DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

Prepare in duplicate. File original in Official Docket. Send copy

To: Statistics Branch (Code 210)

From: Division of

Report Period		
1.1-6.30.57		
DMEA No. 2440	Operator Minerals Engineering Company	Contract No. Idm-E300

ORE ESTIMATES

	Tons	Analysis
DMEA	20,000 *	0.237 % WO_3 *
Operator to date	None	
Total	20,000 *	0.237 " " *
Production to date	16,063 **	0.237 " " **
Ore in ground	3,937 **	0.237 " " **

INVESTMENT

Type	Size		Feet	Cost
Shafts				
Winzes				
Drifts and Crosscuts				
Raises	5' x 6'		218	$7,630
Drilling	Type			
Rehabilitation	Description			

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS

No work was done at property during this period except some bulldozing for annual assessment work.

1,254 tons of ore mined in 1955 was milled in August, 1956. Not previously reported, it is included in the corrected total production shown in this report.

* Adjusted reserve tonnage and grade figures by F. E. Johnson, 2.21.58

** Production tonnage and grade figures adjusted to "Official" grade.

Prepared by Stephen P. Holt Date 2.12.58
(rev. 3.26.58)

Carbon to W. Chamberlain

CAUTION—YOU ARE MAKING A CARBON COPY. PLEASE APPLY PRESSURE WHEN WRITING

☆U. S. GOVERNMENT PRINTING OFFICE: 1973—523-010

GENERAL SERVICES ADMINISTRATION

SPECIAL

GSA FORM JUN 63 371

COLLINS SECURITIES CORPORATION

Investment Bankers

May 16, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 21 1969
INITIALS | CODE
A20

O M E Office
Chief Office of Mineral Exploration
Room 4460
Interior Building
Washington, D. C. 20242
ATTN: Mr. Harold Kirheim

Dear Mr. Kirheim:

Would you kindly send me one DMEA report on Lost Creek Mine in Beaverhead, Montana.

As I am a director of Minerals Engineering Company, I would like this report sent to me in that capacity.

Thanking you in advance

Sincerely,

Robert W. Sarvis

RWS/ln

NOTE Field Officer has been in contact with Mr. Sarvis and authorized him to get permission from operator. No reply has been received since. Mr. Kirkemo was talking to Region on 6/2/69 about this.
9/15/69

718 17th Street • Denver, Colorado 80202 • Telephone 303: 292-1340
DENVER NEW YORK LOS ANGELES
Members: American Stock Exchange (associate) Midwest Stock Exchange

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
October 29, 1963

FILE COPY
RECEIVED OCT 31 1963

DATE		
10/31		800
		120
11/1		110
	Murphy	500
		220

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Messrs. Carl Guidici of Dillon, Montana, and Paul Meine of Spokane (presumably a relative of Henry Meine, one of the original lessors of this property) called at the Spokane office today and asked to see the files pertinent to the subject project.

They were not specific as to the information they wanted but said they owned the property and that Minerals Engineering would not give them information concerning the company's work on the property or the results as required by a "contract" -- I presume they meant lease -- with the company.

I advised them that our files are not open to public inspection and suggested that if Minerals Engineering had not lived up to the "contract" terms perhaps a lawyer might be of some help to them. I also said that if they write to the Director, accompanying their letter with a request from Minerals Engineering asking that the information they wish be given them, they might be given it but that I doubted they would. They gave the impression that relations between them and the company were strained to the point that there was little if any chance of their obtaining such a letter from Minerals Engineering.

After they left, Mrs. Smelser went through the files as she remembered that there had been some difficulty in the past involving these people. Correspondence before and after June 29, 1954, is pertinent, and possibly their letter of July 1, 1954, to Senator Murray expresses what they desire. In any case, I thought I should advise you of the possibility of hearing from these gentlemen.

D. R. MacLaren

D. R. MacLaren

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/25	Murphy	500
6/25	[illegible]	500
6/25	[illegible]	800
	[illegible]	120
6/25	[illegible]	110
"	[illegible]	100
		520

JUN 26 1963

Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Gentlemen:

Thank you for returning the completed MME Form 63's mailed to you on June 12, 1963.

By the terms of the subject Exploration Project Contract, as amended, and the certification of discovery or development dated May 17, 1956, all minerals mined or produced from April 17, 1952, to April 17, 1963, were subject to the Government's royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

Director

MMerrithew/mm
6/24/63
cc: Director's Reading File
Region I (2) w/copy of Form 63 dated 6/12/63
CA&A Division
Docket
Code 500
~~Messrs. Henry Meine and Carl Guidini, Dillon, Montana~~
~~George M. Fleming, Dillon, Montana~~

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/27	Murphy	500
6/25	Enline	500
6/24	Talbot	800
		120
		110
		100
		220

Messrs. Henry Meine
and Carl Guidici
Dillon, Montana

Re: DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Gentlemen:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

The property as set forth in the contract is the same property referred to in an "Option to Purchase" held by Blair Burwell and executed by George M. Fleming on December 15, 1951, at which time Blair Burwell was already in possession of said property under a certain "Mining Lease and Agreement," dated August 30, 1951, executed by Carl Guidici, Henry Meine, and R. M. Fleming. By a "Mining Deed" dated February 28, 1952, R. M. Fleming granted, sold, and conveyed his interest in the aforesaid "Mining Lease and Agreement" of August 30, 1951, to Blair Burwell. By a "Mining Deed" executed March 11, 1952, Blair Burwell conveyed his interest in said property as described in the foregoing instruments to the Minerals Engineering Company.

Sincerely yours,

Director

Enclosure

FMMurphy/mm
6/24/63
cc: Director's Reading File
Region I (2)
Docket
Code 500
Identical letter to: George M. Fleming, Dillon, Montana

43683

Re: DMEA - 2440

I have summoned the letters to Gudici, Meine, & Fleming, but see no need for them. They were, and apparently are, not parties of interest. Only M-E letter should go

Also, I believe Operator's ltr. should be addressed to address on Form 69 reply.

Talbot
6/25/69

Let's change the address on the envelope. BT

Mr. Delpinogl pass these letters above not go out
No obligation letter
NOV necessary
Bennett
Tab

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

Mr. George M. Fleming

Dillon, Montana

Re: DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana

Dear Mr. Fleming:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

The property as set forth in the contract is the same property referred to in an "Option to Purchase" held by Blair Burwell and executed by George M. Fleming on December 15, 1951, at which time Blair Burwell was already in possession of said property under a certain "Mining Lease and Agreement," dated August 30, 1951, executed by Carl Guidici, Henry Meine, and R. M. Fleming. By a "Mining Deed" dated February 28, 1952, R. M. Fleming granted, sold, and conveyed his interest in the aforesaid "Mining Lease and Agreement" of August 30, 1951, to Blair Burwell. By a "Mining Deed" executed March 11, 1952, Blair Burwell conveyed his interest in said property as described in the foregoing instruments to the Minerals Engineering Company.

Sincerely yours,

Director

Enclosure

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

June 12, 1963

Re: DMEA-2440 (Tungsten)
Minerals Engineering Co.
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

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,

F M Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 24 1963

DATE	INITIALS	
6/24		800
6/24		100
6/24		110
		500

RECEIVED 1963

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. **From October 15, 1962, to April 17, 1963,** ~~XXXXX~~ , 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. **From October 15, 1962, to April 17, 1963,** ~~XXXXX~~ , 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

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
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

Submitted by:

Name J W Adams Minerals Engineer Title Vice pres.

Address 801 4th St Golden Colo. Date 6/19/63

4512

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

Sep~~tember 28, 1962~~

~~Re:~~ DMEA-2440 (Tungsten)
Minerals Engineering Co.
Lost Creek Mine
Beaverhead County, Mont.
Contract Idm-E300

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 17 1962

10/17		8.00
8-17		100
10/17		~~110~~
10/32	S.F.H.	500
		220

Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

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,

W. R. Griswold, Chief
Division of Minerals

RECEIVED
OCT 5 1962
MINERALS ENGINEERING CO.

MME Form 63
Revised 3-62

DMEA-2440
Idm-E300

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since April 13, 1960, 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 April 13, 1960, 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

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

Type	Quantity		Estimated Grade	Location
Ore	None	Tons		
Concentrates	None	Tons		
Other	None	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

Submitted by:

Name R B Sullivan Title President

Address P. O. Box 1951
Grand Junction, Colorado

Date October 15, 1962

4511

Cy sent to 800

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 16 1959

DATE	INITIALS	CODE
	C	220
		400

So. 157 Howard Street
Spokane 4, Washington

Air Mail

April 14, 1959

Mr. George H. Allen
District Director
Internal Revenue Service
U. S. Treasury Department
Denver 2, Colorado

Re: Minerals Engineering Company
Grand Junction, Colorado

Dear Mr. Allen:

The following is the information you requested in your letter of March 23, 1959, regarding the Brown's Lake and Lost Creek contracts with the Defense Minerals Exploration Administration. The Office of Minerals Exploration is the successor agency to DMEA.

Three separate exploration project contracts were entered into by DMEA relating to the Brown's Lake property.

The first contract, Idm-E105, dated August 1, 1951, was made with Brown's Lake Tungsten Company which assigned its interest to American Alloy Metals, Inc. on August 20, 1951. The second contract, Idm-E127, dated August 24, 1951, was with the latter company. Work under these two contracts was performed during the months of August 1951 to November 1951.

The third contract, Idm-E247, dated January 29, 1952, was with American Alloy Metals, Inc., and was superseded by an Amended Contract bearing the same number and with the same company, dated January 12, 1953, but effective January 29, 1952. (On April 28, 1953, American Alloy Metals, Inc. entered into an agreement with Minerals Engineering Company by which the latter agreed to complete Amended Contract Idm-E247 and assume responsibility for the payment of royalty due the Government under the terms of the contract.) The exploration work under this contract was discontinued in April 1953 and the contract was formally terminated on November 19, 1953; however, disposal of salvable property acquired in connection with the work was not accomplished until June 1954, and final payment was made to the company in December 1954.

Advised D. Martin per Martin 4/14/59. Ouk.

An agreement dated October 1, 1952, with American Alloy Metals, Inc. stated that the land which was the subject of each of the three contracts was the same, or substantially the same. It was agreed further that the first two contracts would be treated as one for the purpose of accounting, terminating, and winding up and that the land described in all three contracts and the

production therefrom would be subject to the Government's royalty. The acceptable costs and the Government's payments to the company on a 75 percent basis under these three contracts were as follows:

Contract No.	Acceptable Costs	Government's Payments
Idm-E105 and E-127	$30,838.17	$23,128.63
Idm-E247	58,300.23	43,725.17
Totals	$89,138.40	$66,853.80

The Government's participation in the costs under these three contracts was repaid in full during the calendar years 1954 and 1955, as follows:

1954	$62,725.70
1955	4,128.10
Total royalty paid	$66,853.80

The Lost Creek contract Idm-E300 was signed with Minerals Engineering Company on April 17, 1952 and was terminated on May 18, 1954. The amount contributed by the Government was $50,212.51 or 75 percent of the total approved costs vouchered. Repayments to the Government from royalty have been as follows:

1954	$ 175.94
1956	6,028.57
1957	444.35
Total royalty received	$ 6,648.86
Royalty due Gov't. from future production	$43,563.65

Royalty payments are up to date; no further payments are due the Government until or unless more ore is produced.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: OME (3) Air Mail
USBM (2)
USBM (AD)

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/8	C	220
		400
4/6	Martin	400
4/7	JE	

APR 7 1959

Memorandum

To: Executive Officer, OME Field Team, Region I

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-2292 (Tungsten)
American Alloy Metals, Inc.
Brown's Lake Property
Beaverhead County, Montana
Contract No. Idm-E247
and
Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Last Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

The proposed letter to George H. Allen, District Director, Internal Revenue Service, Denver, Colorado, accompanying your letter dated March 27, 1959, has been rewritten by this office so as to incorporate therein corrections and additional information as follows:

(1) The date of Contract Idm-E127 has been corrected to August 24, 1951.

(2) The reference to Contract Idm-E247 has been corrected to show the date of the original contract in addition to the date of the Amended Contract bearing that number.

(3) Reference is made to the agreement dated October 1, 1952, whereby two of the contracts were combined and the royalty provision was made applicable to the land described in the three Brown's Lake contracts.

(4) Royalty repayments under Contract Idm-E247 during 1954 and 1955 have been changed to $62,725.70 and $4,128.10, respectively, for the reason that the payment deposited on January 4, 1955, was covered by the Operator's Check No. A-6821 dated November 30, 1954, and received in U.S.G.S. Office, Spokane, Washington, on December 6, 1954.

8623

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 27 1958

DATE	INITIALS	
1-28	C	220
	WSM	~~400~~
		225

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1957

Date of report: December 16, 1957

Operator: Minerals Engineering Company, Box 1951, Grand Junction, Colorado

Mine name: Lost Creek

County and State: Beaverhead County, Montana

Docket number and commodity: DMEA-2440 (tungsten)

Contract number: Idm-E300

Date of contract: April 17, 1952

Date of certification: May 17, 1956

Expiration date of royalty payments: April 17, 1963

Total amount of contract: $121,280.00

Total expenditures under contract: 66,950.00

Amount of Government participation at 75%: 50,212.50

Royalty payments this period: $ 444.35 * ← Please note

Previous royalty payments: 6,204.51

Total royalty payments to date: 6,648.86

Percent Government participation repaid: 13.2%

Royalty due on production to date: none

Royalty remarks: *This payment represents the royalty reported as due in the semi-annual report for the period of January 1 to June 30, 1957.

Production remarks: Property inactive. The company mill at Glen, Montana, has not operated since September 1957 when it was running ore from the Calvert property near Wise River, Montana. The company has not run DMEA ore through the mill since the 1st of February 1957.

Signed: George T. Krempasky (Engineer)

No reserve data — presumed same as last report — Why go to all the trouble making out 1st page?

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 9-15

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. Mr. Chambers
4. Docket Control Mails and Files
5. _____ Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Royalty Due
2. Follow up
3.
4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

July 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 1957

DATE	INITIALS	CODE
7-15	C	220
15	Com	100

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Dear Mr. Selfridge:

Enclosed are the royalty inspection reports for Peter Antonioli and Minerals Engineering Company which we were unable to transmit with the reports sent to you on July 8, 1957.

Sincerely yours,

Stephen W. Zolchok
for Wing G. Agnew, Member
DMEA Field Team, Region I

Enclosures

cc: USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1957 Date of exam: May 28, 1957

Operator: Minerals Engineering Co., Box 1951, Grand Junction, Colo.

Mine name: Lost Creek

County and State: Beaverhead County, Montana

Docket number and commodity: DMEA-2440 (tungsten)

Contract number: Idm-E300

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE

Date of contract: April 17, 1952

Date of certification: May 17, 1956

Expiration date of royalty payments: April 17, 1963

Total amount of contract: $121,280.00

Total expenditures under contract: 66,950.00

Amount of Government participation at 75%: 50,212.50

Royalty payments this period: none

Previous royalty payments: $6,204.51

Total royalty payments to date: $6,204.51

Percent Government participation repaid: 12%

Royalty due on production to date: $444.35

Royalty remarks: During August 1956, 1250.64 tons of stockpiled ore was milled from which was recovered 233.87 units of WO_3. The prevailing price for tungsten trioxide in August 1956 was $55 per unit. Using the formula in the Termination Agreement the royalty due amounts to $444.35.

	Tons	Analysis
Original estimate of DMEA reserves (from Field Team final report) Mines ____ Survey ___ Joint X	Tonnage was not computed. The ore is submarginal.	
Revised estimate of DMEA reserves (Field Team) Mines ____ Survey ____ Joint ___	none	
Increase of reserves by work performed subsequent to DMEA project work	none	
Production of DMEA ore (this period)	none	
	Corrected total	
(previous)	21,150 tons	0.18%
(to date)	21,150 tons	0.18%
Production of Operator's ore found subsequent to DMEA work (this period)	none	
(previous)	none	
(to date)	none	
Percent of revised reserves mined:	No reserves computed.	

Production remarks: Mr. Craig, general manager, was interviewed on May 28, 1957. He stated that no work was done at the property during the period, except for some bulldozing for annual assessment work. The mine was visited the same day. There was no one at the mine and no sign of recent activity.

Mr. Craig stated that 1,254 tons of ore mined in 1955 was milled in August 1956. This tonnage was not reported in the Semi-Annual Report of Certified Project but is included in the corrected total for this period.

Investment data: Approximately 218 feet of 5'x6' raises at estimated cost of $7,630.

Distribution:
DMEA (4) USBM (AD)
USGS (2) USBM (2)

Signed: Eldon C. Pattee (Engineer)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JAN 22 1957
D.M.E.A.

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1956 Date of exam: Dec. 18, 1956

Operator: Minerals Engineering Co., Box 1951, Grand Junction, Colorado

Mine name: Lost Creek

County and State: Beaverhead County, Montana

Docket number and commodity: DMEA-2440 (tungsten)

Contract number: Idm-E300

Project inactive. No change in status since report of January 1 to June 30, 1956.

Signed: George T. Krempasky (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

RECEIVED
SEP 24 1956

1201 N. Division St.
Spokane 2, Washington
September 17, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: M. R. Lickes, Mining Engineer, Bureau of Mines

Subject: Final inspection report, Docket No. DMEA-2440 (tungsten), Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-E300.

This final inspection report is a composite of information taken from interim inspection reports of the examining engineers on the completed project. As set forth therein, the following units of work allowable under the terms of the contract were completed:

	Authorized	Completed
Road work (job)	$8,030.00	$8,030.00
Drifting (orig. contract)	2,200 feet	1,082 feet
Crosscutting (orig. ")	750 "	421 "
Diamond drilling (Amend. #2)	2,000 "	1,263 "

All equipment was furnished by the company as were the costs of engineering, sampling, accounting, and the erection of buildings.

The project was certified on May 17, 1956.

M. R. Lickes

M. R. Lickes

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Turner
Docket

Date _____

Referred to:

1. Mr. Mistendorf
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. _____ Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Closed down!

2.

3.

4.

and take appropriate action.

- - - - -

Action taken by Division:

_____
Initials

300

RECEIVED
JUL 12 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1956 Date of exam: June 20, 1956

Operator: Minerals Engineering Co., Box 1951, Grand Junction, Colo.

Mine name: Lost Creek

County and State: Beaverhead County, Montana

Docket number and commodity: DMEA-2440 (tungsten)

Contract number: Idm-E300

Date of contract: April 17, 1952

Date of certification: May 17, 1956

Expiration date of royalty payments: April 17, 1963

Total amount of contract: $121,280.00

Total expenditures under contract: $ 66,950.00

Amount of Government participation at 75%: $ 50,212.50

Royalty payments this period: $6,028.57

Previous royalty payments: $ 175.94

Total royalty payments to date: $6,204.51

Percent Government participation repaid: 12%

Royalty due on production to date: none

Royalty remarks: Royalty audit by T. H. Brading dated June 6, 1956

Original estimate of reserves (from final Engr.-Geol. report):	Tonnage was not computed. The ore is submarginal. ?
Increase (or decrease) of reserves by work performed subsequent to original and last Field Team estimates:	none
Revised estimate of reserves:	none
Production this period:	12,050 tons by May 1, 1956 (grade has not been computed)
Amount of previous production (since date of contract):	7,050 tons with a grade of 0.19% WO_3
Total DMEA production to date:	20,000 tons (approximately) (19,869.8 tons according to audit)
Percent of revised reserves mined:	Unknown

Production remarks:

Mr. Niel Roby, mill superintendent, was interviewed June 20, 1956, at the company mill near Glen, Montana. Mr. Roby stated that the company has attempted to mine the ore by surface and underground methods but the cost of mining exceeds the value of the ore. Mining of the ore was discontinued in April 1956.

Other remarks:

According to Mr. Roby, exploration in the form of 40 hours of bulldozing was done during the reporting period. The bulldozing was done for assessment work.

Signed: Eldon C. Pattee (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

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

1201 N. Division St.
Spokane 2, Washington
May 10, 1954

Termination Recommended

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Jr., Mining Engineer, Bureau of Mines

Subject: Report of examination and conference dealing with the Lost Creek Tungsten Property, Minerals Engineering Company, Beaverhead County, Montana, Contract Idm-E300, Docket No. DMEA 2440 (tungsten)

An examination of the Lost Creek Tungsten Property was made on May 6, 1954 in the company of Mr. W. Bradley Myers, geologist, U. S. Geological Survey, and Messrs. R. N. Roby and William Tobey, mining engineers, Minerals Engineering Company. The purpose of the examination was to determine what, if any, additional work should be performed at the Lost Creek property under Contract Idm-E300.

All possible sites for additional exploration were examined and thoroughly discussed. The I-J-K cut area still appears to contain the largest tonnage of a consistent grade in evidence at the property. Open pit mining is no longer being conducted in this area, probably because the grade of the ore is too low (approx. .24% WO_3). Also, aplite and limestone inclusions are evident to the immediate south of the present pit face in the tactite zone.

Exploration possibilities in the H, I, J, and K areas are limited to surface trenching or underground diamond drilling from H level. Either form of exploration could only involve a relatively small amount of work that most certainly would merely serve to further delineate the aplitic intrusives and limestone inclusions that interrupt the tactite zone. There is no reason to believe that ore of a better grade would be encountered. All engineers involved in the examination were in agreement on this, and therefore no additional work in the area is recommended.

The El-F cut area was examined. Lamp values and sample assays in the area are discouraging, and no exploration appears justified.

The C cut area was examined and subsequently ruled out due to a preponderance of low grade assays from C cut and B level tunnel directly below.

A meeting was later held in Butte, Montana on May 8, 1954, that included the two Government engineers and the two Company representatives. The project was further discussed and all maps and sample data perused. No proposals for additional work were presented, and it can be safely stated that the unanimous conclusion was that further exploration at the Lost Creek mine is not warranted.

It is therefore recommended that a termination agreement be mailed to the Minerals Engineering Company regarding the Lost Creek tungsten mine, Contract Idm-E300.

John S. McNabb, Jr.

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JSM/he

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

1201 N. Division St.
Spokane 2, Washington
January 15, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Docket No. DMEA 2440 (tungsten), Minerals Engineering Company, Beaverhead County, Montana, Contract Idm-E300

Work under Contract Idm-E300 remained in a state of suspension during the past month. On January 12, 1954, a discussion with Mr. William Tobey, mine superintendent, Minerals Engineering Co., revealed that his principals are now interested in resuming work under the DMEA project, if approval for a modified exploration program and a time extension can be arranged. Representatives of the Bureau of Mines and the Geological Survey will meet with officials of the Minerals Engineering Co. on January 15, 1954 to evaluate the proposed changes in the exploration program.

During the past month a small tonnage of ore has been mined at I and J cuts at the Lost Creek mine. The ore is being concentrated at the company's mill which was recently completed and is now handling ore from the Browne's Lake and Lost Creek mines.

John S. McNabb

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JSM/he

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

1201 N. Division St.
Spokane 2, Washington
December 11, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Interim report, Minerals Engineering Co., Lost Creek Tungsten Mine, Beaverhead County, Montana, Contract No. Idm-E300, Docket No. DMEA 2440 (tungsten)

No work has been performed under Contract Idm-E300 since August 1953. Personnel have been engaged in mill construction, road building, and a small amount of surface mining. The company's mill at Glen, Montana began operations during the last week in November. Lengthy lease renegotiations between Minerals Engineering Co. and the owners of the Lost Creek property have delayed the resumption of DMEA work.

During the ensuing week an effort will be made to get a definite answer from Minerals Engineering Co. as to whether or not they intend to hold their lease and continue work under Contract Idm-E300.

John S. McNabb

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JSM/he

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

1201 N. Division St.
Spokane 2, Washington
October 13, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Minerals Engineering Co., Lost Creek Tungsten mine, Beaverhead County, Montana, Contract No. Idm-E300, Docket No. DMEA 2440 (tungsten)

Mr. William Tobey, engineer in charge, was interviewed during the past month regarding work under the DMEA contract. No work has been performed under the contract since August 1953. Mr. Tobey stated that the company is presently attempting to renegotiate the lease on the Lost Creek property. The result of the negotiations will apparently determine whether or not additional DMEA work will be performed.

Road building and mill construction presently claims all personnel normally employed at the Lost Creek mine. The 250-ton mill is scheduled for completion on or about December 1, 1953.

John S. McNabb

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JSM/he

Form MI-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1953. Docket No. DMEA 2440 Contract No. DM-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Box 957, Grand Junction, Colorado
Contract Amount, $ 121,280.00 Government Participation: 75 % Amount, $ 90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1450.00	4865.00	6315.00			WSM
Bulldozing						
Crosscutting		14735.00	14735.00			
Drifting		37,870.00	37870.00			
Road Building		8,030.00	8030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1,450.00	65,500.00	66,950.00	1450.00	65,500.00	66,950.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 1, 1953 Payee Minerals Engineering Co.

Per [signature] Title Superintendent.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1087.50

Signature [signature] (Authorized Certifying Officer)

Date 9/22/53 Vou. No. 914

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. I-dm-E300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 9-15-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Thomas E. Howard Title Mining Eng. Date 9/28/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1953. Docket No. DMEA 2440 Contract No. DMI-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Box 957, Grand Junction, Colorado.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	-	-	$37,870.00	1082	$35.00	2200	$35.00
Crosscutting	"	-	-	14,735.00	421	35.00	750	35.00
Raising								
Shafts								
Winzes								
Drilling: Core	"	1,450.00	290.0	6,315.00	1263	5.00	2000	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	-	-	8,030.00	1 Job	8030.00	1 Job	8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1,450.00	290.0	66,950.00				121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 1, 1953 Operator Minerals Engineering Co.

Per [signature] Title Superintendent.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

MINERALS ENGINEERING COMPANY

Cost Distribution Sheet

Contract IDM-E-300

For Month of August, 1953.

Work under the above contract consisted of diamond drilling underground on the "B" Level.

Cost incurred under the contract during the month of August is as follows:

290 feet of diamond drilling @ $5.00/foot	$1450.00
Total cost for reporting period	$1450.00

W. B. Tobey, Superintendent.

NARRATIVE

Minerals Engineering Company

Contract No. Idm-E-300 For the Month of August, 1953.

"B" Level

During the month authorized diamond drilling was begun on "B" Level and a total of 290 feet of hole was drilled. Core recovery in the broken faulted ground of "B" level was considerably below the recovery obtained on "H" level. However, it was better than was expected.

Holes were drilled as follows:

Hole No.	Bearing	Vert. Angle	Length	Location of Collar
13	S 43° E	+ 2°	135 ft.	E wall at face of "B" main heading.
14	N 82° W	+ 2°	51.5 ft.	W wall at face of "B" main Heading.
15	S 83° W	+ 2°	75 ft.	Center line 185 XC + 60 ft. S in west wall.
16	S 84° W	+ 2°	28.5 ft.	Center line 185 XC + 34 ft. N in west wall.

A brief description of each hole is as follows:

Hole #13 - To 10.6' tactite, to 42.8' marble with fault zone from 16.5' to 23.5', to 58' tactite, to 88.3' hornfels, to 119' weak tactite, to 135' weak tactite and hornfels, skarn.
Lamp Values fair 8'-14' and 116'-119'.

Hole #14 - To 4' faulted, gougy tactite, to 51.5' intrusive, (quartz monzonite ?).
No lamp values.

Hole #15 - To 6' limey tactite, to 8' aplite, to 20.2' tactite, to 39.0' hematitic and magnetitic marble, to 46.7' faulted quartz monzonite, to 53.8' gouge, to 55.0' marble, to 56.2' gouge, to 66.0' hornfels, to 67.0' intrusive, to 70' hornfels, to 75' quartz monzonite.
Lamp Values - 0-2.2' fair, 5.5'-5.9' good, 8.8'-13.0' fair, 14.2'-19.2' fair to weak.

Hole #16 - To 8.5' tactite, to 10.0' intrusive, to 12.0' marble, to 13.0' tactite, to 16.2' marble, to 25.0' tactite, to 28.5' aplite.
Lamp values - 0-2' fair, 3.5'-5.0' good, 5.0'-10.0' weak, 16.2'-20.0' weak.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole No. 13 — B Level Face S 43 °E, ∠ 2° 135'

From	To	Description
0	7'	Impure marble, brown, green, white, with black specks
7	10.6'	Limey tactite, mostly red brown, considerable epidote
10.6'	16.5'	Light colored mottled marble.
16.5'	18.5'	Badly fractured brownish marble. Poor core recovery (40%). Probable fault zone.
18.5'	23.5'	Badly fractured marble. Poor core recovery - 40-45%. Probable continuation of fault zone.
23.5'	38.5'	Mixed brown and whitish brown marble.
38.5'	42.8'	Grey marble, not so impure as preceding marble.
42.8'	58'	Weak uniform brown tactite. Considerable quartz in stringers and small inclusions.
58'	60'	Greyish green hornfels.
60'	67'	Black hornfels. Poor recovery - 60%.
67'	69.2'	Green hornfels.
69.2'	88.3'	Light green rather uniform hornfels. From 74'-79' recovery only 5%.
88.3'	101'	Weak reddish brown and green tactite. Considerable quartz in stringers and inclusions.
101'	115'	Mixed shattered tactite and limey hornfels in a fault zone. From 104.9'-107' and 111'-114' fault gouge. Poor recovery, - 50%.
115'	119'	Weak brownish tactite - 50% recovery.
119'	124'	Badly fractured limey hornfels and tactite. Poor recovery.
124'	135'	Badly fractured silicified lime and hornfels, - 35% recovery.

Lamp Values

8'	14'	Fair
116'	119'	Fair

MINERALS ENGINEERING COMPANY

Diamond Drill Hole No. 14

Fce Dr - B Level
N 82°W ∠ 2° 51.5'

From	To	Description
0	4'	Fault gouge, mostly ground up limey tactite or hornfels.
4'	7'	Fault gouge and some shattered quartz monzonite or granite.
7'	9.7'	Light colored quartz monzonite.
9.7'	18'	Light grey or brown quartz monzonite, fine grained with very little dark mineral.
18.0'	18.7'	Granite intrusive.
18.7'	21.7'	Fine grained aplite intrusive.
21.7'	31.5'	Granite rock with occasional narrow bands of fine grained aplite or quartz.
31.5'	32.0'	Fine grained aplite.
32.0'	33.5'	Granite rock with considerable reddish mineral.
33.5'	39.0'	Red granite rock seemingly weathered.
39.0'	46.5'	Granite intrusive, somewhat fractured, with fractures recemented with quartz or fine grained aplite.
46.5'	51.5'	Reddish granite rock apparently shattered and partially recemented. Some quartz, some gouge.

