Docket copy

U. S. BUREAU OF MINES
MINING DIVISION
AUG 10 1954
TUCSON, ARIZONA

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

AMENDMENT NO. 7

It is agreed this 30th day of June, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Magma King Manganese Mining Company, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E428 (Docket No. DMEA-2603), dated October 23, 1952, as amended, hereinafter called the "Contract," is further amended effective May 1, 1953, as follows:

1. a. Work under the Contract has been suspended since May 1, 1953, under the provisions of Amendments Nos. 1 through 6, the latter amendment authorizing continuation of the suspension of work to June 1, 1954. Continuation of the suspension of work is further authorized to not later than September 1, 1954.

b. No costs incurred by the Operator during the suspension of work beginning May 1, 1953, shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of work.

c. The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. Annex I attached to Amendment No. 5 is cancelled, and Annex II attached hereto and made a part hereof is substituted for Article 6 of the Contract form.

3. The time fixed for the completion of the work in Article 3 of the Contract form is changed from "21 months," as provided in Amendment No. 5, to "24 months."

4. It is of the essence of this Contract that work be resumed not later than September 1, 1954, and if work is not so resumed in the manner required by the Contract, the following provisions shall apply:

a. Any work or operations prosecuted or costs incurred by the Operator beginning with September 1, 1954, shall be for the sole account of the Operator without contribution by the Government.

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

c. The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the Contract, in the manner and amount provided in the Contract, as amended herein, certification of discovery or development being hereby waived.

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. M. Mathewson
Administrator, Defense Minerals
Exploration Administration

MAGMA KING MANGANESE MINING COMPANY

By Ralph Johnson

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

ANNEX II

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

No. 6

Rubin 6/3/4

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1954:

> Referring to Amendment No. 5, dated February 17, 1954, first paragraph, which amended Amendment No. 4 changing the date of "February 1, 1954" to read "May 1, 1954", said Amendment No. 5 and Amendment No. 4 as amended are further amended to change the date of "May 1, 1954" to read "June 1, 1954".

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 12 1954

MAGMA KING MANGANESE MINING CO.

By Ralph F. Pomeroy, President

UNITED STATES OF AMERICA

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By W.H. King, Executive Officer
DMEA Field Team, Region IV

Seal

No. 5

AMENDMENT OF CONTRACT: No. Idm-2428

Rubin 3/2/54

Contract Docket No. LEA 2003, dated October 23, 1952, between the United States of America and Magna King Manganese Mining Co., is hereby amended as follows, effective February 1, 1954:

Referring to Amendment No. 4, dated November 24, 1953, which in turn amended Amendment No. 3, dated June 26, 1953, further referring to Amendment No. 4, change the ending date of "February 1, 1954" to read "May 1, 1954".

Referring to "Article 3. Exploration project" of Exploration Project Contract Form AF-200(A) (February 1952) as amended by Amendment No. 3, dated June 26, 1953, following the words "and shall bring the project to completion within a period of", delete "18 months" and in lieu thereof substitute "twenty-one (21) months".

Referring to "Article 6. Payment by Operator" of Exploration Project Contract Form AF-200(A) (February 1952), the provisions under said "Article 6" are deleted and in lieu thereof the provisions of Annex I, attached hereto and made a part thereof, are substituted.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated FEB 17 1954

MAGNA KING MANGANESE MINING CO.

By Ralph J. Romeroy, President

UNITED STATES OF AMERICA

By W. L. King, Executive Officer
DMA Field Team, Region IV

seal

ANNEX I

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns","net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce. This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ANNEX I

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns","net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce. This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Mining Division
Date Rec'd
FEB 17 1954
BUREAU OF MINES
Denver, Colorado

No. 1

RECeive
12/4/53

AMENDMENT OF CONTRACT: No. Idm-1128

Contract Docket No. DMA 2603, dated October 23, 1952, between the United States of America and Magua Kinu Manganese Mining Co., is hereby amended as follows, effective October 1, 1953:

> Referring to Amendment No. 3, dated June 26, 1953, which amended "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) and authorized a recess of operation under Contract Idm-1128, further referring to said Amendment No. 3, second paragraph, change the date of "October 1, 1953" to read "February 1, 1954."

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated November 24, 1953

MAGUA KINU MANGANESE MINING CO.

By Ralph J. Pomeroy

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMA Field Team, Region IV

(J.A.L)

No. 1

AMENDMENT OF CONTRACT: No. Idm-2428

Contract Docket No. DMEA-2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective June 1, 1953.

Referring to "Article 3. Exploration Project" of Exploration Project Contract Form MF-200(A), delete "12 months" and in lieu thereof insert "18 months".

Furthermore, execution of this Amendment constitutes authority to recess operations under Contract Idm-2428. The operator hereby agrees to resume operations on or before October 1, 1953, contingent on the following conditions:

1. The operator hereby releases and agrees to save harmless the Government from all claims and demands arising out of conditions or circumstances that may develop at the site of the DMEA project during the period operations are recessed.

2. The operator agrees to preserve and protect the Government's interest in the work performed to date from any cause resulting from the recess of operations, without cost to the DMEA project.

3. Interim payment for the percentage of the Government's participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the first Form MF-104, Operator's Monthly Report and Voucher, after resumption of normal operations under the contract.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated June 26 1953

MAGMA KING MANGANESE MINING CO.

By Ralph Smedley

(Seal)

UNITED STATES OF AMERICA

By W. H. King

W.H. King, Executive Officer,
DMEA Field Team, Region IV

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No. 2

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1953:

> Execution of this document verifies the authorization to recess work under the contract for a period of one month; further, said authority for recess is given and accepted under the conditions that work will be resumed on or before June 1, 1953. Interim payment for the percentage of Government participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the Form MF-104 Operator's Monthly Report and Voucher in claim for reimbursement for work accomplished during the month of June 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 20 1953 1953

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President and Director

UNITED STATES OF AMERICA

By W. H. King
W.H. King, Executive Officer, DMEA Field Team, Region IV

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Defense Logistics Agency
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No. 1

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Company is hereby amended as follows, effective April 1, 1953:

> Execution of this document verified the authority to recess work under the contract for a period of 30 (thirty) days, further, said authority is given and accepted under the conditions that work will be resumed on or before May 1, 1953. Interim payments for the percentage of Government participation in the costs of the project for the month of March 1953 will be held in deferment pending receipt of advice that work has been resumed.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated: APR 17 1953

Magma King Manganese Mining Co.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President
and Director

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2603

COMMODITY Lead-Zinc

Idm-E428

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 23rd day of October, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Magma King Manganese Mining Co., an Arizona Corporation
532 Security Bldg.
Phoenix, Arizona

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Arizona, County of Pinal, described as follows:[3] Ajax and Ajax No. 1, Survey No. 3949

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner, in possession and entitled to possession, and that the property is subject and subordinate to the following described encumbrances, as to which the subordination agreement of the holder is attached:~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] Lead & Zinc

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay fifty (50) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,550, which is 50 percent of $23,100, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

MAGMA KING MANGANESE MINING CO.
(Operator)

By _____

By W. H. King
Executive Officer, DMEA
Field Team, Region IV

I, Lillie Fraser, certify that I am the Assistant secretary of the corporation named as Operator herein; that Ralph J. Pomeroy, who signed this contract on behalf of the Operator, was then President and Director of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Lillie Fraser [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

MP-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Arizona, County of Pinal, described as follows:1/

Ajax and Ajax No. 1 Mining Claims U. S. Survey No. 3949

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Magma King Manganese Mining Co.

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 11,550.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 6th day of October, 1952.

Lee L. Fraser

Frank H. Allen [Seal] By Peter Schmitz Atty in fact

Gladys Allen [Seal] Theodora Holmes Smith

Peter Schmitz [Seal] By Peter Schmitz Atty in fact

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

EXHIBIT A

Description of the Work

Drift 400 feet northerly from the present north breast of the 176-foot level.

Drive 200 feet of raises at favorable sites disclosed by the drifting. The locations of the raises will be determined after part or all of the drifting is completed and must be acceptable to the DMEA representative.

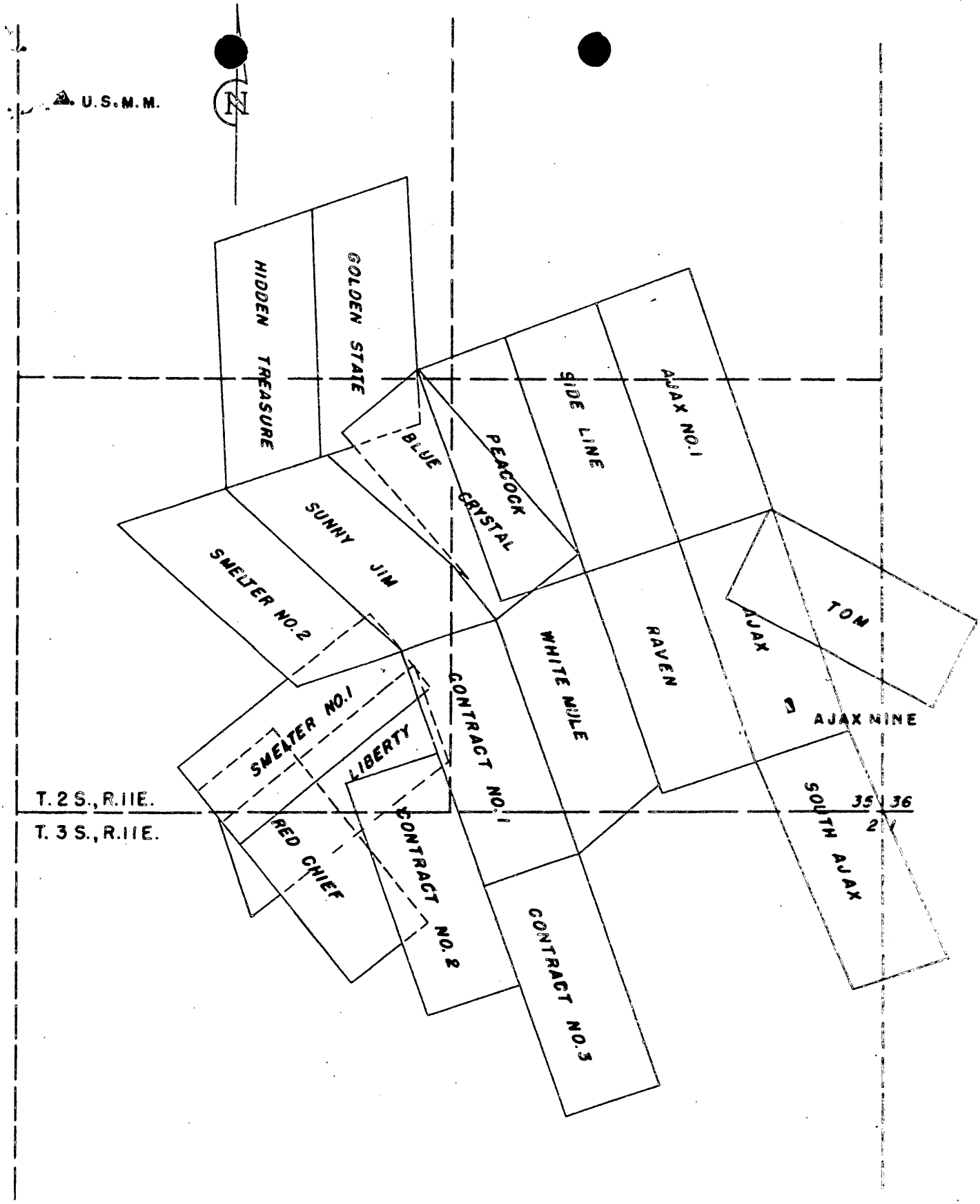
Diamond core drill a maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed. The locations, directions, inclinations and depths of the drill holes must be acceptable to the DMEA representative. A certified drill log must accompany each Monthly Progress Report. Reimbursement will be made only for diamond drill holes completed to the satisfaction of the DMEA representative. Drill cores must be properly stored in acceptable core boxes. Cores must be split and one-half retained for the use of the DMEA.

All the preliminary work will be completed by the operator at no expense to the Government.

The location of the proposed work is shown on Figures 2 and 3 which are attached and made a part of this exhibit.

Estimated Costs of the Project

Drifting, 400 feet @ $35.00 per foot	$14,000.00
Raising, 200 feet @ $33.00 per foot	6,600.00
Diamond Drilling, 500 feet @ $5.00 per foot	2,500.00
Total Cost of Project	$23,100.00
Government participation at 50%	$11,550.00



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

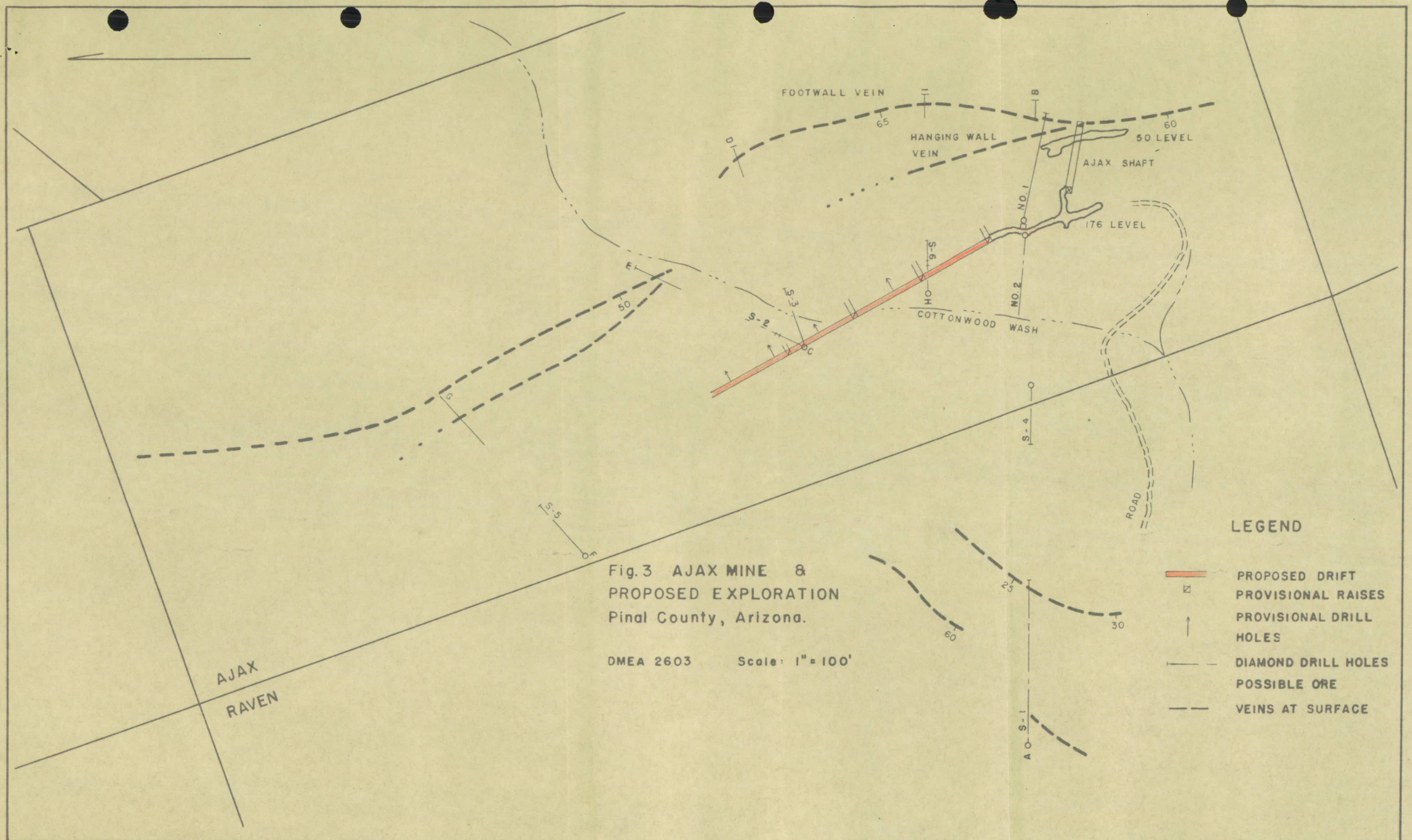


Fig. 3 AJAX MINE & PROPOSED EXPLORATION
Pinal County, Arizona.

DMEA 2603 Scale: 1" = 100'

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2603

DO NOT DETACH THIS SLIP

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

This document has been recorded as

EXPLORATION PROJECT

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

Routing Slip

Copies to USBM, USGS, and Region IV.

To: Code 500, Rm. 2614 Date 7-3-52

To: Op Com Date 7-23-52

To: Open Com Date 10-29-54

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

To: _____ Date _____

DO NOT DETACH

CONTROLLED DOCUMENT

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

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

RECEIVED MAY 1 - 1956 500

PROJECT SUMMARY REPORT

By: J. W. Alt April 25, 1956

1. Docket No. DMEA-2603 (Lead-Zinc)
Contract No. Idm-E428
Property: Ajax Lead-Zinc Mine
Pinal County, Arizona

Operator: Magma King Manganese Mining Co.
532 Security Bldg.
Phoenix, Arizona

Operator's Property Rights: Lessee
Assignment and Agreement dated April 1, 1952.
Owner's Consent to Lien dated October 6, 1952.

2. Contract (Short Form) dated October 23, 1952. To complete - 12 months.

Work Authorized

Drift 400' northerly from the present north breast of the 176-foot level.

Drive 200 feet of raises at favorable sites disclosed by the drifting.

Diamond core drill maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed.

Estimated Costs of the Project.

Drifting, 400 feet @ $35.00/ft.	$14,000.00
Raising, 200 feet @ $33.00/ft.	6,600.00
Diamond drilling, 500 feet @ $5.00/ft.	2,500.00
Total Cost of the Project	$23,100.00
Government Participation @ 50%	$11,550.00

Amendments

No. 1 Effective date April 1, 1953.

Recess operations for 30 days. Work to be resumed on or before May 1, 1953.

No. 2 Effective date May 1, 1953.

Recess operations for one month. Work to be resumed on or before June 1, 1953.

No. 3 Effective date June 1, 1953.

Recess operations and resume work on or before October 1, 1953.

Extend completion time from 12 to 18 months.

No. 4 Effective date October 1, 1953.

Recess operations - Change date of October 1, 1953, of Amendment No. 3 to read February 1, 1954.

No. 5 Effective date February 1, 1954.

Change the recess ending date of February 1, 1954, of Amendment No. 4 to read May 1, 1954.

Extend completion time from 18 to 21 months.
Annex I attached.

No. 6 Effective date May 1, 1954.

Change recess date from May 1, 1954 to June 1, 1954.

No. 7 Effective date May 1, 1953.

Suspension of work to not later than September 1, 1954.

Extend completion time to 24 months.

If work is not resumed by September 1, 1954, this amendment contains a "Pseudo Certification.

Annex II attached.

Work Completed

194 feet of drifting @ $35.00/ft.	$6,790.00
Total cost as submitted by Operator	$6,790.00
Government participation @ 50%	$3,395.00

By Amendment No. 7 the contract was automically terminated when Operator failed to resume work on or before September 1, 1954.

Work under the terms of the contract was started on November 14, 1952 and no work was done after March 1953.

3. Audit Certificate (Report of Review) dated August 31, 1955.

Total cost as billed by Contractor	$6,790.00
Exceptions - None	
Total accepted cost	$6,790.00
Government's participation @ 50%	$3,395.00

Operator's final report: Received February 1, 1956
Field Team final report:
Final engineering report dated February 1954, (received 2/6/56)
Final geological report dated January 31, 1956 (received 2/6/56)

4. Certification date: A Pseudo Certification by Amendment No. 7 effective date September 1, 1954.

The Ajax mine contains no measureable ore.

The indicated reserves have been estimated at: (1) 10,000 tons containing about 10 per cent combined lead and zinc and 1.0 ounce silver a ton; and (2) a few hundred tons containing 2.2 per cent zinc, 0.73 per cent lead, 0.22 per cent copper, and 0.13 ounce gold and 0.3 ounce silver per ton. The 10,000 tons of high-grade material present in the partially developed deposit at the shaft and found by drill holes S-2 and S-5 had been indicated by work done before initiation of the DMEA exploration program. A few hundred tons of low-grade material was penetrated near the end of the drift driven with Government assistance.

The inferred reserves are, 4,700 tons containing 1.0 per cent and 8.0 per cent zinc in a depth extension of the deposit at the shaft.

5. Comments

The mining operations were conducted in a fairly efficient manner. Installation of better ventilation and drainage systems would have materially improved working conditions.

In driving the 194 feet of drift about 120 tons of low-grade material was stockpiled which assayed 0.2 per cent copper, 0.8 per cent lead, 2 per cent zinc, 0.3 ounces silver and 0.02 ounces gold. This material appears to have come from the 90 to 100 feet of the drift adjacent to the face and must represent considerable sorting since total muck produced from a 6 by 7-foot drift 100 feet long would approximate 350 tons.

The Field Team states: "Inasmuch as the drift lacked but 90 feet of reaching the downward projection of ore indicated in a diamond drill hole (S-2) and considerable mineralization was noted in the last 100 feet of drifting both examiners recommend that the project be certified as a discovery."

J. W. Alt

J. W. Alt

JWAlt/er 4/30/56

Copy to: Docket
Base Metals
Chron.

☒ Audited

WORK ANALYSIS SHEET - DMEA PROJECT

☐ Actual Cost

☒ Certified Pseudo

Analysis as of ~~12/30/54~~ 9/9/55

Incl. Voucher for ~~Project Summary Audit~~

☒ Agreed Unit Costs

Name Magma King Manganese Mining Co.

Docket No. DMEA-2603

State Arizona

Commodity Lead-Zinc

Idm-E No. 428

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	400'	$14,000.00	194'	$6,790.00	$6,790.00
Raising	200'	6,600.00			
Shafts					
Winzes					
Drilling (Specify) Diamond	500'	2,500.00			
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$23,100.00		$6,790.00	$6,790.00

Copied

Terminated by terms of Amendment No. 7.

Checks Audit.

Prepared by W. P. Klugescheid

71626

Re: DM&A-2603

Copy of release also should be sent to Walter C. Smith, for himself & as attorney-in-fact, for other landowners.

Talbot
11/9/62

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	[illegible]	500
11/9	[illegible]	800
11/13	[illegible]	220
9	[illegible]	110
11/13	[illegible]	100
		220
Co.		

Magma King Manganese Mining Co.
581 North Colorado Street
Chandler, Arizona

NOV 13 1962

Re: DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract Idm-E428

Gentlemen:

By the terms of the subject Exploration Project Contract, as amended, and the royalty agreement in Paragraph 4.c., Amendment 7, dated June 30, 1954, all minerals mined or produced from October 23, 1952, to October 23, 1962, were subject to the Government's percentage royalty as set forth in said contract.

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

Sincerely yours,

George Fumich, Jr. (gla)

Director

cc: Director's Reading
CA&A Division
Region III (2)
Docket
Mr. Frank H. Allen
Mrs. Gladys Allen, 775 West Toledo St., Chandler, Ariz.

WRGriswold/mm
11-8-62

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Frank	500
11/9	Talbot	800
11/13	Gillespie	120
"	[illegible]	110
11/15	Smith	100
		220

NOV 13 1962

Mr. Walter C. Smith
Coolidge
Arizona

Re: DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract Idm-E428

Dear Mr. Smith:

Enclosed is a self-explanatory letter of today to Magma King Manganese Mining Co. under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on October 6, 1952, for yourself and as attorney-in-fact for other landowners, under the Defense Minerals Exploration Administration program which has been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George Fumich, Jr. (gfu)

Director

Enclosure

WRGriswold/mm
11-9-62
cc: Director's reading file
Region III (2)
✓Docket
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Griswold	500
11/9	Talbot	800
11/13	Lolledge	120
"	Johnson	110
	Fumich	100
		220

NOV 13 1962

Mr. Frank H. Allen
Mrs. Gladys Allen
775 West Toledo Street
Chandler, Arizona

Re: DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract Idm-2428

Dear Mr. and Mrs. Allen:

Enclosed is a self-explanatory letter of today to Magma King Manganese Mining Co. under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on October 6, 1952, under the Defense Minerals Exploration Administration program which has been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George Fumich, Jr. gla

Director

Enclosure

WRGriswold/mm
11-8-62
cc: Director's Reading File
✓Docket
Region III
Code 500

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 26 1962

DATE	INITIALS	CODE
10/26		800
10-24		100
10/24		140
		120
	Grieved	500
		220

October 23, 1962

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: T. M. Romslo, Mining Engineer

Subject: DMEA-2603 (Lead-Zinc)
Contract Idm-E428
Magma King Manganese Mining Co.
(Ajax Mine)
Pinal County, Arizona
FINAL INSPECTION OF CERTIFIED PROJECT

A final inspection of the subject property was made by me October 8, 1962. Information obtained during this inspection and previous inspections indicates that no ore has been produced from the property since October 23, 1952, the starting date of the Royalty Payment Agreement. My findings on October 8, 1962 also indicate that no ore could be produced from the property by October 23, 1962, the termination date of the Royalty Payment Agreement. Therefore, it is recommended that this account be closed.

Detailed information obtained during the final inspection follows. A "No Lien Notice" is posted on Ajax shaft headframe. It states that Roy V. Waughtel acquired the property from the owners by a Bond and Lease Agreement dated January 16, 1962. The owners of the property were listed as Walter Smith, Theodore Holmes Smith, Frank Allen and Gladys Allen. No one was on the property, and there was no equipment of any kind in the shaft area. However, new roads had been built to the mine and to several small mine dumps located within a radius of four or five miles of the Ajax claims. At about 300 yards south of the Ajax shaft, foundations for a mill had been completed, ore bins had been erected, and water storage dams had been built.

Mr. Roy V. Waughtel, lessee, who was contacted at a near-by mining property, furnished information concerning the Lease and Option

agreement and the work done on the Ajax property. The agreement did not provide for royalty payments to the Government on any ore produced to October 23, 1962, because the owner had not informed him that such a lien existed. The work on the Ajax and adjoining claims was started in January 1962, and stopped for financial reasons during June 1962. Also, that the mill will be completed and mining and milling operations will be started in 1963, if the project can be refinanced.

Mr. Connors in a letter dated September 17, 1962 to Mr. Frank H. Allen, one of the owners of the Ajax property, requested information concerning any recent production and any change in ownership of the property. Mr. Allen's wife told me over the telephone in Chandler, Arizona, October 10, 1962 that Mr. Connors' letter had been received, and that her husband's reply would be made without further delay. A copy of Mr. Smith's letter is attached.

Allen's

T. M. Romslo

T. M. Romslo

Attachment

? Marty - What Contract ?

October 10, 1962

OME
DEPARTMENT OF THE INTERIOR
OCT 12 1962
REGION III
DENVER, COLORADO

United States Dept.
of the Interior
Bldg. 20 Federal Center
Denver 25, Colorado

Gentlemen:

Mr. Pomroy's address is 581 North Colorado Street Chandler, Arizona. Phone number 963-3183.

I am not familair with the captioned property. I own half interest in the Ajax, Ajax 1 and Raven. There has been no production of ore from the three mines that I know of. The property is not in operation at this time. Mr. Roy V. Naughtell of Florence Junction, Arizona has a lease and option to purchase. There has been no money paid to me.

Yours truly,

Frank H. Allen

Frank H. Allen
775 West Toledo Street
Chandler, Arizona

Re: your letter of Sept 17, 1962 to Mr. Allen
DMEA 2603 (Lead-Zinc)
Contract Idm - E 428
Magna King Manganese Mining Co.
(Ajax Mine)
Pinal County

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E
SEP 20 1962

September 17, 1962

9/19 800
9/20 500
220

Mr. Frank H. Allen
775 West Toledo
Chandler, Arizona

Re: DMEA-2603 (Lead-Zinc)
Contract Idm-E428
Magna King Manganese Mining Company
(Ajax Mine
Pinal County, Arizona

Dear Mr. Allen:

We have been unable to make any contact with Mr. R. J. Pomeroy or the Magna King Manganese Mining Company regarding the captioned contract.

Could you furnish us the present address of Mr. Pomeroy?

Also, we would like to know if there has been any production of ore from the captioned property since January 1960?

Is the property now in operation?

Have there been any changes in ownership, lease, or sublease?

Any information regarding the property will be greatly appreciated.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

cc Chief, Division of Field Operations, OME
Idm-E428
Chron
HMC/lm

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
9/12	Hansel	500
9/12	Talbot	800
"	on leave	120
"	Johnson	110
9/12	on leave	100
		220

SEP 1 2 1962

Memorandum

To: Acting Field Officer, Region III

From: ACTING Chief, Division of Field Operations

Subject: DMRA-2603 (Lead-Zinc)
Magma King Manganese Mining Company
Ajax Mine
Pinal County, Arizona
Contract Idm-E428

We have been unable to make any contact with the Operator under the referenced project or to effect delivery of our Form MME 63. We infer that your office met with the same lack of success. Do you have any recent information? If not, possibly the Arizona State mine inspector might be kind enough to advise you if there has been any recent activity on the property. Possibly one of the landowners might be of help.

W. R. Griswold (gla)

WRGriswold/ama 9-12-62

cc:
Docket
Director's Reading File
Review Committee

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 14 1960

DATE	INITIALS	CODE
4-14	gad	VVO
4/14	[illegible]	800
	[illegible]	500
		225

Building 20 - Federal Center
Denver 25, Colorado

April 12, 1960

CERTIFIED MAIL

Mr. R. J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. DMEA 2603 (Lead-zinc)
Contract No. Idm-E428
(Ajax mine)
Pinal County, Arizona

Dear Mr. Pomeroy:

It is a requirement of the contract that you furnish information such as that requested in the questionnaire mailed to you January 20, 1960.

In event you did not receive the questionnaire or have mislaid it, you will be expected to complete and immediately return to this office one of the two attached prints of the questionnaire.

Yours very truly,

Original signed by

J. W. Townsend
Executive Officer, OME
Field Team, Region III

Enclosure

TMR/bjo

cc: Chmn. Op. Comm. (2)
Royalty file Idm-E428
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 23 1957

DATE	INITIALS	CODE
8/23	CHW	100

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

August 21, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1957 through June 30, 1957
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428, Magma King Manganese Mining Co. (Ajax Lead-Zinc Mine), Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

Alternate Acting Executive Officer
DMEA Field Team, Region III

Enclosures

MHM/vj

cc: Semiannual Report File E 428
DMEA/TUC
Harshman
Emerick
Chron.

DMEA
ARTMENT OF THE INTERIOR
AUG 19 1957
REGION III
DENVER, COLORADO

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period	Jan. 1 to June 30, 1957
Docket and Contract Number	DMEA-2603, Idm-E428
Operator	Magma King, Manganese Mining Co.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks: Property visited Aug. 6, 1957.

The only person present, R. W. Nicholes, watchman, said no work had been done on the property. He also said that the owner of the property had told him that the operator's lease and option probably would be cancelled in the near future.

The last $\frac{1}{4}$ mile of road to the mine remains impassable.

CC Orig. & 9 Copies to W.H°King
DMEA-2603
DF

Original signed by
Signed T. M. Romslo
T. M. Romslo

Date Aug. 15, 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

224 New Customhouse
Denver 2, Colorado

Date: February 12, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1956 through December 31, 1956
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428, Magma King Manganese Mining Company (Ajax Mine), Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, ~~and~~ Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj
cc: Semiannual Report File E 428
W. R. Storms
Harshman
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 15 1957

DATE	INITIALS	CODE
2-19	C	220

DMEA
DEPARTMENT OF THE INTERIOR
FEB 7 1957
REGION III
DENVER, COLORADO

February 4, 1957

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team

From : Superintendent, Southwest Experiment Station

Subject : Semi-Annual Report of Certified Project, July 1 - December 31, 1956, Docket DMEA-2603 (Lead-Zinc), Contract Idm-2428, Magma King Manganese Mining Co. (Ajax Mine), Pinal County, Ariz.

Enclosed are original and 8 copies of the above report by T. M. Rasmle of the Bureau of Mines.

Signed by Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
DMEA-2603
Cert. File
WF

WRStorms:frj

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 15 1957

DATE	INITIALS	CODE

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period	July 1 to December 31, 1956
Docket and Contract Number	DMEA-2603, Idm-E428
Operator	Magma King Manganese Mining Co.

	"X" one
The project has been inactive during the reporting period	X

Pertinent data relative to the subject contract has remained unchanged since the last report.

Remarks: I visited the project on January 29, 1957 and found that: (1) The last $\frac{1}{4}$ mile of road to the mine had again been washed out; (2) conditions at the mine indicated no recent activities; and (3) R. W. Nicholes is still acting as watchman for the operator. Mr. Nicholes said that no work had been done at the mine during the period of this report and that R. J. Pomeroy, President of the company, had last visited the mine about 3 months ago.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 15 1957

DATE	INITIALS	CODE

Signed

T. M. Romslo

T. M. Romslo

Date

February 4, 1957

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 8-3

2663

Referred to:

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

Note comments in report regarding:

1.

2.

3.

4.

and take appropriate action.

Action taken by Division:

Robert L. Adams

RECEIVED
AUG - 3 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

224 New Customhouse
Denver 2, Colorado

Date: July 31, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1956 through June 30, 1956
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428 Magma King Manganese Mining Company (Ajax Mine), Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, and Memorandum 29., and Special Notice in Minutes of Operating Committee Meeting No. 692.

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj
cc: Semiannual Report File E 428
Royalty File E428
W. R. Storms
E. N. Harshman
Chron.

DMEA
Date Rec'd
JUL 30 1956
BUREAU OF MINES
Denver, Colorado

July 26, 1956

Memorandum

RECEIVED
AUG - 3 1956

To : W. A. Traver, Executive Officer, DMEA Field Team

From : Superintendent, Southwest Experiment Station

Subject : Semi-Annual Report, January 1-June 30, 1956, Docket DMEA-2603, Contract Idm-6428 (Lead-Zinc), Manganese Mining Co. (Ajax Mine), Pinal County, Ariz.

Enclosed are original and 6 copies of the above semi-annual report as per your recent memorandum.

Signed by Walter R. Storms

Walter R. Storms

cc W. A. Traver (6)
DMEA-2603
Cert File
DF

W.Storms:frj

RECEIVED
AUG - 3 1956

Semi-Annual Report of Certifice Projects

Reporting Period	January 1, to June 30, 1956
Docket and Contract Number	Docket DMEA-2603, Contract Idm-E428
Operator	Magma King Manganese Mining Co.
Commodity	Lead-Zinc
Mine Name	Ajax Mine
County and State	Pinal County, Ariz.

Date of Examination for this Report — July 9, 1956

Change in status since previous report:

Data - None

Activities - Confined to road repairs. The road work, according to R. W. Nicholes, watchman, was completed late in June under the supervision of R. J. Pomeroy, President of the Magma King Manganese Co.

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

CC W. M. Traver (Orig. & 8)
DMEA-2603
Cert. file
DF

TMRomslo:frj

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

RECEIVED MAY 14 1956

224 New Customhouse
Denver 2, Colorado

May 10, 1956

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc) Contract Idm-E428, Magma King Manganese Mining Co. (Ajax mine) Pinal County, Arizona

Reference is made to the Semiannual Report for the period July 1, 1955 through December 31, 1955 for Contract Idm-E428. T. M. Romslo states that Magma King Manganese Mining Company's lease to the Ajax property probably would be cancelled because of lack of work on the property. Please have an engineer from your office check to see if this lease was actually cancelled. This type of information is of value to us in keeping our records of the ownership status of DMEA properties current.

This is not a priority request. It can be handled the next time you have an engineer in the vicinity of the Ajax mine.

W. M. TRAVER

W. M. Traver

RDB:jy
cc: Royalty File E428
Corresp. File E428
Sec. Op. Comm. (2)
Chron.

IN REPLY REFER TO:

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

RECEIVED
MAR 12 1956

March 9, 1956

Re: DMEA 2603, Idm E-428
Magma King Manganese
Manufacturing Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
$23,100 - Lead-Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Final Field Team Report

The expenditure of $23,100 was approved in a contract, E-428, dated October 23, 1952. Work was started November 14th and $6,790 was expended on the following work:

194 feet of drifting,
on the 176-foot level of a shaft.

85 feet of the work was in low grade ore.

The work explored a 7-foot vein, in Precambrian chlorite schist, credited with a production of 91.72 tons of lead zinc-silver ore, part of which was sorted ore. Previous work consisted of the 180-foot shaft, drifting on 2 levels and diamond drilling.

Ore reserves

Prior to the DMEA work, reserves consisted of 14,000 tons of 10% (zinc and lead) ore and the DMEA work increased that figure by 2,500 tons of 0.7% lead and 2.2% zinc material.

Intersections of ore grade material are claimed for 2 diamond drill holes and it is believed other ore shoots exist, but the operator discontinued work without having reached certain target areas. Although only low grade material was encountered in the DMEA work, the examiners and Field Team recommended that a Certification of Discovery be issued.

I concur with that recommendation.

N. E. Nelson

N. E. Nelson

2603

ACTION ON INFORM
OR FINAL PRIED REPORT

Date 3-1

Referred to:

1. ~~Mr. Hildebrand~~
2. ~~Mr. Johnson~~
3. ~~Mr. Albers~~
4. ~~Docket Control Mails and Files~~
5. ~~Sam Pitts~~ Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Pseudo "lit".
2. Vague as to kind of
   [illegible].
3.
4.

and take appropriate action.

- - - - - -

Action taken by Division:

Amendment No. 7 - which automatically terminated the contract: contains a false certification. Insufficient information such as actuals, prel. limits.
3/5/56 - J.C.

Initials

Certified by Agreement

RECEIVED
FEB 20 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

224 New Customhouse
Denver 2, Colorado

Date: February 24, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1955 through December 31, 1955.
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428 , Magma King Manganese Company,
Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office. and Memorandum 29.

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
vj
cc: Semiannual Report File E 428
Royalty File E428
W. R. Storms
E. N. Harshman
~~Chron.~~
J. N. Faick
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd
JAN 30 1956

Box 4097
Tucson 5, Arizona

BUREAU OF MINES
Denver, Colorado
January 27, 1956

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

RECEIVED
FEB 20 1956

From : Superintendent, Southwest Experiment Station

Subject : Semi-Annual Report of Certified Project, July 1 - December 31, 1955, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of the above report by T. M. Romslo of the Bureau of Mines.

Walter R. Storms

Walter R. Storms

CC W. M. Traver
DMEA-2603
Cert. File
DF

WRStorms:frj

Semi-Annual Report of Certified Projects

RECEIVED
FEB 29 1956

Reporting period	July 1, 1955 to January 1, 1956
Docket and Contract Number	DMEA-2603, Idm-E428
Operator	Magma King Manganese Mining Co.
Commodity	Lead-Zinc
Mine Name	Ajax
County and State	Pinal County, Arizona
Date of Contract	October 23, 1952
Date of certification	June 30, 1954
Expiration date of Royalty Payments	October 23, 1962
Date of Examination of this Report	January 26, 1956
Total Amount of Contract	$23,100.00
Total Expenditures under Contract	$6,790.00
Amount of Government Participation at 50%	$3,395.00
Royalty Payments this Perioe	$0.00
Previous Royalty Payments	$0.00
Total Royalty Payments to Date	$0.00
% Loan Repayment completed	$0.00
Amount of Royalty Due	None
Royalty Remarks	"

Original Estimate of Reserves
(from Final Engr. Report. Final Geol. Report in preparation.)

No measurable reserves. Approximately 10,000 tons of 10 percent combined lead and zinc indicated in old workings and principal target that was not reached by project. A few hundred tons containing 2.2 percent zinc, 0.73 percent lead and 0.22 percent copper was penetrated by drift driven under subject contract. Inferred reserves remain at a few tens of thousand tons containing about 1 percent lead and 8 percent zinc.

Increase of Reserves by Work performed subsequent to expiration or termination of contract:	None
Revised estimate of Reserves	--
Production this Period	None
Amount of Previous Production (since date of Contract)	None
Total DMEA Production to Date	None
% of Revised Reserves Mined	0.0

Other Remarks. During my visit to the mine I found the last half mile of road was still impassable by automobile. No one was at the mine and all equipment had been removed from the surface buildings. In talking to Mr. R. W. Nicholas, a prospector who resides at the Ajax camp at about 3/4 mile from the mine, I obtained the

following information. About a year ago, R. J. Pomeroy, president of subject company, gave Mr. Nicholas permission to occupy one of the houses. As a result, Mr. Nicholas has acted as unofficial caretaker of the property. Pomeroy, who presently is in Utah or Colorado, last visited the mine in October 1955. He was accompanied by 2 geologists who examined the property and presented unfavorable findings to their client.

At Florence, county seat of Pinal County, I learned that most of the 1955 taxes on the patented claims had been paid by the owners. Mr. W. C. Smith, one of the owners, was contacted via telephone by W. R. Storms. Smith said the Magma King Manganese Mining Co. lease on Ajax is still in force but that the lease probably would be cancelled because of lack of work on the property.

T. M. Romslo
Mining Engineer
Southwest Experiment Station

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
FEB 15 1956

February 15, 1956

Re: DMEA-2603 (Lead-Zinc)
Contract Idm-E428
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of final field team report on January 26, 1956 with U. S. Bureau of Mines field report by Romslo and Hardwick (February 1956) and U. S. Geological Survey field report by Bryner (January 31, 1956)

Under the terms of the contract executed October 23, 1952, a $23,100 program made up of 400 feet of drifting, 200 feet of raising and 500 feet of diamond drilling on the 176-foot level was agreed upon. Of that work only 194 feet of drifting was completed when the company asked that the project be recessed. Thereafter, no additional work was done under the contract and it was terminated September 1, 1954 when the last recess expired.

In driving the 194 feet of drift about 120 tons of low-grade mineral was stockpiled which assayed in the order of 0.2 percent copper, 0.8 percent lead, 2 percent zinc, 0.3 ounces silver and 0.02 ounces gold. This material appears to have come from the 90 to 100 feet of the drift adjacent to the face and must represent considerable sorting since total muck produced from a 6 by 7-foot drift 100 feet long would approximate 350 tons.

Inasmuch as the drift lacked but 90 feet of reaching the downward projection of ore indicated in a diamond drill hole (S-2) and considerable mineralization was noted in the last 100 feet of drifting both examiners recommend that the project be certified as a discovery. I concur with this recommendation.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Branch of Base Metals (2)
Mr. Kiilsgaard, Rm. 5222
Mr. Geehan, Rm. 3608
Files

Date 2/14

Referred to:

1. ~~[illegible]~~
2. ~~[illegible]~~
3. ~~[illegible]~~
4. ~~[illegible] Control Rolls and Files~~
5. ~~[illegible]~~
6. Design Control Rolls and Files Division

Note comments in report regarding:

1. [illegible]
2. [illegible]
3.
4.

and take appropriate action.

Action taken by Division:

2/17/56. [illegible] Manual No. 7 work on this [illegible] automatically [illegible] in [illegible]. This Amendment [illegible] a permanent certificate.

ROBERT E. ADAMS

Initials

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

RECEIVED
FEB 9 1956

224 New Customhouse
Denver 2, Colorado

February 6, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In conjunction with the Field Team's final report of January 26, 1956, pertaining to work completed under the subject contract, we are enclosing the original and three copies of final geologic report by the U. S. Geological Survey.

W. M. Traver

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Box 4126 University Station
Tucson, Arizona

IN REPLY REFER TO:
MINERAL DEPOSITS
DMEA
RECEIVED
FEB 2 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
FEB 3

FEB 3 1956

BUREAU OF MINES
Denver, Colorado

February 1, 1956

RECEIVED
FEB 9 1956

MEMORANDUM

To: E. N. Harshman

From: John N. Faick

Subject: Final Geological Report, DMEA 2603, Contract Idm-E428, (Lead-Zinc) - Magma King Manganese Mining Company's Ajax Mine, Pinal County, Arizona

Enclosed are the original and 8 copies of the final geological report on the exploration project on the Ajax mine. Unfortunately the project was terminated before completion because the operator failed to do the work provided by the contract. A 194 ft. long drift was completed and this did not modify in any way our understanding of the Ajax deposit. I believe the deposit merits additional exploration; however, it is unlikely that the Ajax will ever make a large mine. The low-grade ore reported along the DMEA drift is encouraging, and might lead to the discovery of minable ore at other places in the vein.

Because of the low-grade ore reported in the DMEA drift, and because available evidence indicates that higher grade ores might exist in the project area, it is recommended that the project be certified as a discovery.

John N. Faick

JNF:ms

cc. Harshman (8)
Storms

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd.
FEB 3 1956
BUREAU OF MINES
Denver, Colorado

FIELD TEAM III

GEOLOGY

FINAL REPORT

DMEA 2603, Contract Idm-E428

MAGMA KING MANGANESE MINING CO., AJAX MINE

PINAL COUNTY, ARIZONA

(Lead-Zinc)

By
Leonid Bryner
Geologist
U. S. Geological Survey

January 31, 1956

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM III

FINAL REPORT

DMEA 2603, Contract Idm-E428

MAGMA KING MANGANESE MINING CO., AJAX MINE

PINAL COUNTY, ARIZONA

(Lead-Zinc)

CONTENTS

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GEOLOGY	2
PRODUCTION AND GRADE	5
EXPLORATION	7
Prior to DMEA Contract	7
DMEA Exploration	8
ORE RESERVES	10
CONCLUSIONS AND RECOMMENDATIONS	14

ILLUSTRATIONS

Fig. 3 - Plan map - veins and workings	Following page 14
Fig. 4 - Drill Hole Sections	" " 14
Fig. 5 - Geologic Map of workings	" " 14
Fig. 6 - Sample Map	" " 14

RECEIVED
FEB - 9 1956

INTRODUCTION

The Ajax mine is in section 35, T. 2 S., R. 11 E., Pinal County, Arizona. It is reached from the town of Superior by traveling 11 miles west on U. S. Highway 60-70, then 9 miles southeast on a graded dirt road.

On July 3, 1952 a DMEA application totaling $59,727 was made by the Magma King Manganese Mining Co. to explore for lead and zinc at the Ajax Mine. On August 25, 26, and 27, 1952, J. N. Faick of the U. S. Geological Survey, and T. M. Romslo of the U. S. Bureau of Mines, examined the property. The examiners recommended DMEA assistance in a revised program totaling $23,100. A contract (Idm-E428) for this amount was granted and exploratory work started on November 14, 1952. Exploration continued through March, 1953. The applicant obtained permission to recess the project during the month of April, 1953. Following further requests from the applicant, this recess period was extended time after time, until on September 1, 1954, failure to renew operations resulted in cancellation of the contract. Amendment No. 7, dated June 30, 1954, providing for cancellation of the contract if work was not resumed by September 1, 1954, also provides for repayment of the government by "a percentage royalty on any minerals mined or produced" from the property, "certification of discovery or development being hereby waived." The final payment due the applicant was not made until November 10, 1955, because Ralph J. Pomeroy, president of the applicant company, did not submit his final report until October, 1955.

The mine was allowed to flood during the recess of exploration. No interim geologic inspections of the mine had been made, and as the mine was never dewatered, a final geologic inspection was not possible.

T. M. Romslo of the U. S. Bureau of Mines, however, examined the workings on April 1, 1953, when the maximum advance under the DMEA contract had been reached. Regarding this inspection, and previous monthly inspections, Romslo states that the narrative reports by Frank L. Metler, superintendent, correctly describe the findings in the exploratory drift that was being driven under the DMEA contract. In view of this fact and the lack of firsthand geologic information, the results of exploration given in the present report are based on Metler's periodic reports to DMEA. Much of the present report is abstracted from Faick's examination report, and the writer consulted with Faick and Romslo. The figure numbers used in Faick's report remain the same. The Ajax Mine, as far as the writer can determine, is not described in the literature.

GEOLOGY

The Ajax mine is in the Mineral Hill Mining District near the head of Cottonwood Creek, a dry wash draining relatively rough mountainous desert terrain between the valleys of the Gila River on the south and Queen Creek on the north. Maximum relief in this area is about 500 feet.

The country rock is a fine-grained, greenish-gray, rather uniform chlorite schist of probable Precambrian age. The schistosity, which is vague and poorly developed, is gently folded into small easterly-trending anticlines and synclines that have dips ranging from 10° to 30° on the flanks.

Within the Mineral Hill district there are many small mines and prospects of which the Ajax appears to be one of the most promising. The mine explores part of a conjugate vein system by means of a 180 foot shaft

inclined westward about 65° and by two drifts (Fig. 5). The upper drift, or 50 level, extends 50 feet north of the shaft and 60 feet south of it. The 176 level before DMEA exploration consisted of a 30 foot crosscut to the vein, with drifts extending about 80 feet north and 50 feet south of the crosscut. Eight diamond drill holes have been drilled in the area (Figs. 3 and 4).

The Ajax vein system occupies a fault zone in the schist and the veins are exposed at the surface more-or-less continuously for a distance of about 1800 feet north of the Ajax shaft and about 200 feet south of it (Fig. 3). Two prominent branches of the vein system converge at the Ajax shaft, and the mine workings have explored the western or Hanging Wall branch vein. This vein strikes approximately N. 20° W. but south of the shaft where the two veins converge the strike is nearly south. The Foot Wall or east vein strikes nearly north for a distance of about 500 feet north of the Ajax shaft, then appears to change its strike to N. 20° W. or approximately parallel to the Hanging Wall vein. Although the mine workings are mostly in the Hanging Wall vein, the Foot Wall vein forms the more prominent outcrop and shows more leaching effects at the outcrop than does the Hanging Wall vein. The dip of both veins at the surface is about 65° west but flattens with increasing depth and on the 176 level the dip of the hanging wall vein ranges from 40° to 45°. Where the veins cross Cottonwood Wash there is a zone in which the veins appear to be structurally deformed, suggesting that they may have been folded or faulted. Some brecciation of the enclosing schist was noted but the cause of the brecciation was

not apparent nor could the geology be satisfactorily interpreted. It is possible that the two main veins may merge in this zone, or another branch vein may intersect the footwall vein.

The vein material consists of two distinct types which have been deposited under distinctly different conditions. One type of vein filling consists of specularite in massive, glassy quartz. The other type consists of milky quartz, amethystine quartz, and white calcite, accompanied by sphalerite, galena and trace amounts of chalcopyrite. This type of vein material is prominently banded, and many comb structures and drusy cavities are present in it. It also contains all of the observed sulfide minerals, and locally these are sufficiently abundant to constitute low-grade ore. Galena and sphalerite occur as coarse grains from about one-eighth of an inch to about one inch in maximum dimension. Galena predominates on the 50 level and sphalerite predominates on the 176 level. Otherwise these minerals are dispersed erratically throughout the vein and in many places constitute from 10 to 20 percent of the vein filling; however, in some places the vein is barren. Masses of galena and sphalerite from 1 to 4 inches wide and from a few inches to about 2 feet long are present in many places within the vein. Ore minerals are also present in some of the brecciated wall rock, as for example about 50 feet north of the shaft on the 176 level. Here a lenticular mass of brecciated schist (Fig. 5) is thoroughly impregnated with calcite, quartz, sphalerite, and galena. These occur in small seams and masses cementing part of the breccia. The breccia mass is over 50 feet long, and about 15 feet wide but the sulfides are confined

to an area about 30 feet long and about 10 feet wide. This mineralized breccia is exposed only on the 176 level but it is assumed that the breccia extends at least a short distance above and below the level.

Deformation along the vein zone has disrupted some of the rocks and locally they have been weakened by what appears to be late-ore or post-ore movement. It is probable that deformation and hydrothermal alteration have weakened the wall rocks to such an extent that underground support will be required in some zones if the vein is mined.

PRODUCTION AND GRADE

Little ore has been produced from the mine. Shipments that are thought to represent the total production are as follows:

Date	Tons	Percent Lead	Percent Zinc	Percent Copper	Ounces Silver
12-10-47	0.75	19.00	Trace	0.12	1.50
12-10-47	3.02	60.8	--	Trace	3.9
12-16-47	35.17	7.35	5.4	0.12	1.05
1-22-48	34.85	7.2	3.2	0.12	1.05
2- 5-48	1.53	60.0	--	--	4.0
2- 9-48	16.40	10.3	2.8	0.20	1.45
Total	91.72				

These shipments are products of selective mining of some of the higher grade portions of the vein and are probably also upgraded by hand sorting. The largest shipments, containing relatively low values, are probably not much higher grade than many parts of the vein.

As a result of extending the 176 level with DMEA aid a small amount of low grade material was stockpiled on the property. About 20 tons of this is hand-sorted material, a sample of which assayed 0.34% copper, 0.52% lead, 1.8% zinc, 0.02 oz. gold, and 0.4 oz. silver. The remainder of the stockpiled material is in a pile amounting to about 100 tons. Two samples of the pile assayed 0.23 and 0.095% copper, 0.58 and 1.10% lead, 1.3 and 3.4% zinc, and trace and 0.02 oz. gold, and 0.1 and 0.4 oz. silver.

Many samples (Fig. 6) have been taken of the vein. Most of the samples were taken before the applicant acquired the property. Several were taken by the applicant, and the DMEA examiners took 5 samples as a means of checking and verifying the others. The samples taken by DMEA provide a fair check on the others but are slightly lower grade. It was noted by examination of the mine workings that the sample widths previously reported are exaggerated, and could not be substantiated. Because of these erroneous widths it is not possible to properly weigh the samples and accurately compute the lead and zinc content of the vein. The lead content is greater than the zinc content in the upper part of the mine and the zinc content is greater than that of the lead in the lower part of the mine. The copper content of the ore is small, but it is probable that both copper and silver values will be recovered with the lead and zinc if the ore is beneficiated.

EXPLORATION

Prior to DMEA contract

In addition to the mine workings an attempt has been made to explore the vein by 8 diamond drill holes, two of which encountered sufficient ore to be of possible commercial value. Hole No. S-6 about 200 feet north of the shaft penetrated about 5 feet of ore estimated at 4 percent lead and 6 percent zinc, and hole No. S-2 about 400 feet north of the shaft penetrated about 11 feet of 18 to 25 percent zinc ore (Figs. 3 and 4). At present there is insufficient information to interpret the significance of these penetrations but it appears possible that the holes discovered additional ore shoots. Hole No. S-2 appears especially significant because it may have penetrated the hanging wall vein zone beneath an iron-stained brecciated schist that could be interpreted as being the outcrop of a mineralized zone. The breccia is exposed in a small elliptical area about 20 feet in maximum dimension near the place where the veins cross the floor of Cottonwood Wash.

Holes S-1, S-3, S-4, and S-5 (Fig. 4) were drilled to explore outlying or deep parts of the vein. These penetrated considerable mineralized material having very low values but veins of minable width and grade were not encountered. Available data are insufficient to correctly interpret the significance of these holes, but the veins probably change character by splitting into many small veinlets. It appears as if veins of a size large enough to mine do not exist at depths greater than a few hundred feet.

The underground holes, Nos. 1 and 2 (fig. 6), were apparently drilled to ascertain that the drift was on the main vein and had not bypassed any ore.

DMEA Exploration

The work authorized by the DMEA contract was as follows:

(1) A 400-foot extension in a northerly direction of the 176 level to explore the ore penetrated by holes S-2 and S-6.

(2) Four 50-foot raises to test whatever ore is found along the 176 level.

(3) 500 feet of diamond drilling from the 176 level to test the Foot Wall vein and to delineate ore.

Of this planned work only 194 feet of the drifting was completed. The geologic findings in this drift are shown in figure 5.

The following information is based on Metler's monthly reports. From the starting point, 77.5 feet north of the crosscut to the shaft, 15 feet of drift were driven before the drift got back on the vein; 30 feet from the starting point the vein had widened to 26 inches and showed sphalerite and galena. At 35 feet "mineralization is well scattered across the vein . . . . but is not of commercial value." The meager scattering of galena and sphalerite continues in the drift to 111 feet. In the interval from 35 to 111 feet this mineralization is in a fault breccia. There is evidence of vertical movement in the hanging wall of the drift and much of the ore shows evidence of drag movement. A little beyond the 111-foot point, a "watercourse" one

foot to three-and-a-half feet in width was encountered and the level was temporarily flooded. Sulphide mineralization appears to have been confined to the watercourse and consisted mainly of chalcopyrite. After a 23-foot advance along the watercourse, an additional 34 feet of advance was made through "a good showing of lead, zinc and copper ore" in a 2½-foot wide quartz vein, bringing the total footage to 168 feet beyond the starting point. In this last 34 feet more water was encountered, and timbering was necessary as was also the case in the previous 23 feet. During the advance of 34 feet some of the rock removed was stockpiled as it seemed to be of milling grade. This is undoubtedly some of the stockpiled material mentioned on page 6 of this report. The last monthly advance of 26 feet just before the project closed down was in low grade lead-zinc material. Small stringers of chalcopyrite were noted. The mineralized rock was confined to the floor and near the floor of the drift.

Although Metler in his progress reports did not indicate the presence of an ore shoot in the drift, his progress report maps (fig. 5) show a "copper-lead-zinc ore zone" from about 85 to about 170 feet from the starting point. Romslo says this is probably reliable information. It should be noted, however, that the grade of all the material encountered in the DMEA exploratory drift is very low. No reliable samples were taken in the drift (even though Romslo repeatedly requested Metler to submit samples), but stockpiled material from the drift is, at best, of milling grade. Yet some of this stockpiled

material (perhaps much of it) is hand sorted. The 40-foot, horizontal diamond drill hole No. 3 (fig. 5), drilled during the DMEA project at company expense, to test the hanging wall of the Hanging Wall vein, encountered "nothing of value", according to Metler. The most promising target of exploration, namely the 11-foot, 18 to 25 percent zinc zone in hole S-2, was never reached. The DMEA drift is about 110 feet short of the downdip extension of this zone.

Another target of exploration was the 5-foot, 4 percent lead and 6 percent zinc zone in hole S-6. The downdip extension of this zone would be opposite a point in the drift about 90 feet from the starting point of DMEA work. In figure 5 this would be about at the south edge of the 90-foot "copper-lead-zinc zone" as defined by Metler. However, section H-1 (figs. 3 and 4) shows that the downdip extension of the vein corresponding to the mineralized zone in S-6 is about 30 feet east of the 176 level drift. Consequently it seems possible that the target was missed by the DMEA drift. This very real possibility raises the question of whether the drift does on the whole stay on the main mineralized zone.

ORE RESERVES

Ore reserve estimates submitted by the applicant amount to about 25,000 tons of developed and probable ore. This estimate appears to be too high because it is based on exaggerated vein widths rather than the actual vein widths. The applicant's grade estimates are also somewhat greater than those of the examiners, being about 2 percent higher in combined lead and zinc. DMEA exploration has not substantially changed the reserve picture.

The following reserve estimates, except for discoveries due to DMEA work, are taken from the examination report. The oreshoot developed by the Ajax shaft and levels is sufficiently well explored and sampled to be classed as indicated ore. Vein material containing significant amounts of galena and sphalerite is exposed along both the 50 foot and 176 foot levels. The vein material in the south end of the 50 level drift probably cannot be recovered because it is so thoroughly oxidized that it is not amenable to concentration and is probably too low-grade to constitute shipping ore. It is assumed that similar oxidation has taken place in all the ore within about 30 feet of the surface; therefore minable ore is thought to extend only 20 feet above the 50 level. The vein widths at the 50 level are from 5 to 12 feet, but average about 7 feet, and ore is exposed along the level for a distance of about 70 feet. The block of ore above 50 level is estimated to contain about 800 tons of indicated ore. The grade of the ore is about 9 percent lead, and 3 percent zinc as estimated from several samples and 3 small shipments.

The main ore shoot is also explored by the 176 level where sphalerite and galena are present in the vein for a strike distance of about 110 feet. The oreshoot is exposed in part of the Ajax shaft and the ore is assumed to be continuous between the 176 level and the 50 level and the vein thickness will average about 7 feet. It is conservatively estimated that about 5700 tons of ore are present in the oreshoot, between the 50 and 176 levels. By evaluating many samples (Fig. 6) taken along the shaft and on the 176 level it is estimated that the

average grade of the ore is about 1 percent lead and 8 percent zinc. The ratio of lead to zinc decreases gradually with depth from the 50 level to the 176 level.

The average grade of all the ore in the presently developed oreshoots at the Ajax mine is estimated at 4.4 percent lead and 5.9 percent zinc.

Reserves above the 176 foot level are estimated at 47 tons per foot of depth along the dip of the vein and it is presumed that the ore may be safely projected 150 feet below the 176 level. The ore in the first 50 feet of this projected depth is classified as indicated ore and the remaining 100 feet is considered as inferred ore. About 2300 tons of ore is indicated, and about 4700 tons is inferred to be present. The grade is assumed to be the same as on the 176 level, or about one percent lead and 8 percent zinc.

Ore penetrations were made by diamond drill holes S-6 and S-2 (Figs. 3 and 4) and at each of these locations it is hoped that other oreshoots are present that may contain as much ore as is present in the main shoot. About 1000 tons of indicated ore is assumed to be present at each drill hole penetration. Assays on the core of the hole S-2 yield from 18 to 25 percent zinc but it is believed that the hole accidentally penetrates a rich portion of the vein and this block of ore should not be expected to be much higher grade than developed parts of the vein. The core from hole S-6 has not been assayed but inspection reveals it to be similar in grade to the ore in the developed portion of the mine, and by comparison is estimated to contain about 4 percent lead and 6 percent zinc.

In addition to the above reserve estimates an evaluation of reserves in the ground opened by the DMEA work is needed to complete the reserve picture at the Ajax mine. Because the basic geologic data in this case lacks the reliability of firsthand information, the reserves based on it are considered to be inferred in category. The material in the DMEA drift that most nearly measures up to the definition of ore probably is that in the "copper-lead-zinc ore zone" shown by Metler near the end of the drift. Using dimensions of 90 feet for the strike length as exposed along the drift, a thickness of 3 feet, and updip and downdip extensions of 50 feet in each direction, gives 27,000 cubic feet. Applying a tonnage factor of 11 cubic feet per ton gives about 2,500 tons. The only information upon which to base the grade of this rock is from the three samples of stockpiled material from the drift. These samples average 2.2 percent zinc, 0.73 percent lead, 0.13 oz. gold, and 0.3 oz. silver.

The ore reserve estimates are summarized as follows:

Location	Tons	Percent Lead	Percent Zinc
Indicated Ore			
Above 50 level	800	9	1
Between 50 and 176 levels	5700	1	8
From 176 level to 50 ft. below it	2300	1	8
At drill hole S-2	1000		10-15
At drill hole S-6	1000	4	6
Inferred Ore			
From 50 to 150 ft. below 176 level	4700	1	8
In "oreshoot" discovered by DMEA drifting on 176 level	2500	0.7	2.2
Total	18000		

Potential reserves, based on possible though undiscovered oreshoots in both veins may amount to at least several times the above indicated reserves.

CONCLUSIONS AND RECOMMENDATIONS

Examination of the Ajax vein system reveals that important amounts of galena and sphalerite are present in a quartz-calcite gangue. About 14,000 tons of ore, containing about 10 percent combined lead and zinc, are reasonably assured in the old mine workings. Inferred ore may amount to several times this amount in unexplored or incompletely explored parts of the veins. DMEA work showed only an additional 2500 tons of inferred reserves containing about 3 percent combined lead and zinc. The exploration program, however, was less than half completed when the operator shut down. The most important target area had not been reached, and the second most important target, though not found, had not been disproven, as the drift may have missed this target. The potentialities of the property therefore remain about the same as before exploration was undertaken. It is recommended that government interest in the property be continued as the work done with government aid has provided much better access for future exploration than was possible before the project was undertaken.

[illegible]

ACTION ON [illegible] 2603

Date 2-8

Referred to:

1. ~~[illegible]~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. ~~Docket Control Mails and Files~~
5. ~~Bar Grade Division~~
6. Docket Control Mails and Files

Note comments in report regarding:

1. Question —
2. Should we certify & cancel our panels
3. on our records?

4.

and take appropriate action.

Action taken by Division:

Amend & effectively "waived", the certificates.

2/13/56 - [illegible] - J.W.A.

ROBERT E. ADAMS

Initials

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

224 New Customhouse
Denver 2, Colorado

January 26, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

Enclosed are the following final reports pertaining to work completed under the subject contract:

1. The original and one copy of the Operator's final report.

2. The original and three copies of the final engineering report by the U. S. Bureau of Mines.

The final geologic report by the U. S. Geological Survey is in process of preparation and will be forwarded when made available to this office.

Final payment to the Operator was processed by this office October 25, 1955, in conformance with the Report of Review by the Contract Administration and Audit Division, dated August 31, 1955.

The exploration work consisted of 194 feet of drifting at a total accepted cost of $6,790.00, in which the Government participated to the extent of 50%, or an amount of $3,395.00.

The exploration work resulted in a discovery or development of lead-zinc ore for which a pseudo certification was effected by the provisions of item 4(c) of Amendment No. 7, dated June 30, 1954.

W. M. Traver

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-6-56
(date)

DMEA
FEB 4 1955
RECEIVED
FEB - 1 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

February 2, 1955

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station, Region III

Subject : Final engineering report, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Mineral Hill Mining District, Pinal County, Ariz.

Enclosed are original and 8 copies of a final engineering report on the above property by T. M. Romslo and W. R. Hardwick of the Bureau of Mines. Although this contract probably hasn't been actually terminated, no work has been done on it since March 1953 and termination papers have been sent to the company's president for signature.

Some time ago we recommended that a "Certification of Discovery or Development" be issued.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
J. N. Faick
DMEA-2603
DF

WRStorms:frj

Reviewed by
DMEA OPERATING COMMITTEE
2-6-56
(date)

DMEA
FEB 4 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
FEB - 1 1956

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

FINAL ENGINEERING REPORT

DMEA-2603, Contract Idm-E428

Magma King Manganese Mining Company's Ajax Lead-Zinc Mine

Mineral Hill Mining District

Pinal County, Arizona

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

William R. Hardwick, Mining Engineer
U. S. Bureau of Mines

February 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-6-56
(date)

DMEA-2603, CONTRACT Idm-E428
MAGMA KING MANGANESE MINING COMPANY'S AJAX LEAD-ZINC MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA

RECEIVED
FEB - 1 1983

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4	Drill hole sections	(See Geologic report)
5	Geologic map of mine workings	(See Geologic report)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Early in 1952, the Magma King Manganese Mining Co. of Phoenix, Ariz. applied to the Defense Minerals Exploration Administration under the Defense Production Act of 1950, as amended, for Government assistance to explore the lead-zinc deposit at the Ajax mine in the Mineral Hill Mining District of Pinal County, Ariz. The original application was for an estimated $59,727.00 and was docketed as DMEA-2603. The applicant proposed to explore the deposit by diamond drill holes, and by drifting and crosscutting.

The Ajax property was examined on August 25, 26, and 27, 1952 by T. M. Romslo of the Bureau of Mines and J. N. Faick of the Geological Survey, accompanied by Ralph J. Pomeroy, president of the Magma King Manganese Mining Co. and Frank L. Metler, who was superintendent at that time for this company. After some discussion, the applicant revised its proposals and the DMEA examiners recommended that Government assistance be given the company for the total amount of $23,100.00 for driving 400 feet of drift and 200 feet of raises, and drilling 500 feet of diamond drill hole.

The Ajax mine is situated about 8 air-miles southwest of Superior, Ariz. in the Mineral Hill Mining District. Lead and zinc minerals occur in 2 large fissure veins in pre-Cambrian schist, these veins striking in a northerly direction and dipping from 45 to 65 degrees to the west. One vein had been explored

by a 176-foot shaft, inclined about 65 degrees to the west, with short levels at the 50- and 176-foot points at the time the DMEA application was submitted. The deposit (or deposits) also had been explored to some extent by several surface diamond drill holes.

Exploration Project Contract No. Idm-E428 was signed on October 23, 1952. It provided: (1) Drift 400 feet northerly on the 176-foot level; (2) drive 200 feet of raises at favorable sites disclosed by this drifting; and (3) diamond drill a maximum of 500 feet of core hole at locations which were to be determined after part or all of the drifting had been done. The estimated costs were to be: (1) 400 feet of drifting at $35.00 per foot; (2) 200 feet of raising at $33.00 per foot; and (3) 500 feet of drill hole at $5.00 per foot. The total cost was $23,100.00, or $11,550.00 as the Government's share.

Work under terms of the contract was started on November 14, 1952 after the shaft headframe had been reinforced, a dumping arrangement built, track and skip installed in the shaft, ventilation, pump, water and air lines installed, and track and pipe lines installed on the 176-foot level.

Up until April 1, 1953, the north drift on the 176-foot level had been advanced 194 feet. About that time, the price of lead and zinc declined, so the operator requested and received a recess of operations until May 1, 1953. Additional recess periods were granted to September 1, 1954 although no work under terms of the contract had

been done since March 1953. As no work had been started by September 1, 1954 and as the operator failed to ask for an additional recess period, DMEA representatives recommended that the contract be cancelled.

During the life of the DMEA contract, a small amount of low-grade lead-zinc material was discovered by the 176-foot level north drift. Although this material is not ore at the present time, it indicates the presence of lead amd zinc in a zone that could be an extension of the ore found in old diamond drill hole S-6. The drift was driven 194 feet and lacked only about 90 feet of reaching the main objective, the downward projection of the ore indicated by diamond drill hole S-2. Because of these facts, it was recommended that a "Certification of Discovery or Development" be made.

INTRODUCTION

The Ajax mine in Pinal County, Ariz. was explored during 1952 and 1953 by the Magma King Manganese Mining Co. with Governmental assistance as authorized by the Defense Production Act of 1950, as amended. The company had made application to the Defense Minerals Exploration Administration for assistance in exploring and developing the mine at estimated cost of $59,727.00, with the object of indicating sufficient lead-zinc ore to justify a milling operation. The application was reviewed, docketed as DMEA-2603, and sent to the field for an examination of the property. The field examination,

made by J. N. Faick, Geological Survey and T. M. Romslo, Bureau of Mines, resulted in favorable findings and authorization for aid on a revised exploratory program.

Contract Idm-E428 was executed and duly signed by both parties. It authorized underground exploratory work costing an estimated $23,100.00 and specified that the maximum Governmental participation would be 50 percent of the estimated costs, or $11,550.00. The exploratory work, started on November 14, 1952, continued through March 1953. It then was recessed to September 1, 1954, in accordance with the applicant's request. Failure to renew operations resulted in cancellation of the contract. Only a small portion of the authorized work was completed.

LOCATION AND ACCESSIBILITY

The Ajax mine is about 8 air-miles southwest of Superior, Ariz., the home of the Magma Copper Co. (figure 1). Superior is on U. S. Highway 70 and is the terminus of the Magma Arizona Railroad. The mine may be reached from Superior by traveling 11 miles westerly on U. S. Highway 70, thence 9 miles southeasterly over a graded desert road that contains no excessive grades. Short stretches of the desert road that cross or follow dry-washes are impassable for brief periods after heavy rainfalls.

The nearest railroad shipping point is Price, about 12 miles south of the mine by desert road. The Ajax mine is at an altitude of about 3,000 feet. It is in an area of moderately rugged topography consisting of sharp mountain ridges and narrow valleys. On the property, the altitudes range from about 3,000 to 3,500 feet.

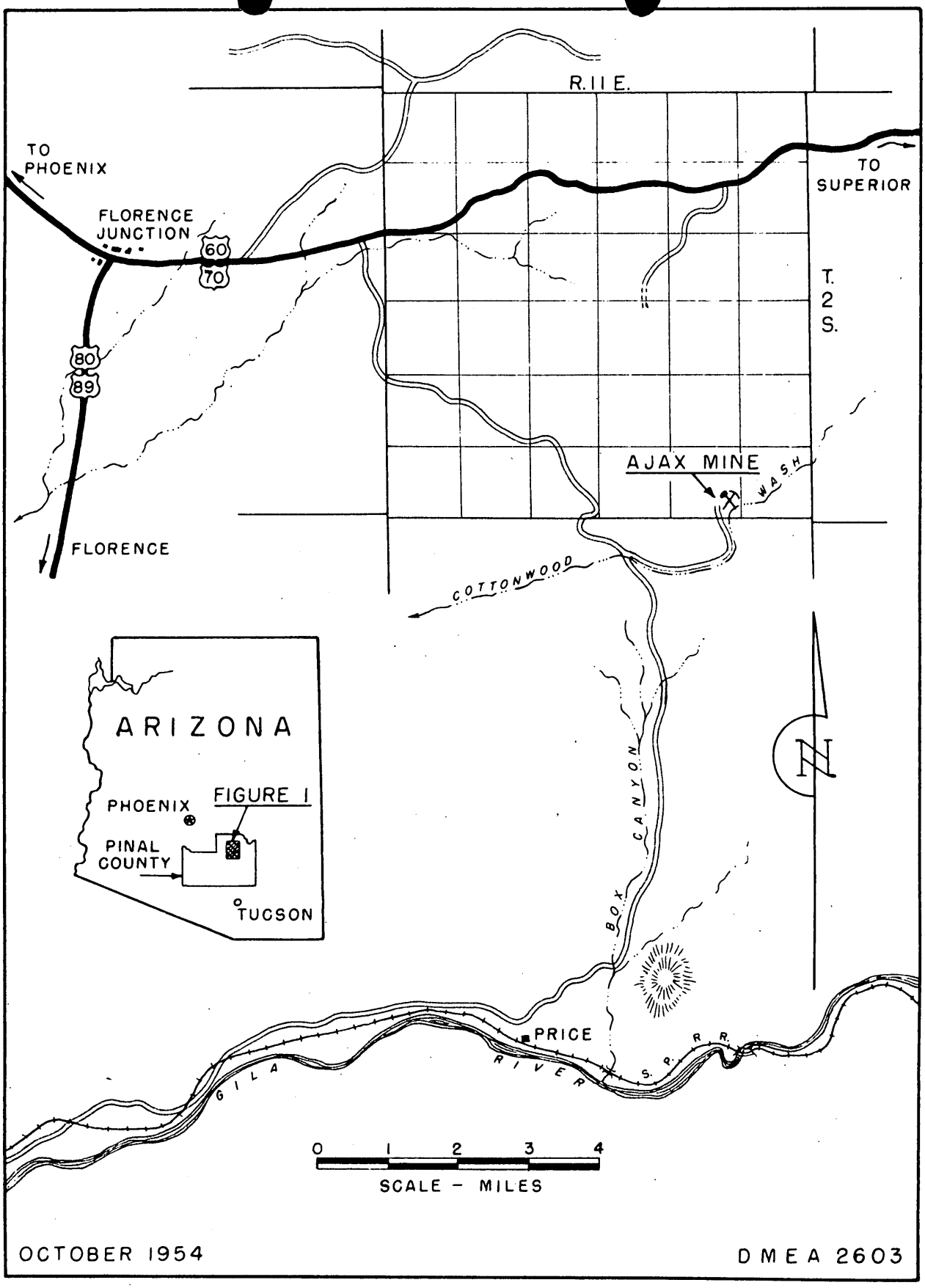


FIGURE 1. - LOCATION MAP - AJAX MINE
MAGMA KING MANGANESE MINING COMPANY PINAL COUNTY, ARIZONA

The mountain slopes support a sparse growth of desert vegetation, mainly cacti and catclaw. Palo Verde trees and mesquite occur in the valleys.

There are no permanent streams in the area that drains southerly to the Gila River.

The climate is typical of the lower altitude regions of southern Arizona. Annual temperatures at the mine probably range from a few tens of degrees below freezing to near 110 degrees. Precipitation, mainly as heavy rain storms during July and August, probably totals between 10 and 15 inches yearly. Light rainfalls and a few snow flurries are common in the winter.

HISTORY AND PRODUCTION 1/

The date of discovery of the Ajax deposit is unknown. Development of the deposit was started in 1906. During the following few years the deposit was developed to its present inclined depth of 180 feet. Probably little or no ore was shipped from this operation. The mine then was inactive until 1947. During 1947 and 1948, lessees shipped 5.25 tons of ore containing 56 percent lead and 4 ounces of silver per ton, and 3 carloads of ore averaging approximately 8 percent lead, 6 percent zinc, 0.14 percent copper, and 1.2 ounces silver a ton. The mine then was allowed to fill with water.

In 1949, the mine was dewatered and a small amount of drifting was done on the 176-foot level. In 1950, the Magma Copper Co. sampled the underground workings, and the Miami Copper Co. carried

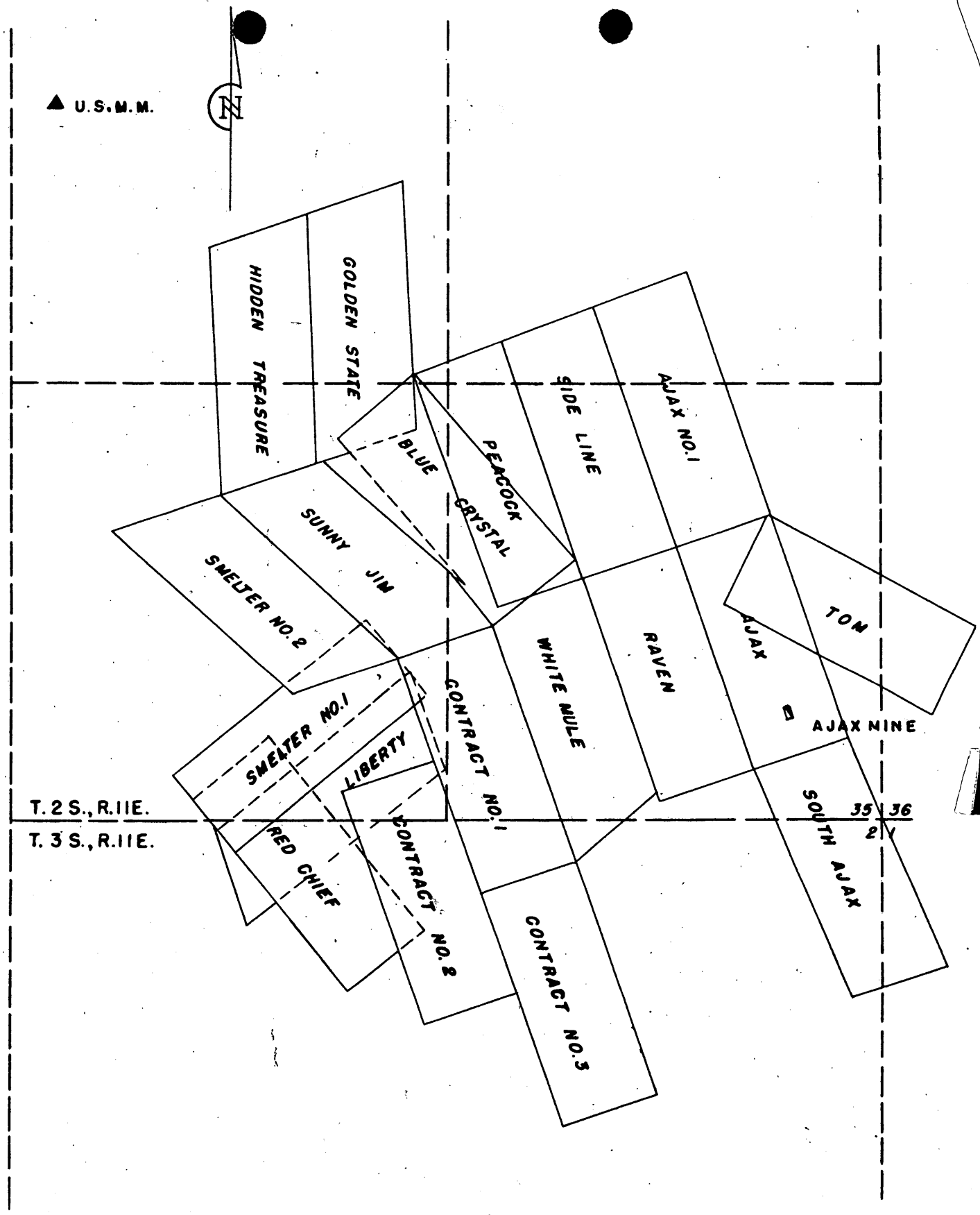
1/ Information supplied by Ralph J. Pomeroy and Frank L. Metler, president and former superintendent of the Magma King Manganese Mining Co., respectively.

out a diamond drilling program. The drilling consisted of 2 holes from the 176-foot level and 5 holes from the surface. The mine then was inactive to April 1952 when the Magma King Manganese Mining Co. reopened it. Prior to initiation of the work authorized by contract with the Government, the company had put down a diamond drill hole from the surface, check-sampled a portion of the underground workings, and started construction of a skip pocket.

PROPERTY AND OWNERSHIP

The property comprises a group of 3 patented and 16 unpatented lode mining claims in secs. 35 and 36, T. 2 S., R. 11 E., and secs. 1 and 2, T. 3 S., R. 11 E., Mineral Hill Mining District, Pinal County, Ariz. (figure 2).

The Magma King Manganese Mining Co. held all the above property under lease and option agreements with Apex Mines, Inc. The patented claims, the Ajax, Ajax No. 1 and Raven, are owned by Mr. and Mrs. Walter S. Smith and Rae L. Frazier, Coolidge, Ariz. The unpatented claims are owned by Mrs. G. O'Dell, Phoenix, Ariz. and Mr. and Mrs. Frank H. Allen, Gilbert, Ariz. The agreements that were transferred by the Apex Mines, Inc. were obtained directly from the owners of the Raven claim and through transfer of agreements on the remaining claims that were held by Louis Hennig and Robert F. Dannelley, Pinal County, Ariz. All of the agreements called for royalty payments to the owners of 10 percent of the net returns from ore produced. Net returns were defined as the gross amount paid by the purchaser of ore concentrates less charges for transportation, milling, concentration,



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

smelting, and trucking. Royalty payments in all cases were to be applied to purchase prices of $40,000.00 for the Ajax and Ajax No. 1 claims, $15,000.00 for the Raven claim, and $32,000.00 for the 16 unpatented claims.

The Magma King Manganese Mining Co., an Arizona Corporation, first maintained an office at 532 Security Building, Phoenix, Ariz., then later moved to 547 North Arizona Ave., Chandler, Ariz. The principal officers of the corporation were: Ralph J. Pomeroy, president, Chandler, Ariz.; Walter C. Smith, vice-president, Coolidge, Ariz.; Loran E. Skousen, sec. and treas., Springfield, N. J.

GEOLOGY AND ORE RESERVES

Geology

The country rocks in the vicinity of the Ajax mine are chlorite schists of probable pre-Cambrian age. The schist is fine-grained and greenish-grey in color, and is gently folded into small easterly trending anticlines and synclines that have dips on their flanks of 10 to 30 degrees. Schistosity is vague and poorly developed.

The Ajax mine explores part of a vein system by means of a 176-foot shaft inclined westward about 65°, and by drifts on the 50- and 176-foot levels (figure 3). The 50-foot level extends 50 feet to the north and 60 feet to the south of the shaft. On the 176-foot level, drifts have been driven 274 feet to the north and 50 feet to the south from a 30-foot crosscut from the shaft. Other underground exploration consists of 3 short diamond drill holes on the bottom level. Surface exploration includes a few shallow pits and 6 diamond drill holes.

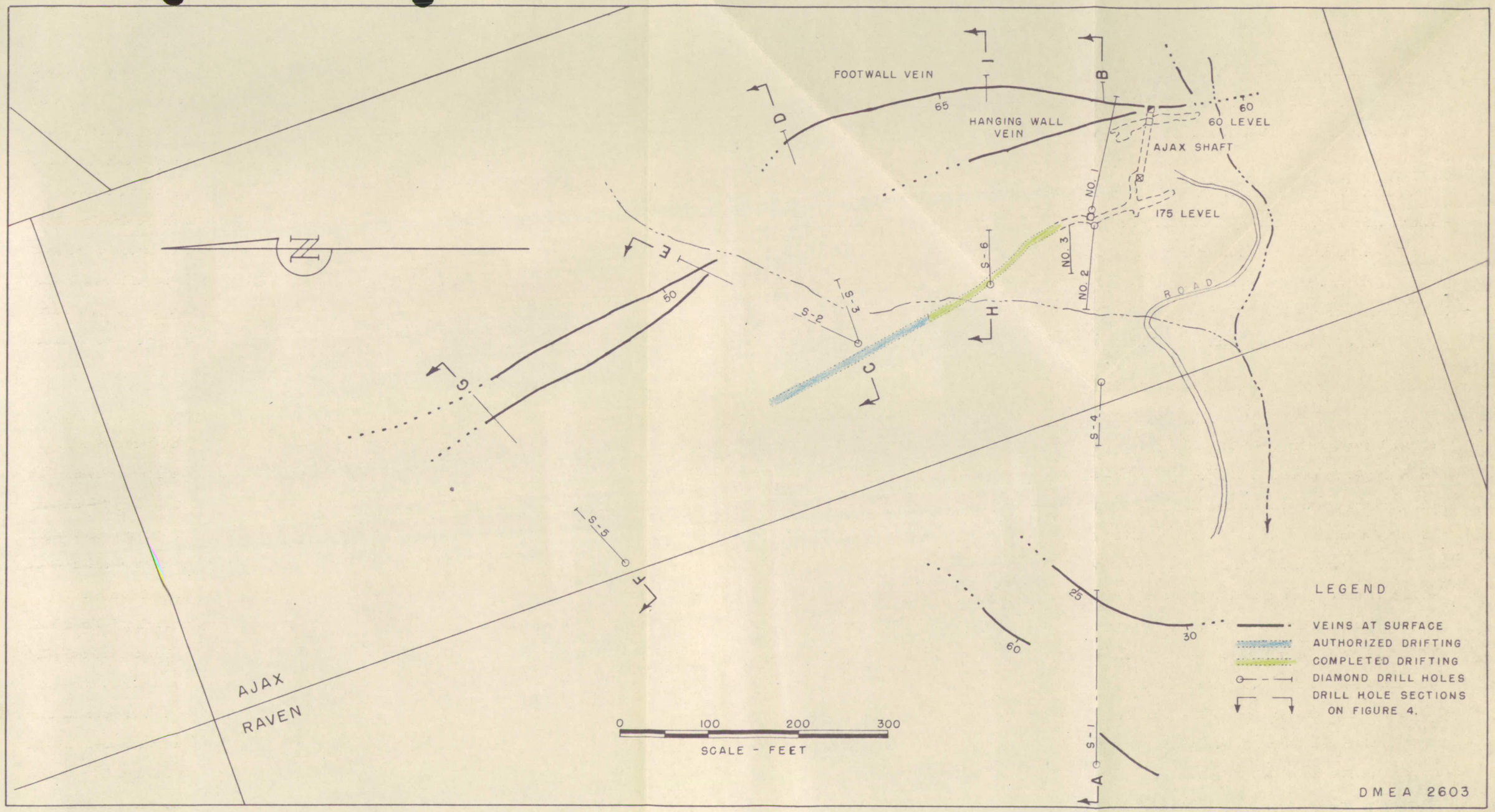


FIGURE 3. - PLAN MAP - AJAX MINE - MAGMA KING MANGANESE MINING COMPANY - PINAL COUNTY, ARIZONA

A system of quartz veins at the Ajax mine occupies a fault zone in schist. It is exposed at the surface for a distance of about 1,800 feet to the south and 200 feet to the north of the Ajax shaft where two prominent branches of the system converge. The mine workings explore a portion of the western or hanging wall vein adjacent to its junction with the footwall vein. The hanging wall vein strikes from nearly north-south to N. 20° W. on the surface and averages about N. 3° W. on the 176-foot level. The strike of the footwall vein, exposed only on the surface, is about north of the shaft and then appears to change to N. 20° W. Both veins dip about 65° to the west at the surface. The hanging wall vein flattens with depth and had a dip ranging from 40 to 50 degrees on the 176-foot level. The veins, where they converge, appear to be structurally deformed, possibly by faulting or folding. Some brecciation of the enclosing schist was noted in this area.

Ore mineralization exposed by the underground workings is confined almost entirely to an ore shoot at the shaft. The deposit has a strike length of about 110 feet and extends from near the surface to an unknown depth below the 176 level. Galena and sphalerite, the observed sulfide ore minerals, occur in quartz and calcite as grains that range in size from about one eighth of an inch to approximately one inch in diameter. They are distributed erratically throughout much of the deposit and in many places constitute as much as 20 percent of the vein filling. Oxidation of the ore zone is believed to be almost complete to a depth of about 30 feet below the surface. A high percentage of the ore minerals occur as oxides on the 50 level.

Below the 50 level the degree of oxidation decreases rapidly to the bottom level where oxides form an insignificant portion of the ore minerals.

The only other zone of ore mineralization encountered in the mine occurs near the north end of the 176 level. Here, the drift driven with Government aid penetrated about 34 feet of highly fractured mineralized vein material containing minor amounts of galena, sphalerite, and chalcopyrite.

Significant ore mineralization encountered by diamond drill holes was confined to surface holes S-2 and S-6.

Ore Reserves

The Ajax mine contains no measureable ore.

The indicated reserves have been estimated at: (1) 10,000 tons containing about 10 percent combined lead and zinc and 1.0 ounce silver a ton; and (2) a few hundred tons containing 2.2 percent zinc, 0.73 percent lead, 0.22 percent copper, and 0.13 ounce gold and 0.3 ounce silver per ton. The 10,000 tons of high-grade material present in the partially developed deposit at the shaft and found by drill holes S-2 and S-6 had been indicated by work done before initiation of the DMEA exploratory program. The few hundred tons of low-grade material was penetrated near the end of the drift driven with Governmental assistance.

The inferred reserves are: (1) 4,700 tons containing 1.0 percent lead and 8 percent zinc in a depth extension of the deposit at the shaft; and (2) a few tens of thousand of tons of similar grade material in other deposits that may exist at drill hole S-2, at the mineralized zone encountered by the 176 north drift, and in other parts of both veins.

RECEIVED
FEB - 1 1956

DESCRIPTION OF WORK COMPLETED

Contract Idm-E428 authorized 400 feet of drifting at $35.00 per foot, 200 feet of raises at $33.00 per foot, and 500 feet of diamond drilling at $5.00 per foot. It specified that: (1) the drifting was to be northerly from the north breast of the 176-foot level; (2) the locations of the raises and the locations, directions, inclinations, and depths of drill holes would have to be acceptable to the DMEA representative; and (3) all preliminary work would be completed by the operator at no expense to the Government.

The drifting authorized by the contract was started on November 14, 1952 after the operator had completed preliminary work, consisting of installation of a skip, removal of debris from the 176-foot level, and the laying of track and pipe lines. To the end of March 1953, work under the contract was confined to 194.0 feet of drifting (figure 3). During this period, the operator drilled diamond drill hole No. 3 at no expense to the Government.

On April 1, 1953, Amendment No. 1 to Contract Idm-E428 became effective, granting a recess of operations until May 1, 1953. No work was resumed at the end of this period and subsequent amendments finally extended this recess period until September 1, 1954. However, no work had been resumed on or before that date so it was recommended that the contract be terminated.

A small amount of low-grade ore was discovered by the drifting. About 20 tons of hand-sorted ore were mined, then placed in one pile on the surface, and possibly 100 tons of low-grade material was placed in another. A sample of the first pile assayed 0.34 percent copper, 0.52 percent lead, 1.8 percent zinc, 0.02 ounce of gold and 0.4 ounce of silver a ton; two samples from the second pile asaayed 0.23 and 0.095 percent copper, 0.58 and 1.10 percent lead, 1.3 and 3.4 percent zinc, trace and 0.02 ounce of gold and 0.1 and 0.4 ounce of silver a ton.

EXPLORATION

Exploration Project Contract Idm-E428 estimated costs of the project as follows:

Drifting, 400 feet at $35 per foot	$14,000.00
Raising, 200 feet at $33 per foot	6,600.00
Diamond drilling, 500 feet at $5 per foot	2,500.00
Total estimated cost	$23,100.00

Actual expenditures were as follows:

194 feet of drifting at $35 per foot	$6,790.00
Government's share of actual cost	3,395.00

A small amount of low-grade ore was mined from the 176-foot level drift and stockpiled on the surface. None of this material has been sold, so no royalty has been paid to the Government.

EFFICIENCY OF OPERATIONS

The mining operations were conducted in a fairly efficient manner under the supervision of Frank L. Metler, mine superintendent. Installation of better ventilation and drainage systems would have

materially improved working conditions. Failure to make these improvements probably was due to lack of funds.

Cooperation with representatives of DMEA was not very good. A survey of the workings was made only after repeated requests, and requests for sampling and assaying resulted in no action.

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

RECEIVED
JAN 30 1956

224 New Customhouse
Denver 2, Colorado

AIR MAIL

January 26, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In reply to your letter of January 23, 1956, the Operator's, Engineer's, and Field Team's final reports will be forwarded to reach you early in the week of January 30 to February 3.

In reference to the last paragraph of your letter of January 23, we are advised from the field as follows:

> "Romslo visited Ajax mine this morning but no work being done. Ralph Pomeroy evidently is in Utah or Colorado. Magma King lease on Ajax still in force, but W. C. Smith, one of the owners, told me that it probably would be cancelled because of lack of work on the property."

W. M. Traver

W. M. Traver

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

RECEIVED
FEB - 1 1956

224 New Customhouse
Denver 2, Colorado

January 26, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

Enclosed are the following final reports pertaining to work completed under the subject contract:

1. The original and one copy of the Operator's final report.

2. The original and three copies of the final engineering report by the U. S. Bureau of Mines.

The final geologic report by the U. S. Geological Survey is in process of preparation and will be forwarded when made available to this office.

Final payment to the Operator was processed by this office October 25, 1955, in conformance with the Report of Review by the Contract Administration and Audit Division, dated August 31, 1955.

The exploration work consisted of 194 feet of drifting at a total accepted cost of $6,790.00, in which the Government participated to the extent of 50%, or an amount of $3,395.00.

The exploration work resulted in a discovery or development of lead-zinc ore for which a psuedo certification was effected by the provisions of item 4(c) of Amendment No. 7, dated June 30, 1954.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

TELEPHONE
PHOENIX 2-0181

DMEA
Date Rec'd
OCT 24 1955
BUREAU OF MINES
Denver, Colorado
FEB - 1 1956
OFFICE

MAGMA KING
MANGANESE MINING COMPANY
SUPERIOR · ARIZONA

~~552 SECURITY BUILDING~~
~~PHOENIX, ARIZONA~~
589 North Colorado St.
Chandler, Arizona

Mr. W. M. Traver, Executive Officer
DMEA Field Team
Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 2603 (Lead, Zinc)
Contract Idm-B428

Dear Mr. Traver:

Enclosed is final report of the Ajax project under Docket DMEA 2603 Contract Idm-B428, Pinal County, Arizona. It is the writers hope that this will be sufficient to close the matter until operations can be instituted on the property.

We feel that we have made a discovery, and that the Government will receive its expenditures as per royalty agreement of the original contract.

Please note that Magma King office is 589 North Colorado Street, Chandler, Arizona. If you should desire to contact me peraonally I can be reached at the Barton Uranium Company, 304 Uranium Center Building, Grand Junction, Colorado. The phone number is Grand Junction 2501.

Sincerely yours,

MAGMA KING MANGANESE MINING COMPANY

By [signature]
President

RJP/or
Enc.

FINAL REPORT

RECEIVED
FEB - 1 1953

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 2603 (Lead, Zinc)
Contract Idm-E428

PROGRESS REPORT

Work under the joint-finance arrangement with the company, Magma King Manganese Mining Company, and Defense Minerals Exploration Administration began on November 1, 1952. Previous to that time the company had, at its own expense, installed a track and skip in the 176-foot shaft. The head-frame was reconstructed and a dump arrangement was installed. Additional pump facilities and pipe lines were installed and a new track was laid in the north drift face.

Under the contract, the cost of drift per foot was set at $35.00. One-half of this cost was to be borne by DMEA, and the company received for the month of November payment from DMEA for its share, amounting to $612.50.

About 15 feet of drifting was necessary to get the drift back into the hanging wall vein. At this point there was about 26 inches of mineralization, consisting of chalcopyrite, galena, and sphalerite.

For the month of December 76 feet of drifting was completed, the greater part of which passed through fault breccia, with lead, zinc, mineralization throughout. The hanging wall of the drift indicated much movement of a vertical nature, and the mineralization appeared to be drag ore.

During January 26 feet of drifting was done. During the first part of the month a large water course was blasted into, which flooded the entire drift and even up to within a few feet of the pump station in the shaft. This water course appeared to be about 25 feet in length and from one to three feet in width. The mud which washed out of the water course had manganese and specular hematite in it. It was necessary to install timber at the face of the drift. A considerable amount of chalcopyrite was observed in the face of the water course.

Progress for the month of February totalled 34 feet of drifting, all of which contained good showing of lead, zinc and copper. A portion of the material removed in drifting was of sufficient mineralization to stock pile, in the event of future milling operations. Much water was encountered this month and additional pumping was necessary throughout the entire month. Also, during this month, a diamond drill hole was drilled to a length of 40 feet in the hanging wall at a point opposite the starting point under the DMEA contract. This hole was drilled entirely at company expense. Nothing of value was observed in the core recovered.

Progress for the month of March was 26 feet of drifting, in ore most of the way for the full width of the drift. A fairly strong copper lens appeared on the foot wall side of the vein. A 14-inch sample cut across this lens assayed 9.78% copper. A 4-foot cut across the face went 2.2 copper, 4.20 lead, and 4.75 zinc. The face of the drift at the termination of the operation appeared to be partially in ore.

CONCLUSION

From the progress report, it would appear that a discovery has been made in the Ajax drift to the north, and while the project was not completed, the company is encouraged by the findings and contemplates completing the exploration program. However, due to financial reasons for the present we wish to terminate this contract with DMEA and as soon as new operations are possible, we will inform whatever Government Agency necessary in the event an operation is begun.

The writer wishes to express appreciation and satisfaction to Mr. W. W. King and others of that department, and Mr. Storm of the Bureau of Mines office at Tucson, whose responsibility it was to process the work program and also the others of that department who rendered assistance to our joint efforts.

For the month of March the DMEA has refused to make payment for its portion of the operation as the contract called for. Request is hereby made that this sum be paid to the company as soon as possible.

Respectfully submitted,

Magma King Manganese Mining Company

By _____
President

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

RECEIVED
JAN 19 1956

224 New Customhouse
Denver 2, Colorado

January 17, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In reference to your letter of January 13, 1956, we have the Operator's and engineer's final reports and can forward them with the Field Team report and send the geologic report when it is received, if you prefer.

It is impossible to advise at this time when the geologic report will be available because of the present heavy work load involved with new applications and reports on requested changes in existing contracts.

W. M. Traver

File Copy
Surname
ALP
Selfridge
Jensen
Johnson
Wittenberg

500

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

JAN 23 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Traver:

In reply to your letter dated January 17, regarding the cited project, we would appreciate it if you would send us the Operator's and the engineer's final report. Please send us the geologic final report when it is received by you.

Will you please advise us if the Magma King Manganese Mining Company still retains an interest in the land as described in the contract.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GHB)

APPROVED:

/s/ Robert W. Geehan (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

JWAlt/bjl (1/20/56)

Copy to: Docket
Admr. R. File
Base Metals
Mr. Bishop
Mr. Kiilsgaard
Operating Committee
Chron.

R.G.

File Copy
Surname
J. Alt
Fairwood
Selfridge
Jeffrey
Mutendorf

UNITED STATES 500
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

JAN 13 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Adm-R428

Dear Mr. Traver:

With reference to the cited project, will you please advise us as to when we may expect to receive the final Operator's report and the final Field Team report.

As work on this project was automatically terminated by Amendment No. 7 on September 1, 1954, we are anxious to close our files for this project.

Please advise us at your earliest convenience regarding these reports.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (S/B)

APPROVED:

/s/ Robert W. Geehan (S/B)
Member, Bureau of Mines

N. E. Nelson (S/B)
Member, Geological Survey

JWAlt/bjl (1/12/56)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kiilsgaard
Chron.

R.G.J.

August 19, 1955

noted
COM

Memorandum

To: The Files

From: George C. Selfridge
Special Assistant

Subject: Docket DMEA-2603, Contract Idm-E428 (Lead-Zinc), Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona.

The subject docket was discussed over the telephone with Mr. Traver today. The writer informed him that Legal had decided that Amendment No. 7 to the subject contract was in effect and that we were so writing him.

As mention had been made in the docket that work ceased in May 1953 and the last MF-104 report and voucher we had was for February, Mr. Traver was asked to check to see if a later voucher had been submitted or if any money had been withheld. The writer was informed that the February voucher was the last and that the Region was not withholding any money due the operator.

George C. Selfridge
George C. Selfridge

GCSelfridge/hb (8/19/55)

Copy to: Docket File
Admr. R. File
C. O. Mittendorf
F. E. Johnson
Mr. Griswold
Mr. Selfridge

Docket Copy
Please Surname
Selfridge.

August 19, 1955

Memorandum

To: The Files

From: George C. Selfridge
Special Assistant

Subject: Docket DMEA-2603, Contract Idm-E428 (Lead-Zinc), Magna King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona.

The subject docket was discussed over the telephone with Mr. Traver today. The writer informed him that Legal had decided that Amendment No. 7 to the subject contract was in effect and that we were so writing him.

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George C. Selfridge

George C. Selfridge (hb)

GCSelfridge/hb (8/19/55)

Copy to: Docket File ✓
Admr. R. File
C. O. Mittendorf
F. E. Johnson
Mr. Griswold
Mr. Selfridge

R.C.S.

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

AUG 19 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Traver:

With reference to the cited contract, it is the opinion of our Legal Division that Amendment No. 7 is in effect and should no longer be treated as "void". We are enclosing the Finance Office, Field Team, and extra copies of the amendment for proper distribution. The Operator's copy is being transmitted to him direct. Copies of the letter of transmittal are attached.

For your information we are enclosing copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated August 9, 1955.

Sincerely yours,

George C. Selfridge (GCB)
Chairman, Operating Committee

Enclosures

JWAlt/er 8/15/55 (rewritten 8/16/55)
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Chron.

APPROVED:

/s/ Robert W. Geehan (GCB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCB)
Member, Geological Survey

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Surname

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Selfridge

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

Mr. Ralph J. Pomeroy, President
Magna King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

AUG 19 1955

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Pomeroy:

This is to advise you that the cited contract was terminated September 1, 1954, as specified in Article 4 of Amendment No. 7 to the contract. We are enclosing a photostatic copy of this amendment for your records.

Please note that under Article 4c of the amendment royalty will be payable to the Government on production which may be made from the land described in the contract until the sum which the Government has advanced as its participating interest is repaid, or until October 23, 1962, whichever occurs first. You should likewise prepare and submit the final geologic and engineering report, as provided in Article 15b of the contract.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosures
WRGriswold/er 8/16 & 18/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Region III (2)
Chron.

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

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

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Sincerely yours,

Administrator

Enclosure

WRGriswold/er 8/16/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Region III (2)
Chron.

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

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-1428

Dear Mr. Traver:

With reference to the cited contract, it is the opinion of our Legal Division that Amendment No. 7 is in effect and should no longer be treated as "void". We are enclosing the Finance Office, Operator's, Field Team, and extra copies of the amendment for proper distribution.

For your information we are enclosing copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated August 9, 1955.

Sincerely yours,

Chairman, Operating Committee

Enclosures

JWAlt/er 8/15/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Chron.

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

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

AUG 9 1955

Memorandum

To: The Administrator, DMEA
Attention: W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Company

Mr. Griswold's memorandum dated August 1 requested that a Notice of Termination be issued under the subject contract.

Our memorandum of June 28 reviewed the question whether it is suitable to terminate this contract by notice under the termination provisions of the contract. It was stated therein that as Amendment No. 7, dated June 20, 1954, executed by both parties, contained an automatic termination provision, unless submission of Amendment No. 7 to the Operator for signatures was clearly conditioned upon his obtaining a new Consent to Lien the failure to furnish said lien would not void Amendment No. 7. Our memorandum stated further that the question probably could be resolved by our review of a copy of Mr. Storms' letter which transmitted Amendment No. 7 to the Operator, which copy was not then before us.

Mr. Traver's memorandum dated July 26 to the Operating Committee furnished us with a copy of Mr. Storms' letter dated July 14, 1954, which transmitted Amendment No. 7 to the Operator for signature and informed the Operator that a copy of the amendment would be sent to it upon receipt by Mr. Storms of the original and four copies of the amendment all signed by the Operator. This letter also informed the Operator that new Consent to Lien forms were necessary, and enclosed forms for execution by the landowners. However, the letter did not clearly condition the effectiveness of Amendment No. 7 upon the receipt by the Government of new Consent to Lien forms. Accordingly, it is our view that Amendment No. 7 is in effect and should no longer be treated as "void."

There is probably some administrative concern over the fact that the "pseudo-certification" provisions of Amendment No. 7 jeopardize the Owner's Consent to Lien attached to the contract, which is executed on the oldest Consent to Lien form and does not authorize amendments which alter the provisions for the payment of the Government's royalty. However, Amendment No. 5 dated February 17, 1954, prepared and executed in the field, also changed the royalty provisions.

J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

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

AUG 9 1955

Memorandum

To: The Administrator, DMEA
Attention: W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Company

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J. L. Hofflund
J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

HCRubin:emd:gjb

Copy to: DMEA Docket
Sol. Docket
W. R. Griswold (2)
J. L. Hofflund
H. C. Rubin
Chron. File

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Surname
J. Alt.

500

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

August 1, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Preparation of a Unilateral Termination ~~Agreement~~ for Magna King Manganese Mining Company, Contract No. Idm-E428, Docket No. DMEA-2603 (Lead-Zinc), Pinal County, Arizona.

Will you please prepare a unilateral termination ~~agreement~~ for the cited contract. A termination agreement was sent to the Operator by the Field Team on January 5, 1955. The Operator has not signed this agreement. The unilateral termination ~~agreement~~ should terminate the work of the contract as of April 1, 1953.

The Field Team has complied with our request and has sent us a copy of the letter to the Operator in which a new Owner's Consent to Lien was necessary before Amendment No. 7 could be properly executed. Please refer to the memorandum, dated July 26, from the Executive Officer, DMEA Field Team, Region III.

W. R. Griswold

W. R. Griswold

~~WRGrisWRGris/ER~~

JWAlt/er
Copy to: Docket
Base Metals
Chron.

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

RECEIVED
JUL 28 1955

224 New Customhouse
Denver 2, Colorado

July 26, 1955

AIR MAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., (Ajax Lead-Zinc Mine), Pinal County, Arizona

This replies to your letter of July 5, 1955 on the subject docket.

Enclosed are two copies of each of the following:

1. Letter to Ralph J. Pomeroy from W. R. Storms dated July 14, 1954

2. Letter from Pomeroy to Storms dated July 30, 1954

3. Letter from Pomeroy to Storms dated August 9, 1954

4. Memorandum from Storms to W. H. King dated August 16, 1954

5. Letter from Storms to Pomeroy dated August 17, 1954

6. Letter from Storms to Pomeroy dated September 16, 1954.

It appears that Storms' letter to Pomeroy dated July 14, 1954 clearly conditions the effectiveness of Amendment No. 7 upon the submission of new Owner's Consent to Lien.

W. M. Traver

W. M. Traver

Enclosures

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

DMEA
Date Rec'd.
JUL 26 1955
BUREAU OF MINES
Denver, Colorado

Box 4097
Tucson 5, Arizona

July 25, 1955

Air Mail

RECEIVED
JUL 28 19

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

As requested in your air mail memorandum of July 21, we are enclosing copies of the following letters and memoranda regarding Amendment No. 7 to DMEA Exploration Project Contract No. Idm-E428:

1. Letter to Ralph J. Pomeroy from W. R. Storms, dated July 14, 1954;

2. Letter from Pomeroy to Storms, dated July 30, 1954;

3. Letter from Pomeroy to Storms, dated August 9, 1954;

4. Memorandum from Storms to W. H. King, dated August 16, 1954;

5. Letter from Storms to Pomeroy, dated August 17, 1954;

6. Letter from Storms to Pomeroy, dated September 16, 1954.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
DMEA-2603
DF

WRStorms:frj

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

July 14, 1954

Register

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
532 Security Bldg.
Phoenix, Ariz.

Re: Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Mr. Pomeroy:

Enclosed are original and four copies of Amendment No. 7 to your DMEA Exploration Project Contract No. Idm-E428 for an extension of your recess and time to complete project work, and original and five copies of Form MF-203 - "Owner's Consent to Lien". If this amendment is satisfactory, please sign all copies, affix your corporate seal, then return all to me. Your copy, which we have retained here, will be sent to you upon receipt of the orignal and four copies.

As Amendment No. 7 contains new provisions concerning royalty payments, the legal department of the Defense Minerals Exploration Administration believes that new Owner's Consent to Lien forms are necessary. Therefore, will you please have the original and five copies of Form MF-203 signed and return all to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
DMEA-2603
DF

WRStorms:frj

(Registered Mail No. 95145. Return receipt signed by Pomeroy on July 27, 1954)

C O P Y

Telephone
Phoenix 2-0181

MAGMA King
Manganese Mining Company
Superior, Arizona

RECEIVED
JUL 28 1955

Office
547 North Arizona Ave.
Chandler, Arizona

July 30, 1954

Mr. Walter R. Storms
Mining Methods Branch
Mining Division, Region IV
Box 4097, University Station
Tucson, Arizona

Dear Mr. Storms:

The Supplemental Agreements and Amendments sent to this office have been delayed due to our change in address and the fact that I have been out of town recently. In order to expedite things I asked Mrs. Fraser to forward the material to Mr. Loran Skousen, Secretary of the company, who is in New York City. I have just talked to him by telephone and was informed that the material will be returned to this office the fore part of the coming week. I sincerely hope that this delay will not inconvenience your office.

I wish to express our appreciation for the assistance you have rendered this company. I wish to co-operate fully with the Bureau of Mines and DMEA in completing this project. Our Eastern associates are of the opinion that the zinc picture will be improved in the near future. This would add justification to the completion of our project.

With kindest personal regards I am,

Sincerely yours,

/s/ Ralph J. Pomeroy
LF

RJP/lf

C O P Y

Telephone
Phoenix 2-0181

MAGMA KING
Manganese Mining Company
Superior, Arizona

Office
547 North Arizona Ave.
Chandler, Arizona

RECEIVED
JUL 28 1955

August 9, 1954

Mr. Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV
Box 4097, University Station
Tucson, Arizona

Dear Mr. Storms:

You will find enclosed the original and four copies of Amendment No. 7 to our DMEA Exploration Project Contract No. Idm-E428 for an extension of our recess and the time to complete our project. These have been signed and this company's seal affixed. I have been given to understand that the "Owner's Consent to Lien," will be signed, however, Mr. Walter C. Smith is enroute home from an extended vacation in the East and just when he will be available to sign hasn't yet been determined. I felt the matter was important enough that the signed Amendments should be sent at this time . As soon as Mr. Smith's signature is affixed to the Owner's Consent to Lien I will forward it on to you immediately.

We appreciate your assistance in this matter and trust that this extension will be sufficient time to complete the project we have planned.

Sincerely yours,
Magma King Manganese Mining Co.

/s/ Ralph J. Pomeroy, President.

RJP/lf
Enc

C O P Y

(ORIGINAL SENT TO DENVER)

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

August 16, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and four copies of Amendment No. 7 to DMEA Contract No. Idm-E428, all duly signed by Ralph J. Pomeroy, company president, and with the corporate seal affixed.

No new Owner's Consent to Lien forms have been sent us by Pomeroy, but in his letter of August 9, he states that these forms will be submitted at a later date. His letter is attached.

The operator's copy of the amendment will be given to Pomeroy when he submits the lien forms.

Walter R. Storms

Walter R. Storms

CC W. H. King (7)
DMEA-2603
DF

WRStorms:frj

COPY

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

August 17, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Mr. Pomeroy:

Your letter of August 9 with the original and four copies of Amendment No. 7 to your DMEA Exploration Project Contract No. Idm-E428 was received several days ago, but was not acknowledged until today as we thought the "Owner's Consent to Lien" forms might come in.

