DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2157

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION PROJECT

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

To:	Code 310 Copper Branch	Date	10/15/51
To:	Rec. Copper Branch	Date	OCT 16 1951
To:	[illegible]	Date	1/52
To:	Mr. Mettendorf	Date	5-27-52
To:	mails & files	Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

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

C C
O O
P P
Y

June 30, 1952

Memorandum

To: Mails & Files

From: Grace L. Ault, Secretary to
Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Subject: Closed files

The attached dockets, listed below, are to be considered closed since no responses have been received to 30-day notice given the applicants that unless data was submitted prior to the expiration of this period the docket would be considered closed.

DMA-1114 Maurice E. Shine (Banner Mine)
DMA-1538X Osmers, Fred C.
DMA-1883X Phillips, Dorr M.
DMA-2157 Victoria Mines, Inc.

/S/ Grace L. Ault

C C
O O
P P
Y

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

Returned to Mr. Ellis 3/18/53 by DMPA, Copper Branch.

June 4, 1952

RECEIPT

DMA-2157

The following documents have been loaned to Mr. Gowan, Copper Branch, DMPA, in accordance with telephone conversation this date with Mr. Ellis:

MF-103 Application dated 9/10/51 - Victoria Mines, Inc. Box 247, Sheridan, Montana

Addendum A, dated January 26, 1951, 6 pages, (unsigned original John T. Potts, President, to Mr. James Boyd, Acting Dir.,

Addendum B (Exhibit A, dated 8/31/51, 5-page "Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.", submitted by Irving G. Irving, Mining Geologist (original copy)

Addenum C, dated 8/28/51 - 1 page

Addendum D, dated 8/4/51 - 1 page

Addendum E, dated 8/31/51- 3 pages

Addendum F, dated (no date)1 page

Addendum G, (no date)1 page

MF-100 dated June 27, 1951

Maps, numbered 3, 4, 5, 6 and 7.

Note: Maps 1, 2, 8 and 9 referred to were not furnished at time the application was received.

For Mr. Gowan

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

June 4, 1952

RECEIPT

DMA-2157

The following documents have been loaned to Mr. Gowan, Copper Branch, DMPA, in accordance with telephone conversation this date with Mr. Ellis:

MF-103 Application dated 9/10/51 - Victoria Mines, Inc. Box 247, Sheridan, Montana

Addendum A, dated January 26, 1951, 6 pages, (unsigned original John T. Potts, President, to Mr. James Boyd, Acting Dir.,

Addendum B (Exhibit A, dated 8/31/51, 5-page "Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.", submitted by Irving G. Irving, Mining Geologist (original copy)

Addenum C, dated 8/28/51 - 1 page

Addendum D, dated 8/4/51 - 1 page

Addendum E, dated 8/31/51- 3 pages

Addendum F, dated (no date)1 page

Addendum G, (no date)1 page

MF-100 dated June 27, 1951

Maps, numbered 3, 4, 5, 6 and 7.

Note: Maps 1, 2, 8 and 9 referred to were not furnished at time the application was received.

For Mr. Gowan

FILE COPY
SURNAME:

700

HKeller
Ellis
Mitt

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

MAY 28 1952

Mr. John T. Cotter, President
Victoria Inec, Inc.
Box 247
Sheridan, Montana

Re: Docket No. [illegible]-2157 (Copper)
Silver Star Line
Madison County, Montana

Dear Mr. Cotter:

Reference is made to our letter to you of January 17, 1952, in connection with your above-docketed application for aid in an exploration project in the amount of $19,936.45, dated October 10, 1951. At that time we requested you to revise your application and addenda to cover only exploration work.

Nothing further has been received from you and we assume that you no longer desire to proceed with the application. We wish to cooperate with you in the matter by allowing ample time, but if the needed data has not been received by June 30, 1952, we will then consider the docket closed.

Sincerely yours,

Ernest M. Ellis, Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

cc 5/28

HFKeller/jem
5/27/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson-3621
Ned Nelson-4216 GSA
Ellis Keller
Field Team, Region II (2)

700
FILE COPY
SURNAME:

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

JAN 17 1952 AIR MAIL

Mr. John A. Potts, President
Victoria Silver, Inc.
Box 247
Meridian, Montana

Re: Docket DMA-2157 (Copper)
Silver Star Mine
Nelson County, Montana

Dear Mr. Potts:

Your subject application for aid in an exploration project in the amount of $49,933.45 is being studied by this department.

Kindly revise your application and addenda to cover only exploration work that would be done when and if the Government would approve a contract for such a project. The Government cannot assume financial obligations for any exploration work done before the date on which a contract might be signed. Therefore you will not be entitled to the credit that you have requested in your application.

This department processes only applications for aid for exploration projects and has nothing to do with the award of price differentials for copper produced in the United States. Such applications are reviewed by the Defense Materials Procurement Agency and awards if at all, are granted only after a very complete study of all concerned justifies such an award.

This request for a revision of your application in no way implies that the Government will approve a contract for the proposed exploration project and your application will receive further consideration on the receipt of this new information.

Sincerely yours,

Ernest M. Ellis, Acting Chief
Base and Fine Metals Division
Defense Minerals Exploration
Administration

H.F.Keller/jem 1-17-52
cc to: Adm. Reading File
Docket
Messrs. Johnson,CH Rm. 3621
Nelson,Ned Rm. 4216 G.S.
Ellis
Keller
Field Team, Reg. II (2)

Notes

Date ?

Tricky type of deposit, no large reserves not to be expected.
But high costs — go with the type.
Assuming the operation has gone along prolong. May have later personnel footing.
Looked to have been well run, but did it ever show a profit?
A good look justified, but while see flaws not encouraging.

1-11-52
DMA-2157
Victoria Mines, Inc.

(Ned Nelson)

1. Perhaps needs field referral.
2. Back work payment not to be included.
3. Revision of project.
4. Maps 1, 2, 8 & 9?

Rm. 4076

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2157

Commodity COPPER

Total Amount $149,938.45

Govt. Participation $74,969.23

1. Name and Address of Applicant VICTORIA MINES INC.
BOX 247, SHERIDAN MONTANA

2. Location of Property SILVER STAR, Alunigardy, MADISON COUNTY, MONTANA T2S, R6W

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? YES

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? YES OWNER
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower PROBABLY

b) Equipment and supplies
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* YES

d) Water (question 13)* YES

e) Power (question 13)* YES

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* YES

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? Yes If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Not all maps present that are claimed to be (Map 1, 2, 8, 9 Missing)

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? No not all

If not, what part of it is? Diamond drilling and as far as can be determined with the maps available all but running on the 916 Ro.

Is this part a worthwhile exploration project? YES

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? —

f) Should more information be requested from applicant? Yes Maps Breakdown of costs

g) Is a field examination necessary to complete Exhibit A? YES

11. Exhibit B (question 23-d)*

a) Is it applicable?

b) If so, are sufficient data furnished? If so, attach a draft.

c) Is a field check needed?

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable?

b) Sufficient data? If so, attach a draft.

c) Are rents and charges reasonable?

d) Is a field check needed?

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data?

b) Is the schedule adequate for the work proposed?

c) Is the schedule excessive for the work proposed?

d) Are the proposed wages and salaries reasonable?

e) Is a field check needed?

Costs cannot be figured out since work already done is included.

DMA-2157

EXHIBIT A

PROPOSED PROJECT

The applicant proposes to

A. 1. Diamond Drill on the 900 level north area the 906 raise

a. Holes 301 & 302 (120' each) to prospect below 900 level for veins A & B - 240 ft.

b. Hole 305 on Vein B on int. level - 30 ft.

c. Holes 304-308, on Breccia Vein - 270 ft

2. Raising on 900 level Extend 916 to the surface 50'
" 918 " " " " 80'

B. In 905 Rs area.

a. Further drilling involving holes # 112 thru 115 550 ft.

C. Further development of Pit Orebodies, including sinking.

a. Diamond Drilling - Holes 200 - 214 - 1,817'

D. A gap Claim on the 141 level

a. Drifting. 160'

b. Crosscutting 50'

c. Diamond Drilling - holes 400-403 525'

E 910 Crosscut

a. Raise from face of 910 Crosscut to get downward extension of Ammonia Pit orebodies 300'

F. A gap from Broadway Mine

a. Drive out under a gap ground from north end of the Broadway 900 level

1. Drifting 575'

2. Crosscutting 125'

3. Raising 300'

DRA-2157

G. Broadway 1000 level

a. Pump out shaft from 900-1000 level and 1000 level drifts.

b. Rehabilitation of 1000 level station & drifts.

c. Drive north under 906 area and southwest under 905 area to develop ore underlying approximate drifting required 1500'

Total Drifting and Excavating	- 2410 ft	@ $28.30/ft	$67,900.00
Total Diamond Drilling	- 3432 ft	@ $2/ft	6864.00
Total Raising	- 732 ft	@ $30/ft	21960.00
			$2916,724

Pump out shaft & level & rehabilitation from underlying pumps 25000.00

$121,724 00

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

15. In your judgment, can the proposed work be done in the proposed time? _____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Applicant should be informed that work already done cannot be included as exploration. He should resubmit his project of the work to be done with itemized costs for this. Check drilling costs (2.00 per ft.) Check feasibility of project and geology to see if there is justification for all work to be done. Inform applicant that raising in process or bodies is not exploration.

Reviewed by: [illegible]
R. E. Nelson

Date _____

INT.-DUP. SEC., WASH., D.C. 99009

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2157

Commodity COPPER

Total Amount $149,938.45

Govt. Participation $78,288.23

1. Name and Address of Applicant VICTORIA MINES INC.
BOX 297 SHERIDAN MONTANA

2. Location of Property SILVER STAR Mining dist MADISON COUNTY
MONTANA T2S R6W

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? YES

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? YES OWNER
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future productive period? —

*question numbers are those of MF-103

Is this part a worthwhile exploration project? Yes

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? _____

f) Should more information be requested from applicant? Yes Breakdown

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? _____

b) If so, are sufficient data furnished? _____ If so, attach a draft.

c) Is a field check needed? _____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? _____

b) Sufficient data? _____ If so, attach a draft.

c) Are rents and charges reasonable? _____

d) Is a field check needed? _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? _____

b) Is the schedule adequate for the work proposed? _____

c) Is the schedule excessive for the work proposed? _____

d) Are the proposed wages and salaries reasonable? _____

e) Is a field check needed? _____

Costs cannot be figured out since work already done is included.

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Probably

b) Equipment and supplies
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? Yes If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Not all maps, permit that are claimed to be (Maps 1, 2, 8, 9 Hamang)

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? No not all

If not, what part of it is? Diamond drilling and as far as can be determined with the maps available all but running in the 916 lbs.

DMA-2157

EXHIBIT A

PROPOSED PROJECT

The applicant proposes to

A. 1. Diamond Drill on the 900 level north from the 906 raise

a. Holes 301 + 302 (120' each) to prospect below 900 level in veins A + B - 240 ft.

b. Hole 305 on Vein B on int. level - 30 ft.

c. Holes 304-308, on Breccia Vein - 270 ft

Extend 916 Rs to exit above 50'

2. Raising on 900 level " 918 " " " " 80 ft

B. In 905 Rs area

a. Further drilling involving holes # 112 thru 115 550 ft.

C. Further development of Pit Crosscuts, including sinking

a. Diamond Drilling - Holes 200 - 214 - 1,817'

D. A jay Claim on the 141 level

a. Drifting 160'

b. Crosscutting 50'

c. Diamond Drilling - holes 400 - 403 525'

~~E Drift~~

E 910 Crosscut

a. Raise from face of 910 Crosscut to get downward extension / common Pit crosscuts 300'

F Ajax from Broadway Mine

a. Drift out under Ajax ground from north end of the Broadway 900 level

1. Drifting 575'

2. Crosscutting 125'

3. Raising 300'

EAA-1157

G. Barrelling 1000 bbl

[illegible] 100-1000 bbl

and 100 bbl lights.

b. Rehabilitation 1000 bbl station. 4 yds.

c. Dismantle [illegible] and [illegible]

[illegible] 150'

1.(a) Dig [illegible]	[illegible]	@ 28-30¢/yd	$67,900.00
1.(b) Remove [illegible]	[illegible]	@ 2¢/yd	6564.00
1.(c) Refill	[illegible]	@ 30¢/yd	21960.00
			$96,724

Transport depot, and rehabilitation from [illegible] 25,000.00

$121,724.00

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

15. In your judgment, can the proposed work be done in the proposed time? _____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Applicant should be informed that work already done cannot be included as exploration. He should resubmit his project & the work to be done with itemized costs for this. Check drilling costs (2^{00} per ft.) Check feasibility of project and geology to see if there is justification for all work to be done. Inform applicant that raising up prospective bodies is not exploration.

Reviewed by: K. E. Kelson

K. E. Kelson

Date _____

INT.-DUP. SEC., WASH., D.C. 99009

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 2157

Commodity COPPER

Total Amount $149,938.45

Govt. Participation $74,969.23

1. Name and Address of Applicant VICTORIA MINES INC.
BOX 747, SHERIDAN MONTANA

2. Location of Property SILVER STAR Mining Dist., MADISON COUNTY,
MONTANA T2S R6W

3. Mineral or metal COPPER Is it listed in Section 9 of MO-5? YES

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? YES OWNER
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? —

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower PROBABLY

b) Equipment and supplies
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* YES

d) Water (question 13)* YES

e) Power (question 13)* YES

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* YES

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? YES

If not, are there sufficient data given so that you can describe the project? YES If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Not all map present that are claimed to be (Map 1, 2, 8, 9 Missing)

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? No not all

If not, what part of it is? Diamond drilling and as far as can be determined with the maps available all but missing on the 916 Rs

Is this part a worthwhile exploration project? YES

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? —

f) Should more information be requested from applicant? Yes Maps Breakdown of costs

g) Is a field examination necessary to complete Exhibit A? YES

11. Exhibit B (question 23-d)*

a) Is it applicable?

b) If so, are sufficient data furnished? If so, attach a draft.

c) Is a field check needed?

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable?

b) Sufficient data? If so, attach a draft.

c) Are rents and charges reasonable?

d) Is a field check needed?

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data?

b) Is the schedule adequate for the work proposed?

c) Is the schedule excessive for the work proposed?

d) Are the proposed wages and salaries reasonable?

e) Is a field check needed?

Costs can not be figured out since work already done is included.

DMA-2157

EXHIBIT A

PROPOSED PROJECT

The applicant proposes to

A. 1. Drift on the 900 level on the Broadway

a. Holes 301 & 302 (1½' wide) to prospect below 900 level for veins A, B - 240 ft.

b. Hole 305 on vein B in crosscut level - 30 ft.

c. Holes 304 & 308, on Bricelin Vein - 270 ft.

Extend 916 level to intersection 501
" 1968 " " " 1 " 82'

2. Raising on 900 level

B. In 405 Rs area

a. Further drilling according to Hole 114 thru 115 550 ft.

C. Further development of Pittsburg, including mining

a. Diamond Drilling Holes 200 - 214 - 1,817'

D. A gap Claim on the 191 level

a. Drifting 160'

b. Crosscutting 50'

c. Diamond Drilling - holes 401 - 403 515'

~~E. [illegible]~~

E. 910 Crosscut

a. Raise from face of 910 Crosscut to get downward extension of Ammon Pittsburg 300'

F. Gap from Broadway Mine

a. Drift out under Gap ground from north end of the Broadway 900 level ~~35~~

1. Drifting 575'

2. Crosscutting 125'

3. Raising 300'

DMA-2157

G. Broadway 1000 level

a. Pump out shaft from 500-1000 level and 1000 level drifts

b. Rehabilitation of 1000 level station, drifts

c. Drive north and south from and southwest [illegible] 405 area to develop ore and [illegible] approximate drifting required 1500'

Total Drifting and Incentive	- 2400 ft	@ $28.30/ft	$67,900.00
Total Diamond Drilling	- 5432 ft	@ $3/ft	6864.00
Total Raising	- 732 ft	@ $30/ft	21960.00
			$96,724

Pump out shaft, level & rehabilitation from including pumps 25000.00

$121,724.00

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

15. In your judgment, can the proposed work be done in the proposed time? _____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Applicant should be informed that work should not commence until exploration permit has been issued. It should not be done with strong, large cats. Check drilling costs (see page 1) check limit of project and verify to see if this is satisfactory. Should work be done from water? Not necessary in view of [illegible] exploration

Reviewed by: Leo Lynch
D. E. Nelson

Date _____

INT.-DUP. SEC., WASH., D.C. 99009

October 15, 1951

Mr. John T. Potts, President
Victoria Mines, Inc. Box 247,
Sheridan, Montana

Subject: DMA-2157
Re: Exploration

My dear Mr. Potts:

This will acknowledge receipt of your application dated October 10, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA- 2157 and referred to the Copper Branch.

Kindly refer to DMA- 2157 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

2463

dma 2157

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. Division St.
Spokane 2, Wash.

October 10, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 51951

Mr. J. B. Gowen, Chief
Copper Branch
Defense Minerals Administration
U. S. Department of Interior
Washington 25, D.C.

Subject: Application for Assistance
Victoria Mines, Inc., of
Sheridan, Mont.

Dear Mr. Gowen:

Transmitted herewith are the original and three copies of an application for exploration assistance from Victoria Mines, Inc., of Sheridan, Montana.

Inasmuch as the application appears unusually complete, a copy has not been retained here, and further action by the Field Team is not contemplated until there is a referral from your office. ? EWR.

Sincerely yours,

M. E. Volin
Acting Executive Officer
DMA Field Team
Region II

1201 N. Division St.
Spokane 2, Wash.

October 10, 1951

Mr. J. B. Gowen, Chief
Copper Branch
Defense Minerals Administration
U. S. Department of Interior
Washington 25, D.C.

Subject: Application for Assistance
Victoria Mines, Inc., of
Sheridan, Mont.

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M. E. Volin
Acting Executive Officer
DMA Field Team
Region II

1201 N. Division St.
Spokane 2, Wash.

October 10, 1951

Mr. J. B. Gowen, Chief
Copper Branch
Defense Minerals Administration
U. S. Department of Interior
Washington 25, D.C.

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M. E. Volin
Acting Executive Officer
DMA Field Team
Region II

1201 N. Division St.
Spokane 2, Wash.

October 10, 1951

Mr. J. B. Gowen, Chief
Copper Branch
Defense Minerals Administration
U. S. Department of Interior
Washington 25, D.C.

Subject: Application for Assistance
Victoria Mines, Inc., of
Sheridan, Mont.

Dear Mr. Gowen:

Transmitted herewith are the original and three copies of an application for exploration assistance from Victoria Mines, Inc., of Sheridan, Montana.

Inasmuch as the application appears unusually complete, a copy has not been retained here, and further action by the Field Team is not contemplated until there is a referral from your office.

Sincerely yours,

M. E. Volin
Acting Executive Officer
DMA Field Team
Region II

1201 N. Division St.
Spokane 2, Wash.

October 10, 1951

Mr. J. D. Cowen, Chief
Copper Branch
Defense Minerals Administration
U. S. Department of Interior
Washington 25, D.C.

Subject: Application for Assistance
Victoria Mines, Inc., of
Sheridan, Mont.

Dear Mr. Cowen:

Transmitted herewith are the original and three copies of an application for exploration assistance from Victoria Mines, Inc., of Sheridan, Montana.

Inasmuch as the application appears unusually complete, a copy has not been retained here, and further action by the Field Team is not contemplated until there is a referral from your office.

Sincerely yours,

M. E. Volin
Acting Executive Officer
DMA Field Team
Region II

Victoria Mines, Inc.
Sheridan, Montana

IRVING G. IRVING
MINING GEOLOGIST
84 Hirsour Bldg.
Butte, Montana

August 31 1951

Mr. M. E. Volin,
Chief of Mining Division,
Bureau of Mines,
Defense Minerals Administration
1207 North Division Street,
Spokane, Washington.

Dear Earl:

Enclosed are the following, pertaining to the application for aid---an exploration loan -- in connection with the Broadway Mine, of the Victoria Mines, Inc. :

1. Form MF-103, made out in quadruplicate, with letter of transmittal, signed by Mr. John T. Potts, President, and numerous addendums and reports.

2. Tracings and white prints of eight maps.

As suggested by you, I am sending the white prints, uncolored, as you may be able to do what is necessary to them in your office. If you do not need all of the four white prints of each map, could you kindly return the ones you do not need.

Please do not fail to return the tracings when they have served their purpose.

With kindest regards, I remain,

Sincerely yours,
I. G. Irving

VICTORIA MINES, INC.
BOX 247
SHERIDAN, MONTANA

September 10, 1951.

Mr. M. E. Volin,
Chief of Mining Division
Bureau of Mines
Defense Minerals Administration
1207 North Division Street
Spokane, Washington

Dear Mr. Volin:

Enclosed herewith is the loan application of Victoria Mines, Inc. on Form MF-103.

An exploration loan is being applied for. Federal aid including an exploration loan was applied for in letter form on January 26, 1951. This original application is included as Addendum A. You will note that parts of this original application are no longer applicable because of changed conditions.

The development work proposed and for which aid is requested is set forth in considerable detail, including estimated costs and is shown in Addendums E. and F. Also shown is the considerable work done since our original letter application and the costs of such work which has been wholly borne by Victoria Mines, Inc. The Victoria Mines, Inc. justifiably expects the Government to give them credit on a matched funds basis for this work that has already been done since the date of our original letter application.

Accompanying the application are a set of tracings. You suggested to Mr. Irving, our engineer, that it would not be necessary to have four sets of white prints made but that you would have copies made in your office and return the tracings as soon as possible. A letter is also enclosed by Mr. Irving pertaining to these maps which we are having insured in transit.

Since the property is being currently operated, all important openings on the property are accessible for examination by your engineers.

Some ore has been found by the work that has already been done and can be ascertained by your engineers when the property is examined.

We cannot stress too strongly the need for Government aid in further development and production from this property which is currently producing copper so vitallyy needed. Development carried on by this company since our letter application of 1/26/51 has given us ore which is now being mined. Because of the lack of funds to support extensive development the actual blocking out of large tonnages has not been possible. Mining of a necessity has had to take precedance over any development program and the monies produced therefrom

have limited the amounts to be expended for development.

We have only been able to carry on this operation since our letter application of January 26, 1951 because of the revenue we have been able to derive from limited mining of new ore that has been found through the small amount of development and the personal funds advanced by the writer.

During February we continued to operate three shifts in the mill when possible but during March this was cut to two shifts and in April and the greater part of May we operated on only one shift in the mill. Newly developed ore again allowed us to operate during June, July and August with two shifts in the mill but on a smaller tonnage per shift than heretofore.

With adequate financial assistance for development work we feel certain additional ore can be developed that will allow us to operate three shifts per day in the mill with a possible increase of tonnage on each shift.

Without financial aid for development as we are requesting, we are again forced to reiterate that we cannot carry on the operation of this property and will be forced to close it.

Yours truly,

Victoria Mines, Inc.

John T. Potts

John T. Potts, President.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 21157

Date received 10-15-51

Participation

RECEIVED OCT 15 1951 Defense Minerals Administration

Victoria Mines, Inc.
Box 247
Sheridan, Montana

Name and address of applicant

Date September 10, 1951

FILL IN THIS BLOCK

Date of application Original letter application dated January 26, 1951

Estimated cost 149, 938.45

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Star, Madison County, Montana

Date of filing MF-100 June 30, 1951

DMA Docket Number, if available MS 1773

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation — See MF-100
*2. If a partnership, state names and addresses of partners. "
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. "
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. "
*5. Are you the owner or the lessee of the property? "
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. Inapplicable

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation. (Section 9 of Mineral Order 5) 50% of cost. We expect the work done on these projects as outlined in addendum E and costs stated in Addendum D to be credited against our share because this work was done since date of our original letter application of January 26, 1951.