No lamp values except of isolated crystals.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole No. 15
B Level ~~Line #~~

Center Line 186 XC 60 ℄ S
℄ 2° S 83°W 75'

From	To	Description
0	6'	Yellowish brown limey tactite. Fair lamp values. Some partially silicified lime.
6'	8'	Intrusive, light colored.
8'	13.0'	Light to dark brown limey tactite.
13.0'	17.5'	Reddish and dark brown limey tactite. Reddish color from hematite.
17.5'	20.2'	Badly weathered dark greyish and brownish tactite with occasional streaks of silicified lime. Fault zone 19'-20'.
20.2'	24.8'	Light brown marble.
24.8'	25.0'	Hematite stringer.
25.0'	31.0'	Marble, light brown.
31.0'	32.5'	Reddish marble, colored by hematite.
32.5'	36.0'	Light brown marble.
36.0'	37.0'	Badly weathered dark brown magnetitic marble.
37.0'	39.0'	Light brown marble.
39.0'	40' ℄	Quartz monzonite.
40' ℄	44'	Ground and recemented quartz monzonite with limestone, presumably brought in by solution later.
44.0'	46.7'	Ground up quartz monzonite as above, but softer.
46.7'	52.5'	Yellowish brown ground up gouge, soapy to feel. Very soft.
52.5'	53.8'	Reddish brown ground up gouge, some talcy dark green mineral.
53.8'	55.0'	Reddish brown impure marble.
55.0'	56.2'	Gouge, with epidote.
56.2'	59.7'	Grey black limey hornfels.
59.7'	60.0'	Greenish brown gouge, apparently ground up tactite and epidote
60.0'	60.9'	Brown hornfels with some epidote.
60.9'	63.0'	Light green hornfels.
63.0'	66.0'	Greyish green limey hornfels.
66.0'	67.0'	Highly altered quartz rock showing some copper stain - intrusive?
67.0'	70.0'	Limey light colored hornfels.
70.0'	75.0'	Quartz monzonite showing copper stain at 71.5'-71.6'.

Lamp Values

0	2.2'	Fair
5.5'	5.9'	Good
8.8'	13.0'	Fair
14.2'	19.2'	Fair to weak.

MINERALS ENGINEERING COMPANY

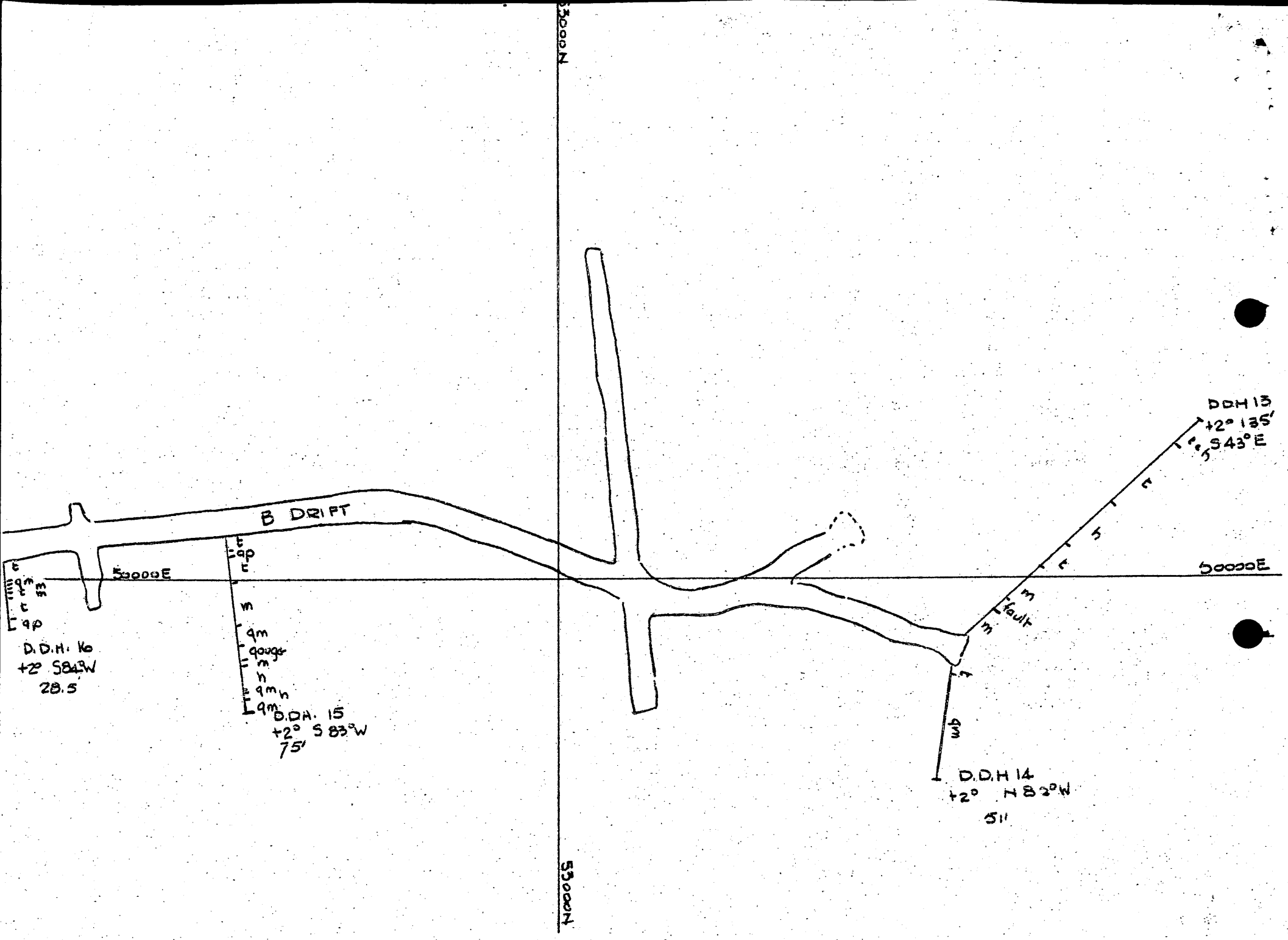
Diamond Drill Hole No. 16 - B Level

Centerline 185 XC / 34' N
S 84° W / 2° 28.5'

From	To	Description
0	5.0'	Brown tactite.
5'	6.7'	Mixed green and brown tactite.
6.7'	8.5'	Black and green tactite.
8.5'	10.0'	Mottled white and green intrusive.
10.0'	12.0'	White marble
12.0'	13.0'	Streaky black, brown and green tactite.
13.0'	16.2'	Light green salt and pepper marble.
16.2'	25.0'	Brown garnet tactite. Only 20% recovery.
25.0'	28.0'	Mottled green and white intrusive.
28.0'	28.5'	Fine grained aplite.

Lamp Values

0	2'	Fair
3.5'	5.0'	Good, coarse.
5.0'	10.0'	Weak
16.2'	20.0'	Weak


53000N
B DRIFT
53000E
50000E
D.D.H. 16
+2° S84°W
28.5'
D.D.H. 15
+2° S 83°W
75'
gouge
D.D.H 14
+2° N 82°W
51'
fault
DDH 13
+2° 135'
S 43° E
53000N

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 1953 Docket No. DMEA 2140 Contract No. DMI-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address P.O. Box 957, Grand Junction, Colorado.
Contract Amount, $ 121,260.00 Government Participation: 75 % Amount, $ 90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	1082.50	3782.50	4865.00			"Lost Creek" WSM
Drilling						
Bulldozing		14,735.00	14,735.00			
Crosscutting		37,870.00	37,870.00			
Drifting		8,030.00	8,030.00			
Road Building						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1082.50	$64,417.50	$65,500.00	1082.50	64417.50	65500.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Aug. 1, 1953 *Payee Minerals Engineering Co.
Per [signature] Title Superintendent.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 811.88
Signature [signature] (Authorized Certifying Officer)
Date 8/19/53 Vou. No. 874
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-F300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 8-11-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S/ F. E. Howard Title Mn. Eng. Date 8/13/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1953. Docket No. DMEA 240 Contract No. [illegible]
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address P.O. Box 957, Grand Junction, Colorado.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	-	-	$37,870.00	1082	35.00	2200	$35.00
Crosscutting	"	-	-	14,735.00	421	35.00	750	35.00
Raising								
Shafts								
Winzes								
Drilling: Core	"	1082.50	216.5	4,865.00	973	5.00	2000	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	-	-	8,030.00	1 job	8,030.00	1 job	8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1082.50	216.5	65,500.00				$121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Aug. 1, 1953 Operator Minerals Engineering Co.

Per Wm. B. Tobey Title Superintendent.

Wm. B. Tobey

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: Work was slowed by equipment breakdowns, and the need for moving the crew to another job temporarily.

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

MINERALS ENGINEERING COMPANY

Cost Distribution Sheet | Contract Idm-E-300

For Month of July, 1953.

Work under the above contract consisted of diamond drilling underground on the "H" level.

Cost incurred under the contract during the month of July is as follows:

216.5 feet of diamond drilling @ $5.00/foot	$1082.50
Total cost for reporting period	$1082.50

W. B. Tobey, Superintendent.

NARRATIVE

Minerals Engineering Company

Contract No. Idm-E-300 For the Month of July, 1953.

"H" Level

During the month authorized diamond drilling was continued and an additional 216.5 feet of coring was completed. This brings the total to the end of July to 971.0 feet.

Holes were drilled as follows:

Hole No.	Bearing	Vert. Angle	Length	Location of Collar
3	Due E	+ 2°	99.5'	Fce 361 XC E
		This hole completed from 65 feet.		
11	S 82° W	+ 35°	90'	Fce Mn Dr, W Wall Floor + 7'
12	S 82° W	- 40°	92'	Fce Mn Dr, W Wall Floor + 0'

A brief description of each hole is as follows:

Hole #3 - Hornfels to 68.5', hornfels partially altered to tactite to 74.5', impure marble to 79.5', hornfels to 99.5', end of hole.
Lamp Values: Very weak 66.5' to 67.0', fair, very yellow 73' to 73.2'.

Hole #11- Intrusive to 18', tactite to 21', intrusive for balance of hole to 90', end of hole.
Lamp Values: Occasional fine or coarse crystals 0 to 20.8', coarse occasional powellite crystals 20.8' to 21.1', occasional single spots of powellite 21.1' to 90'.

Hole #12- Aplite to 26', tactite to 43', aplite to 82', quartz monzonite to 92' end of hole.
Lamp Values: Occasional crystals in monzonite. Fair 27' to 29.3', good 29.3' to 32.2', good 32.2' to 34.0', good 35.2' to 37.7', fair 37.8' to 38.3'.

Core recovery in Hole No. 3 averaged only 55% from 65' to 99.5'.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #3 - "H" Level

Face 361' XC E
Due E
~~110'~~ 99.5 ∠ 02°

Completion of Hole - 65' to 99.5'

From	To	Description
65'	66'	Dark colored hornfels.
66'	67'	Hornfels, limey, partially altered to tactite.
67'	68'	Dark fine grained hornfels.
68'	68.5'	Light grey-green hornfels.
68.5'	70.3'	Dark green and grey hornfels, partially altered to tactite.
70.3'	74.5'	Light grey and brown hornfels partially altered to tactite, and containing some dendritic manganese.
74.5'	79.5'	Fine grained light grey impure marble.
79.5'	84.5'	Fine grained dark grey hornfels.
84.5'	89.6'	Light green fine grained limey hornfels, dendritic manganese.
89.6'	94.5'	Mottled grey and white hornfels.
94.5'	97'	Dark fine grained hornfels.
97'	99.5'	Light green hornfels, some dendritic manganese.

Core Recovery only 55%.

Lamp Values

66.5'	67.0'	Very weak.
73'	73.2'	Fair, very yellow

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #11

Fce H Adit W Wall
Brg. S 82° W ∠ 35°

Collar - Floor ∠ 7'
90'

From	To	Description
0	1'	Light grey aplite.
1'	15'	Light green fine grained dense intrusive (?), quite heavy
15'	18'	Light mottled green and white intrusive
18'	21'	Mixed green and brown tactite partially altered to garnetite
21'	22'	Mottled white and green intrusive, white predominating. Apparently a partly altered quartzy intrusive.
22'	26.1'	Mottled white and light green quartzy intrusive.
26.1'	26.2'	Bull quartz stringer.
26.2'	31.0'	Mottled white, green and brown quartzy intrusive.
31.0'	32.3'	Fine grained green and white alteration product with two quartz veins crossing. Some minor calcite.
32.3'	46'	Mottled white, green and grey intrusive, almost in a mosaic pattern.
46'	46.5'	Same as above, with small inclusions of garnet.
46.5'	62'	Uniform mottled grey, green and white intrusive.
62'	64'	Uniform mottled brown and grey intrusive. Lengthwise fracture cemented with quartz.
64'	67.8'	Mottled green, grey and light brown intrusive. Uniform.
67.8'	69.4'	Quartz stringer.
69.4'	72'	Light brown and yellowy green fine grained intrusive.
72'	77.5'	Darker grey and white mottled intrusive.
77.5'	90'	Mottled uniform white, dark grey and green intrusive - monzonite ?

END

Lamp Values

0	20.8'	Occasional fine or coarse crystals.
20.8'	21.1'	Coarse occasional powellite crystals.
21.1'	90'	Occasional single spots of powellite.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole No. 12

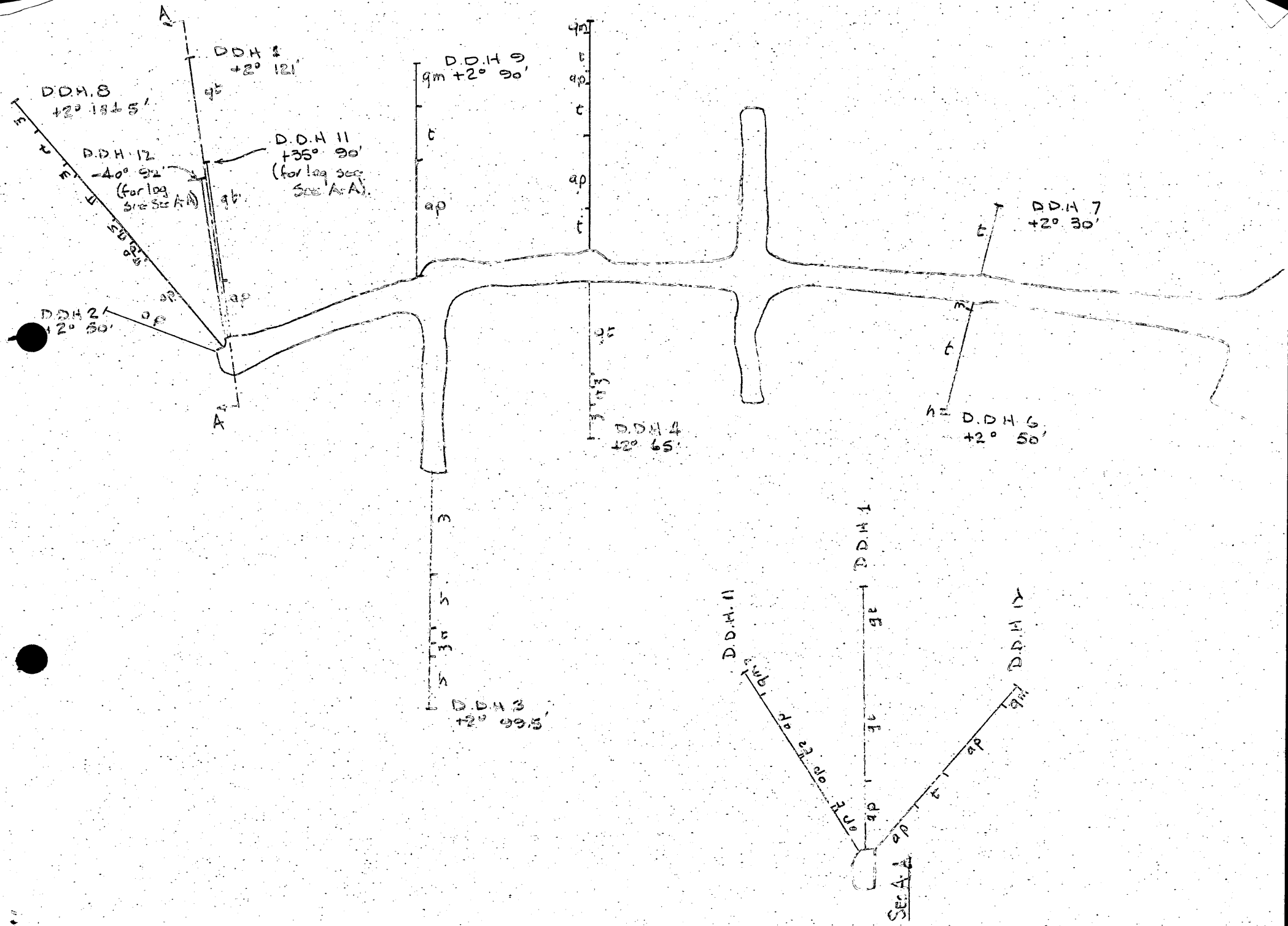
Fce H Adit W Wall
Brg. S 82° W - 40° 92'

From	To	Description
0	19.2'	Fine grained grey aplite with dendritic or bunchy black minerals.
19.2'	20.7'	Darker, more uniform fine grained aplite.
20.7'	26'	Light fine grained aplite with spotty black minerals.
26'	32'	Brown, grey and green tactite. Some quartz.
32'	38'	Brownish green banded fine grained tactite. Occasional quartz stringers.
38'	43'	Mottled, streaky green and brown tactite with considerable quartz in bunches and stringers.
43'	44.1'	Quartz vein.
44.1'	47'	Mottled white and very light brown aplite. Some calcite.
47'	78'	Light grey aplite with bunchy and dendritic manganese (?)
78'	82'	Light brown aplite, less black mineral.
82'	92'	Quartz monzonite.

Lamp Values

Occasional crystals in monzonite.

27'	29.3'	Fair
29.3'	32.2'	Good
32.2'	34.0'	Good
35.2'	37.7'	Good
37.8'	38.3'	Fair


A
D.D.H. 1
+2° 121'
D.D.H. 8
+2° 184.5'
D.D.H. 12
-40° 92'
(for log
see Sec A-A)
D.D.H. 11
+35° 90'
(for log see
Sec A-A).
D.D.H. 9
gm +2° 90'
D.D.H. 7
+2° 30'
D.D.H. 2
+2° 50'
D.D.H. 4
+2° 65'
D.D.H. 6
+2° 50'
D.D.H. 3
+2° 99.5'
D.D.H. 1
D.D.H. 11
D.D.H. 7
Sec. A-A

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
RECEIVED
JUL 3 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 3 195 Docket No. DMEA 2110 Contract No. Idm-3-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address P.O. Box 957, Grand Junction, Colorado.
Contract Amount, $ 121,280.00 Government Participation 75 % Amount, $ 90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1177.50	2605.00	3782.50			WSM
Bulldozing	-					
Crosscutting	-	14735.00	14735.00			
Drifting	-	37870.00	37870.00			
Road Building		8030.00	8030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1177.50	$63,240.00	$64,417.50	1177.50	63240.00	64417.50

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 2 July, 1953 *Payee Minerals Engineering Co.

Per [signature] Title Superintendent.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 883.13

Signature [signature] (Authorized Certifying Officer)

Date 7/22/53 Vou. No. 846
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idn-E 300 in accordance with the terms of the contract.

Signature John D. McNabb Jr. Title Mining Engineer Date 7-19-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1st Thomas E Howard Title Mining Eng. Date 7/21/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL - 6 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1953 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address P.O. Box 957, Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	-	-	$37,870.00	1082	$35.00	2200	$35.00
Crosscutting	"			14,735.00	421	35.00	750	35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	"	1,177.50	235.5	3,782.50	756.5	5.00	2000	5.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
	Job	-	-	8,030.00	1 Job	8030.00	1 Job	$8030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1,177.50	235.5	$64,417.50				$121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 2 July, 1953 Operator Minerals Engineering Co.

Per W. E. Tobey Title Superintendent.

W. E. Tobey

REMARKS: Work was slowed by equipment breakdowns and by the necessity of timbering the "B" Level before drilling could commence there.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

MINERALS ENGINEERING COMPANY

Cost Distribution Sheet

Contract Idm-E-300

For Month of June, 1953.

Work under the above contract consisted of diamond drilling underground on the "H" Level.

Cost incurred under the contract during the month of June is as follows:

235.5 feet of diamond drilling @ $5.00/foot	$1,177.50
Total cost for reporting period	$1,177.50

W. B. Tobey, Superintendent.

NARRATIVE

Minerals Engineering Company

Contract No. Idm-E-300 For the Month of June, 1953.

"H" Level

During the month authorized diamond drilling was continued and an additional 235.5' of coring was completed. This brings the total to the end of June to 754.5'.

Holes were drilled as follows:

Hole No.	Bearing	Vert. Angle	Length	Location of collar
8	S 50° W	∠ 2°	134.5'	West wall main drift at face.
9	(Incorrectly called 8 in May report) Due W	∠ 2°	90' (completed)	Center line 361 XC E ∠ 6' S in west wall of main drift.
10	Due W	∠ 2°	96'	Center line 227 XC ∠ 67' S in west wall of drift.

A brief description of each hole is as follows:

Hole #8 - Aplite to 48', highly altered aplite to 58', tactite to 64', hornfels to 70', tactite to 93.5', marble to 101.5', tactite to 120', altered marble to 134.5' (end).
Lamp Values: weak 51' to 57', fair 70' to 79', weak 79' to 84', fair 102' to 107', 108' to 124' mostly weak with some fair bands, 124' to 125' fair, 129' to 134.5' weak.

Hole #9 - Aplite to 49', tactite to 67', aplite or quartz monzonite to 90'.
Lamp Values: weak 52' to 54', good 54' to 57', weak with occasional fair bands 57' to 67'.

Hole #10 - Tactite 0 to 18', quartz to 21', aplite to 46', grey impure quartz to 50', tactite to 71', aplite to 75', quartz to 76', tactite to 92', intrusive to 96'.
Lamp Values: 0 to 4.5' fair, 5.1' to 6.1' lean, 6.5' to 9.0' good, 9.0' to 10.5' excellent, blank to 62.4', lean from 62.4' to 67.5', fair 69' to 71', good at 74.5', lean 76' to 80.5', rest very weak or blank.

Hole #8 was drilled after hole No. 9 strictly from a standpoint of drilling eas No trouble was encountered except in Hole No. 10 where poor core recovery was obtained in parts of the hole.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #8

Face Main Drift
∠ 2° - 134.5' S 50° W

From	To	Description
0	20.7'	Light grey mottled fairly even textured aplite
20.7'	23.7'	White with dark green flecks finer grained aplite
23.7'	46.0'	White matrix with light green mottling, fairly even grained aplite
46.0'	48.0'	Darker more uneven grained aplite.
48.0'	48.4'	Altered soft brownish material - tactite.
48.4'	51.0'	Darker green altered material with bands of brownish tactite.
51.0'	52.8'	Highly altered mixed brown, grey and green tactite with much fine grained mica and epidote.
52.8'	54.5'	Mottled green aplite, somewhat altered.
54.5'	57.8'	Vari-colored altered aplite with streaked epidote and much mica. Some pyrite. Considerable scattered hematite.
57.8'	64.0'	Mottled light and dark green, white and brown tactite. Some hematite and mica. Little, if any, garnet.
64.0'	65.5'	Light green and grey fine grained hornfels.
65.5'	70'	Brown fine grained hornfels. Some quartz stringers.
70'	76.2'	Grey brown medium grained tactite with considerable quartz.
76.2'	77.2'	Streaked brown and white limey tactite. Some epidote.
77.2'	84.5'	Mottled white and brown limey tactite. Some epidote and quartz.
84.5'	92'	Mottled streaked green, grey and white limey tactite. Some mica and epidote.
92'	93.5'	Green tactite with considerable brown garnet.
93.5'	101.5'	Banded grey and brown marble.
101.5'	103.5'	Limey light green tactite.
103.5'	107'	Mottled brown and green garnetite.
107'	120'	Mixed green and brown limey tactite. Some dendritic manganese.
120'	134.5'	Light brown to reddish brown altered marble.

Lamp Values

51'	57'	Occasional coarse crystals, very weak.
70'	79'	Fair to good, fine grained and medium.
79'	83'	Weak values.
83'	84'	Weak values.
101.8'	104'	Fair, coarser grained.
104.5'	107'	Fair, fine grained.
107.8'	109'	Fair to good.
109'	109.4'	Weak.
109.4'	111.4'	Fair.
111.4'	116'	Weak.
116'	119.6'	Weak.
119.8'	123.8'	Fair to weak.
123.8'	125.0'	Fair to good.
129.2'	134.5'	Weak.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #9

Face - 75' N W Wall
∠ 2° - 90' Due W

From	To	Description
0	49.3'	Light aplite with varying amounts dark material.
49.3'	51.7'	Dark green mottled tactite.
51.7'	62.0'	Mottled brown and light green tactite.
62.0'	67.0'	Irregular greenish brown tactite with considerable quartz. Limey.
67.0'	90.0'	Aplite or quartz monzonite.
	End.	

Lamp Values

52'	54'	Weak.
54'	57'	Fair to good.
57'	59.5'	Weakish.
59.5'	63'	Fair to weak.
64'	67'	Fair to weak.

MINERALS ENGINEERING COMPANY

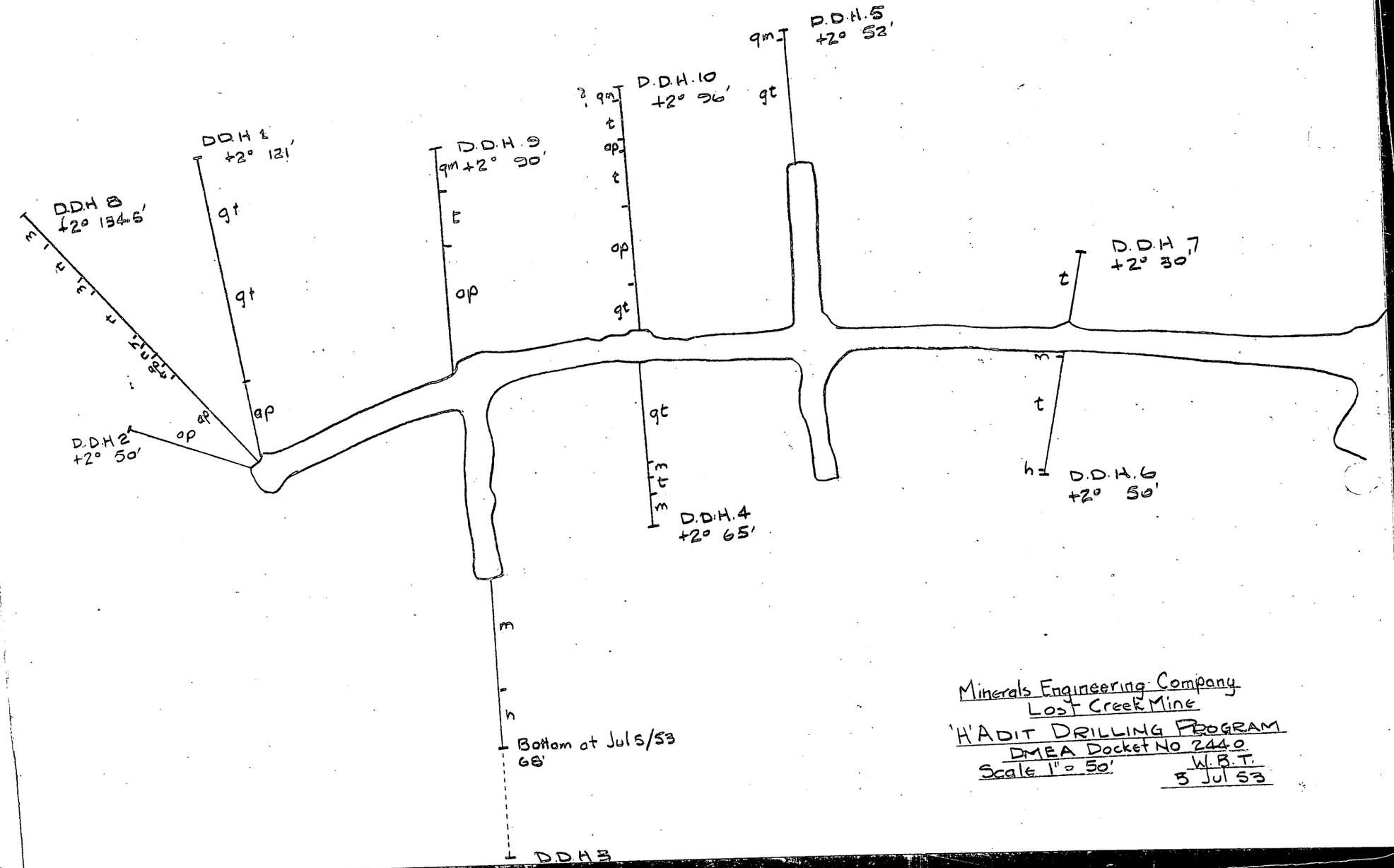
Diamond Drill Hole #10

Collar - Center line 227 XC W ∠
67' S
∠ 02° 96'

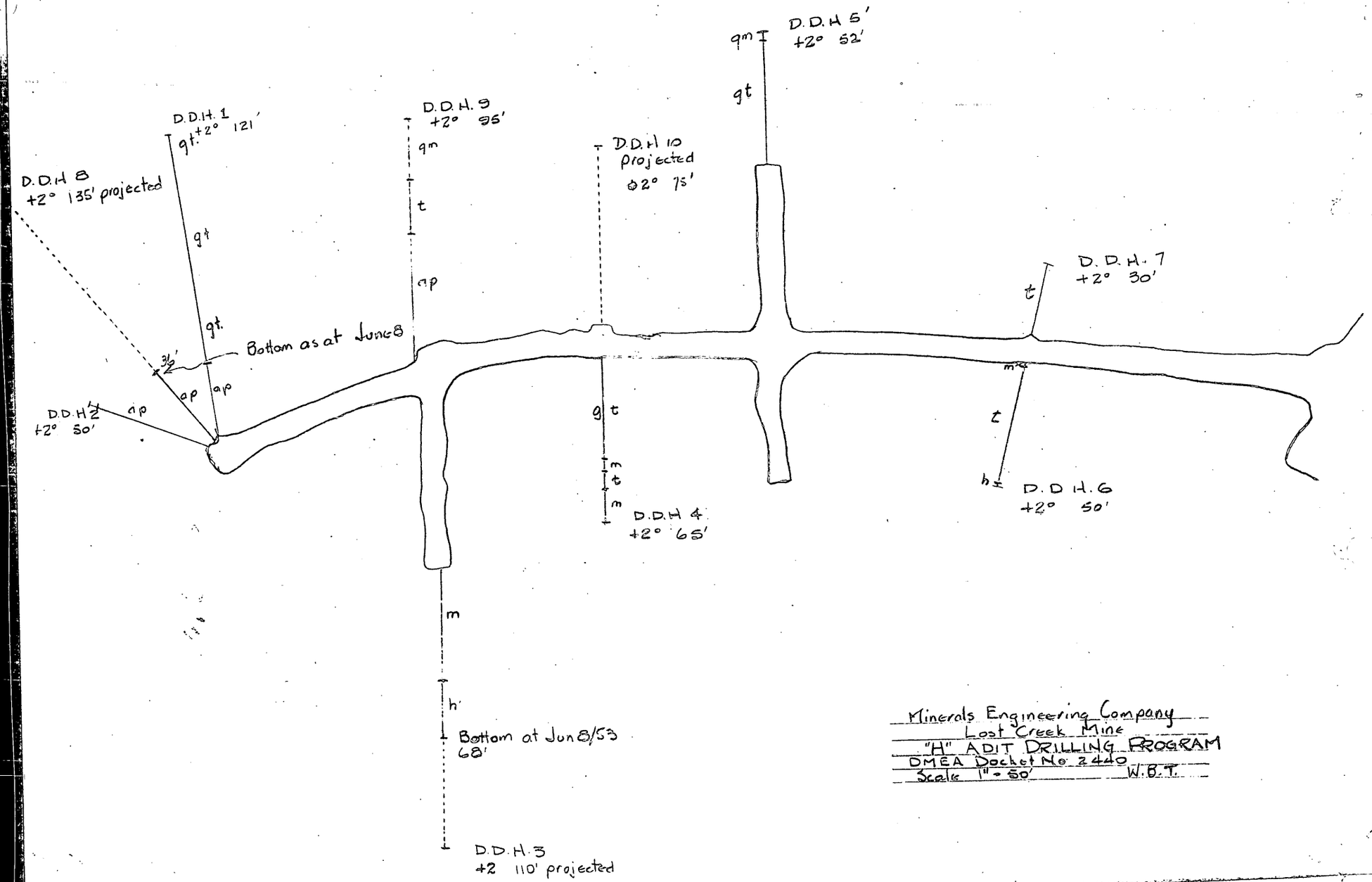
From	To	Description
0	4.5'	Fine grained light grey green limey tactite.
4.5'	8.5'	Coarser green to brown limey tactite. Some dendritic manganese.
8.5'	10.6'	Coarse grained brown and green garnetite.
10.6'	11.1'	Bull quartz with small amounts of green tactite.
11.1'	18.0'	Coarse grained brown and green tactite with considerable quartz.
18.0'	21.0'	Brownish impure quartz.
21.0'	29.5'	Light brownish grey fine grained aplite.
29.5'	35.0'	Mottled darker brown aplite with dendritic manganese.
35.0'	38.6'	Light brown fine grained aplite.
38.6'	46.0'	Light brown aplite with considerable mottling and darker minerals.
46.0'	49.7'	Grey quartz.
49.7'	64.0'	Mottled green and brown tactite. (
64.0'	67.5'	Browner tactite with more quartz. (poorly garnetized.
67.5'	71.0'	Greenish tactite. (
71.0'	73.0'	Mottled banded quartzy aplite.
73.0'	75.0'	Light green banded altered aplite with considerable epidote.
75.0	75.8'	Grey impure quartz.
75.8'	81.5'	Fine grained green tactite with wide bands of brown garnetite.
81.5'	82.5'	Brown, weathered, limey tactite.
82.5'	91.0'	Light green and brown tactite, little garnet.
91.0'	92.2'	Limey tactite.
92.2'	96.0'	Weathered intrusive.
	End.	

