MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
10/7/66	Kirkemo	120
		220

OCT 7 1966

Messrs. Irving G. Irving and
Robert H. Nelson
84 Hirbour Building
Butte, Montana

Re: DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract E-604

Gentlemen:

By the terms of the subject Amended Exploration Project Contract, as amended, and the certification of discovery or development dated August 9, 1956, all minerals mined or produced from September 21, 1953, to September 21, 1966, were subject to the Government's royalty as set forth in said amended 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 amended contract or any future production therefrom. We, therefore, are closing our books and records on this amended contract. Your attention, however, is called to the provisions of the amended contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Umont Mining, Inc., King Street Dock, Burlington, Vermont
The Anaconda Company, 526 Hennessy Bldg., Butte, Montana
Director's Reading File
Division File
Economic Geology File
OME Reading File
DMEA Docket
Region I
Branch of Budget and Finance
120M

MMerrithew/mm (10/7/66)

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
10/7/66	Kirkham	120
		220

OCT 7 1966

The Anaconda Company
526 Hennessy Bldg.
Butte, Montana

Re: DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-E604

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to Messrs. Irving G. Irving and Robert H. Nelson.

This correspondence relates to the deed transferring certain mining property from Umont Mining, Inc., to The Anaconda Company.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
DMEA Docket
OME Reading File
Region I w/cy of incoming 63
120M

MMerrithew/mm (10/7/66)

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
10/7/66	Kirkemo	120
		220

Unont Mining, Inc.
King Street Dock
Burlington, Vermont

Re: DMEA-2874 (Manganese)
Unont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-E604

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to Messrs. Irving G. Irving and Robert H. Nelson.

This correspondence relates to the Assignment of Contract executed by Irving and Nelson, Assignor, on September 26, 1956, and by Lewis P. Evans, Jr., president of Unont Mines, Inc., Assignee, on September 28, 1956.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
DMEA Docket
OME Reading File
Region I
120M

MMerrithew/mm (10/7/66)

23263

Mie(2)

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 29 1963

DATE	INITIALS	CODE
12/2	mcd	500
12/2	Murphy	500
		220

No. 157 Howard Street
Spokane, Washington 99204
November 26, 1963

Memorandum

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

From: Acting Field Officer, Region I

Subject: IDMA-2074 (Manganese)
Uranet Mining, Inc., Assignee
Flutes and Norwich Claims
Silver Bow County, Montana
Amended Contract Ida-8604

There is enclosed the original of a Report of Royalty Review dated November 1, 1963, covering the subject contract for the period April 1, 1960, through October 25, 1963.

One copy of the report has been retained for the Spokane office files. The report is for record purposes only, and no copy was provided for the Operator.

D. R. Maclaren

Enclosure

cc: OMM(2)
CAAA
CPF

Director's Reading File
Resources Research Branch Chief

MLMaclaren:mls

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

NOV 19 1963

Memorandum

To: Acting Field Officer, Region I

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

Subject: DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-E604

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

(a) Original to the Fiscal Section, Division of Management Operations, Office of the Secretary, U. S. Department of the Interior, Washington, D. C. 20240; and

(b) One copy for your files.

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

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

Enclosures

EDTalbert/ama 11-18-63

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

43683

Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
9/13	Holt	500
	Myers	500
9/13	Talbot	800
"	on leave	120
		110
9/13	on leave	100
		220

SEP 13 1962

Umont Mining, Inc.
King Street Dock
Burlington, Vermont

Re: DMEA-2874 (Manganese)
Umont Mining Company, Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-5604

Gentlemen:

We thank you for the information in your reply of August 11, 1962, to our MME Form 63, "Request for Information on Certified Project and Project under Royalty Agreement", and also for the copy of the deed transferring certain mining property, including the land under the subject contract, from Umont Mining, Inc., to The Anaconda Company.

Please be advised, however, that under the terms of Articles 6(b)(2), and 10, and Annex II of the Amended Contract, and as set forth in the letter of August 9, 1956, transmitting the certification of discovery or development under the subject contract, your responsibility for payment of the Government's royalty on any mineral mined or produced from the land under the contract continues, as surety, until the sum of $44,512.39 is repaid, or until September 21, 1966, whichever occurs first. To date $28,533.15 royalty has been paid, leaving a balance repayable by royalty of $15,979.24.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Director

cc: The Anaconda Company
Butte, Montana

SPHolt/ama
9-13-62

cc: Docket
Director's Reading File
CA & A Division
Region I (2) (w/cys of incoming MME Form 63 and deed)
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Name	Code
9/12	Holt	500
	Hirsch	500
		800
9/12	on leave	120
		110
9/12	on leave	100
		220

Umont Mining, Inc.
King Street Dock
Burlington, Vermont

Re: DMEA-2874 (Manganese)
Umont Mining Company, Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-E604

Gentlemen:

We thank you for the information in your reply of August 11, 1962, to our MME Form 63, "Request for Information on Certified Project and Project under Royalty Agreement", and also for the copy of the deed transferring certain mining property, including the land ~~of~~ under the subject contract, from Umont Mining, Inc., to The Anaconda Company.

Please be advised, however, that under the terms of Articles 6(b)(2), and 10, and Annex II of the Amended Contract, and as set forth in the letter of August 9, 1956, transmitting the certification of discovery or development under the subject contract, your responsibility, ~~and that of the Anaconda Company,~~ for payment of the Government's royalty on any mineral mined or produced from the land ~~of~~ under the contract continues, as surety, until the sum of $44,512.39 is repaid, or until September 21, 1966, whichever occurs first. To date $28,533.15 royalty has been paid, leaving a balance repayable by royalty of $15,979.24.

Sincerely yours,

Director

for Director

cc: The Anaconda Company
Butte, Montana

SPHolt/ama
9-12-62

cc: Docket
Director's Reading File
CA & A Division
Region I (2) (w/cys of incoming MME Form 63 and deed)
Code 500

43683

COPY

THIS INDENTURE, Made and entered into this 21 _____ day of December, 1961, by and between UMONT MINING, INC., a Vermont corporation, GRANTOR, and THE ANACONDA COMPANY, a Montana corporation, whose post office address is Anaconda, Deer Lodge County, Montana, GRANTEE, WITNESSETH:

That the Grantor, for and in consideration of the sum of one dollar ($1.00), lawful money of the United States, and other valuable considerations to it in hand paid, the receipt whereof is hereby acknowledged, does by these presents grant, bargain, sell and convey unto the said Grantee, and to its successors and assigns, forever, all of the right, title, estate, interest, claim and demand, both at law and in equity, as well in possession as in expectancy, of the said Grantor of, in and to all of that certain real property situate, lying and being in the County of Silver Bow, State of Montana, and particularly described as follows, to wit:

The Sirius quartz lode mining claim, Survey No. 5964, situated in Section Eight (8), Township Three (3) North, Range Seven (7) West; also

Those quartz lode mining claims situated in Section Thirty-one (31), Township Four (4) North, Range Seven (7) West, Montana Principal Meridian, described as follows: Gemmel, Survey No. 9620; H.&H., Survey No. 9431; Success, Survey No. 9619, also

Those quartz lode mining claims situated in Section Ten (10), Township Three (3) North, Range Eight (8) West, Montana Principal Meridian, described as follows: Montana Club, Survey No. 8813; Green, Survey No. 8350; Warm Springs, Survey No. 9421; Finlen, Survey No. 10097; Woll & Jackman, Survey No. 9743; also

Those quartz lode mining claims situated in Sections Ten (10) and Fifteen (15), Township Three (3) North, Range Eight (8) West, Montana Principal Meridian, described as follows: Norwich, Survey No. 2724; Little Sarah, Survey No. 8095; Plutus, Survey No. 3018; also

The Mars quartz lode mining claim, Survey No. 8922, situated in Section Fourteen (14), Township

Received with MME Form 63, completed by L. P. Evans, Jr., Burlington, Vermont, President, Umont Mining, Inc.

Three (3) North, Range Eight (8) West; also

Those quartz lode mining claims situated in Section Fifteen (15), Township Three (3) North, Range Eight (8) West, Montana Principal Meridian, described as follows: Anglo Norman, Survey No. 2671; Olson Fraction, Survey No. 10290; Michigan, Survey No. 9182; also

The Comstock quartz lode mining claim, Survey No. 4145, situated in Sections Twenty-two (22) and Twenty-three (23), Township Three (3) North, Range Eight (8) West,

Containing in all 153.00 acres, more or less.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances, unto the said Grantee, its successors and assigns, forever.

IN WITNESS WHEREOF, Grantor has caused these presents to be executed by its officers thereunto duly authorized, and its corporate seal to be hereunto affixed, the day and year in this instrument first above written.

UMONT MINING, INC.,

By s/ Lewis P. Evans, Jr.

Its _____ President

ATTEST:

s/ Richard H. Wadhams

Its _____ Secretary

STATE OF Vermont, ss.

County of Chittenden.

On this 20th day of December, in the year 1961, before me, the undersigned, a Notary Public within and for said County and State, personally appeared Lewis P. Evans, Jr., known to me to be the _____ President of UMONT MINING, INC., the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate first above written.

s/ Hilliard B. Bell

Notary Public for the State of Vermont

Residing at Burlington, Vt.

My Commission expires Feb. 10, 1963

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/4	Talbert	800
	Evans	500
		500
1/5	Selfridge	120
		110
1-6	Fumich	100
		220

JAN 5 1962

The Anaconda Company
Butte, Montana

Re: DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract Idm-E604

Gentlemen:

Your Geological Department's December 26 letter addressed to our Spokane office has been referred to this office for reply.

The $44,512.39 repayable under the referenced exploration project contract has been reduced by royalty payments aggregating $28,533.15. Accordingly, the balance repayable by royalty is $15,979.24 as of this date.

Sincerely yours,

George Fumich, Jr.

Director

EDTalbert/ama 1-4-61

cc:
Docket
Director's Reading File
CA & A Division
Acting Field Officer, Region I (2)

43683

THE ANACONDA COMPANY

Butte, Montana

ANACONDA

Geological Department

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 4 1962

DATE	INITIALS	CODE
1/4	Ucw	800
		500

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS F ORATION

TO:	DATE	INITIALS
1. Chief, Div. of Field Oper. ions	1/2/62	
Re: DMMA-2874 (Manganese) Umont Mining, Inc., Assignee		
2. (Irving & Nelson) Plutus and Norwich Claims		
3. Silver Bow County, Montana Amended Contract Idm-E604		
4. Donald R. MacLaren		
Donald R. MacLaren		
5.		
FROM: Acting Field Officer, Region I		

FOR: Check items for action desired

X ____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS: With reference to part of our telephone conversation of 12/28/61 there is enclosed for your reply the Thermofax copies of a self-explanatory letter dated 12/26/61 from Charles C. Goddard, Jr., Geologist in Charge of Butte Mines, Geological Department, The Anaconda Company, Butte, Montana.

INT.-DUP. SEC., WASH., D.C. M50943

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 16 1960

DATE	INITIALS	CODE
5-16	gad	VVO
5/16	[illegible]	800
"	[illegible]	500
		225

So. 157 Howard Street
Spokane 4, Washington
May 11, 1960

Air Mail

Mr. R. H. Wadhams, Treasurer
Umont Mining, Inc., Assignee
King Street Docket
Burlington, Vermont

Re: Docket No. DMLA-2874 (Manganese)
Plutus and Norwich Claims
Silver Bow County, Montana
Contract No. Idm-E604
Irving and Nelson, Assignors

Dear Mr. Wadhams:

For your information and files is enclosed a copy of a Report of Royalty Review dated April 13, 1960, on sales of minerals from the property referred to as the Plutus and Norwich Claims located in Silver Bow County, Montana, during the period January 1, 1958, through April 13, 1960.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosure

cc: Fiscal Section w/orig. Report of Royalty Review
Contract Admin. & Audit Div., OME
OME(2)
USBM w/Thermofax copy of report
DRF

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 16 1960

MME FORM 6 REFERENCE SLIP
REV. 2-59 OFFICE OF MINERALS EXPLORATION

	DATE	INITIALS
TO: Chief, Div. of Field Operations		
1.	1/2/62	
Re: DMEA-2874 (Manganese)		
2. Umont Mining, Inc., Assignee (Irving & Nelson)		
3. Plutus and Norwich Claims Silver Bow County, Montana		
4. Amended Contract Idm-E604 Donald R. MacLaren		
5. Donald R. MacLaren		
FROM: Acting Field Officer, Region I		

FOR: Check items for action desired

x Action	____ Reply for signature of ____	
____ Approval	____ Investigate	____ Surname
____ Comment	____ Recommendations	____ Signature
____ Conference	____ Rewrite	____ File
____ Instructions	____ Your information	

REMARKS:

With reference to part of our telephone conversation of 12/28/61 there is enclosed for your reply the Thermofax copies of a self-explanatory letter dated 12/26/61 from Charles C. Goddard, Jr., Geologist in Charge of Butte Mines, Geological Department, The Anaconda Company, Butte, Montana.

INT.-DUP. SEC., WASH., D.C. M50943

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/26	Talbert	800
2/26	Holt	500
	Driscoll	500
2/29	Selfridge	120
2/29	Johnson	110
2/29	gad	220
		225

FEB 29 1960

Mr. R. H. Wadhams, Treasurer
Umont Mining, Inc.
King Street Dock
Burlington, Vermont

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Wadhams:

By letter dated February 24, 1960, you request confirmation of the amount of royalties paid and the balance payable under the referenced contract.

According to our records the status of your account is as follows:

Total Government contribution	$44,512.39
Repayments by royalties	28,533.15
Balance payable	$15,979.24

The last entries on this account are a royalty payment of $55.54 in April 1958 and the refund of $248.41 in June 1958.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

EDTalbert/ama
February 26, 1960

Copy to: Docket
Director's Reading File
CA & A Division
OME Field Team, Region I (2)

43683

OFFICIAL FILE COPY

Umont Mining Inc.

RECEIVED FEB 25 1960

DATE	INITIALS	CODE
2-25	gad	220
2/26	[illegible]	800
		500

THIS LETTER FROM ☒
KING STREET DOCK
BURLINGTON, VERMONT

THIS LETTER FROM ☐
912 KEARNS BUILDING
SALT LAKE CITY 1, UTAH

February 24, 1960

United States Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Attention: Mr. Frank E. Johnson, Acting Director

Gentlemen:

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

This will acknowledge receipt of your letter dated February 2, 1960 regarding DMEA contract No. 2874.

Our records here indicate that the government's total contribution was $44,512.39 as shown in your letter. Our records indicate further that repayments were made out of royalties as follows:

In connection with Stage I	$ 780.02
In connection with Stage II	27,731.55
Total	$28,511.57
Refunded to Umont July, 1958	248.41
Total amount of royalties paid	28,263.16
Balance due OME	$16,249.23

Inasmuch as we do not have all of the data in this location, we would appreciate confirmation of the above. In the event that your figures do not agree with ours an explanation would be appreciated.

Very truly yours,

R H Wadhams

R. H. Wadhams
Treasurer

RHW/dg
cc Mr. Wheeler
Mr. Weissenborn

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/27/60	Holt	500
	Gronwall	500
1/28	J. Lynch	140
	Hoffman	140
	Dup'd. Sol. Off.	
	Nabhut	800
2/1	Selledge	130
2/2	Yoder	130
2/2	Kirkemo	130
		~~110~~ 220
		225

FEB 2 1960

RECEIVED
JAN 29 1960
ASSOC. SOLICITOR
MINERAL RESOURCES

Uncut Mining, Inc.
King Street Docket
Burlington, Vermont

Re: Docket No. OMEA-2874 (Manganese)
Uncut Mining, Inc., Assignee
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Ida-2604

Gentlemen:

By letter of August 9, 1956, to Irving G. Irving and Robert H. Nelson, transmitting a certification of discovery or development, they were advised that production from the lands under the contract was subject to the Government's royalty as set forth in the contract until the sum of $17,393.03 was repaid, or until September 21, 1964, whichever occurred first.

We wish to call your attention to the fact that under the terms of the amended contract, executed September 19, 1956, and assigned to you by Messrs. Irving and Nelson on September 26, 1956, the Government's total contribution of $44,512.39 is repayable for a period of 13 years from the date of the prior contract, or until September 21, 1966.

Remittances should continue to be made to the Executive Officer, OME Field Team, Region I, South 157 Howard Street, Spokane, Washington.

Sincerely yours,

Frank E. Johnson (fw)

Acting Director

SPHolt/gla 1-27-60
cc to: Director's Reading File
Frank E. Johnson
Operating Committee
Frank D. Lamb, USBM
Harold Kirkemo, USGS
Contract Adm. & Audit Div.
OME Field Team, Region I (2)
Docket
Chron
Code 500

Copies to:
Anaconda Company
National Bank of Commerce of Seattle
Irving G. Irving and Robert H. Nelson

FROM SOLICITOR
JAN 29 1960
FOR SIGNATURE

43683

DMRA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/13	Murphy	500
	Howard	500
8/13	Selfridge	130
		~~100~~
		220
		225

AUG 17 1959

Mr. Clarence A. Fredell, Director
Technical Research and Development Division
Defense Materials Service
General Services Administration
6018 GSA Building
Washington 25, D. C.

8/14 130

Re: Docket No. DMRA-2874 (Manganese)
Umont Mining, Inc. (Assignee) 8/14 130
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-2604

Dear Mr. Fredell:

This is with reference to our letter of August 9, 1956, relating to the subject contract. Subsequent to our letter the contract was assigned to Umont Mining, Inc. by Irving and Nelson and the estimated costs increased from $25,830.00 to $108,510.70, with the Government's share at 75% or $81,383.00. The cost of the work completed was $59,349.83 of which the Government's share was $44,512.39.

The contract was terminated effective August 31, 1957. Work completed comprised 861 feet of drifting; 72 feet of raising; 66.5 feet of underground core drilling; 1138 feet of core drilling from the surface; 128 assays for manganese and silver; 7.5 hours of bulldozing; and certain shaft, underground station, and drift rehabilitation.

During and subsequent to the project 23,351.0579 L.D.T. of ore subject to Government royalty were sold. Net value of the production was $571,368.71 and the royalty paid amounted to $28,535.15. The mine suspended operations March 6, 1958.

Estimated ore reserves are 8913 tons @ 17% Mn. and 9220 tons @ 7.6% Mn. There are 2064 tons containing 8.5% Mn. stockpiled on surface.

Sincerely yours,

Frank E. Johnson

Acting Director

FMMurphy/GMcC
August 13, 1959

cc: Docket
Director's Read. File
OME Field Team, Reg. I (2)
Mr. Frank E. Johnson
Mr. F. M. Murphy
Blue Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington
July 6, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 9 1959

DATE	INITIALS	CODE
7-9	gad	VVO
7-9	JB	130
7/10	JEG	110
7-14	JB	130
		220
7-14	Murphy	500

Memorandum

To: Chairman, Operating Committee, OME

From: OME Field Team, Region I

Subject: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Enclosed are three copies of a Field Team final report on this project by William M. Romischer, Mining Engineer, Bureau of Mines, and William C. Prinz, Geologist, Geological Survey.

The project included 861 feet of drifting, 72 feet of raising, 1,224.5 feet of diamond drilling, cutting, and assaying 128 samples for manganese and silver, 7.5 hours of bulldozing, and certain underground rehabilitation. The total approved cost of the project was $59,349.83, of which the Government contributed 75 percent or $44,512.39. A Certification of Discovery or Development was made August 9, 1956. Up to the time the mine was closed, ore subject to royalty worth $571,368.71 had been produced and $28,533.15 in royalty has been paid the Government.

Surface drilling has not entirely disproved the possibility of additional ore east of the present workings. Under more favorable conditions additional drilling might be warranted but is not recommended at this time.

