DMA Form 2

DEFENSE MINERALS ADMINISTRATION
Status Change Notice

DMA Docket No. 1412 - X

To: Reports and Records Branch Nash Mines

From: LEAD ZINC BRANCH

Date: JUL 6 1951

The following action has been taken this date on the above Controlled Document.

Forwarded to

Type of request changed to:

Denied ☐ Withdrawn ☐

Approved in amount of $

Other action, specify:

On hand. to be denied

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1412X

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

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: Supply Div Date Aug 9 1951

To: Reports + Records Date 8/13

To: Date

To: Date

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To: Date

DO NOT DETACH

CONTROLLED DOCUMENT

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

AUG 1 4 1951

a-E-C-

Memorandum

Re: DMA-1412X

To: Reports and Records Unit
Administrative Management Division

Nash Mines
Duquesne mine at Duquesne, Arizona

From: Lead-Zinc Branch

Exploration loan $41,500
Lead-Zinc

Subject: Denial of exploration loan

The property covered by this application was previously owned by the Duquesne Mining Co., a partnership 70% owned by Byrd Investment Co., Inc. This company made an application to DMA (DMA-54) for a loan to finance exploration of certain mines of their large holdings in the Duquesne area, including the Duquesne mine which is the subject of the present application. A field team consisting of 2 Survey Geologists and a Bureau engineer examined the properties in February 1951 and prepared a detailed report. On the basis of this report, DMA-54 was denied on April 25. The company then optioned for sale all of its holdings in the Duquesne area to two petroleum engineers who promptly made the present application under the name of Nash Mines.

The field team report on DMA-54 showed that the ore bodies in the camp had been essentially mined out. The remaining ore bodies are characteristically small, irregular lenses or pods of contact metamorphic ore localized along faults. These localizing faults are generally small and non-persistent, and therefore not projectable with confidence to aid in a search for new ore. Any additional ore bodies furnish only small targets for exploration. The sizable production already made from the camp has come chiefly from following the outcropping ore producing structures downward until they gave out in depth. The Duquesne mine is specifically mentioned in the field team report as one that had been essentially exhausted by the Callahan Lead-Zinc Company, the largest and most successful operator of this camp, who abandoned the Duquesne mine in 1943, a year before they abandoned the rest of the camp as a worked out proposition. The ore followed down from the surface had been bottomed, and there is little promise in the applicant's suggestion to sink the shaft another 100 feet and drift at the new level, also to drill a "short diamond drill well" in this area. The field team concluded that the Government would not be justified in granting a loan for exploring for new ore in this area.

It is recommended that the present application be denied and that the attached letter be sent to applicant.

Returned herewith are 3 copies of MF-103 with transmittal letter dated May 29, 1951 from James P. Nash; 2 copies of MF-100 with undated transmittal letter (presumably June 25) signed by D. C. Gilbert; and undated letter to Tom Lyon from D. C. Gilbert.

T. P. Billings, Chief
Lead-Zinc Branch

Approved:

Director, Supply Division

FILE COPY
SURNAME: 350

McKnight
Clark
(For Mote)
Belknap

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

AUG 14 1951

Re: DMA-1412

G. E. C.

Nash Mines
Mr. James P. Nash
Nash Building
Austin, Texas

Dear Mr. Nash:

Your application for an exploration loan of $41,500 to dewater and deepen the Duquesne shaft, drive new drifts, and drill a short diamond drill well in this area has been reviewed by the Defense Minerals Administration.

The Byrd Investment Co., Inc. has previously submitted an application for a Government loan on the large holdings of the company. In investigating this application, the property was visited by DMA representatives for several days in February of this year and in addition to field examinations, the maps and reports of the company were studied. On the basis of the report prepared for us by the field examiners, which includes a specific consideration of the Duquesne mine, we must conclude that the chances of finding significant tonnages of additional ore by the exploration that you propose are not promising enough to warrant an expenditure of Federal funds on the project. I regret, therefore, that your application must be declined.