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. See MF-100 and Addendums A & B.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Same

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. See MF-100

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. "

*13. State source and quantity of water available for operations and its sufficiency at all seasons. "
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. "

15. State in detail how the ore could be shipped and how and where milled. "

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. See Addendums A & B

(*b*) State briefly the known history and production of adjoining and neighboring properties See Addendum B

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. See Addendum B.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining			See MF-100	
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly. See Addendum B and Maps accompanying.

(*b*) Submit available maps and assay data. " " " " " " "

(*c*) Give estimated tonnage and grade of each class of ore reserves. " " " " "

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Copper

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it Addendum E.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Addendum D & E and maps accompanying and results of work done to date Addendum C

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate as follows: See Addendum G

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. " " "

(*b*) Supervisors, by numbers and positions, with salaries of each. " " "

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings. " " "

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. " "

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. " " "

(*f*) Cost of rental for equipment which the operator proposes to rent. " " "

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. "

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. " "

(*i*) Cost of power, water, utilities, and any other items not provided for above. " "

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. " " "

CERTIFICATION

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

Victoria Mines, Inc.
(Name of company)

By John T. Potts
(Signature of authorized official)

September 11, 1951
(Date)

President.
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Victoria Mines, Inc.
Sheridan, Montana

August 31 1951

Mr. M. E. Wolin,
Chief of Mining Division,
Bureau of Mines,
Defense Minerals Administration
1207 North Division Street,
Spokane, Washington.

Dear Earl:

Enclosed are the following, pertaining to the application for aid---an exploration loan -- in connection with the Broadway Mine, of the Victoria Mines, Inc. :

1. Form MF-103, made out in quadruplicate, with letter of transmittal, signed by Mr. John T. Potts, President, and numerous addendums and reports.

2. Tracings and white prints of eight maps.

As suggested by you, I am sending the white prints, uncolored, as you may be able to do what is necessary to them in your office. If you do not need all of the four white prints of each map, could you kindly return the ones you do not need.

Please do not fail to return the tracings when they have served their purpose.

With kindest regards, I remain,

Sincerely yours,
T. G. Irving

Victoria Mines, Inc.
Sheridan, Montana

September 10, 1951.

Mr. M. E. Volin,
Chief of Mining Division
Bureau of Mines
Defense Minerals Administration
1207 North Division Street
Spokane, Washington

Dear Mr. Volin:

Enclosed herewith is the loan application of Victoria Mines, Inc. on Form MF-109.

An exploration loan is being applied for. Federal aid including an exploration loan was applied for in letter form on January 26, 1951. This original application is included as Addendum A. You will note that parts of this original application are no longer applicable because of changed conditions.

The development work proposed and for which aid is requested is set forth in considerable detail, including estimated costs and is shown in Addendums E. and F. Also shown is the considerable work done since our original letter application and the costs of such work which has been wholly borne by Victoria Mines, Inc. The Victoria Mines, Inc. justifiably expects the Government to give them credit on a matched funds basis for this work that has already been done since the date of our original letter application.

Accompanying the application are a set of tracings. You suggested to Mr. Irving, our engineer, that it would not be necessary to have four sets of white prints made but that you would have copies made in your office and return the tracings as soon as possible. A letter is also enclosed by Mr. Irving pertaining to these maps which we are having insured in transit.

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Some ore has been found by the work that has already been done and can be ascertained by your engineers when the property is examined.

We cannot stress too strongly the need for Government aid in further development and production from this property which is currently producing copper so vitallyy needed. Development carried on by this company since our letter application of 1/26/51 has given us ore which is now being mined. Because of the lack of funds to support extensive development the actual blocking out of large tonnages has not been possible. Mining of, of necessity has had to take precedence over any development program and the monies produced therefrom

have limited the amounts to be expended for development.

We have only been able to carry on this operation since our letter application of January 26, 1951 because of the revenue we have been able to derive from limited mining of new ore that has been found through the small amount of development and the personal funds advanced by the writer.

During February we continued to operate three shifts in the mill when possible but during March this was cut to two shifts and in April and the greater part of May we operated on only one shift in the mill. Newly developed ore again allowed us to operate during June, July and August with two shifts in the mill but on a smaller tonnage per shift than heretofore.

With adequate financial assistance for development work we feel certain additional ore can be developed that will allow us to operate three shifts per day in the mill with a possible increase of tonnage on each shift.

Without financial aid for development as we are requesting, we are again forced to reiterate that we cannot carry on the operation of this property and will be forced to close it.

Yours truly,

Victoria Mines, Inc.

John T. Potts

John T. Potts, President.

To accompany application for aid, on Form MF-103
Victoria Mines, Inc., Sheridan, Montana

ADDENDUM A.

January 26, 1951

Mr. James Boyd, Acting Director
Minerals Administration for Defense
Room 6416, Dept. of Interior Bldg.,
Washington 25, D. C.

Dear Sir:

This communication is intended to be an application, in letter form, for assistance at the Broadway Group of claims, owned by Victoria Mines, Inc., which is currently producing copper ore in important quantities and which could with further development and mining aid increase substantially its production of this much needed metal and so contribute to the National Defense, in the present emergency.

Victoria Mines, Inc. owns and controls a compact group of 6 patented and 9 unpatented claims in Township 2 S ; Range 6 W; 2 miles west of Silver Star, Madison County, Montana. A 100 ton flotation mill is located adjacent to the main Broadway Shaft. Copper concentrates are shipped on the Northern Pacific Railway which has a loading ramp four miles east of the mill, to the Anaconda Copper Mining Company Smelter, at Anaconda, Montana, a distance of 65 miles.

Victoria Mines, Inc. began operation of the Broadway Group in 1937. Originally a gold producer, a cyanide plant was built at that time to treat such ores. Indications of copper ore were found at depth in the mine but could not be subsequently treated or developed because of the L 208 Gold Closing Order stopping operations. In late 1942 and early 1943 the cyanide plant was converted to flotation for treatment of lead-zinc ores from another property acquired by Victoria Mines, Inc. With the ending of Worls War II and the cessation of Government aid, these lead-zinc ores could no longer be hauled and treated profitably and the Broadway Group was reopened. Open pit work was begun on one of the claims of the Group and substantial amounts of copper ore were developed. These could be treated by the flotation plant previously used on the lead-zinc ores. The 900 level of the Broadway Shaft was unwatered and reopened at considerable expense and the copper ore found earlier was further developed and some tonnage was treated at the mill.

Expensive underground development work by means of diamond drilling showed considerable promise of a substantial tonnage of copper bearing ore and several drifts and raises were begun to develop this ore on the 900 level of the Broadway Shaft.

Additional extensive development work in the open pit previously referred to, in claims where gold ore mining had been carried on previously by the open pit method, revealed considerable quantities of oxidized copper ore. These are being mined cheaply by open pit methods but due to their being highly oxidized, recovery by flotation is consequently low as shown by the figures in the paragraph below. However, as of recent date and as mining has proceeded deeper, the oxidized copper ore has given way in the bottom of the pit to wholly sulphide material consisting of primary copper sulphides. Recovery, therefore, is expected to show great improvement.

The total production of copper since late 1948 to date has been 757,191 pounds from settlement assays. Production during 1950 was 358,214 pounds from ore with an average assay grade of 1.07% which included the oxidized copper ore and much low grade ore encountered in development. The dry tonnage milled during 1950 totalled 22,667 tons.

The Broadway Group is developed by a number of shafts and tunnels, chief of which is the Broadway Shaft, sunk to the 1000 level. Recent underground production has been wholly from the 900 level where ore is being produced from several places. The American pit, where open pit mining is being conducted, has been developed to a depth of 80 feet and is approximately 130 feet long by 80 feet wide.

On the property owned by Victoria Mines, Inc. Pre-Cambrian gneisses and Plaeozoic limestones are intruded by the quartz monzonite of the Boulder batholith. Orebodies, primarily gold and copper have formed in fissures traversing both the sedimentary and igneous rocks and occur also as replacements in the limestone at or near the contact of the quartz monzonite. The mineralization is apparently persistent, and in the case of the Broadway mine, ore is being currently found and mined on the 900 level. Development work and stope control is under the supervision of an experienced geologist.

Because of the lack of funds to support extensive development programs, the actual blocking out of large tonnages of proven ore has not been possible. Development of necessity has proceeded along with mining and while large potential tonnages are indicated, and a number of faces are in ore, to prove up on these extensions and build up a developed ore reserve will require financial help and a long range development program. Diamond drilling has indicated that large potential tonnages can be made available through such a development program.

Current costs show that underground mining is averaging $5.402 per ton of ore hoisted; open pit ore is being mined at a cost of $1.450 per ton and development work done has amounted to $0.496

per ton of ore hoisted. Total milling costs of all ores mined is $1.847 per dry ton milled and hauling is $0.420 per ton. Miscellaneous costs are $0.387 per ton hoisted. A total average cost of $5.822 per ton of ore mined and milled as shown.

The wages now being paid have been effective since August, 1948. Wage scales at our mine have been governed by the rate effective in the Butte Mines. However, during the past few years, because of low prices for metals, Victoria Mines has been unable to meet the increases that have taken place in Butte. Because of the increased cost of living during the past year, an increase in the wage scale at the Victoria Mines will have to be made. At the present time there is a $2.30 per day differential existing between the wages being paid the Butte miners and the Victoria miners and the custom has been for many years to have a differential of only $1.00 per day. The cost of supplies is increasing also. It is therefore expected that our total mining and milling costs will approximate $7.00 per ton.

In order to assist our Government during the present National Emergency and in the consequent dire need for strategic metals, we are making this appeal for assistance so that we may be able to develop and carry on production of copper and not only maintain our present rate of production but increase it in the immediate future.

Below is set forth an outline of the assistance needed.

If granted, the assistance would allow for a well organized development program to prove up known extensions of ore that now exist and help develop areas and situations where the chances of finding new copper ore-bodies are very favorable according to geological indications. Also the assistance would materially aid in covering mining costs under present conditions and take care of probable cost increases in the near future. We know that it is impossible for us to continue to operate under our present wage scale and the monies expended in the past for our present production and development has not been replaced through settlement for metals produced. In fact we have incurred a long continued loss despite a cost as low as any obtained by any like company in this section of the country. We have practically reached the limit of our resources because of such losses. We can truthfully state that not a single officer of this corporation has received any remuneration of any kind during this period and that no high salaries or commissions are being paid to any workman whatsoever.

Therefore, we ask the Government's consideration of the following: That an arrangement be made so that we can receive payment for the copper metal produced, based on the following conditions:

Anticipated average grade for 1951 is Au .06; Ag 0.8; Cu 1.50%

Anticipated tonnage milled per day is 100 dry tons of ore.

Based on the above assays we anticipate the following grades and revenues would result:

Average copper concentrate grade	9.0%
Average tons concentrate produced	14.28 per day
Average pounds copper contained	2570
Smelter content payable (90% of above)	2313 pounds

Value of copper -------- $ 370.00 per day

Value of gold content based on .32 oz per ton in concentrate is -

14.28 tons conc. x .32 x 91.13% x 34.9125

Value of gold --------- $ 145.50 per day

Value of silver content based on 4.0 oz per ton in concentrate -

14.28 tons conc. x 4.0 - 1.0 x .90¢ less .02¢

Value of silver ------- $ 37.70 per day

Anticipated total revenue from the above grades is $ 553.30 per day.

Anticipated costs per month are :

Wages and payroll taxes	$ 11,300.00
Power	1,500.00
Insurance, assays, etc.	1,860.00
Supplies	2,500.00
	$ 17,160.00
Plus 10% for contingencies	1,716.00
Total monthly costs------	$ 18,876.00
Average for 26 working days	$ 726.00 per day
Less: Gold and silver revenues above	183.00
	$ 543.00
Less: Copper revenue at present price	$ 370.00
Deficit under current conditions	$ 173.00 per day

On the basis of the above calculated revenue and costs and the deficit shown, the operation to be continued requires the copper price shown in the calculation below.

At 2313 pounds of payable copper calculated, a market price of $.337 per pound would have to be realized. From this amount a deduction of $.082 per pound is necessary to cover smelter treatment charges, freight and the price differential deduction by the smelter, leaving a net of $.255 per pound which includes $.02 per pound for profit.

In addition to the above request for assistance in continuing current production, we request your consideration of a loan of $125,000.00 to carry on extensive development work as outlined below:

Anticipated 3000 feet of diamond drilling at $2.00 per foot	$ 6,000.00
Unwatering from 900 to 1000 level of the Broadway Shaft and rehabilitating 1000 level station, drifts, etc. and including necessary pumps	35,000.00
Driving new drifts to tap known ore bodies, an estimated 1500 feet of drift at $20.00 per foot	30,000.00
Further development of open pit ore bodies and sinking	25,000.00
Reopening old workings on the Ajax claim where recent samples taken show existence of a considerable sized copper ore body requiring rehabilitation of shaft, installation of equipment, head frame and bins	14,000.00
The balance to be available for unknown contingencies and development	15,000.00

Not more than $5,000.00 of the total of the above loan will be required for capital equipment and the balance of 96% will be spent entirely on development work.

In repayment of such loan, we would agree to pay back to the Government on the basis of 50% of all new profits accruing from the Broadway Group operations and we would anticipate increased production to a basis of 700,000 pounds of copper metal per year.

It is our intention to apply for an additional loan and assistance on the Toledo-Buckeye Group of claims, located near Sheridan, Montana, that are also owned by Victoria Mines, Inc.

to assist the Government in their need for lead-zinc ores. This request will be forwarded as soon as we can correlate all our facts and figures.

We trust this application will receive your serious consideration and if any additional information is required, please let us know.

Yours very truly,

VICTORIA MINES, INC.,

John T. Potts, President

JTP-p

To accompany application for aid on MF-103
Victoria Mines, Inc., Sheridan, Montana

8/31/51

ADDENDUM B.

EXHIBIT A.

(Addendum to MF-100)
Victoria Mines, Inc.
Sheridan, Montana.

Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.

Location

The property, known as the Broadway-Victoria Mine, owned by the Victoria Mines, Inc., is located in Sections 2 and 3, Townships 1 and 2 South, Range 6 West, MPM, about two miles west of Silver Star, Madison County, Montana. The area is referred to as the Silver Star Mining District. The nearest shipping point is at Silver Star which is on the Northern Pacific Railroad.

History and Production

Mining in the area began in the 1860s, and is described in the early writings of R. W. Raymond. Early producers were the Broadway, Green Campbell, Iron Rod and many other smaller properties. Several small mills were quickly built and operated in the 1870s at the various properties. The district has, with a few temporary interruptions, been a continuous producer since the early days.

A report of Hans Fritzsche, available at the Montana School of Mines and entitled "Geology and Ore Reserves of the Silver Star Mining District", places total production--up through 1935--at $2,500,000.00. The Broadway mine accounted for almost fifty percent of this early production. Production since 1935 has been considerable, and is tabulated on a supplementary sheet.

At the present time the mine and mill are working on a two-shift basis and production is at the rate of about 80 tons per day. The crude ore contains copper, gold and silver, and concentrates are shipped to the smelter of the Anaconda Copper Mining Company, at Anaconda, Montana.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

Management

The present operators have managed the property for more than twelve years. John T. Potts, the president of the company, is a man of wide mining experience and devotes a good deal of time to managing the operation. Development work is supervised and laid out by I. G. Irving---a mining geologist of twenty-three years experience. Competent foremen are in charge of mine and mill operations.

Mill and Metallurgical Supervision

The original cyanide mill was converted to a flotation mill several years ago when sulphide copper ores were encountered. The metallurgical research and supervision is under the guidance of The Galigher Company, of Salt Lake City, Utah.

The present mill has a capacity of approximately 125 tons per day.

Mine Equipment

The Broadway mine has an excellent surface plant. Electric power operates the main hoist, the two compressors, underground pumps and other auxiliary equipment. Operations at the American Pit and the Ajax Shaft are furnished with good hoisting equipment and electric power.

Mining operations are aided by mucking machines, slushers and other modern and mechanical equipment.

A fleet of trucks, in good condition, move the ore from mine to mill and the concentrates to the railroad.

Development

Mining is taking place both underground, off the Broadway and Ajax shafts, and in an open pit. The pit is referred to as the American Pit and was mined as an open cut to a depth of about 80 feet below the surface. A shaft was recently sunk to a depth of fifty feet below the bottom of this pit and mining and development work is proceeding off the bottom of this shaft, on what is called the 45 Pit Level.

The main Broadway shaft has been sunk, on the incline, to a depth of approximately 820 feet, and the bottom level is about 590 feet vertically below the surface. The bottom level, referred to as the 1000 level, is under water but the 900 level (about 80' above) is the scene of most of the present underground mining.

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

A total of approximately 1,700 feet of drifting and crosscutting has been done on the 900 level. On the upper levels and the 1000 level below approximately 3,000 feet of work is represented. Present operations include stoping and development work of various kinds on the 900 level.

A shaft on the Keystone claim has recently been reopened to a depth of 141 feet and drifting is proceeding off this working, toward the Ajax ground where ore has been exposed in shallower workings above.

Three other important shafts-- the East Broadway, the Hudson and the West Hudson-- have been sunk to depths of several hundred feet with considerable drifting and crosscutting on various levels.

These shafts are inactive at present. Numerous smaller workings exist on the property also.

A set of maps is being prepared and will be sent in with loan form MF-101, which should arrive at the proper D. M. A. office in the near future. These maps may be consulted, on their arrival if further details are needed on the development work.

Geology and Ore Occurrence

Broadly viewed, the orebodies occur at and near the contact of Paleozoic sedimentary rocks and Pre-Cambrian gneisses and schists with a granitic intrusion--apparently part of the Boulder batholith. Specifically, in the Broadway-Victoria mine, copper-gold ore which is oxidized in the upper levels but present in sulphide form at varying depths, is found in fissures and fractured zones and as replacement bodies in the altered limestone and tactite areas adjacent or very close to the granite.

In the old Broadway workings, while the ore followed in general the igneous contact, there is a suggestion of selective replacement of certain limestone beds as they abut the granite. Further, although a fissure system appears to have exerted significant control in the emplacement of the ore shoots, it is also believed that the fractured zone of the igneous-sedimentary contact itself was in general the main channelway for the ore solutions.

In the American Pit, while the copper ore being mined now gives the superficial appearance of being an irregular body of the "contact metamorphic type", there is very strong evidence that only certain beds, indistinct now because of their more or less complete sillication, contain commercial ore. Present development work, including diamond drilling, is exploring the possible extensions of this ore as tabular bodies of a bedded nature.

EXHIBIT A

Addendum to MF--100----Victoria Mines, Inc., Sheridan, Montana

The Keystone-Ajax development work is revealing ore that closely conforms to the granite contact and a shoot, perhaps 300 to 400 feet long is a possibility.

Underground on the Broadway 900 level, new ore has been found, not only as fissure replacements, but also as a replacement of a broad breccia zone. This latter ore presents new possibilities, in the camp, and is not so directly related to the contact as some of the other occurrences.

Ore Reserves and Potential Tonnage

Owing to the necessity of completing this form (MF-100) before June 30, 1951, a set of maps showing complete details of the ore blocked out, or indicated, can not be prepared in time. These supplementary maps, and longitudinal sections, are being prepared, however, and will accompany loan application form MF-101, which will be sent in a few weeks hence.

The following estimate of blocked out and probable ore will be submitted, however, subject to later modification: *

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore - tons	Probable ore
		Revised.				
American Pit	West orebody above 45 lev.	0.08	1.1	2.75	4,000	
"	West orebody extended 50' below 45 lev.	"	"	"		1800 ~~4,000~~
"	East orebody above 45 lev.	06 0.~~04~~	1.0 ~~0.6~~	1.50		1000 ~~3,000~~
"	East orebody extended 50' below 45 lev.	06 "	1.0 ~~"~~	"		1,000 ~~3,000~~
Broadway Mine	Ore exposed on sill in 906 area, extended 50' below	0.10	2.0	1.99		1,500
"	In 912DWS extended above to 906 Int.dr.	0.22	2.8	3.28	2,120	
"	In 912 DSW extended 50' below sill	0.08	1.0	1.25		1,375

* Note: Corrections in red are revisions made 7/20/51 [illegible]

EXHIBIT A

Addendum to MF-100---Victoria Mines, Inc., Sheridan, Montana

Location	Description	Average Assay oz. Au--oz.Ag.- %Cu			Proven ore--tons	Probable - ore
Broadway Mine	In 906 Idne. vein A carried 50' above	0.33	3.1	5.70	880	
"	In 906 IDNE Vein B carried 50' above	0.11	0.9	1.47	950	
"	In 906 IDW 50' above	0.32	0.4	1.32	2,500	
	50' below	~~0.20~~ 0.32	~~0.7~~ 0.4	~~1.65~~ 1.32		2,500
Totals & Average Grade (		~~0.16~~ 0.19	~~1.5~~ 1.1	~~2.72~~ 2.65	10,450	~~15,375~~ 9,175
		~~0.09~~ 0.14	~~1.0~~ 1.0	~~1.87~~ 1.74		
Combined (Proved & Probable)		~~0.12~~ 0.16	~~1.2~~ 1.1	~~2.21~~ 2.22	~~25,825~~ 19,625	

In addition to the above, more or less proved and probable ore, there are several other areas on the property where prospective and probable ore exists and present development work (done since loan application in letter form was sent in on January 26, 1951) plus additional work if government aid is actually and finally rendered, will convert some of the indicated ore in these areas to the actual ore reserve. Particularly well thought of in this respect is the Keystone-Ajax development work and further development at greater depths below the American and Victoria Pits.

Diamond drilling, now in progress, in the vicinity of 905 stope, southwest of the Broadway shaft, has an excellent chance of revealing important orebodies in this area. Here, geologic factors are good for the localization of orebodies not yet found and for the extension of oreshoots mined in the early days in the upper levels of the old Broadway Mine.

Respectfully submitted,

Irving G. Irving

Irving G. Irving
Mining Geologist

6/22/51

ADDENDUM C

Victoria Mines, Inc
Sheridan, Montana.

8/28/51

To accompany Application for aid on Form MF-103

Work done at the Broadway Mine, Silver Star, Montana, since February 1, 1951, on development projects, outlined in letter application, for aid, dated Janaury 26, 1951

A. Diamond Drilling

In 905 area--- on 900 level
Holes Nos. 109, 110, 111, and 112--totalling 291'

On 900 level North end
Holes Nos. 101,102,103,104,105,106,107,108 and 113
totalling---------- 717'

In American pit
Hole 203 --for a total of 100'

Total drilling 1108'

B. Other Development Work

On 900 Level--North End
Raising (902 Rs., 916 Rs. and 918 Rs.) totalling 123'
Crosscutting (from 906Rs northwest to cut vein in 912DSW.) 18'
Drifting
In 912 DSW.------- 73'
In 906 Int. drift N.E. , on Vein B----- 55'

In American Pit
Shaft Sinking (from bottom of pit to "45"level) 50'
Drifting and crosscutting--on 45 level--a total of 199'
Raising from 45 level (3 raises) totalling 103'

Totals---
Shaft Sinking 50'
Raising 226'
Drifting & x-cutting 345'

C. In Keystone Shaft and Ajax Ground

This work comprised the setting up of a a surface plant, including housing and headframe, and the rehabilitation of 145' ~~66~~ old shaft. From the bottom of the shaft a station was cut and to date ~~90'~~ 110' of drifting and crosscutting has been done. 180

(See Addendum D for an estimate of the cost of this work)

ADDENDUM D

Victoria Mines, Inc.
Sheridan, Montana

8/4/51

To accompany Application for aid on Form MF-103

Cost of work done at Broadway Mine, Silver Star, Montana since February 1, 1951 on development projects outlined in letter application for aid, dated January 26, 1951, the work done being outlined in Addendum C.