A. E. Weissenborn
A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures
cc: USBM(2)
USGS(SRO)
Prinz

Reviewed by
OME OPERATING COMMITTEE
7-14-59
(date)

F. FINAL REPORT

EXTRA COPY
O. M. E.
RECEIVED JUL 9 1959

DATE	INITIALS	CODE
7-14	2ℓB	130
		220

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
FIELD TEAM, REGION I

FINAL REPORT

Amended Contract Idm-E604

by

William M. Romischer
Mining Engineer
U. S. Bureau of Mines

William C. Prinz
Geologist
U. S. Geological Survey

UMONT MINING, INC., ASSIGNEE
I. G. Irving and R. H. Nelson, Partners
King Street Dock
Burlington, Vermont

Docket No.:	DMEA-2874
Commodity:	Manganese
Prior Contract date:	September 21, 1953
Termination date:	August 31, 1957

Reviewed by
OME OPERATING COMMITTEE
7-14-59
(date)

NORWICH-PLUTUS MINE
Butte Mining District
Silver Bow County, Montana

Spokane, Washington

June 1959

CONTENTS

	Page
INTRODUCTION	1
Summary	1
Recommendations	2
PROPERTY	3
GEOLOGY	4
Regional Geology	4
Local Geology	5
THE PROJECT	8
Summary of Factual Data	18
Discussion of Conclusions	20
Exploration Possibilities	21
APPENDIX I (Diamond Drill Hole Logs)	In pocket

ILLUSTRATIONS

Plate 1. Geologic map - surface	In pocket
2. Composite level map	In pocket
3. Geologic map - 200 (2nd) level	In pocket
4. Geologic map - 244 (3rd) and 275 (4th) levels	In pocket
5. Geologic map - 300 (5th) level	In pocket
6. Geologic map - 400 (6th) level	In pocket
7. Geologic cross section	In pocket
8. Long section Norwich F.W. vein	In pocket

FINAL REPORT

UMONT MINING, INC., ASSIGNEE
I. G. Irving and R. H. Nelson, Partners
Norwich-Plutus Mine
Butte Mining District
Silver Bow County, Montana

Amended Contract Idm-E604

* * * * * *

INTRODUCTION

This report describes a project conducted jointly by the Defense Minerals Exploration Administration and Messrs. I. G. Irving and R. H. Nelson, Assignor, and Umont Mining, Inc., Assignee, to explore for manganese in an undeveloped portion of the Norwich-Plutus mine, Silver Bow County, Montana.

Summary

The purpose of the work done at the Norwich-Plutus mine under the exploration project contract was to search for manganese ore in the Plutus vein at depth from the Plutus shaft, and for manganese ore east of the principal ore shoot on the Norwich footwall vein from where nearly all the production from the Norwich claim has been mined. The exploration on the Norwich footwall vein was from the Plutus shaft on the 400 level from a point 150 feet west of the north crosscut to a point 244 feet east of the crosscut. Surface diamond drilling was done on the Plutus claim from about 100 to 200 feet east of the underground exploration conducted on the Norwich footwall vein. The purpose was to determine the thickness of volcanic rocks exposed at the ground surface in this area and explore for any east-west-trending manganese-bearing veins that might be covered by the volcanic rocks.

The preparatory work for the exploration program consisted of the rehabilitation of the Plutus shaft for 36.5 feet below the 244 level and for 110 feet below the 300, provided a combined station

and crosscut on the 275 level, the installation of facilities to the 400 level, rehabilitation of the 400 level station, rehabilitation of 200 feet of the north crosscut on the 400 level, and 7.5 hours of bulldozing for access roads and drill sites.

The main part of the program consisted of 861 feet of drifts and 72 feet of raising with 825.9 feet of the drifts timbered and an additional 20 feet spiled in extremely heavy ground. One hundred and twenty eight samples were taken and assayed for manganese and silver. Eight-six and one-half feet of diamond drilling was completed underground. Surface diamond drilling amounted to 1,138 feet, which included 300 feet of cementing and redrilling or reaming and casing.

The total cost of the work completed under the contract was $59,349.83, of which the Government's participation was $44,512.37. The Government received $28,533.15 in royalties from crude ore shipped during the period of the contract and up to the present time.

The exploration program resulted in the discovery of small amounts of ore-grade mineralization in the Plutus vein, and significant amounts of marginal-grade mineralization in the Norwich footwall vein. The results obtained from surface diamond drilling east of the mine workings were disappointing. The Operator, however, was able to mine an appreciable tonnage from the east stope on the 400 level from the Norwich footwall vein. The Operator was helped in his successful search for manganese ore to the west in the Norwich footwall vein by the contract work.

Recommendations

Since some of the ore in the district occurs in lenses separated by vein segments barren of manganese, the surface drilling has not entirely disproved the possibility of ore east of the present workings. This can only be done by additional exploration in the area.

A Certification of Discovery or Development was issued on August 9, 1956.

PROPERTY

The land subordinated under the contract consists of portions of two patented lode mining claims as follows:

1. The part of the Plutus claim, Survey 3018, located in secs. 10 and 15, T. 3 N., R. 8 W. M.P.M., lying above a horizontal plane 600 feet below the collar of the Plutus shaft.

2. The Norwich claim, Survey No. 2794, Lot No. 590, T. 3 N., R. 8 W. M.P.M., except the portions of the claim lying west of coordinate 5275E and above the Plutus 300 (No.5) level; and all existing dumps on the Norwich claim were also excluded.

The two claims are located about a mile west of Butte in Silver Bow County, Montana.

The Norwich claim is owned in full by Irving and Nelson, partners. A one-quarter interest in the Plutus claim is owned by Irving and Nelson and the other three-quarters interest is held under a lease from Anaconda Copper Mining Company (now known as The Anaconda Company) and the National Bank of Commerce of Seattle. This lease expires June 30, 1961.

The land was subject to a mortgage held by General Services Administration under its Contract GS-10P(D)-3. The Subordination Agreement of General Services Administration and Consents to Lien of the lessors of the Norwich and Plutus claims were waived, but in lieu of Consents to Lien from the owners, a Guaranty dated October 1, 1953, was obtained from Irving and Nelson.

The exploration contract was assigned September 26, 1956, to Umont Mining, Inc., a State of Vermont corporation, King Street Dock, Burlington, Vermont.

GEOLOGY

Regional Geology

The geology of the Butte District is well known and has been described in numerous publications. These used most extensively in the preparation of this report are:

Hart, L. H., 1935, The Butte District, Montana: XVI International Geological Congress, Copper Resources of the World, v. 1, p. 287-305.

Perry, E. S., 1932, The Butte District, Montana: XVI International Geological Congress, United States, 1933, Guide Book 23--Excursion C-2.

Weed, W. H., 1912, Geology and Ore Deposits of the Butte District, Montana: U. S. Geol. Survey Prof. Paper 74.

The Butte District is in the Boulder batholith, a large, Late Cretaceous intrusive body of quartz monzonite and granodiorite. After partial consolidation, the batholith was intruded by many late-stage aplite and alaskite dikes, sheets, and irregular masses. Both the batholith and alaskitic rocks were cut by many faults and sheeted joint zones that became channelways for ore-bearing hydrothermal solutions. The ore deposits which formed in these faults and sheeted zones have been subdivided into three systems. The veins of the oldest or Anaconda system strike east-west and dip steeply to the south. The veins of the Blue system strike northwesterly and dip steeply to the southwest, and the youngest veins, called the Steward system, strike northeast and dip steeply to the southeast. These three systems contain identical ores and were thus apparently formed during the same period of mineralization. The ore minerals show a distinct zonal arrangement. The main or central zone contains copper ore, the intermediate zone, zinc ore, and outer or peripheral zone, silver and manganese ore. This zoning is three dimensional; it is applicable to depth as well as laterally.

In mid-Tertiary time, the unroofed batholith was partly covered by dacite, quartz latite, and rhyolite extrusives, predominantly tuffs. During the same period, many dikes and small stocks and plugs of similar composition were intruded into the batholith and overlying tuffs. All of these mid-Tertiary rocks are post-ore in age.

Local Geology

The Norwich and Plutus claims are in the peripheral, or silver-manganese zone about 3½ miles west of the central copper zone at Butte. The southwestern portions of the claims are underlain by Late Cretaceous rocks of the Boulder batholith, quartz monzonite or granodiorite with abundant late alaskite (called aplite by the Operators) dikes, sills, or blebs. In the northeastern portion of the claims, mid-Tertiary dacite volcanic rocks, mainly tuffs, cover the batholith (pl. 1). Except where faulted, the contact between the two units dips 15°-20° into the volcanics and is marked by typical basal features such as grus, debris of the two rock types intermixed, and poorly bedded ash. East and northeast of the Plutus shaft, a northwest-striking and steeply northeast-dipping fault nearly parallels the contact. In the vicinity of DMEA DDH's S-1, S-2, and S-2A and USBM DDH 4 (John W. Cole, 1951, Investigation of the Norwich Manganese Deposit, Silver Bow County, Montana: U. S. Bureau of Mines, Report o Investigations 4784) the volcanics northeast of the fault have been down dropped 280-300 feet (pl. 7, secs. E-E' and F-F'). To the southeast, the fault is lost in the volcanic rocks; to the northwest, it apparently dies out. It has not been penetrated by underground workings, but one drill hole, DMEA DDH S-1, cuts the Norwich vein northeast of the fault. This meager information indicates that the vein northeast of the fault is displaced to the north but that the amount of horizontal displacement is less than 50 feet.

Four manganese-bearing veins, the Norwich FW, Norwich BW, Plutus, and "No" veins cut the batholith on the Norwich and Plutus claims. These veins strike east-west, dip south, and are probably members of the oldest, or Anaconda vein system. Two of the veins, the Norwich FW and Plutus, have been extensively explored but have not been followed eastward along their postulated extension under the cover of the volcanic rocks.

The Norwich FW vein is the strongest vein at the property and has been the most productive. It has been explored from the surface to a depth of about 400 feet by the Norwich 82, 135, and 170 levels, the R.A.L. 110 level, and the Plutus 244, 300, and 400 levels (pls. 1, 2, 4, 5 and 6) and has been explored along strike for about 850 feet. The vein is a wide, complex altered shear zone that has been partly filled and replaced by quartz and rhodochrosite, some sphalerite and galena. The vein is offset by numerous faults of two types (1) those that approximately parallel the east-west strike and 55° south dip of the vein (pl. 7), and (2) cross faults that usually strike northwest to north and dip to the northeast or east. Cross faults of other orientations have been found but are not common. These faults commonly border heavily mineralized vein segments which thus form small fault slivers averaging about 5 feet wide and 10-30 feet long. In the western

portion of the mine the vein is more persistent and more heavily mineralized and has been mined for manganese oxide near the surface and manganese carbonate below a depth of approximately 40 feet. Some silver occurs with the carbonate. The ore body here may be as wide as 20 feet and as long as 475 feet, and it has been mined almost continuously from the surface to a depth of 400 feet (pl. 8). On the 400 level of the mine the ore body is cut off to the west by a fault that strikes northwest and dips 31° NE (pl. 6), and it has not yet been found west of this fault. The Norwich FW vein has also yielded a small amount of ore from the area immediately above the 400 level drift east.

The Norwich HW vein is parallel with and 50-100 feet south of the Norwich FW vein. It has been cut on the Norwich 135, R.A.L. 110, and Plutus 244 and 300 levels and in USBM DDH's 5 and and 6. From the limited information available it appears that the Norwich HW vein is similar to the Norwich FW vein but is weaker. On the Norwich 135 level it is 6 feet wide and contains 12-15 percent manganese, and on the Plutus 244 it is 4.4 feet wide and contains 14.8 percent manganese (pl. 4). It is also strong in DDH 5 where sludge from a 7.9-foot interval assayed an average of 9.2 percent manganese (pl. 7, D-D'). The vein is weak in DDH 6 and on the Plutus 300 level; in the latter locality it is represented by only two thin gouge seams (pl. 5). The vein has not been recognized in the other drill holes, possibly because of the very poor core recovery, nor on the Plutus 400 level. It appears that the HW vein either pinches or merges with the FW vein at depth and to the east. At one time, Irving G. Irving, former partner in the operation of the Norwich mine, thought that the HW vein was a faulted segment of the FW vein, but this does not now seem to be true (pl. 7, A-A' and B-B'). Production from this vein has been very small.

The Plutus vein is south of the Norwich veins and is exposed in numerous shallow surface workings on the Plutus 125, 200, 244, and 275 levels, on the intermediate level 27 feet above the 244, and in the old short level 20 feet below the Plutus 300 (pls. 1, 3, 4, and 5). The vein strikes slightly north of east and dips 55°-60° S. It is a mineralized shear zone similar to, but weaker than, the Norwich FW vein. The distribution of the ore in the Plutus vein is very erratic and lensy and small pods of ore are commonly terminated abruptly by cross faults. Some of these cross faults are flat with a northwest strike and gentle northeast dip. Considerable manganese oxide minerals are found along the Plutus vein to a depth of 200 feet, and the close association of these oxide minerals with the flat faults suggests that the faults may have been a factor in controlling the depth of oxidation.

At the surface the Plutus vein has been traced for a length of at least 1,000 feet and a small amount of oxide ore has been mined from several shallow workings. The vein is not well exposed on the 125 level because of complex cross faulting but is relatively strong on the 200, 244, and 275 levels. Some stoping has been done on these lower three levels, but the lensy nature of the ore has limited production. Part of the 200 level drift west yielded 481 tons of ore, averaging 14.9 percent manganese, but the ore pinched one floor above the level. On the 244 level the vein is strong near the shaft and some ore was mined through the intermediate level 27 feet above. From a 37-foot portion of the 244 drift west, average assays of 20.3 percent were obtained from an average width of only 2.8 feet and the Operators reported that the vein was even narrower in the back. The vein in the 275 drift east is locally of very good grade, but it is very narrow. In the short level 20 feet below the 300 the vein is extremely weak. Possible faulted segments of the Plutus vein are reported in DMEA DDH S-2A (pl. 7, F-F'), but since these segments lie about 75 feet north of the projection of the Plutus vein, this correlation is considered tentative.

The "Ho" vein has been explored by 460 feet of drifting on the Plutus 400 level and has been exposed near its intersection with the Norwich FW vein below the large stopes above the 400 level drift west (pl. 6). The vein near the end of the 300 level crosscut probably correlates with the "Ho" vein (pl. 5), and the steep vein above the 244 level in the raise near the end of the crosscut north may also be a segment of this same vein above the Norwich FW vein (pl. 7, B-B'). The "Ho" vein strikes north of east, about parallel with the Plutus vein but has a steeper dip vertical to steeply south. The "Ho" vein is commonly less than 5 feet wide and consists of quartz, rhodochrosite, and some sphalerite. No production has been reported from the vein except from near its intersection with the Norwich FW vein on the 400 level where it becomes wider and richer in manganese.

Almost all the ore produced from the Norwich and Plutus claims has come from one ore body along the Norwich FW vein in the western part of the claim group (pl. 8). The controls which localized this ore body are imperfectly known but appear, in part, to be due to the intersection of the "Ho" and Norwich FW veins (pl. 7, A-A', B-B', and C-C'), with the best ore having been formed above this intersection. Gaps in the ore body are primarily the result of later strike and cross faulting such as that noted on the Plutus 244 and 300 levels (pls. 4 and 5). The ore mined from the Plutus vein is from small ore bodies distributed at random along the vein with no apparent controls.

THE PROJECT

The Norwich and Plutus claims are in the manganese-bearing zone just west of the main Butte mining camp and at the time the first application was submitted were known to contain a proven, good manganese-bearing vein, the Norwich FW vein. An essentially parallel vein, the Plutus vein, had been traced at the surface for a distance of at least 1,000 feet and had yielded a small amount of manganese oxide ore from shallow surface workings; therefore, it was concluded that further exploration of the Plutus vein at depth was justified.

After completion of exploration of the Plutus vein, deep exploration of the Norwich FW vein to the east under the cover of volcanic rocks was favorably considered for two reasons: (1) the probability of finding ore along this vein was increased as non-DMEA exploration and stoping operations in the western part of the mine continued to be successful, and (2) no vein had yet been explored under the volcanic rocks that cover the area between the main Butte District and the manganese-producing area to the west.

An application was received February 9, 1953, for Government aid to explore the Plutus vein for manganese in the Plutus mine. The application was submitted by Messrs. I. G. Irving and R. H. Nelson, partners, Butte, Montana.

The original application proposed an aggregate of 670 feet of drifting and raising on the 225 (200) level at an estimated cost of $26,619.10. Rehabilitation of necessary facilities and assays would be additional to this cost.

The property was examined by DMEA representatives and from their recommendations, together with those of the Washington office, an essentially similar exploration project was approved.

The purpose of the approved project was first to explore the Plutus vein at depth on the 200 level for manganese. Later, under the Amended Contract, the purpose was to explore the Norwich footwall vein on the 400 level for manganese and its possible extension eastward and that of the Plutus vein under the cover of volcanic rocks. A contract, dated September 21, 1953, was approved and signed by the Operator. The work under the Prior Contract and Amended Contract and Amendment No. 1 of the Prior Contract and Amendment No. 1 under the Amended Contract was divided into three stages, as follows:

Stage I

1. Drive 470 feet of drift on the Plutus vein.

2. Timbering 470 feet of drift.

3. Drive 80 feet of raise above the 200 level.

4. Unwater and rehabilitate 56 feet of the Plutus shaft below the 200 level.

5. Cutting and timbering station-crosscut on 275 level.

6. Assay 249 samples for silver and manganese.

7. Pumping for 150 days.

Stage II

1. Installation of facilities including pumping equipment in the Plutus shaft to the 300 level.

2. Rehabilitation of the Plutus shaft from the 300 to 410 level and installation of facilities for operation on the 400 level.

3. Rehabilitation and enlargement of the 400 level station by removing 3,200 cubic feet of material and timbering as necessary.

4. Rehabilitation of 240 feet of the 400 level (north) crosscut between the station and the Norwich vein.

5. Drive 550 feet of drift along the Norwich footwall vein, approximately 150 feet westerly and 400 feet easterly on the 400 level.

6. Drift timbering - 550 feet.

7. Extra sets in heavy ground - 100 feet.

8. Spiling - 50 feet.

9. Underground diamond drilling to intersect the downward extension of the Plutus vein at the 400 level - 420 feet.

10. Assaying of 140 samples for silver and manganese.

11. Five hundred feet in aggregate of additional underground diamond drilling to be drilled from the 400 level east drift.

Stage III

1. Bulldozing of access roads and preparation of drill sites for surface diamond drilling on the east side in the vicinity of the volcanic cover.

2. Surface diamond drilling - 1,700 feet.

3. Cementing and redrilling, or reaming and casing - 300 feet.

4. Additional crosscutting and drifting on the 400 level easterly - 650 feet.

5. Normal timbering - 600 feet.

6. Extra sets in heavy ground - 100 feet.

7. Spiling - 60 feet.

8. Diamond drilling for a flat hole underground to intersect the Plutus vein east - 420 feet.

9. Assaying 120 samples for silver and manganese.

The cost of the project in the Prior Contract and subsequent increases by the Amended Contract and its Amendment No. 1 was $108,510.70, with Government participation at 75 percent for all three stages of work or $81,383.00 (rounded).

Work under Stage I was started October 2, 1953, and completed by December 31, 1955. No recesses were granted, but three time extensions were approved to allow the contract work to be completed.

All the contract work under Stage I was exploration of the Plutus vein at depth. The work consisted of an aggregate of 467 feet of drift with 60.8 feet completed on the 200 level including west and east drifts, 222.6 feet on the 244 level in the west drift, and 183.6 feet on the 275 level in the east drift. Also, an aggregate of 454.9 feet of timbering was completed in the drifts; 72 feet of raise was driven upward from the 200 level east drift; 36.5 feet of shaft rehabilitation was completed below the 244 level; and 892.5 cubic feet of excavation was done for a station-crosscut on the 275 level.

The 44.4-foot portion of the west drift on the 200 level driven under the DMEA contract was started October 2, 1953, and completed about the middle of November. For the first 10 feet from the starting point of the contract work the drift was in manganese ore of good grade, but from here westerly for the remainder of the 44.4-foot advance the drift encountered only material of subore grade. All of the advance was in heavy ground which had to be timbered for 42 feet.

The 16.4-foot portion of the east drift on the 200 level driven under the contract was started and completed in November 1953 with 14.3 feet timbered. The drift started in low-grade carbonate ore which quickly became a narrow, low-grade oxidized ore body.