We wish to thank you for bringing this property to our attention.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

ETMcKnight:bc
G 8-8-51
Copies to: J. H. East, Jr. Region IV (2)
Chief, Lead-Zinc Br.
E. T. McKnight
R. H. Mote
Reports and Records Unit
Director's r. file 4214 GSA
Br. r. file 4214 GSA
Files

AUG 1 4 1951

From Niles

Mr. James R. Nass
[illegible]
[illegible], [illegible]

Dear Mr. Nass:

Your application for an exploration [illegible] dated [illegible] December and design the sequence [illegible], or we [illegible] drilling, [illegible] drill well [illegible] has been reviewed by the Defense Materials Administration.

[illegible] the [illegible] and [illegible] [illegible] for [illegible] the [illegible] of the [illegible] [illegible] application, the property was visited by a representative and several [illegible] of mining [illegible] in addition to field examinations, the maps and reports of the company were also [illegible]. On the basis of the report received for us by the field examiners, which indicates a [illegible] of exploration of the sequence zone, we must consider that the chances of finding significant tonnages of [illegible] ore by the exploration that your proposes are not promising enough to warrant an expenditure of materials needed in the program. Regret, therefore, that your application must be declined.

[illegible] wish to [illegible] your [illegible] the property [illegible] your [illegible] work.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

KDMcKnight:bs
G. Gerwyl
Copies to: [illegible] Nast, Jr. Region IV (2)
Chief, Lead-Zinc Br.
E. T. McKnight
R. S. Hute
Reports and Records Unit
Director's r. file 4214 GSA
Br. r. file 4214 GSA
Files

AUG 2 4 1951

Memorandum

No: [illegible]

To: Reports and Records [illegible]
[illegible] Administrative Management Division

Boques [illegible] Boques [illegible]
[illegible]

From: [illegible]

Exploration Lease [illegible]
[illegible]

Subject: [illegible] of exploration [illegible]

The property covered by this application was previously [illegible] by the Boques [illegible] p 70, owned by Syrd Investment [illegible] [illegible] for a lease to [illegible] exploration of certain [illegible] their large holdings in the Boques [illegible] including the Boques area which is the subject of the present application. A field team consisting of 2 survey [illegible] and a mining engineer examined the properties in February 1951 and prepared a detailed report. On the basis of this report, [illegible] was denied on April 25. The company [illegible] optioned for sale all [illegible] holdings in the Boques area to the petroleum engineers and promptly made the present application under the name of [illegible].

The field team report [illegible] showed that no ore bodies in the company had been essentially [illegible]. The [illegible] ore bodies are characteristically [illegible] irregular in size or [illegible] of [illegible] metamorphic [illegible] localized along faults. These local ring faults are generally small and [illegible]-persistent, and therefore not projectable with [illegible] to [illegible] search for new ore. [illegible] additional ore bodies [illegible] by small targets for exploration. The sizable production [illegible] already made from the company [illegible] were entirely from following the metamorphic [illegible] structures downward until they gave out in depth. The Boques [illegible] specifically mentioned in the field team report [illegible] essentially abandoned by the [illegible] company, the largest and most successful operator of this area, who abandoned the Boques [illegible] in 1[illegible] year before they abandoned the rest of the company's [illegible] properties. The ore followed down from the surface has been bottomed, and there is little promise in the applicant's suggestion to sink the shaft a further 100 feet and drift at the new level, also [illegible] a short diamond drill well in this area. The field team also [illegible] the [illegible] and [illegible] a [illegible] exploration [illegible] on the [illegible] area.

It is recommended that the present application be denied and the attached letter be sent to applicants.

Referred herewith are copies of [illegible] letter dated [illegible] from [illegible] copies of [illegible] which indicated the actual letter (presumably June 29) signed by [illegible] and another letter to [illegible] from [illegible].