Lamp Values

0	4.5'	Fair
5.1'	6.1'	Lean
6.5'	9(	Good
9.0'	10.5'	Excellent.
62.4'	62.8'	Fine grained, lean.
66.5'	67.5'	Fine grained, lean.
69'	71'	Fair
	74.5'	Good Values.
75.9'	77.5'	Lean Values.
77.5'	79.5'	Lean Values.
80'	80.5'	Lean Values.
	84'	Slight values.
Balance of hole		Blank or only occasional spots.



Minerals Engineering Company
Lost Creek Mine
'H' ADIT DRILLING PROGRAM
DMEA Docket No 2440
Scale 1" = 50'
W.B.T.
5 Jul 53


D.D.H. 5'
+2° 52'
gm
gt
D.D.H. 1
gt. +2° 121'
D.D.H. 9
+2° 95'
gm
t
ap
D.D.H 10
projected
+2° 75'
D.D.H 8
+2° 135' projected
gt
gt.
Bottom as at June 8
3½'
ap
ap
ap
D.D.H 2
+2° 50'
D.D.H. 7
+2° 30'
t
gt
m
t
m
D.D.H 4
+2° 65'
t
D.D.H.6
+2° 50'
m
h'
Bottom at Jun 8/53
68'
D.D.H.3
+2 110' projected
Minerals Engineering Company
Lost Creek Mine
"H" ADIT DRILLING PROGRAM
DMEA Docket No. 2440
Scale 1" = 50'
W.B.T.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1953 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Box 957, Grand Junction, Colorado.
Contract Amount, $21,280.00 Government Participation: 75 % Amount, $90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2605.00	-	2605.00			WSM
Bulldozing						
Crosscutting	-	14,735.00	14735.00			
Drifting	-	37,870.00	37870.00			
Road Building	-	8,030.00	8030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2605.00	60,635.00	63,240.00	2605.00	60,635.00	63,240.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 6, 1953 *Payee Minerals Engineering Company

Per Russ B. Tobey Title Superintendent.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1953.75

Signature (Authorized Certifying Officer)

Date 6/17/53 Vou. No. 193
(See other side)

22 1953

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 6-12-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature s/ P. E. Howard Title M. Eng. Date 6/16/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 195 3. Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name Minerals Engineering Company Minerals Tungsten
Address Box 957, Grand Junction, Colorado.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	-	-	37,670.00	1082	$35.00	2200	$35.00
Crosscutting	Foot	-	-	14,735.00	421	35.00	750	35.00
Raising								
Shafts								
Winzes								
Drilling: Core	Foot	2,605.00	521	2,605.00	521	5.00	2000	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	-	-	8,030.00	1 Job	$8030.00	1 Job	8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		2,605.00	521	$63,240.00				$121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 6, 1953 Operator Minerals Engineering Co.

Per W. B. Tobey Title Superintendent, Montana Tungsten Division.

W. B. Tobey

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: Work was resumed at Lost Creek on May 1st, 1953, when a Diamond Drill Program was started on the H Level.

(For Government use only)

DEPARTMENT OF THE INTERIOR
JUN 22 1953

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

If you agree with the letter as rewritten, you should sign, date, and forward the original directly to Mr. Allen and make your usual distribution of the copies.

George C. Selfridge
(esf)

APPROVED:

(sgd.) G. W. Josephson (esf)

Member, Bureau of Mines

N. E. Nelson (esf)

Member, Geological Survey

CEFisher/GMcC
April 7, 1959

cc: Docket No. 2292 and Docket No. 2440
Director's Reading File
Operating Committee
T. H. Kiilsgaard
R. Holliday
Mr. Talbert

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1030.
Approval expires 6-30-53.

Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1953 Docket No. DMEA 2440 Contract No. Ida-E-300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Box 957, Grand Junction, Colorado.
Contract Amount, $121,200.00 Government Participation: 75 % Amount, $90,900.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2605.00	-	2605.00			WSM
Bulldozing						
Crosscutting	-	14,735.00	14735.00			
Drifting	-	37,870.00	37870.00			
Road Building	-	6,030.00	6030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2605.00	60,635.00	63,240.00	2605.00	60,635.00	63,240.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 6, 1953 *Payee Minerals Engineering Company

Per Thos. B. Doby Title Superintendent.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1953 75

Signature [signature]
(Authorized Certifying Officer)

Date 6/17/53 Vou. No. 793
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Edm-E 300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 6-12-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature s/ P. E. Howard Title M. Eng. Date 6/16/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1953. Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name Minerals Engineering Company Minerals Tungsten
Address Box 957, Grand Junction, Colorado.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	-	-	37,870.00	1082	35.00	2200	35.00
Crosscutting	Foot	-	-	14,735.00	421	35.00	750	35.00
Raising								
Shafts								
Winzes								
Drilling: Core	Foot	2,605.00	521	2,605.00	521	5.00	2000	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	-	-	3,030.00	1 Job	3,030.00	1 Job	3,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2,605.00	521	63,240.00				121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 6, 1953 Operator Minerals Engineering Co.

Per W. E. Tobey Title Superintendent, Montana Tungsten Division.

W. E. Tobey

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: Work was resumed at Lost Creek on May 1st, 1953, when a Diamond Drill Program was started on the 1 Level.

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

MINERALS ENGINEERING COMPANY

COST DISTRIBUTION SHEET CONTRACT NO. IDM-E-300

For Month of May, 1953

Work under above contract consisted of diamond drilling underground on the H Level.

Cost incurred under the contract during the month of May is as follows:

521 feet of diamond drilling @ $5.00/ft.	$2,605.00
Total cost for reporting period	$2,605.00

W. B. Tobey,
Superintendent,
Montana Tungsten Division

NARRATIVE

MINERALS ENGINEERING COMPANY
CONTRACT NO. IDM-E-300

FOR MONTH OF MAY, 1953

"H" LEVEL

During the reporting period diamond drilling authorized in the supplement to Idm-E-300 was commenced and 521 feet of drilling were completed.

Holes were drilled as follows:

Hole No.	Brg.	Vert. Angle	Length	Location of Collar
1.	S 82° W	∠ 2°	121'	West wall of Main Drift at face - 4' N
2.	S 20° W	∠ 2°	50'	West side of Main Drift face.
3.	Due E	∠ 2°	68' (Incomplete)	Center of face of 361 XC E
4.	Due E	∠ 2°	65'	Center line 227 XC ∠ 67' S in east wall of drift.
5.	Due W	∠ 2°	52'	Center of Face of 227 XC W
6.	S 77° E	∠ 2°	50'	Bureau of Mines reference point at portal ∠ 131' S - E wall.
7.	N 77° W	∠ 2°	30'	Bureau of Mines reference point at portal ∠ 131' S - W wall.
9.	Due W	∠ 2°	85' (Incomplete)	Center line 361 XC E ∠ 6' S in west wall.

A brief description of each hole is as follows:

Hole No. 1 - Aplite to 28.5', balance of hole tactite. Generally fair lamp values from 28.5' to 120'.
Hole No. 2 - All aplite. No lamp values.
Hole No. 3 - Marble to 45', limey hornfels for balance of hole. Occasional very weak lamp values in hornfels.
Hole No. 4 - Tactite with occasional bands of limey material to 35'. 35' to 46' altered marble. 46' to 52' tactite. 52' to end altered marble with pure marble for last 5 feet. Fair lamp values to 11.5'. Mixed good and lean values from 33' to 53'. Balance blank.
Hole No. 5 - Tactite to 47.6'. 47.6' to end quartz monzonite. Lamp values. 5.7-9.0' fair values. Fair to weak values in balance from 0-36'. Balance blank or nearly so.

Hole No. 6 - 0-1' marble. 1'-17' limey tactite and hornfels mixed. Mixed impure marble and hornfels to end. Lamp values very weak to 30'.

Hole No. 7 - All tactite with considerable quartz 13'-18' and 22'-25'. Fine grained values 0-5.7'. Balance blank.

Hole No. 9 - Aplite to 50'. Tactite to 72'. Balance to 85' (depth at end of month) quartz monzonite. Fair values 52' to 62', weak values 62'-72'. Balance blank.

Detailed logs attached.

Maps attached.

Considerable difficulty was experienced in drilling some of these holes. Hole No. 1 gave difficulty when our drill proved too small to handle any drilling past 121'. It was the intention to drill to the quartz monzonite but drill capacity was reached at 121' while still in tactite.

Hole No. 2 was drilled in aplite and this proved too hard for economical drilling beyond 50'.

Hole No. 3 began caving at 38' and required cementing. Our pump proved incapable of a satisfactory cementing job and so the hole was given up until such time as a better pump could be obtained.

Core recovery in holes 6 and 7 was very low despite all precautions. Washing of soft core due to weathering is the probable reason.

Other drilling was done easily and without a hitch.

Since our trouble we have acquired a larger drill and a more satisfactory pump and drilling is proceeding on a more even keel.

William B. Tobey,
Superintendent,
Montana Tungsten Division.

WBT/mt

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #1 - "H" Level

Face - 5' N
121' ∠ 02°
S 82° W

From	To	Description
0	12.5'	Mixed fine and coarse grained aplite.
12.5'	12.6'	Aplite mixed with brown garnet.
12.6'	12.9'	Core consists of finely ground limestone.
12.9'	17.5'	Tactite, mixed garnet and wollastonite with minor amounts limestone.
17.5'	19.4'	Tactite, partially altered impure limestone and garnet.
19.4'	28.5'	Aplite, varying from mottled white to light gray with occasional inclusions of partially altered limestone and tactite.
28.5'	35.0'	Tactite, brown garnetite containing calcite and epidote.
35.0'	36.0'	Highly altered limestone containing much white mica (biotite ?)
36.0'	37.6'	Impure brown marble.
37.6'	38.0'	Altered limestone with white mica.
38.0'	39.5'	Brown garnetite with calcite and epidote.
39.5'	43.7'	Light green softish tactite, fine grained.
43.7'	46.0'	Brown garnetite, coarse.
46.0'	46.2'	Brown garnetite with an inclusion of green talc and small blebs of specular hematite.
46.2'	49.5'	Coarse brown garnetite with epidote and calcite.
49.5'	51.0'	Light green tactite, fine grained with darker green inclusions of green talc (?), considerable epidote.
51.0'	57.0'	Light brown tactite.
57.0'	62.0'	Light green tactite with inclusion of soft dark green mineral (talc ?)
62.0	83.0	Brown tactite or garnetite with considerable calcite and talc.
83.0'	84.8'	Impure partially altered limestone with some brown garnet and scattered small blebs of specular hematite.
84.8'	89.5'	Brown garnetite with some epidote and talc and with vugs at 88.5' and 89' containing pyrite and hematite.
89.5'	96.3'	Highly altered limestone containing small amounts epidote, talc and white mica.
96.3'	107.5'	Mixed brown and green tactite with some quartz inclusions from 103 to 105'. Coarse grained.
107.5'	113.0'	Mixed light brown and green tactite with considerable epidote and some quartz.
113.0'	115.5'	Brown garnetite with considerable quartz.
115.5'	119.0'	Highly altered limestone with quartz inclusions.
119.0'	120.0'	Highly altered material with some talc, garnet and considerable quartz.
120.0'	120.6'	Quartz stringers.
120.6'	121 end	Same as 119.0-120.0

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #2 - "H" Level

Face
S 20° W
51' ∠ 02°

From	To	Description
0	4.5'	Aplite, fine grained grey brown.
4.5'	4.7'	Altered aplite containing brown garnet.
4.7'	7.0'	Fine grained grey brown aplite.
7.0'	11.0'	Tactite containing considerable amounts of quartz and garnet, some epidote.
11.0'	17.2'	Altered aplite containing considerable brown garnet, some epidote.
17.2'	21.2'	Quartz monzonite.
21.2'	31.4'	Aplite.
31.4'	32.0'	Highly altered aplite containing white mica, hematite and calcite.
32.0'	34.1'	Mixed up rock containing dark green mineral (hardness 5-6)(serpentine ?) some epidote, some minor talc, much quartz.
34.1'	36.0'	Aplite showing fracturing and refracturing, with fractures filled with quartz veinlets.
36.0'	37.2'	Light colored aplite.
37.2'	42.0'	Grey (light to dark) quartz monzonite.
42.0'	47.0	Partially altered aplite, some brown garnet, considerable dark green mineral.
47.0'	50.0 end	Quartz monzonite.

Lamp Values

0	10'	Scattered values, considerable powellite.
33'	39'	Scattered specks and coarse crystals, mostly powellite. Remainder blank.

Diamond Drill Hole #3 - "H" Level

Face 361' XC E
Due E
110' ∠ 02°

From	To	Description
0	1'	Impure altered limestone.
1	26'	White to blue marble with occasional narrow bands of impurities. Some mica at 9.1'.
26'	29'	Light brown impure marble.
29'	30'	Vari-colored altered marble with some garnet.
30'	33.5'	Grey banded marble.
33.5'	38.7'	Multi-colored bands of marble mostly brown and white.
38.7'	42.0'	Light yellow, green and brown impure marble, quartz inclusions and a black dendritic mineral. From 40' to 68' recovery is only about 45%.
42.0'	43.0'	Very hard impure silicified limestone.
43.'	45.'	Hard altered silicified limestone with narrow irregular bands of black dendritic mineral and wider bands of medium grained quartz.
45.'	49.5'	Dark grey and green fine grained hornfels.
49.5'	56.0'	Light grey to light green fine grained hornfels.
56.0'	63.0'	Light green hornfels with occasional bands of impure marble.
63.0'	68.0'	Fine grained hornfels with occasional lighter bands and some light brown very fine grained hornfels. Hole not completed as of June 7th.

Lamp Values - No lamp values of any consequence to 68'.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #4 - "H" Level

Station at 227 XC E + 67' S
65' Due E + 02°

From	To	Description
0	4'	Brown and green garnet tactite with some quartz and some calcite.
4'	7.1'	Light colored silicified limestone with considerable black dendritic mineral.
7.1'	10.0'	Brown garnet tactite.
10.0'	12.5'	Alteration zone with impure limestone, epidote.
12.5'	14.5'	Grey marble.
14.5'	15.5'	Fine grained green tactite.
15.5'	17.0'	Multi-colored impure silicified marble.
17.0'	18.2'	Light green tactite.
18.2'	31.2'	Brown garnet tactite with considerable quartz and calcite, coarse.
31.2'	35.0'	Fine grained green tactite with occasional bands of brown garnet.
35.0'	40.0'	Highly altered limestone with considerable black mineral in coarse occlusions.
40.0'	40.8'	Brown garnetite.
40.8'	45.7'	Highly altered limestone with occasional bands brown garnetite and one or two blobs of pyrite.
45.7'	49.3'	Brown garnet tactite with considerable calcite.
49.3'	52.0'	Highly altered limey tactite with some mica, pyrite and hematite and a considerable number of coarse inclusions of soft black or dark green talc (or serpentine ?).
52.0'	59.5'	Mottled light grey altered limestone with considerable serpentine or talc and some pyrite.
59.5'	65.0 End	Grey marble.

Lamp Values

0	2'	Good values (
2'	6'	Lean " (Powellite present
6'	10'	Fair " (
10'	11.5'	Weak
11.5'	33'	Blank except for odd specks.
33'	40'	Lean scattered values except for 4/10 of a foot at 33.5'.
40'	50'	Banded good values with lean sections between.
50'	53'	Fair to good values.
53'	56'	Weak values.
56'	65'	Blank.

Diamond Drill Hole #5 - "H" Level.

Face 227 XC W
Due W 50' + 02°

From	To	Description
0	6.5'	Mottled green tactite.
6.5'	14.0'	Brown garnet tactite.
14.0'	17.5'	Coarse brown and green garnets in a mottled brownish tactite.
17.5'	19.0'	Brown garnetite with considerable coarse epidote.
19.0'	24.5'	Mottled brown and green garnetite with lesser amounts of epidote.
24.5'	28.8'	Mixed banded brown and green garnetite.
28.8'	30.0'	Green tactite with some hornfels.
30.0'	32.2'	Light brown garnetite with some massive quartz.
32.2'	37.0'	Coarse mottled green, brown and white tactite with considerable epidote and quartz.
37.0'	37.8'	Grey hornfels.
37.8'	38.6'	Altered quartz monzonite.
38.6'	47.6'	Mottled and banded quartzy tactite with considerable epidote.

Diamond Drill Hole #5 cont'd.

From	To	Description
47.6'	52.'	Quartz monzonite.

Lamp Values

0	5.7'	Scattered very low values.
5.7'	9.0'	Very fine grained fair values. Considerable powellite.
9.0'	11.4'	Weak values.
11.4'	15.5'	Fair to good fine grained values.
15.5'	17.0'	Fair values.
17.0'	22.0'	Scattered lean values.
24.0'	24.2'	Fair values.
24.2'	36.0'	Blank except for occasional single spots.
36.0'		1/10 foot weak values.
36.0'	46.'	Very weak scattered values.
		Remainder blank.

Diamond Drill Hole #6 - "H" Level. Portal Station ∠ 131' S 8 77° E
50' ∠ 02°

From	To	Description
0	1'	Dark brown, weathered impure marble.
1'	5'	" " " limey tactite.
5'	10'	Badly weathered greenish brown limey tactite.
10'	12'	Light colored, fine grained, hard, cherty material with specks of a dendritic black mineral (hornfels).
12'	16'	Greyish brown tactite, hard, compact with fissures and vugs filled with quartz.
16'	17'	Light brown and greenish cherty material, somewhat limey. Some epidote.
17'	23.8'	Brown mottled impure marble with black inclusions of soft material which gives off a brownish gas with HCl. Also some hematite.
23.8'	30'	Brown, yellow, green and red impure marble, in places partially altered to tactite. ?
30'	34'	Brown hard cherty material (hornfels) with dendritic black mineral.
34'	39.5'	Light colored impure marble.
39.5'	40.5'	Ground marble light brown in color.
40.5'	42.0'	Brown crystalline impure marble with calcite.
42.'	45'	Light brown fine grained medium hard cherty looking material (hornfels ?)
45'	49'	Brown crystalline impure marble with calcite in vugs.
49'	50' End	Light brown fine grained, medium hard cherty looking materials (hornfels ?)

Lamp Values

0	7'	Scattered very light values.
13'	17'	" values.
22'	-	1/10 foot fair values.
30'		1/10 foot good values.
		Remainder of hole blank.

MINERALS ENGINEERING COMPANY

Diamond Drill Hole #7 - "H" Level

Portal Station + 131' S N 77° W
30' + 02°

From	To	Description
0	8.5'	Brown garnet-rich tactite, some brecciation and quartz stringers.
8.5'	13.0'	Lighter greenish brown tactite. Some epidote, some brecciation.
13.0'	18.0'	Quartz breccia, about 50% quartz with brecciated brown tactite.
18.0'	22'	Green tactite, some fine quartz stringers. Considerable epidote.
22'	25'	Quartz breccia, 50% quartz with considerable ground core. Brecciated brown tactite makes up inclusions.
25.0'	30' End	Light brown tactite, fine grained with considerable epidote.

Lamp Values

0	5.7'	Some fine grained values.
		Remainder of hole blank.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Dec 1 to 8-1952

BCS 1/6/53

Month of DECEMBER, 1952 Docket No. DMEA 2440 Contract No. Idm-E-300

Operator's Name MINERALS ENGINEERING COMPANY Minerals TUNGSTEN

Address Grand Junction, Colorado

Contract Amount, $ 121,280.00 Government Participation: 75% Amount, $ 90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	$ 175.00	$14,560.00	$14,735.00	175.00		
Drifting	$1,715.00	$36,155.00	$37,870.00	1715.00		
Road Building	None	$ 8,030.00	$ 8,030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1,890.00	$58,745.00	$60,635.00	1890.00	58745.00	60635.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Dec. 14, 1952 Payee MINERALS ENGINEERING COMPANY

Per M. N. Shaw Title ENGINEER IN CHARGE

M. N. Shaw

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

DEC 30 1952

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1417.50

Signature [signature]
(Authorized Certifying Officer)

Date 12/18/52 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdF-2-300 in accordance with the terms of the contract.

Signature John S. McNally Jr. Title Mining Engineer Date Dec. 14, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Thomas E. Howard Title Min Engr Date 12/15/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of DECEMBER 195 2 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name MINERALS ENGINEERING COMPANY Minerals TUNGSTEN
Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$1,715.00	49	$37,870.00	1,082	$35.00	2,200	$35.00
Crosscutting	Foot	$ 175.00	5	$14,735.00	421	$35.00	750	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	None	None	$ 8,030.00	1 Job	$8,030.	1 Job	$8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$1,890.00	54	$60,635.00				$121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Dec. 14, 1952 Operator MINERALS ENGINEERING CO.

Per M. N. Shaw Title ENGINEER IN CHARGE
M. N. Shaw

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: Work was suspended at the property on December 8, 1952. Will resume work under contract Idm-E-300 in April, 1953, weather conditions permitting.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

NARRATIVE

MINERALS ENGINEERING COMPANY
CONTRACT NO. IDM-E-300

FOR PERIOD DECEMBER 1 TO DECEMBER 8, 1952

"B" LEVEL

During the reporting period the drift was driven through a fractured zone. Timbering was not required although the ground showed signs of sloughing. The beds appear to swing to the south-east and are being cut at an angle. Advance for the reporting period was 31 feet. There was no cross-cutting on this level during the reporting period.

"H" LEVEL

During the reporting period the 361 cross cut east was advanced 5 feet and the tunnel heading was advanced 12 feet under contract Idm-E-300.

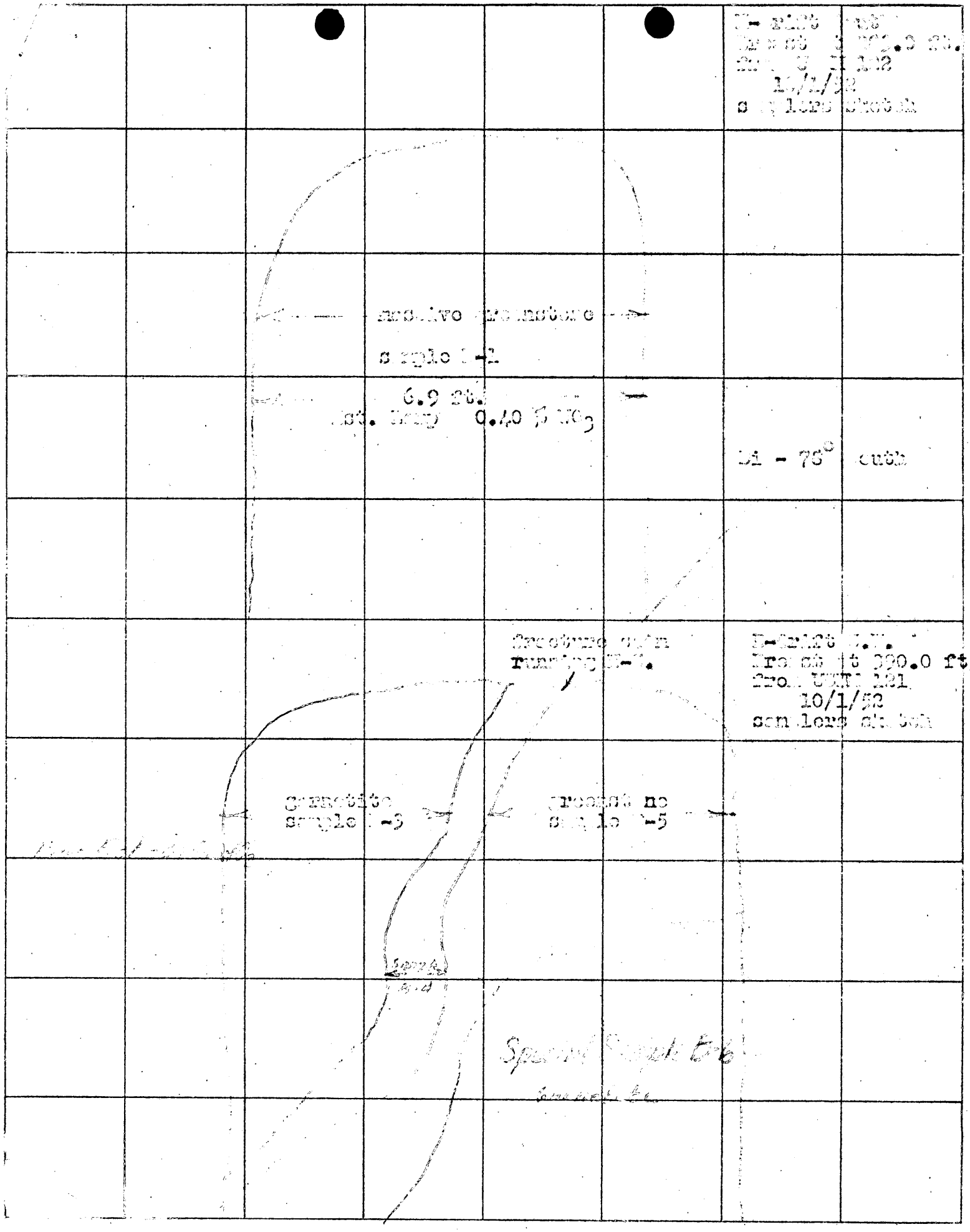
At the end of the reporting period operations were suspended for the winter because of excessive cost encountered by winter operations.

SURFACE EXPLORATION

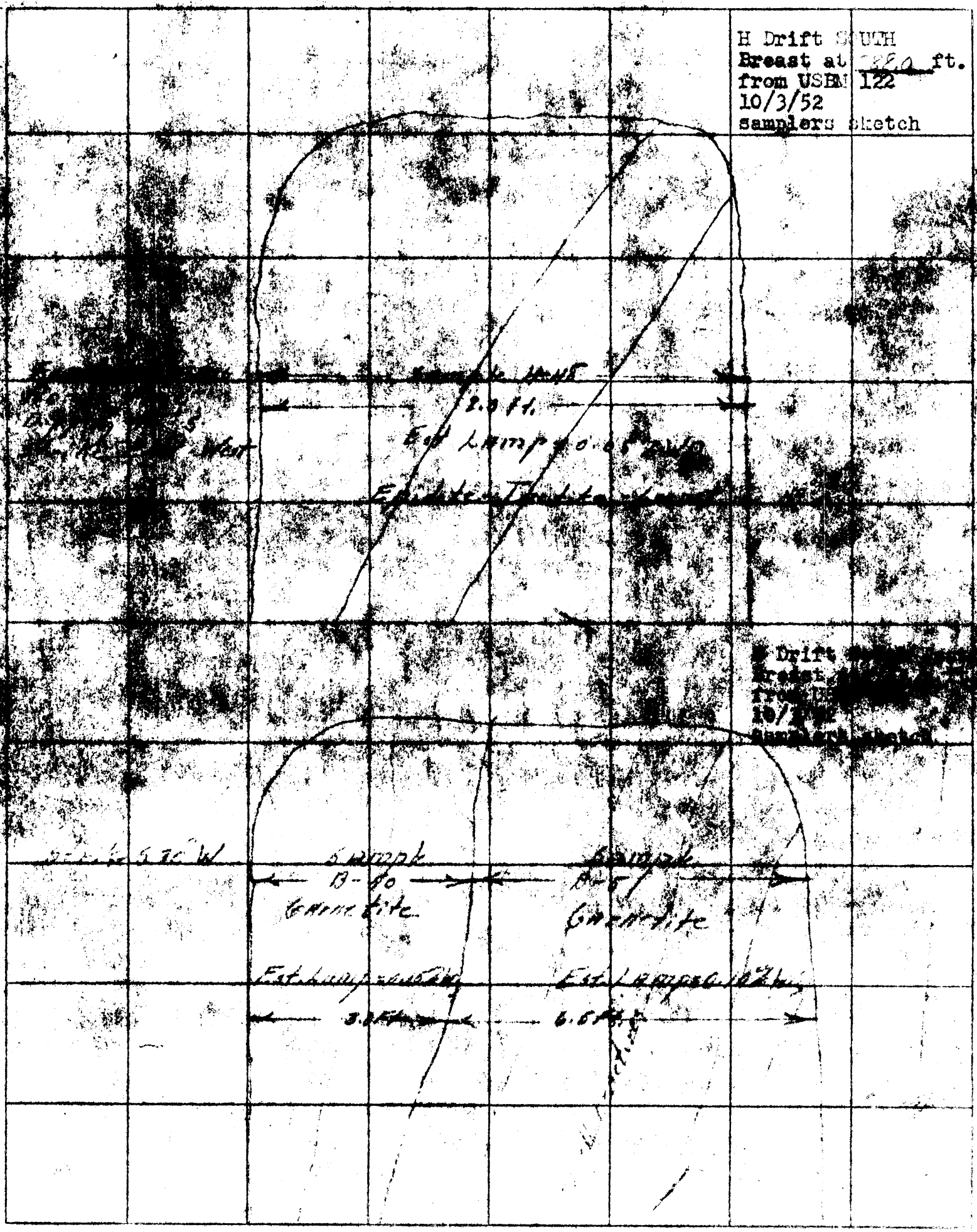
The surface sampling was completed during the last reporting period, and a composite sample made up as reported. During the reporting period, single and three stage flotation tests were made for testing the response of Lost Creek ore to flotation and subsequence pressure digestion and precipitation of refined tungsten.

