094.

A statement of the calculations of royalty is also enclosed.

Very truly yours,

K A Walker

Kenneth A. Walker
Treasurer

KAW:cc
Encls.

11-16-64

File

DMEA 4508 - Co 1094
Moly Corp
certificate 1/13/61 to
May 31, 1973 - 16 years
from date of contract May 1, 1957
Amt agent $200,340.

Regard to date # 632

[illegible]

Yes - Royalties are from tests made on ore - Truman doubt how good. [illegible] Operator is financing large [illegible] mill. Operator performed additional exploration in better grade area and again V to the DMEA project. Will like work yours before substantial production is reached. JSf

11-12 4145

Let's get things of our participation and I can refund this system maybe we can do something.

~~120~~ ~~140~~ ~~100~~ 220

if adverse to a claim holder. "These cases involve basic legal and factual issues fundamental to the validity of many other oil-shale locations," Udall said. "Resolution of the issues presented in these cases could provide the basis for action on other claims." The claims have been 1920 pending more than 44 years--since before the Mineral Leasing Act of ~~1929~~ made oil shale subject to mineral leasing rather than location under the mining laws. (Denver Post, 9/10/64, and Rocky Mountain News, 9/11/64)

Vanadium. - Union Carbide Corp. has announced plans to reopen its Rifle vanadium mine, 10 miles north of Rifle, Colo., late this year or early in 1965. The mine has been worked intermittently since Union Carbide acquired the property in 1926 through acquisition of Vanadium Corp. of Colorado. When operations are resumed, ore will be hauled to Carbide's nearby uranium-vanadium mill at Rifle. (Metal Mining & Processing, 9/64)

Molybdenum. - Molybdenum Corp. of America announced arrangements whereby it will raise $27.5 million required for development of mining properties near Questa, N. Mex. Dow Jones News Service reported that Bankers Trust of New York and Mellon National Bank and Trust Co. of Pittsburg, Pa., have agreed to provide $20 million on a revolving loan that will convert to a 5-year term loan in 1966. The financial wire said the company also plans to issue rights to 125,000 shares of common stock and subordinate debentures to raise $12.5 million, part of which will go to capitalize the Questa operation. (Albuquerque Journal, 9/16/64)

Dale Bellamah Land Co., Inc., will develop a major residential subdivision in Questa, N. Mex. The subdivision will meet the demand for housing created by the activities of the Molybdenum Corp. of America, which has let a contract for construction of a $25-million mine and mill installation east of Questa. In 6 or 7 years, when development is complete, Questa is expected to have a population of about 3,000 persons. About 1,200 persons now are living in Questa. American Moly now employs about 300 persons in activities connected with a pilot mine and mill. Mine employment is expected to reach at least 450 persons when large scale mining and milling begin some time next summer. Mine and mill construction will involve a work force of about 500. In addition, the new basic-industry population will create opportunities for hundreds more in service enterprises. American Moly is expected to move about 12 million tons of material annually at its Questa mine. The mill will refine 5 or 6 pounds of 80-percent-pure molybdenum from each ton of raw ore. The concentrate will go to a Pennsylvania plant for further refining. Current expectations are that the Questa mine will remain in operation for at least 40 or 50 years. Molybdenum is a temperature-resistant alloying metal used in steel fabrication and in missile applications. (Albuquerque Journal, 8/19/64)

Copper. - Mr. Orrin F. Marvin of Phoenix, Ariz., has announced development of a new process to recover copper from leach solutions. He claims that the new process, involving a series of chemical reactions starting with natural gas and manganese or calcium sulphate, replaces and is superior to iron for

G.C. Selfridge "from News of Mineral Industries Area V"

MOLYBDENUM CORPORATION OF AMERICA
280 PARK AVENUE
NEW YORK, N. Y. 10017

KENNETH A. WALKER
TREASURER

August 24, 1964

Field Officer, O.M.E.
Region III
Building 20
Denver Federal Center
Denver 25, Colorado

OME
DEPARTMENT OF THE INTERIOR
AUG 2 1964
REGION III
DENVER, COLORADO

DMEA-4568

Dear Sir:

We enclose herewith our check No. 10599 in the amount of $261.87, this being the second repayment of royalty under the DMEA loan, Contract Idm-E-1094.

A statement of the calculations of royalty is also enclosed.

Very truly yours,

Kenneth A. Walker
Treasurer

KAW:am
enc. 2

August 20, 1964

Field Officer, O.M.E.
Region III
Building 20
Denver 25, Colorado

OME
DEPARTMENT OF THE INTERIOR
AUG 2 5 1964
REGION III
DENVER, COLORADO

Re CONTRACT Idm-E-1094
ROYALTY REPAYMENT OF DMEA LOAN

Shipment from Questa Mine to our Washington, Pa. plant on July 29, 1964

	5,136	Lbs. MoS_2
x	6	
	3,081	Lbs. Mo
x	97.7%	Recovery
	3,010	Lbs. Mo in Mo Oxide
x	1.74	
	$5,237.40	Value of Mo in Mo Oxide
x	5%	
	$ 261.87	Royalty Due

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

K A Walker

Kenneth A. Walker
Treasurer

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		100
5/13		110
		120
		210

MAY 1 3 1964

Mr. H. F. Ditchburn
Molybdenum Corporation of America
Questa, New Mexico

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Ditchburn:

This is in reference to my discussion with you and Mr. Griswold over the telephone on May 8, 1964, regarding a U. S. Bureau of Mines report on statistical studies on the subject property.

There is some misunderstanding concerning just what you had in mind as the Office of Minerals Exploration does not have anything to do with such studies. Possibly you were referring to the type of study undertaken at Climax, Colorado, by the Bureau of Mines in cooperation with the American Metal - Climax Company on sampling and data processing in the Bureau's computor at the Federal Center near Denver, Colorado. For information about this type of study, it is suggested you write to Mr. Robert Geehan, Area Director, Area V, New Custom House Building, Denver, Colorado.

Sincerely yours,

George Fumich, Jr.

Acting Director

FEJohnson/bih
5/13/64

cc to: Files (Docket)
Dir. reading file
OME - Region IV
Mr. Robert Geehan - Denver
Mr. F. E. Johnson

43683

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

OME
DEPARTMENT OF THE INTERIOR
NOV 13 1963
REGION III
DENVER, COLORADO

November 12, 1963

Field Officer, O. M. E.
Region 111, Building 20
Denver Federal Center
Denver 25, Colorado

DMEA - 4568

Dear Sir:

We enclose herewith our check No. 3737 in the amount of $369.68, this being the first repayment of royalty under the DMEA loan.

A statement of the calculations of royalty is also enclosed.

Very truly yours,

K. A. Walker
Ass't. Treasurer

KAW/ck
Encs.

Field Officer, O. M. E.
Region 111
Building 20
Denver Federal Center
Denver 25, Colorado

OME
DEPARTMENT OF THE INTERIOR
NOV 13 1963
REGION III
DENVER, COLORADO

ROYALTY REPAYMENT OF DMEA LOAN

Shipment from Questa mine
to our Washington, Pa. plant
as per letter to you dated 9/12/63 from A.L. Greslin

11,170	lbs. net weight
71.00%	MoS2
7,931	lbs. MoS2
x 6	
4,759	lbs. Mo
x 97.7%	Recovery
4,650	lbs. Mo in Mo Oxide
x 1.59	
$7,393.50	Value of Mo in Mo Oxide
x 5%	
$ 369.68	Royalty due

Certified Correct
MOLYBDENUM CORPORATION OF AMERICA

Wm. B. Kuntz
Treasurer

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 5 1963

DATE	INITIALS	CODE
11/6		800
		700
11/6		110
		190
11/6	Murphy	500
		230

WM. R. KUNTZ
EXECUTIVE VICE PRESIDENT

November 4, 1963

Mr. Frank E. Johnson
U. S. Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Johnson:

We, too, cannot reconcile the 676 lbs. Mo in roasted moly oxide as shown in the third item of my letter of October 25th. This figure should have been 586 lbs. Mo. However, apparently we do agree in principle and I am arranging for our accounting department to pay royalty on the recent shipment from Questa on this basis.

We will accept the E&MJ Metal and Mineral Markets' quotation for molybdenum trioxide as the base price upon which royalty will be computed.

Yours very truly,

Wm. R. Kuntz
Executive Vice President

WRK:am

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/31	Murphy	500
10/31	on Degre	500
10/31	Talbut	800
	Selfridge	120
11/1		110
		100
		220

NOV 1 1963

Mr. William R. Kuntz
Executive Vice President
Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

Re: DMEA-4368 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-K1094

Dear Mr. Kuntz:

In reply to your letter of October 25, 1963, your method of computation of the royalty appears acceptable. However, reviewing your example for royalty calculations, we could not reconcile the 676 lbs. Mo in roasted moly oxide as shown in the third item. Will you kindly clarify this figure? Also, we note the price of $1.59 per lb. of Mo in the fourth item is the same figure as listed for molybdic trioxide in the October 21, 1963, issue of E & MJ Metal and Mineral Markets. Will this weekly price authority be the basis for royalty calculations?

Sincerely yours,

signed for FRANK E. JOHNSON
ACTING Director

FMMurphy/mm
10/31/63
cc: Director's Reading File
Region III w/cy of incoming letter
Docket
Code 500

43683

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 28 1963

DATE	INITIALS	CODE
10/28	[illegible]	500
	Murphy	120
		500
		220

WM. R. KUNTZ
EXECUTIVE VICE PRESIDENT

October 25, 1963

Mr. George Fumich, Jr., Director
U. S. Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Fumich:

Replying to your letter of October 9th, the following are in answer to questions set forth therein.

1. We regret we cannot supply a schedule of our purchases of MoS_2 concentrates since this is high confidential information.

2. The actual percentage of loss in converting molybdenum concentrates to the oxide form at our Washington plant is 2.3%: i.e. recovery of 97.7%.

3. We would consider the time of receipt of the concentrates at our Washington plant as the time of sale of the roasted molybdenum oxide for royalty purposes.

Re: DMEA-4568

Questions (on item 4):

(a) How is 600 lbs. computed?

(b) How is 676 lbs the result of 600 x 97.7%?

(c) What is source of $1.59 price?

Talbut
10/28/63

Mr. George Fumich, Jr., Director October 25, 1963

4. The following is an example of how we would compute the royalty:

1,000 lbs. MoS_2 contained in concentrates.
600 lbs. Mo in concentrates. 1,586.2 lbs.
600 lbs. x 97.7% = 676 lbs. Mo in roasted moly oxide.
676 lbs. Mo x $1.59 = $1,074.84
$1,074.84 x 5% (royalty percentage) = $53.74
$53.74 = royalty.

We will compute and pay royalty for the shipment made from Questa on August 30, 1963 promptly after advice from you.

Yours very truly,

Wm. R. Kuntz
Executive Vice President

WRK:am

Atomic weights

Mo	95.95
S	32.06

MoS_2

95.95
64.12
160.07

$\frac{95.95}{160.07} \times 1000 \text{ lbs} = 599.42$ lbs. Mo

$\frac{64.12}{160.07} \times 1000 \text{ lbs} = 400.57$ lbs. S_2

999.99
1000.00

1.40
600
840.00

586
1.59
5274
2930
586
931.74

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

WM. R. KUNTZ
EXECUTIVE VICE PRESIDENT

October 10, 1963

Mr. George Fumich, Jr., Director
U. S. Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Fumich:

Thank you for your letter of October 9th which was in answer to Mr. Kuntz' letter of September 6th to Mr. Connors.

Mr. Kuntz is presently out of town but your letter will have his attention immediately upon his return.

Very truly yours,

Anne R McLean

Anne R. McLean
Secretary to Mr. Kuntz

am

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 11 1963
DATE
10/14 8.00
10/14 5.00

E Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/9	Murphy	500
10/9	on leave	500
10/9	Talbert	800
	Selfridge	120
10/9	Johnson	110
4	Fumich	100
		520

OCT 9 1963

Mr. William R. Kuntz
Executive Vice President
Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Kuntz:

With reference to your letter of September 26 to Mr. Connors, we will consider the suggestion of basing the Government's percentage royalty upon your selling price for roasted molybdenum oxide after adjustment for processing losses.

To assist us in reaching a final decision in this matter, would you kindly furnish us with the following information:

1. If available, a copy of your schedule for purchase of MoS_2 concentrates.
2. The estimated percentage of loss in converting the concentrate to oxide form.
3. Would you consider the date of receipt of the concentrates at Washington, Pa. as the date of sale of the roasted molybdenum oxides for royalty purposes?
4. Would you kindly give us an example of how you would compute the royalty in the manner you suggested.

Upon receipt and review of the above requested information, we will inform you of our decision in this matter.

Sincerely yours,

George Fumich, Jr.

(bl)

Director

FMMurphy/mm
10/9/63
cc: Director's Reading File
Region III
Docket
Code 500

43683

Building 20 - Federal Center
Denver 25, Colorado
80225

ORIGINAL FILE COPY
OCT 7 1963

10/7	[illegible]	800
		120
	Murphy	500

October 3, 1963

Mr. William R. Kuntz
Executive Vice President
Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

Re: DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Kuntz:

Thank you for your letter of September 26, 1963.

I am forwarding a copy of your letter to the Washington Office OME and they will advise you if your proposal to compute the Government royalty based upon your selling price for roasted molybdenum oxide after adjustment for processing losses is satisfactory.

Sincerely yours,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

cc Chief, Division of Field Operations, OME
w/copy of Mr. Kuntz's letter
Royalty Corres. E1094
Chron
HMC/lm

OME
DEPARTMENT OF THE INTERIOR
SEP 30 1963
REGION III
DENVER, COLORADO

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

WM. R. KUNTZ
EXECUTIVE VICE PRESIDENT

September 26, 1963

Mr. Hugh M. Connors
Acting Field Officer, OME
Region III
U. S. Department of Interior
Building 20 - Federal Center
Denver 25, Colorado 80225

Re: DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Connors:

Mr. A. L. Greslin has forwarded to us copy of your letter of September 18, 1963 regarding royalty on the recent shipment of molybdenite concentrates from Questa.

Your letter indicates that Article 6(c) of our contract requires that the 5% royalty be based upon sales value of the molybdenum in the form in which it is finally sold. The subject material has been shipped to our plant at Washington, Pa. where it will be used in the production of roasted molybdenum oxide which will be sold to customers in the steel industry. I am sure you can appreciate that it is impossible for us to maintain the identity of this particular material after it is charged into our roasting furnace. In view of this, we suggest that the sales value of the material be computed based upon our selling price for roasted molybdenum oxide after adjustment for processing losses.

OME
DEPARTMENT OF THE INTERIOR
SEP 30 1963
REGION III
DENVER, COLORADO

Mr. Hugh M. Connors

September 26, 1963

Please advise me whether the above procedure is satisfactory, after which we will make payment to you from our New York office.

Yours very truly,

Wm. R. Kuntz
Executive Vice President

WRK:am

cc: Mr. A. L. Greslin

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

September 18, 1963

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Moly Mine
Questa, New Mexico

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F M Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 30 1963

DATE	INITIALS	CODE
9/30	[illegible]	800
[illegible]	[illegible]	120
9/30	[illegible]	100
		110
9/30	Murphy	500
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since July 30, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since July 30, 1962, has there been any production from the land subject to the contract? Yes ☒ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
Stockpiled	Approx. 19,200 lb. MoS_2 Recoverable	$15,936.00 ?

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	3,000	Tons	0.4%	Stockpiled at old mill site.
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
See Above		

Submitted by:

Name G. L. Gresline Title General property superintendent

Address Questa, New Mexico Date 27 September 1963

4511

Building 20 - Federal Center
Denver 25, Colorado
80225

OFFICIAL FILE COPY

September 18, 1963

RECEIVED SEP 1963

DATE	INITIALS	CODE
9/20		800
		950

Mr. A. L. Greslin
General Property Superintendent
Molybdenum Corporation of America
Questa Mine
Questa, New Mexico

Re: DMEA-4568 (Molybdenum)
Contract Kdm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Greslin:

Thank you for your letter of September 12, 1963 regarding the shipment of concentrates.

I presume that these concentrates were shipped east to the Molybdenum Corporation of America for further processing by them. If this is the case, please read Article 6 (c) of the contract which is as follows:

> Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling, assaying, or transportation performed or paid by the Operator or by anyone other than the buyer are not deductible in arriving at the "gross

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

You will note from the above that royalty applies to the production in the form in which it is sold. When this shipment of concentrates is sold by the Molybdenum Corporation of America in its final form, please forward this office two copies of the settlement sheet together with a check for 5 percent of the total shipment's value.

Sincerely yours,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

cc Chief, Division of Field Operations, OME
Royalty Corres. Idm-E1094
Chron
HMC/lm

Molybdenum Corporation of America

QUESTA MINE

Questa, New Mexico

September 12, 1963

OME
DEPARTMENT OF THE INTERIOR
SEP 18 1963
REGION III
DENVER, COLORADO

Mr. Hugh Connors
Acting Field Officer O. M. E.
Region 3
Office of Minerals Exploration
Building 20, Federal Center
Denver 25, Colorado

Re: DMEA 4568 (Molybdenum Contract IDM-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

On August 30th, 1963 we shipped the concentrates on hand that were reported to you on August 1, 1962.

There were 7,931 pounds of MoS_2 in concentrates containing 71.00% MoS_2. This was the MoS_2 recovered from 323.5 tons of ore saved from the development work up to October, 1961. = 24.55 lbs/ton 1.23%

Yours very truly,

A. L. Greslin

A. L. Greslin
General Property Superintendent

ALG/fs

HMC

OFFICIAL FILE COPY
O. M. E
RECEIVED AUG 10 1963

DATE	INITIALS	CODE
8/12	[illegible]	800
Wm. R. Kuntz	[illegible]	500
EXECUTIVE VICE PRESIDENT 8/14	[illegible]	500
		220

MOLYBDENUM CORPORATION OF AMERICA
375 PARK AVENUE
NEW YORK 22, N. Y.

OME
DEPARTMENT OF THE INTER
AUG 9 1963
REGION III
DENVER, COLORADO

August 8, 1963

Re: DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corp. of Amer.
(Moly or Questa Mine)
Taos County, New Mexico

Mr. Hugh M. Connors
Acting Field Officer, OME
Region III
U. S. Department of the Interior
Office of Minerals Exploration
Building 20 - Federal Center
Denver 25, Colorado

Dear Mr. Connors:

We wish to thank you for your prompt attention to our request for copies of Amendments 2 and 3 to the above contract. The copies were received here this morning.

Yours very truly,

Wm R Kuntz am

Wm. R. Kuntz

WRK:am

Mr Selfridge
This man says that we are on the ball.
HMC

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 10 1963

DATE		
8/12	[illegible]	500
	Received	520
~~8/19~~	~~Murphy~~	~~500~~
		320

August 7, 1963

AIRMAIL

Mr. William R. Kuntz
Executive Vice President
Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

Re: DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Kuntz:

Attached are copies of Amendments No.2 and No. 3 to the captioned contract, which were requested in your letter of August 6, 1963.

Sincerely yours,

[illegible]

Hugh M. Connors
Acting Field Officer, OME
Region III

Attachments

cc Chief, Division of Field Operations, OME
w/copy Mr. Kuntz's letter of August 6, 1963
Royalty Corres. E1094
Chron

HMC/lm

D.

Rhuc

Molybdenum Corporation of America

375 Park Avenue
New York 22, N. Y.

WM. R. KUNTZ
EXECUTIVE VICE PRESIDENT

August 6, 1963

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. [illegible]-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Mr. J. W. Townsend
Executive Officer
Field Team, Region III
U.S. Department of the Interior
Office of Minerals Exploration
Building 20 - Federal Center
Denver 25, Colorado

Dear Mr. Townsend:

We would appreciate your sending us copies of Amendments 2 and 3 to the above mentioned contract. Amendment #2 is dated January 6, 1958 and Amendment #3 is dated June 23, 1959.

Yours very truly,

Wm R Kuntz

Wm. R. Kuntz
Executive Vice President

WRK:am

OME
DEPARTMENT OF THE INTERIOR
AUG 7 1963
REGION III
DENVER, COLORADO

Hmc

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
555 Battery Street
San Francisco 11, California

OFFICIAL FILE COPY
O. M. E
RECEIVED JUL 11 1963

DATE	INITIALS	CODE
	July 3, 1963	
7/11		800
		~~120~~
		~~600~~
		220

Memorandum

To: Hugh M. Connors, Acting Field Officer, OME, Region III, Denver, Colorado

From: Acting Field Officer, OME, Region II

Subject: DMEA records requested by Atomic Energy Commission in connection with Plowshare

DMEA-4221 (Copper)
Contract Idm-E1027
Lewisohn Copper Corporation
(Peach Mine)
Pima County, Arizona

DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

OME
DEPARTMENT OF THE INTERIOR
JUL 5 1963
REGION III
DENVER, COLORADO

Mr. Mike Lekas has completed checking these files and we are returning them to your office.

Paul V. Fillo

Paul V. Fillo

Enclosures

cc:
Chief, Division of Field Operations, OME, Washington, D. C.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 17 1963

DATE	INITIALS	CODE
6/17		500
		500
		500
		440
		420
		220

Building 20 - Federal Center
Denver 25, Colorado

June 14, 1963

Memorandum

To: Paul Pillo, Acting Field Officer, OME, Region II
420 Custom House
555 Battery Street
San Francisco 11, California

From: Acting Field Officer, OME, Region III

Subject: DMEA records requested by Atomic Energy Commission in connection with Flowsheet

DMEA-4221 (Copper)
Contract IMa-E1027
Lewisohn Copper Corporation
(Peach Mine)
Pima County, Arizona
and
DMEA-4563 (Molybdenum)
Contract IMa-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Mr. Mike Lekas telephoned this office and requested information on the subject contracts be forwarded your office for his perusal.

Under separate cover I am forwarding you the following:

(1) The Report of Examination, Field Team Final Report, and Operator's Final Report on Contract IMa-E1027

(2) The Report of Examination, Field Team Final Report, and Operator's Final Report on IMa-E1094.

You should inform Mr. Lekas that the above mentioned information is for Government use only and must not be removed from your office. You should also inform him that no reproduction of this material can be made without the approval of Mr. George Punich, Jr., Director of OME.

Please return these files to this office as soon as Mr. Lehns needs have been satisfied.

Original signed by

Hugh M. Connors

cc Mr. Mike Lehns
U. S. Atomic Energy Commission
San Francisco Operations Office
2211 Bancroft Way
Berkeley, California

Chief, Division of Field Operations, OME (2)
Contract Idm-E1027
Contract Idm-E1094
Chron
HMC/lm

Molybdenum Corporation of America

Moly Mine
Questa, New Mexico

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 22 1962

DATE		
10/22	Ned	800
		~~120~~
	Murphy	500
		220

October 10, 1962

Mr. W. R. Griswold, Chief
Division of Minerals
United States Dept. of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Dear Mr. Griswold:

On July 30, 1962 I mailed you M. M. E. Form 63, Revised 3-62 completed, giving the production for the period November 3, 1961 to July 30, 1962.

After others from the Company examined it, they didn't think we should report ore. They thought we should report only concentrates. At that time I wrote you for more blanks to correct this.

In the meantime I have talked to Mr. Romslo of the Bureau of Mines and he said this was filled out correctly, that the form should include ore, so please use the form that was filled out and sent to you on July 30, 1962.

This form does not include the production before November 3, 1961 which was 7,931 lbs of MoS2 in concentrates stored at the mill.

Yours very truly,

A. L. Gresham

Cy letter to Region III 10/23/62 gla

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/7	Murphy	500
	Drumel	500
8/7	Talbot	800
8/7	On leave	120
8/7	Johnson	110
8/7	On Leave	100
		220

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Moly Mine
Questa, New Mexico

AUG 7 1962

Re: IMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Greslin:

In accordance with your request of August 3, 1962, enclosed are the original and two copies of MME Form 63 for your use in correcting the information on the form submitted by you on July 30, 1962.

Please return two copies to this office.

Sincerely yours,

W. R. Griswold (glo)

W. R. Griswold, Chief
Division of Minerals

Enclosures

GLAult/a
8-7-62
cc to: Director's Reading File
Region III (2) w/2 cys Mr. Greslin's letter
Docket
Code 500

43683

Molybdenum Corporation of America

Moly Mine
Questa, New Mexico

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 6 1962

DATE	INITIALS	CODE
8/6	[illegible]	800
8/7	[illegible]	500
		220

August 3 , 1962

Mr. W. R. Griswold
United States Department of Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA 4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract IDM-E 1094

Dear Mr. Griswold:

A few days ago I mailed you two copies of form No. MME-63, Revised 3-62, which should be corredted.

Would you please send me three blank forms of the above and I will send the corrected ones to you.

Yours very truly,

A. L. Gresham

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 2 1962

DATE	INITIALS	CODE
8/2		800
8/2	On hand	120
		100
		110
		500

JUL 23 1962

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Murphy

220

Mr. J. B. Carman
Molybdenum Corporation of America
P. O. Box 8
Idaho Springs, Colorado

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W R Griswold

W. R. Griswold, Chief
Division of Minerals

August 7, 1962

New Form 63 sent to:
Mr. A. L, Greslin, Manager
Molybdenum Corporation of America
Moly Mine
Questa, New Mexico
per his letter August 3, 1962.

~~No~~ copy of this form, dated July 23, 1962, to Region III 10/23/62 sent
Apris letr. 10/10/62

gla

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since November 3, 1961, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since November 3, 1961, has there been any production from the land subject to the contract? Yes ☒ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
Stockpiled at Mill	133.84 Tons	$2211.95 approx.

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	133.84	Tons	1.17% MoS2	By Mill
Concentrates	-0-	Tons		
Other	-0-	Tons		

3. Since November 3, 1961, has any production been transported through workings (see of contract)? Yes ☒ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
Stockpiled at Mill	133.84	Approx 2211.95

Note: No. 2 and 3 quantities are same material and is stockpiled at our mill

Submitted by: 7 miles east of Questa, N. Mexico

Name A. L. Gresline Title Manager

Address Questa, New Mexico Date July 30, 1962

4511

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. C.
RECEIVED MAY 24 1962

DATE	INITIALS	CODE
5/24	gla	500
		220

May 21, 1962

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Attached is the original Report of Royalty Review on the subject property dated May 17, 1962 covering the period May 31, 1957, through November 3, 1961.

Original signed by

Hugh M. Connors

Attachments
HMC/lm
cc Chief, Division of Field Operations, OME
E. D. Talbert, Acting Chief
Contract Administration and Audit Division
Royalty Corres E1094
Chron

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

MAY 17 1962

Memorandum

To: Acting Field Officer, Region III

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and

(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 5-17-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 8 1961

DATE	INITIALS	CODE
11/8	HMC	800
"	[illegible]	500
11/8	Murphy	500
		220

Building 20 - Federal Center
Denver 25, Colorado

November 6, 1961

Mr. J. B. Carman
Molybdenum Corporation of America
P. O. Box 8
Idaho Springs, Colorado

Re: DMEA-4568 (Molybdenum)
Contract Idm E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Carman:

Thank you for your letter of November 3, 1961 which advised me of the concentrates you have stockpiled at the mill.

I will appreciate receiving advice from you when the concentrates are shipped.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc Chief, Division of Field Operations, OME
w/copy of Operator's Letter
Idm E1094
Chron

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 8 1961
DATE | INITIALS | CODE
OME
DEPARTMENT OF THE INTERIOR
REGION III
DENVER, COLORADO

MOLYBDENUM CORPORATION OF AMERICA
[redacted]
[redacted]
P. O. Box 8
Idaho Springs, Colorado

November 3, 1961

Mr. Hugh Connors, Field Officer
O.M.E. Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Connors:

According to the letter of certification of January 13, 1961 we are advising you of a production from our Questa Mine.

From September 28th through October 14, 1961 the concentrating mill at Questa was operated with a resulting production of 7,931 pounds of MoS_2 in concentrates. The material treated was accumulated over a long period by saving higher grade material resulting from mine exploration.

The mill was shut down on October 14th and no plans for resumption in the near future ~~is~~ are contemplated. Also, the concentrates produced are being stock piled at the mill to be shipped when enough are available for a car load shipment.

We will advise you of any change in this situation.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J B Carman

J. B. Carman

JBC:r

CC: W. R. Kuntz
A. L. Greslin

OFFICIAL FILE COPY
O M E
RECEIVED AUG 28 1961

STANDARD FORM 135
APRIL 1953
PRESCRIBED BY GENERAL SERVICES ADMINISTRATION
REG. 3-IV-302

TRANSMITTAL OF GOVERNMENT RECORDS

ACCESSION NO. 62-A-77
320
RECORD GROUP NO.

INSTRUCTIONS.—Submit this form to your area GSA regional office. When submitting to the GSA region 3 office, Washington, D. C., submit an original and two copies. When submitting to other GSA regional offices, submit an original and one copy only.

1. FROM (*Name and address of agency transferring the records*)
Office of Minerals Exploration (DMEA)
Building 20 - Federal Center
Denver 25, Colorado

2. AGENCY WHICH CREATED RECORDS (*If different than transferring agency*)
Same

3. AGENCY OFFICIAL AUTHORIZING TRANSFER (*Signature*)
Original signed by
s/ Hugh M. Connors

TITLE
Acting Field Officer
OME, Region III

DATE
August 23, 1961

4. CUSTODIAN OF RECORDS IN TRANSFERRING AGENCY (*Name, address, and telephone number*)
Hugh M. Connors, Building 20 - Federal Center, Denver, Colorado Ext. 598

5. DESCRIPTION OF RECORDS (*With inclusive dates. Use reverse if additional space is required*)
Contract with related correspondence DMEA 4568 Contract Idm E1094
Molybdenum Corporation of America

Moly or Questa Mine
Taos County, New Mexico

Note

2 Copies to OME - Washington, D.C.
Region III

1 Copy - Field Office

6. RESTRICTIONS ON USE OF RECORDS (*If no restrictions, write "none"*)
Authorized employees of OME for official use

7. ARE THESE RECORDS COVERED BY AN AUTHORIZED DISPOSAL SCHEDULE?
[x] YES (*If "yes," identify schedule*)
[ ] NO

8. CUBIC FEET OF RECORDS TRANSFERRED
1

9. CUBIC FEET OF RECORDS DISPOSED OF IN AGENCY

10. SQUARE FEET OF SPACE RELEASED
Office | *Storage*

LOCATION

11. FILING EQUIPMENT (*Enter, where applicable, quantity of each type*):

	FILING CABINETS		TRANSFER CASES		OTHER (*Specify*)
	STEEL	WOOD	STEEL	WOOD	
EMPTIED AND RETAINED AT AGENCY					
RECORDS SHIPPED IN					
TO BE RETURNED					
CUBIC FEET OF SHELVING EMPTIED AT AGENCY					

DO NOT WRITE BELOW THIS LINE

THE ABOVE-DESCRIBED RECORDS WERE RECEIVED August 24, 19 61

SHORTAGES, DAMAGED CONTAINERS, ETC.
none

SIGNATURE E.H. Pubols
TITLE Chief, FRC
FEDERAL RECORDS CENTER ADDRESS Bldg. 48, DFC

STANDARD FORM 134 REVISED
APRIL 1959
PRECRIBED BY GENERAL
SERVICES ADMINISTRATION
REG. 3-IV-302.00

RECORDS SHELF LIST

FROM (*Name and address of agency*)

Office of Minerals Exploration (DMEA)
Building 20 - Federal Center
Denver 25, Colorado

RECORD GROUP NO. 320

FRC ACCESSION NO. 62-A-77

AGENCY WHICH CREATED RECORDS: same

TOTAL NUMBER OF CONTAINERS: 1

DATE PREPARED: August 23, 1961

AGENCY CONTAINER NO.	FRC CONTAINER NO.	DESCRIPTION AND DATE		
		Docket	Contract	
1	14149	DMEA 4568	Idm E1094	Molybdenum Corporation of America (entire box) Application, correspondence, vouchers, Operator's Final Report, Engineer's Final Report.

* U.S. GOVERNMENT PRINTING OFFICE : 1959 O—509519

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
4/19	Selfridge	120
		110
4/19	gad	220

APR 19 1961

Mr. J. B. Carman
Molybdenum Corporation of America
Empire, Colorado

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly, or Questa, Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Carman:

Your letter of April 3, 1961, to Mr. Hugh M. Connors, Acting Field Officer, has been referred to this office.

Enclosed are two Bureau of Land Management pamphlets, "Information in Regard to Mining Claims on the Public Domain" and "Mineral Patents--Information Relative to the Procedure for Obtaining Patent to a Mining Claim." We suggest that the Company proceed as required by the Bureau of Land Management with the patenting of the claims. Should the Bureau seek information from us relating to the claims and the subject DMEA contract, our files will be made available to that Agency.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

Enclosures

GCSelffidge/hb (4/19/61)
Copy to: Docket DMEA-4568
Director's Reading File
Region III (2)
Code 500
Chron - 500
G. C. Selfridge

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
RECEIVED APR 7 1961

DATE	INITIALS	CODE
4-7	gad	VVO
		~~VVO~~
4/10	[illegible]	800
4/10	[illegible]	500
		~~120~~
		220

April 4, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Enclosed are the original and one copy of a letter from the Operator dated April 3, 1961 and two copies of my reply.

Mr. Carman was in this office recently and we discussed the matter of patenting of their lode locations. He was wondering if OME could be of any help to him.

As you know, with all the recent publicity regarding the subject property, many claims have been staked in the area and the little town of Questa is booming.

It appears to me that to protect the Government's royalty interest in the property, it behooves us to give what aid we can to the Operator in bringing the 19 subordinated, unpatented lode mining claims to patent. Neither Mr. Carman nor I know exactly what we can do to help, but we both know that patented claims are hard to come by these days. I am wondering if your contacting the Bureau of Land Management Officials in Washington regarding this particular property and the Government's interest therein, would be of any assistance.

I will be happy to receive your thoughts in this matter.

Hugh M. Connors

Hugh M. Connors

Attachments

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 7 1961

DATE	INITIALS	CODE

April 4, 1961

Mr. J. B. Carman
Molybdenum Corporation of America
Empire, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Carman:

This will acknowledge receipt of your letter dated April 3, 1961. The answer to your letter involves OME policy with which I am not familiar. I am therefore forwarding your letter to the Washington Office OME for their ideas in this matter and you will be advised.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc Chief, Division of Field Operations, OME
E1094
Chron

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

Official
EXTRA COPY
O. M. E
RECEIVED APR 3 1961
DATE
OME
DEPARTMENT OF THE INTERIOR
APR 4 1961
REGION III
DENVER, COLORADO

April 3, 1961

Mr. Hugh M. Connors
Acting Field Officer
O.M.E. Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. D.M.E.A 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Connors:

The Questa Mine recently has had considerable publicity with the consequence that there has been an influx of claim locators in the area including at least, one large substantial company.

It is the desire of the Molybdenum Corporation to apply for patent on all the apparently eligible unpatented claims in the area.

As D.M.E.A. assisted in work done on several of these claims and currently examined the work when in progress, we believe verification by D.M.E.A. of any information in the application, with which they were concerned, would materially assist in the approval of the patent applications. This is of particular significance in regard to drill hole results and with respect to areas that have become or may become inaccesible by caving. Being familiar with the property, you will know the soft character of the ground and the difficulty we have in keeping it open.

We are not clear by just what method D.M.E.A.'s endorsement of results, if they were able to give it, could be accomplished. It might take the form of certifying the sample maps or making its information available to the patent examiners.

We feel that the elimination of any question of ownership of the claims under consideration would be to the Government interest as it due to its lien under the contract is in reality a part owner in the property until the lien is paid or has expired.

Thanking you for your consideration, we are

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

by J B Carman

J. B. Carman

JBC:r

Mr Selfridge (2)

MINING engineering REPORTER

Publicity

DMEA-4568-Molybdenum
Contract Idm-E1094

OLD DISTRICT - NEW DEPOSIT

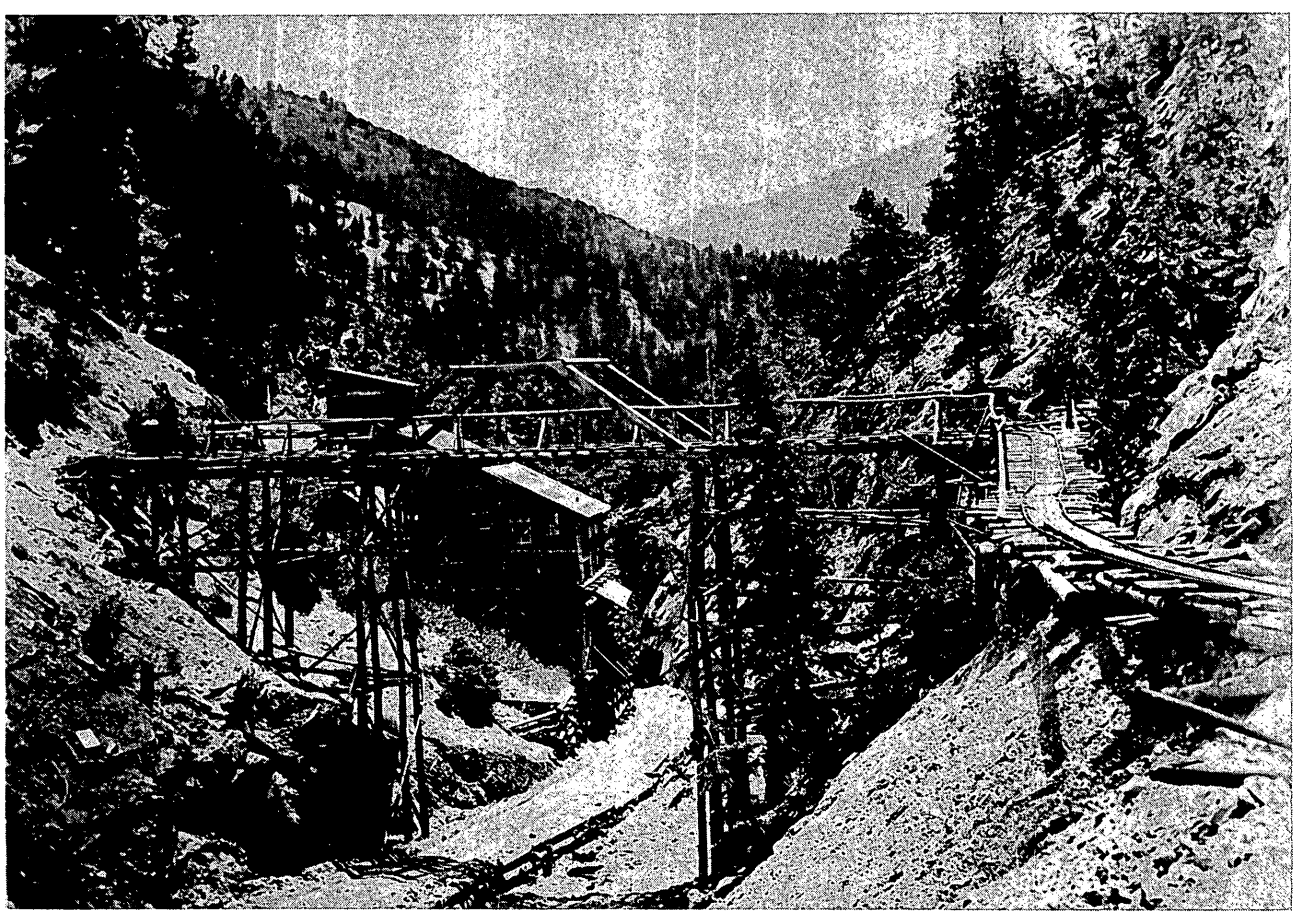
MCA Exploration Finds Large Molybdenite Prospect

New Mexico may contain a molybdenite deposit second only to that at Climax, Colo., according to a recent announcement by the Molybdenum Corporation of America. The new molybdenum prospect, approximately one mile west of the old Questa mine, comprises two separate, but nearby orebodies at depths exceeding 1500 ft. The importance of this deposit to MCA is underscored by the fact that, since the original Questa mine terminated operations in 1956, the company has had to rely on other producers of molybdenum to supply their manufacturing facilities at York and Washington, Pa. and Cleveland, Ohio.