[illegible]
[illegible]
Acting Director

Approved:

Tom Lyon
Director, Supply Division

Attachments
[illegible]
Copies to: [illegible] Dir. Region IV (2)
[illegible], Land and Dir.
[illegible]
[illegible]
Reports and Records Unit
Director's r. file [illegible]
Br. r. file [illegible]
Files

FILE COPY
SURNAME:
350

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

AUG 24 1951

W. Knight
O'Leary
For Note
Bellinger

Memorandum

Re: DMA-1412X

To: Reports and Records Unit
Administrative Management Division

Nash Mines
Duquesne mine at Duquesne, Arizona

From: Lead-Zinc Branch

Exploration loan $41,500
Lead-Zinc

Subject: Denial of exploration loan

The property covered by this application was previously owned by the Duquesne Mining Co., a partnership 70% owned by Byrd Investment Co., Inc. This company made an application to DMA (DMA-54) for a loan to finance exploration on certain mines on their large holdings in the Duquesne area, including the Duquesne mine which is the subject of the present application. A field team consisting of 2 Survey Geologists and a Bureau engineer examined the properties in February 1951 and prepared a detailed report. On the basis of this report, DMA-54 was denied on April 25. The company then optioned for sale all of its holdings in the Duquesne area to two petroleum engineers who promptly made the present application under the name of Nash Mines.

The field team report on DMA-54 showed that the ore bodies in the camp had been essentially mined out. The remaining ore bodies are characteristically small, irregular lenses or pods of contact metamorphic ore localized along faults. Those localizing faults are generally small and non-persistent, and therefore not projectable with confidence to aid in a search for new ore. Any additional ore bodies furnish only small targets for exploration. The sizable production already made from the camp has come chiefly from following the outcropping ore producing structures downward until they gave out in depth. The Duquesne mine is specifically mentioned in the field team report as one that had been essentially exhausted by the Callahan Lead-Zinc Company, the largest and most successful operator of this camp, who abandoned the Duquesne mine in 1943, a year before they abandoned the rest of the camp as a worked out proposition. The ore followed down from the surface had been bottomed, and there is little promise in the applicant's suggestion to sink the shaft another 100 feet and drift at the new level, also to drill a "short diamond drill well" in this area. The field team concluded that the Government would not be justified in granting a loan for exploring for new ore in this area.

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8/14

T. P. Billings, Chief
Lead-Zinc Branch

Approved:

Director, Supply Division

ETMcKnight:bc
G 8-8-51
Copies to: J. H. East, Jr. Region IV (2)
Chief, Zinc-Lead Br.
E. T. McKnight
R. H. Mote
Reports and Records Unit
Director's r. file 4214 GSA
Br. r. file 4214 GSA
Files

FILE COPY
SURNAME:

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

June 19, 1951

Mr. James P. Nash
406 Nash Building
Austin, Texas

Subject: DMA-1412X
Re: Exploration Loan

My dear Mr. Nash:

Receipt is acknowledged of your application and attachments of May 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1412X and referred to Mr. Otto Herres, Chief, Lead-Zinc Branch on June 4, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1412X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
✓ File
Herres
Lyon

dma 1412 X

Air Mail

Jas. P. Nash
Nash Building
Austin, Texas

May 29, 1951

U. S. Department of the Interior
Defense Minerals Administration
Washington, D. C.

Gentlemen:

Inclosed herewith Form MF-103 covering the application for exploration in search of minerals.

We have very recently required the properties of the Duquesne Mining Company in the Patagonia Mining District, Santa Cruiz County, Arizona, from A. R. Bird, Jr. and his assistants. This property is producing between 400 and 500 tons of lead and zinc per month ore running from on an average of 15% of lead, zinc and copper ore. The primary ore, however, is zinc and lead. The mines consist of a mineralized area covering approximately 1200 acre, and something over eleven mines now operating.

What is known as the Duquesne mine itself is a pattened mine of this name which is a shaft completed to something over 150 feet but has been allowed to fill up with water and is not now being used. It is our desire to dewater this mine, sink the shaft at least another 100 feet or more to a better known mineralized area. We also desire to diamond drill holes in search of ore from drifts already existing and from drifts we anticipate cutting. We hope in doing this work to increase the production three fold, or approximately 1500 tons of ore a month. We anticipate spending approximately $40,000 on this work and believe the government could do a great service to the mining industry than to help with this project. We have every reason to believe from other shafts of this area which has been deepened, that this work will produce desired results and even better than we have outlined above. We are now making a geological map of this area and hope to have more accurate information before starting the work.

We appreciate your giving this matter your full consideration and hoping for favorable answers, we remain

Very truly yours,

NASH MINES

Jas P Nash

James P. Nash

JUN 5 1951

S

Addendum to MF-10
Nash Mines
Nash Mines - Duquesne
Patagonia, Ariz.