We have sent the amendment to our Denver office and will forward the Lien forms when received from you. We will hold your copy of the amendment until we receive the "Owner's Consent to Lien" forms.

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
DMEA-2603
BF

WRStorms:frj

COPY

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

September 16, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E428 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the mine road and intend to start work as soon as possible, I would suggest that you immediately write the DMEA Executive Officer in Denver. As you know, Amendment No. 7 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the east. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
J. N. Faick
DMEA-2603
DF

WRStorms:frj

COPY

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

RECEIVED
JUL 25 1955

224 New Customhouse
Denver 2, Colorado

AIR MAIL

July 21, 1955

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc-Mine, Pinal County, Arizona

Attached is a copy of a letter from the Chairman of the Operating Committee and a memorandum from the Acting Assistant Solicitor, DMEA.

Your letter of October 25, 1954 states "we mailed the other copies of Amendment No. 7 to Pomeroy some time ago for his signature . . ." Did this letter or any other letter written to the Operator by you clearly condition the effectiveness of said amendment upon the submission of new Owner's Consent to Lien?

Please send us a copy of your letter of "some time ago" transmitting Amendment No. 7 to Mr. Pomeroy. Copies of any other correspondence to Mr. Pomeroy having any bearing on the question raised by the Chairman of the Operating Committee should also be forwarded to this office.

W. M. Traver

W. M. Traver

Enclosures

HMC:sr

cc Subject
Townsend
Chairman Op. Comm. (2)
Chron

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

RECEIVED
JUL 22 1955

224 New Customhouse
Denver 2, Colorado

July 20, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company (Ajax Lead-Zinc Mine), Pinal County, Arizona

Enclosed are the original and three copies of an interim report by W. R. Hardwick of the United States Bureau of Mines on the subject project with its transmittal by W. R. Storms.

The report requires no comments.

W. M. Traver

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DMEA
Date Rec'd.
JUL 20 1955
BUREAU OF MINES
Denver, Colorado

Box 4097
Tucson 5, Ariz.

July 18, 1955

RECEIVED
JUL 22 1955

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Interim Report, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of an interim report on the above county by W. R. Hardwick of the Bureau of Mines.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
J. N. Faick
DMEA-2603
DF

WRStorms:frj

DMEA
Date Rec'd.
JUL 20 1955
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Box 4097
Tucson 5, Ariz.

July 18, 1955

RECEIVED
JUL 22 1955

Memorandum

To : Walter R. Storms, Superintendent, Southwest Exp. Station

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on July 11, 1955. There was no one at the mine and the road was badly washed for the last half mile. All equipment has been removed.

A Mr. Nicolas, a prospector in the district, stated that he recently had talked with Ralph J. Pomeroy, president of the Magma King Manganese Mining Co. and Pomeroy had stated that the mine would be opened and unwatered on July 12. Pomeroy also told Nicolas that he had interested some company in the Ajax claims, which now is mining uranium in the vicinity of Grand Junction, Colorado. This company will examine the property, and if interested, will provide money for additional drifting according to what Pomeroy told Nicolas.

This short form contract was approved on October 23, 1952 and starting points were set by a Bureau of Mines engineer on October 31, 1952. From November 1952 to March 1953, the operator drove 194 feet of drift at a cost of $6,790.00. The operator then stopped work on the contract and has never resumed work. The contract was kept alive until September 1, 1954 by repeated requests for extensions of recess.

An amendment (No. 7) sent to Ralph J. Pomeroy, president of the company, provided that the contract be terminated if work was not resumed by September 1, 1954. This amendment was signed and returned by Pomeroy but copies of "Owner's Consent to Lien" were not signed and returned.

The purpose of this contract was to drift along a vein to a point where diamond drill holes from the surface had cut a zinc ore body. The objective was not reached before work on the project was

CC W. M. Traver (Orig. & 8)
J. N. Faick
DMEA-2603
DF

WRHardwick:frj

terminated. A final report has been submitted and termination has been recommended. Certification was recommended, based on a small amount of low grade zinc ore that was discovered.

William R. Hardwick

William R. Hardwick
Mining Engineer
Tucson, Ariz.

File Copy
Surname
Chandler
Selfridge
Johnson
McHendry

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

AIR MAIL

JUL - 5 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-8428

Dear Mr. Traver:

With regard to the cited contract, we are enclosing two copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated June 28.

In the last paragraph of this memorandum it is stated:

> "Accordingly, unless Mr. Storms submitted Amendment No. 7 to the Operator with a letter which clearly conditioned the effectiveness of said amendment upon the submission of new Owner's Consents to Lien, and we are furnished with a copy of such evidence, I am inclined to the view that Amendment No. 7 is in effect, that the contract is automatically terminated, and that a "pseudo-certification" is in effect."

At your earliest convenience, we would appreciate hearing from you whether such a letter was written by Mr. Storms, and if so please send a copy of it. If no such letter was written, we will consider that Amendment No. 7 is in effect and will forward the necessary copies of it to you for distribution when we receive your reply to this letter.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/B)

Enclosures

APPROVED:

/s/ Robert W. Geehan (2/B)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/B)
Member, Geological Survey

JWAlt/er 6/29/55
Copy to: Docket
Admr. R. File
Op. Committee

Base Metals Chron.
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.S.

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

JUN 28 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-2428 (Lead-Zinc)

Mr. Griswold's memorandum dated June 24 (1955) requested that a termination notice be prepared for the subject contract.

The suitability of terminating this contract by notice under the termination provisions of the contract was considered in our memoranda dated October 14 and 19, 1954, wherein it was stated that Amendment No. 7 dated June 30, 1954, executed by both parties, contained an automatic termination provision, and that unless submission of Amendment No. 7 to the Operator for signature was clearly conditioned upon his obtaining a new Owner's Consent to lien signed by all the owners, the failure to furnish said lien would not void Amendment No. 7. The question of whether the amendment had been submitted to the Operator subject to the stated condition was left open for determination based upon additional facts.

Pursuant to a teletype to the field dated November 4, 1954, the original and 5 copies of Amendment No. 7 were returned to Washington.

A proposed termination agreement, which specifically would have cancelled Amendment No. 7 by agreement, was submitted to the Operator but was never executed by him.

A proposed letter to the Operator which again raised the question whether Amendment No. 7 was valid was returned to Mr. Griswold with our memorandum dated June 2, 1955, which requested that the field submit all copies of correspondence with the Operator concerning the submission

of Amendment No. 7 to the Operator for signature. We hoped to determine from this correspondence the status of Amendment No. 7. The field submitted certain correspondence concerning Amendment No. 7; however, if Storms submitted the Amendment to the Operator with a letter, no copy of it appears with the copies of the correspondence submitted. If Storms wrote such a letter it would probably throw the most light on the question.

From the facts before us it is clear that new Owner's Consents to Lien were requested by Storms, but it is not clear that they were made a condition of the amendment. If anything, Storms' letter to the Operator dated September 16, 1954 (apparently about a month after the Operator returned all signed copies of Amendment No. 7), reminded the Operator that the termination provisions of Amendment No. 7 would be effective if work had not been resumed by September 1, 1954.

Accordingly, unless Mr. Storms submitted Amendment No. 7 to the Operator with a letter which clearly conditioned the effectiveness of said amendment upon the submission of new Owner's Consents to Lien, and we are furnished with a copy of such evidence, I am inclined to the view that Amendment No. 7 is in effect, that the contract is automatically terminated, and that a "pseudo-certification" is in effect.

/S/ Henry C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
W. R. Griswold (3)
J. L. Hofflund
H. C. Rubin
chron.

File Copy
Surname
J. Cee.

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 24, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Preparation of a Unilateral Termination Agreement for Magma King Manganese Mining Company, Contract No. 4dm-E428, Docket No. DMEA-2603 (Lead-Zinc), Pinal County, Arizona

Will you please prepare a unilateral termination agreement for the cited contract. A termination agreement was sent to the Operator by the Field Team on January 5, 1955. The Operator has not signed this agreement and on February 25, and again on April 21, the Field Team wrote to the Operator regarding the signing of this agreement but has had no reply from him.

Mr. Traver's letter of June 20, lists all correspondence relating to Amendment No. 7 (copies of which are attached to the letter).

The unilateral termination agreement should terminate the work of the contract as of April 1, 1953. This was stated in the Termination Agreement which has not been signed.

W. R. Griswold

W. R. Griswold

JWA lt/er

Copy to: Docket
Base Metals
Chron.

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

224 New Customhouse
Denver 2, Colorado

June 20, 1955

AIRMAIL

RECEIVED
JUN 2 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

In compliance with your request of June 16, 1955, we are enclosing the following letters, which is all of the correspondence we have had with the field relative to Amendment No. 7:

1. Memorandum from this office to W.R. Storms dated July 12, 1954.

2. Letter from Ralph J Pomeroy to Walter R. Storms, dated August 9, 1954.

3. Memorandum from Walter R. Storms to this office, dated August 16, 1954.

4. Letter from Walter R. Storms to Ralph J. Pomeroy, dated September 16, 1954.

5. Memorandum from Walter R. Storms to this office, dated October 25, 1954.

W. M. Traver

W. M. Traver

Encls.

Mining Division
Date Rec'd.
OCT 25 1954
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

October 25, 1954

RECEIVED
JUN 22 1955

Air Mail

Memorandum.

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

As requested in your teletype of this afternoon, we are enclosing the Operator's copy of Amendment No. 7 to Exploration Project Contract No. Idm-E428. We mailed the other copies to Pomeroy sometime ago for his signature, but have heard nothing from him nor have we ever received the new "Owner's Consent to Lien" forms from him.

Walter R. Storms

Walter R. Storms

CC W. H. King
DMEA-2603
DF

WRStorms:frj

work

SEP 2 0 1954

September 16, 1954

Mr. Ralph J. Pomeroy
Magna King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E425
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

RECEIVED
JUN 2 2 1955

Dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E425 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the jeep road and intend to start work as soon as possible, I would suggest that you immediately notify the DMEA Executive Director in Denver. As you know, Amendment No. 1 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Work" form would be signed by the owner when he returned from the east. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to us?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. M. King
J. M. Faick
DMEA-2603
DF

WRStorms:frj

AUG 18 1954
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

August 16, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and four copies of Amendment No. 7 to DMEA Contract No. Idm-E428, all duly signed by Ralph J. Pomeroy, company president, and with the corporate seal affixed.

No new Owner's Consent to Lien forms have been sent us by Pomeroy, but in his letter of August 9, he states that these forms will be submitted at a later date. His letter is attached.

The operator's copy of the amendment will be given to Pomeroy when he submits the lien forms.

Walter R. Storms

Walter R. Storms

CC W. H. King (7)
DMEA-2603
DF

WRStorms:frj

TELEPHONE
PHOENIX 2-0181

Note address change

MAGMA KING

MANGANESE MINING COMPANY

SUPERIOR · ARIZONA

OFFICE
[redacted]
547 North Arizona Ave.
Chandler, Arizona

August 9, 1954.

Mr. Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region II
Box [illegible], University Station
Tucson, Arizona

U. S. BUREAU OF MINES
MINING DIVISION
AUG 10 1954
TUCSON, ARIZONA

RECEIVED
JUN 2 3 1955

Dear Mr. Storms:

You will find enclosed the original and four copies of Amendment No. 7 to our Mail Exploration Project Contract [illegible] for an extension of our recess and the time to complete our project. These have been signed and this company's seal affixed. [illegible] been [illegible] to understand that the "Ownership Assent to Plan," still [illegible] [illegible] which is expected [illegible] from [illegible] and [illegible] will be [illegible] [illegible] matter was important enough [illegible] as Mr. Smith's [illegible] you are [illegible] I will forward it on to you immediately.

[illegible] your assistance [illegible] and hope that this extension will be sufficient time [illegible] have planned.

[illegible],
[illegible] Mining Co.

[illegible], President

[illegible]/lf
Enc.

224 New Customhouse
Denver 2, Colorado

July 12, 1954

Memorandum

RECEIVED
JUN 2 1955

To: V. R. Storms

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract IDm-1428, Magna King Manganese Mining Co., Ajax Lead Zinc Mine, Pinal County, Arizona

Enclosed are the original and five copies of Amendment No. 7 to Contract IDm-1428 which was prepared in Washington and signed by the Administrator for the Government to authorize a further extension of the period for excess of operations.

Also enclosed are the original and five copies of Form MT-205 Owner's Consent to Mine, also prepared in Washington, for execution by the operator in conjunction with Amendment No. 7.

If the amendment is satisfactory to you please present the amendment and the six copies of Form MT-205 to the operator for signature, retaining the operator's copy of the amendment until the remaining copies of all documents have been returned to you properly executed.

In addition to the foregoing enclosed material we are enclosing a copy of the letter from the Chairman of the Operating Committee dated July 1, 1954.

W. H. Kemp
[illegible]

Encls.
JWT:jp
cc Contract
Chron
Alkoschmann
JWTownsend

File Copy
Surname

J. M. Alt
Greenwald
Selfridge
H. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

JUN 1 6 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Traver:

With reference to your memorandum of June 7, we wish to call your attention to the memorandum from the Acting Assistant Solicitor, Defense Minerals, a copy of which was sent to you on June 3, 1955.

In the last sentence of paragraph 2 of this memorandum, it is stated: "Accordingly, the Field should furnish us with copies of the correspondence had with the Operator concerning Amendment No. 7."

In order that we can terminate this project, will you please furnish us with copies of the correspondence as requested by the Acting Assistant Solicitor at your earliest convenience.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JB)

APPROVED:

J. H. Hedges (JB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JB)
Member, Geological Survey

JWAlt/er 6/14/55

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.S.

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

RECEIVED
JUN - 9 1955

224 New Customhouse
Denver 2, Colorado

June 7, 1955

AIRMAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

Reference is made to your letter of June 3, 1955 regarding information requested by the Acting Solicitor relative to the subject contract.

Providing of new Owner's Consent to Lien was a condition of Amendment No. 7. The operator signed the original and four copies of the amendment and returned them to this office but did not return the Owner's Consent to Lien.

All copies of the amendment were returned to the Washington office by our memorandum of November 16, 1954, in conformance with your teletype of November 4.

Recommendations relative to the issuance of a Certification of Discovery or Development were also forwarded by our memorandum of November 16, 1954.

W. M. Traver

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

JUN 28 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (Lead-Zinc)

Mr. Griswold's memorandum dated June 24, 1955, requested that a termination notice be prepared for the subject contract.

The suitability of terminating this contract by notice under the termination provisions of the contract was considered in our memoranda dated October 14 and 19, 1954, wherein it was stated that Amendment No. 7 dated June 30, 1954, executed by both parties, contained an automatic termination provision, and that unless submission of Amendment No. 7 to the Operator for signature was clearly conditioned upon his obtaining a new Owner's Consent to Lien signed by all the owners, the failure to furnish said lien would not void Amendment No. 7. The question of whether the amendment had been submitted to the Operator subject to the stated condition was left open for determination based upon additional facts.

Pursuant to a teletype to the field dated November 4, 1954, the original and 5 copies of Amendment No. 7 were returned to Washington.

A proposed termination agreement, which specifically would have cancelled Amendment No. 7 by agreement, was submitted to the Operator but was never executed by him.

A proposed letter to the Operator which again raised the question whether Amendment No. 7 was valid was returned to Mr. Griswold with our memorandum dated June 2, 1955, which requested that the field submit all copies of correspondence with the Operator concerning the submission

of Amendment No. 7 to the Operator for signature. We hoped to determine from this correspondence the status of Amendment No. 7. The field submitted certain correspondence concerning Amendment No. 7; however, if Storms submitted the Amendment to the Operator with a letter, no copy of it appears with the copies of the correspondence submitted. If Storms wrote such a letter it would probably throw the most light on the question.

From the facts before us it is clear that new Owner's Consents to Lien were requested by Storms, but it is not clear that they were made a condition of the amendment. If anything, Storms' letter to the Operator dated September 16, 1954 (apparently about a month after the Operator returned all signed copies of Amendment No. 7), reminded the Operator that the termination provisions of Amendment No. 7 would be effective if work had not been resumed by September 1, 1954.

Accordingly, unless Mr. Storms submitted Amendment No. 7 to the Operator with a letter which clearly conditioned the effectiveness of said amendment upon the submission of new Owner's Consents to Lien, and we are furnished with a copy of such evidence, I am inclined to the view that Amendment No. 7 is in effect, that the contract is automatically terminated, and that a "pseudo-certification" is in effect.

Henry O. Rubin
Henry O. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

File Copy
Surname

500

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

JUN - 3 1955

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-5428

Dear Mr. Traver:

With reference to your memorandum dated May 19, 1955, regarding the cited contract, we are enclosing copies of memorandum from the Acting Assistant Solicitor, Defense Minerals, dated June 2.

We would appreciate an early reply from you regarding the information requested in the memorandum from the Acting Assistant Solicitor, Defense Minerals.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

J. H. Hedges (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

JWAlt/er 6/3/55

Copy to: Docket
Admr File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

JUN - 2 1955.

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Mining Company (lead-zinc)

Pursuant to a discussion Mr. Alt and I had with Mr. Johnson, we are returning, unsurnamed, a proposed letter to the subject Operator.

A review of the docket does not disclose whether submission of Amendment No. 7 to the Operator for execution was clearly conditioned upon the Operator obtaining a new Consent to Lien. If it was not, Amendment No. 7, which has been signed by the Operator, is in effect and the contract is automatically terminated with a pseudo-certification. Accordingly, the Field should furnish us with copies of the correspondence had with the Operator concerning Amendment No. 7.

If the copies of correspondence referred to above do disclose that Amendment No. 7 was conditioned upon a new Consent to Lien being obtained and is void, consideration should be given to certifying a discovery and terminating by notice, as indicated in prior memoranda from this office.

Harry C. Rubin
H. C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

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

JUN - 2 1955.

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Mining Company (lead-zinc)

Pursuant to a discussion Mr. Alt and I had with Mr. Johnson, we are returning, unsurnamed, a proposed letter to the subject Operator.

A review of the docket does not disclose whether submission of Amendment No. 7 to the Operator for execution was clearly conditioned upon the Operator obtaining a new Consent to Lien. If it was not, Amendment No. 7, which has been signed by the Operator, is in effect and the contract is automatically terminated with a pseudo-certification. Accordingly, the Field should furnish us with copies of the correspondence had with the Operator concerning Amendment No. 7.

If the copies of correspondence referred to above do disclose that Amendment No. 7 was conditioned upon a new Consent to Lien being obtained and is void, consideration should be given to certifying a discovery and terminating by notice, as indicated in prior memoranda from this office.

H. C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

HCRubin/emd
Copy to: ✓DMEA Docket
Solicitor's Docket
W. R. Griswold (2)
J. L. Hofflund
H. C. Rubin
chron.

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

224 New Customhouse
Denver 2, Colorado

May 19, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

Reference is made to the termination agreement which was prepared in Washington and forwarded by your letter of December 29, 1954 for signature by the operator and the Executive Officer, DMEA Field Team, Region IV.

The termination agreement was forwarded to the operator by our letter of January 5, 1955. As the termination agreement was not returned by the operator we subsequently wrote him on February 25 and April 21 requesting that the matter be given his prompt attention. Copies of all three of our letters to the operator were forwarded to you at the time of writing.

Inasmuch as we have been unable to obtain any action in the matter it appears that more drastic action should be initiated by the Washington office. In all probability we will encounter similar difficulty in obtaining the operator's final report or any other action by him in procedures necessary relative to closing the account.

If further action by this office is desired please so advise.

W. M. Traver

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

April 21, 1955

REGISTERED

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Reference is made to the termination agreement forwarded to you for signature by our letter of January 5, 1955 and our letter of inquiry in the matter of February 25, 1955.

We are desirous of closing this account at an early date, therefore we will appreciate your prompt attention to the initial step of closing procedures by returning the properly executed copies of the termination agreement.

Very truly yours,

W. M. TRAVER,
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT:sr

cc Chairman Op. Comm. (2)
Storms
Faick
Harshman
Townsend
Subject
Chron

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

224 New Customhouse
Denver 2, Colorado

February 25, 1955

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Reference is made to our letter of January 5, 1955, whereby we forwarded to you for execution the original and five copies of a termination agreement.

Inasmuch as we have not heard from you in the matter or received the executed copies of the termination agreement we will appreciate your prompt attention to the matter either by returning the executed termination agreement or appropriate advice relative to the matter.

Very truly yours,

W. M. TRAVER,

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT: jp
cc Subject
Chron
Chairman, Op. Comm.
Storms
Faick
Harshman
Townsend

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED

224 New Customhouse
Denver 2, Colorado

January 25, 1955

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Semi-annual Report - Docket No. DMEA 2603, Contract No. Idm-E428 (Lead-Zinc), Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are four copies of the Semi-annual Report on Contract No. Idm-E428.

W. M. Traver

Enclosures

W. M. Traver

Date Rec'd.

JAN 17 1955

BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

January 14, 1955

Memorandum

To : Executive Officer, Defense Minerals Exploration Administration

From : Superintendent, Southwest Experiment Station

Subject : Interim Report, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of a short memorandum report on the above property by W. R. Hardwick of the Bureau of Mines. Hardwick visited this property while checking DMEA certified project in that part of the state.

Walter R. Storms

Walter R. Storms

CC Exec. Off. (8)
DMEA-2603
DF

WRStorms:frj

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
BOX 4097
UNIVERSITY STATION

TUCSON, ARIZONA

January 14, 1955

Memorandum

To : Walter R. Storms, Superintendent, Southwest Experiment Station

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on January 7, 1955. There was no one at the mine. The road was badly washed out and the last half mile was impassable by automobile. The same condition existed when the mine was last visited on September 16, 1954. There has been no ore sold since the contract was approved.

This short form contract was approved on October 23, 1952. The operator drove 194 feet of drift at a total cost of $6,790.00, then stopped work before it reached the objective. Some low-grade ore was discovered. The operator was not able to finance the completion of the project, so termination with "Certification of Discovery or Development" has been recommended. A termination agreement has been sent to the operator, but so far as we know, has not been signed by him and returned to the DMEA Executive Officer. ?

William R. Hardwick
William R. Hardwick
Mining Engineer
Tucson, Arizona

CC Exec. Off. (Orig. & 8)
DMEA-2603
DF

WRStorms:frj

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

224 New Customhouse
Denver 2, Colorado

January 5, 1955

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428
Ajax Lead-Zinc Mine
Pinal County, Arizona

Dear Mr. Pomeroy:

Enclosed are the original and five copies of a termination agreement which has been prepared to effect mutual termination of Contract Idm-E428.

All copies of the termination agreement should be signed by you, the corporate seal affixed, and returned to this office leaving blank the execution date at the head of the agreement, which will be filled in at the time the termination agreement is signed by the Executive Officer, DMEA Field Team, Region IV, after which your copy of the agreement will be forwarded to you.

Very truly yours,

W H King

W. H. King
Executive Officer, DMEA
Field Team, Region IV

Enclosures

JWT:jp
cc Subject
Chron
Chairman, Op. Comm.
Storms
Faick
Townsend

File Copy
Surname

J. W. Alt.
Swanson
Chandler
Martin
Ferguson
Mitkevich

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

500

DEC 23 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. King:

We are enclosing the original and five copies of a Termination Agreement to the cited contract for your signature.

Please present the termination agreement to the Operator for approval and signature and, when completed, distribute the copies of the usual manner.

Upon the receipt of our executed copy of the termination agreement, we will prepare the certification of discovery for this property.

We would appreciate receiving the final Field Team report at your earliest convenience.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (JB)

Enclosure

JWAlt/er 12/20/54

APPROVED:

/s/ C. H. JOHNSON
Member, Bureau of Mines (JB)

/s/ Thor. H. Kiilsgaard
Member, Geological Survey (JB)

Copy to: Docket
Admr R. File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.B.

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

December 23, 1954

PROJECT SUMMARY REPORT (Incomplete)
(No final audit or final reports of Field Team or Operator)

By: J. W. Alt

1. DMEA Docket No. 2603 (Lead-Zinc)
Contract No. Idm-E428
Property: Ajax Lead-Zinc Mine
Location: Pinal County, Arizona
Operator: Magma King Manganese Mining Co.
532 Security Building
Phoenix, Arizona

Operator's Property Rights: Lessee
Assignment and Agreement - April 1, 1952
Owner's Consent to Lien - dated October 6, 1952

2. Contract (Short Form) — dated October 23, 1952, to complete: 12 months

Work Authorized;

Drift 400 feet northerly from the present north breast of the 176-foot level

Drive 200 feet of raises at favorable sites disclosed by the drifting.

Diamond core drill maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed.

Estimated Costs of the Project

Drifting, 400 feet @ $35/ft.	$14,000.00
Raising, 200 feet @ $33/ft.	6,600.00
Diamond drilling, 500 feet @ $5/ft.	2,500.00
Total Cost of Project	$23,100.00
Government participation at 50%	$11,550.00

Amendments:

No. 1 - dated April 17, 1953 — Recess operations for 30 days — work to be resumed on or before May 1, 1953.

No. 2 - Dated May 20, 1953 — Recess operations for one month — work to be resumed on or before June 1, 1953.

No. 3 - Dated June 26, 1953 — Recess operations and resume work on or before October 1, 1954.

Extend completion time from 12 months to 18 months.

No. 4 - Dated November 24, 1953 — Recess operations — change date of October 1, 1953 of Amendment No. 3 to read "February 1, 1954."

No. 5 - Dated February 17, 1954 — Change the recess ending date of February 1, 1954 of Amendment No. 4 to read "May 1, 1954".

Extend completion time from 18 to 21 months.

No. 6 - Dated May 12, 1954 — Change recess date from May 1, 1954 to June 1, 1954.

Work Completed as per last MF-104 in our files (February 1953) 168 feet of drifting on the 176-foot level @ $35/ft. — $5,880.00

3. Audit Certificate:

There will be no liquidation of equipment settlement — Work was done on the unit cost basis.

4. Certification Date:

5. Comments: According to the memorandum of T. M. Romslo, USBM, dated April 15, 1953, the drift in March was advanced 26 feet, making a total of 194 feet of drifting under the terms of the contract. Progress was slow during the five months of operations of the project.

The memorandum of Walter R. Storms, USBM, dated November 12, 1954, states: "The drift had been driven 194 feet when the project was recessed. It lacked about 90 feet of reaching the principal target, the downward projection of the ore zone indicated by diamond drill S-2. At the S-2, the indicated reserves had been estimated at 1,000 tons of ore containing 10 to 15 per cent zinc. This 194 feet of drift should be very valuable to any future mine operator who might wish to continue the exploration work.

"Inasmuch as the operator has submitted written statements that ore was found in the contract drift, and as samples taken by a Bureau of Mines engineer from dump material taken from said drift indicate low grade lead-zinc ore, I recommend that a 'Certification of Discovery ore Development' be made."

From November 1952 to March 1953, 194 feet of drift were driven at $35.00 per foot at a total cost of $6,790.00, the Government's participation being $3,395.00. The unexpended balance of the contract is $16,310.00, and the government participation is $8,155.00.

It is recommended that the contract be terminated and that when this has been done, that a certification of discovery be issued.

J. W. Alt

J. W. Alt

File Copy
Surname
J. W. Alt.

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

INTERIOR DEPT.
NOV 29 1954
SOLICITOR

November 29, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Chief, Base Metals Division

Subject: Mutual Termination Agreement for Contract No. Idm-2428, Docket No. DMEA-2603, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona, (Lead-Zinc)

Will you please prepare a Mutual Termination Agreement for the cited contract. This agreement is to be prepared for the signature of the Executive Officer of Region IV.

Certification of the project will be made when the Operator signs the Termination Agreement and it is returned to this Division.

Amendment No. 7 has been, upon request, returned by the Executive Office, Region IV. The Operator had signed this amendment but did not obtain a new Owner's Consent to Lien, and therefore the amendment was considered void.

W. R. Griswold

W. R. Griswold

JWAlt/er

Copy to: Docket
Base Metals
Chron.

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

Department of the Interior
Defense Minerals Administration
RECEIVED
NOV 22 1954

224 New Customhouse
Denver 2, Colorado

November 16, 1954

Memorandum

To: Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region lV

Subject: Docket No. DMEA 2603 (Lead-Zinc), Contract Idm-E428
Magma King Manganese Mining Company, Ajax Lead-Zinc Mine
Pinal County, Arizona

In compliance with the request contained in your teletype of November 4, 1954, we are enclosing the original and 3 copies of a memorandum dated November 12, 1954, from the Chief, Mining Methods Branch, Mining Division, Region lV, relative to the Certification of Discovery as a result of work under the subject contract. The memorandum is countersigned by J. N. Faick, Geologist, U. S. Geological Survey, T. M. Romslo, Mining Engineer, U. S. Bureau of Mines, and W. R. Hardwick, Mining Engineer, U. S. Bureau of Mines.

The Engineers and Geologists outlined the basis for the certification and recommend that such be issued in which this office concurrs.

Also in compliance with instructions in your teletype of November 4, we are enclosing the original and 5 copies of Amendment No. 7 of the subject contract.

for John F. Shea
W. H. King

Enclosures

Mining Division
Date Rec'd.
NOV 15 1954
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION
TUCSON, ARIZONA

Defense Minerals Administration
RECEIVED
NOV 22 1954

November 12, 1954

Memorandum

Air Mail

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Mineral Hill Mining District, Pinal County, Ariz.

In regard to your teletype of November 4, concerning justification for certification under DMEA Exploration Project Contract No. Idm-E428, I was in Carlsbad when your inquiry arrived and did not return until the afternoon of November 9. I then found that John N. Faick of the Geological Survey was in the field and would not return to his office until today, hence the delay in the answer to your teletype.

So far as I know, the information contained in my memorandum report to you of October 23, 1953 still is authentic. As I mentioned then, in the operator's narrative report which accompanied Forms MF-104 and MF-104A for February 1953, it stated: "Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations". Again in the operator's narrative report of March 1953, it stated that the entire 26 feet of drift was in low-grade ore. T. M. Romslo, the Bureau of Mines engineer who regularly inspected this project for the Defense Minerals Exploration Administration in 1953, stated in his March 1953 progress report: "The Operator's Narrative Report is considered adequate. His statement that the entire 26 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays in future reports". As the project was recessed shortly after that, no samples were taken by the operator. I have talked to Mr. Romslo about this project and he states that so far as he can remember, he never saw any ore in place in the contract drift. However, fragments containing galena and sphalerite were seen in the muck that came from this drift.

CC W. H. King (8)
J. N. Faick
DMEA-2603
DF

WRStorms:frj

Material that came from the contract drift was hand-sorted and from 10 to 20 tons were placed in one pile, and perhaps another hundred tons were placed on the regular dump. These piles were sampled by Bureau of Mines engineer W. R. Hardwick on October 21, 1953, then again on June 2, 1954. The two samples taken on October 21, 1953 were not assayed as the operator stated that work was to be re-started. The three samples taken of the dump material in June 1954, were as follows:

Sample No.	Location	Percent			Ounces a ton	
		Copper	Lead	Zinc	Gold	Silver
13022	Sorted ore dump	0.34	0.52	1.8	0.02	0.4
13023	Main dump	0.23	0.58	1.3	Trace	0.1
13024	" "	0.095	1.10	3.4	0.02	0.4

Although this material is not ore at the present time, it does indicate the presence of zinc and lead in a zone that could be an extension of that encountered by diamond drill hole S-6. Ore reserves for the zone at hole S-6 had been estimated at 1,000 tons containing 4 percent lead and 6 percent zinc. The drift had been driven 194 feet when the project was recessed. It lacked about 90 feet of reaching the principal target, the downward projection of the ore zone indicated by diamond drill hole S-2. At hole S-2, the indicated reserves had been estimated at 1,000 tons of ore containing 10 to 15 percent zinc. This 194 feet of drift should be very valuable to any future mine operator who might wish to continue the exploration work.

Inasmuch as the operator has submitted written statements that ore was found in the contract drift, and as samples taken by a Bureau of Mines engineer from dump material taken from said drift indicate low-grade lead-zinc ore, I recommend that a "Certification of Discovery or Development" be made.

Walter R. Storms

Walter R. Storms.

We have read the above report and agree with its conclusions and recommendations.

J. N. Faick

John N. Faick, Geologist
U. S. Geological Survey

T. M. Romslo

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

W. R. Hardwick

W. R. Hardwick, Mining Engineer
U. S. Bureau of Mines

File Copy
Surname
J.W. Alt
Grunwald
Selfridge
Mistendorf

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

NOV 4 - 1954

WRGrunwald/er, Rm 4444, Ext. 3669

Base Metals Div., DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to Office of the Secretary)

T E L E T Y P E

Date:

To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver 2, Colorado

Reurtt November 2, 1954, Docket DMEA 2603, Contract Idm-E428, Magna King Manganese Mining Company. Pending policy decision, best you return all copies of Amendment No. 7 to this office. Regarding your memorandum of October 29, 1953, send us justification for recommended certification.

George C. Selfridge

Chairman, Operating Committee

JWAlt/er (written 11/4/54)

Copy to: Docket
Admr. File
Operating Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. J. L. Hofflund
Chron
Confirmation

C
O
P
Y

DM 235 BUREAU MINES 11-2-54 9-33 AM

GEORGE C SELFRIDGE
DMEA

REQUEST OCTOBER 29, 1954, DOCKET DMEA 2603, CONTRACT IDM-8428, MAGNA KING MANGANESE MINING COMPANY. NEED CLARIFICATION OF TELETYPE. LINE 2 SAYS, DO NOT DISTRIBUTE AMENDMENT NO. 7 NOR PERMIT IT TO GO INTO EFFECT WITHOUT THE REQUIRED BE. OWNER'S CONSENT TO LIEN. LINE 3 SAYS, SUGGEST YOU RETURN TO OPERATOR THE COPIES OF AMENDMENT NO. 7 WHICH HE HAS SIGNED. INASMUCH AS THE AMENDMENT WAS SIGNED BY THE ADMINISTRATOR FOR THE GOVERNMENT, WE CANNOT RECONCILE THE TWO STATEMENTS.

W N KING

DENVER, COLO.

Mr. Geo. C. Selfridge
DMEA 11/2/54
11:34 A.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 - 1954

DN 235 BUREAU MINES 11-2-54 9-33 AM

GEORGE C SELFRIDGE
DMEA

REURTT OCTOBER 29,1954, DOCKET DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE MINING COMPANY. NEED CLARIFICATIO N OF TELETYPE. LINE 2 SAYS, DO NOT DISTRIBUTE AMENDMENT NO.7 NOR PERMIT IT TO GO INTO EFFECT WITHOUT THE REQUIRED NEW OWNER S CONSENT TO LIEN. LINE 3 SAYS, SUGGEST YOU RETUNXXX RETUNXXX RETURN TO OPERATOR THE COPIES OF AMENDMENT NO.7 WHICH HE HAS SIGNED. INASMUCH AS THE AMENDMENT WAS SIGNED BY THE ADMINISTRATOR FOR THE GOVERNMENT, WE CANNOT RECONCILE THE TWO STATEMENTS.

W H KING

Denver, Colo.

Nov 2 12 10 PM '54

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

DMEA Docket copy
Surname

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

Hofflund
Hedges
Kiilsgaard
Selfridge

OCT 29 1954

DMEA

140
J.L.Hofflund
2919 7351

14X4401(01) Revolving Fund
Defense Production Act, Interior (Allocated Working Fund to the Office of the Secretary)

W.H. King, Executive Officer, DMEA Field Team Region IV, Bureau of Mines, Denver, Colorado

Reurtt October 27 Magma King Manganese Mining Company, Docket No. DMEA-2603, Contract Idm-I428. Do not distribute Amendment No. 7 nor permit it to go into effect without the required new Owner's Consent to Lien. Suggest you return to Operator the copies of Amendment No. 7 which he has signed, and accompany them with a notice of termination of the project as set forth in the form attached to Circular 33 for use under the termination provisions of short-form contracts prior to those of June 1954, leaving Article 4 in preserving the Government's rights to a percentage royalty. Please send at once information necessary for certifying the project.

George C. Selfridge
Chairman, Operating Committee

JLHofflund/emd 10/29/54

Copy to: Confirmation
DMEA Docket
Solicitor's Docket
W. R. Griswold (2)
Adm. R. File
Operating Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
J. L. Hofflund
chron.
pending

SENT
OCT 29 1954
Central Service Section

File Copy
Surname
J.W. Alt.
Gunwood
Talbert

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

T E L E T Y P E

JWAlt/bjl, Rm. 4444, Ext. 3669

Base Metals Div., DMEA

XXXXXXXXXX XXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to Office of Secy.)

Date:

To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Peurtt October 27, 1954, Magna King Manganese Mining Company, Docket DMEA-2603, Contract Idm-F428. You are authorized to terminate contract as per Circular 33. Treat Amendment No. 7 as not being in effect and do not supply Operator with a copy.

Chairman, Operating Committee

(written 10/28/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kiilsgaard
Chron.

Mr. George Selfridge
10-27-54
1:30 pm.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1954

DN 235 BUREAU MINES 10-27-54 10-52 AM

CHAIRMAN, OPERATING COMMITTEE
DMEA

REFERENCE DOCKET DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE MINING COMPANY, YOUR LETTER OCTOBER 21,1954, ENCLOSING HOFFLUND S MEMORANDA OF OCTOBER 14 AND 19. AMENDMENT NO.7 SIGNED BY OPERATOR, HOWEVER, DISTRIBUTION NOT MADE AS HE FAILED TO SUPPLY NEW OWNER S CONSENT TO LIEN. SHOULD WE FORWARD OPERATOR S COPY TO HIM AND ADVISE HIM OF TERMINATION OF CONTRACT AS OUTLINED IN HOFFLUND S MEMORANDUM OF OCTOBER 14. PLEASE TELETYPE ADVICE.

W H KING

Denver Colo.

OCT 27 2 27 PM '54

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

File Copy
Surname
J. W. Alt
Griswold
Chandler
Selfridge
Fehrman
Whitaker

500

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

OCT 21 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. King:

With reference to your memorandum of September 22, 1954, regarding the termination of the cited contract, we are enclosing copies of the memorandums from the Acting Assistant Solicitor, Defense Minerals, dated October 14 and October 19, 1954. We believe that Mr. Hoffland has made it clear as to what action you should take to terminate this contract.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/6)

JWALT/er 10/20/54

Enclosures: 2

APPROVED:

J. H. Hedges
Member, Bureau of Mines (2/6)

Thor H. Kiilsgaard
Member, Geological Survey (2/6)

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

October 19, 1954

Memorandum

To: The Administrator, DMEA

Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (lead-zinc)

In my memorandum of October 14 I stated that: "This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7 . . ."

Mr. Alt has pointed out to me this day that the status of Amendment No. 7 is uncertain, and that it may never have become effective.

Amendment No. 7 was prepared in this office and transmitted to the Administrator by memorandum dated June 28, which stated: ". . . the Operator should be required to obtain a new Owner's Consent to Lien on the form which we have attached for this purpose."

In a letter dated September 16 by Mr. Walter F. Storms of the Field Team to the Operator appears this statement:

> "In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?"

The foregoing is hardly a notice to the Operator that Amendment No. 7 is not effective unless or until accompanied by the new Owner's Consent to Lien. This office has no knowledge as to whether the new Owner's Consent to Lien has ever been received.

Assuming that Amendment No. 7 did go into effect either by virtue of having received the new Owner's Consent to Lien or by virtue of having waived it, my memorandum of October 14 stating that: "This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7 . . ." remains correct. If, on the other hand, Amendment No. 7 did not go into effect, then the case is a proper one for giving a notice of termination, which can easily be done by reference to DMEA Circular 33.

I suggest that copies of this memorandum and of my memorandum of October 14 be sent to the Field Team with instructions to act according to whatever the facts may be.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

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

October 14, 1954

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (Lead-Zinc)

By memorandum to me dated October 1 Mr. Griswold requested that I prepare a reply to a memorandum from Mr. King to the Operating Committee dated September 22 in which he recommends ". . . that the contract be terminated under the provisions of Article 8(b) of the contract."

This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7, the Operator having failed to comply with the requirement of resuming work not later than September 1. All that is necessary in these circumstances is to write to the Operator notifying him that the contract automatically terminated under the provisions of Amendment No. 7, and requiring him to take such winding-up actions as are provided for by the contract and as are deemed desirable.

I cannot prepare such a letter myself because I do not know what the status of the account with the Operator may be nor what reports or winding-up actions the Government may wish to require.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachment

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

October 14, 1954

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (Lead-Zinc)

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J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund/emd
Copy to: DMEA Docket
Solicitor'sDkt.
W.R.Griswold (2)

Attachment

J. L. Hofflund
chron.

DMEA Docket copy

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

October 19, 1954

Memorandum

To: The Administrator, DMEA

Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (lead-zinc)

In my memorandum of October 14 I stated that: "This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7 . . ."

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In a letter dated September 16 by Mr. Walter F. Storms of the Field Team to the Operator appears this statement:

> "In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?"

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I suggest that copies of this memorandum and of my memorandum of October 14 be sent to the Field Team with instructions to act according to whatever the facts may be.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund/emd

Copy to: DMEA Docket
Solicitor's Docket
W. R. Griswold
J. L. Hofflund
chron.

JLHoffland\end

Copy to: DMSA Docket
Solicitor's Docket
W. R. Griswold
J. L. Hoffland
chron.

File Copy
Surname

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

October 1, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Chief, Base Metals Division

Subject: Termination Agreement for Magma King Manganese Mining Company, Docket No. DMEA-2603, Contract No. Idn-2428, Pinal County, Arizona, Lead-Zinc

Will you please answer Mr. King's memorandum dated September 22, 1954. Information regarding Mr. King's request is contained in a memorandum to Walter R. Storms from William R. Hardwick, dated September 17, 1954. Copies of these memorandums are only in our docket.

W. R. Griswold

W. R. Griswold

JWALT:er 10/1/54

Copy to: Docket
Base Metals
Chron.

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DMEA REG IV

TELETYPE

Originator:
Ext.: Room:

Appro.:
Date: + 6/14/54
Time:
No.:
To: C. O. MITTENDORF DMEA WASH

Subject:

RE DOCKET NO. DMEA-2603, CONTRACT IDM-E428, MAGMA KING MANGANESE COMPANY. MATTER DISCUSSED IN OUR LETTER TO OPERATOR OF JUNE 8, 1954, TWO COPIES OF WHICH WERE FURNISHED TO YOU. OPERATOR IN REPLY TO OUR LETTER JUNE 8 REQUESTS AN ADDITIONAL 30 DAY EXTENSION OF THE RECESS PERIOD. PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED.

W. H. KING

Authorized:
CONFIRMATION

Sign original message and transmit to Room _____ in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 23 1954

224 New Customhouse
Denver 2, Colorado

September 22, 1954

AIRMAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Pinal County, Arizona

Enclosed are the original and three copies of a memorandum from William R. Hardwick, Mining Engineer, Tucson, Arizona, dated September 17, 1954, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, relative to nonresumption of work under the subject contract. Also enclosed are four copies of a letter dated September 16, 1954 from Walter R. Storms, Chief, Mining Methods Branch, Mining Division, Region IV, to Ralph J. Pomeroy, requesting advice as to their intentions regarding resumption of work.

Under the circumstances as recited in the foregoing we recommend that the contract be terminated under the provisions of Article 8(b) of the contract.

Please advise as to how we should proceed in the matter.

W H King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SEP 20 1954
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 23 1954

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

September 17, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Interim Report, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of a short interim report by W. R. Hardwick of the Bureau of Mines about DMEA Exploration Project Contract No. Idm-E428. Magma King Manganese Mining Co.'s last recess period expired on September 1, so Hardwick went to the property yesterday to see if work had been resumed. No work had been resumed and from conditions on the property, it would seem that the operator has no intention of resuming work. The road to the mine was badly washed out, but evidently no effort had been made to repair it. The only equipment remaining at the mine was the skip. The hoist, compressor, generator and electric pumps all have been removed from the property.

This office wrote to Mr. Ralph J. Pomeroy, president of the company, on September 16 and asked if the company intended to resume work. Amendment No. 7 to this contract provided that the contract would be terminated if work were not resumed by September 1. This amendment has been signed by Pomeroy and the DMEA Administrator, but Pomeroy has never returned signed copies of "Owner's Consent to Lien" which were to accompany this amendment.

Walter R. Storms

Walter R. Storms

CC W. H. King (8)
J. N. Faick
DMEA-2603
DF

WRStorms:frj

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

September 17, 1954

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on September 16, 1954. There was no one on the property and no indication that work on the contract would be resumed. The road was badly washed and the last half mile was impassable by automobile. This mine was visited last on June 2, 1954.

This short form contract was approved by W. H. King, Executive Officer, DMEA Field team Region IV, for the purpose of exploring a mineralized vein for lead-zinc ore. The contract provided for 400 feet of drifting, 200 feet of raise, and 500 feet of diamond drilling at an agreed estimated total cost of $23,100.00.

The contract was approved on October 23, 1952 and the starting points were set by John H. Soule' of the Bureau of Mines on October 31, 1952. From November 1952 to March 1953, the operator drove 194 feet of drift at a cost of $6,790.00. The operator then stopped work on the contract and has never resumed work. The contract has been kept alive by repeated requests by the operator for extensions of recess which have been granted. There appears to be little possibility that work on the contract will be resumed in the near future and it is recommended that the contract be terminated.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 8)
J. N. Faick
DMEA-2603
DF

WRHardwick:frj

... of the Interior
... Minerals Administration
Received
SEP 23 1954

COPY

September 16, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E428 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the mine road and intend to start work as soon as possible, I would suggest that you immediately write the DMEA Executive Officer in Denver. As you know, Amendment No. 7 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
J. N. Faick
DMEA-2603
DF

WRStorms:frj

File Copy
Surname
J.W. Alt
Jackson
Talbot
Selfridge
H.E. Munkow

500

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

JUL 1 - 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. King:

We are enclosing the original and five copies of Amendment No. 7, with Annex II, to the cited contract, which have been signed by this office for the Government. This is in accordance with our teletype to you of June 16, 1954 which was in reply to your teletype of June 14, 1954.

The legal department states that as the Operator is a lessee and the Owner's Consent to Lien in this case is on an old form, and as we have added a new royalty annex and have provided for a "pseudo certification", the Operator should be required to obtain a new Owner's Consent to Lien on the forms attached for this purpose.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge (GCS)
Chairman, Operating Committee

Enclosures 12

APPROVED:

J. H. Hedges (JHH)
Member, Bureau of Mines

Philip W. Guild (PWG)
Member, Geological Survey

JWAlt/bjl (6/29/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Gildersleeve
Mr. Bishop
Chron.

R.C.G.

UNITED STATES 140
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 28, 1954

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Acting Assistant Solicitor, DMEA

Subject: Magma King Manganese Mining Company, Docket No. DMEA-2603 (Lead-Zinc), Contract Idm-E428

Attached is Amendment No. 7 to the subject contract in satisfactory legal form for execution.

However, as the Operator is a lessee and the Owner's Consent to Lien in this case is on an old form, and as we have added a new royalty annex and have provided for a "pseudocertification," the Operator should be required to obtain a new Owner's Consent to Lien on the form which we have attached for this purpose.

Henry C Ruston
for J. L. Hofflund
Acting Assistant Solicitor

Attachments

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

June 28, 1954

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Acting Assistant Solicitor, DMEA

Subject: Magma King Manganese Mining Company, Docket No. DMEA-2603 (Lead-Zinc), Contract Idm-E428

Attached is Amendment No. 7 to the subject contract in satisfactory legal form for execution.

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/s/ Henry C. Rubin
for J. L. Hofflund
Acting Assistant Solicitor

Attachments

File Copy
Surname
Rubin

140

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

June 28, 1954

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Acting Assistant Solicitor, DMEA

Subject: Magma King Manganese Mining Company, Docket No. DMEA-2603 (Lead-Zinc), Contract Idm-E428

Attached is Amendment No. 7 to the subject contract in satisfactory legal form for execution.

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/s/ Henry C. Rubin
for J. L. Hofflund
Acting Assistant Solicitor

Attachments

HCRubin:ep 6-28-54

Copy to: Docket
Mr. Griswold (2)
Mr. Hofflund
Mr. Rubin
Chron.

File Copy
Surname

500

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

June 18, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Base Metals Division

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company
Contract No. Idn-F428

Will you please prepare Amendment No. 7 to the cited contract. This amendment is to allow the Operator to recess operations to not later than September 1, 1954, and is to extend the completion time by three months, or until October 23, 1954.

The date of the Contract is October 23, 1952. Amendment No. 5 changed the completion time from 18 to 21 months and allowed the operations to be recessed to May 1, 1954.

Amendment No. 6 recessed the operations to June 1, 1954.

In the event that the Operator does not resume work of the contract on or before september 1, 1954, the contract should automatically be terminated.

This amendment should include a pseudo-certification, but this should not prevent us from certifying it at a later date if the operation is resumed and a discovery is made.

J. W. Alt

JWAlt/bjl

Copy to: Docket
Base Metals
Chron.

File Copy
Surname
J. W. Carr
Samuel Hedges
Gould
Selfridge
F. E. Johnson
Rittenhouse

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

T E L E T Y P E

WRGriswold/bjl, Rm. 4058, Ext. 3346

Base Metals Div., DMEA, Interior

X XXXXXXXXXXXXXXXXX XXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated Working Fund to Office of Secy.)

Date: JUN 16 1954

To: W. P. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Peurtt June 14, Docket DMEA-2603, Norma King Manganese Mining Company. We will prepare Amendment No. 7, allowing 90-day extension for recess and like extension for completion time of contract.

George C. Selfridge
Chairman, Operating Committee

written 6/16/54

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals (DMEA)
Mr. Bishop (USBM)
Mr. Gildersleeve (USGS)
Accounts
Chron.

SENT
JUN 16 1954
Clerical Service Section

R.C.B.

Mr. C. O. Mittendorf
June 14, 1954
(unattended service after 4:15)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 15 1954

DN 235 BUREAU MINES 6-14-54 4-08 PM

C O MITTENDORF

RE DOCKET NO. DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE COMPANY. MATTER DISCUSSED IN OUR LETTER TO OPERATOR OF JUNE 8,1954, TWO COPIES OF WHICH WERE FURNISHED TO YOU. OPERATOR IN REPLY TO OUR LETTER JUNE 8 REQUESTS AN ADDITIONAL 30 DAY EXTENSION OF THE RECESS PERIOD. PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED.

W H KING

Denver, Colo.

JUN 15 8 25 AM '54
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

JUN 10 1954

224 New Customhouse
Denver 2, Colorado

June 8, 1954

Memorandum

To: C. O. Mittendorf

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company's Ajax Lead-Zinc Mine, Pinal County, Arizona.

For your information, relative to operations under the subject contract, we are enclosing the following:

1. Three copies of a memorandum report dated June 2, 1954, from William R. Hardwick, Mining Engineer, Tucson, Arizona, and transmittal thereof dated June 3, 1954, from the Chief, Mining Methods Branch, Mining Division, Region IV.
2. Two copies of a letter from this office requesting advice from the operator relative to resumption of operations.

W H King
W. H. King

Enclosures

June 3, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Interim Report, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 6 copies of a short interim report by W. R. Hardwick of the Bureau of Mines on Exploration Project Contract No. Idm-E428.

Amendment No. 6 of this contract provided that work was to start again at the Ajax mine on or before June 1. Hardwick visited the mine on June 2 and found that no recent work had been done. Evidently none is contemplated as all machinery and equipment has been removed from the property.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA—2603
DF

WRStorms:frj

June 2, 1954

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2503, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on June 2, 1954. There was no one at the property and the compressor, hoist, pumps, and all machinery has been removed. There is no indication that work will be resumed in the near future.

A Mr. Nicolas, a prospector in the district, was living in the camp and he stated that he had not seen any of the Manganese King company officials recently and knew nothing of their plans.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 6)
DMEA-2503
DF

WRHardwick:frj

224 New Customhouse
Denver 2, Colorado

June 8, 1954

REGISTERED MAIL

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Co.
547 N. Arizona Ave.
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Your attention is directed to the provisions of Amendment No. 6, Contract Idm-E428, which stipulates that work shall be resumed under the terms of the contract on or before June 1, 1954. In that respect, we have been informed that on inspection of the property June 2, 1954 there was no one at the property and that the compressor, hoist, pumps, and all other machinery had been removed.

Your failure to resume operations as stipulated by Amendment No. 6 places you in default of the contract. Therefore we will appreciate advice from you at your earliest convenience as to your plans relative to resumption of operations.

If you plan to resume operations within the near future you should request further extension of the recess period for the consideration of the Defense Minerals Exploration Administration.

Yours very truly,

W H King

W. H. King
Executive Officer
DMEA Field Team, Region IV

cc: Contract
COMittendorf (2)
AHKoschmann
WRStorms
JWTownsend
Chron.

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

224 New Customhouse
Denver 2, Colorado

May 12, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 6 to Contract Idm-E428 which has been executed in conformance with authorization in a teletype from W. S. Martin, Acting Chairman, dated April 29, 1954, to extend the period of recess of operations from May 1, 1954 to June 1, 1954. Also enclosed are three copies of a letter from the operator's attorney requesting an extension of the recess period.

Copies of the amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

John F. Shaw
For W. H. King

Enclosures

RECEIVED
MAY 20 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

547 North Arizona Ave.
Chandler, Arizona

April 26, 1954.

Mr. W. R. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado.

Re: Docket DMEA 2603
Contract Idm-E428

Dear Mr. King:

The above project, as you will note from the record, has been recessed to May 1, 1954. However, at the last minute we find that Magma King will not be able to actually commence work on this project May 1, 1954, as planned. Magma King President Ralph J. Pomeroy has been delayed for three weeks in New York and our plans to commence operation cannot be put in effect until his return. I therefore make this request as attorney for Magma King Manganese Mining Company for an additional thirty day extension of the recess and completion date of the above contract.

Sincerely yours,
Magma King Manganese Mining Co.

John Vanlandingham

JV/lf
cc: Mr. Walter R. Storms
Mining Methods Branch
Mining Division, Region IV
Tucson, Arizona

COPY

File Copy
Surname

J.W. Alt.
Griswold
Martin
F. Johnson

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

APR 29 1954

T E L E T Y P E

JWAlt/bjl, Rm. 4058, Ext. 3669

Base Metals Div., DMEA, Interior

XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated Working Fund to the Office of the Secretary

Date:

To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt April 28, 1954, Docket DMEA-2603, Contract Idm-P428, Magma King Manganese Mining Company. This is your authority to grant thirty-day extension of recess period, as requested by you.

ACTING Chairman, Operating Committee

Written 4/29/54

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kinkel
Mr. Bishop
Accounts
Chron.

SENT
APR 29 1954
Clerical Service Section

R.C.G.

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DMEA REG IV

TELETYPE

Originator:
Ext.: Room:

Appro.:
Date: 4/28/54
Time:
No.:
To: C. O. MITTENDORF DMEA WASH

Defense Mine
RF
MAY 3 1954

Subject: REFERENCE DOCKET DMEA-2603, CONTRACT IDM-E428, MAGMA KING MANGANESE MINING COMPANY. OPERATOR REQUESTS A 30 DAY EXTENSION OF RECESS PERIOD DUE TO DELAYED RETURN OF POMEROY AS OPERATIONS CANNOT BE RESUMED UNTIL HE RETURNS FROM NEW YORK. PLEASE TELETYPE AUTHORIZATION FOR EXTENSION.

W H King
W. H. KING

Authorized:
CONFIRMATION

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

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

FEB 23 1954

224 New Customhouse
Denver 2, Colorado

February 17, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 5 to Contract Idm-E428 which has been executed in conformance with the authorization from the Chairman of the Operating Committee, by teletype dated January 27, 1954, to extend the recess period to May 1, 1954, extend the period for completion of the project work from 18 months to 21 months and amend article 6 of the contract form by substituting the provisions of Annex I attached to the amendment and made a part thereof. Also enclosed are three copies of a letter from the operator requesting an extension of the recess and completion period.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W H King
W. H. King

Enclosures

RECEIVED
FEB 26 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

xxxxxxxxxxxxx
xxxxxxxxxxx
547 North Ariz. Ave.
Chandler, Arizona

January 21, 1954

Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We are herewith requesting extension of recess of operation on our project, Docket DMEA2603 Contract Idm-2428, pursuant to your telephone conversation with our attorney Mr. John Vanlandingham.

The present financial condition of our company indicates that we will not have proceeds to renew operations on this project by February 1, 1954, as originally planned. We therefore request this extension of the recess of ninety days so that work can be commenced on or before May first. We also request a corresponding extension of a completion date of this contract.

Your immediate attention and reply will be appreciated.

Sincerely yours,
Magma King Manganese Mining Co.

Ralph J. Pomeroy, President

RJP/lf
cc: Mr. Walter R. Storms

N. B. Please note our change of address.

COPY

FILE COPY
SURNAME:

Griswold
Selfridge
Mathews

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

N. S. in R. R.

DMEA

WRGriswold/bjl
3669 4058

January 27, 1954

W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt January 25, 1954, Docket DMEA-2603, Magma King Manganese Mining Company, Contract Idm-2428. You are authorized to grant requested ninety-day extension of recess period and corresponding period of completion.

George C. Selfridge
Chairman, Operating Committee (243)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Accounts
Mr. Bishop
Mr. Kinkel
Chron.

SENT
JAN 27 1954
Clerical Service Section

Mr. C. O. Mittendorf
1-26-54
(unattended service after 4-15)

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
JAN 26 1954

DN 235 BUREAU MINES 1-25-54 4-26 PM

C O MITTENDORF

REFERENCE DOCKET DMEA ~~XXXXXXX~~ 2603, CONTRACT IDM-E428, MAGMA KING MANGAEXXX MANGANESE MINING CO. OPERATOR REQUESTS 90 DAY EXTENSION OF RECESS PERIOD EFFECTIVE FEBRUARY 1,1954 AND CORRESPONDING EXTENSION OF COMPLETION PERIOD BECAUSE OF FINANCIAL DIFFICULTIES. PLEASE TELETYPE AUTHORIZATION FOR PREPARATION OF NECESSARY AMENDMENT.

W H KING

Denver, Colo.

JAN 26 8 49 AM '54
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

224 New Customhouse
Denver 2, Colorado

November 24, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 4 to Contract Idm-E428 which has been executed in conformance with authority contained in a teletype from the Chairman of the Operating Committee dated November 8, 1953 to extend the period of recess of operations from October 1, 1953 to February 1, 1954.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

Enclosures

RECEIVED
DEC - 4 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

11-27

FILE COPY
SURNAME: 9/B

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

Keating
Selfridge
Mitchell

DEPARTMENT OF THE INTERIOR
AGENCY: DMEA

Originator: AGKeating/bjl
Ext.: 3669 Room: 4058

Date: November 5, 1953
To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt November 4, 1953, Docket DMEA-2603, Contract Idm-D428, Macma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona. We approve your preparing and executing an amendment for recession of work to February 1, 1954.

George C. Selfridge
Chairman, Operating Committee

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Audits
Chron.

SENT
NOV 6 1953
Clerical Service Section

R.C.S.
11-6-53

Mr. C.O. Mittendorf
11-5-53
8:00 A.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 5 1953

DN 235 BUREAU MINES 11-4-53 3-54 PM

C O MITTENDORF

REFERENCE DOCKET 26&XXX 2603 CONTRACT IDM-E428, MAGMA KING MANGANESE COMPANY, OUR MEMORANDUM OCTOBER 29, 1953. THE FOLLOWING TELEGRAM JUST RECEIVED FROM THE OPERATOR -- "HAVE JUST RETURNED FROM NEW YORK WHERE I HAVE BEEN ASSURED FINANCES TO CONTINUE PROGRAM UNDER DMEA CONTRACT 39XXX NO. 2603 HOWEVER FINANCES WILL NOT BE AVAILABLE UNTIL JAN 1. PLEASE ADVISE IF RECESS COULD BE CONTINUED UNTIL THEN - SIGNED, RALPH J POMEROY, PRESIDENT ".

PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED IN THE MATTER.

W H KING

Denver, Colo.

NOV 5 9 49 AM '53
RECEIVED
MAIL ROOM
WASHINGTON, D.C.
MAIL ROOM
WASHINGTON, D. C.

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

224 New Customhouse
Denver 2, Colorado

October 29, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603, (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona

In conjunction with the advice contained in the last sentence of a teletype dated October 13, 1953 from the Chairman of the Operating Committee, which was in reply to our memorandum to you of October 6, 1953, we are enclosing the original and three copies of a memorandum report from William R. Hardwick, Mining Engineer, Tucson, Arizona, dated October 23, 1953, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, which are relevant to termination of the subject contract.

We concur in the recommendations of the Chief, Mining Methods Branch, that the contract be terminated by mutual agreement and that a certification of discovery or development be issued.

W. H. King

W. H. King

Enclosures

Mining Division
Date Rec'd.
OCT 23 1953
BUREAU OF MINES
Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION
TUCSON, ARIZONA

October 23, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

In regard to John Shaw's memorandum of October 13, with copy of a teletype from George C. Selfridge, Chairman of the DMEA Operating Committee, asking for a memorandum report containing our recommendations relative to termination of contract Idm-E428, I had W. R. Hardwick and John F. Haynes of the Bureau of Mines visit the Ajax mine on October 21 in order to try to examine the work done under this contract and to take some samples in the contract drift. However, Hardwick and Haynes were unable to enter the 176-foot level because of water. Samples were taken from two ore piles on the surface, the ore having been produced from the contract drift, but assays have not been received to date for these samples.

In the operator's narrative report which accompanied Forms MF-104 and MF-104A for February 1953, it stated: "Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations". Again in the operator's narrative report for March 1953, it stated that the entire 26 feet of drift was in low-grade ore. The Bureau of Mines engineer (T. M. Romslo) in his progress report for March, stated: "The Operator's Narrative Report is considered adequate. His statement that the entire 26 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays infuture reports". However, the project was recessed shortly after the above report was written so evidently no samples were taken. Unfortunate Sent.

CC W. H. King (7)
DMEA-2603
DF

FOR VICTORY
BUY UNITED STATES SAVINGS BONDS AND STAMPS

Inasmuch as the operator has submitted written statements, signed by Frank L. Metler who had direct charge of the project work, that ore was found in the contact drift, I recommend that the contract be terminated by mutual agreement with the certification of discovery being made a part of the termination agreement.

Probably no Ent. Auth. termination with proof and, I suppose

A short report by W. R. Hardwick is attached. You will note that Mr. Anett stated that Mr. Ralph J. Pomeroy, president of the company and the man who signed the contract, said that he intended to resume operations on November 1. However, a letter sent to Mr. Pomeroy at Phoenix on October 8 by this office was never answered, nor was a teletype message sent him on October 22 answered.

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

October 23, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

John F. Haynes of the Bureau of Mines and the undersigned engineer visited the Ajax mine on October 21, 1953 for the purpose of getting samples and other information for a final report. There were no regular employees of Magma King Manganese Mining Co. on the property. However, a Mr. Anett was operating the pump and removing the water from the mine. Mr. Anett stated that he owned property nearby and was living in one of the Magma King Manganese Mining Co.'s houses. Mr. Ralph J. Pomeroy had asked Mr. Anett to pump the water from the shaft. Mr. Anett stated that Mr. Pomeroy had said that he intended to resume operations on the DMEA contract on the first of November.

When the pumping was completed, Haynes and the undersigned attempted to enter the mine, but were unable to get farther than the bottom of the shaft. The water had been up approximately 20 feet above the 174 level. Two dump samples were taken, a sample of a pile of picked high-grade ore containing approximately 20 tons, and a sample of a pile of low-grade milling ore containing 100 tons. All of this ore had been mined from the drift which was completed under contract Idm-E428.

Mr. Anett said that Mr. Pomeroy might be in Phoenix that night and he was requested to tell Mr. Pomeroy that he should let the Bureau of Mines Tucson office know immediately what his plans were with respect to resuming operations.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FOR VICTORY BUY UNITED STATES SAVINGS BONDS AND STAMPS

CC W. H. King (Orig. & 7)
DMEA-2603
DF

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

FILE COPY
SURNAME:

DMEA

A. G. Keating
3669 4058

October 13, 1953

W. H. King, Executive Officer, Region IV, Denver, Colorado

Reurmemo October 6, 1953, DMEA 2603 Magma King Manganese Mining Company, Idm-E428. Suggest project be terminated by mutual agreement if (1) it can be certified; (2) if work to date has not definitely disproved objectives and there is still a possibility of certification with additional work, in which case the termination agreement should include a clause guaranteeing repayment of Government's participation on a royalty basis on future production as though the project had been certified; and (3) if the work to date has definitely indicated that the project would never be certified if it were completed, in which case the termination

R.C.G. 10-13-53

agreement should not include a repayment clause. Washington should be furnished detailed information supporting the type of action to be taken, and will prepare the agreement for execution by you.

George C. Selfridge (fw)

Chairman, Operating Committee

SENT
OCT 13 1953
Clerical Service Section

FILE COPY
SURNAME:

Keating

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

AGENCY DMEA

ORIGINATOR: A. C. Keating
EXT: 3669 Room 4058

Date: October 12, 1953

To: W. H. King, Executive Officer, Region IV, Denver, Colorado

Reurlet Docket DMEA 2603 Magma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona. Contract Idm-E428 if the project is to be certified suggest you endeavor to arrange with Operator termination by mutual consent and advise us regarding your recommendations for certification.

Chairman, Operating Committee

AGKeating/hmj
(10-12-53)
CC to: Docket
Adm. R. File
Op. Committee
Audits
Mr, Kinkel
Mr. Bishop
Base Metals Division (DMEA Rm 4058)
Chron.

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

224 New Customhouse
Denver 2, Colorado

October 6, 1953

AIRMAIL

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed is the following material relative to the status of work under the subject contract:

1. Original and three copies of an interim report dated October 2, 1953 by William R. Hardwick, Mining Engineer, Tucson, Arizona, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date.

2. One copy of Progress Report dated April 15, 1953 from T. M. Romslo, Mining Engineer, Tucson, Arizona, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, pertaining to an inspection of progress under the subject contract for the month of March 1953.

Amendment No. 3, dated June 26, 1953, extended the life of the contract from 12 months to 18 months and authorized a recess of operations from June 1, 1953 to October 1, 1953.

As indicated in the interim report under item 1 above, the operator has not resumed operations as stipulated in Amendment No. 3 and apparently he does not intend to resume operations at any time.

Before we contact the operator in the matter of noncompliance with the contract as amended we will appreciate your advice by teletype as to how we should proceed in the matter.

W. H. King

W. H. King

Enclosures

Mining Division
Date Rec'd.
OCT 5 1953
BUREAU OF MINES
Denver Tucson, Arizona

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

October 2, 1953

MEMORANDUM

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 6 copies of a short interim report on contract Idm-E428 by W. R. Hardwick of the Bureau of Mines. As the company's recess expired on October 1, 1953, Hardwick visited the property today to see if work under the contract had been restarted.

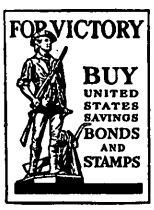
The mine was full of water and no work had been started. A machinery salesman, who was at the property examining the equipment, told Hardwick that he understood that all the machinery was for sale.

We have not contacted company officials but it would seem that no further work was planned.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

October 2, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Arizona, Docket-2603, Contract Idm-E428.

The Ajax Lead-Zinc Mine was visited on October 2, 1953. No one connected with the Magma King Manganese Company was on the property. There were no signs that work on the contract would be resumed.

A salesman from Western Machinery Company stated that he understood that the machinery was for sale.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 6)
DMEA-2603
DF

FOR VICTORY
BUY UNITED STATES SAVINGS BONDS AND STAMPS

FILE COPY
SURNAME:

Keating

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

SEP 25 1953

N.S. in Q.P.

Docket No. DMEA 2603 Magma King Manganese Mining Co. (Lead-Zinc)
Ajax Mine, Pinal County, Arizona, Contract No. Idm-8428

Contract dated October 23, 1952, Form MF-200 A, (February 1952) to be completed within 12 months, extended by amendment six months to April 23, 1954.

Exhibit "A" Digest

Drifting 400 ft. at $35 per foot	$ 14,000.00
Raising 200 ft. at $33 per foot	6,600.00
Diamond drilling 500 ft. at $5.00 per foot	2,500.00
Total estimated cost of the project	$ 23,100.00
Government participation at 50%	11,550.00
Total progress to date - drifting 168 ft. at $35.00	
Expenditures to March 1953	$ 5,880.00
Remainder	17,220.00

Amendment 1 - April 1, 1953 - Recess for 30 days to May 1, 1953.
Amendment 2 - May 20, 1953 - Recess to June 1, 1953.
Amendment 3 - June 1, 1953 - Recess 4 months to October 1, 1953, Extension of time for completion from 12 months to April 1, 1954.

Field Team examination March 5, 1953, reported work conforms to contract. Reported a quartz vein about 2½ ft. wide containing scattered lead-zinc-copper values - no assays. The work has been efficiently done.

A diamond drill hole drilled at Operator's expense revealed nothing of value.

February 5, 1953 - Operator reports considerable chalcopyrite in broken material in face of water course - grab sample 0.02 Au., 2.0 oz. Ag., 6.90 Cu.

Continued recesses requested first to correct bad ventilation conditions and increasing flow of water not taken care of in contract, then changes being made not completed, then to study and re-map the program of work, and to do some diamond drilling and raising before continuing drifting.

The mine was opened in 1906 with some small production averaging 8% Pb., 6% Zn., 0.14 % Cu., and 1.2 ozs Ag. per ton. The mine is equipped for small operation and the Operator will do all necessary preliminary work at his own expense.

A deposit of lead-zinc ore has been partially developed by a shaft, and ore has been cut by diamond drilling north of the shaft. It is estimated that probable ore may be disclosed by the exploration work in an amount of some 14,000 tons of 10% combined lead and zinc.

The project appears to be reasonable and has an opportunity to indicate sufficient ore to justify a small operation under favorable economic conditions.

The recess to October 1, 1953, can do no harm provided the Operator starts work on that date as agreed.

A. G. Keating

AGKeating/hmj
(9/22/53)
CC to: Docket
Mr. Mittendorf
Mr. F. E. Johnson
Mr. Selfridge
Mr. Keating
Mr. Alt
Mr. Griswold
Chron.

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

224 New Customhouse
Denver 2, Colorado

June 26, 1953

Memorandum

To: C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 3, Contract Idm-E428, Docket 2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Amendment No. 3 to Contract Idm-E428. Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a teletype from this office recommending this amendment and three copies of a teletype from the Chairman of the Operating Committee authorizing this amendment.

W. H. King
W. H. King

Enclosures

cal 6-29

1-1027
(April 1948)

UNITED STATES
DEPARTMENT OF THE INTERIOR

COPY

AGENCY .....

Originator:

TELETYPE

Ext.: ..... Room: .....

Appro.:
Date: WASH DC BU MINES 310 6-4-53 11-20 AM
Time:
No.:
To: W H KING

Subject:

REUTT DOCKET DMEA 2603 MAGMA KING MANGANESE MINING COMPANY, CONTRACT IDM-E428. WE APPROVE RECESS OF FOUR MONTHS FROM JUNE 1, 1953 TO OCTOBER 1, 1953 WITH LIKE EXTENSION FOR TIME FOR COMPLETION OF THE WORK AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM.

GEORGE C SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

COPY

TELETYPE

BUR MINES DN 235 6-1-53 3-45 PM

C O MITTENDORF

WE HAVE RECEIVED THE FOLLOWING TELEGRAM FROM RALPH J. POMEROY, PRESIDENT, MAGMA KING MANGANESE MINING COMPANY, CONTRACT NO. IDM-E428 DOCKET NO. DMEA 2603
"I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTHS RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603."
WE RECOMMEND THAT THIS REQUEST BE GRANTED. PLEASE TELETYPE YOUR APPROVAL.

W H KING

COPY

TELEGRAM

W H KING, EXECUTIVE OFFICER DMEA FIELD TEAM REGION 4
224 NEW CUSTOM HOUSE

I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTH RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603.

RALPH J POMEROY PRESIDENT MAGMA KING MANGANESE MINING CO

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY .....

TELETYPE

Originator:
Ext.: ..... Room: .....

Appro.:
Date: June 1, 1953
Time:
No.:
To: C.O. Mittendorf, DMEA, Washington

BD

Subject:

We have received the following telegram from Ralph J. Pomeroy, President, Magma King Manganese Mining Company, Contract No. Idm-E428, Docket No. DMEA 2603: "I regret the need for asking for a four months continuation to the recess already granted this company. We have remapped the drift and plan to request some diamond drilling and a raise near the face of the drift before continuing the balance of the drifting project. This we feel should be coordinated with the price of lead and zinc and since the future outlook has not improved it is hoped this four month recess will make continued operation more logical. Reference to Contract Docket Number DMEA 2603."

We recommend that this request be granted. Please teletype your approval.

Authorized: W.H. King

W. H. King

CONFIRMATION ✓

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

FILE COPY
SURNAME:

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

Keating
Secretary

BP

n.s. in R. v R.

DMEA

AGKeating/bjl
3669 4058

June 3, 1953

W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt docket DMEA 2603, Magma King Manganese Mining Company, Contract Idm-5428. We approve recess of four months from June 1, 1953 to October 1, 1953 with like extension for time for completion of the work and suggest you prepare and execute amendment in compliance with Operating Committee memorandum.

Chairman, Operating Committee

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals (DMEA)
Mr. Bishop (USBM)
Mr. Kinkel (USGS)
Chron.

SENT
JUN 4 1953
Clerical Service Section

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED

JUN 2 1953

M. C. O. Mittendorf
6-2-53
7:45 A.M.
pb

BUR MINES DN 235 6-1-53 3-45 PM

C O MITTENDORF

WE HAVE RECEIVED THE FOLLOWING TELEGRAM FROM RALPH J. POMEROY, PRESIDENT, MAGMA KING MANGANESE MINING COMPANY, CONTRACT NO. IDM-E428, DOCKET NO. DMEA 2603

"I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTHS RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603."

WE RECOMMEND THAT THIS REQUEST BE GRANTED. PLEASE TELETYPE YOUR APPROVAL.

W H KING

Denver, Colo.

JUN 2 8 30 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:
500

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

Keating
Chandler
Bruinsma

MAY 2 6 1953

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Mine, Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. King:

This is in reply to your memorandum of April 17, 1953, regarding the comment of the Operator relative to the withholding of Government funds during a recession of work for the month of March.

The withholding of funds during a recession period is required principally to take care of items that may not be allowed by the certifying officer for that period. The amount to be withheld may be determined by your office in consultation with your certifying officer when necessary.

It may be advisable for you to inform the Operator so that he may more clearly understand the reasons for withholding funds.

Sincerely yours,

SIGNED

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

AGKeating/hmj
(5/20/53)
CC to: Docket
Adm.R. File
Op. Committee
Base Metals Division
Mr. Kinkel
Mr. Bishop
Mr. Keating
Chron.

MDL 5-26-53

500

FILE COPY
SURNAME:

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

REWRITTEN 5/20/53

KEATING
CHAMBERS
~~GRISWOLD~~
Keating
Griswold
Selfridge
Whitenack

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

MAY 2 6 1953

Re: Docket No. [illegible] 2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Mine, Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. King:

This is in reply to your memorandum of April 17, 1953, regarding the comment of the Operator relative to the withholding of Government funds during a recession of work for the month of March.

The withholding of funds during the recession period, in this case, is required principally to take care of items that may not be allowed in the final audit should no further work be done. The amount to be withheld may be determined by your office in consultation with your certifying officer and the DMEA auditors when deemed advisable.

It may be advisable for you to inform the Operator so that he may more clearly understand the reasons for withholding funds.

Sincerely yours,

George C. Selfridge
(JHB)
Chairman, Operating Committee

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JHB)

A. R. Kinkel, Jr.
Member, Geological Survey (JHB)

AGKeating/hmj
(5/25/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Division
Mr. Kinkel
Mr. Bishop
Mr. Keating
Chron.

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

224 New Customhouse
Denver 2, Colorado

April 17, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company (Lead-Zinc)

Enclosed for your information is a copy of a letter dated April 15, 1953 from the president of the Magma King Manganese Mining Company in reply to our letter dated April 8, 1953. Copies of the letter dated April 8 were sent to your office.

W. H. King
W.H. King

Enclosure

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

224 New Customhouse
Denver 2, Colorado

May 20, 1953.

MAY 25 1953

RECEIVED
JUN 3 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 2 to Contract Idm-E428 (Lead-Zinc), Docket DMEA-2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-E428, Docket DMEA-2603.

Copies of this Amendment have been given to the Operator, Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a letter from the Operator requesting this Amendment, three copies of a telegram from the Executive Officer to the Administrator requesting approval, and three copies of a telegram from the Chairman of the Operating Committee to the Executive Officer, Region IV, approving this Amendment.

W. H. King
W. H. King

Enclosures

cee 5/25

COPY

WASH DC BU MINES 310 5-5-53 2-14 PM

W H KING

REURTT DOCKET DMEA-2603, MAGMA KING MANGANESE MINING COMPANY, AJAX MINE, ARIZONA, CONTRACT IDM-E428. WE APPROVE REQUEST BY OPERATOR FOR THIRTY-DAY ADDITIONAL RECESS.

G.C. SELFRIDGE, CHAIRMAN

COPY

DN 235 BUREAU MINES 5-1-53 1-37 PM

C O MITTENDORF

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGRET THIS DELAY, BUT WE FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED." WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W.H. KING

COPY

MAGMA KING
MANGANESE MINING COMPANY
Superior, Arizona

April 30, 1953

Mr. W.H. King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Request is hereby made that an additional 30 day recess be granted the project on the Ajax mine DMEA Docket 2603. We regret this delay, but we find that the changes we are making have not yet been completed.

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

RJP/lf

Mr. C. O. Mittendorf
5/4/53
7:45 AM.
BS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

DN 235 BUREAU MINES 5-1-53 1-37 PM

C O MITTENDORF

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "431735 XXXXXX "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PRPXXX PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGRET THIS DELAY, BUT WE FUXXX FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED."

WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W H KING

Denver, Colo.

MAY 4 8 21 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY Bureau of Mines, Reg. IV

TELETYPE

Originator:
Ext.: Room:

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 5 1953

Appro.:
Date: 5/1/53
Time:
No.:
To: C. O. MITTENDORF DMEA WASH.

Subject:

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGRET THIS DELAY, BUT WE FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED." WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W. H. King
W. H. KING

CONFIRMATION

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

FILE COPY
SURNAME:

Keating
Smith
Hedges
Fitzhugh
Selfridge
Johnson
Mottlewitz

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

DMEA

n.s. in R.J.R.

AGKeating/bjl
3669 2616

May 5, 1953

W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt Docket DMEA-2603, Magma King Manganese Mining Company, Ajax mine, Arizona, Contract Idm-E428. We approve request by Operator for thirty-day additional recess.

George C. Selfridge

G. C. Selfridge, Chairman
Operating Committee, DMEA

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Accounts
Chron.

SENT
MAY 5 1953
Clerical Service Section

Docket copy

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

224 New Customhouse
Denver 2, Colorado

April 17, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 1 to Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company (Lead-Zinc)

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E428. Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a letter from the operator requesting this amendment, three copies of a teletype from the Executive Officer, Region IV, to the Administrator requesting approval of this amendment, and three copies of a teletype from the Chairman of the Operating Committee to the Executive Officer approving this amendment.

W.H. King
W.H. King

Enclosures

RECEIVED
APR 30 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

5/15

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

224 New Customhouse
Denver 2, Colorado

April 8, 1953

RECEIVED
APR 13 1953

Memorandum

To: C.O. Mittenderf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company

Enclosed are two copies of a letter dated April 3, 1953 from the Magma King Manganese Mining Company and two copies of our reply.

W. H. King

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

April 8, 1953

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Dear Mr. Pomeroy:

Reference is made to your letter dated April 3, 1953, regarding withholding the percentage of Government participation in the cost of Exploration Project Contract Idm-E428 for the month of March 1953.

We have received the following instructions from the Washington office: "Any agreement for the suspension of operations should provide also for the resumption of operations, subject to any contingencies that may be agreed upon. The agreement should also provide for whatever report may be deemed necessary from the operator, for the preservation of any equipment in which the Government has an interest, and for withholding a sufficient sum to secure the Government's interest in equipment and to procure the making of suitable reports, present or future. The amount withheld might be more or less than 10 percent, depending upon circumstances."

If you have any further comments please advise us.

Very truly yours,

W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region IV

JFS:jp
cc Contract
Chron
WRStorms
AHKoschmann (2)

COPY

MAGMA KING MANGANESE MINING COMPANY
Superior - Arizona

Office
532 Security Building
Phoenix, Arizona

April 3, 1953

Mr. W.H.King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

I am in receipt of your letter of April 1, 1953 and the six copies of the Amendment No. Idm-E428. I have signed the same, but it is impossible to immediately affix the Corporate seal as at the present time it is in New York City. The Amendment is acceptable and as soon as it is possible to have the Corporate seal affixed I will return them to your office.

In the meantime would you please clarify the reason for withholding the percentage of the Governments participation in the cost of the project for the month of March, 1953. Inasmuch as the work has been done and the company has paid both Government participation and our own costs we feel that there should be no delay in payment by the Government because of the recess as requested.

Thanking you for your prompt attention, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

RJP/lf

COPY

TELETYPE

WASH DC BU MINES 310 3-30-53 2-45 PM

W H KING,

REURTEL MAGMA KING MANGANESE MINING COMPANY DOCKET 2603 CONTRACT IDM-E428 WE APPROVE RECESS OF THIRTY DAYS WITH WORK TO BE RESUMED MAY 1, 1953 AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM 18 DATED MARCH 9th.

GEORGE C SELFRIDGE

COPY

TELETYPE

C O MITTENDORF
WASH DC BU MINES 319

THE FOLLOWING REQUEST HAS BEEN RECEIVED FROM MAGMA KING MANGANESE MINING COMPANY, DOCKET DMEA 2603, CONTRACT IDM-E428 "WE HAVE BEEN EXPERIENCING SOME DIFFICULTIES IN THE AJAX MINE IN VENTILATION AND INCREASING AMOUNT OF WATER WHICH WE ARE ENCOUNTERING IN OUR DEVELOPMENT PROGRAM. IN ORDER TO CORRECT THESE MATTERS WHICH ARE NOT INCLUDED IN OUR DMEA CONTRACT, WE REQUEST THIRTY DAY RECESS WITH WORK BEING RESUMED THE FIRST OF MAY." PLEASE GIVE US YOUR RECOMMENDATIONS BY RETURN TELETYPE.

W H KING

C
O
P
Y

224 New Customhouse
Denver 2, Colorado

March 27, 1953

Mr. Ralph J. Pomeroy, President
Manganese Mining Company
Superior, Arizona

Dear Mr. Pomeroy:

This will acknowledge receipt of your letter dated March 23, 1953 requesting a thirty day recess of work under Contract Idm-E428. This request has been forwarded to our Washington Office for approval.

Very truly yours,

/s/ W. H. King

W. H. King
Executive Officer
Field Team, Region IV

C
O
P
Y

MAGMA KING
Manganese Mining Company
Superior, Arizona

March 23, 1953

Mr. W. H. King
Executive Office, D.M.E.A.
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We have been experiencing some difficulties in the Ajax Mine in ventilation and increasing amount of water which we are encountering in our development program. In order to correct these matters which are not included in our D. M. E. A. contract, we request a thirty day recess with work being resumed the first of May.

Hoping this meets with your approval, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

FILE COPY
SURNAME:

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

Keating
Miranda
Selfridge
Burton
Hedges
Mitchell

n.s. w P.J.R.

Base Metals Div. DMEA

AGKeating 3669 2616

March 27, 1953

Wl R. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

RE:DOCKET, MAMMA KING MANGANESE MINING COMPANY DOCKET 2603 CONTRACT IDM-2428
WE APPROVE RECESS OF THIRTY DAYS WITH WORK TO BE RESUMED MAY 1, 1953
AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH
OPERATING COMMITTEE MEMORANDUM 18 DATED MARCH 9TH.

George C. Selfridge

CHAIRMAN OPERATING COMMITTEE (246)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals Div.
A. G. Keating
Accounts
Confirmation
Chron.

SENT
MAR 30 1953
Clerical Service Section

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

224 New Customhouse
Denver 2, Colorado

March 27, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 30 1953

Memorandum

To: C. G. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603, Contract Idm-B428, Magma King Manganese Mining Company.

Enclosed for your consideration is a request for recess of work under the terms of Contract Idm-B428. This request was transmitted to you by teletype on March 26, 1953.

W. H. King
W. H. King

Enclosure

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY Bureau of Mines

Originator:

TELETYPE

Ext.: Room:

Appro.:
Date: March 26, 1953
Time:
No.:
To: C. O. Mittendorf

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

DMEA Washington 25, D. C.

Subject:

The following request has been received from Magma King Manganese Mining Company, Docket DMEA 2603, Contract Idm-E428;

"We have been experiencing some difficulties in the Ajax Mine in ventilation and increasing amount of water which we are encountering in our development program. In order to correct these matters which are not included in our DMEA contract, we request a thirty day recess with work being resumed the first of May."

Please give us your recommendations by return teletype.

Authorized:

W. H. King

W. H. King

JFS:ld

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

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

224 New Customhouse
Denver 2, Colorado

January 9, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 15 1953

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc), Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report Form MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data for the period of November, 1952, pertaining to DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona.

W. H. King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 24 1952

November 17, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2603, (Lead-Zinc) Magma King Manganese Co., Pinal County, Arizona

Enclosed are four copies of the final report on subject dockets.

The contract has been signed and is in effect.

W. H. King
W. H. King

Cedar Lewis
for A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

September 30, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2603, (Lead-Zinc) Magma King Manganese Co., Ajax Mine, Pinal County, Arizona

Enclosed are nine copies of the final engineering report on DMEA-2603 by T. M. Romalo of the Bureau of Mines.

The applicant originally requested $59,727, but during the field examination he revised his proposal for exploration work in the amount of $23,100.

The examining engineer recommends approval of the revised proposal which consists of drifting, raising and diamond drilling.

We concur in this recommendation.

for John F. Shaw

John F. Shaw for
W. H. King

Enclosure

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

200 New Customhouse
Denver 2, Colorado

September 29, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2603, Ajax Mine, Magma King Manganese Mining Company, Pinal County, Arizona. Lead-Zinc.

Enclosed are the original and 8 copies of the geologic report by J. N. Faick of the U. S. Geological Survey, covering the above docket.

It has been recommended that the loan be approved.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson, Arizona

September 26, 1952

Memorandum

To: A. E. Koschmann, Denver, Colorado

From: A. F. Shride, Tucson, Arizona

Subject: Geologic Report, DMEA 2603, Ajax Mine, Magma King Manganese Mining Company, Final County, Arizona (Lead-Zinc)

Enclosed are the original and 8 copies of the above report by J. N. Faick of the Geological Survey.

From previous development work and favorable geologic conditions it is judged that a small exploration project for lead-zinc is warranted. The report and this conclusion have my approval.

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 9

Arizona-New Mexico Branch
xxxxxxxxxxxxxxxxxxxx

MINING DIVISION
REGION IV

September 25, 1952

Memorandum

To : W. H. King, Denver, Colo.

From : Lincoln A. Stewart for Walter R. Storms, Chief
Arizona-New Mexico Branch, Mining Division, Region IV

Subject : Final Report, Magma King Manganese Co., Ajax Mine,
DMBA Docket 2603, Pinal County, Ariz.

Enclosed find original and 3 copies of the above report by T. M. Romslo of the Bureau of Mines. We are told that the geologic report is complete and will be mailed to Denver within a few days. The examiners agree on a recommendation of approval.

Five photostatic copies of Assignment of Lease are enclosed.

The president and superintendent of this company called at the Tucson office last week and said they would appreciate word from Denver, at the earliest possible date, as to whether project is recommended or denied. This for the reason that they are under considerable expense keeping the mine unwatered.

In the absence of Mr. Storms, I take it upon myself to concur with Romslo's recommendations.

Brochure is enclosed.

Lincoln A. Stewart

Lincoln A. Stewart, Mining
Engineer for Walter R. Storms,
Chief, Arizona-New Mexico Br.,
Mining Division, Region IV

CC: W. H. King (orig. & 3)
A. F. Shride
DMBA-2603
DF

LAStewart:als

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

STRATEGIC MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
NUMBER IV

DMTA-2043, Pacific Mine Manganese Company

Alex Mine (Lead-Zinc), Pinal County, Arizona

J. W. Peick, Geologist
U. S. Geological Survey

T. M. Donald, Mining Engineer
U. S. Bureau of Mines

September 1952

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By J. N. Faick[1] and T. M. Romslo[2]

The Ajax Lead-Zinc Mine, Pinal County, Ariz. was examined in connection with an application by the Magma King Manganese Co. for Governmental aid. The application, docketed as DMA-2003, contained a proposal for exploring the mine at a cost of $59,727 with the object of developing sufficient ore to justify a milling operation. During the field investigations the applicant revised the proposal to a project that could be completed at a cost of $23,100.

The Ajax mine was first opened in 1906. The next period of operation was during 1947 and 1948 when production amounted to about 5 tons of 60 percent lead ore and 3 carloads of ore containing approximately 8 percent lead, 6 percent zinc, 0.14 percent copper and 1.2 ounces of silver a ton. During 1950, the mine was dewatered and sampled and some diamond drilling was done. The property was then inactive to April 1952 when it was taken over by the Magma King Manganese Co. under a lease and option agreement. The company put down one diamond drill hole, took a few underground check-samples, started construction of a skip pocket and has kept the mine dewatered.

Schist, probably pre-Cambrian age, is cut by 2 prominent fissure veins. The veins dip 45 to 65 degrees to the west and have northerly strikes. To the south, they converge at the Ajax shaft. A deposit of lead-zinc ore has been partially developed at the shaft and ore has been cut by diamond drill holes at two widely separated places north of the shaft. The veins of the mine workings consist mainly of

---

1/ Geologist, U. S. Geological Survey
2/ Mining Engineer, U. S. Bureau of Mines

Conclusions regarding the proposed exploratory program follow:

1. Ore mineralization appears to be confined to zones of structural deformation. A partially developed deposit contains estimated total reserves of about 14,000 tons of 10 percent combined lead-zinc ore, and ore of minable widths has been indicated by diamond drilling at 2 widely separated places on one of the veins. A possibility exists that other deposits may be encountered on both veins. The discovery of ore by drilling appears to have been fortuitous because controls of their localization are not readily evident on the surface.

2. The proposed explorations are properly designed and have a fair chance of indicating sufficient ore to justify a small operation under favorable economic conditions. Unit costs of the operations, as proposed by the applicant, are reasonable.

3. Efficient supervision of the work is expectable if supervised by the applicant's present superintendent.

Approval is recommended for the proposed project that can be completed in 10 months at a cost of $23,100.

MAGMA KING MANGANESE MINING COMPANY
AJAX MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA
IDMA 2603

LEAD AND ZINC

Geology

By
John N. Faick
Geologist, U. S. Geological Survey

MAGMA KING MANGANESE MINING COMPANY
AJAX MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA
DMRA 2603

LEAD AND ZINC

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INTRODUCTION

An application for Government aid in exploring the Ajax lead-zinc mine has been received by the Defense Minerals Exploration Administration. The application (DMEA 2603) is from the Magma King Manganese Mining Company, Superior, Arizona, of which Mr. Ralph J. Pomeroy is president. The Ajax mine was examined August 25 to 27, 1952, by DMEA representatives.

GENERAL GEOLOGY

The Ajax mine is located in the Mineral Hill mining district (Fig. 1) about 8 airline miles southwest of Superior, Arizona. The mine is near the head of Cottonwood Creek, a dry wash draining relatively rough mountainous desert terrain between the valleys of the Gila River on the south and Queen Creek on the north. Maximum relief in this area is about 500 feet.

The mountains in the vicinity of the Ajax mine are composed of chlorite schists of probable pre-Cambrian age. The schist is relatively fine-grained, greenish-gray and uniform in character. The schistosity, which is vague and poorly developed, is gently folded into small easterly trending anticlines and synclines that have dips ranging from 10° to 30° on the flanks.

GEOLOGY OF THE AJAX MINE

Within the Mineral Hill district there are many small mines and prospects of which the Ajax appears to be one of the most promising. The mine explores (Fig. 5) part of a conjugate vein system (Fig. 3) by means of a 180 foot shaft inclined westward about 65° and by two drifts. The upper drift, or 50 level, extends 50 feet north of the shaft and 60 feet south of it. The 180 level consists of a 30 foot crosscut to the vein, with drifts extending about 80 feet north and 50 feet south of the crosscut. Eight diamond drill holes have been drilled in the area (Figs. 3 and 4).

The Ajax vein system occupies a fault zone in the schist and the veins are exposed at the surface more-or-less continuously for a distance of about 1800 feet north of the Ajax shaft and about 200 feet south of it. Two prominent branches of the vein system converge at the Ajax shaft, and the mine workings have explored the western or hanging wall branch vein. This vein strikes approximately N. 20° W. but south of the shaft where the two veins converge the strike is nearly south. The footwall or east vein strikes nearly north for a distance of about 500 feet north of the Ajax shaft, then appears to change its strike to N. 20° W. or approximately parallel to the hanging wall vein. The dip of both veins at the surface is about 65° west but flattens with increasing depth and on the 180 level the dip of the hanging wall vein ranges from 40° to 45°. Where the veins cross Cottonwood Wash there is a zone in which the veins appear to be structurally deformed, suggesting that they may have been folded or faulted. Some brecciation of the enclosing schist was noted but the cause of the brecciation was not apparent nor could the geology be satisfactorily interpreted. It is possible that the two main veins may merge in this zone, or another branch vein may intersect the footwall vein.

The vein material consists of two distinct types which have been deposited at different periods of time and under distinctly different conditions. The earlier vein filling consists of specularite in massive, glassy quartz. This early period of mineralization was followed by a relatively late influx of milky quartz and white calcite, accompanied by sphalerite, galena and trace amounts of chalcopyrite. The late-stage vein material is prominently banded, and many comb structures and drusy cavities are present in it.

These characteristics are interpreted as indicating an epithermal origin, and for this reason the writer believes the deposit should not be expected to continue to depths greater than a few hundred feet.

The late-stage epithermal type of vein material contains all of the observed sulfide minerals, and locally these are sufficiently abundant to constitute low-grade ore. Galena and sphalerite occur as coarse grains from about one-eighth of an inch to about one inch in maximum dimension. These are dispersed erratically throughout the vein and in many places constitute from 10 to 20 percent of the vein filling; however, in some places the vein is barren. Masses of galena and sphalerite from 1 to 4 inches wide and from a few inches to about 2 feet long are present in many places within the vein. Ore minerals are also present in some of the brecciated wall rock, as for example about 50 feet north of the shaft on the 180 level. Here a lenticular mass of brecciated schist (Fig. 5) is thoroughly impregnated with calcite, quartz, sphalerite, and galena. These occur in small seams and masses cementing part of the breccia. The breccia mass is about 50 feet long, and about 15 feet wide but the sulfides are confined to an area about 30 feet long and about 10 feet wide. This mineralized breccia is exposed only on the 180 level but it is assumed that the breccia extends at least a short distance above and below the level.

Deformation along the vein zone has disrupted some of the rocks and locally they have been weakened by what appears to be late-ore or post-ore movement. It is probable that deformation and hydrothermal alteration have weakened the wall rocks to such an extent that underground support will be required in some zones if the vein is mined.

PRODUCTION AND GRADE

Little ore has been produced from the mine. Shipments that are thought to represent the total production are as follows:

Date	Tons	Percent Lead	Percent Zinc	Percent Copper	Ounces Silver
12-10-47	0.75	19.0	Trace	0.12	1.50
12-10-47	3.02	60.8	--	Trace	3.9
12-16-47	35.17	7.35	5.4	0.12	1.05
1-22-48	34.85	7.2	3.2	0.12	1.05
2-5-48	1.53	60.0	--	--	4.0
2-9-48	16.40	10.3	2.8	0.20	1.45
Total	91.72				

These shipments are products of selective mining of some of the higher grade portions of the vein and are probably also upgraded by hand sorting. The largest shipments, containing relatively low values, are probably not much higher grade than many parts of the vein.

Many samples (Fig. 6) have been taken of the vein. Most of the samples were taken before the applicant acquired the property. Several were taken by the applicants, and the DMEA examiners took 5 samples as a means of checking and verifying the others. The samples taken by DMEA provide a fair check on the others but are slightly lower grade. It was noted by examination of the mine workings that the sample widths previously reported are exaggerated, and could not be substantiated. Because of these erroneous widths it is not possible to properly weigh the samples and accurately compute the lead and zinc content of the vein. The lead content is greater than the zinc content in the upper part of the mine and the zinc content is greater than that of the lead in the lower part of the

mine. The copper content of the ore is negligible, but it is probable that both copper and silver values will be recovered with the lead and zinc if the ore is beneficiated.

EXPLORATION

In addition to the mine workings an attempt has been made to explore the vein by 8 diamond drill holes, two of which encountered sufficient ore to be of possible commercial value. Hole No. S-6 (Figs. 3 and 4) penetrated ore about 200 feet north of the shaft and hole No. S-8 penetrated ore about 400 feet north of the shaft. At present there is insufficient information to interpret the significance of these penetrations but it appears possible that the holes discovered additional ore shoots. Hole No. S-2 appears especially significant because it may have penetrated the hanging wall vein zone beneath an iron-stained brecciated schist that could be interpreted as being the outcrop of a mineralized zone. The breccia is exposed in a small elliptical area about 20 feet in maximum dimension near the place where the veins cross the floor of Cottonwood Wash.

The results of the underground holes, Nos. 1 and 2 (Fig. 6), were not conclusive. One was drilled into the hanging wall of the hanging wall vein where there was no reason to expect to find additional ore. The other was drilled into the footwall and should have penetrated the footwall vein. The failure of this hole to locate ore is unfavorable evidence, but is not enough to condemn the footwall vein as being unmineralized.

Holes S-1, S-3, S-4, and S-5 (Fig. 4) were drilled to explore outlying or deep parts of the vein. These penetrated considerable mineralized material having very low values but veins of minable width

and grade were not encountered. Available data are insufficient to correctly interpret the significance of these holes, but the writer believes the veins change character by splitting into many small veinlets. It appears as if veins of a size large enough to mine do not exist at depths greater than a few hundred feet.

Results of previous exploration and development suggest that additional exploration of the Ajax vein system is justified. There are about 14,000 tons of reasonably well indicated and inferred ore in the partly developed ore shoot and it is believed that exploration may prove the existence of several times this amount. Additional ore is expected to be found near the ore penetrations of diamond drill holes S-2 and S-6 and at places along the vein where either the early vein filling or country rock was shattered by structural deformation to permit access by the late-stage mineralizers. It is important to note that the footwall vein has not been explored, except possibly to a very small extent on the 50 level. This vein has a very prominent outcrop and the presence of vugs, cavities and siliceous bonwerks suggest that sulfide minerals may have been leached out of it. The footwall vein should be as well mineralized as the hanging wall vein and deserves exploration.

Examination of the Ajax mine and discussion of the applicant's proposed exploration has resulted in making some minor revisions in the proposals, and these will result in more effective exploration methods at worthwhile savings in cost. The revised program (Fig. 3) is to drive 400 feet along the vein on the 176 level to explore the ore penetrated by holes S-2 and S-6. Then, using the 176 drift as a base, it is proposed to drill 4 holes to test the footwall vein and to

drive four 50-foot raises to test whatever ore is found along the drift. Two additional drill holes are allowed to delineate whatever ore may be found. Selection of the sites for drilling or raising must meet with the approval of the examining engineer.

The total cost of this exploration is about $23,000, one-half of which is to be contributed by the Government. The revised project is feasible and well justified in the opinion of the examiners. The program may not block out enough ore to justify erection of a mill, but will determine whether the Ajax vein system is capable of producing important amounts of lead and zinc.

ORE RESERVES

Ore reserve estimates submitted by the applicant amount to about 25,000 tons of developed and probable ore. This estimate appears to be too high because it is based on exaggerated vein widths rather than the actual vein widths. The applicant's grade estimates are also somewhat greater than those of the examiners, being about 2 percent higher in combined lead and zinc.

The ore-shoot developed by the Ajax shaft and levels is sufficiently well explored and sampled to be classed as indicated ore. Vein material containing significant amounts of galena and sphalerite is exposed along both the 50 feet and 176 foot levels. The vein material in the south end of the 50 level drift probably cannot be recovered because it is so thoroughly oxidized that it is not amenable to concentration and is probably too low-grade to constitute shipping ore. It is assumed that similar oxidation has taken place in all the ore within about 30 feet of the surface, therefore minable ore is thought to extend only 20 feet above the 50 level. The vein widths at the

50 level are from 5 to 12 feet, but average about 7 feet, and ore is exposed along the level for a distance of about 70 feet. The block of ore above 50 level is estimated to contain about 800 tons of indicated ore. The grade of the ore is about 9 percent lead, and 3 percent zinc as estimated from several samples and 3 small shipments.

The main ore shoot is also explored by the 176 level where sphalerite and galena are present in the vein for a strike distance of about 110 feet. The ore shoot is exposed in part of the Ajax shaft and the ore is assumed to be continuous between the 176 level and the 50 level and the vein thickness will average about 7 feet. It is conservatively estimated that about 5700 tons of ore are present in the ore shoot, between the 50 and 176 levels. By evaluating many samples (Fig. 6) taken along the shaft and on the 176 level it is estimated that the average grade of the ore is about 1 percent lead and 8 percent zinc. The ratio of lead to zinc decreases gradually with depth from the 50 level to the 176 level.

The average grade of all the ore in the presently developed ore shoots at the Ajax mine is estimated at 4.4 percent lead and 5.9 percent zinc.

Reserves above the 176 foot level are estimated at 47 tons per foot of depth along the dip of the vein and it is presumed that the ore may be safely projected 150 feet below the 176 level. The ore in the first 50 feet of this projected depth is classified as indicated ore and the remaining 100 feet is considered as inferred ore. About 2300 tons of ore is indicated, and about 4700 tons is inferred to be present. The grade is assumed to be the same as on the 176 level, or about one percent lead and 8 percent zinc.

Ore penetrations were made by diamond drill holes S-6 and S-2 (Figs. 3 and 4) and at each of these locations it is hoped that other ore shoots are present that may contain as much ore as is present in the main shoot. About 1000 tons of indicated ore is assumed to be present at each drill hole penetration. Assays on the core of the hole S-2 yield from 18 to 25 percent zinc but it is believed that the hole accidentally penetrates a rich portion of the vein and this block of ore should not be expected to be much higher grade than developed parts of the vein. The core from hole S-6 has not been assayed but inspection reveals it to be similar in grade to the ore in the developed portion of the mine, and by comparison is estimated to contain about 4 percent lead and 6 percent zinc.

It is assumed that a few thousand tons of ore may be present in both the zones where ore was found by diamond drill holes S-2 and S-6. This ore would be in the inferred category but no estimate of tonnage can be made because of the lack of data. It is also assumed that additional ore will be found in the footwall vein which has not been explored by mine workings.

Although sufficient data are not available to justify making a tonnage estimate of all the inferred reserves, it is thought that these will be several times as great as the indicated reserves.

The ore reserve estimates are summarized as follows:

Location	Tons	Percent Lead	Percent Zinc
	Indicated Ore		
Above 50 level	800	9	1
Between 50 and 176 levels	5700	1	8
From 176 level to 50 ft.below it	2300	1	8
At drill hole S-2	1000		10-15
At drill hole S-6	1000	4	6

Location	Tons	Percent Lead	Percent Zinc
Inferred Ore			
From 50 to 150 ft. below 176 level	4700	1	8
Other possible ore shoots in both veins	Unknown amounts but possibly several times more than indicated reserves.		

CONCLUSIONS

Examination of the Ajax vein system reveals that important amounts of galena and sphalerite are present in a quartz-calcite gangue having epithermal characteristics. About 14,000 tons of ore, containing about 10 percent combined lead and zinc, are reasonably assured in the old mine workings. Inferred ore may amount to several times this amount in unexplored or incompletely explored parts of the veins. Additional exploration is necessary to determine whether there is sufficient ore in the veins to support sustained mining and milling operations. The revised exploration proposals are feasible from an engineering point of view, are reasonably easy to accomplish at a total cost of $23,000, and may discover significant amounts of lead and zinc.

RECOMMENDATIONS

It is recommended that the revised exploration proposals be approved because there is a possibility that significant amounts of lead and zinc may be discovered at a reasonable cost within a few months after the project is started.

DMEA-2603, MAGMA KING MANGANESE COMPANY
AJAX MINE (LEAD-ZINC), PINAL COUNTY, ARIZONA

Engineering Report

By T. M. Romslo
Mining Engineer
U. S. Bureau of Mines

September 1952

DMEA-2603, MAMA MINE MANAGEMENT COMPANY
AJAX MINE (LEAD-ZINC), PINAL COUNTY, ARIZONA

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INTRODUCTION

The Ajax Mine (Lead-Zinc), Pinal County, Ariz. was examined in connection with an application for Governmental aid by the Magma King Manganese Company. The application was made to the Defense Minerals Exploration Administration and is docketed as DMEA-2603. It contained a proposal for exploring the property at an estimated cost of $59,727, the cost to be divided equally between the applicant and the Government. The exploratory work, consisting of drifting, raising and diamond drilling, was designed to indicate the presence of sufficient ore to justify construction of a concentrating plant.

The examination was made August 25-27, 1952 by T. M. Romslo, Bureau of Mines, and J. B. Faick, Geological Survey, with the object of determining if the requested assistance could be justified. It was confined to the area of the proposed project that represents a small portion of the property held by the applicant. Ralph J. Pomeroy and Frank L. Metler, President and Superintendent of the Magma King Manganese Company, respectively, were at the mine during the investigations.

LOCATION, TOPOGRAPHY AND CLIMATE

The Ajax mine is about 8 air-miles southwest of Superior, Ariz., the home of the Magma Copper Company (figure 1). Superior, is on U. S. Highway 70 and is the terminus of a branch of the Southern Pacific Railway that connects with its main-line and the Atchison, Topeka and Santa Fe Railroad at Phoenix, about 50 miles westward.

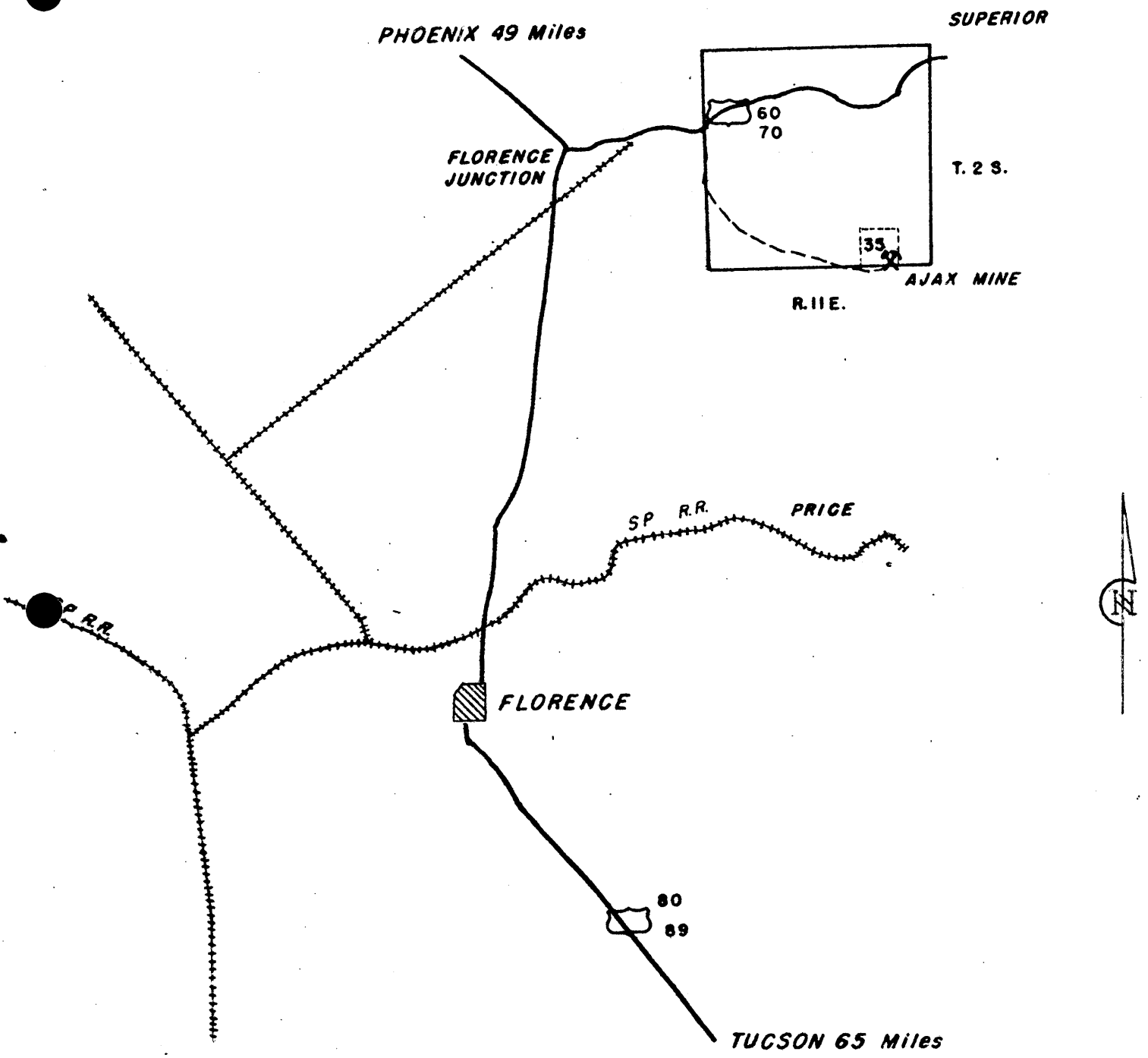


Fig. I LOCATION MAP

DMEA 2603

MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

SCALE: 1" = 4 MI.

The mine is accessible from Superior by traveling 11 miles westerly on the highway and thence 9 miles southwesterly over a graded desert road that contains no excessive grades. Short stretches of the road that cross or follow dry-washes are impassable for brief period after heavy rainfalls.

The nearest railroad shipping point is Price, about 12 miles south of the property by desert road.

The Ajax mine is at an altitude of about 3,000 feet above sea level. It is in an area of moderately rugged topography consisting of sharp mountain ridges that slope steeply to narrow valleys. On the property, the altitude ranges from about 3,000 to 3,500 feet.

The mountain slopes support a sparse growth of desert vegetation, mainly cacti and catclaw. Palo Verde and mesquite occur along the bottom of the valleys.

There are no permanent streams in the area. Drainage is south to the Gila River.

There are no readily accessible records of climate for places near the property. However, it can be said that the climate is typical of the lower-altitude regions of southern Arizona. Temperatures at the property probably show an annual range from a few tens of degrees below freezing to near 110 degrees. Precipitation, probably between 10 and 15 inches yearly, occurs mainly as heavy rain storms during July and August. Light rainfalls and a few snow flurries are common to the winter months.