The results obtained from the 200 level east drifting were unfavorable and Amendment No. 1 authorized the remaining 183.6 feet of drifting easterly under the contract to be done on the 275 level. Funds were provided for shaft rehabilitation below the 244 level sill to the 275 level and for a new combined station and crosscut on the 275 level by transferring some of the money allotted for raising.

The 36.5 feet of shaft repair and 892.5 cubic feet of station cutting on the 275 level were done in December 1953.

The 72 feet of raising above the 200 level east drift was started in September 1954 and completed in the following October. During the interim after the contract work had been stopped on the 200 level in the east drift, the Operator had, on his own account, advanced the face some 40 feet easterly and had disclosed some pretty fair oxidized manganese ore which warranted raising. The raise, which was centered about 47 feet east of the station crosscut, was on ore continuously for about 60 feet upward where the structure, while remaining strong, widened out and the vein became lean as it approached the old 125 level sill at 72 feet. The vein averaged approximately 4 feet wide in the ore zone. According to the Operator, 123 L.D.T. that assayed approximately 19.6 percent manganese were shipped from the raise. All of this tonnage came from the first 35 feet of raise advance. The ore from 35 to 60 feet became too diluted with lean material from the sill above to be of shipping grade.

As low-grade oxidized manganese was encountered about 15 feet above the back of the 200 level west drift, the remaining 225.6 feet of drifting westerly on the 200 level under the contract was authorized to be done on the 244 level west drift by Amendment No. 2.

The drift west, which was collared off the north crosscut, on the Plutus vein on the 244 level was started in November 1954; the 222.6 feet of advance was completed in June 1955. This is 3 feet less than the contract authorized. The drift was driven in ground that had to be timbered all the way.

The results obtained from this drifting were disappointing as the vein was very erratic. Some ore occurred in narrow, relatively short, disconnected lenses. The best showing was a 37-foot segment of the 244 level west drift between 100 and 137 feet west of the starting point of the drift. This ore shoot averaged a little over 2 feet in width and 20.3 percent manganese. Because of the narrow and lensy nature of the small ore shoots, mining of this material could be profitable only under the most favorable conditions.

The drift east on the 275 level, which was collared near the Plutus shaft and driven on the Plutus vein, was started in January 1954 and advanced 25 feet where the face was temporarily stopped. Work was resumed in June 1955 and by the end of December of the same year the 183.6 feet of drifting authorized under the contract was completed. Most of the advance was in heavy ground with 176 feet timbered.

The results obtained from this drifting were disappointing. The vein locally is of very good grade, but it is narrow. The best showing was between 35 and 77 feet east of the starting point of the contract, where for about 42 feet the ore was a little over 2 feet wide and averaged better than 20 percent manganese.

The drifting easterly on the 275 level completed the drifting on the Plutus vein under the Prior Contract as amended on September 29, 1955. This work was later designated as Stage I under the Amended Contract. The results obtained by the contract work under Stage I were considered unfavorable although small amounts of ore-grade material were revealed.

Contract work under Stage II was started April 16, 1956, and completed by January 31, 1957. No recesses nor time extensions were granted.

All the contract work completed under Stage II was exploration along the Norwich footwall vein which was reached from the Plutus shaft on the 400 level. This consisted of drifting westerly 150 feet from the station crosscut and 244 feet easterly toward the volcanic rock cover. Fifteen feet of AX size and 71.5 feet of EX core drilling were done in a flat hole from the face of the east drift.

The preparatory work, which consisted of the rehabilitation of the Plutus shaft to the 410 level and the installation of necessary facilities on the 400 level, the rehabilitation of the 400 level station by the removal of 3,200 cubic feet of material, necessary timbering, and the rehabilitation of 200 feet of the north crosscut between the 400 station and the Norwich vein, was started April 16, 1956, and completed on September 10, 1956.

The drift west on the Norwich footwall vein was started September 11, 1956, and the authorized 150 feet of drift was completed about the middle of the following October. The drift required 130 feet of normal timbering and 20 feet of spiling.

The west drift from where it was collared off the crosscut had advanced on an ore shoot westerly for about 75 feet. The average width of the vein was about 4 feet and the average grade 12.8 percent manganese. From 75 to 150 feet the vein material was of subore grade.

The drift east on the Norwich footwall vein was started September 11, 1956, and the 244-foot advance, which included about 28 feet of probing for the vein in the north wall, was completed December 2. Two hundred and forty-one feet of drift was timbered.

The east drift from where it was collared off the crosscut was advanced 22 feet on the vein. Here a fault striking N. 10° E. and dipping toward the east about 85° cut the vein off entirely. After probing both the north and south walls to locate the vein, the face was advanced easterly through the fault and intersected the vein at a point about 60 feet east of the crosscut. From here the drift continued on ore for about 100 feet in a zone of complex faulting. At about 160 feet east of the station crosscut, the vein weakened and continued weak to the east face.

For about 22 feet the ore shoot averaged 6.6 feet in width and the manganese content averaged 14 percent. The second ore shoot, which was about 100 feet in length and farther to the east, had a width of 5.9 feet and had an average grade of 14.8 percent manganese. The vein actually was wider for the Operator later slabbed off some ore at the sill from this ore shoot.

In January 1957 a flat diamond drill hole 86.5 feet long was drilled N. 45° E. on an inclination of +5° from the face of the east drift to explore for a possible ore shoot on a branch vein in the north wall and to determine if water from a buried channel could flood the mine if the face were advanced farther east. The diamond drill hole disclosed neither an ore shoot nor a water course.

The diamond drill hole completed the Stage II work. The drilling was authorized by Amendments No. 1 and No. 2 of the Amended Contract. The results obtained from the Stage II work cannot be considered unfavorable, although most of the ore encountered by the actual contract drifting on the 400 level of the Norwich footwall vein was considered marginal in grade. However, the Operator was able to mine some of the ore in the east drift by mixing it with higher grade ore from the west drift. He, also, was helped in his successful search for ore in the west Norwich footwall vein by the 150 feet of drift driven west from the north crosscut.

Contract work under Stage III was started about May 8, 1957, and completed by August 21, 1957. There was no necessity for recesses or time extensions.

The work consisted of bulldozing access roads and drill sites and diamond drilling 3 holes, No. S-1, S-2, and S-2A, for an aggregate of 1,138 feet of drilling. All three holes were drilled on the Plutus claim. DDH S-1 was drilled about 193 feet east of the face of the 400 level east drift. DDH's S-2 and S-2A were both collared about 108 feet south and 80 feet west of DDH S-1.

DDH S-1 was started May 9 and completed July 17, 1957. It was drilled vertically for 495 feet to test the depth of the overlying volcanic rocks. The contact between the volcanic and plutonic rocks was cut at a depth of 288 feet. Vein material was encountered from 442 to 450 feet. The part of the core containing predominantly quartz from 442 to 444.5 feet assayed 6.30 percent manganes, and 1.6 ounces silver and 0.02 ounce gold per ton. The core from 444.5 to 450 feet, which was mostly gray to white clay, assayed 1.2 percent manganese and 1.0 ounce silver per ton. No other intervals containing significant amounts of manganese were cut by this hole.

DDH S-2 was started July 18 and completed July 23. The hole was drilled 146 feet on a slope of -62.5° N. No vein structure was encountered in this hole and the only mineralization found was due to staining in seams and fractures. From 0 to 125 feet the hole penetrated a weathered, partially decomposed, fractured biotite granodiorite with small intrusions of fine- to medium-grained aplite (alaskite). From 125 to 131 feet the rock was a medium-grained aplite. From 131 to 146 feet the core is a dacite tuff with numerous thin fault clays. It is believed that the contact between the aplite and dacite tuff is a fault zone consisting of numerous small faults.

DDH S-2A was started July 24 and completed August 21, 1957. The hole was drilled 497 feet on a slope of -77.5° and in a direction N. 10° W. Vein material was cut at four intervals and because of faulting the Plutus and Norwich veins were considered

by the Operator to be penetrated twice. The core interval from 233 to 234 feet assayed 1.8 percent manganese and 0.6 ounce silver per ton and from 277 to 278.5 feet assayed 0.7 percent manganese and 1.2 ounces silver per ton. Both of these intervals were thought to be material from the Plutus vein. The core interval from 423 to 424.5 feet assayed 4.5 percent manganese and 9.6 ounces silver per ton and from 449 to 450.5 feet assayed 3.9 percent manganese and 0.8 ounce silver per ton. Both core intervals were believed to be from the Norwich vein. Although the coring showed a wider structure for the Norwich vein than was sampled, the portions of the core not assayed were definitely barren of ore minerals.

Faults were cut at 75.5 and 92 feet. The ground through which this hole was drilled was badly fractured and contained numerous water channels or fracture zones.

The Plutus vein was located only by stringers of manganese oxide in slightly altered aplite and showed weak mineralization. A vein structure of about 8 feet comprises the Norwich vein. It is highly faulted and crushed. Mineralization is lacking in any appreciable amount in the area of the drill hole.

Data related to the three DMEA drill holes collared at the surface are as follows:

Hole No.	Collar alt. (feet)	Length (feet)	Coord.	Direct.	Inclin.	Core size (feet)	Remarks
S-1	991	495	5520N 5840E		Vert.	5- 10 NX 10- 26 BX 26-495 AX	Passed from volcanics at 288'.
S-2	993	146	5415N 5755E	North	-62½°	0-125 NX 125-146 BX	No vein structure encountered.
S-2A	993	497	5415N 5754E	N. 10° W.	-77½°	0-171 NX 171-395 BX 395-497 AX	Vein material was encountered at 4 intervals.

Detailed information in regard to the drilling and logs for each hole was reported in the Operator's monthly narrative reports (Appendix I). The results obtained from the DMEA drilling of these three surface holes east of the present underground workings, although negative, cannot be considered conclusive. It is known that ore occurs in this area in lenses, which are separated by barren stretches of vein matter, and thus the possibility of ore in this area has not been entirely disproved by the drilling.

The Operator considered that information obtained from the surface drilling indicated large quantities of water in the vicinity of the holes. If the present face of the east drift were to be advanced easterly in the vicinity of the holes, large inflows of water might be encountered.

The remainder of the Stage III work, which was underground exploration east of the present workings, was dependent upon the results obtained from the diamond drilling and the Operator was unwilling to advance this face any farther. The diamond drilling completed the contract work; the results obtained from the Stage III work were discouraging. The mutual Termination Agreement, dated November 22, 1957, was effective as of August 31, 1957.

The contract was amended 10 times, including 9 amendments and an amended contract. The amendments to the original contract were:

Amendment No. 1, dated January 6, 1954, deleted all items under the original contract in Exhibit "A" and substituted a new Exhibit "A." The principal changes were essentially as follows: the 470 feet of drift on the 200 level was limited to 270 feet in the west drift and 16.4 feet in the east drift for a total of 286.4 feet on the 200 level, and the remaining 183.6 feet was to be applied to the east drift on the 275 level. The amount of raising was decreased from 200 to 80 feet and the funds left from the original amount for raising provided for shaft rehabilitation below the 244 level sill and a station crosscut to serve the new 275 level.

Amendment No. 2, dated April 6, 1954, deleted the 270 feet of drifting westerly on the 200 level and substituted crosscutting 15 feet in a southerly direction from the face of the west crosscut on the 244 level and then drifting westerly on the vein for 210.6 feet.

Amendment No. 3, dated August 2, 1954, extended the contract period from 8 to 14 months, setting the termination date as of November 21, 1954.

Amendment No. 4, dated November 23, 1954, again extended the contract period from 14 to 24 months, setting the termination date as of September 21, 1955.

Amendment No. 5, dated May 12, 1955, added the following to Amendment No. 2: drift west 44.4 feet on the Plutus vein on the 200 level.

Amendment No. 6, dated May 25, 1955, changed the 15 feet of crosscutting authorized under Amendment No. 2 on the 244 level to 15 feet of drifting. This increased the authorized footage for drifting westerly on the 244 level to 225.6 feet.

Amendment No. 7, dated September 29, 1955, further extended the completion date from September 21, 1955, to December 31, 1955. The royalty payment period was extended from 10 to 11 years.

The Amended Contract, effective date of September 19, 1956, provided for additional work and designated it as Stages II and III. The work completed under the Prior Contract and its seven amendments was designated as Stage I. All items of work were put on a fixed unit cost basis. The contract amount was raised from $25,830.00 to $106,010.70 and the completion date was advanced from December 31, 1955, to December 31, 1957.

Two amendments were added to the Amended Contract. Amendment No. 1, dated March 1, 1957, provided for 500 feet of additional diamond drilling in the 400 level east drift. The contract amount was increased from $106,010.70 to $108,510.70.

Amendment No. 2, dated June 21, 1957, allowed EX size drilling for AX when drilling conditions warranted.

Summary of Factual Data

The allowable costs of the project were:

Item	Authorized	Completed	Agreed unit cost	Total cost
Stage I				
Drifting	470 ft	467 ft	$ 34.00	$15,878.00
Timbering	470 ft	454.9 ft	5.00	2,274.50
Raising	80 ft	72 ft	35.00	2,520.00
Assays for silver and manganese	249 samples	67 samples	2.00	134.00
Rehabilitation of shaft	56 ft	36.5 ft	35.00	1,277.50
Cutting station crosscut	1,300 cu ft	892.5 cu ft	1.24	1,106.70
Total cost - Stage I				$23,190.70
Stage II				
Installation of facilities and pumping equipment 300 level Plutus shaft	1 unit	1 unit	$2,082.00	$ 2,082.00
Rehabilitate Plutus shaft	1 unit	1 unit	3,148.00	3,148.00
Rehabilitate 400 station	3,200 cu ft	3,200 cu ft	0.50	1,600.00
Rehabilitate crosscut to Norwich vein	240 ft	200 ft	20.50	4,100.00
Drifting	550 ft	394 ft ✓	32.00	12,608.00
Normal timbering	550 ft	371 ft	10.00	3,710.00
Extra sets in heavy ground	100 ft	none	8.00	--
Spiling	50 ft	20 ft	30.00	600.00

Stage II (Cont'd.)

Item	Authorized	Completed	Agreed unit cost	Total cost
AX Diamond drilling underground	420 ft	15 ft	$ 5.00	$ 75.00
EX Diamond drilling underground	71.5 ft	71.5 ft	4.75	339.63
Assays for silver and manganese	140 samples	61 samples	3.50	213.50
Total cost - Stage II				$28,476.13

Stage III

Bulldozing	15 hr	7.5 hr	$ 14.00	$ 105.00
Surface diamond drilling	1,700 ft	1,138 ft	6.00	6,828.00
Cementing and redrilling, or reaming and casing	300 ft	300 ft	2.50	750.00
Total cost - Stage III				$ 7,683.00
Total cost of project				$59,349.83

Total amount of contract	$108,510.70
Government participation at 75 percent	$ 81,383.00 (rounded)
Total amount expended	$ 59,349.83
Government participation	$ 44,512.39
Total amount unexpended	$ 49,160.87
Government's share unexpended	$ 36,870.61
Manganese ore production subject to royalty	23,351.0579 L.D.T.
Manganese oxide ore	311.0820 L.D.T.
Manganese carbonate ore	23,039.9759 L.D.T.
Net value of production subject to Government royalty	$571,368.71
Royalty paid	$ 28,533.15

The Government has no equity in equipment and supplies used on the project.

Discussion of Conclusions

The work was performed satisfactorily. Progress on the contract work was hindered by production operations, especially during Stage I, when the Operator was plagued by financial difficulties. The contract crew was often assigned to other work, and at times the available facilities were not adequate to handle explora- and mine production operation simultaneously.

Operating difficulties encountered during the exploration project were: (1) the veins were erratic in grade; the ore instead of occurring in continuous ore shoots of considerable length and depth such as the Norwich footwall vein does farther to the west occurs in relatively short lenses which are separated by stretches barren of ore mineralization; (2) the veins have been faulted extensively by both strike and cross faulting and in some instances the displacement of the vein segments was relatively small and was more of a nuisance for exploration operations, but in at least one instance the displacement was enough to require considerable probing to locate the vein again; the surface drilling east of the present mine workings indicated faulting where the vein displacement might be of considerable magnitude; (3) nearly all the project work was in heavy ground and required timbering, and in one instance 20 feet of spiling was required; (4) the Operator considered information obtained from the surface diamond drilling east of the present mine workings to indicate large quantities of water in the vicinity of the drill holes. The Operator was unwilling to advance the east face on the 400 level near the drill holes for fear of encountering large inflows of water, which the mine was not equipped to handle.

The contract work completed on the Norwich footwall vein at the 400 level encountered significant amounts of manganese-bearing material, but much of it was marginal in grade other than where the Operator was able to raise and do considerable stoping on the 400 level above the east drift sill.

The results obtained from the contract drilling of three holes from the surface east of the present workings were discouraging, but because of the known lensy nature of much of the ore within the area and barren stretches devoid of manganese, the possibility of ore east of the underground workings has not been entirely disproved.

Exploration Possibilities

The Norwich FW vein has been shown to be a strong, persistent structure capable of producing a sizable amount of manganese carbonate of a grade which is acceptable during periods of national emergency. This vein is still worthy of further exploration especially in search of blind ore shoots to the east under the cover of volcanic rocks. The Plutus vein has been explored at the surface and at depth in the vicinity of the Plutus shaft but has yielded only a small amount of ore from random ore bodies. This vein does not warrant extensive exploration but would be worth checking by diamond drilling in conjunction with exploration of more favorable targets, such as the Norwich FW vein. The Norwich EW and "Ho" veins have not been thoroughly tested, but from available information, they appear to be weak and inconsistent and do not, therefore, make very attractive targets for further exploration.

Enclosures
Distribution:
OME(3)
USBM(3)
USGS(SRO)
Docket
Prinz

APPENDIX I

Diamond drill hole logs
(in pocket)

Diamond Drill Holes 1, S-1, S-2, and S-2A

from Operator's Narrative Reports for April,

May, June, July, and August 1957

Note: These logs were compiled from logs by Operator's geologist. Aplite in the Operator's terminology is equivalent to alaskite as used by geologists of the Survey.

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

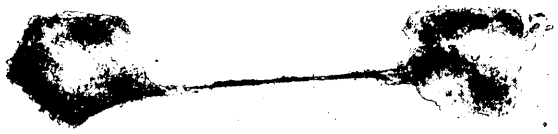
File-
Docket DMEA
2874 (Manganese)
Irving & Nelson
(Umont Mining
Co. Assignee)

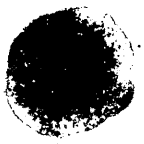
Mining World
November, 1955

WS

I. G. IRVING, formerly of Butte, Montana, is now engaged in mining geologic consulting work in association with the Investment Exchange, 706 Securities Building, Seattle, Washington. Mr. Irving was co-manager of the Norwich manganese mine at Butte, Montana, until the mine was shut down.

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





1201 N. Division St.
Spokane 2, Washington

May 26, 1958

5/28 C 220
5/28 800
WSM 400

Umont Mining, Inc.
912 Kearns Building
Salt Lake City, Utah

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Gentlemen:

Enclosed for your information and files is a copy of Report of Review dated May 8, 1958 by C. A. Turner, DMEA Auditor. This Report of Review covers the period October 1953 to August 1957, inclusive.

This audit discloses the Operator completed 394 feet of drifting under Stage II, but claimed only 391 feet. Therefore, an additional 3 feet of drifting at $32.00 per foot may be claimed by submitting MF-104 and 104A in quintuplicate.

The regulations state an Operator may make claim for any costs of an exploration project contract found allowable by an audit within 120 days after receipt of the Report of Review by the Operator before the project account is closed.

Sincerely yours,

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

Enclosure
cc: DMEA (3)
USGS ~~USBM~~ (2)
USBM (AD)
Turner

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/12	Alley	800
5/13	Talbert	800
5/13	C	220
	Wsoy	400

MAY 13 1958

Mr. C. A. Turner
DMEA Auditor
1201 North Division Street
Spokane 2, Washington

Re: Idm-E604, DMEA-2874 (Manganese)
Umont Mining Company, Inc.

Dear Mr. Turner:

Your report of review covering the above-cited contract is acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Director
Contract Administration
and Audit Division

AMAlley/ama
May 12, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

1201 N. Division St.
Spokane 2, Washington

May 8, 1958

Mr. C. A. Turner
DMEA Auditor, Region I
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2874 (manganese)
Umant Mining, Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-2504

Dear Mr. Turner:

Reference is made to our letter to you dated April 29, 1958 tabulating units of work completed under the cited contract.