1. Materials produced:
   (a) Zinc, lead, copper and silver.
   (b) No byproducts.

2. Names of Mines: Entire productive area of Washington - Duquesne district including the following mines: (about 1100 acres in all)

Bonanza	Empire	Texas
Estella and Louise	Silver Bill	Pride of the West
Duquesne	Belmont	New York
San Antonio	Holland	Maine
California	Dudley Standard	Indiana
Annie	Smuggler	Kansas
		Pocahontas

(a)	4000 lin. feet of shafts.	(Recorded amount only)
(b)	9000 " " drifts & Xcuts.	" "
(c)	2000 " " tunnels & adits.	" "

About one half of above workings have flooded in recent years, but amount of water is small and pumping is not a serious problem.

3. All of above mines are in relatively small area and average distance to nearest treatment point, the Trench Mill of A. S. & R. Co, is 10 miles. Nearest towns are Patagonia, 18½ miles, and Nogales, 20 miles.
   (b) Patagonia Mining District.
   (c) Unsurveyed.
   (d) Santa Cruz County, Ariz.

4. (a) In operation by Nash Mines since June 1, 1951.
   (b) Nash Mines is operating under Lease and Option to Purchase.

5. Mines of this consolidated group have operated intermittently since about 1860. Now in small production.

6. Applicant Nash Mines is a partnership between Jas. P. Nash and Robert P. Teten, both partners residing in Austin, Texas. Jas. P. Nash has had many years experience in oil and gas drilling, refinery operation and engineering. Robert P. Teten has had lesser experience but in the same field.
   (b) Nash Mines is under management of D. C. Gilbert who has had 35 years experience in mining, mining geology and mine management, principally for Anaconda subsidiary International Smelting and Refining Co, and for Ophir Development Co. of Ophir, Utah.

7. A. S. & R. Co. has collected considerable data on past operations which data may be available to us later. A. S. & R. Co. has found records of production of about 450,000 tons of excellent ore from the group. Properties operated by Callahan Zinc Co. during World War II with production of 116,000 tons of zinc sulphide ore with considerable lead and copper. Callahan operated under lease with no option to purchase and ceased operations when metal prices were reduced after World War II.
   (b) No adjoining properties with production of importance.
   (c) We have one copy of report made by S. K. Garrett for Callahan Zinc Co. in 1939. We have no metallurgical reports, but our ores are being milled by A. S. & R. Co. Trench Mill with good recoveries.

8. Partner - Jas. P. Nash, Nash Building, Austin, Texas.
Partner - Robert P. Teten, Nash Building, Austin, Texas.

No salaries, commissions, bonuses etc. were received from applicant by either partner during last fiscal year. Neither partner is available at time of this application and no statement of net worth, insurance etc. is possible at this time.

9. Not a corporation.

10. Present monthly average is about 450 short tons of sulphide ore. No data available on production in recent years, but could be obtained later. All of present production is being shipped to A. S. & R. Co. Trench Mill.

11. Yes. Present production too small to pay expenses. We contemplate increase to 1000 tons per month in near future and to 1500 tons per month in early 1952. Basis for this expectation is the considerable number of places available for development and mining of sulphide ores.

12. Ore bodies are lenticular, usually along contacts between garnetized limestone and marbleized limestone, but in several cases are along contacts between monzonite and limestone. Ore bodies dip steeply and are usually developed by vertical shafts and crosscuts. Bonanza mine is 635 feet deep, now under water but Callahan maps show ore in bottom. Other mines average 150 to 200 feet deep, with good reason to believe some will go as deep as Bonanza. Ore bodies are strong, apparently deep-seated, and can be mined to advantage after development by shafts and levels.

(b) No assay plans available as we are now in process of organizing data. No accurate data now available on ore reserves. We have 15 faces of minable ore of milling grade, which we conservatively believe show proved reserve of 1500 tons and probable reserve of 1500 tons; the possible tonnage in these 15 locations cannot be forecast.

13. Good gravel roads with reasonable grades to Trench Mill, 10 miles distant. Good gravel roads 18½ miles to Patagonia and 20 miles to Nogales, both receiving points for freight shipments.

