500

FILE COPY
Surname:

Moulds

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

MAR 11 1952

Mr. A. W. Bush
524 Linden Avenue
Las Vegas, Nevada

Re: Docket No. DMA 1797X
Iron Horse Mine

Dear Mr. Bush:

A review of the Defense Minerals Exploration Administration files indicates that on August 10, 1951, and again on January 7, 1951, letters were sent to you, requesting information on your application for a defense exploration project.

Since a reply has not been received to either of these letters, we naturally assume that you are no longer interested in this type of assistance. Your application is, therefore, considered closed and we are removing it from our active files.

Sincerely yours,

D. E. Moulds

D. E. Moulds, Chief
Base Metals Division
Defense Minerals Exploration
Administration

3-11-52

DEMoulds/hmj
3-10-52
cc to: Adm. R. File
Docket File Copy
Mr. Moulds
Mr. Bishop
Mr. McKnight
Region III

Mr. A. J. Bush
24 Linden Avenue
Las Vegas, Nevada

Re: Docket No. [illegible] A 1797X
Iron Horse Mine

Dear Mr. Bush:

A review of the Defense Minerals Administration files indicates that on August 10, 1951, a letter over the signature of Mr. [illegible] F. Billings was mailed to you, relative to your application for aid in a Defense Exploration Project.

In order that we may determine the status of your application, we will appreciate receipt at your earliest convenience, of the requested information or your request to withdraw the application in the event you do not desire the exploration assistance under the requirements of Mineral Order 5, a copy of which is enclosed for your information.

Sincerely yours,

D. E. Moulds, Acting Chief
Base Metals Division
Defense Minerals Exploration
Administration

Enclosure

DEMoulds/hmj
1-4-52

cc to: Adm. Reading File
Mails and Files
Mr. Rittendorf
Mr. Bishop
Mr. McKnight
Region IV
Docket

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

January 2, 1952

Re: DMA-1797X
A. W. Bush
Iron Horse Mine, California
Exploration loan, $35,000
Lead, zinc

Memorandum

To: Mr. C. O. Mittendorf

From: Mr. E. T. McKnight

Subject: Closing of docket

On August 10, 1951, in a letter signed by Mr. T. P. Billings, the applicant was asked for additional geological information and a suggestion to consider diamond core drilling as a possible alternate project. Seven copies of MF-202 were also enclosed for completion. Since there has been no reply, I recommend that the docket be closed.

Returned herewith are:

1 Review of application

3 copies Form MF-103 with attachments

Edwin T. McKnight

E. T. McKnight
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

January 2, 1952

Re: DMA-1797X
A. W. Bush
Iron Horse Mine, California
Exploration loan, $35,000
Lead, zinc

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From: Mr. E. T. McKnight

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1 Review of application

3 copies Form MF-103 with attachments

E. T. McKnight
Geologist

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1797 X

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

APPLICATION FOR 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:	Lead-zinc Branch	Date	7/5/51
To:		Date	
To:		Date	
To:		Date	
To:		Date	
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DO NOT DETACH

CONTROLLED DOCUMENT

LANDON F. ...

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 1797X

Date received 7-2-51

Participation

A. W. BUSH
524 Linden Avenue
Las Vegas, Nevada

Name and address of applicant

Date June 30, 1951

FILL IN THIS BLOCK

Date of application June 30, 1951

Estimated cost $35,000.00

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine Clark Mining District
San Bernardino County, California

Date of filing MF-100 None

DMA Docket Number, if available None

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

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.

JUL 6 1951

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.

(Name of company)	By A W Bush (Signature of authorized official)
(Date)	Applicant (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

1. The applicant is an individual, later on it is expected that a corporation will be formed and stock may be sold to help finance operations.

2. Not a Corporation.

3. Not a Corporation.

4. (a) The mining and general business experience of the applicant is summarized as follows:

   (i.) Mr. Bush leased, financed and developed a manganese property in the Irish Mountain Mining District, near Hiko, Nevada in 1950, producing some manganese for the government stockpile. In November 1950, the property was turned to the Combined Metals Company of Salt Lake and Pioche, on a lease and option basis.

   (ii) Mr. Bush organized Morgan and Bush, Inc., in June, 1947, and served as President for about four years, or until November 1950. During this time he served as General Manager and directed the financing of the Company, development of several million tons of organic-mineral material (used for stock and human nutrition) by diamond drilling; initiated open pit mining operations; directed research and sales of product.

   (iii) For about ten (10) years prior to 1947 Mr. Bush financed, managed and directed oil exploration and production.

   (iv) In the present exploration, Mr. Bush will be engaged largely in financing but will assist in the management.

   (b) It is now proposed that the local management will be under the direction of F. T. Ericson (Manager and owner of La Siesta Motel) Las Vegas, Nevada, assisted by Mr. A. W. Bush, 524 Linden Street, Las Vegas, Nevada.

   Mr. Ericson is a graduate chemical engineer with many years of operating experience in the oil industry.

   Mr. J. J. Berson, Consulting Geologist of Salt Lake City, Utah, may be employed in a consulting capacity to direct the proposed exploration. The mine will be operated by experienced superintendent and miners secured to do the work.

5. Lessee

6. We understand that there are no liens or encumbrances against the property.

7. The attached lease is in good standing, and the required subordination agreement is also attached.

8. No current financial statement.

9. Applicant is prepared to invest sufficient money in the project to organize a corporation and undertake the financing of the mine's share of the expense of the exploration. It is expected that the funds to be raised will be more than sufficient to pay applicants part of the cost of the project as detailed in Question 23 of this application form, in accordance with the regulations on Government participation.

THE PROPERTY

10. (a) The real property that may be involved in the proposed exploration project consists of two unpatented lode mining claims and a millsite as follows:

IRON HORSE
IRON HORSE NO. 1
IRON HORSE MILLSITE

Also on the Iron Horse Claim there is several hundred feet of mine workings as shown on the accompanying sketch, which is partially equipped with mine rail and air and water lines; but no other machinery or equipment. There are three cabins on the millsite that will accommodate a small crew and a small blacksmith shop near the shaft. A headframe still stands at the collar of the shaft, but it will require repairs before suitable for operations.

(b) The exact area where the exploration is proposed is within the IRON HORSE Lode Mining Claim. The area that will be explored by the proposed exploration will be below the present 190 foot level of the incline shaft, thus the area accountable for the loan should be below the 190 foot level and otherwise limited to an area within 100 feet of the proposed exploration workings.

11. The present and former name of the property has been and will continue to be called the IRON HORSE MINE.

12. The mine is located about 60 miles southwesterly of Las Vegas, Nevada. It is reached by automobile by driving 59 miles southwest of Las Vegas on U. S. (paved) Highway 93; thence 5 miles southeasterly over gravel road to mine. The mine is also about 6 miles from Wheaton Springs on Highway 93, and 17 miles westerly of Nipton, Nevada, the closes shipping point, on the Union Pacific Railroad.

Hauling of ore from the mine to Nipton would be over very good gravel road for 5 miles and the remaining 12 miles over pavement, at about $2.00 per ton.

13. Water for domestic purposes and drilling in the mine must be hauled from a spring 6 miles from the mine. No milling is contemplated at present. The power used will be gasoline or a 15 H.P. Hoist and a 68 H.P. Compressor. The total consumption of gasoline would amount to about 3.5 gallons per hour or about 28 gallons per day, or about $7.00 per day with oil and other costs for supervision and repairs, this would amount to about $10.00 per day.

14. The only equipment available in the mine consists of about 175 feet of 20 pound rail; 175 feet of 2-inch air pipe; 175 feet of 3/4-inch water pipe, all in the incline shaft at present. The buildings consist of three small frame houses suitable for small crew and a small blacksmith shop; all will be devoted to proposed exploration.

15. The ore mined can be shipped by hauling to railroad and shipping to Salt Lake Valley smelters.

HISTORY

16. (a) The previous exploration on this property has consisted of sinking the Main Incline Shaft westerly at an inclination of about 45 degrees for 150 feet thence 40 feet vertically, with short levels called the 30; 60; 90; 100; 150' and 190' levels, as shown on the accompanying map from brunton survey. The property has produced about 20 cars of 20% lead ore since the present owner acquired it in 1927. About 5 cars were shipped by the owner prior to 1936 and 15 cars by lessors during the period of World War II. Operations were suspended due to the low price of lead and the termination of the Premium Price Plan.

(b) The only other nearby mine is the Blue Buzzard, about a mile to the northwest which is reported to have produced about 20 cars of 47% lead ore. About 3 miles to the east the Houston Mine shipped a substantial tonnage of zinc ore during the same period.

(c) No private reports available to us.

17. Production: The mine has not been in production since the end of the Premium Price Plan.

18. ORE OR MINERAL RESERVES:

(a) The ore deposit consists of a single ore shoot formed as a replacement of limestone along a bedding plane fissure dipping about 45° westerly and striking North 10 to 40 degrees West. The ore is completely oxidized down to the 190' level, thus the lead occurs a carbonate intimately mixed with oxidized iron and some quartz. Galena in small nodules is reported from the deepest level. At the center of the ore shoot the ore is usually 4 to 9 feet thick, and some 10 to 25 feet to the northwest and southeast it may thin to a foot or two. Most of the better grade (20% Lead) ore has been stopped, leaving only pillars to protect the shaft or ore that was too low grade to ship at low lead prices.

The vein can be traced several hundred feet on the surface to the northwest and southeast of the Incline shaft, where shallow surface cuts and shafts show ore to 3 feet of lead ore or mineralization at the 150 level the vein steepens to 65° and appears to converge with a fault or steeper fissure.

(b) The attached map is a brunton survey of the principal workings of the mine.

(c) The ore reserve consists of probably around 1000 tons of dump ore averaging about 10% lead (judging from samples running 6 to 12% lead taken at different times). The underground ore that can be removed without endangering the shaft may amount to a few thousand tons of marginal ore, 15% plus or minus.

19. The reason this property is not in operation at present is the marginal ore that has permitted operation only in times of high prices. This has lead to the hand to mouth operations and little or no equipment. In a steadily producing mine the exploration proposed might be considered as normal development but in this case it is regarded as exploratinn requiring assistance as it is necessary to find whether sulphide ore will be found below the 190 level as suggested by nodules and venlets of galena. At this level also, the solution of a fault problem may be necessary as the work proceeds. There is some

evidence that the steeper structure is only an intersecting vein and this may be an advantage in causing the deposition of higher grade ore.

THE EXPLORATION

20. The exploration will be carried on primarly for LEAD but with the possibility of developing ZINC At greater depth.

21. The proposed work will consist of deepening the present main shaft by 100 feet and driving a level (the 290' Level) 100 feet northwest and 100 feet shotheast along the vein to determine continuity and value of principal ore shoot. The estimated time for this work, on a one shift basis, is 100 working days. At 25 days per month the total time should be 4 months.

22. The geological basis of the project is that silver-lead-zinc replacement deposits in limestone often extend to great depths, and the deposit under consideration has been explored only to comparatively shallow depths below the present surface and the following observations indicate good reasons for expecting continuance to greater depth:

(i) The ore shoot at 170 feet down the Incline Shaft is still continuing with strong mineralization.

(ii) The vein parallels a northwest granitic intrusion but the contact is about 100 feet east of the collar of the main shaft and the vein in the shaft is dipping away from the granite at an angle of 45°.

(iii) The dark limestones show some bleaching along the vein but not sufficient to indicate the approach to the granite contact.

(iv) Nodules and small veins of galena are reported by those who have worked on the 190' level - now inaccessible.

(v) If the lead carbonate changes to galena below the 190 level it can be easily concentrated and lower grade ore can be worked.

If continuity of ore, and particularly sulphide ore (galena) can be proven to depth it should give encouragement to the exploration of extensions of this vein to depth at greater distances from the main shaft.

Only yesterday a geological reconnaissance was made by Mr. Beeson and time does not permit further work before filing this application, thus only sketch maps will be included to show the workings and general geology.

The following random samples show mineralization at widely scattered points and also give gold and silver content and approximate gross values. The samples were taken by A. W. Bush last December:

	oz Gold	oz Silver	% Lead	Value per Ton
#1 Outcrop about 400' south of shaft 1½ ft. vein	.03	3.17	18.8	74.46
#2 Dump	.025	3.08	11.5	43.35
#3 130 ft. level 3½ ft. wide, across vein	.02	2.08	13.5	62.47

	oz Gold	oz Silver	% Lead	Value Per Ton
# 4 Outcropping 400 ft. North of shaft 2 ft. vein	.20	1.10	20.5	76.67
# 5 South lower working 2 ft. wide (450' South of shaft.	.06	.34	6.4	26.57
# 6 150 ft. level drift to south 1 ft.	.03	6.47	23.3	94.34
# 7 30 ft. level north drift 4 ft. face	.02	2.18	8.3	33.81
# 8 150 ft. level at shaft 8 ft. ore sample	.025	3.98	20.0	79.46

THE REQUIREMENTS AND COSTS

23. (a) LABOR: 2 shifts:

4 Miners @ 12.50	$50.00
2 Hoistmen @ 12.50	25.00
2 Top Trammers @ 12.50	25.00
1 Supt. @ $500. per mo.	20.00
1 Consultant @ $200 per mo.	8.00
	$128.00
Supplies, timer, trucking, and meals for men:	97.00
	$225.00

$225.00 ÷ 3 feet = $ 75.00 per foot

100 feet x $75.00 = $7500.

Drifing after sinking is completed:

2 miners @ 12.50	$25.00
2 trammers @ 12.00	24.00
2 top trammers @ 12.00	24.00
1 Supt. at $500. per mo.	20.00
1 Consultant at $200.	8.00
	101.00
Supplies, et cetera:	50.00
	$151.00

$150.00 ÷ 5 ft. per day = $30. per foot
200 feet x $30. = $ 6000.

(b) Included above except for office work

Stenographic and typing $100.00
Supervisor 300.00

4 months @ $400.00 = $1600.00

(c) Repairs to shaft headframe and below 150 Level: $1000.00

(i) COST OF NECESSARY EQUIPMENT

1- 230 cu. ft. Compressor: $5,225.00

MACHINES:

1 Stoper	350.00
2 Jackhammers @ $375.00	750.00

MACHINES, cont'd.

2-Carriages @ $50.00	100.00
2-Cross Arms @ 30.00	60.00
2-Columns 3"x6' @ 90.00	380.00
1-Shaft Hoist	900.00
1-Air Tugger	588.00
1-Ventilating System, (Including fan, engine and 200', 10" Pipe	1000.00
1-Koehler electric generating plant	
12, 50 watt lights	400.00
Insulation, wiring, etc.	200.00
3- Lengths 3/4" Air Hose @ 50.40	151.20
3- Lengths 1/2" Water Hose @35.05	105.15
6-Sets 1-1/8 Round Drill Steel	
6-24" @ 4.80	28.80
6-48 @ 6.80	40,80
6-72 @ 8.80	57.80
500-Timken Bits-2" @ .517	258.50
500-Timken Bits-1-7/8" @ .521	260.00
500-Timken Bits-1-3/4" @ .507	153.00
1-Stayput hose mending kit	12.00
2-6'x3½ Bar @ 190.00	380.00
1-Shaft Signal System	100.00
1-Lot Small Tools	200.00
1-Hoist House	150.00
1-Compressor House	150.00
1-325' ½" 6x9 Hoist Cable @ 15¢ per foot	48.70
1-Set Toledo Rachet Pipe dies ½" to 2"	75.00
1-Set Toledo Bolt dies	50.00
1-Axy-Acetylene Welding Outfit	75.00
1-Armstrong pipe vice	25.00
1-Blacksmith Vice	25.00
1-Rail Bender	40.00
1-Shaft Skip	200.00
3-Mine Cars	450.00
140-ft. Mine rail 20" with fittings	150.00
200-ft. Mine rail 12" with fittings	150.00
400-ft. Black Iron pipe 2"	140.00
400-ft. Black Iron pipe 3/4	72.00
1-Keg Track Spikes 200	15.00
Total	$ 13,515.95
Purchase of pickup truck	1,800.00
	$ 15,315.95 or
	$ 15,316.00

(d) Cost of installation of equipment 500.00

(e) Cost of Necessary Equipment: 15,316.00
See (i) under (c)

(f) None

(g) None

(i) Traveling Consultant Salt Lake to Las Vegas by plane round trip $55., traveling to mine and expenses $45. or a total of $100. per mo. for 4 months: 400.00

Traveling expense of Supervisor and truck to mine 64 miles round trip plus 5 miles extra running around at mine and in Las Vegas 133 miles per day at 10¢ per mile $13.30 per day or $332.50 per month Expenses in town for truck driver $50.00 per month. Total $382.50 per month. $382.50 x 4 months = 1530.00

SUMMARY OF COSTS:

Shaft sinking 100' @ $75. per foot	7500.00
Drifting 200' @ $30. per foot	6000.00
Office and supervision	1600.00
Repairs to headframe and shaft	1000.00
Installation of equipment	500.00
Equipment	15316.00
Traveling and other expense of Consultant @ $100. per month	400.00
Traveling and trucking expenses	1530.00
Total:	$ 33846.00
Contingencies:	1154.00
	$ 35000.00

SUBORDINATION AGREEMENT BETWEEN OWNERS,

LESSEE AND THE UNITED STATES GOVERNMENT.