Under Stage XIX we inadvertently omitted cementing, redrilling and reaming, 300 feet authorized and 300 feet completed.

Regarding your question on the drifting, the Operator's final voucher shows 391 feet whereas the field inspector's actual measurement is 394 feet of drift completed.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USGS (2)
USBM (AD)

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/29	Fisher	800
4/29	Chambers	800
	Martin	400
5/2	[illegible]	130
"	Johnson	110
"	Stattenstor	100
	C	220
	WSM	400

MAY 2 1958

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Weissenborn:

It appears from your letter dated April 25, 1958, that Mr. Criswell anticipates a refund of $248.41 representing overpayment of royalty by Umont Mining, Inc. There is no need for any special form of request for refund of any royalty overpayment, especially in a case such as this where the amount of the overpayment has been determined by audit.

The voucher authorizing the payment should refer to Mr. Criswell's letter transmitting the report, as the Operator's claim, and the royalty audit report and certificate dated March 3, 1958, as authority for the disbursement.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

W. P. Williams

Member, Geological Survey

Copy to: Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. DeHuff, USBM
Mr. Chambers

CEFisher/ama
April 29, 1958

8623

OFFICIAL FILE COPY
DMEA
RECEIVED 5 358
DATE CODE
5/5 C 320
WSM 400

1201 N. Division St.
Spokane 2, Washington

April 29, 1958

Mr. G. A. Turner
DMEA Auditor, Region I
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2874 (manganese)
Uncut Mining, Inc.
Flutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. [illegible]

Dear Mr. Turner:

The project work under the referenced contract was terminated effective August 31, 1957, according to a Termination Agreement executed November 22, 1957. All the work performed was completed to the satisfaction of the Government.

A final inspection report on the completed work was submitted by John A. Boerner on March 3, 1958.

The Operator's final engineering and geological report was received on April 16, 1958. It is considered as having met the requirements of Article 5(e) of the contract.

The project was certified under a prior contract. By the terms of Annex II to the Amended Contract the certification made under the prior contract carries over to this amended contract.

The Government has no equity in equipment and supplies used on the project.

Work units completed within the terms of the contract are:

Stage II	Authorized	Completed
Install facilities and equipment in Plutus shaft to 300L	$2,082.00	$10,501.62
Rehabilitate Plutus shaft 300L to 410L and equip	3,148.00	7,217.00
Rehabilitate and enlarge 400 station	3,200 cu.ft.	4,850 cu. ft.
Rehabilitate 400L XC to N vein	240 ft.	200 ft.
Drifting	550 ft.	394 ft.
Normal timbering	550 ft.	371 ft.
Extra sets	100 ft.	none
Spiling	50 ft.	20 ft.
Diamond drilling (underground)	420 ft.	86.5 ft.
Assaying	140 samples	61 samples
Stage III		
Bulldozing	15 hrs.	7.5 hrs.
Diamond drilling (surface)	1700 ft.	1138 ft.

It is now in order for you to issue your Report of Review.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing C. Agnew, Member
U. S. Bureau of Mines

cc: BMEA (3)
USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1958

DATE	INITIALS	COST
5/2	C	220
5/6	uos	800
	WSM	400

April 29, 1958

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

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc. (Assignee of Irving & Nelson)
Silver Bow County, Montana
Contract No. Idm-E604, Amended

Dear Mr. Selfridge:

Enclosed are two copies of a letter dated April 21, 1958, from Wilbur Criswell of Umont Mining, Inc., with two revised copies of Tables II and III to accompany the Operator's final report.

The Operator's final report was mailed to you April 23, 1958.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

cc: USBM (2)
USBM (AD)
Prinz

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1958

DATE	INITIALS	CODE

THIS LETTER FROM
NORWICH MINE DIVISION
P. O. BOX 727
BUTTE, MONTANA

April 21, 1958

Mr. A. R. Weissenborn, Executive Officer
D.M.E.A. Field Team, Region 1
South 157 Howard Street
Spokane 6, Washington

Dear Mr. Weissenborn:

Enclosed herewith are five revised copies of Tables II and III to accompany the final narrative report which I recently transmitted to you covering Umont Mining, Inc. DMEA Contract Idm-2634, Docket No. 2674. It would be greatly appreciated if you would distribute them properly, and request that they be insert in the report in place of those originally accompanying it which should be destroyed.

In connection with other work, I discovered substantial errors in the cost figures submitted in these tables. In this connection the following charges should be made on page 5 of the text: second paragraph, line 1, $61,316.81 changed to read $61,367.38; third paragraph, line 2, $36,062.54 changed to read $36,17[illegible].42; in the table at the bottom of page 5 under actual cost opposite "Install Pumps, Facilities and Equipment in Shaft" $7,333.63 changed to $5,238.51; same table, opposite "Shaft Rehabilitation" $11,725.36 changed to $13,642.36; and the total of the same column on page six changed to $36, 17[illegible].42.

In the rush getting Umont's business in connection with the Norwich project cleaned up, I failed to check as closely as I should have before mailing the report out to you. I beg your indulgence in the matter. Thanking you helping me correct the situation, I am

Yours very truly,

Wilbur F. Criswell
Resident Manager

WFC/rig

cc: Burlington, Vermont
Salt Lake Office

Encl: 10

RECEIVED
APR 24 1958
U. S. G. S.
SPOKANE, WASH

COPY

TABLE II

Installed Cost of Surface Facilities & Equipment In Preparation For Drifting on Vein

	Purchase Price	Installation Cost	Installed Cost
Gallows Frame	$3,300.00	$3,789.12	$7,089.12
Cage	819.89		819.89
Hoist	8,483.32	4,871.45	13,354.77
Hoist House		3,924.18	3,924.18
Total	$12,603.21	$12,584.75	$25,187.96

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1958
DATE | INITIALS | CODE

RECEIVED
APR 24 1958
U. S. G. S.
SPOKANE, WASH

TABLE III

Installed Cost of Underground Facilities & Equipment, Enlarging Workings,

Shaft Rehabilitation Prepartory to Drifting on Vein

	Labor 3)	Payroll Taxes	Supplies	Equip. Rental	Power	Depre.	Other	Total
Installation Pump & Facilities Equip. in Shaft	$0,747.02	$ 90.19	$4,337.19	$	$15.80	$30.19	$18.12	$5238.51
Shaft Rehabilitation	6,728.60	784.25	5,296.00	278.99	106.67	108.29	339.56	13642.36
Enlarging 400 level Workings 1)	7,530.37	868.51	4,220.05	283.64	205.23	364.08	175.03	13646.91
Mine Electrical System 2)	831.37	0.74	1,579.17		0.26	0.55		2412.09
Ventilation Facitities	153.44	17.85	1,052.04		5.11	10.64	0.47	1239.55
	$15,990.80	$1761.54	$16484.45	$562.63	$333.07	$513.75	$533.18	$36179.42

1) 400 Station and crosscut enlarging included together here.

2) Majority of labor contracted

3) Includes all supervision

Abbr.
Depre - depreciation

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1958

NAME	INITIALS	CODE

RECEIVED
APR 24 1958
U. S. G. S.
SPOKANE, WASH

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

April 25,1958

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

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc. (Assignee of Irving & Nelson)
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

In forwarding his final report on this project, Mr. Wilbur F. Criswell, Resident Manager, states as follows: "With the filing of the final narrative report I assume the Fiscal Officer will soon refund to Umont the overpayment on royalty amounting to $248.41 * * *." According to a recent royalty audit, Mr. Criswell is correct in stating that there has been an overpayment of royalty amounting to this sum. This is because some of the royalty deductions were figured at 5 percent, whereas the grade was such that the proper royalty rate was lower.

Though a substantial balance of the funds that were advanced by the Government remains unpaid, the obligation to repay this does not become effective until the ore is actually mined and shipped. As far as we can determine, royalty payments have been made on all ore shipped and inasmuch as the mine is closed and no more shipments will be made for an indefinite period, I presume that the Operator is entitled to a repayment of $248.41. I am puzzled, however, as to the procedure. Is our audit report together with Mr. Criswell's letter sufficient for us to make this refund or must Criswell request this officially, and if so, how does he do this?

Sincerely yours,

A. E. Weissenborn

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

cc: USBM(2)
USBM(AD)
Turner
Prinz

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 1958
DATE | | CODE
4/28 | C | 220
4/28 | | 800
WSM | | 400

April 23, 1958

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

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc. (Assignee of Irving & Nelson)
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

Enclosed are the original and one copy of a final report covering Stage II work at the Norwich-Plutus mine by Umont Mining, Inc. The report was received April 16, 1958, and is acceptable to the Field Team. A final report on Stage I work performed by Irving G. Irving and Robert H. Nelson was received February 19, 1956. This report was accepted by the Field Team and mailed to you February 29, 1956.

A Certification of Discovery or Development was issued August 9, 1956. By the terms of Annex II to Amended Contract Idm-E604, the certification made under the Prior Contract carries over to the Amended Contract and the requirement for certification in Article 6(a) of the Amended Contract was waived.

By Field Team, Region I

D.R. Mackown
for A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Prinz

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

April 15, 1958

THIS LETTER FROM
NORWICH MINE DIVISION
P. O. BOX 727
BUTTE, MONTANA

Mr. A. E. Weissenborn, Executive Officer
D. M. E. A. Field Team, Region 1
South 157 Howard Street
Spokane 4, Washington

Dear Mr. Weissenborn:

I am transmitting herewith five copies of the final narrative report, five sets of maps, each set consisting of a plan and a longitudinal section, ~~showing~~ up to date as of March 6, 1958, when Umont suspended mining operations at the Norwich mine.

I believe this discharges Umont's final obligation under DMEA Contract Idm-E604, Docket Number 2874.

Since Mr. Turner's audit report was made covering the period through December 31, 1957 we have shipped three additional lots of ore subject to the 5% royalty deduction for DMEA account. These lots and royalty withheld by G.S.A. are:

Lot Number	Gross Value	Royalty Withheld
Raise Lot 179	$1409.49	$ 70.47
Raise Lot 180 & 181 combined	1110.86	55.54
	$2520.35	$126.01

I trust G.S.A. has or soon will pay the $126.01 to DMEA.

With the filing of the final narrative report, I assume the fiscal officer will soon refund to Umont the overpayment of royalty amounting to $248.41. Since we are closing our Butte office, it would be appreciated if you would instruct Mrs. Long to mail this check to Umont Mining, Inc., 912 Kearns Building, Salt Lake City, Utah.

Hoping the final narrative report is satisfactory, and all other matters pertaining to this exploration contract are in order, I am

Yours very truly

Wilbur F. Criswell

Wilbur F. Criswell
Resident Manager

WFC/rlg

cc: Burlington, Vermont
Salt Lake Office

RECEIVED
APR 16 1958
U. S. G. S.
SPOKANE, WASH.

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

April 15, 1958

THIS LETTER FROM ☒
NORWICH MINE DIVISION
P. O. BOX 727
BUTTE, MONTANA

Mr. A. E. Weissenborn, Executive Officer
D. M. E. A. Field Team, Region 1
South 157 Howard Street
Spokane 4, Washington

Dear Mr. Weissenborn:

I am transmitting herewith five copies of the final narrative report & five sets of maps, each set consisting of a plan and a longitudinal section, ~~showing~~ up to date as of March 6, 1958, when Umont suspended mining operations at the Norwich mine.

I believe this discharges Umont's final obligation under DMEA Contract Idm-E604, Docket Number 2874.

Since Mr. Turner's audit report was made covering the period through December 31, 1957 we have shipped three additional lots of ore subject to the 5% royalty deduction for DMEA account. These lots and royalty withheld by G.S.A. are:

Lot Number	Gross Value	Royalty Withheld
Raise Lot 179	$1409.49	$ 70.47
Raise Lot 180 & 181 combined	1110.86	55.54
	$2520.35	$126.01

I trust G.S.A. has or soon will pay the $126.01 to DMEA.

With the filing of the final narrative report, I assume the fiscal officer will soon refund to Umont the overpayment of royalty amounting to $248.41. Since we are closing our Butte office, it would be appreciated if you would instruct Mrs. Long to mail this check to Umont Mining, Inc., 912 Kearns Building, Salt Lake City, Utah.

Hoping the final narrative report is satisfactory, and all other matters pertaining to this exploration contract are in order, I am

Yours very truly

Wilbur F. Criswell

Wilbur F. Criswell
Resident Manager

RECEIVED
APR 16 1958
U. S. G. S.
SPOKANE, WASH.

cc: Burlington, Vermont
Salt Lake Office

RECEIVED
APR 16 1958
U. S. G. S.
SPOKANE, WASH.
OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 195

NORWICH MINE

Silver Bow County

Montana

FINAL NARRATIVE REPORT

DMEA Docket No. 2874 - Contract Idm E604- Manganese

Period April 15, 1956 through December 31, 1957

REHABILITATION

Work under Stage II of the above amended contract was commenced by Umont April 17, 1956, using a crew of 4 shaftmen, 1 hoistman and a superintendent. The first requirement was installation of the facilities and equipment to pump out and rehabilitate the Plutus shaft from the 300 to 400 foot level, and recover the 400 foot Plutus shaft station.

OPER'S FINAL REPORT STAGE II

The required equipment and facilities consisted of a new, longer, hoist rope; 600 feet of 3 conductor, rubber covered, 600 volt insulation power cable; new shaft guides extended from 300 foot level; construction of a concrete dam in a cross-cut 320 feet below the shaft collar to serve as a pump sump for discharging water to the surface; 400 feet of four inch water column; appropriate switches and motor controls; one 40 HP, 2 MRV 40, I-R motor pump for pumping water to surface; two model 3 P-2 VE-10 Jaeger sinking pumps; and a trap door and bucket dump to handle shaft muck at the 300 foot station. In the interest of safety, minor shaft repairs were completed between the collar and the 300 foot level. These facilities and the related equipment had been installed by April 28, 1956, at which time the water level had been lowered to a point about 385 feet below the shaft collar.

Recovery of the shaft below this point involved mucking as well as pumping, and was commenced April 30. It continued with only minor interruptions, due to clogged pump impellars, short power failures, and the necessity for installing a second 40 HP 2 MRV - 40 I-R motor pump to remove water to the surface as fast as delivered to the sump by the Jaeger sinking pumps, until May 12 when the bottom of the shaft sump was reached. The shaft station had been largely mucked out by this time. Initially 450 g.p.m. were pumped. Once the workings had been drained it was necessary to handle only about 100 g.p.m. to keep them dry.

When the 400 level station was gained, the unwatered workings were found to be disappointingly small, full of bad air, and caved at a point about 50 feet from the shaft with considerable water still dammed behind the cave. It was necessary to spile through this cave, drain the crosscut, and install ventilation equipment before the Norwich vein was inspected May 22, 1956. Water dammed behind several minor caves was also drained.

The vein in question was found, at about 206 feet northward from the shaft, to be a strong structure approximately 20 feet in width with the majority of the manganese contained in a five foot section on the footwall. Sampling both sides of the crosscut returned an average manganese content of 20.9% and 1.3 ounces of silver. After the vein had been sampled and mapped, the water column was extended to the 400 level station, the regular mine pumping equipment moved down to the shaft sump, and the sinking pumps, 40 HP 2 MRV 40 motor pumps, and muck handling facilities on the 300 level station were removed. This work was completed by the end of May.

Up to this point the objective had been to do only the minimum required to make the vein accessible for inspection and sampling. It was accomplished in six weeks time at a direct cost, which does not include general or administrative costs, of $11,279.54. There was a total of 200 man shifts worked. The detail of this expenditure is shown in Table I.

ENLARGING UNDERGROUND WORKINGS

Not withstanding that the subject Amended DMEA contract covering the comtemplated project had not as yet been approved or signed, the decision was taken about June 1, 1956 to proceed with the project which it ultimately covered. The rehabilition of the shaft necessarily had been largely completed in the attainment of our first limited objective. It remained to enlarge the 400 level station and the crosscut to the vein, install adequate pumping and ventilation facilities, install adequate lines for transmission of air and drill water, together with the requisite surface facilities such as a larger gallows frame, a larger hoist, a hoist building, and adequate electrical distribution facilities both underground and on surface before the drifting phase of the project could be started with any degree of efficiency. Other than the actual underground work involved in enlarging the workings and the installation of pumps and related facilities, no account of the time or expense required for the installation of the other items was considered in the contract. This considerable expense was borne entirely by the operator to enable more efficient prosecution of the various phases of the project covered by subject Amended Contract.

The installation of the foregoing equipment and facilities was commenced June 1,

concurrently with the enlarging of the underground workings as contemplated under the subject Contract. In addition to lengthening the station full size an additional ten feet, the old 4 x 6 crosscut was enlarged to a section of 8 x 8 in the clear for a distance of 95 feet. This space accomodated the double tracks required for handling loaded and empty trains. Beyond this point the old crosscut was enlarged to a section of 6 by 8 in the clear. All advance was timbered. Considerable difficulty was encountered spiling through running ground about fifty feet north of the shaft in the double track section of the crosscut. Advance through this fifteen foot zone was slow and laborious.

From their inception until drifting was commenced, all Umont activities were greatly hampered by a separate leasing operation being conducted through the Plutus shaft and above the 300 foot level. Among other things this limited Umont to only one shift per day, and required, in many instances, the installation of temporary facilities for their convenience while changing over from old, inadequate facilities to others adequate for servicing both operations. Before an adequate gallows frame could be installed, it was found necessary, due to its condition, to concrete the top 35 feet of the shaft in order to reliably support footings for the gallows frame. Enlargement of the station and about 200 feet of crosscut were completed using available equipment of 18 inch gauge before more efficient, larger capacity equipment of 24 inch gauge was delivered. About a week was required to change the track gauge in the rehabilitated crosscut. About ten days were lost changing from the old, inadequate hoist and gallows frame to the new one, and eliminating various bugs from the new equipment during which time nothing could be accomplished on those phases of the work covered by DMEA contract.

The cumulative effect of the foregoing circumstances and conditions was to slow progress with a consequent increase in cost. By the middle of September both enlargement of the existing underground workings, and the installation of adequate underground and surface equipment and facilities had been completed. Enlarging the 400 level workings required a total of 258 man-shifts distributed as follows: hoisting 63.5, miners 131, topman 54.5, station tender 9. The work was supervised by the superintendent and a night boss. Progress averaged 0.93 feet per man-shift employed in the crosscut.

Up to this point, excluding general, administrative, and office expenses, $61,316.81 had been spent for rehabilitating the shaft, enlarging the 400 level station and crosscut, installing pumps and related facilities, installing adequate air and water lines, and the installation of surface facilities which would enable prosecution of the project in an efficient and economical manner. The detail of this expenditure is shown in Tables II, and III; the former showing the purchase price and installation costs of the surface facilities and equipment, and the latter completed costs of the underground facilities and work covered by the subject contract.

From Table III it can be seen that the cost of a job, for which the DMEA would allow an estimated cost of only $10,930.00, actually amounted to $36,062.54. The portion of this cost borne by the DMEA amounted to 75% of the allowed estimated cost or $8,197.50, which amounts to less than 23% of the actual cost of the work performed. On a unit basis this comparison is shown as follows:

	Actual Cost	Allowed Estimated Cost	Units Completed
Install Pumps, facilities & Equipment in Shaft	$7,038.63	$2,082.00	Job
Shaft rehabilitation	11,725.36	3,148.00	Job
Enlarging 400 Station	*	1,600.00	3200
Enlarging 400 Crosscut	13,646.91	4,100.00	200

	Actual Cost	Allowed Estimated Cost	Units Completed
Mine Electrical system	$ 2,412.09	$ none	Job
Ventilation facilities	1,239.55	none	Job
Total	$36,062.54	$10,930.00	

* All enlarging and rehabilitation of station and crosscut lumped together.

DRIFTING OPERATIONS

Drifting commenced September 11, 1956 and by about the middle of October had progressed 150 feet west of the 400 crosscut, or to completion of the footage allowed under the contract in this direction. It was continued in the east heading until December 1, at which time the 400 East Drift had been extended 205 feet east of the crosscut, where it was stopped pending drilling to probe for water. A total of 241 feet of advance was driven east of the crosscut, including 36 feet driven off the vein in September, looking for its faulted extension.