As is true for much of the West, gold was the substance which first drew miners to this area of the Sangre de Cristo Mountains in the 1880's. In 1923, MCA purchased the Questa property and during the next 33 years, the company extracted 20 million lb of molybdenite from scattered high-grade veins which assayed from 3 to 8 pct MoS_2. After 1945, the high-grade veins encountered became fewer in number and in 1956, all mining was terminated at this site.

Exploration Progress: Initial exploration commenced in 1954 at Questa, two years prior to the cessation of the earlier mining operations. From June 15, 1957 to June 30, 1960, exploration work was conducted with the financial assistance of the Defense Minerals Exploration Administration (DMEA), now known as the Office of Mineral Exploration (OME).

The 1954 exploration program was aimed at locating extensions of the ore deposit then being tapped by the Questa mine. Molybdenite-bearing



The Questa mine as it appeared in 1925 when it was one of the largest producers of molybdenum in the world.

Claim Large Molybdenum Discovery

Molybdenum Corp. of America announced discovery of a large molybdenum deposit in north central New Mexico. Located near the town of Questa, in Taos County, the deposit involves some 260 million tons of indicated ore with a 5-pound-per-ton content of molybdenum disulfide, or the equivalent of 760 million pounds of refined metal. Exploratory work, which started in 1954, was financially aided in the past three years by funds from the Defense Minerals Exploration Administration. No plans for mining will be made until exploration work is completed. **See Page 14 for further details.**

Freeport Sulphur Opens New Mine

Freeport Sulphur Co. put in operation a new sulfur mine at Lake Pelto, some sixty miles southwest of New Orleans on the marshland shore of the Gulf of Mexico. Mining is being done from a barge-mounted plant, used originally a few miles to the north at the now depleted Bay Ste. Elaine deposit.

Inco to Expand Copper Cliff Iron Plant

International Nickel Co. of Canada Ltd. has scheduled an estimated $50 million expansion program slated to triple capacity of its iron ore recovery plant at Copper Cliff, Ont. The plant will treat 1.2 million tons per year of nickel-bearing pyrrhotite high in iron content. According to the company, the process involves solid state pyrometallurgical operations, and the removal of nickel by atmospheric pressure leaching in new high capacity units of company design. The expanded plant is scheduled to be in full operation in 1963. Inco said diversion of this large quantity of pyrrhotite to the new plant will effect a 40-pct decrease in the tonnage of material which would otherwise have to be handled by the nickel section of the Copper Cliff smelter.

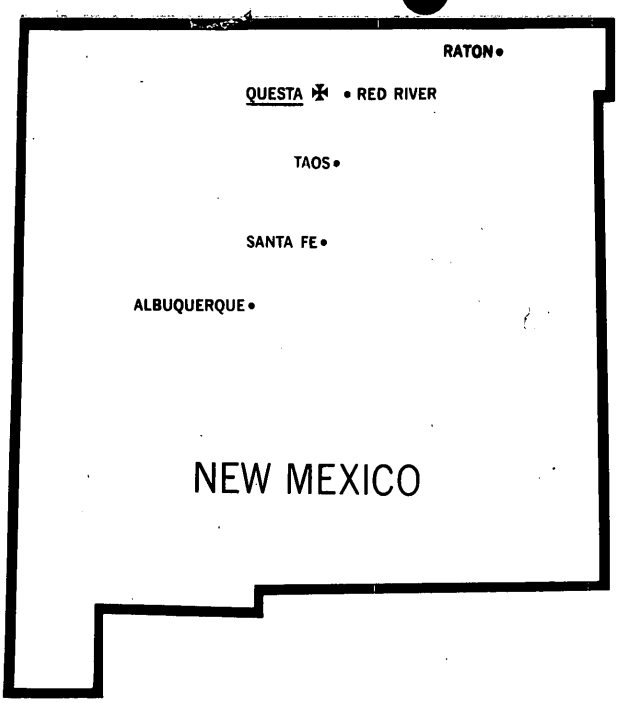
Udall Named Secretary of Interior

Stewart L. Udall, Representative from Arizona, was named Secretary of Interior to the new administration, to replace incumbent Fred A. Seaton. Representative Udall, has been a member of the Mines and Mining Subcommittee of the House Committee on Interior and Insular affairs during his tenure in Congress.

Find Metal Deposit Below Barite

Canada's leading barite producer, Magnet Cove Barium Corp., has discovered a large lead-silver orebody beneath its big barite deposit at Walton, Nova Scotia. Some 450,000 tons of the metal ore, which grades better than $32 a ton, has been indicated down to the 850-ft level. A 125-tpd concentrator is planned for working the deposit, and should be completed in October 1961.

(Continued on page 16)



fractures found in granite gave rise to hopes of further mineralization occurring somewhere in the area. Since 1956, MCA has been doing underground drifting and diamond drilling in conjunction with some surface drilling. To date approximately 16,000 ft of tunneling has been done, and about 30,000 ft of drill core cut. Accompanying geological and geochemical work directed the exploration toward those areas now being extensively investigated.

Geology and Mineralization: Questa is underlain by early Tertiary volcanics ranging from andesites to welded rhyolitic tuffs. This volcanic series was intruded during the late Tertiary by granite porphyries, porphyritic aplites, and rhyolite porphyries. The geology of the area was recently described by Dr. Robert H. Carpenter at the 1960 International Geologic Conference in Copenhagen, Denmark.*

The molybdenite occurs principally in small veinlets within well-developed vein systems varying in width from several inches to more than a foot. The mineral is also found along fault planes within the country rock. It is thought that the introduction of the molybdenite and associated pyrite occurred after the reopening of small fractures within the host rocks.

Ore Reserves: As of June 1960, ore reserves calculated from drift and drill samples indicated 260 million tons of ore assaying 0.25 pct MoS_2, equivalent to about 760 million lb of contained molybdenum. During the last six months, however, additional exploratory work has extended the boundaries of the two orebodies and disclosed substantial zones of higher mineral content, both within and outside the area explored under the DMEA contract. Evaluation of these new findings indicate that the orebodies will attain or exceed an average molybdenite content of 0.5 pct.

MCA has announced their plans of continuing their program of drilling and tunneling to further define the two enriched zones, but no decision regarding possible mining operations will be made until the further exploratory work is completed.

* R. H. Carpenter; Hydrothermal Alteration and Mineralization at Questa, N. M. *Proceedings of the International Geologic Congress*, 1960, Section 18.

A. L. Greslin (left), Questa manager, and J. B. Carman, MCA mining engineer, examining ore from the new prospect.

(Continued from page 13)

Kaiser, Consolidated Zinc Plan Aluminum Complex

Kaiser Aluminum & Chemical Corp., and Consolidated Zinc Corp. Ltd. announced plans to establish a new aluminum complex in Australia and New Zealand. The agreement involves developing large bauxite reserves and hydroelectric power in construction of the largest integrated aluminum facilities in the southern hemisphere. By mid-1966, the following projects are scheduled to be completed: 1) Development of bauxite reserves in the Weipa area on Cape York peninsula, Australia. 2) Construction of a 360,000 long ton alumina refinery at Weipa. 3) Expansion of the Bell Bay, Tasmania, aluminum reduction works from annual primary capacity of 12,000 long tons annually to a minimum of 28,000 long tons. 4) Development of a hydroelectric source using the water of Lakes Te Anua and Manapouri in New Zealand. 5) Construction of a new aluminum reduction works at Bluff, New Zealand, with capacity of 120,000 long tons of primary metal yearly. 6) Establishment of fabricating facilities. During 1961 Kaiser will invest more than $10 million for developing and expanding the properties, which are presently held by Consolidated, and later will participate equally with Consolidated in construction of additional facilities.

Zinc, Copper Strikes Settled

A new wage pact ended the six-week-old strike at the Anaconda Co. Chuquicamata mine in Chile. An upstep in fringe benefits and a 25-pct increase in wages were included in terms of the settlement . . . . New Jersey Zinc Co. and United Steel Workers have come to agreement on a strike which had lasted since August 5. In new wage contracts that run until July 27, 1963, workers at two smelters and five mines will receive immediate wage increases of from 7½ or 8¢ an hour with an additional increase of 2½ to 5½¢ an hour on March 26, 1962.

Beryllium Notes

A third U. S. beryllium producer has entered the market. The organization is General Astrometals Corp., which will produce and sell beryllium products under licenses from French firm, Pechiney. Production is scheduled to begin in early 1961, with ore received from France . . . . U. S. Beryllium Corp. reports new beryllium deposits are being worked in the old Redskin mine in Park County, Colo., some two and a half miles from the Boomer mine—biggest U. S. producer.

Gold Dredge Begins Bolivia Operation

A subsidiary of South American Gold & Platinum Co. has started operating a gold dredge on the Kaka River in Bolivia. The dredge, expected to produce some 6000 oz of gold monthly, was bought in New Guinea, dismantled, and the parts flown to Bolivia for reassembly and use by South American Placers Inc.

Synthetic Quartz Crystals in Production

The first commercial mass production of synthetic quartz crystals has begun in the Merrimac Valley, Mass., works of Western Electric Co.

Form 7
(5-58)

OFFICIAL FILE COPY

Date	Surname	Code
11/4	Murphy	500
	[illegible]	500
		~~140~~
1/13	Talbert	800
1/13	Selfridge	130
		110
1-13	gad	220
		500

JAN 13 1961

Molybdenum Corporation of America
375 Park Avenue
New York 22, New York

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Gentlemen:

Enclosed is a "Certification by the United States of America of a Discovery or Development Under an Exploration Project Contract." This certification covers all the land described in Article 2 of the subject contract.

By the terms of the Exploration Project Contract, as amended, and of the certification, all minerals mined or produced, or transported through DMEA workings, from May 31, 1957, to May 31, 1973, are subject to the Government's percentage royalty as set forth in the contract until the sum of $200,339.57 (subject to audit) is repaid or until May 31, 1973, whichever occurs first.

Royalty payments should be made to the Field Officer, OME, Region III, Building 20, Denver Federal Center, Denver 25, Colorado, by the purchaser, with checks drawn payable to the Office of Minerals Exploration. The purchaser should be advised to deduct royalties from the amount due on each shipment and send the check directly to the Field Officer. Each check should be accompanied by suitable evidence - such as copies of settlement sheets - showing the name of the purchaser, the quantity and grade of the products sold, and the price and charges, certified to be correct by the purchaser.

You are requested to notify the Field Officer of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Your attention is called particularly to Article 2(c) of the contract relating to the preservation of the Government's right to a percentage royalty on production. Also when production starts, please notify the Field Officer. Thereafter, if production ceases for any extended period, please notify him accordingly at six-month intervals.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

Enclosure

FMMurphy/WRGriswold/gla
11-4-60
cc to: Director's Reading File
Mr. Johnson
Review Committee
CA&A Division
Region III (2)
Harold Kirkemo, USGS
Code 500
Chron

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/31	Murphy	500
	Murphy	500
	Sollers	140
11/3	Tullbot	800
11/3	Selfridge	130
		110
		220
		500

Molybdenum Corporation of America
375 Park Avenue
New York 22, New York

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Gentlemen:

*or transported through DMEA workings

Enclosed is a "Certification by the United States of America of a Discovery or Development Under an Exploration Project Contract." This certification covers all the land described in Article 2 of the subject contract.

By the terms of the Exploration Project Contract, as amended, and of the certification, all minerals mined or produced from May 31, 1957, to May 31, 1973, are subject to the Government's percentage royalty as set forth in the contract until the sum of $200,339.57 (subject to audit) is repaid or until May 31, 1973, whichever occurs first.

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Sincerely yours,

Acting Director

Enclosure

FEJohnson
FMMurphy
Chron.

~~Fiscal Section~~
Reg. III (2)
Review Com'te
H.Kirkemo, USGS

FMMurphy/fw-10/28/60
cc: Docket
Director's Read.File
Dotson Minerals Corp.
CA&A Division

43683

Mr. Selfridge — Re: DMGA-4563

I've surnamed the ltr. to Ops., but believe that mention should be made in 2nd par. of Art. 10(c), i.e. Annex II.

Talbert
11/2/60

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/31	Murphy	500
	Brown	500
	Sellers	140
11/3	Tilfert	300
11/3	Offrage	130
		110
1-13	gad	220
		500

JAN 1 3 1961

Mr. Carl E. Dotson, President
Dotson Minerals Corporation
440 Park
Socorro, New Mexico

Re: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Dotson:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter to the Operator, which has been issued pursuant to the terms of the above-cited contract.

This correspondence relates to the Lien and Subordination Agreements signed by you on December 8, 1959. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by you, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

Enclosures

FMMurphy/fw-10/28/60
cc: Docket
Director's Read.File
CA&A Division
~~Fiscal Section~~
Reg. III (2)
Review Committee
H.Kirkemo, USGS
~~F.E.Johnson~~
F.M.Murphy
Chron.

43683

MME Form 7
(10-58)

9

OFFICIAL FILE COPY

Date	Surname	Code
10/31	Murphy	500
	[illegible]	500
	Soller	140
11/3	Talent	800
11/3	Selfridge	130
		110
1-13	gad	220
		500

JAN 1 3 1961

Mr. Clarence A. Fredell, Director
Technical Research and Development Division
Defense Materials Service
General Services Administration
6013 GSA Building
Washington 25, D. C.

Re: EMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

Dear Mr. Fredell:

Enclosed is a copy of a certification of discovery or development relating to Exploration Project Contract Idm-E1094. The contract, dated May 31, 1957, as amended, provided Government participation to the extent of 50 percent in an exploration project estimated to cost $510,500.00. Actual expenditures were $400,679.14, with the Government's share being 50 percent or $200,339.57.

Audited

Work completed consisted of 5777 feet of drifting and crosscutting, timbering 4130 feet, cutting drill stations 321 feet, and 21,419 feet of diamond drilling. In addition, during the contract period the Operator completed 5979 feet of crosscutting and drifting without Government assistance.

The Operator's estimate of indicated ore reserves resulting from the work is as follows:

	Areas Square Feet	Average Thickness Feet	Tons	Percent MoS_2	Pounds MoS_2
Block 1	911,326	812	61,679,960	0.2412	297,303,924
Block 2	1,519,250	852	107,866,750	0.253	545,805,755
Block 3	1,084,676	1,080	90,389,666	0.235	421,215,843
Totals			259,936,376	0.243	1,264,525,522

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

Enclosure

FMMurphy/fw-10/28/60
cc: Docket
Director's Read.File

CA&A Division
Reg. III (2)
Review Committee
H.Kirkemo, USGS

FEJohnson
FMMurphy
Chron.

43683

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

DATE	INITIALS	CODE
1-13	gad	220
1/13	[illegible]	800
1/13	Murphy	500
		220

Building 20 - Federal Center
Denver 25, Colorado

January 10, 1961

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of The Secretary, Department of the Interior
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket DMEA-4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly (Questa) Mine)
Taos County, New Mexico

Enclosed is the original Report of Review on the subject project.

You will note that the balance due the Operator is $500.00.

It is recommended that the amount of $500.00 be paid the Operator to balance this account.

Original signed by

Hugh M. Connors

Attachment

HMC/lm
cc Chief, Division of Field Operations, OME
Contract Corres. E1094
Chron

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 13 1961

DATE	INITIALS	CODE
1-13	gad	220
1/18	[illegible]	800
1/13	Murphy	500
		220

Building 20 - Federal Center
Denver 25, Colorado

January 10, 1961

Molybdenum Corporation of America
375 Park Avenue
New York 22, New York

Re: Docket No. DMEA-4563 (Molybdenum)
Contract No. Idm E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Gentlemen:

Enclosed is a copy of the Report of Review on the subject exploration project contract. You will note the balance due the Operator is $500.00, which sum I have requested the Fiscal Section be reimbursed to you.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, CFF
Region III

Enclosure
cc: Mr. J. B. Carman
URAD Mine
Empire, Colorado

Chief, Division of Field Operations (2)
E. D. Talbert, Acting Chief
Contract Administration and Audit Division
Contract Corres E1094
Chron

Form 7
10-58)

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JAN 5 1961

Memorandum

To: Acting Field Officer, Region III

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly (Questa) Mine
Taos County, New Mexico
Contract Idm-E1094

As requested by your January 3 memorandum, a Report of Review covering the subject contract has been prepared. The original and two copies are attached.

If you concur in the facts as stated in this Report of Review, please make the distribution authorized by section 4 of OME Circular 2, dated February 17, 1960. If for any reason you do not concur, please return the original and both copies to this Division with your comments.

Specific confirmation by you of the number of units of work accepted is not deemed essential in the instant case. In future requests for Reports of Review, however, your conformance with the requirement of sub-item (b) under section 1 of OME Circular 2 will be sincerely appreciated.

Attachments

EDTalbert/ama
January 5, 1961

Copy to: Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

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DATE	INITIALS	
1/5/61	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado

January 3, 1961

Memorandum

To: Contract Administration and Audit Division, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: DMEA 4568 (Molybdenum)
Contract Idn E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

The subject contract expired June 30, 1960 which was 57 months from the date of the contract.

An acceptable final engineering and geological report was received from the Operator October 17, 1960.

Records in this office indicate that a total of $199,[illegible]9.57 has been paid to the Operator. The sum of $500.00 was recommended to be withheld from reimbursement to the Operator pending resolution of matters prerequisite to closing the account in processing the Operator's final accounting report which was for the month of June 1960.

Will you please complete the audit report.

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

HMC/lm
cc: Chief, Division of Field Operations, OME (2)
Contract Corres E1094
Chron

MME Form 7
(10-58)

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12/29	Talbert	800
12/29	GCS	130
12/29	On leave	~~110~~
12/29	Cae	220
		500

DEC 29 1960

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

All final reports except the final audit report of review relating to the above-referenced contract have been received by the Washington Office. Will you kindly request that the audit report be completed.

/s/
George C. Selfridge

(2/2)

FMMurphy:kb - 12-29-60
cc to: Director's reading file
Review Committee
Docket
Chron.

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY

December 21, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4568
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico
FINAL REPORT

FINAL REPORT

Enclosed are the original and two copies of a joint final engineering and geological report dated December 1960 by R. U. King, geologist U. S. Geological Survey and T. M. Romslo, mining engineer, U. S. Bureau of Mines.

The original and two copies of the Operator's final report were forwarded you by me on October 17, 1960.

The exploration work completed included 5,777 feet of drifts and a crosscut 21,419 feet of diamond drilling in 19 holes, and the analysis of 3,333 samples. The total accepted cost of the work was $400,679.14 of which the Government's share was $200,339.57.

The exploration work resulted in the discovery or development of a significant quantity of molybdenum ore.

It is recommended that a Certification of Discovery or Development be issued.

Hugh M. Connors

Hugh M. Connors

Attachments

1 cy to each R. H. Mote, USBM, + Harold Trikeno, USGS
HBerry 12/27/60

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A SEATON, SECRETARY

OFFICE OF MINERAL EXPLORATION
REGION III

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 27 1960
DATE

DOCKET NO. DMEA-4568

CONTRACT NO. IDM- E1094

MOLYBDENUM CORPORATION OF AMERICA

MOLY OR QUESTA MINE

TAOS COUNTY, NEW MEXICO

Molybdenum

Final Geological and Engineering Report

by

R. U. King
U. S. Geological Survey

T. M. Romslo,
U. S. Bureau of Mines

December - 1960

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DMEA 4568
Contract Idm. E1094

MOLYBDENUM CORPORATION OF AMERICA
MOLY OR QUESTA MINE
TAOS COUNTY, NEW MEXICO

INTRODUCTION AND SUMMARY

The Molybdenum Corporation of America applied for Governmental aid in explorations for molybdenum in the area of its Moly or Questa mine, Taos County, New Mexico. Proposed explorations comprised driving 8,500 feet of drifts and crosscuts at an estimated total cost of $471,803.30.

The Moly mine, situated in the rugged Taos range of the Sangre de Cristo mountains of North Central, New Mexico, was productive from 1923 to 1953 when known high grade ore bodies were exhausted. (Fig. 1 & 2).

At the Moly mine, Pre-Cambrian granitic rocks are overlain by Tertiary volcanic rocks. Late Tertiary granite intrudes all the older rocks. Structurally the mine is in a long east-west down-faulted zone that trends across the Taos range.

Molybdenum appears to be the only important metal in the area and the Moly mine has been the only significant producer. Molybdenite, the ore-bearing mineral in the Moly deposit, occurs mainly in veinlets and as fracture filling in a zone over 1,000 feet thick along the contact of altered andesite and granite, but also occurs as disseminated grains, principally in the andesite.

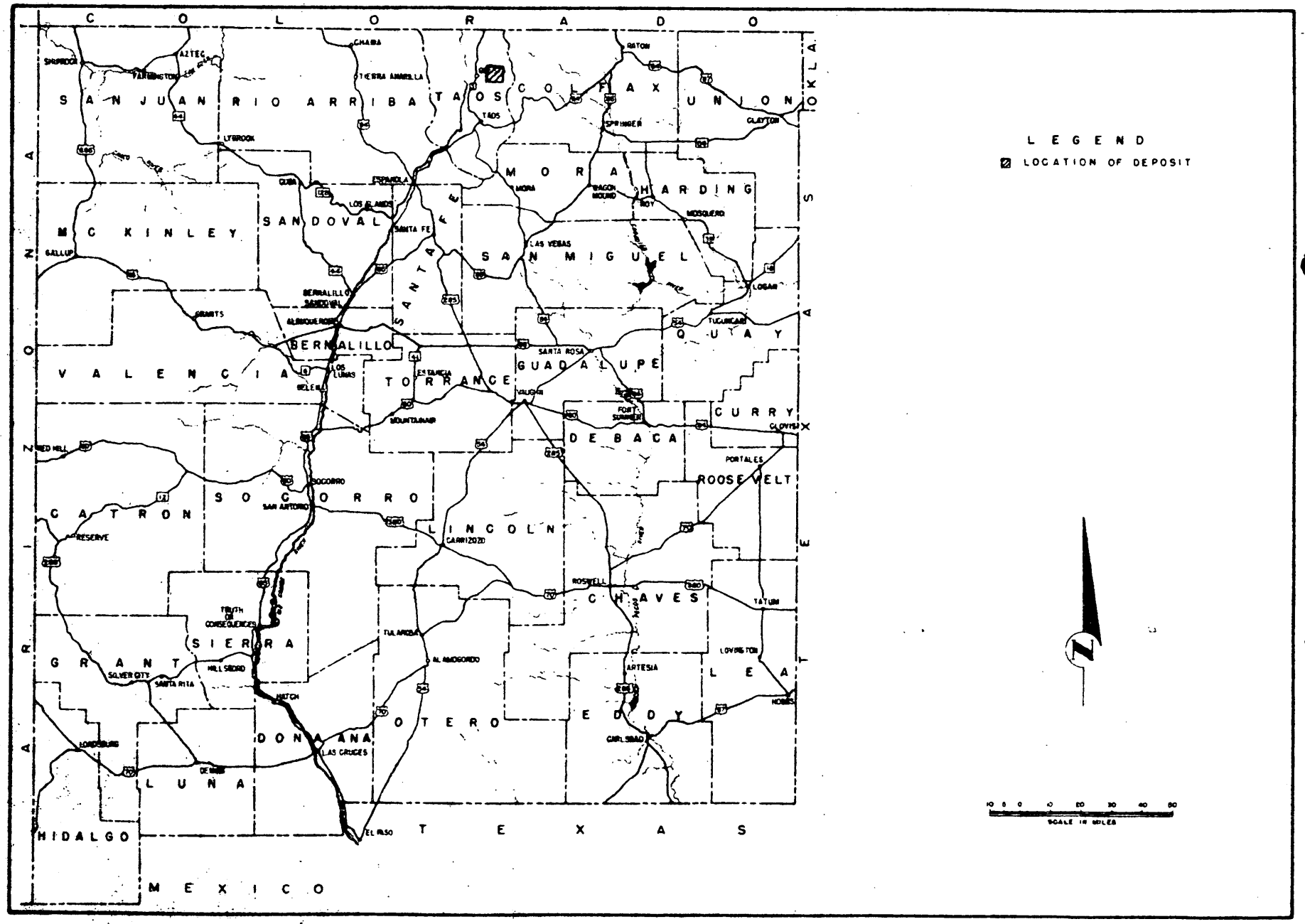

FIGURE 1 - GENERAL AREA MAP, MOLY OR QUESTA MINE, MOLYBNENUM CORPORATION OF AMERICA, TAOS COUNTY, NEW MEXICO.
DMEA 4568

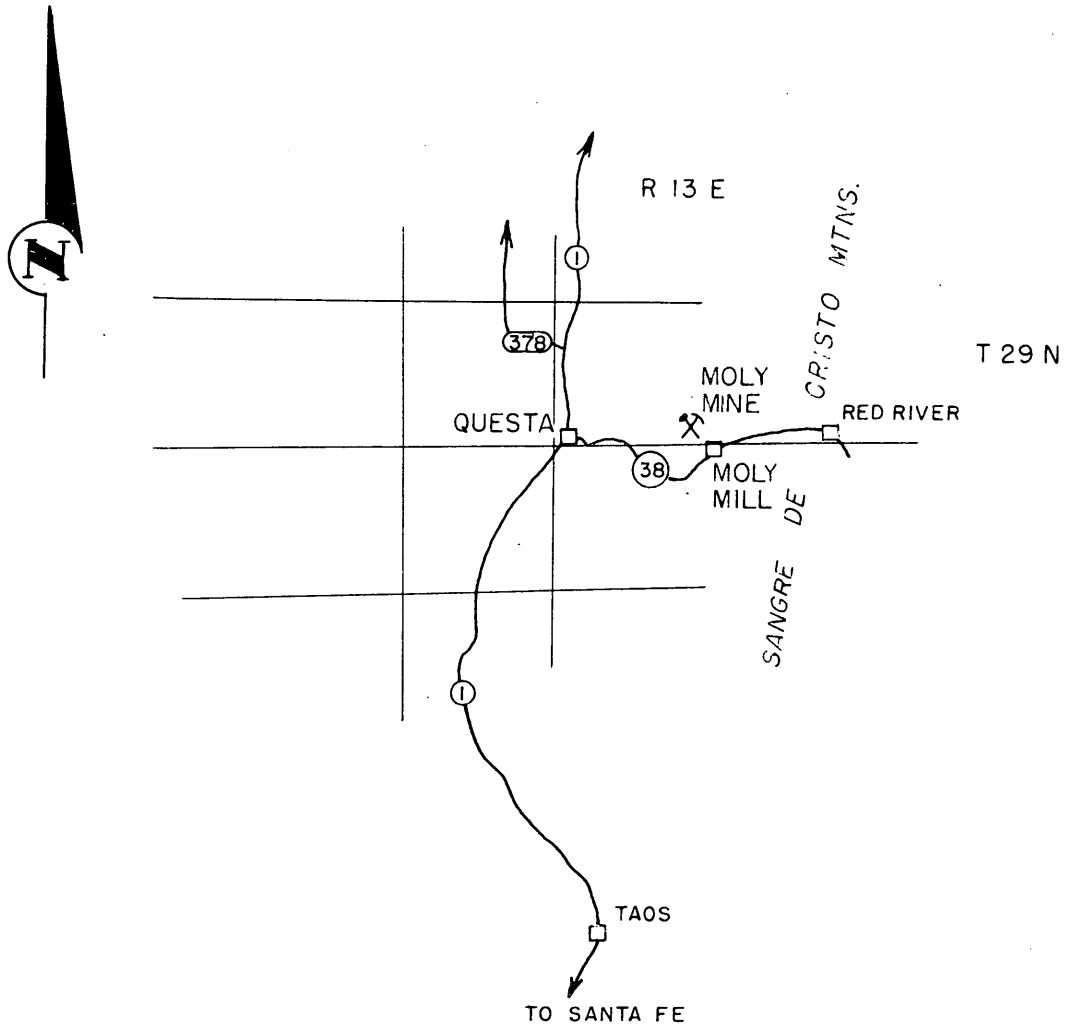

FIGURE 2 - AREA MAP, MOLY OR QUESTA MINE, MOLYBNENUM CORPORATION OF AMERICA, TAOS COUNTY, N. MEX.
DMEA 4568

The property was examined for the Defense Minerals Exploration Administration by D. E. Redman, U. S. Bureau of Mines, and D. N. Richter, U. S. Geological Survey, December 14, 1956. They were accompanied by A. L. Greslin, the applicant's resident manager. Their favorable findings resulted in execution of contract No. Idm. E1094, which authorized a 2-stage project costing an estimated total of $510,498.75, with Government participation of 50 percent.

Project work began June 15, 1957 and continued to June 30, 1960, when the contract expired. During the life of the project, the Operator did much additional work at no expense to the Government. Completed project work included 5,777 feet of drifts and crosscut of which 4,310 feet was timbered, 21,419 feet of diamond drilling in 19 holes, and the analysis of 3,333 samples. The diamond drilling also involved 321 lineal feet of advance for drill sites and the cementing and redrilling or the reaming and casing of 1,000 feet of hole. Analyses of individual samples from all tunnelling and drilling completed under the contract are shown on one inch to 50 feet scale plan maps accompanying the Operator's final report. Total cost of the work was $400,679.14 of which the Government's share was $200,339.57.

Reserves of molybdenum-bearing rock discovered as a result of DMEA and Company exploration completed during the life of the contract, amount to two and a half billion tons containing better than 0.20 percent MoS_2. ? Smaller concentrations of commercial grade ore occur within this extensive mass of mineralized ground, which may be of sufficient tonnage to be mineable under present conditions. How much?

The Operator calculates a reserve of indicated ore amounting to 259,939,376 tons at 0.243 percent MoS_2.

Considerable exploration will still have to be done before a complete evaluation of the molybdenum reserves and potential of this property can be made, but because of the significant tonnage of potential molybdenum ore found as a result of the exploration carried out under the contract, it is recommended that the property be certified as a discovery.

THE PROJECT

The project authorized by contract number Idm. E1094 was started June 15, 1957 and was completed shortly before the contract was terminated by mutual consent, June 30, 1960. Claims subordinated by the contract are shown on figure 3. Project explorations totalling 5,777 feet of drifts and crosscuts and 21,419 feet of diamond drilling, were supplemented by a considerable amount of work carried out at no expense to the Government by the Operator. Additional exploratory work was in progress when the project was completed.

Tabulated below is a summary of the authorized and completed work with costs, and pertinent operational data of the drifting and crosscutting, and diamond drilling.

Figure 4 shows the underground workings and drill holes completed with and without Governmental aid.

Table I. Summary of Estimated and Accepted Costs

	Authorized Work			Completed Work	
	Units	Unit Cost	Estimated Total Cost	Units	Accepted Costs
Stage I					
Diamond Drilling	9,000	$ 5.00/ft.	$ 45,000.00	7,507 ft.	$ 37,535.00
Cementing and redrilling or reaming and casing	500	1.00/ft.	500.00	500 ft.	500.00
Drill Stations	115	44.43/ ft.	5,109.45	71 ft.	3,154.53
Drifts and crosscuts	1,000	44.43/ft.	44,430.00	1,000 ft.	44,430.00
Timbering drifts and crosscuts	1,000	2.70/ft.	2,700.00	932 ft.	2,516.40
Chemical analysis	1,100	3.00/ea.	3,300.00	942	2,826.00
Total cost of Stage I			$101,039.45		$ 90,961.93
Stage II					
Diamond Drilling	19,500	$ 5.00/ft.	$ 97,500.00	13,912 ft.	$ 69,560.00
Cementing and redrilling or reaming and casing	1,000	1.00/ft.	1,000.00	1,000 ft.	1,000.00
Drill Stations	250	44.43/ft.	11,107.50	250 ft.	11,107.50
Drifts and crosscuts	6,160	44.43/ft.	273,688.80	4,777 ft.	212,242.11
Timbering drifts and crosscuts	6,160	2.70/ft.	16,632.00	3,198 ft.	8,634.60
Chemical analyses	3,177	3.00/ea.	9,531.00	2,391	7,173.00
Total costs of Stage II			$ 409,459.30		$ 309,717.21
Total costs of Stage I			101,039.45		90,961.93
Total cost of project			$ 510,498.75		$ 400,679.14
Government participation at 50 percent			$ 255,249.38		$ 200,339.57

Table II. Drift and Crosscut Data

Location	Advance (feet)	Timbered (feet)	Samples Assayed
STAGE I			
No. 2 XCN	500	530.1	112
Drift West	500	401.9	90
Totals Stage I	1000	932.0	202
STAGE II			
Drift West	708	555	144
No. 4 XCS	1500	888	300
No. 5 XCS	400	397	81
No. 2 XCS	500	325	100
No. 4 Dr. W.	1000	585	199
No. 4 Dr. E.	500	277	100
Totals Stage II	4777	3198	958
Totals Stage I	1000	932	202
Totals Project	5777	4130	1150

Table III. Diamond Drill Hole Data

Core recovery, by holes, ranged from 5.90 percent to 59.89 percent and averaged 36.95 percent of the total footage drilled. Through hole No. 23 the core recovery by the initial drilling contractor had averaged 25.53 percent. Thereafter, another contractor was able to increase recovery to an average of 45.45 percent.

Core recovery was low mainly because the major portion of the drilling was in highly altered 'green rock' which disentegrates rapidly when ground with water.

STAGE I

	Hole No.	Total Depth (feet)	Core Recovery Feet	Core Recovery Percent	Samples Assayed	Reamed & Cased or Cemented & Redrilled (feet)	Drill Station Advance (feet)
	1	336	97.0	28.87	34	0	0
	2	420	72.3	17.21	42	0	6
	3	500	144.1	28.82	50	0	3
	4	500	119.5	23.90	50	0	5
	5	500	186.9	37.39	50	110	4
	6	500	29.5	5.90	50	0	4
	7	417	75.9	18.21	44	175	4
	8A	500	273.0	54.59	50	0	0
	9	500	32.7	6.54	50	215	0
	10	500	226.5	45.30	50	0	13
	11	500	46.6	9.32	49	0	0
	12A	500	40.0	7.99	50	0	5
	13A	200	67.3	33.65	20	0	5
	14	500	130.5	26.10	48	0	10
	15	426	30.8	7.43	40	0	8
	16	245	39.8	16.26	28	0	4
	17	463	65.6	14.16	45	0	0
Totals	17	7507	1678.0	(Av.) 22.35	750	500	71

Table III. Diamond Drill Hole Data (cont'd).

STAGE II

	Hole No.	Total Depth (feet)	Core Recovery Feet	Core Recovery Percent	Samples Assayed	Reamed & Cased or Cemented & Drilled (feet)	Drill Station Advance (feet)
	18	407	83.7	20.57	41	272	6
	20	500	98.4	19.68	50	0	5
	21	500	185.4	37.08	50	200	5
	22	800	383.3	47.91	79	0	6
	23	500	178.6	35.72	50	315	11
	24	500	248.7	49.75	50	0	23
	25	500	258.4	51.68	50	213	14
	26	396	212.5	53.65	40	0	8
	27	679	393.0	57.88	68	0	12
	29	804	445.1	55.36	81	0	0
	30	800	375.5	46.94	80	0	8
	31	500	251.2	50.23	50	0	10
	32	546	154.8	28.35	108	0	27
	33	586	214.9	36.68	49	0	11
	34	337	106.1	31.48	33	0	12
	36	390	224.8	57.64	39	0	12
	37	800	397.7	49.71	80	0	7
	38	422	252.7	59.89	42	0	7
	39	711	286.4	40.27	71	0	7
	40	732	274.6	55.02	73	0	8
	41	500	171.3	34.25	50	0	0
	42	500	202.3	40.46	50	0	51
	43	136	46.5	34.18	13	0	0
	43A	66	17.3	26.17	6	0	0
	44	500	231.7	46.34	50	0	0
	45	800	327.0	40.88	80	0	0
Stage II	26	13,912	6021.9	(Av.) 43.29	1433	1000	250
Stage I	17	7,507	1678.0	(Av.) 22.35	750	500	71
Project	43	21,419	7699.9	(Av.) 36.95	2183	1500	321

Geology and Ore Reserves

The Questa molybdenum mine is on the west flank of the Taos range of the Sangre de Cristo Mountains in northern New Mexico. Precambrian granitic and metamorphic rocks that are overlain by Tertiary volcanic rocks make up most of the western part of the range. Small patches of sedimentary rocks presumably of Permo-Triassic age are present in the area. The Tertiary volcanic rocks consist of andesite, latite and rhyolite flows, breccia and tuff, which are in places so highly altered as to obscure original textures and structures. Late Tertiary soda granite, aplites and rhyolite porphyry intrude all older rocks.

The major structural features of the area are high angle normal faults and thrust faults. The Tertiary rocks in the vicinity of the Questa mine occupy a broad-structural trench that trends eastward across the Taos range. The southern boundary of the trench, which is approximately along the Red River, is marked by a series of east-trending normal faults that dip steeply northward. This downfaulted zone is probably the major control for the emplacement of a soda granite stock, with which the molybdenum deposit seems to be genetically related. The stock is elongate in a westerly direction from its outcrop at the original mine workings in Sulphur and Blind Gulches.

Along the western and southwestern contact of the granite stock with the overlying volcanic rocks is a thick zone of fractured and hydrothermally altered rocks. The altered rocks, visible at the surface, exhibit highly colored scars and bad land topography on the steep-walled mountain slopes.