HISTORY AND PRODUCTION 1/

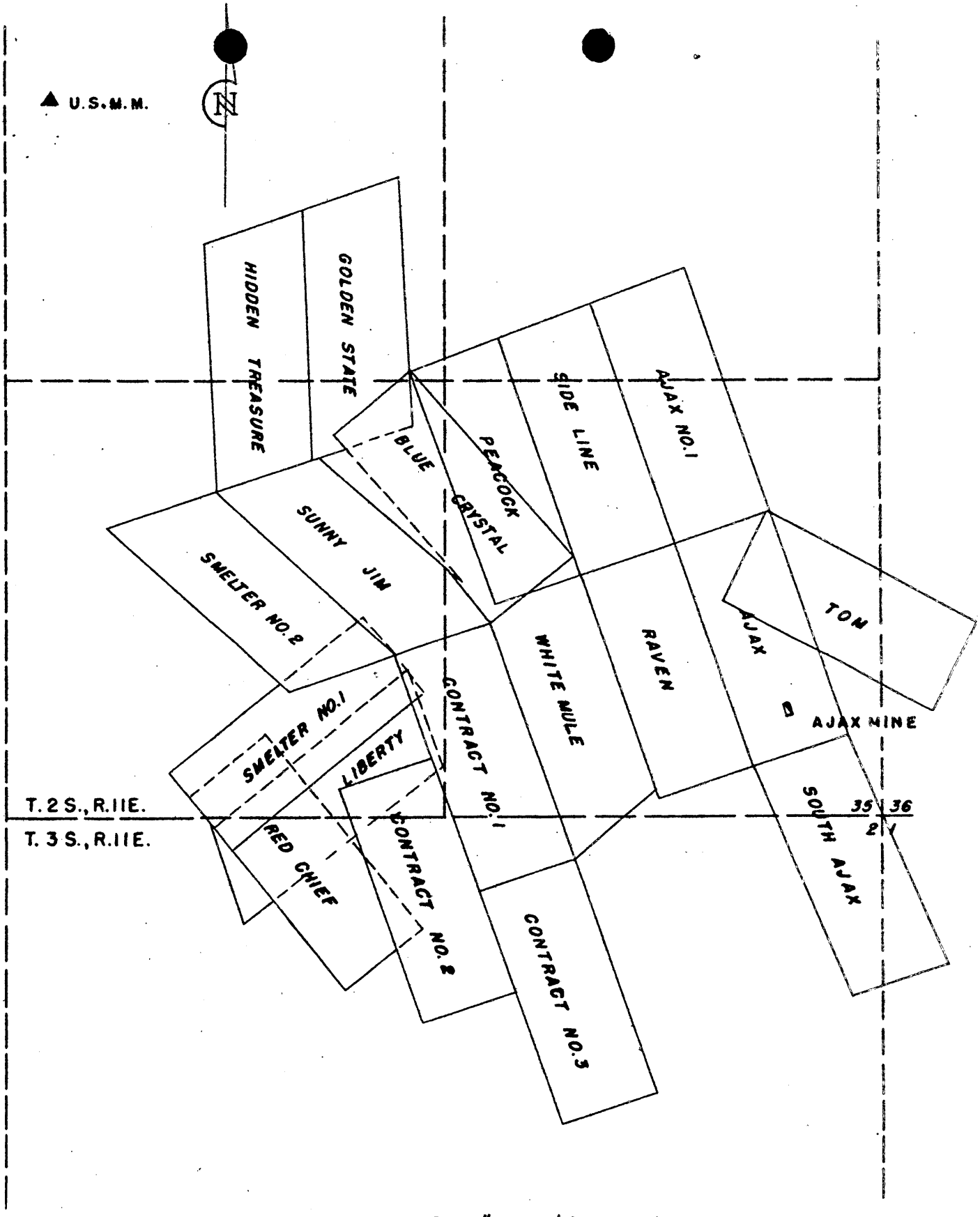
The Ajax mine was first opened in 1906 when it was developed to its present inclined depth of about 170 feet. There are no available production records from this operation but it is probable that little or no ore was shipped. The mine was then inactive to 1947. During 1947 and 1948, lessees shipped 5.25 tons of ore containing about 56 percent lead and 4 ounces of silver a ton, and 3 carloads of ore averaging approximately 8 percent lead, 6 percent zinc, 0.14 percent copper and 1.2 ounces of silver a ton. In 1949 the mine was dewatered and a small amount of drifting was done on the 176-foot level.

During 1950, the Magma Copper Co., sampled the underground workings and the Miami Copper Co. carried out a diamond-drilling project. The drilling consisted of 2 holes from the 176-foot level and 5 holes from the surface. The present operations, by the Magma King Manganese Co., were started April 1952. The company has put down a diamond-drill hole from the surface, check-sampled part of the underground workings, started construction of a skip pocket, and has kept the workings unwatered.

PROPERTY AND OWNERSHIP

The property consists of a group of 3 patented and 16 unpatented lode mining claims in Secs. 25 & 26, T. 2 S., R. 11 E. and Secs. 1 & 2, T. 3 S., R. 11 E., Mineral Hill Mining District, Pinal County, Ariz. (figure 2).

1/ Information supplied by Ralph J. Pomeroy and Frank L. Kotler, President and Superintendent of the Magma King Manganese Company, respectively.



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

Magna King Manganese Co., the applicant, holds all of the above property by the following agreements.

1. The Ajax and Ajax No. 1 patented claims were assigned by the owners, Mr. and Mrs. Walter S. Smith and Rae L. Fraiser, Coolidge, Ariz., to Louis Lennig and Robert F. Dannelley, Pinal County, Ariz. for a period of 8 years in a Lease and Option Agreement dated August 10, 1940. The agreement was assigned to the Apex Mines, Incorporated and then to the applicant.

2. The other patented claim, the Raven, was assigned by the owners of the Ajax and Ajax No. 1 claims to the Apex Mines, Incorporated under the terms and conditions of the Lease and Option Agreement covering the Ajax and Ajax No. 1 claims. The Apex mines, Incorporated, later transferred its rights to this claim, to the applicant.

3. The 16 unpatented claims were assigned by the owners, Mr. and Mrs. C. O'Dell, Phoenix, Ariz. and Mr. and Mrs. Frank A. Allen, Gilbert, Ariz. to Louis Lennig and Robert F. Dannelley for a period of 8 years in a Lease and Option Agreement of October 16, 1940. This agreement was assigned to the Apex Mines, Incorporated and then to the applicant. The terms of this agreement are the same as those covering the above mentioned patented claims.

All of the above agreements call for royalty payments to the owners of 10 percent of the net returns from ore produced. Net returns are defined as the gross amount paid by the purchaser of ore concentrates less charges for transportation, milling, concentration,

smelting and trucking. Royalty payments in all cases are applied to purchase prices of $40,000 for the Ajax and Ajax No. 1 claims, $15,000 for the Raven claim, and $32,000 for the 16 unpatented claims.

Note: The Lease and Option Agreements together with the assignments on the Ajax and Ajax No. 1 claims and the 16 unpatented claims were submitted with the applicant's proposal. Five copies of a letter covering assignment of the Raven claim were obtained during the examination and will be forwarded to the Denver, Colo. office of the Defense Minerals Exploration Administration with this report.

The financial condition of the Magma King Manganese Mining Co. on June 30, 1952 was taken from an Audit Report of the company by Carson and Henry, auditors, Phoenix, Ariz. The balance sheet of the report shows current cash assets of $32,902.63, and current liabilities of $9,000.94. It also shows that the company is authorized to issue 10,000,000 shares of stock and that 2,500,000 shares are outstanding.

The Directors of the Magma King Manganese Mining Co., as presently constituted, are:

"Ralph J. Pomeroy	President	Director	Chandler, Ariz.
Milton G. Smith	Vice President	Director	Coolidge, Ariz.
Raven H. Skousen	Secretary-Treasurer	Director	Springfield, N. J.
George H. Goodman		Director	Mesa, Ariz.
J. Frank Gibson		Director	Mesa, Ariz.

Lillie Fraser	Assistant Secretary	Phoenix, Ariz.
Ralph J. Forsey	Registered Building Contractor, has been operator of the Reward Mine, the Blackwater Mine, and the Magma Ring Property.	
Walter G. Smith	Registered Building Contractor, Registered Civil and Mining Engineer, Pinal County Supervisor (1938-1942) Former County Engineer, Member of the Arizona Bar Association since 1919. Besides acting as operating mining engineer on various mines through out the State he more recently operated the old Seymort Mine near the Ajax property.	
Loren B. Swanson	Banker, with the Chase National Bank for over 20 years, most of which was spent in the Petroleum Dept., of Finance.	
George B. Goodman	Registered Pharmacist, Mayor of the City of Mesa, has engaged in mining operations also.	
J. Frank Gibson	Attorney at law, practicing in Phoenix, also engaged in mining at various times. One of the owners of the Reward Mine, near Casa Grande, Ariz."	

DESCRIPTION OF ORE DEPOSIT

A lead-zinc deposit, at the Ajax shaft occurs at the junction of 2 prominent fissure veins in mica schist of probably pre-Cambrian age (figure 3). Both veins dip from 45 to 65 degrees west. The west or footwall vein strikes nearly north for a distance of about 500 feet north of the shaft. Beyond this point it roughly parallels the N. 20° W. strike of the hanging wall vein. Ore mineralization encountered by diamond-drill holes Nos. S5, and S6 probably occurs in the hanging wall vein (figure 4).

Two distinct types of vein filling are represented in the partially developed deposit. An early period of mineralization consisting of specularite in otherwise barren quartz has been followed by a

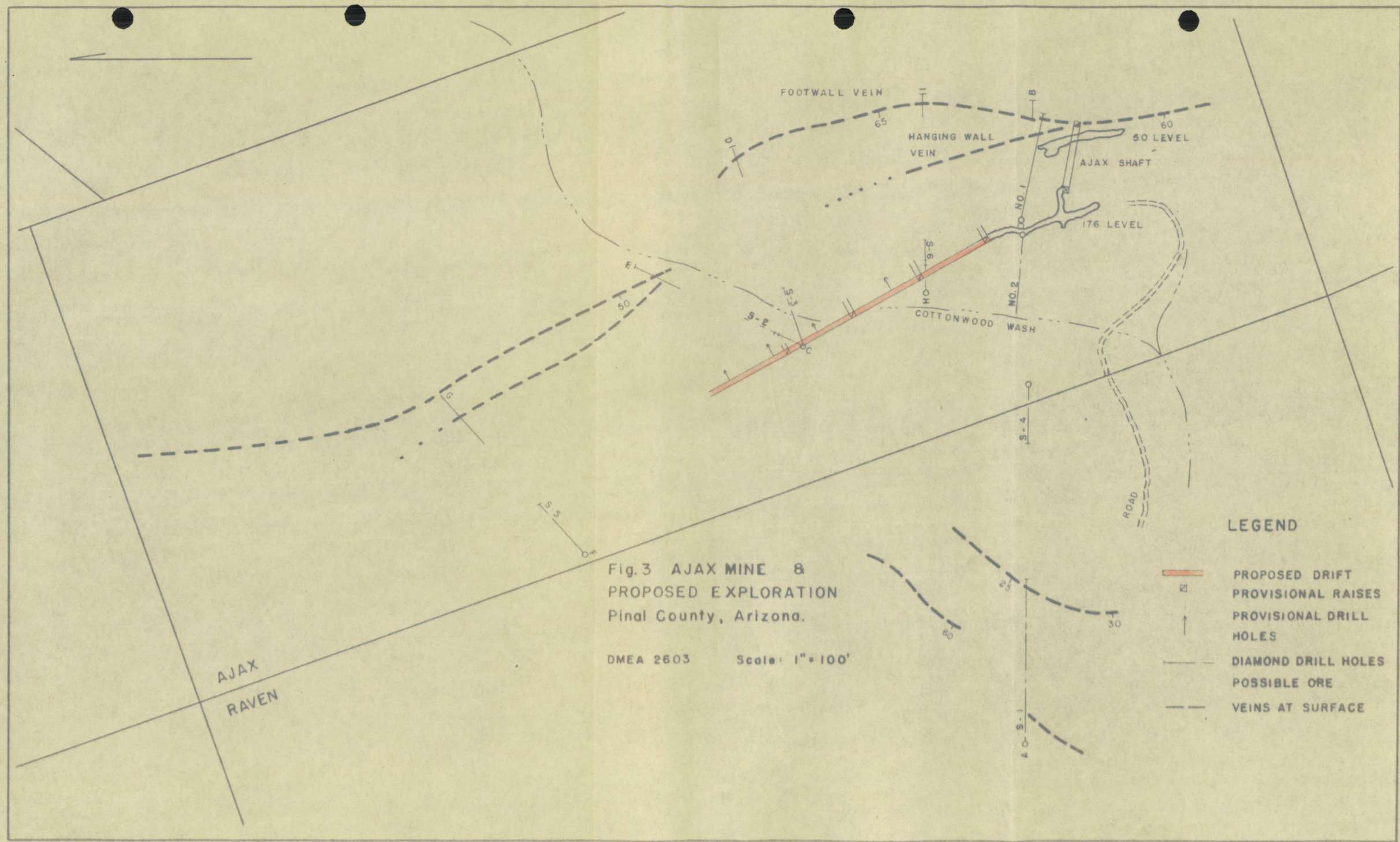


Fig. 3 AJAX MINE & PROPOSED EXPLORATION
Pinal County, Arizona.

DMEA 2603 Scale: 1" = 100'

relatively late influx of quartz, calcite, sphalerite, galena, and minor amounts of chalcopyrite. The late stage vein material has definite epithermal characteristics with prominent banding, comb structures and drusy cavities. Galena and sphalerite occur as coarse grains ranging in size from an eighth to about one inch. They are dispersed erratically throughout the vein and in a few places occur in brecciated wall rock. Masses of galena and sphalerite from 1 to 4 inches wide and a few inches to about 2 feet long are present in several places within the vein. A high percentage of the ore minerals occur as oxides to the 50-foot level. Below the 50 level the degree of oxidation decreases rapidly to the 170 level where oxides form an insignificant part of the ore minerals.

ORE RESERVES

The Ajax mine contains no measured ore.

Indicated reserves have been estimated at about 11,000 tons of partially oxidized sulfide ore containing 10 percent combined lead and zinc, and 1.0 ounce of silver a ton. Approximately 9,000 tons of these reserves containing an estimated 4.4 percent lead and 5.9 percent zinc and 1.0 ounce silver is partly developed at the Ajax shaft. The remaining tonnage is equally divided between deposits indicated by drill holes 82 and 86.

Inferred reserves are placed at several times the tonnage of indicated ore. These reserves consist of (1) 4,700 tons of ore containing 1.0 percent lead, 3.0 percent zinc and 1 ounce of silver a

ton in the down-dip extension of the Ajax deposit, and (2) the geological possibility that deposits similar to that at the Ajax shaft may be present at drill holes 82 and 86 and at other places in both veins.

PRESENT STATUS

Operations

Present operations are confined to pumping water from the mine at 3-day intervals. Rough estimates indicate the mine is making 3 to 5 gallons of water a minute.

Development

The principal workings of the Ajax mine consist of a 130-foot inclined shaft from which levels have been driven on the 50- and 176-foot levels (figures 3 and 5). Two holes have been diamond-drilled from the 176 level. Surface development consists of 6 diamond drill holes and a few shallow pits and trenches. The locations of the diamond drill holes are shown on figure 3 and vertical sections through the drill holes are shown on figure 4. Miami Copper Co., according to the applicant, drilled the underground holes and surface holes 1 to 5. Surface hole no. 6 was drilled by the applicant.

For possible future reference, all drill-hole data was copied and filed in the office of the U. S. Bureau of Mines, Tucson, Ariz.

Surface Plant

The following buildings, all of wood-frame construction and in a good state of repair, are on the property. One of 2 buildings at the mine, houses the hoist and office. The other building contains an

electric generating plant and a machine shop. Other buildings on the property are located at the mine camp, 0.7 miles from the mine on the road to Superior. They consist of boarding house, a bunk house with change room, a storage building, and a pump house that also contains an electric-light plant.

Other structures at the mine consist of a 30-foot "A" type head-frame, a 100 ton ore bin, and a powder magazine.

Equipment

The mine is completely equipped for a small operation. All equipment except a rented mine hoist and a 315-cu. ft. portable Diesel compressor, is owned by the applicant. Company-owned major equipment consists of the following:

1 - 35 K.V.A. Diesel-electric generator set.

1 - 7.5 K.V.A. Diesel-electric Generator set.

1 - 1951, International pickup truck.

1 - 1943, 1½-ton, Flat-bed Ford truck.

1 - 20 H.P., I.R. Motopump

1 - 5 H.P., I.R. Motopump

1 - C. P. sludge pump

1 - Shaft skip

2 - Ore cars

1 - C. P. 55 Core-drill outfit, complete

1 - 12 B, Bimco-Finlay loader (not on property)

Ore Testing

Correspondence from the Denver Equipment Co. to a former lessee of the Ajax mine was furnished the examining engineers by R. J. Pomeroy. The correspondence stated that tests had been made on ore furnished by the lessee but did not give the results of the tests. Pomeroy said he had learned that the testing gave favorable results.

PROPOSED EXPLORATIONS

A revised exploratory program was worked out during the field investigations by the examining engineers and the representatives of the applicant. It was submitted by the applicant in a letter of August 27, 1952 to W. R. Storms, Chief, Arizona-New Mexico Branch, Mining Division, U. S. Bureau of Mines, Tucson, Ariz.

Under the revised program the applicant proposes to do all preliminary work at no expense to the Government and to then carry out the following explorations, at the indicated unit costs, with Government assistance (figure 3).

1. Drifting; Drift 400 feet northerly from the north end of the 176 level, at $35.00 per foot.
2. Raising; Run four 90-foot raises at favorable sites developed by the proposed drift, at $33.00 per foot.
3. Drilling; Diamond drill 500 feet in a maximum of 6 holes from favorable sites, at a cost of $5.00 per foot.

The writer's suggested description of the project as to sequence of operations and work-specifications follows.

The unit costs are approximately the same as the estimated unit costs of the applicant's original proposal. In the writer's opinion they are reasonable and can be attained only if the operations are conducted efficiently. This conclusion is based on the following factors:

1. Relatively hard rock and long tramming distances.
2. Necessity of providing artificial ventilation and pumping facilities.
3. Stations must be cut, and timber is required for each raise.
4. Stations must be cut for diamond-drill locations from which relatively short holes will be drilled.
5. Remoteness of property.

PROPOSED FINANCING

The Magna King Manganese Company proposes to carry out the exploratory program provided financial assistance is obtained in accordance with regulations governing Governmental aid. On this basis, the Government's share would be $11,550.00 or 50 percent of the cost of the project, estimated at $23,100.00.

CONCLUSIONS

Significant ore mineralization in the 2 persistent veins of the Ajax property appears to be confined to zones of structural deformation.

The partially developed deposit at the vein intersection contains estimated total reserves of 14,000 tons of 10 percent combined lead-zinc ore.

Minable widths of lead and zinc ore have been penetrated by drill holes at a additional places on the hanging wall vein. Discovery of this ore appears to have been fortuitous because controls of their localization are not readily evident on the surface.

The drilling and raising operations of the proposed explorations are properly designed to indicate the extent and grade of drill-hole ore and to explore for and partially delineate other deposits that may occur in the hanging wall vein. Exploration of the footwall vein can then be carried out at little additional cost by drilling from favorable sites developed by the drift.

The chances are fair that the proposed explorations will indicate the presence of sufficient ore to justify a small operation under favorable economic conditions.

The applicant's superintendent is believed to be capable of conducting the projected work in an efficient manner.

The applicant can be expected to finance 50 percent of the cost of the project.

RECOMMENDATION

The conclusions of this report are the basis for recommending approval of the proposed exploratory project. Estimates indicate the project can be completed in 24 months at a total cost of $42,[illegible].

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

224 New Customhouse
Denver 2, Colorado

October 30, 1952

REGISTERED # 52005

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, DMEA Docket 2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Contract Idm-E428. Copies of this contract have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King
W. H. King

Enclosures

RECEIVED
NOV 17 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Cal
11-3

SURNAME COPY

Defense Minerals Exploration Administration
Robert E. Adams
2017

14X3923.970, Working Fund, Interior, DMEA
October 29, 1952
2:00 p.m.

W. H. King, Executive Officer, Region IV, 224 New Customhouse Bldg., Denver 2, Colorado

Assignment of Contract Number

REGRETS MAGNA KING MANGANESE MINING COMPANY DMEA 2603. CONTRACT NUMBER

Idm-E 428 ASSIGNED THIS CONTRACT.

C. O. Mittendorf

ADMINISTRATOR

READams/meb
cc to: Adm. Reading File
Mails & Files Br.
Audits Division
Miss Curtin

10-29-52

SPECIAL

GPO 10—41296-1

Mr. C. O. Mittendorf
10-29-52
10:15 AM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1952

DN 235 BUR MINES 8-89///8-89
C O MITTENDORF
WASHINGTON D C
PLEASE ASSIGN A NUMBER TO CONTRACT COVERING DOCKET NO. DMEA-2603
MAGMA KING MANGANESE MINING COMPANY AN ARIZONA CORPORTION
TXXX532 SECURITY BUIKDING PHOENIX ARIZONA - COMMODITY LEAD-"888.71
ZINC. PROPERTY IN PINAL COUNTY ARIZONA. GOVERNMENT PARTICIPATION IS
$11,550.00, TOTAL AMOUNT OF CONTRACT $23,1000.00. CONTRACT DATED
OCTOBER 23, 1952. ASXXXADVISE BY RETURN TELETYPEM

W H KING

MIN PLS FOR CHECKING

COMMODITY IS LEAD-"888.71////"
COMMODITY IS LEAD ZINC

IDM-E 428

Denver Colo

OCT 29 11 11 AM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

September 30, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2603, (Lead-Zinc) Magma King Manganese Co., Ajax Mine, Pinal County, Arizona

The application for Government assistance in exploration work estimated to cost $23,000 has been approved by us and a contract is being prepared.

Government participation will be 50 percent, or $11,550.

Four copies of the Final Report will be forwarded when the contract is processed.

The original and one copy of Form 3b is attached.

John F. Shaw
John F. Shaw for
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

September 30, 1952

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From: Field Team, Region IV

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The original and one copy of Form 3b is attached.

John F. Shaw
John F. Shaw for
W. H. King

A. N. Koschmann
A. N. Koschmann

Enclosures

DMEA Form 3b
(Revised)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTROLLED DOCUMENT
Revised Abstract

DMEA Docket No. 2603

Name of Applicant Magma King Manganese Co. (Lead-Zinc)

Change:	From		To	
	III 1	☐	III 1	☒ 9-30-52
	III 2	☐	III 2	☐
	III 3	☐	III 3	☐
	III 4	☒	III 4	☐
	III 5	☐	III 5	☐

Add:

II 7 $ 59,727

II 8 $ 23,100

II 8a % 50

Remarks:

Initials of person preparing sheet H.M.C.

Date sheet prepared 9-30-52

17367

DMEA Form 3b
(Revised)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTROLLED DOCUMENT
Revised Abstract

DMEA Docket No. 2603

Name of Applicant Magma King Manganese Co. (Lead-Zinc)

Change:	From		To	
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	III 2	☐	III 2	☐
	III 3	☐	III 3	☐
	III 4	☒	III 4	☐
	III 5	☐	III 5	☐

Add:

II 7 $ 59,727

II 8 $ 23,100

II 8a % 50

Remarks:

Initials of person preparing sheet H.M.C.

Date sheet prepared 9-30-52

17367

500

FILE COPY
SURNAME:

Keating
Keller
Fitzsimmons

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

JUL 2 0 1952

Mr. W. H. King
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Company
Ajax Mine, Arizona

Dear Mr. King:

The above-numbered application was recently submitted to this office for consideration. A copy of the application together with supporting maps and papers has been forwarded to you. Our review of the docket indicates that a field examination will be required.

Your attention is called to the program of work outlined in this application relative to 600 feet of drifting and a series of exploration raises. The field examination may give evidence that a portion of this program can be more satisfactorily accomplished by diamond drilling. For your files and information we are enclosing a copy of a memorandum dated July 18, 1952, written by Messrs. E. L. Newcomb and O. M. Bishop, recommending a field referral.

Should the results of the examination warrant further consideration of the project and evidence the possibility of worth-while Government participation, we will appreciate your furnishing such information and data as should be available to us for proper consideration of a contract.

Sincerely yours,

George C. Selfridge
ACTING Chairman, Operating Committee

Enclosure:
APPROVED:

J. H. Hedges
Member, Bureau of Mines

T. P. Thayer
Member, Geological Survey

AGKeating/mb
July 24, 1952
cc to: Docket
Adm Reading File
Operating Committee
Mr. Keller
Mr. Keating
Mr. Bishop
Mr. McKnight
Region IV
Chron

FILE COPY
SURNAME:
500

Keating
Keller
Thayer

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

JUL 25 1952

Mr. Rolf J. Pomeroy, President
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Re: Docket No. DMEA-2603 (Lead-Zinc)
Exploration Loan
Ajax Mine, Arizona

Dear Mr. Pomeroy:

Your application for Government assistance for the purpose of undertaking an exploration program at your property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration.

The application has been referred to:

Mr. W. H. King
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

The Regional office will communicate with you regarding your project at the earliest opportunity.

Sincerely yours,

7/25

(signed) FRANK E. JOHNSON
(GWB)

Acting Administrator
Defense Minerals Exploration
Administration

AGKeating/mb
July 24, 1952
cc to: Docket
Adm. Reading File
Operating Comm.
Mr. Keller
Mr. Keating
Mr. Bishop
Mr. McKnight
Region IV
Chron

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

COPY

July 18, 1952

Memorandum

To: Mr. H. F. Keller

From: E. L. Newcomb, USGS
O. M. Bishop, USBM

Re: DMEA-2603
Ajax Mine
Mineral Hill District
Pinal County, Arizona
$59,727
Lead-Zinc

Subject: Recommendation for field referral

The applicant requests assistance to explore a prominent lead-zinc fissure vein which can be traced on the surface for nearly 2000 feet. The proposal involves rehabilitation of a 200 foot shaft, 600 feet of drifting north on the 176 level, 200 feet of raising from the new 176 level drift extension, 150 feet of raising for a new shaft at a point 670 feet north of the old shaft, and 2000 feet of diamond drilling from the new drift to test for downward extensions of mineralization.

The old workings consist of a 200 foot inclined shaft, 100 feet of drift on the 50 level, 20 feet of crosscut on the 90 level and 200 feet of crosscut and drift on the 176 level.

The Ajax vein is in schist, and strikes N 25° W and dips 50°-70° SW. The shaft and levels have been well sampled. The average grade of ore in the shaft below the 50 level is 3.8% lead and 9.8% zinc. Samples taken in 1948 on the 176 level averaged about 10% in combined lead-zinc. Three cars of ore from the 50 level averaged 10.5% lead and 3.71% zinc. Outcrops of mineralization on the vein are strongly oxidized and the applicant states that oxidation extends down to the 50 level. Lead sulfide is prominent on this level, but below this level the grade increases in zinc and copper and lead decreases. In addition to the data on the old workings, the applicant reports that a diamond drill hole 400 feet north of the shaft cut 8½ feet of zinc ore which assayed 16.9% zinc. This ore was intersected at a depth which corresponds to a 100 level in the shaft.

Although the existence of mineralization near the shaft has been well established by the old workings, there is a possibility that this area contains a single plunging oreshoot. The one diamond drill hole may in turn be on another oreshoot, rather than an extension of the mineralization developed near the shaft. Further drilling along the strike of the vein appears to be a better approach to exploration of the possible mineralization than the applicant's proposed underground project, which borders on development work rather than exploration. In fact, it would be difficult to plan a more

Copy

thorough development program than the work the applicant has outlined as exploration. We recommend that the application be referred to the field team for their review. Inasmuch as copper is reported in the lower workings and may increase at depth, the field team should include copper in their consideration of any proposed work at the Ajax Mine. Field review may give evidence to support the 600 feet of drifting as opposed to exploration by diamond drilling, but it is doubtful that the raises could be justified.

/s/ E. L. Newcomb
Geologist

/s/ O. M. Bishop
Mining Engineer

IN REPLY REFER TO:

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

July 18, 1952
Re: DMEA-2603
Ajax Mine
Mineral Hill District
Pinal County, Arizona
$59,727
Lead, zinc

Memorandum

To: Mr. H. F. Keller

From: E. L. Newcomb, USGS
O. M. Bishop, USBM

Subject: Recommendation for field referral

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E. L. Newcomb
E. L. Newcomb
Geologist

O M Bishop
O. M. Bishop
Mining Engineer

EXPLORATION

Subject: DMEA-2603
Re: Exploration Loan
Ajax Group
July 3, 1952

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

My dear Mr. Pomeroy:

This will acknowledge receipt of your application dated July 1, 1952, for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2603 and referred to the Base Metals Division.

Kindly refer to DMEA-2603 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Administrative Officer

7862

532 Security Building
Phoenix, Arizona
July 1, 1952

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

Attention: Messrs. Mettendorf, Keller and Keating

Gentlemen:

We are enclosing herewith our application for a participating loan administered by your department. We feel that we have supplied all the information requested under Form MF 103 with the exception of the Owners consent to Lien and a current balance sheet.

The writer has been assured by the Owners that they are agreeable to the lien in case a discovery is made. This will be filed as requested as soon as signatures can be obtained. It is our hope that this will not hold up the regular processing of the application.

Since our operation has started already and a good crew assembled we, quite naturally, are desirous that work stoppage will not be necessary. That upon completion of our present project and pending your approval we will be able to coordinately move into the project outlined in the enclosed application.

With this in mind Mr. Frank L. Metler, our engineer and superintendent is returning to Arizona and will take the liberty of presenting a full set of the application papers to Mr. Storms and arrange to accommodate an early inspection of the property by his department.

The writer will remain in Washington on this and other business and will be at hand in case anything arises that could be expedited by him.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 3 - 1952

We wish to thank you gentlemen for the excellent cooperation you are giving us.

Very truly yours,

Ralph J. Pomeroy, President
Magma King Manganese Mining Co.

CC: Messrs. Searles
Hobart

532 Security Building
Phoenix, Arizona
July 1, 1952

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

Attention: Messrs. Mettendorf, Keller and Keating

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Very truly yours,

Ralph J. Pomeroy

Ralph J. Pomeroy, President
Magma King Manganese Mining Co.

CC: Messrs. Searles
Hobart

Superior, Arizona
May 20, 1952

To the Board of Directors
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Gentlemen:

At your request, I have compiled, from personal observation and accumulated data obtained from former operators and engineers, a report on your Ajax property, located in Pinal County, Arizona about 8 miles Southwest of the town of Superior, Arizona.

The report on the Ajax Mine is herewith attached.

Yours very truly,

Frank L. Metler.

REPORT ON AJAX, BLUE CRYSTAL MINES, MINERAL HILL MINING DISTRICT, PINAL COUNTY, ARIZONA.

PAGE 1. ---------- SUMMARY

2. ---------- SUMMARY

3. ---------- PROPERTY

3. ---------- LOCATION

4. ---------- HISTORY

4. ---------- GEOLOGY

5. ---------- GEOLOGY

6. ---------- GEOLOGY

6. ---------- DEVELOPMENT

6. ---------- SAMPLING

7. ---------- SAMPLING

7. ---------- DEVELOPED ORE

8. ---------- PROBABLE ORE

8. ---------- RECOMMENDATIONS

9. ---------- RECOMMENDATIONS

PHOTOGRAPHS

MAPS:
PROPERTY MAP
SAMPLE MAPS

SUMMARY:

The strength, continuity and mineralization of the surface croppings of the Ajax vein together with the amount of commercial ore developed by a small amount of vertical and horizontal workings, indicates that this mining property should by further development and proper management become a profitable producer.

As the vein on the surface at the shaft is much poorer in appearance than it is directly to the North of the present workings, a considerable tonnage of milling ore should be developed by a drift on the 176 foot level in that direction. Sinking on the vein below the present developed orebody should also develop an appreciable tonnage also. However, drifiting to the North should disclose sufficient ore to make the construction of a milling plant feasible.

The metallurgy should not be difficult as the lead and zinc ore are coarsely crystalline and should separate easily by medium grinding in the mill. Below the 50 foot level the minerals are entirely sulphide so no metallurgical trouble can be expected caused by oxidized ores. At the present writing the mine will not produce enough water for milling purposes but further opening of underground workings should add to the present supply. If enough water cannot be produced by the mine a drilled well could augment the present supply.

Summary (Continued)

Other mines in the district have changed at depth to copper, starting with a zinc ore, this is particularly true of the Magma mine at Superior, Arizona. This mine is producing high grade copper ore at a depth of 5000 feet below the outcrop. At what depth the change from copper to zinc might take place cannot be forecast, however, there is a slight increase in the copper content of the ore on the 176 foot level.

A sum of $50,000.00 should be sufficient to provide the necessary equipment and carry on the development program to a point where a mill would be profitable undertaking. In the event that little or no further ore be developed on the property, the cost of the development program should be salvaged by mining and milling the ore now developed. There is almost a certainty that the ore reserves will be steadily increased by carrying on the proposed development.

The writer believes that the Ajax Mine will with proper management and engineering become a profitable producer.

Respectfully Submitted,

Frank L. Metler

PROPERTY:

The Ajax mining property consists of three patented and sixteen unpatented mining claims, all of which are contiguous. The patented claims are; Ajax, Ajax No. 1 and Raven. The unpatented mining claims are: Peacock, Tom, Hidden Treasure, Homestake, (also Known as Smelter No. 1) Smelter No. 2, Blue Crystal, White Mule, Sunny Jim, Contact No. 1, Contact No. 2, Contact No. 3, Red Chief, Liberty, Side Line, and South Ajax.

LOCATION:

The Ajax Blue Crystal Groups are located in Mineral Hill Mining District, Pinal County, Arizona. They are situated about eight miles Southwest of Superior, Arizona, the home of the famous Magma copper mine.

The Ajax group is reached by turning South from the Phoenix Superior Highway at a point eleven miles West of Superior, thence nine miles by country road. The distance from the Ajax Mine to nearest railroad is ten miles.

HISTORY:

The Ajax mine was first opened about 1906 and at that time it was developed to it's present depth.

Evidently, the operators at that time were in search of ores containing lead and silver and became discouraged because of the zinc content which increased as depth was attained. At this period the known methods of separation of lead and zinc were very inefficient and consisted of gravity concentration only. The flotation process had not

HISTORY (Continued)

as yet been discovered. The market price of lead at that periodwas about three cents per pound, so there could have been little incentive to proceed further with development work on the mine.

The mine was dormant until 1948, when leasers tried again to mine a direct smelting product, this operation was unprofitable. However, the ore mined by the leasers was of excellent milling grade. In 1949 operations were again resumed and the mine was unwatered to the bottom or 176 foot level. A small amount of drifting was done and considerable tonnage of mill ore proven. Finances were limited and the proper amount of development work could not be completed or a mill constructed.

At this writing the mine is unwatered and all workings are available for inspection.

GEOLOGY AND MINERALIZATION:

The prevailing formation in the area surrounding the Ajax mine is that of schist and is probably related to the Pinal Schist of the Ray-Miami Districts. The structure at the Ajax has been tilted and is cut by the Ajax-Blue Crystal veins nearly at right angles. The veins are true fissures and are not bedded in the planes of the schist.

The Ajax vein is very prominent and the outcrop extends above the surrounding terrain to a heighth of over ten feet in numerous places. It is plainly visible along the outcrop for a distance of nearly 2000 feet, with minor faulting in several places which are plainly visible on the surface and are of small displacement. The vein at the Ajax is from 8 to

GEOLOGY AND MINERALIZATION (Continued)

20 feet in width and the outcrop contains lead in both sulphide and carbonate form, the carbonate ore predominating. The vein also contains quartz, hematite and calcite minerals. On the surface the oxidation is very pronounced but at the 50 foot level and below, the ore is entirely sulphide in character. At the 50 foot level the ore is predominantly that of lead, but as depth is gained in the shaft, the percentage of zinc steadily increases, with some increase also in the copper content of the ore. Assays also indicate that the gold and silver values are becoming greater on the 176 level South of the Shaft. As greater depth is attained at the Ajax copper should gradually replace the zinc and the vein would then become a producer of copper instead of lead zinc as at the present.

The writer has personaly observed the zinc orebody on the 1800 feet level of the Magma mine, at a slightly greater depth this zinc orebody was replaced by a good grade of copper ore. Quoting from University of Arizona Bulletin on Superior Mining District, dated October, 1943.

"The Western shoot has its apex about 50 feet above the 1200 foot level at departure 4600. Here the ore consists of Sphalerite and a little galena, with only traces of copper, between the 1300 and 1400 levels it changes abrubtly into a Bornite rich ore with little or no zinc and lead.

The Blue Crystal which is a parallel vein and is about 1500 feet distant from the Ajax vein. The Blue Crystal vein is smaller in width at the outcrop, with average width of about four to five feet. Much cerussite (lead carbonate) was observed with some galena and copper carbonate minerals. An ore pile on

GEOLOGY AND MINERALIZATION (Continued)

the dump at the mouth of the Blue Crystal tunnel appears to contain about 10 to 12 percent lead, mostly in carbonate form. This vein is quite strong and well mineralized and should develop considerable ore at depth.

DEVELOPMENT:

At the Ajax, a small shaft has been sunk to a depth of nearly 200 feet at an angle of about 65 degrees. This shaft was started on the vein but went into the footwall at about 90 feet below the collar. This made necessary a crosscut of about 30 feet in order to reach the vein on the 176 foot level. Total drifting on the 176 level consists of about 95 feet of drift to the North and 55 feet of drift to the South of the shaft, together with a short crosscut to the footwall. On the 50 level, the North drift extends 40 feet from the shaft and the South drift about 60 feet. There is a short crosscut directly North of the shaft, which extends into the hanging wall. There are numerous cuts and shallow shafts along the outcrop, which shows the vein to be in place and well mineralized.

BLUE CRYSTAL

Development at the Blue Crystal is composed of a tunnel about 200 feet in length, a two compartment winze said to be 300 feet in depth and a one compartment winze near the face of the tunnel about 90 feet in depth. There is said to be a stope on the lower level of the large winze ready for ore production, but the writer has not seen this stope as water fills the winze to within 100 feet of the tunnel level.

SAMPLING - AJAX:

Three cars shipped by leasers in 1948 gave the following:

	Silver	Lead	Zinc	Copper
Car No. 1	1.05 oz.	7.05%	5.4%	0.12%
Car No. 2	1.03 oz.	7.20%	3.2%	0.12%
Car No. 3	1.45 oz.	10.30%	2.8%	0.20%

Several small lots of sorted ore were shipped with assay returns of 60% lead and 4 ounces of silver per ton. A reported shipment by the original operators when the mine was first opened yielded 68% lead and came from the 50 feet level. The writer has noted large boulders of galena in the vein on the 50 level which would assay at least 68% in lead.

Sampling in the shaft below the 50 level gives a calculated assay value of 3.8% lead and 9.8% zinc per ton. On the 176 level, 27 samples were taken in 1948 and indicated an average value in combined lead and zinc in excess of 10% combined metals, with small additional and recoverable values in gold and silver.

A core drill hole drilled from the surface 400 feet North of the shaft cut the vein at a point corresponding to the 100 foot level in the shaft. This hole shows eight and one half feet of zinc ore assaying 16.9%.

The sampling which has been done on the Ajax vein has been careful and thorough and the values should be maintained under actual mining conditions. (See sample maps of 50 and 76 levels)

DEVELOPED ORE:

Between the 50 level and the 176 level and opened by 140 feet of drifting on the 176 level and 100 feet of drifting on the 50 level there is a calculated tonnage of about 19800 tons,

DEVELOPED ORE (Continued)

This block should average between 10 and 11 percent combined lead and zinc, with some recoverable values in gold and silver. Another 4000 to 5000 tons of partially oxidized ore can be obtained between the 50 level and the surface.

PROBABLE ORE:

It is reasonable to assume ore below the 176 level, assuming 50 feet in depth would add at least 7000 additional tons to that now blocked above the 176 level. There is no particular reason why the ore below the present bottom level shoul not continue to extend downward for a long distance.

The drill hole 400 feet North of the shaft where eight and one half feet of ore assaying over 16% zinc was cut, also indicates commercial ore at this point, and as the face of the North drift is yet in ore, there is no reason to believe that this ore will not continue to develop by drifting to the North.

At a point several hundred feet from the shaft, Northerly, both sulphide and carbonate ores are observed on the outcrop, the vein is exceptionally strong in this area and it is reasonable to expect good ore when a point is reached under this exposure on the lower levels.

RECOMMENDATIONS:

It is recommended that a skip pocket be cut on the lower level and that a skip be installed, to take the place of the hoisting bucket now in place. After installation of skip and cutting skip pocket, drifting should be started to the North and should be continued until a favorable point is reached where a crosscut can be extended into the hanging

RECOMMENDATIONS: (Continued)

wall far enough to permit a vertical shaft to cut the vein at about the 400 foot level. The present shaft would not be suitable for steady production and an additional shaft is necessary to provide adequate ventilation of the workings.

After the crosscut is run, core drilling would then be in order to prove the downward extension of the orebodys.

Should drifting to the North continue to expose ore of an equal grade comparable to that which has been opened by past development, a milling plant would then be necessary. This plant should be of about 100 tons daily capacity and should be designed so that other units could be added in the future.

It is also recommended that the Blue Crystal winze be unwatered and a thorough sampling campaign be conducted at that property. It is very probably that by unwatering the mine considerable tonnage may be opened and made available for milling.

A S S I G N M E N T

THIS ASSIGNMENT and agreement made and entered into this 11 day of March, 1952, by and between LOUIS HENNIG and ROBERT F. DANNELLEY, herein referred to as Assignors, and APEX MINES, INC., an Arizona corporation, herein referred to as Assignee,

W I T N E S S E T H:

WHEREAS the Assignors are Lessees under the terms of a lease and option dated the 10th day of August, 1948, and an amendment thereto, wherein Walter C. Smith and Theodora Holmes Smith, husband and wife, Rae L. Frazier, a widow, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease was recorded on the 21st day of August, 1948, in the office of the Recorder of Pinal County, State of Arizona, in Book No. 8 of Contracts and Agreements, at page 221, and which lease and option embraces certain patented mining claims known as Ajax and Ajax No. 1, and designated by the Surveyor General of Arizona as Survey No. 3949, and The Raven; and said lease and option herein to be designated as Master Lease No. 1; and

WHEREAS the said Assignors are Lessees under a lease and option agreement bearing date of October 18, 1948, wherein G. O'Dell and Ludisa O'Dell, husband and wife, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease embraces sixteen unpatented mining claims located in the County of Pinal, State of Arizona, and which lease and option was recorded in the Pinal County Recorder's Office on January 27, 1949, in Docket 5, page 460, and which lease and option is in this assignment referred to as Master Lease No. 2; and

WHEREAS the said Assignors have been paid the sum of $3,000.00 and for other good and valuable consideration, receipt of which Assignors hereby acknowledge,

NOW, THEREFORE, Assignors hereby sell, assign, transfer and set over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee is hereby authorized to deliver a copy and notice of this assignment to the parties in Master Leases No. 1 and No. 2 appearing as Lessors.

Assignors agree to furnish the proper abstracts and records for the examination of Assignee and further agree that the lessors in said Master Leases No. 1 and No. 2 are the legal owners of said mining properties and have a good and sufficient title thereto, and said Assignors agree to indemnify Assignee from any damages that might be sustained by reason of any defect or flaw in the title to said patented mining claims, or in the mining titles to said unpatented mining claims.

The terms, conditions and provisions of this assignment shall be binding upon and inure to the benefit of the respective parties to this assignment, their heirs, executors, successors and assigns.

IN WITNESS WHEREOF the Assignors have, on the day and year first above written, executed this assignment for the consideration, covenants and terms hereinabove specified, and the Assignee has caused its proper officers to execute this assignment and agreement on the day and year first above written.

(s) Louis Hennig

(s) Robert F. Dannelley
ASSIGNORS

APEX MINES, INC.

By (s) Ralph J. Pomeroy
Its President

Attest (s) Conrad J. Kleinman
Its Secretary
ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned

officer, personally appeared LOUIS HENNIG and ROBERT F. DANNELLEY, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, who acknowledged themselves to be the President and Secretary respectively of APEX MINES, INC., a corporation, and who acknowledged to me that they executed the foregoing instrument for and on behalf of said company, as such officers, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

Receipt is hereby acknowledged of a copy of the foregoing Assignment, and we hereby consent to and accept said assignment, this ____ day of March, 1952.

(s) Walter C. Smith

(s) Theodora Holmes Smith

Rae L. Frazier/Walter C. Smith
Atty. in fact

(s) Frank H. Allen

Gladys Allen by Frank H. Allen

LESSORS

" EXHIBIT " A "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this 16th day of October, 1948, by and between G. O'DELL and LUDISA O'DELL, husband and wife, of Phoenix, Maricopa County, Arizona, and FRANK H. ALLEN and GLADYS ALLEN, husband and wife, of Gilbert, Maricopa County, Arizona, who as a group are the owners and lessors of all the below listed sixteen (16) unpatented mining claims, as LESSORS, and LOUIS HENNIG and ROBERT F. DANNELLEY of Pinal County, Arizona, as LESSEES,

WITNESSETH:

That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let unto the said lessees, all of the following described mine and mining property, the location notices of which are of record in the office of the County Recorder of Pinal County, Arizona, the claims being situated in the Mineral Hill Mining District, County of Pinal, State of Arizona, to-wit:

PEACOCK	CONTACT NO. 1
GOLDEN STATE	CONTACT NO. 2
HIDDEN TREASURE	CONTACT NO. 3
SMELTER NO. 1	RED CHIEF
SMELTER NO. 2	LIBERTY
BLUE CRYSTAL	SIDE LINE
WHITE MULE	TOM
SUNNY JIM	SOUTH WEST AJAX

Unpatented mining claims

together with the appurtenances.

TO HAVE AND TO HOLD unto the said lessees for a term of eight (8) years expiring at noon on the fifteenth (15th) day of October, 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said

lessees reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows; to wit:

To enter upon said mine and premises and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as workable mines, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises, throughout the term of this lease, the annual assessment work as required by Federal and state laws, and to cause affidavits for such to be recorded with the County Recorder of the County of Pinal, state of Arizona, on or before the first day of May of each year this lease shall be in effect.

It is agreed that in the event mining activity be stayed by reason of acts of God, or for other causes beyond the control of Lessees, the lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ores shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten per cent (10%) of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentration, smelting and trucking, any of which above processes may be required and

employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is, five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest, and five (5%) per cent to G. O'Dell, 95 West Willetta Street, Phoenix, Arizona, as agent for the other interest in the unpatented mining claims herein described, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and ore concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessors' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating their determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the period of this lease abandon said lease and will, in such event, notify lessors herein in writing of any such intention, at their proper addresses, and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If at any time the lessees do not perform their obligations hereunder, this lease shall terminate in ninety (90) days thereafter. Upon the termination of this lease because of lessees' default or because of abandonment of this lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have

placed upon said mining claims. If, within said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed, said property shall then belong to the owners of said mining claims. All timbers in place and gallows frame erected upon said mining property shall be and remain the property of the owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property, and of the equipment and property as herein described unto lessors, their heirs and assigns. Upon default and delivery of said possession, as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereinafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of mining, concentrating or leaching the ores mined from said claims, and agree to grant a lease or leases of surface rights upon the ground upon which such structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be

so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is expressly understood, however, that in case of abandonment of this lease by lessees, all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent, said improvements shall become the property of the owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures, surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately.

Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the state of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof; lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipts of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and

recorded as required by law the notice of non-liability provided for by the laws of the state of Arizona, Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the state of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft, and to keep workings in use clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein, and it is agreed that if controversy shall arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such condition or rectify the situation complained of; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary, by consent of all parties.

It is further agreed that this lease may be assigned, and upon such assignment the assigned hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all of the covenants, promises and conditions upon the part of the lessees agreed to be kept and performed.

AND IN CONSIDERATION of the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right, during the term of this lease, to purchase the interest of lessors herein to said premises for the sum of

Thirty-two thousand ($32,000.00) dollars, the sum of Sixteen Thousand ($16,000.00) dollars to each of the two groups of lessors. All royalties paid during the term of this lease shall be credited toward such purchase price, of thirty-two thousand ($32,000.00) dollars, and any remaining amount due shall be paid on or before October 15, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payments, Lessors will execute, acknowledge and deliver, at their own cost, good and sufficient deed or deeds to the lessees, or such person or company as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly understood and agreed that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year first thereinabove written.

G. O'Dell

Ludisa O'Dell
(Husband and wife)

Frank H. Allen

Gladys Allen
(Husband and wife)
LESSORS

Louis Hennig

Robert F. Dannelley
LESSEES

STATE OF ARIZONA :
: SS
COUNTY OF MARICOPA :

On this day, before me, the undersigned Notary Public, personally appeared XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX,XXXXX FRANK H. ALLEN and GLADYS ALLEN, husband and wife, as lessors, and XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX as XXXXXXXX and acknowledged to me that they executed the foregoing lease for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 22nd day of October, 1948.

W. C. Mc Connell
Notary Public

My commission expires:
Nov. 13, 1950.

State of Arizona / SS
County of Maricopa /

On this day, before me, the undersigned Notary Public, personally appeared G. O'DELL and LUDISA O'DELL, husband and wife, as Lessors, acknowledged to me that they executed the lease for the purpose and consideration expressed.

GIVEN UNDER MY HAND and seal of office this 1st day of November, 1948.

Edward J. Gale
Notary Public

My Commission Expires March 10, 1951

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of January, 1949 by Robert F. Dannelley.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8A -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of Jan., 1949 by Louis Hennig.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8B -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I hereby certify that the within instrument was filed and recorded at request

of Louis Hennig
Jan. 27, 1949, at 3:10 P. M.
Docket 5 of Page 460

Witness my hand and official seal the day and year aforesaid.

SOPHIE M. SMITH

County Recorder

by Margaret K. Bamrick

Deputy Recorder

42531

" EXHIBIT "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this tenth day of August of 1948, between Walter C. Smith and Theodora Holmes Smith, husband and wife, and Rae L. Fraser, a widow, of Coolidge, Pinal County, Arizona, and Frank H. Allen and Gladys Allen, husband and wife, of Gilbert, Maricopa County, Arizona, lessors, and Louis Hennig and Robert F. Dannelley of Pinal County, Arizona, Lessees:

WITNESSETH: That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let, unto the said lessees, all the following described mine and mining property, situated in the MINERAL HILL MINING DISTRICT, County of Pinal, State of Arizona, to-wit:

The AJAX AND AJAX NO. 1 patented mining claims together with the appurtenances to have and to hold unto the said lessees for the term of eight (8) years expiring at noon on the first day of September 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said tenant reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows, to-wit: To enter upon said mine or premises, and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as a workable mine, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises throughout the term of this lease, beginning not to exceed ninety (90) days from the date hereof, not less than sixty (60) eight (8) hour man shifts per month, averaged over periods of ninety (90) days. However, it is agreed that in the event work be stayed by reason of acts of God, or for other causes beyond the control of lessees, lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ore shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten (10%) per cent of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentrating, smelting and trucking, any of which above processes may be required and employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is: five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest and five (5%) per cent to Walter C. Smith, Box 546, Coolidge, Arizona, as agent for the other half interest in the AJAX AND AJAX NO. 1 patented claims, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and/or concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessees' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating the determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the term of this lease abandon operation of the properties and will, in such event, notify lessors herein in writing of such intention at their proper addresses and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If, at any time, the said lessees do not perform their obligations hereunder for a period of ninety (90) days, this lease shall terminate. Upon the termination of this lease because of lessees' default or because of abandonment of the lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have placed upon said mining claims. If, within the said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed said property shall then belong to the co-owners of said mining claims. All timbers

in place and gallows frame erected upon said mining property shall be and remain the property of the co-owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property (and of the equipment and property as herein described) unto lessors, their heirs and assigns. Upon default and delivery of said possession as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of milling, concentrating or leaching the ores mined from said claims and agree to grant a lease or leases of surface rights upon the ground upon which said structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is

expressly understood, however, that in case of default or abandonment of this lease by lessees all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent said improvements shall become the property of the co-owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately. Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the State of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof. Lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipt of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and recorded as required by law the notice of non-liability provided for by the laws of the State of Arizona. Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the State of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft and to keep workings clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein and it is agreed that if controversy arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such a condition or rectify the situation complained of if such be justified under the lease; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary.

It is further agreed that this lease may be assigned and upon such assignment the assignee hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all the covenants, promises and conditions upon the part of the lessees herein agreed to be kept and performed.

AND IN CONSIDERATION OF the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right during the term of this lease to purchase the interests of lessors herein to said premises for the sum of FORTY THOUSAND ($40,000.00) DOLLARS, TWENTY THOUSAND ($20,000.00) DOLLARS to owners of each one-half interest. All royalties paid during the term of this lease shall be credited toward such purchase price of FORTY THOUSAND ($40,000.00) DOLLARS and any remaining amount due shall be paid on or before September 1, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payment lessors will execute, acknowledge and deliver at their own cost, good and sufficient deed or deeds to the lessees, or such person or com-

pany as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender, or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly agreed and understood that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year above written.

Frank H. Allen

Gladys Allen

Walter C. Smith

Theodora Holmes Smith

Rae L. Fraser

By
Walter C. Smith, Attorney-in-fact

LESSORS

Louis Hennig

Robert F. Dannelley

LESSEES

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

On this 12th day of August, 1948, personally appeared before me, the undersigned officer, FRANK H. ALLEN AND GLADYS ALLEN, his wife, known to me to be the persons whose names are subscribed to the foregoing lease, and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

W. C. Mc Connell
Notary Public

My Commission expires

Nov. 13. 1950.

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14th day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith and Theodora Holmes Smith, his wife, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3 - 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14 day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith, Attorney-in-fact for Rae L. Fraser, a widow, known to me to be the person whose name is subscribed to the foregoing lease and acknowledged to me that he executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3. 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 20th day of August, 1948, before me, the undersigned officer, personally appeared Louis Hennig, and Robert F. Dannelley, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Jan Meison
Notary Public

My commission expires:

6 - 25 - 51

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I, Sophie M. Smith, Recorder in and for the County of Pinal, State aforesaid, do hereby certify that the annexed Instrument was filed and recorded at request of

Robert F. Dannelley
on the ___ day of Aug 21, 1948
A. D., 19__, at 3:00
__ o'clock, P. M., in Book No. 8
of Contr. & Agnts. Page 221
Witness my hand and official seal the day and year first above written.

SOPHIE M. SMITH
Recorder

Myrtle L. Kay
Deputy

39292

Return to Louis Hennig
200 South Los Angeles Street
Anaheim, California

A S S I G N M E N T

THIS ASSIGNMENT and AGREEMENT made and entered into this 1st day of April, 1952, by and between APEX MINES, INC., an Arizona corporation, hereinafter referred to as Assignor, and MAGMA KING MANGANESE MINING CO., an Arizona corporation, hereinafter referred to as Assignee,

W I T N E S S E T H:

WHEREAS, the Assignor is now the proper Lessee under the terms of two leases which are more fully set out and described in the Assignment attached to this instrument and made a part hereof by reference; and

WHEREAS, the Assignee herein has reimbursed Assignor for all sums expended by it in the acquisition of said Master Leases No. 1 and 2, and in consideration is granting to Assignor other valuable consideration as more fully herein set forth,

NOW, THEREFORE, Assignor hereby sells, assigns, transfers and sets over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2, copies of which are also attached hereto and made a part hereof by reference.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee agrees that it will grant to Assignor, or its nominees, as consideration for this assignment, an option or warrants to purchase 450,000 shares of Assignee's 10¢ par value capital stock, at 50¢ per share, during the period of five years from the date hereof.

The terms, conditions and provisions of this Assignment shall be binding upon and inure to the benefit of the respective parties, their successors and assigns.

IN WITNESS WHEREOF, the parties have caused their proper officers to execute this assignment and agreement on the day and year first above written.

APEX MINES, INC.

ATTEST:

By (s) Ralph J. Pomeroy
Its President

(s) Conrad J. Kleinman
Its Secretary

ASSIGNOR

MAGMA KING MANGANESE MINING CO.

By (s) Ralph J. Pomeroy
Its President

ATTEST:

(s) Conrad J. Kleinman
Its Secretary

ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of APEX MINES, INC., the Assignor therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires:
1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J.

KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of MAGMA KING MANGANESE MINING CO., the Assignee therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires: 1-30-56

A S S I G N M E N T

THIS ASSIGNMENT and AGREEMENT made and entered into this 1st day of April, 1952, by and between APEX MINES, INC., an Arizona corporation, hereinafter referred to as Assignor, and MAGMA KING MANGANESE MINING CO., an Arizona corporation, hereinafter referred to as Assignee,

W I T N E S S E T H:

WHEREAS, the Assignor is now the proper Lessee under the terms of two leases which are more fully set out and described in the Assignment attached to this instrument and made a part hereof by reference; and

WHEREAS, the Assignee herein has reimbursed Assignor for all sums expended by it in the acquisition of said Master Leases No. 1 and 2, and in consideration is granting to Assignor other valuable consideration as more fully herein set forth,

NOW, THEREFORE, Assignor hereby sells, assigns, transfers and sets over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2, copies of which are also attached hereto and made a part hereof by reference.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee agrees that it will grant to Assignor, or its nominees, as consideration for this assignment, an option or warrants to purchase 450,000 shares of Assignee's 10¢ par value capital stock, at 50¢ per share, during the period of five years from the date hereof.

The terms, conditions and provisions of this Assignment shall be binding upon and inure to the benefit of the respective parties, their successors and assigns.

IN WITNESS WHEREOF, the parties have caused their proper officers to execute this assignment and agreement on the day and year first above written.

APEX MINES, INC.

ATTEST:

By (s) Ralph J. Pomeroy
Its President

(s) Conrad J. Kleinman
Its Secretary

ASSIGNOR

MAGMA KING MANGANESE MINING CO.

By (s) Ralph J. Pomeroy
Its President

ATTEST:

(s) Conrad J. Kleinman
Its Secretary

ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of APEX MINES, INC., the Assignor therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires:
1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J.

KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of MAGMA KING MANGANESE MINING CO., the Assignee therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires: 1-30-56

A S S I G N M E N T

THIS ASSIGNMENT and agreement made and entered into this 11 day of March, 1952, by and between LOUIS HENNIG and ROBERT F. DANNELLEY, herein referred to as Assignors, and APEX MINES, INC., an Arizona corporation, herein referred to as Assignee,

W I T N E S S E T H:

WHEREAS the Assignors are Lessees under the terms of a lease and option dated the 10th day of August, 1948, and an amendment thereto, wherein Walter C. Smith and Theodora Holmes Smith, husband and wife, Rae L. Frazier, a widow, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease was recorded on the 21st day of August, 1948, in the office of the Recorder of Pinal County, State of Arizona, in Book No. 8 of Contracts and Agreements, at page 221, and which lease and option embraces certain patented mining claims known as Ajax and Ajax No. 1, and designated by the Surveyor General of Arizona as Survey No. 3949, and The Raven; and said lease and option herein to be designated as Master Lease No. 1; and

WHEREAS the said Assignors are Lessees under a lease and option agreement bearing date of October 18, 1948, wherein G. O'Dell and Ludisa O'Dell, husband and wife, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease embraces sixteen unpatented mining claims located in the County of Pinal, State of Arizona, and which lease and option was recorded in the Pinal County Recorder's Office on January 27, 1949, in Docket 5, page 460, and which lease and option is in this assignment referred to as Master Lease No. 2; and

WHEREAS the said Assignors have been paid the sum of $3,000.00 and for other good and valuable consideration, receipt of which Assignors hereby acknowledge,

NOW, THEREFORE, Assignors hereby sell, assign, transfer and set over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee is hereby authorized to deliver a copy and notice of this assignment to the parties in Master Leases No. 1 and No. 2 appearing as Lessors.

Assignors agree to furnish the proper abstracts and records for the examination of Assignee and further agree that the lessors in said Master Leases No. 1 and No. 2 are the legal owners of said mining properties and have a good and sufficient title thereto, and said Assignors agree to indemnify Assignee from any damages that might be sustained by reason of any defect or flaw in the title to said patented mining claims, or in the mining titles to said unpatented mining claims.

The terms, conditions and provisions of this assignment shall be binding upon and inure to the benefit of the respective parties to this assignment, their heirs, executors, successors and assigns.

IN WITNESS WHEREOF the Assignors have, on the day and year first above written, executed this assignment for the consideration, covenants and terms hereinabove specified, and the Assignee has caused its proper officers to execute this assignment and agreement on the day and year first above written.

(s) Louis Hennig

(s) Robert F. Dannelley
ASSIGNORS

APEX MINES, INC.

By (s) Ralph J. Pomeroy
Its President

Attest (s) Conrad J. Kleinman
Its Secretary
ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned

officer, personally appeared LOUIS HENNIG and ROBERT F. DANNELLEY, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, who acknowledged themselves to be the President and Secretary respectively of APEX MINES, INC., a corporation, and who acknowledged to me that they executed the foregoing instrument for and on behalf of said company, as such officers, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

Receipt is hereby acknowledged of a copy of the foregoing Assignment, and we hereby consent to and accept said assignment, this ____ day of March, 1952.

(s) Walter C. Smith

(s) Theodora Holmes Smith

Rae L. Frazier/Walter C. Smith
Atty. in fact

(s) Frank H. Allen

Gladys Allen by Frank H. Allen

LESSORS

" EXHIBIT " A "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this 16th day of October, 1948, by and between G. O'DELL and LUDISA O'DELL, husband and wife, of Phoenix, Maricopa County, Arizona, and FRANK H. ALLEN and GLADYS ALLEN, husband and wife, of Gilbert, Maricopa County, Arizona, who as a group are the owners and lessors of all the below listed sixteen (16) unpatented mining claims, as LESSORS, and LOUIS HENNIG and ROBERT F. DANNELLEY of Pinal County, Arizona, as LESSEES,

WITNESSETH:

That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let unto the said lessees, all of the following described mine and mining property, the location notices of which are of record in the office of the County Recorder of Pinal County, Arizona, the claims being situated in the Mineral Hill Mining District, County of Pinal, State of Arizona, to-wit:

PEACOCK	CONTACT NO. 1
GOLDEN STATE	CONTACT NO. 2
HIDDEN TREASURE	CONTACT NO. 3
SMELTER NO. 1	RED CHIEF
SMELTER NO. 2	LIBERTY
BLUE CRYSTAL	SIDE LINE
WHITE MULE	TOM
SUNNY JIM	SOUTH WEST AJAX

Unpatented mining claims

together with the appurtenances.

TO HAVE AND TO HOLD unto the said lessees for a term of eight (8) years expiring at noon on the fifteenth (15th) day of October, 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said

lessees reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows; to wit:

To enter upon said mine and premises and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as workable mines, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises, throughout the term of this lease, the annual assessment work as required by Federal and state laws, and to cause affidavits for such to be recorded with the County Recorder of the County of Pinal, state of Arizona, on or before the first day of May of each year this lease shall be in effect.

It is agreed that in the event mining activity be stayed by reason of acts of God, or for other causes beyond the control of Lessees, the lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ores shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten per cent (10%) of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentration, smelting and trucking, any of which above processes may be required and

employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is, five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest, and five (5%) per cent to G. O'Dell, 95 West Willetta Street, Phoenix, Arizona, as agent for the other interest in the unpatented mining claims herein described, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and ore concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessors' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating their determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the period of this lease abandon said lease and will, in such event, notify lessors herein in writing of any such intention, at their proper addresses, and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If at any time the lessees do not perform their obligations hereunder, this lease shall terminate in ninety (90) days thereafter. Upon the termination of this lease because of lessees' default or because of abandonment of this lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have

placed upon said mining claims. If, within said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed, said property shall then belong to the owners of said mining claims. All timbers in place and gallows frame erected upon said mining property shall be and remain the property of the owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property, and of the equipment and property as herein described unto lessors, their heirs and assigns. Upon default and delivery of said possession, as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereinafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of mining, concentrating or leaching the ores mined from said claims, and agree to grant a lease or leases of surface rights upon the ground upon which such structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be

so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is expressly understood, however, that in case of abandonment of this lease by lessees, all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent, said improvements shall become the property of the owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures, surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately.

Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the state of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof; lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipts of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and

recorded as required by law the notice of non-liability provided for by the laws of the state of Arizona, Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the state of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft, and to keep workings in use clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein, and it is agreed that if controversy shall arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such condition or rectify the situation complained of; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary, by consent of all parties.

It is further agreed that this lease may be assigned, and upon such assignment the assigned hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all of the covenants, promises and conditions upon the part of the lessees agreed to be kept and performed.

AND IN CONSIDERATION of the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right, during the term of this lease, to purchase the interest of lessors herein to said premises for the sum of

Thirty-two thousand ($32,000.00) dollars, the sum of Sixteen Thousand ($16,000.00) dollars to each of the two groups of lessors. All royalties paid during the term of this lease shall be credited toward such purchase price, of thirty-two thousand ($32,000.00) dollars, and any remaining amount due shall be paid on or before October 15, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payments, Lessors will execute, acknowledge and deliver, at their own cost, good and sufficient deed or deeds to the lessees, or such person or company as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly understood and agreed that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year first thereinabove written.

G. O'Dell

Ludisa O'Dell
(Husband and wife)

Frank H. Allen

Gladys Allen
(Husband and wife)
LESSORS

Louis Hennig

Robert F. Dannelley
LESSEES

STATE OF ARIZONA :
: SS
COUNTY OF MARICOPA :

On this day, before me, the undersigned Notary Public, personally appeared XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXX,XXXXX FRANK H. ALLEN and GLADYS ALLEN, husband and wife, as lessors, and XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX as XXXXXXXX and acknowledged to me that they executed the foregoing lease for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 22nd day of October, 1948.

W. C. Mc Connell
Notary Public

My commission expires:
Nov. 13, 1950.

State of Arizona / SS
County of Maricopa /

On this day, before me, the undersigned Notary Public, personally appeared G. O'DELL and LUDISA O'DELL, husband and wife, as Lessors, acknowledged to me that they executed the lease for the purpose and consideration expressed.

GIVEN UNDER MY HAND and seal of office this 1st day of November, 1948.

Edward J. Gale
Notary Public

My Commission Expires March 10, 1951

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of January, 1949 by Robert F. Dannelley.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8A -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of Jan., 1949 by Louis Hennig.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8B -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I hereby certify that the within instrument was filed and recorded at request

of Louis Hennig
Jan. 27, 1949, at 3:10 P. M.
Docket 5 of Page 460

Witness my hand and official seal the day and year aforesaid.

SOPHIE M. SMITH

County Recorder

by Margaret K. Bamrick

Deputy Recorder

42531

- 8C -

" EXHIBIT "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this tenth day of August of 1948, between Walter C. Smith and Theodora Holmes Smith, husband and wife, and Rae L. Fraser, a widow, of Coolidge, Pinal County, Arizona, and Frank H. Allen and Gladys Allen, husband and wife, of Gilbert, Maricopa County, Arizona, lessors, and Louis Hennig and Robert F. Dannelley of Pinal County, Arizona, Lessees:

WITNESSETH: That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let, unto the said lessees, all the following described mine and mining property, situated in the MINERAL HILL MINING DISTRICT, County of Pinal, State of Arizona, to-wit:

The AJAX AND AJAX NO. 1 patented mining claims together with the appurtenances to have and to hold unto the said lessees for the term of eight (8) years expiring at noon on the first day of September 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said tenant reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows, to-wit: To enter upon said mine or premises, and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as a workable mine, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises throughout the term of this lease, beginning not to exceed ninety (90) days from the date hereof, not less than sixty (60) eight (8) hour man shifts per month, averaged over periods of ninety (90) days. However, it is agreed that in the event work be stayed by reason of acts of God, or for other causes beyond the control of lessees, lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ore shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten (10%) per cent of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentrating, smelting and trucking, any of which above processes may be required and employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is: five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest and five (5%) per cent to Walter C. Smith, Box 546, Coolidge, Arizona, as agent for the other half interest in the AJAX AND AJAX NO. 1 patented claims, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and/or concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessees' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating the determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the term of this lease abandon operation of the properties and will, in such event, notify lessors herein in writing of such intention at their proper addresses and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If, at any time, the said lessees do not perform their obligations hereunder for a period of ninety (90) days, this lease shall terminate. Upon the termination of this lease because of lessees' default or because of abandonment of the lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have placed upon said mining claims. If, within the said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed said property shall then belong to the co-owners of said mining claims. All timbers

in place and gallows frame erected upon said mining property shall be and remain the property of the co-owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property (and of the equipment and property as herein described) unto lessors, their heirs and assigns. Upon default and delivery of said possession as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of milling, concentrating or leaching the ores mined from said claims and agree to grant a lease or leases of surface rights upon the ground upon which said structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is

expressly understood, however, that in case of default or abandonment of this lease by lessees all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent said improvements shall become the property of the co-owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately. Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the State of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof. Lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipt of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and recorded as required by law the notice of non-liability provided for by the laws of the State of Arizona. Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the State of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no steping within ten (10) feet of any shaft and to keep workings clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein and it is agreed that if controversy arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such a condition or rectify the situation complained of if such be justified under the lease; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary.

It is further agreed that this lease may be assigned and upon such assignment the assignee hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all the covenants, promises and conditions upon the part of the lessees herein agreed to be kept and performed.

AND IN CONSIDERATION OF the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right during the term of this lease to purchase the interests of lessors herein to said premises for the sum of FORTY THOUSAND ($40,000.00) DOLLARS, TWENTY THOUSAND ($20,000.00) DOLLARS to owners of each one-half interest. All royalties paid during the term of this lease shall be credited toward such purchase price of FORTY THOUSAND ($40,000.00) DOLLARS and any remaining amount due shall be paid on or before September 1, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payment lessors will execute, acknowledge and deliver at their own cost, good and sufficient deed or deeds to the lessees, or such person or com-

pany as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender, or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly agreed and understood that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year above written.

Frank H. Allen

Gladys Allen

Walter C. Smith

Theodora Holmes Smith

Rae L. Fraser

By
Walter C. Smith, Attorney-in-fact
LESSORS

Louis Hennig

Robert F. Dannelley

LESSEES

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

On this 12th day of August, 1948, personally appeared before me, the undersigned officer, FRANK H. ALLEN AND GLADYS ALLEN, his wife, known to me to be the persons whose names are subscribed to the foregoing lease, and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

W. C. Mc Connell
Notary Public

My Commission expires

Nov. 13. 1950.

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14th day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith and Theodora Holmes Smith, his wife, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3 - 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14 day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith, Attorney-in-fact for Rae L. Fraser, a widow, known to me to be the person whose name is subscribed to the foregoing lease and acknowledged to me that he executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3. 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 20th day of August, 1948, before me, the undersigned officer, personally appeared Louis Hennig, and Robert F. Dannelley, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Jan Meisen
Notary Public

My commission expires:

6 - 25 - 51

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I, Sophie M. Smith, Recorder in and for the County of Pinal, State aforesaid, do hereby certify that the annexed Instrument was filed and recorded at request of

Robert F. Dannelley
on the ___ day of Aug 21, 1948
A. D., 19__, at 3:00
__ o'clock, P. M., in Book No. 8
of Contr. & Agmts. Page 221
Witness my hand and official seal the day and year first above written.

SOPHIE M. SMITH
Recorder

Myrtle L. Kay
Deputy

39292

Return to Louis Hennig
200 South Los Angeles Street
Anaheim, California

Superior, Arizona
May 20, 1952

To the Board of Directors
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Gentlemen:

At your request, I have compiled, from personal observation and accumulated data obtained from former operators and engineers, a report on your Ajax property, located in Pinal County, Arizona about 8 miles South-west of the town of Superior, Arizona.

The report on the Ajax Mine is herewith attached.

Yours very truly,

Frank L. Metler.

REPORT ON AJAX, BLUE CRYSTAL MINES, MINERAL HILL MINING DISTRICT, PINAL COUNTY, ARIZONA.

PAGE 1. ---------- SUMMARY

2. ---------- SUMMARY

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5. ---------- GEOLOGY

6. ---------- GEOLOGY

6. ---------- DEVELOPMENT

6. ---------- SAMPLING

7. ---------- SAMPLING

7. ---------- DEVELOPED ORE

8. ---------- PROBABLE ORE

8. ---------- RECOMMENDATIONS

9. ---------- RECOMMENDATIONS

PHOTOGRAPHS

MAPS:
PROPERTY MAP
SAMPLE MAPS

SUMMARY:

The strength, continuity and mineralization of the surface croppings of the Ajax vein together with the amount of commercial ore developed by a small amount of vertical and horizontal workings, indicates that this mining property should by further development and proper management become a profitable producer.

As the vein on the surface at the shaft is much poorer in appearance than it is directly to the North of the present workings, a considerable tonnage of milling ore should be developed by a drift on the 176 foot level in that direction. Sinking on the vein below the present developed orebody should also develop an appreciable tonnage also. However, drifiting to the North should disclose sufficient ore to make the construction of a milling plant feasible.

The metallurgy should not be difficult as the lead and zinc ore are coarsely crystalline and should separate easily by medium grinding in the mill. Below the 50 feet level the minerals are entirely sulphide so no metallurgical trouble can be expected caused by oxidized ores. At the present writing the mine will not produce enough water for milling purposes but further opening of underground workings should add to the present supply. If enough water cannot be produced by the mine a drilled well could augment the present supply.

Summary (Continued)

Other mines in the district have changed at depth to copper, starting with a zinc ore, this is particularly true of the Magma mine at Superior, Arizona. This mine is producing high grade copper ore at a depth of 5000 feet below the outcrop. At what depth the change from copper to zinc might take place cannot be forecast, however, there is a slight increase in the copper content of the ore on the 176 feet level.

A sum of $50,000.00 should be sufficient to provide the necessary equipment and carry on the development program to a point where a mill would be profitable undertaking. In the event that little or no further ore be developed on the property, the cost of the development program should be salvaged by mining and milling the ore now developed. There is almost a certainty that the ore reserves will be steadily increased by carrying on the proposed development.

The writer believes that the Ajax Mine will with proper management and engineering become a profitable producer.

Respectfully Submitted,

Frank L. Metler

PROPERTY:

The Ajax mining property consists of three patented and sixteen unpatented mining claims, all of which are contiguous. The patented claims are; Ajax, Ajax No. 1 and Raven. The unpatented mining claims are: Peacock, Tom, Hidden Treasure, Homestake, (also Known as Smelter No. 1) Smelter No. 2, Blue Crystal, White Mule, Sunny Jim, Contact No. 1, Contact No. 2, Contact No. 3, Red Chief, Liberty, Side Line, and South Ajax.

LOCATION:

The Ajax Blue Crystal Groups are located in Mineral Hill Mining District, Pinal County, Arizona. They are situated about eight miles Southwest of Superior, Arizona, the home of the famous Magma copper mine.

The Ajax group is reached by turning South from the Phoenix Superior Highway at a point eleven miles West of Superior, thence nine miles by country road. The distance from the Ajax Mine to nearest railroad is ten miles.

HISTORY:

The Ajax mine was first opened about 1906 and at that time it was developed to it's present depth.

Evidently, the operators at that time were in search of ores containing lead and silver and became discouraged because of the zinc content which increased as depth was attained. At this period the known methods of separation of lead and zinc were very inefficient and consisted of gravity concentration only. The flotation process had not

HISTORY (Continued)

as yet been discovered. The market price of lead at that periodwas about three cents per pound, so there could have been little incentive to proceed further with development work on the mine.

The mine was dormant until 1948, when leasers tried again to mine a direct smelting product, this operation was unprofitable. However, the ore mined by the leasers was of excellent milling grade. In 1949 operations were again resumed and the mine was unwatered to the bottom or 176 foot level. A small amount of drifting was done and considerable tonnage of mill ore proven. Finances were limited and the proper amount of development work could not be completed or a mill constructed.

At this writing the mine is unwatered and all workings are available for inspection.

GEOLOGY AND MINERALIZATION:

The prevaling formation in the area surrounding the Ajax mine is that of schist and is probably related to the Pinal Schist of the Ray-Miami Districts. The structure at the Ajax has been tilted and is cut by the Ajax-Blue Crystal veins nearly at right angles. The veins are true fissures and are not bedded in the planes of the schist.

The Ajax vein is very prominent and the outcrop extends above the surrounding terrain to a heighth of over ten feet in numerous places. It is plainly visible along the outcrop for a distance of nearly 2000 feet, with minor faulting in several places which are plainly visible on the surface and are of small displacement. The vein at the Ajax is from 8 to

GEOLOGY AND MINERALIZATION (Continued)

20 feet in width and the outcrop contains lead in both sulphide and carbonate form, the carbonate ore predominating. The vein also contains quartz, hematite and calcite minerals. On the surface the oxidation is very pronounced but at the 50 feet level and below, the ore is entirely sulphide in character. At the 50 feet level the ore is predominantly that of lead, but as depth is gained in the shaft, the percentage of zinc steadily increases, with some increase also in the copper content of the ore. Assays also indicate that the gold and silver values are becoming greater on the 176 level South of the Shaft. As greater depth is attained at the Ajax copper should gradually replace the zinc and the vein would then become a producer of copper instead of lead zinc as at the present.

The writer has personaly observed the zinc orebody on the 1800 foot level of the Magma mine, at a slightly greater depth this zinc orebody was replaced by a good grade of copper ore. Quoting from University of Arizona Bulletin on Superior Mining District, dated October, 1943.

"The Western sheet has its apex about 50 feet above the 1200 foot level at departure 4600. Here the ore consists of Sphalerite and a little galena, with only traces of copper, between the 1300 and 1400 levels it changes abrubtly into a Bornite rich ore with little or no zinc and lead.

The Blue Crystal which is a parallel vein and is about 1500 feet distant from the Ajax vein. The Blue Crystal vein is smaller in width at the outcrop, with average width of about four to five feet. Much cerussite (lead carbonate) was observed with some galena and copper carbonate minerals. An ore pile on

GEOLOGY AND MINERALIZATION (Continued)

the dump at the mouth of the Blue Crystal tunnel appears to contain about 10 to 12 percent lead, mostly in carbonate form. This vein is quite strong and well mineralized and should develop considerable ore at depth.

DEVELOPMENT:

At the Ajax, a small shaft has been sunk to a depth of nearly 200 feet at an angle of about 65 degrees. This shaft was started on the vein but went into the footwall at about 90 feet below the collar. This made necessary a crosscut of about 30 feet in order to reach the vein on the 176 feet level. Total drifting on the 176 level consists of about 95 feet of drift to the North and 55 feet of drift to the South of the shaft, together with a short crosscut to the footwall. On the 50 level, the North drift extends 40 feet from the shaft and the South drift about 60 feet. There is a short crosscut directly North of the shaft, which extends into the hanging wall. There are numerous cuts and shallow shafts along the outcrop, which shows the vein to be in place and well mineralized.

BLUE CRYSTAL

Development at the Blue Crystal is composed of a tunnel about 200 feet in length, a two compartment winze said to be 300 feet in depth and a one compartment winze near the face of the tunnel about 90 feet in depth. There is said to be a stope on the lower level of the large winze ready for ore production, but the writer has not seen this stope as water fills the winze to within 100 feet of the tunnel level.

SAMPLING - AJAX:

Three cars shipped by leasers in 1948 gave the following:

	Silver	Lead	Zinc	Copper
Car No. 1	1.05 oz.	7.05%	5.4%	0.12%
Car No. 2	1.03 oz.	7.20%	3.2%	0.12%
Car No. 3	1.45 oz.	10.30%	2.8%	0.20%

Several small lots of sorted ore were shipped with assay returns of 60% lead and 4 ounces of silver per ton. A reported shipment by the original operators when the mine was first opened yielded 68% lead and came from the 50 foot level. The writer has noted large boulders of galena in the vein on the 50 level which would assay at least 68% in lead.

Sampling in the shaft below the 50 level gives a calculated assay value of 3.8% lead and 9.8% zinc per ton. On the 176 level, 27 samples were taken in 1948 and indicated an average value in combined lead and zinc in excess of 10% combined metals, with small additional and recoverable values in gold and silver.

A core drill hole drilled from the surface 400 feet North of the shaft cut the vein at a point corresponding to the 100 feet level in the shaft. This hole shows eight and one half feet of zinc ore assaying 16.9%.

The sampling which has been done on the Ajax vein has been careful and thorough and the values should be maintained under actual mining conditions. (See sample maps of 50 and 76 levels)

DEVELOPED ORE:

Between the 50 level and the 176 level and opened by 140 feet of drifting on the 176 level and 100 feet of drifting on the 50 level there is a calculated tonnage of about 19800 tons,

DEVELOPED ORE (Continued)

This block should average between 10 and 11 percent combined lead and zinc, with some recoverable values in gold and silver. Another 4000 to 5000 tons of partially oxidized ore can be obtained between the 50 level and the surface.

PROBABLE ORE:

It is reasonable to assume ore below the 176 level, assuming 50 feet in depth would add at least 7600 additional tons to that now blocked above the 176 level. There is no particular reason why the ore below the present bottom level shoul not continue to extend downward for a long distance.

The drill hole 400 feet North of the shaft where eight and one half feet of ore assaying over 10% zinc was cut, also indicates commercial ore at this point, and as the face of the North drift is yet in ore, there is no reason to believe that this ore will not continue to develop by drifting to the North.

At a point several hundred feet from the shaft, Northerly, both sulphide and carbonate ores are observed on the outcrop, the vein is exceptionally strong in this area and it is reasonable to expect good ore when a point is reached under this exposure on the lower levels.

RECOMMENDATIONS:

It is recommended that a skip pocket be cut on the lower level and that a skip be installed, to take the place of the hoisting bucket now in place. After installation of skip and cutting skip pocket, drifting should be started to the North and should be continued until a favorable point is reached where a crossout can be extended into the hanging

RECOMMENDATIONS: (Continued)

wall far enough to permit a vertical shaft to cut the vein at about the 400 feet level. The present shaft would not be suitable for steady production and an additional shaft is necessary to provide adequate ventilation of the workings.

After the crosscut is run, core drilling would then be in order to prove the downward extension of the orebodys.

Should drifting to the North continue to expose ore of an equal grade comparable to that which has been opened by past development, a milling plant would then be necessary. This plant should be of about 100 tons daily capacity and should be designed so that other units could be added in the future.

It is also recommended that the Blue Crystal winze be unwatered and a thorough sampling campaign be conducted at that property. It is very probably that by unwatering the mine considerable tonnage may be opened and made available for milling.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2603
Metal or Mineral
Date Received 7-3-52
Amount $
Participation (Government %)

Name and address of applicant

Magna King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Date July 1, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

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

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 3 - 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

Magna King Manganese Mining Company (Name of company)

By Ralph Emery (Signature of authorized official)

July 1, 1952 (Date)

President (Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

QUESTION (1)

ANSWER

The Ajax group of mining claims which are under lease with option to purchase to the Magma King Manganese Mining Company; these claims consist of the following named claims:

Ajax	Patented	Book	Page
Ajax No. 2	Patented		
Raven	Patented		
Contact	Unpatented		
Golden State	Unpatented	43	483
Smelter No. 1	Unpatented	47	358
Smelter No. 2	Unpatented	35	151
Sunny Jim	Unpatented	35	151
Blue Crystal	Unpatented	38	451
Peacock	Unpatented	43	479
Side Line	Unpatented	35	207
Sout Ajax	Unpatented	26	281
White Mule	Unpatented	38	451
Contact No. I	Unpatented	36	152
Contact No. 2	Unpatented	30	437
Contact No. 3	Unpatented	36	159
Liberty	Unpatented	47	222
Red Chief	Unpatented	48	36

All claims are located in Mineral Hill Mining District, Pinal County, Arizona. (c). Ajax 1 and Ajax 2.

QUESTION (2)

ANSWER

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Materials and Supplies	1,170.00
TOTAL	$ 3,620.00

Time Required: 21 days.

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Engineering	560.00
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TOTAL	$22,120.00

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Materials and Supplies	2,160.00
TOTAL	$ 6,500.00

Time Required: 50 days

QUESTION (3)

ANSWER

(Continued)

Raising Shaft 150 ft.:

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Materials and Supplies	5,700.00
Supervision	520.00
Engineering	480.00
TOTAL	$15,000.00

Time Required: 60 days

Diamond Drilling 2,000 Ft.

Labor	$ 5,087.00
Supervision	700.00
Engineering	900.00
Assaying	1,600.00
Materials and Supplies	1,700.00
TOTAL	$ 9,987.00

Time Required: 133 days

Contingecies Fund	$ 1,500.00
TOTAL FOR PROJECT	$59,727.00

QUESTION (4)

ANSWER

Maps are herewith submitted.

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ANSWER

The following buildings are now on the property and in a good state of repair.

1. Boarding House
2. Bunk House and Change Room
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4. Building Used as Pump House and Containing Camp Light Plant
5. Hoist House
6. Machine Shop and Generating Plant Bldg.
7. Mine Office
8. Powder Magazine

QUESTION (6)

ANSWER

No road repairs.

No buildings or other facilities are necessary for this exploration project.

QUESTION (7)

ANSWER

To be Purchased:

1 Hoist with Power Unit	$ 1,750.00
1 Air Drill Stopper Type	350.00
1 Drifter Drill Complete with Bar	650.00
TOTAL	$ 2,750.00

Furnished by Magma King Co.:

1 35 KVA Generating Set	$ 2,000.00
1 7.5 KVA Generating Set	1,500.00
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1 Ford Model 1948, Flat Bed 1-1/2 Ton Truck	800.00
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1 10 H.P. I.R. Motopump	200.00
1 5 H.P. I.R. Motopump	100.00
1 C.P. sludge or sump pump	150.00
1 Shaft Skip	350.00
2 Ore Cars	150.00
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QUESTION (7)

ANSWER

(Continued)

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TOTAL RENTALS	$ 650.00 per Mo.

ALSO TO BE FURNISHED BY MAGMA KING:

1 C.P. 55 complete core drilling outfit	3,500.00
Diamond Drill Bits	500.00
TOTAL	$4,000.00

QUESTION (8)

ANSWER

		Per Month
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2	Skip Tender and Trammer at $13	728.00
2	Heistmen at $14.00	793.00
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1	Combination truck driver, time-keeper	370.00
1	Supt.	500.00
TOTAL PER MONTH		$ 4,817.00
Plus 25% Taxes, Insurance Etc.		1,204.00
TOTAL		$ 6,021.00

Time Allowance: 7 Months

QUESTION (9)

ANSWER

Materials (Timber)	$ 2,500.00
Supplies	5,400.00
Engineering	4,000.00
Assaying	1,750.00
Accounting	1,000.00
Power	4,800.00

Time Allowance: 7 Months

QUESTION (10)

ANSWER

The Magna King Manganese Mining Company is prepared to invest the sum of $29,863.50 as their share of the project.

QUESTION (10B)

ANSWER

The sum of $29,863.50 is sufficient to meet our Part of the cost of the project.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2603
Metal or Mineral
Date Received 7-3-52
Amount $
Participation (Government %)

Name and address of applicant

Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Date July 1, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

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

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

JUL 3 - 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

Magna King Manganese Mining Company
(Name of company)

By Ralph Lowery
(Signature of authorized official)

July 1, 1952
(Date)

President
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

QUESTION (1)

ANSWER

The Ajax group of mining claims which are under lease with option to purchase to the Magma King Manganese Mining Company; these claims consist of the following named claims:

Ajax	Patented	Book	Page
Ajax No. 2	Patented		
Raven	Patented		
Contact	Unpatented		
Golden State	Unpatented	43	483
Smelter No. 1	Unpatented	47	358
Smelter No. 2	Unpatented	35	151
Sunny Jim	Unpatented	35	151
Blue Crystal	Unpatented	38	451
Peacock	Unpatented	43	479
Side Line	Unpatented	35	207
Sout Ajax	Unpatented	26	281
White Mule	Unpatented	38	451
Contact No. 1	Unpatented	36	152
Contact No. 2	Unpatented	30	437
Contact No. 3	Unpatented	36	159
Liberty	Unpatented	47	222
Red Chief	Unpatented	48	36

All claims are located in Mineral Hill Mining District, Pinal County, Arizona. (c). Ajax 1 and Ajax 2.

QUESTION (2)

ANSWER

Formation in which the Ajax Vein is located is Pinal Schist, and is the same or similar to that of the Ray-Miami districts. The Ajax Vein can be followed along the surface outcrop for over two thousand feet along the strike with both Sulphide and Carbonate minerals of lead and zinc exposed.

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Attached are maps and Engineers Reports.

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Materials and Supplies	1,170.00
TOTAL	$ 3,620.00

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Materials and Supplies	5,200.00
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Time Required: 100 days

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Engineering	260.00
Materials and Supplies	2,160.00
TOTAL	$ 6,500.00

Dev.??

32.50

Time Required: 50 days

QUESTION (3)

ANSWER

(Continued)

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TOTAL	$ 9,987.00

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ANSWER

Maps are herewith submitted.

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QUESTION (6)

ANSWER

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No buildings or other facilities are necessary for this exploration project.

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ANSWER

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QUESTION (9)

ANSWER

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ANSWER

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QUESTION (10B)

ANSWER

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Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-1603
Metal or Mineral
Date Received 7-3-52
Amount $
Participation (Government %)

Name and address of applicant

Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Date July 1, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

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DEPARTMENT OF THE INTERIOR
RECEIVED
JUL 3 - 1952

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Magma King Manganese Mining Company
(Name of company)

By Ralph Emery
(Signature of authorized official)

July 1, 1952
(Date)

President
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

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ANSWER

(Continued)

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ANSWER

(Continued)

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ANSWER

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TOTAL PER MONTH		$ 4,817.00
Plus 25% Taxes, Insurance Etc.		1,204.00
TOTAL		$ 6,021.00

Time Allowance: 7 Months

QUESTION (9)

ANSWER

Materials (Timber)	$ 2,500.00
Supplies	5,400.00
Engineering	4,000.00
Assaying	1,750.00
Accounting	1,000.00
Power	4,800.00

Time Allowance: 7 Months

QUESTION (10)

ANSWER

The Magma King Manganese Mining Company is prepared to invest the sum of $29,863.50 as their share of the project.

QUESTION (10B)

ANSWER

The sum of $29,863.50 is sufficient to meet our Part of the cost of the project.

Superior, Arizona
May 20, 1952

To the Board of Directors
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Gentlemen:

At your request, I have compiled, from personal observation and accumulated data obtained from former operators and engineers, a report on your Ajax property, located in Pinal County, Arizona about 8 miles Southwest of the town of Superior, Arizona.

The report on the Ajax Mine is herewith attached.

Yours very truly,

Frank L. Metler.

REPORT ON AJAX, BLUE CRYSTAL MINES, MINERAL HILL MINING DISTRICT, PINAL COUNTY, ARIZONA.

PAGE 1. ---------- SUMMARY

2. ---------- SUMMARY

3. ---------- PROPERTY

3. ---------- LOCATION

4. ---------- HISTORY

4. ---------- GEOLOGY

5. ---------- GEOLOGY

6. ---------- GEOLOGY

6. ---------- DEVELOPMENT

6. ---------- SAMPLING

7. ---------- SAMPLING

7. ---------- DEVELOPED ORE

8. ---------- PROBABLE ORE

8. ---------- RECOMMENDATIONS

9. ---------- RECOMMENDATIONS

PHOTOGRAPHS

MAPS:
PROPERTY MAP
SAMPLE MAPS

SUMMARY:

The strength, continuity and mineralization of the surface croppings of the Ajax vein together with the amount of commercial ore developed by a small amount of vertical and horizontal workings, indicates that this mining property should by further development and proper management become a profitable producer.

As the vein on the surface at the shaft is much poorer in appearance than it is directly to the North of the present workings, a considerable tonnage of milling ore should be developed by a drift on the 176 foot level in that direction. Sinking on the vein below the present developed orebody should also develop an appreciable tonnage also. However, drifiting to the North should disclose sufficient ore to make the construction of a milling plant feasible.

The metallurgy should not be difficult as the lead and zinc ore are coarsely crystalline and should separate easily by medium grinding in the mill. Below the 50 foot level the minerals are entirely sulphide so no metallurgical trouble can be expected caused by oxidized ores. At the present writing the mine will not produce enough water for milling purposes but further opening of underground workings should add to the present supply. If enough water cannot be produced by the mine a drilled well could augment the present supply.

Summary (Continued)

Other mines in the district have changed at depth to copper, starting with a zinc ore, this is particularly true of the Magma mine at Superior, Arizona. This mine is producing high grade copper ore at a depth of 5000 feet below the outcrop. At what depth the change from copper to zinc might take place cannot be forecast, however, there is a slight increase in the copper content of the ore on the 176 foot level.

A sum of $50,000.00 should be sufficient to provide the necessary equipment and carry on the development program to a point where a mill would be profitable undertaking. In the event that little or no further ore be developed on the property, the cost of the development program should be salvaged by mining and milling the ore now developed. There is almost a certainty that the ore reserves will be steadily increased by carrying on the proposed development.

The writer believes that the Ajax Mine will with proper management and engineering become a profitable producer.

Respectfully Submitted,

Frank L. Metler

PROPERTY:

The Ajax mining property consists of three patented and sixteen unpatented mining claims, all of which are contiguous. The patented claims are; Ajax, Ajax No. 1 and Raven. The unpatented mining claims are: Peacock, Tom, Hidden Treasure, Homestake, (also Known as Smelter No. 1) Smelter No. 2, Blue Crystal, White Mule, Sunny Jim, Contact No. 1, Contact No. 2, Contact No. 3, Red Chief, Liberty, Side Line, and South Ajax.

LOCATION:

The Ajax Blue Crystal Groups are located in Mineral Hill Mining District, Pinal County, Arizona. They are situated about eight miles Southwest of Superior, Arizona, the home of the famous Magma copper mine.

The Ajax group is reached by turning South from the Phoenix Superior Highway at a point eleven miles West of Superior, thence nine miles by country road. The distance from the Ajax Mine to nearest railroad is ten miles.

HISTORY:

The Ajax mine was first opened about 1906 and at that time it was developed to it's present depth.

Evidently, the operators at that time were in search of ores containing lead and silver and became discouraged because of the zinc content which increased as depth was attained. At this period the known methods of separation of lead and zinc were very inefficient and consisted of gravity concentration only. The flotation process had not

HISTORY (Continued)

as yet been discovered. The market price of lead at that periodwas about three cents per pound, so there could have been little incentive to proceed further with development work on the mine.

The mine was dormant until 1948, when leasers tried again to mine a direct smelting product, this operation was unprofitable. However, the ore mined by the leasers was of excellent milling grade. In 1949 operations were again resumed and the mine was unwatered to the bottom or 176 foot level. A small amount of drifting was done and considerable tonnage of mill ore proven. Finances were limited and the proper amount of development work could not be completed or a mill constructed.

At this writing the mine is unwatered and all workings are available for inspection.

GEOLOGY AND MINERALIZATION:

The prevaling formation in the area surrounding the Ajax mine is that of schist and is probably related to the Pinal Schist of the Ray-Miami Districts. The structure at the Ajax has been tilted and is cut by the Ajax-Blue Crystal veins nearly at right angles. The veins are true fissures and are not bedded in the planes of the schist.

The Ajax vein is very prominent and the outcrop extends above the surrounding terrain to a heighth of over ten feet in numerous places. It is plainly visible along the outcrop for a distance of nearly 2000 feet, with minor faulting in several places which are plainly visible on the surface and are of small displacement. The vein at the Ajax is from 8 to

GEOLOGY AND MINERALIZATION (Continued)

20 feet in width and the outcrop contains lead in both sulphide and carbonate form, the carbonate ore predominating. The vein also contains quartz, hematite and calcite minerals. On the surface the oxidation is very pronounced but at the 50 foot level and below, the ore is entirely sulphide in character. At the 50 foot level the ore is predominantly that of lead, but as depth is gained in the shaft, the percentage of zinc steadily increases, with some increase also in the copper content of the ore. Assays also indicate that the gold and silver values are becoming greater on the 176 level South of the Shaft. As greater depth is attained at the Ajax copper should gradually replace the zinc and the vein would then become a producer of copper instead of lead zinc as at the present.

The writer has personaly observed the zinc orebody on the 1800 foot level of the Magma mine, at a slightly greater depth this zinc orebody was replaced by a good grade of copper ore. Quoting from University of Arizona Bulletin on Superior Mining District, dated October, 1943.

"The Western shoot has its apex about 50 feet above the 1200 foot level at departure 4600. Here the ore consists of Sphalerite and a little galena, with only traces of copper, between the 1300 and 1400 levels it changes abrubtly into a Bornite rich ore with little or no zinc and lead.

The Blue Crystal which is a parallel vein and is about 1500 feet distant from the Ajax vein. The Blue Crystal vein is smaller in width at the outcrop, with average width of about four to five feet. Much cerussite (lead carbonate) was observed with some galena and copper carbonate minerals. An ore pile on

GEOLOGY AND MINERALIZATION (Continued)

the dump at the mouth of the Blue Crystal tunnel appears to contain about 10 to 12 percent lead, mostly in carbonate form. This vein is quite strong and well mineralized and should develop considerable ore at depth.

DEVELOPMENT:

At the Ajax, a small shaft has been sunk to a depth of nearly 200 feet at an angle of about 65 degrees. This shaft was started on the vein but went into the footwall at about 90 feet below the collar. This made necessary a crosscut of about 30 feet in order to reach the vein on the 176 foot level. Total drifting on the 176 level consists of about 95 feet of drift to the North and 55 feet of drift to the South of the shaft, together with a short crosscut to the footwall. On the 50 level, the North drift extends 40 feet from the shaft and the South drift about 60 feet. There is a short crosscut directly North of the shaft, which extends into the hanging wall. There are numerous cuts and shallow shafts along the outcrop, which shows the vein to be in place and well mineralized.

BLUE CRYSTAL

Development at the Blue Crystal is composed of a tunnel about 200 feet in length, a two compartment winze said to be 300 feet in depth and a one compartment winze near the face of the tunnel about 90 feet in depth. There is said to be a stope on the lower level of the large winze ready for ore production, but the writer has not seen this stope as water fills the winze to within 100 feet of the tunnel level.

SAMPLING - AJAX:

Three cars shipped by leasers in 1948 gave the following:

	Silver	Lead	Zinc	Copper
Car No. 1	1.05 oz.	7.05%	5.4%	0.12%
Car No. 2	1.03 oz.	7.20%	3.2%	0.12%
Car No. 3	1.45 oz.	10.30%	2.8%	0.20%

Several small lots of sorted ore were shipped with assay returns of 60% lead and 4 ounces of silver per ton. A reported shipment by the original operators when the mine was first opened yielded 68% lead and came from the 50 foot level. The writer has noted large boulders of galena in the vein on the 50 level which would assay at least 68% in lead.

Sampling in the shaft below the 50 level gives a calculated assay value of 3.8% lead and 9.8% zinc per ton. On the 176 level, 27 samples were taken in 1948 and indicated an average value in combined lead and zinc in excess of 10% combined metals, with small additional and recoverable values in gold and silver.

A core drill hole drilled from the surface 400 feet North of the shaft cut the vein at a point corresponding to the 100 foot level in the shaft. This hole shows eight and one half feet of zinc ore assaying 16.9%.

The sampling which has been done on the Ajax vein has been careful and thorough and the values should be maintained under actual mining conditions. (See sample maps of 50 and 76 levels)

DEVELOPED ORE:

Between the 50 level and the 176 level and opened by 140 feet of drifting on the 176 level and 100 feet of drifting on the 50 level there is a calculated tonnage of about 19800 tons,

DEVELOPED ORE (Continued)

This block should average between 10 and 11 percent combined lead and zinc, with some recoverable values in gold and silver. Another 4000 to 5000 tons of partially oxidized ore can be obtained between the 50 level and the surface.

PROBABLE ORE:

It is reasonable to assume ore below the 176 level, assuming 50 feet in depth would add at least 7000 additional tons to that now blocked above the 176 level. There is no particular reason why the ore below the present bottom level shoul not continue to extend downward for a long distance.

The drill hole 400 feet North of the shaft where eight and one half feet of ore assaying over 16% zinc was cut, also indicates commercial ore at this point, and as the face of the North drift is yet in ore, there is no reason to believe that this ore will not continue to develop by drifting to the North.

At a point several hundred feet from the shaft, Northerly, both sulphide and carbonate ores are observed on the outcrop, the vein is exceptionally strong in this area and it is reasonable to expect good ore when a point is reached under this exposure on the lower levels.

RECOMMENDATIONS:

It is recommended that a skip pocket be cut on the lower level and that a skip be installed, to take the place of the hoisting bucket now in place. After installation of skip and cutting skip pocket, drifting should be started to the North and should be continued until a favorable point is reached where a crosscut can be extended into the hanging

RECOMMENDATIONS: (Continued)

wall far enough to permit a vertical shaft to cut the vein at about the 400 foot level. The present shaft would not be suitable for steady production and an additional shaft is necessary to provide adequate ventilation of the workings.

After the crosscut is run, core drilling would then be in order to prove the downward extension of the orebodys.

Should drifting to the North continue to expose ore of an equal grade comparable to that which has been opened by past development, a milling plant would then be necessary. This plant should be of about 100 tons daily capacity and should be designed so that other units could be added in the future.

It is also recommended that the Blue Crystal winze be unwatered and a thorough sampling campaign be conducted at that property. It is very probably that by unwatering the mine considerable tonnage may be opened and made available for milling.

A S S I G N M E N T

THIS ASSIGNMENT and AGREEMENT made and entered into this 1st day of April, 1952, by and between APEX MINES, INC., an Arizona corporation, hereinafter referred to as Assignor, and MAGMA KING MANGANESE MINING CO., an Arizona corporation, hereinafter referred to as Assignee,

W I T N E S S E T H:

WHEREAS, the Assignor is now the proper Lessee under the terms of two leases which are more fully set out and described in the Assignment attached to this instrument and made a part hereof by reference; and

WHEREAS, the Assignee herein has reimbursed Assignor for all sums expended by it in the acquisition of said Master Leases No. 1 and 2, and in consideration is granting to Assignor other valuable consideration as more fully herein set forth,

NOW, THEREFORE, Assignor hereby sells, assigns, transfers and sets over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2, copies of which are also attached hereto and made a part hereof by reference.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee agrees that it will grant to Assignor, or its nominees, as consideration for this assignment, an option or warrants to purchase 450,000 shares of Assignee's 10¢ par value capital stock, at 50¢ per share, during the period of five years from the date hereof.

The terms, conditions and provisions of this Assignment shall be binding upon and inure to the benefit of the respective parties, their successors and assigns.

IN WITNESS WHEREOF, the parties have caused their proper officers to execute this assignment and agreement on the day and year first above written.

APEX MINES, INC.

ATTEST:

By (s) Ralph J. Pomeroy
Its President

(s) Conrad J. Kleinman
Its Secretary

ASSIGNOR

MAGMA KING MANGANESE MINING CO.

By (s) Ralph J. Pomeroy
Its President

ATTEST:

(s) Conrad J. Kleinman
Its Secretary

ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of APEX MINES, INC., the Assignor therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires:
1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J.

KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of MAGMA KING MANGANESE MINING CO., the Assignee therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires: 1-30-56

A S S I G N M E N T

THIS ASSIGNMENT and agreement made and entered into this 11 day of March, 1952, by and between LOUIS HENNIG and ROBERT F. DANNELLEY, herein referred to as Assignors, and APEX MINES, INC., an Arizona corporation, herein referred to as Assignee,

W I T N E S S E T H:

WHEREAS the Assignors are Lessees under the terms of a lease and option dated the 10th day of August, 1948, and an amendment thereto, wherein Walter C. Smith and Theodora Holmes Smith, husband and wife, Rae L. Frazier, a widow, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease was recorded on the 21st day of August, 1948, in the office of the Recorder of Pinal County, State of Arizona, in Book No. 8 of Contracts and Agreements, at page 221, and which lease and option embraces certain patented mining claims known as Ajax and Ajax No. 1, and designated by the Surveyor General of Arizona as Survey No. 3949, and The Raven; and said lease and option herein to be designated as Master Lease No. 1; and

WHEREAS the said Assignors are Lessees under a lease and option agreement bearing date of October 18, 1948, wherein G. O'Dell and Ludisa O'Dell, husband and wife, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease embraces sixteen unpatented mining claims located in the County of Pinal, State of Arizona, and which lease and option was recorded in the Pinal County Recorder's Office on January 27, 1949, in Docket 5, page 460, and which lease and option is in this assignment referred to as Master Lease No. 2; and

WHEREAS the said Assignors have been paid the sum of $3,000.00 and for other good and valuable consideration, receipt of which Assignors hereby acknowledge,

NOW, THEREFORE, Assignors hereby sell, assign, transfer and set over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee is hereby authorized to deliver a copy and notice of this assignment to the parties in Master Leases No. 1 and No. 2 appearing as Lessors.

Assignors agree to furnish the proper abstracts and records for the examination of Assignee and further agree that the lessors in said Master Leases No. 1 and No. 2 are the legal owners of said mining properties and have a good and sufficient title thereto, and said Assignors agree to indemnify Assignee from any damages that might be sustained by reason of any defect or flaw in the title to said patented mining claims, or in the mining titles to said unpatented mining claims.

The terms, conditions and provisions of this assignment shall be binding upon and inure to the benefit of the respective parties to this assignment, their heirs, executors, successors and assigns.

IN WITNESS WHEREOF the Assignors have, on the day and year first above written, executed this assignment for the consideration, covenants and terms hereinabove specified, and the Assignee has caused its proper officers to execute this assignment and agreement on the day and year first above written.

(s) Louis Hennig

(s) Robert F. Dannelley
ASSIGNORS

APEX MINES, INC.

By (s) Ralph J. Pomeroy
Its President

Attest (s) Conrad J. Kleinman
Its Secretary
ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned

officer, personally appeared LOUIS HENNIG and ROBERT F. DANNELLEY, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, who acknowledged themselves to be the President and Secretary respectively of APEX MINES, INC., a corporation, and who acknowledged to me that they executed the foregoing instrument for and on behalf of said company, as such officers, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

Receipt is hereby acknowledged of a copy of the foregoing Assignment, and we hereby consent to and accept said assignment, this ____ day of March, 1952.

(s) Walter C. Smith

(s) Theodora Holmes Smith

Rae L. Frazier/Walter C. Smith
Atty. in fact

(s) Frank H. Allen

Gladys Allen by Frank H. Allen

LESSORS

" EXHIBIT " A "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this 16th day of October, 1948, by and between G. O'DELL and LUDISA O'DELL, husband and wife, of Phoenix, Maricopa County, Arizona, and FRANK H. ALLEN and GLADYS ALLEN, husband and wife, of Gilbert, Maricopa County, Arizona, who as a group are the owners and lessors of all the below listed sixteen (16) unpatented mining claims, as LESSORS, and LOUIS HENNIG and ROBERT F. DANNELLEY of Pinal County, Arizona, as LESSEES,

WITNESSETH:

That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let unto the said lessees, all of the following described mine and mining property, the location notices of which are of record in the office of the County Recorder of Pinal County, Arizona, the claims being situated in the Mineral Hill Mining District, County of Pinal, State of Arizona, to-wit:

PEACOCK	CONTACT NO. 1
GOLDEN STATE	CONTACT NO. 2
HIDDEN TREASURE	CONTACT NO. 3
SMELTER NO. 1	RED CHIEF
SMELTER NO. 2	LIBERTY
BLUE CRYSTAL	SIDE LINE
WHITE MULE	TOM
SUNNY JIM	SOUTH WEST AJAX

Unpatented mining claims

together with the appurtenances.

TO HAVE AND TO HOLD unto the said lessees for a term of eight (8) years expiring at noon on the fifteenth (15th) day of October, 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said

lessees reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows; to wit:

To enter upon said mine and premises and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as workable mines, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises, throughout the term of this lease, the annual assessment work as required by Federal and state laws, and to cause affidavits for such to be recorded with the County Recorder of the County of Pinal, state of Arizona, on or before the first day of May of each year this lease shall be in effect.

It is agreed that in the event mining activity be stayed by reason of acts of God, or for other causes beyond the control of Lessees, the lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ores shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten per cent (10%) of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentration, smelting and trucking, any of which above processes may be required and

employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is, five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest, and five (5%) per cent to G. O'Dell, 95 West Willetta Street, Phoenix, Arizona, as agent for the other interest in the unpatented mining claims herein described, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and ore concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessors' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating their determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the period of this lease abandon said lease and will, in such event, notify lessors herein in writing of any such intention, at their proper addresses, and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If at any time the lessees do not perform their obligations hereunder, this lease shall terminate in ninety (90) days thereafter. Upon the termination of this lease because of lessees' default or because of abandonment of this lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have

placed upon said mining claims. If, within said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed, said property shall then belong to the owners of said mining claims. All timbers in place and gallows frame erected upon said mining property shall be and remain the property of the owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property, and of the equipment and property as herein described unto lessors, their heirs and assigns. Upon default and delivery of said possession, as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereinafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of mining, concentrating or leaching the ores mined from said claims, and agree to grant a lease or leases of surface rights upon the ground upon which such structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be

so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is expressly understood, however, that in case of abandonment of this lease by lessees, all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent, said improvements shall become the property of the owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures, surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately.

Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the state of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof; lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipts of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and

recorded as required by law the notice of non-liability provided for by the laws of the state of Arizona, Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the state of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft, and to keep workings in use clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein, and it is agreed that if controversy shall arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such condition or rectify the situation complained of; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary, by consent of all parties.

It is further agreed that this lease may be assigned, and upon such assignment the assigned hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all of the covenants, promises and conditions upon the part of the lessees agreed to be kept and performed.

AND IN CONSIDERATION of the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right, during the term of this lease, to purchase the interest of lessors herein to said premises for the sum of

Thirty-two thousand ($32,000.00) dollars, the sum of Sixteen Thousand ($16,000.00) dollars to each of the two groups of lessors. All royalties paid during the term of this lease shall be credited toward such purchase price, of thirty-two thousand ($32,000.00) dollars, and any remaining amount due shall be paid on or before October 15, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payments, Lessors will execute, acknowledge and deliver, at their own cost, good and sufficient deed or deeds to the lessees, or such person or company as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly understood and agreed that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year first thereinabove written.

G. O'Dell

Ludisa O'Dell
(Husband and wife)

Frank H. Allen

Gladys Allen
(Husband and wife)
LESSORS

Louis Hennig

Robert F. Dannelley
LESSEES

STATE OF ARIZONA :
: SS
COUNTY OF MARICOPA :

On this day, before me, the undersigned Notary Public, personally appeared XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX FRANK H. ALLEN and GLADYS ALLEN, husband and wife, as lessors, and XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX as XXXXXXXX and acknowledged to me that they executed the foregoing lease for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 22nd day of October, 1948.

W. C. Mc Connell
Notary Public

My commission expires:
Nov. 13, 1950.

State of Arizona / SS
County of Maricopa /

On this day, before me, the undersigned Notary Public, personally appeared G. O'DELL and LUDISA O'DELL, husband and wife, as Lessors, acknowledged to me that they executed the lease for the purpose and consideration expressed.

GIVEN UNDER MY HAND and seal of office this 1st day of November, 1948.

Edward J. Gale
Notary Public

My Commission Expires March 10, 1951

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of January, 1949 by Robert F. Dannelley.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8A -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of Jan., 1949 by Louis Hennig.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8B -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I hereby certify that the within instrument was filed and recorded at request

of Louis Hennig
Jan. 27, 1949, at 3:10 P. M.
Docket 5 of Page 460

Witness my hand and official seal the day and year aforesaid.