14. All mines on property furnish ample water for mining purposes. A good well, 1 mile distant, furnished ample water for Callahan mill.

15. All power furnished by small units, engine fuel either gasoline, Butane or Diesel oil. About 2000 HP now available in these units.

16. About 25 men now working as lessees, 3 on company work. Increase in both lessees and company employees contemplated in near future.

17. Now in use at various mines of group, 7 engine-powered hoists from 15 to 40 HP and 8 engine-powered air compressors from 108 to 350 c.f.m. all in good operating condition. Also pumps, rock drills and other necessary ~~items~~ items, some of which will need extensive repairs or replacement. Additional pumps, rock drills, hoists, air compressors and shop equipment will be needed as production is increased.

Property has one good bunk house for 12 men, 5 good family homes and 5 poor condition family homes. Also shop building which needs extensive repairs.

18. Yes. Nash mines took over this operation June 1, 1951 and we are now in process of organizing our operations. Map data and records are in very poor condition and it is impossible to furnish all desired figures and data at this time. However, we feel considerable assurance that we will make a material increase in production of zinc sulphide ores, carrying lead, copper and silver, from this district.

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.

Nash Mines

By D C Gilbert
Manager and Authorized Agent

June 25, 1951

Speaker

Nash Mines - Duquesne
Patagonia, Ariz.

Defense Minerals Administration
Dept. of the Interior
Washington 25, D. C.

Gentlemen:

Enclosed are four completed copies of application for serialization, Form MF-100, for Nash Mines.

Since our operations here are just being started we are not able to supply detailed information as requested, in all instances. However, at a later date we will have more complete information as may be required.

Very truly yours,

Nash Mines

By D. C. Gilbert

D. C. Gilbert, Mgr.

Nash Mines - Duquesne

Patagonia, Ariz.

Mr. Tom Lyon, Chief of Supply

D. M. A.

Washington 25, D. C.

Dear Tom:

I believe that at present this application MF-100 falls within your division.

We have had a bad time getting this property whipped into shape, and I have wished many times that I had not started on the thing. However, things are now coming along in good shape, and I think we have a property which we can pull along into a good little producer of chiefly zinc ores. A. S. & R. Co. has been highly interested in the property and made a bid for it early in the year. However, the price and terms were a little above their offer, and we finally came into it. A. S. & R. is anxious to get as much ore as possible from here as we are close to their Trench Mill, and they are offering us a lot of cooperation.

Maybe I would have done better to have brought my boat back to Chesapeake Bay - it's high and dry here, and nothing in sight but a lot of work!

Best regards to Mrs. Lyon and yourself in your new location.

Sincerely yours,

Dm

Form MF-[illegible]0
(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 1412X

Date received M.S. 1259

Nash Mines

(Address) Nash Mines - Duquesne
Patagonia, Arizona

Name and address of applicant

Date June 25, 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?
   (*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:
   (*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.
   (*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.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in 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.
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.
   (*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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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.

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.

(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:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	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)					
Indicated (probable)					

(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:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

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.

Nash Mines
(Name of company)

By D C Gilbert
(Signature of authorized official)

June 25, 1951
(Date)

Manager and Authorized Agent
(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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

Addendum to MF-10
Nash Mines
Nash Mines - Duquesne
Patagonia, Ariz.

1. Materials produced:
   (a) Zinc, lead, copper and silver.
   (b) No byproducts.

2. Names of Mines: Entire productive area of Washington - Duquesne district including the following mines: (about 1100 acres in all)

Bonanza	Empire	Texas
Estella and Louise	Silver Bill	Pride of the West
Duquesne	Belmont	New York
San Antonio	Holland	Maine
California	Duduley Standard	Indiana
Annie	Smuggler	Kansas
		Pocahontas

(a)	4000 lin. feet of shafts.	(Recorded amount only)
(b)	9000 " " drifts & Xcuts.	" "
(c)	2000 " " tunnels & adits.	" "

About one half of above workings have flooded in recent years, but amount of water is small and pumping is not a serious problem.