All drifts were driven with a rock section of approximately 7 x 9 feet in order to accommodate 12 x 12 sill timber and leave a timbered section of 5 x 7½ feet in the clear.

It was necessary for both sides to be closely lagged with 2 inch gob lagging, and the back lagged with 3 inch lagging, with cribbing to the back, throughout the entire advance. Timber requirements were heavy and the expense in time and timber was great. All advance was made under extensible booms for the protection of the miners due to the weak nature of the ground, which was inclined to run, particularly when slightly wet. The grade was maintained at 0.5% using 25 pound track on 24 inch

gauge. A 3 inch victaulic air line, a 2 inch drill water line, blasting wire, and 16 inch fan bag were carried. Equipment employed consisted of an Eimco 12 B mucker, Cleveland H 10 AL push feed drills, Atlas 1½ Ton battery trammer handling seven car trains of 20 cubic foot capacity Couer de Alene Hardware mine cars which were hoisted to the surface for dumping.

From its inception, until the end of October, drifting was prosecuted on a two shift basis. From then on, it progressed on a two shift basis in the west heading, and single shift in the east heading. It was necessary to advance both headings a sufficient distance from the crosscut that they could be independently worked without interference, and it required a little time to hire compentent crews from among the men applying for work. Progress was a little slow until this sorting procress had run its course. Another factor which contributed to slow progress was occassional difficulty with propagation of the drift rounds and resultant wrecks. Several days were required for spiling across an old caved crosscut encountered in the west drift about 85 feet west of the crosscut.

An average advance overall of 4.42 feet per shift, or 2.21 feet per man shift in the heading was made using 2 men per shift drilling 6 and 8 foot rounds. To support or service the drifting operation required additional labor to the extent of 0.895 manshifts per foot of advance for hoisting, tramming, top men, and station tenders. Total labor requirements, including supervision and engineering averaged 1.57 manshifts per foot, or progress average 0.638 feet of advance per manshift on the job. The detail of the labor distribution and cost is shown in Table IV. The cost of drifting under this project, averaged $60.60 per foot exclusive of general, administrative,

and office expense but including supervision and engineering. This compares with an allowed cost under of the project of $42.00 per foot. Government participation in the actual cost thus amounted to less than 52% rather than the 75% contemplated under the law.

The east drift was started in ore which persisted only about 15 feet. It advanced to a point 60 feet east of the crosscut before again encountering mineralization of ore grade. From this point it was driven on ore for about 100 feet. Channel sampling at regular intervals showed this ore to average 5.7 feet in width with a grade of 14.5% manganese. Beyond 160 feet the mineralization became weak and narrow, and was so complicated by strike faults as to become non commerical, finally vanishing altogether. The last 25 feet was driven in waste. Long hole drilling thirty feet in the hanging wall, and diamond drilling about eighty feet in the footwall failed to indicate mineralization or structure of any interest. In the course of this easterly drifting, 540.47 long dry tons of ore were produced and sold with an average manganese content of 16.1%.

The west drift also started in ore which lasted for only one round. From this point west the vein was composed largely of sheared, fractured aplite, with weak mineralization and gouge usually assaying 5 to 10% manganese across widths of 3 to 8 feet. Ocassional higher assays up to 12 to 14% were intermittently recorded for short distances. It was not until the west drift face had been advanced well beyond the 150 foot limit, up to which the government participated in the cost under terms of the contract, that anything resembling commercial ore was found. At a point 375 west of the crosscut three to four feet of good grade ore was encountered which widened to a maximum of seven or eight feet and persisted as far as the drift was driven, although

ocassionally complicated by faulting. In the course of this work 1382.58 long dry tons of ore were produced and sold with an average manganese content of 21.95%. Drifting west was suspended February 9, 1957, near the westeren end of the Noriwch Claim when a flat fault along with a considerable water flow were encountered.

DIAMOND DRILLING

UNDERGROUND

During January 1957, a diamond drill hole, M 1, was drilled 86 feet N 45° E from the east drift face at plus 5°. This hole was collared BX and continued this size for a distance of 11 feet where it was reduced to AX size, extended to 15 feet and again reduced to EX size which continued to bottom. Its purpose was to test the ground ahead and to the left of the area through which the drift would advance for dangerous amounts of water, but primarily to test for the presence of ore, a structure which broke away at an acute angle into the footwall of the mineralized zone being drifted on. Neither water nor mineralization of any signifiance were found. The contract was subsequently amended to provide for government participation in the cost of this hole which amounted to $5.00 per foot.

SURFACE

Pursuant to the terms of the Contract, and Amendment No. 1 thereto, diamond drilling to explore the area about 200 feet east of the face of the 400 Drift East was started May 9, 1957 with the collaring of hole S-1. This was a vertical hole designed to ascertain the depth to the old aplite erosin surface later covered by post-ore volcanics, and probe the aplite for the Norwich vein within it at about the 400 foot level of the mine. It was drilled NX size to 10 feet, BX from 10 to 26 feet and AX

to 367. At intervals as required, it was reamed to BX, and cased from 26 feet to 367 and drilled BX from there to 371, from which point it was continued AX size to bottom at 495 feet, after running AX casing to 371 feet.

The drilling of this hole was slow and expensive because the ground was very unstable, caving and running into the hole. Frequent cementing with consequent re-drilling, casing, and pulling casing which was invariably sanded in, to permit reaming and re-casing, was required. A total of 668 feet of cement was drilled in this hole. Water return was frequently lost, and much cement, Cal-seal, bentonite, and bran was used, usually unsuccessfully, in attempts to recover it. Core recovery averaged 61%.

As the logs previously filed with the monthly reports show, this hole was collared in the post ore volcanics and continued through them to a depth of 288 feet where aplite was encountered. It continued through aplite to bottom, intersecting a weakly mineralized structure from about 440 feet to 450 feet, which is believed to be the Norwich vein. Results of the hole were not encouraging.

Hole S-2 was then collared July 24, 1957, at a point designed to permit an intersection with the Norwich vein about midway between Hole S-1 and the face of the 400 E Drift. This hole was drilled north at minus 62°. It was collared with a tricone rock bit and drilled by this means to a depth of 70 feet. It was cased with pipe to this point and extended NX size to 125 feet, then reduced to BX size and continued to bottom at 146 feet.

Little or no trouble or delay was experienced drilling this hole. Core recovery averaged 28% for the NX hole and 86% for the short distance of BX hole. The hole

was collared in weathered plutonic rocks of the aplite variety which were penetrated to a depth of 131 feet, where the post-ore volcanics were encountered. After drilling 15 feet of volcanics the hole was stopped at a depth of 146 feet because fault complications were suspected which raised doubts as to the probability of this hole reaching its objective.

Hole S-2 A was then collared at the same coordinated with the same objective as S-2, but drilled N 10° W at minus 77°. The same proceedure was followed as with S-2. It was cased with pipe to a depth of 56 feet, extended NX size to 171 feet where it was cased and continued BX size to 395 feet. At this point AX casing was run and the hole continued this size to bottom at 497 feet. Below 120 feet this hole required frequent cementing and considerable drilling mud, but starting it as large as possible eliminated the delay and expense involved in casing, pulling casing, reaming, recasing as was necessary on Hole S-1.

As with S-2, this hole was collared in weathered granitic rocks, and continued through them to bottom at 497 feet, the only change in lithology being from one variety of aplite to another. Weak mineralization about 18 inches wide was encountered in a highly altered, crushed zone which contained several heavy clays, and extended from about 417 to 427 feet. Assays showed a manganese content of 4.5% accompanied by 9.5 ounces of silver. Another similar zone, but with less mineralization, was found from 449 to 458 feet. Core recovery from this hole averaged 82% for the BX portion and 65% for the AX section. Only 21% of the core was recovered from the NX section. No sludge was returned below 250 feet because of the badly factured ground penetrated.

A total of 1,138 feet of surface diamond drilling was accomplished. All was contracted to Boyles Brothers Drilling Co. of Salt Lake City at various rated for drilling depending upon size of hole, reaming, casing, cementing, with Umont supplying cement, betonite, drilling mud,, etc as needed. It resulted in a total cost of $14,179.14 for an average cost per foot of $12.46. The details of this are shown in Table V. Pursuant to the terms of the Contract, the government participated in this cost to the extent of 75% of $7,683.00, the amount of allowable costs as estimated in the contract. This serious under estimation of costs resulted in overall government participation under the drilling phase of the project of less than 41%. Drill shifts including moving and setting up totaled 132 with the contractor using one driller and a helper each shift. Total manshifts amounted to 269.

MINING AND PRODUCTION

Preparation for stoping operations over the east drift were commenced about the middle of February 1957 and stoping was well under way by the end of the month. Extraction was carried on in this area from February through October, by which time the ore had been largely removed. There was some small production in November 1957, and again in February and March of 1958, as a result of minor exploration activity. All together, including that produced from drifting, 3267.87 long dry tons of ore which averaged 15.99% manganese was produced from the ore shoot revealed as a result of project activity in this area. This production exhausted all mineable ore reserves containing in excess of 12% manganese from the east ore shoot.

Preparation for stoping the ore opened by the west Drift were commenced in December 1957, and extraction got under way in March, 1957. All together a total of 23,836.21

long dry tons of ore were extracted through the west drift which averaged 22.04% manganese. The eastern limit of this ore occurred 225 feet west of the portion of the 400 west Drift driven with government assistance. However, the usual royalty was paid for DMEA account on all production except 5293.33 long dry tons averaging 24.89% manganese and 4.70 ounces of silver, which were mined from the Little Sarah claim. Under terms of the contract, only ore produced from the Norwich claim was subject to royalty payments for DMEA account.

That ore subject to royalty for DMEA account was sold to the G.S.A. stockpile under Raise Lot Nos. 1 through 181, and Drift lot Nos. 1 through 79 for a total of $554,631.13. That ore produced from Little Sarah ground which was not subject to DMEA royalty was sold under Little Sarah Lot Nos. 1 through 38 for a total of $175,527.38. Total production by Umont from the Norwich mine from all sources amounted to 27,104.08 long dry tons of ore averaging 21.51% manganese and 3.65 ounces of silver per ton. It contained 582,884 units of manganese and 99,059 ounces of silver. The company received an average selling price of $1.19 per unit for the manganese and 35.4 cents per ounces for the silver which amounted to a production value $730,158.51.

ASSISTANCE RECEIVED AND ROYALTIES PAID

Under stage 1 of the Amended Contract, costs amounted to $23,190.70, toward which the governments' contribution amounted to $17,393.03. This work was performed by the prior operators who returned $780.02 in production royalties under the royalty repayment provision of the contract. Allowable costs for work performed under the Amended

Contract by Umont amounted to $36,063.13 in which the government participated to the extent of $27,047.35. Royalties withheld by G.S.A. for DMEA account on the ore produced by Umont subject to a 5% royalty deduction amounted to $27,731.55. This represents an overpayment of $248.41 as explained in the audit report of Mr. C. A. Turner, of the DMEA Contract and Audit Division, in his report dated March 3, 1958. Allowing for this overpayment, Umont returned $435.79 more to the government in the form of royalty payments than was received as assistance.

REMAINING ORE RESERVES

No measured ore reserves of carbonate ore of suitable grade for purchase by G.S.A. under its stockpile purchase specifications remain in the mine. Reference is made to the accompanying longitudinal section which shows there are a few small blocks of probable ore remaining above the 400 level near the point the 400 crosscut intersects the Norwich vein. These are block Nos. 1 and 9, all with an estimated grade of less than 12% manganese.

In the same vicinity, but below the 400 level drift in block nos. 3 and 11, there is a probable reserve with an estimated grade alos less than 12% manganese. Another probable reserve exists in block 17 near the west end line of the Norwich claim below the 400 West Drift under the area stoped. The grade of this material is estimated at 20% manganese and 3.00 ounces of silver per ton. Beneath the 400 East Drift in block 7 a probable reserve with an estimated grade of 16% manganese and 1.5 ounces of silver per ton exists. Estimates of ore as to class, grade and tonnage are detailed in Table VI.

There is included with this final narrative report a plan map showing all work ac-

complished under the project and much outside its scope including assays, widths, location of daimond drill holes etc.. The accompanying longitudinal sections shows the stoped areas, dates of extraction, and location of remaining ore reserves. I am certain Umont has appreciated such DMEA assistance as it has received in its attempt to develop a significant operation in the west side of the Butte district. The inability of DMEA personnel to arrive at more realistic cost estimates is regrettable.

Wilbur F. Criswell
Resident Manager

WFC/rlg

TABLE I

Expense Of Opening Norwich Vein For Inspection And Sampling

	Labor	Payroll Taxes	Supplies	Equipment Rental	Power	Insurance	Other	Depre.	Total
Shaft Rehabilitation	$4,932.01	$575.14	$3373.02	$255.93	$64.68	$7.79	$261.21	$29.92	$9499.70
400 x-cut rehabilitation	983.02	129.56	344.71	191.01	23.20	2.15	96.42	9.77	1779.84
	$5,915.03	$704.70	$3717.73	$446.94	$87.88	$ 9.94	$357.63	$39.69	$11279.54

TABLE II

Installed Cost of Surface Facilities & Equipment In Preparation For Drifting on Vein

	Purchase Price	Installation Cost	Installed Cost
Gallows Frame	$3,300.00	$3,789.12	$7,155.43
Cage	819.89		819.89
Hoist	8,483.32	4,871.45	13,354.77
Hoist House		3,924.18	3,924.18
Total	$12,603.21	$12,584.75	$25,254.27

TABLE III

Installed Cost of Underground Facilities & Equipment, Enlarging Workings,

Shaft Rehabilitation Prepartory to Drifting on Vein

	Labor 3)	Payroll Taxes	Supplies	Equip. Rental	Power	Depre.	Other	Total
Installation Pump, & Facilities Equipment in Shaft	$2,510.86	$205.06	$4,262.13	$	$14.84	$28.55	$17.19	$7038.63
Shaft Rehabilitation	4,930.60	665.25	5,296.00	278.99	106.67	108.29	339.56	11725.36
Enlarging 400 level Workings 1)	7,530.37	868.51	4,220.05	283.64	205.23	364.08	175.03	13646.91
Mine Electrical System 2)	831.37	0.74	1,579.17		0.26	0.55		2412.09
Ventilation Facilities	153.44	17.85	1,052.04		5.11	10.64	0.47	1239.55
	$15,956.64	$1757.41	$16409.39	$562.63	$332.11	$512.11	$532.25	$36062.54

1) 400 Station and crosscut enlarging included together here.

2) Majority of labor contracted

3) Includes all supervision

Abbr.
Depre - depreciation

TABLE IV

Drifting Costs Per Foot In Dollars and Labor

Classification	Manshifts/Ft.	Dollars/Foot
Drift Miners	0.452	14.69
Tramming	0.050	0.09
Topmen	0.335	*
Station Tenders	0.257	*
Hoisting	0.203	10.81
Pumping	0.012	0.23
Engineering	0.084	2.10
Supervision	0.175	4.56
Total Labor	1.568	$32.47
Payroll taxes		3.53
Supplies		17.61
Equipment Rental		0.36
Waste disposal		2.49
Other **		4.14
Total		$28.13
Total Cost		$60.60

* Included as part of hoisting cost.

** Includes dry expense, depreciation, transportation of miners, etc.

TABLE V

Diamond Drill Costs Of Surface Drilling

Hole	S 1	S 2	S 2A	Total	Av. Unit Cost
Drilling 3)	$3,217.80	$1,094.90	$3,590.90	$7,903.60	$6.95
Reaming 1)	998.40	----	----	998.40	0.88
Casing	98.40	----	----	98.40	0.09
Cementing 2)	954.00	-----	540.60	1,494.60	1.31
Supplies 4)	555.88	84.25	626.70	1,266.83	1.11
Site Preparation	56.00	49.00	------	105.00	0.09
Geologist	783.81	99.36	574.06	1,457.22	1.28
Supervision	217.89	27.62	159.58	405.09	0.36
Mobilization	195.73	57.73	196.52	450.00	0.40
Total	$7,077.91	$1,412.86	$5,688.36	$14,179.14	$12.46
Footage	495	146	497	1138	
Drill shifts	71	9	52	132	
Feet/drill shift	6.97	16.22	9.56	8.62	
Cost/foot	$14.30	$9.68	$11.45	$12.46	

1) 256 feet performed

2) Labor only, supplies not included, 90 hours of labor cementing and re-drilling 1034 feet of cement, 688 feet S-1; 346 feet S-2A.

3) Bit cost not known, but reported by contractor as approximating $3.00 per foot.

4) Cement, bentonite, bran, drilling mud, furnished by Umont.

TABLE VI

D-ore
Table

Class, Quantity, Grade Remaining Ore Reserves

Above 12% Manganese Carbonate below 400 level

	Grade				
	Block No.	% Mn	Oz. Ag.	L.D.T.	
Measured	---	-----	---	None	
Probable	17	20.0	3.0	3700	
	7	16.0	1.5	1350	
					5050
Possible	19	20.0	3.0	1165	
	8	15.0	1.5	2700	
					3865
Total of all classes above 12%					8915

Above 6% and Below 12% Manganese Carbonate

	Block No.	% Mn	Oz. Ag.	L.D.T.	
Measured *	Stockpile	8.5		2064	
					2064
Probable	1	11.0	1.0	590	
	9	7.5	0.5	180	
	3	11.0	1.0	590	
	11	7.5	0.5	180	
	13	7.1	1.0	3840	
	14	7.1	1.0	3840	
					9620 x = 9,220
Possible - None estimated					
Total of all classes below 12%					11,684
Total of all ore					20,599

* Stockpiled on surface in course of development because not acceptible for G.S.A. stockpile.

U. S. Government Messenger Envelope

Standard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
STORES & SHIPPING ROOM 1070	RUN / STOP		RUN / STOP
[illegible]	RUN / STOP		RUN / STOP
Miss Spahutz DM&A Rm 4538	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP
	RUN / STOP		RUN / STOP

d surplus envelopes to nly room for reissue.

Use other side

16—68949a-2

Use RUN and STOP only when messenger service between Government buildings in Washington is required.
Your mail room has RUN and STOP information.

So. 157 Howard Street
Spokane 4, Washington

March 21, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 27 1958

Umont Mining, Inc.
Silver Bow Block
Room 506
Butte, Montana

Re: Docket No. DMEA-2874 (Manganese)
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

G ntlemen:

Enclosed for your information and files are one copy each of the Royalty Audit Certificate and Royalty Audit Report dated March 3, 1958 by C. A. Turner, DMEA Auditor, for the period of April 5, 1955 to December 31, 1957.

Sincerely yours,

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

Enclosures

cc: DMEA (3)
USBM (2)
USBM (AD)
Turner

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/13	Alley	800
3-13	C	220
	WSM	400

MAR 13 1958

Mr. Charles A. Turner
DMEA Auditor
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2874 (Manganese)
Contract No. Idm-E604
Umont Mining Company, Inc.

Dear Mr. Turner:

Your Royalty Audit Certificate and Report covering the above-cited project are acceptable. You are authorized to make normal distribution.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

AMAlley/ama
March 13, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

THIS LETTER FROM
NORWICH MINE DIVISION
P. O. BOX 727
BUTTE, MONTANA

February 18, 1958

		NOTED	DATE
		AEW	
Mac			
Bill			
al			
USGM			
AO			
DMEA			
GPZ			
ANSWERED			

Mr. M. C. Johnson
Regional Comptroller
General Services Administration
Building 41, Denver Federal Center
Denver 1, Colorado

Dear Mr. Johnson:

We are enclosing herewith Acceptance Invoice No. 1760, dated February 14, 1958 covering the shipment by Umont Mining, Inc. of Raise Lot 179, DMEA Class A ore from the Norwich Mine west of Butte.

It has been sometime since we have forwarded any Acceptance Invoices for payment covering ore shipped under the Raise Lot series of numbers.

We wish to remind you that all ore shipped from the Norwich Mine under either the Raise or Drift lot series is subject to a royalty deduction of 5% of the gross value for credit to the account of the Defense Minerals Exploration Administration.