SOPHIE M. SMITH

County Recorder

by Margaret K. Bamrick

Deputy Recorder

42531

" EXHIBIT "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this tenth day of August of 1948, between Walter C. Smith and Theodora Holmes Smith, husband and wife, and Rae L. Fraser, a widow, of Coolidge, Pinal County, Arizona, and Frank H. Allen and Gladys Allen, husband and wife, of Gilbert, Maricopa County, Arizona, lessors, and Louis Hennig and Robert F. Dannelley of Pinal County, Arizona, Lessees:

WITNESSETH: That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let, unto the said lessees, all the following described mine and mining property, situated in the MINERAL HILL MINING DISTRICT, County of Pinal, State of Arizona, to-wit:

The AJAX AND AJAX NO. 1 patented mining claims together with the appurtenances to have and to hold unto the said lessees for the term of eight (8) years expiring at noon on the first day of September 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said tenant reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows, to-wit: To enter upon said mine or premises, and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as a workable mine, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises throughout the term of this lease, beginning not to exceed ninety (90) days from the date hereof, not less than sixty (60) eight (8) hour man shifts per month, averaged over periods of ninety (90) days. However, it is agreed that in the event work be stayed by reason of acts of God, or for other causes beyond the control of lessees, lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ore shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten (10%) per cent of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentrating, smelting and trucking, any of which above processes may be required and employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is: five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest and five (5%) per cent to Walter C. Smith, Box 546, Coolidge, Arizona, as agent for the other half interest in the AJAX AND AJAX NO. 1 patented claims, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and/or concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessees' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating the determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the term of this lease abandon operation of the properties and will, in such event, notify lessors herein in writing of such intention at their proper addresses and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If, at any time, the said lessees do not perform their obligations hereunder for a period of ninety (90) days, this lease shall terminate. Upon the termination of this lease because of lessees' default or because of abandonment of the lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have placed upon said mining claims. If, within the said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed said property shall then belong to the co-owners of said mining claims. All timbers

in place and gallows frame erected upon said mining property shall be and remain the property of the co-owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property (and of the equipment and property as herein described) unto lessors, their heirs and assigns. Upon default and delivery of said possession as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of milling, concentrating or leaching the ores mined from said claims and agree to grant a lease or leases of surface rights upon the ground upon which said structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is

expressly understood, however, that in case of default or abandonment of this lease by lessees all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent said improvements shall become the property of the co-owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately. Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the State of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof. Lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipt of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and recorded as required by law the notice of non-liability provided for by the laws of the State of Arizona. Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the State of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft and to keep workings clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein and it is agreed that if controversy arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such a condition or rectify the situation complained of if such be justified under the lease; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary.

It is further agreed that this lease may be assigned and upon such assignment the assignee hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all the covenants, promises and conditions upon the part of the lessees herein agreed to be kept and performed.

AND IN CONSIDERATION OF the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right during the term of this lease to purchase the interests of lessors herein to said premises for the sum of FORTY THOUSAND ($40,000.00) DOLLARS, TWENTY THOUSAND ($20,000.00) DOLLARS to owners of each one-half interest. All royalties paid during the term of this lease shall be credited toward such purchase price of FORTY THOUSAND ($40,000.00) DOLLARS and any remaining amount due shall be paid on or before September 1, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payment lessors will execute, acknowledge and deliver at their own cost, good and sufficient deed or deeds to the lessees, or such person or com-

pany as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender, or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly agreed and understood that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year above written.

Frank H. Allen

Gladys Allen

Walter C. Smith

Theodora Holmes Smith

Rae L. Fraser

By
Walter C. Smith, Attorney-in-fact

LESSORS

Louis Hennig

Robert F. Dannelley

LESSEES

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

On this 12th day of August, 1948, personally appeared before me, the undersigned officer, FRANK H. ALLEN AND GLADYS ALLEN, his wife, known to me to be the persons whose names are subscribed to the foregoing lease, and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

W. C. Mc Connell
Notary Public

My Commission expires

Nov. 13, 1950.

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14th day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith and Theodora Holmes Smith, his wife, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3 - 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14 day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith, Attorney-in-fact for Rae L. Fraser, a widow, known to me to be the person whose name is subscribed to the foregoing lease and acknowledged to me that he executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3, 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 20th day of August, 1948, before me, the undersigned officer, personally appeared Louis Hennig, and Robert F. Dannelley, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Jan Meison
Notary Public

My commission expires:

6 - 25 - 51

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I, Sophie M. Smith, Recorder in and for the County of Pinal, State aforesaid, do hereby certify that the annexed Instrument was filed and recorded at request of

Robert F. Dannelley
on the ___ day of Aug 21, 1948
A. D., 19__, at 3:00
__ o'clock, P. M., in Book No. 8
of Contr. & Agnts. Page 221
Witness my hand and official seal the day and year first above written.

SOPHIE M. SMITH
Recorder

Myrtle L. Kay
Deputy

39292

Return to Louis Hennig
200 South Los Angeles Street
Anaheim, California

532 Security Building
Phoenix, Arizona
July 1, 1952

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

Attention: Messrs. Mettendorf, Keller and Keating

Gentlemen:

We are enclosing herewith our application for a participating loan administered by your department. We feel that we have supplied all the information requested under Form MF 103 with the exception of the Owners consent to Lien and a current balance sheet.

The writer has been assured by the Owners that they are agreeable to the lien in case a discovery is made. This will be filed as requested as soon as signatures can be obtained. It is our hope that this will not hold up the regular processing of the application.

Since our operation has started already and a good crew assembled we, quite naturally, are desirous that work stoppage will not be necessary. That upon completion of our present project and pending your approval we will be able to coordinately move into the project outlined in the enclosed application.

With this in mind Mr. Frank L. Metler, our engineer and superintendent is returning to Arizona and will take the liberty of presenting a full set of the application papers to Mr. Storms and arrange to accommodate an early inspection of the property by his department.

The writer will remain in Washington on this and other business and will be at hand in case anything arises that could be expedited by him.

We wish to thank you gentlemen for the excellent cooperation you are giving us.

Very truly yours,

Ralph J. Pomeroy

Ralph J. Pomeroy, President
Magma King Manganese Mining Co.

CC: Messrs. Searles
Hobart

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2603
Metal or Mineral
Date Received 7-3-52
Amount $
Participation (Government %)

Name and address of applicant

Magna King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Date July 1, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

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

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 3 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

Magna King Manganese Mining Company (Name of company)

By [signature] (Signature of authorized official)

July 1, 1952 (Date)

President (Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

QUESTION (1)

ANSWER

The Ajax group of mining claims which are under lease with option to purchase to the Magma King Manganese Mining Company; these claims consist of the following named claims:

Ajax	Patented	Book	Page
Ajax No. 2	Patented		
Raven	Patented		
Contact	Unpatented		
Golden State	Unpatented	43	483
Smelter No. 1	Unpatented	47	358
Smelter No. 2	Unpatented	35	151
Sunny Jim	Unpatented	35	151
Blue Crystal	Unpatented	38	451
Peacock	Unpatented	43	479
Side Line	Unpatented	35	207
Sent Ajax	Unpatented	26	281
White Mule	Unpatented	38	451
Contact No. 1	Unpatented	36	152
Contact No. 2	Unpatented	30	437
Contact No. 3	Unpatented	36	159
Liberty	Unpatented	47	222
Red Chief	Unpatented	48	36

All claims are located in Mineral Hill Mining District, Pinal County, Arizona. (c). Ajax 1 and Ajax 2.

QUESTION (2)

ANSWER

Formation in which the Ajax Vein is located is Pinal Schist, and is the same or similar to that of the Ray-Miami districts. The Ajax Vein can be followed along the surface outcrop for over two thousand feet along the strike with both Sulphide and Carbonate minerals of lead and zinc exposed.

Ore is disclosed on the 50 ft. and 176 ft. levels and by short drifts on both.

Attached are maps and Engineers Reports.

QUESTION (3)

ANSWER

Proposed work to be done at Ajax Mine.

Repairing Shaft to 176 ft. level:

Labor	$ 2,100.00
Supervision	350.00
Materials and Supplies	1,170.00
TOTAL	$ 3,620.00

Time Required: 21 days.

Drifting 600 Ft. North from Shaft:

Labor	$14,500.00
Supervision	1,860.00
Engineering	560.00
Materials and Supplies	5,200.00
TOTAL	$22,120.00

Time Required: 100 days

Raising 200 Ft.:

Labor	$ 3,500.00
Supervision	580.00
Engineering	260.00
Materials and Supplies	2,160.00
TOTAL	$ 6,500.00

Time Required: 50 days

QUESTION (3)

ANSWER

(Continued)

Raising Shaft 150 ft.:

Labor	$ 8,300.00
Materials and Supplies	5,700.00
Supervision	520.00
Engineering	480.00
TOTAL	$15,000.00

Time Required: 60 days

Diamond Drilling 2,000 Ft.

Labor	$ 5,087.00
Supervision	700.00
Engineering	900.00
Assaying	1,600.00
Materials and Supplies	1,700.00
TOTAL	$ 9,987.00

Time Required: 133 days

Contingecies Fund	$ 1,500.00
TOTAL FOR PROJECT	$59,727.00

QUESTION (4)

ANSWER

Maps are herewith submitted.

QUESTION (5)

ANSWER

The following buildings are now on the property and in a good state of repair.

1. Bearding House
2. Bunk House and Change Room
3. Small storage building
4. Building Used as Pump House and Containing Camp Light Plant
5. Hoist House
6. Machine Shop and Generating Plant Bldg.
7. Mine Office
8. Powder Magazine

QUESTION (6)

ANSWER

No road repairs.

No buildings or other facilities are necessary for this exploration project.

QUESTION (7)

ANSWER

To be Purchased:

1 Hoist with Power Unit	$ 1,750.00
1 Air Drill Stopper Type	350.00
1 Drifter Drill Complete with Bar	650.00
TOTAL	$ 2,750.00

Furnished by Magma King Co.:

1 35 KVA Generating Set	$ 2,000.00
1 7.5 KVA Generating Set	1,500.00
1 1931 Model International Pickup	1,500.00
1 Ford Model 1948, Flat Bed 1-1/2 Ton Truck	800.00
5 Tons 16# Mine Rail	700.00
1 Motor Driven Blower for Ventilation	100.00
1 10 H.P. I.R. Motopump	200.00
1 5 H.P. I.R. Motopump	100.00
1 C.P. sludge or sump pump	150.00
1 Shaft Skip	350.00
2 Ore Cars	150.00
TOTAL	$ 7,550.00

QUESTION (7)

ANSWER

(Continued)

To Be Rented:

1 Diesel 315 Cu. Ft. Portable Compressor at	$ 450.00 per Mo.
1 12B Eimco Finlay Mucker at	200.00 per Mo.
TOTAL RENTALS	$ 650.00 per Mo.

ALSO TO BE FURNISHED BY MAGMA KING:

1 C.P. 55 complete core drilling outfit	3,500.00
Diamond Drill Bits	500.00
TOTAL	$4,000.00

QUESTION (8)

ANSWER

		Per Month
4	Miners at $14.00 per day	$ 1,586.00
2	Skip Tender and Trammer at $13	728.00
2	Heistmen at $14.00	793.00
1	Diamond Drill Operater at $2.25 per hour	504.00
1	Diamond Drill helper at $1.50 per hour	336.00
1	Combination truck driver, time-keeper	370.00
1	Supt.	500.00
TOTAL PER MONTH		$ 4,817.00
Plus 25% Taxes, Insurance Etc.		1,204.00
TOTAL		$ 6,021.00

Time Allowance: 7 Months

QUESTION (9)

ANSWER

Materials (Timber)	$ 2,500.00
Supplies	5,400.00
Engineering	4,000.00
Assaying	1,750.00
Accounting	1,000.00
Power	4,800.00

Time Allowance: 7 Months

QUESTION (10)

ANSWER

The Magma King Manganese Mining Company is prepared to invest the sum of $29,863.50 as their share of the project.

QUESTION (10B)

ANSWER

The sum of $29,863.50 is sufficient to meet our Part of the cost of the project.

A S S I G N M E N T

THIS ASSIGNMENT and AGREEMENT made and entered into this 1st day of April, 1952, by and between APEX MINES, INC., an Arizona corporation, hereinafter referred to as Assignor, and MAGMA KING MANGANESE MINING CO., an Arizona corporation, hereinafter referred to as Assignee,

W I T N E S S E T H:

WHEREAS, the Assignor is now the proper Lessee under the terms of two leases which are more fully set out and described in the Assignment attached to this instrument and made a part hereof by reference; and

WHEREAS, the Assignee herein has reimbursed Assignor for all sums expended by it in the acquisition of said Master Leases No. 1 and 2, and in consideration is granting to Assignor other valuable consideration as more fully herein set forth,

NOW, THEREFORE, Assignor hereby sells, assigns, transfers and sets over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2, copies of which are also attached hereto and made a part hereof by reference.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee agrees that it will grant to Assignor, or its nominees, as consideration for this assignment, an option or warrants to purchase 450,000 shares of Assignee's 10¢ par value capital stock, at 50¢ per share, during the period of five years from the date hereof.

The terms, conditions and provisions of this Assignment shall be binding upon and inure to the benefit of the respective parties, their successors and assigns.

IN WITNESS WHEREOF, the parties have caused their proper officers to execute this assignment and agreement on the day and year first above written.

APEX MINES, INC.

ATTEST:

By (s) Ralph J. Pomeroy
Its President

(s) Conrad J. Kleinman
Its Secretary

ASSIGNOR

MAGMA KING MANGANESE MINING CO.

By (s) Ralph J. Pomeroy
Its President

ATTEST:

(s) Conrad J. Kleinman
Its Secretary

ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of APEX MINES, INC., the Assignor therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires:
1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 1st day of April, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J.

KLEINMAN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same on behalf of MAGMA KING MANGANESE MINING CO., the Assignee therein, as its President and Secretary, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

(s) Doris C. Williams
Notary Public

My commission expires: 1-30-56

A S S I G N M E N T

THIS ASSIGNMENT and agreement made and entered into this 11 day of March, 1952, by and between LOUIS HENNIG and ROBERT F. DANNELLEY, herein referred to as Assignors, and APEX MINES, INC., an Arizona corporation, herein referred to as Assignee,

W I T N E S S E T H:

WHEREAS the Assignors are Lessees under the terms of a lease and option dated the 10th day of August, 1948, and an amendment thereto, wherein Walter C. Smith and Theodora Holmes Smith, husband and wife, Rae L. Frazier, a widow, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease was recorded on the 21st day of August, 1948, in the office of the Recorder of Pinal County, State of Arizona, in Book No. 8 of Contracts and Agreements, at page 221, and which lease and option embraces certain patented mining claims known as Ajax and Ajax No. 1, and designated by the Surveyor General of Arizona as Survey No. 3949, and The Raven; and said lease and option herein to be designated as Master Lease No. 1; and

WHEREAS the said Assignors are Lessees under a lease and option agreement bearing date of October 18, 1948, wherein G. O'Dell and Ludisa O'Dell, husband and wife, Frank H. Allen and Gladys Allen, husband and wife, are Lessors, and which lease embraces sixteen unpatented mining claims located in the County of Pinal, State of Arizona, and which lease and option was recorded in the Pinal County Recorder's Office on January 27, 1949, in Docket 5, page 460, and which lease and option is in this assignment referred to as Master Lease No. 2; and

WHEREAS the said Assignors have been paid the sum of $3,000.00 and for other good and valuable consideration, receipt of which Assignors hereby acknowledge,

NOW, THEREFORE, Assignors hereby sell, assign, transfer and set over unto the Assignee, its successors and assigns, Master Lease No. 1 and Master Lease No. 2.

Assignee does hereby undertake and agree to keep all of the covenants, undertakings and obligations, and agrees to perform all the conditions in said Master Leases No. 1 and No. 2 contained.

Assignee is hereby authorized to deliver a copy and notice of this assignment to the parties in Master Leases No. 1 and No. 2 appearing as Lessors.

Assignors agree to furnish the proper abstracts and records for the examination of Assignee and further agree that the lessors in said Master Leases No. 1 and No. 2 are the legal owners of said mining properties and have a good and sufficient title thereto, and said Assignors agree to indemnify Assignee from any damages that might be sustained by reason of any defect or flaw in the title to said patented mining claims, or in the mining titles to said unpatented mining claims.

The terms, conditions and provisions of this assignment shall be binding upon and inure to the benefit of the respective parties to this assignment, their heirs, executors, successors and assigns.

IN WITNESS WHEREOF the Assignors have, on the day and year first above written, executed this assignment for the consideration, covenants and terms hereinabove specified, and the Assignee has caused its proper officers to execute this assignment and agreement on the day and year first above written.

(s) Louis Hennig

(s) Robert F. Dannelley
ASSIGNORS

APEX MINES, INC.

By (s) Ralph J. Pomeroy
Its President

Attest (s) Conrad J. Kleinman
Its Secretary
ASSIGNEE

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned

officer, personally appeared LOUIS HENNIG and ROBERT F. DANNELLEY, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and considerations therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On this 11 day of March, 1952, before me, the undersigned officer, personally appeared RALPH J. POMEROY and CONRAD J. KLEINMAN, who acknowledged themselves to be the President and Secretary respectively of APEX MINES, INC., a corporation, and who acknowledged to me that they executed the foregoing instrument for and on behalf of said company, as such officers, being duly authorized so to do, for the purposes and considerations therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

(s) Doris C. Williams
Notary Public

My commission expires:

1-30-56

Receipt is hereby acknowledged of a copy of the foregoing Assignment, and we hereby consent to and accept said assignment, this ____ day of March, 1952.

(s) Walter C. Smith

(s) Theodora Holmes Smith

Rae L. Frazier/Walter C. Smith
Atty. in fact

(s) Frank H. Allen

Gladys Allen by Frank H. Allen

LESSORS

" EXHIBIT " A "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this 16th day of October, 1948, by and between G. O'DELL and LUDISA O'DELL, husband and wife, of Phoenix, Maricopa County, Arizona, and FRANK H. ALLEN and GLADYS ALLEN, husband and wife, of Gilbert, Maricopa County, Arizona, who as a group are the owners and lessors of all the below listed sixteen (16) unpatented mining claims, as LESSORS, and LOUIS HENNIG and ROBERT F. DANNELLEY of Pinal County, Arizona, as LESSEES,

WITNESSETH:

That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let unto the said lessees, all of the following described mine and mining property, the location notices of which are of record in the office of the County Recorder of Pinal County, Arizona, the claims being situated in the Mineral Hill Mining District, County of Pinal, State of Arizona, to-wit:

PEACOCK	CONTACT NO. 1
GOLDEN STATE	CONTACT NO. 2
HIDDEN TREASURE	CONTACT NO. 3
SMELTER NO. 1	RED CHIEF
SMELTER NO. 2	LIBERTY
BLUE CRYSTAL	SIDE LINE
WHITE MULE	TOM
SUNNY JIM	SOUTH WEST AJAX

Unpatented mining claims

together with the appurtenances.

TO HAVE AND TO HOLD unto the said lessees for a term of eight (8) years expiring at noon on the fifteenth (15th) day of October, 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said

lessees reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows; to wit:

To enter upon said mine and premises and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as workable mines, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises, throughout the term of this lease, the annual assessment work as required by Federal and state laws, and to cause affidavits for such to be recorded with the County Recorder of the County of Pinal, state of Arizona, on or before the first day of May of each year this lease shall be in effect.

It is agreed that in the event mining activity be stayed by reason of acts of God, or for other causes beyond the control of Lessees, the lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ores shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten per cent (10%) of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentration, smelting and trucking, any of which above processes may be required and

employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is, five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest, and five (5%) per cent to G. O'Dell, 95 West Willetta Street, Phoenix, Arizona, as agent for the other interest in the unpatented mining claims herein described, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and ore concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessors' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating their determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the period of this lease abandon said lease and will, in such event, notify lessors herein in writing of any such intention, at their proper addresses, and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If at any time the lessees do not perform their obligations hereunder, this lease shall terminate in ninety (90) days thereafter. Upon the termination of this lease because of lessees' default or because of abandonment of this lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have

placed upon said mining claims. If, within said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed, said property shall then belong to the owners of said mining claims. All timbers in place and gallows frame erected upon said mining property shall be and remain the property of the owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property, and of the equipment and property as herein described unto lessors, their heirs and assigns. Upon default and delivery of said possession, as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereinafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of mining, concentrating or leaching the ores mined from said claims, and agree to grant a lease or leases of surface rights upon the ground upon which such structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be

so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is expressly understood, however, that in case of abandonment of this lease by lessees, all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent, said improvements shall become the property of the owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures, surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately.

Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the state of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof; lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipts of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and

recorded as required by law the notice of non-liability provided for by the laws of the state of Arizona, Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the state of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft, and to keep workings in use clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein, and it is agreed that if controversy shall arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such condition or rectify the situation complained of; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary, by consent of all parties.

It is further agreed that this lease may be assigned, and upon such assignment the assigned hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all of the covenants, promises and conditions upon the part of the lessees agreed to be kept and performed.

AND IN CONSIDERATION of the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right, during the term of this lease, to purchase the interest of lessors herein to said premises for the sum of

Thirty-two thousand ($32,000.00) dollars, the sum of Sixteen Thousand ($16,000.00) dollars to each of the two groups of lessors. All royalties paid during the term of this lease shall be credited toward such purchase price, of thirty-two thousand ($32,000.00) dollars, and any remaining amount due shall be paid on or before October 15, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payments, Lessors will execute, acknowledge and deliver, at their own cost, good and sufficient deed or deeds to the lessees, or such person or company as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly understood and agreed that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year first thereinabove written.

G. O'Dell

Ludisa O'Dell
(Husband and wife)

Frank H. Allen

Gladys Allen
(Husband and wife)
LESSORS

Louis Hennig

Robert F. Dannelley
LESSEES

STATE OF ARIZONA :
: SS
COUNTY OF MARICOPA :

On this day, before me, the undersigned Notary Public, personally appeared XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX,XXXXX FRANK H. ALLEN and GLADYS ALLEN, husband and wife, as lessors, and XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX as XXXXXXXX and acknowledged to me that they executed the foregoing lease for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 22nd day of October, 1948.

W. C. Mc Connell
Notary Public

My commission expires:
Nov. 13, 1950.

State of Arizona / SS
County of Maricopa /

On this day, before me, the undersigned Notary Public, personally appeared G. O'DELL and LUDISA O'DELL, husband and wife, as Lessors, acknowledged to me that they executed the lease for the purpose and consideration expressed.

GIVEN UNDER MY HAND and seal of office this 1st day of November, 1948.

Edward J. Gale
Notary Public

My Commission Expires March 10, 1951

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of January, 1949 by Robert F. Dannelley.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8A -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

Subscribed and sworn to before me this 27th day of Jan., 1949 by Louis Hennig.

Elva B. Weaver
Notary Public

My commission expires:

Feb. 16, 1951

- 8B -

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I hereby certify that the within instrument was filed and recorded at request

of Louis Hennig
Jan. 27, 1949, at 3:10 P. M.
Docket 5 of Page 460

Witness my hand and official seal the day and year aforesaid.

SOPHIE M. SMITH

County Recorder

by Margaret K. Bamrick

Deputy Recorder

42531

- 8C -

" EXHIBIT "

LEASE AND OPTION AGREEMENT

THIS AGREEMENT, made this tenth day of August of 1948, between Walter C. Smith and Theodora Holmes Smith, husband and wife, and Rae L. Fraser, a widow, of Coolidge, Pinal County, Arizona, and Frank H. Allen and Gladys Allen, husband and wife, of Gilbert, Maricopa County, Arizona, lessors, and Louis Hennig and Robert F. Dannelley of Pinal County, Arizona, Lessees:

WITNESSETH: That the said lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed, and by the said lessees to be kept and performed, have granted, demised and let, and by these presents do grant, demise and let, unto the said lessees, all the following described mine and mining property, situated in the MINERAL HILL MINING DISTRICT, County of Pinal, State of Arizona, to-wit:

The AJAX AND AJAX NO. 1 patented mining claims together with the appurtenances to have and to hold unto the said lessees for the term of eight (8) years expiring at noon on the first day of September 1956, unless sooner forfeited or determined through the violation of any covenant hereinafter against the said tenant reserved.

And in consideration of the said demise the said lessees do covenant and agree with said lessors as follows, to-wit: To enter upon said mine or premises, and work the same in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the said premises as a workable mine, and to the special covenants hereinafter reserved.

Lessees shall do and perform upon said premises throughout the term of this lease, beginning not to exceed ninety (90) days from the date hereof, not less than sixty (60) eight (8) hour man shifts per month, averaged over periods of ninety (90) days. However, it is agreed that in the event work be stayed by reason of acts of God, or for other causes beyond the control of lessees, lessors shall extend the term of this lease for an equivalent period.

Lessees may, at their option, ship any commercial ores mined from said property to a smelter or other reduction plant, or cause the same to be milled, concentrated or leached upon the property herein leased. In whatever manner the said ore shall be smelted, leached, treated, concentrated or milled, the said ore or concentrate shall be delivered for sale to a smelter and a full ten (10%) per cent of net returns shall be paid to lessors herein, in the manner hereinafter described, as rental or royalties.

"Net returns" is hereby defined and agreed to be the gross amount paid by purchaser of ore or concentrate less charges for transportation, milling, concentrating, smelting and trucking, any of which above processes may be required and employed to prepare ores into marketable standards of metals at prevailing prices.

It is further agreed that lessees will use the most economical means for each of the above processes in order to gain the best price and return possible for lessors and themselves.

Lessees shall pay lessors their respective share of royalty determined herein, that is: five (5%) per cent to Frank H. Allen, Gilbert, Arizona, as agent for the Allen interest and five (5%) per cent to Walter C. Smith, Box 548, Coolidge, Arizona, as agent for the other half interest in the AJAX AND AJAX NO. 1 patented claims, said royalty to be paid on or before the fifth day of each and every month during the term of this lease for all ore and/or concentrate sold during the preceding month and shall submit with each payment copies of purchaser's settlement sheets together with copies of lessees' cost sheets for the corresponding shipments, which latter deducted from the former shall constitute the base in calculating the determined ten (10%) per cent royalty payment due lessors.

Lessees may at any time during the term of this lease abandon operation of the properties and will, in such event, notify lessors herein in writing of such intention at their proper addresses and at the expiration of ninety (90) days from the date of such notice this lease shall terminate. If, at any time, the said lessees do not perform their obligations hereunder for a period of ninety (90) days, this lease shall terminate. Upon the termination of this lease because of lessees' default or because of abandonment of the lease, lessees shall have ninety (90) days within which to remove all tools, machinery or other personal property which they shall theretofore have placed upon said mining claims. If, within the said period of ninety (90) days the lessees do not remove all property hereby permitted to be removed said property shall then belong to the co-owners of said mining claims. All timbers

in place and gallows frame erected upon said mining property shall be and remain the property of the co-owners and shall not be removed.

All ore mined upon the property and not shipped therefrom at the time of the termination of this lease shall be and become the property of lessors, except that lessees may ship said ore within not to exceed ninety (90) days from the termination of this lease.

Upon default herein by lessees and the expiration of the time herein described, lessees agree that they will surrender up possession of said mining property (and of the equipment and property as herein described) unto lessors, their heirs and assigns. Upon default and delivery of said possession as herein described, lessors may, at their option, and without further notice, take possession of said property and evict all persons therefrom, as if said property were held under forcible detainer by lessees, except that lessors shall respect lessees' rights to surface leases and buildings as hereafter provided.

Lessors agree to permit lessees to erect upon said claims whatever buildings or structures which may be required in the process of milling, concentrating or leaching the ores mined from said claims and agree to grant a lease or leases of surface rights upon the ground upon which said structures may be situated until said structures may be removed therefrom by lessees, providing, however, that such structures shall be so situated as not to interfere with any future operations of the property by lessors in case of default or abandonment of this lease. It is the intent of this provision not to work a hardship on lessees in case of abandonment of this lease by reason of inability to profitably operate the said claims. It is

expressly understood, however, that in case of default or abandonment of this lease by lessees all state and county taxes on said improvements shall be paid promptly when and as due and that in the event such taxes be not paid and become delinquent said improvements shall become the property of the co-owners of the claims without the formality of a lawsuit.

It is further agreed that upon removal of any or all of such structures surface leases as above provided shall be revoked as to the structure removed and return of the ground so occupied shall be effective immediately. Lessees shall keep in force continuously throughout the term of this lease an appropriate policy of industrial insurance for the protection of their employees. Lessees shall likewise pay any and all taxes of every kind and nature which may become due or payable to the United States of America, and shall pay to the State of Arizona and County of Pinal all property taxes assessed and levied against said mining property on or before the delinquent date thereof. Lessors shall notify lessees of the amount and due date of all such state and county taxes and lessees shall notify lessors of payment providing lessors with receipt of payment.

Lessees, before taking possession of said property under this lease and before the commencement of any work looking to their performance hereunder, shall cause to be posted and recorded as required by law the notice of non-liability provided for by the laws of the State of Arizona. Lessees may be supplied with such notices by lessors and lessees shall post and keep posted such notices continuously throughout the entire term of this lease at all places so required on said property by the laws of the State of Arizona.

Lessees agree to place and maintain adequate timbering in their mining operations, to do no underhand stoping and no stoping within ten (10) feet of any shaft and to keep workings clear of ore, rock and rubbish.

Lessors or their agents may at all reasonable times go upon the property above mentioned to examine and inspect the same to ascertain the fulfilment of this lease and to examine the books of account herein and it is agreed that if controversy arise as to failure of lessees to comply with the terms of this lease, lessees shall have ninety (90) days within which to cure such a condition or rectify the situation complained of if such be justified under the lease; and it is hereby agreed that any part of this lease may be amended as and when it may appear necessary.

It is further agreed that this lease may be assigned and upon such assignment the assignee hereof shall execute, acknowledge and deliver to lessors an appropriate instrument in writing whereby the said assignee agrees to keep and perform all the covenants, promises and conditions upon the part of the lessees herein agreed to be kept and performed.

AND IN CONSIDERATION OF the foregoing lease and the expenditures to be made thereunder and the well and faithful keeping of the covenants thereof, the said lessees shall have the right during the term of this lease to purchase the interests of lessors herein to said premises for the sum of FORTY THOUSAND ($40,000.00) DOLLARS, TWENTY THOUSAND ($20,000.00) DOLLARS to owners of each one-half interest. All royalties paid during the term of this lease shall be credited toward such purchase price of FORTY THOUSAND ($40,000.00) DOLLARS and any remaining amount due shall be paid on or before September 1, 1956.

Time is of the essence of this contract as to such payments, and upon the tender of the final payment lessors will execute, acknowledge and deliver at their own cost, good and sufficient deed or deeds to the lessees, or such person or com-

pany as the lessees shall nominate, conveying the said premises clear of encumbrance.

The forfeiture, surrender, or termination of the above lease for any cause shall render the option void, and the above mentioned payments may not thereafter be tendered.

It is expressly agreed and understood that this agreement shall be considered as an option to purchase only, and not as obligating the said lessees to purchase said property.

The terms, promises and conditions hereof shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands the day and year above written.

Frank H. Allen

Gladys Allen

Walter C. Smith

Theodora Holmes Smith

Rae L. Fraser

By
Walter C. Smith, Attorney-in-fact

LESSORS

Louis Hennig

Robert F. Dannelley

LESSEES

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

On this 12th day of August, 1948, personally appeared before me, the undersigned officer, FRANK H. ALLEN AND GLADYS ALLEN, his wife, known to me to be the persons whose names are subscribed to the foregoing lease, and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

W. C. Mc Connell
Notary Public

My Commission expires

Nov. 13, 1950.

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14th day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith and Theodora Holmes Smith, his wife, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged to me that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3 - 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 14 day of August, 1948, personally appeared before me, the undersigned officer, Walter C. Smith, Attorney-in-fact for Rae L. Fraser, a widow, known to me to be the person whose name is subscribed to the foregoing lease and acknowledged to me that he executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

John Daskam
Notary Public

My commission expires:

Jan. 3. 1952

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

On this 20th day of August, 1948, before me, the undersigned officer, personally appeared Louis Hennig, and Robert F. Dannelley, known to me to be the persons whose names are subscribed to the foregoing lease and acknowledged that they executed the same for the purposes therein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Jan Meison
Notary Public

My commission expires:

6 - 25 - 51

STATE OF ARIZONA)
) SS.
COUNTY OF PINAL)

I, Sophie M. Smith, Recorder in and for the County of Pinal, State aforesaid, do hereby certify that the annexed Instrument was filed and recorded at request of

Robert F. Dannelley
on the ___ day of Aug 21. 1948
A. D., 19__, at 3:00
__ o'clock, P. M., in Book No. 8
of Contr. & Agnts. Page 221
Witness my hand and official seal the day and year first above written.

SOPHIE M. SMITH
Recorder

Myrtle L. Kay
Deputy

39292

Return to Louis Hennig
200 South Los Angeles Street
Anaheim, California

Superior, Arizona
May 20, 1952

To the Board of Directors
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Gentlemen:

At your request, I have compiled, from personal observation and accumulated data obtained from former operators and engineers, a report on your Ajax property, located in Pinal County, Arizona about 8 miles South-west of the town of Superior, Arizona.

The report on the Ajax Mine is herewith attached.

Yours very truly,

Frank L. Metler.

REPORT ON AJAX, BLUE CRYSTAL MINES, MINERAL HILL MINING DISTRICT, PINAL COUNTY, ARIZONA.

PAGE 1. ---------- SUMMARY

2. ---------- SUMMARY

3. ---------- PROPERTY

3. ---------- LOCATION

4. ---------- HISTORY

4. ---------- GEOLOGY

5. ---------- GEOLOGY

6. ---------- GEOLOGY

6. ---------- DEVELOPMENT

6. ---------- SAMPLING

7. ---------- SAMPLING

7. ---------- DEVELOPED ORE

8. ---------- PROBABLE ORE

8. ---------- RECOMMENDATIONS

9. ---------- RECOMMENDATIONS

PHOTOGRAPHS

MAPS:
PROPERTY MAP
SAMPLE MAPS

SUMMARY:

The strength, continuity and mineralization of the surface croppings of the Ajax vein together with the amount of commercial ore developed by a small amount of vertical and horizontal workings, indicates that this mining property should by further development and proper management become a profitable producer.

As the vein on the surface at the shaft is much poorer in appearance than it is directly to the North of the present workings, a considerable tonnage of milling ore should be developed by a drift on the 176 foot level in that direction. Sinking on the vein below the present developed orebody should also develop an appreciable tonnage also. However, drifiting to the North should disclose sufficient ore to make the construction of a milling plant feasible.

The metallurgy should not be difficult as the lead and zinc ore are coarsely crystalline and should separate easily by medium grinding in the mill. Below the 50 foot level the minerals are entirely sulphide so no metallurgical trouble can be expected caused by oxidized ores. At the present writing the mine will not produce enough water for milling purposes but further opening of underground workings should add to the present supply. If enough water cannot be produced by the mine a drilled well could augment the present supply.

Summary (Continued)

Other mines in the district have changed at depth to copper, starting with a zinc ore, this is particularly true of the Magma mine at Superior, Arizona. This mine is producing high grade copper ore at a depth of 5000 feet below the outcrop. At what depth the change from copper to zinc might take place cannot be forecast, however, there is a slight increase in the copper content of the ore on the 176 feet level.

A sum of $50,000.00 should be sufficient to provide the necessary equipment and carry on the development program to a point where a mill would be profitable undertaking. In the event that little or no further ore be developed on the property, the cost of the development program should be salvaged by mining and milling the ore now developed. There is almost a certainty that the ore reserves will be steadily increased by carrying on the proposed development.

The writer believes that the Ajax Mine will with proper management and engineering become a profitable producer.

Respectfully Submitted,

Frank L. Metler

PROPERTY:

The Ajax mining property consists of three patented and sixteen unpatented mining claims, all of which are contiguous. The patented claims are; Ajax, Ajax No. 1 and Raven. The unpatented mining claims are: Peacock, Tom, Hidden Treasure, Homestake, (also Known as Smelter No. 1) Smelter No. 2, Blue Crystal, White Mule, Sunny Jim, Contact No. 1, Contact No. 2, Contact No. 3, Red Chief, Liberty, Side Line, and South Ajax.

LOCATION:

The Ajax Blue Crystal Groups are located in Mineral Hill Mining District, Pinal County, Arizona. They are situated about eight miles Southwest of Superior, Arizona, the home of the famous Magma copper mine.

The Ajax group is reached by turning South from the Phoenix Superior Highway at a point eleven miles West of Superior, thence nine miles by country road. The distance from the Ajax Mine to nearest railroad is ten miles.

HISTORY:

The Ajax mine was first opened about 1906 and at that time it was developed to it's present depth.

Evidently, the operators at that time were in search of ores containing lead and silver and became discouraged because of the zinc content which increased as depth was attained. At this period the known methods of separation of lead and zinc were very inefficient and consisted of gravity concentration only. The flotation process had not

HISTORY (Continued)

as yet been discovered. The market price of lead at that periodwas about three cents per pound, so there could have been little incentive to proceed further with development work on the mine.

The mine was dormant until 1948, when leasers tried again to mine a direct smelting product, this operation was unprofitable. However, the ore mined by the leasers was of excellent milling grade. In 1949 operations were again resumed and the mine was unwatered to the bottom or 176 foot level. A small amount of drifting was done and considerable tonnage of mill ore proven. Finances were limited and the proper amount of development work could not be completed or a mill constructed.

At this writing the mine is unwatered and all workings are available for inspection.

GEOLOGY AND MINERALIZATION:

The prevaling formation in the area surrounding the Ajax mine is that of schist and is probably related to the Pinal Schist of the Ray-Miami Districts. The structure at the Ajax has been tilted and is cut by the Ajax-Blue Crystal veins nearly at right angles. The veins are true fissures and are not bedded in the planes of the schist.

The Ajax vein is very prominent and the outcrop extends above the surrounding terrain to a heighth of over ten feet in numerous places. It is plainly visible along the outcrop for a distance of nearly 2000 feet, with minor faulting in several places which are plainly visible on the surface and are of small displacement. The vein at the Ajax is from 8 to

GEOLOGY AND MINERALIZATION (Continued)

20 feet in width and the outcrop contains lead in both sulphide and carbonate form, the carbonate ore predominating. The vein also contains quartz, hematite and calcite minerals. On the surface the oxidation is very pronounced but at the 50 feet level and below, the ore is entirely sulphide in character. At the 50 feet level the ore is predominantly that of lead, but as depth is gained in the shaft, the percentage of zinc steadily increases, with some increase also in the copper content of the ore. Assays also indicate that the gold and silver values are becoming greater on the 176 level South of the Shaft. As greater depth is attained at the Ajax copper should gradually replace the zinc and the vein would then become a producer of copper instead of lead zinc as at the present.

The writer has personaly observed the zinc orebody on the 1800 feet level of the Magma mine, at a slightly greater depth this zinc orebody was replaced by a good grade of copper ore. Quoting from University of Arizona Bulletin on Superior Mining District, dated October, 1943.

"The Western sheet has its apex about 50 feet above the 1200 foot level at departure 4600. Here the ore consists of Sphalerite and a little galena, with only traces of copper, between the 1300 and 1400 levels it changes abrubtly into a Bornite rich ore with little or no zinc and lead.

The Blue Crystal which is a parallel vein and is about 1500 feet distant from the Ajax vein. The Blue Crystal vein is smaller in width at the outcrop, with average width of about four to five feet. Much cerussite (lead carbonate) was observed with some galena and copper carbonate minerals. An ore pile on

GEOLOGY AND MINERALIZATION (Continued)

the dump at the mouth of the Blue Crystal tunnel appears to contain about 10 to 12 percent lead, mostly in carbonate form. This vein is quite strong and well mineralized and should develop considerable ore at depth.

DEVELOPMENT:

At the Ajax, a small shaft has been sunk to a depth of nearly 200 feet at an angle of about 65 degrees. This shaft was started on the vein but went into the footwall at about 90 feet below the collar. This made necessary a crosscut of about 30 feet in order to reach the vein on the 176 foot level. Total drifting on the 176 level consists of about 95 feet of drift to the North and 55 feet of drift to the South of the shaft, together with a short crosscut to the footwall. On the 50 level, the North drift extends 40 feet from the shaft and the South drift about 60 feet. There is a short crosscut directly North of the shaft, which extends into the hanging wall. There are numerous cuts and shallow shafts along the outcrop, which shows the vein to be in place and well mineralized.

BLUE CRYSTAL

Development at the Blue Crystal is composed of a tunnel about 200 feet in length, a two compartment winze said to be 300 feet in depth and a one compartment winze near the face of the tunnel about 90 feet in depth. There is said to be a stope on the lower level of the large winze ready for ore production, but the writer has not seen this stope as water fills the winze to within 160 feet of the tunnel level.

SAMPLING - AJAX:

Three cars shipped by leasers in 1948 gave the following:

	Silver	Lead	Zinc	Copper
Car No. 1	1.05 oz.	7.05%	5.4%	0.12%
Car No. 2	1.03 oz.	7.20%	3.2%	0.12%
Car No. 3	1.45 oz.	10.30%	2.3%	0.20%

Several small lots of sorted ore were shipped with assay returns of 60% lead and 4 ounces of silver per ton. A reported shipment by the original operators when the mine was first opened yielded 68% lead and came from the 50 foot level. The writer has noted large boulders of galena in the vein on the 50 level which would assay at least 68% in lead.

Sampling in the shaft below the 50 level gives a calculated assay value of 3.8% lead and 9.3% zinc per ton. On the 176 level, 27 samples were taken in 1948 and indicated an average value in combined lead and zinc in excess of 10% combined metals, with small additional and recoverable values in gold and silver.

A core drill hole drilled from the surface 400 feet North of the shaft cut the vein at a point corresponding to the 100 feet level in the shaft. This hole shows eight and one half feet of zinc ore assaying 16.9%.

The sampling which has been done on the Ajax vein has been careful and thorough and the values should be maintained under actual mining conditions. (See sample maps of 50 and 76 levels)

DEVELOPED ORE:

Between the 50 level and the 176 level and opened by 140 feet of drifting on the 176 level and 100 feet of drifting on the 50 level there is a calculated tonnage of about 19800 tons,

DEVELOPED ORE (Continued)

This block should average between 10 and 11 percent combined lead and zinc, with some recoverable values in gold and silver. Another 4000 to 5000 tons of partially oxidized ore can be obtained between the 50 level and the surface.

PROBABLE ORE:

It is reasonable to assume ore below the 176 level, assuming 50 feet in depth would add at least 7000 additional tons to that now blocked above the 176 level. There is no particular reason why the ore below the present bottom level shoul not continue to extend downward for a long distance.

The drill hole 400 feet North of the shaft where eight and one half feet of ore assaying over 16% zinc was cut, also indicates commercial ore at this point, and as the face of the North drift is yet in ore, there is no reason to believe that this ore will not continue to develop by drifting to the North.

At a point several hundred feet from the shaft, Northerly, both sulphide and carbonate ores are observed on the outcrop, the vein is exceptionally strong in this area and it is reasonable to expect good ore when a point is reached under this exposure on the lower levels.

RECOMMENDATIONS:

It is recommended that a skip pocket be cut on the lower level and that a skip be installed, to take the place of the hoisting bucket now in place. After installation of skip and cutting skip pocket, drifting should be started to the North and should be continued until a favorable point is reached where a crosscut can be extended into the hanging

RECOMMENDATIONS: (Continued)

wall far enough to permit a vertical shaft to cut the vein at about the 400 feet level. The present shaft would not be suitable for steady production and an additional shaft is necessary to provide adequate ventilation of the workings.

After the crosscut is run, core drilling would then be in order to prove the downward extension of the orebodys.

Should drifting to the North continue to expose ore of an equal grade comparable to that which has been opened by past development, a milling plant would then be necessary. This plant should be of about 100 tons daily capacity and should be designed so that other units could be added in the future.

It is also recommended that the Blue Crystal winze be unwatered and a thorough sampling campaign be conducted at that property. It is very probably that by unwatering the mine considerable tonnage may be opened and made available for milling.

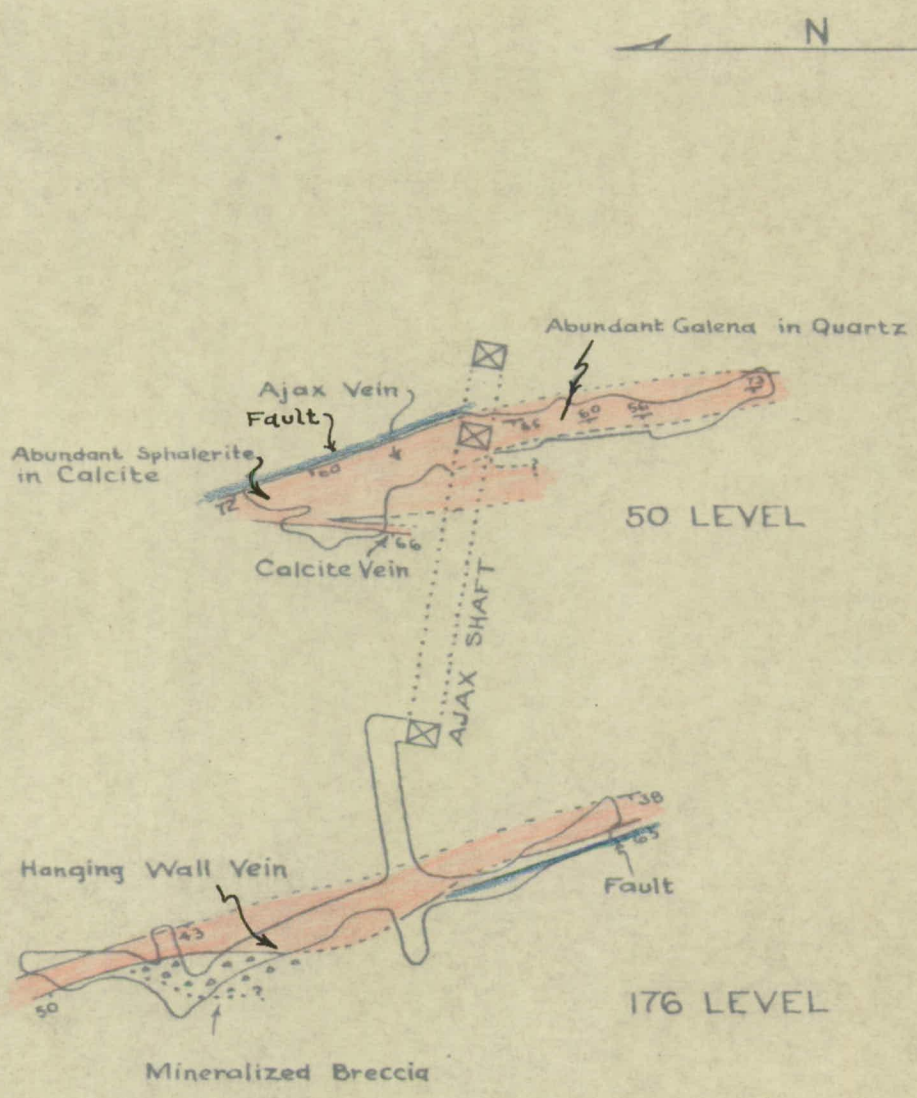
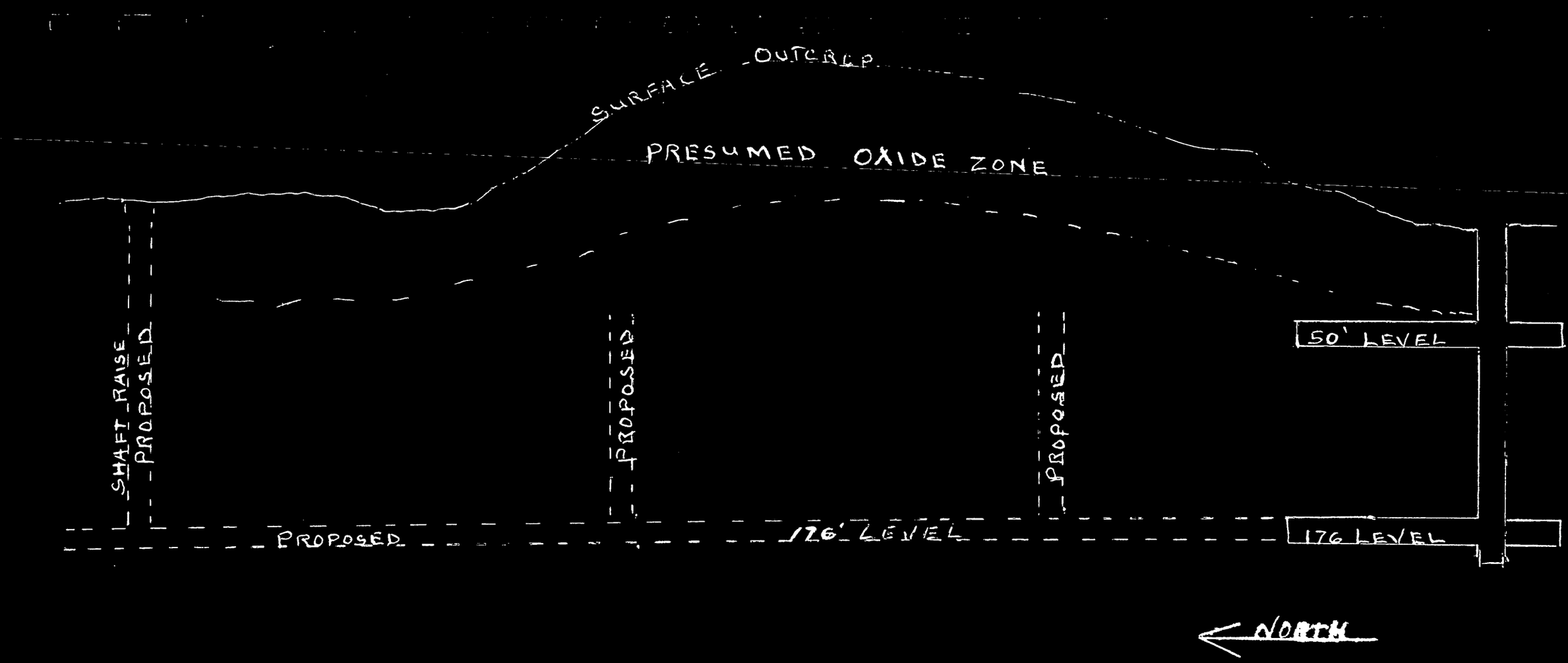
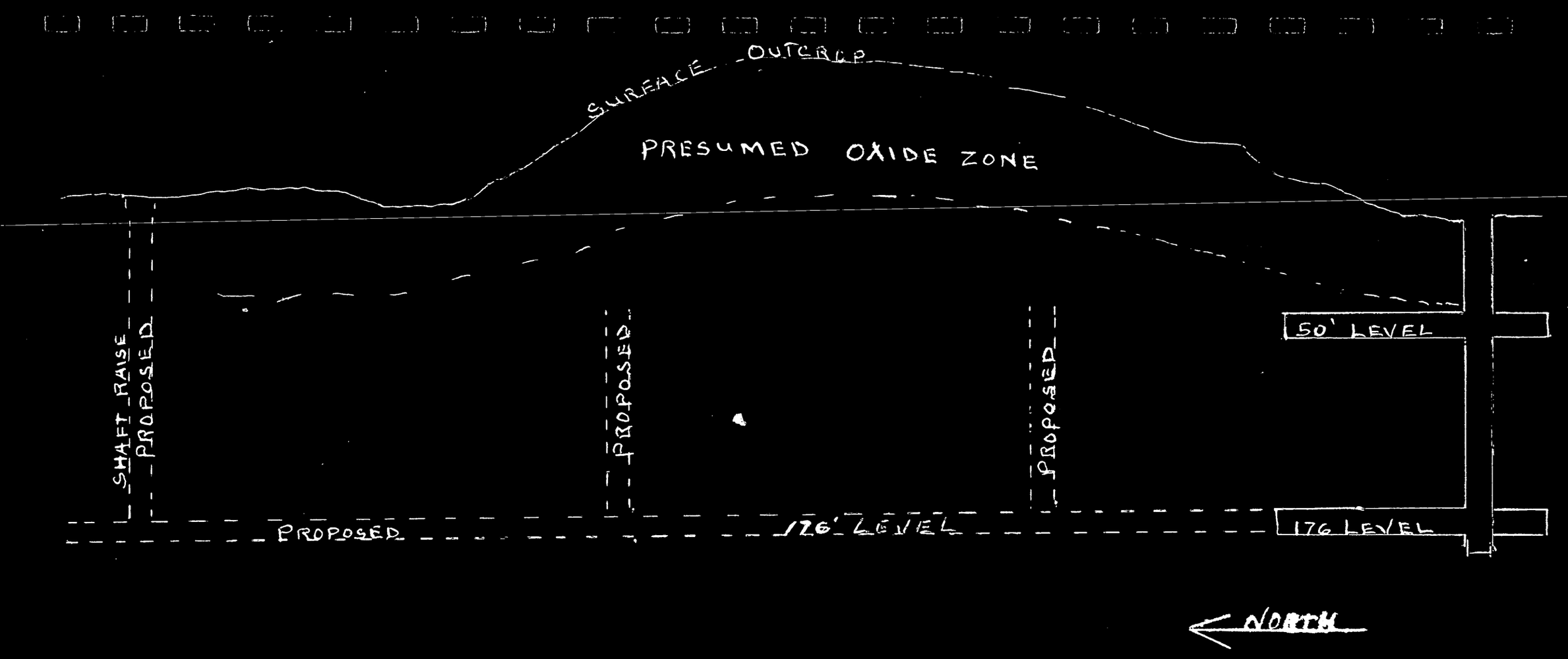


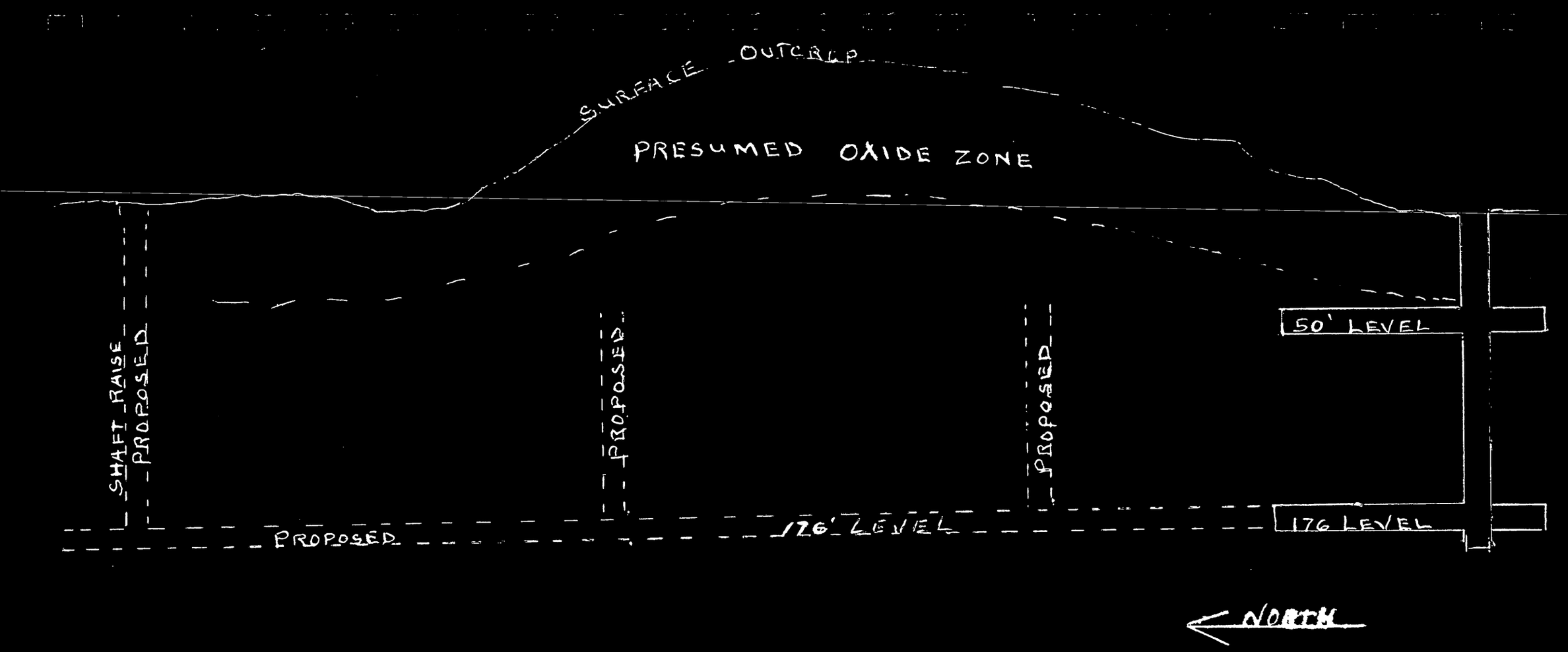
Fig. 5 - Geologic Map, Ajax Mine Workings, Pinal County, Arizona
DMEA 2603 Scale 1" = 40'



ASAX MINE
LONGITUDINAL SECTION
PROPOSED WORK
ONE INCH = 60 FEET



AJAX MINE
LONGITUDINAL SECTION
PROPOSED WORK
ONE INCH = 60 FEET



AJAX MINE
LONGITUDINAL SECTION
PROPOSED WORK
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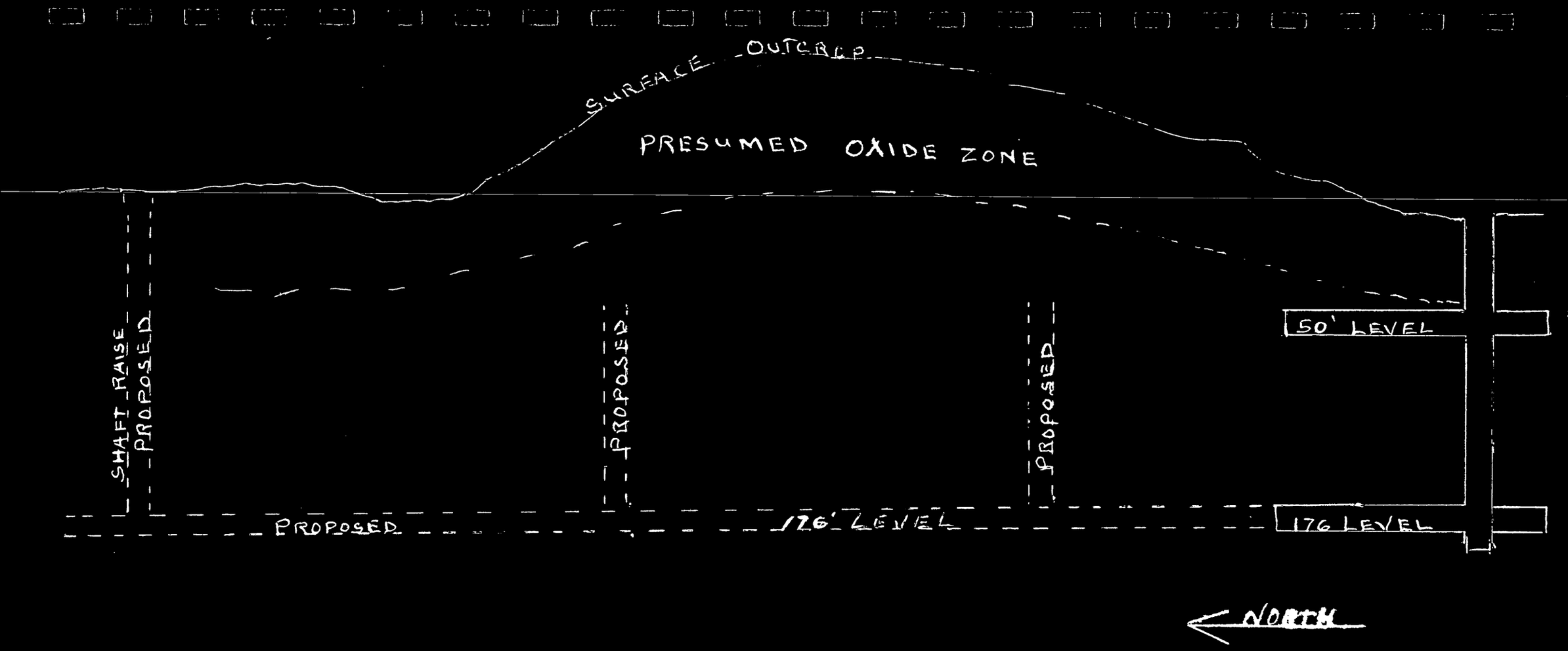

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LONGITUDINAL SECTION
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ONE INCH = 60 FEET

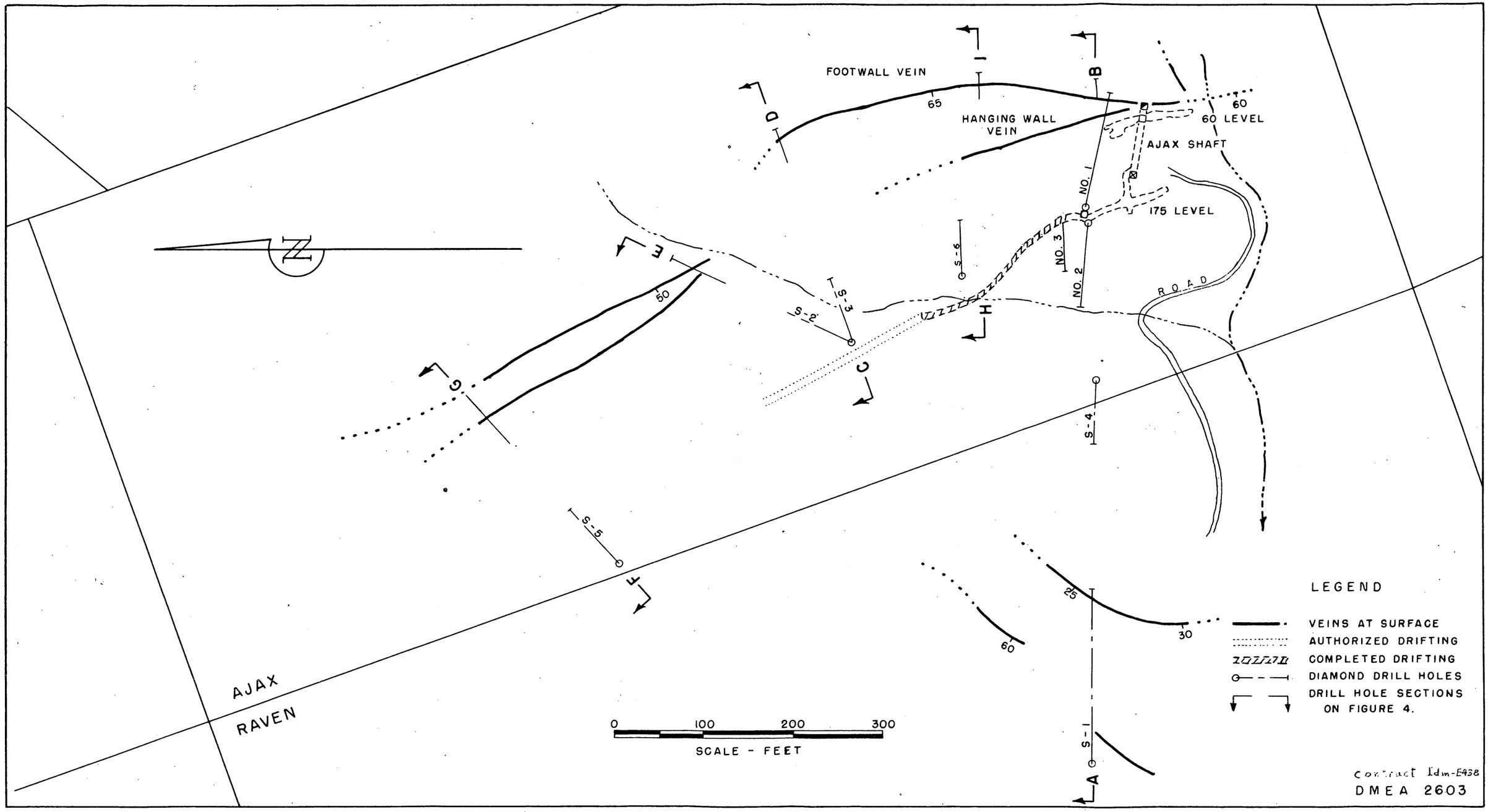


FIGURE 3. - PLAN MAP - AJAX MINE - MAGMA KING MANGANESE MINING COMPANY - PINAL COUNTY, ARIZONA

INFORMATION FROM MONTHLY REPORTS BY F. L. METLER, SUPT.

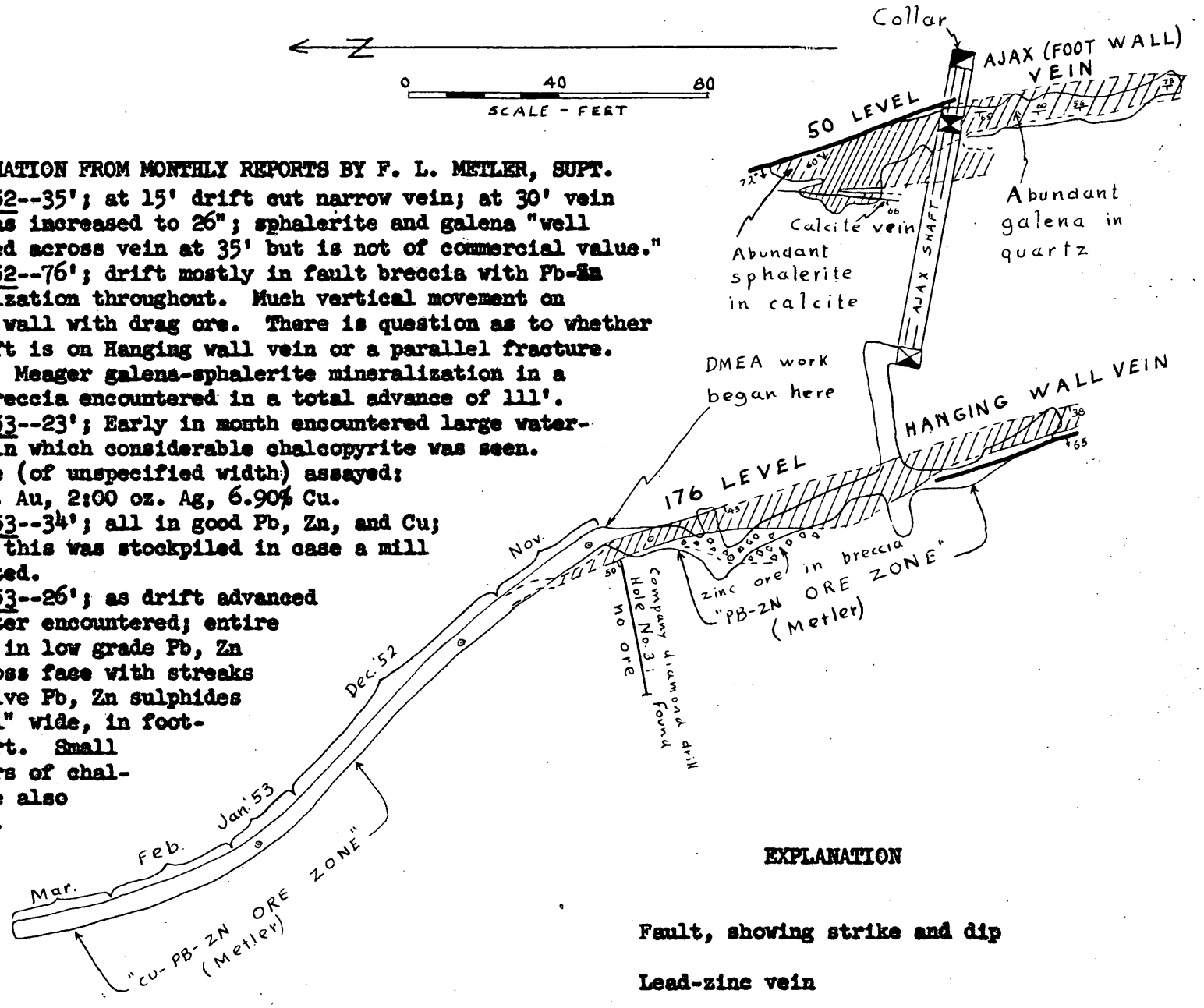
Nov.'52--35'; at 15' drift cut narrow vein; at 30' vein width has increased to 26"; sphalerite and galena "well scattered across vein at 35' but is not of commercial value."

Dec.'52--76'; drift mostly in fault breccia with Pb-Zn mineralization throughout. Much vertical movement on hanging wall with drag ore. There is question as to whether the drift is on Hanging wall vein or a parallel fracture. Romslo: Meager galena-sphalerite mineralization in a fault breccia encountered in a total advance of 111'.

Jan.'53--23'; Early in month encountered large water-course in which considerable chalcopyrite was seen. A sample (of unspecified width) assayed: 0.02 oz. Au, 2:00 oz. Ag, 6.90% Cu.

Feb.'53--34'; all in good Pb, Zn, and Cu; some of this was stockpiled in case a mill is erected.

Mar.'53--26'; as drift advanced more water encountered; entire advance in low grade Pb, Zn ore across face with streaks of massive Pb, Zn sulphides up to 11" wide, in foot-wall part. Small stringers of chal-copyrite also present.



EXPLANATION

Fault, showing strike and dip

Lead-zinc vein

Strike and dip of vein

Country rock is Precambrian (?) chlorite schist. Map is compiled from field mapping of J. N. Faick and monthly progress reports for applicant by F. L. Metler.

FIGURE 5 - GEOLOGIC MAP, AJAX MINE WORKINGS, PINAL COUNTY, ARIZONA.

DMEA 2603, Contract Idm-E428

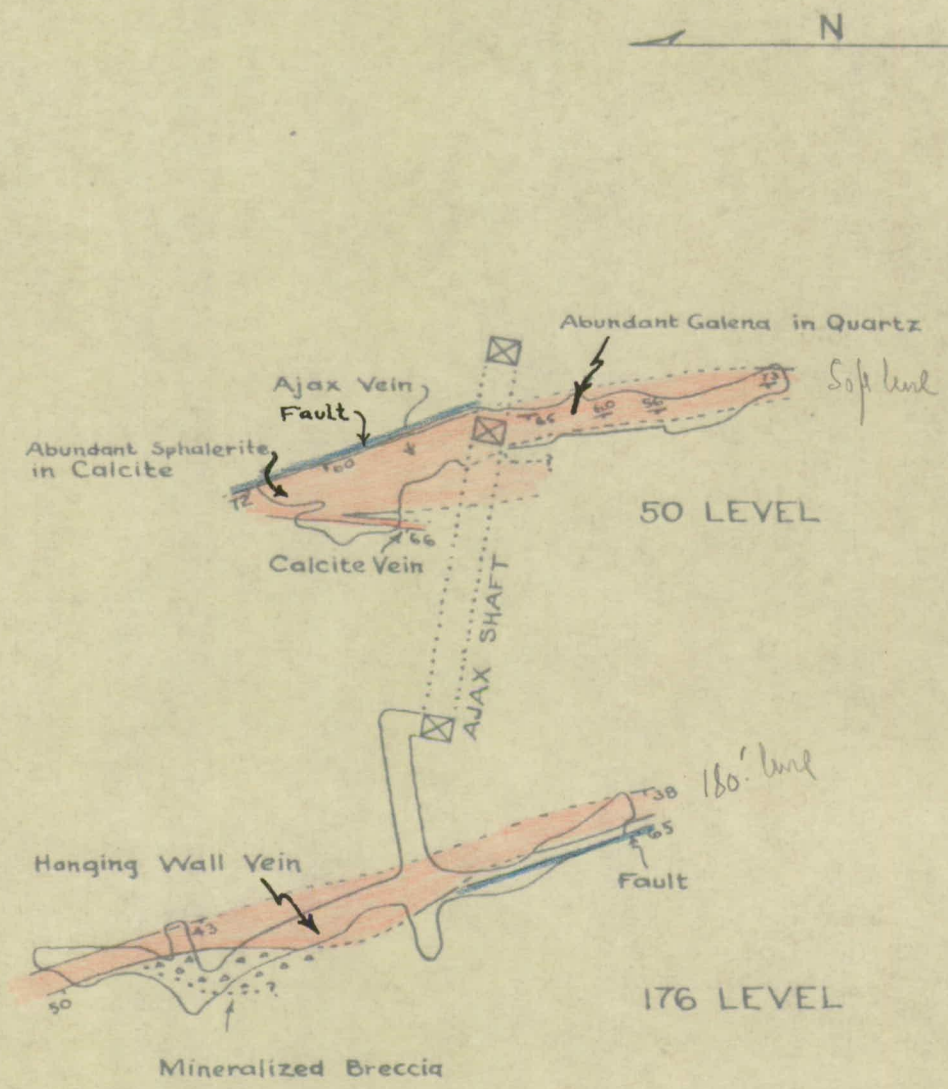


Fig. 5 - Geologic Map, Ajax Mine Workings, Pinal County, Arizona
DMEA 2603 Scale 1" = 40'

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

September 30, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2603, (Lead-Zinc) Magma King Manganese Co., Ajax Mine, Pinal County, Arizona

Enclosed are nine copies of the final engineering report on DMEA-2603 by T. M. Ramalo of the Bureau of Mines.

The applicant originally requested $59,727, but during the field examination he revised his proposal for exploration work in the amount of $23,100.

The examining engineer recommends approval of the revised proposal which consists of drifting, raising and diamond drilling.

We concur in this recommendation.

for John F. Shaw
John F. Shaw for
W. M. King

Enclosure

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

200 New Customhouse
Denver 2, Colorado

September 29, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2603, Ajax Mine, Magma King Manganese Mining Company, Pinal County, Arizona. Lead-Zinc.

Enclosed are the original and 8 copies of the geologic report by J. N. Faick of the U. S. Geological Survey, covering the above docket.

It has been recommended that the loan be approved.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson, Arizona

September 26, 1952

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: A. F. Shride, Tucson, Arizona

Subject: Geologic Report, DMEA 2603, Ajax Mine, Magma King Manganese Mining Company, Final County, Arizona (Lead-Zinc)

Enclosed are the original and 8 copies of the above report by J. H. Faick of the Geological Survey.

From previous development work and favorable geologic conditions it is judged that a small exploration project for lead-zinc is warranted. The report and this conclusion have my approval.

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 9

Arizona-New Mexico Branch
xxxxxxxxxxxxxxxxxxxx

MINING DIVISION
REGION IV

September 25, 1952

Memorandum

To : W. A. Ring, Denver, Colo.

From : Lincoln A. Stewart for Walter E. Storms, Chief
Arizona- ew Mexico Branch, Mining Division, Region IV

Subject : Final Report, Payne Ring Mon ones Co., Ajax Mine,
Mohave Pocket 2603, Pinal County, Ariz.

Enclosed find original and 3 copies of the above report by J. M. Ponsle of the Bureau of Mines. We are told that the geologic report is complete and will be mailed to Denver within a few days. The examiners agree on a recommendation of approval.

Five photostatic copies of Assignment of Lease are enclosed.

The president and superintendent of this company called at the Tucson office last week and said they would appreciate word from Denver, at the earliest possible date, as to whether project is recommended or denied. This for the reason that they are under considerable expense keeping the mine unwatered.

In the absence of Mr. Storms, I take it upon myself to concur with Ponsle's recommendations.

Brochure is enclosed.

Lincoln A. Stewart
Lincoln A. Stewart, Mining
Engineer for Walter E. Storms,
Chief, Arizona- ew Mexico Br.,
Mining Division, Region IV

cc: W. A. Ring (orig. & 3)
A. F. Sirico
LEA-2603
EF

LAStewart:als

[illegible]
DEPARTMENT OF [illegible]
[illegible], SECRETARY

BUREAU OF MINES [illegible] AND [illegible]

REPORT OF INVESTIGATION [illegible]
[illegible] IV

[illegible]

[illegible]

J. [illegible] Reich, Geologist
U. S. Geological Survey

[illegible], Mining Engineer
U. S. Bureau of Mines

September 193[illegible]

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By J. N. Felch[1] and T. M. Romolo[2]

The Ajax lead-zinc mine, Pinal County, Ariz. was examined in connection with an application by the Magma Ring Manganese Co. for Governmental aid. The application, docketed as RFC-2069, contained a proposal for exploring the mine at a cost of $59,747 with the object of developing sufficient ore to justify a milling operation. During the field investigations the applicant revised the proposal to a project that could be completed at a cost of $23,100.

The Ajax mine was first opened in 1906. The next period of operation was during 1943 and 1944 when production amounted to about 5 tons of 60 percent lead ore and 3 carloads of ore containing approximately 5 percent lead, 6 percent zinc, 0.14 percent copper and 1.4 ounces of silver a ton. During 1950, the mine was dewatered and sampled and some diamond drilling was done. The property was then inactive to April 1952 when it was taken over by the Magma Ring Manganese Co. under a lease and option agreement. The company put down one diamond drill hole, took a few underground check-samples, started construction of a chip pocket and has kept the mine dewatered.

Schist, probably pre-Cambrian age, is cut by a prominent fissure vein. The veins dip 45 to 65 degrees to the west and have northerly strikes. To the south, they converge at the Ajax shaft. A deposit of lead-zinc ore has been partially developed at the shaft and ore has been cut by diamond drill holes at two widely separated places north of the shaft. The veins of the mine workings consist mainly of

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1/ Geologist, U. S. Geological Survey
2/ Mining Engineer, U. S. Bureau of Mines

quartz in which galena and sphalerite occur as masses ranging up to 4 inches wide by 2 feet long and as veins from an eighth to one inch in size. Galena and sphalerite also occur in brecciated wall-rock.

The principal workings consist of a 110-foot inclined shaft from which about 200 feet of drifts have been driven from the 50- and 17½-foot levels. Other workings consist of 3 diamond drill holes, 1 surface and 2 underground, and a few shallow pits.

The mine is equipped for a small operation. Structures on the property consist of a headframe and 2 buildings and several small houses at the camp, about one-half mile from the mine. The mine makes 3 to 5 gallons of water a minute.

The revised exploratory proposal consists of drifting 400 feet northerly from the north face of the 17½-foot level, and the driving of four 50-foot raises and the drilling of 500 feet of diamond drill holes, in a maximum of 6 holes, from favorable sites developed by the proposed drift. The applicant proposes to do all preliminary work at no expense to the Government and to carry out the proposed explorations with Governmental aid on the following unit and total cost basis.

Drifting, 400 ft.	$33.00 per foot	$14,200.00
Raising, 200 ft.	$29.00 per foot	6,[illegible]
Drilling, 500 ft.	$9.00 per foot	4,500.00
Total cost		$24,[illegible]

Estimates indicate the preliminary work can be completed in one month and that the exploratory work will require 9 months.

Conclusions regarding the proposed exploratory program follow:

1. Ore mineralization appears to be confined to zones of structural deformation. A partially developed deposit contains estimated total reserves of about 14,000 tons of 10 percent combined lead-zinc ore, and ore of minable widths has been indicated by diamond drilling at 2 widely separated places on one of the veins. A possibility exists that other deposits may be encountered on both veins. The discovery of ore by drilling appears to have been fortuitous because controls of their localization are not readily evident on the surface.

2. The proposed explorations are properly designed and have a fair chance of indicating sufficient ore to justify a small operation under favorable economic conditions. Unit costs of the operations, as proposed by the applicant, are reasonable.

3. Efficient supervision of the work is acceptable if supervised by the applicant's present superintendent.

Approval is recommended for the proposed project that can be completed in 10 months at a cost of $23,100.

MAGMA KING MANGANESE MINING COMPANY
AJAX MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA
IMEA 2603

LEAD AND ZINC

Geology

By
John M. Faick
Geologist, U. S. Geological Survey

MAGMA KING MANGANESE MINING COMPANY
AJAX MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA
DMEA 2503

LEAD AND ZINC

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INTRODUCTION

An application for Government aid in exploring the Ajax lead-zinc mine has been received by the Defense Minerals Exploration Administration. The application (DMEA 2603) is from the Magma King Manganese Mining Company, Superior, Arizona, of which Mr. Ralph J. Pomeroy is president. The Ajax mine was examined August 25 to 27, 1952, by DMEA representatives.

GENERAL GEOLOGY

The Ajax mine is located in the Mineral Hill mining district (Fig. 1) about 8 airline miles southwest of Sup rior, Arizona. The mine is near the head of Cottonwood Creek, a dry wash draining relatively rough mountainous desert terrain between the valleys of the Gila River on the south and Queen Creek on the north. Maximum relief in this area is about 500 feet.

The mountains in the vicinity of the Ajax mine are composed of chlorite schists of probable pre-Cambrian age. The schist is relatively fine-grained, greenish-gray and uniform in character. The schistosity, which is vague and poorly developed, is gently folded into small easterly trending anticlines and synclines that have dips ranging from 10° to 30° on the flanks.

GEOLOGY OF THE AJAX MINE

Within the Mineral Hill district there are many small mines and prospects of which the Ajax appears to be one of the most promising. The mine explores (Fig. 5) part of a conjugate vein system (Fig. 3) by means of a 130 foot shaft inclined westward about 65° and by two drifts. The upper drift, or 50 level, extends 50 feet north of the shaft and 60 feet south of it. The 180 level consists of a 30 foot crosscut to the vein, with drifts extending about 80 feet north and 50 feet south of the crosscut. Eight diamond drill holes have been drilled in the area (Figs. 3 and 4).

The Ajax vein system occupies a fault zone in the schist and the veins are exposed at the surface more-or-less continuously for a distance of about 1800 feet north of the Ajax shaft and about 200 feet south of it. Two prominent branches of the vein system converge at the Ajax shaft, and the mine workings have explored the western or hanging wall branch vein. This vein strikes approximately N. 20° W. but south of the shaft where the two veins converge the strike is nearly south. The footwall or east vein strikes nearly north for a distance of about 500 feet north of the Ajax shaft, then appears to change its strike to N. 20° W. or approximately parallel to the hanging wall vein. The dip of both veins at the surface is about 65° west but flattens with increasing depth and on the 180 level the dip of the hanging wall vein ranges from 40° to 45°. Where the veins cross Cottonwood Wash there is a zone in which the veins appear to be structurally deformed, suggesting that they may have been folded or faulted. Some brecciation of the enclosing schist was noted but the cause of the brecciation was not apparent nor could the geology be satisfactorily interpreted. It is possible that the two main veins may merge in this zone, or another branch vein may intersect the footwall vein.

The vein material consists of two distinct types which have been deposited at different periods of time and under distinctly different conditions. The earlier vein filling consists of specularite in massive, glassy quartz. This early period of mineralization was followed by a relatively late influx of milky quartz and white calcite, accompanied by sphalerite, galena and trace amounts of chalcopyrite. The late-stage vein material is prominently banded, and many comb structures and drusy cavities are present in it.

These characteristics are interpreted as indicating an epithermal origin, and for this reason the writer believes the deposit should not be expected to continue to depths greater than a few hundred feet.

The late-stage epithermal type of vein material contains all of the observed sulfide minerals, and locally these are sufficiently abundant to constitute low-grade ore. Galena and sphalerite occur as coarse grains from about one-eighth of an inch to about one inch in maximum dimension. These are dispersed erratically throughout the vein and in many places constitute from 10 to 20 percent of the vein filling; however, in some places the vein is barren. Masses of galena and sphalerite from 1 to 4 inches wide and from a few inches to about 2 feet long are present in many places within the vein. Ore minerals are also present in some of the brecciated wall rock, as for example about 50 feet north of the shaft on the 180 level. Here a lenticular mass of brecciated schist (Fig. 5) is thoroughly impregnated with calcite, quartz, sphalerite, and galena. These occur in small seams and masses cementing part of the breccia. The breccia mass is about 50 feet long, and about 15 feet wide but the sulfides are confined to an area about 30 feet long and about 10 feet wide. This mineralized breccia is exposed only on the 180 level but it is assumed that the breccia extends at least a short distance above and below the level.

Deformation along the vein zone has disrupted some of the rocks and locally they have been weakened by what appears to be late-ore or post-ore movement. It is probable that deformation and hydrothermal alteration have weakened the wall rocks to such an extent that underground support will be required in some zones if the vein is mined.

PRODUCTION AND GRADE

Little ore has been produced from the mine. Shipments that are thought to represent the total production are as follows:

Date	Tons	Percent Lead	Percent Zinc	Percent Copper	Ounces Silver
12-10-47	0.75	19.0	Trace	0.12	1.50
12-10-47	3.02	60.8	--	Trace	3.9
12-16-47	35.17	7.35	5.4	0.12	1.05
1-22-48	34.85	7.2	3.2	0.12	1.05
2-5-48	1.53	60.0	--	--	4.0
2-9-48	16.40	10.3	2.8	0.20	1.45
Total	91.72				

These shipments are products of selective mining of some of the higher grade portions of the vein and are probably also upgraded by hand sorting. The largest shipments, containing relatively low values, are probably not much higher grade than many parts of the vein.

Many samples (Fig. 6) have been taken of the vein. Most of the samples were taken before the applicant acquired the property. Several were taken by the applicants, and the DMEA examiners took 5 samples as a means of checking and verifying the others. The samples taken by DMEA provide a fair check on the others but are slightly lower grade. It was noted by examination of the mine workings that the sample widths previously reported are exaggerated, and could not be substantiated. Because of these erroneous widths it is not possible to properly weigh the samples and accurately compute the lead and zinc content of the vein. The lead content is greater than the zinc content in the upper part of the mine and the zinc content is greater than that of the lead in the lower part of the

zinc. The copper content of the ore is negligible, but it is probable that both copper and silver values will be recovered with the lead and zinc if the ore is beneficiated.

EXPLORATION

In addition to the mine workings an attempt has been made to explore the vein by 8 diamond drill holes, two of which encountered sufficient ore to be of possible commercial value. Hole No. S-6 (Figs. 3 and 4) penetrated ore about 200 feet north of the shaft and hole No. S-2 penetrated ore about 400 feet north of the shaft. At present there is insufficient information to interpret the significance of these penetrations but it appears possible that the holes discovered additional ore shoots. Hole No. S-2 appears especially significant because it may have penetrated the hanging wall vein zone beneath an iron-stained brecciated schist that could be interpreted as being the outcrop of a mineralized zone. The breccia is exposed in a small elliptical area about 20 feet in maximum dimension near the place where the veins cross the floor of Cottonwood Wash.

The results of the underground holes, Nos. 1 and 2 (Fig. 6), were not conclusive. One was drilled into the hanging wall of the hanging wall vein where there was no reason to expect to find additional ore. The other was drilled into the footwall and should have penetrated the footwall vein. The failure of this hole to locate ore is unfavorable evidence, but is not enough to condemn the footwall vein as being unmineralized.

Holes S-1, S-3, S-4, and S-5 (Fig. 4) were drilled to explore outlying or deep parts of the vein. These penetrated considerable mineralized material having very low values but veins of minable width

and grade were not encountered. Available data are insufficient to correctly interpret the significance of these holes, but the writer believes the veins change character by splitting into many small veinlets. It appears as if veins of a size large enough to mine do not exist at depths greater than a few hundred feet.

Results of previous exploration and development suggest that additional exploration of the Ajax vein system is justified. There are about 14,000 tons of reasonably well indicated and inferred ore in the partly developed ore shoot and it is believed that exploration may prove the existence of several times this amount. Addit onal ore is expected to be found near the ore penetrations of diamond drill holes S-2 and S-6 and at places along the vein where either the early vein filling or country rock was shattered by structural deformation to permit access by the late-stage mineralizers. It is important to note that the footwall vein has not been explored, except possibly to a very small extent on the 50 level. This vein has a very prominent outcrop and the presence of vugs, cavities and siliceous boxworks suggest that sulfide minerals may have been leached out of it. The footwall vein should be as well mineralized as the hanging wall vein and deserves exploration.

Examination of the Ajax mine and discussion of the applicant's proposed exploration has resulted in making some minor revisions in the proposals, and these will result in more effective exploration methods at worthwhile savings in cost. The revised program (Fig. 3) is to drive 400 feet along the vein on the 176 level to explore the ore penetrated by holes S-2 and S-6. Then, using the 176 drift as a base, it is proposed to drill 4 holes to test the footwall vein and to

drive four 50-foot raises to test whatever ore is found along the drift. Two additional drill holes are allowed to delineate whatever ore may be found. Selection of the sites for drilling or raising must meet with the approval of the examining engineer.

The total cost of this exploration is about $23,000, one-half of which is to be contributed by the Government. The revised project is feasible and well justified in the opinion of the examiners. The program may not block out enough ore to justify erection of a mill, but will determine whether the Ajax vein system is capable of producing important amounts of lead and zinc.

ORE RESERVES

Ore reserve estimates submitted by the applicant amount to about 25,000 tons of developed and probable ore. This estimate appears to be too high because it is based on exaggerated vein widths rather than the actual vein widths. The applicant's grade estimates are also somewhat greater than those of the examiners, being about 2 percent higher in combined lead and zinc.

The ore-shoot developed by the Ajax shaft and levels is sufficiently well explored and sampled to be classed as indicated ore. Vein material containing significant amounts of galena and sphalerite is exposed along both the 50 feet and 176 feet levels. The vein material in the south end of the 50 level drift probably cannot be recovered because it is so thoroughly oxidized that it is not amenable to concentration and is probably too low-grade to constitute shipping ore. It is assumed that similar oxidation has taken place in all the ore within about 30 feet of the surface, therefore minable ore is thought to extend only 20 feet above the 50 level. The vein widths at the

50 level are from 5 to 12 feet, but average about 7 feet, and ore is exposed along the level for a distance of about 70 feet. The block of ore above 50 level is estimated to contain about 800 tons of indicated ore. The grade of the ore is about 9 percent lead, and 3 percent zinc as estimated from several samples and 3 small shipments.

The main ore shoot is also explored by the 176 level where sphalerite and galena are present in the vein for a strike distance of about 110 feet. The ore shoot is exposed in part of the Ajax shaft and the ore is assumed to be continuous between the 176 level and the 50 level and the vein thickness will average about 7 feet. It is conservatively estimated that about 5700 tons of ore are present in the ore shoot, between the 50 and 176 levels. By evaluating many samples (Fig. 6) taken along the shaft and on the 176 level it is estimated that the average grade of the ore is about 1 percent lead and 8 percent zinc. The ratio of lead to zinc decreases gradually with depth from the 50 level to the 176 level.

The average grade of all the ore in the presently developed ore shoots at the Ajax mine is estimated at 4.4 percent lead and 5.9 percent zinc.

Reserves above the 176 foot level are estimated at 47 tons per foot of depth along the dip of the vein and it is presumed that the ore may be safely projected 150 feet below the 176 level. The ore in the first 50 feet of this projected depth is classified as indicated ore and the remaining 100 feet is considered as inferred ore. About 2300 tons of ore is indicated, and about 4700 tons is inferred to be present. The grade is assumed to be the same as on the 176 level, or about one percent lead and 8 percent zinc.

Ore penetrations were made by diamond drill holes S-6 and S-2 (Figs. 3 and 4) and at each of these locations it is hoped that other ore shoots are present that may contain as much ore as is present in the main shoot. About 1000 tons of indicated ore is assumed to be present at each drill hole penetration. Assays on the core of the hole S-2 yield from 18 to 25 percent zinc but it is believed that the hole accidentally penetrates a rich portion of the vein and this block of ore should not be expected to be much higher grade than developed parts of the vein. The core from hole S-6 has not been assayed but inspection reveals it to be similar in grade to the ore in the developed portion of the mine, and by comparison is estimated to contain about 4 percent lead and 6 percent zinc.

It is assumed that a few thousand tons of ore may be present in both the zones where ore was found by diamond drill holes S-2 and S-6. This ore would be in the inferred category but no estimate of tonnage can be made because of the lack of data. It is also assumed that additional ore will be found in the footwall vein which has not been explored by mine workings.

Although sufficient data are not available to justify making a tonnage estimate of all the inferred reserves, it is thought that these will be several times as great as the indicated reserves.

The ore reserve estimates are summarized as follows:

Location	Tons	Percent Lead	Percent Zinc
	Indicated Ore		
Above 50 level	800	9	1
Between 50 and 176 levels	5700	1	8
From 176 level to 50 ft.below it	2300	1	8
At drill hole S-2	1000		10-15
At drill hole S-6	1000	4	6

Location	Tons	Percent Lead	Percent Zinc
Inferred Ore			
From 50 to 150 ft. below 176 level	4700	1	8
Other possible ore shoots in both veins	Unknown amounts but possibly several times more than indicated reserves.		

CONCLUSIONS

Examination of the Ajax vein system reveals that important amounts of galena and sphalerite are present in a quartz-calcite gangue having epithermal characteristics. About 14,000 tons of ore, containing about 10 percent combined lead and zinc, are reasonably assured in the old mine workings. Inferred ore may amount to several times this amount in unexplored or incompletely explored parts of the veins. Additional exploration is necessary to determine whether there is sufficient ore in the veins to support sustained mining and milling operations. The revised exploration proposals are feasible from an engineering point of view, are reasonably easy to accomplish at a total cost of $23,000, and may discover significant amounts of lead and zinc.

RECOMMENDATIONS

It is recommended that the revised exploration proposals be approved because there is a possibility that significant amounts of lead and zinc may be discovered at a reasonable cost within a few months after the project is started.

DMEA-2603, MAGNA KING MANGANESE COMPANY
AJAX MINE (LEAD-ZINC), PINAL COUNTY, ARIZONA

Engineering Report

By T. M. Romslo
Mining Engineer
U. S. Bureau of Mines

September 1952

DMA-2009, MAMA KING MINERALS COMPANY
AJAX MINE (LEAD-ZINC), PIMA COUNTY, ARIZONA

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INTRODUCTION

The Ajax Mine (Lead-Zinc), Pinal County, Ariz. was examined in connection with an application for Governmental aid by the Magma King Manganese Company. The application was made to the Defense Minerals Exploration Administration and is docketed as DMEA-2603. It contained a proposal for exploring the property at an estimated cost of $59,727, the cost to be divided equally between the applicant and the Government. The exploratory work, consisting of drifting, raising and diamond drilling, was designed to indicate the presence of sufficient ore to justify construction of a concentrating plant.

The examination was made August 25-27, 1952 by T. M. Romslo, Bureau of Mines, and J. B. Faick, Geological Survey, with the object of determining if the requested assistance could be justified. It was confined to the area of the proposed project that represents a small portion of the property held by the applicant. Ralph J. Pomeroy and Frank L. Metler, President and Superintendent of the Magma King Manganese Company, respectively, were at the mine during the investigations.

LOCATION, TOPOGRAPHY AND CLIMATE

The Ajax mine is about 8 air-miles southwest of Superior, Ariz., the home of the Magma Copper Company (figure 1). Superior, is on U. S. Highway 70 and is the terminus of a branch of the Southern Pacific Railway that connects with its main-line and the Atchison, Topeka and Santa Fe Railroad at Phoenix, about 50 miles westward.

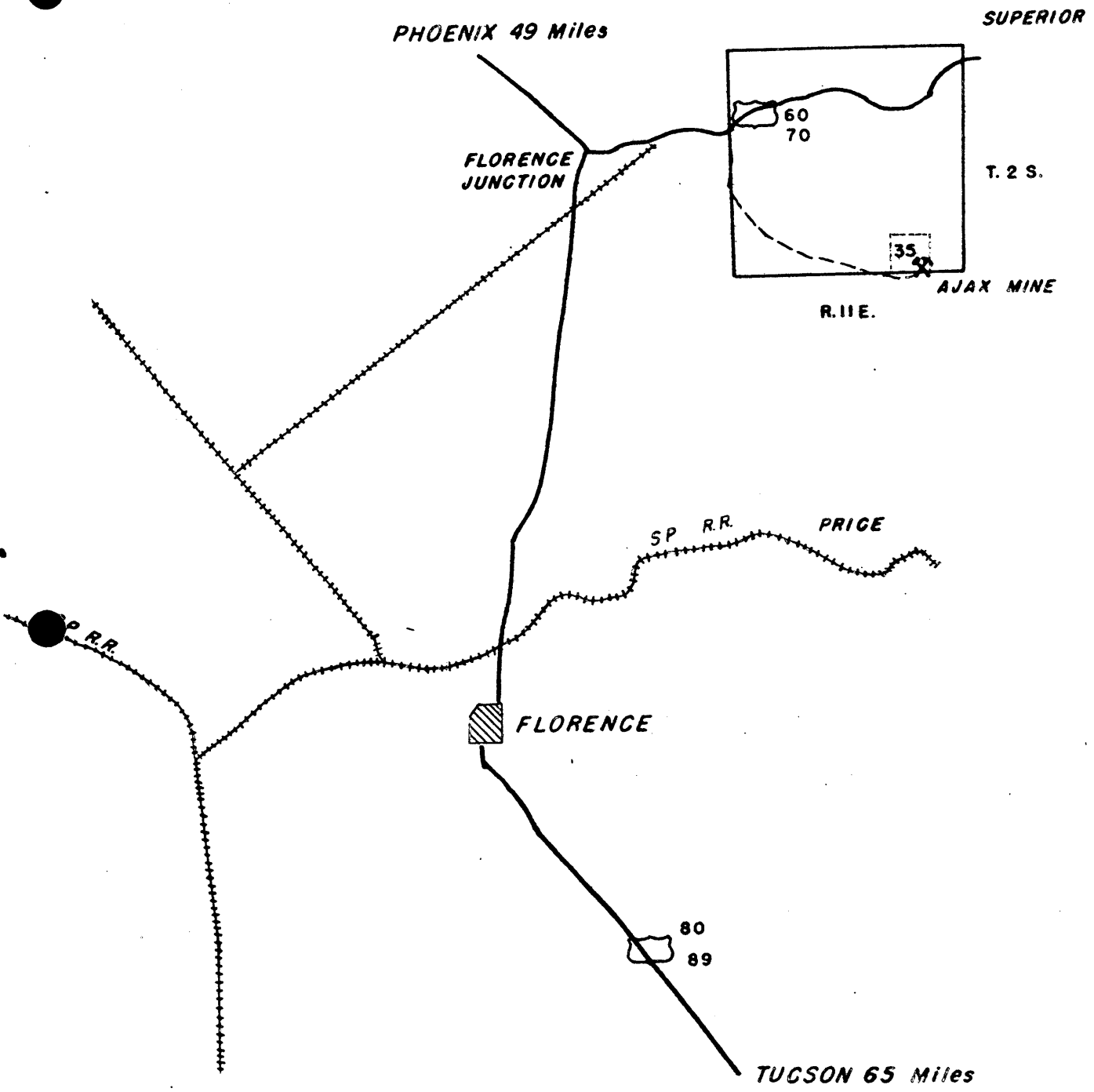


Fig. 1 LOCATION MAP

DMEA 2603

MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

SCALE: 1" = 4 MI.

The mine is accessible from Superior by traveling 11 miles westerly on the highway and thence 9 miles southwesterly over a graded desert road that contains no excessive grades. Short stretches of the road that cross or follow dry-washes are impassable for brief period after heavy rainfalls.

The nearest railroad shipping point is Price, about 12 miles south of the property by desert road.

The Ajax mine is at an altitude of about 3,000 feet above sea level. It is in an area of moderately rugged topography consisting of sharp mountain ridges that slope steeply to narrow valleys. On the property, the altitude ranges from about 3,000 to 3,500 feet.

The mountain slopes support a sparse growth of desert vegetation, mainly cacti and catclaw. Palo Verde and mesquite occur along the bottom of the valleys.

There are no permanent streams in the area. Drainage is south to the Gila River.

There are no readily accessible records of climate for places near the property. However, it can be said that the climate is typical of the lower-altitude regions of southern Arizona. Temperatures at the property probably show an annual range from a few tens of degrees below freezing to near 110 degrees. Precipitation, probably between 10 and 15 inches yearly, occurs mainly as heavy rain storms during July and August. Light rainfalls and a few snow flurries are common to the winter months.

HISTORY AND PRODUCTION 1/

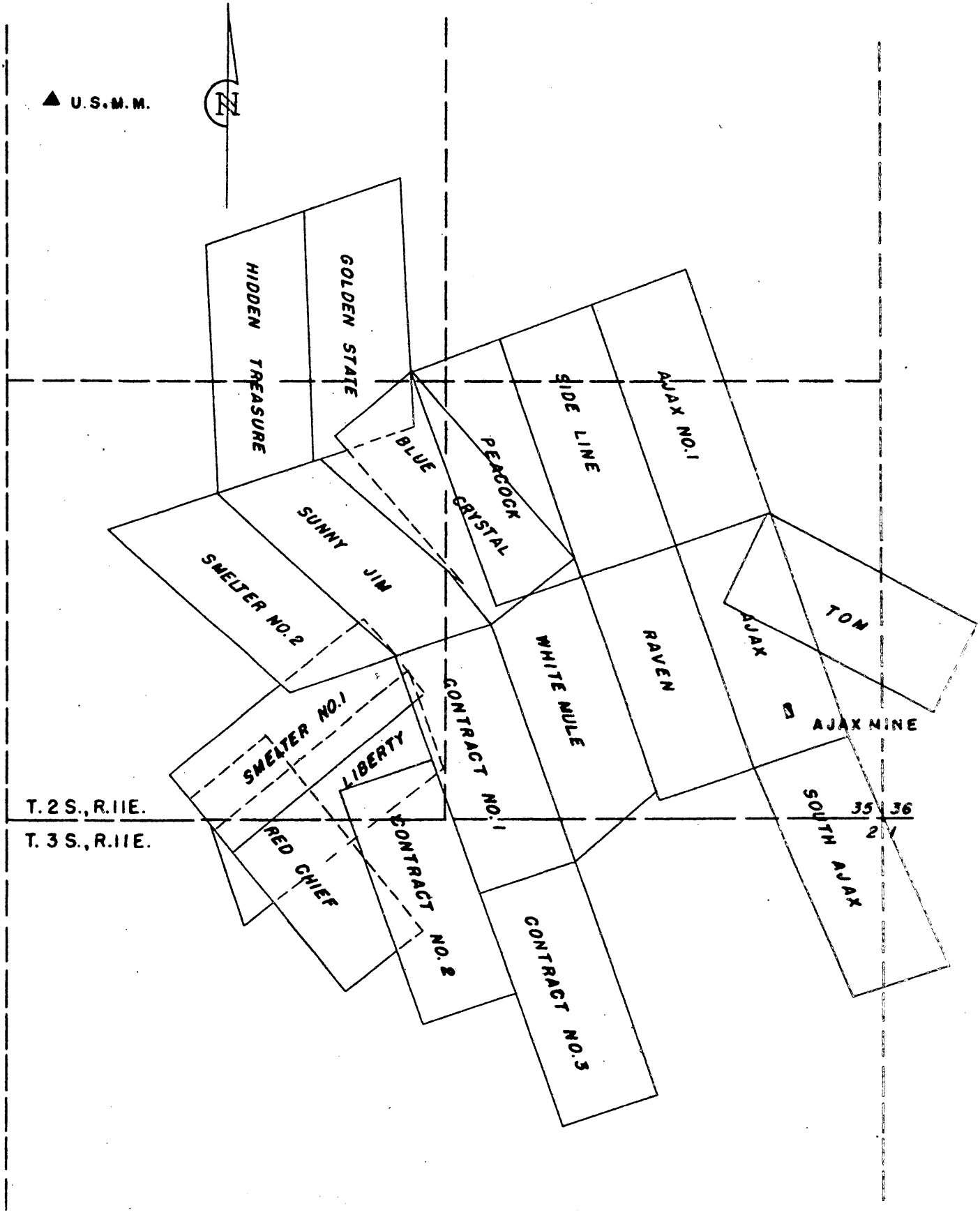
The Ajax mine was first opened in 1906 when it was developed to its present inclined depth of about 1[illegible] feet. There are no available production records from this operation but it is probable that little or no ore was shipped. The mine was then inactive to 1947. During 1947 and 1948, lessees shipped 9.29 tons of ore containing about 56 percent lead and 4 ounces of silver a ton, and 3 carloads of ore averaging approximately 8 percent lead, 6 percent zinc, 0.14 percent copper and 1.2 ounces of silver a ton. In 1949 the mine was dewatered and a small amount of drifting was done on the 176-foot level.

During 1950, the Magma Copper Co., sampled the underground workings and the Miami Copper Co. carried out a diamond-drilling project. The drilling consisted of 2 holes from the 176-foot level and 5 holes from the surface. The present operations, by the Magma King Manganese Co., were started April 1954. The company has put down a diamond-drill hole from the surface, check-sampled part of the underground workings, started construction of a skip pocket, and has kept the workings unwatered.

PROPERTY AND OWNERSHIP

The property consists of a group of 3 patented and 24 unpatented lode mining claims in Secs. 35 & 36, T. 4 S., R. 22 E. and Secs. 1 & 2, T. 5 S., R. 22 E., Mineral Hill Mining District, Pinal County, Ariz. (Figure 2).

1/ Information supplied by Ralph J. Pomeroy and Frank L. Hetler, President and Superintendent of the Magma King Manganese Company, respectively.



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

Magna King Manganese Co., the applicant, holds all of the above property by the following agreements.

1. The Ajax and Ajax No. 1 patented claims were assigned by the owners, Mr. and Mrs. Walter G. Smith and Ina L. Fraiser, Coolidge, Ariz., to Louis Romig and Robert F. Kannolley, Pinal County, Ariz. for a period of 3 years in a Lease and Option Agreement dated August 10, 1943. The agreement was assigned to the Apex Mines, Incorporated and then to the applicant.

2. The other patented claim, the Raven, was assigned by the owners of the Ajax and Ajax No. 1 claims to the Apex Mines, Incorporated under the terms and conditions of the Lease and Option Agreement covering the Ajax and Ajax No. 1 claims. The Apex Mines, Incorporated, later transferred the rights to this claim, to the applicant.

3. The 16 unpatented claims were assigned by the owners, Mr. and Mrs. C. O'Dell, Phoenix, Ariz. and Mr. and Mrs. Frank . Allen, Gilbert, Ariz. to Louis Romig and Robert F. Kannolley for a period of 3 years in a Lease and Option Agreement of October 16, 1943. This agreement was assigned to the Apex Mines, Incorporated and then to the applicant. The terms of this agreement are the same as those covering the above mentioned patented claims.

All of the above agreements call for royalty payments to the owners of 10 percent of the net returns from ore produced. Net returns are defined as the gross amount paid by the purchaser of ore concentrates less charges for transportation, milling, concentration,

smelting and trucking. Royalty payments in all cases are applied to purchase prices of $40,000 for the Ajax and Ajax No. 1 claims, $15,000 for the Lavon claim, and $32,000 for the 16 unpatented claims.

Note: The Lance and Optica Equipments together with the assignments on the Ajax and Ajax No. 1 claims and the 16 unpatented claims were submitted with the applicant's proposal. Five copies of a letter covering assignment of the Lavon claim were obtained during the examination and will be forwarded to the Denver, Colo. office of the Defense Minerals Exploration Administration with this report.

The financial condition of the Magna Ray Manganese Mining Co. on June 30, 1952 was taken from an Audit Report of the company by Ferson and Jenny, auditors, Phoenix, Ariz. The balance sheet of the report shows current cash assets of $92,962.63, and current liabilities of $9,000.94. It also shows that the company is authorized to issue 10,000,000 shares of stock and that 2,500,000 shares are outstanding.

The Directors of the Magna Ray Manganese Mining Co., as presently constituted, are:

"Ralph J. Penoyer	President	Director	Chandler, Ariz.
Walter C. Smith	Vice President	Director	Coolidge, Ariz.
Loren L. Gleason	Secretary-Treasurer	Director	Springfield, N. J.
George L. Goodman		Director	Mesa, Ariz.
J. Frank Gibson		Director	Mesa, Ariz.

Lillie Fraser	Assistant Secretary	Phoenix, Ariz.
Ralph J. Pomeroy	Registered Building Contractor, Has been operator of the Howard Mine, the Blackwater Mine, and the Magma Ring Property.	
Walter C. Smith	Registered Building Contractor, Registered Civil and Mining Engineer, Pinal County Supervisor (1938-1942) Former County Engineer, Member of the Arizona Bar Association since 1919. Besides acting as operating mining engineer on various mines through out the State he more recently operated the old Heymert Mine near the Ajax property.	
Loren E. Skousen	Banker, with the Chase National Bank for over 20 years, most of which was spent in the Petrolium Dept., of Finance.	
George M. Goodman	Registered Pharmacist, Mayor of the City of Mesa, has engaged in mining operations also.	
J. Frank Gibson	Attorney at Law, practising in Phoenix, also engaged in mining at various times. One of the owners of the Howard Mine, near Casa Grande, Ariz."	

DESCRIPTION OF THE DEPOSIT

A lead-zinc deposit, at the Ajax shaft occurs at the junction of 2 prominent fissure veins in mica schist of probably pre-Cambrian age (figure 3). Both veins dip from 45 to 65 degrees west. The west or footwall vein strikes nearly north for a distance of about 900 feet north of the shaft. Beyond this point it roughly parallels the N. 20° W. strike of the hanging wall vein. Ore mineralization encountered by diamond-drill holes Nos. S5 and S6 probably occurs in the hanging wall vein (figure 4).

Two distinct types of vein filling are represented in the partially developed deposit. An early period of mineralization consisting of specularite in otherwise barren quartz has been followed by a

relatively late influx of quartz, calcite, sphalerite, galena, and minor amounts of chalcopyrite. The late stage vein material has definite epithermal characteristics with prominent banding, comb structures and drusy cavities. Galena and sphalerite occur as coarse grains ranging in size from an eighth to about one inch. They are disseminated erratically throughout the vein and in a few places occur in brecciated wall rock. Masses of galena and sphalerite from 1 to 4 inches wide and a few inches to about 2 feet long are present in several places within the vein. A high percentage of the ore minerals occur as oxides to the 50-foot level. Below the 50 level the degree of oxidation decreases rapidly to the 170 level where oxides form an insignificant part of the ore minerals.

ORE RESERVES

The Ajax mine contains no measured ore.

Indicated reserves have been estimated at about 11,000 tons of partially oxidized sulfide ore containing 10 percent combined lead and zinc, and 1.0 ounce of silver a ton. Approximately 9,000 tons of these reserves containing an estimated 4.4 percent lead and 5.9 percent zinc and 1.0 ounce silver is partly developed at the Ajax shaft. The remaining tonnage is equally divided between deposits indicated by drill holes 82 and 86.

Inferred reserves are placed at several times the tonnage of indicated ore. These reserves consist of (1) 4,700 tons of ore containing 1.0 percent lead, 3.0 percent zinc and 1 ounce of silver a

ton in the down-dip extension of the Ajax deposit, and (2) the geological possibility that deposits similar to that at the Ajax shaft may be present at drill holes 2A and 3A and at other places in both veins.

PRESENT STATUS

Operations

Present operations are confined to pumping water from the mine at 3-day intervals. Rough estimates indicate the mine is making 2 to 3 gallons of water a minute.

Development

The principal workings of the Ajax mine consist of a 130-foot inclined shaft from which levels have been driven on the 50- and 170-foot levels (figures 3 and 5). Two holes have been diamond-drilled from the 170 level. Surface development consists of 6 diamond drill holes and a few shallow pits and trenches. The locations of the diamond drill holes are shown on figure 3 and vertical sections through the drill holes are shown on figure 4. Miami Copper Co., according to the applicant, drilled the underground holes and surface holes 1 to 5. Surface hole no. 6 was drilled by the applicant.

For possible future reference, all drill-hole data was copied and filed in the office of the U. S. Bureau of Mines, Tucson, Ariz.

Surface Plant

The following buildings, all of wood-frame construction and in a good state of repair, are on the property. One of 2 buildings at the mine, houses the hoist and office. The other building contains an

electric generating plant and a machine shop. Other buildings on the property are located at the mine camp, 0.7 miles from the mine on the road to Superior. They consist of boarding house, a bunk house with change room, a storage building, and a pump house that also contains an electric-light plant.

Other structures at the mine consist of a 30-foot "A" type head-frame, a 100 ton ore bin, and a powder magazine.

Equipment

The mine is completely equipped for a small operation. All equipment except a rented mine hoist and a 315-cu. ft. portable diesel compressor, is owned by the applicant. Company-owned major equipment consists of the following:

1 - 35 K.V.A. Diesel-electric generator set.