M. N. Shaw
M. N. Shaw
Engineer in Charge

198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION

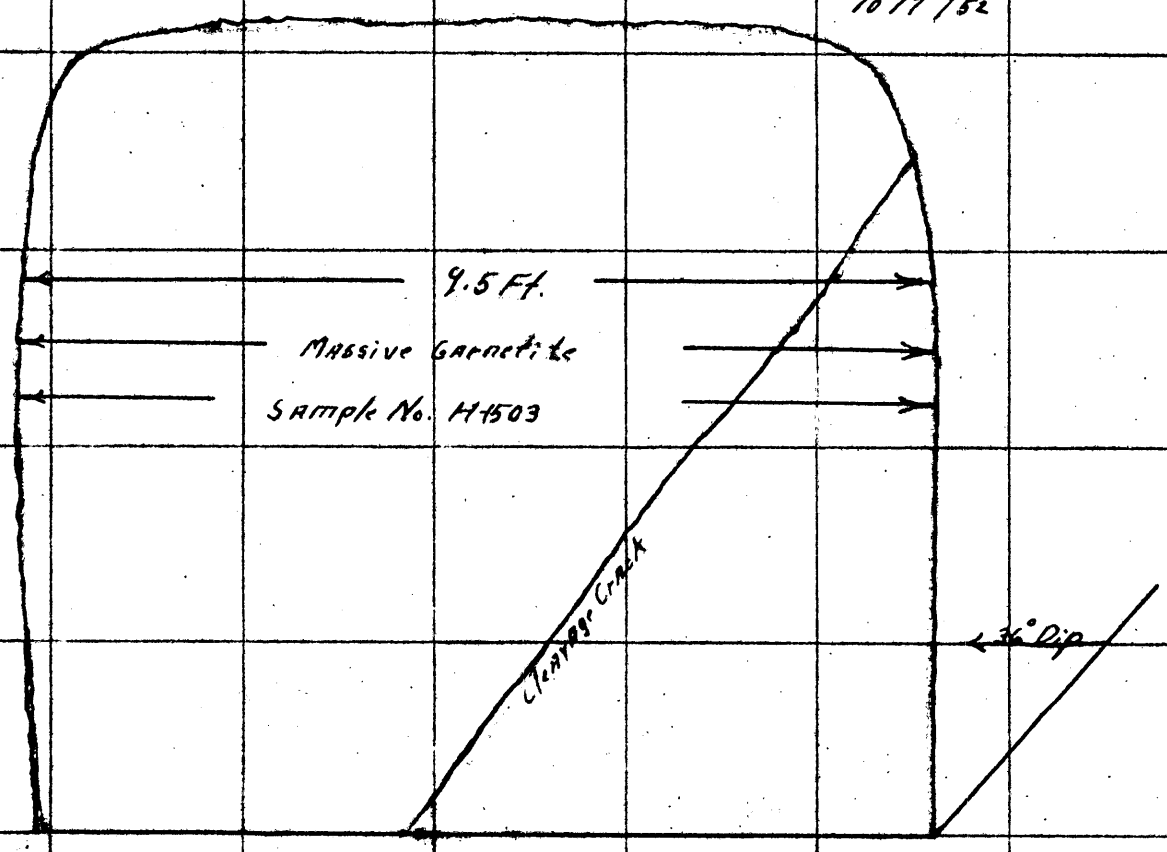


H Drift SOUTH
Breast at 2820 ft.
from USBM 122
10/3/52
samplers sketch



198-14 DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

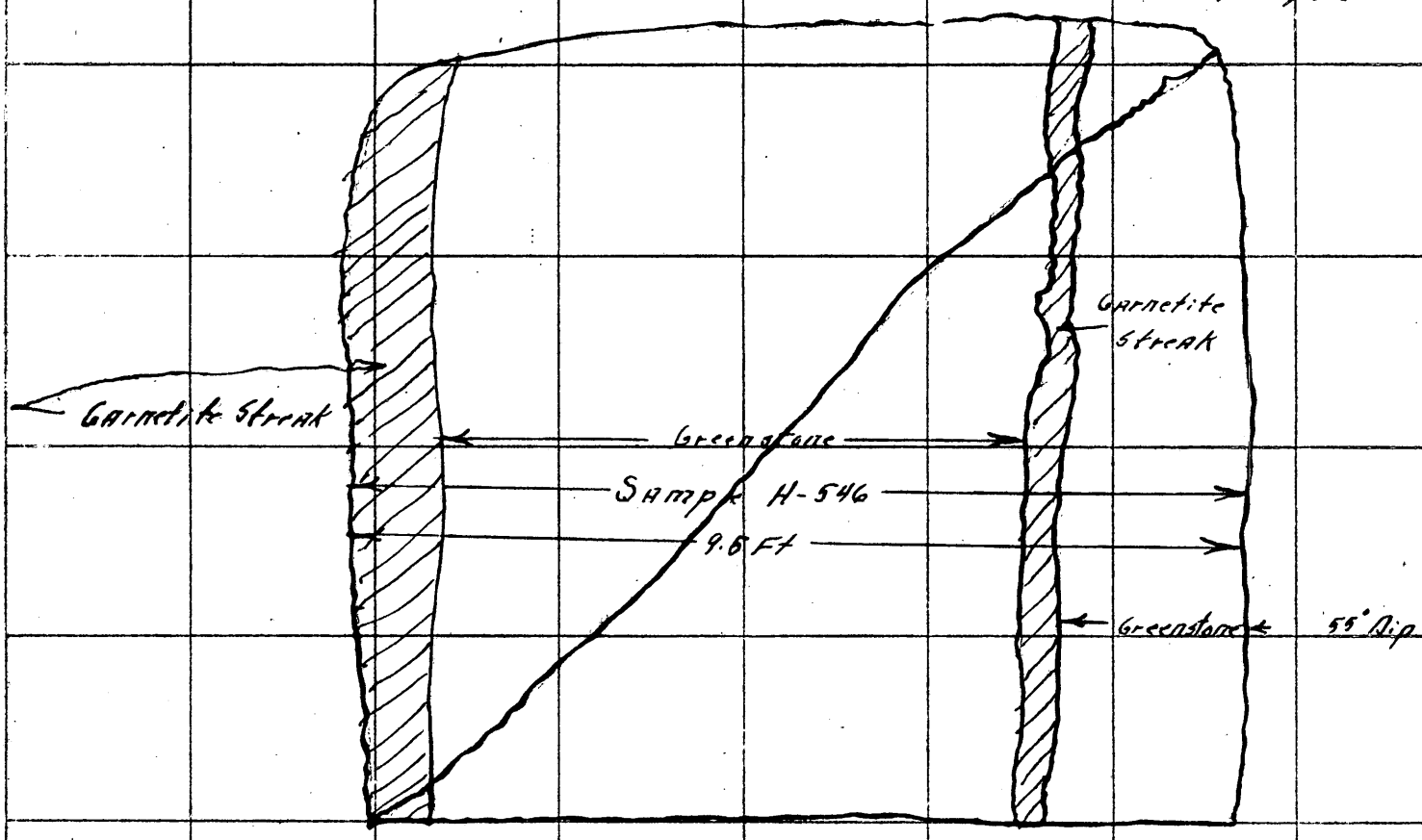
H Drift South
Breast At 301.0 Ft
From US BM 122
10/7/52



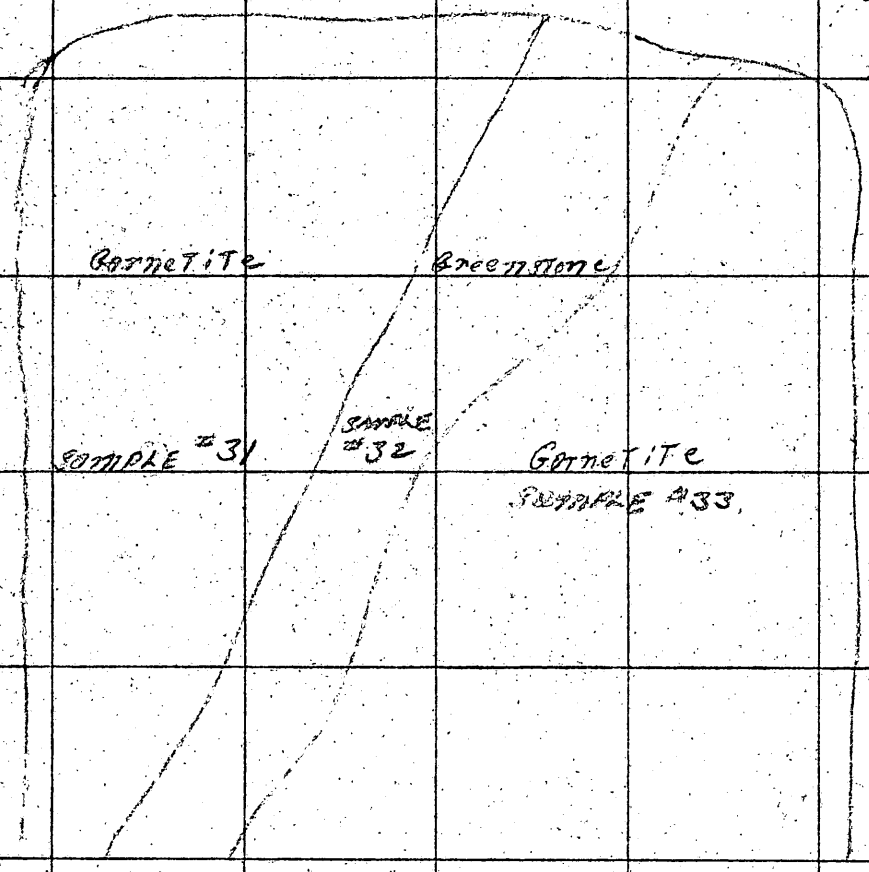
198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

198 H DUNKIN BLUE PRINT & SUPPLY CO., ORANGE JUNCTION, COLO.

H Drift South
Breast At 343.0 Ft.
From USBN 122
10/22/62

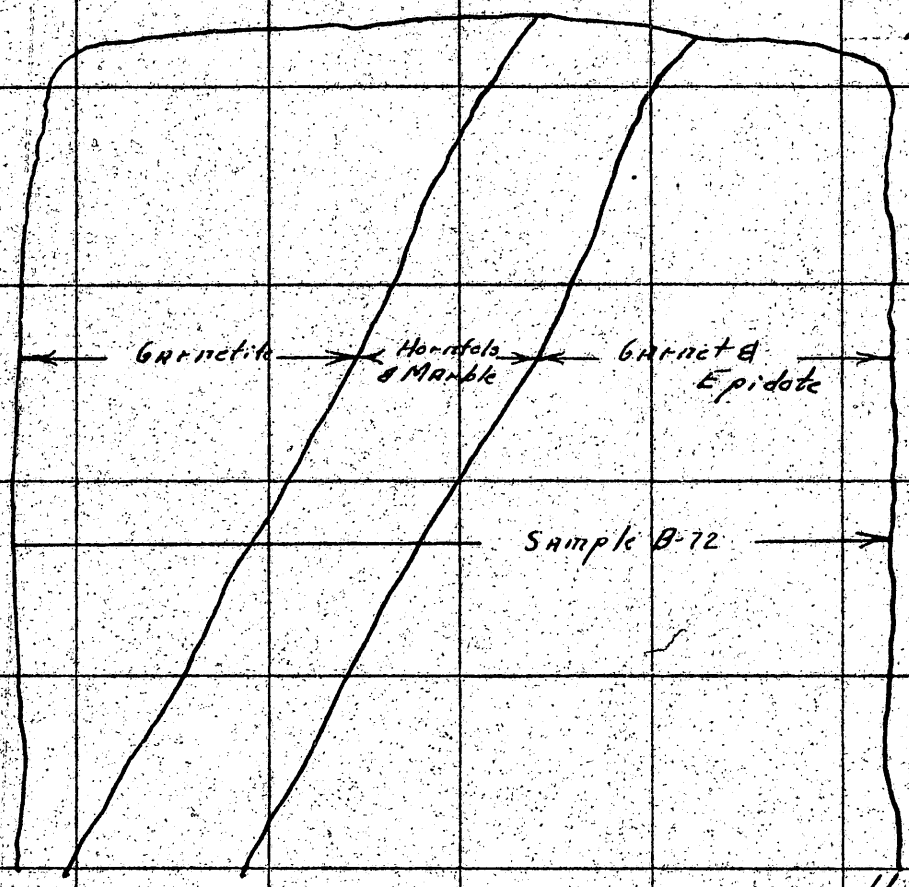


B- Drift South
breast at 403.0 ft.
from USHI 121
10/2/52

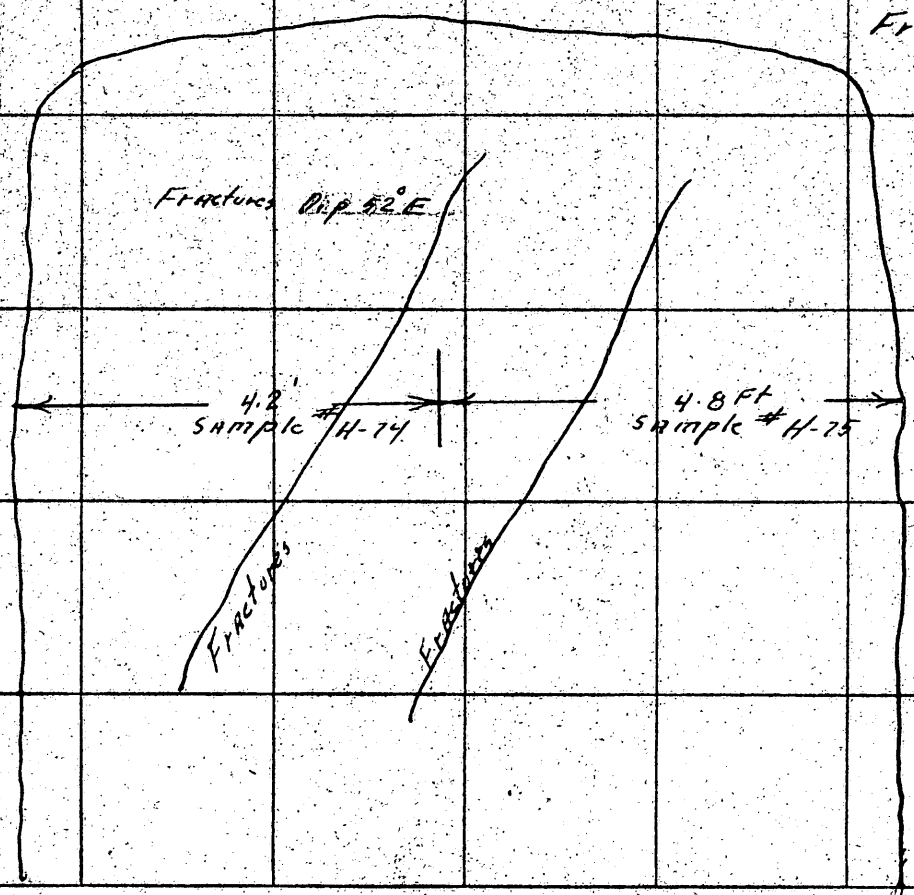


198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

B-Drift South
Breast Ht 421.0 Ft.
From USBM 121
10/4/52

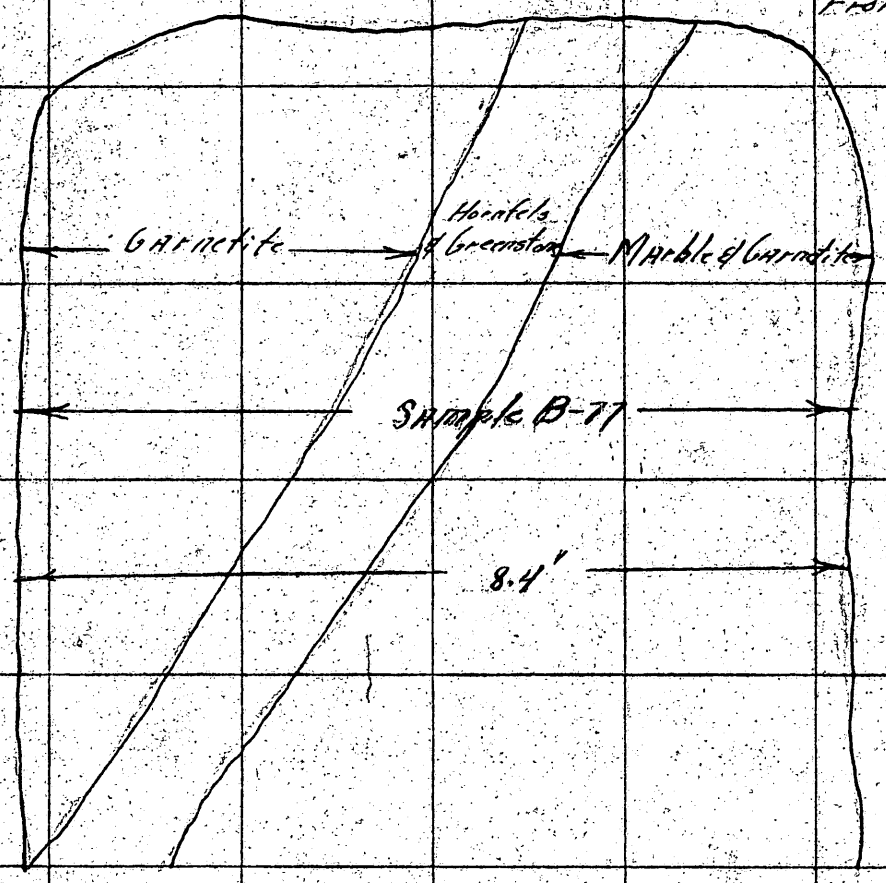


H Drift South
Breast Ht 290.0 Ft.
From USBM 122
10/4/52



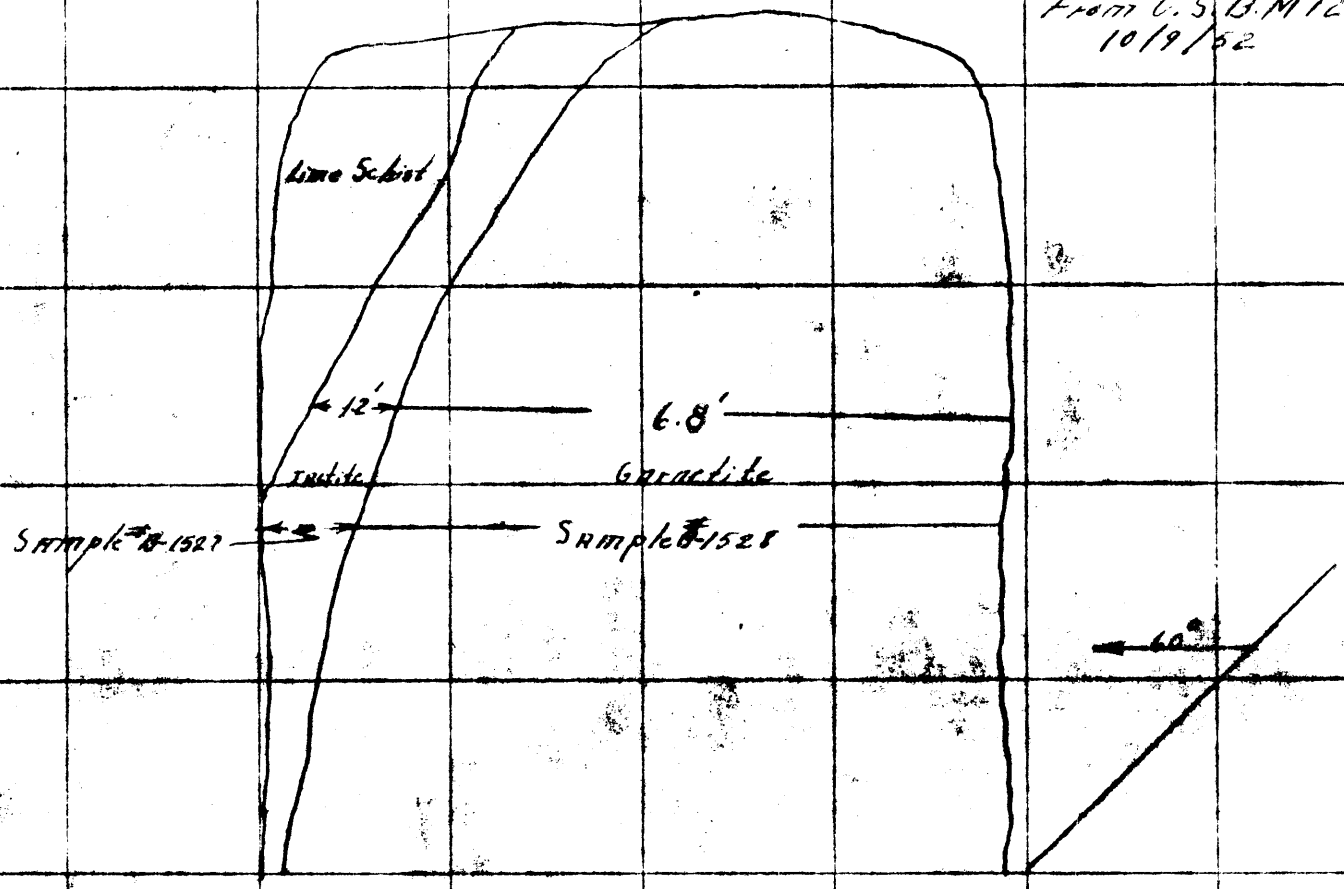
198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

B Drift South
Breast At 425.0 Ft
From U.S.BM 121
10/5/52



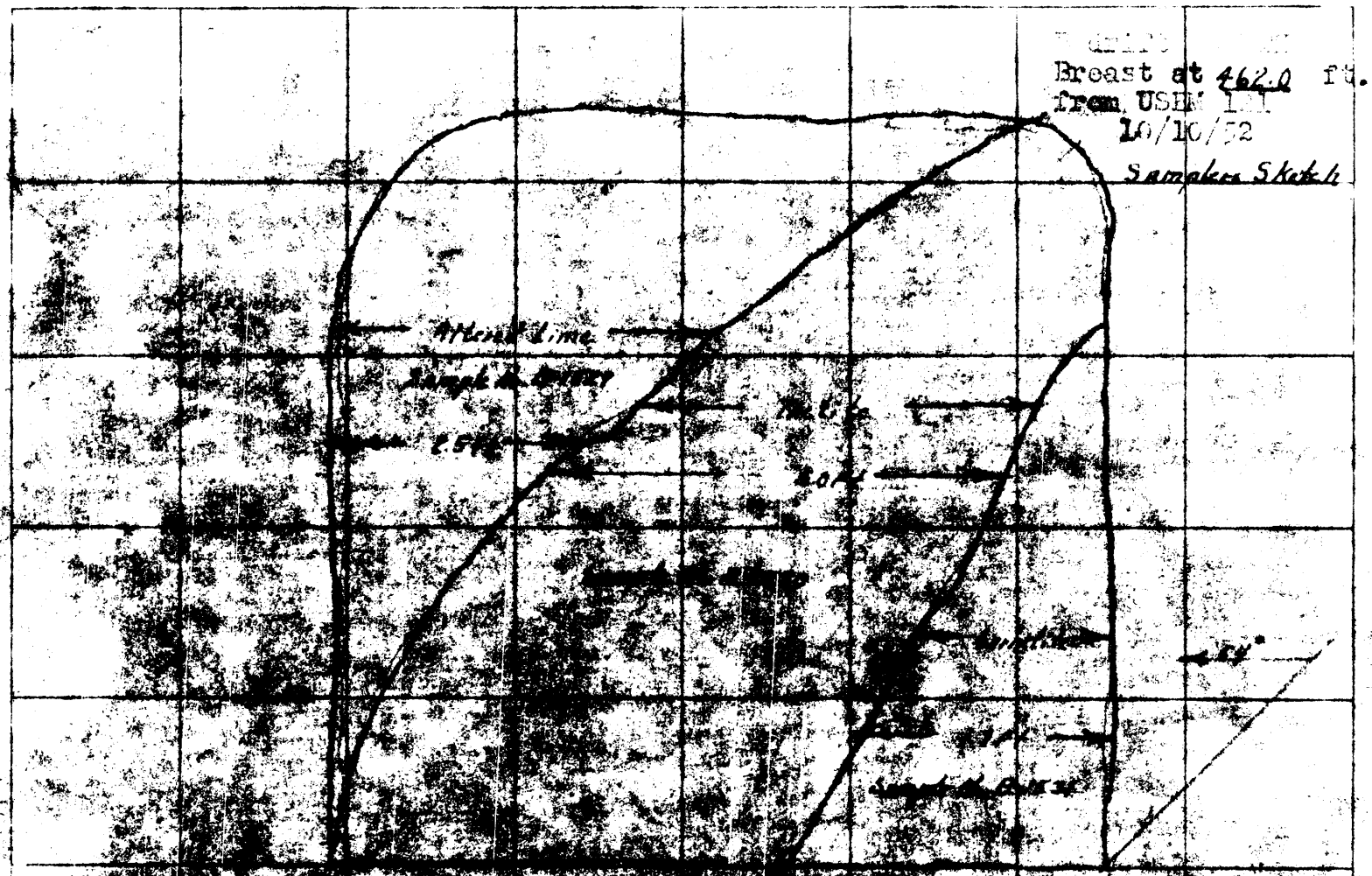
198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

B Drift South
Bicast El 453.0 ft
From U.S. B.M 121
10/9/62



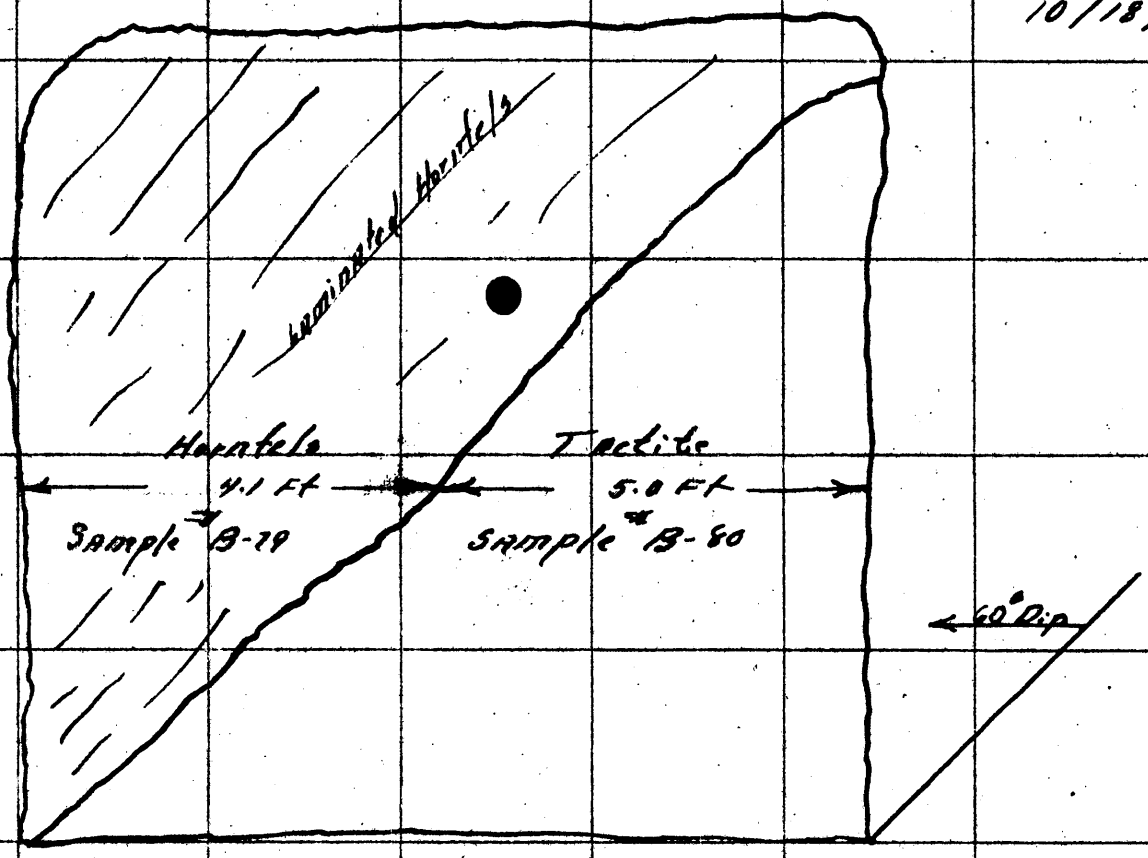
Breast at 462.0 ft.
from USH 1
10/10/52

Samples Sketch



H drift SOUTH
Breast at ft.
From USH 122
10/10/52

B Drift S.E.
Breast Alt 470.0 Ft.
From U.S.B.M 181
10/18/52



198 H DUNKIN BLUE PRINT & SUPPLY CO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~

1201 North Division St.
Spokane 2, Washington
December 1[illegible], 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1[illegible] 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Routine inspection of Lost Creek Mine, Minerals Engineering Co., Beaverhead County, Montana, Contract Idm-E300, Docket No. DMEA 2440 (tungsten)

Frequent visits to the Lost Creek Tungsten Property were made during the past month. Most inspections were made in the company of Mr. W. B. Myers of the U. S. Geological Survey.