If in the future any further shipments should be made under the Little Sarah series of lot numbers, such ore as in the past, will not be subject to any royalty deduction for account of DMEA.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 27 1958

DATE	INITIALS	CODE
2/27	C	220
2/27	EW	800
	WSM	400

Very truly yours,

Wilbur F. Criswell
Resident Manager

WFC/sig

Encl:

cc: Salt Lake Office
Burlington, Vermont
Mr. A. E. Weidenhoven
File

RECE
FEB 20 1958
U.S.G.S.
SPOKANE, WASH

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE
2/19	C	220
	WSM	400

February 13, 1958

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

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

Enclosed are the Government and Audit copies of the Termination Agreement for the above-referenced contract. Other copies of the agreement have already been distributed.

Because the Operator decided to sign the Termination Agreement, the original and all copies of Amendment No. 3 are returned to you unsigned.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

cc: USBM (2)
USBM (AD)
Prinz

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 30 1958

DATE	INITIALS	CODE
1/30	C	220
1/30	[illegible]	800
	WSM	400

So. 157 Howard Street
Spokane 4, Washington

January 27, 1958

Mr. Dooley P. Wheeler, Jr.
Umont Mining, Inc.
Norwich Mine Division
P. O. Box 727
Butte, Montana

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-2604

Dear Mr. Wheeler:

We understand that one of our fieldmen has instructed you to submit an Operator's final engineering and geological report for work completed since the inception of the original Irving and Nelson contract dated September 21, 1953. This will not be necessary and your final report, in accordance with Article 5(c) of the contract, should include only the period covered by the work under the Amended Exploration Project Contract or from April 16, 1956 to the date of termination of the contract.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: Umont Mining, Inc.
912 Kearns Building
Salt Lake City, Utah

DMEA (2)
USBM (2)
USBM (AD)
Prinz

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 27 1958
DATE CODE
1/27 C 220
1/28 CEW 800
WSM 400

So. 157 Howard Street
Spokane 4, Washington

January 22, 1958

Mr. R. Adkins
Purchase Depot
General Services Administration
Butte, Montana

Dear Mr. Adkins:

The end of December 1957 we received from GSA in Denver one copy each of 228 settlement sheets on shipments of ore to your depot by Uscmt Mining, Inc., from their Plutus and Norwich claims. As you perhaps are aware, we need three copies of the settlement sheets. Enclosed are a copy of a letter we wrote Mr. M. C. Johnson, GSA Regional Comptroller, Denver, regarding the obtaining of additional copies, and a copy of his reply, both of which are self-explanatory. Enclosed also is our letter of January 13 to Mr. Johnson, which further points out some difficulties. We have not yet received a reply.

Our immediate problem is that of reproduction of so many copies and also that some of the settlement sheets are such poor copies that they are not reproducible. Of course, we should like to get the extra two copies of each settlement sheet, but if this is not possible, we wonder if, in the future, we could receive three.

Mr. Charles A. Turner, our DMEA auditor, is coming to Butte in the near future and will discuss this matter with you. He is fully aware of the problem and I hope that he will be able to work out something with you.

Sincerely yours,

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

Enclosures
cc: DMEA(3)
USBM(2)
USBM(AD)
Turner
CPF

GENERAL SERVICES ADMINISTRATION

Region 8
Denver 2, Colorado

January 14, 1958

IN REPLY REFER TO 8C

U. S. Department of Interior
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

Attention: A.E. Weissenborn, Executive Officer
Field Team, Region 1

Gentlemen:

We are unable to send three copies of each Umont Mining, Inc. acceptance as requested in your letter of December 31, 1957.

An original and two copies are furnished us. The original is attached to the payment document and one copy becomes a part of the producer's case file. The remaining copy is attached to our Administrative Difference Statement and transmitted with the check to you.

Sincerely yours

M. C. JOHNSON
Regional Comptroller

So. 157 Howard Street
Spokane 4, Washington

January 20, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 23 1958

DATE	INITIALS	CODE
1/24	C	220
1/24	[illegible]	800
	WSM	400

Mr. Dooley P. Wheeler, Jr.
Umont Mining Inc.
912 Kearns Bldg.
Salt Lake City, Utah

Re: Docket No. DMEA-287[illegible] (Manganese)
Umont Mining Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Wheeler:

This will acknowledge receipt of your letter of January 16, 1958 in which you state that you have decided to sign the Termination Agreement in lieu of Amendment No. 3.

Regarding the question you raised when in Spokane concerning the "repay" paragraph in Amendment No. 3, we have just received a letter from Washington regarding the intent of paragraph 4 of Amendment No. 3 and instructing us to add to that paragraph the sentence "This provision is effective December 20, 1957." However, as you have already decided not to sign Amendment No. 3, we are enclosing the original and four copies of a Termination Agreement. If it meets with your approval, would you please sign all copies, retain the one marked for the Operator, and return the rest to this office.

Mr. Prinz of the U. S. Geological Survey is to meet Mr. Bowsher of the U. S. Bureau of Mines in Butte to make a final examination as requested by Mr. Criswell in a telephon conversation with Mr. Bowsher on January 15, 1958.

Sincerely yours,

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

Enclosures

cc: DMEA (2) w/2 copies of incoming
USBM (2)
USBM (AD)
Prinz
Turner

Umont Mining Inc.

THIS LETTER FROM ☐
KING STREET DOCK
BURLINGTON, VERMONT

January 16, 1958

THIS LETTER FROM ☒
912 KEARNS BUILDING
SALT LAKE CITY, UTAH

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 23 1958

DATE	INITIALS	CODE

Mr. A. E. Weissenborn, Executive Officer
U. S. Geological Survey
South 157 Howard Street
Spokane 4, Washington

Re: DMEA CONTRACT NO. IDM-E604

Dear Mr. Weissenborn:

Umont and Irving and Nelson have studied the advisability of signing a termination agreement such as prepared by DMEA, dated November 22, 1957, or signing a third amendment such as prepared December 20, 1957, by DMEA.

We have unanimously agreed that we should sign the termination agreement, and I have instructed Mr. Wilbur Criswell, our Resident Manager at Butte, to prepare a final report for DMEA showing all that is required plus the actual cost of work units as against the allowable cost by DMEA.

We have the opportunity to continue on the manganese carlot program until 1960. In the event that we take advantage of this opportunity we may apply later for DMEA assistance in sinking the Norwich shaft and driving one or two new levels.

Yesterday Mr. Criswell called the DMEA field office at Butte requesting an examination of the Norwich mine so that the DMEA can satisfy itself regarding our reports and royalty payments.

In spite of our differences regarding costs, Umont appreciates the help of the DMEA and feels that DMEA has contributed substantially towards development of the west side of the Butte District (Independence mining district).

Although Umont has paid back more money to the DMEA than it has received, we regret that we have not been able, to date, to entirely repay the part owed DMEA before we came into the picture.

Yours very truly,

Dooley P. Wheeler, Jr.
General Manager

DPW:lh

RECEIVED
Air Mail
JAN 20 1958

U.S.G.S.
SPOKANE, WASH.

DMEA

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Rubin	140
	Dwyer	140
	Chapman	800
	Martin	400
1-15	Chambers	800
1/15	[illegible]	130
"	Johnson	110
1/16	Rutherford	100
1/16	[illegible]	220
		400

JAN 16 1958

AIR MAIL

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2874 - Manganese
Umont Mining, Inc., Assignee
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Weissenborn:

This responds to your teletype dated December 30, 1957, regarding the effective date of paragraph numbered 4 of Amendment No. 3.

It is intended that paragraph numbered 4 become effective as of the date of Amendment No. 3. In order to clarify this intent, please insert the following sentence at the end of paragraph numbered 4:

"This provision is effective December 20, 1957."

You should also insert the following provision at the end of subparagraph 7(d):

"Rights preserved herein include the rights under paragraph numbered 4 of this Amendment."

We have made the changes on the copy of Amendment No. 3 which is enclosed as a guide.

Sincerely yours,

APPROVED:

Frank D. Lamb (HCR)
Member, Bureau of Mines

George C. Selfridge (HCR)
Chairman, Operating Committee

Thor H. Kiilsgaard (HCR)
Member, Geological Survey

HCRubin:md 1/13/58
CC: DMEA Docket
Operating Com.
Field Team, Reg. I
~~XXXXXXXXXXXX~~
T.H. Kiilsgaard
Gilbert DeHuff
W. S. Martin
R. P. Dwyer
H. C. Rubin
Pending
Chron.

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1-14	Chambers	800
	Chapman	400
	Martin	400
1/15	Sellnegg	130
"	Johnson	110
16	Mittendorf	100
		220
		400

1/15 Lamb (130)
1/15 Kilsgaard (130)

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

JAN 16 1958

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Weissenborn:

Your letter of December 20, 1957, informed me that the General Services Administration had finally given you a telegraphic report to the effect that it had collected and was holding in suspense $24,604.41 in royalty funds due DMEA. I am glad that you immediately notified the General Accounting Office of this transaction. It was a little embarrassing to us to have the General Accounting Office discover this sizeable amount due DMEA, when at that time DMEA apparently was unaware of it, or at least had no idea of the sum involved.

According to our records GSA finally paid the amount and DMEA Washington Office received a copy of the deposit ticket on January 6, 1958.

I suppose you are wondering, as are we, about the type of audit report GAO will make on this point. If and when DMEA receives a report, I will furnish you an excerpt of this part of it.

Sincerely yours,

C. O. Mittendorf (fwr)

Administrator

JLChambers/wb
January 14, 1958

Copy to: Docket
Admr. Reading File
Administrator
Operating Committee
Mr. Chambers

8623

XDXXXXXX-079K

YWB040 WAF SP 20 I-GS-G

SPOKANE WASH 12-30-57 1200U

MR GEORGE C SELFRIDGE CHAIRMAN OPERATING COMMITTEE DMEA

DEPT OF INTERIOR, WA

REURLET DECEMBER 20, 1957 DICKET NUMBER DMEA 2874 UMONT MINING INC. AMENDED CONTRACT NUMBER IDM-E604 IS PROVISION NUMBER 4 OF AMENDED NUMBER 3 TO UMONT CONTRACT RETROACTIVE TO SEPTEMBER 19, 1956 THE DATE OF AMENDED CONTRACT WITH UMONT OR DOES IT BECOME EFFECTIVE ON DATE THAT WORK IS RESUMED UNDER AMMENDMENT NUMBER 3.

A E WEISSENBORN EXECUTIVE OFFICER DMEA FIELD TEAM REGION 1

20 1957 2874 IDM-E604 4 3 19 1956 3

SLP 1204U

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 31 1957

DATE	INITIALS	CODE
12/31	C	220
12/31	WSM	400

DEC 30 4 02 PM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 7 1958

DATE	INITIALS	CODE
1/7	C	220
1/7	[illegible]	800
	WSM	400

So. 157 Howard Street
Spokane 4, Washington

December 31, 1957

Mr. M. C. Johnson
Regional Comptroller
General Services Administration
Denver 2, Colorado

Re: Your reference SCRE
Our Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Johnson:

This will acknowledge receipt of your letter of December 27, 1957, Treasury Check No. 11,318,557 in the amount of $24,[illegible].41, and one copy each of 228 settlement sheets--Lots No. 4 through 176-Raise and 23 through 78-Drift.

When I talked with Mr. Menardi the other day, I understood him to say that three copies of each of the settlement sheets and supporting data would be sent but we received only one. Would it be possible to get two more copies of each? We would appreciate receiving the three copies in the future, otherwise we have to retype them on the forms (a supply of which we would get from you) or thermofax them and sometimes we cannot get legible prints from the copies we receive.

You might be interested in the manner in which the check and settlement sheets were received. The envelope "burst at the seams" and was apparently resealed by the Post Office Department before it even left Denver. The envelope is enclosed for your inspection. We were very fortunate that the check was not lost.

Sincerely,

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

Enclosure

cc: DMEA (3)
USBM (2)
USBM (AD)
Turner
CPF

Rec'd 12/23/57

XDXXXXXX-126K

WCB144-

YWB135 WAF SP 22 I-GS-G

WSM

SPOKANE WASH EYWAWPATU 1650U

GEORGE C. SELFRIDGE, CHAIRMAN OPERATING COMMITTEE

DMEAL, SURVEYGEOL

WASHN., 25 DC

REURTT DECEMBER 20, 1957, UMONT MINING COMPANY, DMEA-2874. DEDUCTIONS FROM UMONT HAVE BEEN HELD BY GSA IN SUSPENS ACCOUNT AT DENVER. GSA HAS PROMISED TO SEND CHECK AND SETTLEMENT [illegible]TS THE LAST WEEK IN DECEMBER. A LETTER TO [illegible]ORF DISCUSSING THE SUBJECT IS IN THE MAIL.

[illegible]. WEIS ENBORN, EXECUTIVE OFFICER REGION 1

[illegible]1957 DMEA-2874

[illegible]3U

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. 400		
2.		
3.		
4.		
5.		
FROM:		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

Orig has gone to 800 this is for official docket

INT.-DUP. SEC., WASH., D.C. M8278

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12-20	[illegible]	400
12-20	Martin	400
12-20	Chambers	800
12/20	[illegible]	130
/	[illegible]	110
"	Rutherford	100
12/20	[illegible]	220
		400

DEC 20 1957

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2874 - Manganese
Umont Mining, Inc., Assignee
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed Amendment No. 3 to the above-referenced contract, signed by the Administrator for the Government. Two extra copies are enclosed for the use of the Field Team.

If the conditions and terms of the proposed amendment are satisfactory to you and the Operator, all five copies should be signed by the Operator and the usual distribution made.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Please note and call Operator's attention to Provision No. 4 of the Amendment that provides for royalty payments on any ore transported through DMEA workings.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

Frank D. Lamb (JHB)

Member, Bureau of Mines

N. E. Nelson (JHB)

Member, Geological Survey

JHOPKINS/dlm 12-20-57
cc to: Code 400
Admr. R. File
Oper. Comm.
Messrs. Gilbert DeHuff, USBM
T. H. Kiilsgaard, USGS

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/20	Fisher	800
12/20	gr	220
		400

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

DEC 20 1957

Re: Report of Review
The Castella Corporation
Contract No. Idm-E826
Docket No. DMEA-3724

Dear Mr. Mavor:

The recently submitted copies of the Report of Review covering the above-cited project are accepted and normal distribution is authorized.

Sincerely yours,

Jay L. Chambers, Director
Contract Administration
and Audit Division

CEFisher/wb
December 20, 1957

Copy to; Docket
Admr. Reading File
Mr. Chambers

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12-20	Chambers	800
12/20	Shapiro	400
12/20	Martin	400
12/22	[illegible]	130
"	Whitehead	100
12/20	[illegible]	220
		400

DEC 20 1957

Contract Admin. & Audit Division

Defense Minerals Exploration Admin.

1AX4401(01) Revolving Fund,
Defense Production Act, Interior, (Transfer
to Office of Secretary)

12/20 Lamb (130
12/20 Nelson (130

TELETYPE

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Turner's letter of 12-18-57 to Chambers states that Umont Mining Company, DMEA-2874, Idm-E604, reported to GAO that it had paid royalties of $23,553.62 more than our records show. Believe Umont misunderstood GAO request and reported payments on both GSA contract GS-10P(D)3 and DMEA contract. Please get facts from Umont and if both contracts were reported Umont should make correction immediately to GAO in Portland.

George C. Selfridge

George C. Selfridge
Chairman, Operating Committee (GCS)

JLChambers/wb
December 20, 1957

Copy to; Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. DeHuff, USBM
Mr. Chambers
Mr. Turner
Confirmation

8623

EXCERPT FROM C. A. TURNER'S LETTER OF DECEMBER 18, 1957
TO JAY L. CHAMBERS

Umont Mining Co., Idm-E604

The Operator reported having paid $23,553.62 more royalties than the DMEA records indicated. The GSA had been notified by the Operator to make the necessary royalty deductions and remit direct to DMEA. Mr. Weissenborn called the Manganese Depot at Butte, Montana (Dec. 17, 1957) and the G.S.A. Comptroller (Dec. 17, 1957) at Denver, Colo. The G.S.A. Comptroller (Denver) stated that they were trying to reconcile their accounts and was very vague about the whole matter. However, he did say some deductions were made from Umont and being held, and that he would confirm by telegram and letter. Confirmation has not been received.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 23 1957
DATE | INITIALS | CODE
12 23 | C | 220
" | Com | 100
| | 800
Cy to 400

December 20, 1957

Air Mail

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc. (Assignee)
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. E604

Dear Mitt:

As part of its auditing of DMEA activities in Region I, the GAO circularized all projects which have been certified as discoveries and requested the operators to list the royalty payments they have made. Almost all the operators' reports checked with our records. The few that did not had, with one exception, either very minor or readily explainable differences. The Umont Mining, Inc., (formerly Irving and Nelson) account claimed royalty payments of $27,507.66, whereas our records show receipts of only $3,954.14. The difference is from payments which the operator claimed had been deducted from his settlements since the last check which we received from the GSA on March 1, 1957.

In February 1957 we requested GSA to make the appropriate deductions from the Umont settlements and supplied copies of the contract to GSA. Copies of this request went both to the Seattle and Denver offices of GSA. Umont also wrote to GSA authorizing DMEA royalty deductions from this settlement.

On December 17, I telephoned the Butte Manganese Depot to ask why we had not received payments and was referred to the Regional Comptroller's Office in Denver. Mr. Minardi of that office informed me that the money was being held in a "suspense" account. Asked the reason for this, Mr. Minardi merely stated that this was being done while the shipper's account was being "reconciled." I asked then how much was being held in the suspense account and was told GSA would check and would wire me the amount. Mr. Minardi also

OFFICIAL FILE COPY

promised that he would send us the checks together with copies of the settlement sheets before the end of the month. As of noon on December 19 I had not received the telegram and inasmuch as Mr. Lake, the GAO auditor, was waiting for this information, I sent the attached teletype to GSA again requesting the information. I received in reply the attached teletype confirming that $24,604.41 was being held and promising that the check would be mailed to us next week. I still do not understand why payment was being held up nor why we were not notified.

GAO probably will take the attitude that the Field Team has not been sufficiently alert concerning production by Umont. This is not quite the case. As evidenced by our arrangements with GSA to have the royalty deducted from the settlement, we were aware that Umont was producing. This we knew from our periodic inspection reports, and because Umont informed us of their intention to produce. As a matter of fact, the operator's monthly reports have, in the past, contained a statement of production together with a longitudinal section of the mine. Because the most recent DMEA activity has been wholly surface drilling, we have not received this information recently.

We perhaps can be criticized that, knowing that there were shipments, we did not keep closer track of payments. There is some difficulty in this because there is not uncommonly a considerable interval between the time a shipment is made and the time payment is made. Inasmuch as GSA is a Government agency and had been instructed to make deductions, we felt that in due course we would receive payment and we did not follow this as closely as we might have if shipments had been made to a smelter or private ore buyer. We have devised a practicable system to keep a closer watch on shipments so that if delays occur, they will be investigated sooner.

Sincerely,

A. E. Weissenborn

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

Enclosures

cc: Op. Com. (2)
USBM (2)
USBM (AD)
Turner

T E L E T Y P E

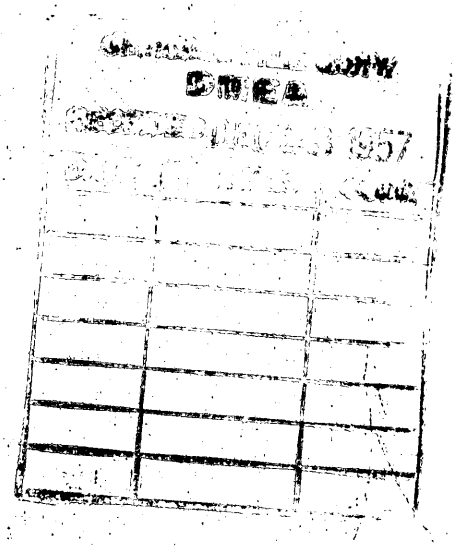
Received: 1:30 p. m.
December 19, 1957
So. 157 Howard Street
Spokane 4, Washington

A. E. WEISSENBORN
EXECUTIVE OFFICER, DMEA
FIELD TEAM, REGION I

AMOUNT DUE DMEA REGION I FOR ORE SHIPMENTS TO BUTTE DEPOT BY UMONT MINING CORPORATION $24,604.41. CHECK WILL BE MAILED DURING WEEK OF DECEMBER 22 TO DECEMBER 28 WITH COPY OF SETTLEMENT SHEETS.