Sulfide mineralization that has accompanied the hydrothermal alteration consists chiefly of molybdenite and pyrite. Only traces of copper, lead, zinc, tungsten, and precious metals are present in the mineralized area.

Propylitization of the Tertiary rocks as well as of adjacent Precambrian rocks is a characteristic feature of the deposit. Gangue minerals, in addition to large amounts of quartz, formed as a result of the hydrothermal alteration include chlorite, sericite, kaolinite, epidote, calcite, fluorite, rhodochrosite, and biotite.

In the higher parts of the deposit and along a thin band close to the contact of the andesite and granite, molybdenum occurred in high grade (5 to 30 percent MoS_2) molybdenite-quartz veins. In a much thicker band, that ranges up to one thousand feet in thickness, molybdenite is dispersed throughout the fractured and altered rocks in quartz veinlets and on fault and fracture surfaces as "paint". The full thickness, attitude and lateral extent of the molybdenite-bearing ground has not been determined, although exploration (including former mine development) has been conducted over a vertical range of more than 2,000 feet and over an area of one mile square.

With the exception of the high grade quartz-molybdenite veins, which were the source of relatively small tonnages of ore, mined during the past 30 years, the tenor of the deposit is low and very uniform, ranging from about 0.05 percent to 0.5 percent MoS_2. From the two miles of exploration drifts, and 21,000 feet of core drill holes less than a dozen samples contained more than 1. percent MoS_2 or less than 0.01 percent MoS_2.

The area explored by drifting and crosscutting during the life of the DMEA contract, from 1957 to 1960, measures about 5000 feet north to south and 5000 feet east to west. During the same period diamond core drilling from the exploration level reached 400 feet above and 800 feet below the level. Only at the extremities of the drifts and crosscuts has the tenor of mineralization fallen below 0.1 percent MoS_2, and although some drill holes in marginal areas averaged less than 0.2 percent MoS_2, other holes bottomed in material averaging considerably better than 0.2 percent MoS_2.

Because of the homogeneous character of the molybdenum deposit it can be reasonably assumed that the entire mass of mineralized rock within the limits of exploration will contain better than 0.2 percent MoS_2. On the other hand, the wide and irregular spacing between exploratory openings precludes the computation of measured or indicated reserves for the entire block of ground.

For the purpose of simplifying reserve estimates, the ore body is assumed to occupy a block of ground 5000 feet on a side by 1000 feet thick. It is estimated that the inferred reserves at Questa are at least 2.5 billion tons of molybdenum-bearing rock containing better than 0.20 percent MoS_2. Within this large low grade body the presence of two small blocks of commercial grade ore (0.5 percent MoS_2) are indicated. The two blocks estimated to contain inferred reserves of 10 million tons each are in (1) the southwest part of the explored area between Nos. 4 and 5 south crosscut in the vicinity of drill holes 22, 27, and 30, and in (2) the north east part at the junction of No. 1 crosscut north and No. 3 drift east.

The Operator calculates indicated reserves of 259,936,376 tons of ore containing 0.243 percent MoS_2, distributed in three blocks. The grade of the reserves are mechanical averages of continuous wall chip sample analyses and drill hole sludge sample analyses, but the basis for the block boundaries are not given.

Conclusions and recommendations

Although the limits of the molybdenite deposit at the Questa mine have not been completely determined, exploration carried out with Government participation under the DMEA contract, has been sufficient to reasonably delineate a tremendous deposit of molybdenite and sampling of the deposit has been adequate to estimate very significant inferred reserves of molybdenum.

Molybdenum Corp. Says It Has Located Large Deposit in New Mexico

Site Said to Contain 260 Million Tons of Ore Holding About 760 Million Pounds of Metal

By a Wall Street Journal Staff Reporter

NEW YORK — Molybdenum Corp. of America announced it has located a large molybdenum deposit about six miles from the town of Questa in the Red River mining district, Taos County, north central New Mexico.

Exploration started in 1954. For the past three years it was carried on with the financial assistance of the Defense Minerals Exploration Administration of the Interior Department.

Marx Hirsch, president of Molybdenum, said the find was of major significance.

The company's final report to the Government agency disclosed about 260 million tons of ore containing about five pounds of molybdenum disulphide a ton, equivalent to approximately 760 million pounds of molybdenum metal.

Further Deposits Found

Mr. Hirsch said that in exploration since June 30 additional zones of higher mineral content have been located both within and outside the area explored under the administration contract.

"No decision will be made regarding possible mining operations until the conclusion of the exploratory work in the enriched area," Mr. Hirsch said. The company has a 50-ton mill at the property which can be expanded to 500 tons a day by additional crushing capacity.

A company official noted, however, that to economically mine and mill an orebody of the size indicated would require a multi-million dollar installation.

Molybdenum is an increasingly important metal to the nation's space and missile programs and to industry, the company said. For many years the free world has primarily depended on the large deposit of American Metal Climax, Inc., in Colorado, and on by-product production from copper mining.

The proven ore reserves of American Metal Climax, the largest single mine deposit in the world, total more than 450 million tons containing over two billion pounds of recoverable molybdenum. Frank Coolbaugh, American Metal Climax president, recently said that this figure could be doubled easily by indicated, but still undefined ore reserves at the American Metal Climax mine. It currently is operating at a rate of 33,000 tons a day of ore mined, and is expected to produce around 50 million pounds of molybdenum in 1960. This rate could be boosted another 10% to 15% with current mining and processing facilities, Mr. Coolbaugh said.

Industry sources estimate that about 16 million pounds of molybdenum will be recovered in the U.S. this year as a by-product of copper mining. The bulk will be produced by Kennecott Copper Corp. The copper mine output of molybdenum this year and last was handicapped by strikes at the copper properties that started in August 1959 and continued into the first quarter of 1960.

In 1959 the free world consumption of molybdenum was about 60 million pounds. Molybdenum contained in mine concentrates currently sells for $1.25 a pound.

Uses Are Expanding

Currently, about 80% to 90% of molybdenum's use is in iron and steel alloys to which it imparts added strength, Molybdenum Corp.'s announcement said. There are many other uses, and technological advances are accelerating. In 1959 the U.S. Bureau of Mines said Government scientists had produced the first casting of molybdenum.

The metal's high melting point, thermal shock resistance, good electrical conductivity and resistance to corrosion in certain mediums have resulted in use in various areas of the defense program. Its strength at high temperatures is of particular interest to scientists working on re-entry and other space problems where missile parts are subjected to intense heat.

Molybdenum Corp. of America has been producing molybdenum products since 1920. The company also produces ferro alloys, chemicals and pure metals of tungsten, columbium, boron and rare earths. Its plants are at Washington and York, Pa., and at Cleveland.

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DMEA-4568
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75—ROCKY MOUNTAIN NEWS—Denver 1, Colo., Wednesday, Nov. 30, 1960

Business and Financial News

Western Trade Winds

Major Molybdenum Deposit Found Near Questa, N.M.

By WARREN LOWE
Rocky Mountain News Business Editor

Existence of a major molybdenum deposit near Questa, N.M., 20 miles south of the Colorado border, has been confirmed by a 3-year-old exploration program, Marx Hirsch, president of the Molybdenum Corp. of America, announced Tuesday.

An ore body of an estimated 260 million tons, containing about five pounds of molybdenum disulphide per ton, has been determined so far, Hirsch said.

Lowe

He added the company intends to continue and intensify exploration activities.

Molybdenum Corp's. Questa Mine property consists of approximately 3000 acres in the Red River mining district, six miles from Questa in Taos County.

The company operated the mine from 1923 to 1958, recovering molybdenum disulphide from scattered high-grade veins. Some 20 million pounds of molybdenum were mined from the property's 30 miles of underground tunnels and drifts.

Starting about 1946, fewer and fewer high grade veins were discovered and in 1958 mining was halted.

The following year the company started exploration under a loan agreement with the Interior Department's Defense Minerals Exploration Administration.

Approximately 16,000 feet of underground drifting and 30,000 feet of drill holes were completed under the agreement to determine the extent of the deposits.

In charge of the exploration have been John B. Carman, a company engineer for 40 years; Albino L. Greslin, resident manager, and Dr. Robert H. Carpenter, professor of mining geology at the Colorado School of Mines.

Molybdenum is designated as a strategic and critical material for stockpiling in the United States. For many years, the free world's supply has been the large deposit at Climax, Colo., and a by-product of copper mining.

Hirsch said no decision will be made regarding possible mining operations at the Questa properties until completion of additional exploration work.

Molybdenum Corp., organized in 1920, currently is primarily engaged in processing of molybdenum, tungsten, columbium, boron and rare earths. Its manufacturing plants are in Washington and York, Pa., and Cleveland, Ohio.

W.O. 2 ✓
11-30-60

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Business and Financial News

Western Trade Winds

Major Molybdenum Deposit Found Near Questa, N.M.

By WARREN LOWE
Rocky Mountain News Business Editor

Existence of a major molybdenum deposit near Questa, N.M., 20 miles south of the Colorado border, has been confirmed by a 3-year-old exploration program, Marx Hirsch, president of the Molybdenum Corp. of America, announced Tuesday.

An ore body of an estimated 260 million tons, containing about five pounds of molybdenum disulphide per ton, has been determined so far, Hirsch said.

Lowe

He added the company intends to continue and intensify exploration activities.

Molybdenum Corp.'s Questa Mine property consists of approximately 3000 acres in the Red River mining district, six miles from Questa in Taos County.

The company operated the mine from 1923 to 1956, recovering molybdenum disulphide from scattered high-grade veins. Some 20 million pounds of molybdenum were mined from the property's 30 miles of underground tunnels and drifts.

Starting about 1946, fewer and fewer high grade veins were discovered and in 1956 mining was halted.

The following year the company started exploration under a loan agreement with the Interior Department's Defense Minerals Exploration Administration.

Approximately 16,000 feet of underground drifting and 30,000 feet of drill holes were completed under the agreement to determine the extent of the deposits.

In charge of the exploration have been John B. Carman, a company engineer for 40 years; Albino L. Greslin, resident manager, and Dr. Robert H. Carpenter, professor of mining geology at the Colorado School of Mines.

Molybdenum is designated as a strategic and critical material for stockpiling in the United States. For many years, the free world's supply has been the large deposit at Climax, Colo., and a by-product of copper mining.

Hirsch said no decision will be made regarding possible mining operations at the Questa properties until conclusion of additional exploration work.

Molybdenum Corp., organized in 1920, currently is primarily engaged in processing of molybdenum, tungsten, columbium, boron and rare earths. Its manufacturing plants are in Washington and York, Pa., and Cleveland, Ohio.

W.O. 2 ✓
11-30-60

MME Form 7
(10-58)

OFFICIAL FILE COPY

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11/18	[illegible]	500
11/18	Talbot	800
11/18	[illegible]	130
"	[illegible]	110
11-18	gad	220
		500

NOV 18 1960

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: IMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract Idm-E1094

We have the November 10 memorandum of Mr. Romslo concerning the Lonesome No. 1 claim. No work under the contract was done within the boundaries of this claim, nor is it mentioned in the title documents pertaining to Amendments Nos. 3 and 4. We, therefore, are not in a position to demand its inclusion into the contract, nor do we consider it as necessary, inasmuch as the Special Agreement Concerning Royalty in Annex No. II appears to adequately protect the Government's interest.

George C. Selfridge (for)

WRGriswold/gla
11-18-60
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
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DATE	INITIALS	CODE
11-14	gad	VVO
"	Murphy	130
		500

November 10, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm. E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

While preparing a claim map for the final report on the subject project I found that the Lonesome No. 1 claim has not been included as part of the subordinated ground. The Lonesome No. 1 claim which is shown on the claim map attached to and described in Amendment No. 3 is within the area subordinated by Amendment No. 4.

Execution of an amendment making the Lonesome No. 1 claim a part of the subordinated ground appears to be in order.

T M Romslo

T. M. Romslo

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 31 1960

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10/31	Cae	210
11/1	Murphy	~~500~~

October 28, 1960

Memorandum

To: Chief, Division of Field Operations OME

From: OME Field Office, Region III

Subject: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Mr. J. B. Carmen, of Molybdenum Corporation of America, telephoned this office late yesterday relative to publicizing the results of the DMEA work by the Corporation's New York office after approval by the Interior Department. He wanted to know when our Final Report would be submitted because Interior's decision apparently was largely dependent upon findings of the report.

I told Mr. Carmen, that we were working on our Final Report as time permits, and would submit it as soon as possible.

The U.S.G.S. is cooperating with us in the preparation of the report which we now hope to complete about the middle of next month.

T M Romslo

T. M. Romslo
for Hugh M. Connors

TMR/lm

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O. M. E.
RECEIVED OCT 19 1960

DATE		CODE
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10/19		800
~~10/21~~	~~Mr Murphy~~	~~500~~

Building 20 - Federal Center
Denver 25, Colorado

October 17, 1960

Mr. J. B. Carmen
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMEA-4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Carmen:

This will acknowledge receipt of the original and seven copies of the Operator's Final Report pertaining to work completed under the subject contract.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

HMR/lm

CC Chief, Division of Field Operations (2)
Final Report File Region III E1094
Corres E1094
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
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DATE		CODE
10-20	gad	220
		120
10/21	Talbot	800
"	Murphy	500

October 17, 1960

Memorandum

To: Chief, Division of Field Operations

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico
OPERATOR'S FINAL REPORT

Enclosed are the original and one copy of a final report submitted by the Operator pertaining to work completed under the subject contract.

It is recommended that the report be accepted as complying with contract requirements.

Hugh M. Connors

Hugh M. Connors

Attachments
TMR/lm

Maps, Plates I, II, III, IV, V,
VI, VIA, VII, VIII
filed in map file, Folder No. 3

OPERATOR'S FINAL REPORT

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OME
OFFICIAL FILE COPY
DEPARTMENT OF THE INTERIOR
O. M. E.
RECEIVED OCT 20 1960
REGION III
DATE | INITIALS | CODE

October 8, 1960

Final Report

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

Persuant to the contract we submit the following Final Report:

INTRODUCTION

We applied on December 3, 1956 for government assistance under D.M.E.A. for the exploration of an area about 4000 feet E-W by 4800 feet N-S. This area lying to the west adjoins a mined area that produced 20,000,000 pounds of molybdenite. On May 31, 1957 the Government offered a contract which conditionally approved 7160 feet of drifting and crosscutting and 28,500 feet of core drilling on a fixed unit cost basis. Work started on June 15, 1957. Time for completion of work originally was 30 months. Under Amendment No. 4, a 7 months extension was granted making the termination date June 30, 1960.

AMENDMENTS

The contract was amended as follows:

Amendment No. 1, October 4, 1957 referred to Exhibit A, Stage I, Project Area B. It conditionally allowed extension of the Second Tunnel Shaft Level, Drift West 500 feet.

Amendment No. 2, January 6, 1958 referred to Exhibit A, Stage II, Area B and provided for (1) Substitution of sludge samples for core samples when insufficient core was recovered;

(2) Allowed the extension of Drift West (mentioned above) to 400 feet west of coordinate W 400 and provided for, with Government approval, north and south crosscuts from this Drift West and allowed drifting from the crosscuts following the strike of favorable zones encountered. It limited 400 feet the distance between north and south crosscuts driven in the same direction.

Amendment No. 3, June 23, 1959 referred to Areas A and B and provided for drifting and drilling and the subordination of more claims under the contract, namely, Summit Nos. 4, 5, 7, 8 and 16.

Amendment No. 4 provided for (1) Extension of termination time to June 30, 1960.

(2) Changing from 15 years to 16 years the time in which royalties are payable to the Government.

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

(3) Detail and Items of contract termination including "Final Report", obligations of successors, exclusion of Government from any claims arising out of contract.

(4) In Annex I the addition of the claims Buena Vista Nos. 1, 2, 3, 4, 6, 7, Torbert No. 2 and Renegade on which proof of title had been given by operator.

(5) Also Annex I claims Phyllis Nos. 5 and 7, operator owned were added.

MAPS

The following attached maps are included herewith:

GEOLOGY MAPS

Plate No. I	S 600	-	N 1000	E 1800	-	W 200
Plate No. II	N 1000	-	N 2600	E 1800	-	W 200
Plate No. III	S 600	-	N 800	E 0	-	W 1800
Plate No. IV	N 1800	-	N 3400	E 2400	-	E 400
Plate No. V	S 2400	-	S 600	E 1200	-	W 800

PROGRESS, DRILL HOLE, AND ASSAY MAPS

Plate No. VI	S 800	-	N 1200	E 2400	-	W 1400
Plate No. VI a	S 800	-	N 1200	W 1400	-	W 2000
Plate No. VII	N 1200	-	N 3200	E 2600	-	W 1400
Plate No. VIII	S 2800	-	S 800	E 1800	-	W 1400

WORK PERFORMED

UNDER CONTRACT (See note below)

STAGE I

DRIFTING AND CROSSCUTTING	Feet		
2nd Tunnel Shaft Level Drift West	500		
Do Do Drift West	500		
	1000	@ $44.43	$44,430.00
TIMBERING	932	2.70	2,516.40

DRILLING

Hole No.	Collar Coordinates		
1	S 23	E 2005	336
2	S 180	E 2009	420
3	S 33	E 1800	500

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

DRILLING (Continued) — Brought Forward $46,946.40

Hole No.	Collar Coordinates		Feet		
4	S 39	E 1800	500		
5	S 42	E 1800	500		
6	S 42	E 1600	500		
7	S 58	E 1600	417		
8 A	S 315	E 1240	500		
9	S 112	E 1395	500		
10	S 112	E 1395	500		
11	S 198	E 1196	500		
12A	S 133	E 1065	500		
13A	S 140	E 1058	200		
14	N 171	E 1185	500		
15	N 848	E 1160	426		
16	N 848	E 1160	245		
17	N 411	E 425	463		
Note: All holes Stage I shown on Plate VI					
		Total	7507	@ $5.00	37,535.00
DRILL STATIONS			71	@ 44.43	3,154.53
CASING AND REAMING			500	@ 1.00	500.00
ANALYSES			942	@ 3.00	2,826.00
TOTAL, STAGE I					$90,961.93

STAGE II

DRIFTING AND CROSSCUTTING		Feet		
2nd Tunnel Shaft)	No. 5 Cx North	169		
Level Drift West)	No. 5 Cx South	400		
	Drift West	708		
)	No. 4 Cx South	1500		
)	No. 1 Cx N, Dft #4 W	1000		
	No. 1 Cx N, Dft #3 E	500		
	No. 2 Cx South	500		
		4777	@ $44.43	$212,242.11
TIMBERING		3198	@ 2.70	8,634.60

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

Brought Forward $220,876.71

DRILLING

Hole No.	Shown on Plate No.	Collar Coordinates		Feet		
18	VI	S 250	E 58	407		
20	VI	S 594	E 395	500		
21	VI	S 592	E 395	500		
22	VI	S 590	E 393	800		
23	VI	S 220	E 392	500		
24	VIII	S 1767	W 325	500		
25	VIII	S 1780	W 300	500		
26	VI	S 707	W 328	396		
27	VI	S 707	W 325	679		
29	VI	S 157	E 859	804		
30	VIII	S 1193	W 328	800		
31	VI	S 348	W 824	500		
32	VI	S 205	W 978	546		
33	VI	N 89	W 1279	586		
34	VII	N 1419	E 1078	337		
36	VII	N 1863	E 1022	390		
37	VII	N 1830	E 633	800		
38	VII	N 1836	E 638	422		
39	VII	N 1723	E 63	711		
40	VII	N 1725	E 65	732		
41	VII	N 2800	E 975	500		
42	VII	N 2800	E 970	500		
43	VII	N 2313	E 1388	136		
43A	VII	N 2313	E 1388	66		
44	VII	N 2313	E 1388	500		
45	VI & VIII	S 770	E 980	800		
		Total		13912	@ $ 5.00	$69,560.00
DRILL STATIONS				250	@ 44.43	11,107.50
CASING AND REAMING				1000	@ 1.00	1,000.00
ANALYSES				2391	@ 3.00	7,173.00

TOTAL, STAGE II - $309,717.21

Note: D.M.E.A. Participated in drifts and crosscuts colored in yellow on Plates VI, VII and VIII.

<u>SUMMARY, STAGES I AND II</u>

	Stage I	Stage II	Total	Amount
DRIFTING AND CROSSCUTTING FT.	1000	4777	5777	$256,672.11
TIMBERING, FEET	932	3198	4130	11,151.00
DRILLING, FEET	7507	13,912	21417 21419	107,095.00
DRILL STATIONS, FEET	71	250	321	14,262.03

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

SUMMARY, STAGES I AND II (Continued)				Brought Forward	$389,180.14
	Stage I	Stage II	Total		
CASING AND REAMING, FEET	500	1000	1500		1,500.00
ANALYSES	932	2391	3333		9,999.00
TOTAL, STAGE I AND STAGE II -					$400,679.14

200 339.57

UNASSISTED WORK

During the contract term the operator did the following drifting and cross-cutting without Government assistance on the 2nd Tunnel Shaft Level. (These distances scaled from Plates.)

Drift West	77 feet
Drift West No. 1 Cx North	2560
Drift West No. 1 CxoN No. 4 Dft West	90
Drift West No. 1 Cx N No. 3 Dft East	992
Drift West No. 2 Cx North	68
Drift West No. 2 Cx South	50
Drift West No. 4 Cx South	131
Drift West No. 5 Cx South (Old)	80
Drift West No. 7 Cx North	1931
Total	5979 feet.

GEOLOGICAL EVALUATION

Work performed under the contract together with other work done simultaneously by the operator, disclosed a very considerable area of molybdenite mineralization, both on the 2nd Tunnel Shaft Level (elevation about 7800 feet) and for several hundred feet vertically above and below the level, see Plates Nos. VI, VI a, VII and VIII.

It showed the Questa mine porphyry intrusive body, although elongate north-south on the surface to extend westward underground as a gently plunging intrusive ridge well mineralized on the south flank with promising mineralization to the north on what appears to be the north flank of the ridge.

It disclosed much of the mineralization situated within or near the transitional contact zone between the porphyries and the volcanic country rocks. It also indicated zones of strong mineralization well below the contact. As, for example, the results of Drill Hole No. 37 at coordinates N 1836, E 638, Plate VII as well as several hundred feet above the contact.

It showed molybdenite to occur with quartz and pyrite in small veinlets, in well developed veins several inches to a foot or more in width and as a thin veneer or paint on joint and fault surfaces. By far the greatest volume of molybdenite occurs in the last manner. The molybdenite appears to have a considerable temperature range of deposition as it is interbanded with biotite along some vein

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

edges and its occurrence as veneer or paint appears to have been formed after most all other mineralization had ceased.

The work disclosed that the major control of molybdenite deposition has been cracking during late stage cooling of the porphyry intrusive body and subsequent failure. The entire contact fringe underwent structural adjustment resulting in innumerable openings which became mineralized.

Strong mineralization was found in all rock types, both intrusive and volcanic. Rock brittleness appears to have a more profound effect on fracture development than the initial rock composition. Hydrothermal alteration, in a sense, has played an important role in preparing the rock for cracking. Those rocks in which there has been an addition of silica and potash feldspar are more favorable than those which have been strongly sericitized or kaolinized.

Cracking and subsequent mineralization is better developed generally in areas of contact irregularities than in more uniform sections. Intersecting dikes and offshooting projections have been noted where mineralization is strong.

Exploration to date gives no geologic indication that higher concentrations of molybdenite may not be found by both intermediate exploration within, and exploration adjacent to the more favorable areas indicated by the widely spaced work done.

ORE EVALUATION

The relatively small amount of exploration work done compared to the large volume of molybdenite bearing material precludes an assured evaluation of any tonnage of a certain grade, consequently the following must be considered as indicated ore.

This evaluation is made by using the chip sample results from the drifts and crosscuts and the drill hole sludge sample results. Regarding the use of sludge versus core samples, first, core recovery varied from 5.9% to a maximum of 59.89% with an overall average of 36%; and second, experience has demonstrated the better mineralized sections are usually in soft or friable material difficult to core.

In arriving at a tonnage figure, a factor of 12 cubic feet per ton is used.

PLATE VI	outlined in red	is shown	ore	Block 1
PLATE VI and VIII	"	"	"	Block 2
PLATE VII	"	"	"	Block 3

October 8, 1960

Mr. Hugh M. Connors
Acting Field Officer, O.M.E.
Building 20, Federal Center
Denver 25, Colorado

Final Report
Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm E-1094
Molybdenum Corporation of America

	Areas Square Feet	Average Thickness Feet	Tons	Percent MoS2	Pounds MoS2
Block 1	911,526.5	812	61,679,960	0.2412	297,503,924
Block 2	1,519,250.0	852	107,866,750	0.253	545,805,755
Block 3	1,084,676.0	1,000	90,389,666	0.233	421,215,843
ALL BLOCKS			259,936,376	0.243	1,264,525,522

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J B Carman

J. B. Carman

Urad Mine, Empire, Colorado

JBC:r

Original & 7 copies
8 copies of 8 maps (64)

CC: Marx Hirsch
A. L. Greslin
File

Main Office:

Molybdenum Corporation of Amerida
375 Park Avenue
New York 22, New York

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

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10/3	~~[illegible]~~	500
"	~~[illegible]~~	"

September 28, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Docket DMEA 4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Questa mine)
Taos County, New Mexico

This responds to your memorandum dated September 26, 1960 on the subject project.

Mr. J. B. Carman, of Molybdenum Corporation of America, telephoned this office today requesting information regarding the final report on the subject property. He estimates that the final report will be forwarded this office the week of October 10, 1960.

Hugh M. Connors

Hugh M. Connors

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
9/26	Murphy	500
	Brunnell	500
	Fisher	800
9/26	GCS	130
		110
9-26	gad	220
		500

SEP 26 1960

Memorandum

To: Acting Field Officer, Region III

From: Chief, Division of Field Operations

Subject: DMRA-4568 (Molybdenum)
Molybdenum Corporation of America
Questa Mine
Taos County, New Mexico
Contract Idm-E1094

We note in Mr. Romslo's memorandum of August 8, 1960, to you, that the Operator's final report on the results of the work under the subject contract might be received early in September. If you have not received the report to date, it is suggested that you contact the Operator to ascertain the approximate date it will be submitted.

/s/ George C. Selfridge

FMMurphy/gla
9-26-60
cc to: Director's Reading File
Review Committee
Docket
Chron

43683

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O. M. E.
RECEIVED JUN 23 1960

DATE	INITIALS	CODE
6 23	Coe	210
	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado

June 21, 1960

Mr. A. L. Greslin
Moly Mine
Questa, New Mexico

Re: Docket No. DMEA-4563 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter dated June 16, 1960, this constitutes concurrence by the Government for you to stop drilling Hole 43A.

Nothing in the above work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the "Fixed Unit Cost" of any item of work.

Very truly yours,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

cc: Mr. J. B. Carman
URAD Mine
Empire, Colorado

HMC/lm

cc: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Chief, Division of Field Operations OME (2)
Amendment File, Region III
Hasler
Corres.
Chron

OME
DEPARTMENT OF THE INTERIOR
JUN 20 1960
REGION III
DENVER, COLORADO

June 16, 1960

Mr. Hugh Conners
Acting Field Officer
O.M.E. Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re:
Docket No. DMEA 4568 (Molybdenum)
Contract No. IDM-E 1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

We ask you herewith for approval to stop drill hole No. 43-a.

We drilled drill hole No. 43 to a depth of 136 feet and had to stop due to caving ground in the hole. Then, with your approval, we tried drilling hole No. 43-a at the same location but at an inclination of plus 80 degrees South.

We drilled to a depth of 66 feet in drill hole No. 43-a but couldn't go any farther due to caving ground in the hole and too much sand in the hole that would stick the rods and couldn't get the rods in or out of the hole.

Yours very truly,

A. L. Greslin

A. L. Greslin, Manager

OME
DEPARTMENT OF THE INTERIOR
JUN 20 1980
Region III
DENVER, COLORADO

OFFICIAL FILE COPY
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RECEIVED JUN 13 1960

DATE	INITIALS	CODE
6-13	gad	VVO
6/14	[illegible]	800

Building 20 - Federal Center
Denver 25, Colorado

June 9, 1960

Mr. A. L. Greslin
Moly Mine
Questa, New Mexico

Re: Docket No. MMA-4568 (Molybdenum)
Contract No. Idm-81094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter dated June 6, 1960, this constitutes concurrence by the Government for you to stop drilling Hole No. 43 at 136 feet and to drill another hole (No. 43A) at the same location as No. 43 but drill this one at an inclination of plus 60° South.

Nothing in the above work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the "Fixed Unit Cost" of any item of work.

Very truly yours,

Hugh M. Connors

Hugh M. Connors
Acting Field Officer
OME, Region III

cc: Mr. J. B. Garman
UMAB Mine
Empire, Colorado

HMC/lm
cc: Fiscal Section, Division of Administrative Services
Office of the Secretary, Department of the Interior
Chief, Division of Field Operations OME (2)
Amendment File, Region III
Hasler
Corres.
Chron

OME
DEPARTMENT OF THE INTERIOR
JUN 9 1960
REGION III
DENVER, COLORADO

June 6, 1960

Mr. Hugh Conners
Acting Field Officer
O.M.E. Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. IDM-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

We ask you herewith for approval to stop drill hole No. 43 at 136 feet.

Drill Hole No. 43 was drilled AX to 136 feet but had to stop due to caving ground to the extent that we couldn't get into the hole nor out with the drill rods. We tried to ream the hole to BX to case it but the rock was too loose to ream and the hole has become too large to do any good reaming.

We ask your approval to drill another hole (No. 43a), at the same location as No. 43 but drill this one at an inclination of Plus 80 Deg. South.

We will try to drill this one BX to get through the broken up zone before going to AX size.

Yours very truly,

A. L. Greslin

A. L. Greslin, Manager

OME
DEPARTMENT OF THE INTERIOR
JUN 9 1960
REGION III
DENVER, COLORADO

Building 20 - Federal Center
Denver 25, Colorado

5-31 gad VVO
5/31 800
~~Murphy 500~~

May 27, 1960

AIR MAIL

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary
Department of the Interior
Washington 25, D.C.

From: Hugh M. Cummore, Acting Field Officer, GMK, Region III

Subject: Docket No. [illegible]-4968 (Molybdenum)
Contract No. IBm-H1094
Molybdenum Corp. of America
(Questa Mine)
Taos County, New Mexico

In conformance with GMK Circular 1, enclosed are the original and two copies of Forms MF-104 and MF-104A with attached maps and other pertinent data, Operator's Narrative Report, and Engineer's Inspection Report covering work performed during the month of April 1960.

It is considered that the Operator has complied with the intent of the contract, and the work for which reimbursement is claimed is acceptable to the Government. All of the work was performed at Fixed Unit Cost under the short form of contract on Form MF-2-100A; therefore, documentation of the cost is not required.

It is recommended that reimbursement be made to the operator for 50% of the amount reported in Form MF-104 subject to final audit of the operator's accounts.

Original signed by

Hugh M. Cummore

Enclosure

HMC/lm
cc: Chief, Division of Field Operations (2)
MF-104 file, Region III
Hasler w/cpy of Engineer's report
Suspense
Chron

Official

~~EXTRA~~ COPY
O. M. E.
RECEIVED APR 28 1960

DATE	INITIALS	CODE
4-28	gad	220
	~~Murphy~~	~~500~~

Building 20 - Federal Center
Denver 25, Colorado

April 26, 1960

Mr. A. L. Greslin
Moly Mine
Questa, New Mexico

Re: Docket No. DMEA-4568 (Molybdenum)
Contract No. Idm-E-1094
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter dated April 22, 1960, this constitutes concurrence by the Government for you to consider Diamond Drill hole No. 40 completed to a length of 732 feet, since the drill machine is no longer able to rotate the rods any deeper than the 732 feet. In addition, drilling to a depth of 732 feet has provided the information for which the hole was originally designed.

Very truly yours,

Original signed by

Hugh M. Connors
Acting Field Officer
OME, Region III

cc: Mr. J. R. Carman
URAD Mine
Empire, Colorado

HMC/bjo

cc: Fiscal Sec., Div. of
Adm. Svcs, OME
Chief, Div. of Field
Operations (2)
Amendment File, Region III
Hasler
Cerres.
Suspense
Chron.

OME
DEPARTMENT OF THE INTERIOR
APR 25 1960
REGION III
DENVER, COLORADO

April 22, 1960

Mr. J.W. Townsend
Executive Officer O. M. E.
Field Team Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. IDM-E 1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

We Ask you herewith for approval to stop drill hole No. 40 at 732 feet.

Drill hole No. 40 was drilled B X to 211 feet and cased. The balance was drilled A X without casing, But due to the change in rock in the hole we didn't have enough power with the drill machine to rotate the rods any deeper than the 732 feet.

We drilled through the porphyry at 676 feet, then into transition rock.

EXTRA COPY
O. M. E.
RECEIVED APR 28 1960

DATE	INITIALS	CODE

Yours very truly,

A. L. Gresline

OFFICIAL FILE COPY O. M. E. RECEIVED APR 28 1960		
DATE	INITIALS	CODE
4-28	gad	VVO
4/28	[illegible]	800
"	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado

AIR MAIL

April 25, 1960

Memorandum

To: Fiscal Section, Division of Administrative Services
Office of the Secretary
Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region III

Subject: Docket No. DMEA-4568 (Molybdenum)
Contract No. Idm-E 1094
Molybdenum Corp. of America
(Questa Mine)
Taos County, New Mexico

In conformance with OME Circular 1, enclosed are the original and two copies of Forms MF-104 and MF-104A with attached maps and other pertinent data, Operator's Narrative Report, and Engineer's Inspection Report covering work performed during the month of March 1960.

It is considered that the operator has complied with the intent of the contract, and the work for which reimbursement is claimed is acceptable to the Government. All of the work was performed at Fixed Unit Cost under the short form of contract on Form MF-2-100A; therefore, documentation of the cost is not required.

It is recommended that reimbursement be made to the operator for 50% of the amount reported in Form MF-104 subject to final audit of the operator's accounts.

Original signed by

Hugh M. Connors

Enclosure

HMC/bjo

cc: Chief, Division of Field
Operations (2)
MF-104 file, Region III
Hasler /w/cpy of Engineer's Report
Suspense
Chron.

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 18 1960

DATE	INITIALS	CODE
3-18	gad	VVO
3/29	[illegible]	800
	[illegible]	~~800~~

Building 20 - Federal Center
Denver 25, Colorado

March 15, 1960

Mr. A. L. Greslin
Moly Mine
Questa, New Mexico

Re: Docket No. DMEA-4568 (Molybdenum)
Contract No. Dm-K1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter dated March 10, 1960, this constitutes concurrence by the Government for you to consider Diamond Drill Hole No. 38 completed to a length of 422 feet, since the caving ground encountered makes further drilling impractical. In addition, drilling to a depth of 422 feet has provided the information for which the hole was originally designed.

Very truly yours,

OME Field Team, Region III

By: J. W. Townsend
J. W. Townsend
Executive Officer

cc: Mr. J. B. Carman
Ured Mine, Empire, Colo

JWT/ms

cc: Fiscal Sec, Div of Admin Svcs
Chm. Op. Comm. (2)
Amendmt File, Reg III
Hasler
OME/DFC
Corres
Suspense
Chron

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 18 1960

DATE	INITIALS	CODE

March 10, 1960

Mr. J. W. Townsend
Executive Officer O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idn-31094
Molybdenum Corporation of America
(Moly or Questa Mine
Taos County, New Mexico

Dear Sir:

We ask you herewith for approval to stop drill hole No 38. It was drilled [illegible] to 190 feet then [illegible] to 422 feet. We drilled in porphyry to 223 feet where we hit the contact to the transition rock and it was transition rock from there to 422 feet where we hit very bad caving ground.

We drilled through this caving ground a few times to get to the bottom of the hole but everytime we would drill through it it would get worse, therefore we had to pull out of the hole at 422 feet.

Yours very truly,

OME
DEPARTMENT OF THE INTERIOR
MAR 14 1960
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 3 1960

DATE	INITIALS	CODE
3/60	RCW	225
3/4	[illegible]	800
	[illegible]	500

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

February 29, 1960

Memorandum

TO: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA-4568 (Molybdenum), contract No. Idm-E1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

Enclosed are the following pertaining to work under the subject contract:

(1) Two (2) copies of Work Approval issued by the OME Field Team, Region III dated February 29, 1960.

(2) Three (3) copies of a joint memorandum dated February 26, 1960 from R. U. King, Geologist, Geological Survey, and T. M. Romslo, Mining Engineer, Bureau of Mines.

(3) Two (2) copies of a letter from the Operator dated February 16, 1960 with attached geological report wherein request is made for approval for six (6) items of work.

J. W. Townsend

Enclosures 3

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 3 1960

DATE	INITIALS	CODE

Building 20 - Federal Center
Denver 25, Colorado

February 29, 1960

Mr. J. B. Carmen
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMEA-4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carmen:

In reference to your letter dated February 16, 1960, the following six (6) items of work are conditionally approved for performance under the provisions of Contract No. Idm-E1094, pertaining thereto, with the understanding that every effort will be made to complete all six items of the work on, or before June 30, 1960 as provided for in Amendment No. 4 dated November 25, 1959. It is to be further understood that the Government will not contribute to the costs of a partially completed item of work; therefore, reimbursement to the Operator for the Government's portion of the costs of an individual item of work will be deferred until the item of work is completed to the satisfaction of the Government, and an appropriate accounting report and voucher is submitted by the Operator.

Item	Diamond Drill Hole No.	Location	Approximate Coordinates of Collar	Inclination	Bearing	Maximum Length
(1)	41	No. 1x-Cut N	2800N-1000E	0°	East	500 ft
(2)	42	No. 1x-Cut N	2800N-1000E	-90°	0	500 ft
(3)	43	No. 3 Drift E	2340N-1400E	+90°	0	500 ft
(4)	44	No. 3 Drift E	2340N-1400E	-90°	0	500 ft
(6)	45	No. 2x-Cut S, Westerly Drift	750S-1000E	-60°	South	800 ft

(5) Drive a drift a distance of 500 feet on a bearing of approximately S30°W from the most southwesterly face of the No. 2 crosscut South. The drift is to start at approximate coordinates 300S-1250E and end at approximate coordinates 750S-1000E, the location of Diamond Drill Hole No. 45, above.

Nothing in the above work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the "Fixed Unit Cost" of any item of work.