1 - 7.5 K.V.A. Diesel-electric Generator set.

1 - 1951, International pickup truck.

1 - 1946, 1½-ton, Flat-bed Ford truck.

1 - 20 H.P., I.R. Motopump

1 - 5 H.P., I.R. Motopump

1 - C. P. sludge pump

1 - Shaft skip

2 - Ore cars

1 - C. P. 55 Core-drill outfit, complete

1 - 12 D, Hance-Finley loader (not on property)

Ore Testing

Correspondence from the Denver Equipment Co. to a former lessee of the Ajax mine was furnished the examining engineers by R. J. Pomeroy. The correspondence stated that tests had been made on ore furnished by the lessee but did not give the results of the tests. Pomeroy said he had learned that the testing gave favorable results.

PROPOSED EXPLORATIONS

A revised exploratory program was worked out during the field investigations by the examining engineers and the representatives of the applicant. It was submitted by the applicant in a letter of August 27, 1952 to W. R. Storms, Chief, Arizona-New Mexico Branch, Mining Division, U. S. Bureau of Mines, Tucson, Ariz.

Under the revised program the applicant proposes to do all preliminary work at no expense to the Government and to then carry out the following explorations, at the indicated unit costs, with Government assistance (figure 3).

1. Drifting; Drift 400 feet northerly from the north end of the 176 level, at $35.00 per foot.
2. Raising; Run four 50-foot raises at favorable sites developed by the proposed drift, at $33.00 per foot.
3. Drilling; Diamond drill 500 feet in a maximum of 6 holes from favorable sites, at a cost of $5.00 per foot.

The writer's suggested description of the project as to sequence of operations and work-specifications follows.

1. Drift; to follow the hanging wall vein, to have a minimum cross-section of 5- by 7 feet, and to be completed before initiating the raising and drilling operations.

2. Raises; to be from sites approved by the Government, to have a minimum cross-section of 5- by 7 feet, to have a timbered manway, and to be driven without a chute if permitted under the state mining laws.

3. Drill holes; to be from the 170 level at sites approved by the Government, to be designed to test the footwall vein and to partially delimit ore deposits encountered by test holes and to be of "AX" size, or larger. The drilling and raising operations to be conducted simultaneously, if possible.

Time Schedule.	Months
Preliminary work (shaft repair, etc. at applicant's expense	1
400 feet of drift @ 3 ft. per day, 133 days or	6
200 feet of raises @ 3 ft. per day, 67 days or	3
Drilling concurrent with raising	0
Total	10 months.

COST OF PROJECT

The cost of the revised project would be as follows:

Drifting, 400 ft. @ $35.00 per ft.	$ 14,000.00
Raising, 200 ft. @ $33.00 per ft.	6,600.00
Drilling, 500 ft. @ $5.00 per ft.	2,500.00
Total cost	$ 23,100.00

The unit costs are approximately the same as the estimated unit costs of the applicant's original proposal. In the writer's opinion they are reasonable and can be attained only if the operations are conducted efficiently. This conclusion is based on the following factors:

1. Relatively hard rock and long tramming distances.
2. Necessity of providing artificial ventilation and pumping facilities.
3. Stations must be cut, and timber is required for each raise.
4. Stations must be cut for diamond-drill locations from which relatively short holes will be drilled.
5. Remoteness of property.

PROPOSED FINANCING

The Magma King Manganese Company proposes to carry out the exploratory program provided financial assistance is obtained in accordance with regulations governing Governmental aid. On this basis, the Government's share would be $11,550.00 or 50 percent of the cost of the project, estimated at $23,100.00.

CONCLUSIONS

Significant ore mineralization in the 2 persistent veins of the Ajax property appears to be confined to zones of structural deformation.

The partially developed deposit at the vein intersection contains estimated total reserves of 14,000 tons of 10 percent combined lead-zinc ore.

Minable widths of lead and zinc ore have been penetrated by drill holes at 2 additional places on the hanging wall vein. Discovery of this ore appears to have been fortuitous because controls of their localization are not readily evident on the surface.

The drifting and raising operations of the proposed explorations are properly designed to indicate the extent and grade of drill-hole ore and to explore for and partially delimit other deposits that may occur in the hanging wall vein. Exploration of the footwall vein can then be carried out at little additional cost by drilling from favorable sites developed by the drift.

The chances are fair that the proposed explorations will indicate the presence of sufficient ore to justify a small operation under favorable economic conditions.

The applicant's superintendent is believed to be capable of conducting the projected work in an efficient manner.

The applicant can be expected to finance 50 percent of the cost of the project.

RECOMMENDATION

The conclusions of this report are the basis for recommending approval of the proposed exploratory project. Estimates indicate the project can be completed in 24 months at a total cost of $43,400.

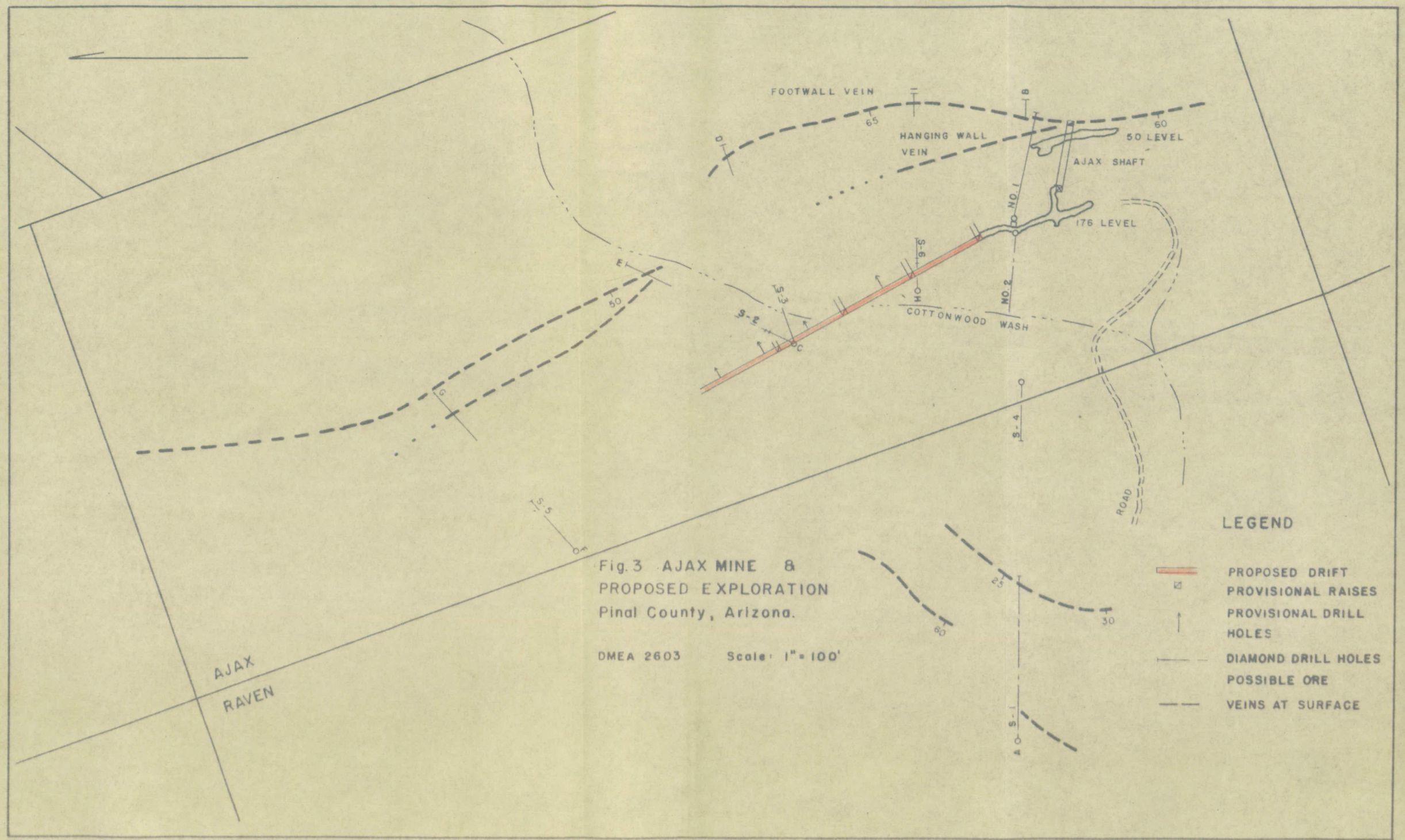


Fig. 3 AJAX MINE & PROPOSED EXPLORATION
Pinal County, Arizona.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Executive Officer, OME Field Team, Region III, Denver, Colorado pertaining to Contract Ida-2408, Docket No. DMEA 2603, dated October 23, 1952, with

Magma Mine Management Mining Company
247 North Arizona Avenue
Chandler, Arizona

for the purpose of determining the amount of royalties due the U. S. Government on the sales of lead-zinc, from property referred to as Ajax Mine, located in Pinal County, Arizona, during the period October 23, 1952 to June 10, 1959.

Pseudo Certification was effected by Amendment No. 7 to the contract and accordingly royalty is payable on all production from the land described in Article 2 of the contract for a maximum period of 10 years from the date of the contract. A Report of Review in lieu of Final Cost Audit indicated accepted costs under the exploration contract amounting to $6,790.00, with the Government's contribution on a 50 percent basis being $3,395.00.

No royalty has been paid to the Government to date in connection with this contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(a) According to the Field Team's Semi-Annual Report of certified project for the period July 1, 1955 to January 1, 1956, operation ceased about March 31, 1953; no ore has been shipped since October 23, 1952, (The date of the exploration contract). Subsequent semi-annual reports of Field Team for the period January 1, 1956 to December 31, 1958, indicate property inactive and no operations or ore shipments are anticipated in 1959.

(b) The administrative costs to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

June 18, 1959

Donald T. Finch
Donald T. Finch
OME Auditor

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/23	a	220
	~~boyd~~	~~300~~
		225

JUN 23 1959

Memorandum

To: Mr. Donald T. Finch, OME Auditor

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

Subject: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Company
Contract No. Idm-E428

Your Report of Royalty Review on the subject contract is acceptable and distribution of the regional copies is authorized.

EDTalbert/ama
June 22, 1959

Copy to: Docket
Director's Reading File
Code 800

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/16	a	220
	~~Wpl.~~	~~500~~
		225

JUN 16 1959

Memorandum

To: Mr. Donald T. Finch, OME Auditor

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

Subject: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Contract No. Idm-E428

The Washington copies of your Report of Royalty Review on the subject contract are returned for revision. To the end of the first sentence of the second paragraph should be added the words "for a maximum period of 10 years from the date of the contract".

Enclosures

EDTalbert/ama
June 16, 1959

Copy to: Docket
Director's Reading File
Code 800

43683

PROJECT SUMMARY REPORT

By: J. W. Alt

April 25, 1956

1. Docket No. DMRA-2603 (Lead-Zinc)
Contract No. Idm-E428
Property: Ajax Lead-Zinc Mine
Pinal County, Arizona

Operator: Magma King Manganese Mining Co.
432 Security Bldg.
Phoenix, Arizona

Operator's Property Rights: Lessee:
Assignment and Agreement dated April 1, 1952.
Owner's Consent to Lien dated October 6, 1952.

2. Contract (Short Form) dated October 23, 1952. To complete - 12 months.

Work Authorized

Drift 400' northerly from the present north breast of the 176-foot level.

Drive 200 feet of raises at favorable sites disclosed by the drifting.

Diamond core drill maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed.

Estimated Costs of the Project.

Drifting, 400 feet @ $35.00/ft.	$14,000.00
Raising, 200 feet @ $33.00/ft.	6,600.00
Diamond drilling, 500 feet @ $5.00/ft.	2,500.00
Total Cost of the Project	$23,100.00
Government Participation @ 50%	$11,550.00

Amendments

No. 1 Effective date April 1, 1953.

Recess operations for 30 days. Work to be resumed on or before May 1, 1953.

No. 2 Effective date May 1, 1953.

Recess operations for one month. Work to be resumed on or before June 1, 1953.

No. 3 Effective date June 1, 1953.

Recess operations and resume work on or before October 1, 1953.

Extend completion time from 12 to 18 months.

No. 4 Effective date October 1, 1953.

Recess operations - Change date of October 1, 1953, of Amendment No. 3 to read February 1, 1954.

No. 5 Effective date February 1, 1954.

Change the recess ending date of February 1, 1954, of Amendment No. 4 to read May 1, 1954.

Extend completion time from 18 to 21 months.
Annex I attached.

No. 6 Effective date May 1, 1954.

Change recess date from May 1, 1954 to June 1, 1954.

No. 7 Effective date May 1, 1953.

Suspension of work to not later than September 1, 1954.

Extend completion time to 24 months.

If work is not resumed by September 1, 1954, this amendment contains a "Pseudo Certification.

Annex II attached.

Work Completed

194 feet of drifting @ $35.00/ft.	$6,790.00
Total cost as submitted by Operator	$6,790.00
Government participation @ 50%	$3,395.00

By Amendment No. 7 the contract was automically terminated when Operator failed to resume work on or before September 1, 1954.

Work under the terms of the contract was started on November 14, 1952 and no work was done after March 1953.

3. Audit Certificate (Report of Review) dated August 31, 1955.

Total cost as billed by Contractor	$6,790.00
Exceptions - None	
Total accepted cost	$6,790.00
Government's participation @ 50%	$3,395.00

Operator's final report: Received February 1, 1956
Field Team final report:
Final engineering report dated February 1954, (received 2/6/56)
Final geological report dated January 31, 1956 (received 2/6/56)

4. Certification date: A Pseudo Certification by Amendment No. 7 effective date September 1, 1954.

The Ajax mine contains no measureable ore.

The indicated reserves have been estimated at: (1) 10,000 tons containing about 10 per cent combined lead and zinc and 1.0 ounce silver a ton; and (2) a few hundred tons containing 2.2 per cent zinc, 0.73 per cent lead, 0.22 per cent copper, and 0.13 ounce gold and 0.3 ounce silver per ton. The 10,000 tons of high-grade material present in the partially developed deposit at the shaft and found by drill holes S-2 and S-5 had been indicated by work done before initiation of the DMEA exploration program. A few hundred tons of low-grade material was penetrated near the end of the drift driven with Government assistance.

The inferred reserves are, 4,700 tons containing 1.0 per cent and 8.0 per cent zinc in a depth extension of the deposit at the shaft.

5. Comments

The mining operations were conducted in a fairly efficient manner. Installation of better ventilation and drainage systems would have materially improved working conditions.

In driving the 194 feet of drift about 120 tons of low-grade material was stockpiled which assayed 0.2 per cent copper, 0.8 per cent lead, 2 per cent zinc, 0.3 ounces silver and 0.02 ounces gold. This material appears to have come from the 90 to 100 feet of the drift adjacent to the face and must represent considerable sorting since total muck produced from a 6 by 7-foot drift 100 feet long would approximate 350 tons.

The Field Team states: "Inasmuch as the drift lacked but 90 feet of reaching the downward projection of ore indicated in a diamond drill hole (S-2) and considerable mineralization was noted in the last 100 feet of drifting both examiners recommend that the project be certified as a discovery."

J. W. Alt

J. W. Alt

JWAlt/er 4/30/56

Copy to: Docket
Base Metals
Chron.

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Betty

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Magna King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

pertaining to Exploration Project Contract No. Idm-E428, Docket No. DMEA-2603, including Amendments Nos. 1 to 7, for the months of November, 1952 to March, 1953, inclusive, covering a project for the exploration of lead and zinc on property known as Ajax Mine, located in Pinal County, Arizona.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Executive Officer, DMEA Field Team, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reason:

All of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$6,790.00
Exceptions:		
By DMEA Finance Officer	$0.00	
Herewith	0.00	0.00
Total Accepted Cost		$6,790.00

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Three thousand, three hundred ninety-five and no/100ths Dollars

** $3,395.00 **

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

August 31, 1955

T. H. Breding, Auditor

Division copy

U. S. BUREAU OF MINES
MINING DIVISION
AUG 10 1954
TUCSON, ARIZONA

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

AMENDMENT NO. 7

It is agreed this 30th day of June, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Magma King Manganese Mining Company, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E428 (Docket No. DMEA-2603), dated October 23, 1952, as amended, hereinafter called the "Contract," is further amended effective May 1, 1953, as follows:

1. a. Work under the Contract has been suspended since May 1, 1953, under the provisions of Amendments Nos. 1 through 6, the latter amendment authorizing continuation of the suspension of work to June 1, 1954. Continuation of the suspension of work is further authorized to not later than September 1, 1954.

b. No costs incurred by the Operator during the suspension of work beginning May 1, 1953, shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of work.

c. The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. Annex I attached to Amendment No. 5 is cancelled, and Annex II attached hereto and made a part hereof is substituted for Article 6 of the Contract form.

3. The time fixed for the completion of the work in Article 3 of the Contract form is changed from "21 months," as provided in Amendment No. 5, to "24 months."

4. It is of the essence of this Contract that work be resumed not later than September 1, 1954, and if work is not so resumed in the manner required by the Contract, the following provisions shall apply:

a. Any work or operations prosecuted or costs incurred by the Operator beginning with September 1, 1954, shall be for the sole account of the Operator without contribution by the Government.

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

c. The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the Contract, in the manner and amount provided in the Contract, as amended herein, certification of discovery or development being hereby waived.

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. O. Mitchendorf
Administrator, Defense Minerals
Exploration Administration

MAGMA KING MANGANESE MINING COMPANY

By Pugh Johnson

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

ANNEX II

The following provisions are in lieu of Article 6:

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

58694

No. 6

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1954:

> Referring to Amendment No. 5, dated February 17, 1954, first paragraph, which amended Amendment No. 4 changing the date of "February 1, 1954" to read "May 1, 1954", said Amendment No. 5 and Amendment No. 4 as amended are further amended to change the date of "May 1, 1954" to read "June 1, 1954".

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 12 1954

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

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No. 5

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magna King Manganese Mining Co., is hereby amended as follows, effective February 1, 1954:

> Referring to Amendment No. 4, dated November 24, 1953, which in turn amended Amendment No. 3, dated June 26, 1953, further referring to Amendment No. 4, change the ending date of "February 1, 1954" to read "May 1, 1954".
>
> Referring to "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) (February 1952) as amended by Amendment No. 3, dated June 26, 1953, following the words "and shall bring the project to completion within a period of", delete "18 months" and in lieu thereof substitute "twenty-one (21) months".
>
> Referring to "Article 6. Payment by Operator" of Exploration Project Contract Form MF-200(A) (February 1952), the provisions under said "Article 6" are deleted and in lieu thereof the provisions of Annex I, attached hereto and made a part hereof, are substituted.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated FEB 17 1954

MAGNA KING MANGANESE MINING CO.

By Ralph J. Pomeroy, President

UNITED STATES OF AMERICA

By W.H. King, Executive Officer
DMEA Field Team, Region IV

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ANNEX 1

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns","net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce. This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ANNEX I

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns","net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce. This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

AMENDMENT OF CONTRACT: No. Idm-4428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective October 1, 1953:

> Referring to Amendment No. 3, dated June 26, 1953, which amended "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) and authorized a recess of operation under Contract Idm-4428, further referring to said Amendment No. 3, second paragraph, change the date of "October 1, 1953" to read "February 1, 1954."

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated November 24, 1953

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

(SWL)

No. 3

AMENDMENT OF CONTRACT: No. Idm-R428

Contract Docket No. DMEA-2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective June 1, 1953.

Referring to "Article 3. Exploration Project" of Exploration Project Contract Form MF-200(A), delete "12 months" and in lieu thereof insert "18 months".

Furthermore, execution of this Amendment constitutes authority to recess operations under Contract Idm-R428. The operator hereby agrees to resume operations on or before October 1, 1953, contingent on the following conditions:

1. The operator hereby releases and agrees to save harmless the Government from all claims and demands arising out of conditions or circumstances that may develop at the site of the DMEA project during the period operations are recessed.

2. The operator agrees to preserve and protect the Government's interest in the work performed to date from any cause resulting from the recess of operations, without cost to the DMEA project.

3. Interim payment for the percentage of the Government's participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the first Form MF-104, Operator's Monthly Report and Voucher, after resumption of normal operations under the contract.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated June 26 1953

MAGMA KING MANGANESE MINING CO.

By Ralph Emery

(Seal)

UNITED STATES OF AMERICA

By W.H. King

W.H. King, Executive Officer,
DMEA Field Team, Region IV

No. 2

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1953:

> Execution of this document verifies the authorization to recess work under the contract for a period of one month; further, said authority for recess is given and accepted under the conditions that work will be resumed on or before June 1, 1953. Interim payment for the percentage of Government participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the Form MF-104 Operator's Monthly Report and Voucher in claim for reimbursement for work accomplished during the month of June 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 20 1953 1953

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President and Director

UNITED STATES OF AMERICA

By W. H. King
W.H. King, Executive Officer, DMEA Field Team, Region IV

Seal

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 25 1953

No. 1

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Company is hereby amended as follows, effective April 1, 1953:

> Execution of this document verified the authority to recess work under the contract for a period of 30 (thirty) days, further, said authority is given and accepted under the conditions that work will be resumed on or before May 1, 1953. Interim payments for the percentage of Government participation in the costs of the project for the month of March 1953 will be held in deferment pending receipt of advice that work has been resumed.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated: APR 17 1953

Magma King Manganese Mining Co.

By Ralph S. Pomeroy
Ralph S. Pomeroy, President and Director

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2603

COMMODITY Lead-Zinc

Idm-E428

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 23rd day of October, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Magma King Consolidated Mining Co., an Arizona Corporation
532 Security Bldg.
Phoenix, Arizona

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Arizona, County of Pinal, described as follows:[3] Ajax and Ajax No. 1, Survey No. 3019

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following liens, encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] Lead & Zinc

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay fifty (50) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,550, which is 50 percent of $23,100, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

MAGMA KING MANGANESE MINING CO.
(Operator)

By Ralph J. Pomeroy

By W. H. King

Executive Officer, DMEA
Field Team, Region IV

I, Lillie Fraser, certify that I am the Assistant secretary of the corporation named as Operator herein; that Ralph J. Pomeroy, who signed this contract on behalf of the Operator, was then President and Director of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Lillie Fraser

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of [redacted], County of [redacted], described as follows:1/

[redacted]

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ [redacted]

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ [redacted], or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 6th day of October, 195[illegible].

Frank H. Allen [Seal]

Gladys Allen [Seal]

Betty Smith [Seal]

Mack L. Frazier
By Betty Smith
Atty in fact

Theodora Helms Smith

By Betty Smith
Atty in fact

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

EXHIBIT A

Description of the Work

Drift 400 feet northerly from the present north breast of the 176-foot level.

Drive 200 feet of raises at favorable sites disclosed by the drifting. The locations of the raises will be determined after part or all of the drifting is completed and must be acceptable to the DMEA representative.

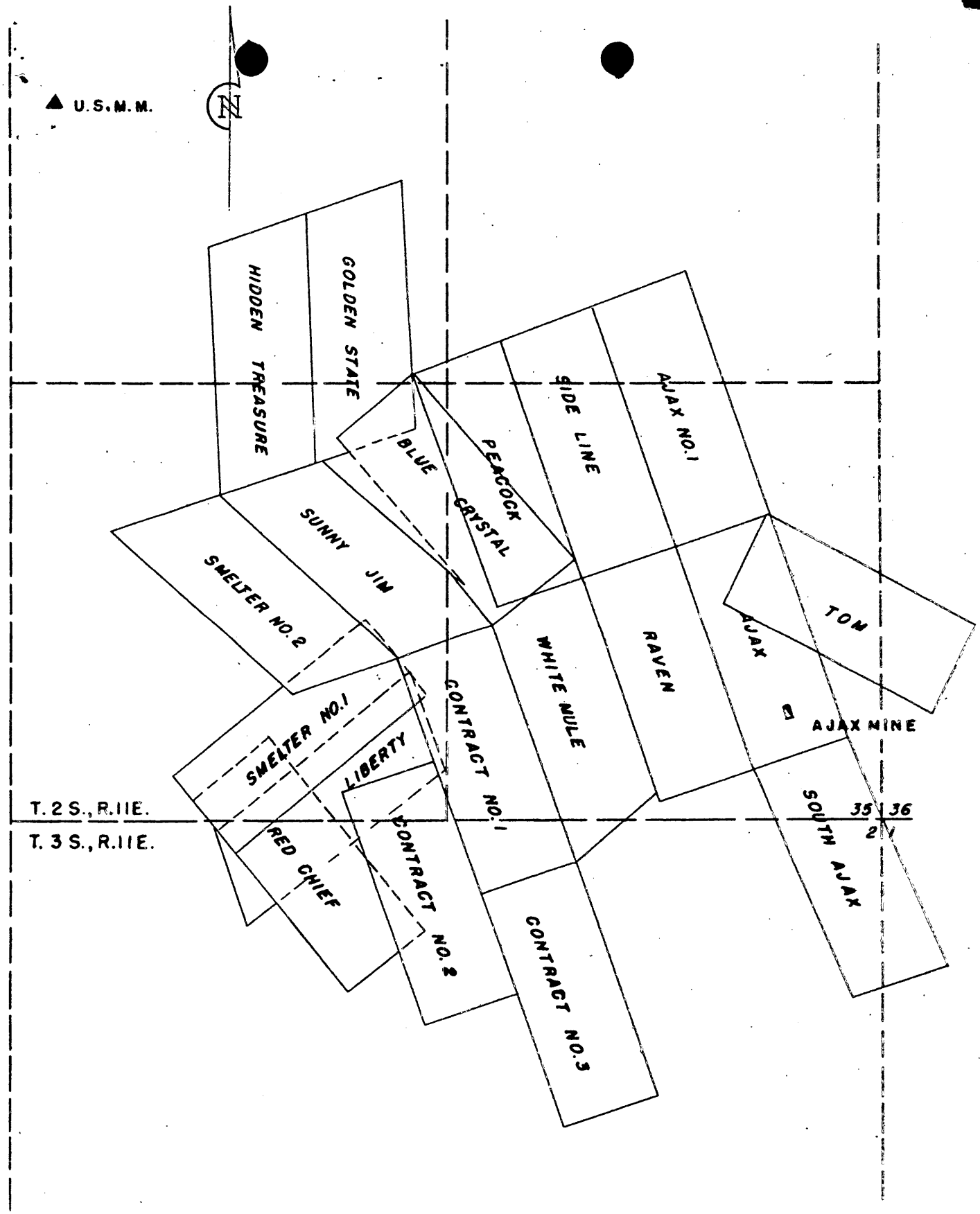
Diamond core drill a maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed. The locations, directions, inclinations and depths of the drill holes must be acceptable to the DMEA representative. A certified drill log must accompany each Monthly Progress Report. Reimbursement will be made only for diamond drill holes completed to the satisfaction of the DMEA representative. Drill cores must be properly stored in acceptable core boxes. Cores must be split and one-half retained for the use of the DMEA.

All the preliminary work will be completed by the operator at no expense to the Government.

The location of the proposed work is shown on Figures 2 and 3 which are attached and made a part of this exhibit.

Estimated Costs of the Project

Drifting, 400 feet @ $35.00 per foot	$14,000.00
Raising, 200 feet @ $33.00 per foot	6,600.00
*Diamond Drilling, 500 feet @ $5.00 per foot	2,500.00
Total Cost of Project -	$23,100.00
Government participation at 50%	$11,550.00



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

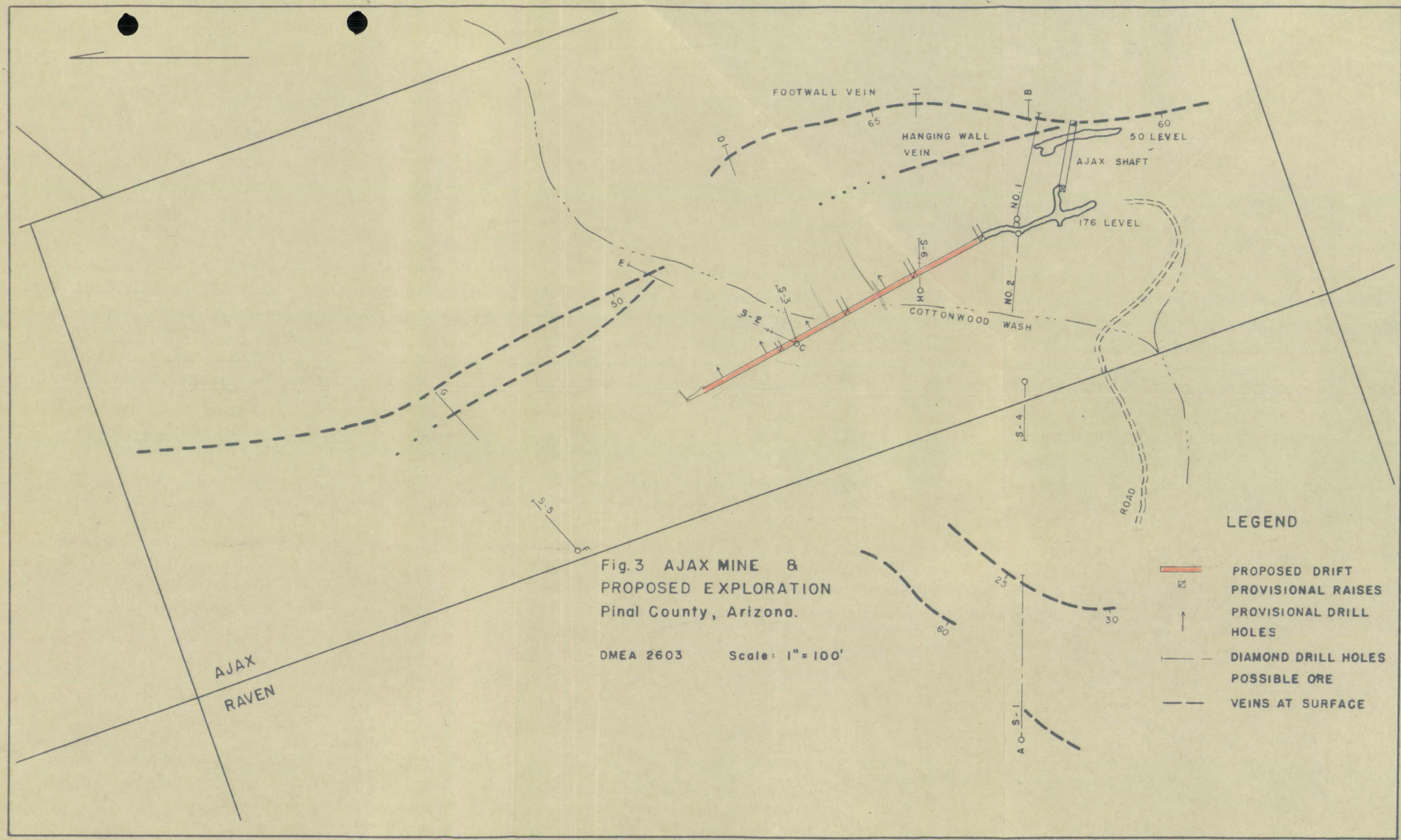


Fig. 3 AJAX MINE & PROPOSED EXPLORATION
Pinal County, Arizona.

DMEA 2603 Scale: 1" = 100'

IN REPLY REFER TO:

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

RECEIVED
MAR 12 1956

March 9, 1956

Re: DMEA 2603, Idm E-428
Magna King Manganese
Manufacturing Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
$23,100 - Lead-Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Final Field Team Report

The expenditure of $23,100 was approved in a contract, E-428, dated October 23, 1952. Work was started November 14th and $6,790 was expended on the following work:

194 feet of drifting,
on the 176-foot level of a shaft.

85 feet of the work was in low grade ore.

The work explored a 7-foot vein, in Precambrian chlorite schist, credited with a production of 91.72 tons of lead zinc-silver ore, part of which was sorted ore. Previous work consisted of the 180-foot shaft, drifting on 2 levels and diamond drilling.

Ore reserves

Prior to the DMEA work, reserves consisted of 14,000 tons of 10% (zinc and lead) ore and the DMEA work increased that figure by 2,500 tons of 0.7% lead and 2.2% zinc material.

Intersections of ore grade material are claimed for 2 diamond drill holes and it is believed other ore shoots exist, but the operator discontinued work without having reached certain target areas. Although only low grade material was encountered in the DMEA work, the examiners and Field Team recommended that a Certification of Discovery be issued.

I concur with that recommendation.

N. E. Nelson

N. E. Nelson

NENelson:jeh
3/9/56
cc: Director's reading 4212
Branch reading 4212
DMEA (3)
Docket file

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
FEB 15 1956

February 15, 1956

Re: DMEA-2603 (Lead-Zinc)
Contract Idm-3428
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of final field team report on January 26, 1956 with U. S. Bureau of Mines field report by Romalo and Bardwick (February 1956) and U. S. Geological Survey field report by Bryner (January 31, 1956)

Under the terms of the contract executed October 23, 1952, a $23,100 program made up of 400 feet of drifting, 200 feet of raising and 500 feet of diamond drilling on the 176-foot level was agreed upon. Of that work only 194 feet of drifting was completed when the company asked that the project be recessed. Thereafter, no additional work was done under the contract and it was terminated September 1, 1954 when the last recess expired.

In driving the 194 feet of drift about 120 tons of low-grade mineral was stockpiled which assayed in the order of 0.2 percent copper, 0.8 percent lead, 2 percent zinc, 0.3 ounces silver and 0.02 ounces gold. This material appears to have come from the 90 to 100 feet of the drift adjacent to the face and must represent considerable sorting since total muck produced from a 6 by 7-foot drift 100 feet long would approximate 350 tons.

Inasmuch as the drift lacked but 90 feet of reaching the downward projection of ore indicated in a diamond drill hole (B-2) and considerable mineralization was noted in the last 100 feet of drifting both examiners recommend that the project be certified as a discovery. I concur with this recommendation.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Branch of Base Metals (2)
Mr. Kiilsgaard, Rm. 5222
Mr. Geehan, Rm. 3608
Files

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

RECEIVED
JAN 30 1956

224 New Customhouse
Denver 2, Colorado

AIR MAIL

January 26, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In reply to your letter of January 23, 1956, the Operator's, Engineer's, and Field Team's final reports will be forwarded to reach you early in the week of January 30 to February 3.

In reference to the last paragraph of your letter of January 23, we are advised from the field as follows:

> "Romslo visited Ajax mine this morning but no work being done. Ralph Pomeroy evidently is in Utah or Colorado. Magma King lease on Ajax still in force, but W. C. Smith, one of the owners, told me that it probably would be cancelled because of lack of work on the property."

W. M. Traver

W. M. Traver

500

JAN 23 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-1128

Dear Mr. Traver:

In reply to your letter dated January 17, regarding the cited project, we would appreciate it if you would send us the Operator's and the engineer's final report. Please send us the geologic final report when it is received by you.

Will you please advise us if the Magma King Mangarese Mining Company still retains an interest in the land as described in the contract.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

JWAlt/bjl (1/20/56)

Copy to: Docket
Admr. R. File
Dens Metals
Mr. Bishop
Mr. Kiilsgaard
Operating Committee
Chron.

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

RECEIVED
JAN 19 1956

224 New Customhouse
Denver 2, Colorado

January 17, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In reference to your letter of January 13, 1956, we have the Operator's and engineer's final reports and can forward them with the Field Team report and send the geologic report when it is received, if you prefer.

It is impossible to advise at this time when the geologic report will be available because of the present heavy work load involved with new applications and reports on requested changes in existing contracts.

W. M. Traver

W. M. Traver

Ck of Mining Dist. Ariz. in the land

JAN 18 1956

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Adm-5426

Dear Mr. Traver:

With reference to the cited project, will you please advise us as to when we may expect to receive the final Operator's report and the final Field Team report.

As work on this project was automatically terminated by Amendment No. 7 on September 1, 1954, we are anxious to close our files for this project.

Please advise us at your earliest convenience regarding these reports.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

JWAlt/bjl (1/12/56)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Killsgaard
Chron.

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

Belly

224 New Customhouse
Denver 2, Colorado

November 18, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-8428, Magma King Manganese Mining Company, Pinal County, Arizona

Enclosed are two copies of a memorandum to T. A. Christensen, dated October 25, 1955, relative to final payment under the terms of the subject contract.

W. M. Traver

By J. W. Townsend

Enclosures

JDC:prl
cc: Subject
Storms
Chron.

RECEIVED
NOV 25 1955

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

224 New Customhouse
Denver 2, Colorado

October 25, 1955

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: FINAL PAYMENT - Docket No. DMEA-2603 (Lead-Zinc), Magma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona. Contract Idm-E428

Reference is made to our memorandum of September 27, 1955 whereby we transmitted final Form MF-104, Operator's Monthly Progress Report and Voucher for the month of March, 1953 and instructed you to withhold the amount of $455.00 from reimbursement to the Operator pending receipt of the Operator's final report.

This report has now been received and we recommend that final payment be made on the following basis.

Basis for Final Payment

Total accepted cost as per Report of Review dated August 31, 1955	$6,790.00
Government participation at 50 percent	3,395.00
Total prior payments	2,940.00
Balance due the Operator	$ 455.00

W. M. Traver
W. M. Traver

Paid $455.00
RRC
Randel R. Cooper
Authorized Certifying Officer

NOV 10 1955 DMA-56-42

JDC:jy
cc: MF-104 File E428
Sec. Op. Comm. (2)
Storms
Townsend
Chron.

August 19, 1955

Betty

Memorandum

To: The Files

From: George C. Selfridge
Special Assistant

Subject: Docket DMEA-2603, Contract Ida-2428 (Lead-Zinc), Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona.

The subject docket was discussed over the telephone with Mr. Traver today. The writer informed him that Legal had decided that Amendment No. 7 to the subject contract was in effect and that we were so writing him.

As mention had been made in the docket that work ceased in May 1953 and the last MF-104 report and voucher we had was for February, Mr. Traver was asked to check to see if a later voucher had been submitted or if any money had been withheld. The writer was informed that the February voucher was the last and that the Region was not withholding any money due the operator.

George C. Selfridge

George C. Selfridge

GCSelfridge/hb (8/19/55)

Copy to: Docket File
Admr. R. File
C. O. Mittendorf
F. R. Johnson
Mr. Griswold
Mr. Selfridge

AUG - 9 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-2428

Dear Mr. Traver:

With reference to the cited contract, it is the opinion of our Legal Division that Amendment No. 7 is in effect and should no longer be treated as "void". We are enclosing the Finance Office, Field Team, and extra copies of the amendment for proper distribution. The Operator's copy is being transmitted to him direct. Copies of the letter of transmittal are attached.

For your information we are enclosing copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated August 9, 1955.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures

JWAlt/er 8/15/55 (rewritten 8/16/55)
Copy to: Docket
Admr R File
Op. Committee
Rise Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Chron.

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Traver:

With reference to the cited contract, it is the opinion of our Legal Division that Amendment No. 7 is in effect and should no longer be treated as "void". We are enclosing the Finance Office, ~~Operators~~, Field Team, and extra copies of the amendment for proper distribution. The Operator's copy is being transmitted to him direct. Copies of the letter of transmittal are attached.

For your information we are enclosing copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated August 9, 1955.

Sincerely yours,

Chairman, Operating Committee

Enclosures

APPROVED:

Robert W. Gechon
Member, Bureau of Mines

Thos H. Kilsgaard
Member, Geological Survey

AUG 1 2 1955

Mr. Ralph J. Pomeroy, President
Magna King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. IM A-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-5425

Dear Mr. Pomeroy:

This is to advise you that the cited contract was terminated September 1, 1954, as specified in Article 4 of Amendment No. 7 to the contract. We are enclosing a photostatic copy of this amendment for your records.

Please note that under Article 4a of the amendment royalty will be payable to the Government on production which may be made from the land described in the contract until the sum which the Government has advanced as its participating interest is repaid, or until October 23, 1962, whichever occurs first. You should likewise prepare and submit the final geologic and engineering report, as provided in Article 15a of the contract.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures
WRGriswold/er 8/16 & 18/55
Copy to: Docket
Admr & File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Killegaard, USGS
Mr. Jay Chambers, IM A
Region III (2)
Chron.

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

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-E428

Dear Mr. Pomeroy:

This is to advise you that the cited contract was terminated September 1, 1954, as specified in Article 4 of Amendment No. 7 to the contract. We are enclosing a photostatic copy of this amendment for your records.

Please note that under Article 4c of the amendment royalty will be payable to the Government on production which may be made from the land described in the contract until the sum which the Government has advanced as its participating interest is repaid, or until October 23, 1962, whichever occurs first.

Sincerely yours,

Administrator

Enclosure

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

AUG 9 1955

Memorandum

To: The Administrator, DMEA
Attention: W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Company

Mr. Griswold's memorandum dated August 1 requested that a Notice of Termination be issued under the subject contract.

Our memorandum of June 28 reviewed the question whether it is suitable to terminate this contract by notice under the termination provisions of the contract. It was stated therein that as Amendment No. 7, dated June 20, 1954, executed by both parties, contained an automatic termination provision, unless submission of Amendment No. 7 to the Operator for signatures was clearly conditioned upon ~~his~~ its obtaining a new Consent to Lien the failure to furnish said lien would not void Amendment No. 7. Our memorandum stated further that the question probably could be resolved by our review of a copy of Mr. Storms' letter which transmitted Amendment No. 7 to the Operator, which copy was not then before us.

Mr. Traver's memorandum dated July 26 to the Operating Committee furnished us with a copy of Mr. Storms' letter dated July 14, 1954, which transmitted Amendment No. 7 to the Operator for signature and informed the Operator that a copy of the amendment would be sent to it upon receipt by Mr. Storms of the original and four copies of the amendment all signed by the Operator. This letter also informed the Operator that new Consent to Lien forms were necessary, and enclosed forms for execution by the landowners. However, the letter did not clearly condition the effectiveness of Amendment No. 7 upon the receipt by the Government of new Consent to Lien forms. Accordingly, it is our view that Amendment No. 7 is in effect and should no longer be treated as "void."

There is probably some administrative concern over the fact that the "pseudo-certification" provisions of Amendment No. 7 jeopardize the Owner's Consent to Lien attached to the contract, which is executed on the oldest Consent to Lien form and does not authorize amendments which alter the provisions for the payment of the Government's royalty. However, Amendment No. 5 dated February 17, 1954, prepared and executed in the field, also changed the royalty provisions.

J. L. Hofflund
J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

August 1, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Preparation of a Unilateral Termination Agreement for Magma King Manganese Mining Company, Contract No. Idm-Bh28, Docket No. IMAA-2603 (Lead-Zinc), Pinal County, Arizona.

Will you please prepare a unilateral termination agreement for the cited contract. A termination agreement was sent to the Operator by the Field Team on January 5, 1955. The Operator has not signed this agreement. The unilateral termination agreement should terminate the work of the contract as of April 1, 1953.

The Field Team has complied with our request and has sent us a copy of the letter to the Operator in which a new Owner's Consent to Lien was necessary before Amendment No. 7 could be properly executed. Please refer to the memorandum, dated July 26, from the Executive Officer, IMAA Field Team, Region III.

W. R. Griswold

W. R. Griswold

~~WRGrinwsld/er~~

JWAlt/er
Copy to: Docket
Base Metals
Chron.

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

224 New Customhouse
Denver 2, Colorado

AIR MAIL

Alt
Betty
RECEIVED
JUL 28 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., (Ajax Lead-Zinc Mine), Pinal County, Arizona

This replies to your letter of July 5, 1955 on the subject docket.

Enclosed are two copies of each of the following:

1. Letter to Ralph J. Pomeroy from W. R. Storms dated July 14, 1954

2. Letter from Pomeroy to Storms dated July 30, 1954

3. Letter from Pomeroy to Storms dated August 9, 1954

4. Memorandum from Storms to W. H. King dated August 16, 1954

5. Letter from Storms to Pomeroy dated August 17, 1954

6. Letter from Storms to Pomeroy dated September 16, 1954.

It appears that Storms' letter to Pomeroy dated July 14, 1954 clearly conditions the effectiveness of Amendment No. 7 upon the submission of new Owner's Consent to Lien.

W. M. Traver

W. M. Traver

Enclosures

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

Box 4097
Tucson 5, Arizona

July 25, 1955

Air Mail

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Docket DMEA-2603, Contract Idm-2428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

As requested in your air mail memorandum of July 21, we are enclosing copies of the following letters and memoranda regarding Amendment No. 7 to DMEA Exploration Project Contract No. Idm-2428:

1. Letter to Ralph J. Pomeroy from W. R. Storms, dated July 14, 1954;

2. Letter from Pomeroy to Storms, dated July 30, 1954;

3. Letter from Pomeroy to Storms, dated August 9, 1954;

4. Memorandum from Storms to W. H. King, dated August 16, 1954;

5. Letter from Storms to Pomeroy, dated August 17, 1954;

6. Letter from Storms to Pomeroy, dated September 16, 1954.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
DMEA-2603
BF

WRStorms:frj

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

September 16, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E428 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the mine road and intend to start work as soon as possible, I would suggest that you immediately write the DMEA Executive Officer in Denver. As you know, Amendment No. 7 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the east. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
J. N. Faick
DMEA-2603
DF

WRStorms:frj

COPY

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

August 17, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Mr. Pomeroy:

Your letter of August 9 with the original and four copies of Amendment No. 7 to your DMEA Exploration Project Contract No. Idm-E428 was received several days ago, but was not acknowledged until today as we thought the "Owner's Consent to Lien" forms might come in.

We have sent the amendment to our Denver office and will forward the Lien forms when received from you. We will hold your copy of the amendment until we receive the "Owner's Consent to Lien" forms.

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
DMEA-2603
DF

WRStorms:frj

COPY

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

August 16, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and four copies of Amendment No. 7 to DMEA Contract No. Idm-E428, all duly signed by Ralph J. Pomeroy, company president, and with the corporate seal affixed.

No new Owner's Consent to Lien forms have been sent us by Pomeroy, but in his letter of August 9, he states that these forms will be submitted at a later date. His letter is attached.

The operator's copy of the amendment will be given to Pomeroy when he submits the lien forms.

Walter R. Storms

Walter R. Storms

CC W. H. King (7)
DMEA-2603
DF

WRStorms:frj

COPY

Telephone
Phoenix 2-0181

RECEIVED
JUL 28 1955

MAGMA KING
Manganese Mining Company
Superior, Arizona

Office
547 North Arizona Ave.
Chandler, Arizona

August 9, 1954

Mr. Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV
Box 4097, University Station
Tucson, Arizona

Dear Mr. Storms:

You will find enclosed the original and four copies of Amendment No. 7 to our DMEA Exploration Project Contract No. Idm-E428 for an extension of our recess and the time to complete our project. These have been signed and this company's seal affixed. I have been given to understand that the "Owner's Consent to Lien," will be signed, however, Mr. Walter C. Smith is enroute home from an extended vacation in the East and just when he will be available to sign hasn't yet been determined. I felt the matter was important enough that the signed Amendments should be sent at this time . As soon as Mr. Smith's signature is affixed to the Owner's Consent to Lien I will forward it on to you immediately.

We appreciate your assistance in this matter and trust that this extension will be sufficient time to complete the project we have planned.

Sincerely yours,
Magma King Manganese Mining Co.

/s/ Ralph J. Pomeroy, President.

RJP/lf
Enc

C O P Y

(ORIGINAL SENT TO DENVER)

Telephone
Phoenix 2-0181

MAGMA King
Manganese Mining Company
Superior, Arizona

Office
547 North Arizona Ave.
Chandler, Arizona

July 30, 1954

Mr. Walter R. Storms
Mining Methods Branch
Mining Division, Region IV
Box 4097, University Station
Tucson, Arizona

Dear Mr. Storms:

The Supplemental Agreements and Amendments sent to this office have been delayed due to our change in address and the fact that I have been out of town recently. In order to expedite things I asked Mrs. Fraser to forward the material to Mr. Loran Skousen, Secretary of the company, who is in New York City. I have just talked to him by telephone and was informed that the material will be returned to this office the fore part of the coming week. I sincerely hope that this delay will not inconvenience your office.

I wish to express our appreciation for the assistance you have rendered this company. I wish to co-operate fully with the Bureau of Mines and DMEA in completing this project. Our Eastern associates are of the opinion that the zinc picture will be improved in the near future. This would add justification to the completion of our project.

With kindest personal regards I am,

Sincerely yours,

/s/ Ralph J. Pomeroy
LF

RJP/lf

C O P Y

U. S. Bureau of Mines
P. O. Box 4097
Tucson 5, Arizona

RECEIVED
JUL 28 1955

July 14, 1954

Register

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
532 Security Bldg,
Phoenix, Ariz.

Re: Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Mr. Pomeroy:

Enclosed are original and four copies of Amendment No. 7 to your DMEA Exploration Project Contract No. Idm-E428 for an extension of your recess and time to complete project work, and original and five copies of Form MF-203 - "Owner's Consent to Lien". If this amendment is satisfactory, please sign all copies, affix your corporate seal, then return all to me. Your copy, which we have retained here, will be sent to you upon receipt of the orignal and four copies.

As Amendment No. 7 contains new provisions concerning royalty payments, the legal department of the Defense Minerals Exploration Administration believes that new Owner's Consent to Lien forms are necessary. Therefore, will you please have the original and five copies of Form MF-203 signed and return all to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
DMEA-2603
DF

WRStorms:frj

(Registered Mail No. 95145. Return receipt signed by Pomeroy on July 27, 1954)

C O P Y

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

RECEIVED
JUL 25 1955

224 New Customhouse
Denver 2, Colorado

AIR MAIL

July 21, 1955

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc-Mine, Pinal County, Arizona

Attached is a copy of a letter from the Chairman of the Operating Committee and a memorandum from the Acting Assistant Solicitor, DMEA.

Your letter of October 25, 1954 states "we mailed the other copies of Amendment No. 7 to Pomeroy some time ago for his signature . . ." Did this letter or any other letter written to the Operator by you clearly condition the effectiveness of said amendment upon the submission of new Owner's Consent to Lien?

Please send us a copy of your letter of "some time ago" transmitting Amendment No. 7 to Mr. Pomeroy. Copies of any other correspondence to Mr. Pomeroy having any bearing on the question raised by the Chairman of the Operating Committee should also be forwarded to this office.

W. M. Traver

W. M. Traver

Enclosures

HMC:sr

cc Subject
Townsend
Chairman Op. Comm. (2)
Chron

JUL - 5 1955

AIR MAIL

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
22h New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-8428

Dear Mr. Traver:

With regard to the cited contract, we are enclosing two copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated June 28.

In the last paragraph of this memorandum it is stated:

> "Accordingly, unless Mr. Sterns submitted Amendment No. 7 to the Operator with a letter which clearly conditioned the effectiveness of said amendment upon the submission of new Owner's Comments to Lien, and we are furnished with a copy of such evidence, I am inclined to the view that Amendment No. 7 is in effect, that the contract is automatically terminated, and that a "pseudo-certification" is in effect."

At your earliest convenience, we would appreciate hearing from you whether such a letter was written by Mr. Sterns, and if so please send a copy of it. If no such letter was written, we will consider that Amendment No. 7 is in effect and will forward the necessary copies of it to you for distribution when we receive your reply to this letter.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

JWAlt/er 6/29/55
Copy to: Docket
Admr. R. File
Op. Committee

Base Metals Chron.
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

JUN 28 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Grimwald

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-2488 (Lead-Zinc)

Mr. Grimwald's memorandum dated June 24, 1955, requested that a termination notice be prepared for the subject contract.

The suitability of terminating this contract by notice under the termination provisions of the contract was considered in our memoranda dated October 14 and 19, 1954, wherein it was stated that Amendment No. 7 dated June 30, 1954, executed by both parties, contained an automatic termination provision, and that unless submission of Amendment No. 7 to the Operator for signature was clearly conditioned upon his obtaining a new Owner's Consent to Lien signed by all the owners, the failure to furnish said lien would not void Amendment No. 7. The question of whether the amendment had been submitted to the Operator subject to the stated condition was left open for determination based upon additional facts.

Pursuant to a teletype to the field dated November 4, 1954, the original and 5 copies of Amendment No. 7 were returned to Washington.

A proposed termination agreement, which specifically would have cancelled Amendment No. 7 by agreement, was submitted to the Operator but was never executed by him.

A proposed letter to the Operator which again raised the question whether Amendment No. 7 was valid was returned to Mr. Grimwald with our memorandum dated June 2, 1955, which requested that the field submit all copies of correspondence with the Operator concerning the submission

of Amendment No. 7 to the Operator for signature. We hoped to determine from this correspondence the status of Amendment No. 7. The field submitted certain correspondence concerning Amendment No. 7; however, if Storms submitted the Amendment to the Operator with a letter, no copy of it appears with the copies of the correspondence submitted. If Storms wrote such a letter it would probably throw the most light on the question.

From the facts before us it is clear that new Owner's Consents to Lien were requested by Storms, but it is not clear that they were made a condition of the amendment. If anything, Storms' letter to the Operator dated September 16, 1954 (apparently about a month after the Operator returned all signed copies of Amendment No. 7), reminded the Operator that the termination provisions of Amendment No. 7 would be effective if work had not been resumed by September 1, 1954.

Accordingly, unless Mr. Storms submitted Amendment No. 7 to the Operator with a letter which clearly conditioned the effectiveness of said amendment upon the submission of new Owner's Consents to Lien, and we are furnished with a copy of such evidence, I am inclined to the view that Amendment No. 7 is in effect, that the contract is automatically terminated, and that a "pseudo-certification" is in effect.

/S/ Henry C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
W. R. Griswold (3)
J. L. Hofflund
H. C. Rubin
chron.

June 24, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Preparation of a Unilateral Termination Agreement for Magma King Manganese Mining Company, Contract No. Idm-2428, Docket No. DMEA-2603 (Lead-Zinc), Pinal County, Arizona

Will you please prepare a unilateral termination agreement for the cited contract. A termination agreement was sent to the Operator by the Field Team on January 5, 1955. The Operator has not signed this agreement and on February 25, and again on April 21, the Field Team wrote to the Operator regarding the signing of this agreement but has had no reply from him.

Mr. Traver's letter of June 20, lists all correspondence relating to Amendment No. 7 (copies of which are attached to the letter).

The unilateral termination agreement should terminate the work of the contract as of April 1, 1953. This was stated in the Termination Agreement which has not been signed.

W. R. Griswold

W. R. Griswold

JWA lt/er

Copy to: Docket
Base Metals
Chron.

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

224 New Customhouse
Denver 2, Colorado

June 20, 1955

AIRMAIL

RECEIVED
JUN 22 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

In compliance with your request of June 16, 1955, we are enclosing the following letters, which is all of the correspondence we have had with the field relative to Amendment No. 7:

1. Memorandum from this office to W.R. Storms dated July 12, 1954.

2. Letter from Ralph J Pomeroy to Walter R. Storms, dated August 9, 1954.

3. Memorandum from Walter R. Storms to this office, dated August 16, 1954.

4. Letter from Walter R. Storms to Ralph J. Pomeroy, dated September 16, 1954.

5. Memorandum from Walter R. Storms to this office, dated October 25, 1954.

W. M. Traver

W. M. Traver

Encls.

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines

Tucson, Arizona

October 25, 1954

Air Mail

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

As requested in your teletype of this afternoon, we are enclosing the Operator's copy of Amendment No. 7 to Exploration Project Contract No. Idm-E428. We mailed the other copies to Pomeroy sometime ago for his signature, but have heard nothing from him nor have we ever received the new "Owner's Consent to Lien" forms from him.

Signed/ Walter R. Storms

CC. W. H. King
DMEA-2603
DF

WRStorms:frj

C
O
P
Y

September 16, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E428 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the mine road and intend to start work as soon as possible, I would suggest that you immediately write the DMEA Executive Officer in Denver. As you know, Amendment No. 7 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?

Sincerely yours,

Signed/ Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
J. N. Faick
DMEA-2603
DF

WRStorms: frj

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines

Tucson, Arizona

August 16, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 7, DMEA Contract Idm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and four copies of Amendment No. 7 to DMEA Contract No. Idm-E428, all duly signed by Ralph J. Pomeroy, company president, and with the corporate seal affixed.

No new Owner's Consent to Lien forms have been sent us by Pomeroy, but in his letter of August 9, he states that these forms will be submitted at a later date. His letter is attached.

The operator's copy of the amendment will be given to Pomeroy when he submits the lien forms.

signed/ Walter R. Storms
Walter R. Storms

CC W. H. King (7)
DMEA-2603
DF

WRStorms:frj

C
O
P
Y

MAGMA KING
Manganese Mining Company

Superior - Arizona

547 North Arizona Ave.
Chandler, Arizona

August 9, 1954

Mr. Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV
Box 4097, University Station
Tucson, Arizona

Dear Mr. Storms:

You will find enclosed the original and four copies of Amendment No. 7 to our DMEA Exploration Project Contract No. Idm-E428 for an extension of our recess and the time to complete our project. These have been signed and this company's seal affixed. I have been given ~~the~~ to understand that the "Owner's Consent to Lien," will be signed, however, Mr. Walter C. Smith is enroute home from an extended vacation in the East and just when he will be available to sign hasn't yet been determined. I felt the matter was important enough that the signed Amendments should be sent at this time. As soon as Mr. Smith's signature is affixed to the Owner's Consent to Lien I will forward it on to you immediately.

We appreciate your assistance in this matter and trust that this extension will be sufficient time to complete the project we have planned.

Sincerely yours,
Magma King Manganese Mining Co.

signed/ Ralph J. Pomeroy
Ralph J. Pomeroy, President

RJP/lf
Enc.

C
O
P
Y

224 New Customhouse
Denver 2, Colorado

July 12, 1954

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead Zinc Mine, Pinal County, Arizona

Enclosed are the original and five copies of Amendment No. 7 to Contract Idm-E428 which was prepared in Washington and signed by the Administrator for the Government to authorize a further extension of the period for recess of operations.

Also enclosed are the original and five copies of Form MF-203 Owner's Consent to Lien, also prepared in Washington, for execution by the operator in conjunction with Amendment No. 7.

If the amendment is satisfactory to you please present the amendment and the six copies of Form MF-203 to the operator for signature, retaining the operator's copy of the amendment until the remaining copies of all documents have been returned to you properly executed.

In addition to the foregoing enclosed material we are enclosing a copy of the letter from the Chairman of the Operating Committee dated July 1, 1954.

signed/ W. H. King

W. H. King

Encls.
JWT;jp
cc Contract
Chron
AHKoschmann
JWTownsend

JUN 1 6 1955

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-4428

Dear Mr. Traver:

With reference to your memorandum of June 7, we wish to call your attention to the memorandum from the Acting Assistant Solicitor, Defense Minerals, a copy of which was sent to you on June 3, 1955.

In the last sentence of paragraph 2 of this memorandum, it is stated: "Accordingly, the Field should furnish us with copies of the correspondence had with the Operator concerning Amendment No. 7."

In order that we can terminate this project, will you please furnish us with copies of the correspondence as requested by the Acting Assistant Solicitor at your earliest convenience.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

JWAlt/er 6/14/55

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

RECEIVED
JUN - 9 1955

224 New Customhouse
Denver 2, Colorado

June 7, 1955

AIRMAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

Reference is made to your letter of June 3, 1955 regarding information requested by the Acting Solicitor relative to the subject contract.

Providing of new Owner's Consent to Lien was a condition of Amendment No. 7. The operator signed the original and four copies of the amendment and returned them to this office but did not return the Owner's Consent to Lien.

All copies of the amendment were returned to the Washington office by our memorandum of November 16, 1954, in conformance with your teletype of November 4.

Recommendations relative to the issuance of a Certification of Discovery or Development were also forwarded by our memorandum of November 16, 1954.

W. M. Traver

W. M. Traver

JUN - 3 1955

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region XIX
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-2428

Dear Mr. Traver:

With reference to your memorandum dated May 19, 1955, regarding the cited contract, we are enclosing copies of memorandum from the Acting Assistant Solicitor, Defense Minerals, dated June 2.

We would appreciate an early reply from you regarding the information requested in the memorandum from the Acting Assistant Solicitor, Defense Minerals.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

JWAlt/er 6/3/55

Copy to: Docket
Admr & File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

JUN - 2 1955.

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma-King Manganese Mining Company (lead-zinc)

Pursuant to a discussion Mr. Alt and I had with Mr. Johnson, we are returning, unsurnamed, a proposed letter to the subject Operator.

A review of the docket does not disclose whether submission of Amendment No. 7 to the Operator for execution was clearly conditioned upon the Operator obtaining a new Consent to Lien. If it was not, Amendment No. 7, which has been signed by the Operator, is in effect and the contract is automatically terminated with a pseudo-certification. Accordingly, the Field should furnish us with copies of the correspondence had with the Operator concerning Amendment No. 7.

If the copies of correspondence referred to above do disclose that Amendment No. 7 was conditioned upon a new Consent to Lien being obtained and is void, consideration should be given to certifying a discovery and terminating by notice, as indicated in prior memoranda from this office.

H. C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

HCRubin/emd
Copy to: DMEA Docket
Solicitor's DOcket
W. R. Griswold (2)
J. L. Hofflund
H. C. Rubin
chron.

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

224 New Customhouse
Denver 2, Colorado

May 19, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Ajax Lead-Zinc Mine, Pinal County, Arizona

Reference is made to the termination agreement which was prepared in Washington and forwarded by your letter of December 29, 1954 for signature by the operator and the Executive Officer, DMEA Field Team, Region IV.

The termination agreement was forwarded to the operator by our letter of January 5, 1955. As the termination agreement was not returned by the operator we subsequently wrote him on February 25 and April 21 requesting that the matter be given his prompt attention. Copies of all three of our letters to the operator were forwarded to you at the time of writing.

Inasmuch as we have been unable to obtain any action in the matter it appears that more drastic action should be initiated by the Washington office. In all probability we will encounter similar difficulty in obtaining the operator's final report or any other action by him in procedures necessary relative to closing the account.

If further action by this office is desired please so advise.

W. M. Traver

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

April 21, 1955

REGISTERED

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Reference is made to the termination agreement forwarded to you for signature by our letter of January 5, 1955 and our letter of inquiry in the matter of February 25, 1955.

We are desirous of closing this account at an early date, therefore we will appreciate your prompt attention to the initial step of closing procedures by returning the properly executed copies of the termination agreement.

Very truly yours,

W. M. TRAVER,
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT:sr

cc Chairman Op. Comm. (2)
Storms
Faick
Harshman
Townsend
Subject
Chron

C
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Y

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

All
Betty

224 New Customhouse
Denver 2, Colorado

February 25, 1955

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Reference is made to our letter of January 5, 1955, whereby we forwarded to you for execution the original and five copies of a termination agreement.

Inasmuch as we have not heard from you in the matter or received the executed copies of the termination agreement we will appreciate your prompt attention to the matter either by returning the executed termination agreement or appropriate advice relative to the matter.

Very truly yours,

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT:jp
cc Subject
Chron
Chairman, Op. Comm.
Storms
Faick
Harshman
Townsend

DEC 29 1954

Mr. W. E. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-3603 (Lead-Zinc)
Hagan King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-3425

Dear Mr. King:

We are enclosing the original and five copies of a Termination Agreement to the cited contract for your signature.

Please present the termination agreement to the Operator for approval and signature and, when completed, distribute the copies of the usual manner.

Upon the receipt of our executed copy of the termination agreement, we will prepare the certification of discovery for this property.

We would appreciate receiving the final Field Team report at your earliest convenience.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

JWAlt/er 12/20/54

Enclosure

APPROVED:

/s/ Robert H. JOHNSON
Director, Bureau of Mines

Thor N. Kiilsgaard
Director, Geological Survey

Copy to: Docket
Admr R. File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

500

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

December 23, 1954

PROJECT SUMMARY REPORT (Incomplete)
(No final audit or final reports of Field Team or Operator)

By: J. W. Alt

1. DMEA Docket No. 2603 (Lead-Zinc)
Contract No. Idm-E428
Property: Ajax Lead-Zinc Mine
Location: Pinal County, Arizona
Operator: Magma King Manganese Mining Co.
532 Security Building
Phoenix, Arizona

Operator's Property Rights: Lessee
Assignment and Agreement - April 1, 1952
Owner's Consent to Lien - dated October 6, 1952

2. Contract (Short Form) — dated October 23, 1952, to complete: 12 months

Work Authorized:

Drift 400 feet northerly from the present north breast of the 176-foot level

Drive 200 feet of raises at favorable sites disclosed by the drifting.

Diamond core drill maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed.

Estimated Costs of the Project

Drifting, 400 feet @ $35/ft.	$14,000.00
Raising, 200 feet @ $33/ft.	6,600.00
Diamond drilling, 500 feet @ $5/ft.	2,500.00
Total Cost of Project	$23,100.00
Government participation at 50%	$11,550.00

Amendments:

No. 1 - dated April 17, 1953 — Recess operations for 30 days — work to be resumed on or before May 1, 1953.

No. 2 - Dated May 20, 1953 — Recess operations for one month — work to be resumed on or before June 1, 1953.

No. 3 - Dated June 26, 1953 — Recess operations and resume work on or before October 1, 1954.

Extend completion time from 12 months to 18 months.

No. 4 - Dated November 24, 1953 — Recess operations — change date of October 1, 1953 of Amendment No. 3 to read "February 1, 1954."

No. 5 - Dated February 17, 1954 — Change the recess ending date of February 1, 1954 of Amendment No. 4 to read "May 1, 1954".

Extend completion time from 18 to 21 months.

No. 6 - Dated May 12, 1954 — Change recess date from May 1, 1954 to June 1, 1954.

Work Completed as per last MF-104 in our files (February 1953)
168 feet of drifting on the 176-foot level @ $35/ft. — $5,880.00

3. Audit Certificate:

There will be no liquidation of equipment settlement — Work was done on the unit cost basis.

4. Certification Date:

5. Comments: According to the memorandum of T. M. Rousie, USBM, dated April 15, 1953, the drift in March was advanced 26 feet, making a total of 194 feet of drifting under the terms of the contract. Progress was slow during the five months of operations of the project.

The memorandum of Walter R. Storms, USBM, dated November 12, 1954, states: "The drift had been driven 194 feet when the project was recessed. It lacked about 90 feet of reaching the principal target, the downward projection of the ore zone indicated by diamond drill S-2. At the S-2, the indicated reserves had been estimated at 1,000 tons of ore containing 10 to 15 per cent zinc. This 194 feet of drift should be very valuable to any future mine operator who might wish to continue the exploration work.

"Inasmuch as the operator has submitted written statements that ore was found in the contract drift, and as samples taken by a Bureau of Mines engineer from dump material taken from said drift indicate low grade lead-zinc ore, I recommend that a 'Certification of Discovery or Development' be made."

From November 1952 to March 1953, 194 feet of drift were driven at $35.00 per foot at a total cost of $6,790.00, the Government's participation being $3,395.00. The unexpended balance of the contract is $16,310.00, and the government participation is $8,155.00.

It is recommended that the contract be terminated and that when this has been done, that a certification of discovery be issued.

J. W. Alt

November 29, 1954

Memorandum

To: Acting Assistant Solicitor, DMRA

From: Chief, Base Metals Division

Subject: Mutual Termination Agreement for Contract No. Idm-2428, Docket No. DMRA-2601, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona, (Lead-Zinc)

Will you please prepare a Mutual Termination Agreement for the cited contract. This agreement is to be prepared for the signature of the Executive Officer of Region IV.

Certification of the project will be made when the Operator signs the Termination Agreement and it is returned to this Division.

Amendment No. 7 has been, upon request, returned by the Executive Office, Region IV. The Operator had signed this amendment but did not obtain a new Owner's Consent to Lien, and therefore the amendment was considered void.

W. R. Grimsrold

JWAlt/er

Copy to: Docket
Base Metals
Chron.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 22 1954

224 New Customhouse
Denver 2, Colorado

November 16, 1954

abe

Memorandum

To: Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region 1V

Subject: Docket No. DMEA 2603 (Lead-Zinc), Contract Idm-E428
Magma King Manganese Mining Company, Ajax Lead-Zinc Mine
Pinal County, Arizona

In compliance with the request contained in your teletype of November 4, 1954, we are enclosing the original and 3 copies of a memorandum dated November 12, 1954, from the Chief, Mining Methods Branch, Mining Division, Region 1V, relative to the Certification of Discovery as a result of work under the subject contract. The memorandum is countersigned by J. N. Faick, Geologist, U. S. Geological Survey, T. M. Romslo, Mining Engineer, U. S. Bureau of Mines, and W. R. Hardwick, Mining Engineer, U. S. Bureau of Mines.

The Engineers and Geologists outlined the basis for the certification and recommend that such be issued in which this office concurrs.

Also in compliance with instructions in your teletype of November 4, we are enclosing the original and 5 copies of Amendment No. 7 of the subject contract.

for John F. Shaw
W. H. King

Enclosures

Defense Minerals Administration
NOV 12 1954

November 12, 1954

Memorandum

Air Mail

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : DMEA Contract Nbr-2488, Project DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Mineral Hill Mining District, Pinal County, Ariz.

In regard to your telotype of November 4, concerning justification for certification under DMEA Exploration Project Contract No. Nbr-2488, I was in Confidence when your inquiry arrived and did not return until the afternoon of November 8. I then found that John N. Faick of the Geological Survey was in the field and would not return to his office until today, hence the delay in the answer to your telotype.

So far as I know, the information contained in my memorandum report to you of October 21, 1953 still is authentic. As I mentioned then, in the operator's narrative report which accompanied Forms MF-104 and MF-104A for February 1953, it stated: "Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations". Again in the operator's narrative report of March 1953, it stated that the entire 36 feet of drift was in low-grade ore. F. M. Remele, the Bureau of Mines engineer who regularly inspected this project for the Defense Minerals Exploration Administration in 1953, stated in his March 1953 progress report: "The Operator's Narrative Report is considered adequate. His statement that the entire 36 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays in future reports". As the project was terminated shortly after that, no samples were taken by the operator. I have talked to Mr. Remele about this project and he states that as far as he can remember, he never saw any ore in place in the compact drift. However, fragments containing galena and sphalerite were seen in the muck that came from this drift.

CC W. H. King (8)
J. N. Faick
DMEA-2603
Br

WHSterns:fr:j

Material that came from the contract drift was hand-sorted and from 10 to 20 tons were placed in one pile, and perhaps another hundred tons were placed on the regular dump. These piles were sampled by Bureau of Mines engineer W. R. Hardwick on October 21, 1953, then again on June 2, 1954. The two samples taken on October 21, 1953 were not assayed as the operator stated that work was to be re-started. The three samples taken of the dump material in June 1954, were as follows:

Sample No.	Location	Percent Copper	Percent Lead	Percent Zinc	Ounces a Ton Gold	Ounces a Ton Silver
13022	Sorted ore dump	0.34	0.52	1.8	0.02	0.4
13023	Main dump	0.23	0.58	1.3	Trace	0.1
13024	" "	0.085	1.10	3.4	0.02	0.4

Although this material is not pro at the present time, it does indicate the presence of zinc and lead in a zone that could be an extension of that encountered by diamond drill hole S-6. Ore reserves for the zone at hole S-6 had been estimated at 1,000 tons containing 4 percent lead and 6 percent zinc. The drift had been driven 194 feet when the project was recessed. It lacked about 90 feet of reaching the principal target, the downward projection of the ore zone indicated by diamond drill hole S-2. At hole S-2, the indicated reserves had been estimated at 1,000 tons of ore containing 10 to 15 percent zinc. This 194 feet of drift should be very valuable to any future mine operator who might wish to continue the exploration work.

Inasmuch as the operator has submitted written statements that ore was found in the contract drift, and as samples taken by a Bureau of Mines engineer from dump material taken from said drift indicate low-grade lead-zinc ore, I recommend that a "Certification of Discovery or Development" be made.

Walter R. Storms

Walter R. Storms.

We have read the above report and agree with its conclusions and recommendations.

John H. Feick, Geologist
U. S. Geological Survey

T. H. Romslo

T. H. Romslo, Mining Engineer
U. S. Bureau of Mines

W R Hardwick

W. R. Hardwick, Mining Engineer
U. S. Bureau of Mines

Division copy

NOV 22 1954

EXPLORATION PROJECT CONTRACT
MAGNA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

AMENDMENT NO. 7

It is agreed this 30th day of June, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Magna King Manganese Mining Company, hereinafter called the "Operator," that Exploration Project Contract No. Idm-2428 (Docket No. DMEA-2603), dated October 23, 1952, as amended, hereinafter called the "Contract," is further amended effective May 1, 1953, as follows:

1. a. Work under the Contract has been suspended since May 1, 1953, under the provisions of Amendments Nos. 1 through 6, the latter amendment authorizing continuation of the suspension of work to June 1, 1954. Continuation of the suspension of work is further authorized to not later than September 1, 1954.

b. No costs incurred by the Operator during the suspension of work beginning May 1, 1953, shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of work.

c. The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. Annex I attached to Amendment No. 5 is cancelled, and Annex II attached hereto and made a part hereof is substituted for Article 6 of the Contract form.

3. The time fixed for the completion of the work in Article 3 of the Contract form is changed from "21 months," as provided in Amendment No. 5, to "24 months."

4. It is of the essence of this Contract that work be resumed not later than September 1, 1954, and if work is not so resumed in the manner required by the Contract, the following provisions shall apply:

vaul

a. Any work or operations prosecuted or costs incurred by the Operator beginning with September 1, 1954, shall be for the sole account of the Operator without contribution by the Government.

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

c. The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the Contract, in the manner and amount provided in the Contract, as amended herein, certification of discovery or development being hereby waived.

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
Administrator, Defense Minerals Exploration Administration

Martin Talbert

MAGMA KING MANGANESE MINING COMPANY

By [signature]

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 22 1954

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

ANNEX II

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 22 1954

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

ANNEX II

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

NOV 4 - 1954

MBGriswold/er, Rm 4444, Ext. 3669

Base Metals Div., DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to Office of the Secretary)

TELETYPE

Date:

To: W. M. King, Executive Officer, DMEA Field Team, Region IV, Denver 2, Colorado

Reurtt November 2, 1954, Docket DMEA 2601, Contract Idm-5428, Magma King Manganese Mining Company. Pending policy decision, best you return all copies of Amendment No. 7 to this office. Regarding your memorandum of October 29, 1953, send as justification for recommended certification.

George C. Selfridge

Chairman, Operating Committee

JWAlt/er (written 11/4/54)

Copy to: Docket
Admr. File
Operating Committee
Base Metals
Mr. Bishop, USBM
Mr. Killsgaard, USBM
Mr. J. L. Hefflund
Chron
Confirmation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 2 - 1954

DN 235 BUREAU MINES 11-2-54 9-33 AM

GEORGE C SELFRIDGE
DMEA

REURTT OCTOBER 29, 1954, DOCKET DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE MINING COMPANY. NEED CLARIFICATION OF TELETYPE. LINE 2 SAYS, DO NOT DISTRIBUTE AMENDMENT NO. 7 NOR PERMIT IT TO GO INTO EFFECT WITHOUT THE REQUIRED NEW OWNER'S CONSENT TO LIEN. LINE 3 SAYS, SUGGEST YOU RETURN TO OPERATOR THE COPIES OF AMENDMENT NO. 7 WHICH HE HAS SIGNED. INASMUCH AS THE AMENDMENT WAS SIGNED BY THE ADMINISTRATOR FOR THE GOVERNMENT, WE CANNOT RECONCILE THE TWO STATEMENTS.

W H KING

DENVER, COLO.

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

OCT 2 9 1954

DMEA 140
J.L.Hofflund
2919 7351

14X4401(01) Revolving Fund
Defense Production Act, Interior (Allocated Working Fund to the Office of the Secretary)

W.H. King, Executive Officer, DMEA Field Team Region IV, Bureau of Mines, Denver, Colorado

Reurtt October 27 Magma King Manganese Mining Company, Docket No. DMEA-2603, Contract Idm-2428. Do not distribute Amendment No. 7 nor permit it to go into effect without the required new Owner's Consent to Lien. Suggest you return to Operator the copies of Amendment No. 7 which he has signed, and accompany them with a notice of termination of the project as set forth in the form attached to Circular 33 for use under the termination provisions of short-form contracts prior to those of June 1954, leaving Article 4 in preserving the Government's rights to a percentage royalty. Please send at once information necessary for certifying the project.

George C. Selfridge
Chairman, Operating Committee

JLHofflund/emd 10/29/54

Copy to: Confirmation
DMEA Docket
Solicitor's Docket
M. R. Griswold (2)
Adm. R. File
Operating Committee
Mr. Bishop, USBM
Mr. Killsgaard, USGS
J. L. Hofflund
chron.
pending

SENT
OCT 29 1954
Clerical Service Section

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1954

alt
Betty

DN 235 BUREAU MINES 10-27-54 10-52 AM

CHAIRMAN, OPERATING COMMITTEE
DMEA

REFERENCE DOCKET DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE MINING COMPANY, YOUR LETTER OCTOBER 21, 1954, ENCLOSING HOFFLUND'S MEMORANDA OF OCTOBER 14 AND 19. AMENDMENT NO. 7 SIGNED BY OPERATOR, HOWEVER, DISTRIBUTION NOT MADE AS HE FAILED TO SUPPLY NEW OWNER'S CONSENT TO LIEN. SHOULD WE FORWARD OPERATOR'S COPY TO HIM AND ADVISE HIM OF TERMINATION OF CONTRACT AS OUTLINED IN HOFFLUND'S MEMORANDUM OF OCTOBER 14. PLEASE TELETYPE ADVICE.

W H KING

DENVER, COLO.

OCT 21 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-2428

Dear Mr. King:

With reference to your memorandum of September 22, 1954, regarding the termination of the cited contract, we are enclosing copies of the memorandums from the Acting Assistant Solicitor, Defense Minerals, dated October 14 and October 19, 1954. We believe that Mr. Hoffland has made it clear as to what action you should take to terminate this contract.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

JWALT/er 10/20/54

Enclosures 2

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

October 19, 1954

Memorandum

To: The Administrator, DMEA

Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (lead-zinc)

In my memorandum of October 14 I stated that: "This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7 . . ."

Mr. Alt has pointed out to me this day that the status of Amendment No. 7 is uncertain, and that it may never have become effective.

Amendment No. 7 was prepared in this office and transmitted to the Administrator by memorandum dated June 28, which stated: ". . . the Operator should be required to obtain a new Owner's Consent to Lien on the form which we have attached for this purpose."

In a letter dated September 16 by Mr. Walter F. Storms of the Field Team to the Operator appears this statement:

> "In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?"

The foregoing is hardly a notice to the Operator that Amendment No. 7 is not effective unless or until accompanied by the new Owner's Consent to Lien. This office has no knowledge as to whether the new Owner's Consent to Lien has ever been received.

Assuming that Amendment No. 7 did go into effect either by virtue of having received the new Owner's Consent to Lien or by virtue of having waived it, my memorandum of October 14 stating that: "This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7 . . ." remains correct. If, on the other hand, Amendment No. 7 did not go into effect, then the case is a proper one for giving a notice of termination, which can easily be done by reference to DMEA Circular 33.

I suggest that copies of this memorandum and of my memorandum of October 14 be sent to the Field Team with instructions to act according to whatever the facts may be.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund/emd

Copy to: DMEA Docket
Solicitor's Docket
W. R. Griswold
J. L. Hofflund
chron.

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

October 14, 1954

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2603, Magma King Manganese Mining Company, Contract Idm-E428 (Lead-Zinc)

By memorandum to me dated October 1 Mr. Griswold requested that I prepare a reply to a memorandum from Mr. King to the Operating Committee dated September 22 in which he recommends ". . . that the contract be terminated under the provisions of Article 8(b) of the contract."

This is not a suitable case for terminating the contract, as it is already terminated by virtue of the provisions of Amendment No. 7, the Operator having failed to comply with the requirement of resuming work not later than September 1. All that is necessary in these circumstances is to write to the Operator notifying him that the contract automatically terminated under the provisions of Amendment No. 7, and requiring him to take such winding-up actions as are provided for by the contract and as are deemed desirable.

I cannot prepare such a letter myself because I do not know what the status of the account with the Operator may be nor what reports or winding-up actions the Government may wish to require.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund/emd
Copy to: DMEA Docket
Solicitor'sDkt.
W.R.Griswold (2)
Attachment
J. L. Hofflund
chron.

October 1, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Chief, Base Metals Division

Subject: Termination Agreement for Magma King Manganese Mining Company, Docket No. DMEA-2603, Contract No. Idm-2428, Pinal County, Arizona, Lead-Zinc

Will you please answer Mr. King's memorandum dated September 22, 1954. Information regarding Mr. King's request is contained in a memorandum to Walter R. Storms from William R. Hardwick, dated September 17, 1954. Copies of these memorandums are only in our docket.

W. R. Griswold

W. R. Griswold

JWALT:er 10/1/54

Copy to: Docket
Base Metals
Chron.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 23 1954

224 New Customhouse
Denver 2, Colorado

September 22, 1954

AIRMAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Pinal County, Arizona

Enclosed are the original and three copies of a memorandum from William R. Hardwick, Mining Engineer, Tucson, Arizona, dated September 17, 1954, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, relative to nonresumption of work under the subject contract. Also enclosed are four copies of a letter dated September 16, 1954 from Walter R. Storms, Chief, Mining Methods Branch, Mining Division, Region IV, to Ralph J. Pomeroy, requesting advice as to their intentions regarding resumption of work.

Under the circumstances as recited in the foregoing we recommend that the contract be terminated under the provisions of Article 8(b) of the contract.

Please advise as to how we should proceed in the matter.

W H King
W. H. King

Enclosures

September 17, 1954

Memorandum

To : W. R. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Interim Report, DMEA Contract Idm-5428, Docket DMEA-2603, Magna King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of a short interim report by W. R. Hardwick of the Bureau of Mines about DMEA Exploration Project Contract No. Idm-5428. Magna King Manganese Mining Co.'s last recess period expired on September 1, so Hardwick went to the property yesterday to see if work had been resumed. No work had been resumed and from conditions on the property, it would seem that the operator has no intention of resuming work. The road to the mine was badly washed out, but evidently no effort had been made to repair it. The only equipment remaining at the mine was the skip. The hoist, compressor, generator and electric pumps all have been removed from the property.

This office wrote to Mr. Ralph J. Pomeroy, president of the company, on September 16 and asked if the company intended to resume work. Amendment No. 7 to this contract provided that the contract would be terminated if work were not resumed by September 1. This amendment has been signed by Pomeroy and the DMEA Administrator, but Pomeroy has never returned signed copies of "Owner's Consent to Lien" which were to accompany this amendment.

Walter R. Storms

Walter R. Storms

cc: W. R. King (8)
J. N. Faick
DMEA-2603
MF

WRStorms:frj

Defense Minerals
RECEIVED
SEP 23 1954

September 17, 1954

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-2428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on September 16, 1954. There was no one on the property and no indication that work on the contract would be resumed. The road was badly washed and the last half mile was impassable by automobile. This mine was visited last on June 2, 1954.

This short form contract was approved by W. H. King, Executive Officer, DMEA Field team Region IV, for the purpose of exploring a mineralized vein for lead-zinc ore. The contract provided for 400 feet of drifting, 200 feet of raise, and 500 feet of diamond drilling at an agreed estimated total cost of $23,180.00.

The contract was approved on October 23, 1952 and the starting points were set by John H. Soule' of the Bureau of Mines on October 31, 1952. From November 1952 to March 1953, the operator drove 194 feet of drift at a cost of $6,790.00. The operator then stopped work on the contract and has never resumed work. The contract has been kept alive by repeated requests by the operator for extensions of recess which have been granted. There appears to be little possibility that work on the contract will be resumed in the near future and it is recommended that the contract be terminated.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

cc: W. H. King (Orig. & 3)
J. N. Faick
DMEA-2603
DF

WRHardwick:frj

Minerals Administration
RECEIVED
SEP 23 1954

COPY

September 16, 1954

Mr. Ralph J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Ave.
Chandler, Ariz.

Re: DMEA Contract Idm-E428
Docket DMEA-2603
Ajax Lead-Zinc Mine
Pinal County, Ariz.

My dear Pomeroy:

As you know, your recess period for work under DMEA Exploration Project Contract No. Idm-E428 expired on September 1, and our engineer on visiting the Ajax mine today found that no work had been started. If you were unable to start work because of the washed-out condition of the mine road and intend to start work as soon as possible, I would suggest that you immediately write the DMEA Executive Officer in Denver. As you know, Amendment No. 7 provided that the contract be terminated if no work was started by September 1.

In your letter of August 9, you stated that the new "Owner's Consent to Lien" forms would be signed by the owner when he returned from the East. So far as I know, we never have received these signed forms. If possible, would you please have them signed and forwarded to me?

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
J. N. Faick
DMEA-2603
DF

WRStorms:frj

JUL 1 - 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-1428

Dear Mr. King:

We are enclosing the original and five copies of Amendment No. 7, with Annex II, to the cited contract, which have been signed by this office for the Government. This is in accordance with our teletype to you of June 16, 1954 which was in reply to your teletype of June 14, 1954.

The legal department states that as the Operator is a lessee and the Owner's Consent to Lien in this case is on an old form, and as we have added a new royalty annex and have provided for a "pseudo certification", the Operator should be required to obtain a new Owner's Consent to Lien on the forms attached for this purpose.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures 12

APPROVED:

J. H. Hedges
Member, Bureau of Mines

Philip W. Guild
Member, Geological Survey

JWAlt/bjl (6/29/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Gildersleeve
Mr. Bishop
Chron.

June 28, 1954

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Acting Assistant Solicitor, DMEA

Subject: Magma King Manganese Mining Company, Docket No. DMEA-2603 (Lead-Zinc), Contract Idm-B428

Attached is Amendment No. 7 to the subject contract in satisfactory legal form for execution.

However, as the Operator is a lessee and the Owner's Consent to Lien in this case is on an old form, and as we have added a new royalty annex and have provided for a "pseudocertification," the Operator should be required to obtain a new Owner's Consent to Lien on the form which we have attached for this purpose.

Henry C. Rubin
for J. L. Hofflund
Acting Assistant Solicitor

Attachments

HCRubin:ep 6-28-54

Copy to: Docket
Mr. Griswold (2)
Mr. Hofflund
Mr. Rubin
Chron.

June 18, 1954

Memorandum

To: Acting Assistant Solicitor, DMFA

From: Base Metals Division

Subject: Docket No. DMFA-2603, Magma King Manganese Mining Company
Contract No. Idm-F428

Will you please prepare Amendment No. 7 to the cited contract. This amendment is to allow the Operator to recess operations to not later than September 1, 1954, and is to extend the completion time by three months, or until October 23, 1954.

The date of the Contract is October 23, 1952. Amendment No. 5 changed the completion time from 18 to 21 months and allowed the operations to be recessed to May 1, 1954.

Amendment No. 6 recessed the operations to June 1, 1954.

In the event that the Operator does not resume work of the contract on or before September 1, 1954, the contract should automatically be terminated.

This amendment should include a pseudo-certification, but this should not prevent us from certifying it at a later date if the operation is resumed and a discovery is made.

J. W. Alt

JWAlt/bjl

Copy to: Docket
Base Metals
Chron.

T E L E T Y P E

X XXXXXXXXXXXXXXXX XXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXX

WRGriswold/bjl, Rm. 4058, Ext. 3386

Base Metals Div., DMEA, Interior

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated Working Fund to Office of Secy.)

Date: JUN 2 6 1954

To: W. F. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Peurtt June 14, Docket DMEA-2603, Magma King Manganese Mining Company. We will prepare Amendment No. 7, allowing 90-day extension for recess and like extension for completion time of contract.

George C. Selfridge

Chairman, Operating Committee

written 6/16/54

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals (DMEA)
Mr. Bishop (USBM)
Mr. Gildersleeve (USGS)
Accounts
Chron.

SENT
JUN 16 1954
Clerical Service Section

JUN 15 1954

DN 235 BUREAU MINES 6-14-54 4-08 PM

C O MITTENDORF

RE DOCKET NO. DMEA 2603, CONTRACT IDM-E428, MAGMA KING MANGANESE COMPANY. MATTER DISCUSSED IN OUR LETTER TO OPERATOR OF JUNE 8, 1954, TWO COPIES OF WHICH WERE FXXXXXXX FURNISHED TO YOU. OPERATOR IN REPLY TO OUR LETTER JUNE 8 REQUESTS AN ADDITIONAL 30 DAY EXTENSION OF THE RECESS PERIOD. PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED.

W H KING

DENVER, COLO.

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

Defense Minerals Administration
JUN 10 1954

224 New Customhouse
Denver 2, Colorado

June 8, 1954

Betty

Memorandum

To: C. O. Mittendorf

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company's Ajax Lead-Zinc Mine, Pinal County, Arizona.

For your information, relative to operations under the subject contract, we are enclosing the following:

1. Three copies of a memorandum report dated June 2, 1954, from William R. Hardwick, Mining Engineer, Tucson, Arizona, and transmittal thereof dated June 3, 1954, from the Chief, Mining Methods Branch, Mining Division, Region IV.
2. Two copies of a letter from this office requesting advice from the operator relative to resumption of operations.

W. H. King

Enclosures

June 3, 1954

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Interim Report, DMEA Contract Idm-E428, Docket DMEA-2603, Magna King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 6 copies of a short interim report by W. R. Hardwick of the Bureau of Mines on Exploration Project Contract No. Idm-E428.

Amendment No. 6 of this contract provided that work was to start again at the Ajax mine on or before June 1. Hardwick visited the mine on June 2 and found that no recent work had been done. Evidently none is contemplated as all machinery and equipment has been removed from the property.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA—2603
DF

WRStorms:frj

June 2, 1954

Memorandum

To : Walter R. Stearns, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMA-2603, Contract Ldm-2438, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on June 2, 1954. There was no one at the property and the compressor, hoist, pumps, and all machinery has been removed. There is no indication that work will be resumed in the near future.

A Mr. Nicolas, a prospector in the district, was living in the cam_ and he stated that he had not seen any of the Manganese King company officials recently and knew nothing of their plans.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 5)
DMA-2603
MF

WRHardwick:fr

224 New Customhouse
Denver 2, Colorado

June 8, 1954

REGISTERED MAIL

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Co.
547 N. Arizona Ave.
Chandler, Arizona

Re: Docket DMEA 2603 (Lead-Zinc)
Contract Idm-E428

Dear Mr. Pomeroy:

Your attention is directed to the provisions of Amendment No. 6, Contract Idm-E428, which stipulates that work shall be resumed under the terms of the contract on or before June 1, 1954. In that respect, we have been informed that on inspection of the property June 2, 1954 there was no one at the property and that the compressor, hoist, pumps, and all other machinery had been removed.

Your failure to resume operations as stipulated by Amendment No. 6 places you in default of the contract. Therefore we will appreciate advice from you at your earliest convenience as to your plans relative to resumption of operations.

If you plan to resume operations within the near future you should request further extension of the recess period for the consideration of the Defense Minerals Exploration Administration.

Yours very truly,

W H King

L. H. King
Executive Officer
DMEA Field Team, Region IV

cc: Contract
COMittendorf (2)
AHKoschmann
WRStorms
JWTownsend
Chron.

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

224 New Customhouse
Denver 2, Colorado

May 12, 1954

Memorandum

Amendment

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 6 to Contract Idm-E428 which has been executed in conformance with authorization in a teletype from W. S. Martin, Acting Chairman, dated April 29, 1954, to extend the period of recess of operations from May 1, 1954 to June 1, 1954. Also enclosed are three copies of a letter from the operator's attorney requesting an extension of the recess period.

Copies of the amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

John F. Shaw
John F. Shaw
For W. H. King

Enclosures

xxxxxxxxxxxxx
xxxxxxxxxxxxx
547 North Arizona Ave.
Chandler, Arizona

April 26, 1954

Mr. W. R. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado.

Re: Docket DMEA 2603
Contract Idm-4428

Dear Mr. King:

The above project, as you will note from the record, has been recessed to May 1, 1954. However, at the last minute we find that Magma King will not be able to actually commence work on this project May 1, 1954, as planned. Magma King President Ralph J. Pomeroy has been delayed for three weeks in New York and our plans to commence operation cannot be put in effect until his return. I therefore make this request as attorney for Magma King Manganese Mining Company for an additional thirty day extension of the recess and completion date of the above contract.

Sincerely yours,
Magma King Manganese Mining Co.

John Vanlandingham

JV/lf
cc: Mr. Walter R. Storms
Mining Methods Branch
Mining Division, Region IV
Tucson, Arizona

COPY

APR 2 9 1954

T E L E T Y P E

JWAlt/bjl, Rm. 4058, Ext. 3669

Base Metals Div., DMEA, Interior

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

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

Date:

To: W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Recert April 28, 1954, Docket DMEA-2603, Contract Idm-2428, Magna King Manganese Mining Company. This is your authority to grant thirty-day extension of recess period, as requested by you.

ACTING Chairman, Operating Committee

Written 4/29/54

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kinkel
Mr. Bishop
Accounts
Chron.

SENT
APR 2 9 1954
Clerical Service Section

C. O. Mittendorf
4-28-54
2:25 P.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 28 1954

~~OLC~~ 4/29/54
Beth

CR MINES DN 235 4-28-54 11-25 PM XXXX AM

O MITTENDORF

EFERENCE DOCKET DMEA-2603, CONTRACT ID M-E428, MAGMA KING MANGANESE
INING COMPANY. OPERATOR REQUESTS A 30-DAY EXTENSION OF RECESS PERIOD
LE TO DELAYED RETURN OF POMEROY AS OPERATIONS CANNOT BE RESUMED
NTIL HE RETURNS FROM NEW YORK. PLEASE TELETYPE AUTHORIZATION FOR
TENSION.

W H KING

er, Colo.

APR 28 3 10 PM '54
BUREAU OF M.P.
MAIL ROOM
WASHINGTON, D.C.

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

FEB 23 1954

224 New Customhouse
Denver 2, Colorado

February 17, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 5 to Contract Idm-E428 which has been executed in conformance with the authorization from the Chairman of the Operating Committee, by teletype dated January 27, 1954, to extend the recess period to May 1, 1954, extend the period for completion of the project work from 18 months to 21 months and amend article 6 of the contract form by substituting the provisions of Annex I attached to the amendment and made a part thereof. Also enclosed are three copies of a letter from the operator requesting an extension of the recess and completion period.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W H King
W. H. King

Enclosures

547 North Ariz. Ave.
Chandler, Arizona

January 21, 1954

Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We are herewith requesting extension of recess of operation on our project, Docket DMEA 2603 Contract Idm-E428, pursuant to your telephone conversation with our attorney Mr. John Vanlandingham.

The present financial condition of our company indicates that we will not have proceeds to renew operations on this project by February 1, 1954, as originally planned. We therefore request this extension of the recess of ninety days so that work can be commenced on or before May first. We also request a corresponding extension of a completion date of this contract.

Your immediate attention and reply will be appreciated.

Sincerely yours,
Magma King Manganese Mining Co.

Ralph J. Pomeroy, President

RJP/lf
cc: Mr. Walter R. Storms

Please note our new address.

COPY

DMEA

WRGriswold/bjl
3669 4058

January 27, 1954

W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Heartt January 25, 1954, Docket DMEA-2603, Magma King Manganese Mining Company, Contract Idm-3428. You are authorized to grant requested ninety-day extension of recess period and corresponding period of completion.

George C. Selfridge
Chairman, Operating Committee

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals — Rm. 4640
Accounts
Mr. Bishop
Mr. Kinkel
Chron.

SENT
JAN 27 1954
Clerical Service Section

C
O
P
Y

ORIGINAL TO DOCKET

TELETYPE

DN 235 BUREAU MINES 1-25-54 4-26 PM

C.O MITTENDORF

REFERENCE DOCKET DMEA 2603, CONTRACT IDM-E426, MAGMA KING MANGANESE MINING CO. OPERATOR REQUEST 90 DAY EXTENSION OF RECESS PERIOD EFFECTIVE FEBRUARY 1,1954 AND CORRESPONDING EXTENSION OF COMPLETION PERIOD BECAUSE OF FINANCIAL DIFFICULTIES. PLEASE TELETYPE AUTHORIZATION FOR PREPARATION OF NECESSARY AMENDMENT.

(SIGNED) W. H. KING

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

224 New Customhouse
Denver 2, Colorado

November 24, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are the original and two copies of Amendment No. 4 to Contract Idm-E428 which has been executed in conformance with authority contained in a teletype from the Chairman of the Operating Committee dated November 8, 1953 to extend the period of recess of operations from October 1, 1953 to February 1, 1954.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

W. H. King

Enclosures

DEPARTMENT OF THE INTERIOR
AGENCY: DMEA

Originator: aDKeating/bjl
Ext.: 3669 Room: 4058

Date: November 5, 1953
To: V. R. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt November 4, 1953, Docket DMEA-2603, Contract Ism-D428, Norma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona. We approve your preparing and executing an amendment for recession of work to February 1, 1954.

George C. Selfridge

Chairman, Operating Committee

Copy to: Docket
Admr. P. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Audits
Chron.

SENT
NOV 6 1953
Clerical Service Section

C
O
P
Y

DN 235 BUREAU MINES 11/4/53 3:54

C O MITTENDORF

REFERENCE DOCKET 2603 CONTRACT IDM-E428, MAGMA KING MANGANESE COMPANY, OUR MEMORANDUM OCTOBER 29, 1953. THE FOLLOWING TELEGRAM JUST RECEIVED FROM THE OPERATOR-- "HAVE JUST RETURNED FROM NEW YORK WHERE I HAVE BEEN ASSURED FINANCES TO CONTINUE PROGRAM UNDER DMEA CONTRACT NO. 2603. HOWEVER, FINANCES WILL NOT BE AVAILABLE UNTIL JAN. L. PLEASE ADVISE IF RECESS COULD BE CONTINUED UNTIL THEN.

RALPH J. POMEROY, PRESIDENT.

PLEASE TELETYPE ADVICE AS TO HOW WE SHOULD PROCEED IN THE MATTER.

King.

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

224 New Customhouse
Denver 2, Colorado

October 29, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603, (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona

In conjunction with the advice contained in the last sentence of a teletype dated October 13, 1953 from the Chairman of the Operating Committee, which was in reply to our memorandum to you of October 6, 1953, we are enclosing the original and three copies of a memorandum report from William R. Hardwick, Mining Engineer, Tucson, Arizona, dated October 23, 1953, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, which are relevant to termination of the subject contract.

We concur in the recommendations of the Chief, Mining Methods Branch, that the contract be terminated by mutual agreement and that a certification of discovery or development be issued.

W. H. King

W. H. King

Enclosures

11/5/53 See teletype from Executive Officer Region IV suggesting recess. Operator has funds.
K

MINING DIVISION
REGION IV

October 23, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Contract Idm-2428, Docket DMLA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

In regard to John Shaw's memorandum of October 13, with copy of a teletype from George C. Selfridge, Chairman of the DMLA Operating Committee, asking for a memorandum report containing our recommendations relative to termination of contract Idm-2428, I had W. R. Hardwick and John F. Haynes of the Bureau of Mines visit the Ajax mine on October 21 in order to try to examine the work done under this contract and to take some samples in the contract drift. However, Hardwick and Haynes were unable to enter the 176-foot level because of water. Samples were taken from two ore piles on the surface, the ore having been produced from the contract drift, but assays have not been received to date for these samples.

In the operator's narrative report which accompanied Forms MF-104 and MF-104A for February 1953, it stated: "Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations". Again in the operator's narrative report for March 1953, it stated that the entire 26 feet of drift was in low-grade ore. The Bureau of Mines engineer (T. A. Romslo) in his progress report for March, stated: "The Operator's Narrative Report is considered adequate. His statement that the entire 26 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays infuture reports". However, the project was recessed shortly after the above report was written so evidently no samples were taken.

cc W. H. King (7)
DMLA-2603
DF

WRStorms:frj

Inasmuch as the operator has submitted written statements, signed by Frank L. Metler who had direct charge of the project work, that ore was found in the contact drift, I recommend that the contract be terminated by mutual agreement with the certification of discovery being made a part of the termination agreement.

A short report by W. R. Hardwick is attached. You will note that Mr. Knott stated that Mr. Ralph J. Pomeroy, president of the company and the man who signed the contract, said that he intended to resume operations on November 1. However, a letter sent to Mr. Pomeroy at Phoenix on October 8 by this office was never answered, nor was a teletype message sent him on October 22 answered.

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

MINING DIVISION
REGION IV

October 23, 1953

Memorandum

To : Walter M. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-2428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

John F. Haynes of the Bureau of Mines and the undersigned engineer visited the Ajax mine on October 21, 1953 for the purpose of getting samples and other information for a final report. There were no regular employees of Magma King Manganese Mining Co. on the property. However, a Mr. Anett was operating the pump and removing the water from the mine. Mr. Anett stated that he owned property nearby and was living in one of the Magma King Manganese Mining Co.'s houses. Mr. Ralph J. Pomeroy had asked Mr. Anett to pump the water from the shaft. Mr. Anett stated that Mr. Pomeroy had said that he intended to resume operations on the DMEA contract on the first of November.

When the pumping was completed, Haynes and the undersigned attempted to enter the mine, but were unable to get farther than the bottom of the shaft. The water had been up approximately 20 feet above the 174 level. Two dump samples were taken, a sample of a pile of picked high-grade ore containing approximately 20 tons, and a sample of a pile of low-grade milling ore containing 100 tons. All of this ore had been mined from the drift which was completed under contract Idm-2428.

Mr. Anett said that Mr. Pomeroy might be in Phoenix that night and he was requested to tell Mr. Pomeroy that he should let the Bureau of Mines Tucson office know immediately what his plans were with respect to resuming operations.

William R Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 7)
DMEA-2603
DF

WRHardwick:frj

~~[illegible]~~
4058
Code-500

[illegible]

A. S. Keeling
3609 4058

[illegible]ember 12, 1953

[illegible]. L. King, Executive Officer, Region IV, Denver, Colorado

Reference October 6, 1953, [illegible] King Manganese Mining Company, Ida-1425. Subject project be terminated by mutual agreement if (1) it can be certified; (2) if work to date has not definitely disproved objectives and there is still a possibility of certification with additional work, in which case the termination agreement should include a clause guaranteeing repayment of Government's participation on a royalty basis on future production as though the project had been certified; and (3) if the work to date has definitely indicated that the project would never be certified if it were completed, in which case the termination

agreement should not include a repayment clause. Washington should be furnished detailed information supporting the type of action to be taken, and will prepare the agreement for execution by you.

George C. Selfridge

Chairman, Operating Committee

ACKeating/GCSelfridge/hmj/esf
(10-13-53)

CC to: Docket
Admr. Reading File
Op. Committee
Audit
Mr. Kinkel
Mr. Bishop
Base Metals Div. (DMRA Rm 4058)
Chron.

SENT
OCT 13 1953
Clerical Service Section

AGENCY DMEA

FROM: A. C. Keating
EXT: 3669 Room 4058

Date: October 12, 1953

To: W. H. King, Executive Officer, Region IV, Denver, Colorado

Docket DMT 2603 Dennis King Manganese Mining Company, Jax Mine, Pinal County, Arizona. Contract Adm-2428 if the project is to be certified suggest you endeavor to arrange with operator termination by mutual consent and advise us regarding your recommendations for certification.

Chairman, Operating Committee

ACKeating/hmj
(10-12-53)
CC to: Docket
Adm. R. File
Op. Committee
Audits
Mr. Kinkel
Mr. Bishop
Base Metals Division (DMEA Rm 4058)
Chron.

DOCKETS DIVISION
OCT 1953
RECEIVED

Bureau of Mines
DEPARTMENT OF THE INTERIOR
RECEIVED
OCT 14 1953
BASE METALS BRANCH

orig. in docket

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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

October 6, 1953

AIRMAIL

Memorandum

Keating
Telem

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed is the following material relative to the status of work under the subject contract:

1. Original and three copies of an interim report dated October 2, 1953 by William R. Hardwick, Mining Engineer, Tucson, Arizona, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date.

2. One copy of Progress Report dated April 15, 1953 from T. M. Romslo, Mining Engineer, Tucson, Arizona, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, of the same date, pertaining to an inspection of progress under the subject contract for the month of March 1953.

Amendment No. 3, dated June 26, 1953, extended the life of the contract from 12 months to 18 months and authorized a recess of operations from June 1, 1953 to October 1, 1953.

As indicated in the interim report under item 1 above, the operator has not resumed operations as stipulated in Amendment No. 3 and apparently he does not intend to resume operations at any time.

Before we contact the operator in the matter of noncompliance with the contract as amended we will appreciate your advice by teletype as to how we should proceed in the matter.

W. H. King
W. H. King

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

MINING DIVISION
REGION IV

October 2, 1953

MEMORANDUM

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : Contract Idm-1428, Docket MM-2603, Magna King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 6 copies of a short interim report on contract Idm-1428 by W. R. Hardwick of the Bureau of Mines. As the company's recess expired on October 1, 1953, Hardwick visited the property today to see if work under the contract had been restarted.

The mine was full of water and no work had been started. A machinery salesman, who was at the property examining the equipment, told Hardwick that he understood that all the machinery was for sale.

We have not contacted company officials but it would seem that no further work was planned.

Walter R. Storms
Walter R. Storms

CC W. H. King (6)
MM-2603
MF

WRStorms:frj

MINING DIVISION
REGION IV

October 2, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Arizona, Docket-2603, Contract Idm-R428.

The Ajax Lead-Zinc Mine was visited on October 2, 1953. No one connected with the Magma King Manganese Company was on the property. There were no signs that work on the contract would be resumed.

A salesman from Western Machinery Company stated that he understood that the machinery was for sale.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 6)
DMEA-2603
DF

WRHardwick:frj

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 10-9

REFERRED TO:

1. Code 500
2. Code 220
3.
4.

FOR:

- ____ Action
- ____ Approval
- ____ Comment
- ____ Conference
- ____ Consideration
- ____ Filing
- ____ Instructions
- ____ Investigation
- ____ Initials
- ____ Mailing
- ____ Previous correspondence
- ____ Recommendation
- ____ Record of ____
- ____ Referring to ____
- ____ Reply for signature of ____
- ____ Rewriting
- ____ Signature
- ____ Suggestions
- ____ Your information

REMARKS:

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

MINING DIVISION
REGION IV

April 15, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : March 1953 Progress Report, Docket DMEA-2603, Contract Idm-8428, Magma King Manganese Mining Co's Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

DEPARTMENT OF THE ...
Defense Liaison Administration
RECEIVED
OCT - 8 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 8 1953

MINING DIVISION
REGION IV

April 13, 1953

Memorandum

To : W. R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for March 1953, Magma King Manganese Mining Co.'s Ajax Lead Zinc Mine, Pinal County, Ariz., Docket DMEA-2603, Contract Idm-L428.

The Ajax mine was visited on April 1, to check the advance for March and to determine if the work continues to be in conformance with subject contract. An inspection of the project was made in the company of Frank L. Metler, superintendent for the company.

All work on the project has been confined to the advance of the north drift on the 176-foot level. During March, the drift was advanced 26.0 feet. On April 1, the face of the drift was 65.5 feet from station 176-8 and 194.0 feet from the starting point.

Contract, Forms MF-104 and 104-A, and Operator's Narrative Report

The following is indicated by the inspection of the project and from a review of the subject data:

1. The work performed and for which claim is made conforms with the contract and is as reported on Form MF-104A;

2. The 26 feet of advance has been charged for on Form MF-104 at the contracted rate of $35.00 per foot;

3. The Operator's Narrative Report is considered adequate. His statement that the entire 26 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays in future reports.

CC W. H. King (orig. & 6)
DMEA-2603
DF

WRStorms:frj

Defense Nuclear Agency
RECEIVED
OCT - 5 1983

The next progress examination will be for the month of May, as a recess of one month in operations has been granted by the Defense Minerals Exploration Administration, or from April 1 to May 1.

T. M. Romslo, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

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

SEP 25 1953

Docket No. DMEA 2603 Magma King Manganese Mining Co. (Lead-Zinc)
Ajax Mine, Pinal County, Arizona, Contract No. Idm-E428

Contract dated October 23, 1952, Form MF-200 A, (February 1952) to be completed within 12 months, extended by amendment six months to April 23, 1954.

Exhibit "A" Digest

Drifting 400 ft. at $35 per foot	$ 14,000.00
Raising 200 ft. at $33 per foot	6,600.00
Diamond drilling 500 ft. at $5.00 per foot	2,500.00
Total estimated cost of the project	$ 23,100.00
Government participation at 50%	11,550.00
Total progress to date - drifting 168 ft. at $35.00	
Expenditures to March 1953	$ 5,880.00
Remainder	17,220.00

Amendment 1 - April 1, 1953 - Recess for 30 days to May 1, 1953.
Amendment 2 - May 20, 1953 - Recess to June 1, 1953.
Amendment 3 - June 1, 1953 - Recess 4 months to October 1, 1953, Extension of time for completion from 12 months to April 1, 1954.

Field Team examination March 5, 1953, reported work conforms to contract. Reported a quartz vein about 2½ ft. wide containing scattered lead-zinc-copper values - no assays. The work has been efficiently done.

A diamond drill hole drilled at Operator's expense revealed nothing of value.

February 5, 1953 - Operator reports considerable chalcopyrite in broken material in face of water course - grab sample 0.02 Au., 2.0 oz. Ag., 6.90 Cu.

Continued recesses requested first to correct bad ventilation conditions and increasing flow of water not taken care of in contract, then changes being made not completed, then to study and re-map the program of work, and to do some diamond drilling and raising before continuing drifting.

The mine was opened in 1906 with some small production averaging 8% Pb., 6% Zn., 0.14 % Cu., and 1.2 ozs Ag. per ton. The mine is equipped for small operation and the Operator will do all necessary preliminary work at his own expense.

A deposit of lead-zinc ore has been partially developed by a shaft, and ore has been cut by diamond drilling north of the shaft. It is estimated that probable ore may be disclosed by the exploration work in an amount of some 14,000 tons of 10% combined lead and zinc.

where drilling? not SMEA

The project appears to be reasonable and has an opportunity to indicate sufficient ore to justify a small operation under favorable economic conditions.

The recess to October 1, 1953, can do no harm provided the Operator starts work on that date as agreed.

Keating
A. G. Keating

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

224 New Customhouse
Denver 2, Colorado

June 26, 1953

Memorandum

To: C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 3, Contract Idm-E428, Docket 2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Amendment No. 3 to Contract Idm-E428. Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a teletype from this office recommending this amendment and three copies of a teletype from the Chairman of the Operating Committee authorizing this amendment.

W H King
W. H. King

Enclosures

JHS:ld

cc: Koechmann
Storms
sub
chron

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

COPY

AGENCY .....

TELETYPE

Originator:
Ext.: ..... Room: .....

Appro.:
Date: WASH DC BU MINES 310 6-4-53 11-20 AM
Time:
No.:
To: W H KING

Subject:

REURTT DOCKET DMEA 2603 MAGMA KING MANGANESE MINING COMPANY, CONTRACT IDM-E428. WE APPROVE RECESS OF FOUR MONTHS FROM JUNE 1, 1953 TO OCTOBER 1, 1953 WITH LIKE EXTENSION FOR TIME FOR COMPLETION OF THE WORK AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM.

GEORGE C SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

COPY

TELETYPE

BUR MINES DN 235 6-1-53 3-45 PM

C O MITTENDORF

WE HAVE RECEIVED THE FOLLOWING TELEGRAM FROM RALPH J. POMEROY, PRESIDENT, MAGMA KING MANGANESE MINING COMPANY, CONTRACT NO. IDM-E428 DOCKET NO. DMEA 2603
"I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTHS RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603."
WE RECOMMEND THAT THIS REQUEST BE GRANTED. PLEASE TELETYPE YOUR APPROVAL.