The exploration project continued in an efficient fashion during November and first part of December. Work included drifting and crosscutting on both "B" and "H" levels. Severe winter conditions set in at the project during the latter half of November causing operating costs to rise sharply. On December 8, 1952 the Minerals Engineering Company suspended operations for the remainder of the winter season. A brunton-tape survey made at the conclusion of operations showed the following overall progress made to date under Contract Idm-E300:

"B" Level

Drifting	625.3 feet
Crosscutting	
428 crosscut E.	140.0 feet
428 crosscut W.	51.0
184 crosscut W.	27.0
184 crosscut E.	10.0
Total crosscutting	228.0 feet

"H" Level

Drifting	456.5 feet
Crosscutting	
361 crosscut E.	74.0 feet
227 crosscut E.	51.0
227 crosscut W.	68.0
Total crosscutting	193.0 feet

Fifty percent of the total amount of money in Contract Idm-E300 was expended at the time work was suspended on December 8, 1952.

During November and December the Operators completed their detailed sampling and assaying program. The USBM has kept abreast of the program and a large number of splits and check samples are being processed at the Albany, Oregon laboratories. Assay results along with geologic data provided by Mr. Myers will be posted on a map of the property in the near future. It is expected that a more accurate evaluation of the deposit will result when all available data is posted and correlated.

Minerals Engineering Co. intend to resume operations at the property in the spring of 1953. Work will probably commence during the latter half of April.

John S. McNabb

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
JSM/vf

Form DF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952 Docket No. DMEA 2440 Contract No. Idm-E 300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $121,280.00 Government Participation: 75 % Amount, $90,960.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	$4200.00	$10,360.00	$14,560.00			
Drifting	$5075.00	$31,080.00	$36,155.00			
Roadbuilding	None	$ 8,030.00	$ 8,030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$9,275.00	$49,470.00	$58,745.00	9275.00	49470.00	58745.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Dec. 5, 1952 *Payee Minerals Engineering Co.

Per M. N. Shaw Title Engineer in Charge
M. N. Shaw

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

6956.25 $6956.25

Signature (Authorized Certifying Officer)

Date 12/18/52 Vou. No. (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date Dec. 6, 1952

John S. McNabb Jr.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

/S/

Signature Thomas E. Howard Title Mining Engr Date 12/16/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1952 Docket No. DMEA 2440 Contract No. Idm-E 300
Operator's Name Minerals Engineering Co. Minerals Tungsten
Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$5,075.00	145	$36,155.00	1,033	$35.00	2,200	$35.00
Crosscutting	Foot	$4,200.00	120	$14,560.00	416	$35.00	750	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	None	None	$8,080.00	1 Job	$8,030.	1 Job	$8,030
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$9,275.00	265	$58,795.00				$121,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Dec. 5, 1952 Operator Minerals Engineering Co.

Per M. N. Shaw Title Engineer in Charge
M. N. Shaw

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: During the reporting period 145 feet of drifting and 120 feet of crosscutting was completed at a cost of $35.00 per foot, as authorized in the contract.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE : 205676

NARRATIVE

Contract Idm-E 300

November 1 thru November 30, 1952

"B" Level Tunnel

During the reporting period the 428 crosscut was driven eastward through the intrusive, but we failed to encounter and ore zone. At 184 feet a crosscut was turned to the west and tungsten bearing material was encountered for some 27 feet; the east crosscut was driven 10 feet, the first three feet of which was tungsten bearing. At 530 feet the main drift encountered the strike fault which apparently is swinging more to the west. As the fault was encountered, the ground was heavy and a sand pocket was tapped causing the drift to curve. In as much as the fault was swinging westward and we had not encountered ore east of the fault, we did not continue, but dropped back approximately 50 feet and continued the drift in a more southerly direction. Advance during the reporting period was 89 feet of drifting and 70 feet of crosscutting under Contract Idm-E 300.

"H" Level Tunnel

During the reporting period the tunnel was driven south 56 feet and crosscutting to the east advanced 50 feet under Contract Idm-E 300.

Surface Exploration

During the reporting period surface sampling was continued. Work preparing "F" Cut was completed and samples cut. During the last half of the reporting period a composite sample of the surface and underground samples was made which should be representative of the ore exposed so far in exploring the ore deposit.

The composite was made up of the following weights of our different exposures:

I-J Cut	100 lbs
H Level	100 lbs
E-1 Cut	100 lbs
E Cut	100 lbs
C-S-2 Cut	66 lbs
C-S-1 Cut	67 lbs
B Level	67 lbs
Total:	600 lbs

The composite was crushed through ten mesh and a head sample cut. The remainder will be used for metallurgical testing.

M. N. Shaw

M. N. Shaw
Engineer in Charge

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

NOV 12 1952

Month of OCTOBER, 1952 Docket No. DMEA 2440 Contract No. Idm-E-300 11/26/52
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $ 111,280.00 Government Participation: 75 % Amount, $ 83,460.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	$6,755.00	$ 3,605.00	$10,360.00			
Drifting	$6,020.00	$25,060.00	$31,080.00			
Road Building	None	$ 8,030.00	$ 8,030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$12,775.00	$36,695.00	$49,470.00	12,775.00	36,695.00	49,470.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date November 4, 1952 *Payee MINERALS ENGINEERING COMPANY

Per M. N. Shaw Title Engineer in Charge

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 9,581.25

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E-300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date November 4, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Department of the Interior
Defense Minerals Administration
NOV 2 1952

Month of OCTOBER 195 2 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$ 6,020.00	172	$31,080.00	888	$35.00	2200	$35.00
Crosscutting	Foot	$ 6,755.00	193	$10,360.00	296	$35.00	750	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	None	None	$ 8,030.00	1 Job	$8030.00	1 Job	$8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		$12,775.00	365	$49,470.00				$111,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date November 4, 1952 Operator MINERALS ENGINEERING CO.

Per M. N. Shaw Title Engineer in Charge
M. N. Shaw

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: During the reporting period 172 feet of drifting and 193 feet of cross-cutting was completed at a cost of $35.00 per foot, as authorized in the contract.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE CONTRACT NO. IDM-R-300

MINERALS ENGINEERING COMPANY

From October 1 to October 31, 1952

"B" LEVEL TUNNEL

During the reporting period the tunnel left the faulted zone and was advanced in solid formations. A turn was made to the east as the tunnel encountered barren shale. By the end of the reporting period the mineralized zone was apparently coming in on the left hand rib. Cross cuts were turned east and west at 428 feet. The west cross cut was driven 51 feet to granite. The east cross cut was driven 107 feet through the fault zone and into an intrusive formation, and at the end of the reporting period we were continuing to drive eastward to the ore zone thought to be east of the intrusive formation. Advance during the reporting period was 93 feet of drifting and 158 feet of cross-cutting, making a total advance of 505.3 feet of drifting and 158 feet of cross-cutting under the contract in "B" level.

"F" LEVEL TUNNEL

During the reporting period the tunnel was driven ahead 79 feet. As the period ended the heading was in an intrusive formation. An advance of 35 feet of cross-cutting was made in this tunnel during the reporting period. Total advance in this tunnel is 387.2 feet of drifting and 138 feet of cross-cutting under Contract IDM-R-300.

SURFACE EXPLORATION

During the reporting period surface exploration was continued. Using the same methods as outlined in the narrative for the reporting period of September 1 to September 31, 1952, the "E" Cut, "C" Cut and "C-2" Cut were sampled, and the surface at "F" Cut was prepared for sampling. Work was started to enlarge the surface exposure at "J" Cut. This work was in progress as the reporting period ended.

M. N. Shaw
M. N. Shaw
Engineer in Charge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

1201 N. Division St.
Spokane 2, Washington

October 13, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Routine inspection of the Lost Creek Tungsten mine, Minerals Engineering Co., Contract Idm-E300, Beaverhead County, Montana, Docket No. DMEA 2440 (tungsten)

A routine inspection of the Lost Creek Tungsten mine was made on October 8, 1952. At the time of my inspection work was progressing in a work-manlike fashion under the DMEA contract.

A crew of 16 men are now at work at the Lost Creek property, and the exploration program is being pushed most vigorously. Advance in the drifts and cross--cuts at B and H levels was rather slow during the month of September due to hindrances caused by sheared heavy ground. The drift at B level was advanced 87 feet during September; most of this ground having to be timbered. The drift has passed through the sheared area at this date and future work should proceed more rapidly. The first east and west cross-cuts in B level were begun during the first week of October. These cross-cuts should delineate the boundary of the tactite zone that is exposed in "C" cut on the surface. The drift at H level was advanced 73 feet and crosscuts 227 east and 227 west advanced 38 and 58 feet respectively during September.

The Minerals Engineering Co. have undertaken a most extensive sampling program. Their own laboratory has been installed at the property and tungsten analyses are performed by means of pressure digestion. Personnel involved in sampling and assaying include two metallurgical engineers, a dozer operator, and four samplers. All tactite exposures are sampled and assayed most thoroughly. The following method is used in sampling surface exposures: The exposure is first cut as deeply as possible with the bulldozer, one ton samples are then shot from the face at five-foot intervals, samples are then crushed in a portable crusher and split into two 1,000 pound piles which are placed on tarpaper to avoid contamination, splits of these piles are then made and finally analyzed.

Wherever the tactite appears to contain commercial, tungsten ore I have taken check samples from the splits which will be run by the Bureau of Mines laboratory in Albany, Oregon. Occasionally I take a chip sample from one of the faces after it has been shot. Although the chip samples are not nearly as accurate as the large bulk samples taken by the Minerals Engineering Co., they do serve to check on the bulk sample as the assays should be reasonably close. The Minerals Engineering Co. intend to continue their extensive sampling program until at least January 1, 1953. I intend to keep abreast of the program by taking check samples of their split bulk samples, when there is a possibility that commercial values are present.

John S. McNabb

CC: 3-Wash
2-USGS
DMEA
JSM
M/D

JSM:kt

Form MF-204 (Rev.)
(April 1952)

Ward

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.
RECEIVED
NOV 5 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of SEPTEMBER, 1952 Docket No. DMEA 2440 Contract No. Idm-E-300 11/10/52
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $111,280.00 Government Participation: 75% Amount, $83,460.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	$3,360.00	$ 245.00	$ 3,605.00			
Drifting	$5,600.00	$19,460.00	$25,060.00			
Roads and Trails	None	$ 8,030.00	$ 8,030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$8,960.00	$27,735.00	$36,695.00	8960.00	27735.00	36695.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 15, 1952 *Payee MINERALS ENGINEERING COMPANY

Per M. N. Shaw Title Engineer in Charge

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 6720.00

Signature (Authorized Certifying Officer)

Date 10/30/52 Vou. No. (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E-300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date Oct. 15, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

DEPARTMENT OF THE INTERIOR
Budget Bureau No. 42-R1151
Defense Approval expires 6-30-53.
RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of SEPTEMBER 195 2 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$5600.00	160	$25,060.00	716	$35.00	2950	$35.00
Crosscutting	Foot	$3360.00	96	$ 3,605.00	103	$35.00	750	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
	Job	None	None	$ 8,030.00	1 Job	$8,030.00	1 Job	$8,030.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$8,960.00	256	$ 36,695.00				$111,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 15, 1952 Operator Minerals Engineering Co.

Per M N Shaw Title Engineer in Charge.
M. N. Shaw

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: During the reporting period 160 feet of drifting and 96 feet of crosscutting was completed at a cost of $35.00 per foot as authorized in the contract.

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

COST DISTRIBUTION SHEET CONTRACT NO. IDM-E-300

MINERALS ENGINEERING COMPANY

FOR PERIOD SEPTEMBER 1 to SEPTEMBER 30, 1952

Work under Contract No. Idm-E-300 including drifting on "B" and "H" levels and crosscutting on "H" level.

The "B" level tunnel was advanced from 325.3 feet to 412.3 feet, an advance of 87 feet during the month of September, 1952.

The "H" level tunnel was advanced from 235.2 feet to 308.2 feet, an advance of 73 feet during the month of September, 1952. Crosscutting in "H" level tunnel was advanced from 7 feet to 103 feet, a total crosscutting advance of 96 feet during the month of September, 1952.

Costs entailed during the reporting period under Contract No. Idm-E-300:

87 feet of drifting in "B" level tunnel
73 feet of drifting in "H" level tunnel
96 feet of crosscutting in "H" level tunnel
256 feet of advance during the reporting period.

256 feet of drifting and crosscutting at $35.00 per foot.

$35.00
x 256
$8960.00

Total $8,960.00

M. N. Shaw

M. N. Shaw
Engineer in Charge

NARRATIVE CONTRACT No. Idm-E300

MINERALS ENGINEERING COMPANY

For period September 1 to September 30, 1952.

"B" Level Tunnel

During most of the month this tunnel was driven through the strike fault zone encountered the last part of the month of August, all of which required timbering. Vibrations set up while blasting caused sloughing of a portion of the untimbered section of the tunnel so it was necessary to timber the effected section. During the last few days of the reporting period the tunnel passed through the fault zone and timber was not needed. Advance for the reporting period was 87 feet, making a total advance under the contract of 412.3 feet.

"H" Level Tunnel

During the reporting period the tunnel and cross-cut were driven through hard tactite which did not require timbering. On the third of September a cross-cut was turned to the west so there were three headings being driven simultaneously, the cross-cut east, the cross-cut west, and the drift south. A total advance of 73 feet of drifting and 96 feet of crosscutting was made during the month, making a total advance under the contract of 308.2 feet of drifting and 103 feet of cross-cutting.

Surface Exploration

During the reporting period considerable work was done on the surface to further aid in the evaluation of the deposit. The Government did not participate in this work, however, the agencies concerned were advised and information obtained was made available to them. In an area between the "E" Cut and the "F" Cut, named the "E-1" Cut, the overburden was stripped to expose the rock. The lower part was then faced off by drilling and blasting, exposing a face from three to ten feet high. This face was chip sampled in five foot sections, about 10 to 15 pounds of material being taken in each sample. This was a preliminary sample. The face was then drilled and blasted and from 1,000 to 1,500 pounds of material taken from each five foot section. This material taken was crushed to 3/8 inch and split through a Jones splitter to about fifty pounds. It was then taken to the sample preparation room where it was prepared for analysis in the routine manner. By the end of the reporting period work was in progress crushing an d splitting the samples.

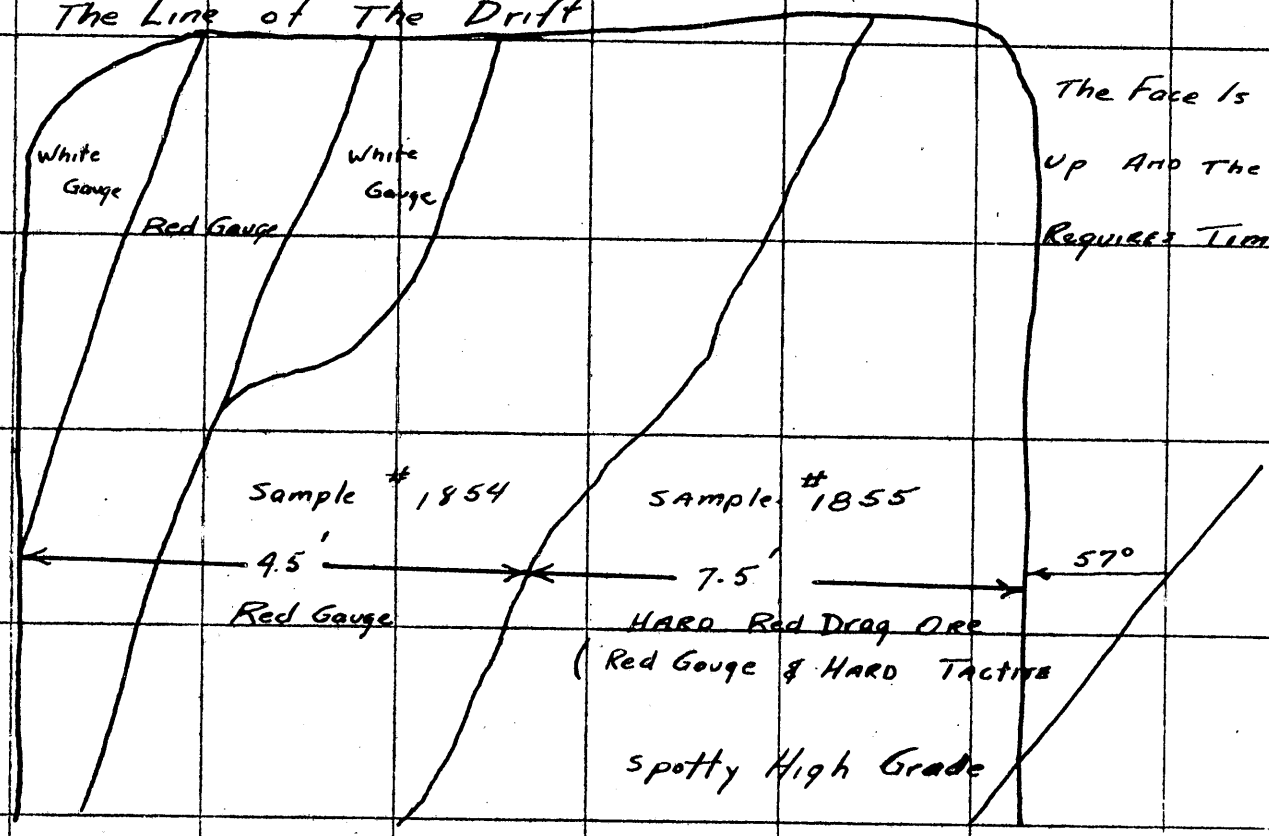
During the reporting period the "E" Cut was prepared for sampling in a like manner, and work preparing "C","C-1", and "C-2" cuts was started.

M. N. Shaw

M. N. Shaw
Engineer in Charge

B Drift S.E
Breast at 309.0'
9/2/52

The Fault Slip On The East Side Is Following The Line of The Drift



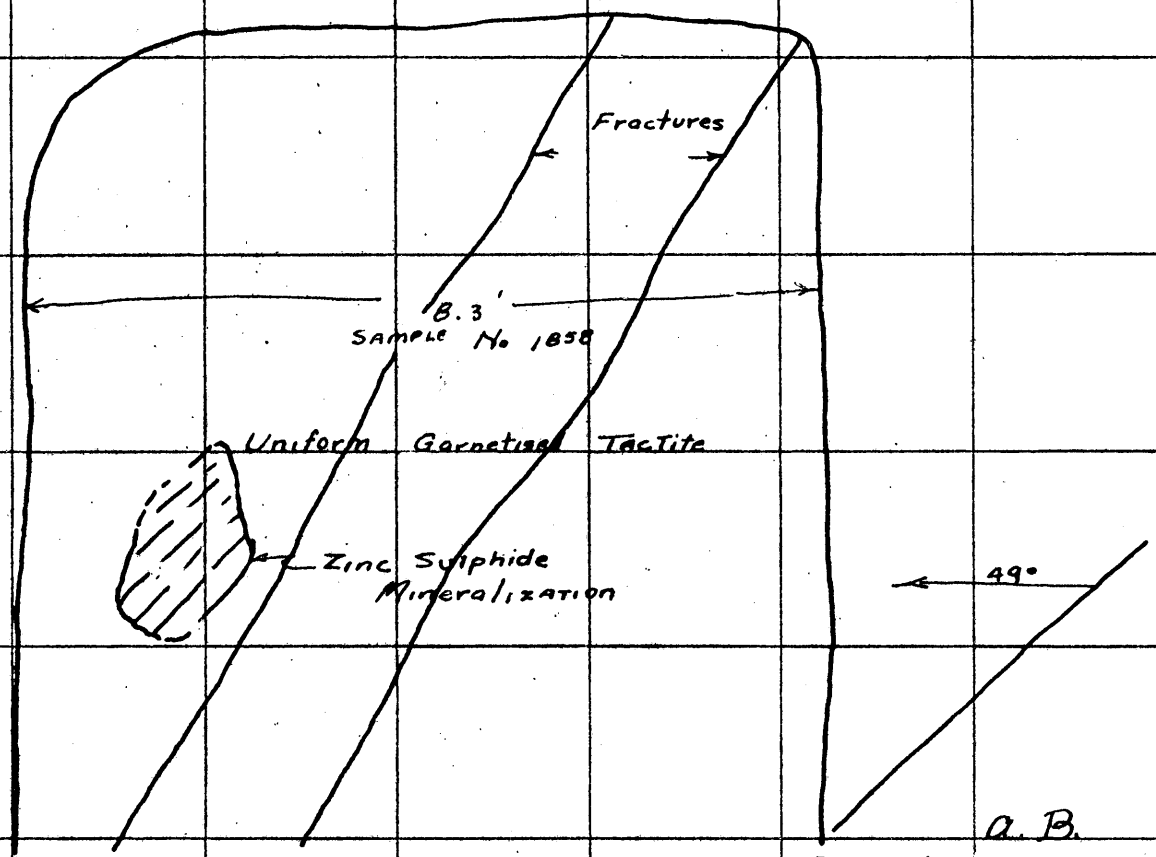
The Face Is Broken Up And The Ground Requires Timbering

The HARD "DRAG ORE" Lamps Very High
Suggest The Drift Be Driven straight For 20 ft.

A.B.

198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

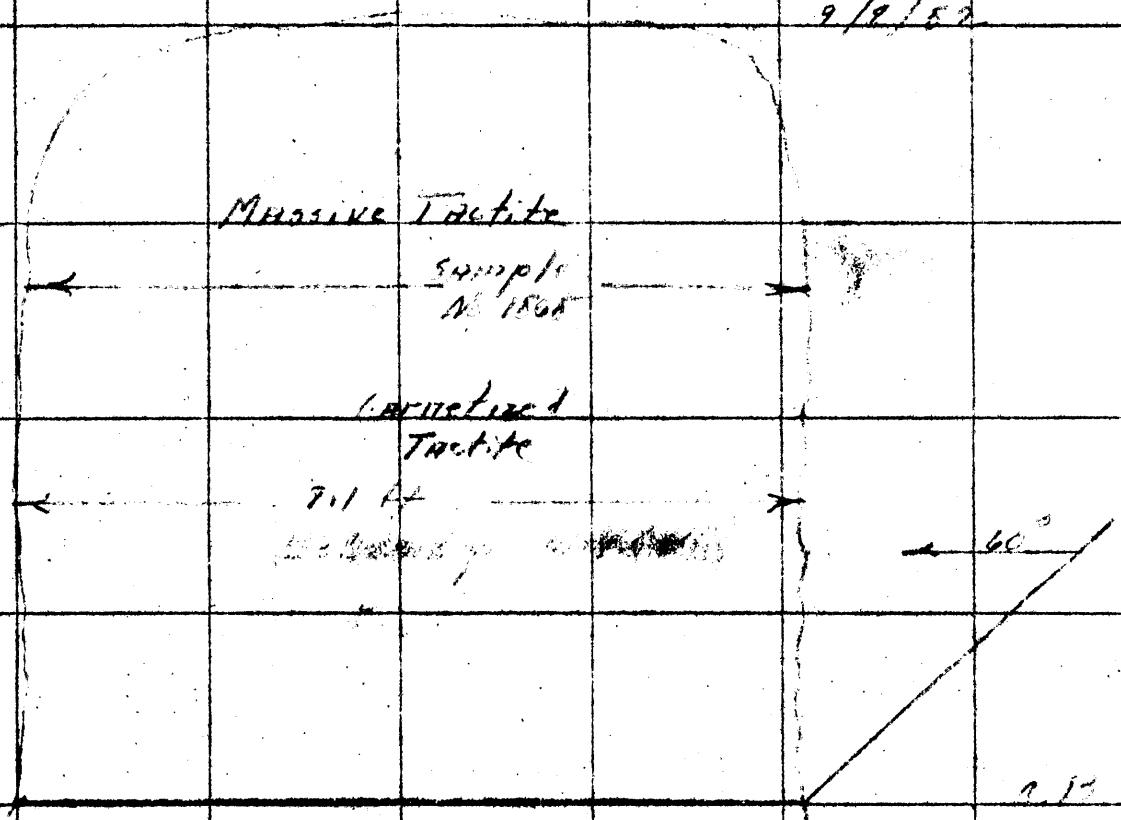
H Drift 9/4/52
Breast at 213.0 ft
From U.S.B.M 122



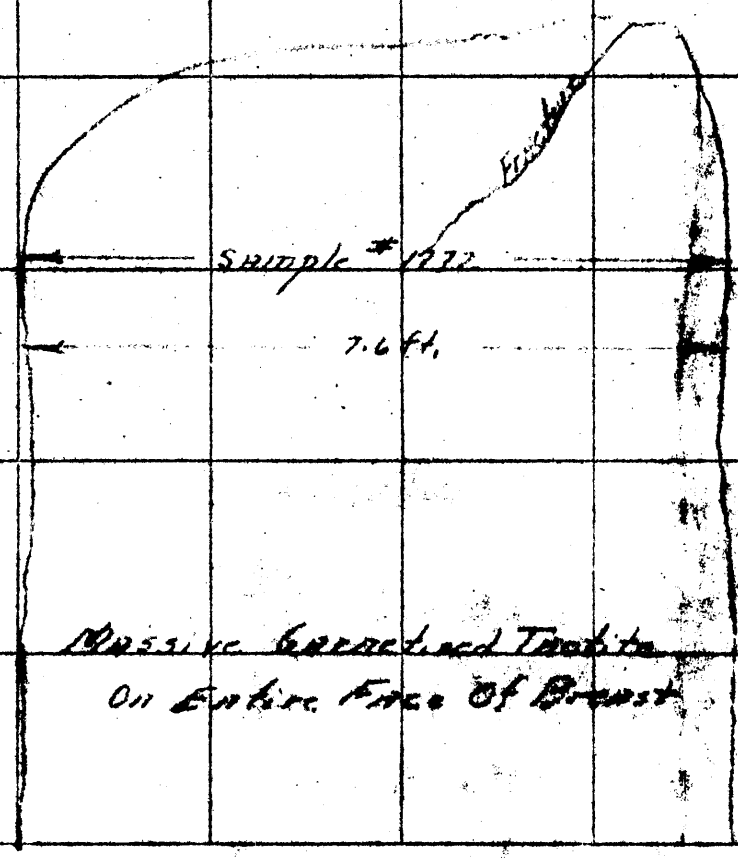
a. B.
B. Drift S.E.
Breast AT
From U.S.BM 121
9/4/52

198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

H Drift 5.
Breast At 225.0 ft
From USBM 122
Samplers Sketch
9/8/52

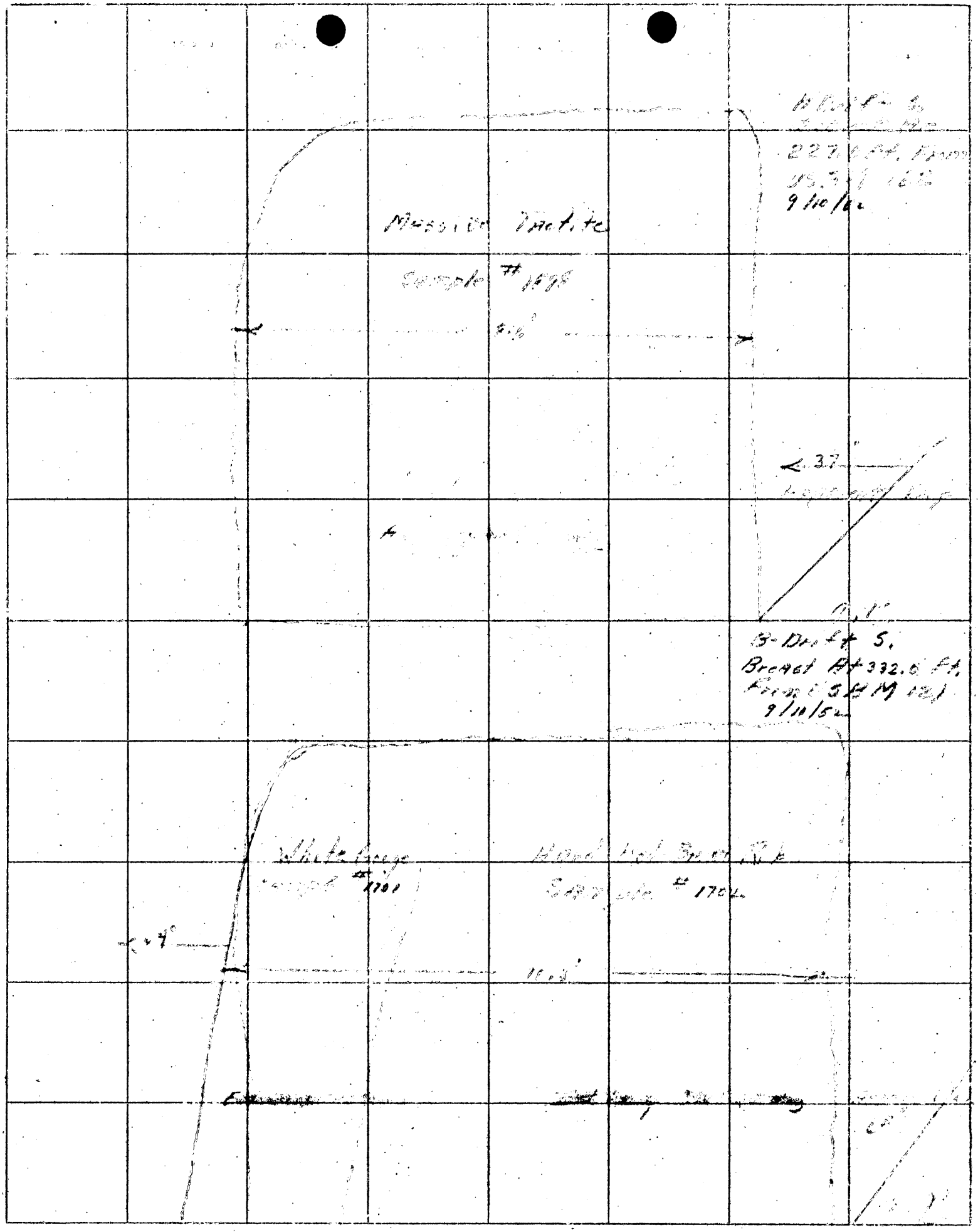


H Drift South
Breast At 236.0 ft
From USBM 122
9/15/52



DUNKIN BLUE PRINT CO. - GRAND JUNCTION - 1284

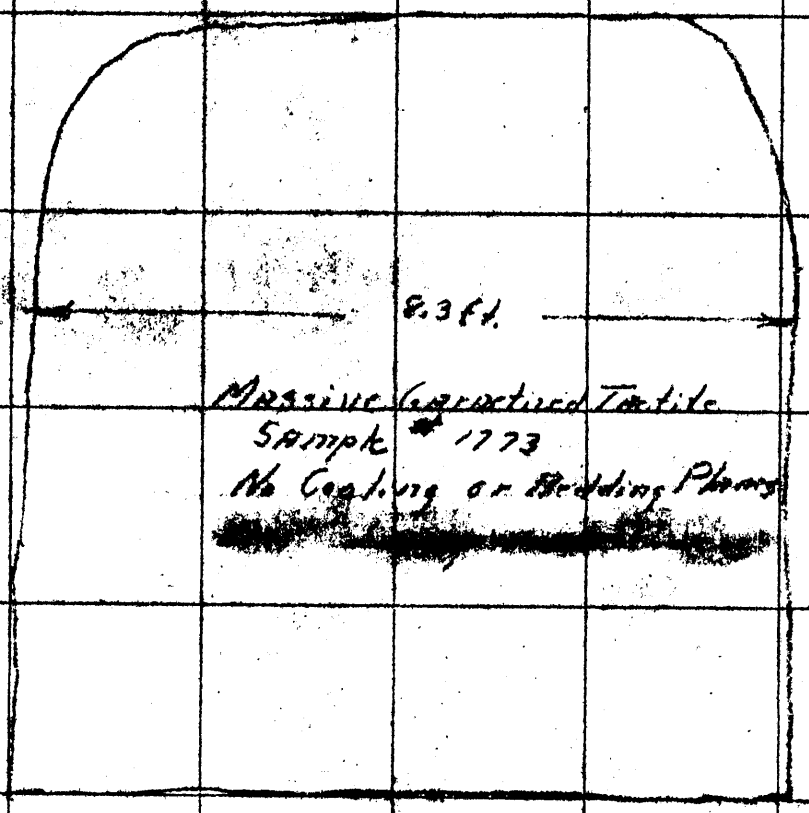
CORNIN BLUE PRINT CO. · GRAND JUNCTION · 1888



MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ SCALE _____ DATE _____

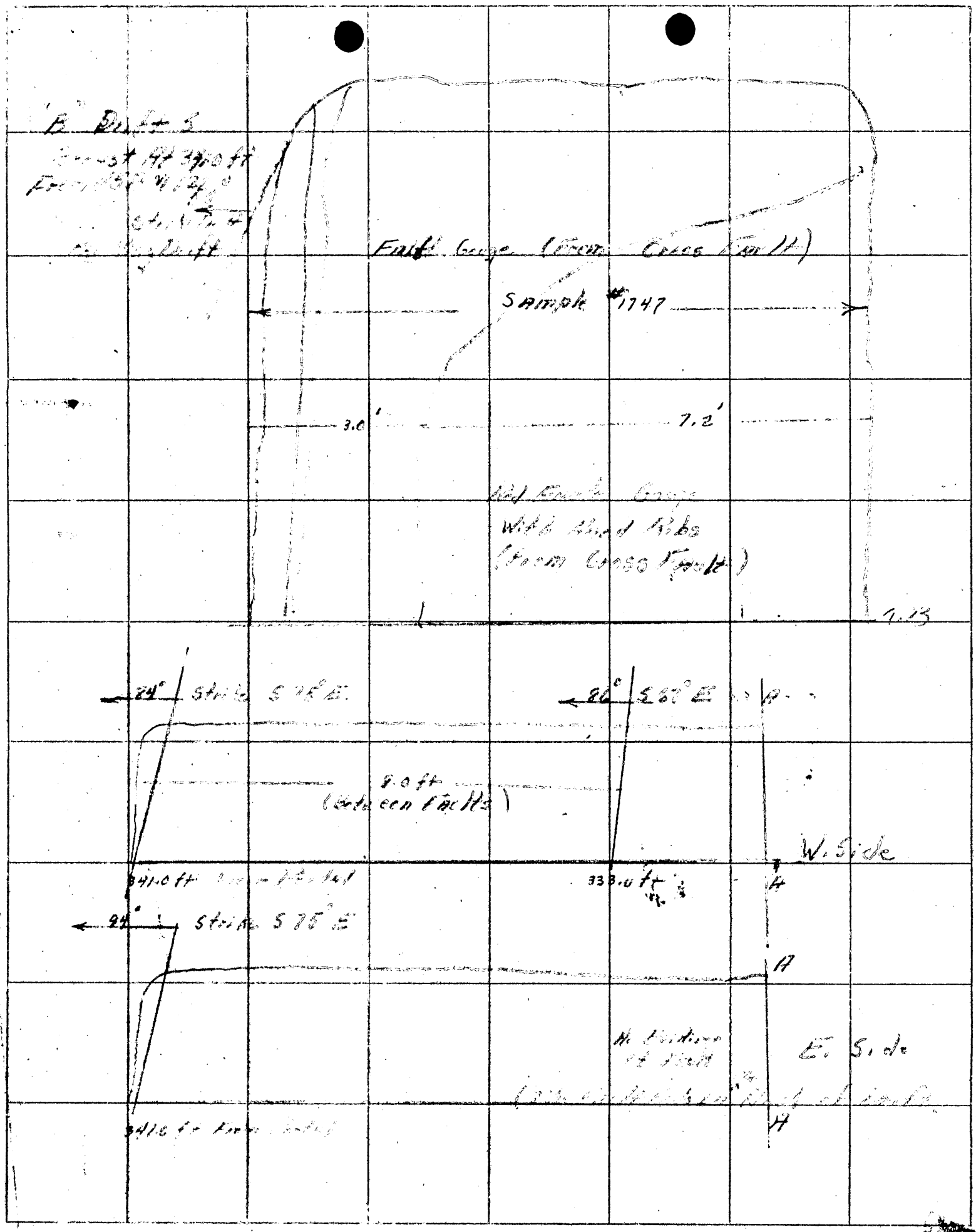
H-Drift 5,
Breast Ht 243.0 ft.
From USBM 122
9/12/50



1.P.

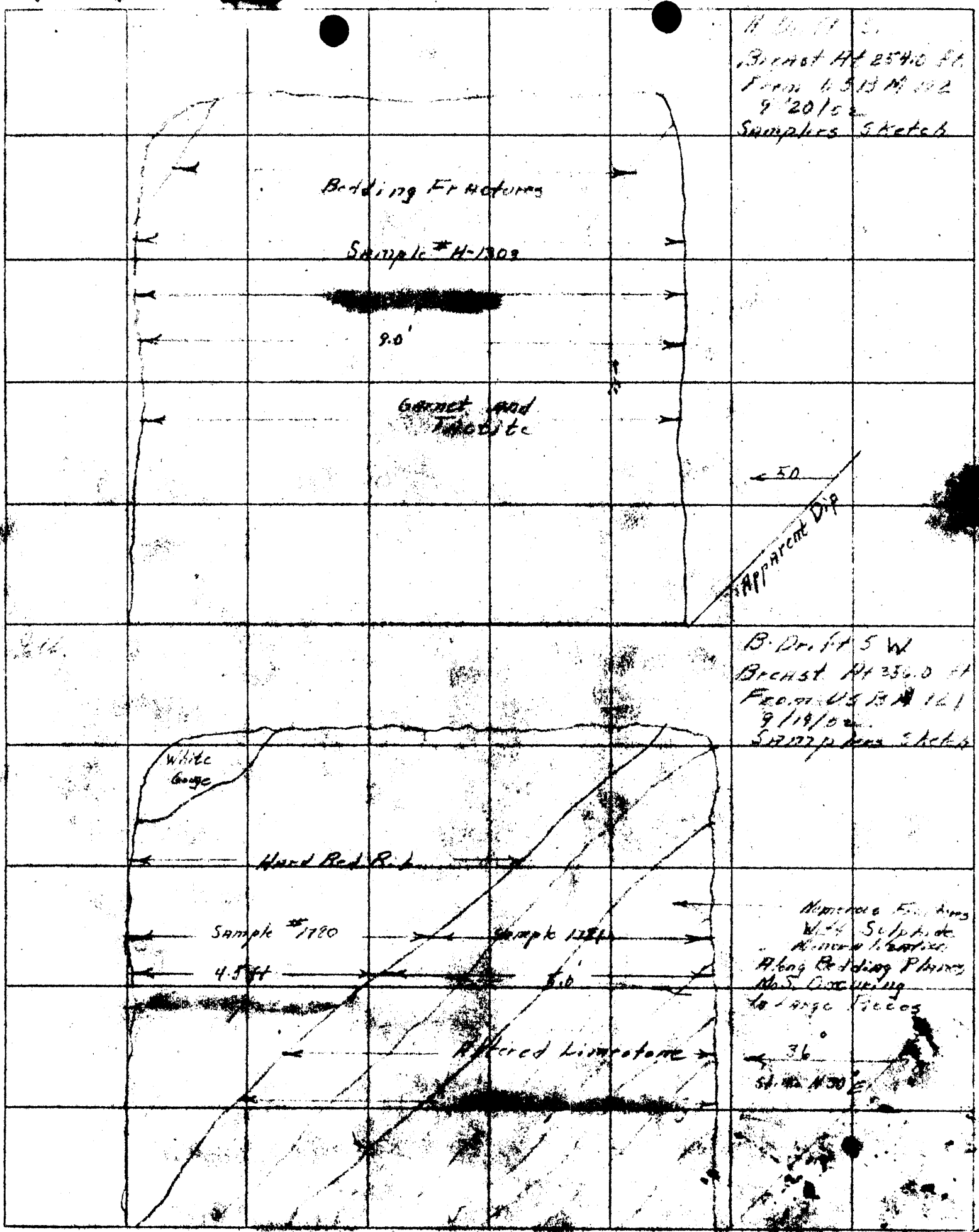
198 H SUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.

DARKIN BLUE PRINT CO. · GRAND JUNCTION · M661



MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ SCALE _____ DATE _____



188 N DIAZO BLUE PRINT SUPPLIES DENVER, COLO

198 H DUNKIN SCUE CO. NT & SUPPLY CO. GRAND RAPIDS

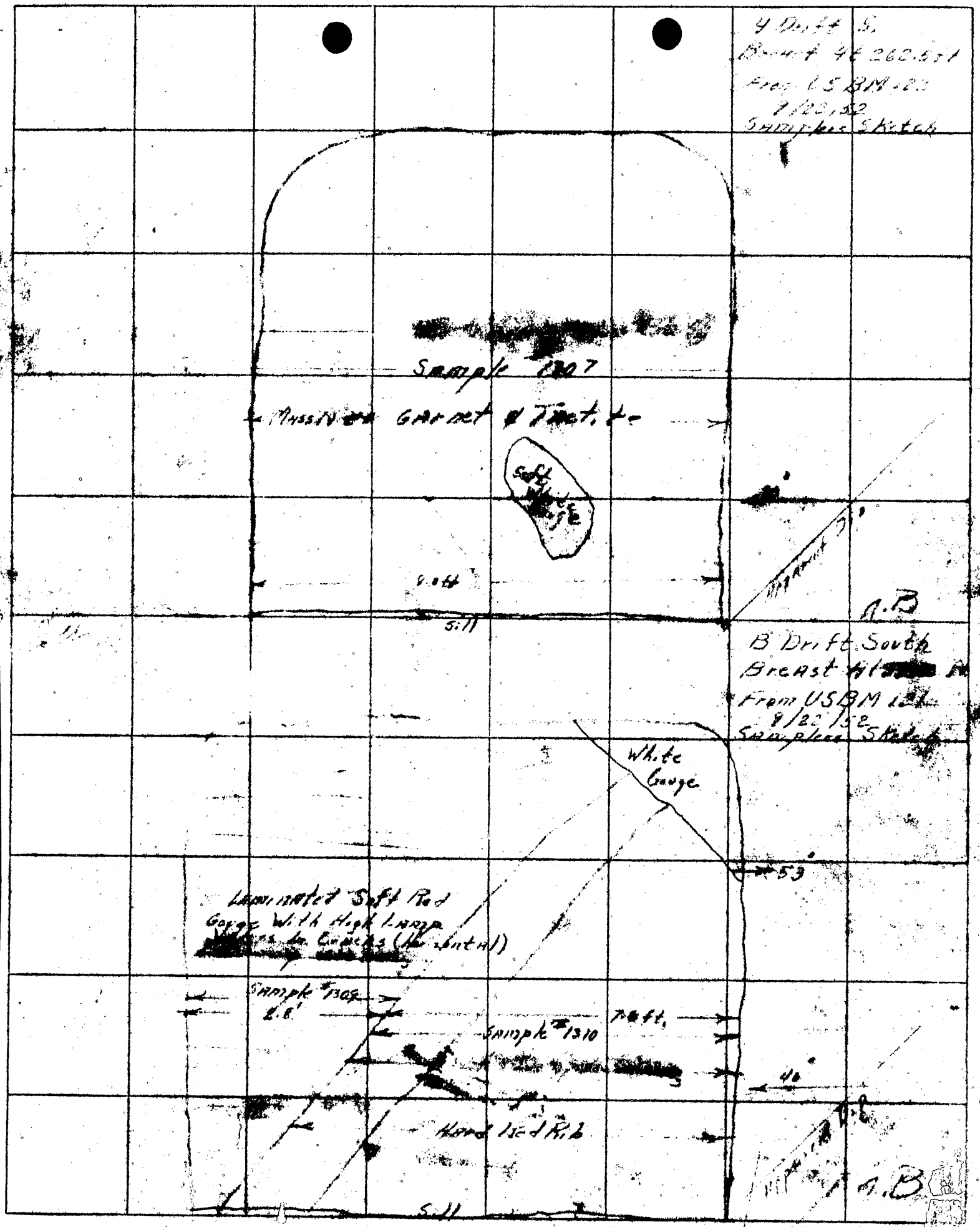
R-Drift S.W.
Breast [illegible]
From [illegible]
[illegible]

The Entire Breast
Shows [illegible]
Very high [illegible]
[illegible]

Sample #1804
9.1 Ft.

Topped Ledge
3.9'
5.2'
Sample #1805
[illegible]

[illegible]



198 N. DUKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION

H- drift [illegible]
[illegible] 377.5 [illegible]
from U.R.I. 122
9/24/52
Drillers sketch

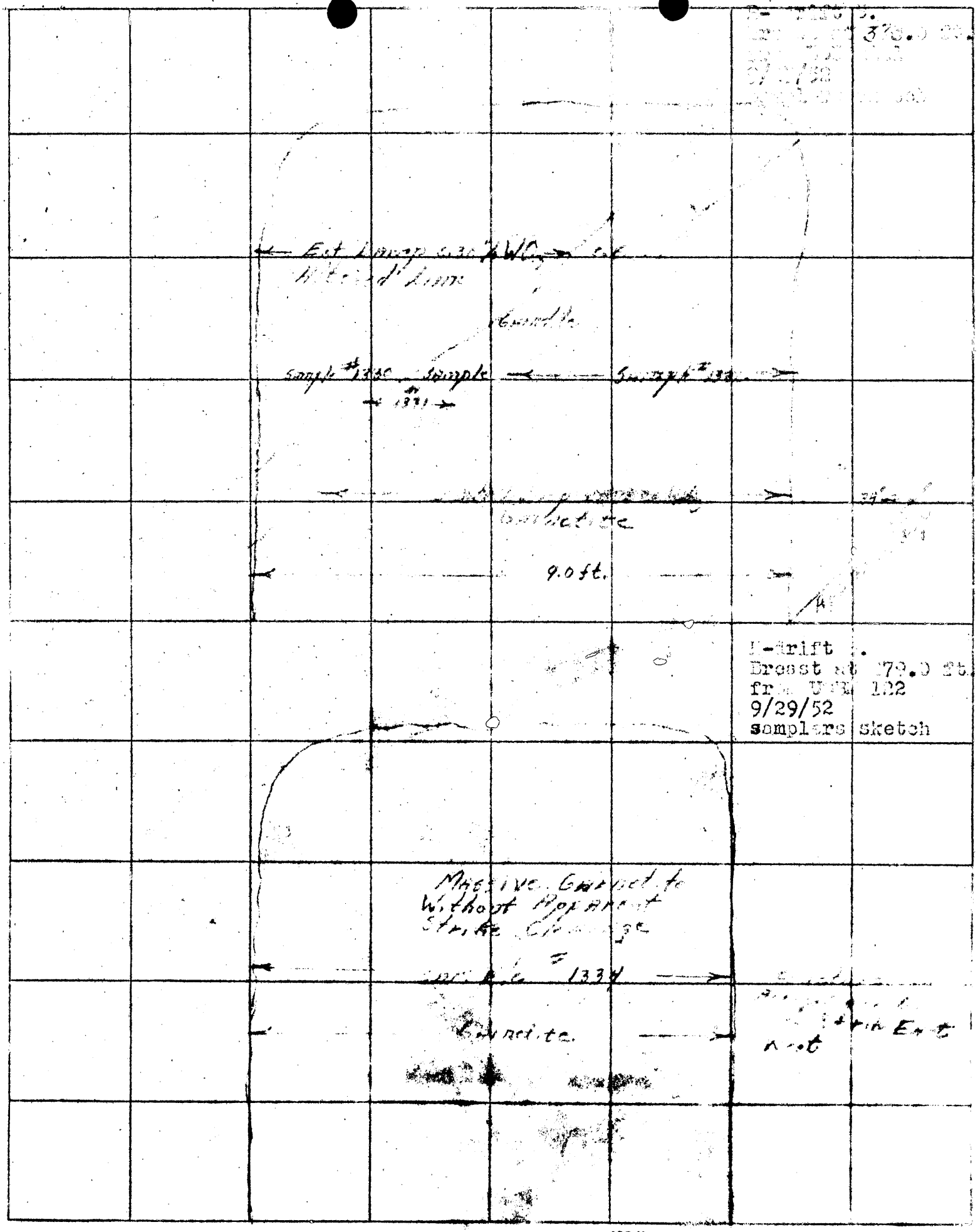
Sample # H-1912
Est. Lange = 0.[illegible] % WO_3
Massive Tactite
Width = 7.8 ft.
Bottom approach Dip

H- drift South
Breast at 377.0 ft.
from URI 122
9/26/52
Drillers sketch

Sample # H-1916
Est. Lange = 0.[illegible] % WO_3
Width = [illegible] ft.
Massive Tactite

48°

198 H DUNKIN BLUE PRINT & SUPPLY CO., GRAND JUNCTION, COLO.



I-drift
Dressst at 179.0 ft.
fr. U.R. 182
9/29/52
samplers sketch

198 H DUNN & BRADSTREET'S SUPPLY CO., GRAND RAPIDS, MICH.

Form DF-104 (Rev.)
(April 1952)

Wash

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

10/24/52

Month of AUGUST, 1952 Docket No. DMEA 2440 Contract No. Idm-S-300
Operator's Name MINERAL MINING RIO COMPANY Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $ 111,280.00 Government Participation: 75 % Amount, $ 83,460.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	$ 245.00	None	$ 245.00	245.00	-0-	245.00
Drifting	$13,090.00	$6,370.00	$ 19,460.00	13,090.00	6,370.00	19,460.00
Roadbuilding	None	$8,030.00	$ 8,030.00	-0-	8,030.00	8,030.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$13,335.00	$14,400.00	$27,735.00	13335.00	14400.00	27735.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sept. 14, 1952 *Payee MINERAL MINING RIO COMPANY

Per H. W. Shaw Title Engineer in Charge

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

OCT 2 - 1952

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 10001.25

Signature Wash
(Authorized Certifying Officer)

Date 10-13-52 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-2-300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date September 14, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of AUGUST 195 2 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$13,090.00	374	$19,460.00	556	$35.00	2950	$35.00
Crosscutting	Foot	$ 245.00	7	$ 245.00	7	$35.00	750	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		$13,335.00	381	$27,735.00				$111,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 14, 1952 Operator MINERALS ENGINEERING CO.

Per M. N. Shaw Title Engineer in Charge
M. N. Shaw

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: During the report period 374 feet of drifting and 7 feet of cross-cutting was completed at a cost of $35.00 per feet as authorized in the contract.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

MINERAL ENGINEERING COMPANY
For Period August 1 to August 31, 1952

"B" Level Tunnel

During the first twenty-six days of the month advance in the tunnel was rapid and did not require timbering. A strike fault was encountered and all advance then required timber which caused less total advance for the reporting period than had been anticipated. By the end of the report period the tunnel was being driven through broken ground, all of which required timbering. Advance for the reporting period was 227 feet, making a total advance under the contract of 325.3 feet in "B" Level.

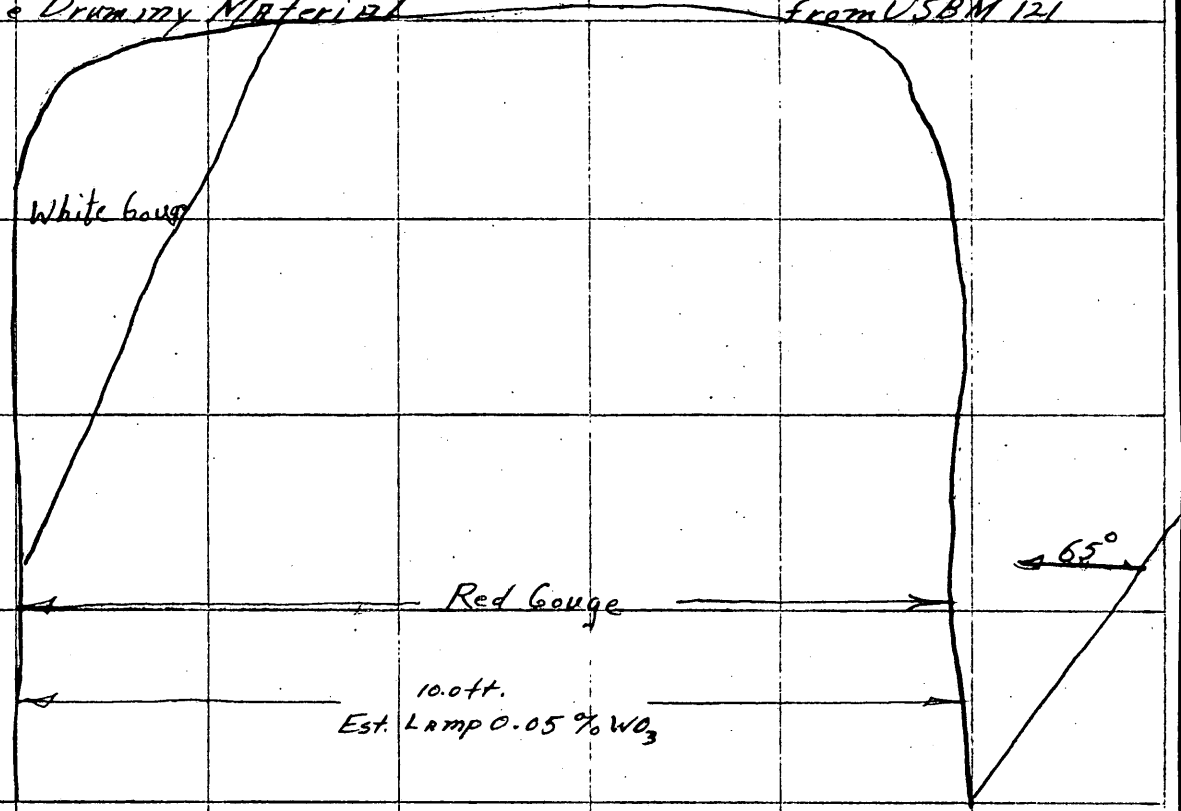
"F" Level Contract

During the reporting period the tunnel was driven in hard tactite which did not require timbering. On the 22nd the course of the tunnel was changed 5 degrees to the east to follow a limestone rib which had swung an estimated 5 degrees to the east. During the reporting period a crosscut was started to explore the structure through which the tunnel was passing. A total advance of 147 feet of drifting and 7 feet of cross-cutting was made during the month, making a total advance under the contract of 235.2 feet of drifting and 7 feet of cross-cutting in "F" Level.

D. N. Shaw
D. N. Shaw
Engineer in Charge

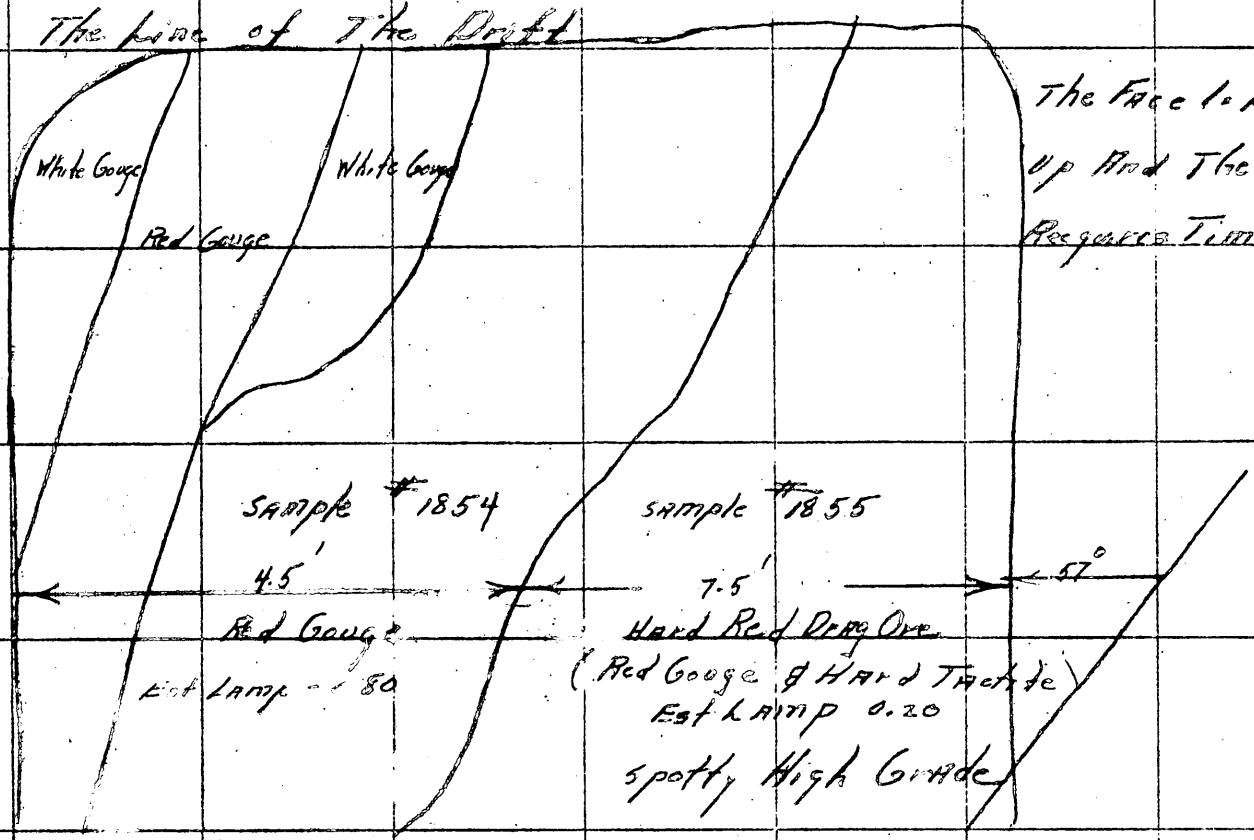
"B" Drift S. E.
Breast at 297.0 ft
from USBM 121

The Breast is Loose Druminy Material



B Drift SE
Breast At 304.0'
9/2/52

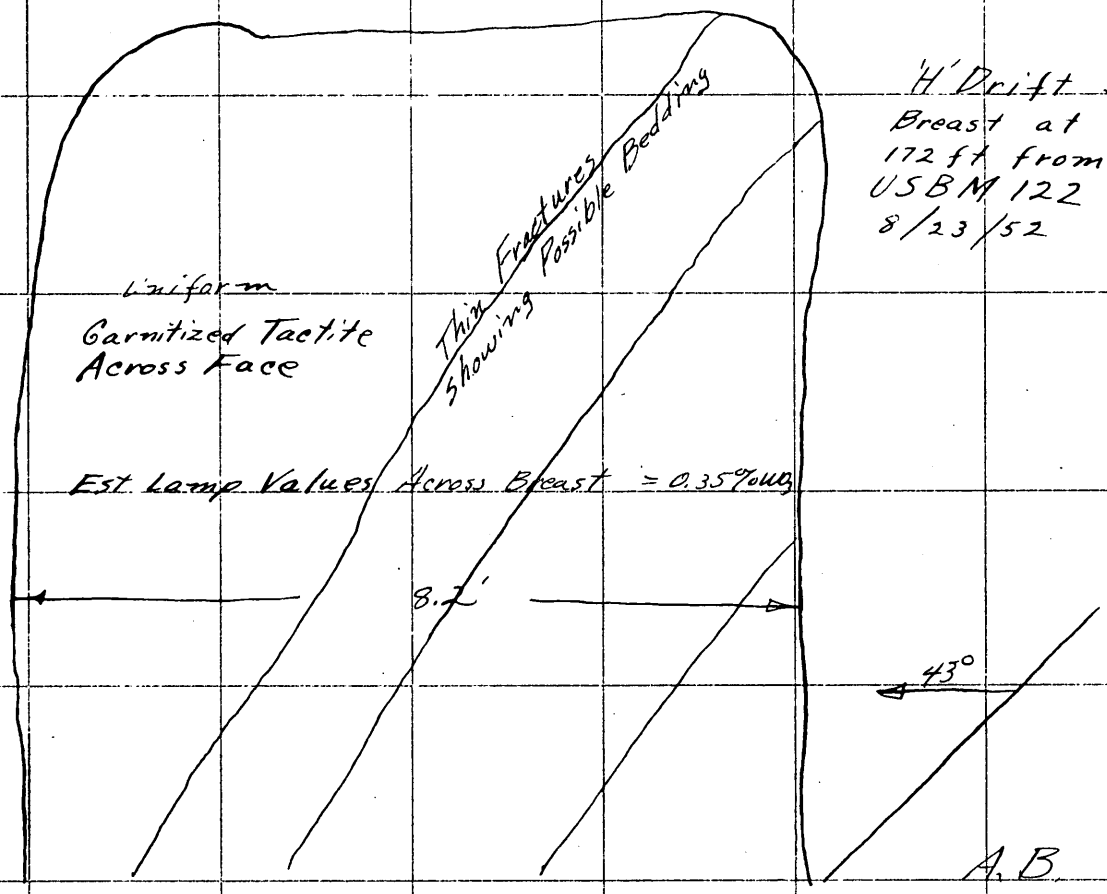
The Fault Slip On The East Side Is Following The Line of The Drift

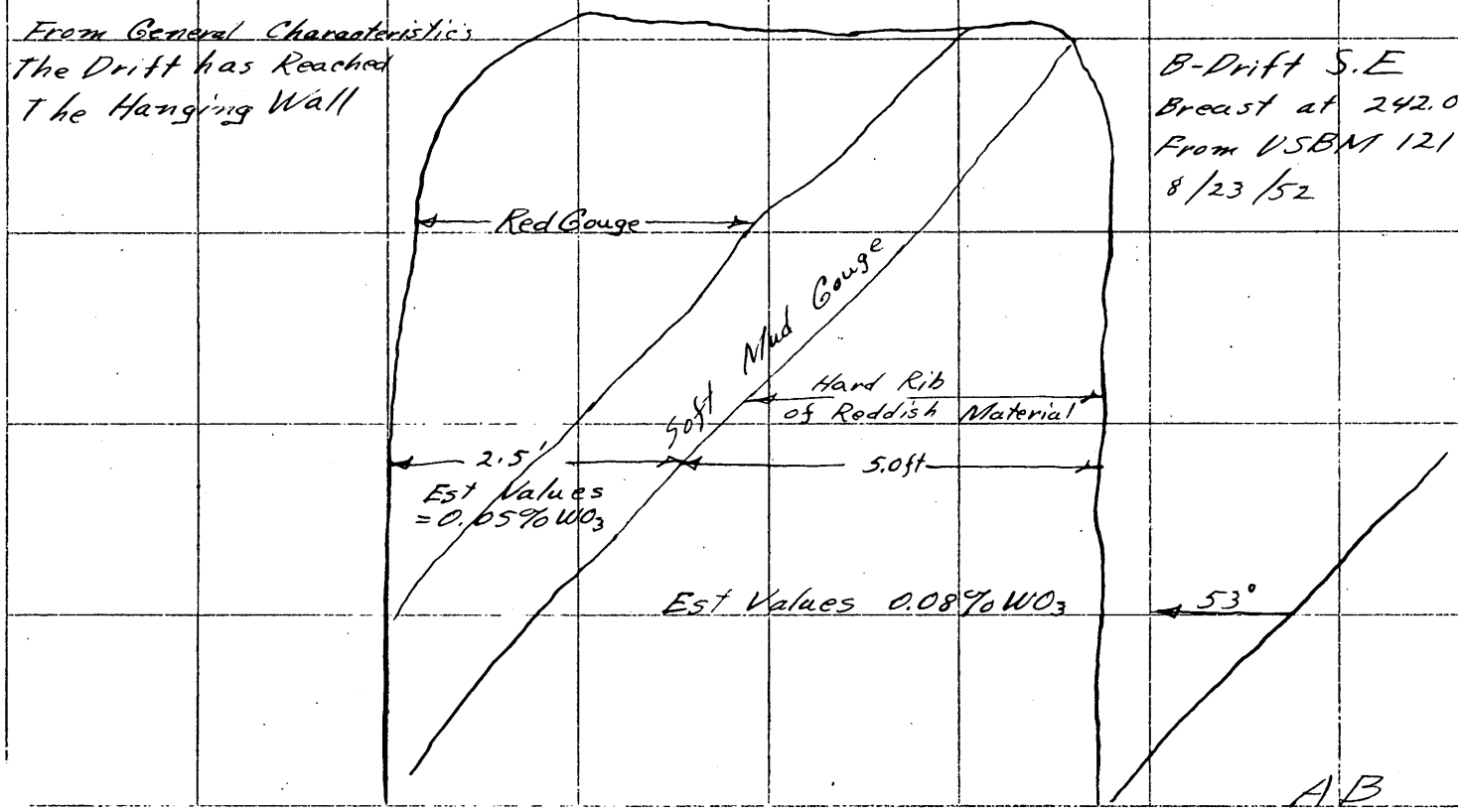


The Hard "Drag Ore" Limps Very High ..
Suggest The Drift Be Driven Straight
For 2 ft.