Very truly yours,

OME Field Team, Region III

By J. W. Townsend
J. W. Townsend

By J. W. Hasler
J. W. Hasler

cc: A. L. Gresslin
Moly Mine
Questa, New Mexico

Chmn Op Comm (2)
Finance Off, Reg III
Amend File, Reg III
Hasler
OME/DFC
Corres file
Susp
Chron

W.O.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

IN REPLY REFER TO:

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 3 1960

DATE	INITIALS	CODE

February 26, 1960

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: J. W. Hasler JWH

From: R. W. King
T. N. Rosale

Subject: Docket No. DMEA 4568 (Molybdenum), Contract IGm-E 1094, Molybdenum Corporation of America, Taos County, New Mexico

In a letter dated February 16, 1960, the operator of the subject contract requested approval of five core drill holes and 500 feet of crosscut tunnel. Justification of the request is contained in a supplemental geologic report dated February 16, 1960, by R. H. Carpenter, consulting geologist for the operator.

The first four holes are in the northeastern part of the contract area and will explore favorable mineralized ground made accessible in part by drifting under the contract (No. 3 drift east) and in part by crosscutting at the operator's sole expense (No. 1 X-cut north).

The fifth drill hole will explore ground to the south of the West drift about on coordinate K1,000 that is thought to be favorable for the occurrence of higher grade molybdenite mineralization. This interpretation is based on the results of early DMEA holes including holes 8A, 10, 11, and 13A, and of the more recent drill holes Nos. 27, 30, and 32.

In order to reach the area in question by drilling (1,000E and 1,200S), access will be needed for a drill station at about coordinate 750 S, 1,000E. The proposed crosscut is necessary to provide this access.

It is recommended that the operator's request to perform the following items of exploration be approved:

Item Drill hole	Location	Collar coordinates	Bearing	Inclination	Estimated length
41	No. 1 X-cut N	2800N, 1000E	East	0°	500
42	No. 1 X-cut N	2800N, 1000E	--	-90°	500
43	No. 3 Dr. E.	2350N, 1400E	--	+90°	500
44	No. 3 Dr. E.	2350N, 1400E	--	-90°	500

Crosscut from 300S, 1250E, to 750S, 1000E, an estimated distance of 500 feet, and drill proposed hole No. 45 from face of crosscut (750S, 1000E) due south at -60° for an estimated length of 800 feet.

R U King

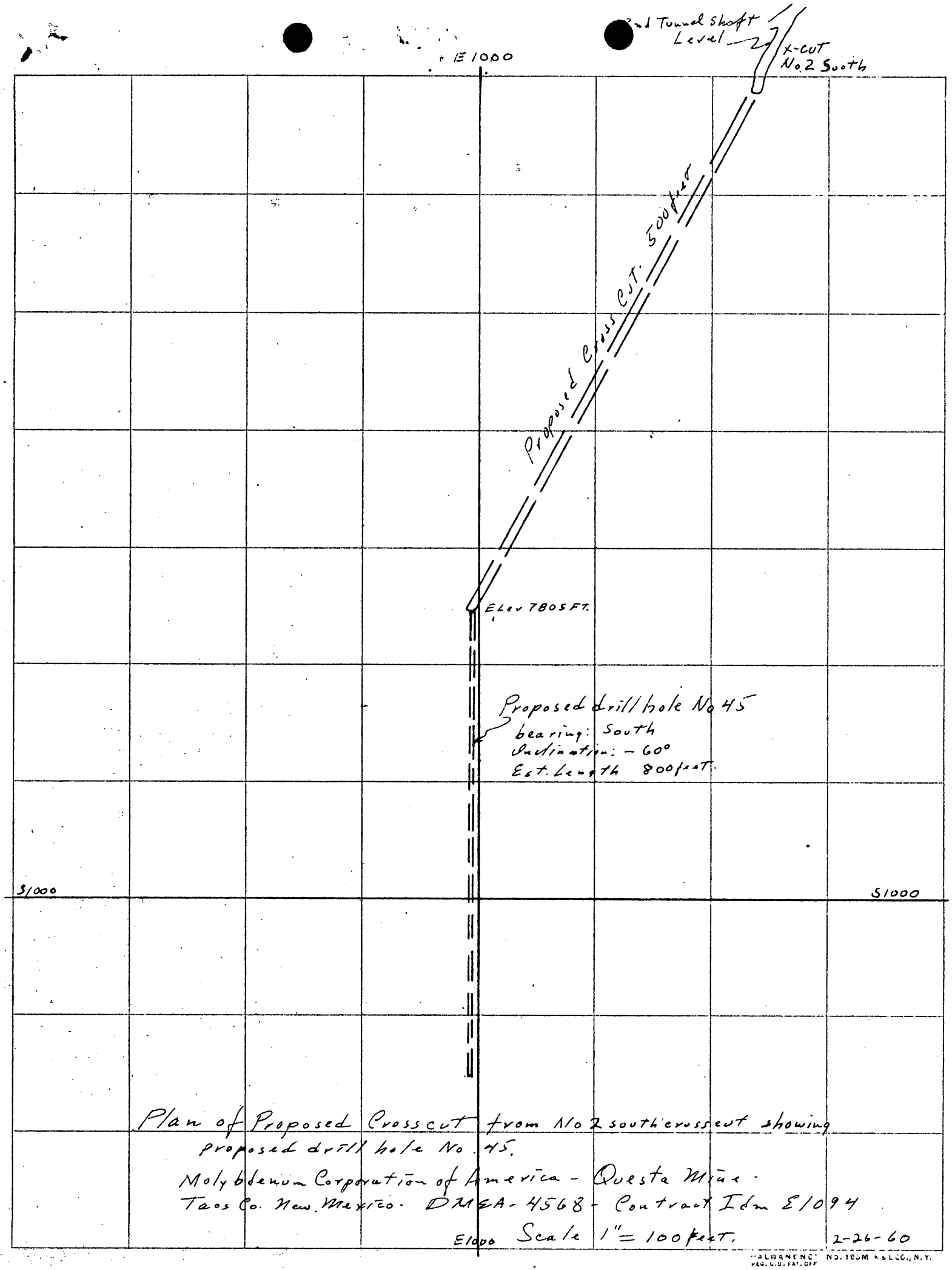
R. U. King, Geologist

T M Romslo

T. M. Romslo, Mining Engineer

Copy to: Townsend 5/orig.
Director's Reading File

RUKing:arh



Plan of Proposed Crosscut from No 2 south crosscut showing proposed drill hole No. 45.

Molybdenum Corporation of America - Questa Mine.

Taos Co. New Mexico - DMEA-4568 - Contract Idm E1094

Scale 1" = 100 feet.

2-26-60

ALBANENE NO. 180M N.S.E.CO., N.Y. REG. U.S. PAT. OFF.

OFFICIAL FILE COPY
RECEIVED MAR 3 1960
O. M. E.

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OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 3 1960

DATE	INITIALS	CODE

February 16, 1960

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We herewith make application for the following drifting and drilling on the 2nd Level.

It is our understanding that the reasons for this request have been given by our geologist Dr. Robert H. Carpenter in conference with Messers Hasler and King on February 11th.

ITEM	HOLE NO.	LOCATION	APPROX. COORDINATES		INCLINATION	BEARING	MAX DEPTH
(1)	41	Cx No. 1 N	2800 N	1000 E	0°	East	500 ft.
(2)	42	Cx No. 1 N	2800 N	1000 E	-90°	0	500 ft.
(3)	43	Cx #1 N Dft #3 E	2340 N	1400 E	plus 90°	0	500 ft.
(4)	44	Cx #1 N Dft #3 E	2340 N	1400 E	-90°	0	500 ft.
(6)	45	Dft W Cx #2 S	750 S	990 E	-60°	S	800 ft.

DRIFTING

(5) A crosscut to be driven from the southwest face of "No. 2 Drift South starting from approximate coordinates 300 S - 1240 E on a course of S 30° W for 500 feet. Item (6) above to be drilled from the face of this drift when completed.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J B Carman

J. B. Carman
Urad Mine, Empire, Colorado

JBC:r

Original & 5 Copies
CC: Marx Hirsch
A. L. Greslin
R. H. Carpenter

SUPPLEMENTAL DATA IN SUPPORT OF REQUEST TO O.M.E. DATED FEBRUARY 16, 1960

Very encouraging assay results and geologic data have been obtained in No. 3 Drift East and in No. 1 XCN around the western fringe of what appears to be the vertical projection of the western flank of the porphyry plug which outcrops in upper Sulfur Gulch. Mineralized fault zones and high grade 4 to 18 inch veins together with mineralization occurring along small cracks and fractures have resulted in an overall average of 0.45% MoS_2 in the first 500 feet of No. 3 Drift East. Most of these structures trend northerly and dip westerly.

In order to round out exploration in this northeast area under O.M.A., the following diamond drilling is recommended:

1. Hole No. 41---to be drilled on a due east bearing at 0° for a distance of 800 feet from Crosscut No. 1 North at approximately 2800 N, 1000 E. The purpose of this hole is to crosscut the mineralized structures intersected in No. 3 Drift East along a line some 450 feet north of this drift.

2. Hole No. 42---to be drilled vertically downward (-90°) for a distance of 500 feet from the same location as Hole No. 42. This hole will yield third dimension geologic and assay data.

3. Hole No. 43---to be drilled vertically upward (+90°) for a distance of 500 feet from No. 3 Drift East. The location of this hole will be in the neighborhood of 2340 N, 1400 E; the exact location will be dependent on geologic relationships. The purpose of this hole is to test the mineralization along the western fringe of the porphyry plug.

4. Hole No. 44--- to be drilled downward (-90°) from the same location as Hole No. 43. This hole will test the geologic relationships and mineralization at depth in the root zone of the porphyry intrusive plug.

The mineralization encountered in the southwestern part of the exploration level suggests a sizable area of strong mineralization, the boundaries of which have yet to be established. In order to delimit this area to the east of No. 4 XCS the following exploration work is recommended:

5. A crosscut should be driven from the southwest face of "No. 2" Drift South starting from approximately 300 S, 1240 E on a course of S 30°W for 500 feet. This crosscut will explore more fully the hanging wall of the southwest flank of the westerly plunging porphyry intrusive ridge, and establish a face from which the northerly dipping dikes, projected eastward from No. 4 XCS, may be intersected by drilling.

6. Hole No. 45---to be drilled from the face of the proposed crosscut described under No. 5, will be drilled on a due south bearing at a -60° inclination for a distance of 800 feet. This proposed hole is

shown on accompanying Cross Section L - M which illustrates the relationships between northerly dipping dikes and the porphyry intrusive ridge along 1,000 E.

The northerly dipping quartz porphyry dikes referred to under 5 consist of Goat Hill type porphyry. They were encountered in No. 4 MDS between the stations from which diamond drill holes 27 and 30 were drilled; they were intersected by diamond drill holes 22, 31, and 32 as well. They appear to be dipping about 80° to the north, and trending easterly. The strong mineralization which occurs in holes 27, 30, and 22 is situated within, between, and below these dikes.

The zone representing the trace of intersection between these dikes and the westerly plunging granite porphyry intrusive ridge may be a potential ore zone. It's trace is believed to be westerly along the southern flank of the granite porphyry fringe, and arcuate to the northwest below the western part of the exploration level. The mineralization in holes 22 and 27 probably represents post intrusive cracking along this zone of intersection.

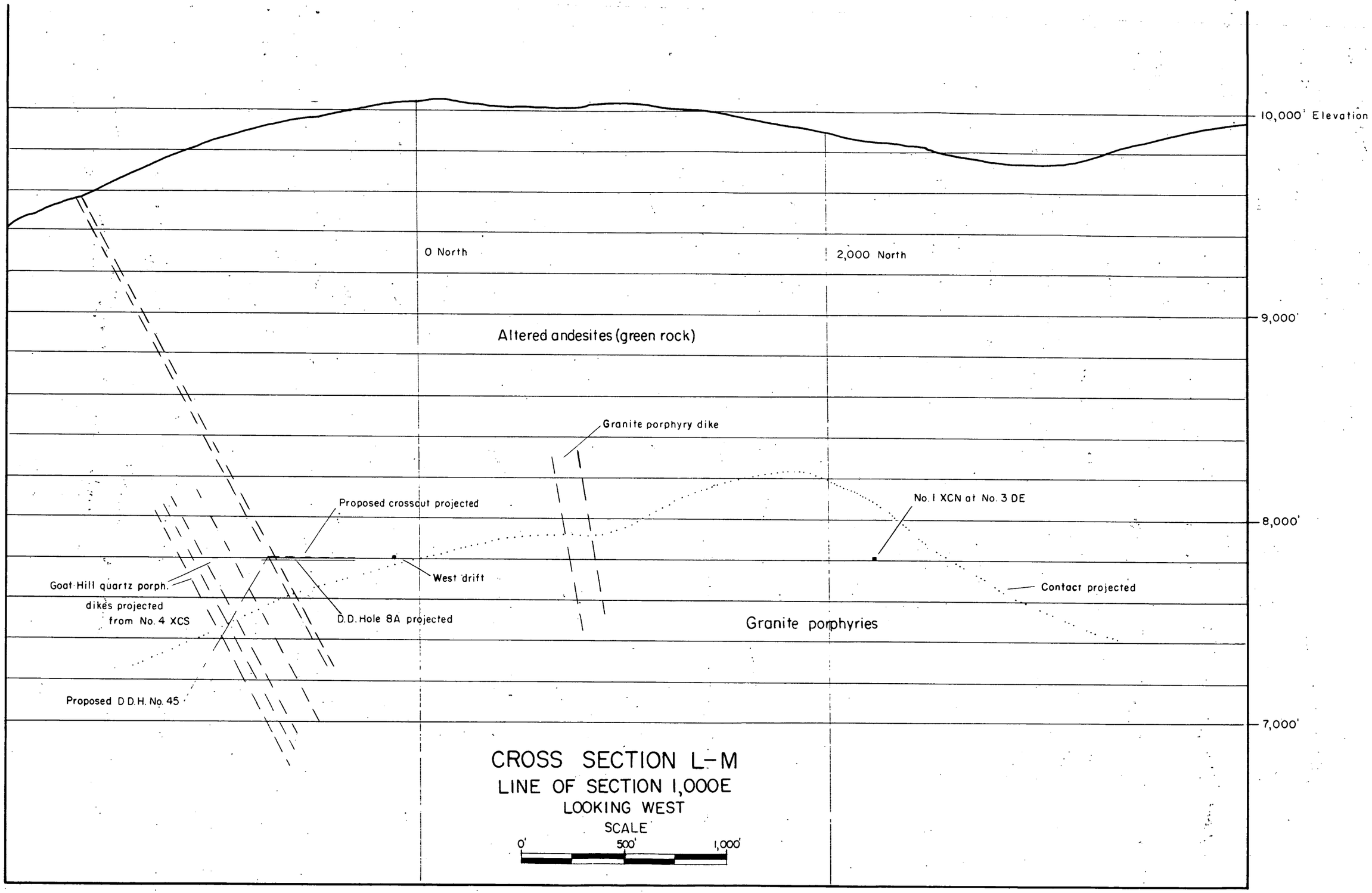
It is my opinion that these northerly dipping, easterly trending dikes are a part of a regional system of faults which have controlled the general outline of the Red River trench of volcanics of intermediate composition. These "green rocks" subsequently were intruded by granite porphyries, aplites, and quartz porphyries.

Respectfully submitted,

Robert H. Carpenter

Robert H. Carpenter

February 22, 1950


10,000' Elevation
9,000'
8,000'
7,000'
0 North
2,000 North
Altered andesites (green rock)
Granite porphyry dike
Proposed crosscut projected
No. 1 XCN at No. 3 DE
West drift
Goat Hill quartz porph.
dikes projected
from No. 4 XCS
D.D. Hole 8A projected
Contact projected
Granite porphyries
Proposed D.D.H. No. 45
CROSS SECTION L-M
LINE OF SECTION 1,000E
LOOKING WEST
SCALE
0'
500'
1,000'

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/11/60	Murphy	500
1/11		500
1/11	Talbot	800
1/14	Selfridge	130
1/13	J. Lynch	140
	Hoffman	140
1/14	Asst. Sol. Int.	110
1-14	gad	220
		500

RECEIVED
JAN 14 1960
ASSOC. SOLICITOR
MINERAL RESOURCES

SOLICITOR
JAN 12 1960
INTERIOR DEPT.

Memorandum

To: Executive Officer, OME Field Team, Region III

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract No. Idm-E1094

This is in response to your memorandum of December 21, 1959, relating to the provisions of Item 3 of Amendment No. 4. The pseudo-certification will be effective only if all authorized work has not been completed by June 30, 1960.

Mr. R. U. King's memorandum of April 16, 1959, to you, relating to potential ore reserves on the subject property, and the results reported monthly since that date indicate that the project should be certified. However, we will reserve our decision on this matter until the final reports and recommendations relating to the project are received.

/s/ George C. Selfridge (26)

APPROVED:

P. F. Yopes (26)
Member, Bureau of Mines

Harold Kirkemo (26)
Member, Geological Survey

FMMurphy/gla 1-11-60
cc to: Director's Reading File
Operating Committee
Mr. McInnis, USBM
Mr. Kirkemo, USGS
Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado
December 21, 1959

OFFICIAL FILE COPY O. M. E. RECEIVED DEC 23 1959		
DATE	INITIALS	CODE
12/23	ACW	225
~~12/29~~	~~[illegible]~~	~~500~~

Memorandum

TO: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Enclosed are the following pertaining to operations under the subject contract:

(1) Government and Audit copies of Amendment No. 4 which was forwarded by your memorandum of November 25, 1959, for signature by the Operator after supplying recording data for the Phyllis claims and execution of MME Form 52, Lien and Subordination Agreements.

(2) Two copies of project work approval issued by the OME Field Team, Region III, authorizing extension of the No. 3 Drift East.

It appears to be a foregoing conclusion that all the work provided for under the contract will not have been completed by June 30, 1960; therefore, the provisions of Item 3d of Amendment No. 4 would automatically become effective which constitutes Psuedo Certification of the project. Please advise as to whether or not we are correct in the above interpretation of the Amendment.

J. W. Townsend

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 23 1959

DATE	INITIALS	CODE

Building 20 - Federal Center
Denver 25, Colorado
December 21, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

In reference to your letter of October 20, 1959, enclosed is the Operator's copy of Amendment No. 4 and copy of project work approval issued by the OME Field Team, Region III.

Very truly yours,

Original signed by

J. W. Townsend
Executive Officer, OME
Field Team, Region III

cc: Mr. AL. Greslin
Moly Mine
Questa, New Mexico

JWT:ltm

cc: Chmn. Op. Comm. (2)
Hasler
OME/DFC
Susp.
Chron.

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 23 1959

DATE	INITIALS	CODE

Building 20 - Federal Center
Denver 25, Colorado
December 21, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

In reference to Item 10 of your letter dated October 20, 1959, Government approval of work is as follows:

Extend the No. 3 Drift East on a bearing of approximately N 80° E not to exceed 500 feet beginning at coordinate E 1300.

In reference to Item 9 of your letter of October 20, 1959, extension of the No. 1 Crosscut North, and in reference to your letter of December 7, 1959 requesting reconsideration of the matter, you will be advised at a later date as to the Government's decision.

Nothing in the above work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the "Fixed Unit Cost" of any item of work.

Very truly yours,

OME Field Team, Region III

By J. W. Townsend
J. W. Townsend

By J. William Hasler
J. W. Hasler

JWT:ltm

cc: Chmn. Op. Comm. (2)
Finance Off. Reg. III
Amend. file, Reg. III
Hasler
OME/DFC
cc: A. L. Greslin
Moly Mine
Questa, New Mexico

Corres. file
Susp.
Chron.

w.o.

Molybdenum Corporation of America

375 Park Avenue
New York 22, N. Y.

OME
DEPARTMENT OF THE INTERIOR
DEC 17 1959
REGION III
DENVER, COLORADO

December 14th, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Department of the Interior
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket No.DMEA 4568 (Molybdenum)
Contract No.Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

Referring to your letter of December 10th, 1959, addressed to Mr. J. B. Carman, Molybdenum Corp'n of America, Urad Mine, Empire, Colorado, we enclose herewith one original and three carbon copies of Amendment No.4 -- Exploration Project Contract - Molybdenum Corporation of America Docket No.DMEA-4568, dated November 25, 1959, which has been duly executed by our President, Mr. Marx Hirsch.

Very truly yours,

Wm. R. Kuntz

K
B

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 28 1959

DATE	INITIALS	
		220
12/28	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado
December 21, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMA 4568 (Molybdenum)
Contract Idm-X1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Reference is made to work request Item 9 of your letter of October 20, 1959, and your letter of December 7, 1959, requesting Government approval for extension of the No. 1 Crosscut North under the provisions of Contract Idm-X1094.

Government contribution to the costs of extending the No. 1 Crosscut North is not considered warranted at this time, at least not until more conclusive information is obtained relative to the trend of the more highly mineralized zone which has recently been encountered in the No. 3 Drift East being driven from the No. 1 Crosscut North at approximate coordinate N 2300; therefore, Government approval of the work request is denied at this time.

Possibly consideration should be given to diamond drilling ahead of the No. 1 Crosscut North, and drilling to the East to test for continuity and extent of the mineralized zone encountered in the No. 3 Drift East.

Very truly yours,

JWT:ltm

OME Field Team, Region III

Original signed by
By J. W. Townsend

Original signed by
J. WILLIAM HASLER
By J. W. Hasler

cc: Chan. Op. Comm2)w/cpy Joint Hasler)Memo. from R.U.King OME/DFC) & T.M.Romalo dtd. Corres. file) 12/21/59
Susp.
Chron.

cc: A. L. Crealin
Moly Mine
Questa, New Mexico

IN REPLY REFER TO:
OME
DEPARTMENT OF THE INTERIOR
DEC 21 1959
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

December 21, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: J. William Ensler

From: R. U. King
T. M. Romslo

Subject: BMEA Docket 4968 (Molybdenum), Contract Idm-21094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

The operator on December 9 restates his request of an earlier date to continue driving the No. 1 crosscut north to about coordinate 3100 north.

Strictly on geologic grounds, the operator's consulting geologist, Dr. R. H. Carpenter, makes a good case for continued exploration in a northerly direction. He points out that the Granite-Green Rock north-trending contact intersected in the No. 4 crosscut west is swinging toward the east, and therefore, continuation of the No. 1 crosscut should also cross the contact. Again if there is an easterly swing to the contact followed by a northerly swing, a northwestward-plunging trough would occur along the contact. That such structural conditions are favorable for mineral concentration is not doubted, but the exploration to date has discovered in these same geologic conditions an enormous volume of material containing 0.2 to 0.3 percent MoS_2. The assays of drift samples over the last several hundred feet do not indicate any significant increase in MoS_2 content over that already discovered. Also coordinate 3100 N could be reached by a 600-foot horizontal drill hole if such a target is considered to have merit.

The face of the No. 1 crosscut north has at this date passed underneath the zone of surface geochemical anomalies, and the grade of mineralization (0.2-0.3 percent MoS_2) is believed to be quite adequate to have furnished sufficient mineral to account for the anomalies (500 to 1,000 ppm).

One possibility remains: the mineralized zone reflected in the surface geochemical anomalies may dip northward reaching the level

(7,805 feet) north of the present face of the No. 1 crosscut north. If this is the situation, a horizontal hole due north should intersect the zone if it is within reasonable reach.

Continuation of crosscutting northward at this time is not recommended.

R. U. King, Geologist

T. M. Romslo, Mining Engineer

Copy to: Director's Reading File
Townsend 5 w/original

RUKing:arh

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O. M. F.
RECEIVED DEC 14 1959

DATE	INITIALS	CODE
12-14	gad	VVO
12/14	[illegible]	800
12/15	[illegible]	500

Building 20 - Federal Center
Denver 25, Colorado
December 11, 1959

Memorandum

TO: J. W. Hasler)w/encls.
T. M. Romalo

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract No. Idm-M1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Enclosed is a copy of the Operator's letter of December 9, 1959, with attached letter from Robert H. Carpenter to this Office dated December 7, 1959, containing comments and recommendations relative to extension of the No. 1 Crosscut North.

By letter of October 20, 1959, the Operator requested under Item 9 Government approval for the extension of the No. 1 Crosscut North from approximate coordinate North 2430 to North 2930. The memorandum dated November 4, 1959 from the field examiners regarding the Operator's work proposal of October 20, recommended that extension of the No. 1 Crosscut North under Item 9 be denied.

Please submit a joint memorandum containing your recommendations in reference to the Operator's request that the northerly extension of the No. 1 Crosscut North be reconsidered.

Original signed by

J. W. Townsend

JWT:ltm

cc: Chmn. Op. Comm. (2)w/cpy encls.
OME/DFC)
Corres. file)
Susp.
Chron.

OME
DEPARTMENT OF THE INTERIOR
DEC 11 1959
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 14 1959

DATE	INITIALS	CODE

December 7, 1959

Mr. J. W. Townsend, Executive Officer
Office of Minerals Exploration, Region 3
Denver Federal Center, Building 25
Lakewood, Colorado

Dear Mr. Townsend:

You will find enclosed three copies of the geologic notes covering the October and November advance in No. 1 Crosscut North and No. 3 Drift East which are located in the northern part of the Questa mine exploration level.

This part of the mine appears to be resolving into a very favorable target area. The contact seems to be swinging to the east, it appears to be low angle to the west or northwest, and is quite irregular. Intrusive porphyries (red rock) and intruded andesitic rocks (green rock) occur alternately in both headings. A part of this irregularity can be attributed to initial irregularities in the intrusive contact and a part to post intrusive faulting. We may be entering the root zone or break through area of the porphyry plug and the northerly and easterly-trending dikes which occur directly above on the surface in the upper part of Sulphur and Iron Gulches. If the contact swings sharply to the east and thence northward, this break-through would be located in a northwesterly plunging trough in the porphyry contact.

Structurally, there is a distinct change in attitude of the faults. To the south, the fabric consists of northeast-trending veins with a southeast dip, of somewhat later northerly-trending faults with a west dip, and of still later northeast trending faults with a northwest dip. As illustrated on the accompanying sketch, the mineralized faults and fractures trend northwesterly to northerly and dip westward in No. 3 Drift East except for a strong north-south-striking vein which dips approximately 30 degrees to the east.

The frequency of appreciably higher grade zones of mineralization appears to be increasing in this area of the mine. This is indicated by an overlay of the assay map as well as by the strength and number of mineralized faults and fractures evident underground.

It is my recommendation to the Company that No. 1 Crosscut North be driven northward to Coordinate 3100 North in order to close off the geologic relationships on the western side of the proposed target area. It is entirely possible that westerly-trending dikes and structures on the surface will be in evidence in this northerly extension of No. 1 XCN, and that appreciable mineralization will be related to such structures. In any case, certainly, this work will yield very valuable geologic data vital in the interpretation of the geologic features within the target area.

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OME
DEPARTMENT OF THE INTERIOR
DEC 11 1959
REGION III
DENVER, COLORADO

December 9, 1959

Mr. J. W. Townsend, Executive Officer
O.M.E. Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idr-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

Included in our application of October 20th is Item 9, Drifting North in Crosscut No. 1 North.

Dr. Carpenter, our geologist, has prepared a geological sketch of this area and a letter giving his interpretation of the geological significance with respect to molybdenite mineralization in this area and his recommendation that this drifting be approved.

We are enclosing six copies of the sketch and letter which we hope will better inform you of the reasonableness of our request.

In regard to the release from Dotson Minerals Corporation and the record of Phyllis Claims 5 and 7, we expect to get this information to you within the next day or so.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE

By J. B. Carman

J. B. Carman

JBC:r

CC: RC

Encls: 6 maps 6 letters
Dr. Carpenter

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 14 1959

DATE	INITIALS	CODE

It is my understanding that the present face of No. 1 XCN is approximately in the position deemed desirable under the initial D. M. E. A. recommendations of the Project. Since that time, much critical geologic information has been secured on the surface and underground related to the area now being explored by No. 3 Drift East. It is my opinion that in order to wind up the O. M. E. work under the Questa project, it is very desirable that financial support be given to an extension of No. 1 Crosscut North to Coordinate 3100 North. Diamond Drilling will not give attitudes and detailed relationships of faults, veins, fractures, and rock types critical to an analysis of the geology in the target area. It is my sincere hope that you will recommend O. M. E. support to the extension of No. 1 XCN in order to round out the project in this part of the mine.

If there is further information which you wish to have please call on me.

Very sincerely,

Robert H. Carpenter

Robert H. Carpenter

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OME
DEPARTMENT OF THE INTERIOR
DEC 14 1959
REGION III
DENVER, COLORADO

December 10, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-M1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

Confirming our telephone conversation today, the Phyllis Claim record in Taos County, New Mexico shows:

Phyllis No. 5 Located May 1918, Book F-13, Page 238;

Phyllis No. 7 Located May 1918, Book F-13, Page 239.

This supplies the missing information in our application of October 20, 1959 for amending the contract.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE

By J. B. Carman

J. B. Carman

JBC:r

CC: ALG

Geologic Map

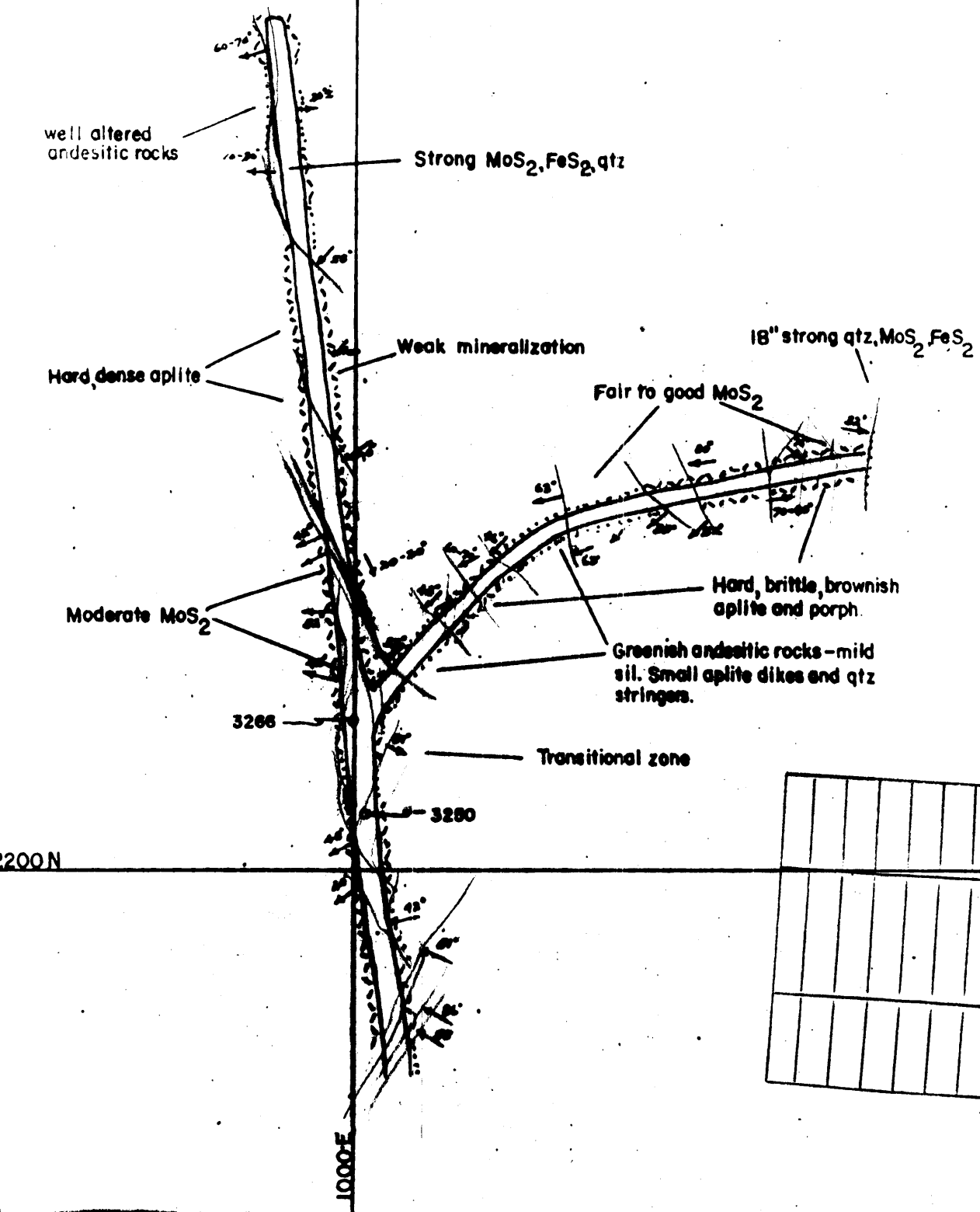
Period 10/1/59 to 11/27/59

Tunnel Shaft 2nd level

SCALE 1" = 50'

MOLYBDENUM CORPORATION OF AMERICA

Questa, New Mexico



RECEIVED DEC 1 1959
O. M. M.
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O. M. E.
RECEIVED DEC 14 1959

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O. M. E.
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12-14	gad	VVO
12/14	[illegible]	800
12/15	[illegible]	600

Building 20 - Federal Center
Denver 25, Colorado
December 10, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Now that executed MMC Form 52 Lien and Subordination Agreements have been provided, also recording data for the Phyllis No. 5 and 7 claims; therefore, proposed Amendment No. 4 to Contract Idm-E1094 can be released for execution. Enclosed are the Government's, Audit, Finance Office and Field Team copies for that purpose.

If the proposed amendment is satisfactory, all copies are to be signed by an official of Molybdenum Corporation of America authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office.

Upon return of the executed copies of the amendment, the Operator's copy of the amendment and confirmation of approval extending the No. 3 drift easterly will be forwarded to you.

Very truly yours,

Original signed by

J. W. Townsend
Executive Officer, OME
Field Team, Region III

JWT:ltm

cc: Chmn. Op. Comm. (2)
Hasler
OME/DFC
Corres. file, Reg. III
Susp.
Chron.

Mr. J. N. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Dear Mr. Townsend:

Pursuant to instructions from Mr. [illegible] of the [illegible] um Corporation of America, we are enclosing [illegible] duly executed copies of the [illegible] constituting the Subordination Agreement of the [illegible] holder on the property of the [illegible] Corporation of America obtained by the warranty deed [illegible] 1959.

Very truly yours,

John T. [illegible]

JTM:v
Encls.

cc: Mr. Carman
Mr. Katz

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 14 1959

DATE	INITIALS	CODE

Chairman gp. Gen (2)

Building 20 - Federal Center
Denver 25, Colorado
December 7, 1959

Memorandum

TO: J. W. Townsend, Executive Officer, GME Field Team, Region III

From: T. M. Romslo

Subject: Docket No. 4568 (Molybdenum) Contract Idm-E1094, Molybdenum Corporation of America (Moly or Questa mine) Taos County, New Mexico

A zone of relatively high grade ore was cut during November 1959 by No. 3 Drift East which is being driven from No. 1 Crosscut North. The zone is localized by a northerly trending dike of a fine-grained, siliceous rock, probably felsite, that dips about 45 degrees west. Molybdenite is mainly concentrated in a 15-foot wide zone along the hanging wall of the dike where it is closely associated with quartz veinlets in transition rock. It also occurs in the dike rock as a filling of weak fractures. The foot wall of the 30- to 40- foot wide dike is in fault contact with essentially barren greenstone.

Assays of samples from the mineralized zone had not been completed when I visited the mine December 3, 1959. However, the grade is indicated by the assays of samples taken from 29 4-ton truck loads of the ore which has been stockpiled at the mill. The MoS_2 content of the approximately 120 tons of ore ranged from 1.5 percent to 4.5 percent and averaged about 2.2 percent.

T. M. Romslo

T. M. Romslo

TMR:ltm

cc: 6
Chron.

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DATE	INITIALS	CODE
12-9	gad	VVO
12/9	[illegible]	800
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MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
11/24	Murphy	500
	Hasenly	500
11/24	Tallant	800
11/25	[illegible]	130
11/25	Johnson	110
11-24	Jgad	220
		500

NOV 25 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract No. Idm-E1094

Enclosed are the original and four copies of a proposed Amendment No. 4 (3 pages) to the subject contract, signed by the Acting Director for the Government. Also enclosed are two extra copies for Field Team use, and the original and four copies of the Lien and Subordination Agreements mentioned in the amendment.

After the agreements are properly executed by Dotson Minerals Corporation and attached to their respective copies of the amendment, if you and the Operator find the proposed amendment in order, please have an authorized representative of the corporation sign the original and four copies. Thereafter, kindly distribute the copies in the usual manner.

This amendment has been prepared in accordance with the recommendations submitted with your memorandum of November 9, 1959. However, we recommend that the Field Team authorize the Operator to drive the No. 3E crosscut from the N. drift only 500 feet (to coordinates 2325N - 1810E) at this time. Additional drilling from the end of the crosscut should be sufficient to explore this area and could probably be completed before June 30, 1960, the termination date of the contract, as amended.

Please insert recording data for Phyllis claims in the amendment.

/s/ George C. Selfridge (HB)

Enclosures

APPROVED:

P. F. Yopes (HB)
Member, Bureau of Mines

Harold Kirkemo (HB)
Member, Geological Survey

FMMurphy/gla 11-24-59
cc to: Director's Reading File
Operating Committee
W. McInnis, USBM
Harold Kirkemo, USGS
Docket
Chron

43683

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DATE	INITIALS	CODE
11-19	gad	VVO
11/19	[illegible]	800
	~~[illegible]~~	~~500~~

Building 20 - Federal Center
Denver 25, Colorado
November 16, 1959

Mr. J. R. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. IMMA 4568 (Molybdenum)
Contract No. Bm-E1094
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Reference is made to the letter dated November 9, 1959, from the OME Field Team, Region III, approving the drilling of holes Nos. 37, 38, 39 and 40.

Please change the East coordinate of holes 39 and 40 from 630 E to 60 E.

Thank you for your letter of November 12, calling our attention to the error.

Very truly yours,

J. W. Townsend
J. W. Townsend
Executive Officer, OME
Field Team, Region III

cc: A. L. Greslin
Molybdenum Corp. of America
Questa, New Mexico

JWT:ltm
cc: Chmn. Op. Comm. (2)
Finance Office, Reg. III
Amend. file, Reg. III
Hasler
OME/DFC
Corres. file, Reg. III
Chron.

Docket copy

DRAFT
11/16/59
FMMurphy/gla

EXPLORATION PROJECT CONTRACT
MOLYBDENUM CORPORATION OF AMERICA
DOCKET NO. DMEA-4568

AMENDMENT NO. 4

It is agreed this _____ day of _____, 1959, between the United States of America, acting through the Office of Minerals Exploration, hereinafter called the Government, and Molybdenum Corporation of America, hereinafter called the Contractor, that Exploration Project Contract No. Idm-E1094 (Docket No. DMEA-4568), dated May 31, 1957, as amended, is further amended, effective November 1, 1959, as follows:

1. The date fixed in Arti le 1 (a) of the contract for completion of the work is extended from 30 months to 37 months.

2. In Annex II, Item (b) is changed to read as follows: In Article 6 (b) of the contract the period "15 years" is changed to "16 years."