3. All of above mines are in relatively small area and average distance to nearest treatment point, the Trench Mill of A. S. & R. Co, is 10 miles. Nearest towns are Patagonia, 18½ miles, and Nogales, 20 miles.
   (b) Patagonia Mining District.
   (c) Unsurveyed.
   (d) Santa Cruz County, Ariz.

4. (a) In operation by Nash Mines since June 1, 1951.
   (b) Nash Mines is operating under Lease and Option to Purchase.

5. Mines of this consolidated group have operated intermittently since about 1860. Now in small production.

6. Applicant Nash Mines is a partnership between Jas. P. Nash and Robert P. Teten, both partners residing in Austin, Texas. Jas. P. Nash has had many years experience in oil and gas drilling, refinery operation and engineering. Robert P. Teten has had lesser experience but in the same field.
   (b) Nash Mines is under management of D. C. Gilbert who has had 35 years experience in mining, mining geology and mine management, principally for Anaconda subsidiary International Smelting and Refining Co, and for Ophir Development Co. of Ophir, Utah.

7. A. S. & R. Co. has collected considerable data on past operations which data may be available to us later. A. S. & R. Co. has found records of production of about 450,000 tons of excellent ore from the group. Properties operated by Callahan Zinc Co. during World War II with production of 116,000 tons of zinc sulphide ore with considerable lead and copper. Callahan operated under lease with no option to purchase and ceased operations when metal prices were reduced after World War II.
   (b) No adjoining properties with production of importance.
   (c) We have one copy of report made by S. K. Garrett for Callahan Zinc Co. in 1939. We have no metallurgical reports, but our ores are being milled by A. S. & R. Co. Trench Mill with good recoveries.

8. Partner - Jas. P. Nash, Nash Building, Austin, Texas.
Partner - Robert P. Teten, Nash Building, Austin, Texas.

No salaries, commissions, bonuses etc. were received from applicant by either partner during last fiscal year. Neither partner is available at time of this application and no statement of net worth, insurance etc. is possible at this time.

9. Not a corporation.

10. Present monthly average is about 450 short tons of sulphide ore. No data available on production in recent years, but could be obtained later. All of present production is being shipped to A. S. & R. Co. Trench Mill.

11. Yes. Present production too small to pay expenses. We contemplate increase to 1000 tons per month in near future and to 1500 tons per month in early 1952. Basis for this expectation is the considerable number of places available for development and mining of sulphide ores.

12. Ore bodies are lenticular, usually along contacts between garnetized limestone and marbleized limestone, but in several cases are along contacts between monzonite and limestone. Ore bodies dip steeply and are usually developed by vertical shafts and crosscuts. Bonanza mine is 635 feet deep, now under water but Callahan maps show ore in bottom. Other mines average 150 to 200 feet deep, with good reason to believe some will go as deep as Bonanza. Ore bodies are strong, apparently deep-seated, and can be mined to advantage after development by shafts and levels.

(b) No assay plans available as we are now in process of organizing data.

No accurate data now available on ore reserves. We have 15 faces of minable ore of milling grade, which we conservatively believe show proved reserve of 1500 tons and probable reserve of 1500 tons; the possible tonnage in these 15 locations cannot be forecast.

13. Good gravel roads with reasonable grades to Trench Mill, 10 miles distant. Good gravel roads 18½ miles to Patagonia and 20 miles to Nogales, both receiving points for freight shipments.

14. All mines on property furnish ample water for mining purposes. A good well, 1 mile distant, furnished ample water for Callahan mill.

15. All power furnished by small units, engine fuel either gasoline, Butane or Diesel oil. About 2000 HP now available in these units.

16. About 25 men now working as lessees, 3 on company work. Increase in both lessees and company employees contemplated in near future.

17. Now in use at various mines of group, 7 engine-powered hoists from 15 to 40 HP and 8 engine-powered air compressors from 108 to 350 c.f.m. all in good operating condition. Also pumps, rock drills and other necessary ~~items~~ items, some of which will need extensive repairs or replacement. Additional pumps, rock drills, hoists, air compressors and shop equipment will be needed as production is increased.

Property has one good bunk house for 12 men, 5 good family homes and 5 poor condition family homes. Also shop building which needs extensive repairs.