WE, the undersigned Owners and Lessors of the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILL-SITE, situated in Clark Mountain Mining District, San Bernardino County, California, hereby subordinate our interest to that of the United States Government in accordance with the requirements of Paragraph 7 of Form MF 103, APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950.

OWNERS

Tony Marteletti
TONY MARTELETTI.

Fern Marteletti
FERN MARTELETTI, Wife of Tony Marteletti.

A W Bush
A. W. BUSH

Elin L Bush.
ELIN L. BUSH, Wife of A. W. BUSH

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for the said County and State, TONY MARTELETTI and FERN MARTELETTI, A. W. BUSH and ELIN L. BUSH, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Lucile Fischer
Notary Public in and for said County and State.

My commission expires:
March 22, 1952

INDENTURE OF OPTION

THIS INDENTURE OF OPTION, made and entered into this _____ day of _____, 1951, by and between TONY MARTELETTI, and FERN MARTELETTI, his wife, of Las Vegas, Nevada, Parties of the First Part, and P. W. DUFFIN, SR., and A. W. BUSH, of Caliente, Nevada, Parties of the Second Part,

WITNESSETH:

That the Parties of the First Part, for and in consideration of the sum of $300.00 lawful money of the United States, to them in hand paid, by the Parties of the Second Part, the receipt whereof is hereby acknowledged, do hereby give and grant unto the Parties of the Second Part, either the one or the other of the following rights or options, to-wit:

F I R S T O P T I O N

The Parties of the First Part do hereby give and grant to the Parties of the Second Part, the exclusive right, privilege and option to purchase the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILLSITE, situate in the Clark Mountain Mining District, San Bernardino County, California, for the sum or purchase price of Nine Thousand, Seven Hundred Dollars ($9,700.00) in lawful money of the United States, for and during the period ending October 1st, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Avenue, Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada or Utah, on or before October 1, 1951) that they have exercised this First Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1st, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the amount of said purchase price, to-wit: The sum of $9,700.00, with instructions to said Bank to hold the same in escrow, and to pay the said amount over to the Parties of the First Part:

(a) As and when said First Parties will deliver to said bank, a good and sufficient Deed conveying the above described Lode Mining Claims and Millsite to the Parties of the Second Part, (or to such person, firm, or corporation as the Parties of the Second Part may in such notice of exercise of option, designate, and to whom said Second Parties may have in writing, assigned their rights under this option), and

(b) As and when said First Parties shall deposit in said bank an Abstract of Title prepared and certified by the County Recorder of San Bernardino County, California, or by a duly licensed or commissioned Abstracter, authorized under the Laws of the State of California to prepare and certify to Abstracts of Title, said Abstract will show that a marketable title in and to said Lode Mining Claims and Millsite is vested in the Parties of the First Part, or either of them, free and clear

of all encumbrances, SAVE AND EXCEPT the Paramount title of the United State of America; PROVIDED, HOWEVER, that upon the deposit of said Deed and Abstract of Title, in escrow, as aforesaid, said Bank shall be instructed to notify the Parties of the Second Part of the deposit thereof, which last mentioned notice shall be in writing, and shall be given to the Parties of the Second Part by mailing the same addressed to the Parties of the Second Part at Box 156, Caliente, Nevada, and with said Notice said Bank will deliver the Abstract of Title, together with a full, true and correct copy of said Deed so deposited, to said Second Parties; and said Bank shall be further instructed not to pay over the amount of the purchase price so deposited as aforesaid, to the Parties of the First Part, until fifteen (15) days after said last mentioned Notice and Abstract and copy of Deed have been mailed by said Bank to the Parties of the Second Part, as aforesaid; nor shall said purchase price so deposited be paid over to First Parties, if during the said last mentioned fifteen-day period, the Parties of the Second Part shall deposit with said Bank, a written opinion by an Attorney at Law licensed to practice law in the State of Nevada, or the State of California, to the effect that the title to said mining claim as shown by said abstract, is so defective as to be not marketable, and in which Opinion such attorney shall specify the defects in said title and shall specify what things are necessary in order to make said title a marketable one. If said written opinion be so deposited with said Bank, said Bank will continue to hold the amount of the purchase price so deposited, until the specified defects in such title have been remedied. Said Abstract of Title need not contain proofs of performance of annual assessment work, or notices of Intention to Hold, filed or recorded prior to October 1, 1951, but shall contain such proofs of labor or notices of intention to hold filed subsequent to October 1, 1951.

SECOND OPTION

The Parties of the First Part do hereby give and grant to the Second Parties, the exclusive right, privilege and option to purchase said IRON HORSE & IRON HORSE NO. 1, and said IRON HORSE MILLSITE, for the sum or purchase price of Fourteen Thousand, Seven Hundred ($14,700.00) Dollars, for and during the period ending October 1, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Ave., Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada, or Utah, on or before October 1, 1951) that they have exercised this Second Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the sum of $3,000.00, with instructions to said bank, to pay the said amount over to the Parties of the First Part, as and when said First Parties will deliver to said Bank a lease and right to purchase, duly executed by said First Parties wherein and whereby said First Parties lease unto said Second Parties, (or to such person, firm or corporation as the Parties of the Second Part may in such Notice of exercise of option, designate, and to whom said Second

EH Jr.
T.M.

Parties may have, in writing, assigned their rights under this option the said Lode Mining Claims and Millsite.

Said lease shall be for a term of five years from October 1, 1951, and shall contain the following conditions:

(a) That Lessees will, perform or cause to be performed upon said mining claims, and for and in the development thereof, not less than 72 shifts each month during the life of said lease.

(b) That Lessee will pay to Lessor a royalty of fifteen percent (15%) of the Smelter returns received from ore mined from said claims, after deducting from said returns the cost of transporting such ores from the mine to the smelter, and sampler and smelter treatment charges.

(c) That Lessees will keep said mine and premises free and clear of liens of all kinds.

(d) That Lessee will cause to be recorded in the office of the County Recorder of San Bernardino County, California, on or before June 15th of each year, beginning with the year 1952, an affidavit of labor, in proper form, showing that the annual assessment work on said mining claims for the year ending July 1st, at noon, during the term of said lease, has been performed, and on or before June 20, of each such year deliver to Lessors proof that such Affidavit has been so recorded.

(e) Such other terms and conditions as are usually contained in leases to Combined Metals Reduction Company, on mines located in Lincoln County, Nevada.

(f) That default in the performance of any of such conditions shall terminate the lease and all rights of Lessee thereunder.

Said lease shall also provide that Lessee therein, may at any time during the term thereof purchase said mining claims and millsite for the sum or purchase price of $11,700.00, lawful money of the United States, exclusive of and in addition to the sum of $3000.00 paid at the time of the exercise of this Second Option, but including all sums paid to Lessors for Royalties, it being understood that all royalties paid to Lessors pursuant to the terms of said lease shall be credited upon the amount of said purchase price and shall reduce the same accordingly.

The form of said lease shall be prepared by the Second Parties and such form, in duplicate, will be delivered to First Parties at the same time and in the same manner as is hereinabove provided for the delivery of the notice of the exercise of option.

Said executed Lease and right to purchase shall be so deposited with said Bank within five days from the date of the exercise of said option as aforesaid, and upon receipt thereof, said Bank will deliver same to Second Parties or their assigns, upon their demand therefor.

The Bank's escrow charges shall be paid by the parties hereto, share and share alike.

In case the Parties of the Second Part shall fail to exercise either of said options within the time and in the manner hereinabove specified for the exercise thereof, then said options shall

cease and terminate and be no longer of any force or effect.

The terms and conditions of this instrument shall inure to the benefit of and bind the heirs, executors, administrators and assigns of the respective parties hereto, and the rights and obligations hereunder, of the respective parties hereto are and shall continue to be joint and several.

The said Iron Horse Lode Mining Claim is located South of and adjoing the Easter Lode Mining Claim, which Easter Lode Mining Claim is more particularly described in the Certificate of Location thereof, which is on file and of Record in Book 293 of Mining Records, at page 30, San Bernardino County, California, Records; and the said Iron Horse No. 1 adjoins the said Iron Horse Lode Mining Claim, and said Iron Horse Millsite adjoins said last mentioned Lode Mining Claims.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto set their hands the day and year first above written.

Tony Martelletti

Fern Martelletti

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for said County and State, TONY MARTELETTI and FERN MARTELETTI, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Millie Bannister
NOTARY PUBLIC

My commission expires: Aug 11, 1954

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 1797 X

Date received 7-2-51

Participation

A. W. BUSH
524 Linden Avenue
Las Vegas, Nevada

Name and address of applicant

Date June 30, 1951

FILL IN THIS BLOCK

Date of application June 30, 1951

Estimated cost $35,000.00

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine Clark Mining District
San Bernardino County, California

Date of filing MF-100 None

DMA Docket Number, if available None

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

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.

(Name of company)	By A W Bush (Signature of authorized official)
(Date)	Applicant (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

1. The applicant is an individual, later on it is expected that a corporation will be formed and stock may be sold to help finance operations.

2. Not a Corporation.

3. Not a Corporation.

4. (a) The mining and general business experience of the applicant is summarized as follows:

   (i.) Mr. Bush leased, financed and developed a manganese property in the Irish Mountain Mining District, near Hiko, Nevada in 1950, producing some manganese for the government stockpile. In November 1950, the property was turned to the Combined Metals Company of Salt Lake and Pioche, on a lease and option basis.

   (ii) Mr. Bush organized Morgan and Bush, Inc., in June, 1947, and served as President for about four years, or until November 1950. During this time he served as General Manager and directed the financing of the Company, development of several million tons of organic-mineral material (used for stock and human nutrition) by diamond drilling; initiated open pit mining operations; directed research and sales of product.

   (iii) For about ten (10) years prior to 1947 Mr. Bush financed, managed and directed oil exploration and production.

   (iv) In the present exploration, Mr. Bush will be engaged largely in financing but will assist in the management.

   (b) It is now proposed that the local management will be under the direction of F. T. Ericson (Manager and owner of La Siesta Motel) Las Vegas, Nevada, assisted by Mr. A. W. Bush, 524 Linden Street, Las Vegas, Nevada.

   Mr. Ericson is a graduate chemical engineer with many years of operating experience in the oil industry.

   Mr. J. J. Buson, Consulting Geologist of Salt Lake City, Utah, may be employed in a consulting capacity to direct the proposed exploration. The mine will be operated by experienced superintendent and miners secured to do the work.

5. Lessee

6. We understand that there are no liens or encumbrances against the property.

7. The attached lease is in good standing, and the required subordination agreement is also attached.

8. No current financial statement.

9. Applicant is prepared to invest sufficient money in the project to organize a corporation and undertake the financing of the mine's share of the expense of the exploration. It is expected that the funds to be raised will be more than sufficient to pay applicants part of the cost of the project as detailed in Question 23 of this application form, in accordance with the regulations on Government participation.

THE PROPERTY

10. (a) The real property that may be involved in the proposed exploration project consists of two unpatented lode mining claims and a millsite as follows:

IRON HORSE
IRON HORSE NO. 1
IRON HORSE MILLSITE

Also on the Iron Horse Claim there is several hundred feet of mine workings as shown on the accompanying sketch, which is partially equipped with mine rail and air and water lines; but no other machinery or equipment. There are three cabins on the millsite that will accommodate a small crew and a small blacksmith shop near the shaft. A headframe still stands at the collar of the shaft, but it will require repairs before suitable for operations.

(b) The exact area where the exploration is proposed is within the IRON HORSE Lode Mining Claim. The area that will be explored by the proposed exploration will be below the present 190 foot level of the incline shaft, thus the area accountable for the loan should be below the 190 foot level and otherwise limited to an area within 100 feet of the proposed exploration workings.

11. The present and former name of the property has been and will continue to be called the IRON HORSE MINE.

12. The mine is located about 60 miles southwesterly of Las Vegas, Nevada. It is reached by automobile by driving 59 miles southwest of Las Vegas on U. S. (paved) Highway 93; thence 5 miles southeasterly over gravel road to mine. The mine is also about 6 miles from Wheaton Springs on Highway 93, and 17 miles westerly of Nipton, Nevada, the closes shipping point, on the Union Pacific Railroad.

Hauling of ore from the mine to Nipton would be over very good gravel road for 5 miles and the remaining 12 miles over pavement, at about $2.00 per ton.

13. Water for domestic purposes and drilling in the mine must be hauled from a spring 6 miles from the mine. No milling is contemplated at present. The power used will be gasoline or a 15 H.P. Hoist and a 68 H.P. Compressor. The total consumption of gasoline would amount to about 3.5 gallons per hour or about 28 gallons per day, or about $7.00 per day with oil and other costs for supervision and repairs, this would amount to about $10.00 per day.

14. The only equipment available in the mine consists of about 175 feet of 20 pound rail; 175 feet of 2-inch air pipe; 175 feet of 3/4-inch water pipe, all in the Incline shaft at present. The buildings consist of three small frame houses suitable for small crew and a small blacksmith shop; all will be devoted to proposed exploration.

15. The ore mined can be shipped by hauling to railroad and shipping to Salt Lake Valley smelters.

HISTORY

16. (a) The previous exploration on this property has consisted of sinking the Main Incline Shaft westerly at an inclination of about 45 degrees for 150 feet thence 40 feet vertically, with short levels called the 30; 60; 90; 100; 150' and 190' levels, as shown on the accompanying map from brunton survey. The property has produced about 20 cars of 20% lead ore since the present owner acquired it in 1927. About 5 cars were shipped by the owner prior to 1936 and 15 cars by lessors during the period of World War II. Operations were suspended due to the low price of lead and the termination of the Premium Price Plan.

(b) The only other nearby mine is the Blue Buzzard, about a mile to the northwest which is reported to have produced about 20 cars of 47% lead ore. About 3 miles to the east the Houston Mine shipped a substantial tonnage of zinc ore during the same period.

(c) No private reports available to us.

17. Production: The mine has not been in production since the end of the Premium Price Plan.

18. ORE OR MINERAL RESERVES:

(a) The ore deposit consists of a single ore shoot formed as a replacement of limestone along a bedding plane fissure dipping about 45° westerly and striking North 10 to 40 degrees West. The ore is completely oxidized down to the 190' level, thus the lead occurs a carbonate intimately mixed with oxidized iron and some quartz. Galena in small nodules is reported from the deepest level. At the center of the ore shoot the ore is usually 4 to 9 feet thick, and some 10 to 25 feet to the nortwest and southeast it may thin to a foot or two. Most of the better grade (20% Lead) ore has been stopped, leaving only pillars to protect the shaft or ore that was too low grade to ship at low lead prices.

The vein can be traced several hundred feet on the surface to the northwest and southeast of the Incline shaft, where shallow surface cuts and shafts show ore to 3 feet of lead ore or mineralization at the 150 level the vein steepens to 65° and appears to converge with a fault or steeper fissure.

(b) The attached map is a brunton survey of the principal workings of the mine.

(c) The ore reserve consists of probably around 1000 tons of dump ore averaging about 10% lead (judging from samples running 6 to 12% lead taken at different times). The underground ore that can be removed without endangering the shaft may amount to a few thousand tons of marginal ore, 15% plus or minus.

19. The reason this property is not in operation at present is the marginal ore that has permitted operation only in times of high prices. This has lead to the hand to mouth operations and little or no equipment. In a steadily producing mine the exploration proposed might be considered as normal development but in this case it is regarded as exploratimn requiring assistance as it is necessary to find whether sulphide ore will be found below the 190 level as suggested by nodules and venlets of galena. At this level also, the solution of a fault problem may be necessary as the work proceeds. There is some

evidence that the steeper structure is only an intersecting vein and this may be an advantage in causing the deposition of higher grade ore.

THE EXPLORATION

20. The exploration will be carried on primarly for LEAD but with the possibility of developing ZINC At greater depth.

21. The proposed work will consist of deepening the present main shaft by 100 feet and driving a level (the 290' Level) 100 feet northwest and 100 feet shotheast along the vein to determine continuity and value of principal ore shoot. The estimated time for this work, on a one shift basis, is 100 working days. At 25 days per month the total time should be 4 months.