3. It is the essence of this Contract that the work be completed on or before June 30, 1960, in the manner required by the Contract, and if it is not so completed, the following provisions shall thereupon become effective:

(a) The Contract and all obligations of the parties thereunder, except as otherwise herein provided, shall be and are hereby termined.

(b) The Government will contribute only to the allowable costs incurred prior to June 30, 1960, except the costs for assays of samples shipped to laboratories on or prior to that date, which may be billed subsequently.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of a final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty on production provided for in the Contract, (as amended herein), as if certification of discovery or development had been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the Contract with respect to a certification of discovery or development, percentage royalty and liens to secure payment thereof, reports (including preservation of the Operator's records), accounts, audits, and the right to recover any overpayments are hereby preserved.

(e) The Operator hereby agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided by this amendment.

4. In Annex I of the Contract the following claims are added:

Buena Vista Nos. 1, 2, 3, 4, 6, and 7, Torber No. 2, and Renegade, situate in secs. 25, 35, and 36, T. 29 N., R. 13 E., Red River Mining District, Taos County, New Mexico. The claims are as shown by U. S. Mineral Survey No. 1943, and as described in U. S. Patent No. 1013380, dated March 10, 1928.

The approximate locations of the above-mentioned claims with reference to the other claims mentioned in Annex I are shown on the claim map attached to and described in Amendment No. 3 to the Contract, and made part hereof by reference. These claims are in Area A of the project area as described by the terms of the Contract.

The Operator has rights of possession of the above-named claims under the terms of a "Warranty Deed," dated October 15, 1959, by Dotson Minerals Corporation, which is recorded in Book A-58, pages 391-392, in the official records of Taos County, New Mexico.

A Lien and Subordination Agreement covering the claims, executed by Dotson Minerals Corporation, is attached hereto and made part hereof.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the date and year first above written.

THE UNITED STATES OF AMERICA

By_____
Acting Director, Office of
Minerals Exploration

MOLYBDENUM CORPORATION OF AMERICA

By_____

Title_____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado
November 9, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 12 1959

DATE	INITIALS	CODE
11-12	gad	220
		130
11-13	Murphy	500

AIR MAIL

Memorandum

TO: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket No. DMEA ~~4468~~ 4568 (Molybdenum) Contract Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Reference is made to the Operator's letters of October 20 and October 30, 1959, with attached data which were forwarded to you by copy of memoranda from this office to the field examiners dated October 26 and November 3, 1959. Enclosed are the following in conjunction with the matter:

1. The original and two copies of a joint memorandum dated November 4, 1959 from R. U. King and J. W. Hasler, Geologists, Geological Survey, and T. M. Romslo, Mining Engineer, Bureau of Mines.

2. Two copies of the Field Team's approval for the drilling of 4 holes from the No. 4 drift westerly off of the No. 1 Crosscut North.

You will note in the work approval that the Operator's work requests, Items 5-8, inclusive, were denied and that there was a change in the attitude of 2 of the 4 approved holes from that requested by the Operator.

Final action regarding the work approval requested under Items 9 and 10 is contingent on the execution of an amendment to the contract to extend the presently established completion date, and to include under Article 2 and Annex 1 of the contract the additional claims listed by the Operator. The claims are shown on the map attached to the Operator's letter of October 20.

The field examiners recommend denial for the northerly extension of the No. 1 Crosscut North under the Operator's Item 9, but recommend the driving of 1,000 ft. of drift easterly from the No. 1 Crosscut North. The drifting easterly was also recommended by the field examiners in their memorandum of May 14, 1959, which was in conjunction with Amendment No. 3. The Operator did not hold possession of the land involved at that time; therefore, the drifting easterly could not be approved along with the drifting westerly.

1/ As of Oct 1. 1959 - 2595 feet of the drifting and crosscutting allowed under the contract have not been used.

To further extend the completion date is a matter of policy that can only be resolved at the Washington level; however, this office concurs in the belief of the field examiners that exploration to the east of the No. 1 Crosscut North is desirable in order to round out the exploration program; therefore, it is recommended that an appropriate amendment be prepared to extend the completion date to June 30, 1960, as requested by the Operator, and to include the additional claims under Article 2 of the contract.

By J. W. Townsend
J. W. Townsend
Executive Officer

Enclosures

June 15 1960

IN REPLY REFER TO:
OME
DEPARTMENT OF THE INTERIOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

NOV 5 1959
REGION III
OFFICIAL FILE COPY
DENVER, COLORADO
O. M. E.
RECEIVED NOV 12 1959

DATE	INITIALS	CODE
November 4, 1959		

Memorandum

To: Executive Officer, OME Field Team, Region III

From: R. U. King
J. W. Hasler
T. M. Romslo

Subject: Request for approval of additional diamond drilling and drifting. DMEA Docket 4568 (Molybdenum), Contract Idm-E1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

The operator, in a request dated October 20, 1959, made application for approval of additional diamond drilling and drifting under the subject contract. A detailed study and review of the request has been made and resulted in the following recommendations and conclusions.

A list of 10 items was requested. Items 1 through 8 constitute diamond drilling totalling an estimated 6,400 feet, and items 9 and 10 constitute crosscutting totalling an estimated 1,000 feet. The drilling and drifting are designed to test the porphyry-green rock contact as well as other ground thought to be favorable for discovering additional molybdenum-bearing material.

Items 1 through 5, comprised of diamond drill holes number 37 through 41, are located in the northeast portion of the Questa mine on the 2nd Tunnel Shaft level in and adjacent to the No. 1 Crosscut North, and constitute drilling anticipated when the approved Drift No. 4 West from the No. 1 Crosscut North was completed. Drift No. 4 West penetrated the porphyry-green rock contact at the 430 E coordinate.

Assays from diamond drill holes number 34 and 36 and from wall samples are high enough in grade to warrant additional drilling in the area. The area in general will average better than 0.20 percent MoS_2.

Item No. 1, proposed drill hole No. 37, is designed to test the continuity of the contact above the drift. The examining team, however, thinks that DD Hole No. 37 should be drilled vertically downward

rather than vertically upward since two previously completed holes (Nos. 34 and 36) penetrated the porphyry-green rock contact farther southeast on the No. 1 Crosscut North from 350 to 390 feet above the level. A hole drilled vertically downward in the vicinity of proposed hole No. 37 would give an additional thickness to the deposit as no work has been done below the 2nd Tunnel Shaft level in this area. It is therefore recommended that DD hole No. 37 be drilled downward -90° rather than as proposed by the applicant.

Proposed item No. 2, diamond drill hole No. 38, is designed to test the area northward from coordinate 1830 N, 630 E. It is recommended that the hole be drilled as proposed by the applicant (due north at 0°).

Item No. 3, proposed diamond drill hole No. 39, at coordinates 1720 N., 60 E, is designed to test the contact 800 feet below Drift No. 4 West. It is recommended that hole No. 39 be drilled at -90°, as proposed by the applicant, as this hole will again test the area below the 2nd Tunnel Shaft level, heretofore unexplored.

Item No. 4, proposed diamond drill hole No. 40 located at coordinates 1720 N, 60 east, is designed to penetrate ground northward for 800 feet at an angle of a minus 45 degrees. The examining team recommends that this hole be drilled as a horizontal hole, as the ground explored between a -90° hole and a -45° hole from the same station would not explore enough virgin ground in this type of a disseminated deposit.

Item No. 5, proposed diamond drill hole No. 41 at coordinates 1720 N 60 E, is designed to explore westward (S 82° W) from the face of Drift No. 4 West off the No. 1 Crosscut North. Analyses of samples taken along the drift show the last 200 feet to assay 0.18 percent MoS_2. Proposed hole No. 41 would explore ground within 800 feet of surface hole 11-A and would also explore beyond the favorable area circumscribed by the geochemical work on the surface. It is therefore recommended that Hole 41 be denied, or at least be held in abeyance pending results of proposed holes 39 and 40.

Item No. 6, proposed diamond drill hole No. 42 in the No. 7 Crosscut North, is designed to penetrate the porphyry-green rock contact at depth. The porphyry-green rock contact should have been cut by the No. 7 Crosscut North if the contact dipped eastward, but since the contact has not been found in this crosscut the contact must dip in a westerly direction, and hole 42 could not reach its objective. It is therefore recommended that item 6, hole 42, be denied.

Item No. 7, proposed diamond drill hole No. 43, is designed to reach the porphyry-green rock contact at depth below the No. 7 Crosscut North. The denial of this hole is recommended for the same reason as the previously proposed hole No. 42.

Item No. 8, proposed diamond drill hole No. 44, is designed, by the applicant, to test an area north of the present face of the No. 7 Crosscut North. Sampling along the No. 7 Crosscut North shows that MoS_2 of the 2nd Tunnel Shaft level, assayed less than 0.10 percent MoS_2. The geochemical anomaly map shows this western area to be less favorable than the eastern area, and exploration this near the surface (less than 900 feet) is not good, as indicated by exposures of country rock and only low-grade mineralization in Goat Hill gulch.

It is proposed therefore that item 8, diamond drill hole No. 44, be denied, and that the equivalent footage be used to further test the favorable area in the vicinity of diamond drill holes 30 and 27 in No. 4 Crosscut South and hole No. 22 in No. 5 Crosscut South. These three holes penetrated from a 400- to 600-foot thickness of mineralized material averaging about 0.4 percent MoS_2 (present day ore grade and better than most of the material discovered to date).

Items 9 and 10 constitute proposed drifting north and east from the No. 1 Crosscut North to test favorable ground in the northeast portion of the property. These two drifts must have additional ground subordinated under the contract as well as extension of contract termination date should they be approved as proposed by the applicant.

Item 9 is a drift proposed to explore ground north (N 7° W) from the present face of the No. 1 Crosscut North. An appraisal of this work shows that the present drift has passed under the most favorable area shown on the geochemical map, and that any further work may penetrate less favorable ground. It is proposed that Item No. 9 be denied, and that equivalent footage be used under proposed Item No. 10.

Item No. 10 is a proposed drift to explore eastward into favorable ground toward the old mine workings, and under the most favorable area indicated by the chemical work. It is recommended that a drift be driven in this direction (N 83° E) for 1,000 feet rather than the proposed 500 feet. This unit of exploration should not be approved, however, unless the contract termination date is extended. The operator could not possibly complete the work unit within the remaining two months of life in the contract. The drifting under item 10 is recommended only in anticipation of subsequent complimentary drilling from the new openings. If an extension is not granted, a drill hole (N 82° E. 0°) should be substituted for the 1,000 feet of drifting.

The examining team feels that exploration to the east of the No. 1 Crosscut North, under the favorable area indicated by the geochemical work and by exploration in the vicinity of drill hole 30,

is needed to complete and round out the exploration program and to fulfill the objectives of the contract; and therefore it is recommended that extension of the contract termination date be seriously considered.

R. U. King, Geologist

T. M. Romslo, Mining Engineer

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 12 1959

DATE	INITIALS	CODE

Building 20 - Federal Center
Denver 25, Colorado
November 9, 1959

Mr. J. E. Carman
Molybdenum Corporation of America
Urad Mine
Questa, Colorado

Re: Docket No. DMEA 4765 (Molybdenum)
Contract No. Ilm-8109A
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Reference is made to your letters dated October 20 and October 30, 1959, with attached data which constitutes your request for the Government's approval for 10 items of work, and preparation of an amendment to the contract which would include additional land to that substituted under Article 2, and extend the completion date in Article 1 to June 30, 1960. Government approval is granted for the drilling of 4 holes as follows. Item numbers correspond to the item numbers of your request:

Item	Hole No.	Approximate Coordinate Location of Hole		Inclination	Bearing	Depth**
1	37	1850 N	650 E	-90°*	0	800 ft.
2	38	1850 N	650 E	0°	N	500 ft.
3	39	1780 N	650 E	-90°	0	800 ft.
4	40	1780 N	650 E	0°*	N	800 ft.

Note-*: Hole 37 changed from requested plus 90° to minus 90°. Hole 40 changed from requested minus 45° to horizontal.

** Approval of holes 37, 38, 39 and 40 is further qualified to the extent that the holes may be continued to the stated depths or within practicable limits provided drill samples contain visible MoS2 estimated to be in excess of 0.20 percent. The exception is hole No. 38 which is limited to a maximum of 500 ft.

There follows Government action on work items 5-10, inclusive:

Item No. 5, hole No. 41, Government participation in the costs of drilling the hole denied because it is considered that results of the hole would not add materially to present knowledge of the deposit. In addition, company surface hole 11A has roughly indicated the grade of mineralization in the objective area.

Item No. 6, hole No. 42, Government participation in the costs of drilling the hole denied because it is believed that the proposed hole would not reach the planned objective of the porphyry-green rock contact, and otherwise would not add materially to present knowledge of the deposit.

Item No. 7, hole No. 43, Government participation in the costs of drilling the hole denied for the same reason as the basis for denial of hole No. 42, Item No. 6.

Item No. 8, hole No. 44, Government participation in the costs of drilling the hole denied on the same basis as denial of hole No. 41, Item No. 5.

Item No. 9, drifting northerly from the end of the No. 1 Crosscut North and Item No. 10, drifting southerly from the No. 1 Crosscut North. Action regarding the proposed drifting under Items Nos. 9 and 10 is deferred because approval is contingent on the execution of an amendment to the contract to extend the date presently fixed for completion of the work and to include additional land to that presently subcontracted under Article 2 of the contract as described in Annex I, and amendments thereto. Preparation of an amendment of the nature involved is not within the authority delegated to this office; therefore, the materials being referred to the Washington Office, OME, for their consideration and appropriate action on which you will be advised as soon as this office is informed.

All of the above approved work is to be performed in conformance with all provisions in the contract pertaining thereto. The Government will not contribute to the costs of a hole which has not been completed to its objective, by the date fixed for completion of all work under the contract.

Nothing in the foregoing work approval shall be construed to increase the total estimated cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Very truly yours,

OME Field Team, Region III

By J. W. Townsend
J. W. Townsend

By J. William Hosler
J. William Hosler

JWT:ltm

cc: Chem. Op. Comm. (2)
Finance Off. Reg. III
Assmd. File, Reg. III
Hosler
OME/DPC
Corres. File, Reg. III
Sump.
Chron.

cc: A. L. Gwynlin
Molybdenum Corporation of America
Questa, New Mexico

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 5 1959

DATE	INITIALS	CODE
11-5	gad	220
11/5	[illegible]	800
11-6	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado
November 3, 1959

Memorandum

TO: J. W. Hasler)
T. M. Romslo) w/enclosures

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

In conjunction with the material forwarded by my memorandum of October 26, 1959, regarding the Operator's request for approval for additional work, enclosed is a copy of the Operator's letter of October 30, 1959, with attached copies of Agreement of Sale of Mining Claims, Warranty Deed and Mortgage, pertaining to the land proposed for subordination under Article 2 of the contract.

Original signed by

J. W. Townsend

Enclosures

JWT:ltm

cc: Chmn. Op. Comm. (2) w/cpy Oper's.
Corres. file)ltr & attach.
susp.
Chron.

Agreement of Sale of Mining Claims, Warranty Deed and Mortgage, filed in Folder No. 1, with contract (left-hand side of folder)

O. M. E.
RECEIVED NOV 5 1959

DATE	INITIALS	CODE

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OME
DEPARTMENT OF THE INTERIOR
NOV 2 1959
REGION III
DENVER, COLORADO

October 30, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

Supplementing our application of October 20, 1959 asking for additional work under the contract, we anticipate you may require verification of ownership of property recently purchased.

In this group of claims are: Buena Vista 1, 4, 6 &7, Renegade and Torbert No. 2 which we asked to be subordinated in our application.

We are therefore enclosing copies of the following documents, all on file in the Taos County Clerk's office, Taos, New Mexico.

AGREEMENT OF SALE OF MINING CLAIMS

WARRANTY DEED

MORTGAGE

We will appreciate your advising us, as soon as convenient, any additional information that may be necessary for the consideration of our application.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J B Carman

J. B. Carman
Urad Mine, Empire, Colorado

JBC:r

Original & 5 Copies
3 Documents

CC: Marx Hirsch
A. L. Greslin

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 5 1959

DATE	INITIALS	CODE

OFFICIAL FILE COPY O. M. E. RECEIVED OCT 29 1959		
DATE	INITIALS	CODE
10-29	gad	VVO
10/29	[illegible]	800
10/30	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado

October 26, 1959

Memorandum

TO: J. W. Hasler) w/enclosures
T. M. Romslo)

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract No. Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Enclosed is a copy of a letter dated October 20, 1959, with attached data from the subject Operator requesting approval of additional diamond drilling and drifting.

The proposed additional work if approved will necessitate an amendment to the contract to add additional land to that presently subordinated under Article 2 of the contract, and an extension of the completion date of the contract to June 30, 1960.

Please submit a joint memorandum report containing your recommendations in the matter.

Original signed by

J. W. Townsend

Enclosures

JWT:ltm

cc: Chmn. Op. Comm. (2)) w/cpy of Oper's
Corres. file) ltr. 10/20/59 &
Suspense attachd. data
Chron.

October 20, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We are herewith making application for the following drifting and drilling, all on the 2nd Tunnel Shaft Level:

DRILLING

ITEM	HOLE NO.	LOCATION	APPROX. COORDINATES		INCLINATION	BEARING	MAX DEPTH
(1)	37	Cx #1 N Dft #4 W	1830 N	630 E	plus 90°	0	800 ft**
(2)	38	" "	1830 N	630 E	0°	N	800 ft
(3)	39	" "	1720 N	60 E	-90°	0	800 ft
(4)	40*	" "	1720 N	60 E	-45°*	N	800 ft
(5)	41	" "	1720 N	60 E	0°	S 82 W	800 ft
(6)	42	Cx #7 N	510 N	1630 W	-90°	0	800 ft
(7)	43	Cx #7 N	740 N	1890 W	-90°	0	800 ft
(8)	44	Cx #7 N	950 N	1860 W	0°	N	800 ft

*Note: Subject to change to flatter inclination pending results from Hole #39.
** Probable average depth: 500 feet.

DRIFTING

ITEM	LOCATION	APPROXIMATE COORDINATES Beginning	Ending	DISTANCE	BEARING
(9)	Cx #1 N	2430 N - 980 E	2930 N - 920 E	500 ft.	N 7° W
(10)	Cx #1 N Dft #3 E	2265 N -1315 E	2325 N - 1810 E	500 ft.	N 83° E

Items (1) through (5) cover the drilling program anticipated when approval of Drift #4 W was given. Drift #4 W was in granite porphyry until the drift crosses coordinate about 430 E, hence Hole #37, Item (1) is inclined at plus 90 degrees seeking the contact.

Hole #38, Item (2), a horizontal hole north has the objective of probing under what could be a west dipping and striking "nose" of granite porphyry with the possibility of reaching a north dipping contact on the north side of the granite "nose".

Hole #39, Item (3) in green rock is on the west side of what is designated as a fault contact, thus it is a -90° hole seeking the contact.

October 20, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Federal Center, Denver, Colo.

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America

Hole #40, Item (4) is planned to determine the contact position to the north and below. Its inclination is tentatively put at -45°. After determining the contact location by Hole #39, it may be desirable to change the inclination of this hole.

Hole #41, Item (5) should determine the structure to the west. Block faulting may have occurred in the area, thus this hole could again enter granite porphyry. Faulting could well have altered the relative positions of the drift and the contact with consequent effect on mineralization.

Hole #42, Item (6) would depend upon the results obtained in Hole #33 some 400 feet to the south east off crosscut #7 N. Holes #31 and #32 further to the south east did not reach the granite contact as both entered a green mud after leaving the porphyry. It became impossible to drill through this mud and both holes had to be abandoned at about 500 feet below the level.

Hole #43, Item (7) has the contact as the objective.

Hole #44, Item (8) to the north will probe an area the surface geology of which, both as to structure and alteration, appears favorable.

Relative to Items (9) and (10), Cx No. 1 N and Cx No. 1 N Drift #3 E the beginning coordinates are estimated as the location of these workings on December 1st when we might expect ratification of this application.

Work in Cx #1 N Dft #3 E was resumed about October 15th and in Cx #1 N is scheduled to be resumed November 1st after having been discontinued due to entering or approaching claims purchased on February 17, 1959, the title of which was not cleared until October 16, 1959.

Work in No. 1 Crosscut North was in progress when the D.M.E.A. contract started in June, 1957. It has been driven some 2400 feet, all without government assistance. At about coordinate 1400 N, average assays began to improve, at first, about doubling over the previous several hundred feet; then at 1850 N showing some comparative highs. From approximately 2100 N to the breast at 2300 N several high assays brought the average of about the last 200 feet of drift up to 0.42% MoS_2 making this a new and most significant discovery. In fact, this is the best showing so far opened.

Work under Item (9) would determine structure and values to the north. Contact contours, it is speculated could turn north east thus giving a north east strike with a north west dip to the contact. This is a similar situation to that found in the old mine to the south where a southeast contact strike was determined dipping to the southwest.

October 20, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Federal Center, Denver, Colo.

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America

Item (10), would be pursuing to the east the discovery in the north crosscut.

For all of the work herein requested additional claims will be necessary. We therefore ask that the following be subordinated under the contract:

Summit #10 and #11 to cover work requested in Items (7) and (8).
Buena Vista #4 and #7 and Summit #6 to cover work requested in Item (9).
Renegade, Phyllis #5 and #7, Lonesome #1, Torbert #2, Buena Vista #1 and #6, to cover work requested in Item (10). Items (1) through (6) are on subordinated claims.

In order to complete the work above requested additional time will be required under the contract which expires January 15, 1960.

It is desirable from the standpoint of keeping No. 7 Crosscut open and ventilated that drilling be first done here, Items (6) to (8), where three holes are scheduled in addition to Hole #33 which should be completed November 1st, 1959. Then the program would be to drill holes Items (1) to (5). Reviewing the time required per hole and average depth of hole, it is found that during the time Boyles Bros. has been drilling since January, 1959, the average feet per day drilled in the mine has been 26.2 and the average depth of hole has been 564.6 feet, thus on the basis of 25 two-shift working days per month, a hole will be drilled in .862 months. For 8 holes, it will require therefore 6.9 months.

As drifting has been proceeding at a 400 ft. per month rate, 2½ months from December 1st should complete Items (9) and (10). This would allow time for additional drilling in these drifts. With the drifting finished, drilling could be expedited.

During the past year due to conditions imposed under the contract we have been unable to expedite the drilling by putting on another drill. Also due to the title difficulty we were unable to exploit the area under Items (9) and (10) and in this area we have, from present data a most important discovery, not contemplated when the contract was made.

We therefore ask that the contract be extended to June 30, 1960.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J. B. Carman

J. B. Carman
Urad Mine, Empire, Colorado

JBC:r

Original & 5 Copies
Maps--See separate list
CC: Marx Hirsch, A. L. Greslin

October 20, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Federal Center, Denver, Colo.

Re: Docket No. DMEA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America

MAPS ENCLOSED

PLATE 1 Claim Map

PLATE 2 Geology--Crosscut #7 N and #2 Drift E.

PLATE 3 Chip Samples--Crosscut #7 N and #2 Drift E.

PLATE 4 Geology, Crosscut #1 N.

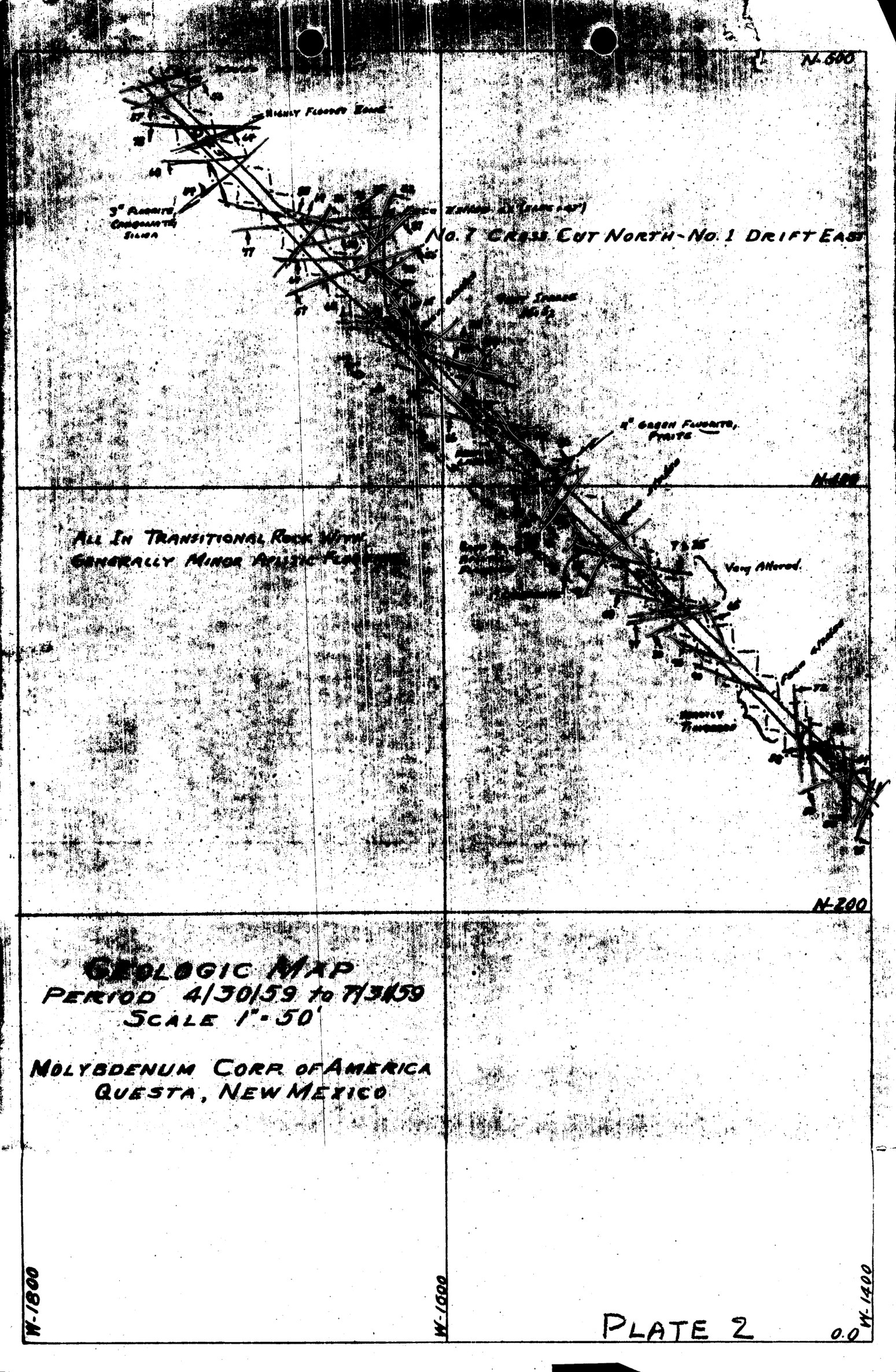
PLATE 5 Chip Samples, Crosscut #1 N.

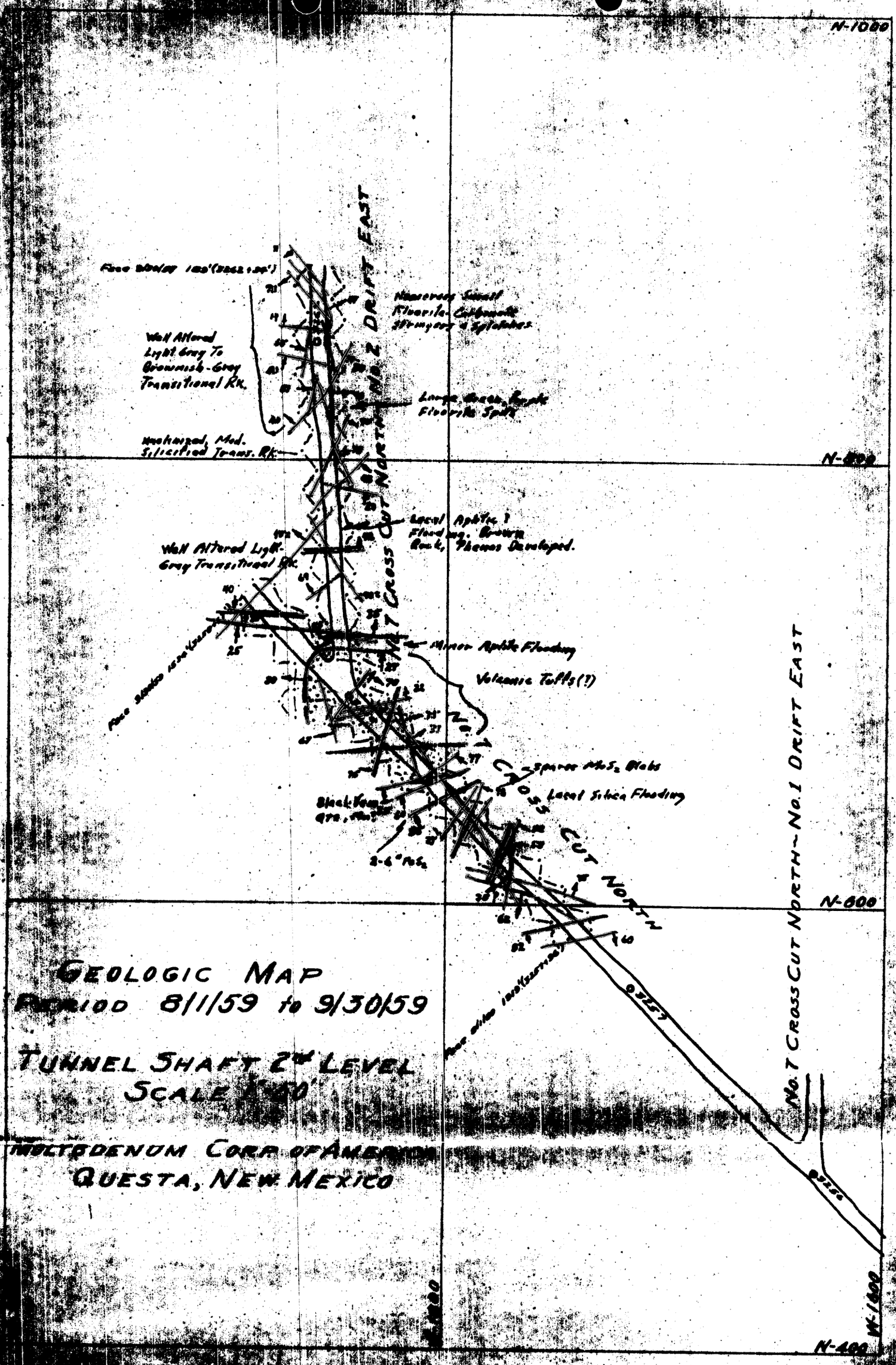
These maps will supplement similar information which you have.

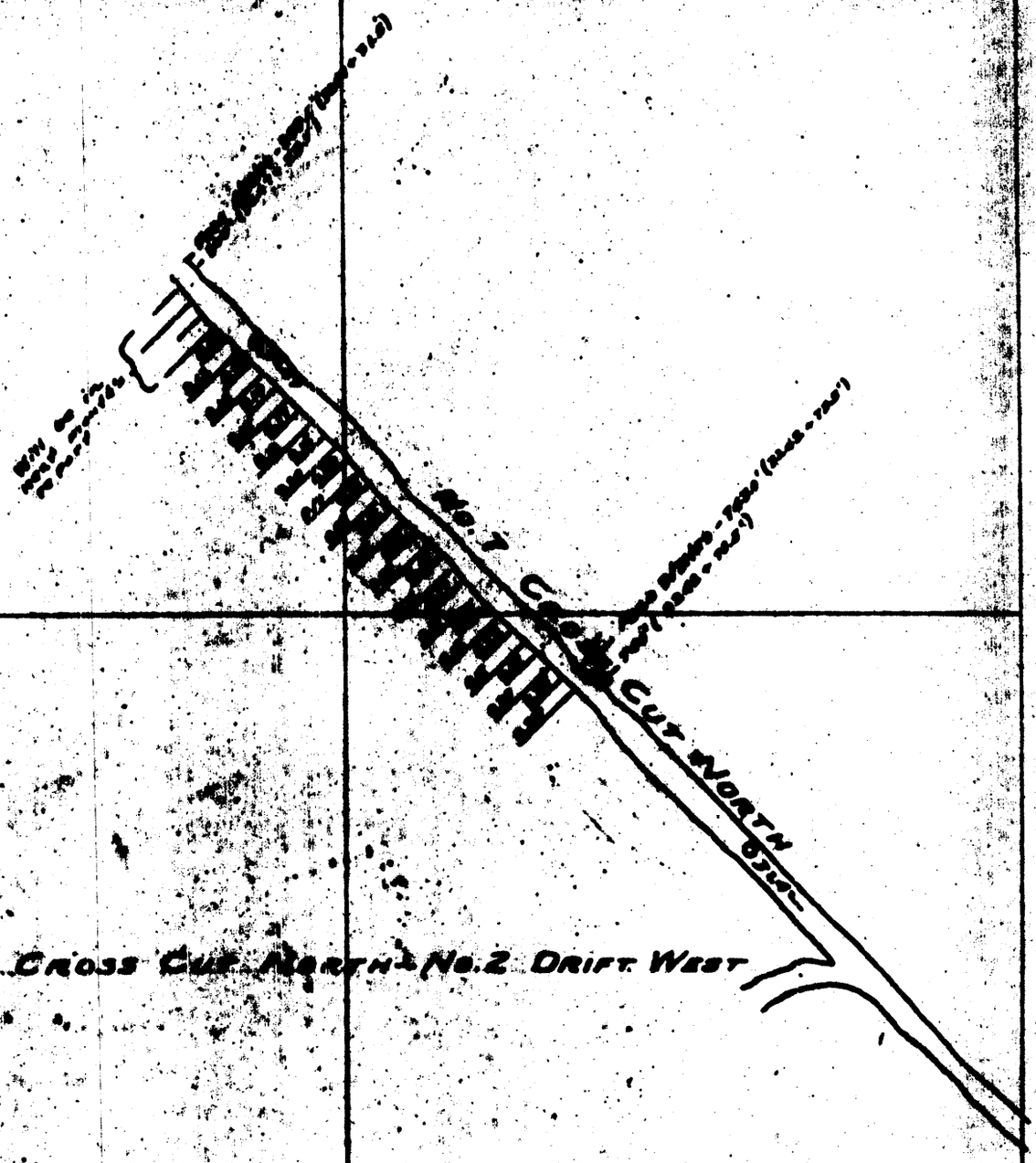
Enclosed:

8 copies Plate 1

6 copies each, Plates 2 - 5


N-300
Highly Fractured Zone
3" Fluorite Carbonate Silica
No. 7 Cross Cut North - No. 1 Drift East
Very Altered.
N-200
All In Transitional Rock With Generally Minor Argillic Fracture
Geologic Map
Period 4/30/59 to 7/31/59
Scale 1" = 50'
Molybdenum Corp. of America
Questa, New Mexico
W-1800
W-1600
W-1400
Plate 2


N-1000
N-800
N-600
N-400
No. 2 DRIFT EAST
No. 7 CROSS CUT NORTH
No. 1 DRIFT EAST
CROSS CUT NORTH
Well Altered Light Gray To Brownish-Gray Transitional Rk.
Mechanical, Mod. Silicified Trans. Rk.
Well Altered Light-Gray Transitional Rk.
Local Aplitic Flooding, Brown Rock, Pyrites Developed.
Minor Aplite Flooding
Volcanic Tuffs (?)
Sparse MoS2 Blebs
Local Silica Flooding
Black Vein
2-6" MoS2
GEOLOGIC MAP
PERIOD 8/1/59 to 9/30/59
TUNNEL SHAFT 2nd LEVEL
SCALE 1"=20'
MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO



PROGRESS & CHIP SAMPLES
PERIOD 4/1/59 to 4/30/59
% No. 52

TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 30'

[illegible]
[illegible], NEW MEXICO

PLATE 3

N-800

N-600

N-400

N-200

W-1600

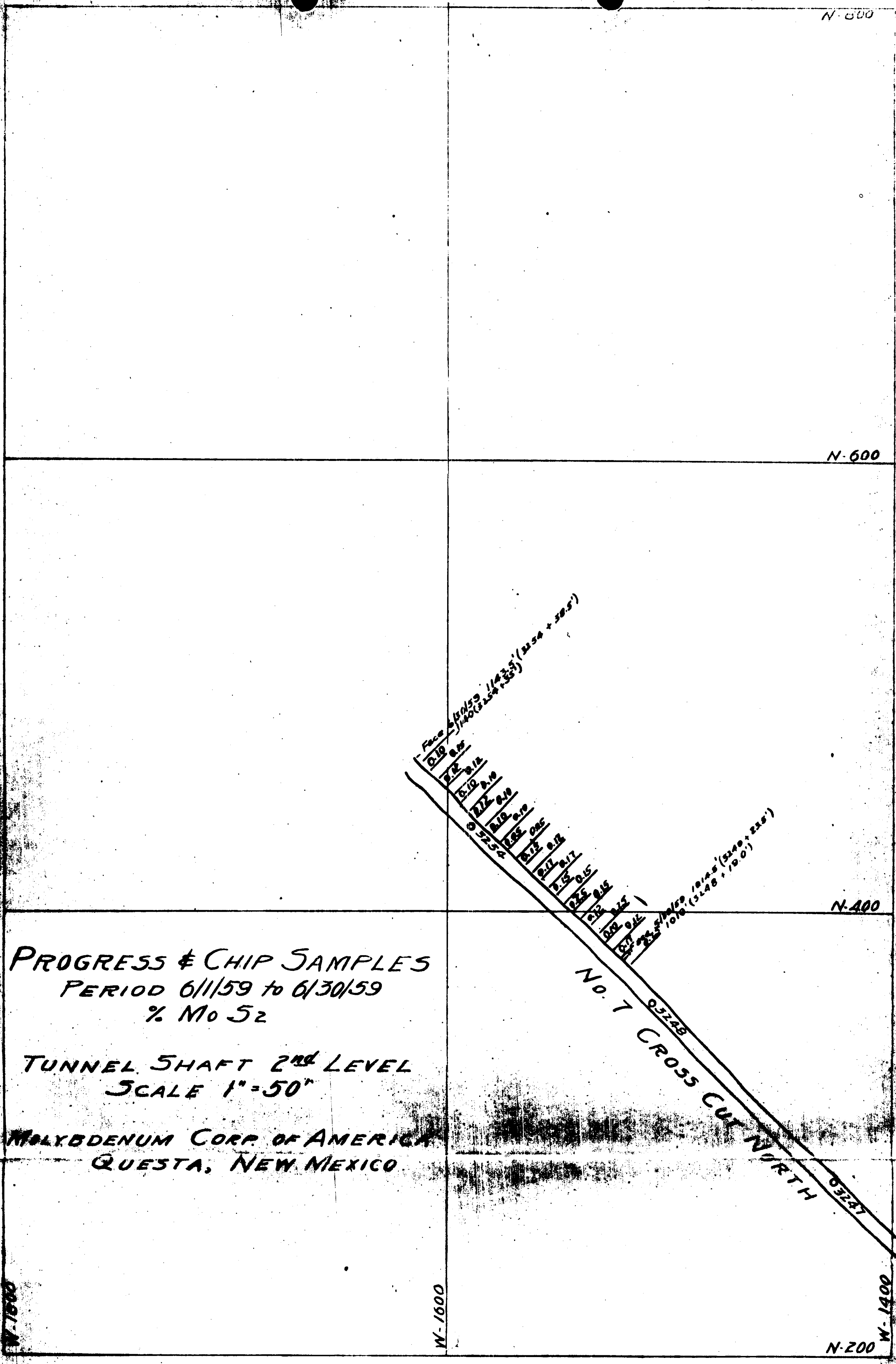
W-1400

PROGRESS & CHIP SAMPLES
PERIOD 5/1/59 to 5/30/59
% MoS_2

TUNNEL SHAFT 2nd LEVEL
SCALE 1"=50'

MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO

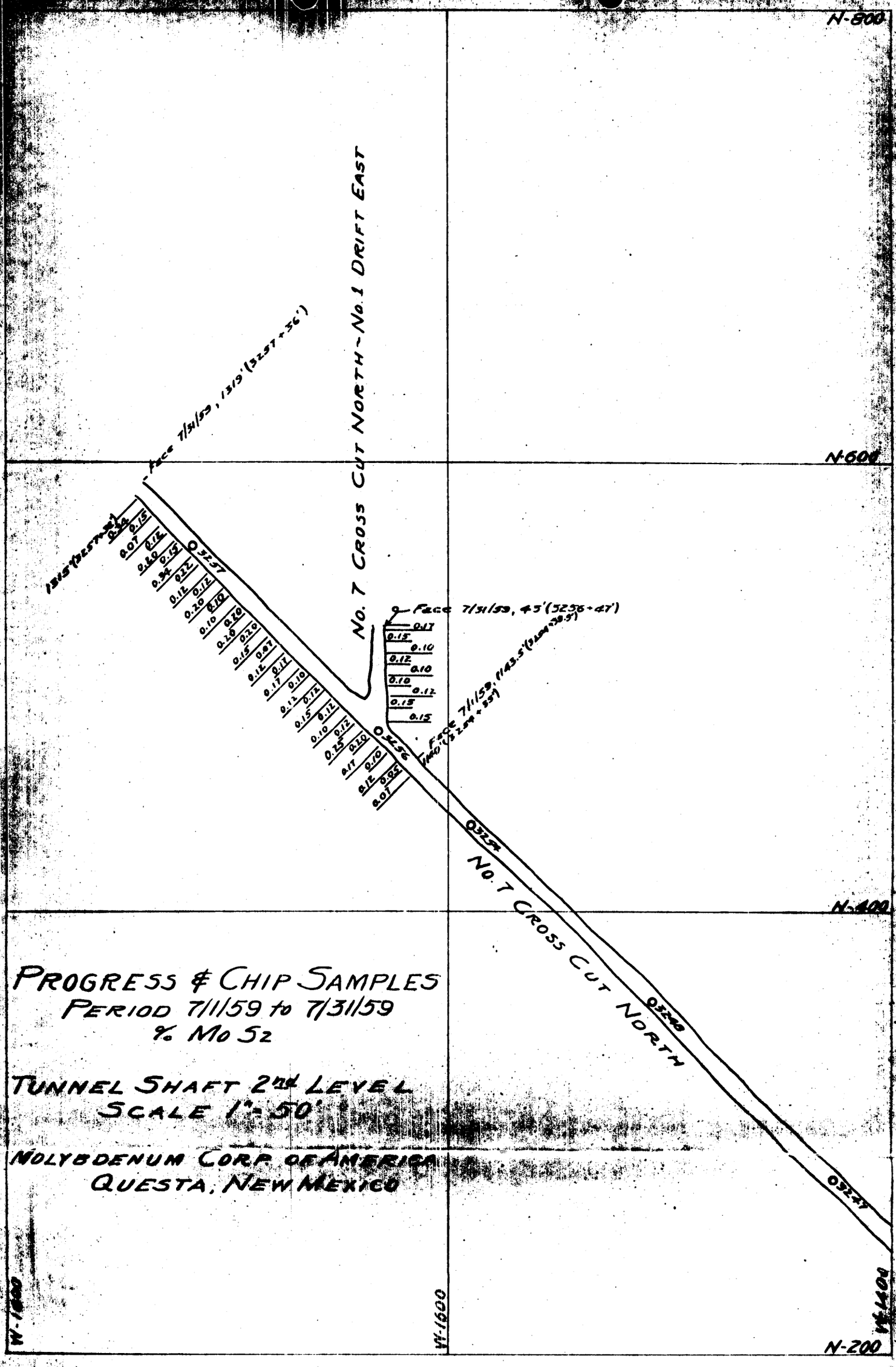
No. 7 CROSS CUT NORTH



PROGRESS & CHIP SAMPLES
PERIOD 6/11/59 to 6/30/59
% MoS_2

TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'

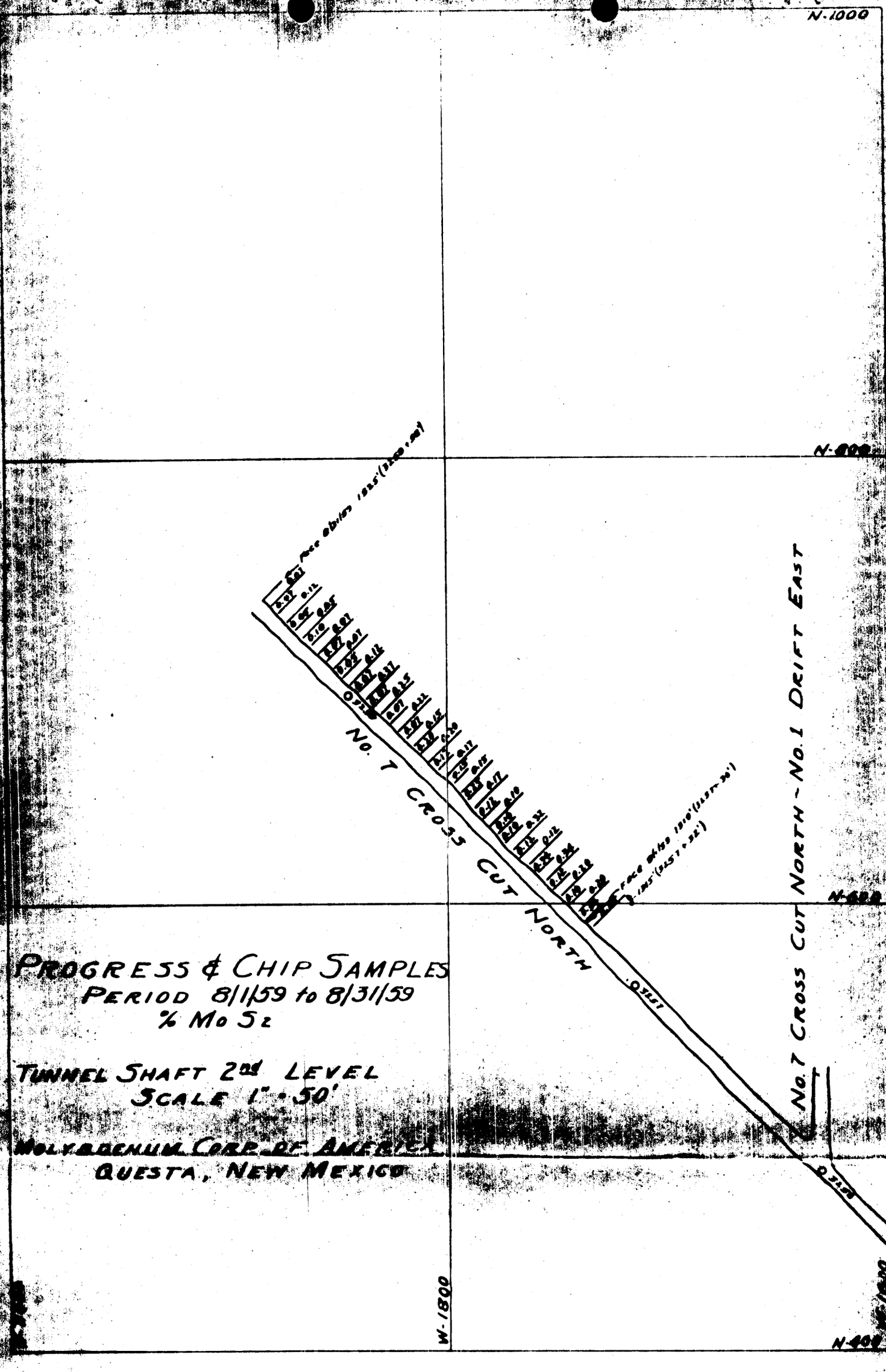
MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO

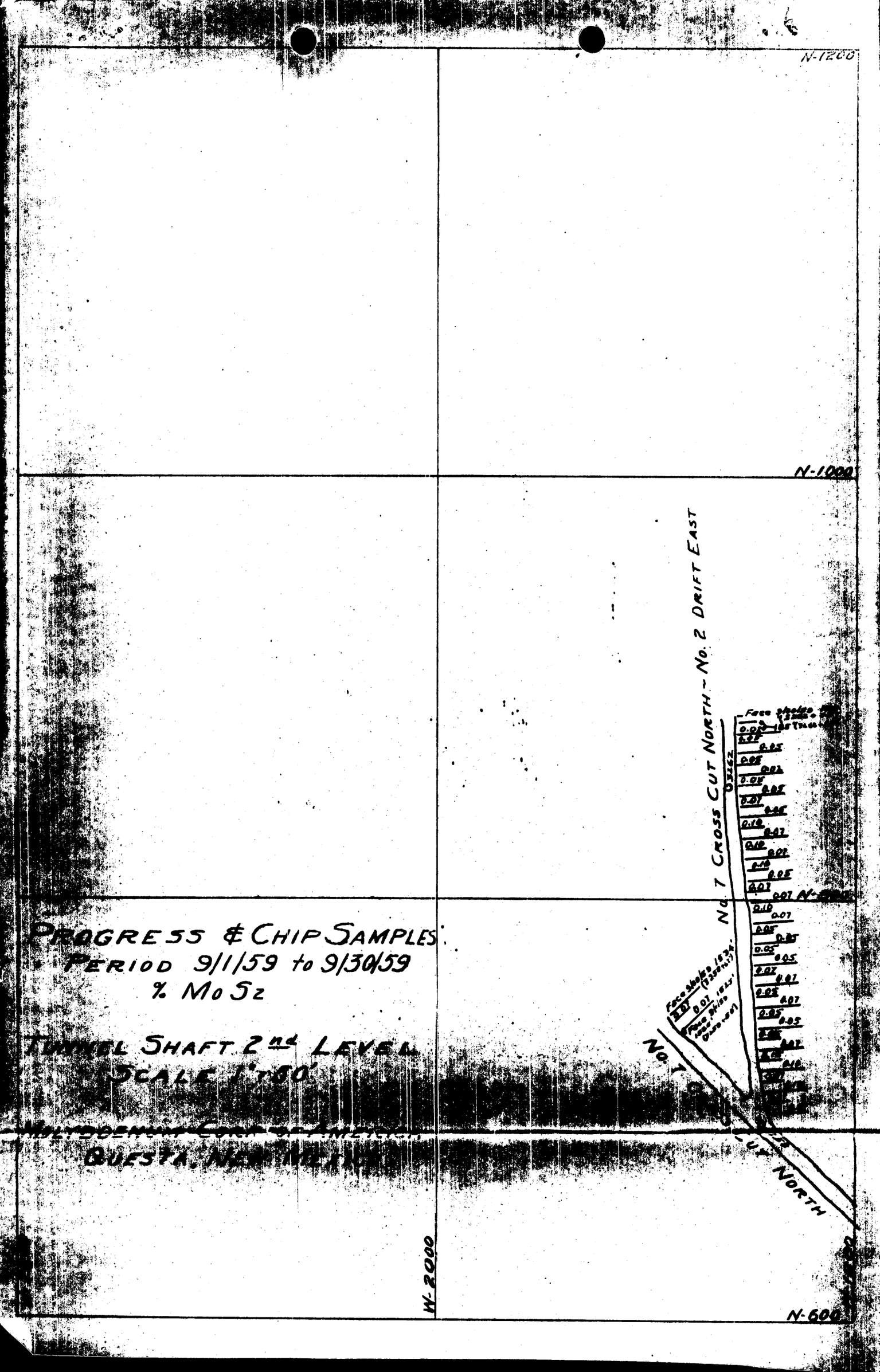


PROGRESS & CHIP SAMPLES
PERIOD 7/1/59 to 7/31/59
% Mo S2

TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'

MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO


N-1000
N-800
N-600
N-400
W-1800
W-1600
No. 7 CROSS CUT NORTH
No. 7 CROSS CUT NORTH - No. 1 DRIFT EAST
0.25 EAST
0.22 EAST
PROGRESS & CHIP SAMPLES
PERIOD 8/1/59 to 8/31/59
% Mo S2
TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'
MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO


N-1200
N-1000
No. 7 CROSS CUT NORTH - No. 2 DRIFT EAST
0.02 62
Face shots 1532'
0.01 (2500 ft)
Face shots 1525'
0.01
No. 7 CROSS CUT
NORTH
W-2000
N-600
PROGRESS & CHIP SAMPLES
PERIOD 9/1/59 to 9/30/59
% MoS2
TUNNEL SHAFT 2nd LEVEL
SCALE 1"=50'
QUESTA, NEW MEXICO

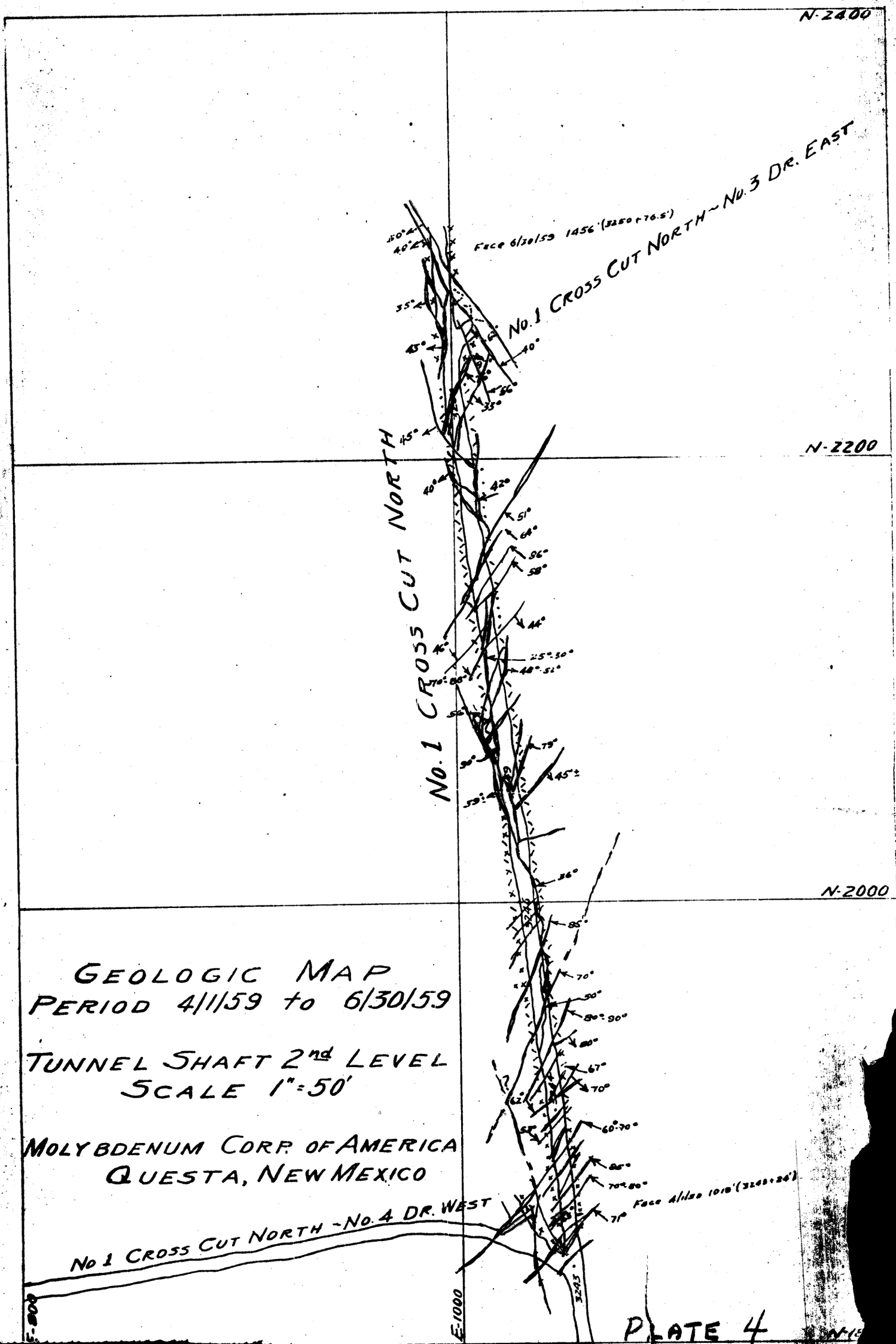

N-2400
N-2200
N-2000
E-1000
No. 1 CROSS CUT NORTH ~ No. 3 DR. EAST
No. 1 CROSS CUT NORTH
No 1 CROSS CUT NORTH ~ No. 4 DR. WEST
Face 6/30/59 1456' (3250+76.5')
Face 4/1/59 1010' (3248+36')
3243'
GEOLOGIC MAP
PERIOD 4/1/59 to 6/30/59
TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'
MOLYBDENUM CORP. OF AMERICA
QUESTA, NEW MEXICO

PLATE 4

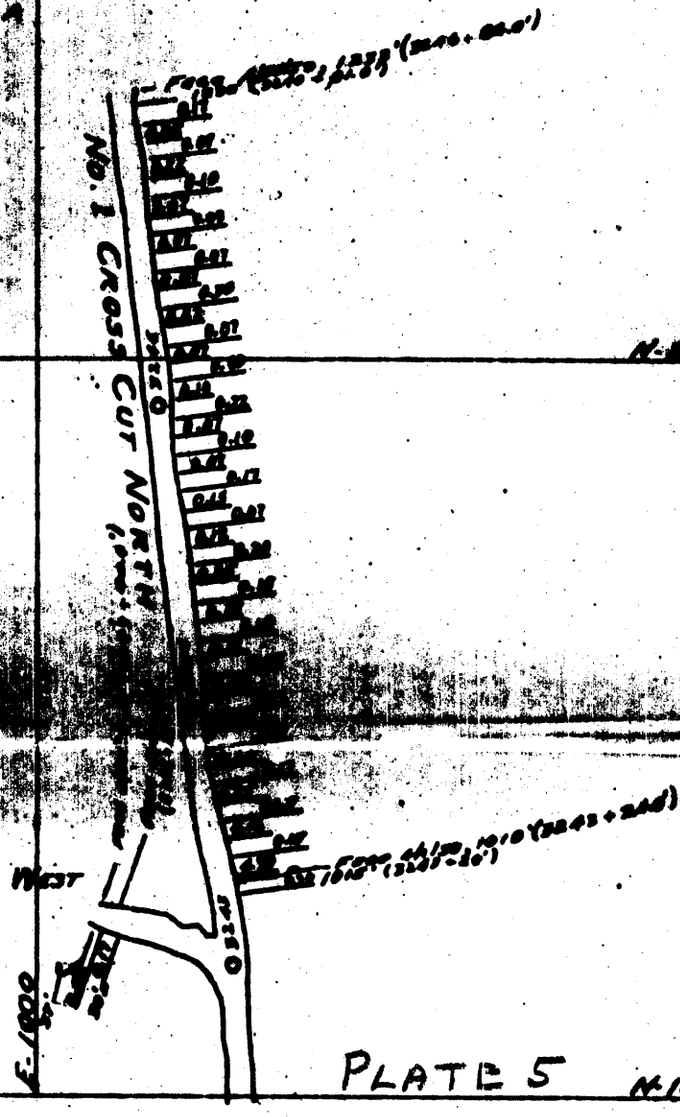
N-2400

N-2300

PROGRESS & CHIP SAMPLES
PERIOD 4/1/59 to 4/30/59
% MoS2

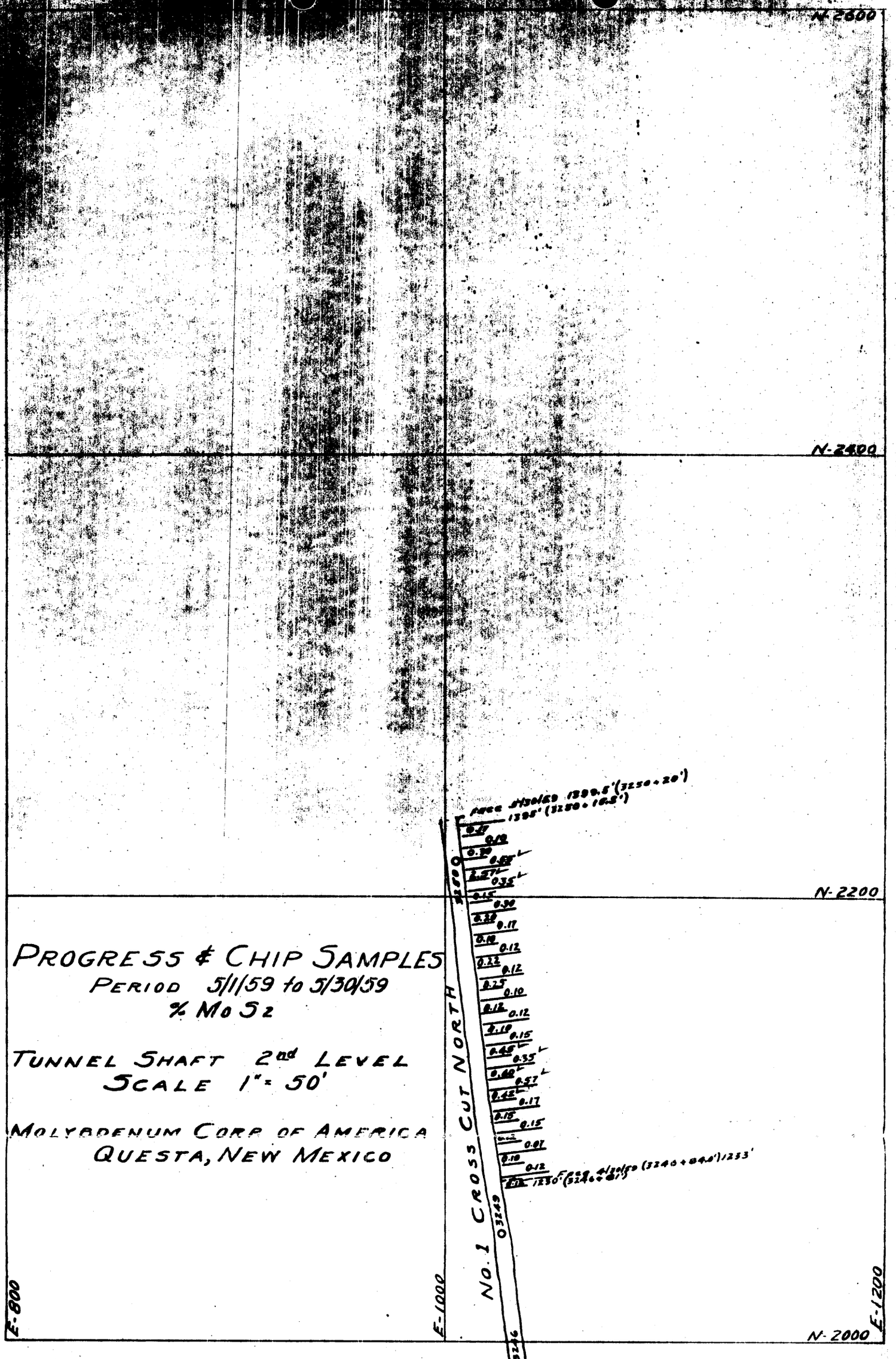
TUNNEL SHAFT 2ND LEVEL
SCALE 1" = 50'

MOLYBDENUM CORP OF AMERICA
QUESTA, NEW MEXICO



No. 1 CROSS CUT NORTH — No. 4 DRIFT WEST

PLATE 5


N-2600
N-2400
N-2200
N-2000
E-800
E-1000
E-1200
PROGRESS & CHIP SAMPLES
PERIOD 5/1/59 to 5/30/59
% MoS2
TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'
MOLYBDENUM CORP OF AMERICA
QUESTA, NEW MEXICO
NO. 1 CROSS CUT NORTH
3250
3249
3246
0.17
0.12
0.30
0.55
2.57
0.35
0.15
0.30
0.22
0.17
0.10
0.12
0.22
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0.45
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0.62
0.57
0.42
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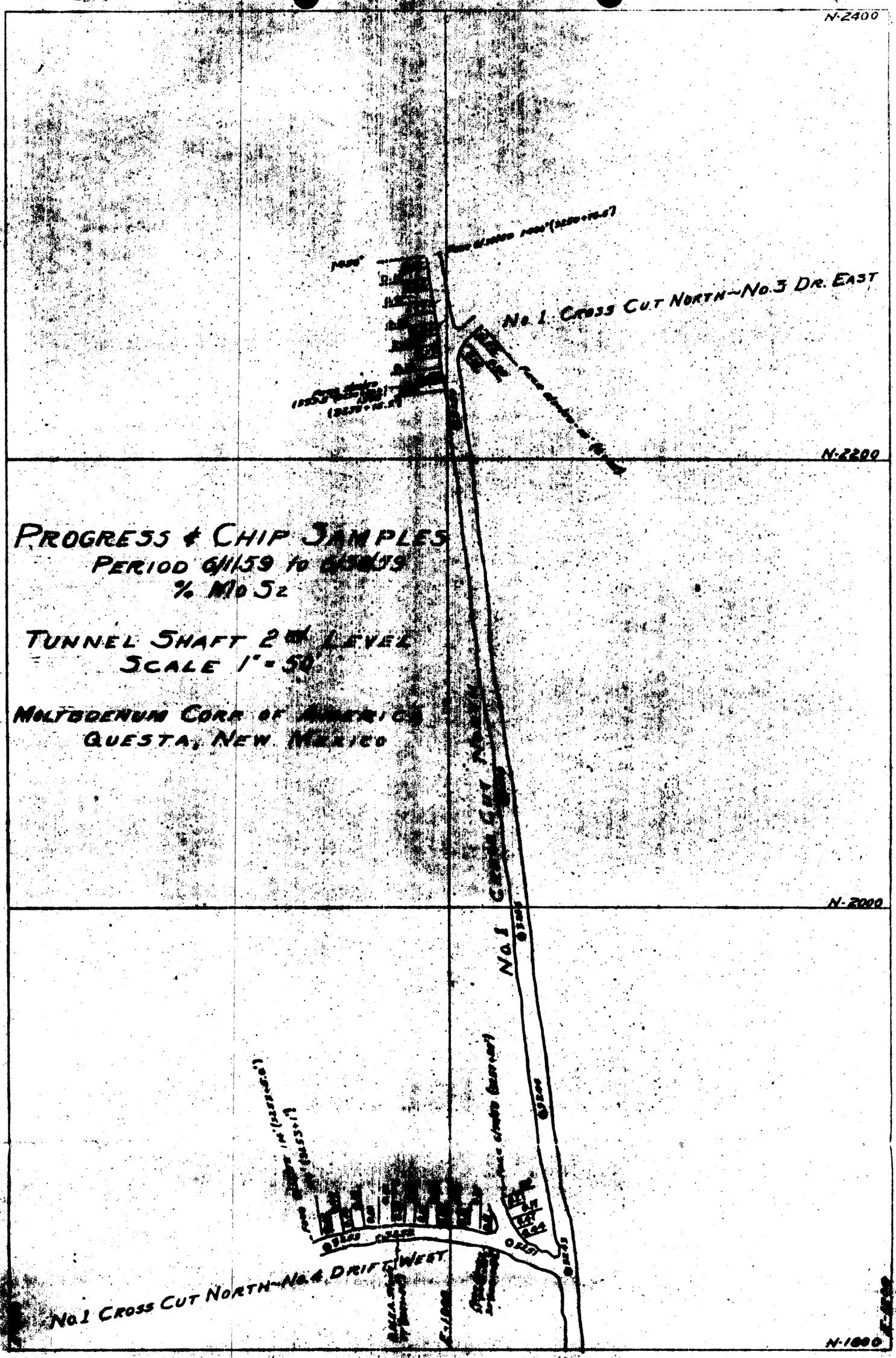
0.07
0.10
0.12


N-2400
No. 1 Cross Cut North-No. 3 Dr. East
N-2200
PROGRESS & CHIP SAMPLES
PERIOD 6/1/59 to 6/30/59
% MoS2
TUNNEL SHAFT 2nd LEVEL
SCALE 1" = 50'
MOLYBDENUM CORP OF AMERICA
QUESTA, NEW MEXICO
N-2000
No. 1 Cross Cut North
No. 1 Cross Cut North-No. 4 Drift West
N-1800

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959

DATE	INITIALS	CODE
9-28	gad	VVO
9/28	[illegible]	800
9/29	Murphy	500

Building 20 - Federal Center
Denver 25, Colorado
September 18, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. ~~RMKA~~ 4568 (Molybdenum)
Contract No. ~~Km~~-K1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

In reference to your two letters dated August 25 and August 27, 1959, this constitutes Government approval for work under the contract as follows:

(1) Confirmation of verbal approval given August 26, 1959 for 100 ft. extension of the drift westerly from Crosscut No. 1 North.

(2) Approval to extend the drift westerly from Crosscut No. 1 North an additional 400 ft., or to a point not to exceed 1000 ft. from the point of beginning of the westerly drift at Crosscut No. 1 North.

(3) Drill holes Nos. 32 and 33 from points in the No. 7 Crosscut North at the following approximate locations and attitudes:

Hole No.	Coordinate Location	Inclination	Depth
32	S200 - W970	- 90°	1/
33	N100 - W1270	- 90°	1/

1/ Holes may be continued to a depth of 800 ft. or within practicable limits as long as drill samples contain visible MoS_2 estimated to be in excess of 0.20 percent.

All of the above approved work is to be performed in conformance with provisions in the contract pertaining thereto.

Nothing in the foregoing work approval shall be construed to increase the total estimated cost of the project, the aggregate amount which the Government may be required to contribute, nor the "Fixed Unit Cost" of any item of work.

JWT:lt m

cc: Amend. file, Reg. III)w/cpy
Fin. Off. Reg. III)Oper's ltr. &
Chem. Op. Comm. (2)Field Engnr's
Hasler) Rept.
OME/DFC) 9/18/59
Corres. file, Reg. III
Suspense file
Chron.

Very truly yours,

J. W. Townsend
Executive Officer, OME
Field Team, Region III

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959

DATE	INITIALS	CODE

September 18, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: J. W. Hasler
T. M. Romslo

Subject: Recommendation for reinstatement of two prior requested holes as well as approval for 500 feet of additional drifting westward from No. 1 crosscut north. DMEA Docket 4568 (Molybdenum) Contract I6m-E 1094, Molybdenum Corporation of America, Questa mine, Taos County, New Mexico

The applicant requested reinstatement of two diamond drill holes that were originally requested in a letter with attached map dated May 18, 1959, and were subsequently denied due to lack of sufficient data. The holes were Nos. 32 and 33 located in the No. 7 XCM some distance from diamond drill holes 30 and 31 in the No. 4 crosscut tunnel south and the main crosscut tunnel west, respectively.

The applicant also requested approval for an additional 500 feet of drifting S 82° W in the No. 4 crosscut west from the No. 1 crosscut north.

A field inspection was made by an OME examining team September 9, 1959.

Diamond drill hole No. 31 was drilled vertically downward at the junction of the 200 Level Second tunnel west drift and the No. 7 crosscut north. Granite was reportedly cut 10 feet below the drift; however, a transition (operator's terminology) zone continues to about 150 feet. Sludge samples averaged 0.21 percent MoS_2 for the first 260 feet.

Diamond drill hole No. 30 in the No. 4 crosscut south reached a depth of 800 feet. Assays from the hole ranged from 0.10 percent to 1.65 percent MoS_2 and averaged 0.20 percent MoS_2. The granite was penetrated at 100 feet below the drift.

It is recommended that upon the strength of assays in diamond drill hole Nos. 30 and 31, as well as upon the knowledge of Green rock-granite contact, request for diamond drill holes Nos. 32 and 33 in the No. 7 crosscut north be reinstated and that both holes be completed.

The operator in a letter dated August 25, 1959, requested an additional 500 feet in the No. 4 drift west from the No. 1 crosscut north as he has completed the first 500 feet. The drift is in fractured granite porphyry, and samples taken assayed from 0.07 percent MoS_2 to 2.89 percent MoS_2 and averaged at least 0.20 percent MoS_2.

It is recommended that the additional 500 feet of drifting westward as requested by the applicant be approved because of the favorability of the granite porphyry. Verbal approval was given the operator August 26, 1959, for the first 100 feet, and the balance of 400 feet was to be approved or disapproved pending a field examination which was made September 9, 1959, as previously mentioned.

J W Hasler

J. W. Hasler, Geologist

T M Rempe

T. M. Rempe, Mining Engineer

JWHasler:ark

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959
DEPARTMENT OF THE INTERIOR
DATE INITIALS
AUG 31 1959
REGION III
DENVER, COLORADO

August 27, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We wish to reinstate our request of May 18th to drill holes No. 32 and No. 33 in Crosscut No. 7 North. Request on these holes was withheld in your letter of July 9th.

2nd LEVEL DRIFT WEST CROSSCUT NO. 7 NORTH

Hole No.	Bearing	Inclination	Coordinate
32	0	- 90°	S 200 - W 970
33	0	- 90°	N 100 - W 1270

Our objective in drilling these holes is to further explore the granite or granite porphyry contact supposedly underlying the transition rock of the No. 7 Crosscut to the east of the Goat Hill porphyry. Hole No. 31, the log of which you have, was stopped in very broken porphyry at 500 feet after having passed through 150 feet of transition rock, 100 feet of granite and 250 feet of porphyry. Deeper drilling in holes 32 and 33 seeking a granite contact may be found necessary.

We consider downward exploration necessary as part of the exploration of this area, not only as to mineralization but as to formation.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

By J B Carman

J. B. Carman

JBC:r

Original and 5 Copies

CC: MH
AL&

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959
DEPARTMENT OF THE INTERIOR
DATE | INITIALS | CODE
AUG 26 1959
REGION III
DENVER, COLORADO

August 25, 1959

Mr. J. W. Townsend
Executive Officer, O. M. E.
Field Team Region III
Building 20, Federal Center
Denver 25, Colorado

Re: Docket No. D.M.E.A. 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico

Dear Mr. Townsend:

As the 500 feet of approved work in the west drift off of Crosscut No. 1 North will probably be completed August 29th, we are asking approval of an additional 500 feet.

This drift started from Crosscut No. 1 North of the second level at approximately 1850 N and was driven S 82° W. We wish approval to continue it 500 feet in the same direction approximately to coordinates 1725 N and 65 E.

This drift as you will note from our July "104" report was in granite porphyry during that month and has so continued up to date. Recently, there have been some small inclusions of "green rock" in the porphyry. According to the chip samples to the end of July and the car samples since that time, the first 80 feet averaged 0.40% MoS_2. The balance of the drift in the porphyry has run consistently 0.16% MoS_2 with no trend in mineralization evident.

Extending this drift should cross the contact at this level. It would allow vertical drilling for contact determination as well as drilling to the north to explore that area. For information in this regard refer to Dr. Carpenter's report with our letter of April 23, 1959.

Incidentally, we drilled Hole No. 36 to 390 feet and abandoned it due to squeezing ground. It was in porphyry to 380 feet and supposedly reached the contact at that point. The last 10 feet was in mud, thought to be transition material. Sludge assays averaged 0.22% MoS_2.

We trust our request will be approved.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

By J B Carman

JBC:r

J. B. Carman

Original & 5 Copies

CC: MH
ALG

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 8 1959

DATE	INITIALS	ZONE
9-8	gad	rvo
		rvo
9-8	Memphis	~~500~~

Building 20 - Federal Center
Denver 25, Colorado

September 4, 1959

Mr. A. L. Greslin
Molybedenum Corporation of America
Moly mine
Questa, New Mexico

Re: Docket No. DMEA 4568 (Molybedenum)
Contract No. Idm-21694
Molybedenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter of August 29, 1959, this constitutes Government concurrence for you to discontinue drilling of hole number 34 at a depth of 337 feet because of the adverse conditions encountered.

Very truly yours,

J. W. Townsend
Executive Officer, OME
Field Team, Region III

JWT/cg

cc: Amendment 5, Reg. III
Chmn. Op. Comm. (2)
Fin. Off. Reg. III
Hasler
OME/DFC
Corres.
Susp.
Chron.

w/cpy Oper's ltr 8/29/59

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 8 1959

DATE	INITIALS	CODE

August 29, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team, Region III
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket IMEA 4568 (Molybdenum)
Contract No. IDM-E1094
Molybdenum Corp. of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

We ask you herewith for approval to stop drill hole No. 34. It was drilled AX.

We were in Porphyry to 330 feet, then hit the contact and drilled 7 more feet in a very soft mud. This soft material would squeeze so bad we couldn't get the rods back to the bottom of the hole. Therefore, we had to quit drilling in this hole at 337 feet.

Yours very truly,

OME
DEPARTMENT OF THE INTERIOR
AUG 31 1959
REGION III
DENVER, COLORADO

Building 20 - Federal Center
Denver 25, Colorado
August 17, 1959

Mr. A. L. Gresslin
Molybdenum Corporation of America
Moly Mine
Questa, New Mexico

Re: Docket No. DMA 4568 (Molybdenum)
Contract No. 16m-1 1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Gresslin:

In reference to your letter of August 14, 1959, this constitutes Government concurrence for you to discontinue drilling of hole number 36 at a depth of 350 feet because of adverse conditions encountered.