W H KING

COPY TELEGRAM

W H KING, EXECUTIVE OFFICER DMEA FIELD TEAM REGION 4
224 NEW CUSTOM HOUSE

I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTH RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603.

RALPH J POMEROY PRESIDENT MAGMA KING MANGANESE MINING CO

2603

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
(Received)
JUN 10 1953

Mn Keating -
Form 4058

DMEA

3469 ACKeating/bjl 4058

June 3, 1953

W. R. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt docket DMEA 2603, Magma Mine Manganese Mining Company, Contract Idm-8428. We approve recess of four months from June 1, 1953 to October 1, 1953 with like extension for time for completion of the work and suggest you prepare and execute amendment in compliance with Operating Committee memorandum.

Chairman, Operating Committee

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals (DMEA)
Mr. Bishop (USBM)
Mr. Kinkel (USGS)
Chron.

SENT
JUN 4 1953
Clerical Service Section

BUR MINES DN 235 6-1-53 3-45 PM

Keating
Betty

CO MITTENDORF

WE HAVE RECEIVED THE FOLLOWING TELEGRAM FROM RALPH J. POMEROY, PRESIDENT, MAGMA KING MANGANESE MINING COMPANY, CONTRACT NO. IDM-E428, DOCKET NO. DMEA 2603
"I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTHS RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603."
WE RECOMMEND THAT THIS REQUEST BE GRANTED. PLEASE TELETYPE YOUR APPROVAL.

W H KING

MAY 2 6 1953

Mr. L. H. King, Executive Officer
RMO Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. [illegible] 2603 (Lead-Zinc)
Niagara Zinc Manganese Mining Co.
Ajax Mine, Pinal County, Arizona
Contract No. Idm-2428

Dear Mr. King:

This is in reply to your memorandum of April 17, 1953, regarding the comment of the Operator relative to the withholding of Government funds during a recession of work for the month of March.

The withholding of funds during the recession period, in this case, is required principally to take care of items that may not be allowed in the final audit should no further work be done. The amount to be withheld may be determined by your office in consultation with your certifying officer and the RMO auditors when deemed advisable.

It may be advisable for you to inform the Operator so that he may more clearly understand the reasons for withholding funds.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

AGKeating/hmj
(5/25/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Division
Mr. Kinkel
Mr. Bishop
Mr. Keating
Chron.

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

224 New Customhouse
Denver 2, Colorado

May 20, 1953.

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 2 to Contract Idm-E428 (Lead-Zinc), Docket DMEA-2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-E428, Docket DMEA-2603.

Copies of this Amendment have been given to the Operator, Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a letter from the Operator requesting this Amendment, three copies of a telegram from the Executive Officer to the Administrator requesting approval, and three copies of a telegram from the Chairman of the Operating Committee to the Executive Officer, Region IV, approving this Amendment.

W. H. King
W. H. King

Enclosures

COPY

WASH DC BU MINES 310 5-5-53 2-14 PM

W H KING

REURTT DOCKET DMEA-2603, MAGMA KING MANGANESE MINING COMPANY, AJAX MINE, ARIZONA, CONTRACT IDM-E428. WE APPROVE REQUEST BY OPERATOR FOR THIRTY-DAY ADDITIONAL RECESS.

G.C. SELFRIDGE, CHAIRMAN

COPY

DN 235 BUREAU MINES 5-1-53 1-37 PM

C O MITTENDORF

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGRET THIS DELAY, BUT WE FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED." WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W.H. KING

COPY

MAGMA KING
MANGANESE MINING COMPANY
Superior, Arizona

April 30, 1953

Mr. W.H. King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Request is hereby made that an additional 30 day recess be granted the project on the Ajax mine DMEA Docket 2603. We regret this delay, but we find that the changes we are making have not yet been completed.

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

RJP/lf

DMEA

AGKeating/bjl
3669 2616

May 5, 1953

W. H. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

Reurtt Docket DMEA-2603, Harman King Manganese Mining Company, Ajax mine, Arizona, Contract Idm-U428. We approve request by Operator for thirty-day additional recess.

George C. Selfridge

G. C. Selfridge, Chairman
Operating Committee, DMEA

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kinkel
Accounts
Chron.

SENT
MAY 5 1953
Clerical Service Section

C
O
P
Y

Keating
Betty

DN 235 BUREAU MINES 5-1-53 1-37 PM

C O MITTENDORF

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "431735 XXXXXX "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PRPXXX PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGREAT THIS DELAY, BUT WE FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED."

WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W. H. KING

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

224 New Customhouse
Denver 2, Colorado

April 17, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 1 to Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company (Lead-Zinc)

Enclosed are the original and two copies of Amendment No. 1 to Contract Idm-E428. Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

Also enclosed are three copies of a letter from the operator requesting this amendment, three copies of a teletype from the Executive Officer, Region IV, to the Administrator requesting approval of this amendment, and three copies of a teletype from the Chairman of the Operating Committee to the Executive Officer approving this amendment.

W H King
W.H. King

Enclosures

COPY

TELETYPE

WASH DC BU MINES 310 3-30-53 2-45 PM

W H KING,

REURTEL MAGMA KING MANGANESE MINING COMPANY DOCKET 2603 CONTRACT IDM-E428 WE APPROVE RECESS OF THIRTY DAYS WITH WORK TO BE RESUMED MAY 1, 1953 AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM 18 DATED MARCH 9th.

GEORGE C SELFRIDGE

COPY

TELETYPE

C O MITTENDORF
WASH DC BU MINES 319

THE FOLLOWING REQUEST HAS BEEN RECEIVED FROM MAGMA KING MANGANESE MINING COMPANY, DOCKET DMEA 2603, CONTRACT IDM-E428 "WE HAVE BEEN EXPERIENCING SOME DIFFICULTIES IN THE AJAX MINE IN VENTILATION AND INCREASING AMOUNT OF WATER WHICH WE ARE ENCOUNTERING IN OUR DEVELOPMENT PROGRAM. IN ORDER TO CORRECT THESE MATTERS WHICH ARE NOT INCLUDED IN OUR DMEA CONTRACT, WE REQUEST THIRTY DAY RECESS WITH WORK BEING RESUMED THE FIRST OF MAY." PLEASE GIVE US YOUR RECOMMENDATIONS BY RETURN TELETYPE.

W H KING

C
O
P
Y

224 New Customhouse
Denver 2, Colorado

March 27, 1953

Mr. Ralph J. Pomeroy, President
Manganese Mining Company
Superior, Arizona

Dear Mr. Pomeroy:

This will acknowledge receipt of your letter dated March 23, 1953 requesting a thirty day recess of work under Contract Idm-E428. This request has been forwarded to our Washington Office for approval.

Very truly yours,

/s/ W. H. King

W. H. King
Executive Officer
Field Team, Region IV

C
O
P
Y

MAGMA KING
Manganese Mining Company
Superior, Arizona

March 23, 1953

Mr. W. H. King
Executive Office, D.M.E.A.
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We have been experiencing some difficulties in the Ajax Mine in ventilation and increasing amount of water which we are encountering in our development program. In order to correct these matters which are not included in our D. M. E. A. contract, we request a thirty day recess with work being resumed the first of May.

Hoping this meets with your approval, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

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

224 New Customhouse
Denver 2, Colorado

April 17, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company (Lead-Zinc)

Enclosed for your information is a copy of a letter dated April 15, 1953 from the president of the Magma King Manganese Mining Company in reply to our letter dated April 8, 1953. Copies of the letter dated April 8 were sent to your office.

W.H. King

W.H. King

Enclosure

COPY

MAGMA KING
MANGANESE MINING COMPANY
Superior, Arizona

April 15, 1953

Mr. W.H.King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

You will please find enclosed the six copies of the Amendment of Contract, No. Idm-E428, signed and sealed as requested.

With regards to the answer received April 8th, from your office in relation to the need for withholding the Government participation of the cost of the project for the month of March, I wish to make the following comment.

It would appear that the instructions from the Washington office should not apply to this particular contract, for the reason that the Government has no interest in any of the equipment used in connection with this project. All of the equipment, operating capital, etc., was furnished by this Company and inasmuch as the work done for the month of March has been paid in full, we feel such an imposition is not warranted. However, as it is planned to resume operations by May first it is assumed that this payment will be made shortly thereafter by the Government as scheduled heretofore.

Thanking you for your confidence and effort in the matter, I am,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President.

RJP/lf

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

224 New Customhouse
Denver 2, Colorado

April 8, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 13 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, Docket DMEA 2603, Magma King Manganese Mining Company

Enclosed are two copies of a letter dated April 3, 1953 from the Magma King Manganese Mining Company and two copies of our reply.

W. H. King

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

April 8, 1953

Mr. Ralph J. Pomeroy, President
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Dear Mr. Pomeroy:

Reference is made to your letter dated April 3, 1953, regarding withholding the percentage of Government participation in the cost of Exploration Project Contract Idm-E428 for the month of March 1953.

We have received the following instructions from the Washington office: "Any agreement for the suspension of operations should provide also for the resumption of operations, subject to any contingencies that may be agreed upon. The agreement should also provide for whatever report may be deemed necessary from the operator, for the preservation of any equipment in which the Government has an interest, and for withholding a sufficient sum to secure the Government's interest in equipment and to procure the making of suitable reports, present or future. The amount withheld might be more or less than 10 percent, depending upon circumstances."

If you have any further comments please advise us.

Very truly yours,

W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region IV

JFS:jp
cc Contract
Chron
WRStorms
AHKoschmann (2)

COPY

MAGMA KING MANGANESE MINING COMPANY
Superior - Arizona

Office
532 Security Building
Phoenix, Arizona

April 3, 1953

Mr. W.H.King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

I am in receipt of your letter of April 1, 1953 and the six copies of the Amendment No. Idm-E428. I have signed the same, but it is impossible to immediately affix the Corporate seal as at the present time it is in New York City. The Amendment is acceptable and as soon as it is possible to have the Corporate seal affixed I will return them to your office.

In the meantime would you please clarify the reason for withholding the percentage of the Governments participation in the cost of the project for the month of March, 1953. Inasmuch as the work has been done and the company has paid both Government participation and our own costs we feel that there should be no delay in payment by the Government because of the recess as requested.

Thanking you for your prompt attention, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

RJP/lf

Base Metals Div. DMEA

Marketing 7616
3669

March 27, 1953

Wm E. King, Executive Officer, DMEA Field Team, Region IV, Denver, Colorado

[illegible] MINING FOR MINING COMPANY DOCKET 2603 CONTRACT AT-[illegible]-BA28
[illegible] NOTICE OF THIRTY DAY SUSPENSION TO BE RESUMED MAY 1, 1953
AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH
OPERATING COMMITTEE MEMORANDUM 18 DATED MARCH 9TH.

George C. Selfridge

CHAIRMAN OPERATING COMMITTEE

Copy to: Docket
Admr. R. File
Op. Committee
✓Base Metals Div.
A. G. Keating
Accounts
Confirmation
Chron.

SENT
MAR 31 1953
Clerical Service Section

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

Wisenwald
Koeting

224 New Customhouse
Denver 2, Colorado

March 27, 1953.

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 30 1953

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2603, Contract Idm-E428, Magma King Manganese Mining Company.

Enclosed for your consideration is a request for recess of work under the terms of Contract Idm-E428. This request was transmitted to you by teletype on March 26, 1953.

W. H. King
W. H. King

Enclosure

COPY

MAGMA KING
Manganese Mining Company
Superior, Ariz.

March 23, 1953.

Mr. W. H. King
Executive Office, D.M.E.A.
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We have been experiencing some difficulties in the Ajax Mine in ventilation and increasing amount of water which we are encountering in our development program. In order to correct these matters which are not included in our D.M.E.A. contract, we request a thirty day recess with work being resumed the first of May.

Hoping this meets with your approval, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy, President

C. O. Mittendorf
3-26-53
12:55

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1953

BUR MINES DN 235 3-26-53 10-55 AM

C O MITTENDORF

THE FOLLOWING REQUEST HAS BEEN RECEIVED FROM MAGMA KING MANGANESE MINING COMPANY, DOCKET DMEA 2603, CONTRACT ID MXXX IDM-E428 "WE HAVE BEEN EXPERIENCING SOME DIFFICULTIES IN THE AJAX MINE IN VENTILATION AND INCREASING AMOUNT OF WATER WHICH WE ARE ENCOUNTERING IN OUR DEVEELOPMENT PROGRAM. IN ORDER TO CORRECT THESE MATTERS WHICH ARE NOT INCLUDED IN OUR DMEA CONTRACT, WE REQUEST T THIRTY XXXX REQUEST A THIRTY DAY RECESS WITH WORK BEING RESUMED THE FIRST OF MAY." PLEASE GIVE US YOUR RECOMMENAXXX RECOMMENDATIONS BY RETURN TELETYPE.

W H KING

Denver, Colo.

MAR 26 1 26 PM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

224 New Customhouse
Denver 2, Colorado

October 30, 1952

REGISTERED

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E428, DMEA Docket 2603, Magma King Manganese Mining Company

Enclosed are the original and two copies of Contract Idm-E428. Copies of this contract have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King
W. H. King

Enclosures

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY Mines, Region IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 5 1952

TELETYPE

Originator:
Ext.: Room:

Appro.:
Date: October 29, 1952
Time:
No.:
To: C. O. Mittendorf -- Washington, D. C.

Subject: Please assign a number to contract covering docket No. DMEA 2603, Magma King Manganese Mining Company, an Arizona Corporation, 532 Security Building, Phoenix, Arizona, commodity lead-zinc. Property in Pinal County, Arizona. Government participation is $11,550.00, total amount of contract $23,100.00. Contract dated October 23, 1952. Advise by return teletype.

W. H. King
W. H. King

CONFIRMATION

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—60915-1

Mr. Rolf J. Pomeroy, President
Magma King Manganese Mining Company
532 Security Building
Phoenix, Arizona

Re: Docket No. DMEA-2603 (Lead-Zinc)
Exploration Loan
Ajax Mine, Arizona

Dear Mr. Pomeroy:

Your application for Government assistance for the purpose of undertaking an exploration program at your property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration.

The application has been referred to:

Mr. W. H. King
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

The Regional office will communicate with you regarding your project at the earliest opportunity.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Administrator
Defense Minerals Exploration
Administration

AGKeating/mb
July 24, 1952
cc to: Docket
Adm. Reading File
Operating Comm.
Mr. Keller
Mr. Keating
Mr. Bishop
Mr. McKnight
Region IV
Chron

Mr. W. H. King
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magna King Manganese Mining Company
Ajax Mine, Arizona

Dear Mr. King:

The above-numbered application was recently submitted to this office for consideration. A copy of the application together with supporting maps and papers has been forwarded to you. Our review of the docket indicates that a field examination will be required.

Your attention is called to the program of work outlined in this application relative to 600 feet of drifting and a series of exploration raises. The field examination may give evidence that a portion of this program can be more satisfactorily accomplished by diamond drilling. For your files and information we are enclosing a copy of a memorandum dated July 18, 1952, written by Messrs. R. L. Newcomb and O. M. Bishop, recommending a field referral.

Should the results of the examination warrant further consideration of the project and evidence the possibility of worth-while Government participation, we will a preciate your furnishing such information and data as should be available to us for proper consideration of a contract.

Sincerely yours,

George C. Selfridge
ACTING Chairman, Operating Committee

Enclosure:
APPROVED:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

AOKeating/mb
July 24, 1952
cc to: Docket
Adm Reading File
Operating Committee
Mr. Keller
Mr. Keating
Mr. Bishop
Mr. McKnight
Region IV
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
DEFENSE MINERALS EXPLORATION ADMINISTRATION

COPY

WASHINGTON 25, D. C.

July 18, 1952

Memorandum

Re: DMEA-2603
Ajax Mine
Mineral Hill District
Pinal County, Arizona
$59,727
Lead-Zinc

To: Mr. H. F. Keller

From: E. L. Newcomb, USGS
O. M. Bishop, USBM

Subject: Recommendation for field referral

The applicant requests assistance to explore a prominent lead-zinc fissure vein which can be traced on the surface for nearly 2000 feet. The proposal involves rehabilitation of a 200 foot shaft, 600 feet of drifting north on the 176 level, 200 feet of raising from the new 176 level drift extension, 150 feet of raising for a new shaft at a point 670 feet north of the old shaft, and 2000 feet of diamond drilling from the new drift to test for downward extensions of mineralization.

The old workings consist of a 200 foot inclined shaft, 100 feet of drift on the 50 level, 20 feet of crosscut on the 90 level and 200 feet of crosscut and drift on the 176 level.

The Ajax vein is in schist, and strikes N 25° W and dips 50°-70° SW. The shaft and levels have been well sampled. The average grade of ore in the shaft below the 50 level is 3.8% lead and 9.8% zinc. Samples taken in 1948 on the 176 level averaged about 10% in combined lead-zinc. Three cars of ore from the 50 level averaged 10.5% lead and 3.71% zinc. Outcrops of mineralization on the vein are strongly oxidized and the applicant states that oxidation extends down to the 50 level. Lead sulfide is prominent on this level, but below this level the grade increases in zinc and copper and lead decreases. In addition to the data on the old workings, the applicant reports that a diamond drill hole 400 feet north of the shaft cut 8½ feet of zinc ore which assayed 16.9% zinc. This ore was intersected at a depth which corresponds to a 100 level in the shaft.

Although the existence of mineralization near the shaft has been well established by the old workings, there is a possibility that this area contains a single plunging oreshoot. The one diamond drill hole may in turn be on another oreshoot, rather than an extension of the mineralization developed near the shaft. Further drilling along the strike of the vein appears to be a better approach to exploration of the possible mineralization than the applicant's proposed underground project, which borders on development work rather than exploration. In fact, it would be difficult to plan a more

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

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF INTERIOR

RETURN RECEIPT
REQUESTED

REASON CHECKED
Unclaimed
Unknown
Refused
Insufficient address
Moved, left no address
No such office in state
Do not remail in this envelope
POSTMASTER: RETURN TO SENDER

REGISTERED

SECRETARY'S
MAIL CENTER
SEP 10 1962
INTERIOR DEPT.

598393

REGISTERED MAIL

Mr. R. J. Pomeroy
Magma King Manganese Mining Company
~~421 East 4th Avenue~~
~~Mesa, Arizona~~

Superior Arizona

Received
220

13

thorough development program than the work the applicant has outlined as exploration. We recommend that the application be referred to the field team for their review. Inasmuch as copper is reported in the lower workings and may increase at depth, the field team should include copper in their consideration of any proposed work at the Ajax Mine. Field review may give evidence to support the 600 feet of drifting as opposed to exploration by diamond drilling, but it is doubtful that the raises could be justified.

/s/ E. L. Newcomb
Geologist

/s/ O. M. Bishop
Mining Engineer

SEP 4 8 1962
WASHINGTON, D.C.
AUG 30 1962
REG. DIV.
SEP 4 1962
WASHINGTON, D.C.
AUG 30 1962
REG. DIV.

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee ☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED	ADDRESS WHERE DELIVERED *(only if requested in item #1)*

C55—16—71548-4 GPO

WASHINGTON, D.C.
AUG 30 1962
REG. DIV.

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

August 29, 1962

Re: DMEA-2603 (Lead-Zinc)
Magma King Manganese
Mining Company
Ajax Mine
Pinal County, Arizona
Contract Idm-E428

REGISTERED MAIL

Mr. R. J. Pomeroy
Magma King Manganese Mining Company
421 East 4th Avenue
Mesa, Arizona

Dear Mr. Pomeroy:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

See memo to R-III
9/12/62

MME Form 63
Revised 3-62

DMEA-2603
Idm-E428

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since June 6, 1960, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since June 6, 1960, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____		
_____	_____	_____

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

Type	Quantity	Estimated Grade	Location
Ore	_____ Tons	_____	_____
Concentrates	_____ Tons	_____	_____
Other	_____ Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 22 1960

DATE	INITIALS	
8-22	gad	220
"		110
8-23		800
"	gh	500
		225

August 18, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Report of Certified Project for the period
January 1, 1959 to December 31, 1959
DMEA Docket No. 2603 (Lead-Zinc) Contract No. Idm E428
Magma King Manganese Mining Company
(Ajax mine)
Pinal County, Arizona

The subject certified project was listed in your memorandum of August 12, 1960 as not having an annual report.

Our records show that we forwarded statement in lieu of interim report to your office on June 3, 1960. Attached are the original and two copies of that interim report. recd 6-6-60 + filed in 2603 Rpts. gad.

Hugh M. Connors

Hugh M. Connors

Attachments

Copy

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 1960
DATE | INITIALS

OFFICE OF MINERALS EXPLORATION

REGION III

Statement in Lieu of Interim Report
of Certified Project

Reporting Period January 1, 1959 to December 31, 1959

Docket and Contract Number DMEA-2603, Idm-E428

Operator Magma King Manganese Mining Company (~~Lead-Zinc~~)
(Ajax mine) Pinal County, Arizona

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks:

Letters sent to the Operator at various addresses were returned by the P. O. department marked "unclaimed".

On site inspection of property made by writer while in vicinity on other official business, 5/23/60. Findings during this and previous inspections indicate the property has been inactive since shortly after the contract was terminated.

Frank H. Allen, one of the owners of the property, said in a letter received by the OME 5/25/60 that: The property is still held by the Operator who can probably be contacted at Pomeroy Development Co., 421 East 4th Ave., Mesa, Arizona.

Signed S/ T. M. Romslo Date 5/27/60

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Building 20 - Federal Center
Denver 25, Colorado

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 6 1960

DATE	INITIALS	CODE
6-6	gad	VVO
6/6	on leave	~~170~~
6/6	EEF	800
"	gla	500
		225

June 3, 1960

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Hugh M. Connors, Acting Field Officer, OME, Region III

Subject: Report of Certified Project for the period
January 1, 1959 to December 31, 1959

DMEA Docket No. 2603 Contract No. Idm-E428 (Lead-Zinc)
Magma King Manganese Mining Company
(Ajax mine)
Pinal County, Arizona

Enclosed are the original and one copy of the subject report.

Hugh M. Connors

Hugh M. Connors

Enclosure

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 6 1960

DATE	INITIALS	CODE

OFFICE OF MINERALS EXPLORATION

REGION III

Statement in Lieu of Interim Report
of Certified Project

Reporting Period January 1, 1959 to December 31, 1959

Docket and Contract Number DMEA-2603, Idm-E428

Operator Magma King Manganese Mining Company (Lead-Zinc)
(Ajax mine) Pinal County, Arizona

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks:

Letters sent to the Operator at various addresses were returned by the P.O. department marked "unclaimed".

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Frank H. Allen, one of the owners of the property, said in a letter received by the OME 5/25/60 that: The property is still held by the Operator who can probably be contacted at Pomeroy Development Co., 421 East 4th Ave., Mesa, Arizona.

Signed D M Pomeroy Date 5/27/60

OME, REGION III

Statement in Lieu of Semiannual Report

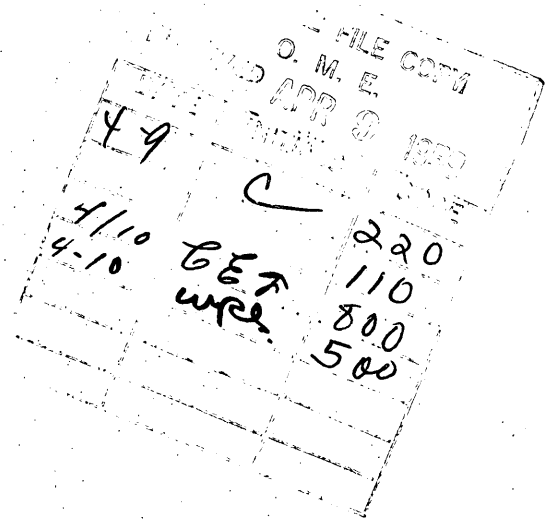
Reporting Period July 1, 1958 - December 31, 1958
Docket and Contract Number DMEA 2603 - Idm-E428 (Pb-Zn)
Operator Magma King Manganese Co.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [X]

Remarks:

No DMEA ore stockpiled.



Original signed by

Signed T. M. Romslo

Date April 2, 1959

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

April 28, 1958

Memorandum

To: Wingfield Chamberlain, Statistics Branch
Division of Operation Control & Statistics

From: Director, Division of Base Metals

Subject: Semi-Annual Reports for Certified Project, for the Period July 1, 1957 thru December 31, 1957.

The following projects were inactive during the cited period.

Docket No.	Contract No.	Name
DMEA-1 & 1A	Idm-E4	Chief Consolidated Mining Company
DMEA-989	Idm-E131	Harrington Mines, Company
DMEA-1094	Idm-E16	Naildriver Mining Company
DMEA-1098	Idm-E13½	Combined Metals Reduction Company
DMEA-1708	Idm-E229	Kentucky-Utah Mining Company
DMEA-2603	Idm-E428	Magna King Manganese Mining Company
DMEA-2653	Idm-E477	U. S. Smelting, Refining & Mining Company
DMEA-2672	Idm-E437	Duke Page Auto Company
DMEA-2887	Idm-E606	Gordon French
DMEA-3266	Idm-E733	Big Indian Uranium Corporation
DMEA-3288	Idm-E667	Alaska Copper Mines, Inc.

W. R. Griswold

W. R. Griswold

8623

OFFICIAL FILE COPY
DMEA
RECEIVED APR 4 1958
DATE | INITIAL | CODE
4/4 | C | 220
4 | Com | 100
" | JLJ | 110
4/8 | EB | 200
4/9 | [illegible] | [illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

April 1, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1957 through December 31, 1957

DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428
Magma King Manganese Mining Co. (Ajax Lead-Zinc Mine)
Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

E. M. Hershman

Acting Executive Officer, DMEA
Field Team, Region III

Enclosures

MHM:dp

cc: Semiannual Report File E 428
Emerick
DMEA/TUC.
Chron.

ORIGINAL FILE COPY
DMEA
RECEIVED APR 4 1958

DMEA, REGION III

Statement in Lieu of Semiannual Report

Reporting Period	July 1 to Dec. 30, 1957
Docket and Contract Number	DMEA-2603 - Idm-E428
Operator	Magma King Manganese Mining Co.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks: I inspected the property March 20, 1958.

R. W. Nicholes, caretaker, said the project had been idle during the reporting period. I found no evidence to the contrary at the mine workings.

Signed T M Romslo

T. M. Romslo

Date March 24, 1958

CC W. H. King
DMEA-2603

Cert. file
DF

TMRomslo:frj

DMEA
ARTMENT OF THE INTERIOR
AUG 19 1957
REGION III
DENVER, COLORADO

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period — Jan. 1 to June 30, 1957
Docket and Contract Number — DMEA-2603, Idn-E428
Operator — Magna King Manganese Mining Co.

The project has been inactive during the reporting period [X]

Pertinent data relative to the subject contract has remained unchanged since the last report [ ]

Remarks: Property visited August 6, 1957.

The only person present, R. W. Nicholas, watchman, said no work had been done on the property. He also said that the owner of the property had told him that the operator's lease and option probably would be cancelled in the near future.

The last ½ mile of road to the mine remains impassable.

extra
~~ORIGINAL~~ FILE COPY
DMEA
RECEIVED AUG 23 1957

DATE	INITIALS	CODE
		~~400~~
8/23	Jwa	500

CC W. H. King (Orig. & 9)
DMEA-2603
DF

Signed Original signed by T. M. Romslo
T. M. Romslo

Date August 15, 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

224 New Customhouse
Denver 2, Colorado

Date: February 12, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1956 through December 31, 1956
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428, Magma King Manganese Mining Company (Ajax Mine), Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, and Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

Original signed by
W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj
cc: Semiannual Report File E 428
W. R. Storms
Harshman
Chron.

EXEC. COPY
DMEA
RECEIVED FEB 15 1957
DATE | INITIALS | CODE
2/18 | ab | 500

DMEA
DEPARTMENT OF THE INTERIOR
FEB 7 1957
REGION IV
DENVER, COLORADO

February 4, 1957

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team

From : Superintendent, Southwest Experiment Station

Subject : Semi-Annual Report of Certified Project, July 1 - December 31, 1956, Docket DMEA-2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Co. (Ajax Mine), Pinal County, Ariz.

Enclosed are original and 8 copies of the above report by T. M. Ronale of the Bureau of Mines.

Signed by Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
DMEA-2603
Cert. File
WF

FEB 1957
3 0003

WRStorms:frj

DMEA, REGION III

STATEMENT IN LIEU OF SEMIANNUAL REPORT

Reporting Period	July 1 to December 31, 1986
Docket and Contract Number	DMEA-2603, Idm-5428
Operator	Magna King Manganese Mining Co.

	"X" one
The project has been inactive during the reporting period	X

Pertinent data relative to the subject contract has remained unchanged since the last report.

Remarks: I visited the project on January 28, 1987 and found that: (1) The last ½ mile of road to the mine had again been washed out; (2) conditions at the mine indicated no recent activities; and (3) R. W. Nicholes is still acting as watchman for the operator. Mr. Nicholes said that no work had been done at the mine during the period of this report and that R. J. Pomeroy, President of the company, had last visited the mine about 3 months ago.

Date	Code

Signed

Original signed by
T. M. Romalo

T. M. Romalo

Date

February 4, 1987

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

RECEIVED
AUG - 3 1956

224 New Customhouse
Denver 2, Colorado

Date: July 31, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period January 1, 1956 through June 30, 1956
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 428 Magma King Manganese Mining Company (Ajax Mine), Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office, and Memorandum 29, and Special Notice in Minutes of Operating Committee Meeting No. 692.

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
MBM/vj
cc: Semiannual Report File E 428
Royalty File E428
W. R. Storms
E. N. Harshman
Chron.

DMEA
Date Rec'd.
JUL 30 1956
BUREAU OF MINES
Denver, Colorado

July 26, 1956

RECEIVED
AUG - 3 1956

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team

From : Superintendent, Southwest Experiment Station

Subject : Semi-Annual Report, January 1-June 30, 1956, Docket DMEA-2603, Contract I&m-5428 (Lead-Zinc), Magma King Manganese Mining Co. (Ajax Mine), Pinal County, Ariz.

Enclosed are original and 8 copies of the above semi-annual report as per your recent memorandum.

Signed by Walter R. Storms

Walter R. Storms

cc W. M. Traver (3)
DMEA-2603
Cert File
RF

WRStorms:frj

RECEIVED
AUG - 3 1956

Semi-Annual Report of Certified Projects

Reporting Period	January 1, to June 30, 1956
Docket and Contract Number	Docket DMEA-2603, Contract Idm-8428
Operator	Magma King Manganese Mining Co.
Commodity	Lead-Zinc
Mine Name	Ajax Mine
County and State	Pinal County, Ariz.

Date of Examination for this Report — July 9, 1956

Change in status since previous report:

Date - None

Activities - Confined to road repairs. The road work, according to R. W. Nicholas, watchman, was completed late in June under the supervision of H. J. Pomeroy, President of the Magma King Manganese Co.

T. M. Romalo, Mining Engineer
U. S. Bureau of Mines

CC W. M. Trower (Orig. & 8)
DMEA-2603
Cert. file
DF

TMRomalo:frj

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

RECEIVED
MAY 14 1956

224 New Customhouse
Denver 2, Colorado

May 10, 1956

Memorandum

To: W. R. Storms

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc) Contract Idm-E428, Magma King Manganese Mining Co. (Ajax mine) Pinal County, Arizona

Reference is made to the Semiannual Report for the period July 1, 1955 through December 31, 1955 for Contract Idm-E428. T. M. Romslo states that Magma King Manganese Mining Company's lease to the Ajax property probably would be cancelled because of lack of work on the property. Please have an engineer from your office check to see if this lease was actually cancelled. This type of information is of value to us in keeping our records of the ownership status of DMEA properties current.

This is not a priority request. It can be handled the next time you have an engineer in the vicinity of the Ajax mine.

W. M. TRAVER

W. M. Traver

RDB:jy
cc: Royalty File E428
Corresp. File E428
Sec. Op. Comm. (2)
Chron.

IN REPLY REFER TO:

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

RECEIVED
MAR 12 1956

March 9, 1956

Re: DMEA 2603, Idw. E-428
Magna King Manganese
Manufacturing Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
$23,100 - Lead-Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Final Field Team Report

The expenditure of $23,100 was approved in a contract, E-428, dated October 23, 1952. Work was started November 14th and $6,790 was expended on the following work:

194 feet of drifting,
on the 176-foot level of a shaft.

85 feet of the work was in low grade ore.

The work explored a 7-foot vein, in Precambrian chlorite schist, credited with a production of 91.72 tons of lead zinc-silver ore, part of which was sorted ore. Previous work consisted of the 180-foot shaft, drifting on 2 levels and diamond drilling.

Ore reserves

Prior to the DMEA work, reserves consisted of 14,000 tons of 10% (zinc and lead) ore and the DMEA work increased that figure by 2,500 tons of 0.7% lead and 2.2% zinc material.

Intersections of ore grade material are claimed for 2 diamond drill holes and it is believed other ore shoots exist, but the operator discontinued work without having reached certain target areas. Although only low grade material was encountered in the DMEA work, the examiners and Field Team recommended that a Certification of Discovery be issued.

I concur with that recommendation.

N. E. Nelson

N. E. Nelson

NENelson:jeh
3/9/56
cc: Director's reading 4212
Branch reading 4212
DMEA (3)
Docket file

RECEIVED
FEB 29 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

224 New Customhouse
Denver 2, Colorado

Date: February 24, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1, 1955 through December 31, 1955.
DMEA Docket 2603 (Lead-Zinc)
Contract Idm-E 480 , Magna King Manganese Company,
Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office. and Memorandum 29.

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
vj

cc: Semiannual Report File E 480
Royalty File E42
W. R. Storms
E. H. Harshman
Chron
J. R. Falck
Chron.

DMEA
Date Rec'd.
JAN 30 1956
BUREAU OF MINES
Denver, Colorado

[redacted]
Tucson 5, Arizona [redacted]

[redacted]

To : W. H. Turner, Executive Officer, DMEA Field Team, Region XIX

From : Superintendent, Southwest Experiment Station

Subject : Semi-annual Report of Certified Project, July 1 - December 31, 1955, Index DMEA-[redacted], Contract No. [redacted], Vegas King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 2 copies of the above report by T. H. Rawle of the Bureau of Mines.

Walter R. Storms

[redacted]

cc: W. H. Turner
DMEA-[redacted]
Corr. File
RF

[redacted]

Semi-Annual Report of Certified Projects

Reporting period	July 1, 1955 to January 1, 1956
Docket and Contract Number	[illegible]A-2503, Bm-1428
Operator	Magma King Manganese Mining Co.
Commodity	Lead-Zinc
Mine Name	Ajax
County and State	Pinal County, Arizona

Date of Contract	October 23, 1953
Date of certification	June 30, 1954
Expiration date of Royalty Payments	October 23, 1962
Date of Examination of this Report	January 25, 1956

Total Amount of Contract	$23,100.00
Total Expenditures under Contract	$6,790.00
Amount of Government Participation at 50%	$3,395.00

Royalty Payments this Period	$0.00
Previous Royalty Payments	$0.00
Total Royalty Payments to Date	$0.00
% Loan Repayment completed	$0.00

Amount of Royalty due	None
Royalty Remarks	"

Original Estimate of Reserves
(from Final Eng. Report, Final Geol. Report in preparation.)

No recoverable reserves. Approximately 10,000 tons of 10 percent combined lead and zinc indicated in old workings and principal target that was not reached by project. A few hundred tons containing 3.1 percent zinc, 0.73 percent lead and 0.32 percent copper was generated by drift drives under subject contract. Inferred reserves remain at a few tens of thousand tons containing about 2 percent lead and 8 percent zinc.

Increase of Reserves by their published subsequent to exploration or termination of contract:	None
Revised estimate of Reserves	—
Production this period	None
Amount of previous Production (since date of Contract)	None
Total AMLA Production to date	None
% of Revised Reserves Mined	0.0

Other Remarks. During my visit to the mine I found the have half mile of road was still impassible by automobile. No one was on the mine and all equipment had been removed from the surface buildings. In talking to Mr. A. W. Nicholson, a prospector who resides on the Ajax map at about 3/4 mile from the mine, I obtained the

following information. About a year ago, R. J. Pomeroy, president of Subject company, gave Mr. Nicholas permission to occupy one of the houses. As a result, Mr. Nicholas has acted as unofficial caretaker of the property. Pomeroy, who presently is in Utah or Colorado, last visited the mine in October 1955. He was accompanied by 2 geologists who examined the property and presented unfavorable findings to their client.

At Florence, county seat of Pinal County, I learned that most of the 1955 taxes on the patented claims had been paid by the owners. Mr. W. C. Smith, one of the owners, was contacted via telephone by W. R. Stearns. Smith said the Hague King Manganese Mining Co. lease on Ajax is still in force but that the lease probably would be cancelled because of lack of work on the property.

T. M. Romslo
Mining Engineer
Southwest Experiment Station

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
FEB 15 1956

February 15, 1956

Re: DMEA-2603 (Lead-Zinc)
Contract Idm-2428
Magma King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of final field team report on January 26, 1956 with U. S. Bureau of Mines field report by Romalo and Hardwick (February 1956) and U. S. Geological Survey field report by Bryner (January 31, 1956)

Under the terms of the contract executed October 23, 1952, a $23,100 program made up of 400 feet of drifting, 200 feet of raising and 500 feet of diamond drilling on the 176-foot level was agreed upon. Of that work only 194 feet of drifting was completed when the company asked that the project be recessed. Thereafter, no additional work was done under the contract and it was terminated September 1, 1954 when the last recess expired.

In driving the 194 feet of drift about 120 tons of low-grade mineral was stockpiled which assayed in the order of 0.2 percent copper, 0.8 percent lead, 2 percent zinc, 0.3 ounces silver and 0.02 ounces gold. This material appears to have come from the 90 to 100 feet of the drift adjacent to the face and must represent considerable sorting since total muck produced from a 6 by 7-foot drift 100 feet long would approximate 350 tons.

Inasmuch as the drift lacked but 90 feet of reaching the downward projection of ore indicated in a diamond drill hole (S-2) and considerable mineralization was noted in the last 100 feet of drifting both examiners recommend that the project be certified as a discovery. I concur with this recommendation.

O. M. Bishop

O. M. Bishop

Copy to - Division of Minerals
Branch of Base Metals (2)
Mr. Kiilsgaard, Rm. 5222
Mr. Geehan, Rm. 3608
Files

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

RECEIVED
FEB 10 1956

224 New Customhouse
Denver 2, Colorado

February 6, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

In conjunction with the Field Team's final report of January 26, 1956, pertaining to work completed under the subject contract, we are enclosing the original and three copies of final geologic report by the U. S. Geological Survey.

W. M. Traver

W. M. Traver

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

MINERAL DEPOSITS
DMEA
RECEIVED
FEB 3 1956
GEOLOGICAL SURVEY
DENVER, COLORADO
DMEA
Date Rec'd.
FEB 3 1 3
BUREAU OF MINES
Denver, Colorado

Box 4126 University Station
Tucson, Arizona

February 1, 1956

MEMORANDUM

To: E. H. Harshman

From: John H. Faick

Subject: Final Geological Report, DMEA 2603, Contract Idm-2485, (Lead-Zinc) - Magma King Manganese Mining Company's Ajax Mine, Pinal County, Arizona

Enclosed are the original and 8 copies of the final geological report on the exploration project on the Ajax mine. Unfortunately the project was terminated before completion because the operator failed to do the work provided by the contract. A 194 ft. long drift was completed and this did not modify in any way our understanding of the Ajax deposit. I believe the deposit merits additional exploration; however, it is unlikely that the Ajax will ever make a large mine. The low-grade ore reported along the DMEA drift is encouraging, and might lead to the discovery of minable ore at other places in the vein.

Because of the low-grade ore reported in the DMEA drift, and because available evidence indicates that higher grade ores might exist in the project area, it is recommended that the project be certified as a discovery.

John H. Faick

John H. Faick

JHF:rm

cc. Harshman (8)
Stearns

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM III

GEOLOGY

FINAL REPORT

DMEA 2603, Contract Idm-2426

NACMA KING MANGANESE MINING CO., AJAX MINE

PINAL COUNTY, ARIZONA

(Lead-Zinc)

By
Leonid Bryner
Geologist
U. S. Geological Survey

January 31, 1956

Reviewed by
DMEA OPERATING COMMITTEE
2-13-56
(date)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM III

FINAL REPORT

DMEA 2603, Contract Idm-5A23

MAGMA KING MANSANEGE MINING CO., AJAX MINE

PINAL COUNTY, ARIZONA

(Lead-Zinc)

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PRODUCTION AND GRADE	5
EXPLORATION	7
Prior to DMEA Contract	7
DMEA Exploration	8
ORE RESERVES	10
CONCLUSIONS AND RECOMMENDATIONS	14

ILLUSTRATIONS

Fig. 3 - Plan map - veins and workings	Following page 14
Fig. 4 - Drill Hole Sections	" " 14
Fig. 5 - Geologic Map of workings	" " 14
Fig. 6 - Sample Map	" " 14

INTRODUCTION

The Ajax mine is in section 35, T. 2 S., R. 11 E., Pinal County, Arizona. It is reached from the town of Superior by traveling 11 miles west on U. S. Highway 60-70, then 9 miles southeast on a graded dirt road.

On July 3, 1952 a DMEA application totaling $59,727 was made by the Magma King Manganese Mining Co. to explore for lead and zinc at the Ajax Mine. On August 25, 26, and 27, 1952, J. H. Faink of the U. S. Geological Survey, and T. M. Romslo of the U. S. Bureau of Mines, examined the property. The examiners recommended DMEA assistance in a revised program totaling $23,100. A contract (IAm-2488) for this amount was granted and exploratory work started on November 14, 1952. Exploration continued through March, 1953. The applicant obtained permission to recess the project during the month of April, 1953. Following further requests from the applicant, this recess period was extended time after time, until on September 1, 1954, failure to renew operations resulted in cancellation of the contract. Amendment No. 7, dated June 30, 1954, providing for cancellation of the contract if work was not resumed by September 1, 1954, also provides for repayment of the government by "a percentage royalty on any minerals mined or produced" from the property, "certification of discovery or development being hereby waived." The final payment due the applicant was not made until November 10, 1955, because Ralph J. Pomeroy, president of the applicant company, did not submit his final report until October, 1955.

The mine was allowed to flood during the recess of exploration. No interim geologic inspections of the mine had been made, and as the mine was never dewatered, a final geologic inspection was not possible.

T. M. Romslo of the U. S. Bureau of Mines, however, examined the workings on April 1, 1953, when the maximum advance under the DMEA contract had been reached. Regarding this inspection, and previous monthly inspections, Romslo states that the narrative reports by Frank L. Metler, superintendent, correctly describe the findings in the exploratory drift that was being driven under the DMEA contract. In view of this fact and the lack of firsthand geologic information, the results of exploration given in the present report are based on Metler's periodic reports to DMEA. Much of the present report is abstracted from Faick's examination report, and the writer consulted with Faick and Romslo. The figure numbers used in Faick's report remain the same. The Ajax Mine, as far as the writer can determine, is not described in the literature.

GEOLOGY

The Ajax mine is in the Mineral Hill Mining District near the head of Cottonwood Creek, a dry wash draining relatively rough mountainous desert terrain between the valleys of the Gila River on the south and Queen Creek on the north. Maximum relief in this area is about 500 feet.

The country rock is a fine-grained, greenish-gray, rather uniform chlorite schist of probable Precambrian age. The schistosity, which is vague and poorly developed, is gently folded into small easterly-trending anticlines and synclines that have dips ranging from 10° to 30° on the flanks.

Within the Mineral Hill district there are many small mines and prospects of which the Ajax appears to be one of the most promising. The mine explores part of a conjugate vein system by means of a 180 foot shaft

inclined westward about 65° and by two drifts (Fig. 5). The upper drift, or 50 level, extends 50 feet north of the shaft and 60 feet south of it. The 176 level before MMRA exploration consisted of a 30 foot crosscut to the vein, with drifts extending about 80 feet north and 50 feet south of the crosscut. Eight diamond drill holes have been drilled in the area (Figs. 3 and 4).

The Ajax vein system occupies a fault zone in the schist and the veins are exposed at the surface more-or-less continuously for a distance of about 1800 feet north of the Ajax shaft and about 800 feet south of it (Fig. 3). Two prominent branches of the vein system converge at the Ajax shaft, and the mine workings have explored the western or Hanging Wall branch vein. This vein strikes approximately N. 20° W. but south of the shaft where the two veins converge the strike is nearly south. The Foot Wall or east vein strikes nearly north for a distance of about 500 feet north of the Ajax shaft, then appears to change its strike to N. 20° W. or approximately parallel to the Hanging Wall vein. Although the mine workings are mostly in the Hanging Wall vein, the Foot Wall vein forms the more prominent outcrop and shows more leaching effects at the outcrop than does the Hanging Wall vein. The dip of both veins at the surface is about 65° west but flattens with increasing depth and on the 176 level the dip of the hanging wall vein ranges from 40° to 45°. Where the veins cross Cottonwood Wash there is a zone in which the veins appear to be structurally deformed, suggesting that they may have been folded or faulted. Some brecciation of the enclosing schist was noted but the cause of the brecciation was

not apparent nor could the geology be satisfactorily interpreted. It is possible that the two main veins may merge in this zone, or another branch vein may intersect the footwall vein.

The vein material consists of two distinct types which have been deposited under distinctly different conditions. One type of vein filling consists of specularite in massive, glassy quartz. The other type consists of milky quartz, amethystine quartz, and white calcite, accompanied by sphalerite, galena and trace amounts of chalcopyrite. This type of vein material is prominently banded, and many comb structures and drusy cavities are present in it. It also contains all of the observed sulfide minerals, and locally these are sufficiently abundant to constitute low-grade ore. Galena and sphalerite occur as coarse grains from about one-eighth of an inch to about one inch in maximum dimension. Galena predominates on the 50 level and sphalerite predominates on the 176 level. Otherwise these minerals are dispersed erratically throughout the vein and in many places constitute from 10 to 20 percent of the vein filling; however, in some places the vein is barren. Masses of galena and sphalerite from 1 to 4 inches wide and from a few inches to about 2 feet long are present in many places within the vein. Ore minerals are also present in some of the brecciated wall rock, as for example about 50 feet north of the shaft on the 176 level. Here a lenticular mass of brecciated schist (Fig. 5) is thoroughly impregnated with calcite, quartz, sphalerite, and galena. These occur in small seams and masses cementing part of the breccia. The breccia mass is over 50 feet long, and about 15 feet wide but the sulfides are confined

to an area about 30 feet long and about 10 feet wide. This mineralized breccia is exposed only on the 176 level but it is assumed that the breccia extends at least a short distance above and below the level.

Deformation along the vein zone has disrupted some of the rocks and locally they have been weakened by what appears to be late-ore or post-ore movement. It is probable that deformation and hydrothermal alteration have weakened the wall rocks to such an extent that underground support will be required in some zones if the vein is mined.

PRODUCTION AND GRADE

Little ore has been produced from the mine. Shipments that are thought to represent the total production are as follows:

Date	Tons	Percent Lead	Percent Zinc	Percent Copper	Ounces Silver
12-10-47	0.75	19.00	Trace	0.12	1.50
12-10-47	3.02	60.8	--	Trace	3.9
12-16-47	35.17	7.35	5.4	0.12	1.05
1-22-48	34.85	7.2	3.2	0.12	1.05
2- 5-48	1.53	60.0	--	--	4.0
2- 9-48	16.40	10.3	2.8	0.20	1.45
Total	91.72				

These shipments are products of selective mining of some of the higher grade portions of the vein and are probably also upgraded by hand sorting. The largest shipments, containing relatively low values, are probably not much higher grade than many parts of the vein.

As a result of extending the 176 level with BMEA aid a small amount of low grade material was stockpiled on the property. About 20 tons of this is hand-sorted material, a sample of which assayed 0.34% copper, 0.58% lead, 1.8% zinc, 0.02 oz. gold, and 0.4 oz. silver. The remainder of the stockpiled material is in a pile amounting to about 100 tons. Two samples of the pile assayed 0.23 and 0.093% copper, 0.58 and 1.10% lead, 1.3 and 3.4% zinc, and trace and 0.02 oz. gold, and 0.1 and 0.4 oz. silver.

Many samples (Fig. 6) have been taken of the vein. Most of the samples were taken before the applicant acquired the property. Several were taken by the applicant, and the BMEA examiners took 5 samples as a means of checking and verifying the others. The samples taken by BMEA provide a fair check on the others but are slightly lower grade. It was noted by examination of the mine workings that the sample widths previously reported are exaggerated, and could not be substantiated. Because of these erroneous widths it is not possible to properly weigh the samples and accurately compute the lead and zinc content of the vein. The lead content is greater than the zinc content in the upper part of the mine and the zinc content is greater than that of the lead in the lower part of the mine. The copper content of the ore is small, but it is probable that both copper and silver values will be recovered with the lead and zinc if the ore is beneficiated.

EXPLORATION

Prior to DMEA contract

In addition to the mine workings an attempt has been made to explore the vein by 8 diamond drill holes, two of which encountered sufficient ore to be of possible commercial value. Hole No. S-6 about 200 feet north of the shaft penetrated about 5 feet of ore estimated at 4 percent lead and 6 percent zinc, and hole No. S-2 about 400 feet north of the shaft penetrated about 11 feet of 18 to 25 percent zinc ore (Figs. 3 and 4). At present there is insufficient information to interpret the significance of these penetrations but it appears possible that the holes discovered additional ore shoots. Hole No. S-2 appears especially significant because it may have penetrated the hanging wall vein zone beneath an iron-stained brecciated schist that could be interpreted as being the outcrop of a mineralized zone. The breccia is exposed in a small elliptical area about 20 feet in maximum dimension near the place where the veins cross the floor of Cottonwood Wash.

Holes S-1, S-3, S-4, and S-5 (Fig. 4) were drilled to explore outlying or deep parts of the vein. These penetrated considerable mineralized material having very low values but veins of minable width and grade were not encountered. Available data are insufficient to correctly interpret the significance of these holes, but the veins probably change character by splitting into many small veinlets. It appears as if veins of a size large enough to mine do not exist at depths greater than a few hundred feet.

The underground holes, Nos. 1 and 2 (fig. 6), were apparently drilled to ascertain that the drift was on the main vein and had not bypassed any ore.

EMEA Exploration

The work authorized by the EMEA contract was as follows:

(1) A 400-foot extension in a northerly direction of the 176 level to explore the ore penetrated by holes S-2 and S-6.

(2) Four 50-foot raises to test whatever ore is found along the 176 level.

(3) 500 feet of diamond drilling from the 176 level to test the Foot Wall vein and to delineate ore.

Of this planned work only 194 feet of the drifting was completed. The geologic findings in this drift are shown in figure 5.

The following information is based on Butler's monthly reports. From the starting point, 77.5 feet north of the crosscut to the shaft, 15 feet of drift were driven before the drift got back on the vein; 30 feet from the starting point the vein had widened to 26 inches and showed sphalerite and galena. At 35 feet "mineralization is well scattered across the vein . . . . but is not of commercial value." The meager scattering of galena and sphalerite continues in the drift to 111 feet. In the interval from 35 to 111 feet this mineralization is in a fault breccia. There is evidence of vertical movement in the hanging wall of the drift and much of the ore shows evidence of drag movement. A little beyond the 111-foot point, a "watercourse" one

foot to three-and-a-half feet in width was encountered and the level was temporarily flooded. Sulphide mineralization appears to have been confined to the watercourse and consisted mainly of chalcopyrite. After a 23-foot advance along the watercourse, an additional 34 feet of advance was made through "a good showing of lead, zinc and copper ore" in a 2½-foot wide quartz vein, bringing the total footage to 168 feet beyond the starting point. In this last 34 feet more water was encountered, and timbering was necessary as was also the case in the previous 23 feet. During the advance of 34 feet some of the rock removed was stockpiled as it seemed to be of milling grade. This is undoubtedly some of the stockpiled material mentioned on page 6 of this report. The last monthly advance of 26 feet just before the project closed down was in low grade lead-zinc material. Small stringers of chalcopyrite were noted. The mineralized rock was confined to the floor and near the floor of the drift.

Although Metler in his progress reports did not indicate the presence of an ore shoot in the drift, his progress report maps (fig. 5) show a "copper-lead-zinc ore zone" from about 85 to about 170 feet from the starting point. Romain says this is probably reliable information. It should be noted, however, that the grade of all the material encountered in the MMRA exploratory drift is very low. No reliable samples were taken in the drift (even though Romain repeatedly requested Metler to submit samples), but stockpiled material from the drift is, at best, of milling grade. Yet some of this stockpiled

material (perhaps much of it) is hand sorted. The 40-foot, horizontal diamond drill hole No. 3 (fig. 5), drilled during the DMEA project at company expense, to test the hanging wall of the Hanging Wall vein, encountered "nothing of value", according to Metler. The most promising target of exploration, namely the 11-foot, 18 to 25 percent zinc zone in hole S-2, was never reached. The DMEA drift is about 110 feet short of the downdip extension of this zone.

Another target of exploration was the 5-foot, 4 percent lead and 6 percent zinc zone in hole S-6. The downdip extension of this zone would be opposite a point in the drift about 90 feet from the starting point of DMEA work. In figure 5 this would be about at the south edge of the 90-foot "copper-lead-zinc zone" as defined by Metler. However, section E-1 (figs. 3 and 4) shows that the downdip extension of the vein corresponding to the mineralized zone in S-6 is about 30 feet east of the 176 level drift. Consequently it seems possible that the target was missed by the DMEA drift. This very real possibility raises the question of whether the drift does on the whole stay on the main mineralized zone.

ORE RESERVES

Ore reserve estimates submitted by the applicant amount to about 25,000 tons of developed and probable ore. This estimate appears to be too high because it is based on exaggerated vein widths rather than the actual vein widths. The applicant's grade estimates are also somewhat greater than those of the examiners, being about 2 percent higher in combined lead and zinc. DMEA exploration has not substantially changed the reserve picture.

The following reserve estimates, except for discoveries due to DMEA work, are taken from the examination report. The oreshoot developed by the Ajax shaft and levels is sufficiently well explored and sampled to be classed as indicated ore. Vein material containing significant amounts of galena and sphalerite is exposed along both the 50 foot and 176 foot levels. The vein material in the south end of the 50 level drift probably cannot be recovered because it is so thoroughly oxidized that it is not amenable to concentration and is probably too low-grade to constitute shipping ore. It is assumed that similar oxidation has taken place in all the ore within about 30 feet of the surface; therefore minable ore is thought to extend only 80 feet above the 50 level. The vein widths at the 50 level are from 5 to 12 feet, but average about 7 feet, and ore is exposed along the level for a distance of about 70 feet. The block of ore above 50 level is estimated to contain about 800 tons of indicated ore. The grade of the ore is about 9 percent lead, and 3 percent zinc as estimated from several samples and 3 small shipments.

The main ore shoot is also explored by the 176 level where sphalerite and galena are present in the vein for a strike distance of about 110 feet. The oreshoot is exposed in part of the Ajax shaft and the ore is assumed to be continuous between the 176 level and the 50 level and the vein thickness will average about 7 feet. It is conservatively estimated that about 5700 tons of ore are present in the oreshoot, between the 50 and 176 levels. By evaluating many samples (Fig. 6) taken along the shaft and on the 176 level it is estimated that the

average grade of the ore is about 1 percent lead and 8 percent zinc. The ratio of lead to zinc decreases gradually with depth from the 50 level to the 176 level.

The average grade of all the ore in the presently developed oreshoots at the Ajax mine is estimated at 4.4 percent lead and 5.9 percent zinc.

Reserves above the 176 foot level are estimated at 47 tons per foot of depth along the dip of the vein and it is presumed that the ore may be safely projected 150 feet below the 176 level. The ore in the first 50 feet of this projected depth is classified as indicated ore and the remaining 100 feet is considered as inferred ore. About 2300 tons of ore is indicated, and about 4700 tons is inferred to be present. The grade is assumed to be the same as on the 176 level, or about one percent lead and 8 percent zinc.

Ore penetrations were made by diamond drill holes S-6 and S-2 (Figs. 3 and 4) and at each of these locations it is hoped that other oreshoots are present that may contain as much ore as is present in the main shoot. About 1000 tons of indicated ore is assumed to be present at each drill hole penetration. Assays on the core of the hole S-2 yield from 18 to 25 percent zinc but it is believed that the hole accidentally penetrates a rich portion of the vein and this block of ore should not be expected to be much higher grade than developed parts of the vein. The core from hole S-6 has not been assayed but inspection reveals it to be similar in grade to the ore in the developed portion of the mine, and by comparison is estimated to contain about 4 percent lead and 6 percent zinc.

In addition to the above reserve estimates an evaluation of reserves in the ground opened by the BMEA work is needed to complete the reserve picture at the Ajax mine. Because the basic geologic data in this case lacks the reliability of firsthand information, the reserves based on it are considered to be inferred in category. The material in the BMEA drift that most nearly measures up to the definition of ore probably is that in the "copper-lead-zinc ore zone" shown by Butler near the end of the drift. Using dimensions of 50 feet for the strike length as exposed along the drift, a thickness of 3 feet, and updip and downdip extensions of 50 feet in each direction, gives 27,000 cubic feet. Applying a tonnage factor of 11 cubic feet per ton gives about 2,500 tons. The only information upon which to base the grade of this rock is from the three samples of stockpiled material from the drift. These samples average 2.2 percent zinc, 0.73 percent lead, 0.13 oz. gold, and 0.3 oz. silver.

The ore reserve estimates are summarized as follows:

Location	Tons	Percent Lead	Percent Zinc
Indicated Ore			
Above 50 level	800	9	1
Between 50 and 176 levels	5700	1	8
From 176 level to 50 ft. below it	2300	1	8
At drill hole 8-2	1000		10-15
At drill hole 8-6	1000	4	6
Inferred Ore			
From 50 to 150 ft. below 176 level	4700	1	8
In "oreshoot" discovered by BMEA drifting on 176 level	2500	0.7	2.2
Total	18000		

Potential reserves, based on possible though undiscovered oreshoots in both veins may amount to at least several times the above indicated reserves.

CONCLUSIONS AND RECOMMENDATIONS

Examination of the Ajax vein system reveals that important amounts of galena and sphalerite are present in a quartz-calcite gangue. About 14,000 tons of ore, containing about 10 percent combined lead and zinc, are reasonably assured in the old mine workings. Inferred ore may amount to several times this amount in unexplored or incompletely explored parts of the veins. DREA work showed only an additional 2500 tons of inferred reserves containing about 3 percent combined lead and zinc. The exploration program, however, was less than half completed when the operator shut down. The most important target area had not been reached, and the second most important target, though not found, had not been disproven, as the drift may have missed this target. The potentialities of the property therefore remain about the same as before exploration was undertaken. It is recommended that government interest in the property be continued as the work done with government aid has provided much better access for future exploration than was possible before the project was undertaken.

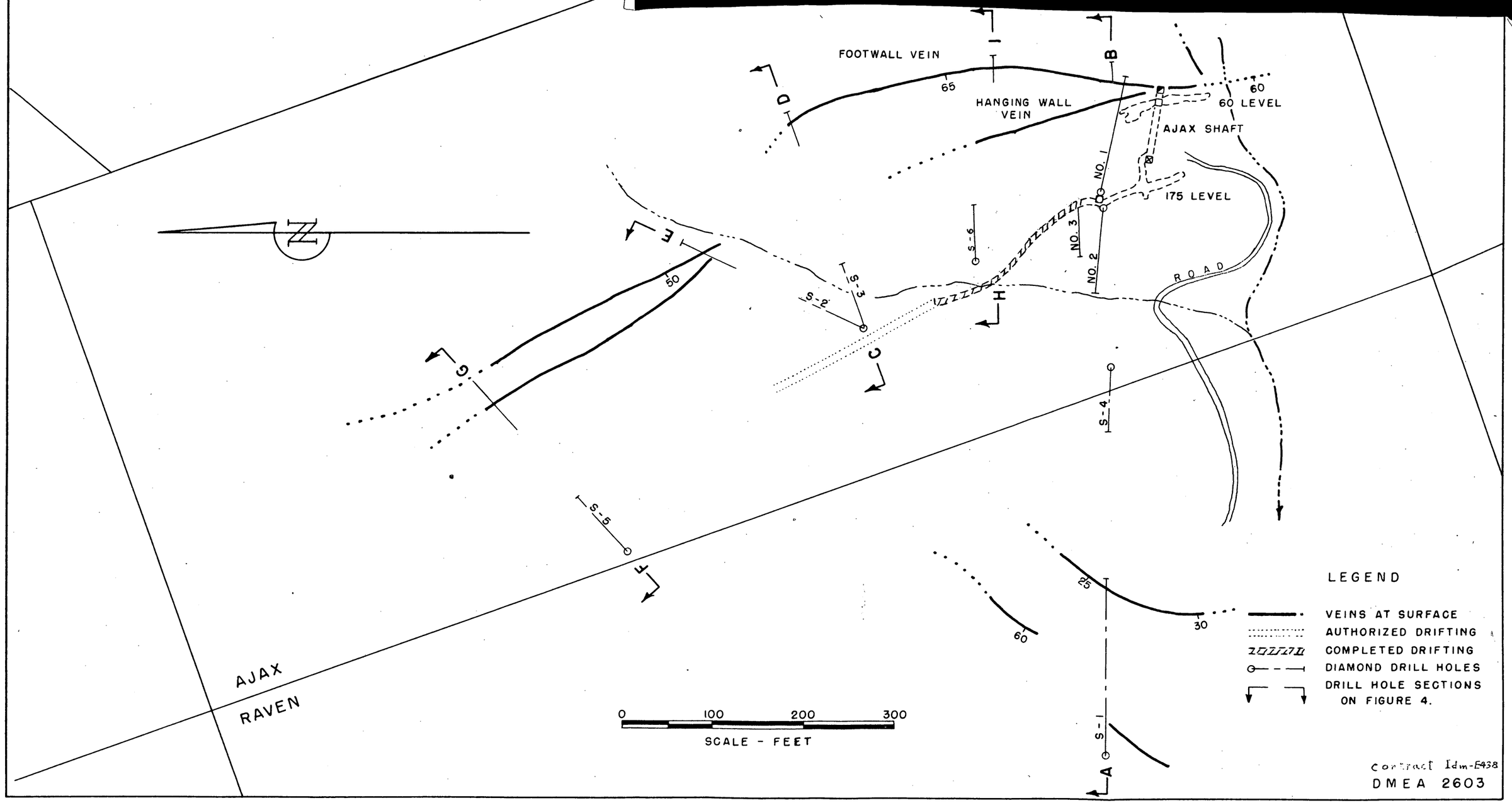
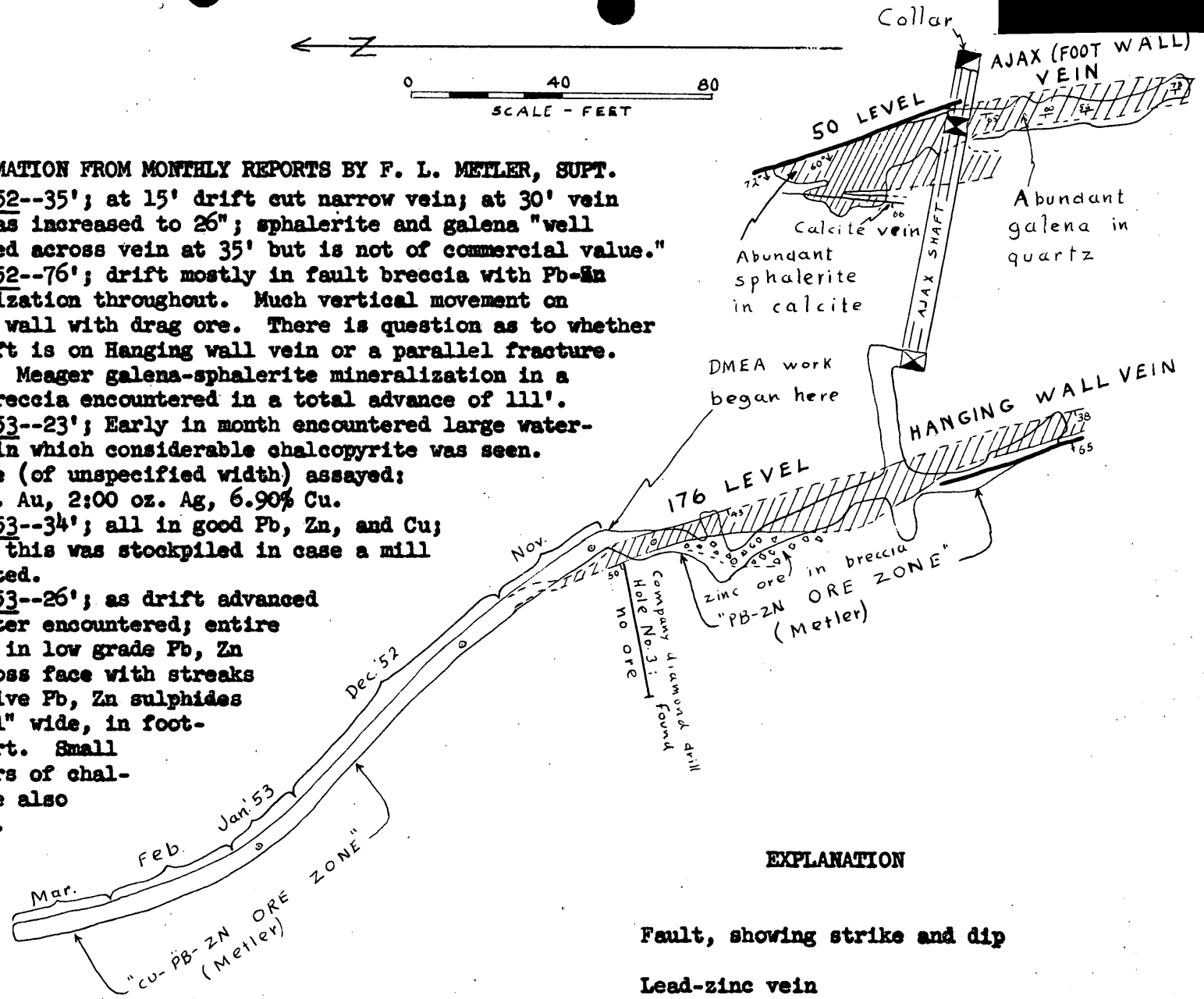


FIGURE 3. - PLAN MAP - AJAX MINE - MAGMA KING MANGANESE MINING COMPANY - PINAL COUNTY, ARIZONA



INFORMATION FROM MONTHLY REPORTS BY F. L. METLER, SUPT.

Nov.'52--35'; at 15' drift cut narrow vein; at 30' vein width has increased to 26"; sphalerite and galena "well scattered across vein at 35' but is not of commercial value."

Dec.'52--76'; drift mostly in fault breccia with Pb-Zn mineralization throughout. Much vertical movement on hanging wall with drag ore. There is question as to whether the drift is on Hanging wall vein or a parallel fracture. Romslo: Meager galena-sphalerite mineralization in a fault breccia encountered in a total advance of 111'.

Jan.'53--23'; Early in month encountered large water-course in which considerable chalcopyrite was seen. A sample (of unspecified width) assayed: 0.02 oz. Au, 2:00 oz. Ag, 6.90% Cu.

Feb.'53--34'; all in good Pb, Zn, and Cu; some of this was stockpiled in case a mill is erected.

Mar.'53--26'; as drift advanced more water encountered; entire advance in low grade Pb, Zn ore across face with streaks of massive Pb, Zn sulphides up to 11" wide, in foot-wall part. Small stringers of chal-copyrite also present.

EXPLANATION

Fault, showing strike and dip

Lead-zinc vein

Strike and dip of vein

Country rock is Precambrian (?) chlorite schist. Map is compiled from field mapping of J. N. Faick and monthly progress reports for applicant by F. L. Metler.

FIGURE 5 - GEOLOGIC MAP, AJAX MINE WORKINGS, PINAL COUNTY, ARIZONA.

DMEA 2603, Contract Idm-E428

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

COPY

224 New Customhouse
Denver 2, Colorado

January 26, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

Enclosed are the following final reports pertaining to work completed under the subject contract:

1. The original and one copy of the Operator's final report.

2. The original and three copies of the final engineering report by the U. S. Bureau of Mines.

The final geologic report by the U. S. Geological Survey is in process of preparation and will be forwarded when made available to this office.

Final payment to the Operator was processed by this office October 25, 1955, in conformance with the Report of Review by the Contract Administration and Audit Division, dated August 31, 1955.

The exploration work consisted of 194 feet of drifting at a total accepted cost of $6,790.00, in which the Government participated to the extent of 50%, or an amount of $3,395.00.

The exploration work resulted in a discovery or development of lead-zinc ore for which a psuedo certification was effected by the provisions of item 4(c) of Amendment No. 7, dated June 30, 1954.

/s/ W. M. TRAVER
W. M. Traver

/s/ E. N. HARSHMAN
E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-6-56
(date)

Gm SQ
FEB 4 1955

February 2, 1955

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station, Region III

Subject : Final engineering report, DMEA Contract Ida-6425, Docket DMEA-3503, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Mineral Hill Mining District, Pinal County, Ariz.

Enclosed are original and 5 copies of a final engineering report on the above property by T. M. Rennie and W. R. Hardwick of the Bureau of Mines. Although this contract probably hasn't been actually terminated, no work has been done on it since March 1953 and termination papers have been sent to the company's president for signature.

Some time ago we recommended that a "Certification of Discovery or Development" be issued.

Walter R. Storms

Walter R. Storms

cc W. M. Traver (8)
J. K. Falck
DMEA-3503
SF

WRStorms:frj

Reviewed by
DMEA OPERATING COMMITTEE
2-6-56
(date)

DMEA
FEB 4 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
FEB - 1 1955

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

FINAL ENGINEERING REPORT

DMEA-2603, Contract DPc-2455

Kenova King Mountain Mining Company's Alma Lead-Zinc Mine

Mineral Hill Mining District

Pinal County, Arizona

T. M. Kennedy, Mining Engineer
U. S. Bureau of Mines

William R. Hardgrove, Mining Engineer
U. S. Bureau of Mines

February 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-6-54
(date)

RECEIVED
FEB - 1 1978

BMA-2603, CONTRACT 14-11-0429
MAGMA KING MANGANESE MINING COMPANY'S AJAX LEAD-ZINC MINE
MINERAL HILL MINING DISTRICT
PINAL COUNTY, ARIZONA

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4	Drill hole sections	(See Geologic report)
5	Geologic map of mine workings	(See Geologic report)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Early in 1952, the Magna King Manganese Mining Co. of Phoenix, Ariz. applied to the Defense Minerals Exploration Administration under the Defense Production Act of 1950, as amended, for Government assistance to explore the lead-zinc deposit at the Ajax mine in the Mineral Hill Mining District of Pinal County, Ariz. The original application was for an estimated $59,727.00 and was docketed as DMEA-2603. The applicant proposed to explore the deposit by diamond drill holes, and by drifting and crosscutting.

The Ajax property was examined on August 25, 26, and 27, 1952 by T. M. Rosalo of the Bureau of Mines and J. M. Faick of the Geological Survey, accompanied by Ralph J. Pomeroy, president of the Magna King Manganese Mining Co. and Frank L. Metler, who was superintendent at that time for this company. After some discussion, the applicant revised its proposals and the DMEA examiners recommended that Government assistance be given the company for the total amount of $23,100.00 for driving 400 feet of drift and 200 feet of raises, and drilling 500 feet of diamond drill hole.

The Ajax mine is situated about 8 air-miles southwest of Superior, Ariz. in the Mineral Hill Mining District. Lead and zinc minerals occur in 2 large fissure veins in pre-Cambrian schist, these veins striking in a northerly direction and dipping from 45 to 65 degrees to the west. One vein had been explored

by a 176-foot shaft, inclined about 65 degrees to the west, with short levels at the 50- and 176-foot points at the time the RFCA application was submitted. The deposit (or deposits) also had been explored to some extent by several surface diamond drill holes.

Exploration Project Contract No. Ida-8428 was signed on October 23, 1952. It provided: (1) Drift 400 feet northerly on the 176-foot level; (2) drive 200 feet of raises at favorable sites disclosed by this drifting; and (3) diamond drill a maximum of 500 feet of core hole at locations which were to be determined after part or all of the drifting had been done. The estimated costs were to be: (1) 400 feet of drifting at $35.00 per foot; (2) 200 feet of raising at $33.00 per foot; and (3) 500 feet of drill hole at $5.00 per foot. The total cost was $23,100.00, or $11,550.00 as the Government's share.

Work under terms of the contract was started on November 14, 1952 after the shaft headframe had been reinforced, a dumping arrangement built, track and skip installed in the shaft, ventilation, pump, water and air lines installed, and track and pipe lines installed on the 176-foot level.

Up until April 1, 1953, the north drift on the 176-foot level had been advanced 194 feet. About that time, the price of lead and zinc declined, so the operator requested and received a recess of operations until May 1, 1953. Additional recess periods were granted to September 1, 1954 although no work under terms of the contract had

been done since March 1953. As no work had been started by September 1, 1954 and as the operator failed to ask for an additional recess period, DMEA representatives recommended that the contract be cancelled.

During the life of the DMEA contract, a small amount of low-grade lead-zinc material was discovered by the 176-foot level north drift. Although this material is not ore at the present time, it indicates the presence of lead and zinc in a zone that could be an extension of the ore found in old diamond drill hole S-6. The drift was driven 194 feet and lacked only about 90 feet of reaching the main objective, the downward projection of the ore indicated by diamond drill hole S-2. Because of these facts, it was recommended that a "Certification of Discovery or Development" be made.

INTRODUCTION

The Ajax mine in Pinal County, Ariz. was explored during 1952 and 1953 by the Magna King Manganese Mining Co. with Governmental assistance as authorized by the Defense Production Act of 1950, as amended. The company had made application to the Defense Minerals Exploration Administration for assistance in exploring and developing the mine at estimated cost of $39,727.00, with the object of indicating sufficient lead-zinc ore to justify a milling operation. The application was reviewed, docketed as DMEA-2603, and sent to the field for an examination of the property. The field examination,

made by J. M. Faick, Geological Survey and T. M. Ronalo, Bureau of Mines, resulted in favorable findings and authorization for aid on a revised exploratory program.

Contract Bm-2428 was executed and duly signed by both parties. It authorized underground exploratory work costing an estimated $23,100.00 and specified that the maximum Governmental participation would be 50 percent of the estimated costs, or $11,550.00. The exploratory work, started on November 14, 1952, continued through March 1953. It then was restarted to September 1, 1954, in accordance with the applicant's request. Failure to renew operations resulted in cancellation of the contract. Only a small portion of the authorized work was completed.

LOCATION AND ACCESSIBILITY

The Ajax mine is about 8 air-miles southeast of Superior, Ariz., the home of the Magma Copper Co. (figure 1). Superior is on U. S. Highway 70 and is the terminus of the Magma Arizona Railroad. The mine may be reached from Superior by traveling 11 miles westerly on U. S. Highway 70, thence 9 miles southeasterly over a graded desert road that contains no excessive grades. Short stretches of the desert road that cross or follow dry-washes are impassable for brief periods after heavy rainfalls.

The nearest railroad shipping point is Price, about 12 miles south of the mine by desert road. The Ajax mine is at an altitude of about 3,000 feet. It is in an area of moderately rugged topography consisting of sharp mountain ridges and narrow valleys. On the property, the altitudes range from about 3,000 to 3,500 feet.

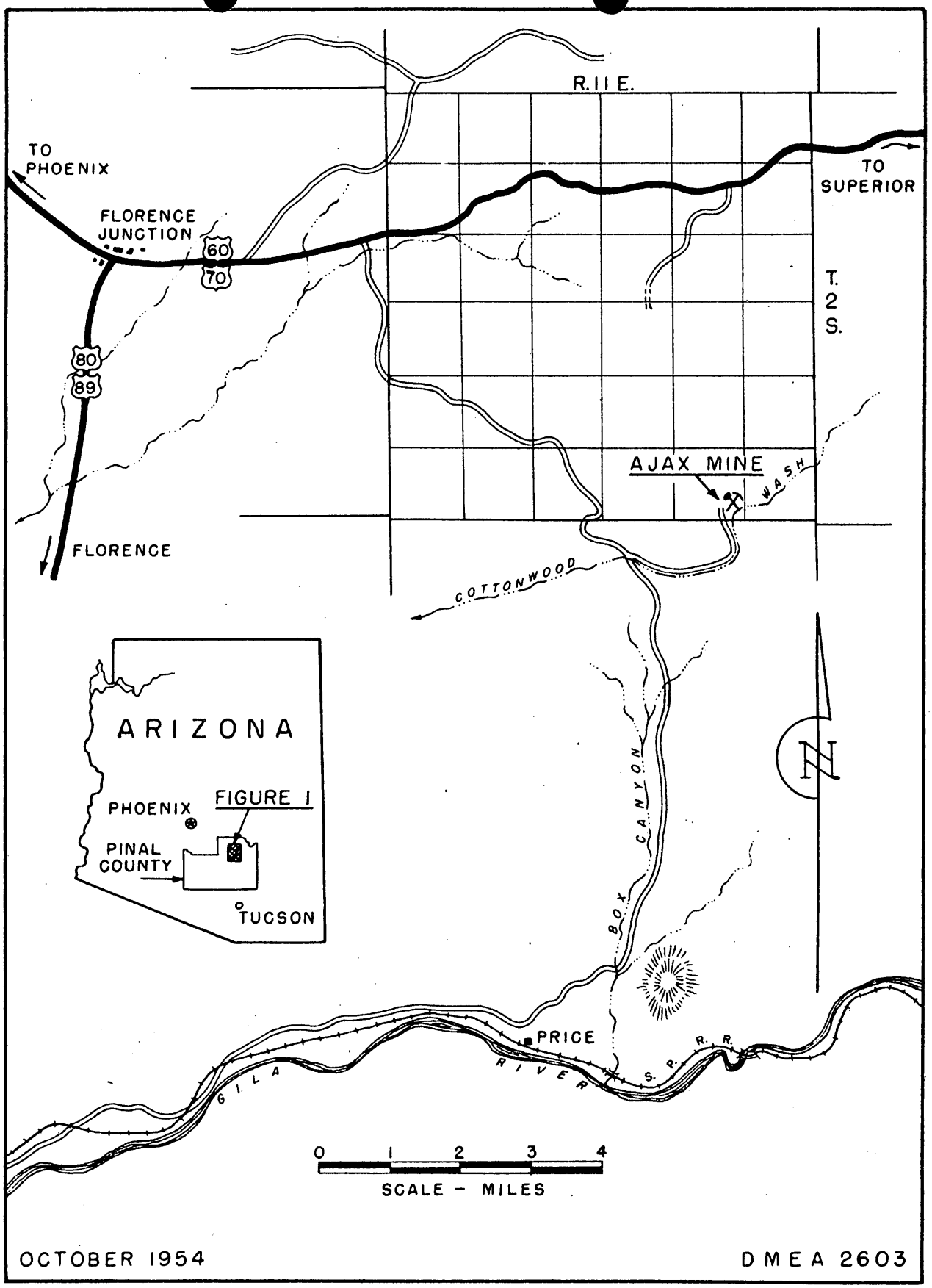


FIGURE 1. - LOCATION MAP - AJAX MINE
MAGMA KING MANGANESE MINING COMPANY PINAL COUNTY, ARIZONA

The mountain slopes support a sparse growth of desert vegetation, mainly cacti and catclaw. Palo Verde trees and mesquite occur in the valleys.

There are no permanent streams in the area that drains southerly to the Gila River.

The climate is typical of the lower altitude regions of southern Arizona. Annual temperatures at the mine probably range from a few tens of degrees below freezing to near 110 degrees. Precipitation, mainly as heavy rain storms during July and August, probably totals between 10 and 15 inches yearly. Light rainfalls and a few snow flurries are common in the winter.

HISTORY AND PRODUCTION 1/

The date of discovery of the Ajax deposit is unknown. Development of the deposit was started in 1906. During the following few years the deposit was developed to its present inclined depth of 190 feet. Probably little or no ore was shipped from this operation. The mine then was inactive until 1947. During 1947 and 1948, lessees shipped 5.25 tons of ore containing 56 percent lead and 4 ounces of silver per ton, and 3 carloads of ore averaging approximately 8 percent lead, 6 percent zinc, 0.14 percent copper, and 1.2 ounces silver a ton. The mine then was allowed to fill with water.

In 1949, the mine was dewatered and a small amount of drifting was done on the 175-foot level. In 1953, the Magma Copper Co. sampled the underground workings, and the Miami Copper Co. carried

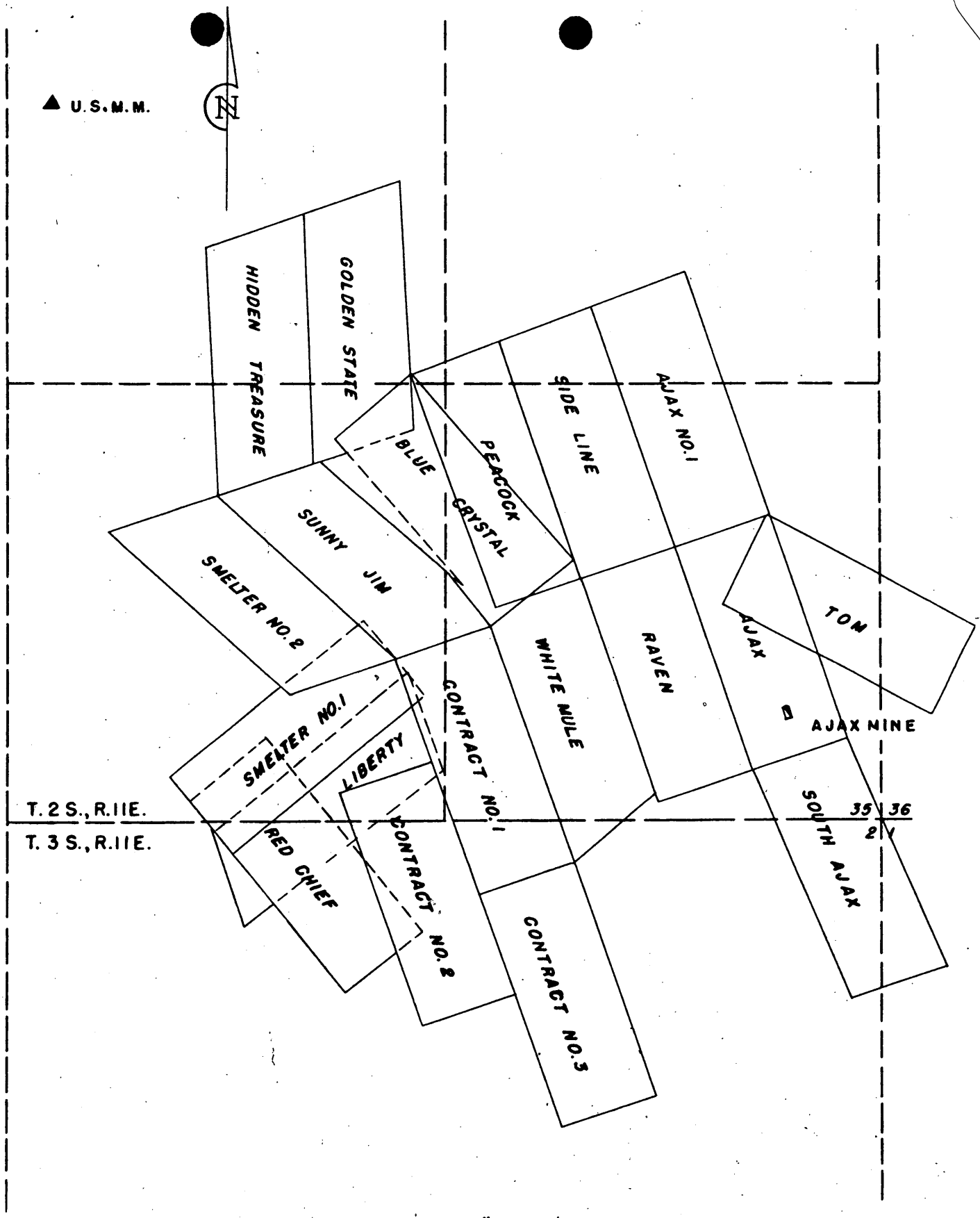
1/ Information supplied by Ralph J. Pomeroy and Frank L. Metler, president and former superintendent of the Magma King Manganese Mining Co., respectively.

out a diamond drilling program. The drilling consisted of 2 holes from the 175-foot level and 5 holes from the surface. The mine then was inactive to April 1952 when the Magna King Manganese Mining Co. reopened it. Prior to initiation of the work authorized by contract with the Government, the company had put down a diamond drill hole from the surface, check-sampled a portion of the underground workings, and started construction of a skip pocket.

PROPERTY AND OWNERSHIP

The property comprises a group of 3 patented and 16 unpatented lode mining claims in secs. 35 and 36, T. 2 S., R. 11 E., and secs. 1 and 2, T. 3 S., R. 11 E., Mineral Hill Mining District, Pinal County, Ariz. (figure 2).

The Magna King Manganese Mining Co. held all the above property under lease and option agreements with Apex Mines, Inc. The patented claims, the Ajax, Ajax No. 1 and Raven, are owned by Mr. and Mrs. Walter S. Smith and Rae L. Frazier, Coolidge, Ariz. The unpatented claims are owned by Mrs. J. O'Dell, Phoenix, Ariz. and Mr. and Mrs. Frank H. Allen, Gilbert, Ariz. The agreements that were transferred by the Apex Mines, Inc. were obtained directly from the owners of the Raven claim and through transfer of agreements on the remaining claims that were held by Louis Hennig and Robert F. Dannelley, Pinal County, Ariz. All of the agreements called for royalty payments to the owners of 10 percent of the net returns from ore produced. Net returns were defined as the gross amount paid by the purchaser of ore concentrates less charges for transportation, milling, concentration,



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

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smelting, and trucking. Royalty payments in all cases were to be applied to purchase prices of $40,000.00 for the Ajax and Ajax No. 1 claims, $16,000.00 for the Raven claim, and $32,000.00 for the 16 unpatented claims.

The Magna King Manganese Mining Co., an Arizona Corporation, first maintained an office at 532 Security Building, Phoenix, Ariz., then later moved to 547 North Arizona Ave., Chandler, Ariz. The principal officers of the corporation were: Ralph J. Pomeroy, president, Chandler, Ariz.; Walter C. Smith, vice-president, Coolidge, Ariz.; Loren K. Shannon, sec. and treas., Springfield, N. J.

GEOLOGY AND ORE RESERVES

Geology

The country rocks in the vicinity of the Ajax mine are chlorite schists of probable pre-Cambrian age. The schist is fine-grained and greenish-grey in color, and is gently folded into small easterly trending anticlines and synclines that have dips on their flanks of 10 to 30 degrees. Schistosity is vague and poorly developed.

The Ajax mine explores part of a vein system by means of a 176-foot shaft inclined westward about 65°, and by drifts on the 50- and 176-foot levels (figure 3). The 50-foot level extends 30 feet to the north and 60 feet to the south of the shaft. On the 176-foot level, drifts have been driven 274 feet to the north and 80 feet to the south from a 30-foot crosscut from the shaft. Other underground exploration consists of 3 short diamond drill holes on the bottom level. Surface exploration includes a few shallow pits and 6 diamond drill holes.

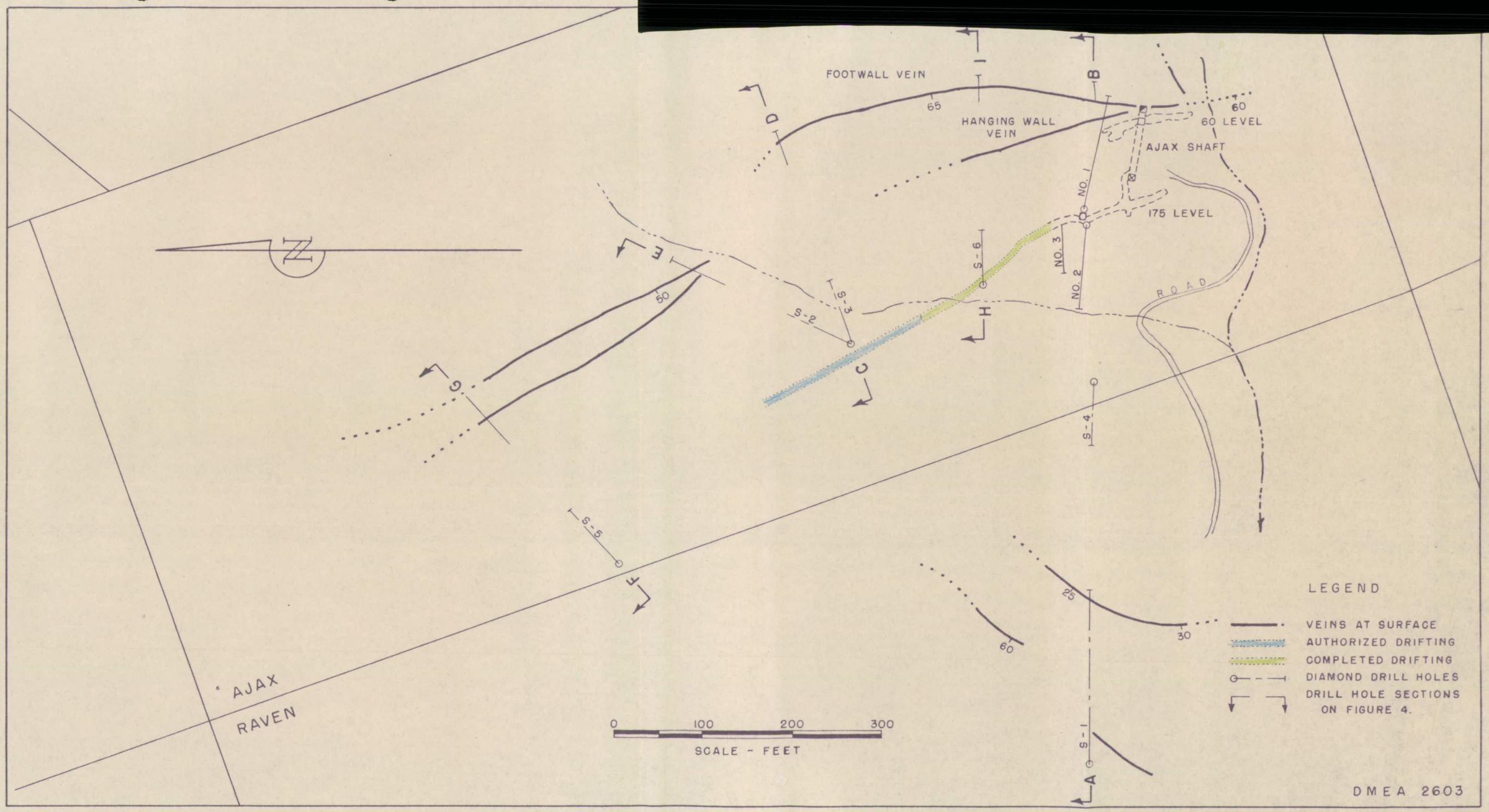

FIGURE 3. - PLAN MAP - AJAX MINE - MAGMA KING MANGANESE MINING COMPANY - PINAL COUNTY, ARIZONA

A system of quartz veins at the Ajax mine occupies a fault zone in schist. It is exposed at the surface for a distance of about 1,800 feet to the south and 300 feet to the north of the Ajax shaft where two prominent branches of the system converge. The mine workings explore a portion of the western or hanging wall vein adjacent to its junction with the footwall vein. The hanging wall vein strikes from easterly north-south to N. 20° W. on the surface and averages about N. 5° W. on the 175-foot level. The strike of the footwall vein, exposed only on the surface, is about north of the shaft and then appears to change to N. 20° W. Both veins dip about 60° to the west at the surface. The hanging wall vein flattens with depth and had a dip ranging from 40 to 50 degrees on the 175-foot level. The veins, where they converge, appear to be structurally deformed, possibly by faulting or folding. Some brecciation of the enclosing schist was noted in this area.

Ore mineralization exposed by the underground workings is confined almost entirely to an ore shoot at the shaft. The deposit has a strike length of about 110 feet and extends from near the surface to an unknown depth below the 175 level. Galena and sphalerite, the observed sulfide ore minerals, occur in quartz and calcite as grains that range in size from about one eighth of an inch to approximately one inch in diameter. They are distributed erratically throughout much of the deposit and in many places constitute as much as 25 percent of the vein filling. Oxidation of the ore zone is believed to be almost complete to a depth of about 20 feet below the surface. A high percentage of the ore minerals occur as oxides on the 50 level.

Below the 50 level the degree of oxidation decreases rapidly to the bottom level where oxides form an insignificant portion of the ore minerals.

The only other zone of ore mineralization encountered in the mine occurs near the north end of the 176 level. Here, the drift driven with Government aid penetrated about 34 feet of highly fractured mineralized vein material containing minor amounts of galena, sphalerite, and chalcopyrite.

Significant ore mineralization encountered by diamond drill holes was confined to surface holes S-2 and S-6.

Ore Reserves

The Ajax mine contains no measureable ore.

The indicated reserves have been estimated at: (1) 10,000 tons containing about 10 percent combined lead and zinc and 1.0 ounce silver a ton; and (2) a few hundred tons containing 2.2 percent zinc, 0.73 percent lead, 0.22 percent copper, and 0.13 ounce gold and 0.3 ounce silver per ton. The 10,000 tons of high-grade material present in the partially developed deposit at the shaft and found by drill holes S-2 and S-6 had been indicated by work done before initiation of the DMA exploratory program. The few hundred tons of low-grade material was penetrated near the end of the drift driven with Governmental assistance.

The inferred reserves are: (1) 4,700 tons containing 1.0 percent lead and 8 percent zinc in a depth extension of the deposit at the shaft; and (2) a few tens of thousand of tons of similar grade material in other deposits that may exist at drill hole S-2, at the mineralized zone encountered by the 176 north drift, and in other parts of both veins.

DESCRIPTION OF WORK COMPLETED

Contract Ida-6428 authorized 400 feet of drifting at $35.00 per foot, 200 feet of raises at $33.00 per foot, and 500 feet of diamond drilling at $5.00 per foot. It specified that: (1) the drifting was to be northerly from the north breast of the 176-foot level; (2) the locations of the raises and the locations, directions, inclinations, and depths of drill holes would have to be acceptable to the DMA representative; and (3) all preliminary work would be completed by the operator at no expense to the Government.

The drifting authorized by the contract was started on November 14, 1952 after the operator had completed preliminary work, consisting of installation of a skip, removal of debris from the 176-foot level, and the laying of track and pipe lines. To the end of March 1953, work under the contract was confined to 194.0 feet of drifting (figure 3). During this period, the operator drilled diamond drill hole No. 3 at no expense to the Government.

On April 1, 1953, Amendment No. 1 to Contract Ida-6428 became effective, granting a recess of operations until May 1, 1953. No work was resumed at the end of this period and subsequent amendments finally extended this recess period until September 1, 1954. However, no work had been resumed on or before that date so it was recommended that the contract be terminated.

A small amount of low-grade ore was discovered by the drifting. About 20 tons of hand-sorted ore were mined, then placed in one pile on the surface, and possibly 100 tons of low-grade material was placed in another. A sample of the first pile assayed 0.34 percent copper, 0.52 percent lead, 1.8 percent zinc, 0.02 ounce of gold and 0.4 ounce of silver a ton; two samples from the second pile assayed 0.23 and 0.095 percent copper, 0.35 and 1.10 percent lead, 1.3 and 3.4 percent zinc, trace and 0.02 ounce of gold and 0.1 and 0.4 ounce of silver a ton.

EXPLORATION

Exploration Project Contract Ibs-5428 estimated costs of the project as follows:

Drifting, 400 feet at $35 per foot	$14,000.00
Raising, 200 feet at $33 per foot	6,600.00
Diamond drilling, 500 feet at $8 per foot	2,500.00
Total estimated cost	$23,100.00

Actual expenditures were as follows:

194 feet of drifting at $35 per foot	$6,790.00
Government's share of actual cost	3,395.00

A small amount of low-grade ore was mined from the 176-foot level drift and stockpiled on the surface. Some of this material has been sold, so no royalty has been paid to the Government.

EFFICIENCY OF OPERATIONS

The mining operations were conducted in a fairly efficient manner under the supervision of Frank L. Metler, mine superintendent. Installation of better ventilation and drainage systems would have

materially improved working conditions. Failure to make these improvements probably was due to lack of funds.

Cooperation with representatives of BMA was not very good. A survey of the workings was made only after repeated requests, and requests for sampling and stamping resulted in no action.

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

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FEB - 1 1956

224 New Customhouse
Denver 2, Colorado

January 26, 1956

All
Betty

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax Lead-Zinc mine, Pinal County, Arizona

Enclosed are the following final reports pertaining to work completed under the subject contract:

1. The original and one copy of the Operator's final report.

2. The original and three copies of the final engineering report by the U. S. Bureau of Mines.

The final geologic report by the U. S. Geological Survey is in process of preparation and will be forwarded when made available to this office.

Final payment to the Operator was processed by this office October 25, 1955, in conformance with the Report of Review by the Contract Administration and Audit Division, dated August 31, 1955.

The exploration work consisted of 194 feet of drifting at a total accepted cost of $6,790.00, in which the Government participated to the extent of 50%, or an amount of $3,395.00.

The exploration work resulted in a discovery or development of lead-zinc ore for which a psuedo certification was effected by the provisions of item 4(c) of Amendment No. 7, dated June 30, 1954.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

Operator's Final Report

DMEA
Date Rec'd
OCT 24 1955
BUREAU OF MINES
Denver, Colorado

TELEPHONE
PHOENIX 2-0181

MAGMA KING
MANGANESE MINING COMPANY
SUPERIOR · ARIZONA

OFFICE
[redacted]
589 North Colorado St.
Chandler, Arizona

Mr. W. M. Traver, Executive Officer
DMEA Field Team
Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 2603 (Lead, Zinc)
Contract Idm-B428

Dear Mr. Traver:

Enclosed is final report of the Ajax project under Docket DMEA 2603 Contract Idm-B428, Pinal County, Arizona. It is the writers hope that this will be sufficient to close the matter until operations can be instituted on the property.

We feel that we have made a discovery, and that the Government will receive its expenditures as per royalty agreement of the original contract.

Please note that Magma King office is 589 North Colorado Street, Chandler, Arizona. If you should desire to contact me peraonally I can be reached at the Barton Uranium Company, 304 Uranium Center Building, Grand Junction, Colorado. The phone number is Grand Junction 2501.

Sincerely yours,

MAGMA KING MANGANESE MINING COMPANY

By [signature]
President

RJP/cr
Enc.

FINAL REPORT

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA-2603 (Lead, Zinc)
Contract Idm-B428

PROGRESS REPORT

Work under the joint-finance arrangement with the company, Magma King Manganese Mining Company, and Defense Minerals Exploration Administration began on November 1, 1952. Previous to that time the company had, at its own expense, installed a track and skip in the 176-foot shaft. The headframe was reconstructed and a dump arrangement was installed. Additional pump facilities and pipe lines were installed and a new track was laid in the north drift face.

Under the contract, the cost of drift per foot was set at $35.00. One-half of this cost was to be borne by DMEA, and the company received for the month of November payment from DMEA for its share, amounting to $612.50.

About 15 feet of drifting was necessary to get the drift back into the hanging wall vein. At this point there was about 26 inches of mineralization, consisting of chalcopyrite, galena, and sphalerite.

For the month of December 76 feet of drifting was completed, the greater part of which passed through fault breccia, with lead, zinc, mineralization throughout. The hanging wall of the drift indicated much movement of a vertical nature, and the mineralization appeared to be drag ore.

During January 26 feet of drifting was done. During the first part of the month a large water course was blasted into, which flooded the entire drift and even up to within a few feet of the pump station in the shaft. This water course appeared to be about 25 feet in length and from one to three feet in width. The mud which washed out of the water course had manganese and specular hematite in it. It was necessary to install timber at the face of the drift. A considerable amount of chalcopyrite was observed in the face of the water course.

Progress for the month of February totalled 34 feet of drifting, all of which contained good showing of lead, zinc and copper. A portion of the material removed in drifting was of sufficient mineralization to stock pile, in the event of future milling operations. Much water was encountered this month and additional pumping was necessary throughout the entire month. Also, during this month, a diamond drill hole was drilled to a length of 40 feet in the hanging wall at a point opposite the starting point under the DMEA contract. This hole was drilled entirely at company expense. Nothing of value was observed in the core recovered.

Progress for the month of March was 26 feet of drifting, in ore most of the way for the full width of the drift. A fairly strong copper lens appeared on the foot wall side of the vein. A 14-inch sample cut across this lens assayed 9.78% copper. A 4-foot cut across the face went 2.2 copper, 4.20 lead, and 4.75 zinc. The face of the drift at the termination of the operation appeared to be partially in ore.

CONCLUSION

From the progress report, it would appear that a discovery has been made in the Ajax drift to the north, and while the project was not completed, the company is encouraged by the findings and contemplates completing the exploration program. However, due to financial reasons for the present we wish to terminate this contract with DMEA and as soon as new operations are possible, we will inform whatever Government Agency necessary in the event an operation is begun.

The writer wishes to express appreciation and satisfaction to Mr. W. W. King and others of that department, and Mr. Storm of the Bureau of Mines office at Tucson, whose responsibility it was to process the work program and also the others of that department who rendered assistance to our joint efforts.

For the month of March the DMEA has refused to make payment for its portion of the operation as the contract called for. Request is hereby made that this sum be paid to the company as soon as possible.

Respectfully submitted,

Magma King Manganese Mining Company

By [signature]
President

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

RECEIVED
OCT 17 1955

224 New Customhouse
Denver 2, Colorado

October 14, 1955

~~Klugerhard~~
Betty

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc) Contract Idm-E428, Magma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report, Forms MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data pertaining to work under the subject contract for the month of March, 1953.

W. M. Traver

J W Townsend
By J. W. Townsend

Enclosures

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U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION IV

Administrative Audit Difference Statement

Date: October 11, 1956
Payee's
Reference: March 1959

Magma King Manganese Mining Co.
532 Security Building
Phoenix, Arizona

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 910.00

Difference $

Amount Approved* $ 910.00

The reason for the difference was due to:

* Entire amount due withheld pending receipt of your final report.

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-IV-B & F Form No. 4
4-15-52 D

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

RECEIVED
OCT 17 1955

224 New Customhouse
Denver 2, Colorado

September 27, 1955

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 2603, (Lead, Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax mine, Pinal County, Arizona - Operator's Monthly Progress Report for the period March, 1953.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore, we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

This Progress Report was held up pending resumption of the project work and the later difficulties concerning termination under the provisions of Amendment No. 7. The final Report of Review was released to this office on August 31, 1955 approving costs as claimed in this Progress Report.

We have written the Operator requesting his final report and recommend that Government contribution in the approved claim, $455.00, be withheld until this report is received.

W. M. Traver

W. M. Traver

Enclosures
WMT:jy
cc: MF-104 File E428
Sec. Opr. Comm. (2)
Storms
Chron.

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OCT 17 1955

MINING DIVISION
REGION IV

April 15, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : March 1953 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

The next progress examination will be for the month of May, as a recess of one month in operations has been granted by the Defense Minerals Exploration Administration, or from April 1 to May 1.

T. M. Romslo

T. M. Romslo, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

DMEA Docket 2603
Contract Idm-2428

Narrative Report Ajax Mine
Magna King Manganese Mining Company.
March 1953.

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The total advance in the North drift on the 176 foot level of the Ajax Mine for the month of March 1953 was 26 feet.

Work was interrupted twice during the month by break down of the plant which provides power for pumping operations.

As the drift face progresses to the North more water is encountered and at the present time nearly one half of the shift is used in dewatering operations.

The entire 26 feet of advance was in low grade lead-zinc ore across the face of drift with streaks of massive lead zinc sulphides up to eleven inches in width in the footwall section. Small stringers of chalcopyrite are also present.

A recess of thirty days, extending from April 1, 1953 to March 1, 1953 has been granted by the Defense Minerals Exploration Administration. A portion of this time is to be used in providing a suitable ventilating system so that work can be resumed on a two shift basis.

May
TMK.

Frank L. Metler

Frank L. Metler, Supt.

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

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DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1953 Docket No. DMEA 2603 Contract No. Idm E-428
Operator's Name Magna King Manganese Mining Company Minerals Lead-Zinc
Address 532 Security Bldg; Phoenix, Arizona

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$910.00	26	$6790.00	194	$35.00	400	$35.00
Crosscutting								
Raising	Feet						200	$33.00
Shafts								
Winzes								
Drilling: Core	Foot						500	$ 5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$910.00		$6790.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$910.00		$6790.00				

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

Date Apr. 11, 1953 Operator Magna King Manganese Mining Company
Per Frank R. Mellor Title Superintendent

REMARKS: Power unit broke down two time during month

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

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

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

RECEIVED
OCT 17 1955

Month of March, 1953 Docket No. DMEA 2603 Contract No. Ism E-428
Operator's Name Magma King Manganese Mining Co. Minerals Lead- Zinc
Address 532 Security Bldg; Phoenix, Arizona.
Contract Amount, $ 23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	910.00	$5880.00	$6790.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$910.00	$5880.00	$6790.00			

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

Date Apr. 11, 1953 *Payee Magma King Manganese Mng. Co.

Per Hank Mettler Title Superintendent

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

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

(Instructions on reverse)

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

$ No payment

Signature RRa
(Authorized Certifying Officer)

Date 10/12/55 Vou. No. —
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 428 in accordance with the terms of the contract.

Signature T M Pomolo WMP Title Mining Engineer Date April 14, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Signature W. M. Leavy Title Executive Officer Date SEP 27 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

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

RECEIVED
JUL 22 1955

224 New Customhouse
Denver 2, Colorado

July 20, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 2603 (Lead-Zinc), Contract Idm-E428, Magma King Manganese Mining Company (Ajax Lead-Zinc Mine), Pinal County, Arizona

Enclosed are the original and three copies of an interim report by W. R. Hardwick of the United States Bureau of Mines on the subject project with its transmittal by W. R. Storms.

The report requires no comments.

W. M. Traver

Enclosure

vj

cc: Harshman w/copy of memo
Faick w/copy of memo
Storms w/copy of memo
Townsend w/copy of memo
Subject w/copy of memo
Chron.

DMEA
Date Rec'd.
JUL 20 1955
BUREAU OF MINES
Denver, Colorado

Box 4097
Tucson 5, Ariz.

July 18, 1955

RECEIVED
JUL 22 1955

Memorandum

To : W. M. Trever, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Interim Report, DMEA Contract Mm-E428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of an interim report on the above county by W. R. Hardwick of the Bureau of Mines.

Walter R. Storms

Walter R. Storms

CC W. M. Trever (8)
J. N. Faick
DMEA-2603
DF

WRStorms:frj

Date Rec'd.

JUL 20 1955

BUREAU OF MINES
Denver, Colorado

RECEIVED

JUL 22 1955

Box 4027
Tucson 5, Ariz.

July 18, 1955

Memorandum

To : Walter R. Pearce, Superintendent, Southwest Exp. Station

From : William R. Hartdegen, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Project [illegible], Contract [illegible], Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on July 11, 1955. There was no ore at the mine and the road was badly washed for the last half mile. All equipment has been removed.

A Mr. Hinkle, a prospector in the district, stated that he recently had talked with Ralph A. Penney, president of the Magma King Manganese Mining Co. and Penney had stated that the mine would be opened and worked on July 18. Penney also told Hinkle that he had interested some company in the Ajax claims, which are in mining operation in the vicinity of Grand Junction, Colorado. This company will examine the property, and if successful, will provide money for additional drifting according to what Penney told Hinkle.

This short form contract was approved on October 22, 1953 and starting points were set by a bureau of mines engineer on October 26, 1953. From November 1953 to March 1954, the operator drove 154 feet of drift at a cost of $4,750.00. The operator then stopped work on the contract and has never resumed work. The contract was kept alive until September 1, 1954 by repeated requests for extensions of reports.

An amendment (No. 7) sent to Ralph A. Penney, president of the company, provided that the contract be terminated if work was not resumed by September 1, 1954. This amendment was signed and returned by Penney but copies of "Owner's Statement to Lessor" were not signed and returned.

The purpose of this contract was to drift along a vein to a point where diamond drill holes from the surface had cut a mine ore body. The objective was not reached before work on the project was

DS W. H. Trayer (Orig. & 2)
J. H. Fabel
[illegible]
RF

[illegible]

terminated. A final report has been submitted and termination has been recommended. Certification was recommended, based on a small amount of low grade zinc ore that was discovered.

William R. Hardwick

William R. Hardwick
Mining Engineer
Tucson, Ariz.

224 New Customhouse
Denver 2, Colorado

January 25, 1955

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Semi-annual Report - Docket No. DMEA 2603, Contract No. Idm-E428 (Lead-Zinc), Magma King Manganese Mining Co., Pinal County, Arizona

Enclosed are four copies of the Semi-annual Report on Contract No. Idm-E428.

W. M. TRAVER

Enclosures

W. M. Traver

January 14, 1955

Memorandum

To : Executive Officer, Defense Minerals Exploration Administration

From : Superintendent, Southwest Experiment Station

Subject : Interim Report, DMEA Contract Idm-2428, Docket DMEA-2603, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed are original and 8 copies of a short memorandum report on the above property by W. R. Hardwick of the Bureau of Mines. Hardwick visited this property while checking DMEA certified project in that part of the state.

Walter R. Storms

Walter R. Storms

CC Exec. Off. (8)
DMEA-2603
BF

WRStorms:frj

January 14, 1955

Memorandum

To : Walter R. Stearns, Superintendent, Southwest Experiment Station

From : William R. Hardwick, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-2603, Contract Idm-2428, Magma King Manganese Mining Co.'s Ajax Lead-Zinc Mine, Pinal County, Ariz.

The Ajax mine was visited on January 7, 1955. There was no one at the mine. The road was badly washed out and the last half mile was impassable by automobile. The same condition existed when the mine was last visited on September 26, 1954. There has been no ore sold since the contract was approved.

This short form contract was approved on October 23, 1952. The operator drove 194 feet of drift at a total cost of $6,790.00, then stopped work before it reached the objective. Some low-grade ore was discovered. The operator was not able to finance the completion of the project, so termination with "Certification of Discovery or Development" has been recommended. A termination agreement has been sent to the operator, but so far as we know, has not been signed by him and returned to the DMEA Executive Officer.

William R. Hardwick
William R. Hardwick
Mining Engineer
Tucson, Arizona

CC Exec. Off. (Orig. & 8)
DMEA-2603
DF

WRHstorms:frj

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

Keating
Griswold
Betty

224 New Customhouse
Denver 2, Colorado

April 2, 1953

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report Form MF-104, and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data for the period of February, 1953, pertaining to DMEA Docket 2603, Contract Idm E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona.

W. H. King

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

March 23, 1953

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1953

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona - Operator's Monthly Progress Report, for the period February 1953

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report----------March 10, 1953
Date Received in Field Office----------March 12, 1953
Date Received in Region Office----------March 19, 1953
Date Processed for Payment----------March 20, 1953

W. H. King
W. H. King

Enclosures
RDB:es
cc: Contract
Sec. to the Oper. Comm. (2)
Chron.
Storms

MINING DIVISION
REGION IV

March 18, 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : February 1953 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Sterms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

MINING DIVISION
REGION IV

March 17, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Division, Region IV, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for February 1953, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-E428.

The Ajax mine was visited on March 5, 1953. An attempt to reach the mine March 2 was unsuccessful due to high water in Cottonwood Wash. The object of the visit was to determine if the exploratory work continues to conform with the contract and to check progress for February. Pertinent underground workings were inspected in the company of C. V. McCutcheon, miner on the project. Frank L. Metler, project supervisor, reportedly had been at the mine before I arrived and had left to delivery payrolls to the corporation's office at Phoenix.