22. The geological basis of the project is that silver-lead-zinc replacement deposits in limestone often extend to great depths, and the deposit under consideration has been explored only to comparatively shallow depths below the present surface and the following observations indicate good reasons for expecting continuance to greater depth:

(i) The ore shoot at 170 feet down the Incline Shaft is still continuing with strong mineralisation.

(ii) The vein parallels a northwest granitic intrusion but the contact is about 100 feet east of the collar of the main shaft and the vein in the shaft is dipping away from the granite at an angle of 45°.

(iii) The dark limestones show some bleaching along the vein but not sufficient to indicate the approach to the granite contact.

(iv) Nodules and small veins of galena are reported by those who have worked on the 190' level - now inaccessible.

(v) If the lead carbonate changes to galena below the 190 level it can be easily concentrated and lower grade ore can be worked.

If continuity of ore, and particularly sulphide ore (galena) can be proven to depth it should give encouragement to the exploration of extensions of this vein to depth at greater distances from the main shaft.

Only yesterday a geological reconnaissance was made by Mr. Beeson and time does not permit further work before filing this application, thus only sketch maps will be included to show the workings and general geology.

The following random samples show mineralization at widely scattered points and also give gold and silver content and approximate gross values. The samples were taken by A. N. Bush last December:

	oz Gold	oz Silver	% Lead	Value per Ton
#1 Outcrop about 400' south of shaft 1 ft. vein	.03	3.17	18.8	74.46
#2 Dump	.025	3.08	11.5	43.35
#3 130 ft. level 3½ ft. wide, across vein	.02	2.08	13.5	62.47

	oz Gold	oz Silver	% Lead	Value Per Ton
# 4 Outcropping 400 ft. North of shaft 2 ft. vein	.20	1.10	20.5	76.67
# 5 South lower working 2 ft. wide (450' South of shaft.	.06	.34	6.4	26.57
# 6 150 ft. level drift to south 1 ft.	.03	6.47	23.3	94.34
# 7 30 ft. level north drift 4 ft. face	.02	2.18	8.3	33.81
# 8 150 ft. level at shaft 8 ft. ore sample	.025	3.98	20.0	79.46

THE REQUIREMENTS AND COSTS

23. (a) LABOR: 2 shifts:

4 Miners @ 12.50	$50.00
2 Hoistmen @ 12.50	25.00
2 Top Trammers @ 12.50	25.00
1 Supt. @ $500. per mo.	20.00
1 Consultant @ $200 per mo.	8.00
	$128.00
Supplies, timer, trucking, and meals for men:	97.00
	$225.00

$225.00 ÷ 3 feet = $ 75.00 per foot

100 feet x $75.00 = $7500.

Drifing after sinking is completed:

2 miners @ 12.50	$25.00
2 trammers @ 12.00	24.00
2 top trammers @ 12.00	24.00
1 Supt. at $500. per mo.	20.00
1 Consultant at $200.	8.00
	101.00
Supplies, et cetera:	50.00
	$151.00

$150.00 ÷ 5 ft. per day = $30. per foot
200 feet x $30. = $ 6000.

(b) Included above except for office work

Stenographic and typing $100.00
Supervisor 300.00

4 months @ $400.00 = $1600.00

(c) Repairs to shaft headframe and below 150 Level: $1000.00

(i) COST OF NECESSARY EQUIPMENT

1- 230 cu. ft. Compressor: $5,225.00

MACHINES:

1 Stoper	350.00
2 Jackhammers @ $375.00	750.00

MACHINES, cont'd.

2-Carriages @ $50.00	100.00
2-Cross Arms @ 30.00	60.00
2-Columns 3"x6' @ 90.00	380.00
1-Shaft Hoist	900.00
1-Air Tugger	588.00
1-Ventilating System, (Including fan, engine and 200', 10" Pipe	1000.00
1-Koehler electric generating plant	
12, 50 watt lights	400.00
Insulation, wiring, etc.	200.00
3- Lengths 3/4" Air Hose @ 50.40	151.20
3- Lengths 1/2" Water Hose @35.05	105.15
6-Sets 1-1/8 Round Drill Steel	
6-24" @ 4.80	28.80
6-48 @ 6.80	40,80
6-72 @ 8.80	57.80
500-Timken Bits-2" @ .517	258.50
500-Timken Bits-1-7/8" @ .521	260.00
500-Timken Bits-1-3/4" @ .507	153.00
1-Stayput hose mending kit	12.00
2-6'x3½ Bar @ 190.00	380.00
1-Shaft Signal System	100.00
1-Lot Small Tools	200.00
1-Hoist House	150.00
1-Compressor House	150.00
1-325' ½" 6x9 Hoist Cable @ 15¢ per foot	48.70
1-Set Toledo Rachet Pipe dies ½" to 2"	75.00
1-Set Toledo Bolt dies	50.00
1-Axy-Acetylene Welding Cutfit	75.00
1-Armstrong pipe vice	25.00
1-Blacksmith Vice	25.00
1-Rail Bender	40.00
1-Shaft Skip	200.00
3-Mine Cars	450.00
140-ft. Mine rail 20" with fittings	150.00
200-ft. Mine rail 12" with fittings	150.00
400-ft. Black Iron pipe 2"	140.00
400-ft. Black Iron pipe 3/4	72.00
1-Keg Track Spikes 200	15.00
Total	$ 13,515.95
Purchase of pickup truck	1,800.00
	$ 15,315.95 or
	$ 15,316.00

(d) Cost of installation of equipment 500.00

(e) Cost of Necessary Equipment: 15,316.00
See (i) under (c)

(f) None

(g) None

(i) Traveling Consultant Salt Lake to Las Vegas by plane round trip $55., traveling to mine and expenses $45. or a total of $100. per mo. for 4 months: 400.00

Traveling expense of Supervisor and truck to mine 64 miles round trip plus 5 miles extra running around at mine and in Las Vegas 133 miles per day at 10¢ per mile $13.30 per day or $332.50 per month Expenses in town for truck driver $50.00 per month. Total $382.50 per month. $382.50 x 4 months = 1530.00

SUMMARY OF COSTS:

Shaft sinking 100' @ $75. per foot	7500.00
Drifting 200' @ $30. per foot	6000.00
Office and supervision	1600.00
Repairs to headframe and shaft	1000.00
Installation of equipment	500.00
Equipment	15316.00
Traveling and other expense of Consultant @ $100. per month	400.00
Traveling and trucking expenses	1530.00
Total:	$ 33846.00
Contingencies:	1154.00
	$ 35000.00

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 1797X

Date received 7-2-51

Participation

A. W. BUSH
524 Linden Avenue
Las Vegas, Nevada

Name and address of applicant

Date June 30, 1951

FILL IN THIS BLOCK

Date of application June 30, 1951

Estimated cost $35,000.00

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine Clark Mining District ~~San Bernardino County,~~ California

Date of filing MF-100 None

DMA Docket Number, if available None

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

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.

(Name of company)	By A W Brush (Signature of authorized official)
(Date)	Applicant (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

1. The applicant is an individual, later on it is expected that a corporation will be formed and stock may be sold to help finance operations.

2. Not a Corporation.

3. Not a Corporation.

4. (a) The mining and general business experience of the applicant is summarized as follows:

   (i.) Mr. Bush leased, financed and developed a manganese property in the Irish Mountain Mining District, near Hiko, Nevada in 1950, producing some manganese for the government stockpile. In November 1950, the property was turned to the Combined Metals Company of Salt Lake and Pioche, on a lease and option basis.

   (ii) Mr. Bush organized Morgan and Bush, Inc., in June, 1947, and served as President for about four years, or until November 1950. During this time he served as General Manager and directed the financing of the Company, development of several million tons of organiz-mineral material (used for stock and human nutrition) by diamond drilling; initiated open pit mining operations; directed research and sales of product.

   (iii) For about ten (10) years prior to 1947 Mr. Bush financed, managed and directed oil exploration and production.

   (iv) In the present exploration, Mr. Bush will be engaged largely in financing but will assist in the management.

   (b) It is now proposed that the local management will be under the direction of F. T. Ericson (Manager and owner of La Siesta Motel) Las Vegas, Nevada, assisted by Mr. A. W. Bush, 524 Linden Street, Las Vegas, Nevada.

   Mr. Ericson is a graduate chemical engineer with many years of operating experience in the oil industry.

   Mr. J. J. Buson, Consulting Geologist of Salt Lake City, Utah, may be employed in a consulting capacity to direct the proposed exploration. The mine will be operated by experienced superintendent and miners secured to do the work.

5. Lessee

6. We understand that there are no liens or encumbrances against the property.

7. The attached lease is in good standing, and the required subordination agreement is also attached.

8. No current financial statement.

9. Applicant is prepared to invest sufficient money in the project to organize a corporation and undertake the financing of the mine's share of the expense of the exploration. It is expected that the funds to be raised will be more than sufficient to pay applicants part of the cost of the project as detailed in Question 23 of this application form, in accordance with the regulations on Government participation.

THE PROPERTY

10. (a) The real property that may be involved in the proposed exploration project consists of two unpatented lode mining claims and a millsite as follows:

IRON HORSE
IRON HORSE NO. 1
IRON HORSE MILLSITE

Also on the Iron Horse Claim there is several hundred feet of mine workings as shown on the accompanying sketch, which is partially equipped with mine rail and air and water lines; but no other machinery or equipment. There are three cabins on the millsite that will accommodate a small crew and a small blacksmith shop near the shaft. A headframe still stands at the collar of the shaft, but it will require repairs before suitable for operations.

(b) The exact area where the exploration is proposed is within the IRON HORSE Lode Mining Claim. The area that will be explored by the proposed exploration will be below the present 190 foot level of the incline shaft, thus the area accountable for the loan should be below the 190 foot level and otherwise limited to an area within 100 feet of the proposed exploration workings.

11. The present and former name of the property has been and will continue to be called the IRON HORSE MINE.

12. The mine is located about 60 miles southwesterly of Las Vegas, Nevada. It is reached by automobile by driving 59 miles southwest of Las Vegas on U. S. (paved) Highway 93; thence 5 miles southeasterly over gravel road to mine. The mine is also about 6 miles from Wheaton Springs on Highway 93, and 17 miles westerly of Nipton, Nevada, the closes shipping point, on the Union Pacific Railroad.

Hauling of ore from the mine to Nipton would be over very good gravel road for 5 miles and the remaining 12 miles over pavement, at about $2.00 per ton.

13. Water for domestic purposes and drilling in the mine must be hauled from a spring 6 miles from the mine. No milling is contemplated at present. The power used will be gasoline or a 15 H.P. Hoist and a 68 H.P. Compressor. The total consumption of gasoline would amount to about 3.5 gallons per hour or about 28 gallons per day, or about $7.00 per day with oil and other costs for supervision and repairs, this would amount to about $10.00 per day.

14. The only equipment available in the mine consists of about 175 feet of 20 pound rail; 175 feet of 2-inch air pipe; 175 feet of 3/4-inch water pipe, all in the Incline shaft at present. The buildings consist of three small frame houses suitable for small crew and a small blacksmith shop; all will be devoted to proposed exploration.

15. The ore mined can be shipped by hauling to railroad and shipping to Salt Lake Valley smelters.

HISTORY

16. (a) The previous exploration on this property has consisted of sinking the Main Incline Shaft westerly at an inclination of about 45 degrees for 150 feet thence 40 feet vertically, with short levels called the 30; 60; 90; 100; 150' and 190' levels, as shown on the accompanying map from brunton survey. The property has produced about 20 cars of 20% lead ore since the present owner acquired it in 1927. About 5 cars were shipped by the owner prior to 1936 and 15 cars by lessors during the period of World War II. Operations were suspended due to the low price of lead and the termination of the Premium Price Plan.

(b) The only other nearby mine is the Blue Buzzard, about a mile to the northwest which is reported to have produced about 20 cars of 47% lead ore. About 3 miles to the east the Houston Mine shipped a substantial tonnage of zinc ore during the same period.

(c) No private reports available to us.

17. Production: The mine has not been in production since the end of the Premium Price Plan.

18. ORE OR MINERAL RESERVES:

(a) The ore deposit consists of a single ore shoot formed as a replacement of limestone along a bedding plane fissure dipping about 45° westerly and striking North 10 to 40 degrees West. The ore is completely oxidized down to the 190' level, thus the lead occurs a carbonate intimately mixed with oxidized iron and some quartz. Galena in small nodules is reported from the deepest level. At the center of the ore shoot the ore is usually 4 to 9 feet thick, and some 10 to 25 feet to the nortwest and southeast it may thin to a foot or two. Most of the better grade (20% Lead) ore has been stopped, leaving only pillars to protect the shaft or ore that was too low grade to ship at low lead prices.

The vein can be traced several hundred feet on the surface to the northwest and southeast of the Incline shaft, where shallow surface cuts and shafts show ore to 3 feet of lead ore or mineralization at the 150 level the vein steepens to 65° and appears to converge with a fault or steeper fissure.

(b) The attached map is a brunton survey of the principal workings of the mine.

(c) The ore reserve consists of probably around 1000 tons of dump ore averaging about 10% lead (judging from samples running 6 to 12% lead taken at different times). The underground ore that can be removed without endangering the shaft may amount to a few thousand tons of marginal ore, 15% plus or minus.

19. The reason this property is not in operation at present is the marginal ore that has permitted operation only in times of high prices. This has lead to the hand to mouth operations and little or no equipment. In a steadily producing mine the exploration proposed might be considered as normal development but in this case it is regarded as exploratinn requiring assistance as it is necessary to find whether sulphide ore will be found below the 190 level as suggested by nodules and venlets of galena. At this level also, the solution of a fault problem may be necessary as the work proceeds. There is some

evidence that the steeper structure is only an intersecting vein and this may be an advantage in causing the deposition of higher grade ore.

THE EXPLORATION

20. The exploration will be carried on primarly for LEAD but with the possibility of developing ZINC At greater depth.

21. The proposed work will consist of deepening the present main shaft by 100 feet and driving a level (the 290' Level) 100 feet northwest and 100 feet shotheast along the vein to determine continuity and value of principal ore shoot. The estimated time for this work, on a one shift basis, is 100 working days. At 25 days per month the total time should be 4 months.

22. The geological basis of the project is that silver-lead-zinc replacement deposits in limestone often extend to great depths, and the deposit under consideration has been explored only to comparatively shallow depths below the present surface and the following observations indicate good reasons for expecting continuance to greater depth:

(i) The ore shoot at 170 feet down the Incline Shaft is still continuing with strong mineralization.

(ii) The vein parallels a northwest granitic intrusion but the contact is about 100 feet east of the collar of the main shaft and the vein in the shaft is dipping away from the granite at an angle of 45°.

(iii) The dark limestones show some bleaching along the vein but not sufficient to indicate the approach to the granite contact.

(iv) Nodules and small veins of galena are reported by those who have worked on the 190' level - now inaccessible.

(v) If the lead carbonate changes to galena below the 190 level it can be easily concentrated and lower grade ore can be worked.

If continuity of ore, and particularly sulphide ore (galena) can be proven to depth it should give encouragement to the exploration of extensions of this vein to depth at greater distances from the main shaft.

Only yesterday a geological reconnaissance was made by Mr. Beeson and time does not permit further work before filing this application, thus only sketch maps will be included to show the workings and general geology.

The following random samples show mineralization at widely scattered points and also give gold and silver content and approximate gross values. The samples were taken by A. W. Bush last December:

		oz Gold	oz Silver	% Lead	Value per Ton
#1	Outcrop about 400' south of shaft 1 ft. vein	.03	3.17	18.8	74.46
#2	Dump	.025	3.08	11.5	43.35
#3	130 ft. level 3½ ft. wide, across vein	.02	2.08	13.5	62.47

	oz Gold	oz Silver	% Lead	Value Per Ton
# 4 Outcropping 400 ft. North of shaft 2 ft. vein	.20	1.10	20.5	76.67
# 5 South lower working 2 ft. wide (450' South of shaft.	.06	.34	6.4	26.57
# 6 150 ft. level drift to south 1 ft.	.03	6.47	23.3	94.34
# 7 30 ft. level north drift 4 ft. face	.02	2.18	8.3	33.81
# 8 150 ft. level at shaft 8 ft. ore sample	.025	3.98	20.0	79.46

THE REQUIREMENTS AND COSTS

23. (a) LABOR: 2 shifts:

4 Miners @ 12.50	$50.00
2 Hoistmen @ 12.50	25.00
2 Top Trammers @ 12.50	25.00
1 Supt. @ $500. per mo.	20.00
1 Consultant @ $200 per mo.	8.00
	$128.00
Supplies, timer, trucking, and meals for men:	97.00
	$225.00

$225.00 ÷ 3 feet = $ 75.00 per foot

100 feet x $75.00 = $7500.