A. Diamond drilling.

In 905 Area -	291 feet	$ 502.35
900 level north -	717 feet	1237.76
American Pit -	100 feet	186.45
	Total	$ 1926.56

B. Development Work.

900 Level North -	Raising Crosscutting Drifiting	$ 8388.94
American Pit -	Shaft Sinking Drifting Raising	$ 9295.72

C. Keystone Shaft - Ajax Ground

- Total cost to 8/1/51	$ 7721.34

Total cost of work done since 2/1/51 to 8/1/51 $ 27,332.56

ADDENDUM E

To accompany Application for Aid
on Form # MF-103

Victoria Mines, Inc.
Sheridan, Montana
8/31/51

PROPOSED DEVELOPMENT WORK

The work outlined below was envisioned at the start of the year and was outlined broadly , but without specific detail, in our letter application, dated January 26, 1951.

The entire program is set forth, and also noted is the work done, on this program, by us, since the date of our original application.

A. In 906 Area

The further development of the orebodies exposed and partly developed, in the vicinity of 906 raise, on the 900 level, north. (See Maps 2,6 and 7)

1. Work already done, since 1/26/51
   a. Crosscutting-- In 906 xcn-- 18'
   b. Drifting--in 906 DRE.----- 55'
   in 912 DRW------- 73'
   c. Raising, in 902,916, and 918 raises-- 123'
   Total drifts, x-cuts and raises 269'

   d. Diamond drilling(holes 101 thru 108 and hole 113) 717'

2. Work yet to be done
   a. Raising---Extend 916 Rs to sill above 50'
   Extend 918 Rs. " " " 82'

   b. Diamond drilling
   Holes 301&302 (120' ea.) to prospect below 900 level for Veins A & B 240'
   Hole 305, on Vein B, on int. level 30'
   Holes 304 thru 308, on Breccia Vein 270'

B. In 905 Rs. Area

The further exploration, in 905 Rs area, southwest of station on the 900 level, for the downward extension of orebodies found above in the vicinity of the "nose" of the granitic intrusive, and in the anticlinal structure displayed in the limestone beds, in the vicinity of this intrusion. (See Map 2)

1. Work already done, since 1/26/51
   a. Drifting--- Int. drift, 5th Sl Rs. 70'
   b. Dia. Drilling, Holes 109,110 & 111 300'

2. Work yet to be done
   Further drilling, as shown on Map 2, involving holes # 112 thru 115 550'

To accompany application for Aid on Form MF-103

C. Further Development of Pit Orebodies, including Sinking.
(See Maps 4,5, 8 & 9)

1. Work already done since 1/26/51
   a. Shaft Sinking - 50' of 6'x12' shaft 50'
   b. Drifting and X-cutting on new 45' level 199'
   c. Raising from new 45 level (4 raises) 103'
   d. Diamond drilling - hole 203 100'

2. Work yet to be done
   a. Diamond Drilling - Holes 200 thru 214 - 1,817'

D. Ajax Claim Reopen Keystone Shaft (including setting up of a surface plant) and drift out, on the 141 level, under the strong mineralization shown at the contact in the old Ajax workings. (See Maps 1 & 3)

1. Work already done, since 1/26/51
   a. Surface plant - headframe, engineroom, machinery etc. set up. Power line also.
   b. 145' of old shaft widened, rehabilitated, guides, rail etc accomplished.
   c. Sump sunk 5'
   d. Station cut on 141 level
   e. Crosscut driven 40'
   f. Drifting along contact 70'

2. Work yet to be done.
   a. Drifting 160'
   b. Crosscutting 50'
   c. Diamond drilling - holes 400 thru 403 525'

E. 910 Crosscut.

1. No work on this project done.
2. Raise from face of 910 Crosscut to get downward extension of American Pit orebodies. 300'

F. Ajax from Broadway Mine.

1. No work done on this project.

2. Drive out under Ajax ground from north end of the Broadway 900 level.
   a. Drifting 575'
   b. Crosscutting 125'
   c. Raising 300'

G. Broadway 1000 Level.

Reopen the 1000 level and drive north under the 906 area and southwest under 905 area to develop ore indicated by drilling done. (see Map 2)

To accompany application for aid on Form MF-103

G. Broadway 1000 Level cont'd.

Work to be done

a. Pump out shaft from 900 to 1000 level and 1000 level drifts.
b. Rehabilitation of 1000 level station and drifts.

c. Drive north under 906 area and southwest under 905 area to develop ore indicated. Approximately 1500' of drifting required

Summary of Proposed Development Work.
(This includes all work done since original application dated 1/26/51 by the Company at its own expense.)

Project.	Drifting and Crosscutting	Raising	Shaft Sinking	Diamond Drilling	Other
A.	146	255		1257	
B.	70			850	
C.	199	103	50	1897	
D.	320		5	525	Rehabilitation
E.		300			
F.	700	300			
G.	1500				Rehabilitation
Totals	2935'	958'	55'	4529'	

For work already done see Addendum C.

For the estimated cost of the proposed development work see addendum F.

It is anticipated that approximately 20 months will be required to complete the above projects, this will be after approval is granted. Many of the phases of some of the projects will be scheduled for completion within several months after approval.

Addendum F.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

Estimated Cost of Proposed Development Work outlined in our Addendum E accompanying this application and previously outlined in our letter application of 1/26/51, a copy of which is attached to this application as Addendum A.

A.	1.	Work already done 906 area	8,388.94
	2.	a. Raising 916 & 918 total 132'	3,960.00
		b. Diamond Drilling total 540'	1,080.00
		Total	$ 13,428.94
B.	1.	Work already done 905 Raise area	2,622.00
	2.	Diamond Drilling to be done 550'	1,100.00
			$ 3,722.00
C.	1.	Work already done Pit Area	9,482.17
	2.	Diamond Drilling to be done 1,1817'	3,634.00
			$ 13,116.17
D.		Work already done Ajax Claim	7,721.34
	2.	a. & b. Drifting & X-cutting 210'	6,300.00
		c. Diamond Drilling 525'	1,050.00
			$ 15,071.34
E.		Work to be done 910 Crosscut 300' Raise	$ 9,000.00
F.		Work to be done Ajax from Broadway Mine	
		a. & b. Drifiting & X-cutting 700'	19,600.00
		c. Raise 300'	9,000.00
			$ 28,600.00
G.		Broadway 1000 Level	
		a. & b. Pump out shaft & level and rehabilitation ofsame including Pumps	25,000.00
		c. Drifiting approx 1500'	42,000.00
			$ 67,000.00
		Grand Total	$ 149,938.45

Addendum G.

Victoria Mines, Inc.
Sheriden, Montana

To accompany application for aid on Form MF-103

23.	a.	6 miners	48,800.00
		3 Hoistmen-truckers	24,400.00
		1 Diamond Drill Operator	3,500.00
	b.	1 Mine Foreman	8,840.00
		1 Mine Superintendent	9,620.00
		1 Part time Office man	6,240.00
	c.	None	
	d.	Cost Ajax rehabilitation	4,681.00
	e,	Additional Equipment & Install	15,000.00
	f.	None	
	g.	None	
	h.	Materials & Supplies	32,658.00
	i.	Power & water control	6,000.00
		Total	$ 149,939.00

24. The project as outlined in Addendum E is estimated to require approximately 20 months to complete. Projects A, B, C and D would be scheduled for completion first and would require approximately nine months to complete after the project is approved with approximately $ 17,124.00 being spent. Some parts of projects above would be completed within a few months after beginning and projects E, F and G. would be scheduled to begin, in that order.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 2157

Date received 10-15-51

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 15 1951

Victoria Mines, Inc.
Box 247
Sheridan, Montana

Name and address of applicant

Date September 10, 1951

FILL IN THIS BLOCK

Date of application Original letter application dated January 26, 1951

Estimated cost 149,938.45

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Star, Madison County, Montana

Date of filing MF-100 June 30, 1951

DMA Docket Number, if available MS 1773

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation
*2. If a partnership, state names and addresses of partners. See MF-100
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. "
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. "
*5. Are you the owner or the lessee of the property? "
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. Inapplicable

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? 50% of cost. We expect the work done on these projects as outlined in addendum E and costs stated in Addendum D to be credited against our share because this work was done since date of our original letter application of January 26, 1951.

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property MF-100 is in any way involved in the exploration project, including any existing mine or operating property. See MF-100 and Addendums A & B.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Same

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. See MF-100

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. "

*13. State source and quantity of water available for operations and its sufficiency at all seasons. "
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. "

15. State in detail how the ore could be shipped and how and where milled. "

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation and production of property, with reasons for any past suspensions of operations. See Addendums A & B

(*b*) State briefly the known history and production of adjoining and neighboring properties. See Addendum B

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. See Addendum B

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining			See MF-100	
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.) See Addendum B and Maps accompanying.

(*a*) Describe the ore or mineral deposits briefly. " " " " " " "

(*b*) Submit available maps and assay data. " " " " "

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Copper

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Addendum E.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed mining, assay maps, results of other prospecting, and other pertinent data. See Addendum B & E and Maps accompanying and results of work done to date Addendum C

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: See Addendum C

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. " " "

(*b*) Supervisors, by numbers and positions, with salaries of each. " " "

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings. " "

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. " "

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. " " "

(*f*) Cost of rental for equipment which the operator proposes to rent. " " "

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. " "

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. " "

(*i*) Cost of power, water, utilities, and any other items not provided for above. " " "

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

Victoria Mines, Inc.
(Name of company)

By John T. Potts
(Signature of authorized official)

September 11, 1941
(Date)

President.
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Victoria Mines, Inc.
Sheridan, Montana

August 31 1951

Mr. M. E. Volin,
Chief of Mining Division,
Bureau of Mines,
Defense Minerals Administration
1207 North Division Street,
Spokane, Washington.

Dear Earl:

Enclosed are the following, pertaining to the application for aid---an exploration loan -- in connection with the Broadway Mine, of the Victoria Mines, Inc. :

1. Form MF-103, made out in quadruplicate, with letter of transmittal, signed by Mr. John T. Potts, President, and numerous addendums and reports.

2. Tracings and white prints of eight maps.

As suggested by you, I am sending the white prints, uncolored, as you may be able to do what is necessary to them in your office. If you do not need all of the four white prints of each map, could you kindly return the ones you do not need.

Please do not fail to return the tracings when they have served their purpose.

With kindest regards, I remain,

Sincerely yours,

I. G. Irving

Victoria Mines, Inc.
Sheridan, Montana

September 10, 1951.

Mr. M. E. Volin,
Chief of Mining Division
Bureau of Mines
Defense Minerals Administration
1207 North Division Street
Spokane, Washington

Dear Mr. Volin:

Enclosed herewith is the loan application of Victoria Mines, Inc. on Form MF-103.

An exploration loan is being applied for. Federal aid including an exploration loan was applied for in letter form on January 26, 1951. This original application is included as Addendum A. You will note that parts of this original application are no longer applicable because of changed conditions.

The development work proposed and for which aid is requested is set forth in considerable detail, including estimated costs and is shown in Addendums E. and F. Also shown is the considerable work done since our original letter application and the costs of such work which has been wholly borne by Victoria Mines, Inc. The Victoria Mines, Inc. justifiably expects the Government to give them credit on a matched funds basis for this work that has already been done since the date of our original letter application.

Accompanying the application are a set of tracings. You suggested to Mr. Irving, our engineer, that it would not be necessary to have four sets of white prints made but that you would have copies made in your office and return the tracings as soon as possible. A letter is also enclosed by Mr. Irving pertaining to these maps which we are having insured in transit.

Since the property is being currently operated, all important openings on the property are accessible for examination by your engineers.

Some ore has been found by the work that has already been done and can be ascertained by your engineers when the property is examined.

We cannot stress too strongly the need for Government aid in further development and production from this property which is currently producing copper so vitallyy needed. Development carried on by this company since our letter application of 1/26/51 has given us ore which is now being mined. Because of the lack of funds to support extensive development the actual blocking out of large tonnages has not been possible. Mining of a necessity has had to take precedance over any development program and the monies produced therefrom

have limited the amounts to be expended for development.

We have only been able to carry on this operation since our letter application of January 26, 1951 because of the revenue we have been able to derive from limited mining of new ore that has been found through the small amount of development and the personal funds advanced by the writer.

During February we continued to operate three shifts in the mill when possible but during March this was cut to two shifts and in April and the greater part of May we operated on only one shift in the mill. Newly developed ore again allowed us to operate during June, July and August with two shifts in the mill but on a smaller tonnage per shift than heretofore.

With adequate financial assistance for development work we feel certain additional ore can be developed that will allow us to operate three shifts per day in the mill with a possible increase of tonnage on each shift.

Without financial aid for development as we are requesting, we are again forced to reiterate that we cannot carry on the operation of this property and will be forced to close it.

Yours truly,

Victoria Mines, Inc.

John T. Potts, President.

To accompany application for aid, on form MF-103
Victoria Mines, Inc. , Sheridan, Montana.

ADDENDUM A.

January 26, 1951

Mr. James Boyd, Acting Director
Minerals Administration for Defense
Room 6416, Dept. of Interior Bldg.,
Washington 25, D. C.

Dear Sir:

This communication is intended to be an application, in letter form, for assistance at the Broadway Group of claims, owned by Victoria Mines, Inc., which is currently producing copper ore in important quantities and which could with further development and mining aid increase substantially its production of this much needed metal and so contribute to the National Defense, in the present emergency.

Victoria Mines, Inc. owns and controls a compact group of 6 patented and 9 unpatented claims in Township 2 S ; Range 6 W; 2 miles west of Silver Star, Madison County, Montana. A 100 ton flotation mill is located adjacent to the main Broadway Shaft. Copper concentrates are shipped on the Northern Pacific Railway which has a loading ramp four miles east of the mill, to the Anaconda Copper Mining Company Smelter, at Anaconda, Montana, a distance of 65 miles.

Victoria Mines, Inc. began operation of the Broadway Group in 1937. Originally a gold producer, a cyanide plant was built at that time to treat such ores. Indications of copper ore were found at depth in the mine but could not be subsequently treated or developed because of the L 208 Gold Closing Order stopping operations. In late 1942 and early 1943 the cyanide plant was converted to flotation for treatment of lead-zinc ores from another property acquired by Victoria Mines, Inc. With the ending of Worls War II and the cessation of Government aid, these lead-zinc ores could no longer be hauled and treated profitably and the Broadway Group was reopened. Open pit work was begun on one of the claims of the Group and substantial amounts of copper ore were developed. These could be treated by the flotation plant previously used on the lead-zinc ores. The 900 level of the Broadway Shaft was unwatered and reopened at considerable expense and the copper ore found earlier was further developed and some tonnage was treated at the mill.

Expensive underground development work by means of diamond drilling showed considerable promise of a substantial tonnage of copper bearing ore and several drifts and raises were begun to develop this ore on the 900 level of the Broadway Shaft.

Additional extensive development work in the open pit previously referred to, in claims where gold ore mining had been carried on previously by the open pit method, revealed considerable quantities of oxidized copper ore. These are being mined cheaply by open pit methods but due to their being highly oxidized, recovery by flotation is consequently low as shown by the figures in the paragraph below. However, as of recent date and as mining has proceeded deeper, the oxidized copper ore has given way in the bottom of the pit to wholly sulphide material consisting of primary copper sulphides. Recovery, therefore, is expected to show great improvement.

The total production of copper since late 1948 to date has been 757,191 pounds from settlement assays. Production during 1950 was 358,214 pounds from ore with an average assay grade of 1.07% which included the oxidized copper ore and much low grade ore encountered in development. The dry tonnage milled during 1950 totalled 22,667 tons.

The Broadway Group is developed by a number of shafts and tunnels, chief of which is the Broadway Shaft, sunk to the 1000 level. Recent underground production has been wholly from the 900 level where ore is being produced from several places. The American pit, where open pit mining is being conducted, has been developed to a depth of 80 feet and is approximately 130 feet long by 80 feet wide.

On the property owned by Victoria Mines, Inc. Pre-Cambrian gneisses and Plaeozoic limestones are intruded by the quartz monzonite of the Boulder batholith. Orebodies, primarily gold and copper have formed in fissures traversing both the sedimentary and igneous rocks and occur also as replacements in the limestone at or near the contact of the quartz monzonite. The mineralization is apparently persistent, and in the case of the Broadway mine, ore is being currently found and mined on the 900 level. Development work and stope control is under the supervision of an experienced geologist.

Because of the lack of funds to support extensive development programs, the actual blocking out of large tonnages of proven ore has not been possible. Development of necessity has proceeded along with mining and while large potential tonnages are indicated, and a number of faces are in ore, to prove up on these extensions and build up a developed ore reserve will require financial help and a long range development program. Diamond drilling has indicated that large potential tonnages can be made available through such a development program.

Current costs show that underground mining is averaging $5.402 per ton of ore hoisted; open pit ore is being mined at a cost of $1.450 per ton and development work done has amounted to $0.496

per ton of ore hoisted. Total milling costs of all ores mined is $1.847 per dry ton milled and hauling is $0.420 per ton. Miscellaneous costs are $0.387 per ton hoisted. A total average cost of $5.822 per ton of ore mined and milled as shown.

The wages now being paid have been effective since August, 1948. Wage scales at our mine have been governed by the rate effective in the Butte Mines. However, during the past few years, because of low prices for metals, Victoria Mines has been unable to meet the increases that have taken place in Butte. Because of the increased cost of living during the past year, an increase in the wage scale at the Victoria Mines will have to be made. At the present time there is a $2.30 per day differential existing between the wages being paid the Butte miners and the Victoria miners and the custom has been for many years to have a differential of only $1.00 per day. The cost of supplies is increasing also. It is therefore expected that our total mining and milling costs will approximate $7.00 per ton.

In order to assist our Government during the present National Emergency and in the consequent dire need for strategic metals, we are making this appeal for assistance so that we may be able to develop and carry on production of copper and not only maintain our present rate of production but increase it in the immediate future.

Below is set forth an outline of the assistance needed.

If granted, the assistance would allow for a well organized development program to prove up known extensions of ore that now exist and help develop areas and situations where the chances of finding new copper ore-bodies are very favorable according to geological indications. Also the assistance would materially aid in covering mining costs under present conditions and take care of probable cost increases in the near future. We know that it is impossible for us to continue to operate under our present wage scale and the monies expended in the past for our present production and development has not been replaced through settlement for metals produced. In fact we have incurred a long continued loss despite a cost as low as any obtained by any like company in this section of the country. We have practically reached the limit of our resources because of such losses. We can truthfully state that not a single officer of this corporation has received any remuneration of any kind during this period and that no high salaries or commissions are being paid to any workman whatsoever.

Therefore, we ask the Government's consideration of the following: That an arrangement be made so that we can receive payment for the copper metal produced, based on the following conditions:

Anticipated average grade for 1951 is Au .06;Ag 0.8; Cu 1.50%

Anticipated tonnage milled per day is 100 dry tons of ore.

Based on the above assays we anticipate the following grades and revenues would result:

Average copper concentrate grade	9.0%
Average tons concentrate produced	14.28 per day
Average pounds copper contained	2570
Smelter content payable (90% of above)	2313 pounds

Value of copper -------- $ 370.00 per day

Value of gold content based on .32 oz per ton in concentrate is -

14.28 tons conc. x .32 x 91.13% x 34.9125

Value of gold --------- $ 145.50 per day

Value of silver content based on 4.0 oz per ton in concentrate -

14.28 tons conc. x 4.0 - 1.0 x .90¢ less .02¢

Value of silver ------- $ 37.70 per day

Anticipated total revenue from the above grades is $ 553.30 per day.

Anticipated costs per month are :

Wages and payroll taxes	$ 11,300.00
Power	1,500.00
Insurance, assays, etc.	1,860.00
Supplies	2,500.00
	$ 17,160.00
Plus 10% for contingencies	1,716.00
Total monthly costs------	$ 18,876.00
Average for 26 working days	$ 726.00 per day
Less: Gold and silver revenues above	183.00
	$ 543.00
Less: Copper revenue at present price	$ 370.00
Deficit under current conditions	$ 173.00 per day

On the basis of the above calculated revenue and costs and the deficit shown, the operation to be continued requires the copper price shown in the calculation below.

At 2313 pounds of payable copper calculated, a market price of $.337 per pound would have to be realized. From this amount a deduction of $.082 per pound is necessary to cover smelter treatment charges, freight and the price differential deduction by the smelter, leaving a net of $.255 per pound which includes $.02 per pound for profit.

In addition to the above request for assistance in continuing current production, we request your consideration of a loan of $125,000.00 to carry on extensive development work as outlined below:

Anticipated 3000 feet of diamond drilling at $2.00 per foot	$ 6,000.00
Unwatering from 900 to 1000 level of the Broadway Shaft and rehabilitating 1000 level station, drifts, etc. and including necessary pumps	35,000.00
Driving new drifts to tap known ore bodies, an estimated 1500 feet of drift at $20.00 per foot	30,000.00
Further development of open pit ore bodies and sinking	25,000.00
Reopening old workings on the Ajax claim where recent samples taken show existence of a considerable sized copper ore body requiring rehabilitation of shaft, installation of equipment, head frame and bins	14,000.00
The balance to be available for unknown contingencies and development	15,000.00

Not more than $5,000.00 of the total of the above loan be required for capital equipment and the balance of 96% will be spent entirely on development work.

In repayment of such loan, we would agree to pay back to the Government on the basis of 50% of all new profits accruing from the Broadway Group operations and we would anticipate increased production to a basis of 700,000 pounds of copper metal per year.

It is our intention to apply for an additional loan and assistance on the Toledo-Buckeye Group of claims, located near Sheridan, Montana, that are also owned by Victoria Mines, Inc.

Victoria Mines, Inc.

to assist the Government in their need for lead-zinc ores. This request will be forwarded as soon as we can correlate all our facts and figures.

We trust this application will receive your serious consideration and if any additional information is required, please let us know.

Yours very truly,

VICTORIA MINES, INC.,

John T. Potts, President

JTP-p

To accompany application for aid on Form MF-103
Victoria Mines, Inc., Sheridan, Montana

8/31/51

ADDENDUM B.

(EXHIBIT A.)

(Addendum to MF-100)
Victoria Mines, Inc.
Sheridan, Montana.

Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.

Location

The property, known as the Broadway-Victoria Mine, owned by the Victoria Mines, Inc., is located in Sections 2 and 3, Townships 1 and 2 South, Range 6 West, MPM, about two miles west of Silver Star, Madison County, Montana. The area is referred to as the Silver Star Mining District. The nearest shipping point is at Silver Star which is on the Northern Pacific Railroad.

History and Production

Mining in the area began in the 1860s, and is described in the early writings of R. W. Raymond. Early producers were the Broadway, Green Campbell, Iron Rod and many other smaller properties. Several small mills were quickly built and operated in the 1870s at the various properties. The district has, with a few temporary interruptions, been a continuous producer since the early days.