Inspection of the 176 level showed that the north drift had been advanced 34 feet during February to place the face at 168 feet from the starting point.

Advance for February was on a quartz vein about 2.5 feet wide that contained scattered ore values of sphalerite, galena, and chalcopyrite.

A 40-foot hole was diamond drilled into the footwall of the 176 level from near the starting point of the contract drift. No ore mineralization was encountered in this hole that was drilled at the corporation's expense. A verbal request for drilling this hole under the contract was denied by the writer during January, because available data indicated that the hole had little or no chance of encountering ore. At the time, I told Mr. Metler that I would approve some contract drilling in this area, provided it was justified by results obtained in a hole drilled at the corporation's expense.

CC W. H. King (Orig. & 6)
DMEA-2603
DF

WRStorms:frj

CONTRACT, FORMS MF-104 and 104-A, AND OPERATOR'S NARRATIVE REPORT

The following is indicated by an inspection of the project and subject data:

1. The work performed and for which claim is made conforms with the contract and is as reported on Form MF-104A.

2. The 34 feet of advance has been charged on Form MF-104 at the contracted rate of $35.00 per foot.

3. The Operator's Narrative Report with attached map is considered adequate. The map is new and was prepared from a transit survey that was completed by the supervisor only after much prodding by the writer. I have suggested and will see that other desirable data is furnished in the future. These data should include, for the purpose of planning diamond drilling, sections through drill hole S-2 and S-6 and the mapping of geologic structures. Furthermore, mineralized zones should be sampled and the sampling data should be recorded.

T M Romslo

T. M. ROMSLO, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

Superior, Arizona
March 10, 1953.

Ajax Mine- Magma King Manganese Mining Co.
Docket No. DMEA 2605- Contract No. Idm-2428

Progress Report February 1953.

Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations.

Progress was slow because of the additional amount of water encountered and because timbering was also necessary through out the month.

Lack of proper ventilating and drilling equipment was also responsible for the small footage made.

During the month a diamond drill hole was drilled 40 feet into the hangingwall at a point opposite the start of the DMEA contract. This hole was drilled entirely on company account and is not included in the DMEA contract. Nothing of value was noted in the drill core recovered.

Frank L. Metler

Frank L. Metler, Supt.
Magma King Manganese Mng. Co.

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

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

Month of Feb., 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Co. Minerals Lead -Zinc
Address 532 Security Bldg; Phoenix, Arizona.
Contract Amount, $23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$1190.00	$4690.00	$5880.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1190.00	$4690.00	$5880.00	1190.00	4690.00	5880.00

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

Date Mar. 10, 1953 *Payee Magma King Manganese Mng. Co.

Per [signature] Title Superintendent

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

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

(Instructions on reverse)

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

$595.00

Signature [signature]
(Authorized Certifying Officer)

Date 3/26/53 Vou. No. DMA 53-112

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-15428 in accordance with the terms of the contract.

Signature T M Romalo WAS Title Mining Engineer Date March 17, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.S.B.

Signature W. H. King Title Executive Officer Date MAR 23 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1953 Docket No. DMEA 2603 Contract No. Idm-E428

Operator's Name Magma King Manganese Mining Co. Minerals Lead-Zinc

Address 532 Security Bldg; Phoenix Arizona

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	foot	$1190.00	34	$5880.00	168	$35.00	400	$35.00
Crosscutting								
Raising							200	$33.00
Shafts								
Winzes								
Drilling: Core							500	$ 5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1190.00		$5880.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1190.00		5880.00				23,100

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

Date March 10 1953 Operator Magma King Manganese Mining Co.

Per Frank L. Mueller Title Superintendent

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

Keating
Griswold
Betty

224 New Customhouse
Denver 2, Colorado

March 9, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc), Magma King Manganese Mining Company's Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report Form MF-104, and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data for the period of January, 1953, pertaining to DMEA Docket 2603, Contract Idm-E428, Magma King Manganese Mining Company's Ajax Lead-Zinc Mine.

W. H. King
W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

March 5, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-N428 (Lead-Zinc), Magma King Manganese Mining Company's Ajax Lead-Zinc Mine, Pinal County, Arizona. Operator's Monthly Progress Report for the period January, 1953.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - February 14, 1953.
Date Received in Field Office (Originally) - February 10, 1953
Date Received in Field Office (Corrected) - February 22, 1953.
Date Received in Region Office - March 2, 1953.
Date Processed for Payment - March 4, 1953.

Forms were returned to Operator by Field Office for corrections and signatures.

W. H. King
W. H. King

Enclosures

RDBerk:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

February 26, 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : January 1953 Progress Report, Docket DMEA-2603, Contract Idm-E42B, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and 104a.

Also enclosed are two extra copies of our engineer's report.

As all work is in conformance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRSTORMS:frj

MINING DIVISION
REGION IV

February 26, 1953

Memorandum

To : W. R. Storms, Chief, Mining Methods Br., Mining Div., Region I V, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for January 1953, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idh-E428

The Ajax mine was visited Feb. 3, to check progress on the exploratory project and to determine if the work continues to be in conformance with subject contract. E. R. Rodriquez, Health and Safety Engineer, U. S. Bureau of Mines, Phoenix, Ariz., accompanied me to the mine and inspected safety conditions of the project. He and C. V. McCutcheon, miner on the project, accompanied me during an inspection of the pertinent mine workings.

Progress to date has been confined to drifting northward on the 176 level. For January the advance was 23 feet. Total advance to date of 134 feet consists of January's advance, plus the 111 feet previously reported. The face of the drift on Feb. 1 was 166.5 feet from the established reference point. A new reference point for measurements is the first timber set of the drift at 161 feet from the original reference point. Thus, advance for February will be the distance from the timber set to the face less 5.5 feet.

CONTRACT, FORMS MF-104 and 104A, AND OPERATOR'S NARRATIVE REPORT

A record of the processing of the Operator's Report at Tucson follows:

Received	Returned to Operator
Feb. 10	Feb. 12 for corrections
Feb. 18	Feb. 18 for signatures
Feb. 22	

The report received final checking February 25 and this report was completed the same day.

CC W. H. King (Orig. & 6)
DMEA-2603
DF
TMROMSLO:frj

Inspection of the project and subject data indicates the following:

1. The work performed and for which claim is made is in conformance with the contract and is as reported on form MF-104A (Reported units to date of 137 feet should be 134. The error will be picked up in next month's report);

2. The work performed has been charged out on Form MF-104 at the contracted cost of $35.00 per foot;

3. The Operator's Narrative Report with attached map is considered adequate. He will be instructed to revise his progress map to conform with corrections made at Tucson and to use the "Remark" space of Form M F-104 for a brief explanation of any unusual operating conditions that are encountered in the future. Further, he has been asked to map locations of samples and to indicate the extent of the sampled zone.

T M Romslo

T. M. ROMSLO
Mining Engineer

FRANK L. METLER
MINING ENGINEER

Superior, Arizona
Feb. 5, 1953.

Docket No. DMEA-2603
Contract No. Idm-E428

PROGRESS REPORT-AJAX MINE, MAGMA KING MANGANESE MNG. CO.

January, 1953.

Very little progress was made in the North 176 foot level drift during the month of January 1953..

Early in the month a large watercourse was blasted into. This water course appeared to be about twenty five or thirty feet in length and from one foot to three and one half in width. At one time before the loose muck settled to drift level, about twenty feet of opening could be observed above the drift level.

When the watercourse was broken into the drift was flooded, the sump was filled with black mud composed of manganese and specular hematite. Pump suctions were trapped and the drift to the shaft was partially filled with mud and broken rock.

The balance of the month was required to unwater the 176 foot level, remove muck from the drift and timber the face of the drift.

Considerable chalcopyrite is observed in the broken material in the face of the watercourse a sample of which assayed c.02 oz gold, 2.00 oz. silver and 6.90 % copper.

At this writing the timbering is complete and advancing of the drift is underway.

Total Advance 23 feet.

Frank L. Metler

Frank L. Metler, Supt.

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Company Minerals Lead-Zinc
Address 532 Security Bldg. Phoenix, Arizona
Contract Amount, $ 23,100.00 Government Participation: 50 % Amount, $ 11,550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$805.00	$3885.00	$4690.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$805.00	$3885.00	$4690.00	805.00	3,885.00	4,690.00

U. S. BUREAU OF MINES
MINERAL DIVISION
FEB 22 1953
TUCSON, ARIZONA

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

Date Feb. 14, 1953 Payee Magma King Manganese Mng. Co.

Per Frank Dmetler Title Superintendent

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

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

(Instructions on reverse)

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

$ 402.50

Signature [illegible]
(Authorized Certifying Officer)

Date 3/6/53 Vou. No. DMA 53-105

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Edm-E 428 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date Feb 26, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: RDR

Signature W. H. King Title Executive Officer Date MAR 5 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

Month of February 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Co. Minerals Lead-Zinc
Address 532 Security Bldg. Phoenix, Arizona.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Foot	805.00	23	4690.00	137	35.00	400	35.00
Crosscutting								
Raising					134		200	3300
Shafts								
Winzes								
Drilling: Core							500	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		805.00		4690.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		805.00		4690.00				

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

REMARKS:

Date Feb. 14, 1953 Operator Magma King Manganese Mining Company
Per Frank R. Metler Title Superintendent

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

Keating
Betty

224 New Customhouse
Denver 2, Colorado

January 28, 1953

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report Form MF-104, and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data for the period of December, 1952, pertaining to DMEA Docket 2603, Contract Idm-E428, Magma King Manganese Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona.

W. H. King
W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

January 19, 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-2428 (Lead-Zinc) Magma King Manganese Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona Operator's Monthly Progress Report for the period of December, 1952

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - January 4, 1953
Date Received in Branch Office - January 6, 1953
Date Received in Region Office - January 15, 1953
Date Processed for Payment - January 19, 1953

W. H. King
W. H. King

RDB:oc

cc: Contract
Secretary to the Operating Committee (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

January 13, 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Branch, Mining Div., Region IV

Subject : December 1952 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines engineer's report;
(2) Operator's narrative report with map;
(3) Forms MF-104 and 104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs (50 percent) be paid.

Walter R. Storms

Walter R. Storms

CC: W. H. King (6)
DMEA-2603
DF

WRStorms:als

MINING DIVISION
REGION IV

January 13, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Branch, Mining Division, Region IV

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for December 1952, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-E428.

The Ajax Mine was visited Jan. 5, 1953 to check progress on the exploratory project and to determine if the work continues to be in conformance with subject contract.

An inspection of the project workings showed that the north drift of the 176 level had been advanced 76 feet during December. Total advance of 111 feet to Jan. 1, 1953 is shown on a plan map of the 176 level that was submitted by Frank L. Metler, Superintendent, who was temporarily absent from the project during the inspection trip. Meager lead and zinc mineralization encountered to date consists of widely scattered fragments of galena and sphalerite in fault breccia.

CONTRACT, FORMS MF-104 AND 104A,
AND OPERATOR'S NARRATIVE REPORT

Inspection of the project and subject data indicates the following:

1. The work performed and for which claim is made is in accordance with the contract and is as reported on Form MF-104A. The drift continues to be driven at a smaller than normal size for the reason given in last month's report.

2. The cost of work performed has been charged on Form MF-104 at the contract's stipulated price of $35.00 per foot of drift.

3. The Operator's Narrative Report is considered adequate. No action will be taken on his recommendation for diamond-drilling

CC: W. H. King (Orig. & 6)
DMEA-2603
DF

TMRomslo:als

and crosscutting until he submits a plan and reasons for such work. He has been informed verbally that an acceptable drilling program will be approved at Tucson and that work not covered by the contract, such as the suggested crosscutting, must be submitted as a proposed amendment for final approval by the Denver office.

W. M. Romslo, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

Superior, Arizona.
Jan. 4, 1953.

PROGRESS REPORT- AJAX MINE-DECEMBER 1952.
Docket DMEA-2603, Contract Idm-E428

A total of 76 feet of drifting was done on the 175 foot level in a direction Northerly from the shaft during the month of December 1952.

A greater part of the formation passed through consisted of fault breccia with lead - zinc mineralization through out. The hanging wall of the drift indicates much movement of a vertical nature and the mineralization appears to be drag ore. As no crosscutting or core drilling has yet been done it is impossible to determine if the drift is following the hanging wall vein or a parallel fracture.

It is recommended that several core drill holes be extended into both the foot and hanging walls, to determine if the drift is following the hanging wall vein and also crosscut in search of the footwall vein shown on the surface.

Because of poor ventilation, it is impossible to conduct more than one shift each twenty four hours.

Magma King Manganese Mining Co.

Frank L. Metler, Superintendent.

Frank L. Metler

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 2 195 Docket No. DMEA 2603 Contract No. EMF-428

Operator's Name Magma King Manganese Mining Co Minerals Lead-Zinc

Address 532, Security Bldg; Phoenix, Arizona

Contract Amount 23100.00 Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
	2660.00	1225.00	3885.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2660.00	1225.00	3885.00	2660.00	1225.00	3885.00

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

Date Jan 4, 1953 *Payee Magma King Manganese Mng. Co.

Per [signature] Title Superintendent

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

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

(Instructions on reverse)

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

$1330.00

Signature [signature]
(Authorized Certifying Officer)

Date 1/23/53 Vou. No. DMM 53-88

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E428 in accordance with the terms of the contract.

Signature T M Pomalo WRK Title Mining Engineer Date Jan 12, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R. D. B.

Signature W. H. King Title Executive Officer Date JAN 19 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 2603 Contract No Idm-E428
Operator's Name Magma King Manganese Mining Company Minerals Lead- Zinc
Address 532 Security Bldg; Phoenix , Arizona.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	foot	$2660.0	76	$3885.00	111	$35.00	400	$35.00
Crosscutting								
Raising	foot						200	$33.00
Shafts								
Winzes								
Drilling: Core	foot						500	$5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$2660.00	76	$3885.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$2660.00		$3885.00				$23,100.00

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

Date Jan. 4,1953 Operator Magma King Manganese Mining Co.
Per Frank R. Mettler Title Supt.

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

224 New Customhouse
Denver 2, Colorado

Heading
Betty

January 9, 1953

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc), Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report Form MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data for the period of November, 1952, pertaining to DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona.

W. H. King
W. H. King

Enclosures

53-77

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

224 New Customhouse
Denver 2, Colorado

January 5, 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-1428 (Lead-Zinc) Magna King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona - Operator's Monthly Progress Report for the period of November, 1952

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - December 3, 1952
Date Received in New Mexico-Arizona Branch Office - December 8, 1952
Date Received in Region IV Office - December 29, 1952
Date Processed for Payment - January 2, 1953

W. H. King
W. H. King

Enclosures

RDB:ec

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.
Koschmann (2)

MINING DIVISION
REGION IV

December 23, 1952

Memorandum

To : W. N. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : November 1952 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines Engineer's report;
(2) Operator's narrative report with map;
(3) Forms MF-104 and MF-104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of 50 percent of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. N. King (6)
DMEA-2603
DF

WRStorms:frj

MINING DIVISION
REGION IV

December 23, 1952

Memorandum

To : W. R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for November 1952 Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-E428

The Ajax Mine was visited December 5, 1952 to check progress on the exploratory project and to determine if the work was being carried out in accordance with subject contract.

Inspection of the project was made in the company of Frank L. Metler, Superintendent of the applicant's field operations. The inspection trip showed that the face of the north drift on the 176-level had been advanced to a point 77 feet beyond the starting point established and described in John H. Soule's memorandum of October 31, 1952. With the face at 32.5 feet from the face of the drift at starting of drifting, the advance to December 5 was 44.5 feet of which 35 feet had been completed to Dec. 1, according to Metler, Prior to initiation of work under the contract, additional pipe lines, track, and a skip were installed in the shaft, muck was removed from the 176-level, and track was installed, all at no expense to the Government.

CONTRACT, FORMS MF-104 and 104A, AND OPERATOR'S NARRATIVE REPORT

The following is based on the inspection of the project and the subject data:

1. The work performed and for which claim is made is in accordance with the contract and is as reported on Form MF-104A. Although the contract does not specify a cross-section dimension for the drift, the writer believes the drift size should normally be driven about 5 by 7 feet in cross-section. At present the drift is being driven less than 5 by 7 feet in size because the ground is ravelly and has already sluffed to the acceptable size, in places. For this reason, the writer has approved the driving of the smaller drift as long as it is maintained in a condition that will meet safety regulations of the State of Arizona.

CC W. H. King (Orig. & 6)
DMEA-2630
DF

TMRomsloPfrj

2. The drifting has been charged out on Form MF-104 at the contracted price of $35.00 per foot.

3. The Operator's Narrative Report is considered adequate. The attached progress map was supplied by the DMEA Tucson office. Subsequent reports will contain a map now being prepared by the Operator.

T. M. Romslo

T. M. ROMSLO

U. S. BUREAU OF MINES
MINING DIVISION
DEC 8 1952
TUCSON, ARIZONA

Dec. 3, 1952.

Mr. Walter R. Storms, Chief
Arizona-New Mexico Branch
Mining Division, Region IV
Tucson, Arizona.

Dear Mr. Storms:

The following is a resume of work performed at the Ajax Mine during the month Of November, 1952 under DMEA Docket 2603, Contract Idm 2428 and is to accompany forms MF-104 and 104A.

Track and skip installed in shaft.
Head frame reinforced and dumping arrangement constructed.
Additional pump and pipe lines installed in the shaft. Ventilating pipe installed, 176 level station and new track layed to North drift face.
Muck removed from 176 feet level.
The above work was not done under DMEA Loan and was entirely financed by the Magma King Company.

On November 14, 1952 actual mining was commenced at North drift face on the 176 feet level and on November 30th an advance of 35 feet had been made.

About 15 feet of drifting was required to bring the drift back on the hanging wall vein, at this point some mineralization consisting of chalcopyrite and galena was noted. After a few feet beyond the 15 feet point the vein widened to 26 inches with increased mineralization consisting of sphalerite and galena. The mineralization is well scattered across the vein at the 35 foot point, but is not of commercial value.

The break down of the electric generating plant resulted in low footage for the month.

Yours very truly,
Frank L. Metler
Frank L. Metler, Supt.

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

Budget Bureau No. 42-R1036.3.
Expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 15 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Nov. 1952, 1952 Docket No. DMEA 2603 Contract No. Idm-E 428
Operator's Name Magma King Manganese Mining Co. Minerals Lead- Zinc
Address 532 Security Bldg. Phoenix, Arizona
Contract Amount, $ 23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ RRR Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting 35 feet	1225.00	00	1225.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS				1225.00	00	1225.00

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

Date Dec. 3, 1952 *Payee Magma King Manganese Mng.Co.

Per Frank Kuetler Title Superintendent

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

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

(Instructions on reverse)

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

$ 612.50

Signature [illegible] (Authorized Certifying Officer)

Date 1-7-53 Vou. No. 53-77

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 428 in accordance with the terms of the contract.

Signature D M Pomeroy WRH Title Mining Engineer Date Dec 18, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R. DB.

Signature W. H. King Title Executive Officer Date 1/5/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MR-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 5 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Nov. 195 2 Docket No. DMEA 3003 Contract No. Idm-E 428

Operator's Name Lone King Manganese Mining Company Minerals Lead-zinc

Address 522 Security Bldg. Phoenix Arizona

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	feet	1225.00	35	1225.00	35	35.00	400	35.00
Crosscutting								
Raising							200	35.00
Shafts								
Winzes								
Drilling: Core							500	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1225.00						Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1225.00						35100.00

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

Date Dec. 3, 1953 Operator Lone King Manganese Mining Co.

Per Frank L. Kietler Title Superintendent

Remarks: Low footage caused by breakdown of generating plant or inability to secure parts promptly. Scattered lead-zinc ore appearing in drift face.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

Building 20 - Federal Center
Denver 25, Colorado

October 23, 1962

EXTRA COPY
O. M. E
RECEIVED OCT 23 1962
800

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D. C.

From: T. M. Romslo, Mining Engineer

Subject: DMEA-2603 (Lead-Zinc)
Contract Dm-B428
Magna King Manganese Mining Co.
(Ajax Mine)
Pinal County, Arizona
FINAL INSPECTION OF CERTIFIED PROJECT

A final inspection of the subject property was made by me October 8, 1962. Information obtained during this inspection and previous inspections indicates that no ore has been produced from the property since October 23, 1952, the starting date of the Royalty Payment Agreement. My findings on October 8, 1962 also indicate that no ore could be produced from the property by October 23, 1962, the termination date of the Royalty Payment Agreement. Therefore, it is recommended that this account be closed.

Detailed information obtained during the final inspection follows. A "No Lien Notice" is posted on Ajax shaft headframe. It states that Roy V. Waughtel acquired the property from the owners by a Bond and Lease Agreement dated January 16, 1962. The owners of the property were listed as Walter Smith, Theodore Holmes Smith, Frank Allen and Gladys Allen. No one was on the property, and there was no equipment of any kind in the shaft area. However, new roads had been built to the mine and to several small mine dumps located within a radius of four or five miles of the Ajax claims. At about 300 yards south of the Ajax shaft, foundations for a mill had been completed, ore bins had been erected, and water storage dams had been built.

Mr. Roy V. Waughtel, lessee, who was contacted at a near-by mining property, furnished information concerning the Lease and Option

agreement and the work done on the Ajax property. The agreement did not provide for royalty payments to the Government on any ore produced to October 23, 1962, because the owner had not informed him that such a lien existed. The work on the Ajax and adjoining claims was started in January 1962, and stopped for financial reasons during June 1962. Also, that the mill will be completed and mining and milling operations will be started in 1963, if the project can be refinanced.

Mr. Connors in a letter dated September 17, 1962 to Mr. Frank H. Allen, one of the owners of the Ajax property, requested information concerning any recent production and any change in ownership of the property. Mr. Allen's wife told me over the telephone in Chandler, Arizona, October 10, 1962 that Mr. Connors' letter had been received, and that her husband's reply would be made without further delay. A copy of Mr. Smith's letter is attached.

Original signed by

T. M. Rumslo

Attachment

To Marty - What contract?

October 10, 1962

OME
DEPARTMENT OF THE INTERIOR
OCT 12 1962
REGION III
DENVER, COLORADO

United States Dept.
of the Interior
Bldg. 20 Federal Center
Denver 25, Colorado

Gentlemen:

Mr. Pomroy's address is 581 North Colorado Street Chandler, Arizona. Phone number 963-3183.

I am not familair with the captioned property. I own half interest in the Ajax, Ajax 1 and Raven. There has been no production of ore from the three mines that I know of. The property is not in operation at this time. Mr. Roy V. Waughtell of Florence Junction, Arizona has a lease and option to purchase. There has been no money paid to me.

Yours truly,

Frank H. Allen

Frank H. Allen
775 West Toledo Street
Chandler, Arizona

Re: your letter of Sept. 17, 1962 to Mr. Allen
DJMEA 2603 (Lead-Zinc)
Contract Idm - E 428
Magma King Manganese Mining Co.
(Ajax Mine)
Pinal County, Ariz.

Building 20 - Federal Center
Denver 25, Colorado

September 17, 1962

EXTRA COPY
O. M. E.
RECEIVED SEP 19
800

Mr. Frank H. Allen
775 West Toledo
Chandler, Arizona

Re: DMMA-2603 (Lead-Zinc)
Contract Idm-E428
Magma King Manganese Mining Company
(Ajax Mine
Pinal County, Arizona

Dear Mr. Allen:

We have been unable to make any contact with Mr. R. J. Pomeroy or the Magma King Manganese Mining Company regarding the captioned contract.

Could you furnish us the present address of Mr. Pomeroy?

Also, we would like to know if there has been any production of ore from the captioned property since January 1960?

Is the property now in operation?

Have there been any changes in ownership, lease, or sublease?

Any information regarding the property will be greatly appreciated.

Yours very truly,

Original signed by

Hugh M. Connors
Acting Field Officer, OME
Region III

cc Chief, Division of Field Operations, OME
Idm-E428
Chron
HMC/lm

EXTRA COPY, O. M. E. RECEIVED APR 14 1960		
DATE	INITIALS	CODE
		800

Building 20 - Federal Center
Denver 25, Colorado

April 12, 1960

CERTIFIED MAIL

Mr. R. J. Pomeroy
Magma King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. IBEA 2603 (Lead-zinc)
Contract No. Idm-R428
(Ajax mine)
Pinal County, Arizona

Dear Mr. Pomeroy:

It is a requirement of the contract that you furnish information such as that requested in the questionnaire mailed to you January 20, 1960.

In event you did not receive the questionnaire or have mislaid it, you will be expected to complete and immediately return to this office one of the two attached prints of the questionnaire.

Yours very truly,

Original signed by

J. W. Townsend
Executive Officer, OMK
Field Team, Region III

Enclosure

TMR/bjo

cc: Chem. Op. Comm. (2)
Royalty file Idm-R428
Chron.

REPORT OF
ROYALTY REVIEW

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT ON ROYALTY REVIEW

I have reviewed the files of the Executive Officer, OME Field Team, Region III, Denver, Colorado pertaining to Contract Idm-2428, Docket No. DMEA 2603, dated October 23, 1952, with

Mamie King Manganese Mining Company
547 North Arizona Avenue
Chandler, Arizona

for the purpose of determining the amount of royalties due the U. S. Government on the sales of Land-Zinc, from property referred to as Ajax Mine, located in Pinal County, Arizona, during the period October 23, 1952 to June 10, 1959.

Pseudo Certification was effected by Amendment No. 7 to the contract and accordingly royalty is payable on all production from the land described in Article 2 of the contract for a maximum period of 10 years from the date of the contract. A Report of Review in lieu of Final Cost Audit indicated accepted costs under the exploration contract amounting to $6,790.00, with the Government's contribution on a 50 percent basis being $3,395.00.

No royalty has been paid to the Government to date in connection with this contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(a) According to the Field Team's Semi-Annual Report of certified project for the period July 1, 1955 to January 1, 1956, operation ceased about March 31, 1953; no ore has been shipped since October 23, 1952, (The date of the exploration contract). Subsequent semi-annual reports of Field Team for the period January 1, 1956 to December 31, 1958, indicate property inactive and no operations or ore shipments are anticipated in 1959.

(b) The administrative costs to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

June 18, 1959

Donald T. Finch
Donald T. Finch
OME Auditor

JUN 22 1959
O.M.E.

JUN 23 1959

Memorandum

To: Mr. Donald T. Finch, CME Auditor

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

Subject: Docket No. DMEA-2603 (Lead-Zinc)
Magma King Manganese Mining Company
Contract No. Idm-E128

Your Report of Royalty Review on the subject contract is acceptable and distribution of the regional copies is authorized.

EDTalbert/ama
June 22, 1959

Copy to: Docket
Director's Reading File
Code 800

JUN 16 1959

Memorandum

To: Mr. Donald T. Finch, OME Auditor

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

Subject: Docket No. DMRA-2603 (Lead-Zinc)
Magma King Manganese Mining Co.
Contract No. Idm-Eh28

The Washington copies of your Report of Royalty Review on the subject contract are returned for revision. To the end of the first sentence of the second paragraph should be added the words "for a maximum period of 10 years from the date of the contract".

Enclosures

EDTalbert/ama
June 16, 1959

Copy to: Docket
Director's Reading File
Code 800

REPORT
OF REVIEW

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

RECEIVED
SEP - 1 1955

I have reviewed the Monthly Reports of:

Magna King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

pertaining to Exploration Project Contract No. Idm-E428, Docket No. DMEA-2603, including Amendments Nos. 1 to 7, for the months of November, 1952 to March, 1953, inclusive, covering a project for the exploration of lead and zinc on property known as Ajax Mine, located in Pinal County, Arizona.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Executive Officer, DMEA Field Team, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reason:

All of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$6,790.00
Exceptions:		
By DMEA Finance Officer	$0.00	
Herewith	0.00	0.00
Total Accepted Cost		$6,790.00

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Three thousand, three hundred ninety-five and no/100ths Dollars

** $3,395.00 **

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

August 31, 1955

T. H. Brading, Auditor

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

224 New Customhouse
Denver 2, Colorado

October 25, 1955

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: FINAL PAYMENT - Docket No. DMEA-2603 (Lead-Zinc), Magma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona. Contract Idm-E428

Reference is made to our memorandum of September 27, 1955 whereby we transmitted final Form MF-104, Operator's Monthly Progress Report and Voucher for the month of March, 1953 and instructed you to withhold the amount of $455.00 from reimbursement to the Operator pending receipt of the Operator's final report.

This report has now been received and we recommend that final payment be made on the following basis.

Basis for Final Payment

Total accepted cost as per Report of Review dated August 31, 1955	$6,790.00
Government participation at 50 percent	3,395.00
Total prior payments	2,940.00
Balance due the Operator	$ 455.00

W. M. Traver

Paid $455.00
RRC

Randel R. Cooper
Authorized Certifying Officer

NOV 10 1955

DMA-56-42

JDC:jy
cc: MF-104 File E428
Sec. Op. Comm. (2)
Storms
Townsend
Chron.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
OCT 17 1955

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1953 Docket No. DMEA 2603 Contract No. Idm E-428
Operator's Name Magma King Manganese Mining Co. Minerals Lead- Zinc
Address 532 Security Bldg; Phoenix, Arizona.
Contract Amount, $ 23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	910.00	$5880.00	$6790.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$910.00	$5880.00	$6790.00			

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

Date Apr. 11, 1953 Payee Magma King Manganese Mng. Co.

Per Frank R. Nether Title Superintendent

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

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

(Instructions on reverse)

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

$ No payment

Signature RRQ
(Authorized Certifying Officer)

Date 10/12/55 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 428 in accordance with the terms of the contract.

Signature J. M. Pomalo Title Mining Engineer Date April 14, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. M. Shaver Title Executive Officer Date SEP 27 1955

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
OCT 17 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1953 Docket No. DMEA 2603 Contract No. Idm E-428
Operator's Name Magma King Manganese Mining Company Minerals Lead-Zinc
Address 532 Security Bldg; Phoenix, Arizona

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	$910.00	26	$6790.00	194	$35.00	400	$35.00
Crosscutting								
Raising	Foot						200	$33.00
Shafts								
Winzes								
Drilling: Core	Foot						500	$ 5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$910.00		$6790.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$910.00		$6790.00				

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

Date Apr. 11, 1953 Operator Magma King Manganese Mining Company
Per Frank L. Mettler Title Superintendent

REMARKS:
Power unit broke down two time during month

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

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

RECEIVED
OCT 17 1955

224 New Customhouse
Denver 2, Colorado

October 14, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2603 (Lead-Zinc) Contract Idm-E428, Magma King Manganese Mining Company, Ajax Mine, Pinal County, Arizona

Enclosed are two copies of the Operator's Monthly Progress Report, Forms MF-104 and MF-104A, Operator's Narrative Report, Inspecting Engineer's Narrative Report, and other supporting data pertaining to work under the subject contract for the month of March, 1953.

W. M. Traver

By J. W. Townsend

Enclosures

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION IV

RECEIVED
OCT 17 1955

Administrative Audit Difference Statement

Date: October 11, 1955
Payee's
Reference: March 1953

Pegas King Engineers Mining Co.
[illegible] Security Building
Phoenix, Arizona

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 720.00

Difference $

Amount Approved* $ 720.00

The reason for the difference was due to:

* Entire amount due withheld pending receipt of your final report.

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-IV-B & F Form No. 4
4-15-52 D

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

RECEIVED
OCT 17 1955

224 New Customhouse
Denver 2, Colorado

September 27, 1955

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 2603, (Lead, Zinc), Contract Idm-E428, Magma King Manganese Mining Company, Ajax mine, Pinal County, Arizona - Operator's Monthly Progress Report for the period March, 1953.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore, we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

This Progress Report was held up pending resumption of the project work and the later difficulties concerning termination under the provisions of Amendment No. 7. The final Report of Review was released to this office on August 31, 1955 approving costs as claimed in this Progress Report.

We have written the Operator requesting his final report and recommend that Government contribution in the approved claim, $455.00, be withheld until this report is received.

W. M. Traver

W. M. Traver

Enclosures
WLD ~~WMT~~:jy
cc: MF-104 File E428
Sec. Opr. Comm. (2)
Storms
Chron.

RECEIVED
OCT 17 1955

MINING DIVISION
REGION IV

April 15, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : March 1953 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

RECEIVED

OCT 17 1955

MINING DIVISION
REGION IV

April 15, 1953

Memorandum

To : W. R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for March 1953, Magma King Manganese Mining Co.'s Ajax Lead Zinc Mine, Pinal County, Ariz., Docket DMEA-2603, Contract Idm-1428.

The Ajax mine was visited on April 1, to check the advance for March and to determine if the work continues to be in conformance with subject contract. An inspection of the project was made in the company of Frank L. Metler, superintendent for the company.

All work on the project has been confined to the advance of the north drift on the 176-foot level. During March, the drift was advanced 26.0 feet. On April 1, the face of the drift was 65.5 feet from station 176-8 and 194.0 feet from the starting point.

Contract, Forms MF-104 and 104-A, and Operator's Narrative Report

The following is indicated by the inspection of the project and from a review of the subject data:

1. The work performed and for which claim is made conforms with the contract and is as reported on Form MF-104A;

2. The 26 feet of advance has been charged for on Form MF-104 at the contracted rate of $35.00 per foot;

3. The Operator's Narrative Report is considered adequate. His statement that the entire 26 feet of advance was in low-grade ore appears to be correct, based on the presence of fragments of ore in the muck removed. According to Mr. Metler, the ore occurred only in the lower half of the drift. This seems to be the reason why no ore is visible in the face or back of the heading. I asked Metler to sample mineralized sections of the drift and to report the assays in future reports.

CC W. H. King (orig. & 6)
DMEA-2603
DF

WRStorms:frj

The next progress examination will be for the month of May, as a recess of one month in operations has been granted by the Defense Minerals Exploration Administration, or from April 1 to May 1.

T. M. Romslo

T. M. Romslo, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

DMEA Docket 2603
Contract Idm-2428

Narrative Report Ajax Mine
Magma King Manganese Mining Company.
March 1953.

RECEIVED
OCT 17 1956

The total advance in the North drift on the 175 foot level of the Ajax Mine for the month of March 1953 was 36 feet.

Work was interrupted twice during the month by break down of the plant which provides power for pumping operations.

As the drift face progresses to the North more water is encountered and at the present time nearly one half of the shift is used in dewatering operations.

The entire 36 feet of advance was in low grade lead-zinc ore across the face of drift with streaks of massive lead zinc sulphides up to eleven inches in width in the footwall section. Small stringers of chalcopyrite are also present.

A recess of thirty days, extending from April 1, 1953 to March 1, 1953 has been granted by the Defense Minerals Exploration Administration. A portion of this time is to be used in providing a suitable ventilating system so that work can be resumed on a two shift basis.

May
Tons

Frank L. Metler

Frank L. Metler, Supt.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Defense Minerals Administration
RECEIVED
APR 6 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Feb., 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Co. Minerals Lead -Zinc
Address 532 Security Bldg; Phoenix, Arizona.
Contract Amount, $ 23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$1190.00	$4690.00	$5880.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1190.00	$4690.00	$5880.00	1190.00	4690.00	5880.00

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

Date Mar. 10, 1953 *Payee Magma King Manganese Mng. Co.

Per [signature] Title Superintendent

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

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

(Instructions on reverse)

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

$595.00

Signature [signature]
(Authorized Certifying Officer)

Date 3/26/53 Vou. No. DMA 53-112

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E428 in accordance with the terms of the contract.

Signature T M Ramsdo WRH Title Mining Engineer Date March 17, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature W. H. King Title Executive Officer Date MAR 23 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1953 Docket No. DMEA 2603 Contract No. Ian-E428
Operator's Name Magma King Manganese Mining Co. Minerals Lead-Zinc
Address 532 Security Bldg; Phoenix Arizona

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	foot	$1190.00	34	$5880.00	168	$35.00	400	$35.00
Crosscutting								
Raising							200	$33.00
Shafts								
Winzes								
Drilling: Core							500	$ 5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$1190.00		$5880.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1190.00		5880.00				23,100

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

Date March 10 1953 Operator Magma King Manganese Mining Co.
Per Frank L. Mueller Title Superintendent

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

224 New Customhouse
Denver 2, Colorado

March 23, 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona - Operator's Monthly Progress Report, for the period February 1953

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report----------March 10, 1953
Date Received in Field Office----------March 12, 1953
Date Received in Region Office----------March 19, 1953
Date Processed for Payment----------March 20, 1953

W. H. King
W. H. King

Enclosures

RDB:es
cc: Contract
Sec. to the Oper. Comm. (2)
Chron.
Storms

MINING DIVISION
REGION IV

March 1[illegible], 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : February 1953 Progress Report, Docket DMEA-2603, Contract Idm-3428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

MINING DIVISION
REGION IV

March 17, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Division, Region IV, Tucson, Ariz.

From : E. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for February 1953, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-5428.

The Ajax mine was visited on March 5, 1953. An attempt to reach the mine March 2 was unsuccessful due to high water in Cottonwood Wash. The object of the visit was to determine if the exploratory work continues to conform with the contract and to check progress for February. Pertinent underground workings were inspected in the company of C. V. McCutcheon, miner on the project. Frank L. Metler, project supervisor, reportedly had been at the mine before I arrived and had left to delivery payrolls to the corporation's office at Phoenix.

Inspection of the 175 level showed that the north drift had been advanced 34 feet during February to place the face at 163 feet from the starting point.

Advance for February was on a quartz vein about 2.5 feet wide that contained scattered ore values of sphalerite, galena, and chalcopyrite.

A 40-foot hole was diamond drilled into the footwall of the 175 level from near the starting point of the contract drift. No ore mineralization was encountered in this hole that was drilled at the corporation's expense. A verbal request for drilling this hole under the contract was denied by the writer during January, because available data indicated that the hole had little or no chance of encountering ore. At the time, I told Mr. Metler that I would approve some contract drilling in this area, provided it was justified by results obtained in a hole drilled at the corporation's expense.

CC J. H. King (Orig. & 6)
DMEA-2603
DP

WRStorms:frj

CONTRACT, FORMS MF-104 and 104-A, AND OPERATOR'S NARRATIVE REPORT

The following is indicated by an inspection of the project and subject data:

1. The work performed and for which claim is made conforms with the contract and is as reported on Form MF-104A.

2. The 34 feet of advance has been charged on Form MF-104 at the contracted rate of $35.00 per foot.

3. The Operator's Narrative Report with attached map is considered adequate. The map is new and was prepared from a transit survey that was completed by the supervisor only after much prodding by the writer. I have suggested and will see that other desirable data is furnished in the future. These data should include, for the purpose of planning diamond drilling, sections through drill hole S-2 and S-6 and the mapping of geologic structures. Furthermore, mineralized zones should be sampled and the sampling data should be recorded.

T. M. Romslo

T. M. ROMSLO, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

Superior, Arizona
March 10, 1953.

Ajax Mine- Magma King Manganese Mining Co.
Docket No. DMEA 2603- Contract No. Idm-E428

Progress Report February 1953.

Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations.

How good?

Progress was slow because of the additional amount of water encountered and because timbering was also necessary through out the month.

Lack of proper ventilating and drilling equipment was also responsible for the small footage made.

During the month a diamond drill hole was drilled 40 feet into the hangingwall at a point opposite the start of the DMEA contract. This hole was drilled entirely on company account and is not included in the DMEA contract. Nothing of value was noted in the drill core recovered.

Frank L. Metler

Frank L. Metler, Supt.
Magma King Manganese Mng.

FRANK L. METLER
MINING ENGINEER

Superior, Arizona
March 10, 1953.

Ajax Mine- Magma King Manganese Mining Co.
Docket No. DMEA 2603- Contract No. Idm-E428

Progress Report February 1953.

Progress for the month of February totaled 34 feet of drifting all of which contained a good showing of lead, zinc and copper ore. A portion of the material removed in drifting was of sufficient mineral content to stock pile in the event of future milling operations. How good?

Progress was slow because of the additional amount of water encountered and because timbering was also necessary through out the month.

Lack of proper ventilating and drilling equipment was also responsible for the small footage made.

During the month a diamond drill hole was drilled 40 feet into the hangingwall at a point opposite the start of the DMEA contract. This hole was drilled entirely on company account and is not included in the DMEA contract. Nothing of value was noted in the drill core recovered.

Frank L. Metler

Frank L. Metler, Supt.
Magma King Manganese Mng. Co.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of ~~February~~ JANUARY-amn, 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Company Minerals Lead-Zinc
Address 532 Security Bldg. Phoenix, Arizona
Contract Amount, $ 23,100.00 Government Participation: 50 % Amount, $ 11,550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$805.00	$3885.00	$4690.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$805.00	$3885.00	$4690.00	805.00	3,885.00	4,690.00

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

Date Feb. 14, 1953 *Payee Magma King Manganese Mng. Co.

Per [signature] Title Superintendent

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

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

(Instructions on reverse)

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

$403.50

Signature [signature]
(Authorized Certifying Officer)

Date 3/6/53 Vou. No. DMA 53-105

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-6428 in accordance with the terms of the contract.

Signature T. M. Pomeroy WRH Title Mining Engineer Date Feb 26, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature ..... Title Executive Officer Date MAR 5 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

U. S. BUREAU OF MINES
MINING DIVISION
FEB 22 1953
TUCSON, ARIZONA

Month of February 1953 Docket No. DMEA 2603 Contract No. Idm-E428
Operator's Name Magma King Manganese Mining Co. Minerals Lead-Zinc
Address 532 Security Bldg. Phoenix, Arizona.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	805.00	23	4690.00	137	35.00	400	35.00
Crosscutting								
Raising					154		200	3300
Shafts								
Winzes								
Drilling: Core							500	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		805.00		4690.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		805.00		4690.00				

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

Date Feb. 14, 1953 Operator Magma King Manganese Mining Company
Per Frank R. Bretler Title Superintendent

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

224 New Customhouse
Denver 2, Colorado

March 5, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-1428 (Lead-Zinc), Magma King Manganese Mining Company's Ajax Lead-Zinc Mine, Pinal County, Arizona. Operator's Monthly Progress Report for the period January, 1953.

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - February 14, 1953.
Date Received in Field Office (Originally) - February 10, 1953
Date Received in Field Office (Corrected) - February 22, 1953.
Date Received in Region Office - March 2, 1953.
Date Processed for Payment - March 4, 1953.

Forms were returned to Operator by Field Office for corrections and signatures.

W. H. King
W. H. King

Enclosures

RDBerk:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

February 26, 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : January 1953 Progress Report, Docket DMRA-2603, Contract Idm-2428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and 104a.

Also enclosed are two extra copies of our engineer's report.

As all work is in conformance with the terms of the contract, I recommend that the Government's share of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMRA-2603
DF

WRSTORMS:frj

MINING DIVISION
REGION IV

February 26, 1953

Memorandum

To : W. R. Sterms, Chief, Mining Methods Br., Mining Div., Region I V, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for January 1953, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract IdA-E428

The Ajax mine was visited Feb. 3, to check progress on the exploratory project and to determine if the work continues to be in conformance with subject contract. E. R. Rodriquez, Health and Safety Engineer, U. S. Bureau of Mines, Phoenix, Ariz., accompanied me to the mine and inspected safety conditions of the project. He and C. V. McCutcheon, miner on the project, accompanied me during an inspection of the pertinent mine workings.

Progress to date has been confined to drifting northward on the 176 level. For January the advance was 23 feet. Total advance to date of 134 feet consists of January's advance, plus the 111 feet previously reported. The face of the drift on Feb. 1 was 166.5 feet from the established reference point. A new reference point for measurements is the first timber set of the drift at 161 feet from the original reference point. Thus, advance for February will be the distance from the timber set to the face less 5.5 feet.

CONTRACT, FORMS MF-104 and 104A, AND OPERATOR'S NARRATIVE REPORT

A record of the processing of the Operator's Report at Tucson follows:

Received	Returned to Operator
Feb. 10	Feb. 12 for corrections
Feb. 18	Feb. 18 for signatures
Feb. 22	

The report received final checking February 25 and this report was completed the same day.

CC W. H. King (Orig. & 6)
DMEA-2603
DF
TMROMSLO:frj

Inspection of the project and subject data indicates the following:

1. The work performed and for which claim is made is in conformance with the contract and is as reported on form MF-104A (Reported units to date of 137 feet should be 134. The error will be picked up in next month's report);

2. The work performed has been charged out on Form MF-104 at the contracted cost of $35.00 per foot;

3. The Operator's Narrative Report with attached map is considered adequate. He will be instructed to revise his progress map to conform with corrections made at Tucson and to use the "Remark" space of Form M F-104 for a brief explanation of any unusual operating conditions that are encountered in the future. Further, he has been asked to map locations of samples and to indicate the extent of the sampled zone.

T. M. Romslo
Mining Engineer

FRANK L. METLER
MINING ENGINEER

Superior, Arizona
Feb. 5, 1953.

Docket No. DMEA-2603
Contract No. Idm-E428

PROGRESS REPORT-AJAX MINE, MAGMA KING MANGANESE MNG. CO.

January, 1953.

Very little progress was made in the North 176 foot level drift during the month of January 1953..

Early in the month a large watercourse was blasted into.
This water course appeared to be about twenty five or thirty feet in length and from one foot to three and one half in width. At one time before the loose muck settled to drift level, about twenty feet of opening could be observed above the drift level.

When the watercourse was broken into the drift was flooded, the sump was filled with black mud composed of manganese and specular hematite. Pump suctions were trapped and the drift to the shaft was partially filled with mud and broken rock.

The balance of the month was required to unwater the 176 feet level, remove muck from the drift and timber the face of the drift.

Considerable chalcopyrite is observed in the broken material in the face of the watercourse a sample of which assayed 0.02 oz gold, 2.00 oz. silver and 6.90 % copper.
At this writing the timbering is complete and advancing of the drift is underway.

Total Advance 23 feet.

Frank L. Metler

Frank L. Metler, Supt.

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month December 1, 1952 Docket No. DMEA 2603 Contract No. Idm-E428

Operator's Name Magma King Manganese Mining Co Minerals Lead-Zinc

Address 532 Security Bldg; Phoenix, Arizona

Contract Amount $ 23100.00 Government Participation 50 % Amount $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	2660.00	1225.00	3885.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2660.00	1225.00	3885.00	2660.00	1225.00	3885.00

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

Date Jan 4, 1953 *Payee Magma King Manganese Mng. Co.

Per Frank L. Shelley Title Superintendent

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

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

(Instructions on reverse)

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

$ 1330.00

Signature [signature]
(Authorized Certifying Officer)

Date 1/23/53 Vou. No. DMA 53-88

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E428 in accordance with the terms of the contract.

Signature T M Pomalo WRJ Title Mining Engineer Date Jan 12, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature W. H. King Title Executive Officer Date JAN 19 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 195 2 Docket No. DMEA 2603 Contract No. Idm-E428

Operator's Name Magma King Manganese Mining Co. Minerals Lead- Zinc

Address 532 Security Bldg; Phoenix, Arizona.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting	Foot	$2660.00	76	$3885.00	111	$35.	400	$35.00
Raising								
Shafts	Foot						200	$33.00
Winzes								
Drilling: Core								
Churn	Foot						500	$5.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		$2660.00		$3885.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$2660.00		$3885.00				$23,100.00

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

Date Jan. 4, 1953 Operator Magma King Manganese Mining Co.

Per Frank L. Fuller Title Supt.

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

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

234 New Customhouse
Denver 2, Colorado

January 19, 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-2426 (Lead-Zinc) Magma King Manganese Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona Operator's Monthly Progress Report for the period of December, 1952

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-300A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - January 4, 1953
Date Received in Branch Office - January 6, 1953
Date Received in Region Office - January 15, 1953
Date Processed for Payment - January 19, 1953

W. H. King
W. H. King

RDB:oc

cc: Contract
Secretary to the Operating Committee (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

January 13, 1953

Memorandum

To : W. H. King, Chief, Mining Div., Region IV

From : Chief, Mining Methods Branch, Mining Div., Region IV

Subject : December 1952 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines engineer's report;
(2) Operator's narrative report with map;
(3) Forms MF-104 and 104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of the costs (50 percent) be paid.

Walter R. Storms

Walter R. Storms

CC: W. H. King (6)
DMEA-2603
DF

WRStorms:als

MINING DIVISION
REGION IV

January 13, 1953

Memorandum

To : Walter H. Storms, Chief, Mining Methods Branch, Mining Division, Region IV

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for December 1952, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-E428.

The Ajax Mine was visited Jan. 8, 1953 to check progress on the exploratory project and to determine if the work continues to be in conformance with subject contract.

An inspection of the project workings showed that the north drift of the 176 level had been advanced 76 feet during December. Total advance of 111 feet to Jan. 1, 1953 is shown on a plan map of the 176 level that was submitted by Frank L. Metler, Superintendent, who was temporarily absent from the project during the inspection trip. Meager lead and zinc mineralization encountered to date consists of widely scattered fragments of galena and sphalerite in fault breccia.

CONTRACT, FORMS MF-104 AND 104A,
AND OPERATOR'S NARRATIVE REPORT

Inspection of the project and subject data indicates the following:

1. The work performed and for which claim is made is in accordance with the contract and is as reported on Form MF-104A. The drift continues to be driven at a smaller than normal size for the reason given in last month's report.

2. The cost of work performed has been charged on Form MF-104 at the contract's stipulated price of $35.00 per foot of drift.

3. The Operator's Narrative Report is considered adequate. No action will be taken on his recommendation for diamond-drilling

CC: W. H. King (Orig. & 6)
DMEA-2603
DF

TMRomslo:als

and crosscutting until he submits a plan and reasons for such work. He has been informed verbally that an acceptable drilling program will be approved at Tucson and that work not covered by the contract, such as the suggested crosscutting, must be submitted as a proposed amendment for final approval by the Denver office.

W. M. Romslo

W. M. Romslo, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

FRANK L. METLER
MINING ENGINEER

Superior, Arizona.
Jan. 4, 1953.

PROGRESS REPORT- AJAX MINE-DECEMBER 1952.

Docket DMEA-2603, Contract Idm-E428

A total of 76 feet of drifting was done on the 175 foot level in a direction Northerly from the shaft during the month of December 1952.

A greater part of the formation passed through consisted of fault breccia with lead - zinc mineralization through out. The hanging wall of the drift indicates much movement of a vertical nature and the mineralization appears to be drag ore. As no crosscutting or core drilling has yet been done it is impossible to determine if the drift is following the hanging wall vein or a parallel fracture.

It is recommended that several core drill holes be extended into both the foot and hanging walls, to determine if the drift is following the hanging wall vein and also crosscut in search of the footwall vein shown on the surface.

Because of poor ventilation, it is impossible to conduct more than one shift each twenty four hours.

Magma Ring Manganese Mining Co.

Frank L. Metler, Superintendent.

Frank L. Metler

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Mineral Administration
RECEIVED
JAN 1 1953

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

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Nov. 1952, 195-2 Docket No. DMEA 2603 Contract No. Idm-E 428
Operator's Name Joseph King Manganese Mining Co. Minerals Lead- Zinc
Address 838 Security Bldg. Phoenix, Arizona
Contract Amount, $ 23100.00 Government Participation: 50 % Amount, $ 11550.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting 35 feet	1225.00	00	1225.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS				1225.00	00	1225.00

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

Date Dec. 3, 1952 *Payee Joseph King Manganese Mng. Co.

Per Frank Beetles Title Superintendent

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

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

(Instructions on reverse)

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

$ 612.50

Signature [illegible] (Authorized Certifying Officer)

Date 1-7-53 Vou. No. 53-77

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E428 in accordance with the terms of the contract.

Signature T M Romalo WRK Title Mining Engineer Date Dec 18, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature W. H. King Title Executive Officer Date 1/5/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 15 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Nov. 195 2 Docket No. DMEA 2603 Contract No. Idm-E 428
Operator's Name Hecla King Manganese Mining Co. Minerals Lead-Zinc
Address 5[illegible] Security Bldg. Phoenix, Arizona

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	feet	1225.00	35	1225.00	35	35.00	400	35.00
Crosscutting								
Raising							200	35.00
Shafts								
Winzes								
Drilling: Core							500	5.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1225.00						Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1225.00						35100.00

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

Date Dec. 8, 1952 Operator Hecla King Manganese Mining Company.

Per Frank R. Mettler Title Superintendent

Remarks: Low recovery caused by breakdown of generating plant and inability to secure parts promptly.
Scattered lead-zinc ore appearing in face.

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

(Instructions on reverse)

(For Government use only)

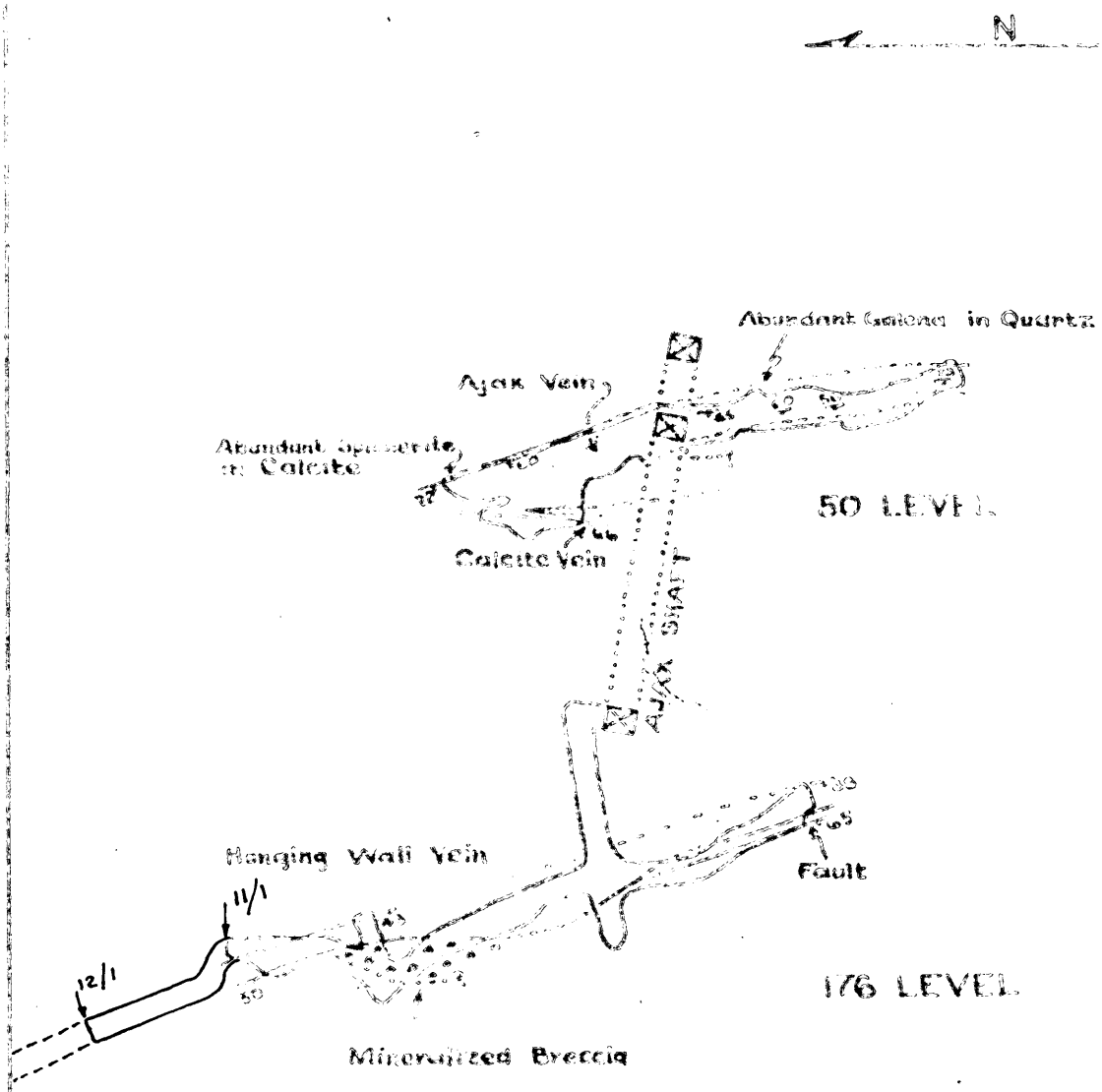
INSTRUCTIONS

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

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

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

GPO 83-38475


N
Abundant Galena in Quartz
Ajax Vein
Abundant Sphalerite in Calcite
50 LEVEL
Calcite Vein
AJAX SHAFT
Hanging Wall Vein
11/1
12/1
Fault
176 LEVEL
Mineralized Breccia

[illegible]

53-77

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

224 New Customhouse
Denver 2, Colorado

January 5, 1953

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2603, Contract Idm-E428 (Lead-Zinc) Magna King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Arizona - Operator's Monthly Progress Report for the period of November, 1952

Enclosed are the original and four copies of Form MF-104 and MF-104A, Narrative Report, and Engineer's Report for the above period.

Work has been completed as authorized by the contract. No documentation is required for work performed under contracts prepared on Form MF-200A, therefore we recommend that payment be made for 50 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

Remarks:

Date of Report - December 3, 1952
Date Received in New Mexico-Arizona Branch Office - December 8, 1952
Date Received in Region IV Office - December 29, 1952
Date Processed for Payment - January 2, 1953

W. H. King
W. H. King

Enclosures

RDB:oc

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.
Koschmann (2)

MINING DIVISION
REGION IV

December 23, 1952

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div., Region IV

Subject : November 1952 Progress Report, Docket DMEA-2603, Contract Idm-E428, Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz.

Enclosed in quintuplicate are the following items for the above report:

(1) Bureau of Mines Engineer's report;
(2) Operator's narrative report with map;
(3) Forms MF-104 and MF-104A.

Also enclosed are two extra copies of our engineer's report.

As all work is in accordance with the terms of the contract, I recommend that the Government's share of 50 percent of the costs be paid.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2603
DF

WRStorms:frj

MINING DIVISION
REGION IV

December 23, 1952

Memorandum

To : W. R. Storms, Chief, Mining Methods Br., Mining Div., Region IV, Tucson, Ariz.

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for November 1952 Magma King Manganese Mining Co's. Ajax Lead-Zinc Mine, Pinal County, Ariz. Docket DMEA-2603, Contract Idm-E428

The Ajax Mine was visited December 5, 1952 to check progress on the exploratory project and to determine if the work was being carried out in accordance with subject contract.

Inspection of the project was made in the company of Frank L. Metler, Superintendent of the applicant's field operations. The inspection trip showed that the face of the north drift on the 176-level had been advanced to a point 77 feet beyond the starting point established and described in John H. Soule's memorandum of October 31, 1952. With the face at 32.5 feet from the face of the drift at starting of drifting, the advance to December 5 was 44.5 feet of which 35 feet had been completed to Dec. 1, according to Metler, Prior to initiation of work under the contract, additional pipe lines, track, and a skip were installed in the shaft, muck was removed from the 176-level, and track was installed, all at no expense to the Government.

CONTRACT, FORMS MF-104 and 104A, AND OPERATOR'S NARRATIVE REPORT

The following is based on the inspection of the project and the subject data:

1. The work performed and for which claim is made is in accordance with the contract and is as reported on Form MF-104A. Although the contract does not specify a cross-section dimension for the drift, the writer believes the drift size should normally be driven about 5 by 7 feet in cross-section. At present the drift is being driven less than 5 by 7 feet in size because the ground is ravelly and has already sluffed to the acceptable size, in places. For this reason, the writer has approved the driving of the smaller drift as long as it is maintained in a condition that will meet safety regulations of the State of Arizona.

CC W. M. King (Orig. & 6)
DMEA-2630
DF

TMRomsloPfrj

2. The drifting has been charged out on Form MF-104 at the contracted price of $35.00 per foot.

3. The Operator's Narrative Report is considered adequate. The attached progress map was supplied by the DMEA Tucson office. Subsequent reports will contain a map now being prepared by the Operator.

T. M. Romslo

T. M. ROMSLO

U. S. BUREAU OF MINES
MINING DIVISION
DEC 8 1952
TUCSON, ARIZONA

Dec. 3, 1952.

Mr. Walter R. Storms, Chief
Arizona-New Mexico Branch
Mining Division, Region IV
Tucson, Arizona.

Dear Mr. Storms:

The following is a resume of work performed at the Ajax Mine during the month Of November, 1952 under DMEA Docket 2603, Contract Idm E428 and is to accompany forms MF-104 and 104A.

Track and skip installed in shaft.
Head frame reinforced and dumping arrangement constructed.
Additional pump and pipe lines installed in the shaft. Ventilating pipe installed, 176 level station and new track layed to North drift face.
Muck removed from 176 feet level.
The above work was not done under DMEA Loan and was entirely financed by the Magma King Company.

On November 14, 1952 actual mining was commenced at North drift face on the 176 foot level and on November 30th an advance of 35 feet had been made.

About 15 feet of drifting was required to bring the drift back on the hanging wall vein, at this point some mineralization consisting of chalcopyrite and galena was noted. After a few feet beyond the 15 feet point the vein widened to 26 inches with increased mineralization consisting of sphalerite and galena. The mineralization is well scattered across the vein at the 35 foot point, but is not of commercial value.

The break down of the electric generating plant resulted in low footage for the month.

Yours very truly,
Frank L. Metler
Frank L. Metler, Supt.

NOV 13 1962

Magnet King Manganese Mining Co.
901 North Colorado Street
Chandler, Arizona

Re: IMEA-2503 (Lead-Zinc)
Magnet King Manganese Mining Co.
Alex Lead-Zinc Mine
Pinal County, Arizona
Contract 14m-9428

Gentlemen:

By the terms of the subject Exploration Project Contract, as amended, and the royalty agreement in Paragraph 4.e., Amendment 7, dated June 28, 1954, all minerals mined or produced from October 23, 1952, to October 23, 1962, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government consenting to its present towards outstand or claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

Director

cc: Director's Reading
CAAA Division
Region III (2)
Docket
Mr. Frank H. Allen
Mrs. Gladys Allen, 775 West Toledo St., Chandler, Ariz.
WHGriswold/mm
11-8-62

AUG 1 9 1955

Mr. Ralph J. Pomeroy, President
Magna King Manganese Mining Co.
547 North Arizona Avenue
Chandler, Arizona

Re: Docket No. DMA-2603 (Lead-Zinc)
Magna King Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Ida-4428

Dear Mr. Pomeroy:

This is to advise you that the cited contract was terminated September 1, 1954, as specified in Article 4 of Amendment No. 7 to the contract. We are enclosing a photostatic copy of this amendment for your records.

Please note that under Article 4a of the amendment royalty will be payable to the Government on production which may be made from the land described in the contract until the sum which the Government has advanced as its participating interest is repaid, or until October 31, 1962, whichever occurs first. You should likewise prepare and submit the final geologic and engineering report, as provided in Article 15b of the contract.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures
MEGriswold/mr 8/16 & 18/55
Copy to: Docket
Admr & File
Op. Committee
Base Metals
Mr. Bishop, USGS
Mr. Kittelgaard, USGS
Mr. Jay Chambers, DMA
Region III (2)
Chron.

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-2603 (Lead-Zinc)
Magma Zinc Manganese Mining Co.
Ajax Lead-Zinc Mine
Pinal County, Arizona
Contract No. Idm-4488

Dear Mr. Traver:

With reference to the cited contract, it is the opinion of our Legal Division that Amendment No. 7 is in effect and should no longer be treated as "void". We are enclosing the Finance Office, Field Team, and extra copies of the amendment for proper distribution. The Operator's copy is being transmitted to him direct. Copies of the letter of transmittal are attached.

For your information we are enclosing copies of a memorandum from the Acting Assistant Solicitor, Defense Minerals, dated August 9, 1955.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

JWAlt/er 8/15/55 (rewritten 8/16/55)
Copy to: Docket
Admr & File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Chron.

Government copy
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 22 1954
U. S. BUREAU OF MINES
MINING DIVISION
AUG 10 1954
TUCSON, ARIZONA

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

AMENDMENT NO. 7

It is agreed this 30th day of June, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Magma King Manganese Mining Company, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E428 (Docket No. DMEA-2603), dated October 23, 1952, as amended, hereinafter called the "Contract," is further amended effective May 1, 1953, as follows:

1. a. Work under the Contract has been suspended since May 1, 1953, under the provisions of Amendments Nos. 1 through 6, the latter amendment authorizing continuation of the suspension of work to June 1, 1954. Continuation of the suspension of work is further authorized to not later than September 1, 1954.

b. No costs incurred by the Operator during the suspension of work beginning May 1, 1953, shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of work.

c. The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. Annex I attached to Amendment No. 5 is cancelled, and Annex II attached hereto and made a part hereof is substituted for Article 6 of the Contract form.

3. The time fixed for the completion of the work in Article 3 of the Contract form is changed from "21 months," as provided in Amendment No. 5, to "24 months."

4. It is of the essence of this Contract that work be resumed not later than September 1, 1954, and if work is not so resumed in the manner required by the Contract, the following provisions shall apply:

a. Any work or operations prosecuted or costs incurred by the Operator beginning with September 1, 1954, shall be for the sole account of the Operator without contribution by the Government.

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

c. The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the Contract, in the manner and amount provided in the Contract, as amended herein, certification of discovery or development being hereby waived.

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Meadors
Administrator, Defense Minerals
Exploration Administration

MAGMA KING MANGANESE MINING COMPANY

By Ralph J. Muroy

EXPLORATION PROJECT CONTRACT
MAGMA KING MANGANESE MINING COMPANY
DOCKET NO. DMEA-2603

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 22 1954

ANNEX II

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

58694

No. 6

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1954:

> Referring to Amendment No. 5, dated February 17, 1954, first paragraph, which amended Amendment No. 4 changing the date of "February 1, 1954" to read "May 1, 1954", said Amendment No. 5 and Amendment No. 4 as amended are further amended to change the date of "May 1, 1954" to read "June 1, 1954".

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 12 1954

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy, President

UNITED STATES OF AMERICA

By W H King
W.H. King, Executive Officer
DMEA Field Team, Region IV

Seal

547 North Arizona Ave.
Chandler, Arizona

April 26, 1954.

Mr. W. R. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado.

Re: Docket DMEA 2603
Contract Idm-E428

Dear Mr. King:

The above project, as you will note from the record, has been recessed to May 1, 1954. However, at the last minute we find that Magma King will not be able to actually commence work on this project May 1, 1954, as planned. Magma King President Ralph J. Pomeroy has been delayed for three weeks in New York and our plans to commence operation cannot be put in effect until his return. I therefore make this request as attorney for Magma King Manganese Mining Company for an additional thirty day extension of the recess and completion date of the above contract.

Sincerely yours,
Magma King Manganese Mining Co.

John Vanlandingham

JV/lf
cc: Mr. Walter R. Storms
Mining Methods Branch
Mining Division, Region IV
Tucson, Arizona

COPY

No. 5

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective February 1, 1954:

> Referring to Amendment No. 4, dated November 24, 1953, which in turn amended Amendment No. 3, dated June 26, 1953, further referring to Amendment No. 4, change the ending date of "February 1, 1954" to read "May 1, 1954".
>
> Referring to "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) (February 1952) as amended by Amendment No. 3, dated June 26, 1953, following the words "and shall bring the project to completion within a period of", delete "18 months" and in lieu thereof substitute "twenty-one (21) months".
>
> Referring to "Article 6. Payment by Operator" of Exploration Project Contract Form MF-200(A) (February 1952), the provisions under said "Article 6" are deleted and in lieu thereof the provisions of Annex I, attached hereto and made a part hereof, are substituted.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated FEB 17 1954

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy, President

UNITED STATES OF AMERICA

By W.H. King, Executive Officer
DMEA Field Team, Region IV

Seal

DEPARTMENT OF THE INTERIOR
Bureau Mines Administration
RECEIVED
FEB 23 1954

ANNEX I

The following provisions are in lieu of Article 6:

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce. This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

23 1954

xxxxxxxxxxxx
xxxxxxxxxxxx
547 North Aris. Ave.
Chandler, Arizona

January 21, 1954

Mr. W. H. King
Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We are herewith requesting extension of recess of operation on our project, Docket DMEA2603 Contract Idm-E428, pursuant to your telephone conversation with our attorney Mr. John Vanlandingham.

The present financial condition of our company indicates that we will not have proceeds to renew operations on this project by February 1, 1954, as originally planned. We therefore request this extension of the recess of ninety days so that work can be commenced on or before May first. We also request a corresponding extension of a completion date of this contract.

Your immediate attention and reply will be appreciated.

Sincerely yours,
Magma King Manganese Mining Co.

Ralph J. Pomeroy, President

RJP/lf
cc: Mr. Walter R. Storms

P. S. Please note our change of address.

COPY

Date Rec'd
NOV 3 1953
BUREAU OF MINES
Denver Colorado

No. 4

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective October 1, 1953:

> Referring to Amendment No. 3, dated June 26, 1953, which amended "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) and authorized a recess of operation under Contract Idm-E428, further referring to said Amendment No. 3, second paragraph, change the date of "October 1, 1953" to read "February 1, 1954."

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated November 24, 1953

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy
Ralph J. Pomeroy

UNITED STATES OF AMERICA

By W H King
W. H. King, Executive Officer
DMEA Field Team, Region IV

(SEAL)

Mining Division
Date Rec'd
JUN 23 1953
BUREAU OF MINES
Denver, Colorado

No. 3

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA-2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective June 1, 1953.

Referring to "Article 3. Exploration Project" of Exploration Project Contract Form MF-200(A), delete "12 months" and in lieu thereof insert "18 months".

Furthermore, execution of this Amendment constitutes authority to recess operations under Contract Idm-E428. The operator hereby agrees to resume operations on or before October 1, 1953, contingent on the following conditions:

1. The operator hereby releases and agrees to save harmless the Government from all claims and demands arising out of conditions or circumstances that may develop at the site of the DMEA project during the period operations are recessed.

2. The operator agrees to preserve and protect the Government's interest in the work performed to date from any cause resulting from the recess of operations, without cost to the DMEA project.

3. Interim payment for the percentage of the Government's participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the first Form MF-104, Operator's Monthly Report and Voucher, after resumption of normal operations under the contract.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated June 26 1953

MAGMA KING MANGANESE MINING CO.

By [signature]

(Seal)

UNITED STATES OF AMERICA

By W. H. King

W.H. King, Executive Officer,
DMEA Field Team, Region IV

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

COPY

AGENCY .....

Originator:

TELETYPE

Ext.: ..... Room: .....

Appro.:
Date: WASH DC BU MINES 310 6-4-53 11-20 AM
Time:
No.:
To: W H KING

Subject:

REURTT DOCKET DMEA 2603 MAGMA KING MANGANESE MINING COMPANY, CONTRACT IDM-E428. WE APPROVE RECESS OF FOUR MONTHS FROM JUNE 1, 1953 TO OCTOBER 1, 1953 WITH LIKE EXTENSION FOR TIME FOR COMPLETION OF THE WORK AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM.

GEORGE C SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

COPY

AGENCY .....

Originator:

TELETYPE

Ext.: ..... Room: .....

Appro.:
Date: WASH DC BU MINES 310 6-4-53 11-20 AM
Time:
No.:
To: W H KING

Subject:

REURTT DOCKET DMEA 2603 MAGMA KING MANGANESE MINING COMPANY, CONTRACT IDM-E428. WE APPROVE RECESS OF FOUR MONTHS FROM JUNE 1, 1953 TO OCTOBER 1, 1953 WITH LIKE EXTENSION FOR TIME FOR COMPLETION OF THE WORK AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM.

GEORGE C SEILFRIDGE, CHAIRMAN, OPERATING COMMITTEE

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

TELETYPE

COPY

BUR MINES DN 235 6-1-53 3-45 PM

C O MITTENDORF

WE HAVE RECEIVED THE FOLLOWING TELEGRAM FROM RALPH J. POMEROY, PRESIDENT, MAGMA KING MANGANESE MINING COMPANY, CONTRACT NO. IDM-E428, DOCKET NO. DMEA 2603

"I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTHS RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA 2603."

WE RECOMMEND THAT THIS REQUEST BE GRANTED. PLEASE TELETYPE YOUR APPROVAL.

W H KING

COPY

TELEGRAM

W H KING, EXECUTIVE OFFICER DMEA FIELD TEAM REGION 4=
224 NEW CUSTOM HOUSE DVR=

I REGRET THE NEED FOR ASKING FOR A FOUR MONTHS CONTINUATION TO THE RECESS ALREADY GRANTED THIS COMPANY. WE HAVE REMAPPED THE DRIFT AND PLAN TO REQUEST SOME DIAMOND DRILLING AND A RAISE NEAR THE FACE OF THE DRIFT BEFORE CONTINUING THE BALANCE OF THE DRIFTING PROJECT. THIS WE FEEL SHOULD BE COORDINATED WITH THE PRICE OF LEAD AND ZINC AND SINCE THE FUTURE OUTLOOK HAS NOT IMPROVED IT IS HOPED THIS FOUR MONTH RECESS WILL MAKE CONTINUED OPERATION MORE LOGICAL. REFERENCE TO CONTRACT DOCKET NUMBER DMEA .2603=

RALPH JPOMEROY PRESIDENT MAGMA KING MANGANESE MINING CO=

No. 2

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Co., is hereby amended as follows, effective May 1, 1953:

> Execution of this document verifies the authorization to recess work under the contract for a period of one month; further, said authority for recess is given and accepted under the conditions that work will be resumed on or before June 1, 1953. Interim payment for the percentage of Government participation in the costs of work performed during the month of March 1953 will be held in deferment pending receipt of the Form MF-104 Operator's Monthly Report and Voucher in claim for reimbursement for work accomplished during the month of June 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAY 20 1953 1953

MAGMA KING MANGANESE MINING CO.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President and Director

UNITED STATES OF AMERICA

By W. H. King
W.H. King, Executive Officer, DMEA Field Team, Region IV

Seal

COPY

MAGMA KING
MANGANESE MINING COMPANY
Superior, Arizona

April 30, 1953

Mr. W.H. King
Executive Officer, DMEA
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

Request is hereby made that an additional 30 day recess be granted the project on the Ajax mine DMEA Docket 2603. We regret this delay, but we find that the changes we are making have not yet been completed.

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

RJP/lf

Amendment No. 2

COPY

DN 235 BUREAU MINES 5-1-53 1-37 PM

C O MITTENDORF

WE RECEIVED THE FOLLOWING REQUEST FROM THE MAGMA KING MANGANESE COMPANY, DOCKET DMEA 2603, CONTRACT NUMBER IDM-E428, LEAD-ZINC, "REQUEST IS HEREBY MADE THAT AN ADDITIONAL 30 DAY RECESS BE GRANTED THE PROJECT ON THE AJAX MINE DMEA DOCKET 2603. WE REGRET THIS DELAY, BUT WE FIND THAT THE CHANGES WE ARE MAKING HAVE NOT YET BEEN COMPLETED." WE RECOMMEND THAT THIS EXTENSION BE APPROVED. PLEASE GIVE US YOUR RECOMMENDATIONS BY TELETYPE.

W.H. KING

COPY

WASH DC BU MINES 310 5-5-53 2-14 PM

W H KING

REURTT DOCKET DMEA-2603, MAGMA KING MANGANESE MINING COMPANY, AJAX MINE, ARIZONA, CONTRACT IDM-E428. WE APPROVE REQUEST BY OPERATOR FOR THIRTY-DAY ADDITIONAL RECESS.

G.C. SELFRIDGE, CHAIRMAN

No. 1

AMENDMENT OF CONTRACT: No. Idm-E428

Contract Docket No. DMEA 2603, dated October 23, 1952, between the United States of America and Magma King Manganese Mining Company is hereby amended as follows, effective April 1, 1953:

> Execution of this document verified the authority to recess work under the contract for a period of 30 (thirty) days, further, said authority is given and accepted under the conditions that work will be resumed on or before May 1, 1953. Interim payments for the percentage of Government participation in the costs of the project for the month of March 1953 will be held in deferment pending receipt of advice that work has been resumed.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum."

Dated: APR 17 1953

Magma King Manganese Mining Co.

By Ralph J. Pomeroy
Ralph J. Pomeroy, President and Director

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMEA Field Team, Region IV

COPY

TELETYPE

WASH DC BU MINES 310 3-30-53 2-45 PM

W H KING,

REURTEL MAGMA KING MANGANESE MINING COMPANY DOCKET 2603 CONTRACT IDM-E428 WE APPROVE RECESS OF THIRTY DAYS WITH WORK TO BE RESUMED MAY 1, 1953 AND SUGGEST YOU PREPARE AND EXECUTE AMENDMENT IN COMPLIANCE WITH OPERATING COMMITTEE MEMORANDUM 18 DATED MARCH 9th.

GEORGE C SELFRIDGE

COPY

TELETYPE

C O MITTENDORF
WASH DC BU MINES 319

THE FOLLOWING REQUEST HAS BEEN RECEIVED FROM MAGMA KING MANGANESE MINING COMPANY, DOCKET DMEA 2603, CONTRACT IDM-E428 "WE HAVE BEEN EXPERIENCING SOME DIFFICULTIES IN THE AJAX MINE IN VENTILATION AND INCREASING AMOUNT OF WATER WHICH WE ARE ENCOUNTERING IN OUR DEVELOPMENT PROGRAM. IN ORDER TO CORRECT THESE MATTERS WHICH ARE NOT INCLUDED IN OUR DMEA CONTRACT, WE REQUEST THIRTY DAY RECESS WITH WORK BEING RESUMED THE FIRST OF MAY." PLEASE GIVE US YOUR RECOMMENDATIONS BY RETURN TELETYPE.

W H KING

C
O
P
Y

224 New Customhouse
Denver 2, Colorado

March 27, 1953

Mr. Ralph J. Pomeroy, President
Manganese Mining Company
Superior, Arizona

Dear Mr. Pomeroy:

This will acknowledge receipt of your letter dated March 23, 1953 requesting a thirty day recess of work under Contract Idm-E428. This request has been forwarded to our Washington Office for approval.

Very truly yours,

/s/ W. H. King

W. H. King
Executive Officer
Field Team, Region IV

C
O
P
Y

MAGMA KING
Manganese Mining Company
Superior, Arizona

March 23, 1953

Mr. W. H. King
Executive Office, D.M.E.A.
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Mr. King:

We have been experiencing some difficulties in the Ajax Mine in ventilation and increasing amount of water which we are encountering in our development program. In order to correct these matters which are not included in our D. M. E. A. contract, we request a thirty day recess with work being resumed the first of May.

Hoping this meets with your approval, I remain,

Sincerely yours,

/s/ Ralph J. Pomeroy

Ralph J. Pomeroy, President

Docket No. 2603

Commodity Lead-Zinc

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 428

Date of Contract October 23, 1952

Name and Address of Operator:

Magna King Manganese Mining Co.
Security Building
Phoenix, Arizona

Amount of Government participation $ 11,550.00

Percent of Government participation 50 %

Region: III State: Arizona

Note: Please release $8,155.00

(Name)
for J. L. Chambers, Chief
Contract Administration and
Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington.

9/20/55

54458

Docket No. [illegible]

Commodity [illegible]

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 428

Date of Contract ~~or Amendment~~: October 29, 1952

Name and Address of Operator:

Magna King Manganese Mining Co.
Security Building,
Phoenix, Arizona

Amount of Government participation $ 11,250.00

Percent of Government participation 50 %

Region: IV State: Arizona

(Name)

J. L. Chambers,
Chief, Contract Administration and Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington. Oct. 29, 1952

13908

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2603

COMMODITY Lead-Zinc

Idm-E428

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 23rd day of October, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Magma King Manganese Mining Co., an Arizona Corporation
532 Security Bldg.
Phoenix, Arizona

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Arizona, County of Pinal, described as follows:[3] Ajax and Ajax No. 1, Survey No. 3949

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following liens, or encumbrances, or exceptions, which are subordination agreement of the holder is attached.~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] Lead & Zinc

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay fifty (50) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $ 11,550, which is 50 percent of $ 23,100, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

MAGMA KING MANGANESE MINING CO.
(Operator)

By Ralph J. Pomeroy

By W. H. King
Executive Officer, DMEA
Field Team, Region IV

I, Lillie Fraser, certify that I am the Assistant secretary of the corporation named as Operator herein; that Ralph J. Pomeroy, who signed this contract on behalf of the Operator, was then President and Director of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Lillie Fraser [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Arizona, County of Pinal, described as follows:1/

Ajax and Ajax No. 1 Mining Claims U. S. Survey No. 3949

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Magma King Manganese Mining Co.

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 11,550.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 6th day of October, 1952.

Frank H. Allen [Seal] Bette Chretien Atty in fact

Gladys Allen [Seal] Deborah Adams Smith

Bette C. Smith [Seal] Bette Chretien Atty in fact

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

EXHIBIT A

Description of the Work

Drift 400 feet northerly from the present north breast of the 176-foot level.

Drive 200 feet of raises at favorable sites disclosed by the drifting. The locations of the raises will be determined after part or all of the drifting is completed and must be acceptable to the DMEA representative.

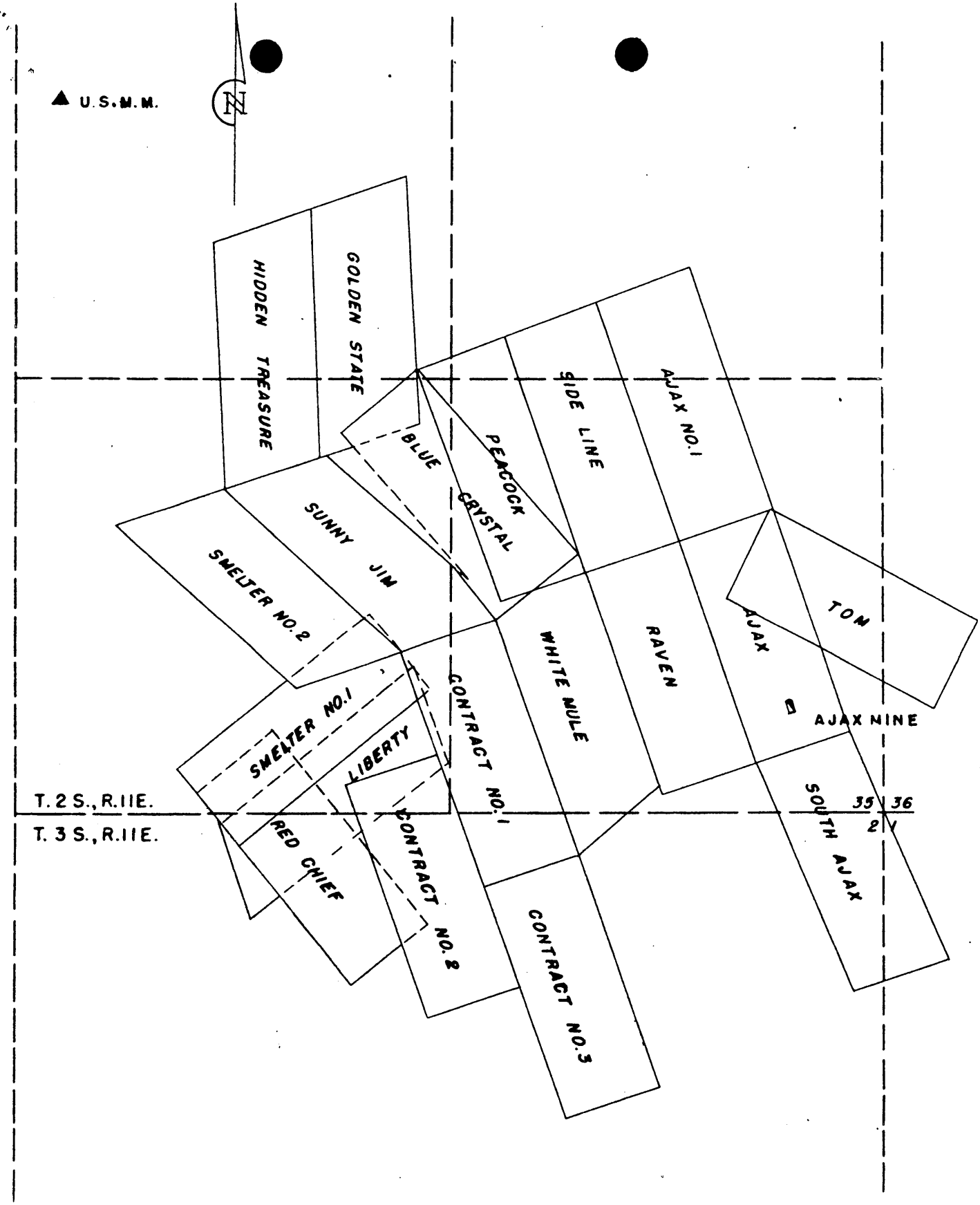
Diamond core drill a maximum of 500 feet of hole at locations to be determined after part or all of the drifting is completed. The locations, directions, inclinations and depths of the drill holes must be acceptable to the DMEA representative. A certified drill log must accompany each Monthly Progress Report. Reimbursement will be made only for diamond drill holes completed to the satisfaction of the DMEA representative. Drill cores must be properly stored in acceptable core boxes. Cores must be split and one-half retained for the use of the DMEA.

All the preliminary work will be completed by the operator at no expense to the Government.

The location of the proposed work is shown on Figures 2 and 3 which are attached and made a part of this exhibit.

Estimated Costs of the Project

Drifting, 400 feet @ $35.00 per foot	$14,000.00
Raising, 200 feet @ $33.00 per foot	6,600.00
*Diamond Drilling, 500 feet @ $5.00 per foot	2,500.00
Total Cost of Project -	$23,100.00
Government participation at 50%	$11,550.00



SCALE: 1" = 800' (APPROX.)

DMEA 2603

CLAIM MAP

Fig. 2 MAGMA KING MANGANESE CO.'S AJAX MINE, PINAL CO., ARIZ.

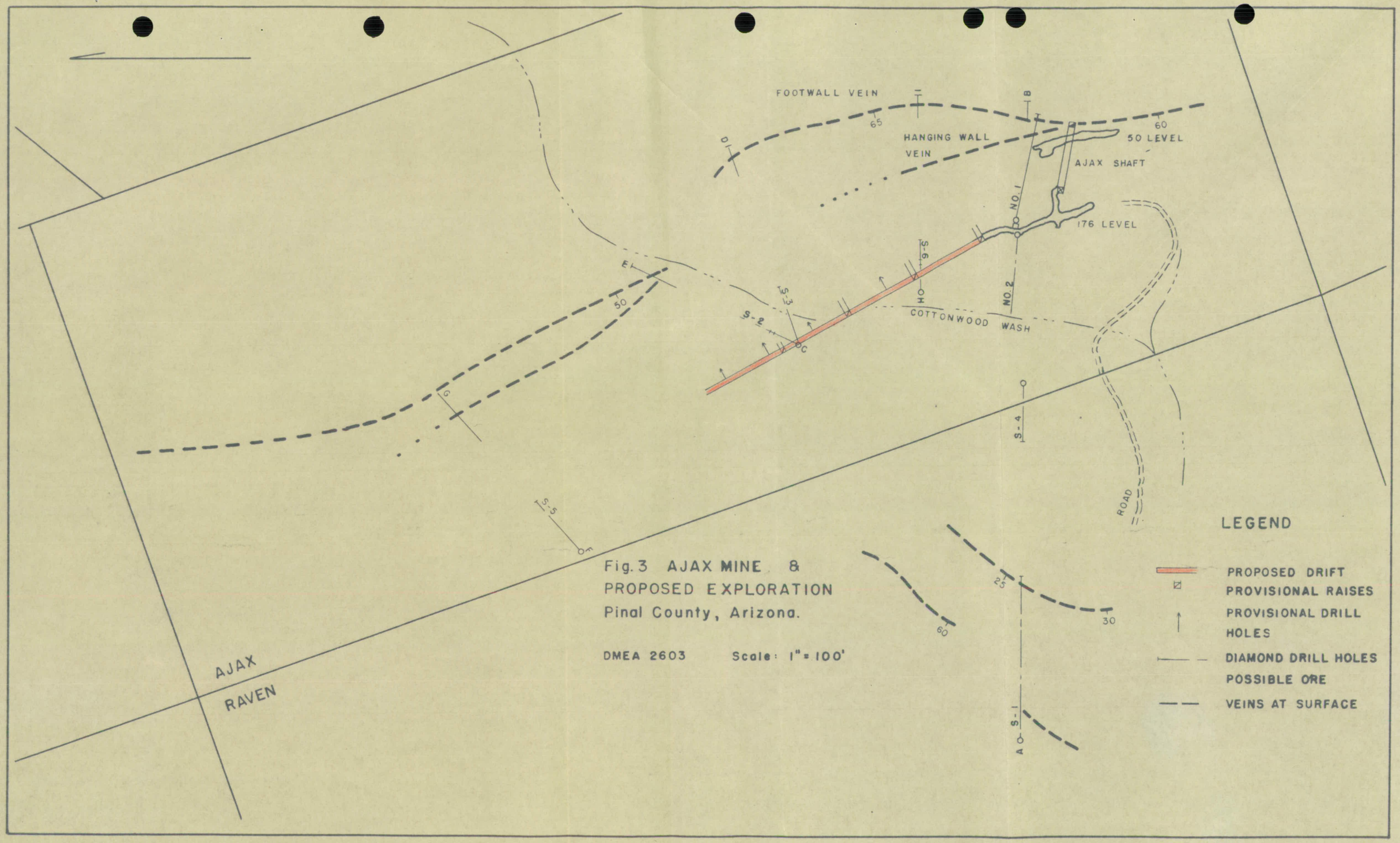
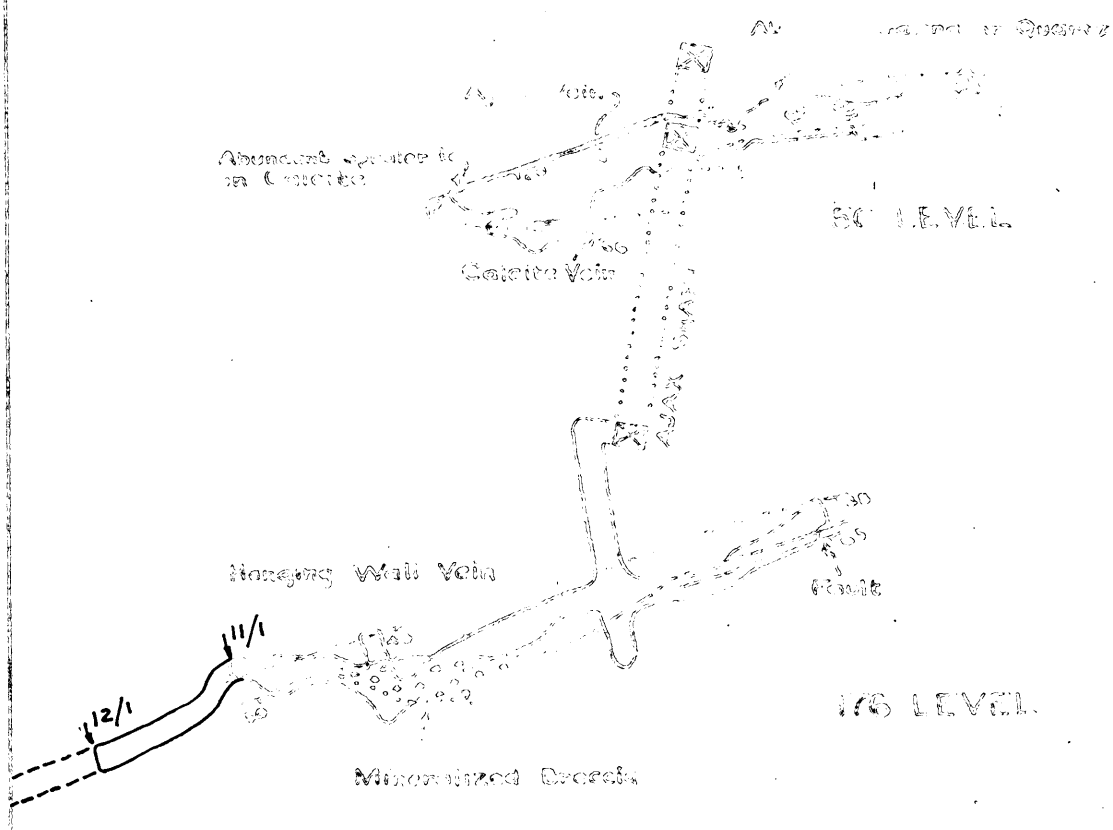
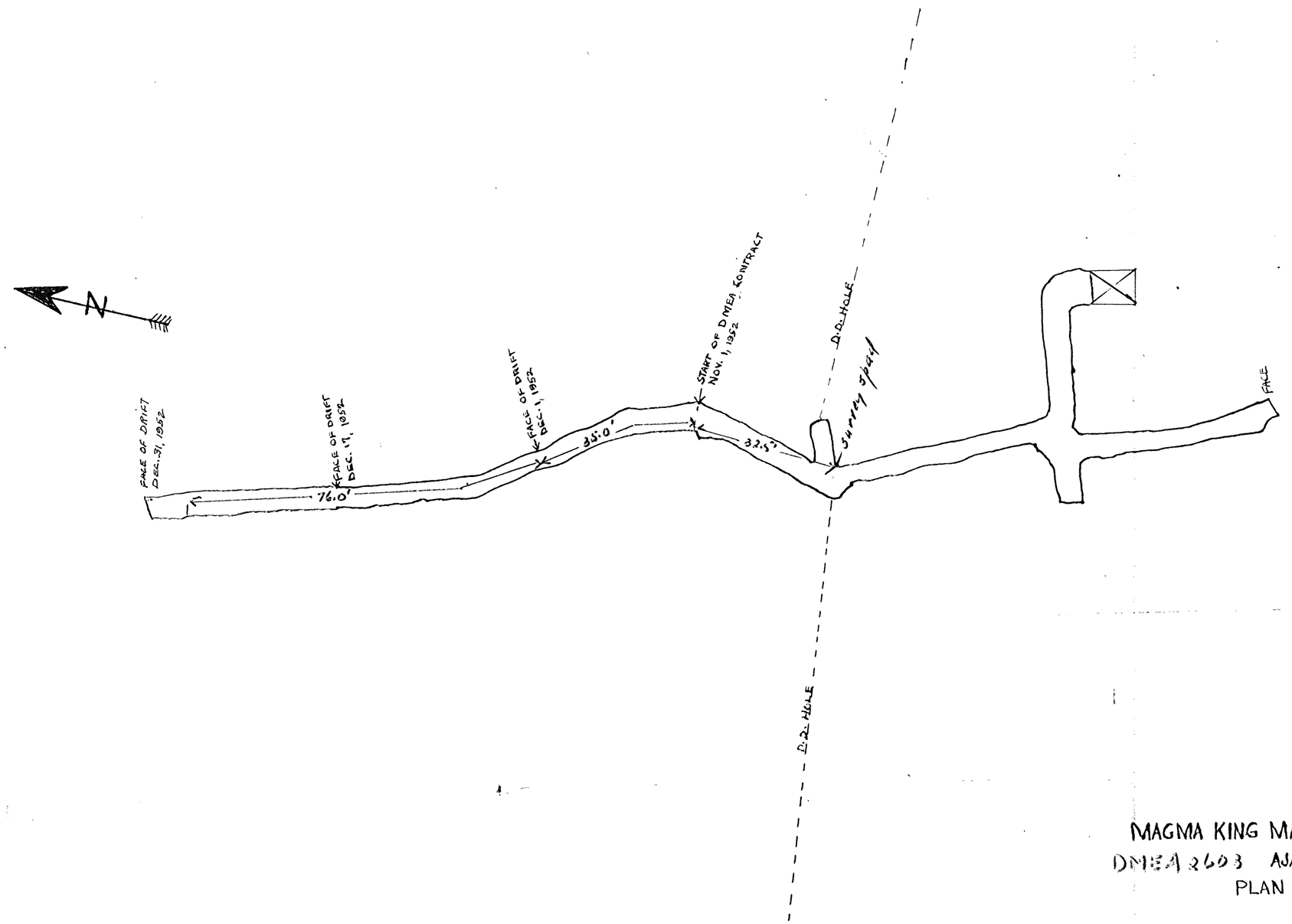


Fig. 3 AJAX MINE & PROPOSED EXPLORATION
Pinal County, Arizona.