Drifing after sinking is completed:

2 miners @ 12.50	$25.00
2 trammers @ 12.00	24.00
2 top trammers @ 12.00	24.00
1 Supt. at $500. per mo.	20.00
1 Consultant at $200.	8.00
	101.00
Supplies, et cetera:	50.00
	$151.00

$150.00 ÷ 5 ft. per day = $30. per foot
200 feet x $30. = $ 6000.

(b) Included above except for office work

Stenographic and typing	$100.00
Supervisor	300.00

4 months @ $400.00 = $1600.00

(c) Repairs to shaft headframe and below 150 Level: $1000.00

(i) COST OF NECESSARY EQUIPMENT

1- 230 cu. ft. Compressor: $5,225.00

MACHINES:

1 Stoper	350.00
2 Jackhammers @ $375.00	750.00

MACHINES, cont'd.

2-Carriages @ $50.00	100.00
2-Cross Arms @ 30.00	60.00
2-Columns 3"x6' @ 90.00	380.00
1-Shaft Hoist	900.00
1-Air Tugger	588.00
1-Ventilating System, (Including fan, engine and 200', 10" Pipe	1000.00
1-Koehler electric generating plant	
12, 50 watt lights	400.00
Insulation, wiring, etc.	200.00
3- Lengths 3/4" Air Hose @ 50.40	151.20
3- Lengths 1/2" Water Hose @35.05	105.15
6-Sets 1-1/8 Round Drill Steel	
6-24" @ 4.80	28.80
6-48 @ 6.80	40.80
6-72 @ 8.80	57.80
500-Timken Bits-2" @ .517	258.50
500-Timken Bits-1-7/8" @ .521	260.00
500-Timken Bits-1-3/4" @ .507	153.00
1-Stayput hose mending kit	12.00
2-6'x3½ Bar @ 190.00	380.00
1-Shaft Signal System	100.00
1-Lot Small Tools	200.00
1-Hoist House	150.00
1-Compressor House	150.00
1-325' ½" 6x9 Hoist Cable @ 15¢ per foot	48.70
1-Set Toledo Rachet Pipe dies ½" to 2"	75.00
1-Set Toledo Bolt dies	50.00
1-Axy-Acetylene Welding Outfit	75.00
1-Armstrong pipe vice	25.00
1-Blacksmith Vice	25.00
1-Rail Bender	40.00
1-Shaft Skip	200.00
3-Mine Cars	450.00
140-ft. Mine rail 20" with fittings	150.00
200-ft. Mine rail 12" with fittings	150.00
400-ft. Black Iron pipe 2"	140.00
400-ft. Black Iron pipe 3/4	72.00
1-Keg Track Spikes 200	15.00
Total	$ 13,515.95
Purchase of pickup truck	1,800.00
	$ 15,315.95 or
	$ 15,316.00

(d) Cost of installation of equipment 500.00

(e) Cost of Necessary Equipment: 15,316.00
See (i) under (c)

(f) None

(g) None

(i) Traveling Consultant Salt Lake to Las Vegas by plane round trip $55., traveling to mine and expenses $45. or a total of $100. per mo. for 4 months: 400.00

Traveling expense of Supervisor and truck to mine 64 miles round trip plus 5 miles extra running around at mine and in Las Vegas 133 miles per day at 10¢ per mile $13.30 per day or $332.50 per month Expenses in town for truck driver $50.00 per month. Total $382.50 per month. $382.50 x 4 months =	1530.00

SUMMARY OF COSTS:

Shaft sinking 100' @ $75. per foot	7500.00
Drifting 200' @ $30. per foot	6000.00
Office and supervision	1600.00
Repairs to headframe and shaft	1000.00
Installation of equipment	500.00
Equipment	15316.00
Traveling and other expense of Consultant @ $100. per month	400.00
Traveling and trucking expenses	1530.00
Total:	$ 33846.00
Contingencies:	1154.00
	$ 35000.00

SUBORDINATION AGREEMENT BETWEEN OWNERS, LESSEE AND THE UNITED STATES GOVERNMENT.

WE, the undersigned Owners and Lessors of the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILL-SITE, situated in Clark Mountain Mining District, San Bernardino County, California, hereby subordinate our interest to that of the United States Government in accordance with the requirements of Paragraph 7 of Form MF 103, APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950.

OWNERS

Tony Marteletti
TONY MARTELETTI.

Fern Marteletti
FERN MARTELETTI, Wife of Tony Marteletti.

A W Bush
A. W. BUSH

Elin L. Bush
ELIN L. BUSH, Wife of A. W. BUSH

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for the said County and State, TONY MARTELETTI and FERN MARTELETTI, A. W. BUSH and ELIN L. BUSH, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Lucile Fischer
Notary Public in and for said County and State.

My commission expires:
March 22, 1952

INDENTURE OF OPTION

THIS INDENTURE OF OPTION, made and entered into this _____ day of _____, 1951, by and between TONY MARTELETTI, and FERN MARTELETTI, his wife, of Las Vegas, Nevada, Parties of the First Part, and P. W. DUFFIN, JR., and A. W. BUSH, of Caliente, Nevada, Parties of the Second Part,

WITNESSETH:

That the Parties of the First Part, for and in consideration of the sum of $300.00 lawful money of the United States, to them in hand paid, by the Parties of the Second Part, the receipt whereof is hereby acknowledged, do hereby give and grant unto the Parties of the Second Part, either the one or the other of the following rights or options, to-wit:

F I R S T O P T I O N

The Parties of the First Part do hereby give and grant to the Parties of the Second Part, the exclusive right, privilege and option to purchase the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILLSITE, situate in the Clark Mountain Mining District, San Bernardino County, California, for the sum or purchase price of Nine Thousand, Seven Hundred Dollars ($9,700.00) in lawful money of the United States, for and during the period ending October 1st, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Avenue, Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada or Utah, on or before October 1, 1951) that they have exercised this First Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1st, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the amount of said purchase price, to-wit: The sum of $9,700.00, with instructions to said Bank to hold the same in escrow, and to pay the said amount over to the Parties of the First Part:

(a) As and when said First Parties will deliver to said bank, a good and sufficient Deed conveying the above described Lode Mining Claims and Millsite to the Parties of the Second Part, (or to such person, firm, or corporation as the Parties of the Second Part may in such notice of exercise of option, designate, and to whom said Second Parties may have in writing, assigned their rights under this option), and

(b) As and when said First Parties shall deposit in said bank an Abstract of Title prepared and certified by the County Recorder of San Bernardino County, California, or by a duly licensed or commissioned Abstracter, authorized under the Laws of the State of California to prepare and certify to Abstracts of Title, said Abstract will show that a marketable title in and to said Lode Mining Claims and Millsite is vested in the Parties of the First Part, or either of them, free and clear

of all encumbrances, SAVE AND EXCEPT the Paramount title of the United State of America; PROVIDED, HOWEVER, that upon the deposit of said Deed and Abstract of Title, in escrow, as aforesaid, said Bank shall be instructed to notify the Parties of the Second Part of the deposit thereof, which last mentioned notice shall be in writing, and shall be given to the Parties of the Second Part by mailing the same addressed to the Parties of the Second Part at Box 156, Caliente, Nevada, and with said Notice said Bank will deliver the Abstract of Title, together with a full, true and correct copy of said Deed so deposited, to said Second Parties; and said Bank shall be further instructed not to pay over the amount of the purchase price so deposited as aforesaid, to the Parties of the First Part, until fifteen (15) days after said last mentioned Notice and Abstract and copy of Deed have been mailed by said Bank to the Parties of the Second Part, as aforesaid; nor shall said purchase price so deposited be paid over to First Parties, if during the said last mentioned fifteen-day period, the Parties of the Second Part shall deposit with said Bank, a written opinion by an Attorney at Law licensed to practice law in the State of Nevada, or the State of California, to the effect that the title to said mining claim as shown by said abstract, is so defective as to be not marketable, and in which Opinion such attorney shall specify the defects in said title and shall specify what things are necessary in order to make said title a marketable one. If said written opinion be so deposited with said Bank, said Bank will continue to hold the amount of the purchase price so deposited, until the specified defects in such title have been remedied. Said Abstract of Title need not contain proofs of performance of annual assessment work, or notices of Intention to Held, filed or recorded prior to October 1, 1951, but shall contain such proofs of labor or notices of intention to hold filed subsequent to October 1, 1951.

SECOND OPTION

The Parties of the First Part do hereby give and grant to the Second Parties, the exclusive right, privilege and option to purchase said IRON HORSE & IRON HORSE NO. 1, and said IRON HORSE MILLSITE, for the sum or purchase price of Fourteen Thousand, Seven Hundred ($14,700.00) Dollars, for and during the period ending October 1, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Ave., Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada, or Utah, on or before October 1, 1951) that they have exercised this Second Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the sum of $3,000.00, with instructions to said bank, to pay the said amount over to the Parties of the First Part, as and when said First Parties will deliver to said Bank a lease and right to purchase, duly executed by said First Parties wherein and whereby said First Parties lease unto said Second Parties, (or to such person, firm or corporation as the Parties of the Second Part may in such Notice of exercise of option, designate, and to whom said Second

O.H.M.
T.M.

Parties may have, in writing, assigned their rights under this option) the said Lode Mining Claims and Millsite.

Said lease shall be for a term of five years from October 1, 1951, and shall contain the following conditions:

(a) That Lessees will, perform or cause to be performed upon said mining claims, and for and in the development thereof, not less than 72 shifts each month during the life of said lease.

(b) That Lessee will pay to Lessor a royalty of fifteen percent (15%) of the Smelter returns received from ore mined from said claims, after deducting from said returns the cost of transporting such ores from the mine to the smelter, and sampler and smelter treatment charges.

(c) That Lessees will keep said mine and premises free and clear of liens of all kinds.

(d) That Lessee will cause to be recorded in the office of the County Recorder of San Bernardino County, California, on or before June 15th of each year, beginning with the year 1952, an affidavit of labor, in proper form, showing that the annual assessment work on said mining claims for the year ending July 1st, at noon, during the term of said lease, has been performed, and on or before June 20, of each such year deliver to Lessors proof that such Affidavit has been so recorded.

(e) Such other terms and conditions as are usually contained in leases to Combined Metals Reduction Company, on mines located in Lincoln County, Nevada.

(f) That default in the performance of any of such conditions shall terminate the lease and all rights of Lessee thereunder.

Said lease shall also provide that Lessee therein, may at any time during the term thereof purchase said mining claims and millsite for the sum or purchase price of $11,700.00, lawful money of the United States, exclusive of and in addition to the sum of $3000.00 paid at the time of the exercise of this Second Option, but including all sums paid to Lessors for Royalties, it being understood that all royalties paid to Lessors pursuant to the terms of said lease shall be credited upon the amount of said purchase price and shall reduce the same accordingly.

The form of said lease shall be prepared by the Second Parties and such form, in duplicate, will be delivered to First Parties at the same time and in the same manner as is hereinabove provided for the delivery of the notice of the exercise of option.

Said executed Lease and right to purchase shall be so deposited with said Bank within five days from the date of the exercise of said option as aforesaid, and upon receipt thereof, said Bank will deliver same to Second Parties or their assigns, upon their demand therefor.

The Bank's escrow charges shall be paid by the parties hereto, share and share alike.

In case the Parties of the Second Part shall fail to exercise either of said options within the time and in the manner hereinabove specified for the exercise thereof, then said options shall

cease and terminate and be no longer of any force or effect.

The terms and conditions of this instrument shall inure to the benefit of and bind the heirs, executors, administrators and assigns of the respective parties hereto, and the rights and obligations hereunder, of the respective parties hereto are and shall continue to be joint and several.

The said Iron Horse Lode Mining Claim is located South of and adjoing the Easter Lode Mining Claim, which Easter Lode Mining Claim is more particularly described in the Certificate of Location thereof, which is on file and of Record in Book 293 of Mining Records, at page 30, San Bernardino County, California, Records; and the said Iron Horse No. 1 adjoins the said Iron Horse Lode Mining Claim, and said Iron Horse Millsite adjoins said last mentioned Lode Mining Claims.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto set their hands the day and year first above written.

Tony Martelletti

Fern Martelletti

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for said County and State, TONY MARTELETTI and FERN MARTELETTI, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Millie Bannister
NOTARY PUBLIC

My commission expires: Aug 11, 1954

500 FILE COPY
SURNAME:

Moulds
Mitt

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

JAN 7 1952

Mr. A. W. Bush
524 Linden Avenue
Las Vegas, Nevada

Re: Docket No. DMA 1797X
Iron Horse Mine

Dear Mr. Bush:

A review of the Defense Minerals Administration files indicates that on August 10, 1951, a letter over the signature of Mr. T. P. Billings was mailed to you, relative to your application for aid in a Defense Exploration Project.

In order that we may determine the status of your application, we will appreciate receipt at your earliest convenience, of the requested information or your request to withdraw the application in the event you do not desire the exploration assistance under the requirements of Mineral Order 5, a copy of which is enclosed for your information.

Sincerely yours,

SIGNED cc 1-7-52

D. E. Moulds, Acting Chief
Base Metals Division
Defense Minerals Exploration
Administration

Enclosure

DEMoulds/hmj
1-4-52

cc to: Adm. Reading File
Mails and Files
Mr. Mittendorf
Mr. Bishop
Mr. McKnight
Region IV
Docket

J.a.

FILE COPY
350
SURNAME:

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

AUG 10 1951

Re: DMA-1797X

Mr. A. W. Bush
5211 Linden Avenue
Las Vegas, Nevada

Dear Mr. Bush:

In order to complete the consideration of your application for an exploration project on the Iron Horse mine (DMA Docket No. 1797X) we should like to have additional information.

We should like to have any additional details you can give as to the basis for sinking the proposed 60° incline in relation to the fault. From the data presented there seems to be some question as to whether or not the structure is a fault or an intersecting vein. If it is a fault, on what basis is it assumed that the main ore body will be located at the 290 foot level? If it is not a fault apparently the proposed incline would not intersect the ore body to the southwest. Clarification of your statement "There is some evidence that the steeper structure is only an intersecting vein...." also would be helpful. A report by Mr. Beeson, if available, would aid the review of your application.

Under Item 106 of the application it is stated that the area accountable for the loan will be below the 190 foot level. However, on the vertical section accompanying the application the proposed 100 foot incline is shown extending for 60 feet above the 190 foot level. Does the proposed 100 foot incline begin as shown on the vertical section? If so, do you propose to pay all of the expense of the incline above the 190 foot level and, as stated under Item 106, confine your application to work below the 190 foot level? In addition we should like to know the size of the proposed incline and of the proposed drifts.

It would seem likely that a possible alternative method of exploration would be two or three diamond drill holes (approximately 250 feet deep) to locate the main ore shoot. Have you considered the advisability of such a drilling program?

Enclosed are 7 copies of Form MF-202, Landlord's Subordination Agreement. Please execute and return 6 copies. Also, please submit 3 additional copies of the lease which accompanied your application.

Very truly yours,

BJ 8/10

T. P. Billings, Chief
Lead-Zinc Branch

Enclosures

BGildersleeve:bc
G 8-8-51
Copies to: Harold C. Miller RegionIII (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 0 1951

Mr. [illegible] Bush
[illegible] Street
[illegible], Nevada

Re: DEM-17/7A

Dear Mr. Bush:

In order to complete the consideration of your application for an exploration project on the Iron Horse mine [illegible] we should like to have additional information.

We would like to have any additional details you can give us on the bra[illegible] for a[illegible] the proposed [illegible] 100 foot incline in relation to the fault. From the data presented there seems to be some question as to whether or not the structure is a fault or an intersecting vein. If it is a fault, on what basis is it assumed that the main ore body will be located at the 2[illegible]0 foot level? If it is not a fault apparently the proposed incline would not intersect the ore body to the southeast. In reflection of your statement "there is some evidence that the steeper structure is only an intersecting vein....." also would be helpful. A report by Mr. [illegible], if available, would aid the review of your application.

Under item 10b of the application it is stated that the area accessible for the long will be below the 1[illegible]0 foot level. However, on the vertical section accompanying the application the proposed 100 foot incline is shown extending for 50 feet above the 1[illegible]0 foot level. Does the proposed 100 foot incline begin as shown on the vertical section? If so, do you propose to pay all of the expense of the incline above the 1[illegible]0 foot level and, as stated under item 10b, confine your application to work below the 1[illegible]0 foot level? In addition we would like to know the size of the proposed incline and of the proposed drifts.