A report of Hans Fritzsche, available at the Montana School of Mines and entitled "Geology and Ore Reserves of the Silver Star Mining District", places total production--up through 1935--at $2,500,000.00. The Broadway mine accounted for almost fifty percent of this early production. Production since 1935 has been considerable, and is tabulated on a supplementary sheet.

At the present time the mine and mill are working on a two-shift basis and production is at the rate of about 80 tons per day. The crude ore contains copper, gold and silver, and concentrates are shipped to the smelter of the Anaconda Copper Mining Company, at Anaconda, Montana.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

Management

The present operators have managed the property for more than twelve years. John T. Potts, the president of the company, is a man of wide mining experience and devotes a good deal of time to managing the operation. Development work is supervised and laid out by I. G. Irving---a mining geologist of twenty-three years experience. Competent foremen are in charge of mine and mill operations.

Mill and Metallurgical Supervision

The original cyanide mill was converted to a flotation mill several years ago when sulphide copper ores were encountered. The metallurgical research and supervision is under the guidance of The Galigher Company, of Salt Lake City, Utah.

The present mill has a capacity of approximately 125 tons per day.

Mine Equipment

The Broadway mine has an excellent surface plant. Electric power operates the main hoist, the two compressors, underground pumps and other auxiliary equipment. Operations at the American Pit and the Ajax Shaft are furnished with good hoisting equipment and electric power.

Mining operations are aided by mucking machines, slushers and other modern and mechanical equipment.

A fleet of trucks, in good condition, move the ore from mine to mill and the concentrates to the railroad.

Development

Mining is taking place both underground, off the Broadway and Ajax shafts, and in an open pit. The pit is referred to as the American Pit and was mined as an open cut to a depth of about 80 feet below the surface. A shaft was recently sunk to a depth of fifty feet below the bottom of this pit and mining and development work is proceeding off the bottom of this shaft, on what is called the 45 Pit Level.

The main Broadway shaft has been sunk, on the incline, to a depth of approximately 820 feet, and the bottom level is about 590 feet vertically below the surface. The bottom level, referred to as the 1000 level, is under water but the 900 level (about 80' above) is the scene of most of the present underground mining.

Addendum to MF-100----Victoria Mines, Inc., Sheridan,Montana

A total of approximately 1,700 feet of drifting and crosscutting has been done on the 900 level. On the upper levels and the 1000 level below approximately 3,000 feet of work is represented. Present operations include stoping and development work of various kinds on the 900 level.

A shaft on the Keystone claim has recently been reopened to a depth of 141 feet and drifting is proceeding off this working, toward the Ajax ground where ore has been exposed in shallower workings above.

Three other important shafts-- the East Broadway, the Hudson and the West Hudson-- have been sunk to depths of several hundred feet with considerable drifting and crosscutting on various levels.

These shafts are inactive at present. Numerous smaller workings exist on the property also.

A set of maps is being prepared and will be sent in with loan form MF-101, which should arrive at the proper D. M. A. office in the near future. These maps may be consulted, on their arrival if further details are needed on the development work.

Geology and Ore Occurrence

Broadly viewed, the orebodies occur at and near the contact of Paleozoic sedimentary rocks and Pre-Cambrian gneisses and schists with a granitic intrusion--apparently part of the Boulder batholith. Specifically, in the Broadway-Victoria mine, copper-gold ore which is oxidized in the upper levels but present in sulphide form at varying depths, is found in fissures and fractured zones and as replacement bodies in the altered limestone and tactite areas adjacent or very close to the granite.

In the old Broadway workings, while the ore followed in general the igneous contact, there is a suggestion of selective replacement of certain limestone beds as they abut the granite. Further,although a fissure system appears to have exerted significant control in the emplacement of the ore shoots, it is also believed that the fractured zone of the igneous-sedimentary contact itself was in general the main channelway for the ore solutions.

In the American Pit, while the copper ore being mined now gives the superficial appearance of being an irregular body of the "contact metamorphic type", there is very strong evidence that only certain beds, indistinct now because of their more or less complete sillication, contain commercial ore. Present development work, including diamond drilling, is exploring the possible extensions of this ore as tabular bodies of a bedded nature.

EXHIBIT A

Addendum to MF--100----Victoria Mines, Inc., Sheridan, Montana

The Keystone-Ajax development work is revealing ore that closely conforms to the granite contact and a shoot, perhaps 300 to 400 feet long is a possibility.

Underground on the Broadway 900 level, new ore has been found, not only as fissure replacements, but also as a replacement of a broad breccia zone. This latter ore presents new possibilities, in the camp, and is not so directly related to the contact as some of the other occurrences.

Ore Reserves and Potential Tonnage

Owing to the necessity of completing this form (MF-100) before June 30, 1951, a set of maps showing complete details of the ore blocked out, or indicated, can not be prepared in time. These supplementary maps, and longitudinal sections, are being prepared, however, and will accompany loan application form MF-101, which will be sent in a few weeks hence.

The following estimate of blocked out and probable ore will be submitted, however, subject to later ~~modification:~~ *

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore - tons	Probable ore
		Revised.				
American Pit	West orebody above 45 lev.	0.08	1.1	2.75	4,000	
"	West orebody extended 50' below 45 14v.	"	"	"		~~4,000~~ 1800
"	East orebody above 45 lev.	~~0.04~~ .06	~~0.6~~ 1.0	1.50		~~3,000~~ 1000
"	East orebody extended 50' below 45 lev.	~~"~~ .06	~~"~~ 1.0	"		~~3,000~~ 1000
Broadway Mine	Ore exposed on sill in 906 area, extended 50' below	0.10	2.0	1.99		1,500
"	In 912DWS extended above to 906 Int.dr.	0.22	2.8	3.28	2,120	
"	In 912 DSW extended 50' below sill	0.08	1.0	1.25		1,375

* Note! .. Corrections in red are revisions made 7/28/51 [illegible]

EXHIBIT A

Addendum to MF-100---Victoria Mines, Inc., Sheridan, Montana

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore--tons	Probable - ore
Broadway Mine	In 906 Idne. vein A carried 50' above	0.33	3.1	5.70	880	
"	In 906 IDNE Vein B carried 50' above	0.11	0.9	1.47	950	
"	In 906 IDW 50' above	0.32	0.4	1.32	2,500	
	50' below	~~0.20~~ 0.32	~~0.7~~ 0.4	~~1.65~~ 1.32		2,500
Totals & Average Grade (		~~0.16~~ 0.19	~~1.5~~ 1.1	~~2.72~~ 2.65	10,450	~~15,375~~ 9,175
		~~0.09~~ 0.14	~~1.0~~ 1.0	~~1.87~~ 1.74		
Combined (Proved & Probable)		~~0.12~~ 0.16	~~1.2~~ 1.1	~~2.21~~ 2.22	~~25,825~~ 19,625	

In addition to the above, more or less proved and probable ore, there are several other areas on the property where prospective and probable ore exists and present development work (done since loan application in letter form was sent in on January 26, 1951) plus additional work if government aid is actually and finally rendered, will convert some of the indicated ore in these areas to the actual ore reserve. Particularly well thought of in this respect is the Keystone-Ajax development work and further development at greater depths below the American and Victoria Pits.

Diamond drilling, now in progress, in the vicinity of 905 stope, southwest of the Broadway shaft, has an excellent chance of revealing important orebodies in this area. Here, geologic factors are good for the localization of orebodies not yet found and for the extension of oreshoots mined in the early days in the upper levels of the old Broadway Mine.

Respectfully submitted,

Irving G. Irving
Mining Geologist

6/24/51

ADDENDUM C

Victoria Mines, Inc
Sheridan, Montana.
8/28/51

To accompany Application for aid on Form MF-103

Work done at the Broadway Mine, Silver Star, Montana, since February 1, 1951, on development projects, outlined in letter application, for aid, dated Janaury 26, 1951

A. Diamond Drilling

In 905 area--- on 900 level
Holes Nos. 109, 110, 111, and 112--totalling 291'

On 900 level North end
Holes Nos. 101,102,103,104,105,106,107,108 and 113
totalling---------- 717'

In American pit
Hole 203 --for a total of 100'

Total drilling 1108'

B. Other Development Work

On 900 Level--North End
Raising (902 Rs., 916 Rs. and 918 Rs.) totalling 123'
Crosscutting (from 906Rs northwest to cut vein in 912DSW.) 18'
Drifting
In 912 DSW.------- 73'
In 906 Int. drift N.E. , on Vein B----- 55'

In American Pit
Shaft Sinking (from bottom of pit to "45"level) 50'
Drifting and crosscutting--on 45 level--a total of 199'
Raising from 45 level (3 raises) totalling 103'

Totals---
Shaft Sinking 50'
Raising 226'
Drifting & x-cutting 345'

C. In Keystone Shaft and Ajax Ground

This work comprised the setting up of a surface plant, including housing and headframe, and the rehabilitation of 145' of old shaft. From the bottom of the shaft a station was cut and to date ~~90'~~ 110' of drifting and crosscutting has been done. JBJ

(See Addendum D for an estimate of the cost of this work)

ADDENDUM D

Victoria Mines, Inc.
Sheridan, Montana

8/4/51

To accompany Application for aid on Form MF-103

Cost of work done at Broadway Mine, Silver Star, Montana since February 1, 1951 on development projects outlined in letter application for aid, dated January 26, 1951, the work done being outlined in Addendum C.

A. Diamond drilling.

In 905 Area -	291 feet	$ 502.35
900 level north -	717 feet	1237.76
American Pit -	100 feet	186.45
	Total	$ 1926.56

B. Development Work.

900 Level North -	Raising Crosscutting Drifiting	$ 8388.94
American Pit -	Shaft Sinking Drifting Raising	$ 9295.72

C. Keystone Shaft - Ajax Ground

* Total cost to 8/1/51	$ 7721.34

Total cost of work done since 2/1/51 to 8/1/51 $ 27,332.56

ADDENDUM E

To accompany Application for Aid
on Form # VF-103

Victoria Mines, Inc.
Sheridan, Montana
8/31/51

PROPOSED DEVELOPMENT WORK

The work outlined below was envisioned at the start of the year and was outlined broadly , but without specific detail, in our letter application, dated January 26, 1951.

The entire program is set forth, and also noted is the work done, on this program, by us, since the date of our original application.

A. In 906 Area

The further development of the orebodies exposed and partly developed, in the vicinity of 906 raise, on the 900 level, north. (See Maps 2,6 and 7)

1. Work already done, since 1/26/51
   - a. Crosscutting-- In 906 xcn-- 18'
   - b. Drifting--in 906 IDNE.----- 55'
   - in 912 DSW------- 73'
   - c. Raising, in 902,916, and 918 Raises-- 123'
   - Total drifts, x-cuts and raises 269'
   - d. Diamond drilling(holes 101 thru 108 and hole 113) 717'
2. Work yet to be done
   - a. Raising---Extend 916 Rs to sill above 50'
   - Extend 918 Rs. " " 82'
   - b. Diamond drilling
     - Holes 301&302 (120' ea.) to prospect below 900 level for Veins A & B 240'
     - Hole 305, on Vein B, on int. level 30'
     - Holes 304 thru 308, on Breccia Vein 270'

B. In 905 Rs. Area

The further exploration, in 905 Rs area, southwest of station on the 900 level, for the downward extension of orebodies found above in the vicinity of the "nose" of the granitic intrusive, and in the anticlinal structure displayed in the limestone beds, in the vicinity of this intrusion. (See Map 2)

1. Work already done, since 1/26/51
   - a. Drifting--- Int. drift, 6th Fl Rs. 70'
   - b. Dia. Drilling, Holes 109,110 & 111 300'
2. Work yet to be done
   - Further drilling, as shown on Map 2, involving holes # 112 thru 115 550'

To accompany application for Aid on Form MF-103

C. Further Development of Pit Orebodies, including Sinking.
(See Maps 4,5, 8 & 9)

1. Work already done since 1/26/51
   a. Shaft Sinking - 50' of 6'x12' shaft 50'
   b. Drifting and X-cutting on new 45' level 199'
   c. Raising from new 45 level (4 raises) 103'
   d. Diamond drilling - hole 203 100'

2. Work yet to be done
   a. Diamond Drilling - Holes 200 thru 214 - 1,817'

D. Ajax Claim Reopen Keystone Shaft (including setting up of a surface plant) and drift out, on the 141 level, under the strong mineralization shown at the contact in the old Ajax workings. (See Maps 1 & 3)

1. Work already done, since 1/26/51
   a. Surface plant - headframe, engineroom, machinery etc. set up. Power line also.
   b. 145' of old shaft widened, rehabilitated, guides, rail etc accomplished.
   c. Sump sunk 5'
   d. Station cut on 141 level
   e. Crosscut driven 40'
   f. Drifting along contact 70'

2. Work yet to be done.
   a. Drifting 160'
   b. Crosscutting 50'
   c. Diamond drilling - holes 400 thru 403 525'

E. 910 Crosscut.

1. No work on this project done.
2. Raise from face of 910 Crosscut to get downward extension of American Pit orebodies. 300'

F. Ajax from Broadway Mine.

1. No work done on this project.

2. Drive out under Ajax ground from north end of the Broadway 900 level.
   a. Drifting 575'
   b. Crosscutting 125'
   c. Raising 300'

G. Broadway 1000 Level.

Reopen the 1000 level and drive north under the 906 area and southwest under 905 area to develop ore indicated by drilling done. (see Map 2)

To accompany application for aid on Form MF-103

G. Broadway 1000 Level cont'd.

Work to be done

a. Pump out shaft from 900 to 1000 level and 1000 level drifts.
b. Rehabilitation of 1000 level station and drifts.
c. Drive north under 906 area and southwest under 905 area to develop ore indicated. Approximately 1500' of drifting required

Summary of Proposed Development Work.
(This includes all work done since original application dated 1/26/51 by the Company at its own expense.)

Project.	Drifting and Crosscutting	Raising	Shaft Sinking	Diamond Drilling	Other
A.	146	255		1257	
B.	70			850	
C.	199	103	50	1897	
D.	320		5	525	Rehabilitation
E.		300			
F.	700	300			
G.	1500				Rehabilitation
Totals	2935'	958'	55'	4529'	

For work already done see Addendum C.

For the estimated cost of the proposed development work see addendum F.

It is anticipated that approximately 20 months will be required to complete the above projects, this will be after approval is granted. Many of the phases of some of the projects will be scheduled for completion within several months after approval.

Addendum

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

Estimated Cost of Proposed Development Work outlined in our Addendum E accompanying this application and previously outlined in our letter application of 1/26/51, a copy of which is attached to this application as Addendum A.

A.	1.	Work already done 906 area	8,388.94
	2.	a. Raising 916 & 918 total 132'	3,960.00
		b. Diamond Drilling total 540'	1,080.00
		Total	$ 13,428.94
B.	1.	Work already done 905 Raise area	2,622.00
	2.	Diamond Drilling to be done 550'	1,100.00
			$ 3,722.00
C.	1.	Work already done Pit Area	9,482.17
	2.	Diamond Drilling to be done 1,±817'	3,634.00
			$ 13,116.17
D.		Work already done Ajax Claim	7,721.34
	2.	a. & b. Drifting & X-cutting 210'	6,300.00
		c. Diamond Drilling 525'	1,050.00
			$ 15,071.34
E.		Work to be done 910 Crosscut 300' Raise	$ 9,000.00
F.		Work to be done Ajax from Broadway Mine	
		a. & b. Drifiting & X-cutting 700'	19,600.00
		c. Raise 300'	9,000.00
			$ 28,600.00
G.		Broadway 1000 Level	
		a. & b. Pump out shaft & level and rehabilitation ofsame including Pumps	25,000.00
		c. Drifiting approx 1500'	42,000.00
			$ 67,000.00
		Grand Total	$ 149,938.45

Addendum G.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

23.	a.	6 miners	48,800.00
		3 Hoistmen-truckers	24,400.00
		1 Diamond Drill Operator	3,500.00
	b.	1 Mine Foreman	8,840.00
		1 Mine Superintendent	9,620.00
		1 Part time Office man	6,240.00
	c.	None	
	d.	Cost Ajax rehabilitation	4,681.00
	e,	Additional Equipment & Install	15,000.00
	f.	None	
	g.	None	
	h.	Materials & Supplies	32,858.00
	i.	Power & water control	6,000.00
		Total	$ 149,939.00

24. The project as outlined in Addendum E is estimated to require approximately 20 months to complete. Projects A, B, C and D would be scheduled for completion first and would require approximately nine months to complete after the project is approved with approximately $ 17,124.00 being spent. Some parts of projects above would be completed within a few months after beginning and projects E, F and G. would be scheduled to begin, in that order.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dmm 21157

Date received 10-15-51

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 5 1951

Victoria Mines, Inc.
Box 247
Sheridan, Montana

Name and address of applicant

Date September 10, 1951

FILL IN THIS BLOCK

Date of application Original letter application dated January 26, 1951

Estimated cost 149, 938.45

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Star, Madison County, Montana

Date of filing MF-100 June 30, 1951

DMA Docket Number, if available MS 1773

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation — See MF-100
*2. If a partnership, state names and addresses of partners. "
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. "
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. "
*5. Are you the owner or the lessee of the property? "
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. Inapplicable

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? 50% of cost. We expect the work done on these projects as outlined in addendum E and costs stated in Addendum D to be credited against our share because this work was done since date of our original letter application of January 26, 1951.

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64967-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. See MF-100 and Addendums A & B.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Same

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. See MF-100

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. "

*13. State source and quantity of water available for operations and its sufficiency at all seasons. "
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. "

15. State in detail how the ore could be shipped and how and where milled. "

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. See Addendums A & B

(*b*) State briefly the known history and production of adjoining and neighboring properties. See Addendum B

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. See Addendum B.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining			See MF-100	
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly. See Addendum B and Maps accompanying.

(*b*) Submit available maps and assay data. " " " " " " "

(*c*) Give estimated tonnage and grade of each class of ore reserves. " " " " "

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Copper

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Addendum E.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Addendum B & E and maps accompanying and results of work done to date Addendum C

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: See Addendum G

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. " " "

(*b*) Supervisors, by numbers and positions, with salaries of each. " " "

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings. " "

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. " "

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. " " "

(*f*) Cost of rental for equipment which the operator proposes to rent. " " "

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. "

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. " "

(*i*) Cost of power, water, utilities, and any other items not provided for above. " "

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. " " "

CERTIFICATION

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

Victoria Mines, Inc.
(Name of company)

By John T. Potts
(Signature of authorized official)

September 11, 1951
(Date)

President.
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Victoria Mines, Inc.
Sheridan, Montana

August 31 1951

Mr. M. E. Volin,
Chief of Mining Division,
Bureau of Mines,
Defense Minerals Administration
1207 North Division Street,
Spokane, Washington.

Dear Earl:

Enclosed are the following, pertaining to the application for aid---an exploration loan -- in connection with the Broadway Mine, of the Victoria Mines, Inc. :

1. Form MF-103, made out in quadruplicate, with letter of transmittal, signed by Mr. John T. Potts, President, and numerous addendums and reports.

2. Tracings and white prints of eight maps.

As suggested by you, I am sending the white prints, uncolored, as you may be able to do what is necessary to them in your office. If you do not need all of the four white prints of each map, could you kindly return the ones you do not need.

Please do not fail to return the tracings when they have served their purpose.

With kindest regards, I remain,

Sincerely yours,
I. G. Irving

Victoria Mines, Inc.
Sheridan, Montana

September 10, 1951.

Mr. M. E. Volin,
Chief of Mining Division
Bureau of Mines
Defense Minerals Administration
1207 North Division Street
Spokane, Washington

Dear Mr. Volin:

Enclosed herewith is the loan application of Victoria Mines, Inc. on Form MF-103.

An exploration loan is being applied for. Federal aid including an exploration loan was applied for in letter form on January 26, 1951. This original application is included as Addendum A. You will note that parts of this original application are no longer applicable because of changed conditions.

The development work proposed and for which aid is requested is set forth in considerable detail, including estimated costs and is shown in Addendums E. and F. Also shown is the considerable work done since our original letter application and the costs of such work which has been wholly borne by Victoria Mines, Inc. The Victoria Mines, Inc. justifiably expects the Government to give them credit on a matched funds basis for this work that has already been done since the date of our original letter application.

Accompanying the application are a set of tracings. You suggested to Mr. Irving, our engineer, that it would not be necessary to have four sets of white prints made but that you would have copies made in your office and return the tracings as soon as possible. A letter is also enclosed by Mr. Irving pertaining to these maps which we are having insured in transit.

Since the property is being currently operated, all important openings on the property are accessible for examination by your engineers.

Some ore has been found by the work that has already been done and can be ascertained by your engineers when the property is examined.

We cannot stress too strongly the need for Government aid in further development and production from this property which is currently producing copper so vitallyy needed. Development carried on by this company since our letter application of 1/26/51 has given us ore which is now being mined. Because of the lack of funds to support extensive development the actual blocking out of large tonnages has not been possible. Mining of a necessity has had to take precedance over any development program and the monies produced therefrom

have limited the amounts to be expended for development.

We have only been able to carry on this operation since our letter application of January 26, 1951 because of the revenue we have been able to derive from limited mining of new ore that has been found through the small amount of development and the personal funds advanced by the writer.

During February we continued to operate three shifts in the mill when possible but during March this was cut to two shifts and in April and the greater part of May we operated on only one shift in the mill. Newly developed ore again allowed us to operate during June, July and August with two shifts in the mill but on a smaller tonnage per shift than heretofore.

With adequate financial assistance for development work we feel certain additional ore can be developed that will allow us to operate three shifts per day in the mill with a possible increase of tonnage on each shift.

Without financial aid for development as we are requesting, we are again forced to reiterate that we cannot carry on the operation of this property and will be forced to close it.

Yours truly,

Victoria Mines, Inc.

John T. Potts

John T. Potts, President.

To accomapny application for aid, on Form MF-103
Victoria Mines, Inc., Sheridan, Montana.

ADDENDUM A.

January 26, 1951

Mr. James Boyd, Acting Director
Minerals Administration for Defense
Room 6416, Dept. of Interior Bldg.,
Washington 25, D. C.

Dear Sir:

This communication is intended to be an application, in letter form, for assistance at the Broadway Group of claims, owned by Victoria Mines, Inc., which is currently producing copper ore in important quantities and which could with further development and mining aid increase substantially its production of this much needed metal and so contribute to the National Defense, in the present emergency.

Victoria Mines, Inc. owns and controls a compact group of 6 patented and 9 unpatented claims in Township 2 S ; Range 6 W; 2 miles west of Silver Star, Madison County, Montana. A 100 ton flotation mill is located adjacent to the main Broadway Shaft. Copper concentrates are shipped on the Northern Pacific Railway which has a loading ramp four miles east of the mill, to the Anaconda Copper Mining Company Smelter, at Anaconda, Montana, a distance of 65 miles.

Victoria Mines, Inc. began operation of the Broadway Group in 1937. Originally a gold producer, a cyanide plant was built at that time to treat such ores. Indications of copper ore were found at depth in the mine but could not be subsequently treated or developed because of the L 208 Gold Closing Order stopping operations. In late 1942 and early 1943 the cyanide plant was converted to flotation for treatment of lead-zinc ores from another property acquired by Victoria Mines, Inc. With the ending of Worls War II and the cessation of Government aid, these lead-zinc ores could no longer be hauled and treated profitably and the Broadway Group was reopened. Open pit work was begun on one of the claims of the Group and substantial amounts of copper ore were developed. These could be treated by the flotation plant previously used on the lead-zinc ores. The 900 level of the Broadway Shaft was unwatered and reopened at considerable expense and the copper ore found earlier was further developed and some tonnage was treated at the mill.