18. Yes. Nash mines took over this operation June 1, 1951 and we are now in process of organizing our operations. Map data and records are in very poor condition and it is impossible to furnish all desired figures and data at this time. However, we feel considerable assurance that we will make a material increase in production of zinc sulphide ores, carrying lead, copper and silver, from this district.

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.

Nash Mines

By O C Gilbert
Manager and Authorized Agent

June 25, 1951

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/1412X

Date received 5-31-51

Participation

Nash Mines
James P. Nash
406 Nash Building
Austin, Texas

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $41,500

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine T24S R15E, Patagonia Mining District
Santa Cruiz County, Arizona

Date of filing MF-100

DMA Docket Number, if available

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?
*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.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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)?

*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 that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    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.

*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.
    (*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.

*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				
(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.
    (*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?

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

    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.

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:
    (*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.

Nash Mines
(Name of company)

By [signature]
(Signature of authorized official)

May 28 '51
(Date)

Owner
(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

THE APPLICANT

6. There is now due against the property $150,000 to be paid out of 10% of the ore after all charges of milling, hauling, etc. are deducted, and starting July 1952 this amount due against these claims must equal $10,000 semiannual.

7. Lease Option agreement covers about 17 pages. The contents of which we pay a sum equal to a $150,000. $20,000 a year starting the year 1952 and continuing until the above amount is paid out. The title is held in escrow in the Valley National Bank in Tucson, Arizona. The contract will be furnished you upon demand.

8. Owner of property net worth considerable over one million dollars.

9. Owner is prepared to spend $25,000 to $30,000 in project if necessary, and in any event to match any money the government will furnish.

THE PROPERTY

10. (a) Property is survey number 2957 known as Duquesne patten being 8.243 acres.
(b) In the Patagonia mining district, Santa Cruz County, Arizona.

15. Ore will be shipped by truck ten miles to the mill of the American Smelting and Refining Company and purchased by them at the mill.

THE EXPLORATION

20. We will explore for lead, zinc and smaller quantities of copper and silver.

21. The work will consist of dewatering the present shafts and drifts and sinking shaft deeper possibly as much as 100 feet. Continuing further with present drifts and driving new drifts after sinking shafts. It is proposed further that short diamond drill well will be drilled to make further ore possible expected to exist in this area.

22. This area is a highly mineralized district, ore being found in veins and pods. A geological map is now being prepared based on new information and should be available at time present shaft is dewatered.

THE REQUIREMENTS AND COSTS

23. (a) Propose to employ approximately ten miners and fourteen muckers at an approximate price of $12.00 per day per man.
(b) One supervisor at $500 per month and one consulant engineer of which $100 per month will be charged against this operation.
(c) $2,000 repairs on timbering of present shaft.
(d) New head-frame, approximate cost $3,000.
(e) Compressure and engine complete $10,000, one double drum slusher approximate cost $2,000, one muker machine $3,000.
(f) Rental equipment will approximately run $300 a month

The Requirements and Costs (Cont'd)

(g) Cost to rent equipment $100 per month.
(h) $1,000.
(i) Cost insignificant.

24. One year.

All other questions answered on Form HF100 filed May 21, 1951

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 1412X

Date received 5-31-51

Participation

Nash Mines
James P. Nash
406 Nash Building
Austin, Texas

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $41,500

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine T24S R15E, Patagonia Mining District
Santa Cruiz County, Arizona

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

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*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.

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

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    (*f*) Cost of rental for equipment which the operator proposes to rent.
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Nash Mines
(Name of company)

By [signature]
(Signature of authorized official)

May 28, '51
(Date)

Owner
(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

THE APPLICANT

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9. Owner is prepared to spend $25,000 to $30,000 in project if necessary, and in any event to match any money the government will furnish.

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    (b) One supervisor at $500 per month and one consulant engineer of which $100 per month will be charged against this operation.
    (c) $2,000 repairs on timbering of present shaft.
    (d) New head-frame, approximate cost $3,000.
    (e) Compressure and engine complete $10,000, one double drum slusher approximate cost $2,000, one mucker machine $3,000.
    (f) Rental equipment will approximately run $300 a month

The Requirements and Costs (Cont'd)

(g) Cost to rent equipment $100 per month.
(h) $1,000.
(i) Cost insignificant.