It would seem likely there is a possible alternative method of exploration would be two or three diamond drill holes (approximately 250 feet deep) to locate the main ore shoots. Have you considered the advisability of such a drilling program?

Enclosed are [illegible] copies of Form [illegible]-202, Landlord's Subordination Agreement. Please execute the return [illegible] copies. Also, please submit 3 additional copies of the lease which accompanied your application.

Very truly yours,

[illegible] Billings, Chief
Leasing Branch

Enclosures

Wilderslevesbo
[illegible]-51
Copies to: Harold [illegible]ller Region III (2)
Chief, Lead-Zinc Br.
A. T. Wright
R. H. Kote
Reports and Records Unit
Director's r. file 4244 35A
Br. r. file 4244 35A
Files

FILE COPY
SURNAME:

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

July 9, 1951

Mr. A. W. Bush
524 Linden Avenue
Las Vegas, Nevada

Subject: DMA-1797X
Re: Exploration Loan -
Iron Horse Mine

My dear Mr. Bush:

Receipt is acknowledged of your application and attachments of June 30, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1797X and referred to Mr. Otto Herres, Chief, Lead-Zinc Branch on July 5, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1797X.

Sincerely yours,

LANDON F. STROBEL
jc

Landon F. Strobel
Executive Secretary

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

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1797X

Commodity LEAD ZINC

Total Amount $35,000.00

Govt. Participation 50%

1. Name and Address of Applicant A. W. BUSH, 524 LINDEN AVENUE, LAS VEGAS, NEVADA

2. Location of Property IRON HORSE MINE, CLARK MINING DISTRICT, SAN BERNARDINO COUNTY, CALIFORNIA

3. Mineral or metal LEAD, ZINC 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?_____
(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?_____

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_____

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

c) Accessibility (question 12)*_____

d) Water (question 13)*_____

e) Power (question 13)*_____

Is a field check needed on any of these points?_____

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

_____

Is a field check needed on this point?_____

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

a) Is the project adequately described?_____

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

b) Is there an adequate map or sketch of the proposed work?_____

_____

c) Is the proposed work "exploration" under the definition of Section 8, MO-5?_____

If not, what part of it is?_____

_____

_____

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

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

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?_____

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?_____

Reviewed by:_____

Date_____

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

Form MF-193
(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 1797X

Date received 7-2-51

Participation

A. W. BUSH
524 Linden Avenue
Las Vegas, Nevada

Name and address of applicant

Date June 30, 1951

FILL IN THIS BLOCK

Date of application June 30, 1951

Estimated cost $35,000.00

Mineral or metal Lead & Zinc

Percentage of Government participation 50%

Location of mine Clark Mining District
San Bernardino County, California

Date of filing MF-100 None

DMA Docket Number, if available None

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 1951
LANDON F. STROBEL
Executive Secretary

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.

(Name of company)	By A W Bush (Signature of authorized official)
(Date)	Applicant (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

1. The applicant is an individual, later on it is expected that a corporation will be formed and stock may be sold to help finance operations.

2. Not a Corporation.

3. Not a Corporation.

4. (a) The mining and general business experience of the applicant is summarized as follows:

   (i.) Mr. Bush leased, financed and developed a manganese property in the Irish Mountain Mining District, near Hiko, Nevada in 1950, producing some manganese for the government stockpile. In November 1950, the property was turned to the Combined Metals Company of Salt Lake and Pioche, on a lease and option basis.

   (ii) Mr. Bush organized Morgan and Bush, Inc., in June, 1947, and served as President for about four years, or until November 1950. During this time he served as General Manager and directed the financing of the Company, development of several million tons of organic-mineral material (used for stock and human nutrition) by diamond drilling; initiated open pit mining operations; directed research and sales of product.

   (iii) For about ten (10) years prior to 1947 Mr. Bush financed, managed and directed oil exploration and production.

   (iv) In the present exploration, Mr. Bush will be engaged largely in financing but will assist in the management.

   (b) It is now proposed that the local management will be under the direction of F. T. Ericson (Manager and owner of La Siesta Motel) Las Vegas, Nevada, assisted by Mr. A. W. Bush, 524 Linden Street, Las Vegas, Nevada.

   Mr. Ericson is a graduate chemical engineer with many years of operating experience in the oil industry.

   Mr. J. J. Buson, Consulting Geologist of Salt Lake City, Utah, may be employed in a consulting capacity to direct the proposed exploration. The mine will be operated by experienced superintendent and miners secured to do the work.

5. Leases

6. We understand that there are no liens or encumbrances against the property.

7. The attached lease is in good standing, and the required subordination agreement is also attached.

8. No current financial statement.

9. Applicant is prepared to invest sufficient money in the project to organize a corporation and undertake the financing of the mine's share of the expense of the exploration. It is expected that the funds to be raised will be more than sufficient to pay applicants part of the cost of the project as detailed in Question 23 of this application form, in accordance with the regulations on Government participation.

THE PROPERTY

10. (a) The real property that may be involved in the proposed exploration project consists of two unpatented lode mining claims and a millsite as follows:

IRON HORSE
IRON HORSE NO. 1
IRON HORSE MILLSITE

Also on the Iron Horse Claim there is several hundred feet of mine workings as shown on the accompanying sketch, which is partially equipped with mine rail and air and water lines; but no other machinery or equipment. There are three cabins on the millsite that will accommodate a small crew and a small blacksmith shop near the shaft. A headframe still stands at the collar of the shaft, but it will require repairs before suitable for operations.

(b) The exact area where the exploration is proposed is within the IRON HORSE Lode Mining Claim. The area that will be explored by the proposed exploration will be below the present 190 foot level of the incline shaft, thus the area accountable for the loan should be below the 190 foot level and otherwise limited to an area within 100 feet of the proposed exploration workings.

11. The present and former name of the property has been and will continue to be called the IRON HORSE MINE.

12. The mine is located about 60 miles southwesterly of Las Vegas, Nevada. It is reached by automobile by driving 59 miles southwest of Las Vegas on U. S. (paved) Highway 93; thence 5 miles southeasterly over gravel road to mine. The mine is also about 6 miles from Wheaton Springs on Highway 93, and 17 miles westerly of Nipton, Nevada, the closes shipping point, on the Union Pacific Railroad.

Hauling of ore from the mine to Nipton would be over very good gravel road for 5 miles and the remaining 12 miles over pavement, at about $2.00 per ton.

13. Water for domestic purposes and drilling in the mine must be hauled from a spring 6 miles from the mine. No milling is contemplated at present. The power used will be gasoline or a 15 H.P. Hoist and a 68 H.P. Compressor. The total consumption of gasoline would amount to about 3.5 gallons per hour or about 28 gallons per day, or about $7.00 per day with oil and other costs for supervision and repairs, this would amount to about $10.00 per day.

14. The only equipment available in the mine consists of about 175 feet of 20 pound rail; 175 feet of 2-inch air pipe; 175 feet of 3/4-inch water pipe, all in the incline shaft at present. The buildings consist of three small frame houses suitable for small crew and a small blacksmith shop; all will be devoted to proposed exploration.

15. The ore mined can be shipped by hauling to railroad and shipping to Salt Lake Valley smelters.

HISTORY

16. (a) The previous exploration on this property has consisted of sinking the Main Incline Shaft westerly at an inclination of about 45 degrees for 150 feet thence 40 feet vertically, with short levels called the 30; 60; 90; 100; 150' and 190' levels, as shown on the accompanying map from brunton survey. The property has produced about 20 cars of 20% lead ore since the present owner acquired it in 1927. About 5 cars were shipped by the owner prior to 1936 and 15 cars by lessors during the period of World War II. Operations were suspended due to the low price of lead and the termination of the Premium Price Plan.

(b) The only other nearby mine is the Blue Buzzard, about a mile to the northwest which is reported to have produced about 20 cars of 47% lead ore. About 3 miles to the east the Houston Mine shipped a substantial tonnage of zinc ore during the same period.

(c) No private reports available to us.

17. Production: The mine has not been in production since the end of the Premium Price Plan.

18. ORE OR MINERAL RESERVES:

(a) The ore deposit consists of a single ore shoot formed as a replacement of limestone along a bedding plane fissure dipping about 45° westerly and striking North 10 to 40 degrees West. The ore is completely oxidized down to the 190' level, thus the lead occurs a carbonate intimately mixed with oxidized iron and some quartz. Galena in small nodules is reported from the deepest level. At the center of the ore shoot the ore is usually 4 to 9 feet thick, and some 10 to 25 feet to the northwest and southeast it may thin to a foot or two. Most of the better grade (20% Lead) ore has been stopped, leaving only pillars to protect the shaft or ore that was too low grade to ship at low lead prices.

The vein can be traced several hundred feet on the surface to the northwest and southeast of the Incline shaft, where shallow surface cuts and shafts show ore to 3 feet of lead ore or mineralization at the 150 level the vein steepens to 65° and appears to converge with a fault or steeper fissure.

(b) The attached map is a brunton survey of the principal workings of the mine.

(c) The ore reserve consists of probably around 1000 tons of dump ore averaging about 10% lead (judging from samples running 6 to 12% lead taken at different times). The underground ore that can be removed without endangering the shaft may amount to a few thousand tons of marginal ore, 15% plus or minus.

19. The reason this property is not in operation at present is the marginal ore that has permitted operation only in times of high prices. This has lead to the hand to mouth operations and little or no equipment. In a steadily producing mine the exploration proposed might be considered as normal development but in this case it is regarded as exploration requiring assistance as it is necessary to find whether sulphide ore will be found below the 190 level as suggested by nodules and venlets of galena. At this level also, the solution of a fault problem may be necessary as the work proceeds. There is some

evidence that the steeper structure is only an intersecting vein and this may be an advantage in causing the deposition of higher grade ore.

THE EXPLORATION

20. The exploration will be carried on primarly for LEAD but with the possibility of developing ZINC At greater depth.

21. The proposed work will consist of deepening the present main shaft by 100 feet and driving a level (the 290' Level) 100 feet northwest and 100 feet shotheast along the vein to determine continuity and value of principal ore shoot. The estimated time for this work, on a one shift basis, is 100 working days. At 25 days per month the total time should be 4 months.

22. The geological basis of the project is that silver-lead-zinc replacement deposits in limestone often extend to great depths, and the deposit under consideration has been explored only to comparatively shallow depths below the present surface and the following observations indicate good reasons for expecting continuance to greater depth:

(i) The ore shoot at 170 feet down the Incline Shaft is still continuing with strong mineralisation.

(ii) The vein parallels a northwest granitic intrusion but the contact is about 100 feet east of the collar of the main shaft and the vein in the shaft is dipping away from the granite at an angle of 45°.

(iii) The dark limestones show some bleaching along the vein but not sufficient to indicate the approach to the granite contact.

(iv) Nodules and small veins of galena are reported by those who have worked on the 190' level - now inaccessible.

(v) If the lead carbonate changes to galena below the 190 level it can be easily concentrated and lower grade ore can be worked.

If continuity of ore, and particularly sulphide ore (galena) can be proven to depth it should give encouragement to the exploration of extensions of this vein to depth at greater distances from the main shaft.

Only yesterday a geological reconnaissance was made by Mr. Beeson and time does not permit further work before filing this application, thus only sketch maps will be included to show the workings and general geology.

The following random samples show mineralisation at widely scattered points and also give gold and silver content and approximate gross values. The samples were taken by A. W. Bush last December:

	oz Gold	oz Silver	% Lead	Value per Ton
#1 Outcrop about 400' south of shaft 1 ft. vein	.03	3.17	18.8	74.46
#2 Dump	.025	3.08	11.5	43.35
#3 130 ft. level 3½ ft. wide, across vein	.02	2.08	13.5	62.47

	oz Gold	oz Silver	% Lead	Value Per Ton
# 4 Outcropping 400 ft. North of shaft 2 ft. vein	.20	1.10	20.5	76.67
# 5 South lower working 2 ft. wide (450' South of shaft.	.06	.34	6.4	26.57
# 6 150 ft. level drift to south 1 ft.	.03	6.47	23.3	94.34
# 7 30 ft. level north drift 4 ft. face	.02	2.18	8.3	33.81
# 8 150 ft. level at shaft 8 ft. ore sample	.025	3.98	20.0	79.46

THE REQUIREMENTS AND COSTS

23. (a) LABOR: 2 shifts:

4 Miners @ 12.50	$50.00
2 Hoistmen @ 12.50	25.00
2 Top Trammers @ 12.50	25.00
1 Supt. @ $500. per mo.	20.00
1 Consultant @ $200 per mo.	8.00
	$128.00
Supplies, timer, trucking, and meals for men:	97.00
	$225.00

$225.00÷ 3 feet = $ 75.00 per foot

100 feet x $75.00 = $7500.

Drifing after sinking is completed:

2 miners @ 12.50	$25.00
2 trammers @ 12.00	24.00
2 top trammers @ 12.00	24.00
1 Supt. at $500. per mo.	20.00
1 Consultant at $200.	8.00
	101.00
Supplies, et cetera:	50.00
	$151.00

$150.00 ÷ 5 ft. per day = $30. per foot
200 feet x $30. = $ 6000.

(b) Included above except for office work

Stenographic and typing $100.00
Supervisor 300.00

4 months @ $400.00 = $1600.00

(c) Repairs to shaft headframe and below 150 Level: $1000.00

(i) COST OF NECESSARY EQUIPMENT

1- 230 cu. ft. Compressor: $5,225.00

MACHINES:

1 Stoper	350.00
2 Jackhammers @ $375.00	750.00

MACHINES, cont'd.

2-Carriages @ $50.00	100.00
2-Cross Arms @ 30.00	60.00
2-Columns 3"x6' @ 90.00	380.00
1-Shaft Hoist	900.00
1-Air Tugger	588.00
1-Ventilating System, (Including fan, engine and 200', 10" Pipe	1000.00
1-Koehler electric generating plant	
12, 50 watt lights	400.00
Insulation, wiring, etc.	200.00
3- Lengths 3/4" Air Hose @ 50.40	151.20
3- Lengths 1/2" Water Hose @35.05	105.15
6-Sets 1-1/8 Round Drill Steel	
6-24" @ 4.80	28.80
6-48 @ 6.80	40.80
6-72 @ 8.80	57.80
500-Timken Bits-2" @ .517	258.50
500-Timken Bits-1-7/8" @ .521	260.00
500-Timken Bits-1-3/4" @ .507	153.00
1-Stayput hose mending kit	12.00
2-6'x3½ Bar @ 190.00	380.00
1-Shaft Signal System	100.00
1-Lot Small Tools	200.00
1-Hoist House	150.00
1-Compressor House	150.00
1-325' ½" 6x9 Hoist Cable @ 15¢ per foot	48.70
1-Set Toledo Rachet Pipe dies ½" to 2"	75.00
1-Set Toledo Bolt dies	50.00
1-Axy-Acetylene Welding Outfit	75.00
1-Armstrong pipe vice	25.00
1-Blacksmith Vice	25.00
1-Rail Bender	40.00
1-Shaft Skip	200.00
3-Mine Cars	450.00
140-ft. Mine rail 20" with fittings	150.00
200-ft. Mine rail 12" with fittings	150.00
400-ft. Black Iron pipe 2"	140.00
400-ft. Black Iron pipe 3/4	72.00
1-Keg Track Spikes 200	15.00
Total	$ 13,515.95
Purchase of pickup truck	1,800.00
	$ 15,315.95 or
	$ 15,316.00

(d) Cost of installation of equipment 500.00

(e) Cost of Necessary Equipment: 15,316.00
See (i) under (c)

(f) None

(g) None

(i) Traveling Consultant Salt Lake to Las Vegas by plane round trip $55., traveling to mine and expenses $45. or a total of $100. per mo. for 4 months: 400.00

Traveling expense of Supervisor and truck to mine 64 miles round trip plus 5 miles extra running around at mine and in Las Vegas 133 miles per day at 10¢ per mile $13.30 per day or $332.50 per month Expenses in town for truck driver $50.00 per month. Total $382.50 per month. $382.50 x 4 months =	1530.00

SUMMARY OF COSTS:

Shaft sinking 100' @ $75. per foot	7500.00
Drifting 200' @ $30. per foot	6000.00
Office and supervision	1600.00
Repairs to headframe and shaft	1000.00
Installation of equipment	500.00
Equipment	15316.00
Traveling and other expense of Consultant @ $100. per month	400.00
Traveling and trucking expenses	1530.00
Total:	$ 33846.00
Contingencies:	1154.00
	$ 35000.00

SUBORDINATION AGREEMENT BETWEEN OWNERS, LESSEE AND THE UNITED STATES GOVERNMENT.