Expensive underground development work by means of diamond drilling showed considerable promise of a substantial tonnage of copper bearing ore and several drifts and raises were begun to develop this ore on the 900 level of the Broadway Shaft.

Additional extensive development work in the open pit previously referred to, in claims where gold ore mining had been carried on previously by the open pit method, revealed considerable quantities of oxidized copper ore. These are being mined cheaply by open pit methods but due to their being highly oxidized, recovery by flotation is consequently low as shown by the figures in the paragraph below. However, as of recent date and as mining has proceeded deeper, the oxidized copper ore has given way in the bottom of the pit to wholly sulphide material consisting of primary copper sulphides. Recovery, therefore, is expected to show great improvement.

The total production of copper since late 1948 to date has been 757,191 pounds from settlement assays. Production during 1950 was 358,214 pounds from ore with an average assay grade of 1.07% which included the oxidized copper ore and much low grade ore encountered in development. The dry tonnage milled during 1950 totalled 22,667 tons.

The Broadway Group is developed by a number of shafts and tunnels, chief of which is the Broadway Shaft, sunk to the 1000 level. Recent underground production has been wholly from the 900 level where ore is being produced from several places. The American pit, where open pit mining is being conducted, has been developed to a depth of 80 feet and is approximately 130 feet long by 80 feet wide.

On the property owned by Victoria Mines, Inc. Pre-Cambrian gneisses and Plaeozoic limestones are intruded by the quartz monzonite of the Boulder batholith. Orebodies, primarily gold and copper have formed in fissures traversing both the sedimentary and igneous rocks and occur also as replacements in the limestone at or near the contact of the quartz monzonite. The mineralization is apparently persistent, and in the case of the Broadway mine, ore is being currently found and mined on the 900 level. Development work and stope control is under the supervision of an experienced geologist.

Because of the lack of funds to support extensive development programs, the actual blocking out of large tonnages of proven ore has not been possible. Development of necessity has proceeded along with mining and while large potential tonnages are indicated, and a number of faces are in ore, to prove up on these extensions and build up a developed ore reserve will require financial help and a long range development program. Diamond drilling has indicated that large potential tonnages can be made available through such a development program.

Current costs show that underground mining is averaging $5.402 per ton of ore hoisted; open pit ore is being mined at a cost of $1.450 per ton and development work done has amounted to $0.496

Victoria Mines, Inc.
Butte, Montana

per ton of ore hoisted. Total milling costs of all ores mined is $1.847 per dry ton milled and hauling is $0.420 per ton. Miscellaneous costs are $0.387 per ton hoisted. A total average cost of $5.822 per ton of ore mined and milled as shown.

The wages now being paid have been effective since August, 1948. Wage scales at our mine have been governed by the rate effective in the Butte Mines. However, during the past few years, because of low prices for metals, Victoria Mines has been unable to meet the increases that have taken place in Butte. Because of the increased cost of living during the past year, an increase in the wage scale at the Victoria Mines will have to be made. At the present time there is a $2.30 per day differential existing between the wages being paid the Butte miners and the Victoria miners and the custom has been for many years to have a differential of only $1.00 per day. The cost of supplies is increasing also. It is therefore expected that our total mining and milling costs will approximate $7.00 per ton.

In order to assist our Government during the present National Emergency and in the consequent dire need for strategic metals, we are making this appeal for assistance so that we may be able to develop and carry on production of copper and not only maintain our present rate of production but increase it in the immediate future.

Below is set forth an outline of the assistance needed.

If granted, the assistance would allow for a well organized development program to prove up known extensions of ore that now exist and help develop areas and situations where the chances of finding new copper ore-bodies are very favorable according to geological indications. Also the assistance would materially aid in covering mining costs under present conditions and take care of probable cost increases in the near future. We know that it is impossible for us to continue to operate under our present wage scale and the monies expended in the past for our present production and development has not been replaced through settlement for metals produced. In fact we have incurred a long continued loss despite a cost as low as any obtained by any like company in this section of the country. We have practically reached the limit of our resources because of such losses. We can truthfully state that not a single officer of this corporation has received any remuneration of any kind during this period and that no high salaries or commissions are being paid to any workman whatsoever.

Therefore, we ask the Government's consideration of the following: That an arrangement be made so that we can receive payment for the copper metal produced, based on the following conditions:

Anticipated average grade for 1951 is Au .06; Ag 0.8; Cu 1.50%

Anticipated tonnage milled per day is 100 dry tons of ore.

Based on the above assays we anticipate the following grades and revenues would result:

Average copper concentrate grade	9.0%
Average tons concentrate produced	14.28 per day
Average pounds copper contained	2570
Smelter content payable (90% of above)	2313 pounds

Value of copper -------- $ 370.00 per day

Value of gold content based on .32 oz per ton in concentrate is -

14.28 tons conc. x .32 x 91.13% x 34.9125

Value of gold --------- $ 145.50 per day

Value of silver content based on 4.0 oz per ton in concentrate -

14.28 tons conc. x 4.0 - 1.0 x .90¢ less .02¢

Value of silver ------- $ 37.70 per day

Anticipated total revenue from the above grades is $ 553.30 per day.

Anticipated costs per month are :

Wages and payroll taxes	$ 11,300.00
Power	1,500.00
Insurance, assays, etc.	1,860.00
Supplies	2,500.00
	$ 17,160.00
Plus 10% for contingencies	1,716.00
Total monthly costs------	$ 18,876.00
Average for 26 working days	$ 726.00 per day
Less: Gold and silver revenues above	183.00
	$ 543.00
Less: Copper revenue at present price	$ 370.00
Deficit under current conditions	$ 173.00 per day

On the basis of the above calculated revenue and costs and the deficit shown, the operation to be continued requires the copper price shown in the calculation below.

At 2313 pounds of payable copper calculated, a market price of $.337 per pound would have to be realized. From this amount a deduction of $.082 per pound is necessary to cover smelter treatment charges, freight and the price differential deduction by the smelter, leaving a net of $.255 per pound which includes $.02 per pound for profit.

In addition to the above request for assistance in continuing current production, we request your consideration of a loan of $125,000.00 to carry on extensive development work as outlined below:

Anticipated 3000 feet of diamond drilling at $2.00 per foot	$ 6,000.00
Unwatering from 900 to 1000 level of the Broadway Shaft and rehabilitating 1000 level station, drifts, etc. and including necessary pumps	35,000.00
Driving new drifts to tap known ore bodies, an estimated 1500 feet of drift at $20.00 per foot	30,000.00
Further development of open pit ore bodies and sinking	25,000.00
Reopening old workings on the Ajax claim where recent samples taken show existence of a considerable sized copper ore body requiring rehabilitation of shaft, installation of equipment, head frame and bins	14,000.00
The balance to be available for unknown contingencies and development	15,000.00

Not more than $5,000.00 of the total of the above loan be required for capital equipment and the balance of 96% will be spent entirely on development work.

In repayment of such loan, we would agree to pay back to the Government on the basis of 50% of all new profits accruing from the Broadway Group operations and we would anticipate increased production to a basis of 700,000 pounds of copper metal per year.

It is our intention to apply for an additional loan and assistance on the Toledo-Buckeye Group of claims, located near Sheridan, Montana, that are also owned by Victoria Mines,Inc.

Victoria Mines, Inc.
Thompson, Montana

to assist the Government in their need for lead-zinc ores. This request will be forwarded as soon as we can correlate all our facts and figures.

We trust this application will receive your serious consideration and if any additional information is required, please let us know.

Yours very truly,

VICTORIA MINES, INC.,

John T. Potts, President

JTP-p

To accompany application for aid on MF-103
Victoria Mines, Inc., Sheridan, Montana.

8/31/51

ADDENDUM B.

EXHIBIT A.

(Addendum to MF-100)
Victoria Mines, Inc.
Sheridan, Montana.

Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.

Location

The property, known as the Broadway-Victoria Mine, owned by the Victoria Mines, Inc., is located in Sections 2 and 3, Townships 1 and 2 South, Range 6 West, MPM, about two miles west of Silver Star, Madison County, Montana. The area is referred to as the Silver Star Mining District. The nearest shipping point is at Silver Star which is on the Northern Pacific Railroad.

History and Production

Mining in the area began in the 1860s, and is described in the early writings of R. W. Raymond. Early producers were the Broadway, Green Campbell, Iron Rod and many other smaller properties. Several small mills were quickly built and operated in the 1870s at the various properties. The district has, with a few temporary interruptions, been a continuous producer since the early days.

A report of Hans Fritzsche, available at the Montana School of Mines and entitled "Geology and Ore Reserves of the Silver Star Mining District", places total production--up through 1935--at $2,500,000.00. The Broadway mine accounted for almost fifty percent of this early production. Production since 1935 has been considerable, and is tabulated on a supplementary sheet.

At the present time the mine and mill are working on a two-shift basis and production is at the rate of about 80 tons per day. The crude ore contains copper, gold and silver, and concentrates are shipped to the smelter of the Anaconda Copper Mining Company, at Anaconda, Montana.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

Management

The present operators have managed the property for more than twelve years. John T. Potts, the president of the company, is a man of wide mining experience and devotes a good deal of time to managing the operation. Development work is supervised and laid out by I. G. Irving---a mining geologist of twenty-three years experience. Competent foremen are in charge of mine and mill operations.

Mill and Metallurgical Supervision

The original cyanide mill was converted to a flotation mill several years ago when sulphide copper ores were encountered. The metallurgical research and supervision is under the guidance of The Caligher Company, of Salt Lake City, Utah.

The present mill has a capacity of approximately 125 tons per day.

Mine Equipment

The Broadway mine has an excellent surface plant. Electric power operates the main hoist, the two compressors, underground pumps and other auxiliary equipment. Operations at the American Pit and the Ajax Shaft are furnished with good hoisting equipment and electric power.

Mining operations are aided by mucking machines, slushers and other modern and mechanical equipment.

A fleet of trucks, in good condition, move the ore from mine to mill and the concentrates to the railroad.

Development

Mining is taking place both underground, off the Broadway and Ajax shafts, and in an open pit. The pit is referred to as the American Pit and was mined as an open cut to a depth of about 80 feet below the surface. A shaft was recently sunk to a depth of fifty feet below the bottom of this pit and mining and development work is proceeding off the bottom of this shaft, on what is called the 45 Pit Level.

The main Broadway shaft has been sunk, on the incline, to a depth of approximately 820 feet, and the bottom level is about 590 feet vertically below the surface. The bottom level, referred to as the 1000 level, is under water but the 900 level (about 80' above) is the scene of most of the present underground mining.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

A total of approximately 1,700 feet of drifting and crosscutting has been done on the 900 level. On the upper levels and the 1000 level below approximately 3,000 feet of work is represented. Present operations include stoping and development work of various kinds on the 900 level.

A shaft on the Keystone claim has recently been reopened to a depth of 141 feet and drifting is proceeding off this working, toward the Ajax ground where ore has been exposed in shallower workings above.

Three other important shafts-- the East Broadway, the Hudson and the West Hudson-- have been sunk to depths of several hundred feet with considerable drifting and crosscutting on various levels.

These shafts are inactive at present. Numerous smaller workings exist on the property also.

A set of maps is being prepared and will be sent in with loan form MF-101, which should arrive at the proper D. M. A. office in the near future. These maps may be consulted, on their arrival if further details are needed on the development work.

Geology and Ore Occurrence

Broadly viewed, the orebodies occur at and near the contact of Paleozoic sedimentary rocks and Pre-Cambrian gneisses and schists with a granitic intrusion--apparently part of the Boulder batholith. Specifically, in the Broadway-Victoria mine, copper-gold ore which is oxidized in the upper levels but present in sulphide form at varying depths, is found in fissures and fractured zones and as replacement bodies in the altered limestone and tactite areas adjacent or very close to the granite.

In the old Broadway workings, while the ore followed in general the igneous contact, there is a suggestion of selective replacement of certain limestone beds as they abut the granite. Further, although a fissure system appears to have exerted significant control in the emplacement of the ore shoots, it is also believed that the fractured zone of the igneous-sedimentary contact itself was in general the main channelway for the ore solutions.

In the American Pit, while the copper ore being mined now gives the superficial appearance of being an irregular body of the "contact metamorphic type", there is very strong evidence that only certain beds, indistinct now because of their more or less complete sillication, contain commercial ore. Present development work, including diamond drilling, is exploring the possible extensions of this ore as tabular bodies of a bedded nature.

EXHIBIT A

Addendum to MF--100----Victoria Mines, Inc., Sheridan, Montana

The Keystone-Ajax development work is revealing ore that closely conforms to the granite contact and a shoot, perhaps 300 to 400 feet long is a possibility.

Underground on the Broadway 900 level, new ore has been found, not only as fissure replacements, but also as a replacement of a broad breccia zone. This latter ore presents new possibilities, in the camp, and is not so directly related to the contact as some of the other occurrences.

Ore Reserves and Potential Tonnage

Owing to the necessity of completing this form (MF-100) before June 30, 1951, a set of maps showing complete details of the ore blocked out, or indicated, can not be prepared in time. These supplementary maps, and longitudinal sections, are being prepared, however, and will accompany loan application form MF-101, which will be sent in a few weeks hence.

The following estimate of blocked out and probable ore will be submitted, however, subject to later modification: *

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore - tons	Probable ore
		Revised.				
American Pit	West orebody above 45 lev.	0.08	1.1	2.75	4,000	
"	West orebody extended 50' below 45 lev.	"	"	"		1800 ~~4,000~~
"	East orebody above 45 lev.	.06 ~~0.04~~	1.0 ~~0.6~~	1.50		1000 ~~3,000~~
"	East orebody extended 50' below 45 lev.	.06 ~~"~~	1.0 ~~"~~	"		1000 ~~3,000~~
Broadway Mine	Ore exposed on sill in 906 area, extended 50' below	0.10	2.0	1.99		1,500
"	In 912DWS extended above to 906 Int.dr.	0.22	2.8	3.28	2,120	
"	In 912 DSW extended 50' below sill	0.08	1.0	1.25		1,375

* Note — Corrections in red are revisions made 7/28/51 [illegible]

EXHIBIT A

Addendum to MF-100---Victoria Mines, Inc., Sheridan, Montana

Location	Description	Average Assay oz. Au	oz. Ag.	% Cu	Proven ore--tons	Probable - ore
Broadway Mine	In 906 Idne. vein A carried 50' above	0.33	3.1	5.70	880	
"	In 906 IDNE Vein B carried 50' above	0.11	0.9	1.47	950	
"	In 906 IDW 50' above	0.32	0.4	1.32	2,500	
	50' below	~~0.28~~ 0.32	~~0.7~~ 0.04	~~1.65~~ 1.32		2,500
Totals & Average Grade (		~~0.16~~ 0.19	~~1.5~~ 1.1	~~2.72~~ 2.65	10,450	~~15,375~~ 9175
		~~0.09~~ 0.14	~~1.0~~ 1.0	~~1.87~~ 1.74		
Combined (Proved & Probable)		~~0.12~~ 0.16	~~1.2~~ 1.1	~~2.21~~ 2.22	~~25,825~~ 19,625	

In addition to the above, more or less proved and probable ore, there are several other areas on the property where prospective and probable ore exists and present development work (done since loan application in letter form was sent in on January 26, 1951) plus additional work if government aid is actually and finally rendered, will convert some of the indicated ore in these areas to the actual ore reserve. Particularly well thought of in this respect is the Keystone-Ajax development work and further development at greater depths below the American and Victoria Pits.

Diamond drilling, now in progress, in the vicinity of 905 stope, southwest of the Broadway shaft, has an excellent chance of revealing important orebodies in this area. Here, geologic factors are good for the localization of orebodies not yet found and for the extension of oreshoots mined in the early days in the upper levels of the old Broadway Mine.

Respectfully submitted,

Irving G. Irving
Mining Geologist

6/28/51

ADDENDUM C

Victoria Mines, Inc
Sheridan, Montana.

To accompany Application for aid on Form MF-103 8/28/51

Work done at the Broadway Mine, Silver Star, Montana, since February 1, 1951, on development projects, outlined in letter application, for aid, dated Janaury 26, 1951

A. Diamond Drilling

In 905 area--- on 900 level
Holes Nos. 109, 110, 111, and 112--totalling 291'

On 900 level North end
Holes Nos. 101,102,103,104,105,106,107,108 and 113
totalling---------- 717'

In American pit
Hole 203 --for a total of 100'

Total drilling 1108'

B. Other Development Work

On 900 Level--North End
Raising (902 Rs., 916 Rs. and 918 Rs.) totalling 123'
Crosscutting (From 906Rs northwest to cut vein in 912DSW.) 18'
Drifting
In 912 DSW.------- 73'
In 906 Int. drift N.E. , on Vein B----- 55'

In American Pit
Shaft Sinking (from bottom of pit to "45"level) 50'
Drifting and crosscutting--on 45 level--a total of 199'
Raising from 45 level (3 raises) totalling 103'

Totals---
Shaft Sinking 50'
Raising 226'
Drifting & x-cutting 345'

C. In Keystone Shaft and Ajax Ground

This work comprised the setting up of a surface plant, including housing and headframe, and the rehabilitation of 145' ~~66~~ old shaft. From the bottom of the shaft a station was cut and to date ~~90'~~ 180' of drifting and crosscutting has been done.

(See Addendum D for an estimate of the cost of this work)

ADDENDUM D

Victoria Mines, Inc.
Sheridan, Montana

8/4/51

To accompany Application for aid on Form MF-103

Cost of work done at Broadway Mine, Silver Star, Montana since Febrhary 1, 1951 on development projects outlined in letter application for aid, dated January 26, 1951, the work done being outlined in Addendum C.

A. Diamond drilling.

In 905 Area -	291 feet	$ 502.35
900 level north -	717 feet	1237.76
American Pit -	100 feet	186.45
	Total	$ 1926.56

B. Development Work.

900 Level North -	Raising Crosscutting Drifiting	$ 8388.94
American Pit -	Shaft Sinking Drifting Raising	$ 9295.72

C. Keystone Shaft - Ajax Ground

* Total cost to 8/1/51	$ 7721.34

Total cost of work done since 2/1/51 to 8/1/51 $ 27,332.56

ADDENDUM E

To accompany Application for Aid
on Form # WF-103

Victoria Mines, Inc.
Sheridan, Montana
8/31/51

PROPOSED DEVELOPMENT WORK

The work outlined below was envisioned at the start of the year and was outlined broadly , but without specific detail, in our letter application, dated January 26, 1951.

The entire program is set forth, and also noted is the work done, on this program, by us, since the date of our original application.

A. In 906 Area

The further development of the orebodies exposed and partly developed, in the vicinity of 906 raise, on the 900 level, north. (See Maps 2,6 and 7)

1. Work already done, since 1/26/51
   a. Crosscutting-- In 906 xcn-- 18'
   b. Drifting--in 906 IDNE.----- 55'
   in 912 DSW------- 73'
   c. Raising, in 902,916, and 918 Raises-- 123'
   Total drifts, x-cuts and raises 269'

   d. Diamond drilling(holes 101 thru 108 and hole 113) 717'

2. Work yet to be done
   a. Raising---Extend 916 Rs to sill above 50'
   Extend 918 Rs. " " " 82'

   b. Diamond drilling
   Holes 301&302 (120' ea.) to prospect below 900 level for Veins A & B 240'
   Hole 305, on Vein B, on int. level 30'
   Holes 304 thru 308, on Breccia Vein 270'

B. In 905 Rs. Area

The further exploration, in 905 Rs area, southwest of station on the 900 level, for the downward extension of orebodies found above in the vicinity of the "nose" of the granitic intrusive, and in the anticlinal structure displayed in the limestone beds, in the vicinity of this intrusion. (See Map 2)

1. Work already done, since 1/25/51
   a. Drifting--- Int. drift, 6th Fl Rs. 70'
   b. Dia. Drilling, Holes 109,110 & 111 300'

2. Work yet to be done
   Further drilling, as shown on Map 2, involving holes # 112 thru 115 550'

To accompany application for Aid on Form MF-103

C. Further Development of Pit Orebodies, including Sinking.
(See Maps 4,5, 8 & 9)

1. Work already done since 1/26/51
   a. Shaft Sinking - 50' of 6'x12' shaft 50'
   b. Drifting and X-cutting on new 45' level 199'
   c. Raising from new 45 level (4 raises) 103'
   d. Diamond drilling - hole 203 100'

2. Work yet to be done
   a. Diamond Drilling - Holes 200 thru 214 - 1,817'

D. Ajax Claim Reopen Keystone Shaft (including setting up of a surface plant) and drift out, on the 141 level, under the strong mineralization shown at the contact in the old Ajax workings. (See Maps 1 & 3)

1. Work already done, since 1/26/51
   a. Surface plant - headframe, engineroom, machinery etc. set up. Power line also.
   b. 145' of old shaft widened, rehabilitated, guides, rail etc accomplished.
   c. Sump sunk 5'
   d. Station cut on 141 level
   e. Crosscut driven 40'
   f. Drifting along contact 70'

2. Work yet to be done.
   a. Drifting 160'
   b. Crosscutting 50'
   c. Diamond drilling - holes 400 thru 403 525'

E. 910 Crosscut.

1. No work on this project done.
2. Raise from face of 910 Crosscut to get downward extension of American Pit orebodies. 300'

F. Ajax from Broadway Mine.

1. No work done on this project.

2. Drive out under Ajax ground from north end of the Broadway 900 level.
   a. Drifting 575'
   b. Crosscutting 125'
   c. Raising 300'

G. Broadway 1000 Level.

Reopen the 1000 level and drive north under the 906 area and southwest under 905 area to develop ore indicated by drilling done. (see Map 2)

Victoria Mines, Inc
Sheridan, Montana

To accompany application for aid on Form MF-103

G. Broadway 1000 Level cont'd.

Work to be done

a. Pump out shaft from 900 to 1000 level and 1000 level drifts.
b. Rehabilitation of 1000 level station and drifts.

c. Drive north under 906 area and southwest under 905 area to develop ore indicated. Approximately 1500' of drifting required

Summary of Proposed Development Work.
(This includes all work done since original application dated 1/26/51 by the Company at its own expense.)

Project.	Drifting and Crosscutting	Raising	Shaft Sinking	Diamond Drilling	Other
A.	146	255		1257	
B.	70			850	
C.	199	103	50	1897	
D.	320		5	525	Rehabilitation
E.		300			
F.	700	300			
G.	1500				Rehabilitation
Totals	2935'	958'	55'	4529'	

For work already done see Addendum C.

For the estimated cost of the proposed development work see addendum F.

It is anticipated that approximately 20 months will be required to complete the above projects, this will be after approval is granted. Many of the phases of some of the projects will be scheduled for completion within several months after approval.

Addendum E.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

Estimated Cost of Proposed Development Work outlined in our Addendum E accompanying this application and previously outlined in our letter application of 1/26/51, a copy of which is attached to this application as Addendum A.