A. B.

DUNKIN BLUE PRINT CO. - GRAND JUNCTION

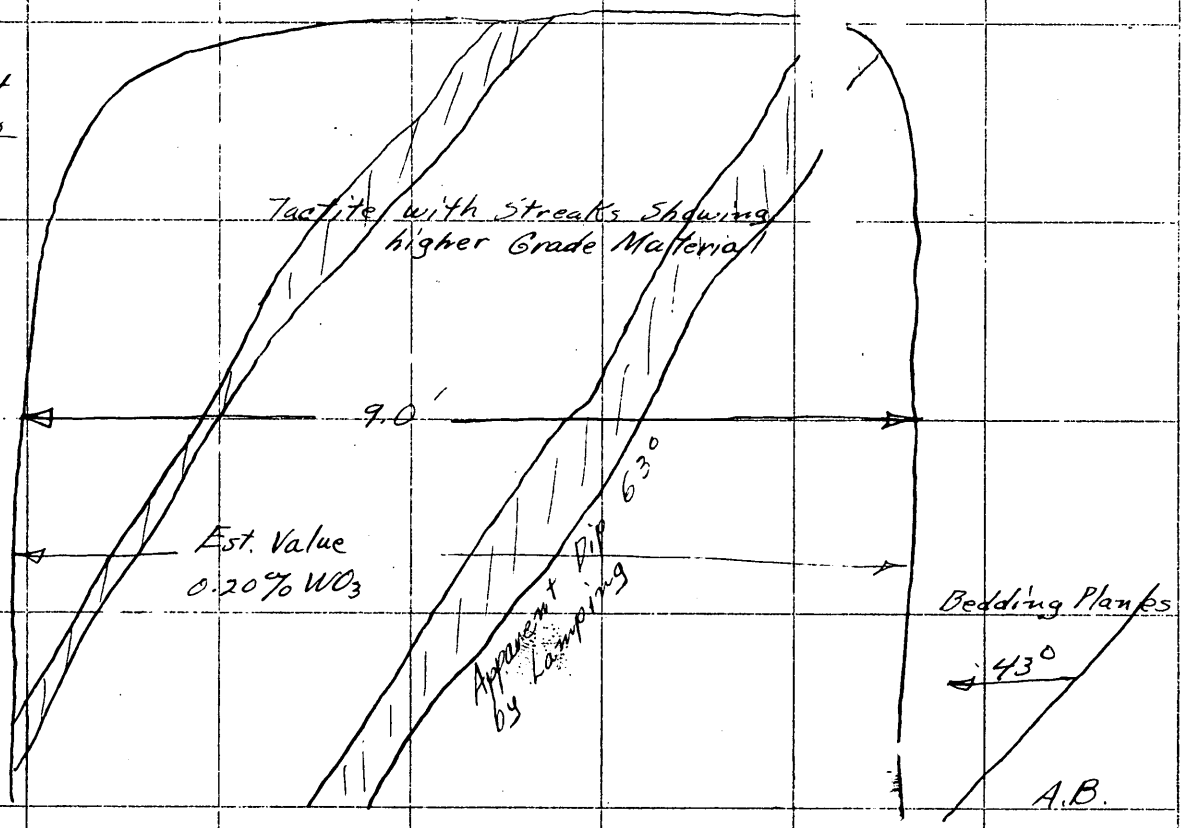




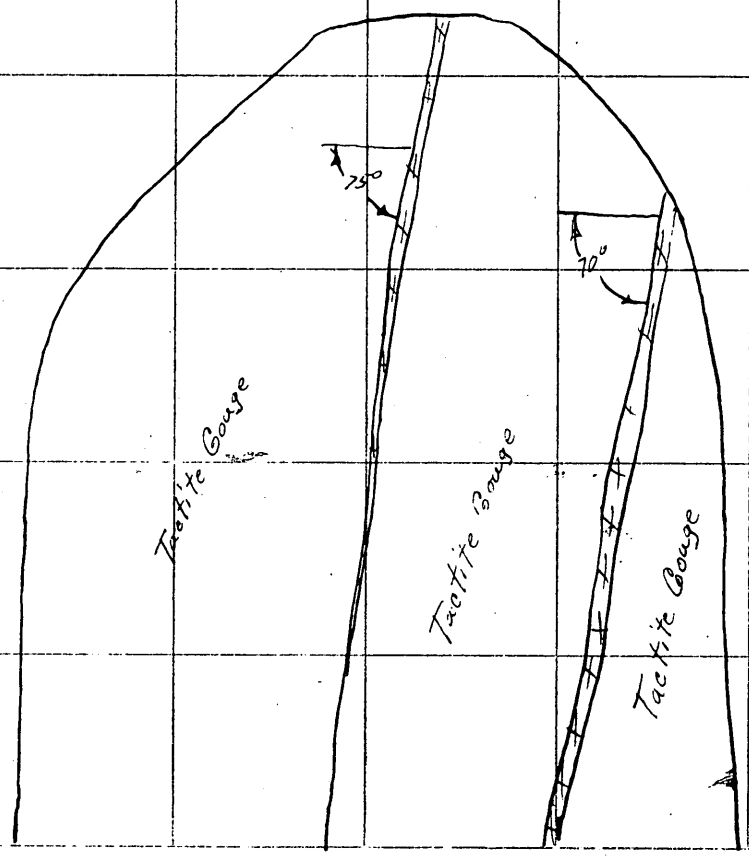
LOCATION _____ LEVEL _____

LOGY BY _____ SURVEY _____ SCALE _____ DATE _____

H Drift South
Breast at 186.8 ft
from USBM 122
8/25/52



'B' Drift
Breast at 265 ft.
from USBM 121
8/25/52



MINE _____ LOCATION _____ LEVEL _____

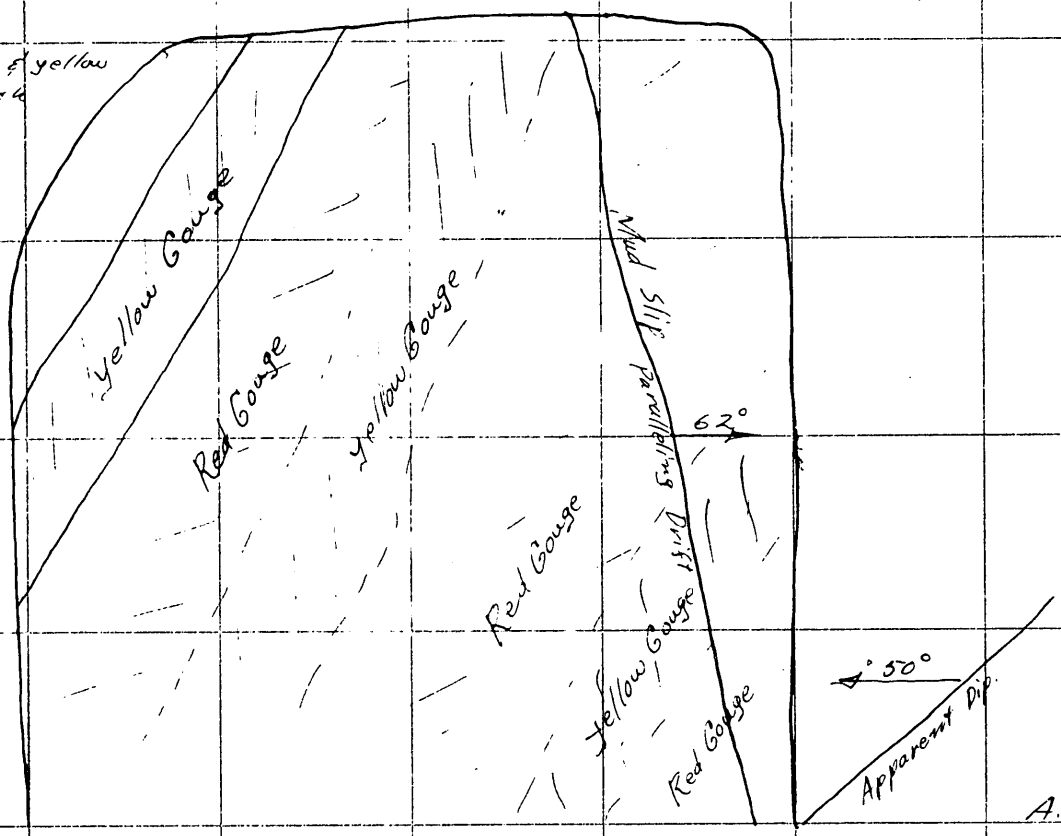
GEOLOGY BY _____ SURVEY _____ SCALE _____ DATE _____

B-Drift S.E
Breast At 276.0 ft
From USBM 121.
8/26/52

Face Banded with Red & yellow Gouge grading into each other

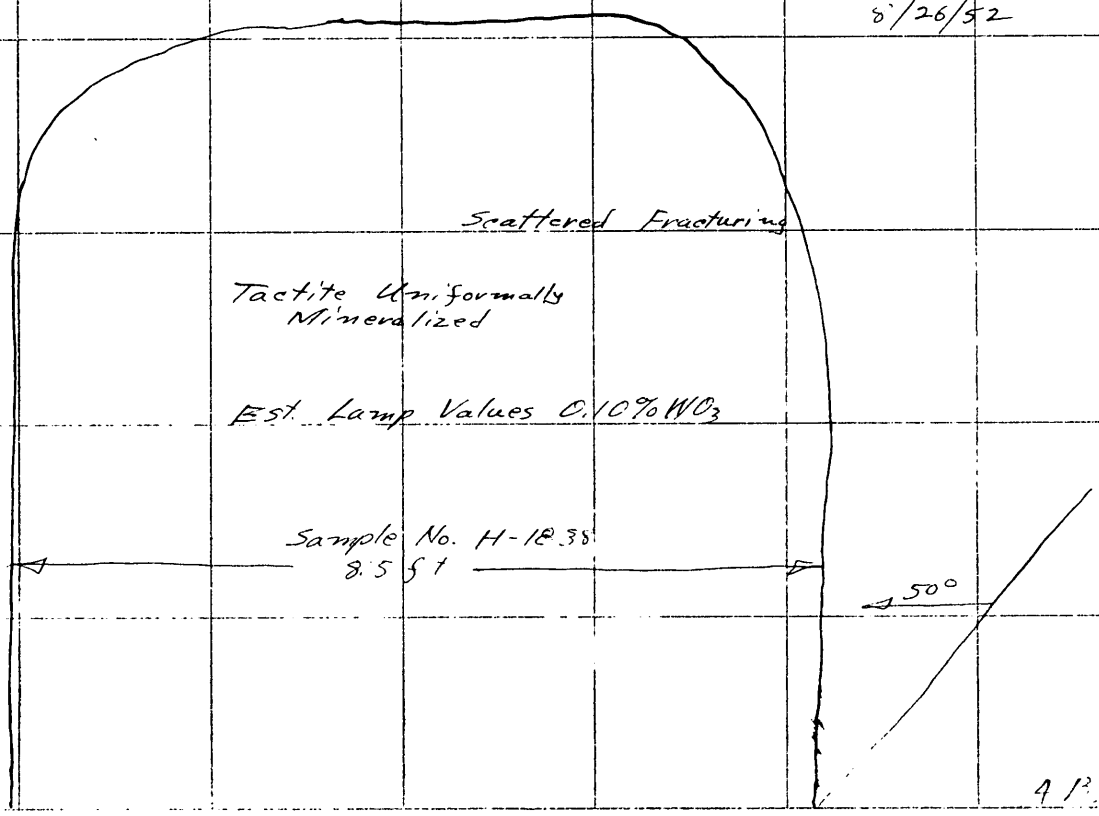
Est. Lamp Values
0.05% WO_3

Sample # B-1834



A. B.

H-Drift S.
Breast at 194.0 ft
from USBM 122
8/26/52



A B.

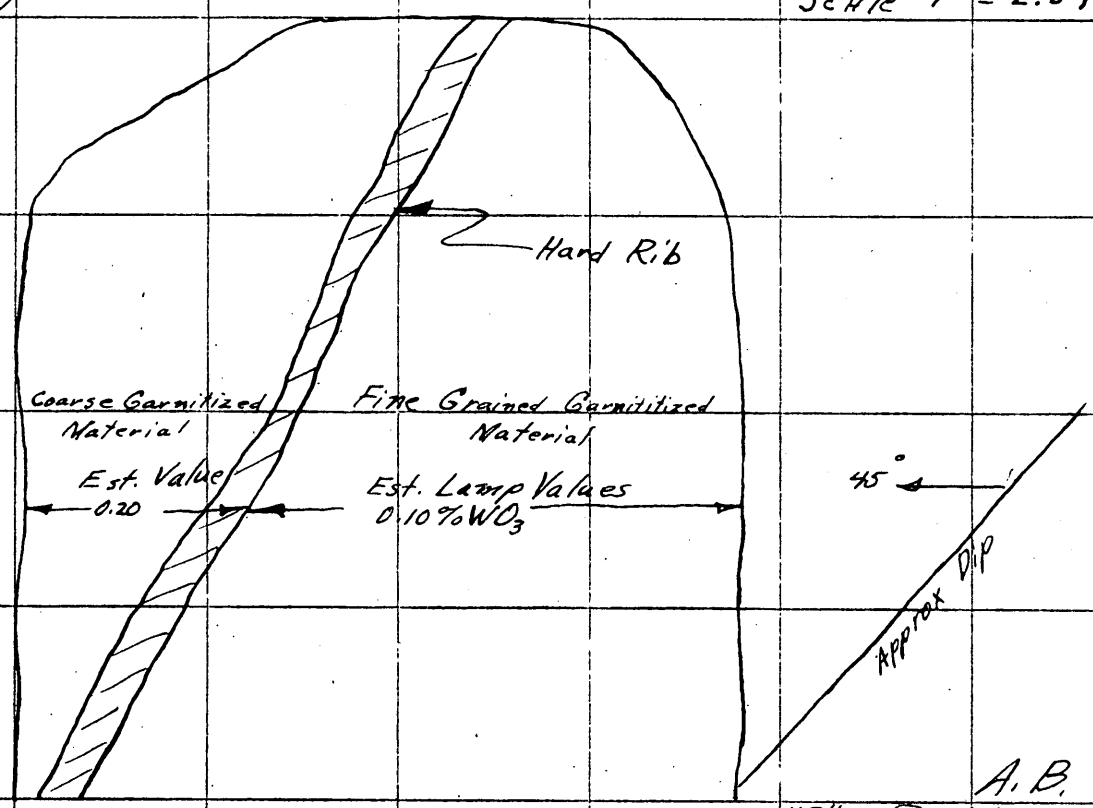
MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ SCALE _____ DATE _____

"H" Drift
Breast at 157.7 ft
From USBM 122

Scale 1" = 2.0 ft

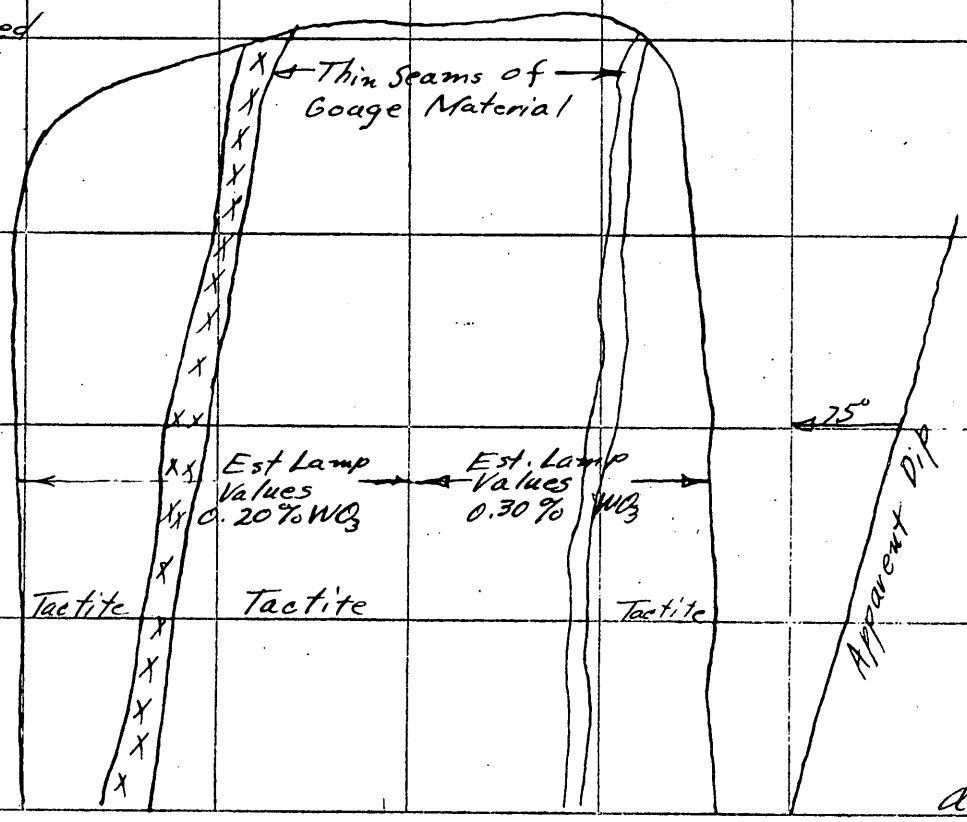
The Face Lamped in Pockets



A.B.

"B" Drift.
Breast at 220'
From USBM 121
Scale 1" = 2.0'

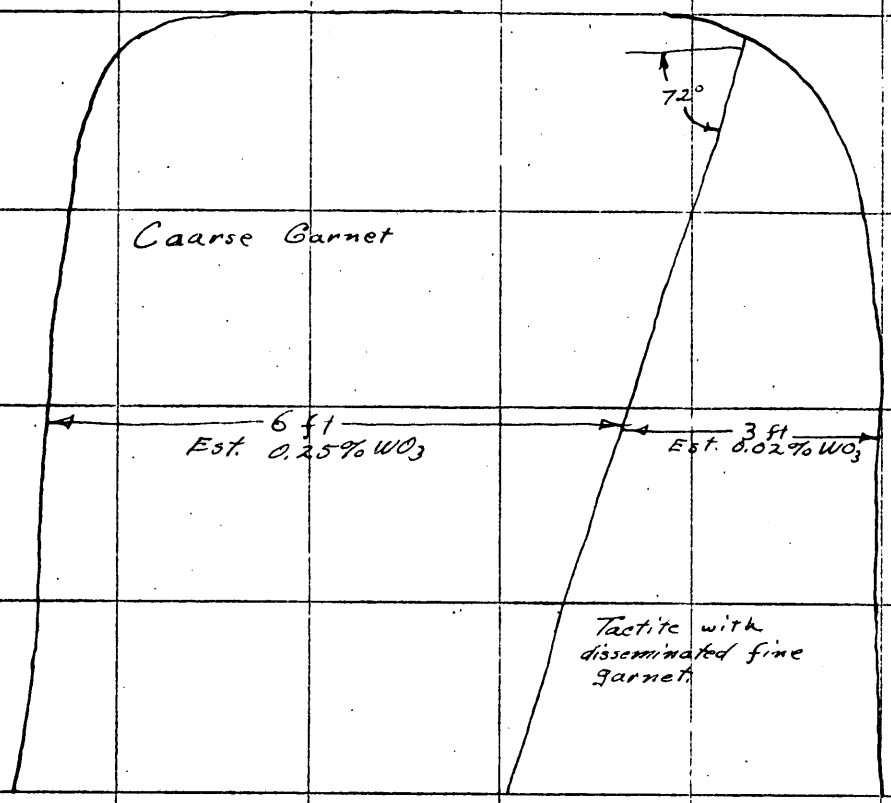
The Face Lamped Uniformally



aB

'H' Drift
8/22/52
Breast at 167-ft
from USBM 122

Scale 1" = 2 ft

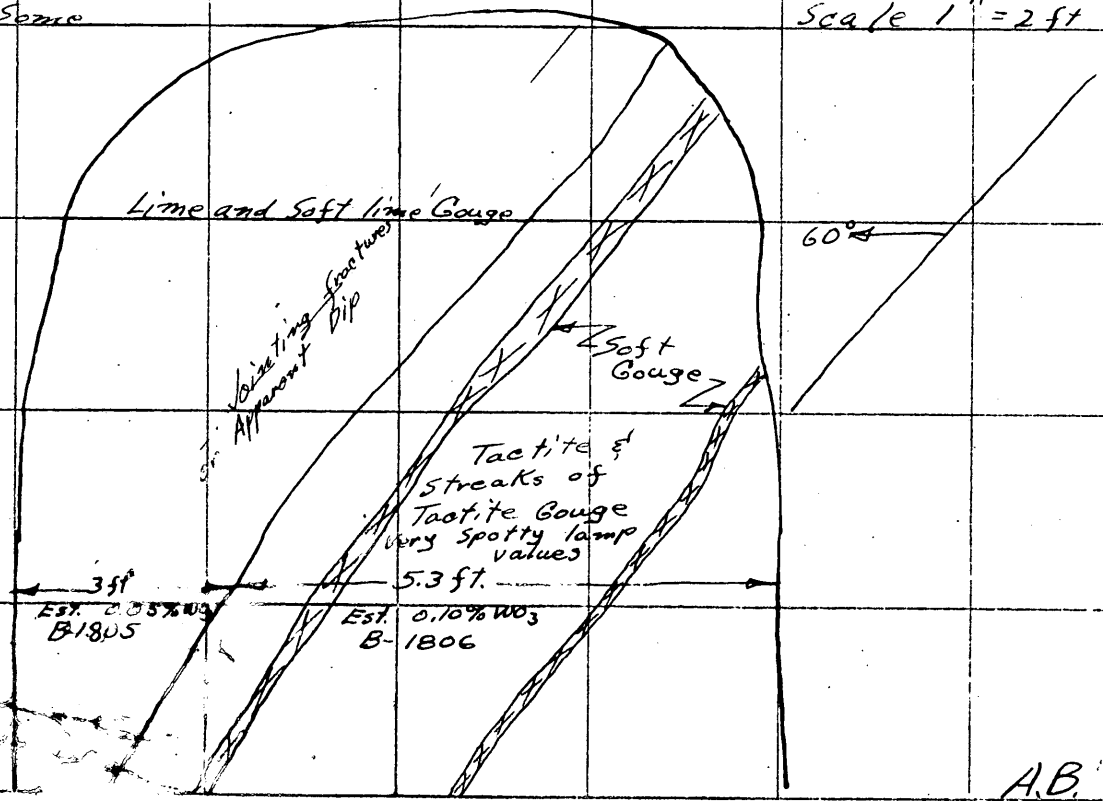


JCT

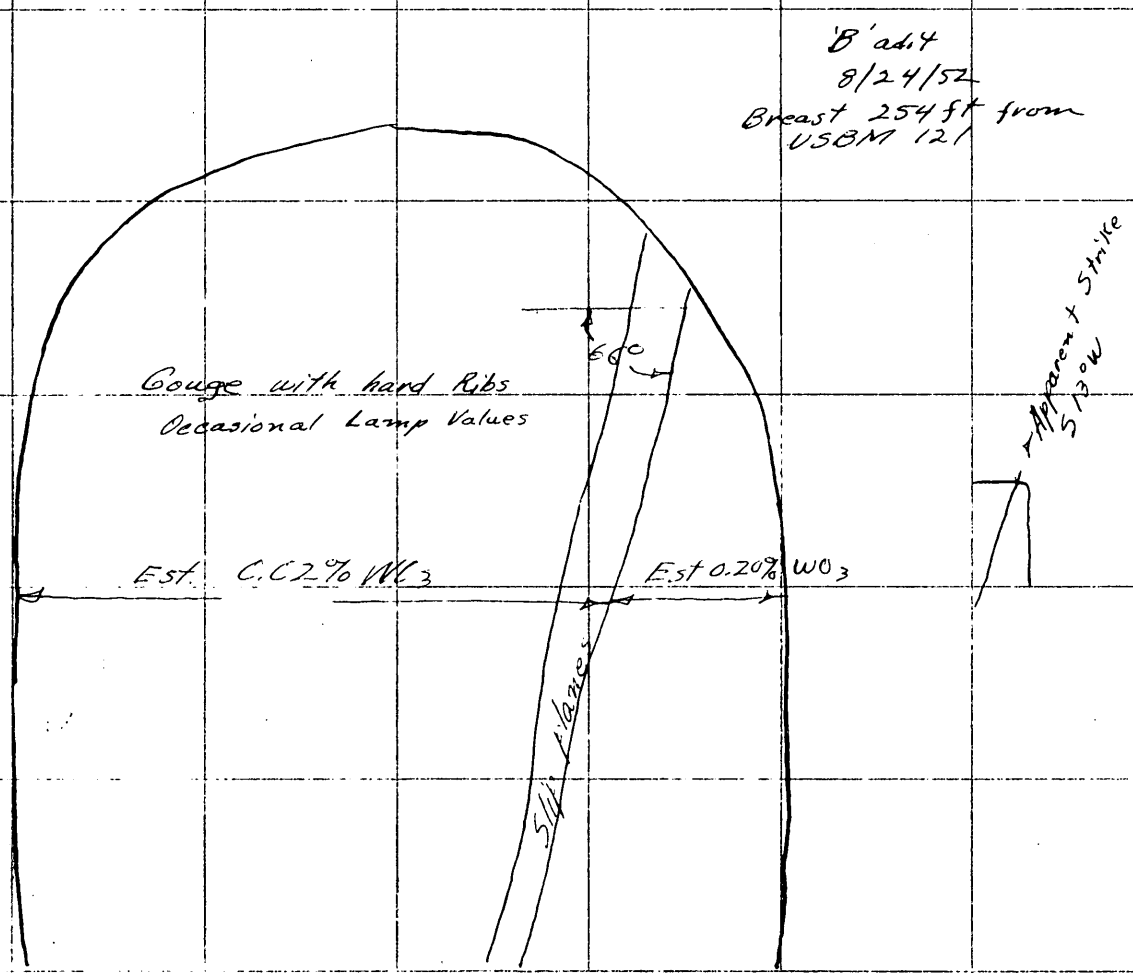
B-Drift.
Breast at 231.0 ft.
From USBM 121
8/22/52

Scale 1" = 2 ft

Lamping Shows Some Spotty Values

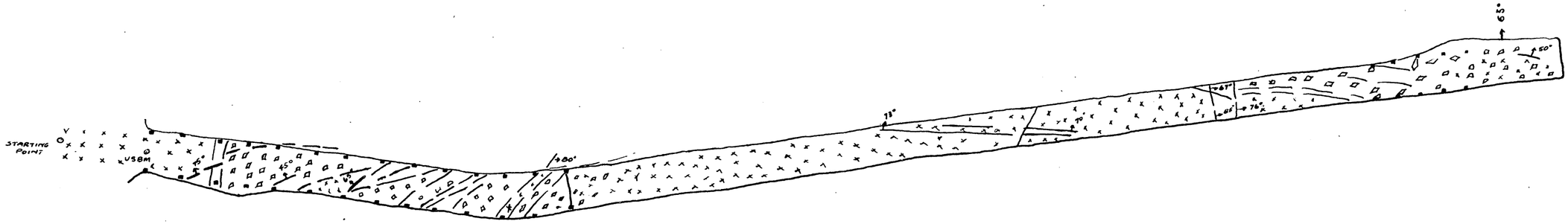


A.B.



LOCATION _____ LEVEL _____

OGY BY _____ SURVEY _____ SCALE _____ DATE _____



N

Garnetized Tactite

Misc. Gauge & Breccia

Fault & Slip Planes

Scale: 1-in = 20 FT.