WE, the undersigned Owners and Lessors of the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILL-SITE, situated in Clark Mountain Mining District, San Bernardino County, California, hereby subordinate our interest to that of the United States Government in accordance with the requirements of Paragraph 7 of Form MF 103, APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950.

OWNERS

Tony Marteletti
TONY MARTELETTI.

Fern Marteletti
FERN MARTELETTI, Wife of Tony Marteletti.

A W Bush
A. W. BUSH

Elin L. Bush
ELIN L. BUSH, Wife of A. W. BUSH

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for the said County and State, TONY MARTELETTI and FERN MARTELETTI, A. W. BUSH and ELIN L. BUSH, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentbned.

Lucile Fischer
Notary Public in and for said County and State.

My commission expires:
March 22, 1952

INDENTURE OF OPTION

THIS INDENTURE OF OPTION, made and entered into this _____ day of _____, 1951, by and between TONY MARTELETTI, and FERN MARTELETTI, his wife, of Las Vegas, Nevada, Parties of the First Part, and P. W. DUFFIN, SR., and A. W. BUSH, of Caliente, Nevada, Parties of the Second Part,

WITNESSETH:

That the Parties of the First Part, for and in consideration of the sum of $300.00 lawful money of the United States, to them in hand paid, by the Parties of the Second Part, the receipt whereof is hereby acknowledged, do hereby give and grant unto the Parties of the Second Part, either the one or the other of the following rights or options, to-wit:

F I R S T O P T I O N

The Parties of the First Part do hereby give and grant to the Parties of the Second Part, the exclusive right, privilege and option to purchase the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILLSITE, situate in the Clark Mountain Mining District, San Bernardino County, California, for the sum or purchase price of Nine Thousand, Seven Hundred Dollars ($9,700.00) in lawful money of the United States, for and during the period ending October 1st, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Avenue, Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada or Utah, on or before October 1, 1951) that they have exercised this First Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1st, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the amount of said purchase price, to-wit: The sum of $9,700.00, with instructions to said Bank to hold the same in escrow, and to pay the said amount over to the Parties of the First Part:

(a) As and when said First Parties will deliver to said bank, a good and sufficient Deed conveying the above described Lode Mining Claims and Millsite to the Parties of the Second Part, (or to such person, firm, or corporation as the Parties of the Second Part may in such notice of exercise of option, designate, and to whom said Second Parties may have in writing, assigned their rights under this option), and

(b) As and when said First Parties shall deposit in said bank an Abstract of Title prepared and certified by the County Recorder of San Bernardino County, California, or by a duly licensed or commissioned Abstracter, authorized under the Laws of the State of California to prepare and certify to Abstracts of Title, said Abstract will show that a marketable title in and to said Lode Mining Claims and Millsite is vested in the Parties of the First Part, or either of them, free and clear

of all encumbrances, SAVE AND EXCEPT the Paramount title of the United State of America; PROVIDED, HOWEVER, that upon the deposit of said Deed and Abstract of Title, in escrow, as aforesaid, said Bank shall be instructed to notify the Parties of the Second Part of the deposit thereof, which last mentioned notice shall be in writing, and shall be given to the Parties of the Second Part by mailing the same addressed to the Parties of the Second Part at Box 156, Caliente, Nevada, and with said Notice said Bank will deliver the Abstract of Title, together with a full, true and correct copy of said Deed so deposited, to said Second Parties; and said Bank shall be further instructed not to pay over the amount of the purchase price so deposited as aforesaid, to the Parties of the First Part, until fifteen (15) days after said last mentioned Notice and Abstract and copy of Deed have been mailed by said Bank to the Parties of the Second Part, as aforesaid; nor shall said purchase price so deposited be paid over to First Parties, if during the said last mentioned fifteen-day period, the Parties of the Second Part shall deposit with said Bank, a written opinion by an Attorney at Law licensed to practice law in the State of Nevada, or the State of California, to the effect that the title to said mining claim as shown by said abstract, is so defective as to be not marketable, and in which Opinion such attorney shall specify the defects in said title and shall specify what things are necessary in order to make said title a marketable one. If said written opinion be so deposited with said Bank, said Bank will continue to hold the amount of the purchase price so deposited, until the specified defects in such title have been remedied. Said Abstract of Title need not contain proofs of performance of annual assessment work, or notices of Intention to Hold, filed or recorded prior to October 1, 1951, but shall contain such proofs of labor or notices of intention to hold filed subsequent to October 1, 1951.

SECOND OPTION

The Parties of the First Part do hereby give and grant to the Second Parties, the exclusive right, privilege and option to purchase said IRON HORSE & IRON HORSE NO. 1, and said IRON HORSE MILLSITE, for the sum or purchase price of Fourteen Thousand, Seven Hundred ($14,700.00) Dollars, for and during the period ending October 1, 1951.

This option, if exercised, shall be exercised in the following manner:

~~The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Ave., Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada, or Utah, on or before October 1, 1951) that they have exercised this Second Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the sum of $3,000.00, with instructions to said bank, to pay the said amount over to the Parties of the First Part, as and when said First Parties will deliver to said Bank a lease and right to purchase, duly executed by said First Parties wherein and whereby said First Parties lease unto said Second Parties, (or to such person, firm or corporation as the Parties of the Second Part may in such Notice of exercise of option, designate, and to whom said Second~~

FM - TM,

Parties may have, in writing, assigned their rights under this option) the said Lode Mining Claims and Millsite.

Said lease shall be for a term of five years from October 1, 1951, and shall contain the following conditions:

(a) That Lessees will, perform or cause to be performed upon said mining claims, and for and in the development thereof, not less than 72 shifts each month during the life of said lease.

(b) That Lessee will pay to Lessor a royalty of fifteen percent (15%) of the Smelter returns received from ore mined from said claims, after deducting from said returns the cost of transporting such ores from the mine to the smelter, and sampler and smelter treatment charges.

(c) That Lessees will keep said mine and premises free and clear of liens of all kinds.

(d) That Lessee will cause to be recorded in the office of the County Recorder of San Bernardino County, California, on or before June 15th of each year, beginning with the year 1952, an affidavit of labor, in proper form, showing that the annual assessment work on said mining claims for the year ending July 1st, at noon, during the term of said lease, has been performed, and on or before June 20, of each such year deliver to Lessors proof that such Affidavit has been so recorded.

(e) Such other terms and conditions as are usually contained in leases to Combined Metals Reduction Company, on mines located in Lincoln County, Nevada.

(f) That default in the performance of any of such conditions shall terminate the lease and all rights of Lessee thereunder.

Said lease shall also provide that Lessee therein, may at any time during the term thereof purchase said mining claims and millsite for the sum or purchase price of $11,700.00, lawful money of the United States, exclusive of and in addition to the sum of $3000.00 paid at the time of the exercise of this Second Option, but including all sums paid to Lessors for Royalties, it being understood that all royalties paid to Lessors pursuant to the terms of said lease shall be credited upon the amount of said purchase price and shall reduce the same accordingly.

The form of said lease shall be prepared by the Second Parties and such form, in duplicate, will be delivered to First Parties at the same time and in the same manner as is hereinabove provided for the delivery of the notice of the exercise of option.

Said executed Lease and right to purchase shall be so deposited with said Bank within five days from the date of the exercise of said option as aforesaid, and upon receipt thereof, said Bank will deliver same to Second Parties or their assigns, upon their demand therefor.

The Bank's escrow charges shall be paid by the parties hereto, share and share alike.

In case the Parties of the Second Part shall fail to exercise either of said options within the time and in the manner hereinabove specified for the exercise thereof, then said options shall

cease and terminate and be no longer of any force or effect.

The terms and conditions of this instrument shall inure to the benefit of and bind the heirs, executors, administrators and assigns of the respective parties hereto, and the rights and obligations hereunder, of the respective parties hereto are and shall continue to be joint and several.

The said Iron Horse Lode Mining Claim is located South of and adjoing the Easter Lode Mining Claim, which Easter Lode Mining Claim is more particularly described in the Certificate of Location thereof, which is on file and of Record in Book 293 of Mining Records, at page 30, San Bernardino County, California, Records; and the said Iron Horse No. 1 adjoins the said Iron Horse Lode Mining Claim, and said Iron Horse Millsite adjoins said last mentioned Lode Mining Claims.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto set their hands the day and year first above written.

Tony Marteletti

Fern Marteletti

STATE OF NEVADA)
SS
COUNTY OF CLARK)

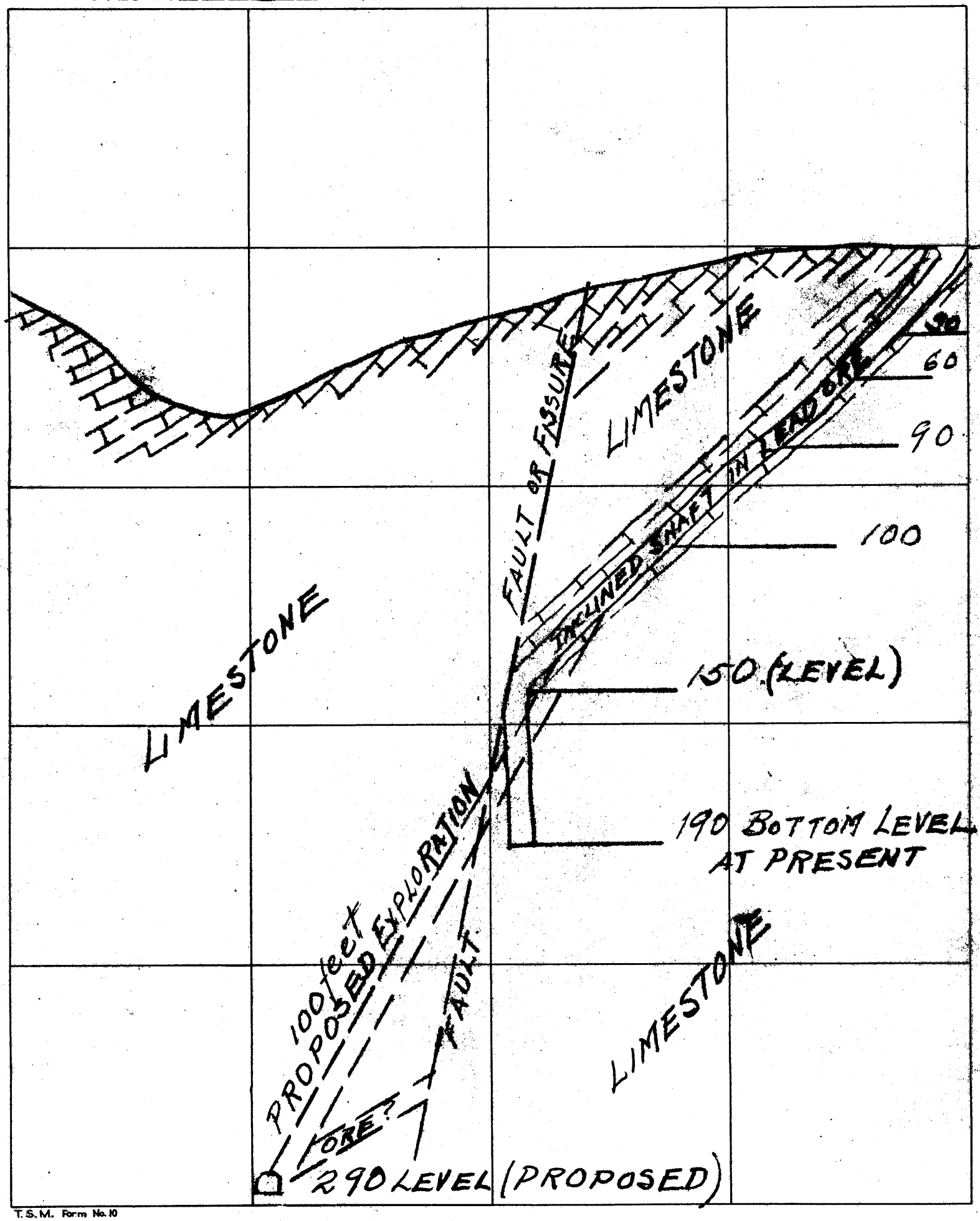
On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for said County and State, TONY MARTELETTI and FERN MARTELETTI, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Millie Bannister
NOTARY PUBLIC

My commission expires: Aug 11, 1954

④ LEVEL VERTICAL SECTION MINE IRON HORSE DATE 6/29/51

NOTES BY J. J. BEESON SCALE 1" = 30'

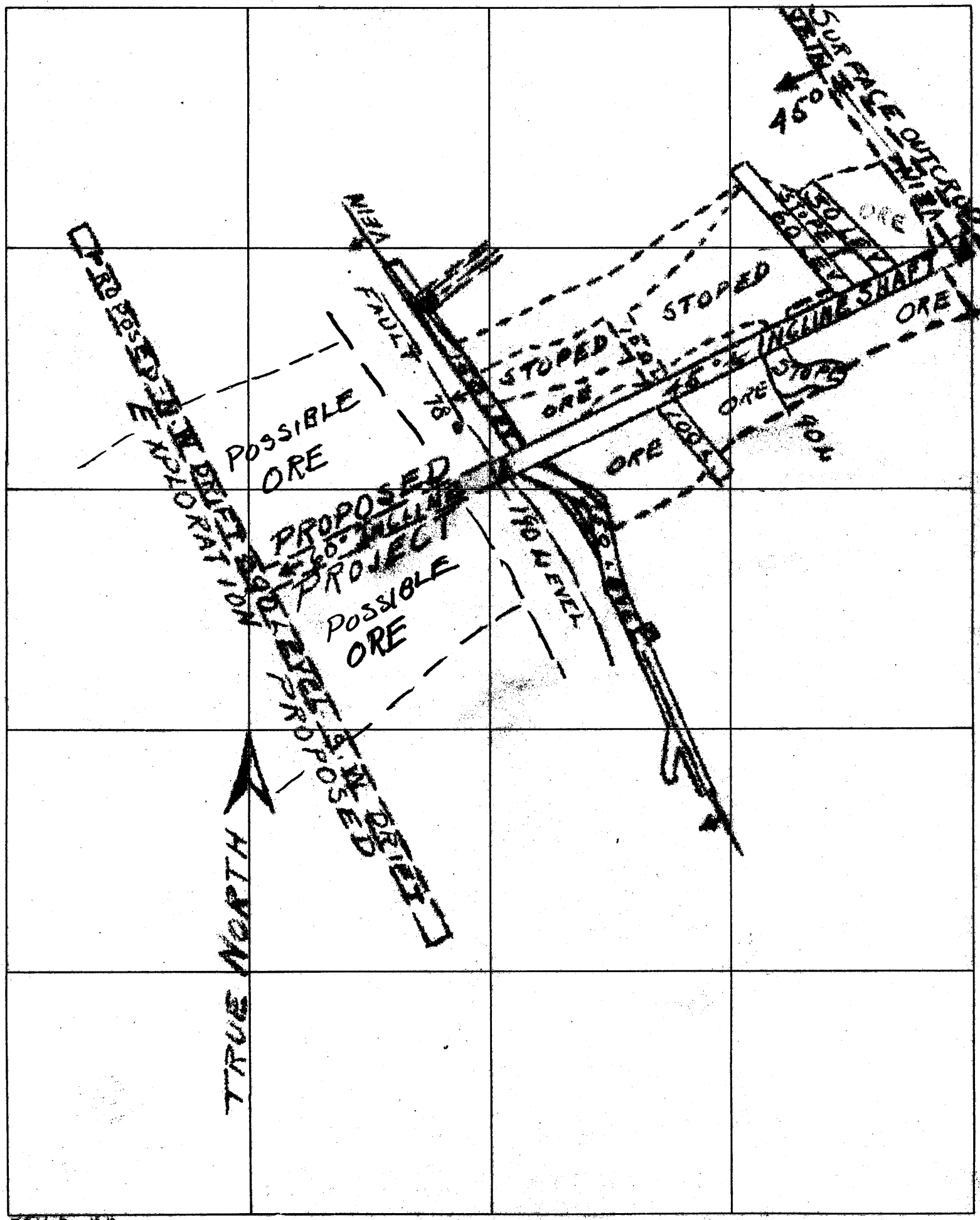


T.S.M. Form No. 10

4

LEVEL 5 COMPOSITE MINE IRON HORSE DATE 6/29/51

NOTES BY J. J. BEESON SCALE 1" = 30'



T.S.M. Form No. 10

INDENTURE OF OPTION

THIS INDENTURE OF OPTION, made and entered into this _____ day of _____, 1951, by and between TONY MARTELETTI, and FERN MARTELETTI, his wife, of Las Vegas, Nevada, Parties of the First Part, and P. W. DUFFIN, SR., and A. W. BUSH, of Caliente, Nevada, Parties of the Second Part,

WITNESSETH:

That the Parties of the First Part, for and in consideration of the sum of $300.00 lawful money of the United States, to them in hand paid, by the Parties of the Second Part, the receipt whereof is hereby acknowledged, do hereby give and grant unto the Parties of the Second Part, either the one or the other of the following rights or options, to-wit:

F I R S T O P T I O N

The Parties of the First Part do hereby give and grant to the Parties of the Second Part, the exclusive right, privilege and option to purchase the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILLSITE, situate in the Clark Mountain Mining District, San Bernardino County, California, for the sum or purchase price of Nine Thousand, Seven Hundred Dollars ($9,700.00) in lawful money of the United States, for and during the period ending October 1st, 1951.