A.	1.	Work already done 906 area	8,388.94
	2.	a. Raising 916 & 918 total 132'	3,960.00
		b. Diamond Drilling total 540'	1,080.00
		Total	$ 13,428.94
B.	1.	Work already done 905 Raise area	2,622.00
	2.	Diamond Drilling to be done 550'	1,100.00
			$ 3,722.00
C.	1.	Work already done Pit Area	9,482.17
	2.	Diamond Drilling to be done 1,817'	3,634.00
			$ 13,116.17
D.		Work already done Ajax Claim	7,721.34
	2.	a. & b. Drifting & X-cutting 210'	6,300.00
		c. Diamond Drilling 525'	1,050.00
			$ 15,071.34
E.		Work to be done 910 Crosscut 300' Raise	$ 9,000.00
F.		Work to be done Ajax from Broadway Mine	
		a. & b. Drifiting & X-cutting 700'	19,600.00
		c. Raise 300'	9,000.00
			$ 28,600.00
G.		Broadway 1000 Level	
		a. & b. Pump out shaft & level and rehabilitation ofsame including Pumps	25,000.00
		c. Drifiting approx 1500'	42,000.00
			$ 67,000.00
		Grand Total	$ 149,938.45

Addendum G.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

23.	a.	6 miners	48,800.00
		3 Hoistmen-truckers	24,400.00
		1 Diamond Drill Operator	3,500.00
	b.	1 Mine Foreman	8,840.00
		1 Mine Superintendent	9,620.00
		1 Part time Office man	6,240.00
	c.	None	
	d.	Cost Ajax rehabilitation	4,681.00
	e,	Additional Equipment & Install	5,000.00
	f.	None	
	g.	None	
	h.	Materials & Supplies	32,858.00
	i.	Power & water control	6,000.00
		Total	$ 149,939.00

24. The project as outlined in Addendum E is estimated to require approximately 20 months to complete. Projects A, B, C and D would be scheduled for completion first and would require approximately nine months to complete after the project is approved with approximately $ 17,124.00 being spent. Some parts of projects above would be completed within a few months after beginning and projects E, F and G. would be scheduled to begin, in that order.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. dma 2157

Date received 10-15-51

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 15 1951

Name and address of applicant

Victoria Mines, Inc.
Box 247
Sheridan, Montana

Date September 10, 1951

FILL IN THIS BLOCK

Date of application Original letter application dated January 26, 1951

Estimated cost 149, 938.45

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Silver Star, Madison County, Montana

Date of filing MF-100 June 30, 1951

DMA Docket Number, if available MS 1773

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation — See MF-100
*2. If a partnership, state names and addresses of partners. "
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. "
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property? "
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing. Inapplicable

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? 50% of cost. We expect the work done on these projects as outlined in addendum E and costs stated in Addendum D to be credited against our share because this work was done since date of our original letter application of January 26, 1951.

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

Theodore Newlon, Chief Accountant

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. See MF-100 and Addendums A & B.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Same

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any. See MF-100

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads. "

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source. "

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work. "

15. State in detail how the ore could be shipped and how and where milled. "

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations. See Addendums A & B

(*b*) State briefly the known history and production of adjoining and neighboring properties. See Addendum B

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations. See Addendum B.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining			See MF-100	
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly. See Addendum B and Maps accompanying.

(*b*) Submit available maps and assay data. " " " " " " "

(*c*) Give estimated tonnage and grade of each class of ore reserves. " " " " "

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted? Copper

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it. Addendum E.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data. See Addendum B & E and maps accompanying and results of work done to date Addendum C

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows: See Addendum G

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each. " " "

(*b*) Supervisors, by numbers and positions, with salaries of each. " " "

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings. " " "

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings. " "

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each. " " "

(*f*) Cost of rental for equipment which the operator proposes to rent. " " "

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work. "

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each. " "

(*i*) Cost of power, water, utilities, and any other items not provided for above. " "

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent. " " "

CERTIFICATION

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

Victoria Mines, Inc.
(Name of company)

By John T. Potts
(Signature of authorized official)

September 11, 1941
(Date)

President.
(Title)

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

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

To accompany application for aid, on form MF-103
Victoria Mines, Inc., Sheridan, Montana

ADDENDUM A.

January 26, 1951

Mr. James Boyd, Acting Director
Minerals Administration for Defense
Room 6416, Dept. of Interior Bldg.,
Washington 25, D. C.

Dear Sir:

This communication is intended to be an application, in letter form, for assistance at the Broadway Group of claims, owned by Victoria Mines, Inc., which is currently producing copper ore in important quantities and which could with further development and mining aid increase substantially its production of this much needed metal and so contribute to the National Defense, in the present emergency.

Victoria Mines, Inc. owns and controls a compact group of 6 patented and 9 unpatented claims in Township 2 S ; Range 6 W; 2 miles west of Silver Star, Madison County, Montana. A 100 ton flotation mill is located adjacent to the main Broadway Shaft. Copper concentrates are shipped on the Northern Pacific Railway which has a loading ramp four miles east of the mill, to the Anaconda Copper Mining Company Smelter, at Anaconda, Montana, a distance of 65 miles.

Victoria Mines, Inc. began operation of the Broadway Group in 1937. Originally a gold producer, a cyanide plant was built at that time to treat such ores. Indications of copper ore were found at depth in the mine but could not be subsequently treated or developed because of the L 208 Gold Closing Order stopping operations. In late 1942 and early 1943 the cyanide plant was converted to flotation for treatment of lead-zinc ores from another property acquired by Victoria Mines, Inc. With the ending of Worls War II and the cessation of Government aid, these lead-zinc ores could no longer be hauled and treated profitably and the Broadway Group was reopened. Open pit work was begun on one of the claims of the Group and substantial amounts of copper ore were developed. These could be treated by the flotation plant previously used on the lead-zinc ores. The 900 level of the Broadway Shaft was unwatered and reopened at considerable expense and the copper ore found earlier was further developed and some tonnage was treated at the mill.

Expensive underground development work by means of diamond drilling showed considerable promise of a substantial tonnage of copper bearing ore and several drifts and raises were begun to develop this ore on the 900 level of the Broadway Shaft.

Additional extensive development work in the open pit previously referred to, in claims where gold ore mining had been carried on previously by the open pit method, revealed considerable quantities of oxidized copper ore. These are being mined cheaply by open pit methods but due to their being highly oxidized, recovery by flotation is consequently low as shown by the figures in the paragraph below. However, as of recent date and as mining has proceeded deeper, the oxidized copper ore has given way in the bottom of the pit to wholly sulphide material consisting of primary copper sulphides. Recovery, therefore, is expected to show great improvement.

The total production of copper since late 1948 to date has been 757,191 pounds from settlement assays. Production during 1950 was 358,214 pounds from ore with an average assay grade of 1.07% which included the oxidized copper ore and much low grade ore encountered in development. The dry tonnage milled during 1950 totalled 22,667 tons.

The Broadway Group is developed by a number of shafts and tunnels, chief of which is the Broadway Shaft, sunk to the 1000 level. Recent underground production has been wholly from the 900 level where ore is being produced from several places. The American pit, where open pit mining is being conducted, has been developed to a depth of 80 feet and is approximately 130 feet long by 80 feet wide.

On the property owned by Victoria Mines, Inc. Pre-Cambrian gneisses and Plaeozoic limestones are intruded by the quartz monzonite of the Boulder batholith. Orebodies, primarily gold and copper have formed in fissures traversing both the sedimentary and igneous rocks and occur also as replacements in the limestone at or near the contact of the quartz monzonite. The mineralization is apparently persistent, and in the case of the Broadway mine, ore is being currently found and mined on the 900 level. Development work and stope control is under the supervision of an experienced geologist.

Because of the lack of funds to support extensive development programs, the actual blocking out of large tonnages of proven ore has not been possible. Development of necessity has proceeded along with mining and while large potential tonnages are indicated, and a number of faces are in ore, to prove up on these extensions and build up a developed ore reserve will require financial help and a long range development program. Diamond drilling has indicated that large potential tonnages can be made available through such a development program.

Current costs show that underground mining is averaging $5.402 per ton of ore hoisted; open pit ore is being mined at a cost of $1.450 per ton and development work done has amounted to $0.496

Victoria Mines, Inc.
Sheridan, Montana

per ton of ore hoisted. Total milling costs of all ores mined is $1.847 per dry ton milled and hauling is $0.420 per ton. Miscellaneous costs are $0.387 per ton hoisted. A total average cost of $5.822 per ton of ore mined and milled as shown.

The wages now being paid have been effective since August, 1948. Wage scales at our mine have been governed by the rate effective in the Butte Mines. However, during the past few years, because of low prices for metals, Victoria Mines has been unable to meet the increases that have taken place in Butte. Because of the increased cost of living during the past year, an increase in the wage scale at the Victoria Mines will have to be made. At the present time there is a $2.30 per day differential existing between the wages being paid the Butte miners and the Victoria miners and the custom has been for many years to have a differential of only $1.00 per day. The cost of supplies is increasing also. It is therefore expected that our total mining and milling costs will approximate $7.00 per ton.

In order to assist our Government during the present National Emergency and in the consequent dire need for strategic metals, we are making this appeal for assistance so that we may be able to develop and carry on production of copper and not only maintain our present rate of production but increase it in the immediate future.

Below is set forth an outline of the assistance needed.

If granted, the assistance would allow for a well organized development program to prove up known extensions of ore that now exist and help develop areas and situations where the chances of finding new copper ore-bodies are very favorable according to geological indications. Also the assistance would materially aid in covering mining costs under present conditions and take care of probable cost increases in the near future. We know that it is impossible for us to continue to operate under our present wage scale and the monies expended in the past for our present production and development has not been replaced through settlement for metals produced. In fact we have incurred a long continued loss despite a cost as low as any obtained by any like company in this section of the country. We have practically reached the limit of our resources because of such losses. We can truthfully state that not a single officer of this corporation has received any remuneration of any kind during this period and that no high salaries or commissions are being paid to any workman whatsoever.

Therefore, we ask the Government's consideration of the following:

That an arrangement be made so that we can receive payment for the copper metal produced, based on the following conditions:

Victoria Mines, Inc.
Helena, Montana

Anticipated average grade for 1951 is Au .06; Ag 0.8; Cu 1.50%

Anticipated tonnage milled per day is 100 dry tons of ore.

Based on the above assays we anticipate the following grades and revenues would result:

Average copper concentrate grade	9.0%
Average tons concentrate produced	14.28 per day
Average pounds copper contained	2570
Smelter content payable (90% of above)	2313 pounds

Value of copper -------- $ 370.00 per day

Value of gold content based on .32 oz per ton in concentrate is -

14.28 tons conc. x .32 x 91.13% x 34.9125

Value of gold --------- $ 145.50 per day

Value of silver content based on 4.0 oz per ton in concentrate -

14.28 tons conc. x 4.0 - 1.0 x .90¢ less .02¢

Value of silver ------- $ 37.70 per day

Anticipated total revenue from the above grades is $ 553.30 per day.

Anticipated costs per month are :

Wages and payroll taxes	$ 11,300.00
Power	1,500.00
Insurance, assays, etc.	1,860.00
Supplies	2,500.00
	$ 17,160.00
Plus 10% for contingencies	1,716.00
Total monthly costs------	$ 18,876.00

7.26 5.30

Average for 26 working days	$ 726.00	per day
Less: Gold and silver revenues above	183.00	
	$ 543.00	
Less: Copper revenue at present price	$ 370.00	
Deficit under current conditions	$ 173.00	per day

On the basis of the above calculated revenue and costs and the deficit shown, the operation to be continued requires the copper price shown in the calculation below.

At 2313 pounds of payable copper calculated, a market price of $.337 per pound would have to be realized. From this amount a deduction of $.082 per pound is necessary to cover smelter treatment charges, freight and the price differential deduction by the smelter, leaving a net of $.255 per pound which includes $.02 per pound for profit.

In addition to the above request for assistance in continuing current production, we request your consideration of a loan of $125,000.00 to carry on extensive development work as outlined below:

Anticipated 3000 feet of diamond drilling at $2.00 per foot	$ 6,000.00
Unwatering from 900 to 1000 level of the Broadway Shaft and rehabilitating 1000 level station, drifts, etc. and including necessary pumps	35,000.00
Driving new drifts to tap known ore bodies, an estimated 1500 feet of drift at $20.00 per foot	30,000.00
Further development of open pit ore bodies and sinking	25,000.00
Reopening old workings on the Ajax claim where recent samples taken show existence of a considerable sized copper ore body requiring rehabilitation of shaft, installation of equipment, head frame and bins	14,000.00
The balance to be available for unknown contingencies and development	15,000.00

Not more than $5,000.00 of the total of the above loan be required for capital equipment and the balance of 96% will be spent entirely on development work.

In repayment of such loan, we would agree to pay back to the Government on the basis of 50% of all new profits accruing from the Broadway Group operations and we would anticipate increased production to a basis of 700,000 pounds of copper metal per year.

It is our intention to apply for an additional loan and assistance on the Toledo-Buckeye Group of claims, located near Sheridan, Montana, that are also owned by Victoria Mines, Inc.

to assist the Government in their need for lead-zinc ores. This request will be forwarded as soon as we can correlate all our facts and figures.

We trust this application will receive your serious consideration and if any additional information is required, please let us know.

Yours very truly,

VICTORIA MINES, INC.,

John T. Potts, President

JTP-p

To accompany application for aid, on Form MF-103
Victoria Mines, Inc. Sheridan, Montana

8/31/51

ADDENDUM B.

EXHIBIT A.

(Addendum to MF-100)
Victoria Mines, Inc.
Sheridan, Montana.

Report on the Broadway-Victoria Mine of the Victoria Mines, Inc.

Location

The property, known as the Broadway-Victoria Mine, owned by the Victoria Mines, Inc., is located in Sections 2 and 3, Townships 1 and 2 South, Range 6 West, MPM, about two miles west of Silver Star, Madison County, Montana. The area is referred to as the Silver Star Mining District. The nearest shipping point is at Silver Star which is on the Northern Pacific Railroad.

History and Production

Mining in the area began in the 1860s, and is described in the early writings of R. W. Raymond. Early producers were the Broadway, Green Campbell, Iron Rod and many other smaller properties. Several small mills were quickly built and operated in the 1870s at the various properties. The district has, with a few temporary interruptions, been a continuous producer since the early days.

A report of Hans Fritzsche, available at the Montana School of Mines and entitled "Geology and Ore Reserves of the Silver Star Mining District", places total production--up through 1935--at $2,500,000.00. The Broadway mine accounted for almost fifty percent of this early production. Production since 1935 has been considerable, and is tabulated on a supplementary sheet.

At the present time the mine and mill are working on a two-shift basis and production is at the rate of about 80 tons per day. The crude ore contains copper, gold and silver, and concentrates are shipped to the smelter of the Anaconda Copper Mining Company, at Anaconda, Montana.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan, Montana

Management

The present operators have managed the property for more than twelve years. John T. Potts, the president of the company, is a man of wide mining experience and devotes a good deal of time to managing the operation. Development work is supervised and laid out by I. G. Irving---a mining geologist of twenty-three years experience. Competent foremen are in charge of mine and mill operations.

Mill and Metallurgical Supervision

The original cyanide mill was converted to a flotation mill several years ago when sulphide copper ores were encountered. The metallurgical research and supervision is under the guidance of The Galigher Company, of Salt Lake City, Utah.

The present mill has a capacity of approximately 125 tons per day.

Mine Equipment

The Broadway mine has an excellent surface plant. Electric power operates the main hoist, the two compressors, underground pumps and other auxiliary equipment. Operations at the American Pit and the Ajax Shaft are furnished with good hoisting equipment and electric power.

Mining operations are aided by mucking machines, slushers and other modern and mechanical equipment.

A fleet of trucks, in good condition, move the ore from mine to mill and the concentrates to the railroad.

Development

Mining is taking place both underground, off the Broadway and Ajax shafts, and in an open pit. The pit is referred to as the American Pit and was mined as an open cut to a depth of about 80 feet below the surface. A shaft was recently sunk to a depth of fifty feet below the bottom of this pit and mining and development work is proceeding off the bottom of this shaft, on what is called the 45 Pit Level.

The main Broadway shaft has been sunk, on the incline, to a depth of approximately 820 feet, and the bottom level is about 590 feet vertically below the surface. The bottom level, referred to as the 1000 level, is under water but the 900 level (about 80' above) is the scene of most of the present underground mining.

EXHIBIT A

Addendum to MF-100----Victoria Mines, Inc., Sheridan,Montana

A total of approximately 1,700 feet of drifting and crosscutting has been done on the 900 level. On the upper levels and the 1000 level below approximately 3,000 feet of work is represented. Present operations include stoping and development work of various kinds on the 900 level.

A shaft on the Keystone claim has recently been reopened to a depth of 141 feet and drifting is proceeding off this working, toward the Ajax ground where ore has been exposed in shallower workings above.

Three other important shafts-- the East Broadway, the Hudson and the West Hudson-- have been sunk to depths of several hundred feet with considerable drifting and crosscutting on various levels.

These shafts are inactive at present. Numerous smaller workings exist on the property also.

A set of maps is being prepared and will be sent in with loan form MF-101, which should arrive at the proper D. M. A. office in the near future. These maps may be consulted, on their arrival if further details are needed on the development work.

Geology and Ore Occurrence

Broadly viewed, the orebodies occur at and near the contact of Paleozoic sedimentary rocks and Pre-Cambrian gneisses and schists with a granitic intrusion--apparently part of the Boulder batholith. Specifically, in the Broadway-Victoria mine, copper-gold ore which is oxidized in the upper levels but present in sulphide form at varying depths, is found in fissures and fractured zones and as replacement bodies in the altered limestone and tactite areas adjacent or very close to the granite.

In the old Broadway workings, while the ore followed in general the igneous contact, there is a suggestion of selective replacement of certain limestone beds as they abut the granite. Further,although a fissure system appears to have exerted significant control in the emplacement of the ore shoots, it is also believed that the fractured zone of the igneous-sedimentary contact itself was in general the main channelway for the ore solutions.

In the American Pit, while the copper ore being mined now gives the superficial appearance of being an irregular body of the "contact metamorphic type", there is very strong evidence that only certain beds, indistinct now because of their more or less complete sillication, contain commercial ore. Present development work, including diamond drilling, is exploring the possible extensions of this ore as tabular bodies of a bedded nature.

EXHIBIT A

Addendum to MF--100----Victoria Mines, Inc., Sheridan, Montana

The Keystone-Ajax development work is revealing ore that closely conforms to the granite contact and a shoot, perhaps 300 to 400 feet long is a possibility.

Underground on the Broadway 900 level, new ore has been found, not only as fissure replacements, but also as a replacement of a broad breccia zone. This latter ore presents new possibilities, in the camp, and is not so directly related to the contact as some of the other occurrences.

Ore Reserves and Potential Tonnage

Owing to the necessity of completing this form (MF-100) before June 30, 1951, a set of maps showing complete details of the ore blocked out, or indicated, can not be prepared in time. These supplementary maps, and longitudinal sections, are being prepared, however, and will accompany loan application form MF-101, which will be sent in a few weeks hence.

The following estimate of blocked out and probable ore will be submitted, however, subject to later modification: *

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore - tons	Probable ore
		Revised.				
American Pit	West orebody above 45 lev.	0.08	1.1	2.75	4,000	
"	West orebody extended 50' below 45 14v.	"	"	"		~~4,000~~ 1,800
"	East orebody above 45 lev.	~~0.04~~ .06	0.6 1.0	1.50		~~3,000~~ 1000
"	East orebody extended 50' below 45 lev.	" .06	" 1.0	"		~~3,000~~ 1,000
Broadway Mine	Ore exposed on sill in 906 area, extended 50' below	0.10	2.0	1.99		1,500
"	In 912DWS extended above to 906 Int.dr.	0.22	2.8	3.28	2,120	
"	In 912 DSW extended 50' below sill	0.08	1.0	1.25		1,375

* Note: Corrections in red are revisions made 7/20/51 J.A.J.

EXHIBIT A

Addendum to MF-100---Victoria Mines, Inc., Sheridan, Montana

Location	Description	Average Assay oz. Au	oz. Ag.	%Cu	Proven ore--tons	Probable ore
Broadway Mine	In 906 Idne. vein A carried 50' above	0.33	3.1	5.70	880	
"	In 906 IDNE Vein B carried 50' above	0.11	0.9	1.47	950	
"	In 906 IDW 50' above	0.32	0.4	1.32	2,500	
	50' below	~~0.20~~ 0.32	~~0.7~~ 0.4	~~1.65~~ 1.32		2,500
Totals & Average Grade (		~~0.16~~ 0.19	~~1.5~~ 1.1	~~2.72~~ 2.65	10,450	9,175
		~~0.09~~ 0.14	1.0	~~1.87~~ 1.74		~~15,375~~
Combined (Proved & Probable)		~~0.12~~ 0.16	~~1.2~~ 1.1	~~2.21~~ 2.22	~~25,825~~ 19,625	

J.B.I

In addition to the above, more or less proved and probable ore, there are several other areas on the property where prospective and probable ore exists and present development work (done since loan application in letter form was sent in on January 26, 1951) plus additional work if government aid is actually and finally rendered, will convert some of the indicated ore in these areas to the actual ore reserve. Particularly well thought of in this respect is the Keystone-Ajax development work and further development at greater depths below the American and Victoria Pits.

Diamond drilling, now in progress, in the vicinity of 905 stope, southwest of the Broadway shaft, has an excellent chance of revealing important orebodies in this area. Here, geologic factors are good for the localization of orebodies not yet found and for the extension of oreshoots mined in the early days in the upper levels of the old Broadway Mine.

Respectfully submitted,

Irving G. Irving

Irving G. Irving
Mining Geologist

6/28/51

ADDENDUM C

Victoria Mines, Inc
Sheridan, Montana.
8/28/51

To accompany Application for aid on Form MF-103

C

Work done at the Broadway Mine, Silver Star, Montana, since February 1, 1951, on development projects, outlined in letter application, for aid, dated Janaury 26, 1951

A. Diamond Drilling

In 905 area--- on 900 level
Holes Nos. 109, 110, 111, and 112--totalling 291'

On 900 level North end
Holes Nos. 101,102,103,104,105,106,107,108 and 113
totalling---------- 717'

In American pit
Hole 203 --for a total of 100'

Total drilling 1108'

B. Other Development Work

On 900 Level--North End
Raising (902 Rs., 916 Rs. and 918 Rs.) totalling 123'
Crosscutting (From 906Rs northwest to cut vein in 912DSW.) 18'
Drifting
In 912 DSW.------- 73'
In 906 Int. drift N.E. , on Vein B----- 55'

In American Pit
Shaft Sinking (from bottom of pit to "45"level) 50'
Drifting and crosscutting--on 45 level--a total of 199'
Raising from 45 level (3 raises) totalling 103'

Totals---
Shaft Sinking 50'
Raising 226'
Drifting & x-cutting 345'

C. In Keystone Shaft and Ajax Ground

This work comprised the setting up of a surface plant, including housing and headframe, and the rehabilitation of 145' of old shaft. From the bottom of the shaft a station was cut and to date ~~90'~~ 110' of drifting and crosscutting has been done. 180

(See Addendum D for an estimate of the cost of this work)

ADDENDUM D

Victoria Mines, Inc.
Sheridan, Montana

8/4/51

To accompany Application for aid on Form MF-103

D

Cost of work done at Broadway Mine, Silver Star, Montana since February 1, 1951 on development projects outlined in letter application for aid, dated January 26, 1951, the work done being outlined in Addendum C.