M. C. JOHNSON
GSA
DENVER, COLORADO

Distribution:
Turner
H. A. Lake
DMEA
Mittendorf w/letter 12/20/57
CPF
Incoming
USBM



T E L E T Y P E

No. 157 Howard Street
Spokane, Washington
Sent: 10: 50 a. m.
12/19/1957

MR. M. C. JOHNSON
REGIONAL COMPTROLLER
GENERAL SERVICES ADMINISTRATION
DENVER FEDERAL CENTER
DENVER, COLORADO

RE MY PHONE CONVERSATION WITH MR. MINARDI DECEMBER 17, PLEASE WIRE AMOUNT ROYALTY DUE DMEA REGION I AND HELD IN YOUR SUSPENSE ACCOUNT FROM SHIPMENTS OF MANGANESE ORE TO BUTTE DEPOT BY UMONT MINING, INC. GAO AUDITOR PRESSING US FOR THIS INFORMATION. ALSO PLEASE FORWARD TO THIS OFFICE AT EARLIEST CONVENIENCE CHECK COVERING AMOUNT DUE TOGETHER WITH COPIES OF SETTLEMENT SHEETS.

A. A. WEIRSEMBORN
EXECUTIVE OFFICER, DMEA
FIELD TEAM, REGION I

Distribution:
Outgoing TT's
CPF
Mr. Lake
Turner
USBM (AD)
USBM (2)
DMEA (2)
Chrono
Confirmation
Mittendorf

(Docket No. DMEA-2074, Umont Mining, Inc., Plutus and Norwich claims, Silver Bow County, Montana, Contract No. Idm-8606, Amended)

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 6 1957

DATE	INITIALS	CODE
12/6	C	220
12/6	[illegible]	800
12/10	hsay	400

So. 157 Howard Street
Spokane 4, Washington

December 2, 1957

Mr. Dooley P. Wheeler, Jr.
Umont Mining Inc.
912 Kearns Bldg.
Salt Lake City, Utah

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining Inc.
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E004

Dear Mr. Wheeler:

This will acknowledge your letter of November 23, 1957, in which you request an extension of your contract.

We received your letter of October 17, 1957, in which you requested termination of your contract. On the same day we received a proposed amendment to churn drill a hole 273 feet east of the three diamond drill holes. We returned this proposed amendment to Washington with your request for termination.

The day after we received your letter of November 23, we received the Termination Agreement you requested October 17, 1957. We have forwarded your request of November 23 to Washington for consideration and will hold the Termination Agreement pending a decision.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USBM (2)
USBM (AD)
Prinz

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 2 1957

DATE	INITIALS	CODE
12/2	C	220
12/2	WSM	400

November 27, 1957

Air Mail

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

Re: Docket No. DMEA-2874 (manganese)
Umont Mining, Inc.
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

In his letter of October 17, 1957, the Operator requested termination of the Norwich contract, giving as his reasons the unencouraging results of his surface drilling and his fear that advance of the 400-foot drift eastward under the volcanics might develop such a flow of water that the mine might be flooded and a valuable ore body lost.

In our Field Team letter to you of October 22, 1957, we pointed out that the ore in the Norwich mine area typically occurs in lenses separated by barren stretches of vein and that the drilling therefore has not disproved the possibility of ore east of the present workings. We still believe that the area to the east was worth exploration but in view of the Operator's strong fear of the potential water hazzard we were reluctant to insist that he continue and recommended termination on this basis.

In his letter of November 23, 1957 (copies enclosed) rescinding his previous request for termination, the Operator states that nearly all the higher grade ore above the 400 level will be mined by the end of the year. Should the low-grade buying program continue or should concentration tests now in progress show the feasibility of shipping on the car-lot program, he will start underhand stoping below the 400 level. This ore he is willing to risk should the 400 drift east hit a flow of water so strong that his pumps could not handle it.

TLC

Maybe we can take the attitude that having set this up for a termination only some strong consideration - such as a clause about "one transported through DMEA workings" - would justify us in going on with the work

WSM

There has been no work done under the contract since the completion of surface drill hole S-2A in August 1957. As the drifting may be resumed in about a month we do not know whether or not it is worth while asking for a recess. However, if it would be better, we recommend a recess from September 1, 1957 to January 15, 1958. As there is a possibility that the Operator may resume drifting easterly, we recommend that the contract be extended from December 31, 1957 to June 30, 1958.

We have just received the Termination Agreement enclosed with your letter of November 22, 1957 and are sorry that we did not learn of the Operator's change in plans in time to avoid the nuisance of preparing the agreement. We will hold the Termination Agreement until we hear whether or not the contract is to be extended.

By Field Team Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Stephen A. Zolotok
for Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure (in duplicate)

cc: USBM (2)
USBM(AD)
Prinz
Turner

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

OFFICIAL FILE COPY DMEA RECEIVED DEC 2 1957		
DATE	INITIALS	CODE

THIS LETTER FROM
DOOLEY P. WHEELER JR., WRITE FROM
912 KEARNS BLDG.
SALT LAKE CITY, UTAH

November 23, 1957

Mr. A. E. Weissenborn, Executive Officer
U. S. Geological Survey
South 157 Howard Street
Spokane 4, Washington

Re: DMEA Contract No. IDM-[redacted]

Dear Mr. Weissenborn:

Enclosed please find a copy of a letter that I wrote to you October 17th concerning termination or suspension of the DMEA contract. I am enclosing the copy because I now fear that the original did not get through to you.

On November 1, 1957, we completed the assessment churn drilling referred to in the enclosed letter. The drilling was done by Price and Lindsay of Clancy, Montana. We drilled on the eleven-dollar-per-hour basis. Price and Lindsay's bill for drilling 155 feet of 6" hole was $797.50. No casing was lost and in that depth of hole a casing to firm rock and a reduction to a smaller size casing near the bottom was in order. Drilling slowed to one foot per hour when bit size was reduced to less than six-inch, thereby confirming Anaconda's opinion that it is too costly to go below six-inch bit size. I am convinced that any deep churn drill holes in the west side will need start with no smaller than 13-inch stand pipe to bedrock or solid rock followed by two and possibly three casing reductions. In future churn drilling, in order to make sure that we get to our objective I would prefer to have 16-inch stand pipe to solid rock, followed by 13", 10", 8", 6" changes. Such a procedure would give maximum assurance that the deepest objective would be reached and properly sampled.

The 155-foot deep assessment hole was drilled about on the 5820-foot contour line of Professional Paper 74, Plate X, one-half inch west of longitude 112° 35' in line with the Moody and Sankey vein group. The hole was collared in extrusive rhyolite and remained in it to the bottom. There was evidence in the cuttings and drilling characteristics that we cut faults near the bottom of the hole. We have the drill log and cuttings for Umont and the U. S. Geological Survey records.

About the end of this year we will have the ore that can be mined at a profit extracted from above the 400 level of the Norwich Mine. This may coincide with termination of the low-grade program. If this happens we will be out of business unless the current research with Arthur Little, Inc. and Colorado School of Mines Research Foundation, Inc. shows a profitable means of continuing on lower grade material

RECEIVED
NOV 1957

than the present low-grade program will permit us to mine.

If the low-grade program still has a few months left in it at the end of 1957, we must seriously consider underhand stoping below the 400 level in the 497-506 area and the 553-557 area in order to maintain a break-even position in the mine as long as there is hope for research to show us the way to continue on lower grade ore. We have driven 553 raise above the 400 level 130 feet and have been in and out of ore. If we continue on an underhand stoping basis, we would continue to drive the raise for exploration purposes. The raise would undoubtedly supply fill for underhand stopes and probably supply some ore (silver values have been increasing in the raise).

Underhand stoping would probably require more fill than the raise would supply and at that time we would like to cautiously feel our way east on 400 drift east in order to explore the vein and to get fill for 553-557 underhand stope. We would like to have the DM contract term extended in order to help us break even on such a basis.

We realize that extension of 400 drift east would involve risk of flooding the mine, but by cautious probing ahead we would expect to avoid such a catastrophe. If, however, water flows developed that exceed our pump capacity, we would not be losing ore that could be mined at a profit or for which a long-term market had been developed. Therefore, extension of 400 drift east to 1[illegible] would not be as serious a catastrophe as it would have been while we still had high-grade or easily available above the 400 level.

Yours very truly,

Dooley P. Wheeler, Jr.
General Manager

DPW:lh

cc: Burlington, Vermont
Butte, Montana

RECEIVED
NOV 25 1957

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/15	Chapman	400
11/15	Martin	400
11-20	Chamber	800
11/21	Selfridge	130
"	Johnson	110
22	Whitenden	100
		220
		400

NOV 22 1957

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2874 - Manganese
Umont Mining, Inc., Assignee
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed Termination Agreement for the above-referenced contract, signed by the Administrator for the Government. Two extra copies are enclosed for the use of the Field Team.

If the conditions and terms of the proposed agreement are satisfactory to you and the Operator, all five copies are to be signed by the Operator and the usual distribution made.

If any of the conditions and terms of the proposed agreement do not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

TLCHAPMAN:foc 11-15-57
cc to: 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. Gilbert DeHuff, USBM
T. H. Kiilsgaard, USGS

Enclosures

8623

Why do we talk about the lien if we have no consent to lien

Could we ask for a consent to lien now

Took it up with legal and was advised the Guaranty covered the matter.

RLC

Government's Copy

Tony Sawyer
"Appd. Sol. Off."
Chapman
Martin
Chamber

TERMINATION AGREEMENT

It is agreed this ___ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government" and Umont Mining, Inc., (Assignee) hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E604 (Docket No. DMEA 2874), dated September 19, 1956, as amended, hereinafter referred to as the "Contract," that: Amended

1. Effective August 31, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to September 1, 1957.

3. The Operator shall promptly perform all winding up and settlement actions provided for in the Contract, including the rendering of final report and final account.

4. The Certification of Discovery or Development heretofore issued under the Prior Contract together with all rights of the Government respecting percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment are hereby preserved.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract except as otherwise provided for in this Termination Agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Administrator, Defense Minerals Exploration Administration

UMONT MINING, INC.

By_____

Title_____

Long
Sleinger
Chapman
Martin

GOVERNMENT'S COPY

TERMINATION AGREEMENT

It is agreed this ____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government" and Umont Mining, Inc., (Assignee) hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E604 (Docket No. DMEA-2874), dated September 19, 1956, as amended, hereinafter referred to as the "Contract," that:

1. Effective August 31, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to September 1, 1957.

3. The Operator shall promptly perform all winding up and settlement actions provided for in the Contract, including the rendering of final report and final account.

insert new 4

~~4. All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment are hereby preserved.~~

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract except as otherwise provided for in this Termination Agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

UMONT MINING, INC.

By_____

Title_____

By_____
Administrator, Defense Minerals Exploration Administration

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

NOV - 7 1957

Memorandum

TO: Administrator, DMEA
Attention: T. L. Chapman, Acting Director,
Division of Iron and Ferro-Alloys

FROM: Associate Solicitor, Division of Mineral Resources

SUBJECT: Termination Agreement
Docket No. DMEA 2874 - Manganese
Umont Mining, Inc. (Assignee)
Plutus and Norwich claims
Silver Bow County, Montana
Contract No. Idm-E604

Your memorandum of November 1, 1957, requests that a termination agreement be prepared for the subject contract. You also call attention to the fact that no Owner's Consent to Lien was provided and request a determination as to whether any further action can be taken to protect the Government's interest.

We have prepared the attached Termination Agreement for your use and in doing so have preserved all of the Government's rights against Irving and Nelson, and their assignee, the Umont Mining Company, Inc.

In view of the fact that the Consent to Lien and Subordination Agreements were waived in this case, the Government could, if it so desired, request the Operator, as a condition precedent to granting the Termination Agreement, to furnish a bond to insure the repayment of all monies loaned by DMEA.

Robert P. Dwyer

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11-4	Chapman	400
		140

November 1, 1957

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources

From: Division of Iron and Ferro-Alloys, DMEA

Subject: Termination Agreement
Docket No. DMEA 2874 - Manganese
Umont Mining, Inc. (Assignee)
Plutus and Norwich claims
Silver Bow County, Montana
Contract No. Idm-E604

Transmitted herewith is a rough draft of a termination agreement for your use in preparing the agreement in final form. This project was certified from the results of work on the Plutus claim, and the same certification was made a part of the Amended Contract. No Owner's Consent to Lien was provided. Please determine whether there is any further action we can take to insure that the Government is fully protected.

T. L. Chapman, Acting Director
Division of Iron and Ferro-Alloys

RECEIVED
NOV - 4 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

TLCHAPMAN:foc
11-1-57
cc to: Docket
Code 400
Read. File

R.W.S.

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government" and Umont Mining, Inc., (Assignee) hereinafter called the "Operator" parties to that certain Exploration Project Contract No. Idm-E604 (Docket No. DMEA-2874), dated September 19, 1956, as ~~and~~ amend~~ments thereto,~~ all herein-after referred to as the "Contract", that:

1. ~~No work or operation provided for in said Contract shall be performed after~~ Effective August 31, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated

2. The Government shall contribute only to the ~~agreed~~ fixed unit costs of work performed prior to September 1, 1957.

3. The Operator shall promptly perform all winding up and settlement actions provided for in the Contract, including the rendering of final report and final account.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided for in this Termination Agreement.

4. All rights of the Government ~~as provided for in the Contract~~ respecting are hereby preserved, ~~with respect to audits, maintenance of records, recovery of any overpayment,~~ certification of discovery or development, ~~and~~ percentage royalty and liens ~~for sites~~ to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, & the right to recover any overpayment

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

UMONT MINING, INC.

By _____

Title _____

JUSTIFICATION

The Operator requests and the Field Team recommends approval of a termination agreement due to the poor results found in the east drift and 100 foot diamond drill hole on the 400 level of the Norwich mine. The Operator accents the possibility of flooding the mine by further drifting to the east, but this Division does not believe this is vital as this possibility was covered by allowable diamond drill holes in Amendment No. 1.

The results of the surface diamond drill holes No. 1 and No. 2 were poor, showing little indication of any good manganese mineralization. The Plutus and Norwich veins were cut and neither vein indicated any significant possibilities of minable orebodies. As a result of this work this division concurs with the Operator and the Field Team that no further work to the east on the 400 level is justified and under these conditions the drilling of hole No. 3 to the east on surface is not warranted.

Under the above conditions termination of the project is justified.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 14 1957

DATE	INITIALS	CODE
11-14	C	220
14	Com	100
11/15	WSM	400

October 23, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: William C. Prinz, Geologist, U. S. Geological Survey

Subject: Interim Inspection Report, Docket No. DMEA-2874 (Manganese), Umont Mining, Inc., Assignee, Plutus and Norwich claims, Silver Bow County, Montana, Amended Contract No. Idm-E604

The 400-foot level of the Plutus mine was examined October 14, 1957, accompanied by John Papastamatiou, Geologist, Institute of Geology, Athens, Greece, and Bob Garwood, company geologist. No DMEA work has been done since the last inspection on September 11, 1957. The operator is currently mining known ore bodies as quickly as possible before the Government's low grade manganese buying program ends. He is also doing some non-DMEA underground diamond drilling from the west face of the 400-foot level in search of the Norwich vein which has been cut off by a fault which strikes northwest and dips 31° east. Thus far, this work has not been successful.

In a letter to the Field Team dated October 17, 1957, Dooley P. Wheeler, Jr., vice president of the company, asked that the subject contract be terminated, and the Field Team recommended approval of his request in their letter of October 22, 1957 to the Operating Committee.

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Prinz

[illegible]
[illegible] FIELD [illegible]

Date 11-14

Referred to:

1. ~~[illegible]~~
2. ~~[illegible]~~
3. ~~[illegible]~~
4. Docket Control Mails and Files
5. [illegible] Division
6. Docket Control Mails and Files
7. 400

Note comments in report regarding:

1. Recommends Termination
2.
3.
4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

Please put this in the Docket with the Termination sent to Operating Committee 11/15/57 WJM

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

10/25	C	220
		130
10/25	WSG	400

October 22, 1957

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

Re: Docket No. DMEA-2874 (Manganese)
Umont Mining, Inc.
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

Enclosed are two copies of a letter from Dooley P. Wheeler, Jr., vice president, Umont Mining, Inc., requesting termination of the subject contract.

Under the terms of the contract, the following work remains to be done: several hundred feet of drifting eastward along the Norwich vein on the 400-foot level, diamond drilling southerly from the 400-foot level to test for the downward extension of the Plutus vein, and one surface diamond drill hole. Most of the drifting eastward is dependent upon the results of surface diamond drilling. Surface drilling has shown that there is no rhyolite dike present, but rather a series of volcanic rocks extending, in one place, to a depth of 288 feet and which have been down dropped on the northwest by a fault. The Operator will not advance the 400-foot drift eastward because he is fearful of encountering a heavy flow of water at the fault and under the volcanic rocks. This flow of water could possibly endanger the whole 400-foot level and cause the loss of considerable tonnage of unmined ore. The remaining surface drill hole is to serve as a guide for further drifting eastward and since the Operator does not plan to continue this drifting, the remaining surface drilling is no longer warranted. The Plutus vein has been encountered in two surface drill holes and has been shown to be a very weak structure; therefore, underground drilling to test this vein is not considered necessary.

The surface drill holes have also cut the Norwich vein which, too, is poorly mineralized in this area. Because ore in the Norwich mine area occurs typically in lenses separated by

by barren stretches of vein the drilling results have not disproved the possibility of ore occurring east of the present workings but the lack of positive evidence plus the potential water hazzard has discouraged the Operator from doing further work.

Since further DMEA exploration work on the property is dependent upon advancing the 400-foot drift eastward and since the Operator is reluctant to perform this work for the above reasons, the Field Team recommends that the request to terminate be approved.

A discovery can be claimed legitimately, but a pseudo-certification of discovery is included in paragraph 4b of Annex II of the contract.

By Field Team, Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Prinz

P. S. We have just received Amendment No. 3 which we are returning unsigned in view of the Operator's request for termination. We regret he did not advise us in time to stop processing of the amendment.

Umont Mining Inc.

KING STREET DOCK
BURLINGTON, VERMONT

Mac
ac
Buff
USBM
DMEA

THE LETTER BOX
DUDLEY F. WHEELER JR., VICE PRES.
612 BEAMS BLDG
SALT LAKE CITY UTAH

October 17, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 25 1957

DATE	INITIALS	CODE

Mr. A. E. Weissenborn, Executive Officer
U. S. Geological Survey
South 157 Howard Street
Spokane 4, Washington

Re: DMEA Contract No. IDM-E604

Dear Mr. Weissenborn:

We have been unable to get a contractor who can, within the [illegible]-dollar-per-foot limit, drill our [illegible] hole 270 feet east of our surface hole S1. Our difficulty is in getting 8-inch casing. [illegible] has advised not to start [illegible] less than 10" in diameter and drill less than 8-inch [illegible] from. Heterogeneity of rock and target [illegible] at least two [illegible] reductions which we are unable to get. Consequently we have abandoned the plan for drilling the 562-foot hole.

The underground long-hole drilling on the east face of 400 drift east gave negative results. We do not believe it worth while to drill the DMEA hole south-southeast from that face because Hole S24 intersected the Plutus vein 200 feet south and found a very poor fault structure and very poor mineralization.

Our original plan was to drill for the Plutus vein from a face about 185 feet further east than our present face. Such a drill position is good because it is closer to the intersection of the Plutus and Norwich vein and such intersections, judging by the Plutus-Norwich intersection [illegible] are more. We cannot, however, safely drive 400 drift east further because of the danger of flooding the mine. The danger of flooding is pointed up by the surface drilling which showed excessive depth of oxidation out where the volcanics are deep and extreme porosity and high water content of the volcanics. We already have as much water as we can safely handle in the west end of the mine.