24. One year.

All other questions answered on Form MF100 filed May 28, 1951

Form MF-103
(May 1951)

HERRES

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 1412X

Date received M.S. 1259

Nash Mines
(Address) Nash Mines - Duquesne
Patagonia, Arizona

Name and address of applicant

Date June 25, 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?
   (*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:
   (*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.
   (*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.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in 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.
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.
   (*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.

16—63792-2

JUL 3 1951

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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			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	$	$	$		
Preferred stock	$	$	$		

*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.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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.

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.

(*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:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	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)					
Indicated (probable)					

(*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:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

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.

Nash Mines
(Name of company)

By D C Gillett
(Signature of authorized official)

June 25 1951
(Date)

Manager and Authorized Agent
(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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

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 1412X

Date received 5-31-51

Participation

Nash Mines
James P. Nash
406 Nash Building
Austin, Texas

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $41,500

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine T24S R15E, Patagonia Mining District
Santa Cruiz County, Arizona

Date of filing MF-100

DMA Docket Number, if available

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?
*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.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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)?

*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 that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    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.

*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.
    (*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.

*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				
(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.
    (*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?

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

    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.

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:
    (*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.

Nash Mines
(Name of company)

By [signature]
(Signature of authorized official)

May 28, '51
(Date)

Owner
(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

THE APPLICANT

6. There is now due against the property $150,000 to be paid out of 10% of the ore after all charges of milling, hauling, etc. are deducted, and starting July 1952 this amount due against these claims must equal $10,000 semiannual.

7. Lease Option agreement covers about 17 pages. The contents of which we pay a sum equal to a $150,000. $20,000 a year starting the year 1952 and continuing until the above amount is paid out. The title is held in escrow in the Valley National Bank in Tuscon, Arizona. The contract will be furnished you upon demand.

8. Owner of property net worth considerable over one million dollars.

9. Owner is prepared to spend $25,000 to $30,000 in project if necessary, and in any event to match any money the government will furnish.

THE PROPERTY

10. (a) Property is survey number 2037 known as Duquesne patten being 8.243 acres.
    (b) In the Patagonia mining district, Santa Cruiz County, Arizona.

15. Ore will be shipped by truck ten miles to the mill of the American Smelting and Refining Company and purchased by them at the mill.

THE EXPLORATION

20. We will explore for lead, zinc and smaller quantities of copper and silver.

21. The work will consist of dewatering the present shafts and drifts and sinking shaft deeper possibly as much as 100 feet. Continuing further with present drifts and driving new drifts after sinking shafts. It is proposed further that short diamond drill well will be drilled to make further ore possible expected to exist in this area.

22. This area is a highly mineralized district, ore being found in veins and pods. A geological map is now being prepared based on new information and should be available at time present shaft is dewatered.

THE REQUIREMENTS AND COSTS

23. (a) Propose to employ approximately ten miners and fourteen muckers at an approximate price of $12.00 per day per man.
    (b) One supervisor at $500 per month and one consulant engineer of which $100 per month will be charged against this operation.
    (c) $2,000 repairs on timbering of present shaft.
    (d) New head-frame, approximate cost $3,000.
    (e) Compressure and engine complete $10,000, one double drum slusher approximate cost $2,000, one mucker machine $3,000.
    (f) Rental equipment will approximately run $300 a month

The Requirements and Costs (Cont'd)

(g) Cost to rent equipment $100 per month.
(h) $1,000.
(i) Cost insignificant.

24. One year.

All other questions answered on Form MW100 filed May 28, 1951

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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Date received 5-31-51

Participation

Nash Mines
James P. Nash
406 Nash Building
Austin, Texas

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

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Mineral or metal Lead & Zinc

Percentage of Government participation 50%

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Santa Cruiz County, Arizona

Date of filing MF-100

DMA Docket Number, if available

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Nash Mines
(Name of company)

By Jasper Nash
(Signature of authorized official)

May 28 '51
(Date)

Owner
(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.

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

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(i) Cost insignificant.

24. One year.

All other questions answered on Form NF100 filed May 28, 1951