A. Diamond drilling.

In 905 Area -	291 feet	$ 502.35
900 level north -	717 feet	1237.76
American Pit -	100 feet	186.45
	Total	$ 1926.56

B. Development Work.

900 Level North -	Raising Crosscutting Drifiting	$ 8388.94
American Pit -	Shaft Sinking Drifting Raising	$ 9295.72

C. Keystone Shaft - Ajax Ground

* Total cost to 8/1/51	$ 7721.34

Total cost of work done since 2/1/51 to 8/1/51 $ 27,332.56

ADDENDUM E

To accompany Application for Aid
on Form # MF-103

Victoria Mines, Inc.
Sheridan, Montana
8/31/51

PROPOSED DEVELOPMENT WORK

E

The work outlined below was envisioned at the start of the year and was outlined broadly, but without specific detail, in our letter application, dated January 26, 1951.

The entire program is set forth, and also noted is the work done, on this program, by us, since the date of our original application.

A. In 906 Area

The further development of the orebodies exposed and partly developed, in the vicinity of 906 raise, on the 900 level, north. (See Maps 2,6 and 7)

1. Work already done, since 1/26/51
   - a. Crosscutting-- In 906 xcn-- 18'
   - b. Drifting--in 906 IDNE.----- 55'
   - ~~ex~~ in 912 DSW------- 73'
   - c. Raising, in 902,916, and 918 Raises-- 123'

   Total drifts, x-cuts and Raises 269'

   - d. Diamond drilling(holes 101 thru 108 and hole 113) 717'

2. Work yet to be done
   - a. Raising---Extend 916 Rs to sill above 50'
     Extend 918 Rs. " " " 82'
   - b. Diamond drilling
     Holes 301&302 (120' ea.) to prospect below 900 level for Veins A & B 240'
     Hole 305, on Vein B, on int. level 30'
     Holes 304 thru 308, on Breccia Vein 270'

B. In 905 Rs. Area

The further exploration, in 905 Rs area, southwest of station on the 900 level, for the downward extension of orebodies found above in the vicinity of the "nose" of the granitic intrusive, and in the anticlinal structure displayed in the limestone beds, in the vicinity of this intrusion. (See Map 2)

1. Work already done, since 1/26/51
   - a. Drifting--- Int. drift, 6th Fl Rs. 70'
   - b. Dia. Drilling, Holes 109,110 & 111 300'

2. Work yet to be done
   Further drilling, as shown on Map 2, involving holes # 112 thru 115 550'

To accompany application for Aid on Form MF-103

C. Further Development of Pit Orebodies, including Sinking.
(See Maps 4,5, 8 & 9)

1. Work already done since 1/26/51
   a. Shaft Sinking - 50' of 6'x12' shaft 50'
   b. Drifting and X-cutting on new 45' level 199'
   c. Raising from new 45 level (4 raises) 103'
   d. Diamond drilling - hole 203 100'

2. Work yet to be done
   a. Diamond Drilling - Holes 200 thru 214 - 1,817'

D. Ajax Claim Reopen Keystone Shaft (including setting up of a surface plant) and drift out, on the 141 level, under the strong mineralization shown at the contact in the old Ajax workings. (See Maps 1 & 3)

1. Work already done, since 1/26/51
   a. Surface plant - headframe, engineroom, machinery etc. set up. Power line also.
   b. 145' of old shaft widened, rehabilitated, guides, rail etc accomplished.
   c. Sump sunk 5'
   d. Station cut on 141 level
   e. Crosscut driven 40'
   f. Drifting along contact 70'

2. Work yet to be done.
   a. Drifting 160'
   b. Crosscutting 50'
   c. Diamond drilling - holes 400 thru 403 525'

E. 910 Crosscut.

1. No work on this project done.

2. Raise from face of 910 Crosscut to get downward extension of American Pit orebodies. 300'

F. Ajax from Broadway Mine.

1. No work done on this project.

2. Drive out under Ajax ground from north end of the Broadway 900 level.
   a. Drifting 575'
   b. Crosscutting 125'
   c. Raising 300'

G. Broadway 1000 Level.

Reopen the 1000 level and drive north under the 906 area and southwest under 905 area to develop ore indicated by drilling done. (see Map 2)

To accompany application for aid on Form MF-104

G. Broadway 1000 Level cont'd.

Work to be done

a. Pump out shaft from 900 to 1000 level and 1000 level drifts.
b. Rehabilitation of 1000 level station and drifts.

c. Drive north under 906 area and southwest under 905 area to develop ore indicated. Approximately 1500' of drifting required

Summary of Proposed Development Work.
(This includes all work done since original application dated 1/26/51 by the Company at its own expense.)

Project.	Drifting and Crosscutting	Raising	Shaft Sinking	Diamond Drilling	Other
A.	146	255		1257	
B.	70			850	
C.	199	103	50	1897	
D.	320		5	525	Rehabilitation
E.		300			
F.	700	300			
G.	1500				Rehabilitation
Totals	2935'	958'	55'	4529'	

For work already done see Addendum C.

For the estimated cost of the proposed development work see addendum F.

It is anticipated that approximately 20 months will be required to complete the above projects, this will be after approval is granted. Many of the phases of some of the projects will be scheduled for completion within several months after approval.

Addendum F.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

Estimated Cost of Proposed Development Work outlined in our Addendum E accompanying this application and previously outlined in our letter application of 1/26/51, a copy of which is attached to this application as Addendum A.

A.	1.	Work already done 906 area	8,388.94
	2.	a. Raising 916 & 918 total 132'	3,960.00
		b. Diamond Drilling total 540'	1,080.00
		Total	$ 13,428.94
B.	1.	Work already done 905 Raise area	2,622.00
	2.	Diamond Drilling to be done 550'	1,100.00
			$ 3,722.00
C.	1.	Work already done Pit Area	9,482.17
	2.	Diamond Drilling to be done 1,817'	3,634.00
			$ 13,116.17
D.		Work already done Ajax Claim	7,721.34
	2.	a. & b. Drifting & X-cutting 210'	6,300.00
		c. Diamond Drilling 525'	1,050.00
			$ 15,071.34
E.		Work to be done 910 Crosscut 300' Raise	$ 9,000.00
F.		Work to be done Ajax from Broadway Mine	
		a. & b. Drifiting & X-cutting 700'	19,600.00
		c. Raise 300'	9,000.00
			$ 28,600.00
G.		Broadway 1000 Level	
		a. & b. Pump out shaft & level and rehabilitation ofsame including Pumps	25,000.00
		c. Drifiting approx 1500'	42,000.00
			$ 67,000.00
		Grand Total	$ 149,938.45

Addendum G.

Victoria Mines, Inc.
Sheridan, Montana

To accompany application for aid on Form MF-103

23.	a.	6 miners	48,800.00
		3 Hoistmen-truckers	24,400.00
		1 Diamond Drill Operator	3,500.00
	b.	1 Mine Foreman	8,840.00
		1 Mine Superintendent	9,620.00
		1 Part time Office man	6,240.00
	c.	None	
	d.	Cost Ajax rehabilitation	4,681.00
	e,	Additional Equipment & Install	5,000.00
	f.	None	
	g.	None	
	h.	Materials & Supplies	32,858.00
	i.	Power & water control	6,000.00
		Total	$ 149,939.00

24. The project as outlined in Addendum E is estimated to require approximately 20 months to complete. Projects A, B, C and D would be scheduled for completion first and would require approximately nine months to complete after the project is approved with approximately $ 17,124.00 being spent. Some parts of projects above would be completed within a few months after beginning and projects E, F and G. would be scheduled to begin, in that order.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 2157

Date received 10-15-51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 15 1951

Victoria Mines, Inc.
Box 247
Sheridan, Montana

Name and address of applicant

Date June 27, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Copper, Gold, Silver
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following: See Page 2 - Exhibit A.
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district. See Page 1, - Exhibit A
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Being operated as owner by Victoria Mines, Inc.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production 6 years as Gold Mine - 3 years Copper Production.

   If not in production or operation, estimated date when production will begin
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project. See Page 1 - Exhibit A
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. See Page 1 - Exhibit A.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
John T. Potts Salt Lake City, Utah	Pres. D	None	Not Known	95,000	None	None	None
Alf C. Kremer Butte, Montana	V-Pres. D	"	"	15,000	"	"	"
Sanford Knapp Phillipsburg, Montana	Treas	"	"	1	"	"	"
" " Alvin Taylor, Jr	Secty D	"	"	1	"	"	"
Robt H. Nelson Helena, Montana	Director	"	"	23,000	"	"	"
The Galigher Co Salt Lake City, Utah	Stockholder	"	"	50,000	"	"	"
Taylorm Nelson, Knapp	"	"	"	63,998	"	"	"
	Total	None	x x x x x	248,000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$500,000	$247,000	$ 1.00	247,000	None
Preferred stock	$ None	$ None	$ None	None	None

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Copper Lead-zinc	17,627 11,178	25,878	22,667	2,000
2. Quantity of product processed (specify unit of measure and type of process)	Copper Concs	1025.71T	2297.36	2468.59	175T
3. Quantity and grade of product sold or shipped (specify units of measure)	Lead Zinc Copper	159 T 168 T 20 T	179 T	179 T	15 T

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Increase if Possible

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. See Page 3 to 5 - Exhibit A.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows: See Page 4 - Exhibit A.

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Short Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	10,450	~~2.72%~~ Cu 0.16 Au ~~1.50 Ag~~	14.70	11.76	7.238
Indicated (probable)	15,375	0.09 Au ~~1.00 Ag~~	9.48	7.58	7.238
	25 825	1.87% Cu	Cu 2.21 Au .11 Ag 1.20		

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads: 2 Miles to Silver Star good graded roads- 40 Mi Butte Paved Road
Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply: Underground pumps - 150 GPM - Sufficient
State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power: Electric - Montana Power Co - Approx 130,000 kw per Month
State amount of power used, rate per hour, and source thereof.

16. Labor: 11 Miners - 5 Mill - 1 Truck- 3 Hoist - 1 Repair - 1 Office
State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: See Page 2 - Exhibit A.
Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

Victoria Mines, Inc.
(Name of company)

By John T. Potts
(Signature of authorized official)

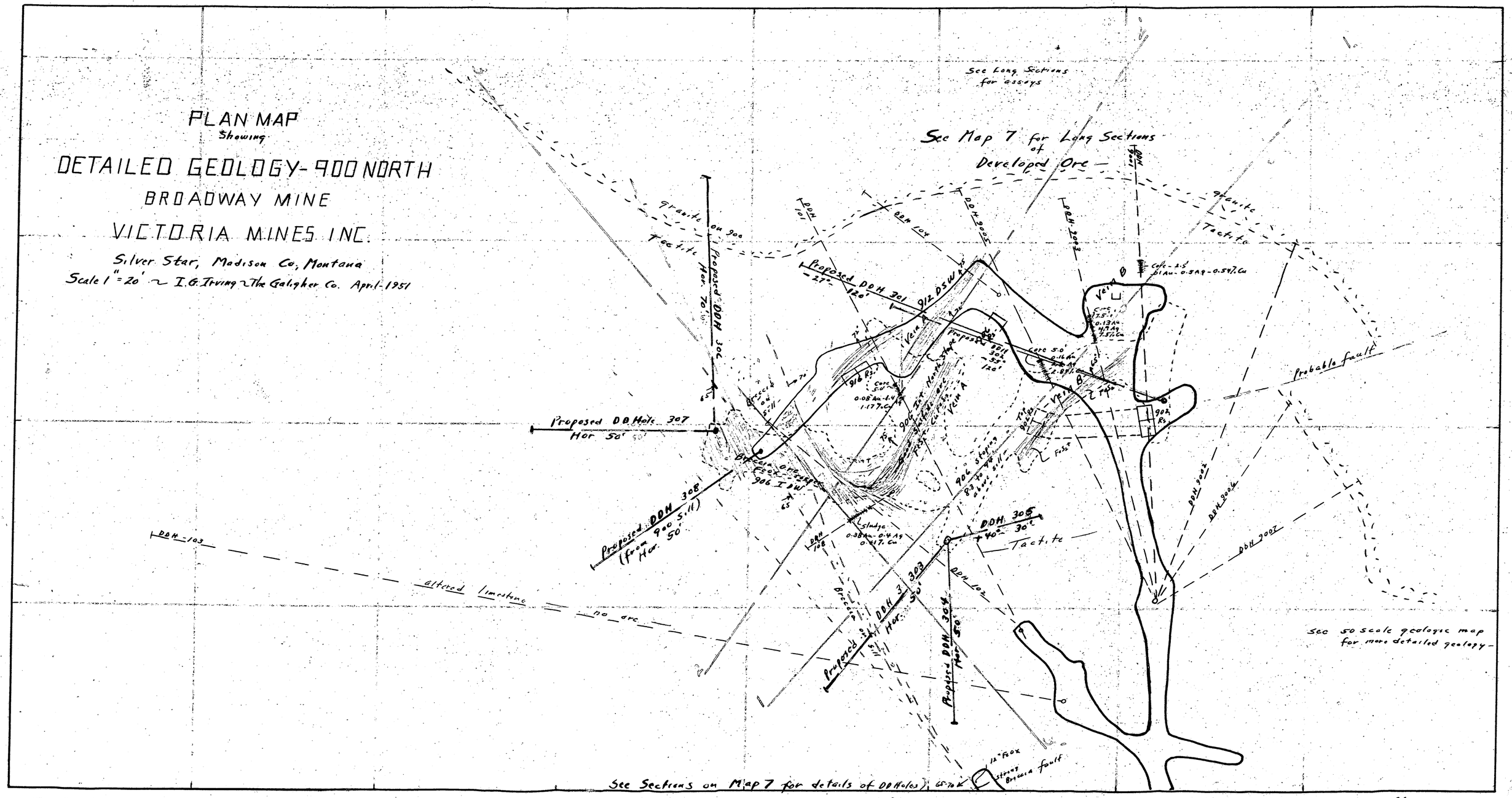
Sheridan, Montana
(Date)

President.
(Title)

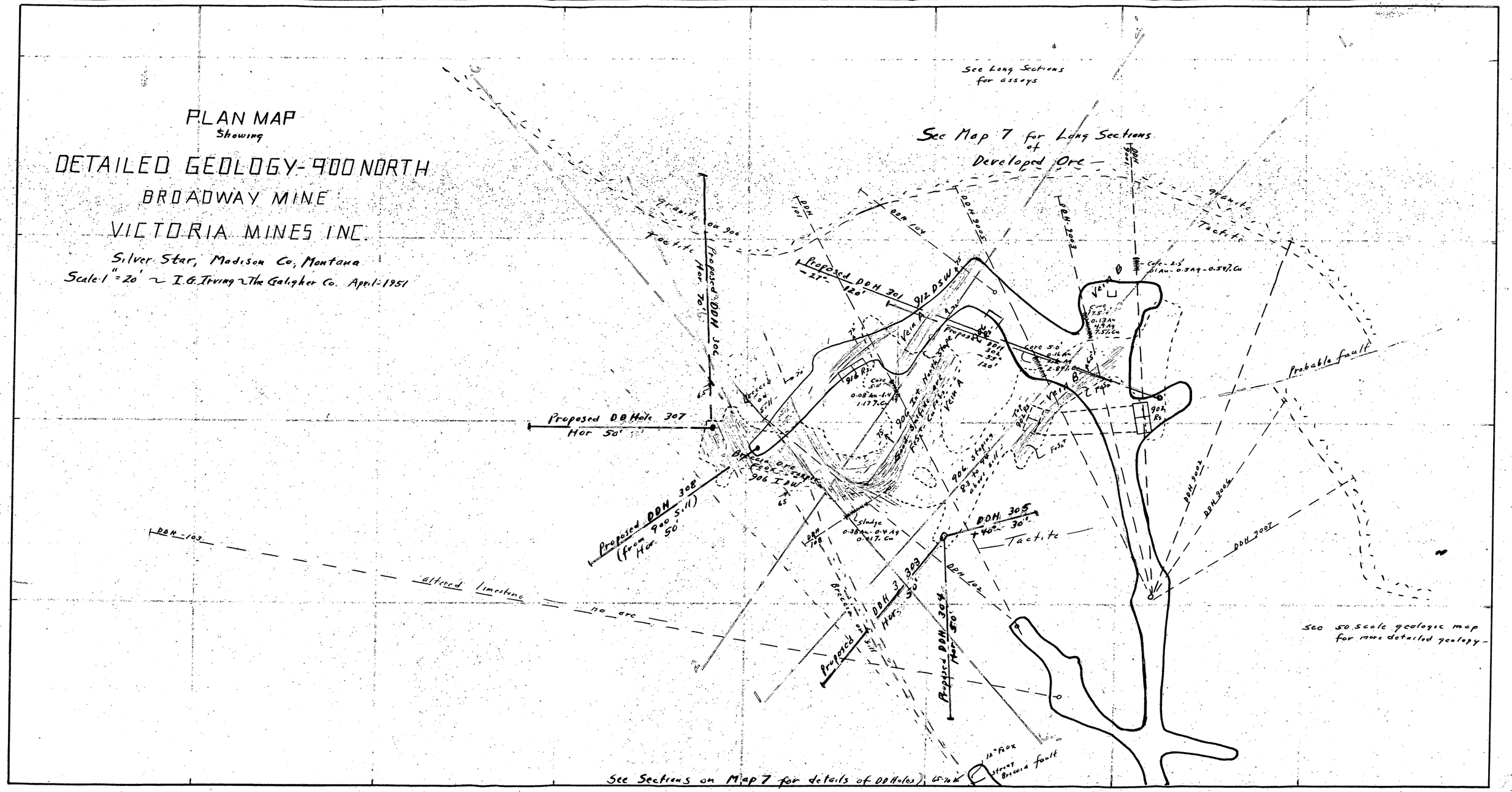
June 27, 1951

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

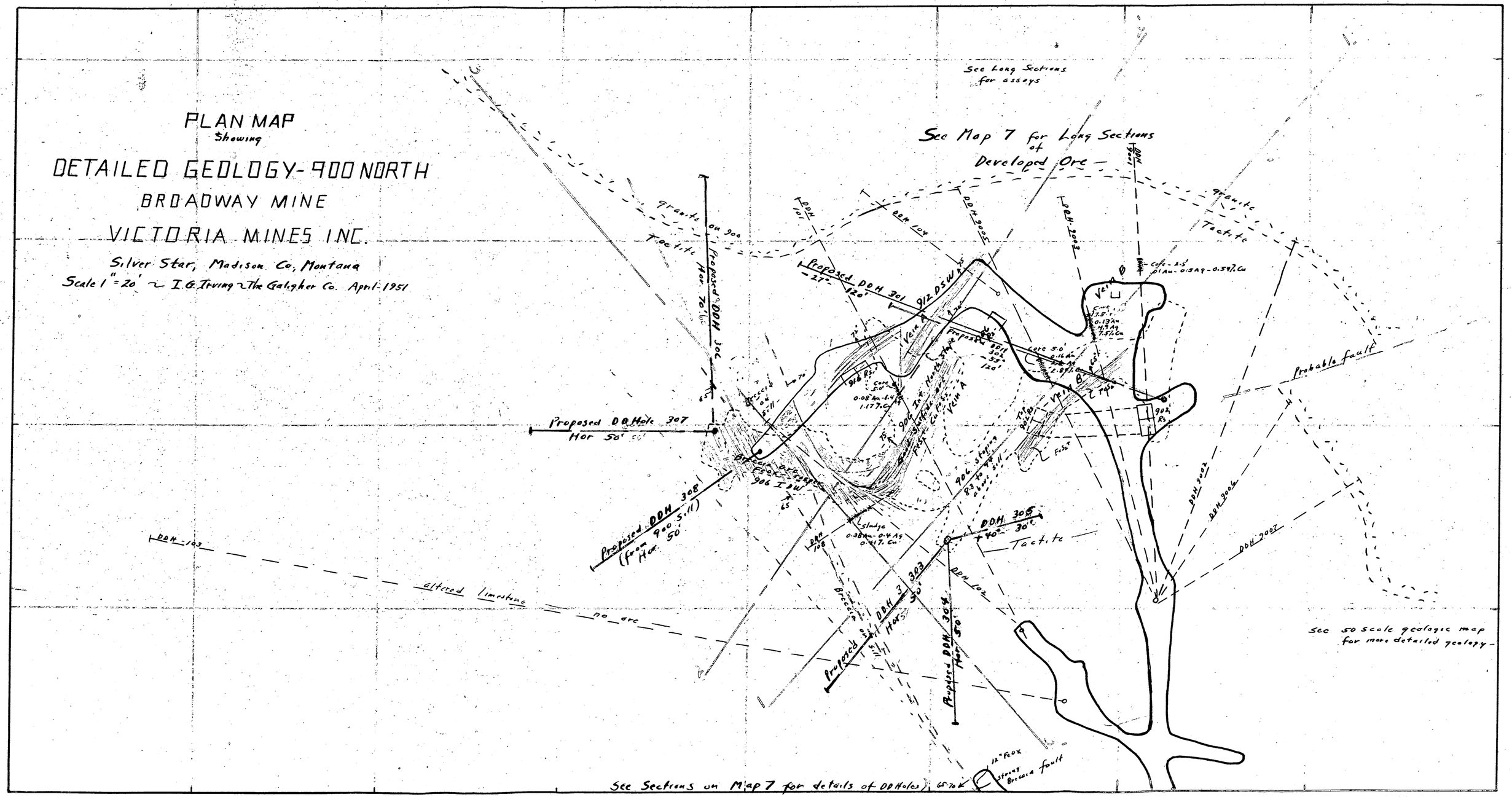
U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