Very truly yours,

J. W. Townsend
J. W. Townsend
Executive Officer, OME
Field Team, Region III

JWT/cg

cc: Chem. Op. Comm. (2)
Finance Office, Region III
Amendment file, Region III
Hasler
OME/DFC
Corres. file
Susp. file
Chron.

w/cpy Oper's ltr. 8/14/59

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 20 1959

DATE	INITIALS	CODE
8-20	gad	220
8/21	[illegible]	800
"	Murphy	500

August 14, 1959

Mr. J. W. Townsend
Executive Director, O.M.E.
Field Team, Region III
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket No. IME
Contract No. I
Molybdenum Co
(Moly or Quest
Taos County, N

Dear Sir:

We ask you herewith for approval to stop drill
was drilled to 100 feet BX, then from 100 to 390 f
contact from porphyry to greenrock at about 384.
390 it is a soft green mud and it squeezes in so b
get to the bottom of the hole.

Yours ve

G. S

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 20 1959

DATE	INITIALS	CODE

DEPAR

DEN

August 14, 1959

Mr. J. W. Townsend
Executive Director, O.M.E.
Field Team, Region III
Building 20 - Federal Center
Denver 25, Colorado

Re: Docket No. IMEA 4568 (Molybdenum)
Contract No. IDM-E1094
Molybdenum Corp. of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Sir:

We ask you herewith for approval to stop drill hole No. 36. It was drilled to 100 feet BX, then from 100 to 390 feet AX. Hit the contact from porphyry to greenrock at about 384. From there on to 390 it is a soft green mud and it squeezes in so bad that we can't get to the bottom of the hole.

Yours very truly,

A. L. Gresham

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 20 1959

DATE	INITIALS	CODE

OME
DEPARTMENT OF THE INTERIOR
AUG 17 1959
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado

JUL 14 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 17 1959

DATE	INITIALS	CODE
7-17	gad	WVO
~~7/20~~	~~MM~~	~~VOO~~

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket DMEA 4568 (Molybdenum) Contract Idm-E1094, Molybdenum Corporation of America (Moly or Questa mine) Taos County, New Mexico

Enclosed are two copies of a project work approval issued by the OME Field Team, Region III. Also enclosed are two copies of a memorandum dated June 24, 1959, from Robert U. King, Geologist, Geological Survey, pertaining to the diamond drilling, and two copies of a memorandum dated July 7, 1959, from E. N. Harshman, Geologist, Geological Survey and member of OME Field Team, Region III, pertaining to the drifting.

J. W. Townsend

J. W. Townsend

Enclosures

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 17 1959

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

July 9, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket DMEA 4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Reference is made to your letters of April 23, May 18, and June 9, 1959, wherein you request Government approval for certain additional drifting, crosscutting, and diamond drilling. Government action in the matter is as follows:

1. Approval is withheld for extending the No. 7 Crosscut North in a northwesterly direction.

2. Approval is withheld for the drilling of diamond drill holes Nos. 32 and 33 from points in the No. 7 Crosscut North.

3. Approval is denied for the drilling of diamond drill hole No. 5 from a point in the No. 1 Crosscut North because of too close spacing to other holes.

4. Approval is granted to drift not to exceed a distance of 500 feet approximately S. 82° west from a point in the No. 1 Crosscut North at approximate coordinate 1850 N.

5. Approval is granted to drill two diamond drill holes from points in the No. 1 Crosscut North as follows:

Hole No.	Approximate Coordinate location of collar	Inclination
34	N 1400 - E1100	∠ 90°
36	N 1840 - E1040	∠ 90°

The work approved under items 4 and 5 above is to be performed in compliance with all provisions in the contract pertaining thereto.

Nothing in the foregoing work approval shall be construed to increase the total estimated cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Very truly yours,

OME Field Team, Region III

J. W. Townsend

E. N. Harshman

JWT:jy

cc: Chm. Op. Comm. (2)
Finance Office, Reg. III
Amend. file, Reg. III
Harshman
OME/DFC
Corres.
Suspense
Chron.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

OME
DEPARTMENT OF THE INTERIOR
JUL 8 - 1959
REGION III
DENVER, COLORADO

W. O.

July 7, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 4568 (Molybdenum), Contract Ida-2 1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

With reference to the operator's requests of April 30 and June 9, 1959, for extending the No. 7 crosscut north and drifting westerly from the No. 1 crosscut north, the field examiners recommend as follows:

1. Deny the request to extend the No. 7 crosscut north pending completion of drilling from the workstumpt workings and a thorough review of the results of that drilling.

2. Approve the request for drifting approximately S 82° west from approximate coordinate E 1890 in the No. 1 crosscut north. At this time approval should be limited to drifting 500 feet southwesterly; additional drifting, if warranted, may be recommended after completion of the first 500 feet. Drilling to explore laterally from the recommended crosscut is contemplated.

The project was examined on June 3, 1959, at which time the No. 1 crosscut north had been extended to about coordinate 2350 North. The recommendation to drift southwesterly at coordinate 1850 North, in contrast to a previous recommendation for drifting at coordinate 2000 North, was based on the field examination.

I concur with above recommendations.

Orig[illegible],
E. N. [illegible]

E. N. Harshman
Member, Field Team

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 17 1959

DATE	INITIALS	CODE

ENHarshman:arh

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
OME
DEPARTMENT OF THE INTERIOR
RECEIVED JUL 17 1959
JUN 25 1959
DATE | INITIALS
REGION III
DENVER, COLORADO

June 24, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: E. N. Harshman

From: Robert U. King

Subject: Docket MMA 4568 (Molybdenum), Contract IAm-2 1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

In a letter dated May 18, 1959, the operator requested approval to drill the following holes:

A. No. 32, -90°, approx. S 800, W 970, in the No. 7 X-cut N; and No. 33, -90°, approx. N 100, W 1270 also in the No. 7 X-cut N. The objective of these holes is to explore the Goat Hill Porphyry contact which is expected to underlie the crosscut.

B. No. 34, +90°, approx. N 1400, E 1140, No. 1 X-cut N; No. 35, N 65° E, +49°, approx. N 1600, E 1110, No. 1 X-cut N; and No. 36, +90°, approx. N 1840, E 1040, No. 1 X-cut N. The objective of these holes is to explore the Granite-Green rock contact above the level.

A. Holes 32 and 33 cannot be recommended at this time because results of drilling to date have not indicated the probability that the Goat Hill porphyry contact dips eastward under the No. 7 X-cut N. The fact that the X-cut has not yet (6-1-59) encountered the porphyry indicates the contact has a very steep eastward dip of at least 65°. Consequently, vertical down holes would tend to parallel rather than crosscut such a structure.

Furthermore, little evidence has been presented to indicate any significant relations of the Porphyry-Green rock contact to better than average (0.2 percent MoS_2) mineralization.

Finally, exploration from the No. 7 X-cut north logically should follow completion of the currently approved hole No. 31 which is to be drilled from the juncture of the West drift and the No. 7 X-cut N.

B. It is recommended that holes 34 and 36 be approved but that the intervening proposed hole, No. 35, be denied, at least at its proposed inclination and bearing. Drilling at much less than 500-foot centers is not warranted in view of the very uniform character of mineralization indicated to date. A horizontal hole easterly or westerly or a down hole from the proposed location would not be unreasonable and could be recommended if requested by the operator.

Robert U. King

Robert U. King

RUKing:arh

OFFICIAL FILE COPY

Date	Surname	Code
7/14	Murphy	500
	Friend	500
7/14	Talbot	800
7/14	[illegible]	130
7/14	Johnson	110
7/14	gad	220
		500

JUL 14 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract No. Idm-K1094

In reply to your memorandum of July 8, 1959, this office does not list the subject contract with psuedo-certified projects.

When the project work is completed and if the project is not certified, we will then file the subject contract with other psuedo-certified projects in keeping with the special royalty agreement mentioned in Annex II (c) of the contract.

/s/ George C. Selfridge

(JB)

APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines

Harold Kirkemo (JB)
Member, Geological Survey

FMMurphy/gla 7-14-59
cc to: Director's Reading File
Operating Committee
Contract Adm. & Audit Div.
Mr. Lamb, USBM
Mr. Kirkemo, USGS
Docket
Chron

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado

July 8, 1959

Memorandum

TO: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract No. Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Will you please advise if you show the subject contract as a Psuedo Certified project in your records in accordance with the statement in Annex II of the contract.

J. W. Townsend

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1959

DATE	INITIALS	CODE
7-13	gad	2r0
"	Murphy	500

OFFICIAL FILE COPY		
RECEIVED JUL 13 1959		
DATE	INITIALS	CODE
7-13	gad	VVO
	~~Memphis~~	~~500~~

224 New Customhouse
Denver 2, Colorado

July 8, 1959

Mr. J. E. Carman
Molybdenum Corporation of America
Urad Mine
Eagire, Colorado

Re: Docket DMEA 4568 (Molybdenum)
Contract Idm-X1094
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

Enclosed is the Operator's copy of Amendment No. 3, which has been executed to provide for Stage II drifting and drilling in Area A as well as Area B and to include additional ground under Article 2 of the contract.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Executive Officer
OME Field Team, Region III

Copy to:
Wm. R. Kunts
375 Park Avenue
New York 22, N. Y.

JWT:jy
cc: Chm. Op. Comm. (2) w/copy of Government & Audit
Finance Office } copies of Amend. 3
Hurshman } w/copy of Amendment
OME/DFC }
Corres.
Suspense
Chron.

224 New Customhouse
Denver 2, Colorado

July 7, 1959

Memorandum

TO: T. A. Christensen

From: Executive Officer, CMX Field Team, Region III

Subject: Docket No. DMRA 4568 (Molybdenum) Contract No. Idm-E1094
Molybdenum Corporation of America (Moly or Questa Mine)
Taos County, New Mexico

Enclosed is a copy of the Operator's letter of July 2, 1959, requesting that our records be changed to show their new address as follows:

Molybdenum Corporation of America
575 Park Avenue
New York 22, New York

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosure

JWT:ltm

cc: Chmn. Op. Comm. (2)
Corres. file, Reg. III
Susp. file
Chron.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1959

DATE	INITIALS	CODE
7-13	gad	220
"	Murphy	500

Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

OFFICE OF THE
TREASURER

OME
DEPARTMENT OF THE INTE
JUL 6 - 1959
REGION III
DENVER, COLORADO

July 2, 1959

Mr. J. W. Townsend
Executive Officer
O.M.E. Field Team Region III
224 New Customhouse
Denver 2, Colorado

Re: Contract Idm-E1094

Dear Mr. Townsend:

We have been receiving correspondence, and monthly checks from your disbursing office for payments under our DME contract, at our former address.

Would you please change your records to show our new address as follows:

Molybdenum Corporation of America
375 Park Avenue
New York 22, N. Y.

Yours very truly,

Wm. R. Kuntz

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1959

DATE	INITIALS	CODE

ORIGINAL FILE COPY

RECEIVED JUN 29 1959

220
800
700

224 New Customhouse
Denver 2, Colorado
June 26, 1959

CERTIFIED MAIL

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. DMRA 4568 (Molybdenum)
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Carman:

Enclosed are the Government's, Audit, Finance Office, and Field Team copies of proposed Amendment No. 3 to Contract Idm-E1094, which has been prepared to provide for Stage II drilling and drifting in Area A as well as Area B, and to include the Summit Claims Nos. 4, 5, 7, 8, and 16 under the provisions of Article 2 of the contract.

If the Amendment is satisfactory, all copies are to be signed by an official of the Molybdenum Corporation of America authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office.

If the Amendment is not satisfactory, all copies are to be promptly returned to this office together with your comments on or objectives to the Amendment.

If the Amendment is returned properly executed, the Operator's copy will be forwarded to you together with Government approval for drifting and drilling from the No. 1 crosscut north.

Very truly yours,

JWT:ltm

Original signed by
J. W. TOWNSEND

cc: Chmn. Op. Comm. (2)
Harshman
OME/DFC
Corres. file, Reg. III
Susp. file
Chron.

J. W. Townsend
Executive Officer, OME
Field Team, Region III

Enclosure

OFFICIAL FILE COPY

Date	Surname	Code
6/23	Murphy	700
6/23	Talbot	800
6/23	Martin	130
"	Johnson	110
		100
"	a	220
		700

JUN 23 1959

Memorandum

To: Executive Officer
OME Field Team, Region III

From: ACTING Chairman, Operating Committee

Subject: Docket No. DMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract No. Idm-E1094

Enclosed are the original and four copies of a proposed Amendment No. 3 to the subject contract signed by the Acting Director for the Government. Also enclosed are two extra copies for Field Team use.

If you and the Operator find the proposed amendment in order, please have an authorized representative of the corporation sign the original and four copies. Thereafter, kindly distribute the copies in the usual manner.

This amendment has been prepared in accordance with the Field Team's recommendations of June 10, 1959, and prior correspondence.

/s/ W. S. Martin (24B)

Approved:

Frank D. Lamb (24B)
Member, Bureau of Mines

Harold Kirkemo (24B)
Member, Geological Survey

FMMurphy/gla
6/23/59
cc to: Director's Reading File
Operating Committee
H. Kirkemo, Rm. 5222
FMMurphy

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado

June 10, 1959

Memorandum

TO: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract No. Idm-E1094, Molybdenum Corporation of America (Moly or Questa Mine) Taos County, New Mexico

In reference to your letter of May 29, 1959, enclosed are five copies of a map submitted by the Operator which shows the Crosscut No. 1 north, the proposed drift to the west, and the additional claims to be subordinated, also enclosed are the original and one copy of the Operator's letter of June 9, 1959, by which the maps were transmitted to this office.

The Operator requested approval to drift from Crosscut No. 1 north in a direction S 82° W from approximate coordinate N 1850. The field examiners advise that they concur in that location and direction of the drifting even though their report previously submitted recommended drifting westerly from approximate coordinate N 2,000.

It will be necessary to omit for the present drifting to the east from the Crosscut No. 1 north as previously recommended by the field examiners and this office, because the Operator does not, at present, hold clear title to the land involved.

In addition to providing for Stage II drifting in Area A, the amendment should also include provision for Stage II drilling from the Crosscut No. 1 north, or from drifts therefrom.

It is recommended that Summit claims Nos. 4, 5, 7, 8, and 16 be included in the ground subordination under Article 2 of the contract.

OFFICIAL FILE COPY O. M. E. RECEIVED JUN 12 1959		
DATE	INITIALS	CODE
6/12	G	220
		1304
		700

J. W. Townsend

? Hercules group - add later

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OFFICIAL FILE COPY
O.M.E.
DEPARTMENT OF THE INTERIOR
RECEIVED JUN 12 1959
JUN 10 1959

DATE	INITIALS	CODE
DENVER, COLORADO		

June 9, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
Field Team Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. D.M.E.A. 4568 (Molybdenum
Contract No. Idm-E1094
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico

Dear Mr. Townsend:

To supplement our application of April 23rd in which we asked for (1) To extend No. 7 Crosscut North from approximate coordinates N 150 to N 1200;

(2) To drift approximately S 82° W from approximate coordinate N 1850 in Crosscut No. 1 North, 1,000 feet.

We understand in conference with your representatives that "(1)" will not be approved.

We also understand that "(2)" is being considered more favorably but its approval will depend upon amending the contract to include this work under Stage II.

The work under "(2)" together with later anticipated drilling from this drift, if approved, will require the subordination of additional claims under the contract.

We therefore ask that, provided approval is given for all or an appreciable part of our request "(2)" that the following additional claims be subordinated under the contract: Summit No. 4, 5, 7, 8 and 16.

It has been suggested, in connection with our application of April 23, that drifting to the east from Crosscut No. 1 North would be desirable. Unfortunately, this work would enter the Hercules Group which the Molybdenum Corporation has purchased but the title of which has not been definitely cleared.

We are enclosing herewith a claim map showing the mine workings to June 1st; the proposed work from Crosscut No. 1 North; the claims, bounded by red lines already subordinated; the claims requested to be subordinated bounded by orange lines and the Hercules Group bounded by green lines.

This letter will replace our letter of September 16, 1958 regarding subordination of claims on which no action has been taken by the government.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

By J B Carman

J. B. Carman

JBC:r

Original & 5 Copies, 8 Maps

CC: MH
AIG

DMEA Form 7
(12-56)

XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXX
TELETYPE

G. [illegible]elfridge,
Chairman
Operating Committee

[illegible] of Minerals Exploration
1490100, Salaries and
Expenses, Office of Minerals Exploration,
Interior, 1959

OFFICIAL FILE COPY

Date	Surname	Code
6/9	Murphy	700
6/9	Kennedy	700
		130
6/9	[illegible]	130
6/9	Williams	130
"	Johnson	110
		~~100~~
		~~110~~
6/10	W	220
		700

4/9 GCS. 130

MR. J. W. TOWNSEND, EXECUTIVE OFFICER
OME FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

JUN 9 1959

REURTT JUNE 8, DMEA 4568, MOLYBDENUM CORPORATION OF AMERICA. YOU MAY GRANT VERBAL APPROVAL FOR DRILLING IN AREA A PENDING EXECUTION OF AMENDMENT. HOWEVER, APPROVED DRILLING MUST BE FOR EXPLORATION, WITH WIDE SPACING OF HOLES, NOT DEVELOPMENT OR BLOCKING OUT KNOWN MINERALIZED AREAS.

George C. Selfridge

(46)

GEORGE C. SELFRIDGE
CHAIRMAN, OPERATING COMMITTEE

FMMurphy-fw-6/9/59

cc: ~~Docket~~
Dir.Read.File
Operating Com'te
Mr. McInnis, USBM, Rm. 3515
Mr. Kiilsgaard, USGS, Rm.5222
Mr. Murphy
~~700~~
Chron.

8623

Chairman, Operating Committee OME

DN 235 BUR MINES 6-8-59 4-20

CHAIRMAN, OPERATING COMMITTEE, OME

RE DOCKET DMEA 4568, CONTRACT IDM-E1094, MOLYBDENUM CORP. OF AMERICA. MAPS REQUESTED BY YOUR LETTER OF 5-29-59 BEING PREPARED BY OPERATOR AND WILL BE AIRMAULXXX AIRMAILED AS SOON AS AVAILABLE. DRILLING FROM NO. 1 CROSSCUT NORTH DESIRABLE. HOWEVER, NEED YOUR APPROVAL SO THAT PLAN FOR DRILLING CAN BE FORMULATED AND VERBAL APPROVAL FOR THE DRILLING GRANTED BY THIS OFFICE CONTINGENT ON EXECUTION OF AMENDMENT TO PROVIDE FOR STAGE 11 DRILLING IN AREA A. IN ORDER TO KEEP RIG AND DRILL CREW BUSY, VERBAL APPROVAL FOR THE DRILLING WILL BE NEEDED BEFORE IT WILL BE POSSIBLE TO EXECUTE THE AMENDMENT. PLEASE TELETYPE ADVICE AS TO YOUR DECISION.

J W TOWNSEND

ok exploration drilling
not blocking out ore
Stage II - need amendment { to drill in Area A
" drift " "

Denver, Colo.

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.
JUN 9 8 08 AM '59

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 9 1959

DATE	INITIALS	CODE
6/9	W	225
		~~130~~
		700

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/28	Murphy	700
5/28	Kingsbury	700
5/29	EG	130
		~~130~~
		~~130~~
5/29	Johnson	110
		~~100~~ 370
5/29	a	220
		700

MAY 29 1959

Memorandum

To: Executive Officer, OME Field Team, Region III

From: Chairman, Operating Committee, OME

Subject: Docket No. IMEA-4568 (Molybdenum)
Molybdenum Corporation of America
Moly or Questa Mine
Taos County, New Mexico
Contract No. Idm-E1094

This is in response to your memorandum of May 19, 1959, pertaining to Government participation in additional underground exploration of the area north of the 2nd level west drift.

We concur in your recommendation that the area should be explored by drifting east and west from No. 1 crosscut N. at approximately coordinate 2000 N. It is suggested, however, that initial approval be granted for 300 feet of drift from each side of the crosscut. If results warrant, then additional work could be approved. We also concur in your recommendation that the Operator's request to extend No. 7 crosscut to the north should be denied at this time. If the proposed west drift from No. 1 crosscut indicates that this area is favorable, it could be explored by drilling or crosscutting from the drift.

Since the proposed drifts are in Area A, an amendment to the contract will be required. The amendment should also include the new claims to be subordinated. With respect to the new claims, the Operator should subordinate the claims mentioned in your memorandum and probably more. With this in mind, kindly have the Operator submit five copies of a map showing all the claims held; then we will select the claims that we believe should be subordinated. This map should show the principal drifts and crosscuts as well as the proposed drifts from No. 1 crosscut N. Upon receipt of these data we will prepare the proposed amendment.

Will you kindly request the field examiners to take some check samples when they inspect the mine. It might be well at this time to check the Operator's results by cutting a few duplicate samples. toward the present face of No. 1 crosscut north.

43683

On May 27, 1959, Mr. J. B. Carman, in a (local) telephone conversation with Mr. Murphy, asked if the corporation's proposal for new work mentioned in his letter dated April 23, 1959, to you had been considered. Mr. Murphy stated that drifts from No. 1 crosscut N. might be approved, but at this time the proposed extension of No. 7 crosscut to the north would not be approved.

Mr. Murphy also mentioned that drifts both east and west from No. 1 crosscut were being considered. Mr. Carman then stated that he could see no need of the east drift since it would enter an area that had previously been explored by the company. Mr. Murphy said that we had no information on such work and it would be best for Mr. Carman to discuss the matter with you. He agreed to do so and said that he would visit you on his return from Washington.

/s/ George C. Selfridge

(GCS)

APPROVED:

/s/ O. M. Bishop (GCS)
Member, Bureau of Mines

W. P. Williams (GCS)
Member, Geological Survey

FMurphy/fw-5/27/59

cc: Docket
Dir.Read.File
Operating Com'te
Mr. McInnis, USBM, Rm. 3515
Mr. Kiilsgaard, USGS
Mr. Murphy
Chron.

Memorandum

To: Chairman, Operating Committee, OME.

From: Division of Rare and Miscellaneous Metals

Re: Contract No. Idm-E 1094
Molybdenum Corporation of America

Under stage II of the subject contract there remains 3382 feet of drifting and crosscutting and as of April 1, 1959 about 15000 feet of core drilling.

The completion date of the contract is December 15, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE
5/25	glg	220
5/27	Murphy	700

224 New Customhouse
Denver 2, Colorado

May 22, 1959

Mr. J. E. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. [illegible] 4568 (Molybdenum)
Contract No. IAm-K1094
Molybdenum Corporation of America
(Moly or Quarta mine)
Taos County, New Mexico

Dear Mr. Carman:

Reference is made to your letter of May 18, 1959, wherein you request Government approval for the drilling of two holes f rom the No. 7 XCN, and three holes from the No. 1 XCN.

The No. 1 XCN is in area A, and there is presently no provisions in the contract for drilling in that area under Stage II; therefore, it will be necessary to defer action on your requested approval for the drilling until the matter of extending the two crosscuts is resolved.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Executive Officer, OME
Field Team, Region III

JWT:ltm

cc: Chmn. Op. Comm. (2) ✓
Harshman
Belser, OME/DFC
Corres. File, Reg. III
Susp. File, Reg. III
Chron.

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE
5/27	Murphy	700

224 New Customhouse
Denver 2, Colorado

MAY 21 1959

Memorandum

TO: E. N. Harshman)
Carl Belser) w/enclosures

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMMA 4568 (Molybdenum) Contract No. Dm-K1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Enclosed is a copy of the Operator's letter of May 18, 1959, wherein Government approval is requested for the drilling of two holes from the No. 7 XCN, and three holes from the No. 1 XCN.

The holes would be drilled from portions of the crosscuts that were driven at company expense without Government participation, under the provisions of the DMMA Contract.

The No. 1 XCN is in Area A, and there is no provision in the contract for drilling in that area under Stage II. Under the circumstances, and in reference to matters discussed in the teletype from the Chairman, Operating Committee, dated August 29, 1958, regarding additional work, it appears that the matter of the drilling requested must be deferred until we have received a decision from Washington regarding the proposed extension of the No. 1 XCN, and drifting easterly and westerly from it, which is now under consideration.

When the foregoing matter has been resolved, please submit a Joint Memorandum Report containing your recommendations relative to the requested drilling.

Original signed by
J. W. TOWNSEND

J. W. Townsend

JWT:ltm

cc: Chmn. Op. Comm. (2)✓) w/cpy
Corres. File Reg.III) Oper's ltr.
Suspense File Reg. III
Chron.

10.0

OME
DEPARTMENT OF THE INTERIOR

MAY 20 1959
REGION III
DENVER, COLORADO

May 18, 1959

Mr. J. W. Townsend
Executive Officer
O.M.E. Field Team Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket D.M.E.A. 4568 (Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We ask approval of the following drill holes in connection with the above contract.

2nd LEVEL DRIFT WEST CROSSCUT No. 7 NORTH

Hole No.	Bearing	Inclination	Coordinate	
32	0	-90°	S 200	W 970
33	0	-90°	N 100	W 1270

The objective of these holes is to reach and explore underlying porphyry contact.

2nd LEVEL DRIFT WEST CROSSCUT No. 1 NORTH

34	0	plus 90°	N 1400	E 1100
35	N 65° E	plus 45°	N 1600	E 1110
36	0	plus 90°	N 1840	E 1040

The objective of these holes is to determine the overlying contact of the granite with the green rock and determine mineralization in the vicinity of the contact.

As you are quite familiar with the geology in both of these areas, we have dispensed with detailing all our reasons for this request but will be glad to add more if you wish.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

By J B Carman

J. B. Carman

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

JBC:r

Original & 5 Copies
CC: MH
AIG
File

OFFICIAL FILE COPY O. M. E. RECEIVED MAY 22 1959		
DATE	INITIALS	CODE
5/25	G	220
5/27	Murphy	700

224 New Customhouse
Denver 2, Colorado

May 19, 1959

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Moly Mine
Questa, New Mexico

Re: Docket No. DMRA 4568 (Molybdenum)
Contract No. Idm-E1094
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter of May 13, 1959, and drilling approval from the DMRA Field Team, Region III, dated August 5, 1958, pertaining to the drilling of hole No. 19, this constitutes concurrence by the Government for you to not drill hole No. 19 at the previously approved location in the No. 2 North crosscut at coordinates E 425 and N 410.

Very truly yours,

OME Field Team, Region III

By J. W. Townsend
J. W. Townsend
Executive Officer

JWT:ltm

cc: Chmn. Op. Comm. (2))
Fin. Off. Reg. III
Amnd. File, Reg. III)
Harshman) w/cpy
Belser, OME/DFC) Oper's
Corres.) ltr.
Susp. File, Reg. III) 5/13/59
Chron.

cc: Mr. J. B. Carman
Empire, Colorado

OME
DEPARTMENT OF THE INTERIOR
MAY 15 1959
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 22 1959

DATE	INITIALS	CODE

May 13, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
DMEA Field Team III
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 4568
(Molybdenum)
Contract IDM - E1094
(Moly or Questa Mine)
Taos County, New Mexico
Molybdenum Corp. of America

Dear Mr. Townsend:

We herewith ask approval to cancel drill hole No. 19.

Drill hole No. 19 is located in No. 2 CxN at about coordinate E 425 and N 410.

No. 2 CxN was in extremely heavy ground and we were unable to keep it open long enough to finish drilling. We have tried opening it up again but the cost would be prohibitive.

Yours very truly,

A. L. Greslin

A. L. Greslin, Manager

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado

May 19, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	
5/25	a	
~~5/26~~	~~[illegible]~~	220
		130
		700

Memorandum

TO: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract No. Idm-E1094
Molybdenum Corporation of America (Moly or Questa mine)
Taos County, New Mexico

Enclosed are the following pertaining to Government approval for additional drifting under the subject contract.

1. The original and one copy of the Operator's letter of April 23, 1959, with attached data constituting a request for the additional work.

2. The original and two copies of a Memorandum Report dated May 14, 1959 from R. U. King, Geologist, Geological Survey, and Carl Belser, Mining Engineer, Bureau of Mines, pertaining to the Operator's work request.

The Operator requests Government approval, under the provisions of the contract, to extend the No. 7 XCN due north for 1,000 ft. and to drift S 82° W from the No. 1 XCN a distance of 1,000 ft.

This office concurs in the field examiners recommendations that:

1. The extension of the No. 7 XCN be denied. agree

2. Approval be granted for drifting 1,000 ft., both easterly and westerly, from the No. 1 XCN approximately along coordinate N 2,000 ft., also provisions be made to establish a starting point of Government participation in extending the No. 1 XCN to the north as required to reach the starting point of the easterly and westerly drifts.

Approval for the drifting easterly and westerly will necessitate including additional ground to that presently subordinating under the contract.

By letter of September 16, 1958, the Operator proposed subordinating to the Government the Summit claims Nos. 4, 7, and 16; however, it appears that the Summit claims Nos. 5 and 8 should also be subordinated.

In addition if favorable consideration is to be given for Government participation in the drifting easterly from the No. 1 XCN, at least the Buena Vista No. 6, Renegade and Phyllis No. 5 claims should be subordinated. The Operator has indicated willingness to subordinate such additional ground as required by the Government.

If you concur with our recommendations regarding the crosscutting and drifting easterly and westerly, please advise, and we will initiate action with the Operator in obtaining approval for including such additional grounds as you consider necessary.

By J. W. Townsend
J. W. Townsend

By E. N. Harshman
E. N. Harshman

Enclosures

OFFICIAL FILE COPY
O. M.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver 25, Colorado

OME
DEPARTMENT OF THE INTERIOR
MAY 18 1959
DENVER COLORADO

May 14, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: E. N. Harshman

From: R. U. King
Carl Belser

Subject: Docket DMEA 4568 (Molybdenum), Contract Idm-E 1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

The operator in a letter of April 23, 1959, requests approval (1) to extend No. 7 crosscut north for a distance of 1050 feet due north, and (2) to drift S 82° W a distance of 1,000 feet from No. 1 crosscut north at about coordinate 1850 N. The operator's justification for these two proposals arises from the favorable results obtained from driving the No. 7 crosscut north and the No. 1 crosscut north at company expense. Also, he has found it necessary to abandon preliminary exploration by surface drilling owing to the extreme difficulties of drilling and the expense involved.

Proposed extension of No. 7 crosscut north

Inspection of the assay plan of the No. 7 crosscut north does not bear out the operator's contention that the grade of MoS_2 has increased significantly toward the face. Assay averages for the last 100-foot intervals amount to 0.26 and 0.16 percent MoS_2 for the 5-foot wall samples, and 0.19 and 0.20 percent MoS_2 for the February and March

monthly composite car grab samples. This is virtually the same as the grade in the last several hundred feet of the West Drift (0.12 to 0.23 percent MoS_2).

At this time no evidence exists to support the operator's conclusion that ore-grade material occurs along the contact of the Green rock with the porphyry (fig. 1). The high grade ore in holes 22 and 27 which the operator relates to the porphyry (Goat Hill rhyolite porphyry) is better explained as related to the downward projection of the known trend of mineralization on the soda granite-green rock contact.

In addition, Surface Drill hole II A (fig. 1) which bottomed within 500 feet vertically and 100 feet horizontally of the area (1200 N, 1200 W) of proposed exploration, averaged about 0.07 percent MoS_2 for the entire 1,160 feet of the hole. It appears that the surface geochemical anomalies in the western area may be adequately accounted for by the MoS_2 mineralization penetrated by hole II A. Because of the uniformity of mineralization discovered to date and lack of evidence of high grade material in this area, it is recommended that the request to extend No. 7 crosscut north along coord W 1300 be denied.

Proposed drifting S 82° W from No. 1 crosscut north

The grade of mineralization over the last 500 feet in the No. 1 crosscut north (fig. 2) is about twice that of the first 1,500 feet and about equal to that found in the higher grade zone (0.25 percent) along the West drift. Further exploration is warranted in this area for the following reasons: (1) the crosscut has penetrated material that is approaching ore grade (1957 average grade at Climax was 0.367 percent MoS_2);

and (2) the proximity of the crosscut to the area of highest geochemical soil anomalies, the area of high grade near surface deposits, and the Granite-Green rock contact, still the best ore guide available, all point to the conclusion that higher grade material is more likely to be discovered in this area than elsewhere.

It is concluded that it would be to the Government's advantage to determine the limits of the potential ore-bearing zone below the anomalous area close to the area of known high grade mineralization, and in the vicinity of the Granite-Green rock contact. This information can probably be most readily obtained by drifting both westward and eastward along coordinate 2000 N from the No. 1 crosscut north, and by drilling from these proposed drifts, as well as from the existing part of the No. 1 crosscut north.

The operator's request is to drift 1,000 feet S 82° W from a convenient point along No. 1 crosscut north, and is considered to be reasonable, but the examiners recommend that the proposal be modified to drifting 1,000 feet both easterly and westerly on the 2000 N coordinate.

The above recommended exploration will require subordination of additional claims north and east of the presently subordinated block, a portion of which ground was referred to in correspondence to the Operating Committee dated October 28, 1958. The operator has advised that the company has purchased recently and owns ground adjoining the area of proposed exploration. It is suggested that he be advised to submit for subordination sufficient claims to cover the projected work.

R. U. King, Geologist

Carl Belser, Mining Engineer

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 18 1959

DATE	INITIALS	CODE
5/18	a	220
5/18	[illegible]	800
5/19	[illegible]	700

22d New Customhouse
Denver 2, Colorado

May 14, 1959

Mr. A. L. Gresslin, Manager
Molybdenum Corporation of America
Questa, New Mexico

Re: Contract [illegible] (Molybdenum)
Contract 14n-[illegible]
Molybdenum Corporation of America
(Only or Questa mine)
Taos County, New Mexico

Dear Mr. Gresslin:

Supplementing drilling approval dated September 30, 1958, and in reference to your letter of May 11, 1959, requesting the drilling of Hole No. 29 to a depth greater than 500 feet, this constitutes Government concurrence for the drilling of the hole to a greater depth.

Hole No. 29 may be contained within practical limits as long as the visible MoS2 is estimated to be in excess of 0.25%.

Nothing in this concurrence in the drilling of Hole No. 29 to greater depth shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Very truly yours,

ORE Field Team, Region III

By J. W. Townsend
Executive Officer

Copy to:
J. B. Gannon
Eagle, Colorado

JWT:jy

cc: Finance Office, Reg. III
Assnd. File, Reg. III
Chm. Op. Comm. 2
Corres. file
Contract file
Hardman
Balser, ORE/DPC
Suspense file
Chron.

} w/copy of Oper's. ltr. of May 11.

Molybdenum Corporation of America

Moly Mine
Questa, New Mexico

May 11, 1959

OME
DEPARTMENT OF THE INTERIOR
MAY 1 1 1959
REGION 6
DENVER, COLORADO

Mr. J. W. Townsend
Executive Officer, O. M. E.
IMEA Field Team III
224 New Customhouse
Denver 2, Colorado

Re: Docket IMEA 4568
(Molybdenum)
Contract IDM-F1094
(Moly or Questa Mine)
Taos County, New Mexico
Molybdenum Corp. of America

Dear Mr. Townsend:

We herewith ask your approval to continue drilling hole No. 29 beyond 500 foot. Diamond drill hole No. 29 is located at coordinate 85CE and about 150 south, bearing south at a minus 45 degree.

We hit Granite at 140 feet and are still in Granite with some good mineralization.

Yours very truly,

A. B. Gresslin

A. B. Gresslin, Mana

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O. M. E.
RECEIVED MAY 18 1959

DATE	INITIALS	CODE

W.O.(2)

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

OME
DEPARTMENT OF THE INTERIOR
APR 27 1959
REGION III
DENVER, COLORADO

April 23, 1959

Mr. J. W. Townsend
Member Field Team Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket No. D.M.E.A. 4568
Molybdenum
Contract No. Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

Our requests of August 14, 1958 and November 25, 1958 for additional drifting to the north of the 2nd level drift west by extending the No. 1 Cx N (at 1200 E on the West Drift) and driving crosscut No. 7 N, northwest from 800 W on the West Drift, were denied pending the outcome of the surface drill holes I, II, III and IV.

In the meantime, No. 1 crosscut has been advanced about 1000 feet to approximately 1850 N, 1000 E and No. 7 crosscut to about 150 N, 1300 W. Both disclose what we consider very encouraging results, both geological and mineralogical. These results corollate very well with geological projections and geochemical results. Details are given in Dr. Carpenter's summary, attached hereto.

The following maps and data are included:

maps placed in envelope below folder #3

PLATE I. Surface, topography, geology, geochemical results, surface drill hole locations, as originally planned, and mine workings including some of the old mine workings.

PLATE II. Geology, Crosscut No. 1 North.

PLATE II-A. Assay map of Crosscut No. 1 North.

PLATE III. Geology, Crosscut No. 7 North.

PLATE III-A. Assay map, Crosscut No. 7 North.

PLATE IV. Horizontal and Vertical projection of drill hole No. II-A.

Log of drill hole II-A.

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O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

SURFACE DRILL HOLES:

Hole II was driven to 780 feet and abandoned. Hole II-A was then started near II and after many difficulties bottomed at 1160 feet on April 13, 1959. About 2350 feet of drilling, not including reaming and lost equipment was done to get 1160 feet of "effective" hole and, at a prohibitive cost.

April 23, 1959

Mr. J. W. Townsend
Member Field Team Region III
Denver, Colorado.

Re: Docket No. D.M.E.A. 4568
Molybdenum
Contract No. Idm-E1094

This hole was planned to go S-30° E at 450° inclination; it bottomed several hundred feet west and 150 feet above its planned objective as shown on Plate IV. The depth of the glassy volcanics and the location of porphyry is the only significant information obtained from it. (See log of Hole II-A).

With the unfortunate outcome of Hole II-A as to cost and information, and in addition the fact that the underground work is nearing the area which the holes were planned to explore, it has been decided to do no more long hole drilling from the surface. It is evident to us that the best means of exploring in this area is by drifts with subsequent drilling from them.

We therefore ask, in view of the foregoing, that you approve O.D.M. participation in the following:

(1) To extend No. 7 Crosscut North, north from approximate coordinates N-150 to N-1200.

(2) To drift approximately S 82° W from coordinate N-1850 in Crosscut No. 1 North, 1000 feet. We would appreciate having the north coordinate of the take-off of this drift flexible as we are now extending this crosscut and by the time we get a decision on this application we may encounter a more desirable location north of 1850 for drifting westward.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA

By J B Carman

J. B. Carman
Urad Mine, Empire, Colorado

JBC:r

Original and 5 Copies
6 Maps
1 Drill Hole Log

CC: MH
ALG

SUMMARY OF EXPLORATION AT THE QUESTA MINE QUESTA, NEW MEXICO

THIS REPORT IS TO ACCOMPANY AN APPLICATION FOR CERTAIN WORK UNDER THE D. M. E. A. CONTRACT WITH THE MOLYBDENUM CORPORATION OF AMERICA

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O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

ROBERT H. CARPENTER

APRIL 20, 1959

ROBERT H. CARPENTER, Consulting Geologist

OME
DEPARTMENT OF THE INTERIOR
APR 27 1959
REGION III
DENVER, COLORADO

SUMMARY OF EXPLORATION AT THE QUESTA MINE QUESTA, NEW MEXICO

Critical relationships have become apparent as a result of recent exploration work at the Questa mine in Taos County, New Mexico, particularly in No. 1 crosscut north.