This option, if exercised, shall be exercised in the following manner:

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Avenue, Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada or Utah, on or before October 1, 1951) that they have exercised this First Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1st, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the amount of said purchase price, to-wit: The sum of $9,700.00, with instructions to said Bank to hold the same in escrow, and to pay the said amount over to the Parties of the First Part:

(a) As and when said First Parties will deliver to said bank, a good and sufficient Deed conveying the above described Lode Mining Claims and Millsite to the Parties of the Second Part, (or to such person, firm, or corporation as the Parties of the Second Part may in such notice of exercise of option, designate, and to whom said Second Parties may have in writing, assigned their rights under this option), and

(b) As and when said First Parties shall deposit in said bank an Abstract of Title prepared and certified by the County Recorder of San Bernardino County, California, or by a duly licensed or commissioned Abstracter, authorized under the Laws of the State of California to prepare and certify to Abstracts of Title, said Abstract will show that a marketable title in and to said Lode Mining Claims and Millsite is vested in the Parties of the First Part, or either of them, free and clear

of all encumbrances, SAVE AND EXCEPT the Paramount title of the United State of America; PROVIDED, HOWEVER, that upon the deposit of said Deed and Abstract of Title, in escrow, as aforesaid, said Bank shall be instructed to notify the Parties of the Second Part of the deposit thereof, which last mentioned notice shall be in writing, and shall be given to the Parties of the Second Part by mailing the same addressed to the Parties of the Second Part at Box 156, Caliente, Nevada, and with said Notice said Bank will deliver the Abstract of Title, together with a full, true and correct copy of said Deed so deposited, to said Second Parties; and said Bank shall be further instructed not to pay over the amount of the purchase price so deposited as aforesaid, to the Parties of the First Part, until fifteen (15) days after said last mentioned Notice and Abstract and copy of Deed have been mailed by said Bank to the Parties of the Second Part, as aforesaid; nor shall said purchase price so deposited be paid over to First Parties, if during the said last mentioned fifteen-day period, the Parties of the Second Part shall deposit with said Bank, a written opinion by an Attorney at Law licensed to practice law in the State of Nevada, or the State of California, to the effect that the title to said mining claim as shown by said abstract, is so defective as to be not marketable, and in which Opinion such attorney shall specify the defects in said title and shall specify what things are necessary in order to make said title a marketable one. If said written opinion be so deposited with said Bank, said Bank will continue to hold the amount of the purchase price so deposited, until the specified defects in such title have been remedied. Said Abstract of Title need not contain proofs of performance of annual assessment work, or notices of Intention to Hold, filed or recorded prior to October 1, 1951, but shall contain such proofs of labor or notices of intention to hold filed subsequent to October 1, 1951.

SECOND OPTION

The Parties of the First Part do hereby give and grant to the Second Parties, the exclusive right, privilege and option to purchase said IRON HORSE & IRON HORSE NO. 1, and said IRON HORSE MILLSITE, for the sum or purchase price of Fourteen Thousand, Seven Hundred ($14,700.00) Dollars, for and during the period ending October 1, 1951.

This option, if exercised, shall be exercised in the following manner:

G.M.
T.M.

The Parties of the Second Part will notify the Parties of the First Part, in writing, by registered mail addressed to said First Parties at 524 Linden Ave., Las Vegas, Nevada (which notice shall be deposited in a United States Post Office located in the States of California, Nevada, or Utah, on or before October 1, 1951) that they have exercised this Second Option, and at the time of the exercise of said option, as aforesaid, and on or before October 1, 1951, the Parties of the Second Part will pay to First National Bank of Nevada, Las Vegas Branch, at Las Vegas, Nevada, for the benefit of the Parties of the First Part, the sum of $3,000.00, with instructions to said bank, to pay the said amount over to the Parties of the First Part, as and when said First Parties will deliver to said Bank a lease and right to purchase, duly executed by said First Parties wherein and whereby said First Parties lease unto said Second Parties, (or to such person, firm or corporation as the Parties of the Second Part may in such Notice of exercise of option, designate, and to whom said Second

F.M.
T.M.

Parties may have, in writing, assigned their rights under this option) the said Lode Mining Claims and Millsite.

Said lease shall be for a term of five years from October 1, 1951, and shall contain the following conditions:

(a) That Lessees will, perform or cause to be performed upon said mining claims, and for and in the development thereof, not less than 72 shifts each month during the life of said lease.

(b) That Lessee will pay to Lessor a royalty of fifteen percent (15%) of the Smelter returns received from ore mined from said claims, after deducting from said returns the cost of transporting such ores from the mine to the smelter, and sampler and smelter treatment charges.

(c) That Lessees will keep said mine and premises free and clear of liens of all kinds.

(d) That Lessee will cause to be recorded in the office of the County Recorder of San Bernardino County, California, on or before June 15th of each year, beginning with the year 1952, an affidavit of labor, in proper form, showing that the annual assessment work on said mining claims for the year ending July 1st, at noon, during the term of said lease, has been performed, and on or before June 20, of each such year deliver to Lessors proof that such Affidavit has been so recorded.

(e) Such other terms and conditions as are usually contained in leases to Combined Metals Reduction Company, on mines located in Lincoln County, Nevada.

(f) That default in the performance of any of such conditions shall terminate the lease and all rights of Lessee thereunder.

Said lease shall also provide that Lessee therein, may at any time during the term thereof purchase said mining claims and millsite for the sum or purchase price of $11,700.00, lawful money of the United States, exclusive of and in addition to the sum of $3000.00 paid at the time of the exercise of this Second Option, but including all sums paid to Lessors for Royalties, it being understood that all royalties paid to Lessors pursuant to the terms of said lease shall be credited upon the amount of said purchase price and shall reduce the same accordingly.

The form of said lease shall be prepared by the Second Parties and such form, in duplicate, will be delivered to First Parties at the same time and in the same manner as is hereinabove provided for the delivery of the notice of the exercise of option.

Said executed Lease and right to purchase shall be so deposited with said Bank within five days from the date of the exercise of said option as aforesaid, and upon receipt thereof, said Bank will deliver same to Second Parties or their assigns, upon their demand therefor.

The Bank's escrow charges shall be paid by the parties hereto, share and share alike.

In case the Parties of the Second Part shall fail to exercise either of said options within the time and in the manner hereinabove specified for the exercise thereof, then said options shall

cease and terminate and be no longer of any force or effect.

The terms and conditions of this instrument shall inure to the benefit of and bind the heirs, executors, administrators and assigns of the respective parties herete, and the rights and obligations hereunder, of the respective parties herete are and shall continue to be joint and several.

The said Iron Horse Lode Mining Claim is located South of and adjoing the Easter Lode Mining Claim, which Easter Lode Mining Claim is more particularly described in the Certificate of Location thereof, which is on file and of Record in Book 293 of Mining Records, at page 30, San Bernardino County, California, Records; and the said Iron Horse No. 1 adjoins the said Iron Horse Lode Mining Claim, and said Iron Horse Millsite adjoins said last mentioned Lode Mining Claims.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto set their hands the day and year first above written.

Tony Marteletti

Fern Marteletti

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for said County and State, TONY MARTELETTI and FERN MARTELETTI, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

Millie Bannister
NOTARY PUBLIC

My commission expires: Aug 11, 1954

SUBORDINATION AGREEMENT BETWEEN OWNERS, LESSEE AND THE UNITED STATES GOVERNMENT.

WE, the undersigned Owners and Lessors of the IRON HORSE and IRON HORSE NO. 1 LODE MINING CLAIMS, and the IRON HORSE MILL-SITE, situated in Clark Mountain Mining District, San Bernardino County, California, hereby subordinate our interest to that of the United States Government in accordance with the requirements of Paragraph 7 of Form MF 103, APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950.

OWNERS

Tony Marteletti
TONY MARTELETTI.

Fern Marteletti
FERN MARTELETTI, Wife of Tony Marteletti.

A W Bush
A. W. BUSH

Elin L. Bush
ELIN L. BUSH, Wife of A. W. BUSH

STATE OF NEVADA)
SS
COUNTY OF CLARK)

On this 30th day of June, 1951, personally appeared before me, a Notary Public in and for the said County and State, TONY MARTELETTI and FERN MARTELETTI, A. W. BUSH and ELIN L. BUSH, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentbned.

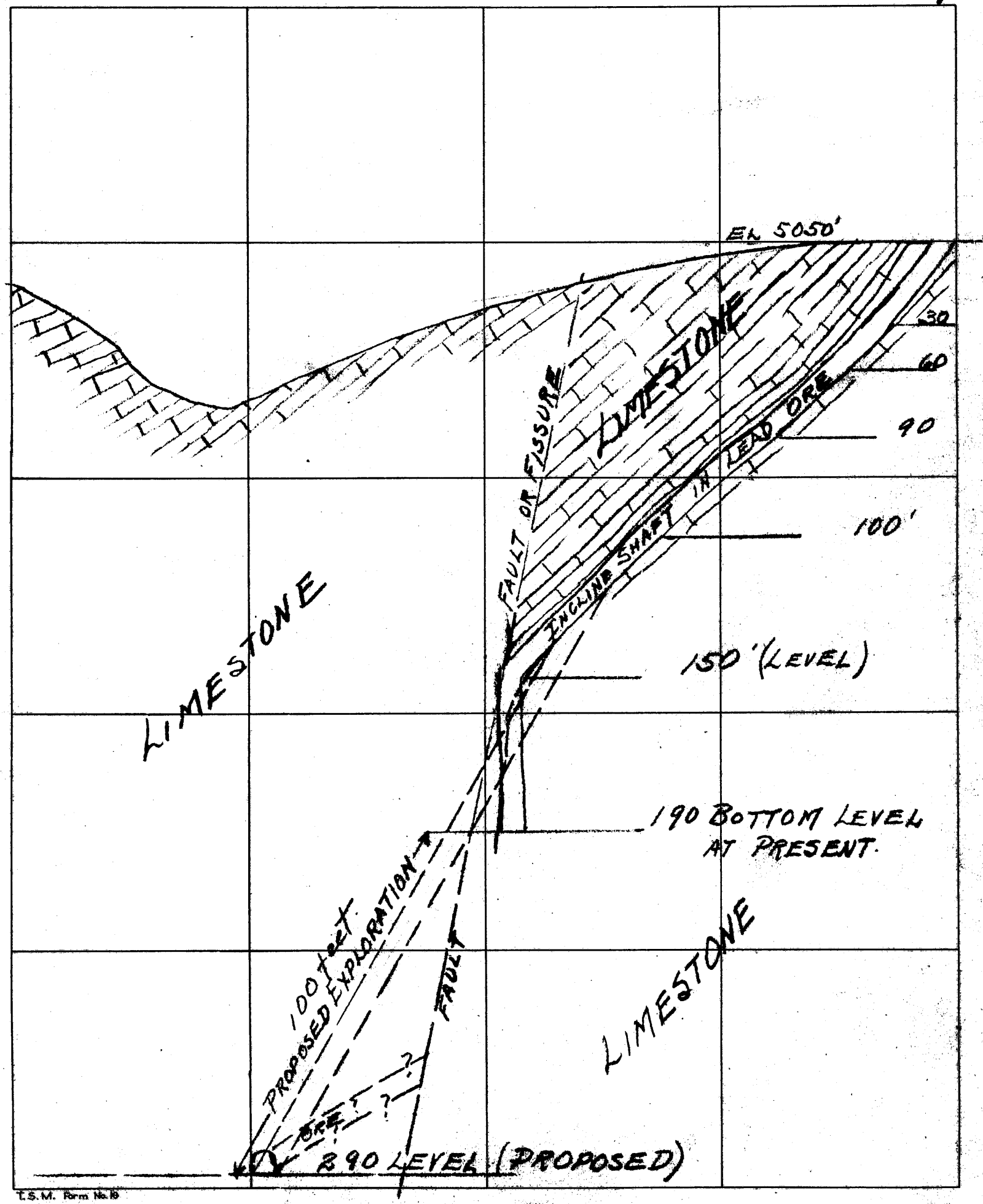
Lucile Irwin
Notary Public in and for said County and State.

My commission expires:
March 22, 1952

① ~~LEVEL~~ VERTICAL SECTION

NOTES BY J.J. BEESON MINE IRON HORSE DATE 6/29/51

SCALE 1 in = 30 ft

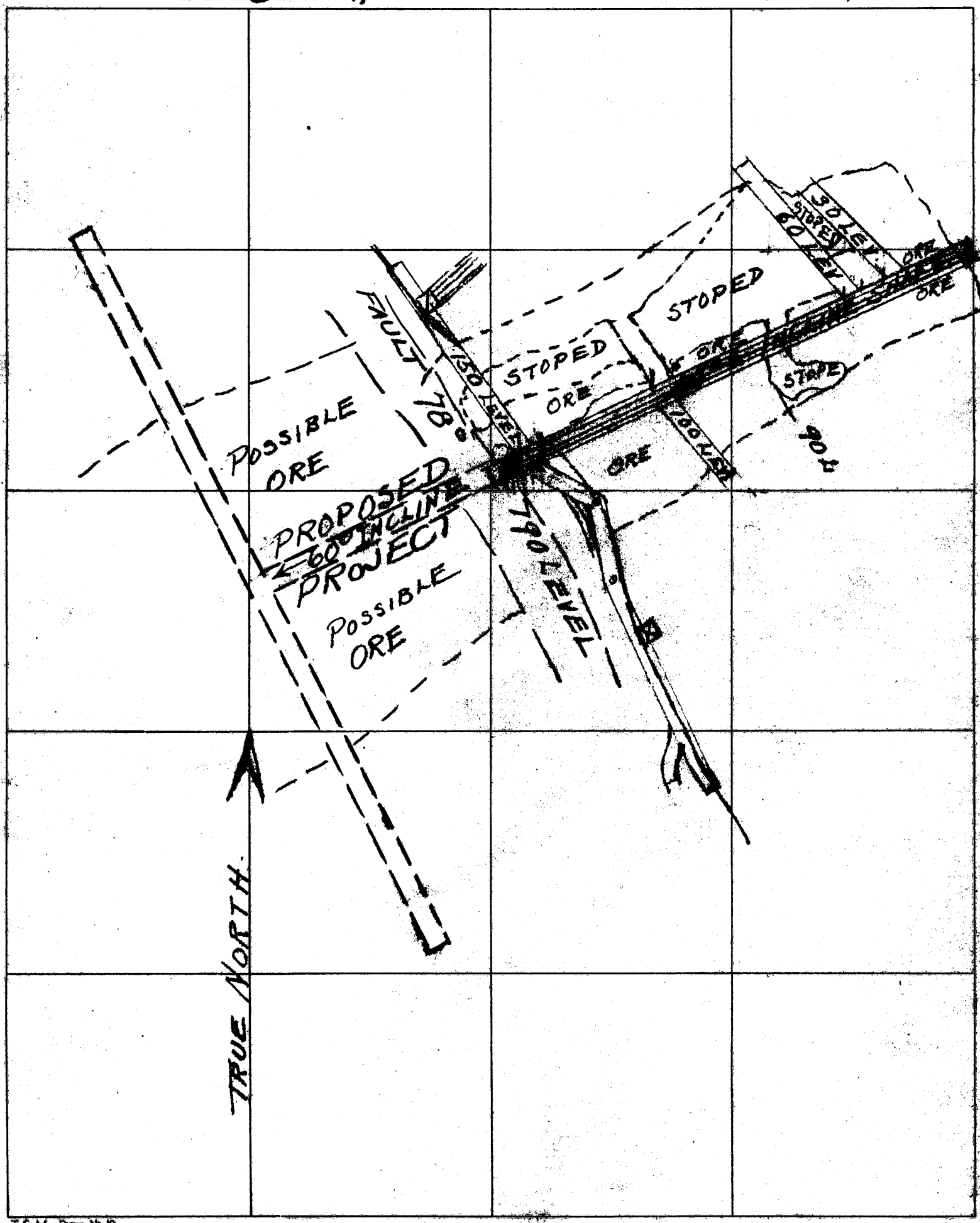


T.S.M. Form No. 19

(1)