0 10 20 30 40 50 60 70 80 90 100

10 5 0

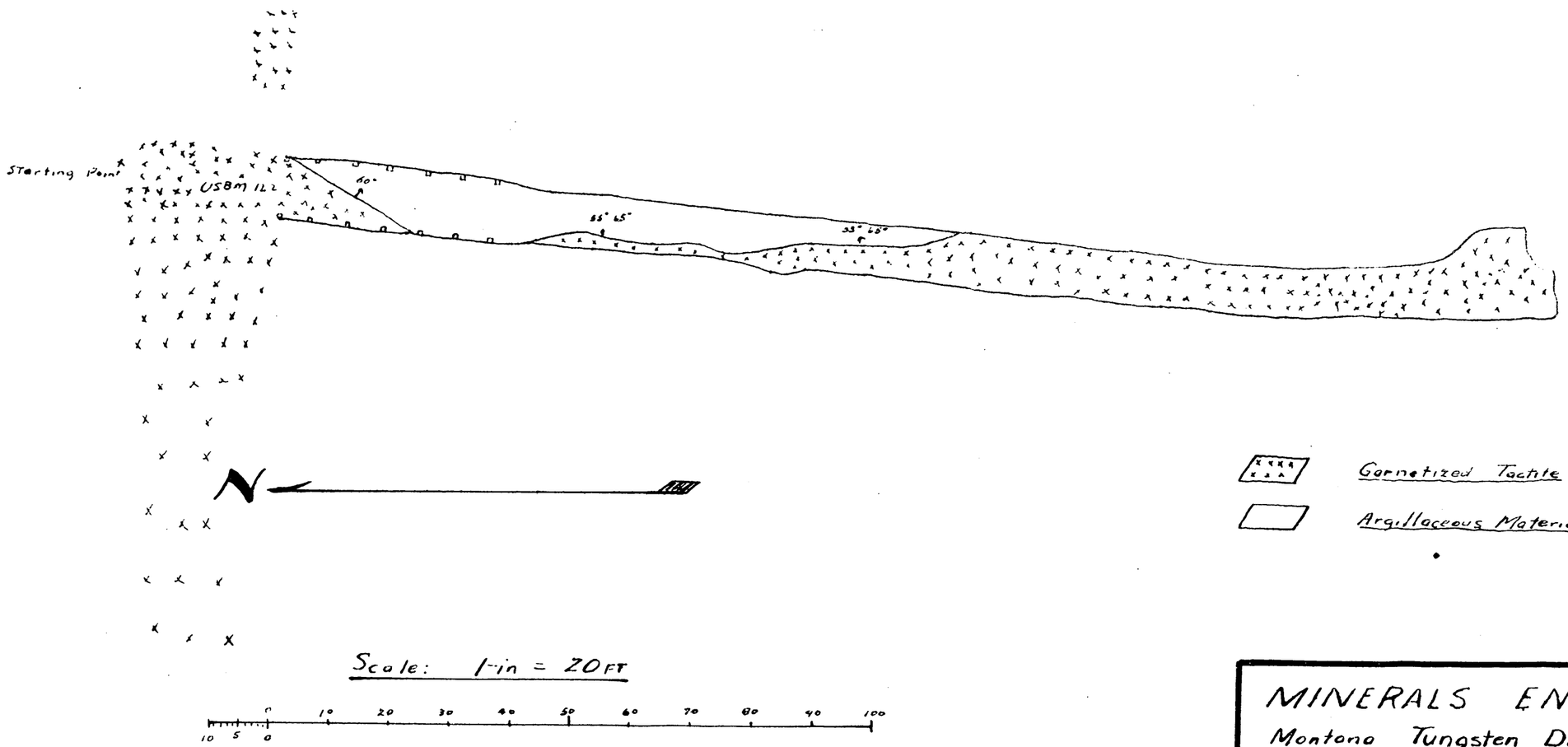
MINERALS ENGINEERING CO

Montana Tungsten Div – Lost Creek Unit

"B" ADIT

as of 9/1/52

Date Drawn 9/8/52 – Drawn by J.C. Ternehan Jr.



MINERALS ENGINEERING CO.

Montana Tungsten Div. - Lost Creek Unit

'H' ADIT

as of 9/1/52

Date Drawn 9/8/52 — Drawn by J.C. Ternahan Jr.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : M. E. Volin, Member, DMEA Field Team, Region II DATE: Butte, Montana Aug. 12, 1952

FROM : John S. McNabb, Mining Engineer, Bureau of Mines

SUBJECT: Routine inspection of Minerals Engineering Co., Contract Idm-E 300, Lost Creek Tungsten, Beaverhead County, Montana, Docket No. DMEA 2440 (tungsten)

A routine inspection of the Lost Creek Tungsten Deposit was made on August 1, 1952. The drifts on B and H levels were inspected and a Brunton survey was made of each. The drift at B level had advanced a distance of 42.8 feet during the month and the entire drift now measured 93.8 feet. Most of the drift to date has been driven in shear zones and has required timbering. It was noted that the drift was being driven too far to the west by about 15 degrees. Mr. Meyers of the U.S. G.S. also noted this fact and has instructed the operators to make an eastward turn.

The drift at H level was begun on July 1 and on August 1 had reached a distance of 88.2 feet. At the time of the inspection there was a showing of tactite in one corner of the drift.

In addition to the work being done under Contract Idm-E 300, a surface stripping project was being carried on in the vicinity of E level. An area about 150 feet wide had been stripped all of which reportedly showed signs of mineralization. No assays had been taken from this area at the time of my inspection.

An assay laboratory has been installed at the property. Assaying will be done by means of chemical digestion, just as bulk ore is handled in the refinery at Bishop, California.

The work at the Lost Creek Property is being carried on vigorously and efficiently. The drift work has been recently put on a contract basis, and the operators are aiming at an advance of 600 feet per month. Two shifts are being worked in both drifts, and should the miners round in and out on each shift, it is possible that an advance of approximately 600 feet could be attained during a month's operation.

John S. McNabb

Form MF-504 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 5-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of JULY, 1952 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name THE MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $ 111,280.00 Government Participation: 75 % Amount, $ 83,460.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$4,585.00	$1,785.00	$6,370.00	4585.00	1785.00	6370.00
Road Building	None	8,030.00	8,030.00		8030.00	8030.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$4,585.00	$9,815.00	$14,400.00	4585.00	9815.00	14400.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Aug. 12, 1952 *Payee Minerals Engineering Company

Per M. N. Shaw Title Engineer in Charge
M. N. Shaw

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 3438.75

Signature W. R. (Authorized Certifying Officer)

Date 8/25/52 Vou. No. (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E-300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date August 12, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E Howard Title Mining Engr Date 8/14/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of JULY 195 2 Docket No. DMEA 2440 Contract No. Idm-E-300

Operator's Name THE MINERALS ENGINEERING COMPANY Minerals Tungsten

Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	$4,585.00	131.0	$6,370.00	182.0	$35.00	2,950	$35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	None	None	$8,030.00	1 Job	$8,030.00	1 Job	$8,030.00
TOTAL DISTRIBUTED COSTS		$4,585.00	131.0	$14,400.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$4,585.00		$14,400.00				$111,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date August 12, 1952 Operator Minerals Engineering Co.

Per M. N. Shaw Title Engineer in Charge.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: During the report period 131.0 feet of drifting was completed at a cost of $35.00 per foot as authorized in the contract.

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE CONTRACT NO. I4m-R-300

9/19/52

MINERALS ENGINEERING COMPANY

For Period July 1 to July 31, 1952

"B" Level Tunnel

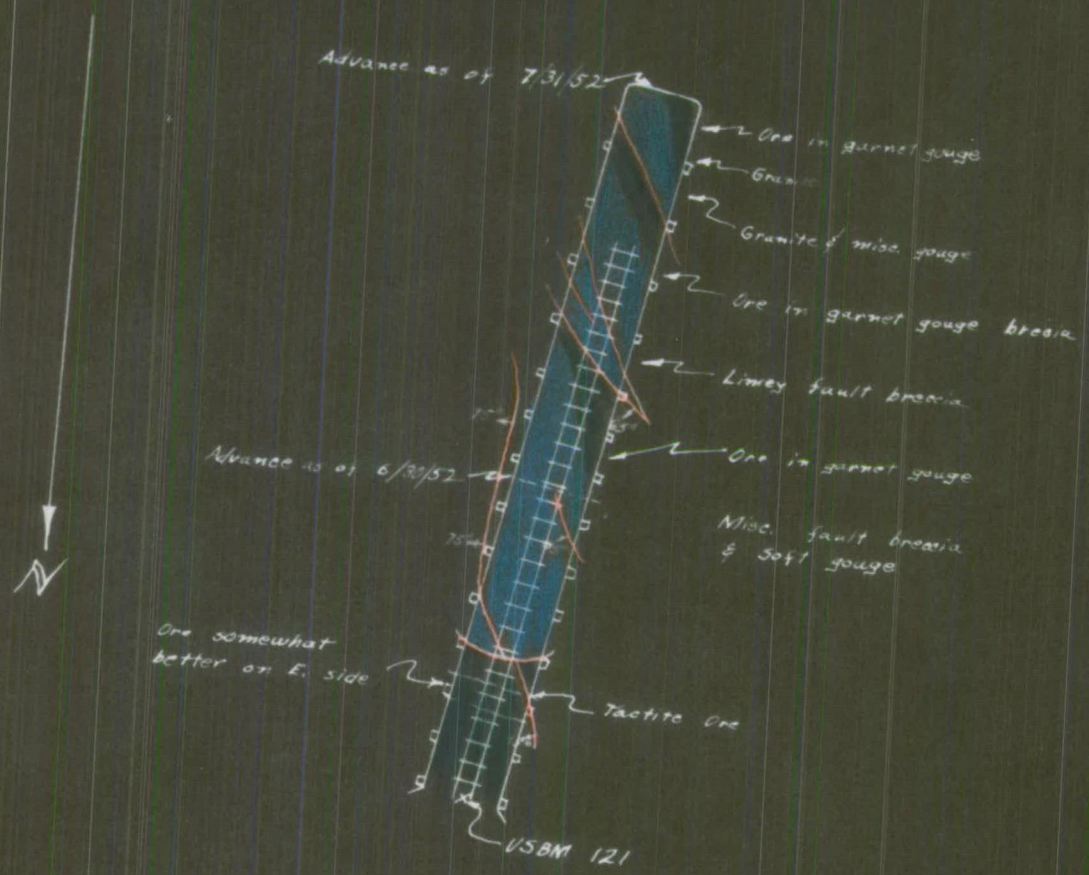
During the first twenty-two days of the reporting period the tunnel was timbered through the broken ground encountered during the June reporting period, track laid and the ore and waste dump prepared for use. On the twenty third of the month, driving of the tunnel was resumed, through broken ground, all of which required timbering. Advance for the reporting period was 42.8 feet making a total of advance under the contract of 93.8 feet.

"E" Level Tunnel

Driving of the tunnel was started on the first day of the reporting period and continued throughout the period. Soft broken ground was encountered the first sixty feet making it necessary to timber most of the way. A change in the structure was encountered which presented a broken limestone full of vug holes and a sizeable old water course. As the period ended the structure became more consolidated and did not require timbering. A total advance of 88.2 feet was made during the month.

M. N. Shaw

M. N. Shaw
Engineer in Charge



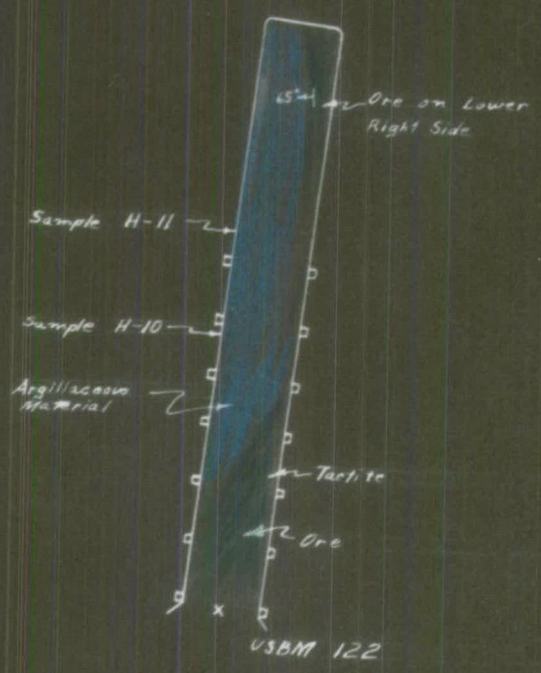
No Lamp Values

Some Lamp Values

Fault & Slip lines

Scale 1" = 20'

MINERALS ENGINEERING CO.
Montana Tungsten Div., Last Creek Unit
'B' Adit
as of 7/31/52
Date drawn 8/6/52 – Drawn By JCTr



No Lamp Values

Lamp Values Indicating Ore

X Starting Point

Scale 1" = 20'

MINERALS ENGINEERING CO.
Montana Tungsten Div. Lost Creek Unit
'H' Adit
as of 7/31/52
Date Drawn 8/7/52 – Drawn by J.C.T.

M. E. Volin, Member, DMEA Field Team, Region II July 22, 1952

John S. McNabb, Mining Engineer, Bureau of Mines

Routine inspection of Minerals Engineering, Contract Idm-E300,
Lost Creek Tungsten, Beaverhead County, Montana,
Docket No. DMEA 2440 (tungsten)

The property was visited on June 2, 1952, in the company of Mr. Brad Meyer of the U.S.G.S. The main purpose of this visit was to determine the feasibility of the proposed directions and starting points of the two adits. Mr. Meyer and I spent the day and evening mapping and lamping the deposit. The drifts, as proposed, were to be driven from C & H cuts in a southerly direction along the east or hangwall side of the ore zone. The marble hanging wall generally strikes north-south, but is characterized by numerous marble horses wich intersect the tactite zones. It is these marble horses that will make it impossible to drift along the hanging and stay in tactite at all times. However, Mr. Meyer and myself felt that the proposed starting points of the drifts provide the logical approach to the underground exploration of the deposit. Some short underground diamond drill holes in lieu of the extensive cross-cutting that might prove necessary to properly evaluate the deposit might prove a definite cost saving to the underground program. It was Mr. Meyer's intention to discuss this possibility with Mr. Weissenborn.

It was noted that approximately one-half of the road work to be done under the contract was completed. There were no safety violations evident at the property, and the operation appeared to be carried on in an efficient manner.

John S. McNabb

cc: Our Files (1)
USGS (2)
Wash. (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

July 17, 1952

Memorandum

To: DMEA Field Team, Region II

From: A. L. Weissenborn, Executive Officer, DMEA Field Team, Region II

Subject: Routine Inspection of Contract Idm-8300, Docket DMEA-2440, Tungsten, Lost Creek Deposit, Minerals Engineering Company, Beaverhead County, Montana.

The subject project was inspected on June 28, 1952, accompanied with W. B. Myers of the U. S. Geological Survey, George Aronis, Greek Geological Survey (State Department Point IV Trainee), Blair Burwell, President of the Minerals Engineering Company, and Mr. Shaw, in charge of the project.

Further bulldozing on the C-D-E has been done preparatory to making an adit site and the adit was in about 40 feet. The adit had not progressed far enough to add very much to what was already known of the geology. On the H-I-J cut stripping was in progress preparatory to starting the adit at this point. Stripping had revealed that the tactite zone is somewhat wider than had been anticipated. Stripping at this locality has confirmed, but has not added much to the concept of a highly regular contact described by Mr. Myers in an inspection report of June 10, 1952, copy of which you should have. Visual inspection indicates the grade of the tactite vein in the H-I-J cut may be appreciably higher than had been anticipated and that the irregular nature of the contact is a favorable condition. It is almost certain, however, that conditions in the ground will be more complex than had been anticipated and it is likewise almost certain that more crosscutting will be required than had been thought necessary in planning the work. Appropriate recommendations will be made as the work progresses. It was pointed out by Mr. Burwell that at least 10 to 15 thousand tons of tactite are available for open pit mining in the immediate vicinity of the H-I-J cut. It is obvious that this is a reasonably conservative estimate. Sampling to date indicates that the over-all grade may average between 0.20 and 0.30 percent WO_3. The grade may be appreciably higher but no reliable estimate can be made on the basis of present information. Accurate approximation of the grade probably can only be obtained through some such device as a mill-run test.

The work is obviously being conducted in an energetic and competent manner. The company has put into the project considerably more money than they expect to receive back under the terms of the contract. Results to date are distinctly encouraging.

A. K. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
USGS (SRO)
W.B.Myers

SD

Butte, Montana
July 8, 1952

M. N. Volin, Member, DMEA Field Team, Region II

John S. McNabb, Mining Engineer, Mining Division, Region II

Routine Inspection, Contract No. Idm-E 300, Docket No. DMEA 2440, Minerals Engineering Co., tungsten, Beaverhead County, Montana.

The property of the Minerals Engineering Co., known as the Lost Creek Tungsten mine, was visited on July 1, 1952, and a routine inspection and Brunton survey were made.

During the month of June the Minerals Engineering Co. completed the remaining half of the road work specified in Contract Idm-E 300. Two miles of roadwork were completed during the month. The road was built to the top portal site at "H" Cut, and some work was also done widening and grading the road along the north side of the canyon approaching the mine proper. Grades on the mountain were held to a 10% maximum, and a very good piece of road was constructed.

Drifting in "G" cut was begun on June 10, and at the time of my visit the distance from portal to face of drift was 51 feet. Most of this distance was in a shear zone that resulted in excessive overbreak in the area. The average cross sectional measurement of the drift over this 51 foot distance was about 9' x 11'. However, the drift had not been timbered at the time of my visit, and when this is done the 8' x 9' specifications will be more closely approached. I am confident that excessive overbreak will be no problem as soon as the shear zone is passed.

At "H" cut a crew was working preparing a face for the portal site. Drifting was scheduled to begin in a few days.

The Minerals Engineering Co. are carrying out the project in an efficient and workmanlike manner, and progress to date has been quite satisfactory.

John S. McNabb

Orig. DMEA File
cc: U.S.G.S. (2)
Washington D.C. (2) ✓
JS

Form MF-504 (Rev.)
(April 1952)

Wash.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of JUNE, 1952 Docket No. DMEA 2440 Contract No. Idm-E-300
Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten
Address Grand Junction, Colorado
Contract Amount, $ 111,280.00 Government Participation: 75 % Amount, $ 83,460.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$1,785.00	None	$1,785.00			
Roadbuilding	$4,015.00	$4,015.00	$8,030.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$5,800.00	$4,015.00	$9,815.00	5800.00	4015.00	9815.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 14, 1952 *Payee Minerals Engineering Company

Per [signature] Title Engineer in Charge

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 3500.00

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E-300 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date July 14, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E. Howard Title Mining Eng. Date 7-17-52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of JUNE 1952 Docket No. DMEA 2440 Contract No. Idm-E-300

Operator's Name MINERALS ENGINEERING COMPANY Minerals Tungsten

Address Grand Junction, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$1,785.00	51	$1,785.00	51	$35.00	2,950	$35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Job	$4,015.00	½ Job	$8,030.00	1 Job	$8,030.	1 Job	$8,030.00
TOTAL DISTRIBUTED COSTS		$5,800.00		$9,815.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$5,800.00		$9,815.00				$111,280.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 14, 1952 Operator Minerals Engineering Co.

Per M. N. Shaw Title Engineer in Charge

M. N. Shaw

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: During report period 51 ft. of drifting was completed at a cost of $35.00/Ft. as authorized in the contract. Also during the period the remaining ½ of the prescribed roadwork was completed at a cost of $4,015.00. (½ of the total amount allowed in the contract.)

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE CONTRACT NO. Idm-E-300

9/19/52

MINERALS ENGINEERING COMPANY

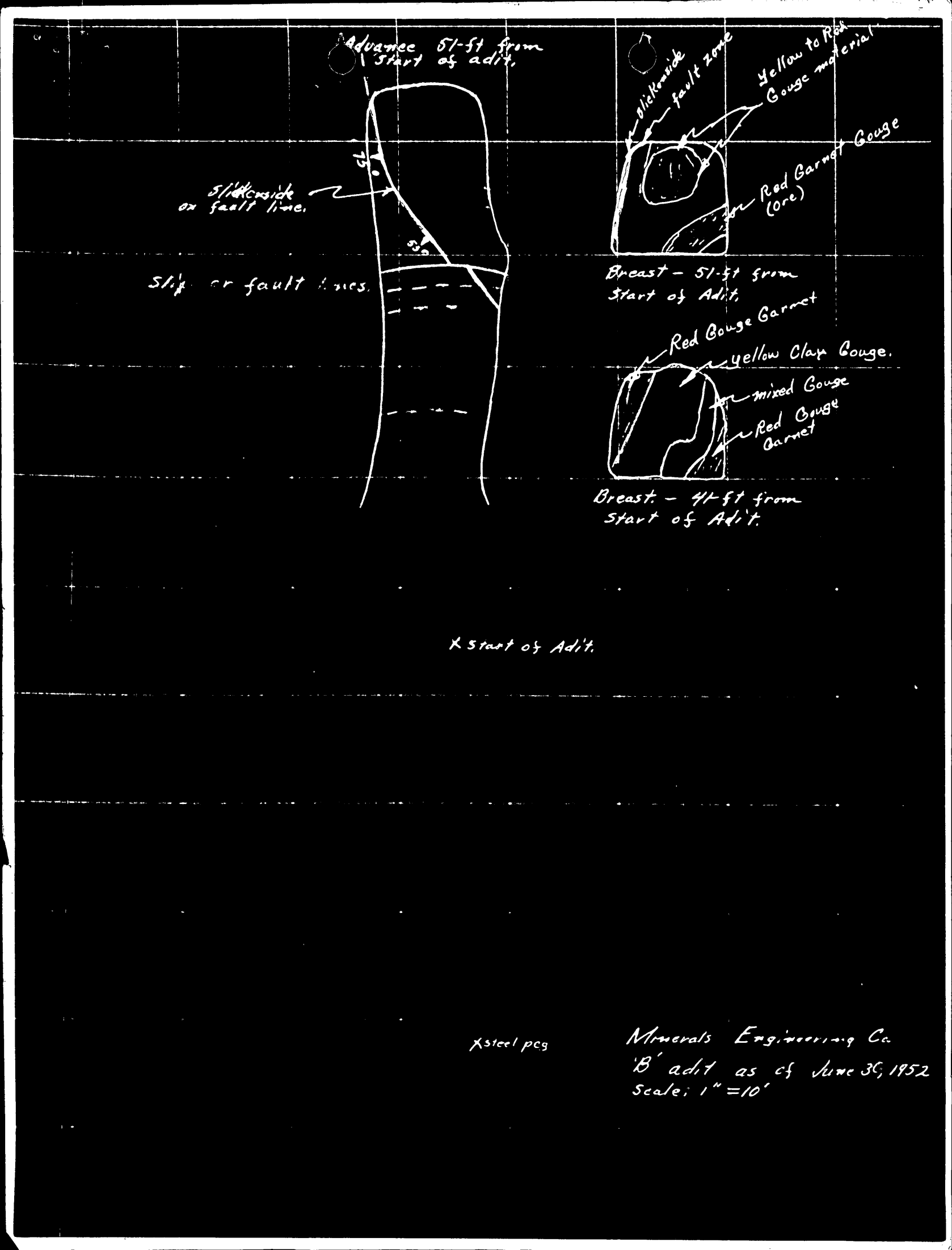
For Period June 1 to June 30, 1952

During the reporting period the road was extended approximately two miles. This included extending the road from "E" cut to "I" cut and work near the Spritzer Ranch. By the end of the reporting period the road work was completed.

On June 12 "B" level tunnel was started and an advance of 51 feet was made by the end of the reporting period. A northwest-southeast slip was encountered along with altered material. By the end of the reporting period we had passed through the fault, but were still in the altered zone with a narrow tongue of ore coming in on the west side of the drift. No sampling or assaying was done at the property during the report period.

M. N. Shaw

M. N. Shaw
Engineer in Charge


Advance 51-ft from Start of adit.
75
Slickenside or fault line.
Slip or fault lines.
Slickenside
fault zone
Yellow to Red Gouge material
Red Garnet Gouge (ore)
Breast - 51-ft from Start of Adit.
Red Gouge Garnet
yellow Clay Gouge.
mixed Gouge
Red Gouge Garnet
Breast - 41-ft from Start of Adit.
X Start of Adit.
X steel peg
Minerals Engineering Co.
'B' adit as of June 30, 1952
Scale: 1" = 10'

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No. - 300
Idm-E

6/26/52

Name of Operator Minerals Engineering Company
Docket No. DMA DMEA 2440
Total Contract Amount $ 111,280.00
Government Participation: 75 % Amount $ 83,460.00
Distribution of Expenditures for Month of April 18 to May 31, 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Minerals Engineering Company
(Name of Company)

By M. N. Shaw
M.N. Shaw (Signature of Authorized Official)

June 12, 1952
(Date)

Engineer in Charge
(Title)

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

16--64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Fixtures						
2. Operating Equipment:						
(*a*) Purchased[1]						
(*b*) Rented[2]						
(*c*) Furnished by operator						
3. Rehabilitation and Repairs:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Installations						

NARRATIVE CONTRACT NO. Idm-E-300

MINERALS ENGINEERING COMPANY
For Period April 18 to May 31, 1952

Work done during the reporting period under Contract No. Idm-E-300 was confined to widening, rebuilding, and extending the bulldozer truck trail from the Spritzer Ranch to the sites of proposed mine operations. Approximately one-half of the work was accomplished during the reporting period.

From April 18th to 28th the existing dozer trail was widened and a section rebuilt. From April 29th to May 3rd the road was extended from the end of the bulldozer trail to the "C" cut. On May 5th work was started to extend the road from "E" cut to connect with the extended road at "C" cut. This was completed on May 27th after several interuptions to rebuild portions of old dozer trail in the vicinity of the camp and Spritzer's Ranch.

During the reporting period there were:

29 shifts with the RD 7 caterpillar bulldozer
7 shifts with the RD 5 shovel leader.
2 shifts with the IR - 110 cfm compressor
2 shifts with jack-hammer
43 man shifts additional.

Signed: M. N. Shaw

M. N. Shaw, Engineer in Charge

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision						
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work						
11. Other (specify)						
Readbuilding	$4,015.00	None	$4,015.00			
Total	$4,015.00	None	$4,015.00			
Deletions						
Adjusted totals						
Totals previously reported						
Totals to date						

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by W. H. Lee
Entered by
Approved by John J. McNabb Jr.
Amount approved for payment $3,011.25
Remarks

16—64068-3

I certify that a minimum amount of $4,015.00 was spent on readbuilding under Contract No. Idm-E-300 during this report period; and that the figure of $4,015.00 is correct and just.

Signed: M. N. Shaw
M. N. Shaw,
Engineer in Charge

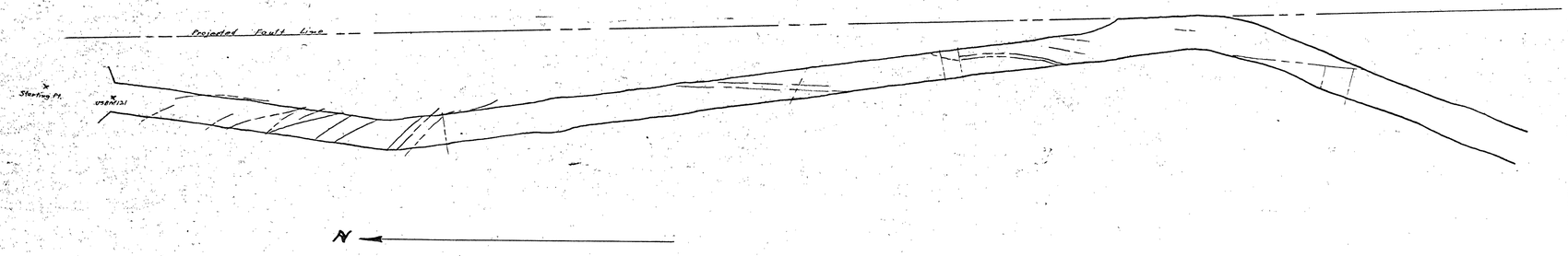
EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF APRIL 18 to MAY 31, 1952

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails					$4,015.00	1 Job	½ Job	None	½ Job	1 Job
Test pits										
Other (specify)										
Totals					$4,015.00	1 Job	½ Job	None	½ Job	1 Job

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE



MINERALS ENGINEERING CO.
MONTANA TUNGSTEN DIV.~ LOST CREEK UNIT

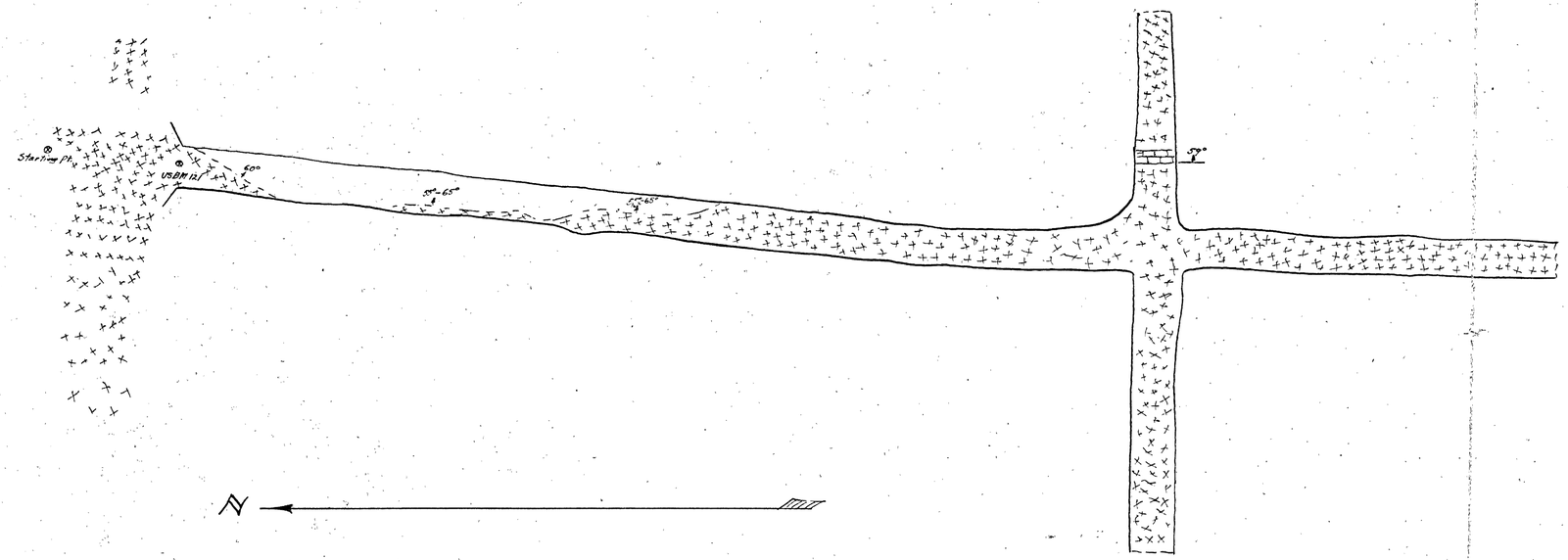
'B' ADIT

AS OF: OCTOBER 1, 1952

SCALE: 1" = 20'

DATE DRAWN: 10/11/52

DRAWN BY: JAMES C. TERNAHAN JR.



Garnetite

Argillaceous Material

Marblized Limestone

MINERALS ENGINEERING CO.
MONTANA TUNGSTEN DIV. ~ LOST CREEK UNIT

'H' ADIT
AS OF: OCTOBER 1, 1952

SCALE: 1" = 20'

DATE DRAWN: 10/14/52

DRAWN BY: JAMES C. TERNAHAN JR.