Today we started a churn drill hole for [illegible] assessment work on our unpatented claims. This hole is designed to check the depth of the volcanics about 3000 feet north of the Norwich claim. We expect to learn something about the churn drilling characteristics of the volcanics in this shallow hole and to check the performance of our churn drill contractor.

We are still drilling to try to find ore west of two different faults in the face of 400 drift west. This work has been

DMEA

W. Hart

unsuccessful to date and we may find that there is no ore west of the [illegible] faults.

We are confronted with an early termination of the low-grade manganese program and we believe that it is wiser to concentrate our remaining effort exploring the means by which we may continue to [illegible] in the area rather than doggedly complete the DMEA program this year—particularly when the results will be inconclusive, or in one case the work will even risk flooding the mine.

The DMEA loan has helped us find [illegible] and adjusted our thinking regarding the volcanics. We believe that with the new [illegible] and economic conditions we have reached a point where we can stop DMEA exploration and explore new [illegible], new products and improved metallurgy so that we may be able to continue to produce a profit.

We trust that the DMEA will [illegible] us and permit us to [illegible] DMEA exploration at this point. We [illegible] action to stop work of termination of the low-grade program about the first of November 1958.

Very truly yours,

Robert E. Wheeler, Jr.

REW:lh

Air Mail

Government's copy

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 25 1957
DATE | INITIALS | CODE

AMENDED EXPLORATION PROJECT CONTRACT
UMONT MINING, INC., (ASSIGNEE)
DOCKET NO. DMEA 2874

AMENDMENT NO. 3

It is agreed this 16th day of October, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Umont Mining, Inc., (Assignee), that Amended Exploration Project Contract No. Idm-E604 (Docket No. DMEA 2874), executed September 19, 1956, as amended, is further amended, effective September 4, 1957 as follows:

In Exhibit "A":

(a) Under the heading "Description of the Work", Stage III, paragraph three, is revised to read as follows:

"Hole No. 2 shall dip to the north at about 60 degrees and shall not exceed 600 feet in length."

(b) A new paragraph is added immediately after paragraph three as follows:

"Hole No. 3 shall be churn drilled to a maximum depth of 562 feet. The hole shall be started with a 10-inch bit and shall be completed with not less than a 4-inch bit.

Samples, not exceeding five feet in length, shall be taken in mineralized zones. The samples shall be assayed for manganese."

(c) Under the heading "Estimated Cost of the Project," Stage III, the second item is revised as follows:

not used

Long
Chapman
Chamberlin
Selfridge
Johnson

"Diamond drilling on surface,
1138 feet @ $6.00/ft. $6,828.00"

(d) The following new item is added immediately after the above revision:

"Churn drilling 562 feet @
$6.00/ft. $3,372.00"

This amendment shall not be construed to increase the total estimated cost of the project, the aggregate amount which the Government may be required to contribute, nor the agreed cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. E. Mitchell
Administrator, Defense Minerals
Exploration Administration

UMONT MINING, INC.

By_____

Title_____

IEA Form 7
12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-15	Chapman	400
10-15	Martin	400
10-15	Chandler	800
10/16	GCS	130
	Johnson	110
"	Rutledge	100
10/17	BD	220
		400

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

OCT 17 1957

Re: Docket No. DMEA 2874 - Manganese
Umont Mining, Inc., {Assignee}
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Ids-E604

Dear Mr. Weissenburn:

Enclosed are the original and four copies of a proposed Amendment No. 3, to the above-referenced amended contract, signed by the Administrator for the Government. Two extra copies are enclosed for the use of the Field Team.

If the conditions and terms of the proposed amendment are satisfactory to you and the Operator, all five copies are to be signed by the Operator and the usual distribution made.

If any part of the proposed amendment does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

Frank D. Lamb (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

TLCHAPMAN:foc 10-15-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. Gilbert DeHuff, USBM
T. H. Kiilsgaard, USGS

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-4	Chapman	400
10-4	Martin	400
		140

October 4, 1957

MEMORANDUM

TO: Associate Solicitor, Division of Mineral Resources

From: Division of Iron and Ferro-Alloys, DMEA

Subject: Preparation of Amendment
Docket No. DMEA 2874 - Manganese
Umont Mining, Inc., Assignee
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Attached is a rough draft of Amendment No. 3 to the above-captioned contract for your use in preparing it in final form.

W. S. MARTIN

W. S. Martin, Director
Division of Iron and Ferro-Alloys

Attachment

TLChapman:foc
10-4-57
cc to: Docket
Read. File

copy of draft attached for Legal

8623

OCT 2 5 40 PM 57

XDXXXXXX-118K

YWA183

WAF SP 12 I-GS-G

SPOKANE WASH 10-2-57 1420U

MR GEORGE C SELFRIDGE CHAIRMAN OPERATING COMMITTEE DMEA DEPT OF INTERIOR, WA.

REURTT OCTOBER 2, 1957 DOCKET NO. DMEA 2874 UMONT MINING INC. REQUEST AMMENDMENT SPECIFY HOLE WILL START 10 INCHES AND MAY BE REDUCTED TO MINIMUM OF 4 INCHES.

A E WEISSENBORN EXECUTIVE OFFICER DMEA FIELD TEAM REGION 1

2 1957 2874 10 4

SLP 1423U

Special

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 3 1957

DATE	INITIALS	CODE
10/3	C	220
10/3	WSM	400

OCT 3 9 22 AM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-1	Chapman	400
10-1	Martin	400
		800
10/1	GCS	130
"	Johnson	110
2	Butterdorf	100
10/2	CP	220
		400

OCT 2 1957

INTERIOR

DMEA

T E L E T Y P E

xxxxxxxxxxxxxxxxxxxxxxxxxx

14x4401(01) REVOLVING FUND,

DEFENSE PRODUCTION ACT, INTERIOR, (TRANSFER TO OFFICE OF SECRETARY)

MR. A. E. WEISSENBORN, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION I
SOUTH 157 HOWARD STREET
SPOKANE 4, WASHINGTON

RE OUR COPY OF MACLAREN'S MEMO OF SEPTEMBER 16, CONCERNING TELEPHONE CALL OF DOLBY WHEELER, RE DOCKET NO. DMEA -2874, UMONT MINING, INC. FROM OUR WIRE OF SEPTEMBER 4, WE QUOTE "WILL WRITE AMENDMENT FOR HOLE NOT TO EXCEED 562 FEET IN DEPTH COSTING NOT TO EXCEED $6.00 PER FOOT. OPERATOR MAY PROCEED AT HIS OWN RISK." WE CANNOT ~~CONSIDER~~ RECONSIDER~~THIS~~. AMENDMENT WILL SPECIFY HOLE WILL START AT 8 INCHES AND MAY BE REDUCED TO A MINIMUM OF 4 INCHES, AND COST NOT TO EXCEED $3,372.00.

George C. Selfridge
(Rep. CSF)
CHAIRMAN, OPERATING COMMITTEE

TLCHAPMAN/dlm 10-1-57
cc to: Code 400 FT. REG. I
Admr. R. File Messrs. Gilbert DeHuff, Jr., USBM
Oper. Comm. T. H. Kiilsgaard, USGS

8623

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 26 1957

DATE	INITIALS	CODE
9/26	C	220
9/26	WSM	400

So. 157 Howard Street
Spokane 4, Washington

September 23, 1957

Mr. Robert Garwood, Geologist
Unont Mining, Inc.
Norwich Mine Division
P. O. Box 727
Butte, Montana

Work Authorization
Re: Docket No. DMEA-2874 (Manganese)
Plutus and Norwich claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Garwood:

This is in reference to your telephone conversation of this morning with A. E. Weissenborn, D. H. MacLaren, W. C. Prinz, and J. A. Bowsher regarding a diamond drill hole (#4) south from the Norwich 400-foot level. Your proposal to intersect the Plutus vein by drilling a flat hole from the east face, S. 20° E. approximately 200 feet is in accordance with the contract and you are hereby authorized to proceed with this work. This hole will take the place of the two holes mentioned in the last paragraph of Dooley P. Wheeler's letter to Wilbur Criswell dated September 5, 1957.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Thomas E. Howard, Acting Member
U. S. Bureau of Mines

cc: DMEA (3)
USGM (2)
USBM (AD)
Prinz

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 26 1957

DATE	INITIALS	CODE
9/26	C	220
9/26	[illegible]	800
9/30	WSM	400

So. 157 Howard Street
Spokane 4, Washington

September 16, 1957

MEMORANDUM

To: The Files

From: D. R. MacLaren, U. S. Geological Survey

Subject: Telephone call from Dooley Wheeler, Jr., Vice President of Umont Mining, Inc., Docket No. DMEA-2874 (manganese), Plutus and Norwich claims, Silver Bow County, Montana Amended Contract No. Idm-E604.

Mr. Wheeler called about 3:30 p. m., September 13, 1957, to say that Ed Shay of Anaconda had suggested that he start his churn drilling with an 8-inch or 10-inch hole instead of the 6 inch requested by Wheeler. He wanted to know if the balance of funds allocated to bulldozing and any other unused funds could be allocated to the cost of the larger hole.

I told him the requested amendment was probably in Committee now, that he would have to make his request in writing, and that if he did so the whole question would have to be reconsidered. I advised him to wait and see what limitations might be in the amendment after which he could choose whether to return it unsigned and request the new changes, or sign it and ask later for more funds but pointed out that if the signed the amendment it would be next to impossible to get the cost per foot changed. He decided to wait for the contract.

"he" or "they"

(1) not just "next to"
(2) and whether it was signed or not

cc: DMEA (2)
USBM (2)
Prinz

10/1/57
Phoned Weissenborn but got MacLaren and told him we cannot increase unit prices in unit cost contracts. See our teletype of Oct. 2, 1957

WSM

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 16 1957

DATE	INITIALS	CODE
9-16	C	220
9/16	WSM	400

September 11, 1957

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

Re: Umont Mining, Inc.
Docket No. DMEA-2874 (Manganese)
Plutus and Norwich Claims
Silver Bow County, Montana
Amended Contract No. Idm-E604

Dear Mr. Selfridge:

Enclosed are two copies of a self-explanatory letter dated September 3, 1957 from Dooley P. Wheeler, Jr., vice president of Umont Mining, Inc., to Wilbur Criswell, resident manager. Two copies of the correspondence referred to in Mr. Wheeler's letter was forwarded to you August 29, 1957.

Sincerely yours,

DRMacLaren
D. R. MacLaren
Alternate Acting Exec. Officer
DMEA Region I, Field Team

Enclosures

cc: USBM (2)
Prinz

DMEA

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 16 1957

DATE	INITIALS	CODE
9/16	WSM	400

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-4	Chapman	400
9-4	Martin	400
9/4	Selfridge	130
9/4	McMahon	130
9/4	Kiilsgaard	130
"	Johnson	110
"	Battendorf	100
9/4	P	220
		400

SEP 4 1957

INTERIOR

DMEA

14X4401(01) REVOLVING
FUND, DEFENSE PRODUCTION ACT, INTERIOR
(TRANSFER TO OFFICE OF SECRETARY)

XXXXXXXXXXXXXXXXXXXXXXXXX

T E L E T Y P E

MR. A. E. WEISSENBORN, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION I
SOUTH 157 HOWARD STREET
SPOKANE 4, WASHINGTON

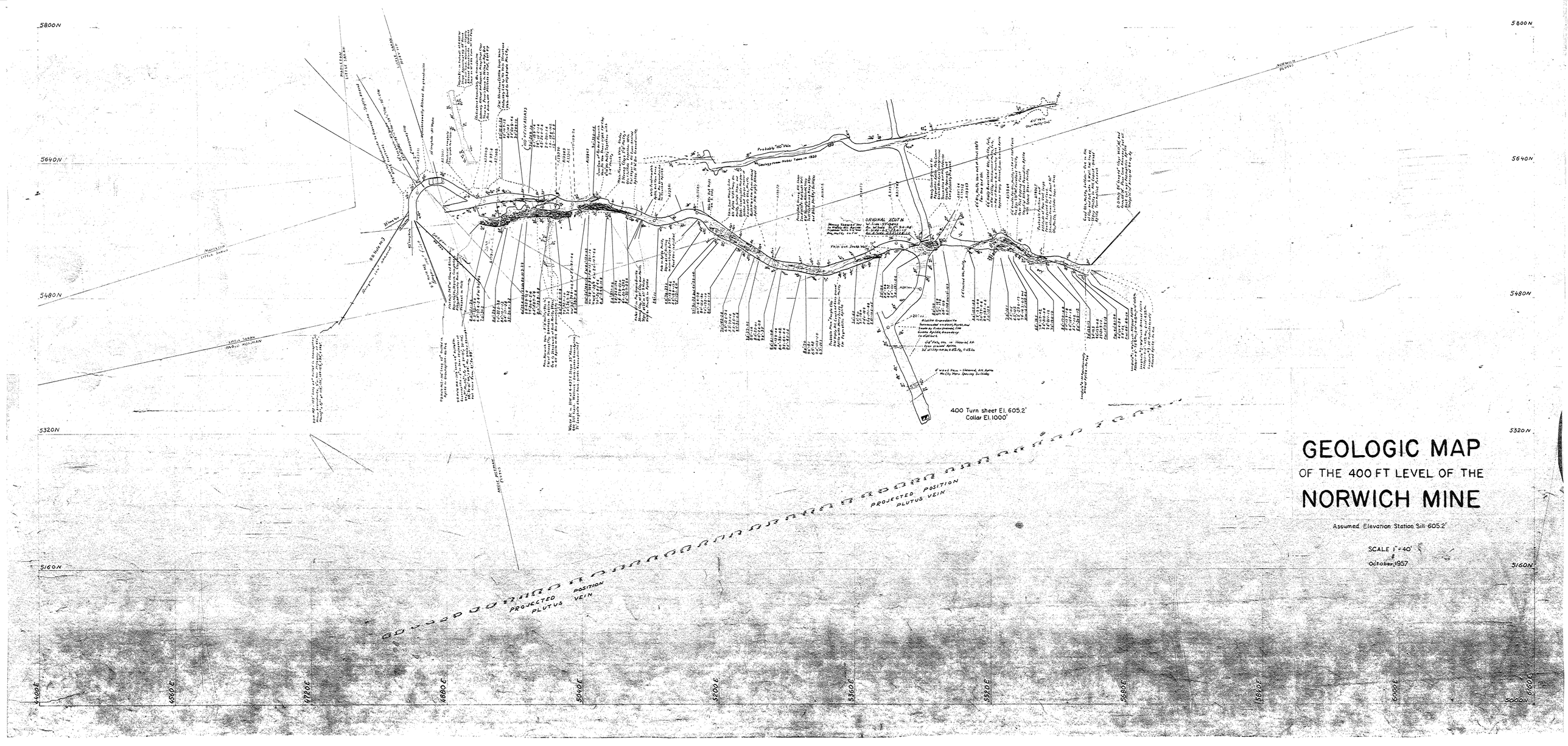
REURLET AUGUST 29, DOCKET NO. DMEA 2874, UMONT MINING, INC., WITH COPIES OPERATOR'S LETTER REQUESTING CHANGE FROM SURFACE DIAMOND DRILLING TO CHURN DRILLING AT DESIGNATED POINT. WE CONCUR WITH YOUR RECOMMENDATIONS, AND WILL WRITE AMENDMENT FOR HOLE NOT TO EXCEED 562 FEET IN DEPTH COSTING NOT TO EXCEED $6.00 PER FOOT. OPERATOR MAY PROCEED WITH HOLE AT HIS OWN RISK.

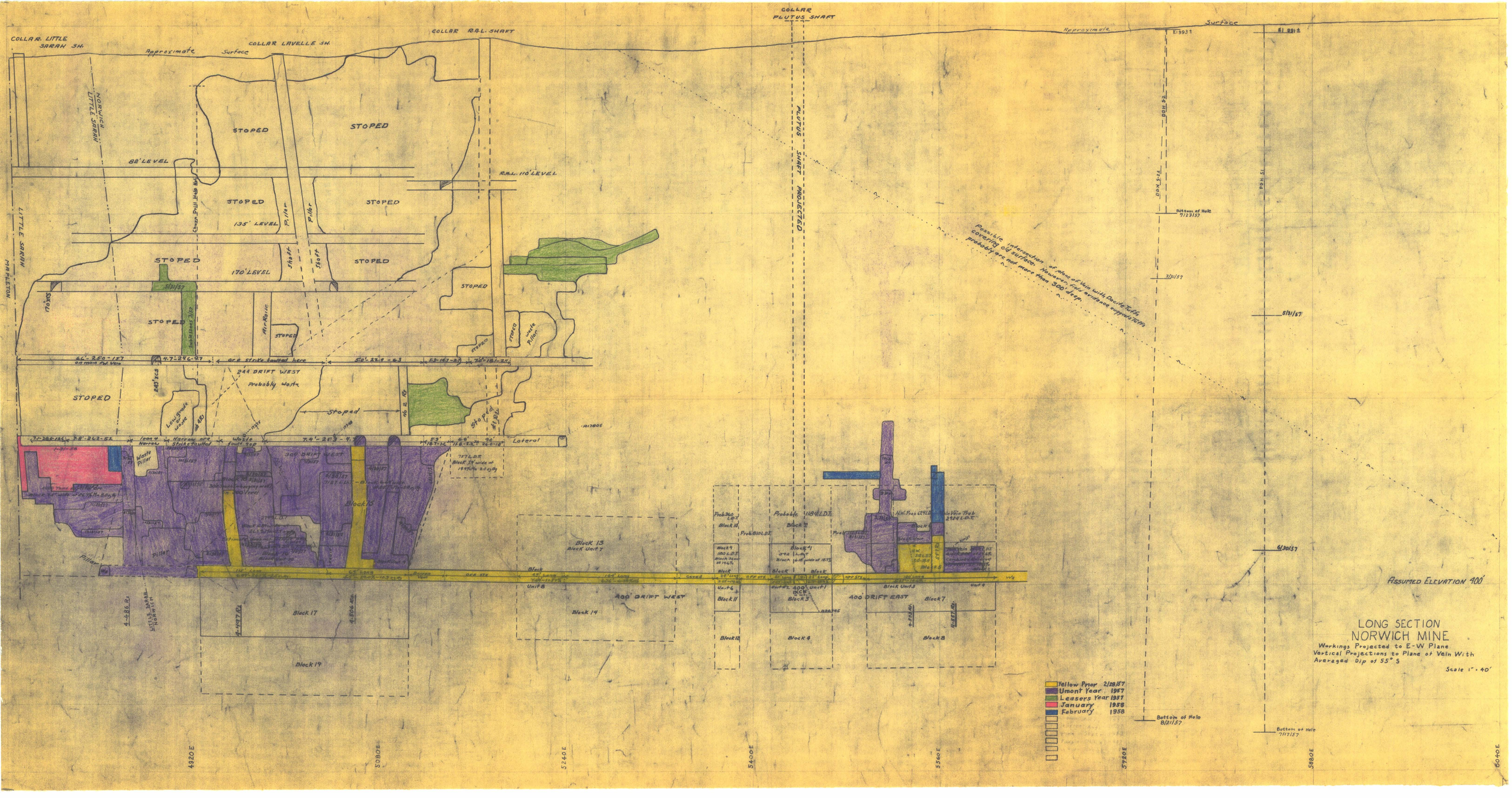
George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE
DMEA

TLCHAPMAN:foc
9-4-57
cc to: Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. Gilbert DeHuff, Jr., BM
T. H. Kiilsgaard, GS

8623


GEOLOGIC MAP
OF THE 400 FT LEVEL OF THE
NORWICH MINE
Assumed Elevation Station Sill 605.2'
SCALE 1" = 40'
October, 1957
400 Turn sheet El. 605.2'
Collar El. 1000'
ORIGINAL SCUTIN
PROJECTED POSITION
PLUTUS VEIN
PROJECTED POSITION
PLUTUS VEIN
5800N
5640N
5480N
5320N
5160N
4400E
4960E
4720E
4880E
5040E
5200E
5360E
5520E
5680E
5840E
6000E
6160E



LONG SECTION
NORWICH MINE
Workings Projected to E-W Plane
Vertical Projections to Plane of Vein With
Averaged Dip of 55° S

Scale 1" = 40'