LEVELS COMPOSITE MINE IRON HORSE DATE 6/29/51

NOTES BY J. J. BEESON SCALE 1" = 30'



T.S.M. Form No. 10

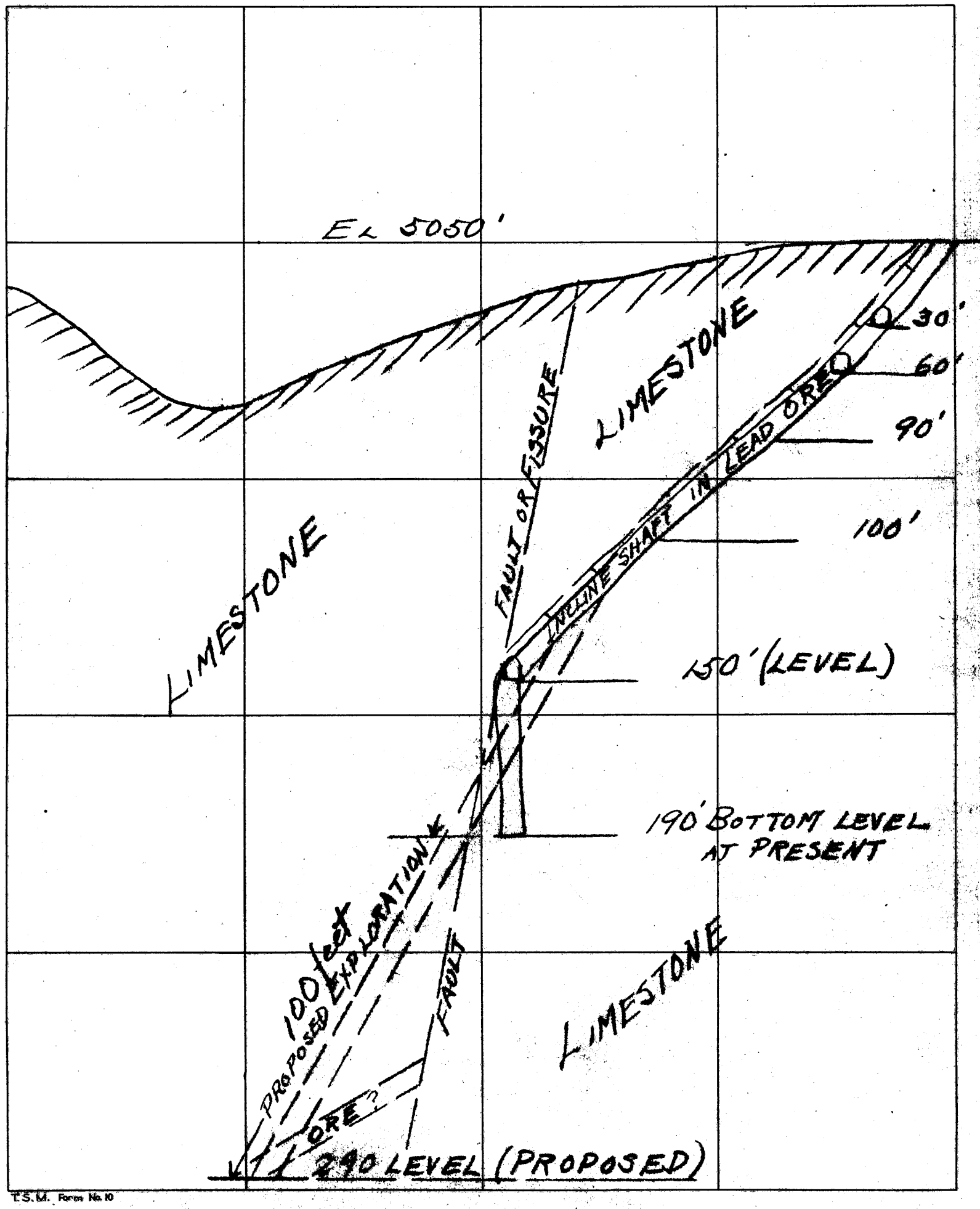
(3)

LEVEL VERTICAL SECTION

NOTES BY J. J. BEESON MINE IRON HORSE

DATE 6/29/51

SCALE 1" = 30'

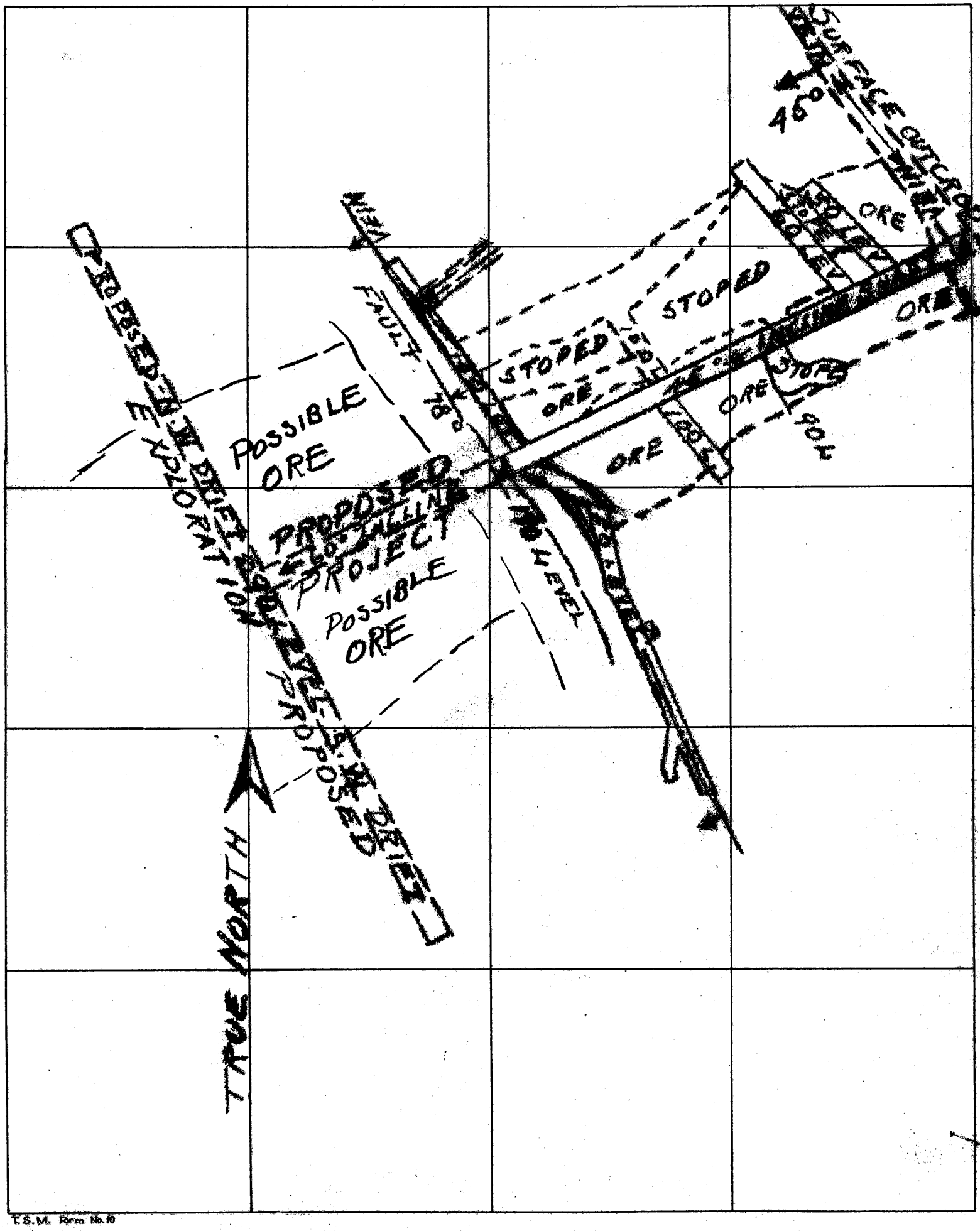


T.S.M. Form No. 10

3)

LEVEL COMPOSITE MINE IRON HORSE DATE 6/29/51

NOTES BY J. J. BEESON SCALE 1" = 30'



T.S.M. Form No. 10

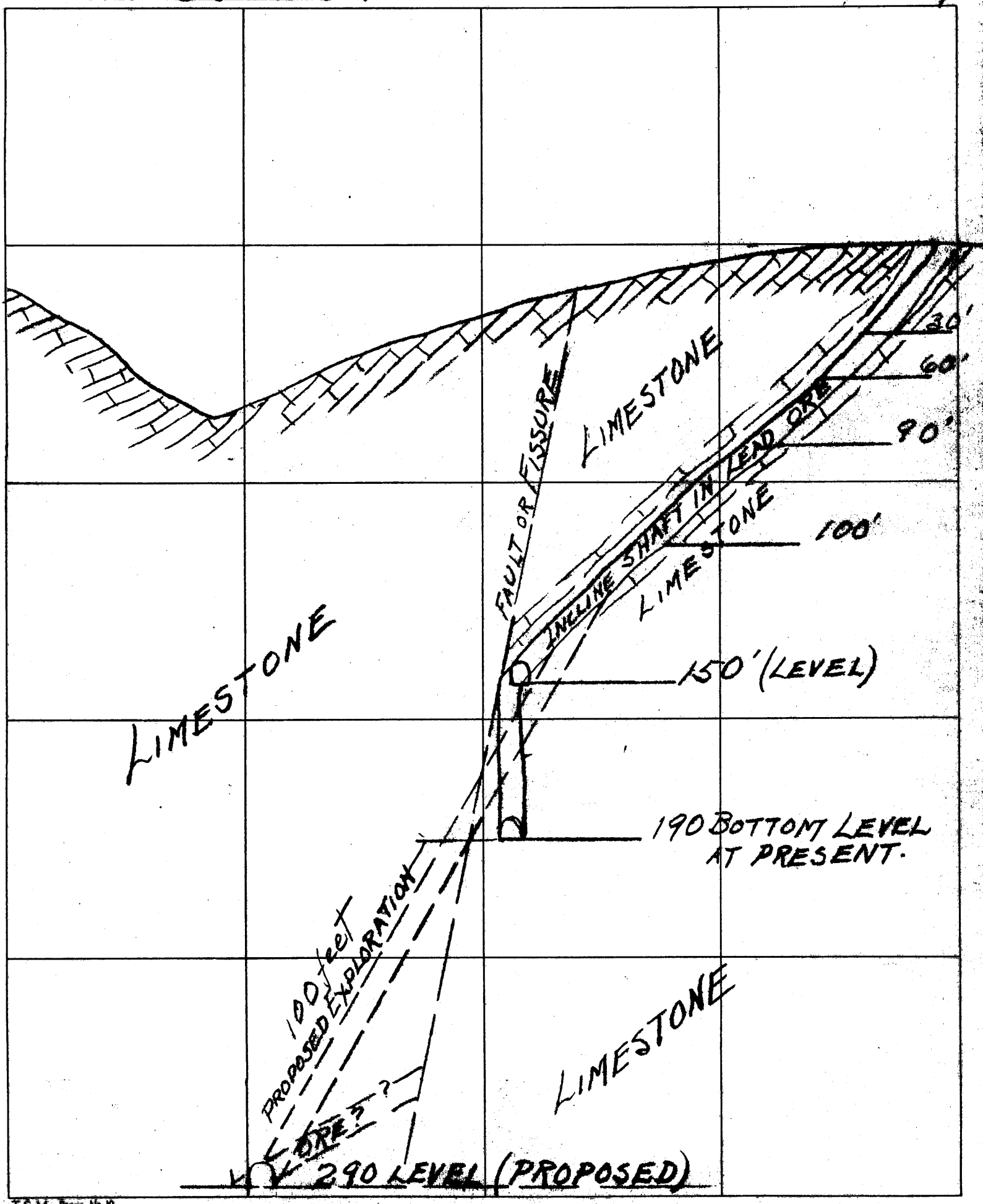
(2)

LEVEL VERTICAL SECTION MINE IRON HORSE

NOTES BY J. J. BEESON

DATE 6/29/51

SCALE 1" = 30 ft

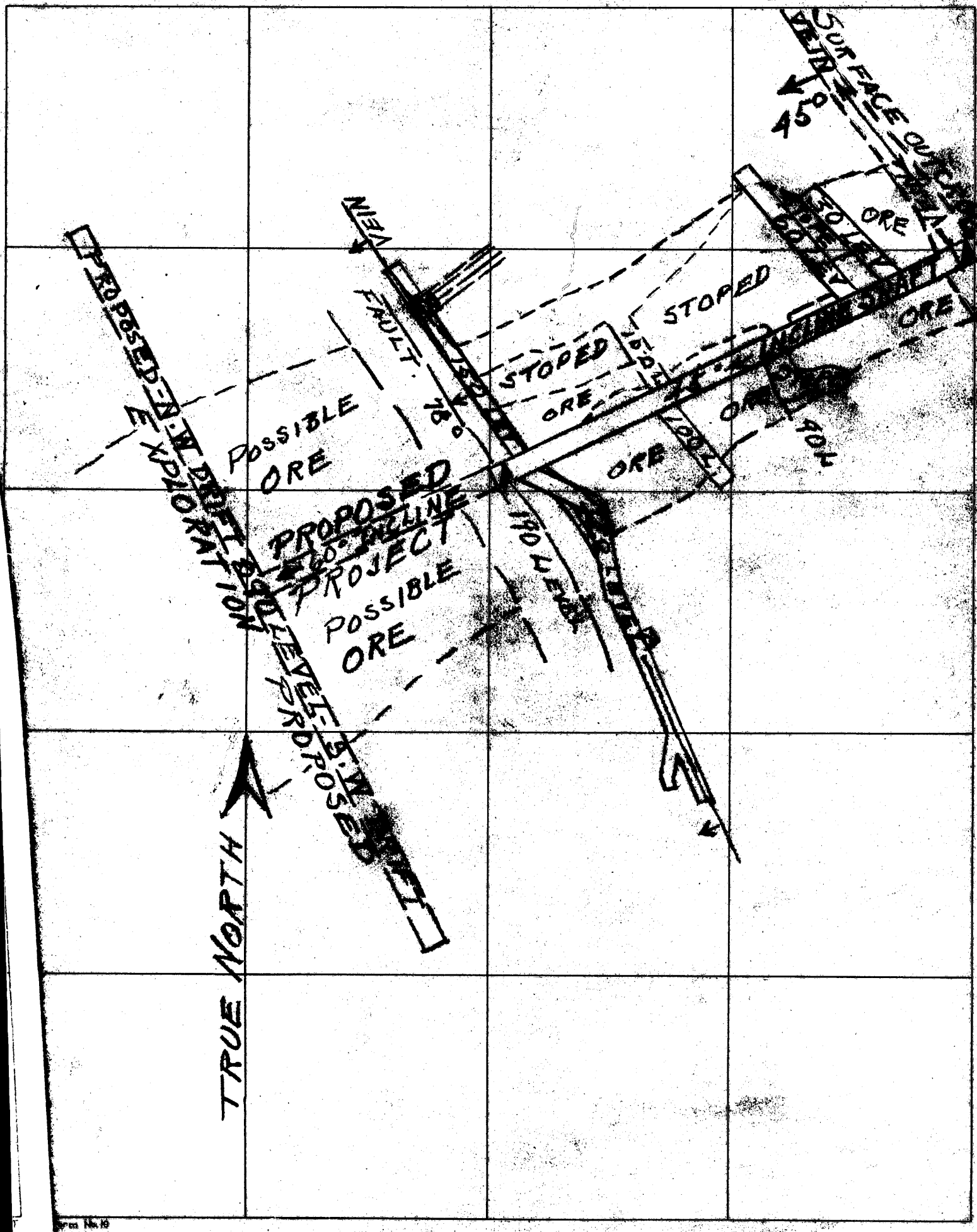


T.S.M. Form No. 10

(2)

LEVEL S COMPOSITE MINE IRON HORSE DATE 6/29/51

NOTES BY J. J. BEESON SCALE 1" = 30'



Form No. 10