A well mineralized zone was encountered in this crosscut from coordinates 1524 north to 1791 north; the average MoS_2 content is approximately 0.24% in this interval. The molybdenite occurs in narrow veinlets with quartz and sparse pyrite, as paint on joint surfaces, and in veins several inches in width accompanied by gangue minerals. This zone is shown on Plate 2.

In the vicinity of coordinate 1850 north in No. 1 crosscut north, strong molybdenite mineralization was encountered in highly fractured rocks. The MoS_2 occurs along faults and on joint surfaces for the most part; very few quartz-molybdenite veinlets were noted. This zone averages about 0.37% MoS_2 for over a hundred feet.

A northeast trending dike of grey granite porphyry containing potash feldspar phenocrysts up to 15 mm in length and plagioclase phenocrysts up to 8 mm long embedded in a groundmass of microcrystalline mosaic of quartz and potash feldspar was intersected at approximately coordinate 880 north. It is believed to be the same dike which was found in No. 2 crosscut north, in the main west drift, and in No. 4 crosscut south.

To the north of this dike the granitic rocks alternate between this type of porphyry and the so called red rock, a porphyry of similar composition, but consisting largely of a mosaic of quartz and feldspar with numerous phenocrysts of plagioclase and sparse potassium feldspar phenocrysts. This rock probably should be classified either as a porphyritic aplite or as

a fine grained granite porphyry.

Both types have been well sericitized, and locally, such as the zone from 1700 N to 1850 N, highly kaolinized as well. Strong mineralization is present in areas of intense kaolinization and in areas of intense sericitization.

The geochemical anomoly which trends westerly from upper Sulfur Gulch to Goat Hill Gulch on the surface, and shown on Plate 1, lies directly above and to the north of the mineralization in No. 1 XCN at coordinate 1850 N. On the surface appreciable shattering is present in the extremely altered rocks along this trend.

Porphyry similar in type to the porphyry found on the surface on Goat Hill has been intersected in No. 7 crosscut northwest at the turnoff from the main drift west, and in the vicinity of coordinate 50 north along the south wall and in the back. Alteration has been extreme, but quartz phenocrysts are evident just as in the case of the Goat Hill porphyry. Quartz phenocrysts are not apparent in the granite porphyries of the 200 exploration level.

The "green rock" sequence occurring in No. 7 crosscut northwest is believed to consist largely of andesitic flows, tuffs, and sediments. These rocks have been chloritized and locally flooded by later altering solutions resulting in rocks which are brownish, brittle, partly silicified, and sporadically mineralized. In general, the zones of superposed alteration, just described, are more strongly mineralized. The altering solutions may have been derived from the Goat Hill porphyry.

Molybdenite in No. 7 XCNW occurs as paint on joint surfaces, with quartz and pyrite in small veinlets and on major fractures. Plate 3 illustrates the structural fabric encountered along this crosscut.

It is my conclusion after a review of data made avaliable from geologic studies on the surface and underground that additional exploration is highly desirable in an arc northward, westward, and northeastward from No. 7 XCNW , and westward and northward from No. 1 XCN. On the surface above this arc and underground the following significant geologic features are present:

a. Very intense hydrothermal alteration is evident along this zone from the Questa mine granite porphyry body in Sulfur Gulch westward to the Goat Hill porphyry body.

b. Strong structural development is discernable along this zone including east-west trending, mineralized fissures in Sulfur Gulch and northeast trending faults in Goat Hill Gulch.

c. A pronounced geochemical anomoly extends from Sulfur Gulch westward to the Goat Hill porphyry body (Plate 1)

d. Small porphyry necks and dikes are found along this zone.

e. The Questa mine granite porphyry body plunges westward from the surface at a low angle down to at least No. 1 XCN. (Plate 2) Mineralization is present at the surface and in No. 1 XCN.

f. Mineralization is present in No. 7 XCNW; porphyry of the Goat Hill type also was noted in this crosscut. (Plate 3)

It is my recommendation that a drift be driven westerly for 1,000 feet at a favorable location at or to the north of Coordinate 1850 north in No. 1 crosscut north. It is my recommendation that No. 7 XCN be turned north at Coordinate 1300 west, and driven north for 1,000 feet. It also is my recommendation that from these workings diamond drilling be completed to test all reasonable possibilities of ore occurrences along this are in plan, at depth, and upward (particularly on the eastern side of the arc.)

It is my opinion that ore may occur along this zone at any place where there has been appreciable rock failure in relatively brittle rocks prior to molybdenite mineralization.

Respectfully submitted,

Robert H. Carpenter

Robert H. Carpenter
April 20, 1959

MOLYBDENUM CORPORATION OF AMERICA
QUESTA, NEW MEXICO
MOLY MINE

CORE LOG DIAMOND DRILL HOLE II-A

AT COORDINATES N-1944.0, W-[illegible]02.51. BEARING: S-30° E; INCLINATION: -50°

DISTANCE FROM	TO	SAMPLE NUMBER	PER CENT Mo S2	REMARKS
0.0	50.0			Altered Rhyolite Porphyry
50.0	53.6	4637	0.05	" " "
53.6	63.6			Andesite
63.6	73.6	4638	0.07	"
73.6	83.6	4639	0.07	Glassy Volcanics Breccia
83.6	93.6	4858	0.10	" " "
93.6	100			" " "
100	102	4859	0.10	" " "
102	105.8	4860	0.07	" " "
105.8	108.8	4861	0.07	" " "
108.8	113.0	4862	0.07	" " "
113	114.8	4863	0.05	" " "
114.8	116.8	4864	0.07	" " "
116.8	119	4874	0.10	" " "
119	122.6	4875	0.07	" " "
122.6	123.6	4876	0.10	" " "
123.6	124.8	4877	0.05	" " "
124.8	127.0	4878	0.07	" " "
127	130.2	4879	0.07	" " "
130.2	137.2	4880	0.10	" " "
137.2	141.8	4881	0.10	" " "
141.8	145.8	4882	0.07	" " "
145.8	150.0	4883	0.07	" " "
150.0	155	5016	0.10	" " "
155	156	5017	0.10	" " "
156	165	5018	0.07	" " "
165	170	5019	0.07	" " "
170	175	5020	0.07	" " "
175	185	5021	0.10	" " "
185	191.6	5022	0.05	" " "
191.6	195	5023	0.02	" " "
195	200	5024	0.05	" " "
200	205	5025	0.07	" " "
205	210	5026	0.05	" " "
210	210.5	5027	0.05	" " "
210.5	215	5070	0.07	" " "
215	217.3	5071	0.07	" " "
217.3	219	5072	0.07	" " "
219	221.6	5073	0.05	" " "
221.6	230	5074	0.05	" " "
230	235	5075	0.02	" " "
235	243.8	5076	0.05	" " "
243.8	252.6	5077	0.05	" " "
252.6	255.6	5078	0.05	" " "
255.6	259.6	5079	0.05	" " "
259.6	264.6	5080	0.05	" " "

MOLYBDENUM CORPORATION OF AMERICA
QUESTA, NEW MEXICO
MOLY MINE

CORE LOG DIAMOND DRILL HOLE II-A

AT COORDINATES N-1944.0, W-902.51. BEARING: S-30° E; INCLINATION: -50°

DISTANCE FROM	TO	SAMPLE NUMBER	PER CENT Mo S2	REMARKS
264.6	270	5081	0.05	Glassy Volcanics Breccia
270	280	5082	0.07	" " "
280	286	5083	0.07	" " "
286	295	5084	0.10	" " "
295	305	5085	0.07	" " "
305	315	5086	0.07	" " "
315	325	5087	0.10	" " "
325	350	5088	0.07	" " "
350	360	5089	0.07	" " "
360	362.6	5198	0.02	" " "
362.6	365	5199	0.05	" " "
365	367.6	5200	0.05	" " "
367.6	372.6	5201	0.05	" " "
372.6	375			" " "
375	377.6	5202	0.05	" " "
377.6	382.6	5203	0.02	" " "
382.6	392			" " "
392	397.6	5204	0.02	" " "
397.6	400	5205	0.02	" " "
400	407.6	5206	0.02	" " "
407.6	410			" " "
410	415	5207	0.02	" " "
415	418	5208	0.02	" " "
418	422	5217	0.05	" " "
422	425	5218	0.05	" " "
425	430	7442	0.10	Glassy Volcanics
430	440	7443	0.10	" "
440	450	7444	0.07	" "
450	460	7445	0.10	Porphyry
460	470	7446	0.02	Glassy Volcanics
470	480	7447	0.07	" "
480	490	7448	0.10	" "
490	500	7449	0.07	" "
500	510	7450	0.07	" "
510	520	7451	0.07	" "
520	530	7491	0.02	" "
530	540	7492	0.02	" "
540	550	7493	0.05	" "
550	560	7595	0.05	" "
560	570	7496	0.05	" "
570	580	7497	0.05	" "
580	590	7498	0.07	" "
590	600	7544	0.07	" "
600	610	7545	0.05	" "
610	620	7546	0.05	" "

MOLYBDENUM CORPORATION OF AMERICA
QUESTA, NEW MEXICO
MOLY MINE

CORE LOG DIAMOND DRILL HOLE II-A

AT COORDINATES N-1944.0, W-902.51. BEARING: S-30° E; INCLINATION: -50°

DISTANCE FROM	TO	SAMPLE NUMBER	PER CENT Mo S2	REMARKS
620	630	7562	0.07	Porphyry
630	640	7563	0.10	"
640	650	7584	0.05	"
650	660	7585	0.12	"
660	670	7586	0.10	"
670	680	7595	0.02	Glassy Volcanics
680	690	7596	0.02	" "
690	700	7597	0.02	" "
700	710	7784	0.05	Transition and Quarts
710	720	7785	0.03	" " "
720	730	7786	0.05	Silicious Glassy Volcanics
730	740	7787	0.03	" " "
740	770	7788	0.03	" " "
770	790	7792	0.07	" " "
790	800	7793	0.05	" " "
800	810	7794	0.07	Dark Quarts -- Granite
810	820	7795	0.05	" " "
820	830	7796	0.07	" " "
830	840	7797	0.07	Porphyry
840	850	7798	0.05	"
850	860	7799	0.05	Porphyry, Some Quarts
860	870	7800	0.07	" " " Pyrite
870	880	7801	0.05	" " " "
880	890	7802	0.07	Granite
890	900	7803	0.05	" Dark Quarts
900	910	7804	0.05	" " "
910	920	7805	0.07	" " "
920	930	7843	0.05	Porphyry
930	940	7844	0.05	"
940	950	7845	0.03	"
950	960	7846	0.03	Porphyry
960	970	8088	0.07	"
970	980			"
980	990			"
990	1000	8089	0.05	"
1000	1010	8090	0.03	"
1010	1020	8091	0.07	"
1020	1030	8092	0.05	"
1030	1040	8093	0.07	"
1040	1050	8094	0.05	"

MOLYBDENUM CORPORATION OF AMERICA
QUESTA, NEW MEXICO
MOLY MINE

CORE LOG DIAMOND DRILL HOLE II-A

AT COORDINATES N-1944.0, W-902.51. BEARING: S-30° E; INCLINATION: -50°

DISTANCE FROM	TO	SAMPLE NUMBER	PER CENT Mo S2	REMARKS
1050	1060	8095	0.03	Porphyry
1060	1070	8096	0.03	"
1070	1080	8097	0.03	"
1080	1090	8090	0.07	"
1090	1100			"
1100	1110			"
1110	1120			"
1120	1130			"
1130	1140			"
1090	1140	8099	0.07	"
1140	1150	8100	0.07	"
1150	1160	8101	0.05	"

End of Hole

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O. M. E.
RECEIVED APR 27 1959

DATE	INITIALS	CODE
4/27	G	220
4/27	[illegible]	800
4/28	[illegible]	[illegible]

224 New Customhouse
Denver 2, Colorado
April 24, 1959

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Questa, New Mexico

Re: Docket No. DMRA 4568
(Molybdenum)
Contract Idm-81D94
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter of April 22, 1959, this constitutes concurrence by the Government for you to discontinue drilling in hole No. 22 at a depth of 800 feet, due to adverse drilling conditions encountered. The hole is considered completed at its present depth of 800 feet.

Very truly yours,

OME Field Team, Region III

Original signed by
J. W. TOWNSEND

By _____
J. W. Townsend
Executive Officer

JDC:hmh

cc: Chmn. Op.Comm. (2)
Finance Office, Reg. III
Harshman
Belser, OME/DFC
Corres.file, Reg.III
Amendment File, Reg. III
Cooper
Chron

) w/copy of Operator's letter of 4/22/59

cc: Mr. J. B. Carman
Urad Mine,
Empire, Colorado

OME
DEPARTMENT OF THE INTERIOR
APR 25 1959
REGION III
DENVER, COLORADO

April 22, 1959

Mr. J.W.Townsend
Executive Officer O.M.E.
D.M.E.A. Field Team 111
224 New Customhouse
Denver 2 Colorado

Re: Docket D.M.E.A. 4568
(Molybdenum)
Contract I.D.M. E1094
(Moly or Questa Mine)
Taos County, New Mexico
Molybdenum Corp. of America

Dear Mr. Townsend:

We Herewith ask your approval to discontinue drilling in hole No.22 located in 5cxs bearing 60 degrees west at a -70 degrees.

We set up on this hole again and drilled beyond 500 feet to a depth of 800 feet. That was as far as they could drill with their equipment. There was some good mineralization still showing in the core when we had to quit.

Yours very truly

A. Greslin

A.L. Greslin, Manager

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O. M. E.
RECEIVED APR 27 1959

DATE	INITIALS	CODE

4568

224 New Customhouse
Denver 2, Colorado
April 14, 1959

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Questa, New Mexico

Re: Docket No. DMEA 4568
(Molybdenum)
Contract No. Idm-11094
Molybdenum Corporation of America
(Moly Or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter of April 4, 1959, this constitutes concurrence by the Government for you to discontinue drilling in hole No. 27 at a depth of 679 feet, due to adverse drilling conditions encountered. The hole is considered completed at its present depth of 679 feet.

Very truly yours,

OME Field Team, Region III

Original signed by
J. W. TOWNSEND

By _____
J. W. Townsend, Member

cc: Mr. J. B. Carman
Urad Mine
Empire, Colorado

JDC:hmh

cc: Chmn. Op. Comm. (2)) w/copy of
Finance Office, Reg.III) Operator's
Harshman) letter of
Belser, OME/DFC) 4/4/59
Corres.file, Reg. III)
Amendment file, Reg.III
Cooper
Chron

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RECEIVED APR 16 1959

DATE	INITIALS	
4/16	C	120
4/17	Moyle	700

OME
DEPARTMENT OF THE INTERIOR
APR 6 - 1959
REGION III
DENVER, COLORADO

April 4, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
D.M.E.A. Field Team III
224 New Customhouse
Denver 2, Colorado

Re: Docket D.M.E.A. 4568
(Molybdenum)
Contract I.D.M. E 1094
(Moly or Questa Mine)
Taos County, New Mexico
Molybdenum Corp. of America

Dear Mr. Townsend:

We herewith ask your approval to discontinue drilling in hole No. 27 in No. 4 CxS, at Coordinate 700 S. It is a minus 90 degree hole.

We drilled hole No. 27 to a depth of 679 feet but stuck the rods and lost some of them as well as the bit in the hole and couldn't get them out.

Yours very truly,

A. L. Greslin

A. L. Greslin, Manager

cc: J. B. Carman

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

224 New Customhouse
Denver 2, Colorado
April 22, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 27 1959

DATE	INITIALS	CODE
4/27	G	220
"	JEJ	110
4/28	[illegible]	800
~~4/28~~	~~[illegible]~~	~~700~~

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4568 (Molybdenum) Contract Idm-E1094, Molybdenum Corporation of America, (Moly or Questa mine) Taos County, New Mexico - Interim Geologic Report

Enclosed are the original and two copies of an interim geologic report, dated April 17, 1959, from R. U. King, Geologist, Geological Survey, covering progress under the subject contract, as well as work being performed by the Operator at its sole expense, during the period from October, 1958, to early March, 1959.

J. W. Townsend

J. W. Townsend

Enclosures

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O. M. E.
RECEIVED APR 27 1959
DATE | INITIALS | CODE

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Office of Minerals Exploration
Denver Federal Center
Denver, Colorado

OME
DEPARTMENT OF THE INTERIOR
APR 17 1959
REGION III
DENVER, COLORADO

April 16, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: E. N. Harshman

From: R. U. King

Subject: DMEA Docket 4568 (Molybdenum), Contract Idm-E 1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico
INTERIM GEOLOGIC REPORT

Exploration at the Questa mine during the period October 1958 to March 1959, consisted of 2,500 feet of core drilling, done under Stage II of the contract, about 1,500 feet of crosscutting and 700 feet of core drilling from the surface, done by the operator. A check of the operator's analytical (1957) results, begun early in 1958, indicates that his revised (1958) analytical procedures are reliable.

Two inclined down holes from the No. 5 crosscut south average better than 0.2 percent MoS_2 for their entire lengths, and one vertical down hole averages better than 0.4 percent MoS_2 for its first 640 feet. These results are further evidence of a significant body of marginal grade ore within the limits of the explored mineralized (0.1 percent MoS_2 +) area. The body, only vaguely outlined to date, seems to trend from the area of the company's former workings westward along the west drift and across the Nos. 4 and 5 crosscuts south (fig. 1); its dip

or plunge can only be surmized (figs. 3, 4, and 5). The two holes drilled from the southern extremity of No. 4 crosscut south show no improvement in MoS_2 mineralization nor other evidence of increase in rock alteration over that occurring in the last 100 feet of the crosscut, from which it is concluded that further exploration in a southerly direction is not warranted.

On its own account, the operator has pushed the No. 1 crosscut north to about the N 1800 coordinate and the No. 7 crosscut north (northwest extension of west drift) to about the 00 coordinate. The objective of this work is to explore at depth the suspected favorable ground under the geochemical (Mo) soil anomaly "highs". The face of No. 1 crosscut north is still about 500 short (south) of the anomalous area, and the No. 7 crosscut north is about 1,000 feet short (southeast) of its target area. A slight improvement in MoS_2 mineralization in the current headings is reported, but no significant changes in structure or rock type have been noted.

It is felt that the anomalies offer a favorable target area and that further exploration on the 7,800 level is warranted. Proposals for underground exploration by drifting or drilling however will logically depend on analysis of results of current company surface drilling in this area.

Greater confidence in drill hole sample data has resulted from much improved core recovery (50 to 75 percent) being obtained by

the new drilling contractor (Boyles Bros). It is expected that both core and sludge analyses can be used directly in future determinations of grade of mineralization.

An estimate of the quantity of sub-grade molybdenite ore in the explored area 3,000 x 2,000 feet, obtained by including all assays amounts to 400,000,000 tons for a body 800 feet in thickness. The average grade of this material is 0.2 percent MoS_2. By eliminating fringe areas known to average less than 0.2 percent MoS_2, the tonnage is reduced 50 percent but the grade is increased only to 0.25 percent MoS_2.

In conjunction with the checking of the operator's analytical procedures, a moderate number of spectrographic analyses were made. A summary of the data is shown in the attached table.

R. U. King
Geologist

Trace element content of altered rocks at the Questa mine

	West drift		D.D.H. No. 1	
	Altered volcanics (Green rock) 19 samples		Soda granite (Red rock) 3 samples	
Element	Percent		Percent	
Ti	0.15	-0.7	0.03	-0.15
Ba	0.07	-0.15	0.007	-0.07
Be	0.00015	-0.0003	0.00015	-0.0003
Co	0	-0.003		
Cr	0.003	-0.015	0.0015	-0.007
Cu	0.007	-0.07	0.007	-0.015
Ga	0.0015	-0.003	0.0003	-0.0015
La	0.003	-0.015	0	-0.003
Nb	0.0015	-0.007	0.0015	-0.003
Ni	0.0015	-0.015	0.0015	-0.003
Pb	0.0015	-0.7	0.003	-0.015
Sc	0.0007	-0.003	0	-0.0007
Sn	0.0015	-0.003	0	-0.0015
Sr	0.03	-0.07	0.003	-0.03
V	0.003	-0.03	0	-0.003
Y	0.0015	-0.003	0	-0.0015
Yb	0.00015	-0.0003	0	-0.00015
Zr	0.007	-0.015	0.003	-0.007

2 samples contained 0.0015 Bi
2 samples contained 0.015 Nd
1 sample contained 0.15 Zn

OFFICIAL FILE COPY
U. M. E
RECEIVED APR 3 1
DATE
4/3
4/3 Murphy 700 220

25th New Customhouse
Denver 2, Colorado
March 31, 1959

Mr. A. L. Greslin, Manager
Molybdenum Corporation of America
Questa, New Mexico

Re: Docket No. [illegible] 4568
(Molybdenum) Contract I[illegible]-2109
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Greslin:

In reference to your letter of March 30, 1959, this constitutes concurrence by the Government, for you to discontinue drilling in hole No. 26 at a depth of 396 feet, due to adverse drilling conditions encountered. The hole is considered completed at the present depth of 396 feet.

Very truly yours,

OME Field Team

Original signed by
J. W. TOWNSEND

By _____
J. W. Townsend
Executive Officer, OME
Field Team, Region III

JDC:hmh

cc: Mr. J. B. Carman
Ured Mine
Empire, Colorado

cc: Chem. Op. Comm. (2)) w/copy
Finance Office, Reg. III) of Operator's
Marshman) letter of
Balser, OME/DFC) 3/30/59
Corres. file, Reg. III)
Amendment file, Reg. III
Cooper
Chron

OME
DEPARTMENT OF THE INTERIOR

MAR 31 1959
REGION III
DENVER, COLORADO

March 30, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
D.M.E.A. Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket D.M.E.A. 4568
(Molybdenum)
Contract IDM-E 1094
Molybdenum Corp. of Am.
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We herewith ask your approval to discontinue drilling in hole No. 26 No. 26 in No. 4 CxS at coordinate 700 S. It is a plus 45 degree hole bearing West.

We drilled hole No. 26 to a depth of 396 feet but had to stop because it was squeezing so bad we couldn't get back to the bottom of the hole. Going into the hole with the rods and core barrel we would get a core barrel full of broken core before we could get to the bottom of the hole.

Yours very truly,

A. L. Greslin

A. L. Greslin, Manager

cc: J. B. Carman

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 30 1959

DATE	INITIALS	CODE
3/30	C	220
3/30	Murphy	700

22d New Customhouse
Denver 2, Colorado
March 25, 1959

Mr. J. B. Carman
Molybdenum Corporation of America
Urad Mine
Empire, Colorado

Re: Docket No. [redacted] 4968
(Molybdenum)
Contract 16s-21034
Molybdenum Corporation of America
(Moly or Questa mine)
Taos County, New Mexico

Dear Mr. Carman:

In reference to your letter of March 3, 1959, this confirms verbal approval given by the Government for you to perform the following work under Stage II of the captioned contract.

1. Drill two holes as follows:

Hole No.	Location	Inclination
30	No. 4 x-cut S., at approx. coord. 1300 S	-90°
31	West drift, at approx. coord. 800 W	-90°

The two holes are to be drilled in accordance with the general provisions of EXHIBIT "A" to the contract, as amended by Amendment No. 2. Drilling in the holes may be continued, within practical limits, as long as the visible MoS_2 mineralization is estimated to be in excess of 0.2 percent.

2. Continue drilling in hole No. 22, as practicable, as long as the visible MoS_2 mineralization is estimated to be in excess of 0.2 percent.

3. Re-enter hole No. 27, and drill beyond present length of 500 feet, as practicable, as long as the visible MoS_2 mineralization is estimated to be in excess of 0.2 percent.

Nothing in the verbal approval, or this confirmation thereof, shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Very truly yours,

OME Field Team

By J. W. Townsend
J. W. Townsend

By E. M. Harshman
E. M. Harshman

cc: Mr. A. L. Greslin
Questa, New Mexico

JBC:hmh

cc: Finance Office, Reg. III
Amendment file, Reg. III
Chmn. Op. Comm. (2)) w/copy Operator's letter of
Corres. file, Reg. III) 3/3/59 and Joint Memo. of 3/16/59 by OME examiners
Harshman) w/copy Joint Memo. of 3/16/59
Belser, OME/BEC)
Cooper
Chron

OME
DEPARTMENT OF THE INTERIOR
MAR 5 - 1959
REGION III
DENVER, COLORADO

March 3, 1959

Mr. J. W. Townsend
Executive Officer, O.M.E.
D.M.E.A. Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket D.M.E.A. 4568
(Molybdenum)
Contract Idm-E1094
Molybdenum Corporation of America
(Moly or Questa Mine)
Taos County, New Mexico

Dear Mr. Townsend:

We ask approval of the following as part of Area B Stage II drilling program on the 2nd Tunnel Shaft Level.

	Hole No.	Location	Inclination	Bearing
(1)	30	No. 4 X-Cut S at Coord. 1200 S	-90°	---
(2)	31	Drift West at Coordinate 800 W	-90°	---

Hole No. 30 will explore the area to the south of Hole No. 27 which has shown interesting mineralization.

Hole No. 31 will explore below the level ore indications exposed nearby in Cx No. 7 North.

(3) Continue Hole No. 27 in the No. 4 X-Cut S at coordinate 700 S beyond 500 feet an indefinite distance depending on MoS2 mineralization.

(4) Re-enter, if possible, Hole No. 22 located in the face of No. 5 Cx S (New) at approximate coordinates E400-S590 bearing S 60° W and inclined at -70° and drill beyond 500 feet under the same plan as (3) above.

Our wish to continue these holes is based on the comparatively good assays found at or near the bottom of each.

Yours very truly,

MOLYBDENUM CORPORATION OF AMERICA
URAD MINE
EMPIRE, COLORADO

By J B Carman

J. B. Carman

JBC:r

Original & 5 Copies

CC: MH
ALG
file

W O

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Office of Minerals Exploration
Denver Federal Center
Denver, Colorado

OME
DEPARTMENT OF THE INTERIOR
MAR 18 1959
REGION III
DENVER, COLORADO

March 16, 1959

Memorandum

To: Executive Officer, OME Field Team, Region III
Through: E. N. Harshman EMH

From: R. U. King
Carl Balser

Subject: DMEA Docket 4568 (Molybdenum), Contract Idm-X 1094, Molybdenum Corporation of America (Moly or Questa mine), Taos County, New Mexico

In a letter dated March 3, 1959, the operator requested (1) to drill a vertical down hole from each of two locations on the 2nd tunnel shaft level at approximate coordinates 1200 S, 300 W and 350 S, 800 W, (2) to re-enter and deepen hole 22 if practicable, and (3) to continue hole 27 beyond a 500-foot depth. Verbal authorization of the Field Team was conveyed to the operator, pending receipt of his letter of justification.

Because favorable results have been obtained in the first 500 feet below the level (0.4 percent MoS_2) in hole No. 27, it is concluded that additional exploration is warranted, and that this hole should be continued to reasonable depths beyond the 500-foot point as long as the grade of mineralization holds up.

The proposed -90° holes from the West Drift and No. 4 crosscut south are considered necessary to determine the extent and attitude of the ore-grade material discovered in hole No. 27. Deepening of hole No. 22 (No. 5 crosscut south) is likewise justified, particularly as because of the high grade assays obtained at the bottom of this hole.

It is recommended that the operator's request be approved as follows:

1. Continue hole No. 27 beyond 500 feet, as practicable, provided visible MoS_2 mineralization is estimated to be better than 0.2 percent.

2. Re-occupy hole No. 22 and deepen as under (1) above.

3. Vertical down hole from West Drift at approximate coordinates 350 S, 800 W, with depth limitation as per (1) above.

4. Vertical down hole from No. 4 crosscut south at approximate coordinates 1200 S, 300 W, with depth limitations as per (1) above.

R U King

R. U. King, Geologist

Carl Belser

Carl Belser, Mining Engineer

RUKing:arh

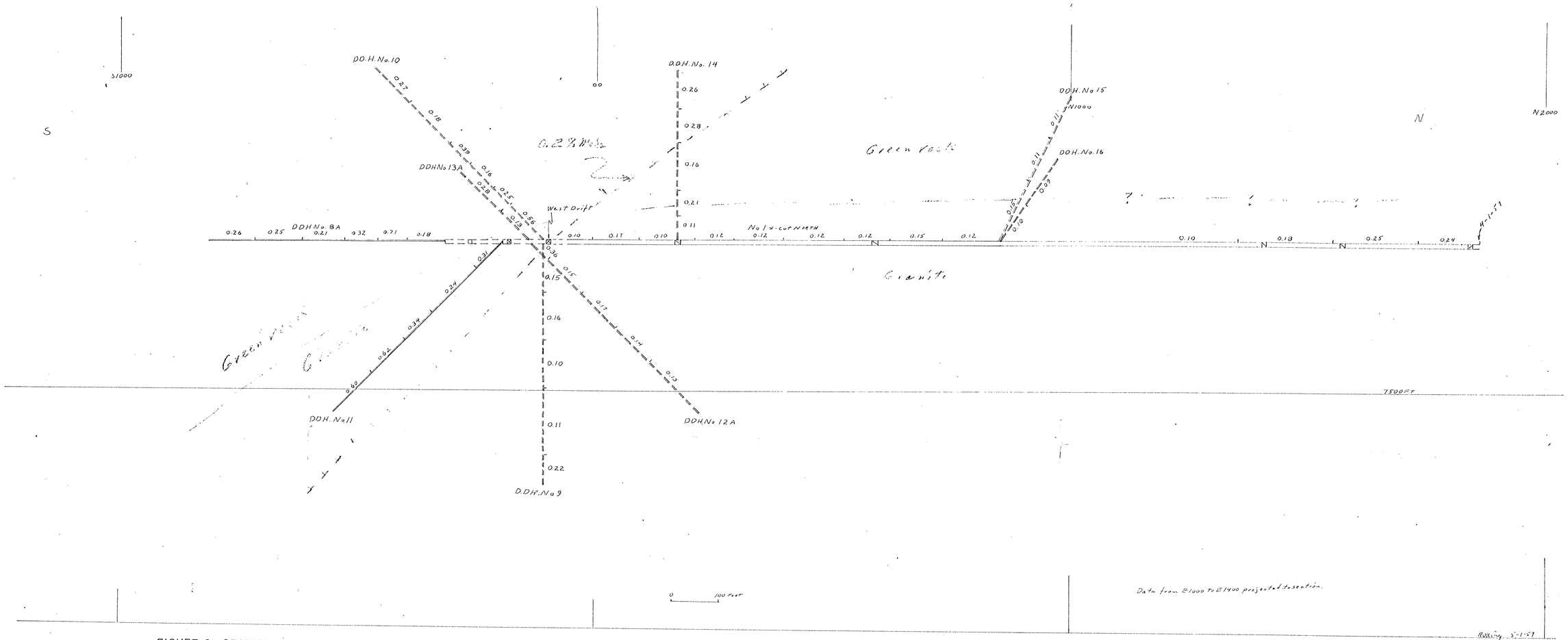


FIGURE 2.-SECTION ALONG COORDINATE E1200

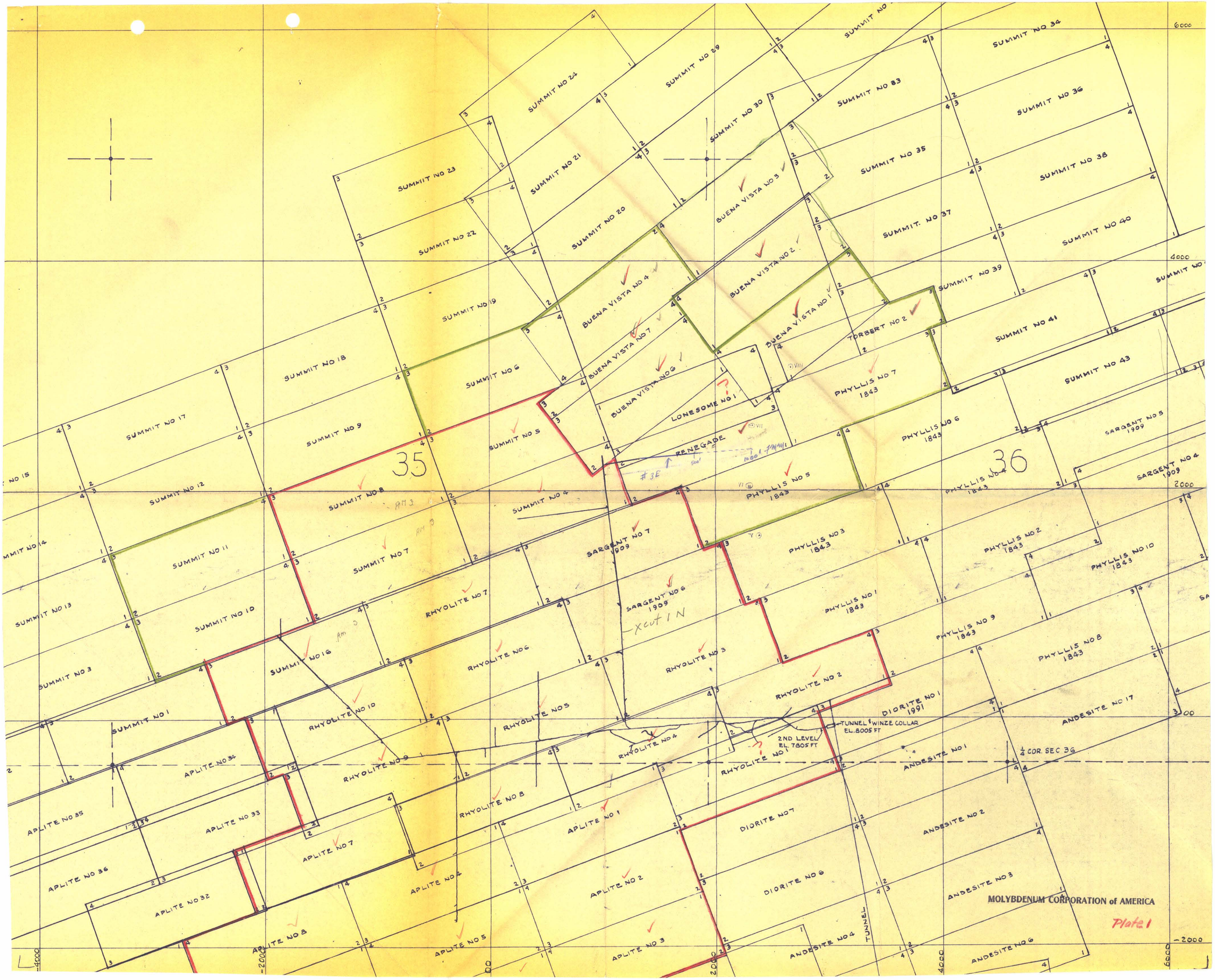
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA 4568 CONTRACT Idm-E1094

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIG. 1 GENERALIZED GEOLOGIC MAP OF THE QUESTA MINE AREA, TAOS COUNTY, NEW MEXICO.

R. U. King, 1958
D. Richter, 1957


SUMMIT NO 23
SUMMIT NO 24
SUMMIT NO 29
SUMMIT NO 34
SUMMIT NO 22
SUMMIT NO 21
SUMMIT NO 30
SUMMIT NO 83
SUMMIT NO 36
SUMMIT NO 20
BUENA VISTA NO 3
SUMMIT NO 35
SUMMIT NO 38
SUMMIT. NO 37
SUMMIT NO 40
SUMMIT NO 19
BUENA VISTA NO 4
BUENA VISTA NO 2
SUMMIT NO 39
SUMMIT NO 18
SUMMIT NO 6
BUENA VISTA NO 7
BUENA VISTA NO 1
TORBERT NO 2
SUMMIT NO 41
SUMMIT NO 17
SUMMIT NO 9
BUENA VISTA NO 6
LONESOME NO 1
PHYLLIS NO 7
1843
SUMMIT NO 43
SUMMIT NO 5
35
RENEGADE
PHYLLIS NO 6
1843
SARGENT NO 5
1909
SUMMIT NO 12
SUMMIT NO 8
SUMMIT NO 4
PHYLLIS NO 5
1843
36
PHYLLIS NO 4
1843
SARGENT NO 4
1909
SUMMIT NO 11
SUMMIT NO 7
SARGENT NO 7
1909
PHYLLIS NO 3
1843
PHYLLIS NO 2
1843
SUMMIT NO 13
SUMMIT NO 10
RHYOLITE NO 7
SARGENT NO 6
1909
PHYLLIS NO 1
1843
PHYLLIS NO 10
1843
SUMMIT NO 3
SUMMIT NO 16
RHYOLITE NO 6
RHYOLITE NO 3
PHYLLIS NO 9
1843
PHYLLIS NO 8
1843
RHYOLITE NO 2
DIORITE NO 1
1991
SUMMIT NO 1
RHYOLITE NO 10
RHYOLITE NO 5
TUNNEL & WINZE COLLAR
EL. 8005 FT
2ND LEVEL
EL. 7805 FT
ANDESITE NO 17
APLITE NO 34
RHYOLITE NO 9
RHYOLITE NO 4
RHYOLITE NO 1
ANDESITE NO 1
1/4 COR. SEC 36
RHYOLITE NO 8
APLITE NO 35
APLITE NO 33
APLITE NO 1
DIORITE NO 7
ANDESITE NO 2
APLITE NO 7
APLITE NO 36
APLITE NO 4
APLITE NO 2
DIORITE NO 6
ANDESITE NO 3
APLITE NO 32
APLITE NO 8
APLITE NO 5
APLITE NO 3
ANDESITE NO 4
ANDESITE NO 6
MOLYBDENUM CORPORATION of AMERICA
Plate I

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

FINAL REPORT
DMEA 4568 CONTRACT Idm-E1094

PREPARED FOR OME

FIGURE 4.- PLAN OF THE SECOND TUNNEL SHAFT LEVEL SHOWING EXPLORATION, MOLY OR QUESTA MINE, MOLYBDENUM CORPORATION OF AMERICA, TAOS COUNTY, NEW MEXICO.

200 0 200 400 600 800 1000 Feet

FIGURE 3. CLAIM MAP, MOLY OR QUESTA MINE, MOLYBDENUM CORPORATION OF AMERICA, TAOS COUNTY, NEW MEXICO. DMEA 4568.