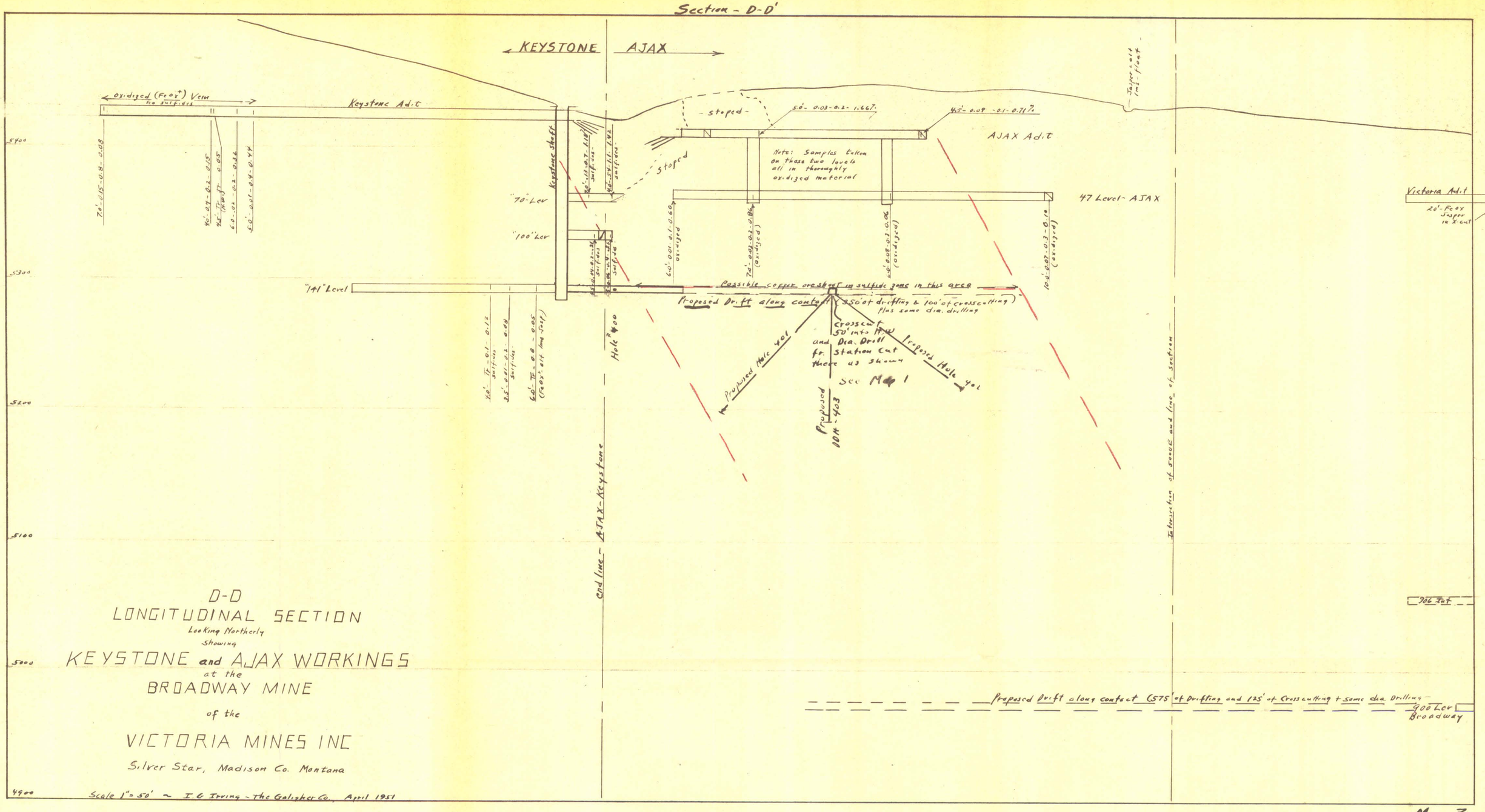

PLAN MAP
Showing
DETAILED GEOLOGY-900 NORTH
BROADWAY MINE
VICTORIA MINES INC.
Silver Star, Madison Co., Montana
Scale 1" = 20' ~ I.G. Irving ~ The Gallagher Co. April-1951
See Long Sections for assays
See Map 7 for Long Sections of Developed Ore
See 50 scale geologic map for more detailed geology
See Sections on Map 7 for details of DD Holes
Granite
Tactite
Proposed DDH 306
Hor. 70'
Proposed DD Hole 307
Hor 50'
Proposed DDH 308
(from 900 S.11)
Hor. 50'
Proposed DDH 301
Proposed DDH 302
Proposed DDH 303
Hor. 50'
Proposed DDH 304
Hor. 50'
DDH 305
Vein A
Vein B
Vein C
Vein D
Breccia
Fault
Probable fault
altered limestone
no ore
DDH 103
DDH 102
DDH 9002
DDH 9003
DDH 9004
DDH 9005
DDH 9007
12" Fox
Strong Breccia fault

Map 6

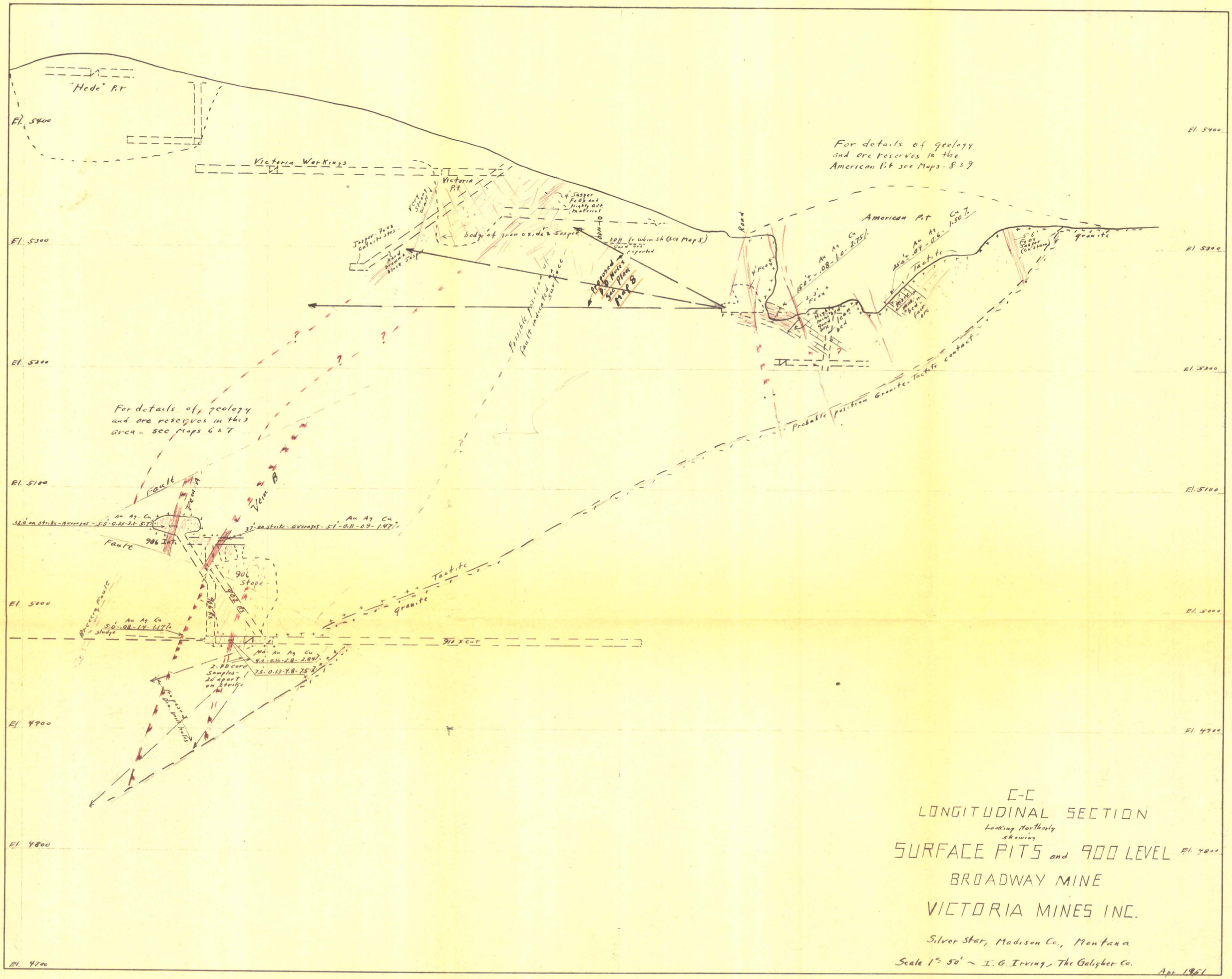

PLAN MAP
Showing
DETAILED GEOLOGY-900 NORTH
BROADWAY MINE
VICTORIA MINES INC.
Silver Star, Madison Co, Montana
Scale 1" = 20' ~ I.G. Irving ~ The Gallagher Co. April-1951
See Long Sections for assays
See Map 7 for Long Sections of Developed Ore
Granite
Tactite
Proposed DDH 301
Proposed DDH 302
Proposed DDH 303
Proposed DDH 304
Proposed DDH 305
Proposed DDH 306
Proposed DDH 307
Proposed DDH 308
Hor 50'
Vein A
Vein B
Probable fault
altered limestone
no arc
Breccia
Sludge
Stoping
Core 5.0'
DDH 101
DDH 102
DDH 103
DDH 900S
DDH 900T
See 50 scale geologic map for more detailed geology
See Sections on Map 7 for details of DD Holes
Strong Breccia fault

Map 6


PLAN MAP
Showing
DETAILED GEOLOGY-900 NORTH
BROADWAY MINE
VICTORIA MINES INC.
Silver Star, Madison Co, Montana
Scale 1" = 20' ~ I.G. Irving ~ The Gallagher Co. April-1951
See Long Sections for assays
See Map 7 for Long Sections of Developed Ore
See 50 scale geologic map for more detailed geology
See Sections on Map 7 for details of DD Holes
Granite
Tactite
Proposed DDH 306
Hor 70'
Proposed DD Hole 307
Hor 50'
Proposed DDH 308
(from 900 S.11)
Hor 50'
Proposed DDH 301
120°
Proposed DDH 302
Proposed DDH 303
Hor 50'
Proposed DDH 304
Hor 50'
DDH 305
30°
Vein A
Vein B
Vein C
Breccia
Sludge
Probable fault
Strong Breccia fault
altered limestone
no ore
DDH 103
DDH 102
DDH 101
DDH 104
DDH 9002
DDH 9003
DDH 9004
DDH 9005
DDH 9006
DDH 9007
Map 6


Section - D-D'
KEYSTONE
AJAX
Oxidized (Fe ox+) Vein
no sulfides
Keystone Adit
Keystone Shaft
stoped
stoped
AJAX Adit
Note: Samples taken on these two levels all in thoroughly oxidized material
"70" Lev
"100" Lev
"141" Level
47 Level - AJAX
Victoria Adit
Possible copper ore shoot in sulfide zone in this area
Proposed Drift along contact (350' of drifting & 100' of crosscutting) Plus some dia. drilling
Crosscut 50' into ftw and Dia. Drill fr. Station Cut there as shown
See Map 1
Proposed Hole 401
Proposed Hole 402
Proposed DDH-403
Hole #400
End line - AJAX-Keystone
Intersection of 5000E and line of section
Proposed Drift along contact (575' of Drifting and 125' of Cross cutting + some dia. Drilling
900 Lev Broadway
5400
5300
5200
5100
5000
4900
D-D
LONGITUDINAL SECTION
Looking Northerly
Showing
KEYSTONE and AJAX WORKINGS
at the
BROADWAY MINE
of the
VICTORIA MINES INC
Silver Star, Madison Co. Montana
Scale 1" = 50' ~ I. G. Irving - The Gallagher Co. April 1951

Map 3



C-C
LONGITUDINAL SECTION
looking Northerly
showing
SURFACE PITS and 900 LEVEL
BROADWAY MINE
VICTORIA MINES INC.

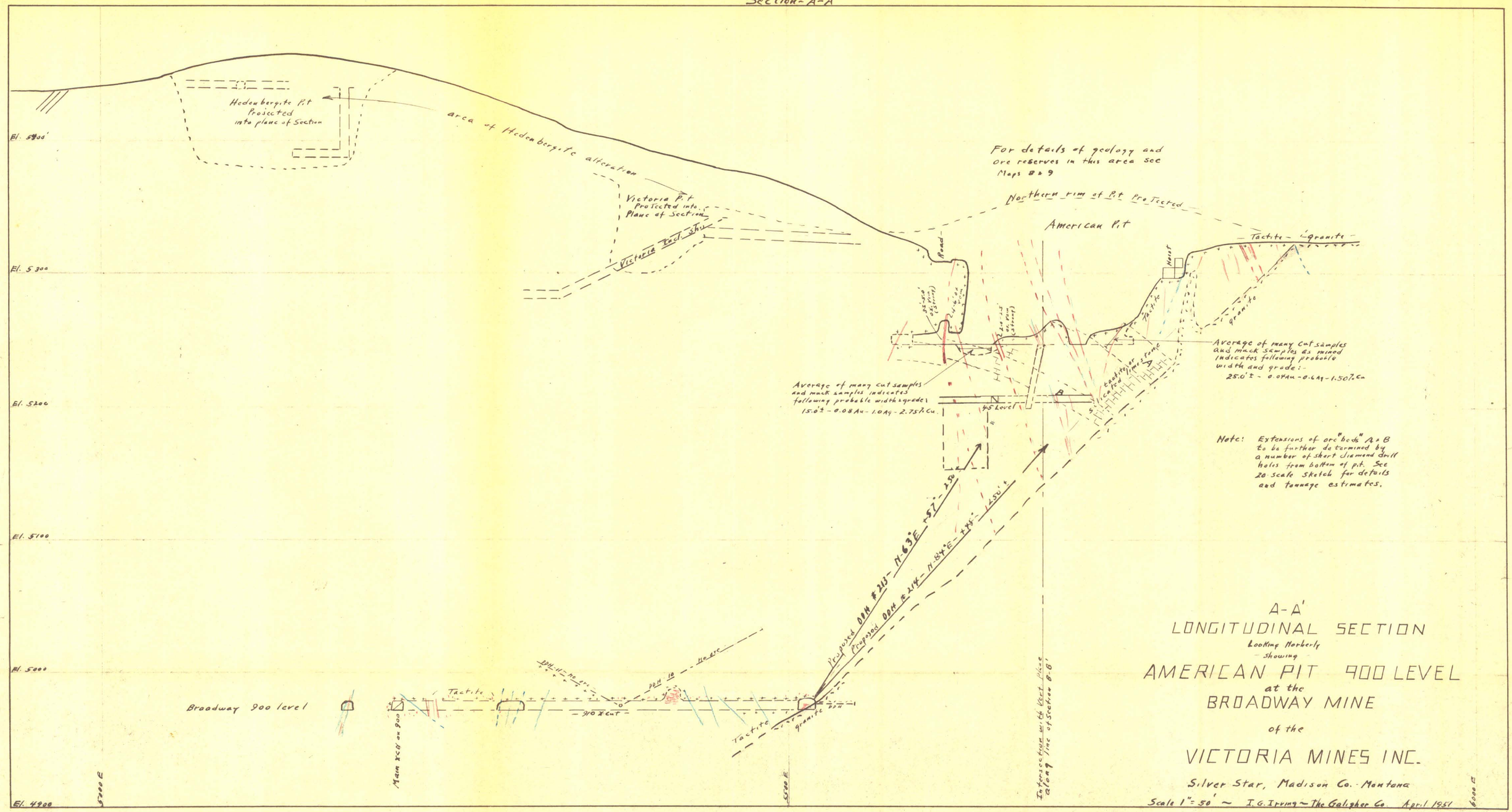
Silver Star, Madison Co., Montana

Scale 1" = 50' ~ I. G. Irving, The Galigher Co.

Apr. 1961

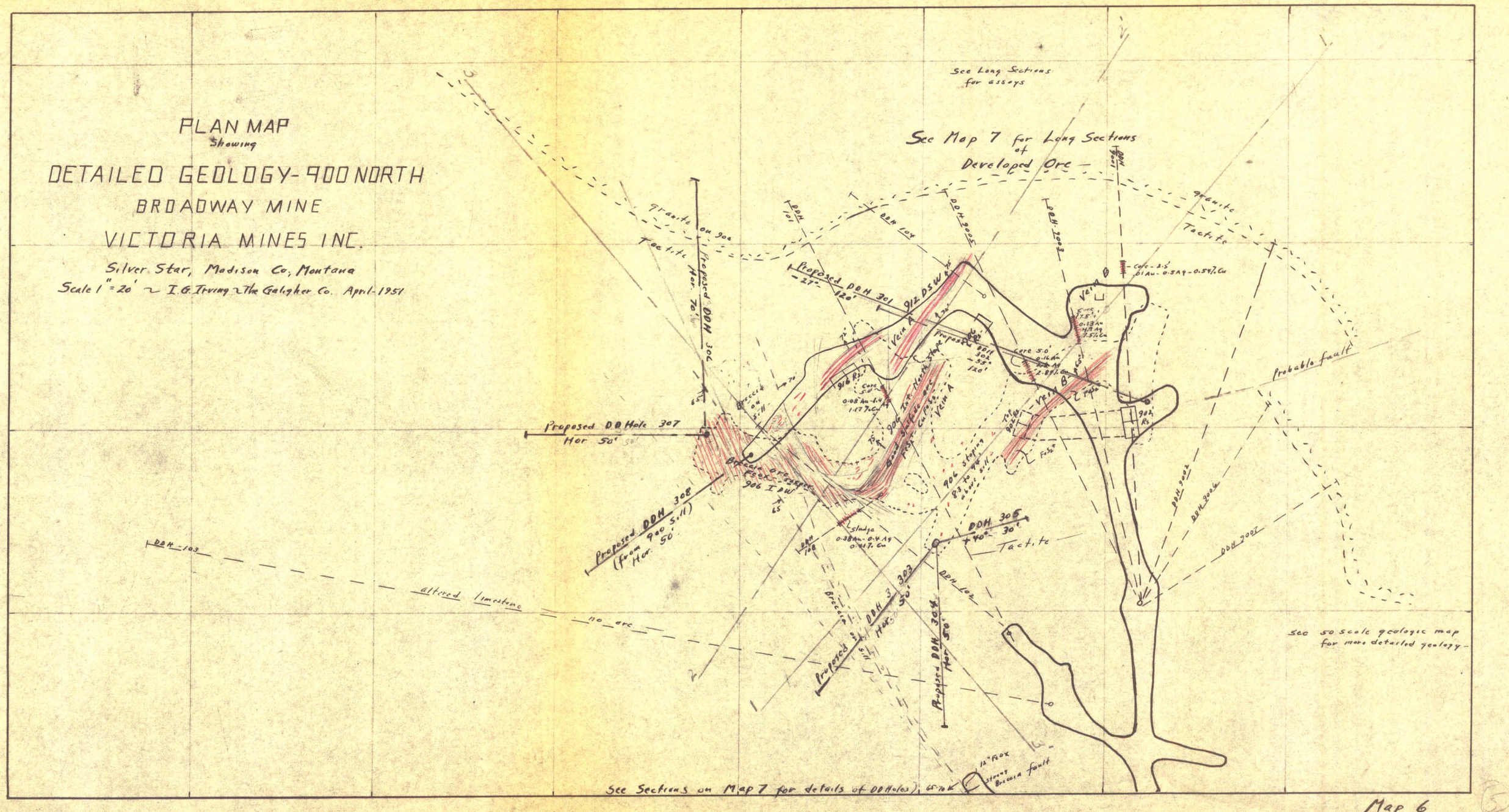
Map 4

Section-A-A'



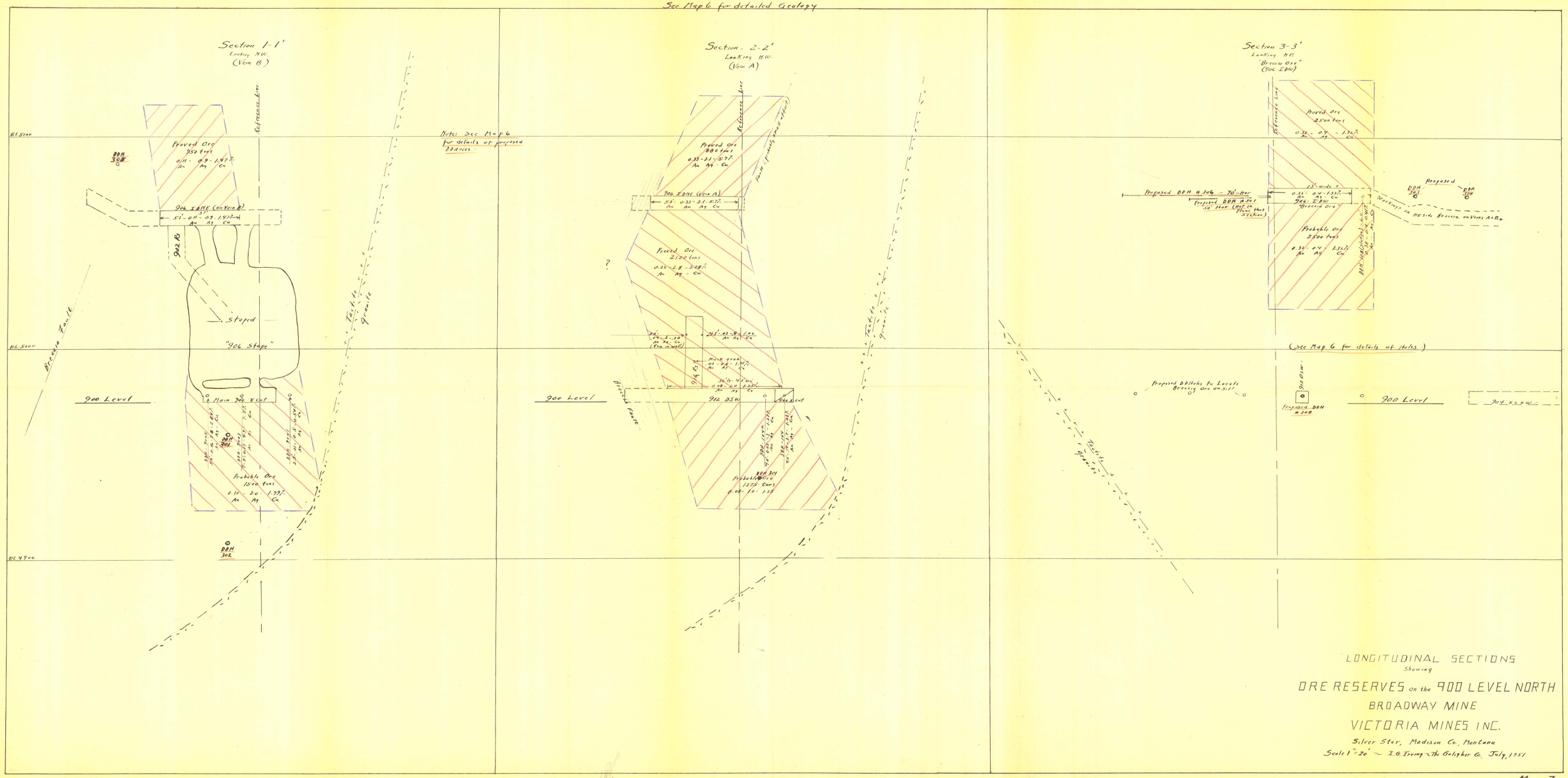
A-A'
LONGITUDINAL SECTION
Looking Northerly
- Showing -
AMERICAN PIT 900 LEVEL
at the
BROADWAY MINE
of the
VICTORIA MINES INC.
Silver Star, Madison Co. - Montana
Scale 1" = 50' ~ I. G. Irving ~ The Galigher Co. April 1951

Map 5


PLAN MAP
Showing
DETAILED GEOLOGY-900 NORTH
BROADWAY MINE
VICTORIA MINES INC.
Silver Star, Madison Co, Montana
Scale 1" = 20' ~ I.G. Irving & The Gallagher Co. April-1951
See Long Sections for assays
See Map 7 for Long Sections of Developed Ore
Granite
Tactite
Proposed DDH 306
Hor 70'
Proposed DDH 301
120'
Vein A
Vein B
Core 5.0'
0.14 Au
2.8% Cu
Core 2.5'
0.1 Au - 0.3 Ag - 0.5% Cu
Core 1.5'
0.13 Au
4.7 Ag
7.5% Cu
Core 5.0'
0.08 Au - 1.4 Ag
1.1% Cu
Breccia 0.4' 5.11
Proposed DD Hole 307
Hor 50'
Proposed DDH 308
(from 900 5.11)
Hor 50'
Breccia pressures
906 I DW
Good Tactite ore
Poor Cu assay
Vein A
906 stoping
83' to 98'
Sludge
0.38 Au - 0.4 Ag
0.41% Cu
DDH 306
30'
Tactite
DDH 303
50'
Proposed DDH 304
Hor 50'
Breccia
Proposed DDH 3
Hor 50'
DDH-103
altered limestone
no ore
Probable fault
DDH 2002
DDH 2003
DDH 2005
DDH 2007
See 50 scale geologic map for more detailed geology
See Sections on Map 7 for details of DD Holes
14" Rock
Strong Breccia fault

Map 6

See Map 6 for detailed Geology



LONGITUDINAL SECTIONS
Showing
ORE RESERVES on the 900 LEVEL NORTH
BROADWAY MINE
VICTORIA MINES INC.
Silver Star, Madison Co., Montana
Scale 1" = 20' ~ I.G. Irving ~ The Gallagher Co. July, 1951

Map 7