DMEA 2603 Scale: 1" = 100'

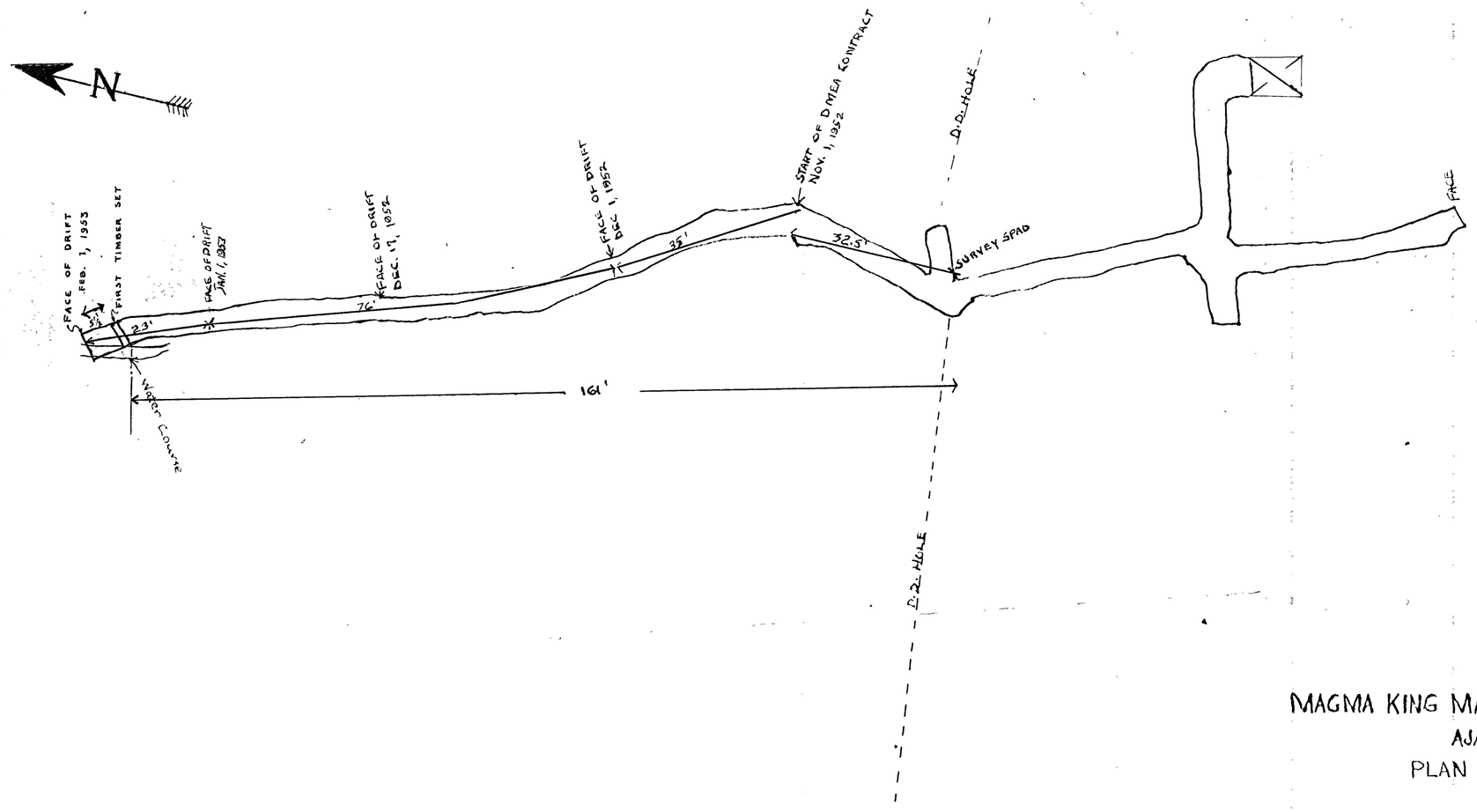

Galena Vein
Hanging Wall Vein
Granite
11/1
12/1
Mineralized Breccia



MAGMA KING MANGANESE MINING CO.
DMEA 2603 AJAX MINE Contract Idm-E428
PLAN 176 FOOT LEVEL

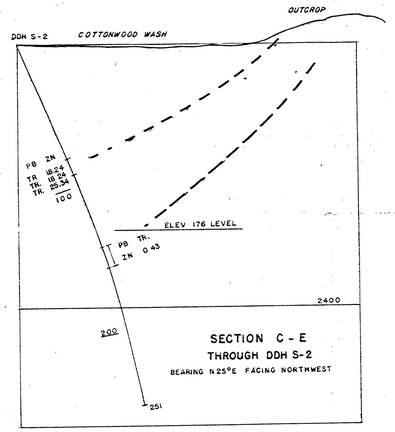
ONE INCH = 20 FEET

DOCKET NO. BA 2603
CONTRACT Iu.r.-E428

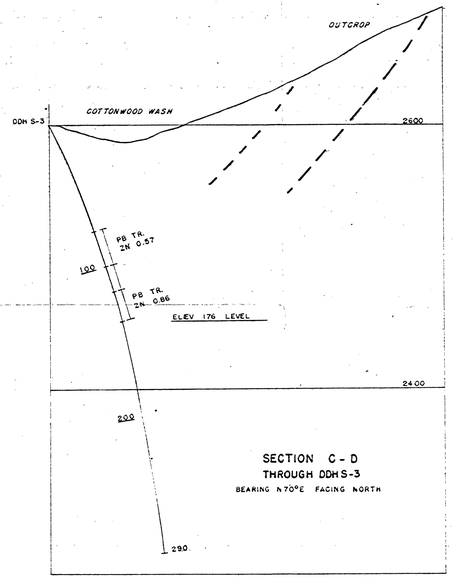


MAGMA KING MANGANESE MINING CO.
AJAX MINE
PLAN 176 FOOT LEVEL

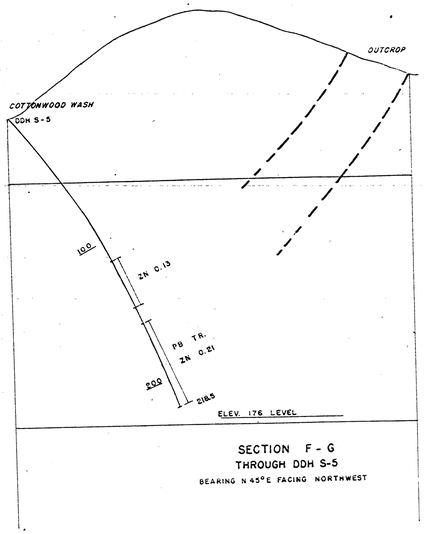
ONE INCH = 20 FEET



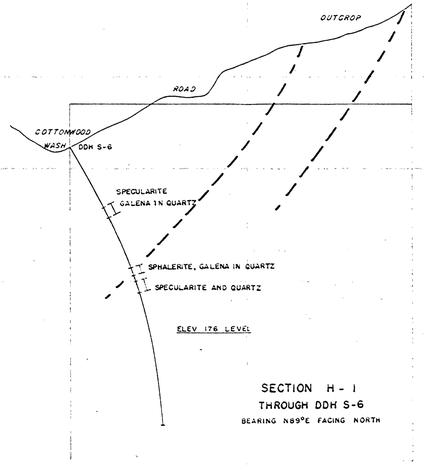
SECTION C - E
THROUGH DDH S-2
BEARING N25°E FACING NORTHWEST



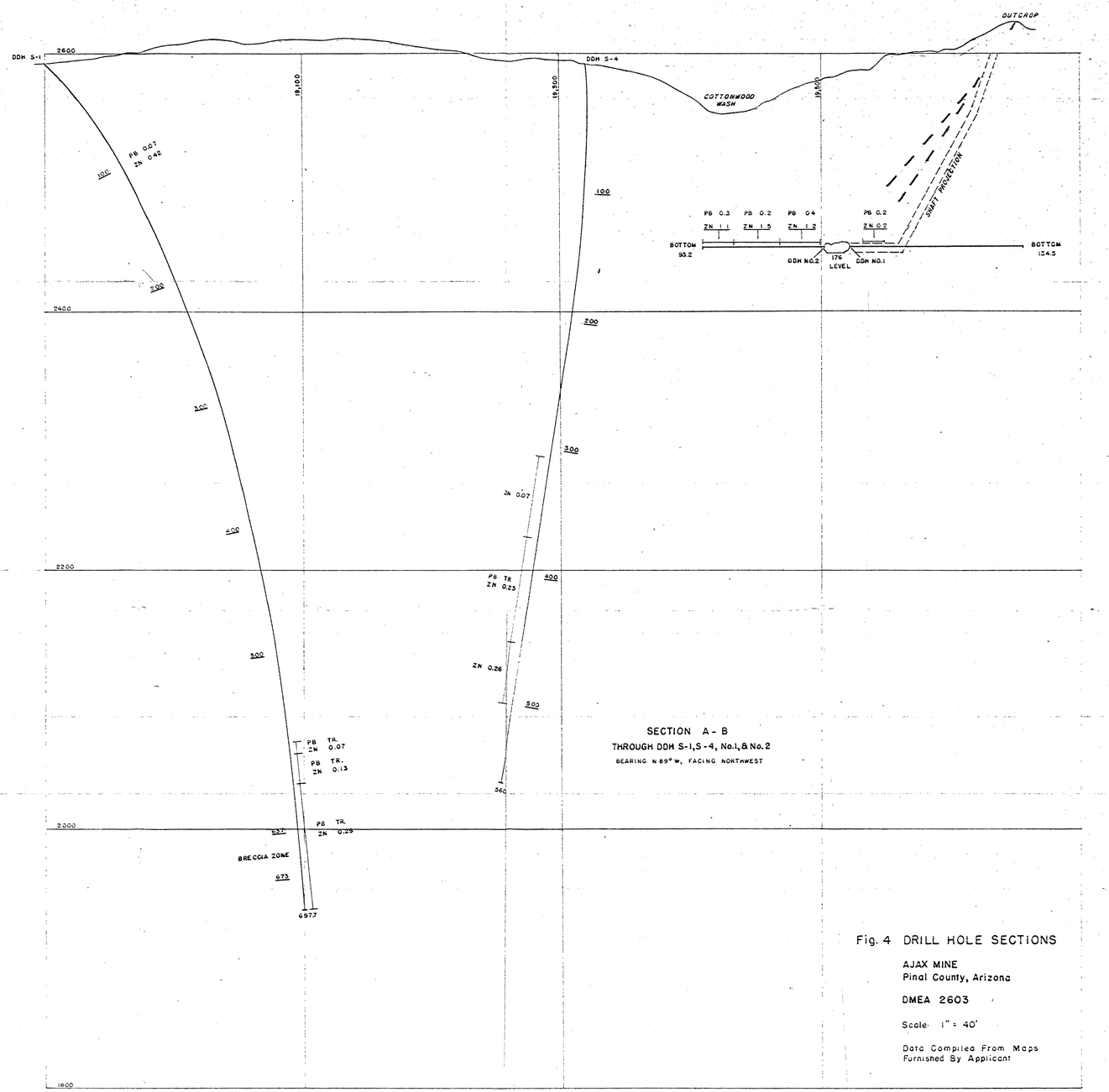
SECTION C - D
THROUGH DDH S-3
BEARING N70°E FACING NORTH



SECTION F - G
THROUGH DDH S-5
BEARING N45°E FACING NORTHWEST



SECTION H - I
THROUGH DDH S-6
BEARING N89°E FACING NORTH



SECTION A - B
THROUGH DDH S-1, S-4, No.1, & No.2
BEARING N 89° W, FACING NORTHWEST

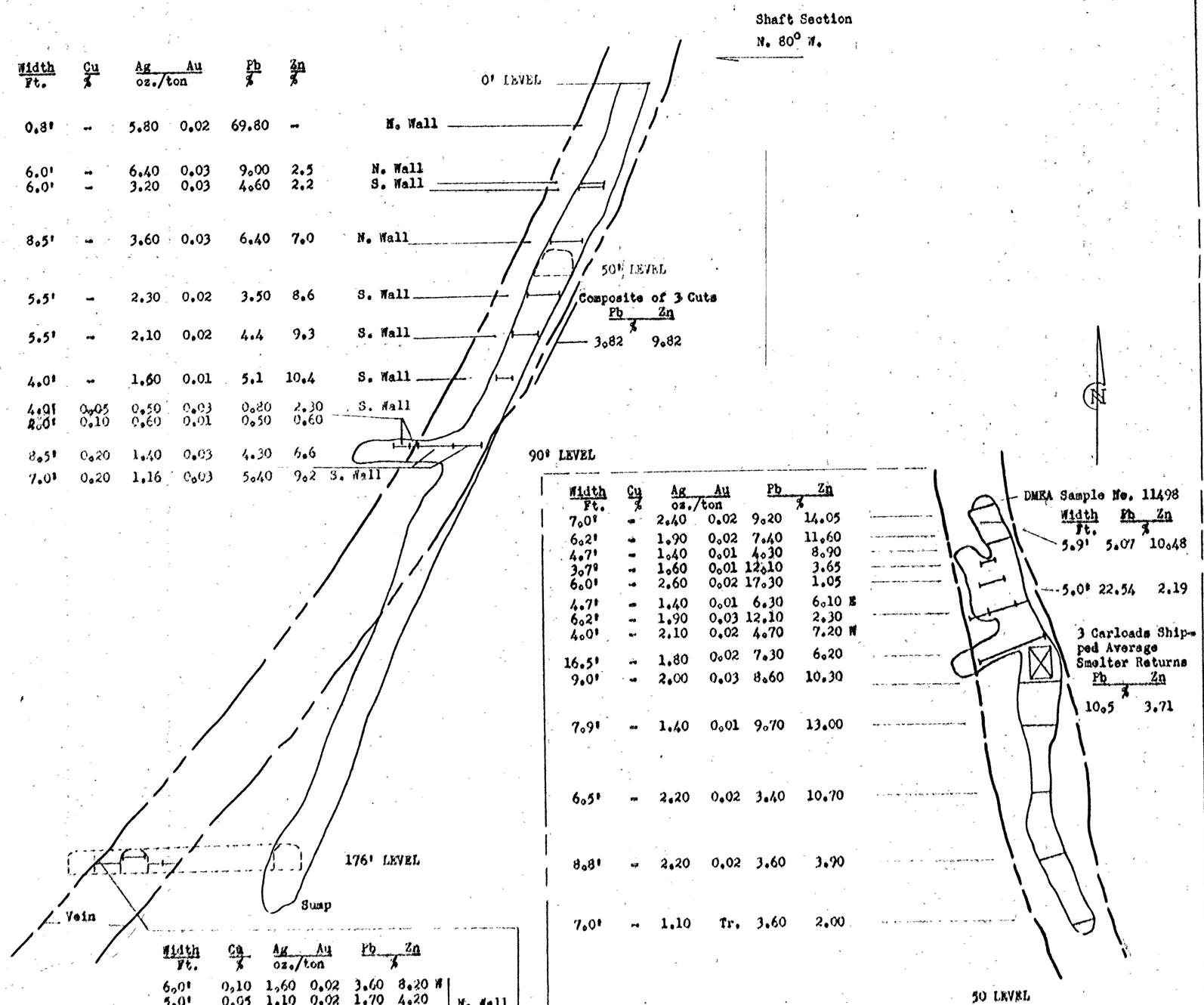
Fig. 4 DRILL HOLE SECTIONS

AJAX MINE
Pinal County, Arizona

DMEA 2603

Scale: 1" = 40'

Data Compiled From Maps
Furnished By Applicant



Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %
0.8'	-	5.80	0.02	69.80	-
6.0'	-	6.40	0.03	9.00	2.5
6.0'	-	3.20	0.03	4.60	2.2
8.5'	-	3.60	0.03	6.40	7.0
5.5'	-	2.30	0.02	3.50	8.6
5.5'	-	2.10	0.02	4.4	9.3
4.0'	-	1.60	0.01	5.1	10.4
4.0'	0.05	0.50	0.03	0.80	2.30
2.0'	0.10	0.60	0.01	0.50	0.60
8.5'	0.20	1.40	0.03	4.30	6.6
7.0'	0.20	1.16	0.03	5.40	9.2

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %
7.0'	-	2.40	0.02	9.20	14.05
6.2'	-	1.90	0.02	7.40	11.60
4.7'	-	1.40	0.01	4.30	8.90
3.7'	-	1.60	0.01	12.10	3.65
6.0'	-	2.60	0.02	17.30	1.05
4.7'	-	1.40	0.01	6.30	6.10 E
6.2'	-	1.90	0.03	12.10	2.30
4.0'	-	2.10	0.02	4.70	7.20 W
16.5'	-	1.80	0.02	7.30	6.20
9.0'	-	2.00	0.03	8.60	10.30
7.9'	-	1.40	0.01	9.70	13.00
6.5'	-	2.20	0.02	3.40	10.70
8.8'	-	2.20	0.02	3.60	3.90
7.0'	-	1.10	Tr.	3.60	2.00

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

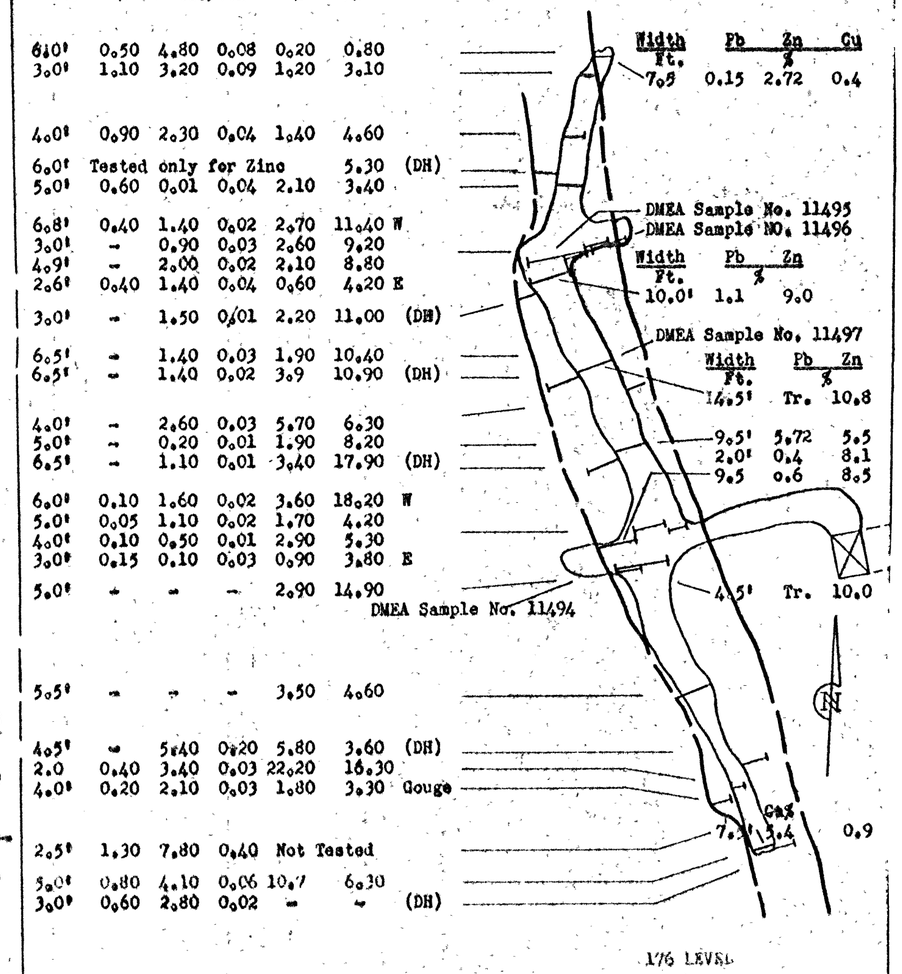
N. Wall

VERTICAL SECTION

THROUGH AJAX SHAFT

ASSAY PLAN 50 LEVEL

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	(DH= Drill Hole)
6.0'	0.50	4.80	0.08	0.20	0.80	
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zinc				5.30	(DH)
5.0'	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	-	0.90	0.03	2.60	9.20	
4.9'	-	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	-	1.50	0.01	2.20	11.00	(DH)
6.5'	-	1.40	0.03	1.90	10.40	
6.5'	-	1.40	0.02	3.9	10.90	(DH)
4.0'	-	2.60	0.03	5.70	6.30	
5.0'	-	0.20	0.01	1.90	8.20	
6.5'	-	1.10	0.01	3.40	17.90	(DH)
6.0'	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	-	-	-	2.90	14.90	
5.5'	-	-	-	3.50	4.60	
4.5'	-	5.40	0.20	5.80	3.60	(DH)
2.0	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not Tested		
3.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	-	-	(DH)



ASSAY PLAN 176 LEVEL

DMEA SAMPLE No.	Sample Length	Au oz./ton	Ag	%Pb Total	%Pb Oxide	%Cu Total	%Cu Oxide	%Zn Total	%Zn Oxide
11494	8.7'	0.01	0.55	0.85	0.05	0.07	0.02	5.5	1.70
11495	12.2'	0.01	0.4	0.22	0.01	0.17	0.05	8.15	0.05
11496	6.5'	0.01	0.7	0.7	0.04	0.65	0.12	1.7	0.01
11497	6.0'	0.01	0.2	0.4	0.01	0.07	0.02	3.95	0.03
11498	5.0'	0.02	1.3	5.6	3.25	0.15	0.06	8.65	4.05

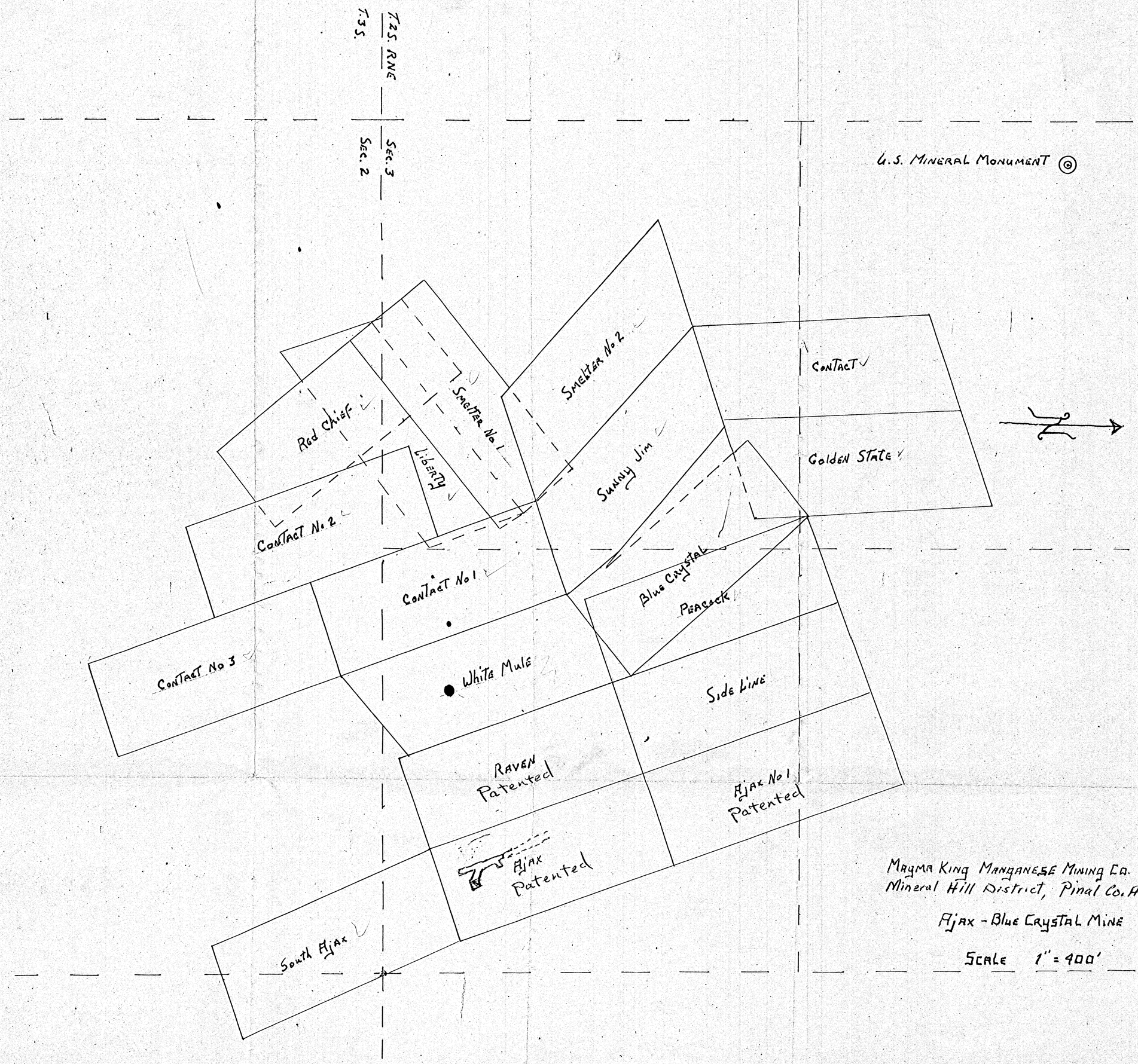
Fig. 6 SAMPLE MAP

MAGMA KING MANGANESE COMPANY'S, AJAX MINE
Pinal County, Arizona

DMEA 260)

Scale: 1" = 20'

Data from applicant's map with the addition of 5 D.M.E.A. Samples

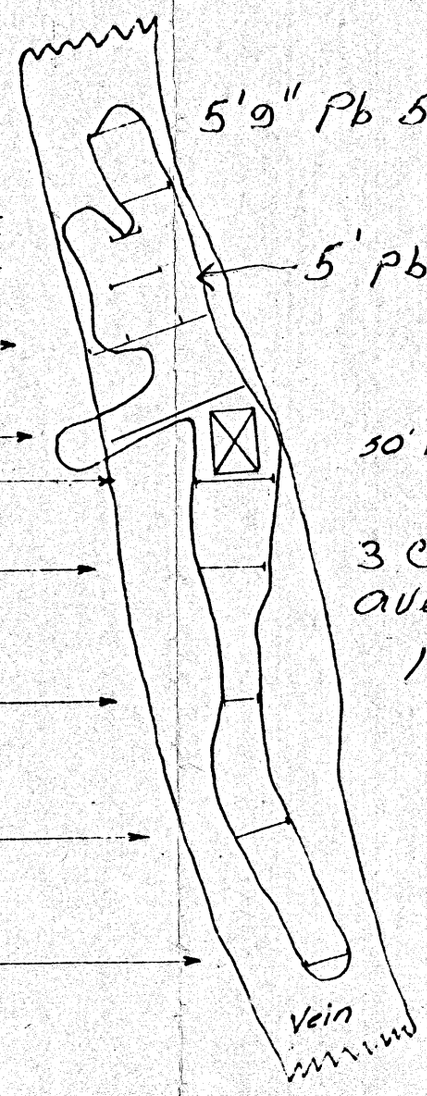


Magma King Manganese Mining Co.
Mineral Hill District, Pinal Co. Arizona

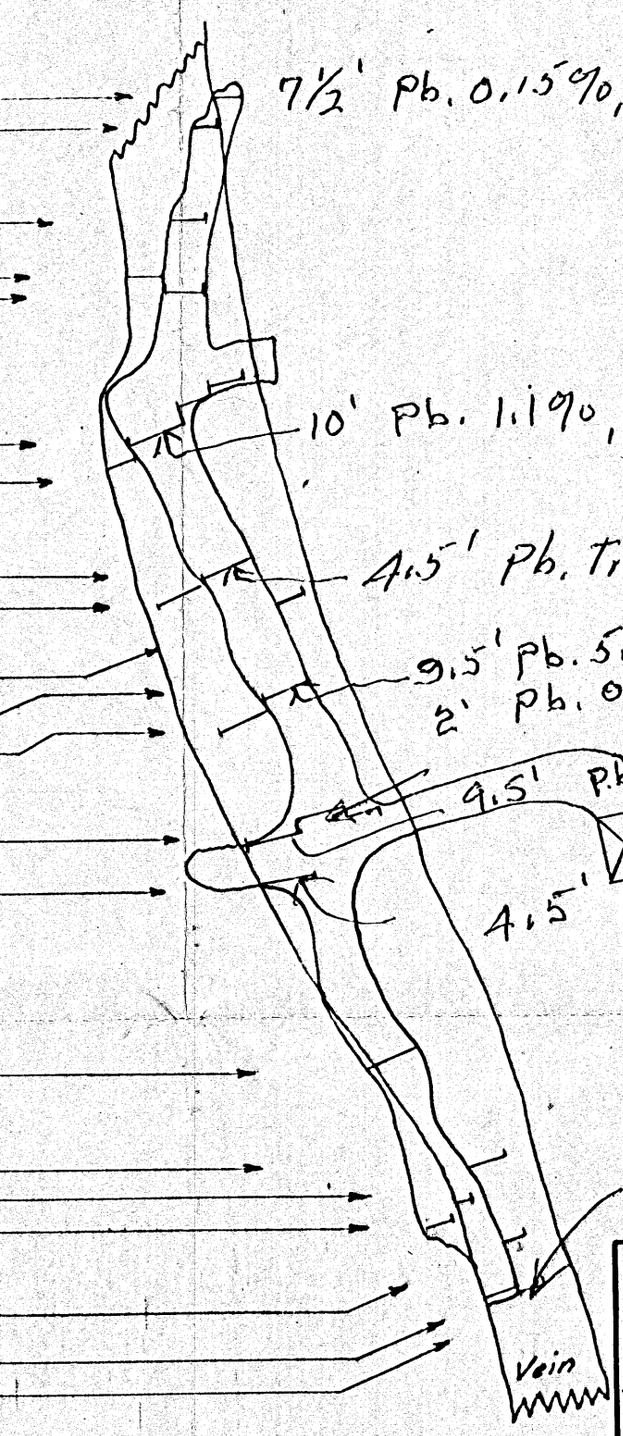
Ajax - Blue Crystal Mine

Scale 1" = 400'

Width	Cu. %	Ag. oz.	Au. oz	Pb %	Zn %	
7.0'	Not tested	2.40	0.02	9.20	14.05	
6.2'	—	1.90	0.02	7.40	11.60	
4.7'	—	1.40	0.01	4.30	8.90	
3.7'	—	1.60	0.01	12.10	3.65	
6.0'	—	2.60	0.02	17.30	1.05	
4.7'	—	1.40	0.01	6.30	6.10	E
6.2'	—	1.90	0.03	12.10	2.30	
4.0	—	2.10	0.02	4.70	7.20	W
16.5	—	1.80	0.02	7.30	6.20	
9.0'	—	2.00	0.03	8.60	10.30	
7.9'	—	1.40	0.01	9.70	13.00	
6.5'	—	2.20	0.02	3.40	10.70	
8.8'	—	2.20	0.02	3.60	3.90	
7.0'	—	1.10	Tr.	3.60	2.00	



6.0'	0.50	4.80	0.08	0.20	0.80	Foot Wall
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zn.				5.30	Drill Hole
5.0	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	—	0.90	0.03	2.60	9.20	
4.9'	—	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	—	1.50	0.01	2.20	11.00	Drill Hole
6.5'	—	1.40	0.03	1.90	10.40	
6.3'	—	1.40	0.02	3.9	10.90	Drill Hole
4.0'	—	2.60	0.03	5.70	6.30	
5.0'	—	0.20	0.01	1.90	8.20	
6.5'	—	1.10	0.01	3.40	17.90	Drill Hole
6.0	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.13	0.10	0.03	0.90	3.80	E
5.0'	—	—	—	2.90	14.90	
5.5'	—	—	—	3.50	4.60	
4.5'	—	5.40	0.20	5.80	3.60	Drill Hole
2.0'	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not tested		
5.0'	0.80	4.10	0.08	10.7	6.30	
3.0'	0.60	2.80	0.02	—	—	Drill Hole



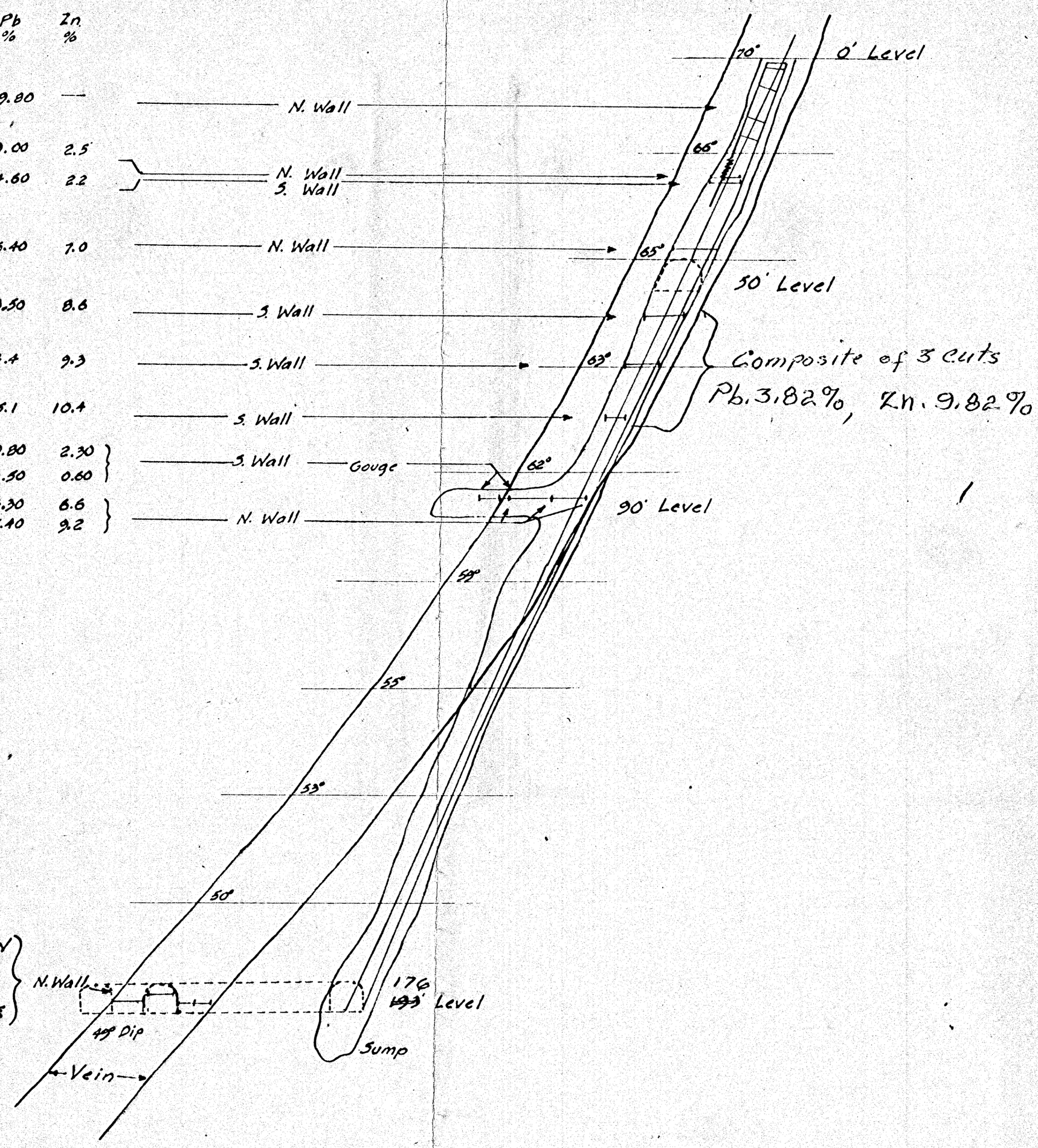
~~HERCEL MINERALS, INC.~~
~~P. O. Box 119~~
~~Superior, Arizona~~

APEX MINES INC.
AJAX MINE.

ASSAY PLAN
50' AND 176' LEVELS.

SCALE: 1" = 20'

Width Ft.	Cu %	Ag oz. per ton	Au	Pb %	Zn %	
0.8'	—	5.80	0.02	69.80	—	N. Wall
6.0'	—	6.40	0.03	9.00	2.5	N. Wall
6.0'	—	3.20	0.03	4.60	2.2	S. Wall
8.5'	—	3.60	0.03	6.40	7.0	N. Wall
5.5'	—	2.30	0.02	3.50	8.6	S. Wall
5.5'	—	2.10	0.02	4.4	9.3	S. Wall
4.0'	—	1.60	0.01	5.1	10.4	S. Wall
4.0	0.05	0.50	0.03	0.80	2.30	S. Wall — Gouge
2.0	0.10	0.60	0.01	0.50	0.60	
8.5'	0.20	1.40	0.03	4.30	6.6	N. Wall
7.0'	0.20	1.16	0.03	5.40	9.2	



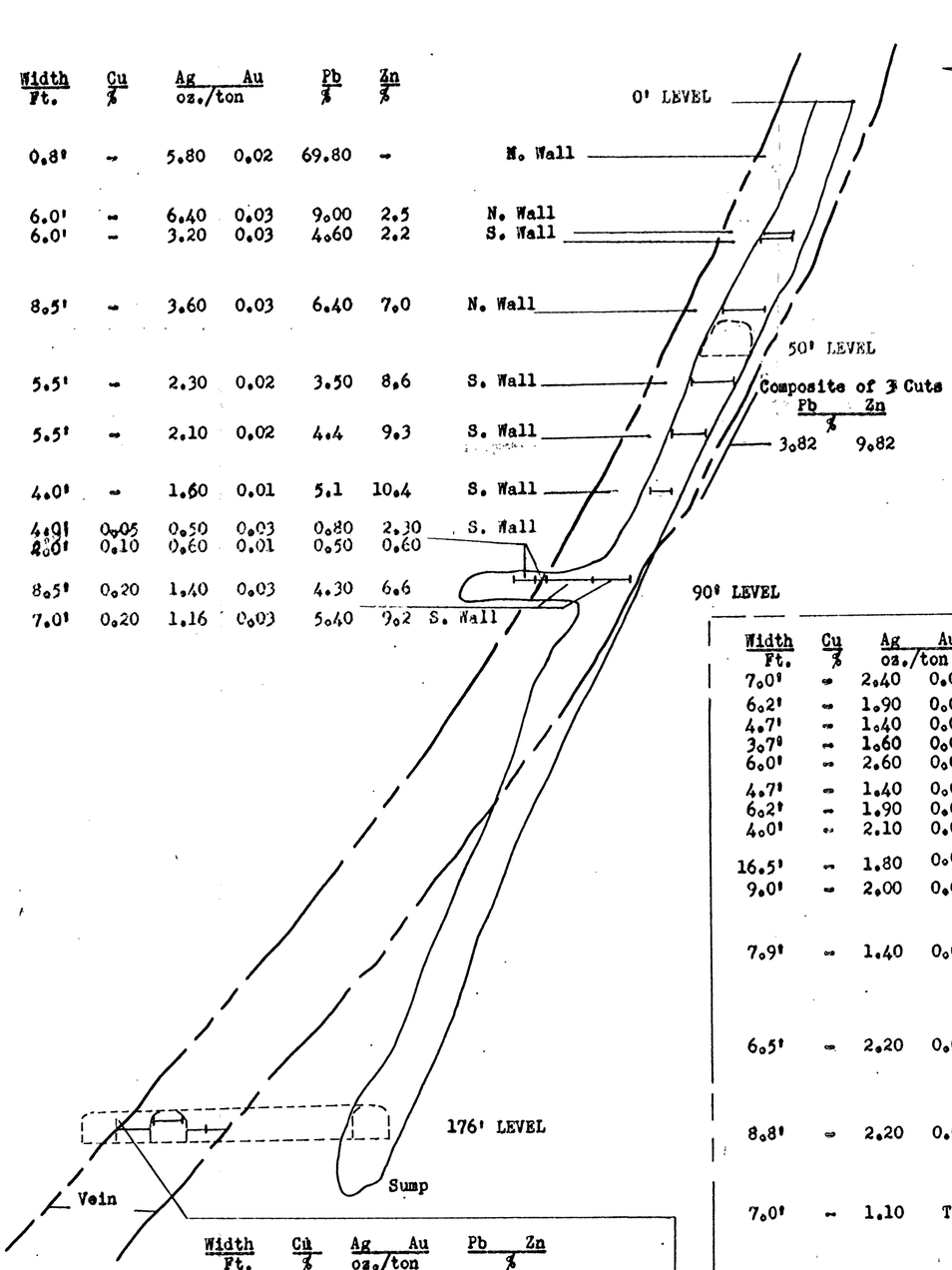
Width	Cu. %	Ag	Au.	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

APEX MINES, INC.

AJAX MINE.

VERTICAL SECTION N.80°E THROUGH SHAFT

SCALE: 1" = 20'



Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
0.8'	-	5.80	0.02	69.80	-	
6.0'	-	6.40	0.03	9.00	2.5	
6.0'	-	3.20	0.03	4.60	2.2	
8.5'	-	3.60	0.03	6.40	7.0	
5.5'	-	2.30	0.02	3.50	8.6	
5.5'	-	2.10	0.02	4.4	9.3	
4.0'	-	1.60	0.01	5.1	10.4	
4.0'	0.05	0.50	0.03	0.80	2.30	
2.0'	0.10	0.60	0.01	0.50	0.60	
8.5'	0.20	1.40	0.03	4.30	6.6	
7.0'	0.20	1.16	0.03	5.40	9.2	

Composite of 3 Cuts

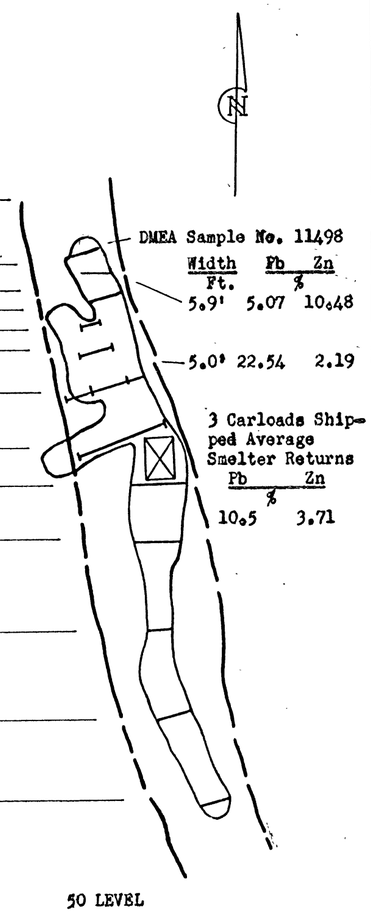
Pb %	Zn %
3.82	9.82

Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

N. Wall

VERTICAL SECTION

THROUGH AJAX SHAFT



Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
7.0'	-	2.40	0.02	9.20	14.05	
6.2'	-	1.90	0.02	7.40	11.60	
4.7'	-	1.40	0.01	4.30	8.90	
3.7'	-	1.60	0.01	12.10	3.65	
6.0'	-	2.60	0.02	17.30	1.05	
4.7'	-	1.40	0.01	6.30	6.10	E
6.2'	-	1.90	0.03	12.10	2.30	
4.0'	-	2.10	0.02	4.70	7.20	W
16.5'	-	1.80	0.02	7.30	6.20	
9.0'	-	2.00	0.03	8.60	10.30	
7.9'	-	1.40	0.01	9.70	13.00	
6.5'	-	2.20	0.02	3.40	10.70	
8.8'	-	2.20	0.02	3.60	3.90	
7.0'	-	1.10	Tr.	3.60	2.00	

DMEA Sample No. 11498

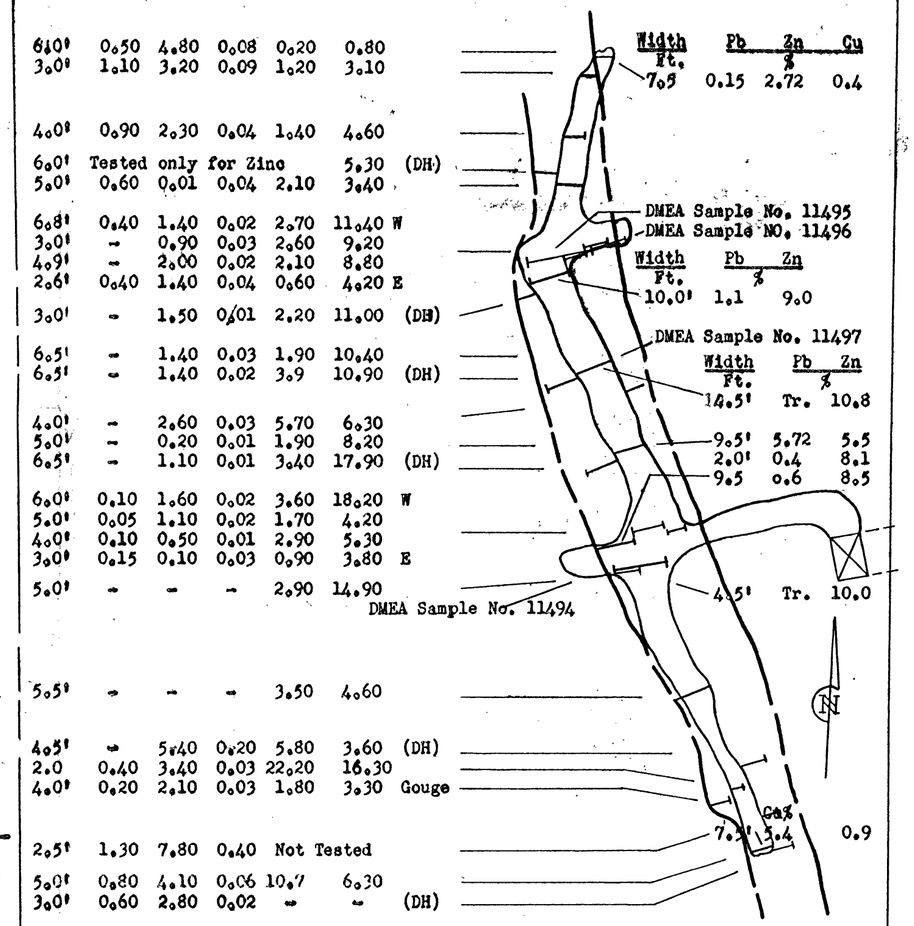
Width Ft.	Pb %	Zn %
5.9'	5.07	10.48
5.0'	22.54	2.19

3 Carloads Shipped Average Smelter Returns

Pb %	Zn %
10.5	3.71

50 LEVEL

ASSAY PLAN 50 LEVEL



Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
6.0'	0.50	4.80	0.08	0.20	0.80	
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zinc				5.30	(DH)
5.0'	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	-	0.90	0.03	2.60	9.20	
4.9'	-	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	-	1.50	0.01	2.20	11.00	(DH)
6.5'	-	1.40	0.03	1.90	10.40	
6.5'	-	1.40	0.02	3.9	10.90	(DH)
4.0'	-	2.60	0.03	5.70	6.30	
5.0'	-	0.20	0.01	1.90	8.20	
6.5'	-	1.10	0.01	3.40	17.90	(DH)
6.0'	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	-	-	-	2.90	14.90	
5.5'	-	-	-	3.50	4.60	
4.5'	-	5.40	0.20	5.80	3.60	(DH)
2.0	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not Tested		
5.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	-	-	(DH)

(DH= Drill Hole)

Width Ft.	Pb %	Zn %	Cu %
7.5	0.15	2.72	0.4

DMEA Sample No. 11495
DMEA Sample NO. 11496

Width Ft.	Pb %	Zn %
10.0'	1.1	9.0

DMEA Sample No. 11497

Width Ft.	Pb %	Zn %
14.5'	Tr.	10.8
9.5'	5.72	5.5
2.0'	0.4	8.1
9.5	0.6	8.5
4.5'	Tr.	10.0
7.5'	5.4	0.9

DMEA Sample No. 11494

ASSAY PLAN 176 LEVEL

DMEA SAMPLE No.	Sample Length	Au oz./ton	Ag oz./ton	%Pb Total	%Pb Oxide	%Cu Total	%Cu Oxide	%Zn Total	%Zn Oxide
11494	8.7'	0.01	0.55	0.85	0.05	0.07	0.02	5.5	1.70
11495	12.2'	0.01	0.4	0.22	0.01	0.17	0.05	8.15	0.05
11496	6.5'	0.01	0.7	0.7	0.04	0.65	0.12	1.7	0.01
11497	6.0'	0.01	0.2	0.4	0.01	0.07	0.02	3.95	0.03
11498	5.0'	0.02	1.3	5.6	3.25	0.15	0.06	8.65	4.05

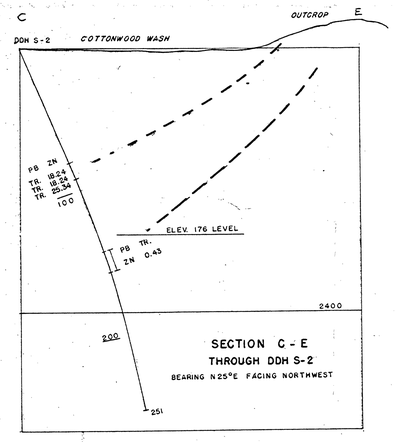
Fig. 6 SAMPLE MAP

MAGMA KING MANGANESE COMPANY'S, AJAX MINE
Pinal County, Arizona

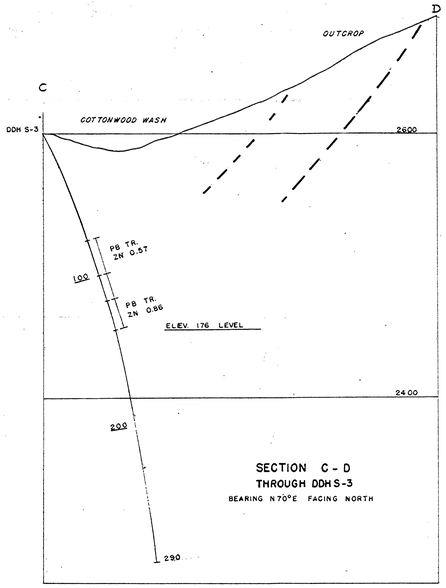
DMEA 2603, Contract Idm-E428

Scale: 1" = 20'

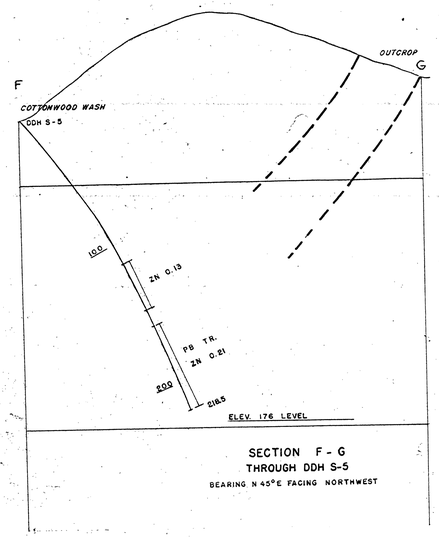
Data from applicant's map with the addition of 5 D.M.E.A. Samples



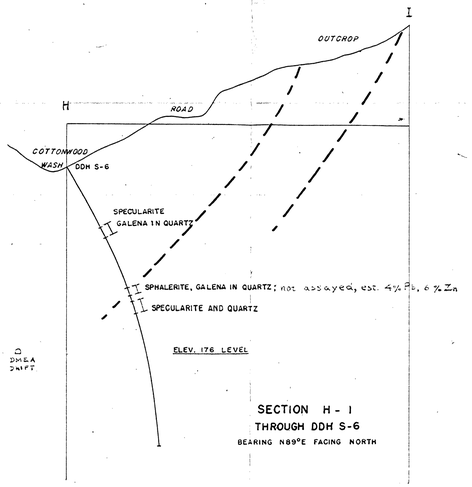
SECTION C - E
THROUGH DDH S-2
BEARING N25°E FACING NORTHWEST



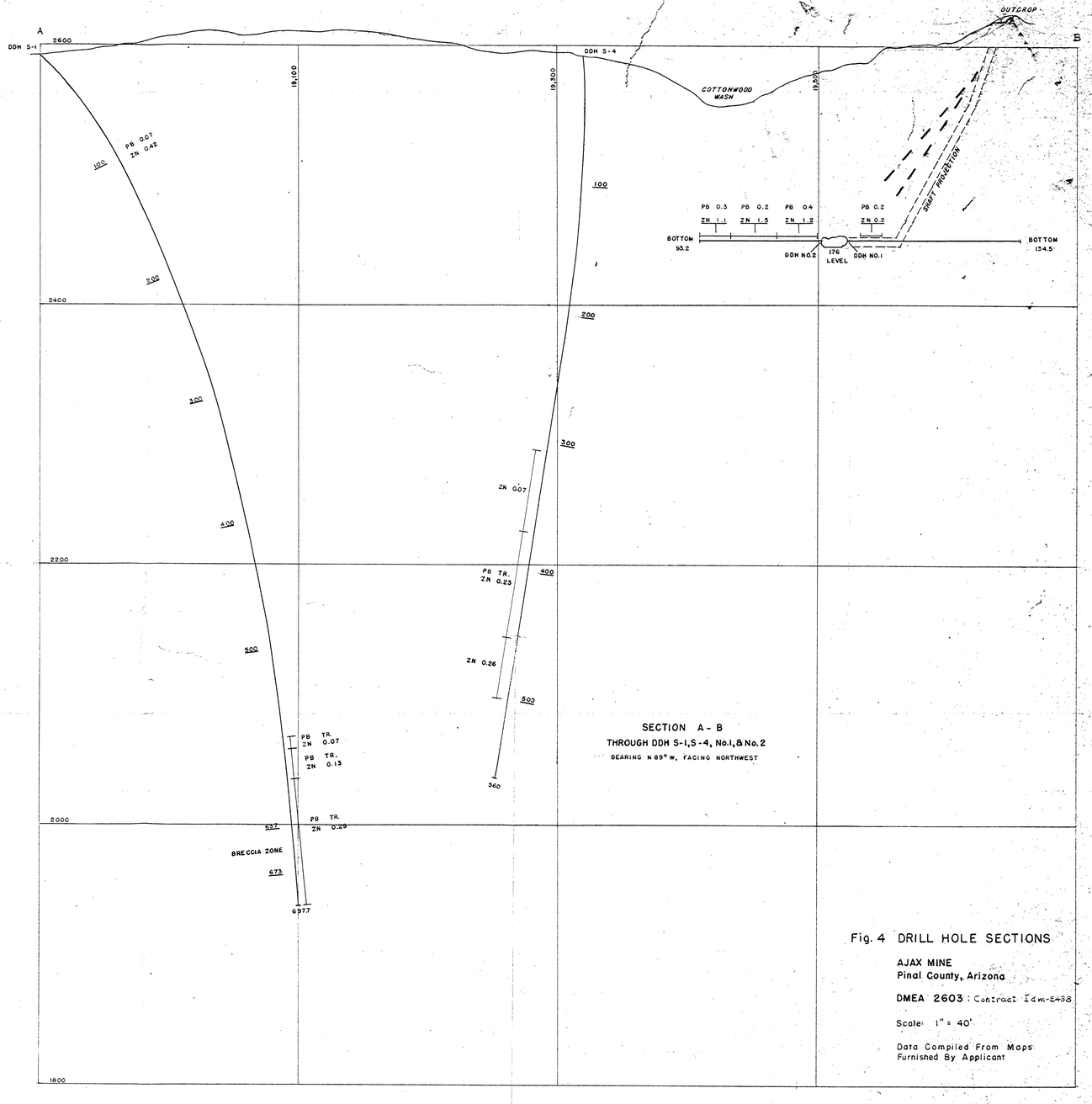
SECTION C - D
THROUGH DDH S-3
BEARING N70°E FACING NORTH



SECTION F - G
THROUGH DDH S-5
BEARING N45°E FACING NORTHWEST



SECTION H - I
THROUGH DDH S-6
BEARING N89°E FACING NORTH



SECTION A - B
THROUGH DDH S-1, S-4, No.1, & No.2
BEARING N 89° W, FACING NORTHWEST

Fig. 4 DRILL HOLE SECTIONS

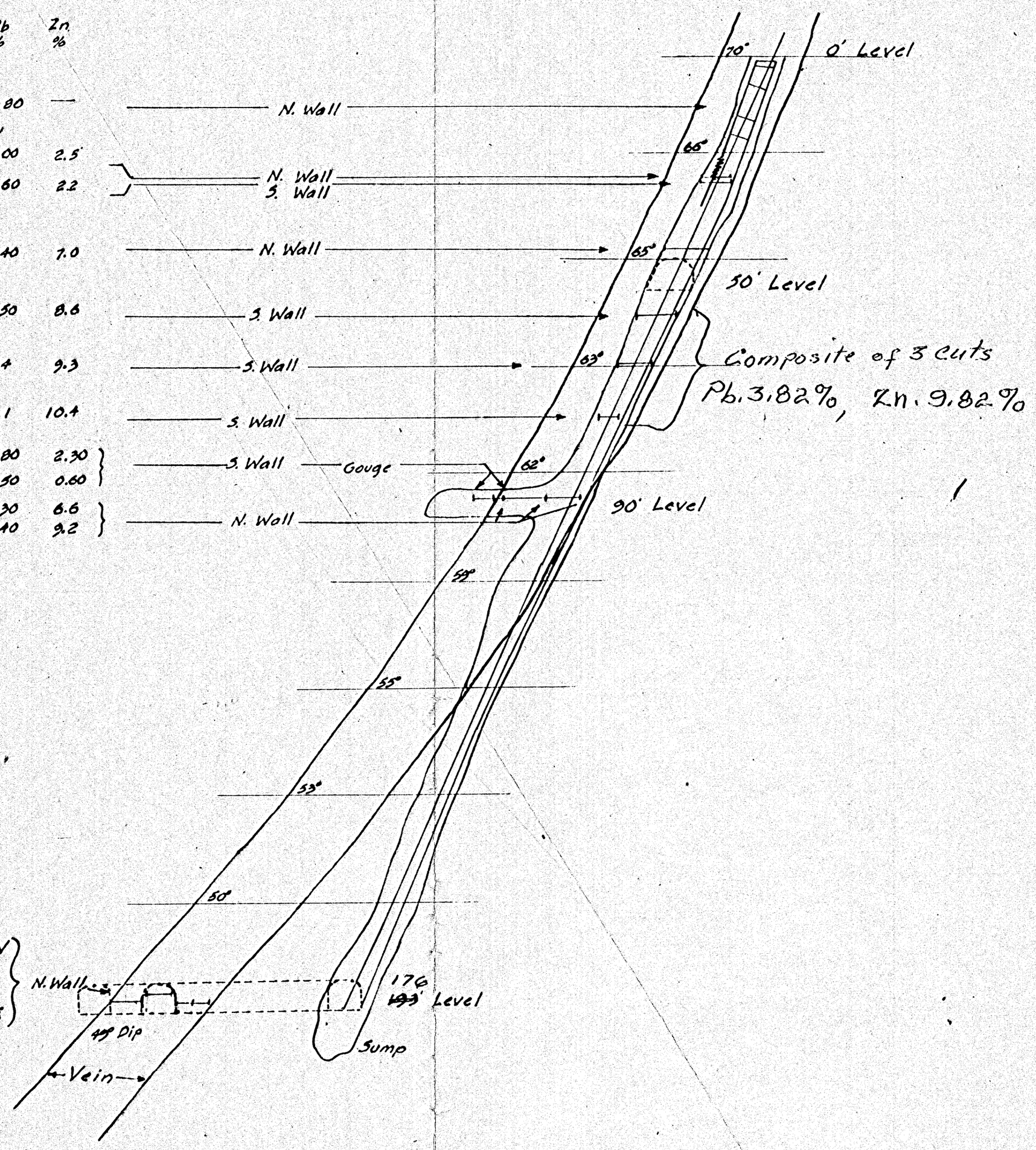
AJAX MINE
Pinal County, Arizona

DMEA 2603 : Contract Idm-8438

Scale: 1" = 40'

Data Compiled From Maps
Furnished By Applicant

Width Ft.	Cu %	Ag oz. per ton	Au	Pb %	Zn %	
0.8'	—	5.80	0.02	69.80	—	N. Wall
6.0'	—	6.40	0.03	9.00	2.5	N. Wall
6.0'	—	3.20	0.03	4.60	2.2	S. Wall
8.5'	—	3.60	0.03	6.40	7.0	N. Wall
5.5'	—	2.30	0.02	3.50	8.6	S. Wall
5.5'	—	2.10	0.02	4.4	9.3	S. Wall
4.0'	—	1.60	0.01	5.1	10.4	S. Wall
4.0	0.05	0.50	0.03	0.80	2.30	S. Wall — Gouge
2.0	0.10	0.60	0.01	0.50	0.60	
8.5'	0.20	1.40	0.03	4.30	6.6	N. Wall
7.0'	0.20	1.16	0.03	5.40	9.2	



Width	Cu. %	Ag	Au.	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

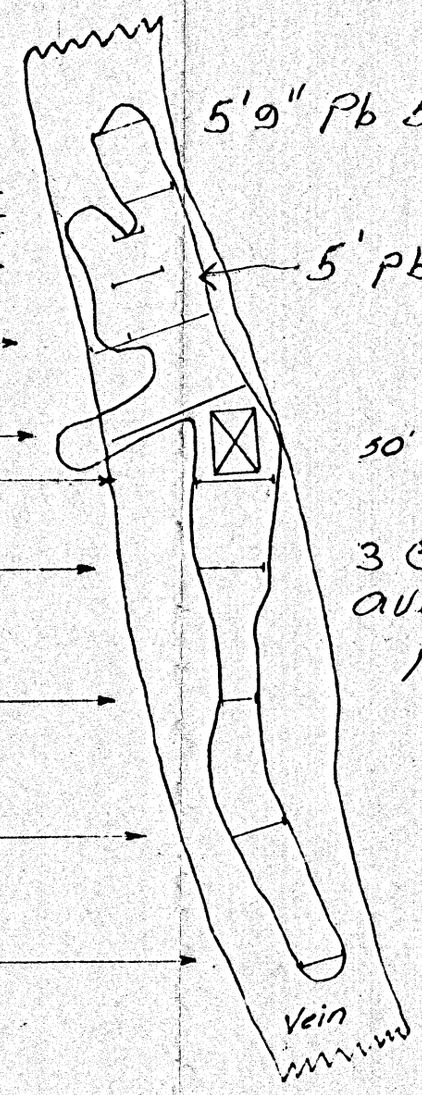
APEX MINES, INC.

AJAX MINE.

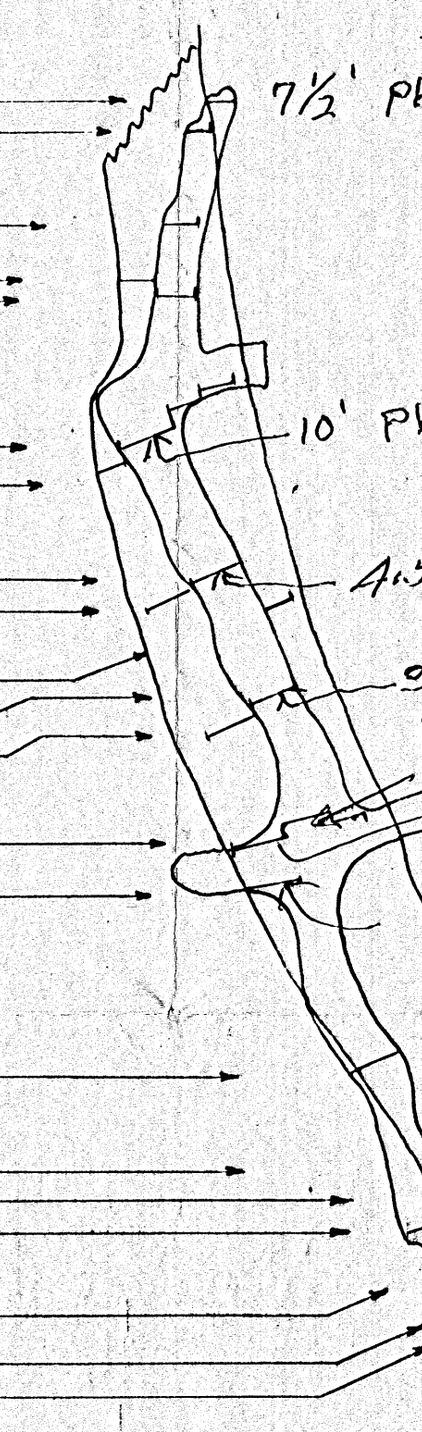
VERTICAL SECTION N.80°E THROUGH SHAFT

SCALE: 1" = 20'

Width	Cu. %	Ag. oz.	Au. oz.	Pb %	Zn %	
7.0'	Not tested	2.40	0.02	9.20	14.05	
6.2'	—	1.90	0.02	7.40	11.60	
4.7'	—	1.40	0.01	4.30	8.90	
3.7'	—	1.60	0.01	12.10	3.65	
6.0'	—	2.60	0.02	17.30	1.05	
4.7'	—	1.40	0.01	6.30	6.10	E
6.2'	—	1.90	0.03	12.10	2.30	
4.0	—	2.10	0.02	4.70	7.20	W
16.5	—	1.80	0.02	7.30	6.20	
9.0'	—	2.00	0.03	8.60	10.30	
17.9'	—	1.40	0.01	9.70	13.00	
6.5'	—	2.20	0.02	3.40	10.70	
8.8'	—	2.20	0.02	3.60	3.90	
7.0'	—	1.10	Tr.	3.60	2.00	



6.0'	0.50	4.90	0.08	0.20	0.80	Foot Wall
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zn.				5.30	Drill Hole
5.0	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	—	0.90	0.03	2.60	9.20	
4.9'	—	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	—	1.50	0.01	2.20	11.00	Drill Hole
6.5'	—	1.40	0.03	1.90	10.40	
6.3'	—	1.40	0.02	3.9	10.90	Drill Hole
4.0'	—	2.60	0.03	5.70	6.30	
5.0'	—	0.20	0.01	1.90	8.20	
6.5'	—	1.10	0.01	3.40	17.90	Drill Hole
6.0	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	3.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	—	—	—	2.90	14.90	



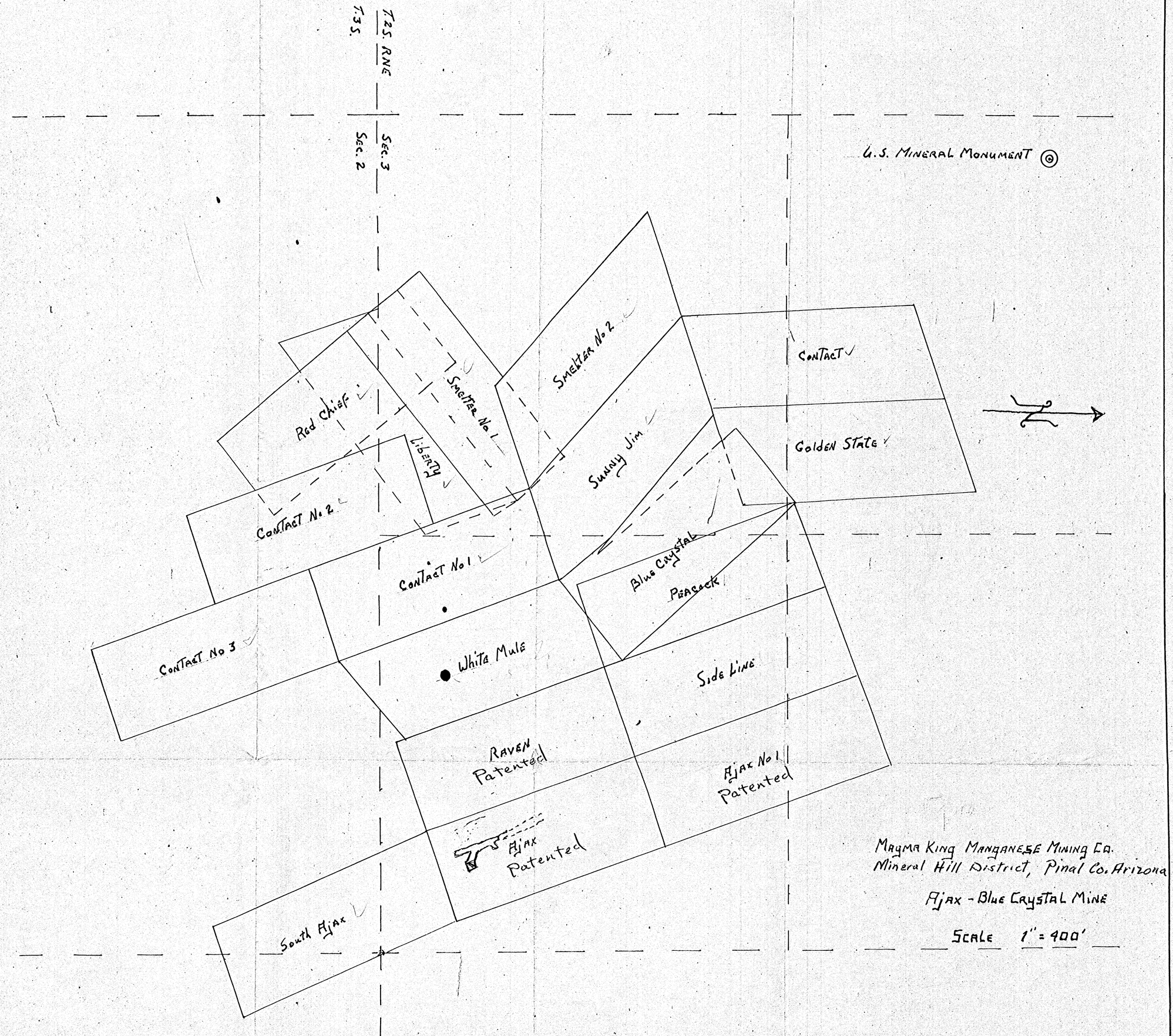
5.5'	—	—	—	3.50	4.60	
4.5'	—	5.40	0.20	5.80	3.60	Drill Hole
2.0'	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not tested		
5.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	—	—	Drill Hole

~~HERCEL MINERALS, INC.~~
~~P. O. Box 479~~
~~Superior, Arizona~~

APEX MINES INC.
AJAX MINE.

ASSAY PLAN
50' AND 176' LEVELS

SCALE: 1" = 20'

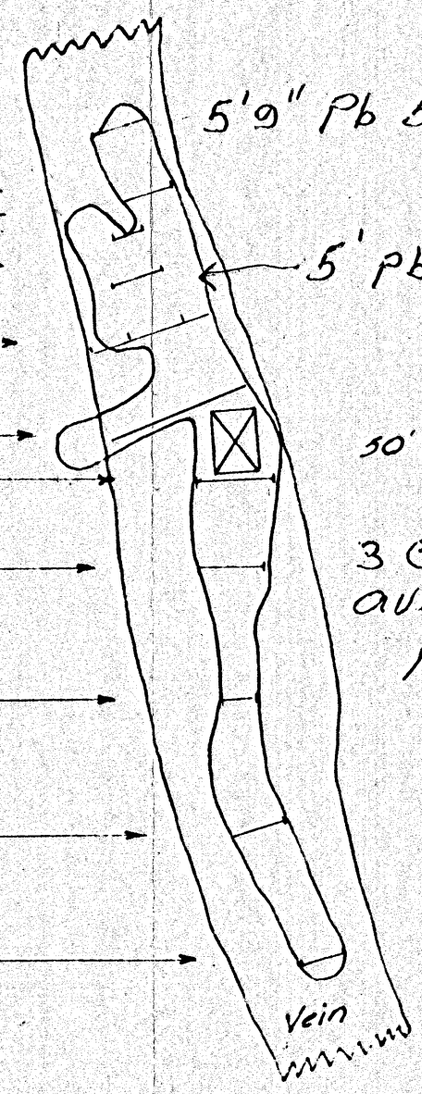


Magma King Manganese Mining Co.
Mineral Hill District, Pinal Co. Arizona

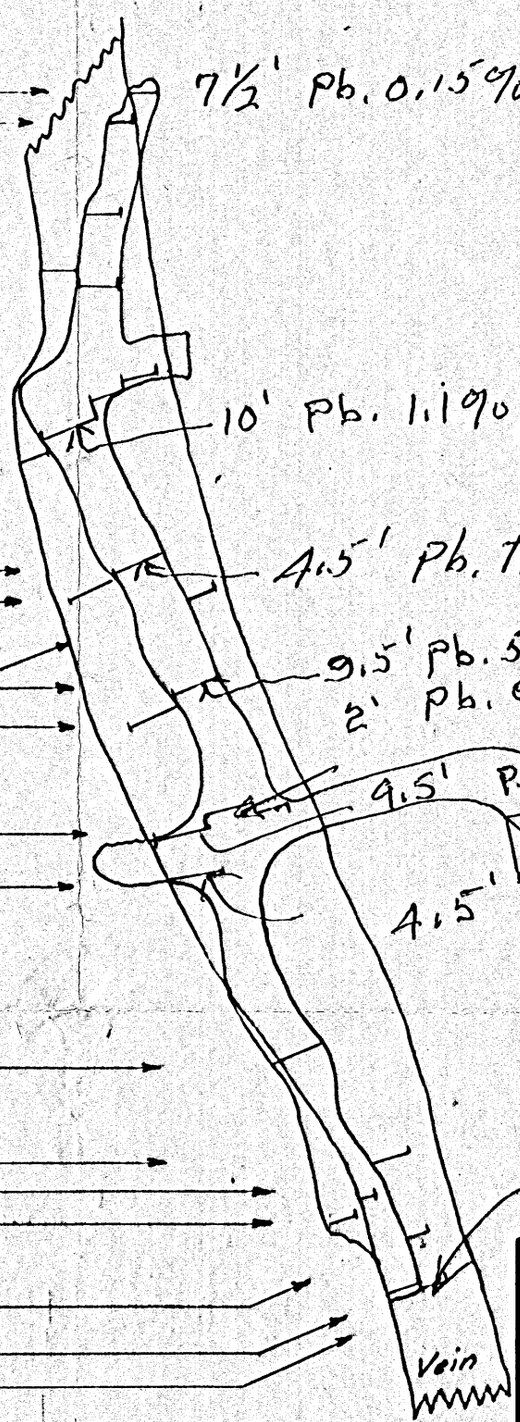
Ajax - Blue Crystal Mine

Scale 1" = 400'

Width	Cu. %	Ag. oz.	Au. oz.	Pb %	Zn %	
7.0'	Not tested	2.40	0.02	9.20	14.05	
6.2'	—	1.90	0.02	7.40	11.60	
4.7'	—	1.40	0.01	4.30	8.90	
3.7'	—	1.60	0.01	12.10	3.65	
6.0'	—	2.60	0.02	17.30	1.05	
4.7'	—	1.40	0.01	6.30	6.10	E
6.2'	—	1.90	0.03	12.10	2.30	
4.0	—	2.10	0.02	4.70	7.20	W
16.5	—	1.80	0.02	7.30	6.20	
9.0'	—	2.00	0.03	8.60	10.30	
7.9'	—	1.40	0.01	9.70	13.00	
6.5'	—	2.20	0.02	3.40	10.70	
8.8'	—	2.20	0.02	3.60	3.90	
7.0'	—	1.10	Tr.	3.60	2.00	



6.0'	0.50	4.80	0.08	0.20	0.80	Foot Wall
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zn.				5.30	Drill Hole
5.0	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	—	0.90	0.03	2.60	9.20	
4.9'	—	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	—	1.50	0.01	2.20	11.00	Drill Hole
6.5'	—	1.40	0.03	1.90	10.40	
6.9'	—	1.40	0.02	3.9	10.90	Drill Hole
4.0'	—	2.60	0.03	5.70	6.30	
5.0'	—	0.20	0.01	1.90	8.20	
6.5'	—	1.10	0.01	3.40	17.90	Drill Hole
6.0	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	3.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	—	—	—	2.90	14.90	



2.5'	—	—	—	3.50	4.60	
4.3'	—	5.40	0.20	5.80	3.60	Drill Hole
2.0'	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not tested		
5.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	—	—	Drill Hole

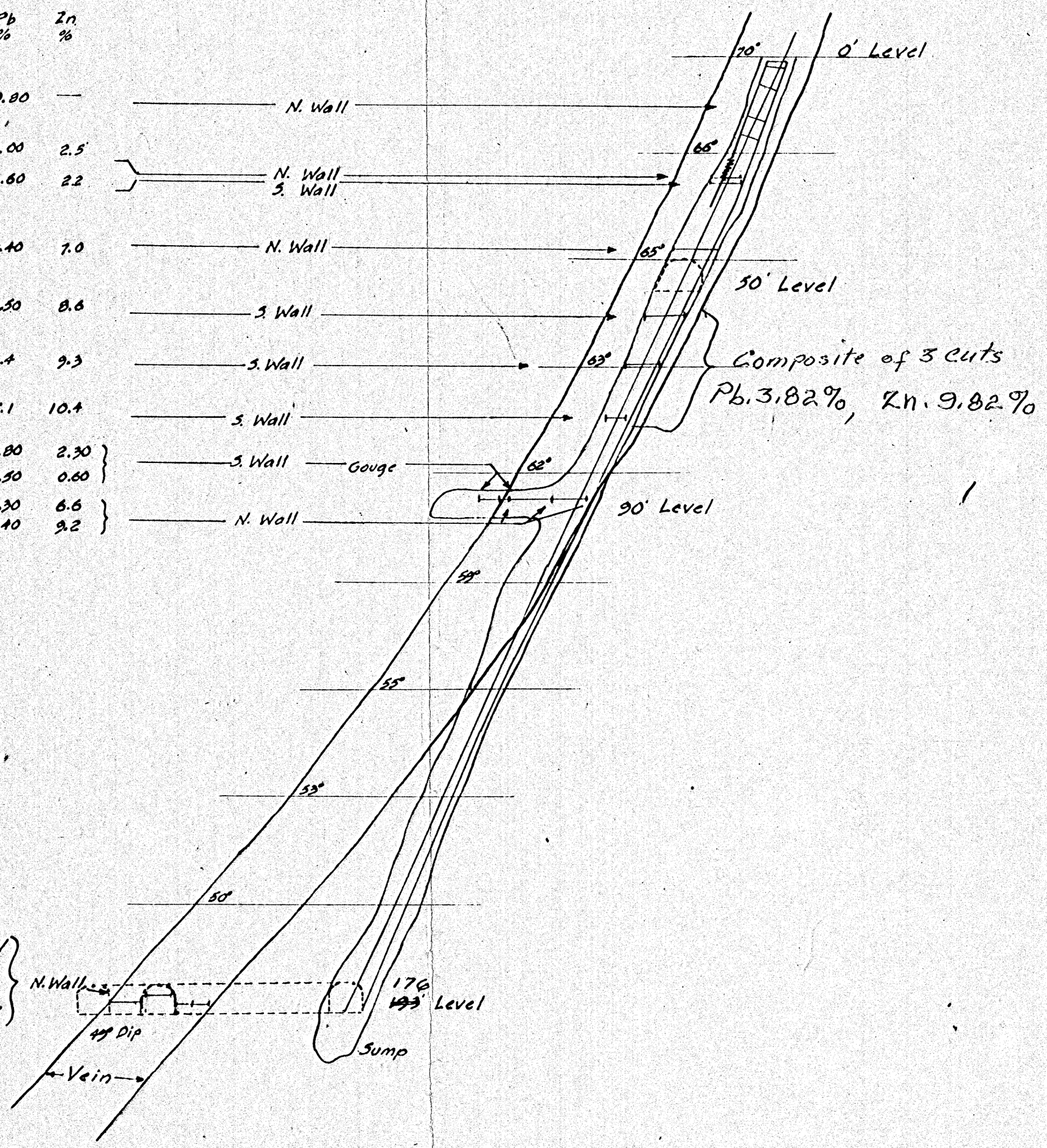
~~HEBEL MINERALS, INC.~~
~~P. O. Box 479~~
~~Superior, Arizona~~

APEX MINES INC.
AJAX MINE.

ASSAY PLAN
50' AND 176' LEVELS

SCALE: 1" = 20'

Width Ft.	Cu %	Ag oz. per ton	Au	Pb %	Zn %	
0.8'	—	5.80	0.02	69.80	—	N. Wall
6.0'	—	6.40	0.03	9.00	2.5	
6.0'	—	3.20	0.03	4.60	2.2	N. Wall, S. Wall
8.5'	—	3.60	0.03	6.40	7.0	N. Wall
5.5'	—	2.30	0.02	3.50	8.6	S. Wall
5.5'	—	2.10	0.02	4.4	9.3	S. Wall
4.0'	—	1.60	0.01	5.1	10.4	S. Wall
4.0	0.05	0.50	0.03	0.80	2.30	S. Wall — Gouge
2.0	0.10	0.60	0.01	0.50	0.60	
8.5'	0.20	1.40	0.03	4.30	6.6	N. Wall
7.0'	0.20	1.16	0.03	5.40	9.2	



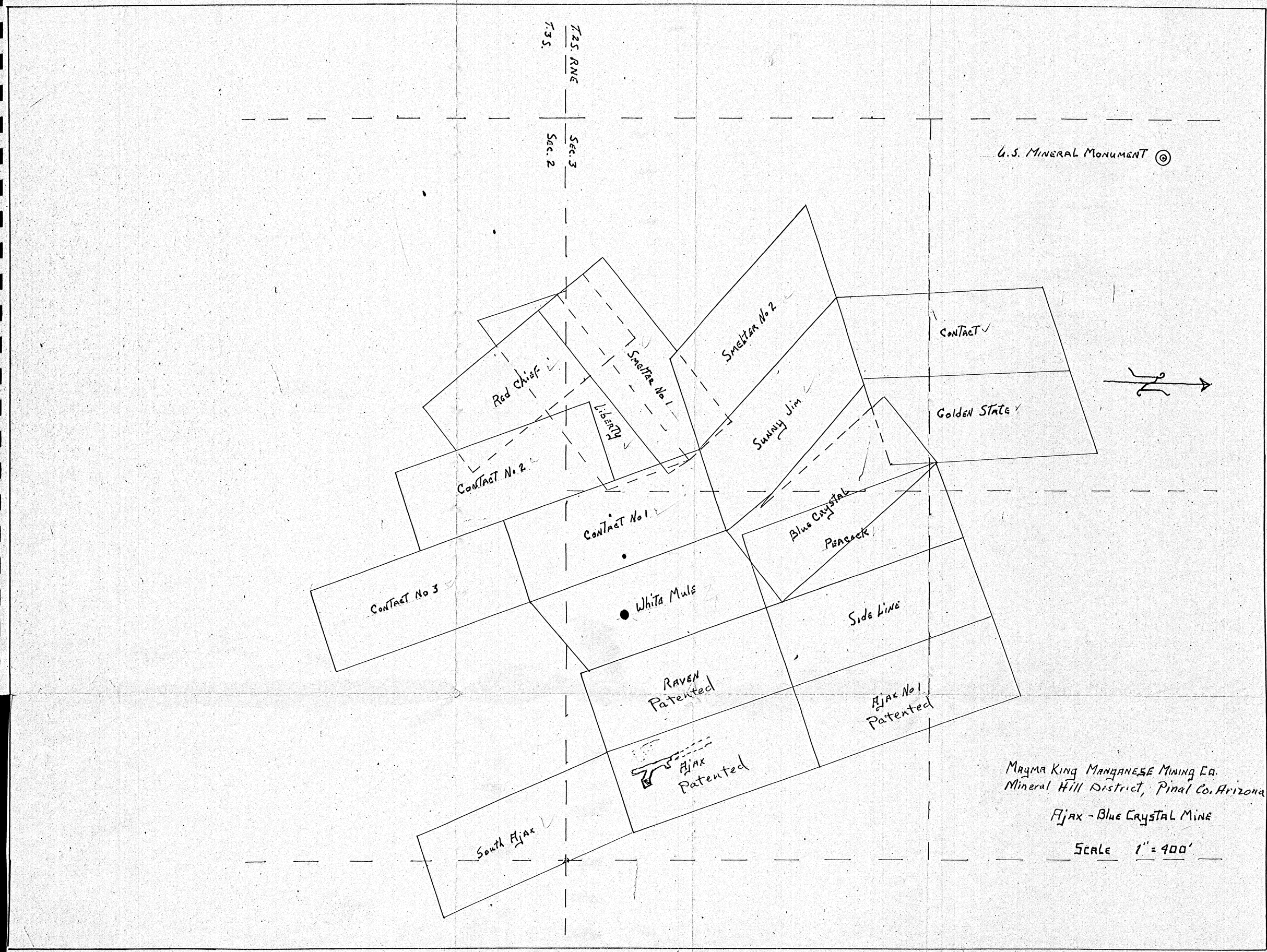
Width	Cu. %	Ag	Au.	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

APEX MINES, INC.

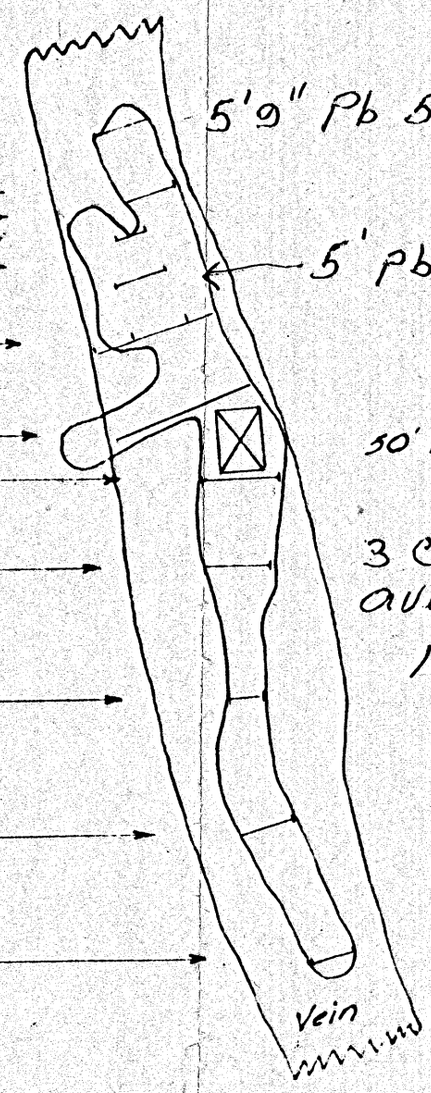
AJAX MINE.

VERTICAL SECTION N.80°E THROUGH SHAFT

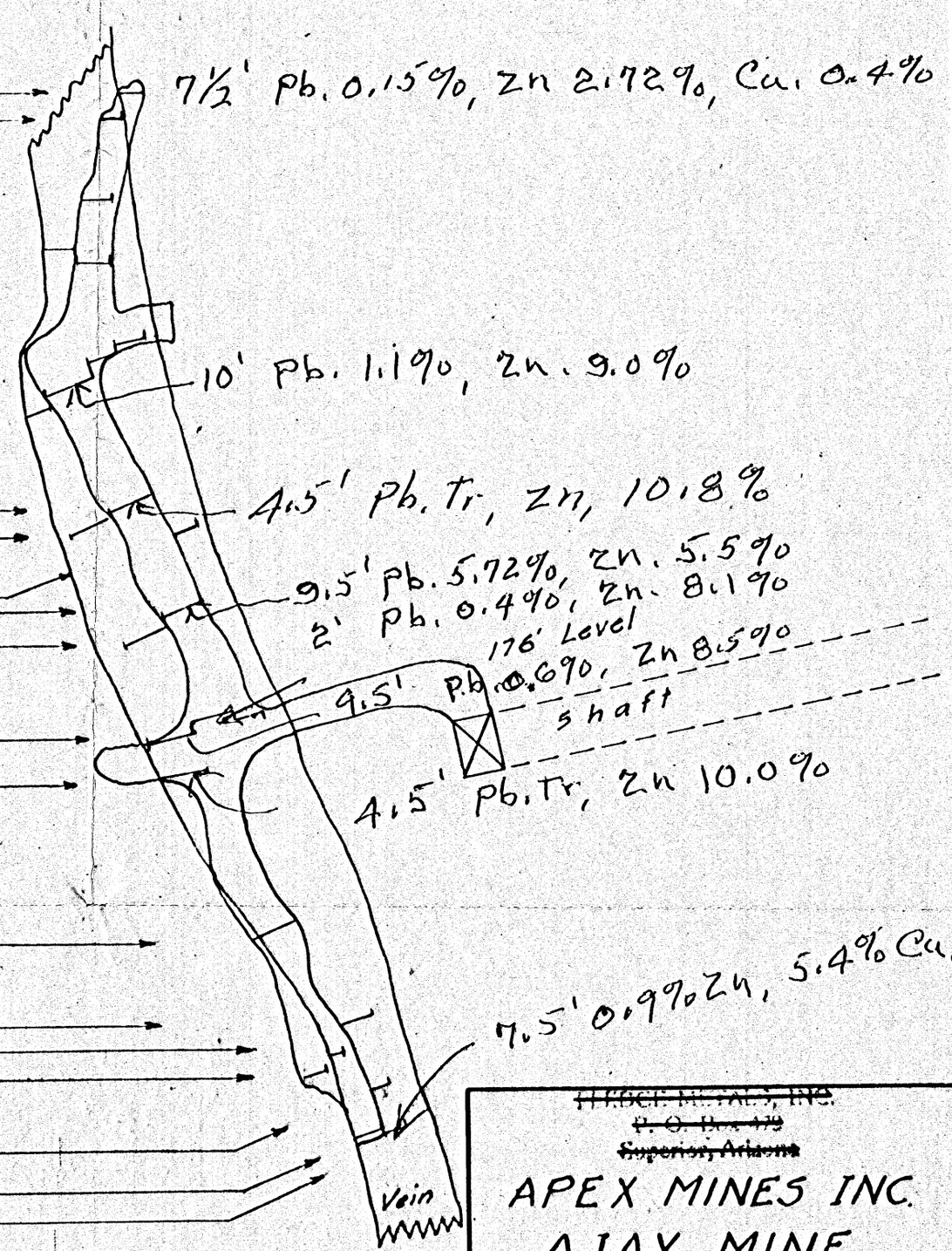
SCALE: 1" = 20'


T.2S. R.N.E.
T.3S.
Sec. 3
Sec. 2
U.S. Mineral Monument
Red Chief
Liberty
Smelter No 1
Smelter No 2
Contact
Golden State
Sunny Jim
Contact No 2
Contact No 1
Blue Crystal
Peacock
Contact No 3
White Mule
Side Line
Raven
Patented
Ajax No 1
Patented
Ajax
Patented
South Ajax
Magma King Manganese Mining Co.
Mineral Hill District, Pinal Co. Arizona
Ajax - Blue Crystal Mine
Scale 1" = 400'

Width	Cu. %	Ag. oz.	Au. oz.	Pb %	Zn %	
7.0'	Not tested	2.40	0.02	9.20	14.05	
6.2'	—	1.90	0.02	7.40	11.60	
4.7'	—	1.40	0.01	4.30	8.90	
3.7'	—	1.60	0.01	12.10	3.65	
6.0'	—	2.60	0.02	17.30	1.05	
4.7'	—	1.40	0.01	6.30	6.10	E
6.2'	—	1.90	0.03	12.10	2.30	
4.0	—	2.10	0.02	4.70	7.20	W
16.5	—	1.80	0.02	7.30	6.20	
9.0'	—	2.00	0.03	8.60	10.30	
17.9'	—	1.40	0.01	9.70	13.00	
6.5'	—	2.20	0.02	3.40	10.70	
8.8'	—	2.20	0.02	3.60	3.90	
7.0'	—	1.10	Tr.	3.60	2.00	



6.0'	0.50	4.80	0.08	0.20	0.80	Foot Wall
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zn.				5.30	Drill Hole
5.0	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	—	0.90	0.03	2.60	9.20	
4.9'	—	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	—	1.50	0.01	2.20	11.00	Drill Hole
6.5'	—	1.40	0.03	1.90	10.40	
6.3'	—	1.40	0.02	3.9	10.90	Drill Hole
4.0'	—	2.60	0.03	5.70	6.30	
5.0'	—	0.20	0.01	1.90	8.20	
6.5'	—	1.10	0.01	3.40	17.90	Drill Hole
6.0	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.13	0.10	0.03	0.90	3.80	E
5.0'	—	—	—	2.90	14.90	
5.5'	—	—	—	3.50	4.60	
4.5'	—	5.40	0.20	5.80	3.60	Drill Hole
2.0'	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not tested		
5.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	—	—	Drill Hole



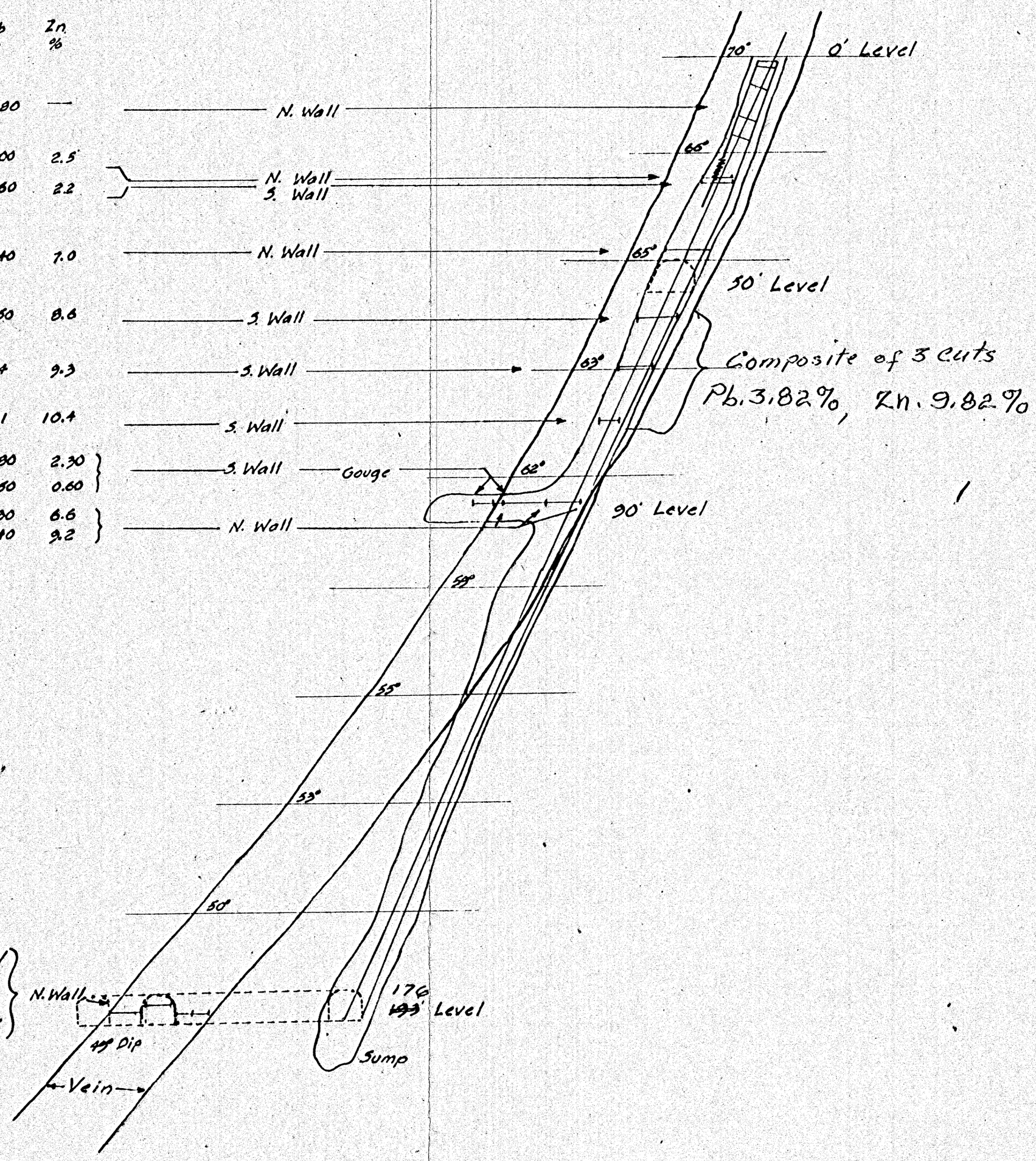
~~HERCI METALS, INC.~~
~~P. O. Box 479~~
~~Superior, Arizona~~

APEX MINES INC.
AJAX MINE.

ASSAY PLAN
50' AND 176' LEVELS.

SCALE: 1" = 20'

Width Ft.	Cu %	Ag oz. per	Au ton	Pb %	Zn %	
0.8'	—	5.80	0.02	69.80	—	N. Wall
6.0'	—	6.40	0.03	9.00	2.5	N. Wall
6.0'	—	3.20	0.03	4.60	2.2	S. Wall
8.5'	—	3.60	0.03	6.40	7.0	N. Wall
5.5'	—	2.30	0.02	3.50	8.6	S. Wall
5.5'	—	2.10	0.02	4.4	9.3	S. Wall
4.0'	—	1.60	0.01	5.1	10.4	S. Wall
4.0	0.05	0.50	0.03	0.80	2.30	S. Wall — Gouge
2.0	0.10	0.60	0.01	0.50	0.60	S. Wall — Gouge
8.5'	0.20	1.40	0.03	4.30	6.6	N. Wall
7.0'	0.20	1.16	0.03	5.40	9.2	N. Wall



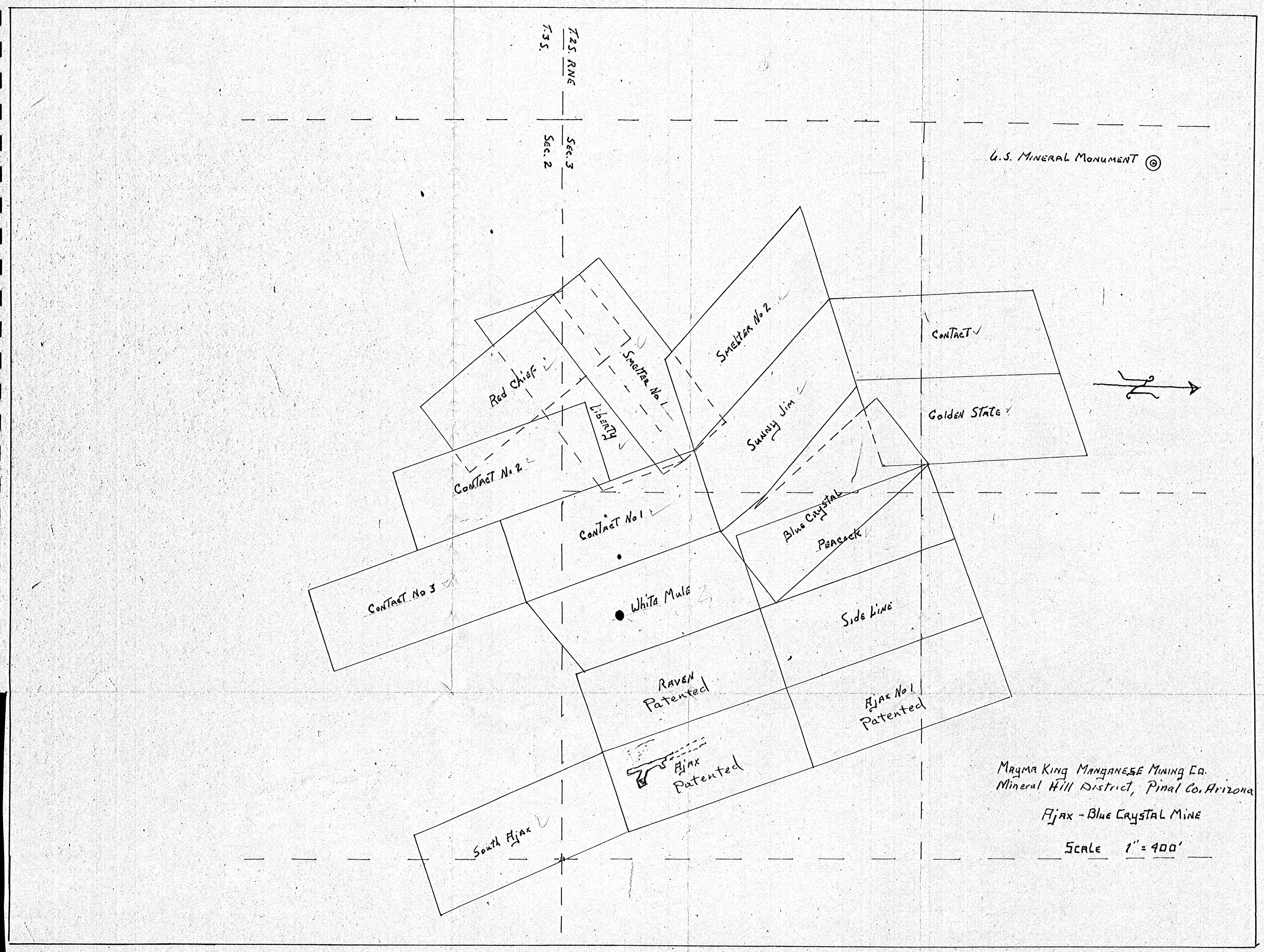
Width	Cu. %	Ag	Au.	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

APEX MINES, INC.

AJAX MINE.

VERTICAL SECTION N.80°E THROUGH SHAFT

SCALE: 1" = 20'

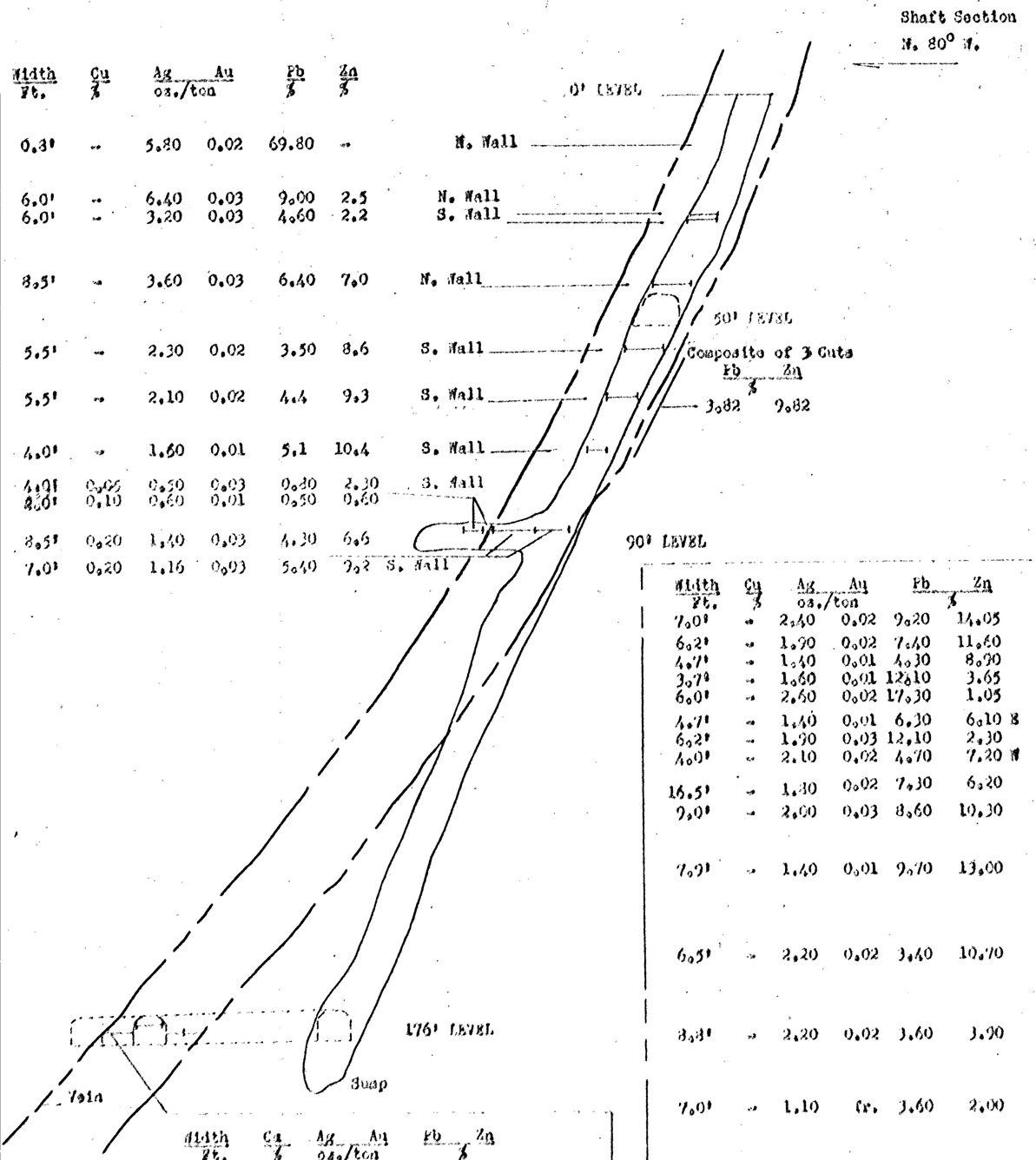


Magma King Manganese Mining Co.
Mineral Hill District, Pinal Co. Arizona

Ajax - Blue Crystal Mine

Scale 1" = 400'

Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
0.3'	-	5.80	0.02	69.80	-	N. Wall
6.0'	-	6.40	0.03	9.00	2.5	N. Wall
6.0'	-	3.20	0.03	4.60	2.2	S. Wall
8.5'	-	3.60	0.03	6.40	7.0	N. Wall
5.5'	-	2.30	0.02	3.50	8.6	S. Wall
5.5'	-	2.10	0.02	4.4	9.3	S. Wall
4.0'	-	1.60	0.01	5.1	10.4	S. Wall
4.0'	0.05	0.50	0.03	0.20	2.30	S. Wall
8.0'	0.10	0.60	0.01	0.30	0.20	
8.5'	0.20	1.40	0.03	4.30	6.6	
7.0'	0.20	1.16	0.03	5.40	9.2	S. Wall

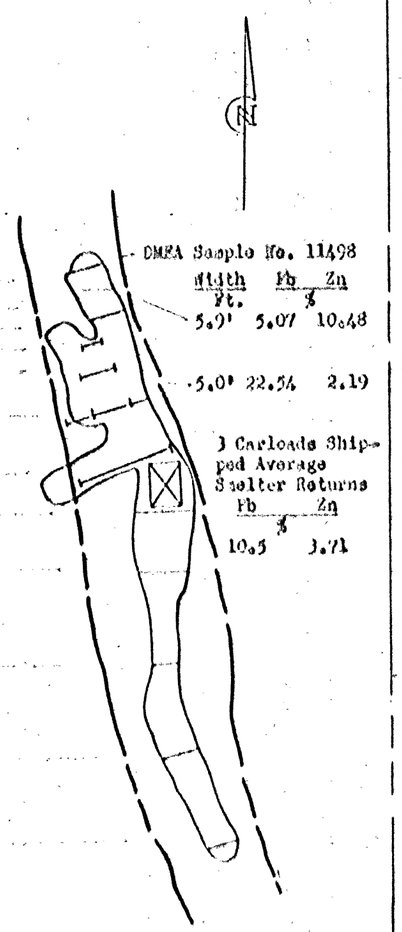


Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	N. Wall
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

VERTICAL SECTION

THROUGH AJAX SHAFT

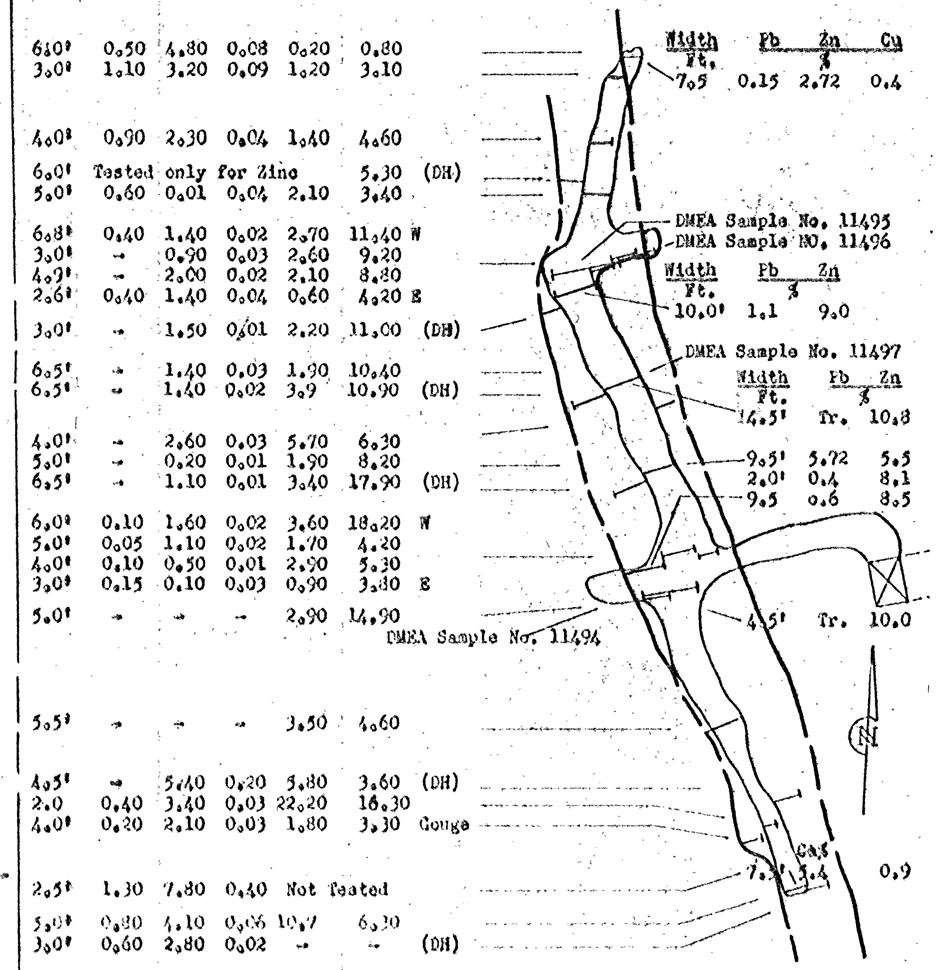
Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
7.0'	-	2.40	0.02	9.20	14.05	
6.2'	-	1.90	0.02	7.40	11.60	
4.7'	-	1.40	0.01	4.30	8.90	
3.7'	-	1.60	0.01	12.10	3.65	
6.0'	-	2.60	0.02	17.30	1.05	
4.7'	-	1.40	0.01	6.30	6.10	E
6.2'	-	1.90	0.03	12.10	2.30	
4.0'	-	2.10	0.02	4.70	7.20	W
16.5'	-	1.30	0.02	7.30	6.20	
9.0'	-	2.00	0.03	8.60	10.30	
7.9'	-	1.40	0.01	9.70	13.00	
6.5'	-	2.20	0.02	3.40	10.70	
8.8'	-	2.20	0.02	3.60	3.90	
7.0'	-	1.10	tr.	3.60	2.00	



ASSAY PLAN 50 LEVEL

(DH= Drill Hole)

Width Ft.	Cu %	Ag oz./ton	Au oz./ton	Pb %	Zn %	
6.0'	0.50	4.80	0.08	0.20	0.80	
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zinc				5.30	(DH)
5.0'	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	-	0.90	0.03	2.60	9.20	
4.9'	-	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	-	1.50	0.01	2.20	11.00	(DH)
6.5'	-	1.40	0.03	1.90	10.40	
6.5'	-	1.40	0.02	3.9	10.90	(DH)
4.0'	-	2.60	0.03	5.70	6.30	
5.0'	-	0.20	0.01	1.90	8.20	
6.5'	-	1.10	0.01	3.40	17.90	(DH)
6.0'	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	-	-	-	2.90	14.90	
5.5'	-	-	-	3.50	4.60	
4.5'	-	5.40	0.20	5.80	3.60	(DH)
2.0	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not Tested		
5.0'	0.80	4.10	0.06	10.7	6.20	
3.0'	0.60	2.80	0.02	-	-	(DH)



ASSAY PLAN 176 LEVEL

DMEA SAMPLE No.	Sample Length	Au oz./ton	Ag oz./ton	%Pb Total	%Pb Oxide	%Cu Total	%Cu Oxide	%Zn Total	%Zn Oxide
11494	8.7'	0.01	0.55	0.85	0.05	0.07	0.02	5.5	1.70
11495	12.2'	0.01	0.4	0.22	0.01	0.17	0.05	8.15	0.05
11496	6.5'	0.01	0.7	0.7	0.04	0.65	0.12	1.7	0.01
11497	6.0'	0.01	0.2	0.4	0.01	0.07	0.02	3.95	0.03
11498	5.0'	0.02	1.3	5.6	3.25	0.15	0.06	8.65	4.05

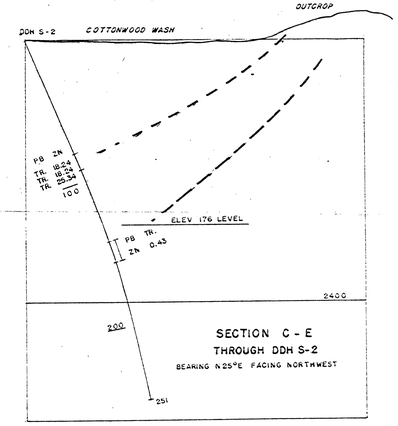
Fig. 6 SAMPLE MAP

MAGMA KING MANGANESE COMPANY'S, AJAX MINE
Pinal County, Arizona

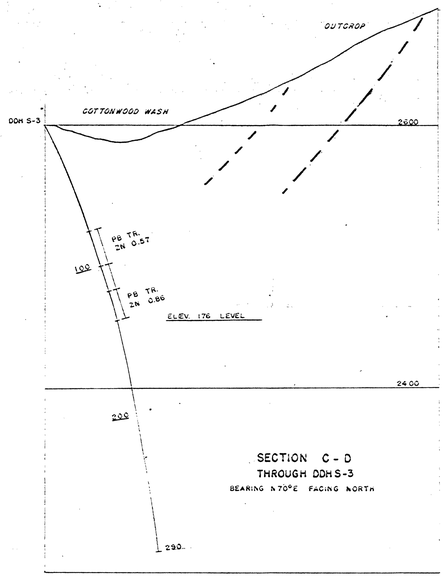
DMEA 2603

Scale: 1" = 20'

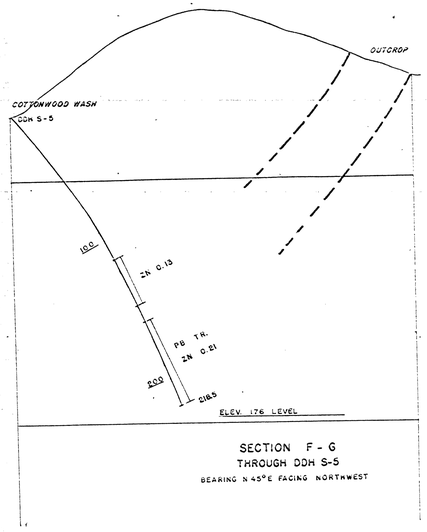
Data from applicant's map with the addition of 5 D.M.E.A. Samples



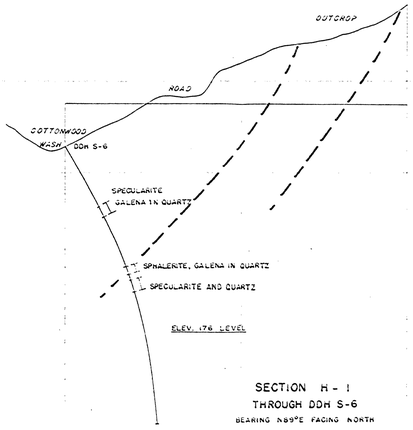
SECTION C - E
THROUGH DDH S-2
BEARING N25°E FACING NORTHWEST



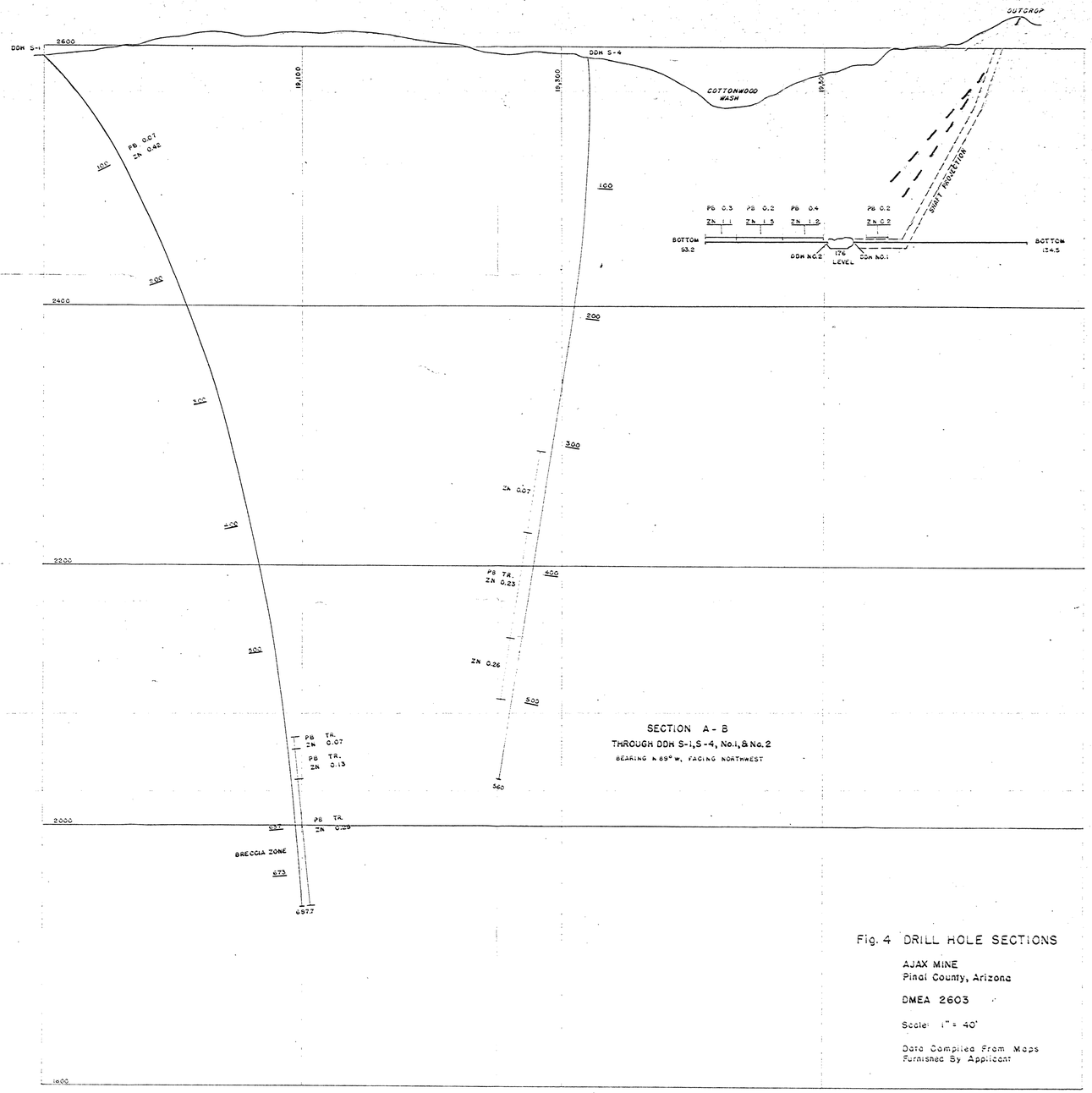
SECTION C - D
THROUGH DDH S-3
BEARING N70°E FACING NORTH



SECTION F - G
THROUGH DDH S-5
BEARING N45°E FACING NORTHWEST



SECTION H - I
THROUGH DDH S-6
BEARING N89°E FACING NORTH



SECTION A - B
THROUGH DDH S-1, S-4, No.1, & No.2
BEARING N89° W, FACING NORTHWEST

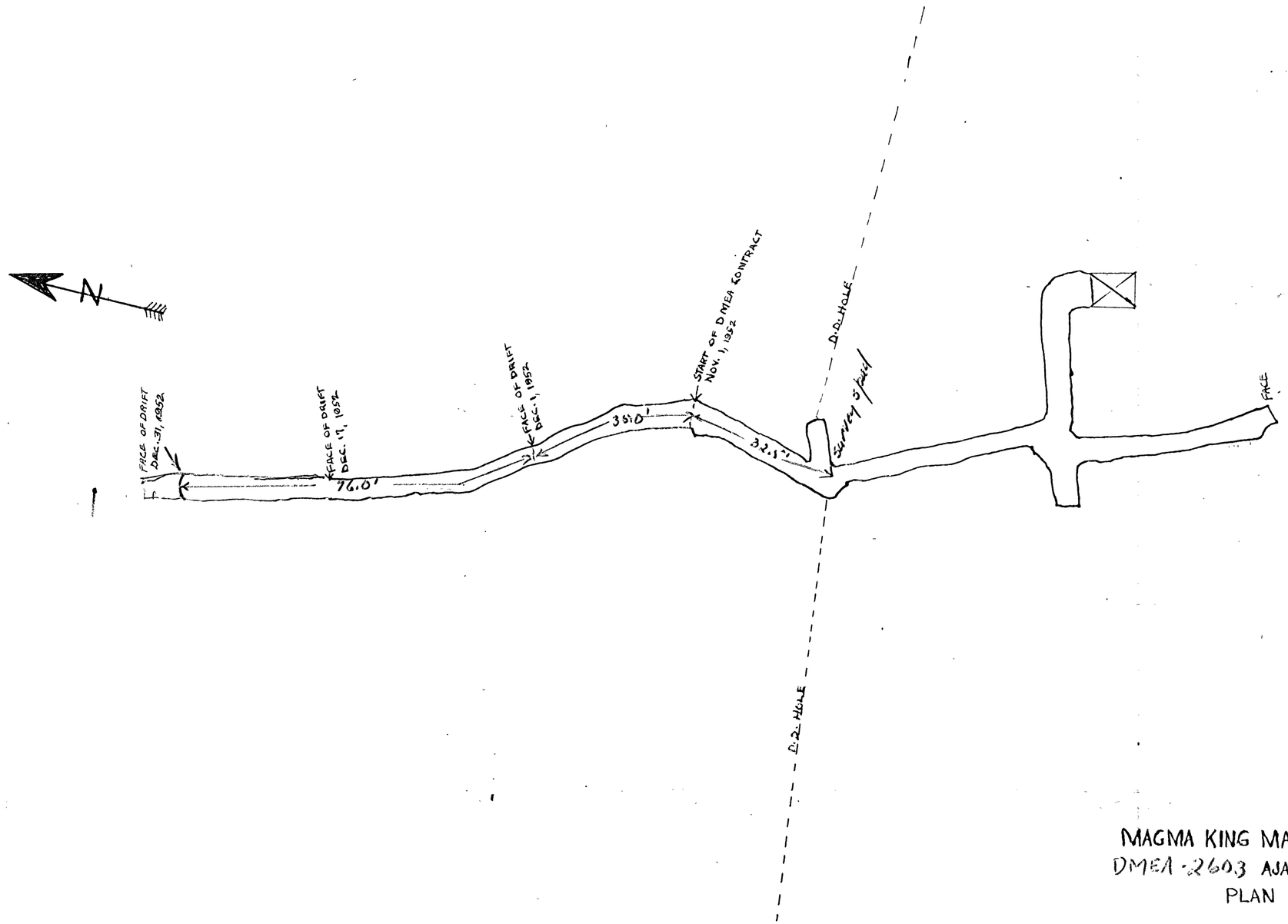
Fig. 4 DRILL HOLE SECTIONS

AJAX MINE
Pinal County, Arizona

DMEA 2603

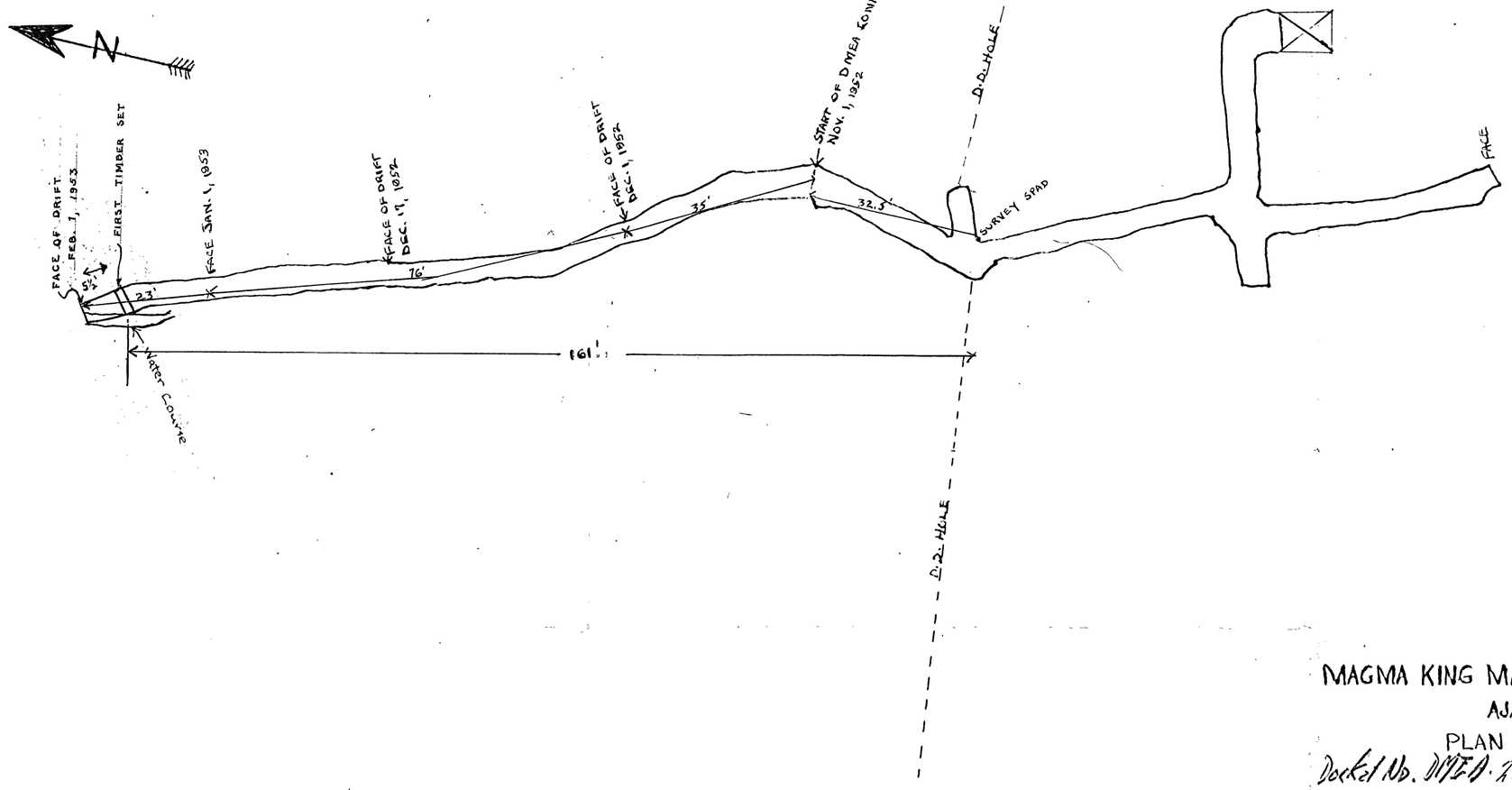
Scale: 1" = 40'

Data Compiled From Maps
Furnished By Applicant



MAGMA KING MANGANESE MINING CO.
DMEA-2603 AJAX MINE Contract Idn- E 428
PLAN 176 FOOT LEVEL

ONE INCH = 20 FEET



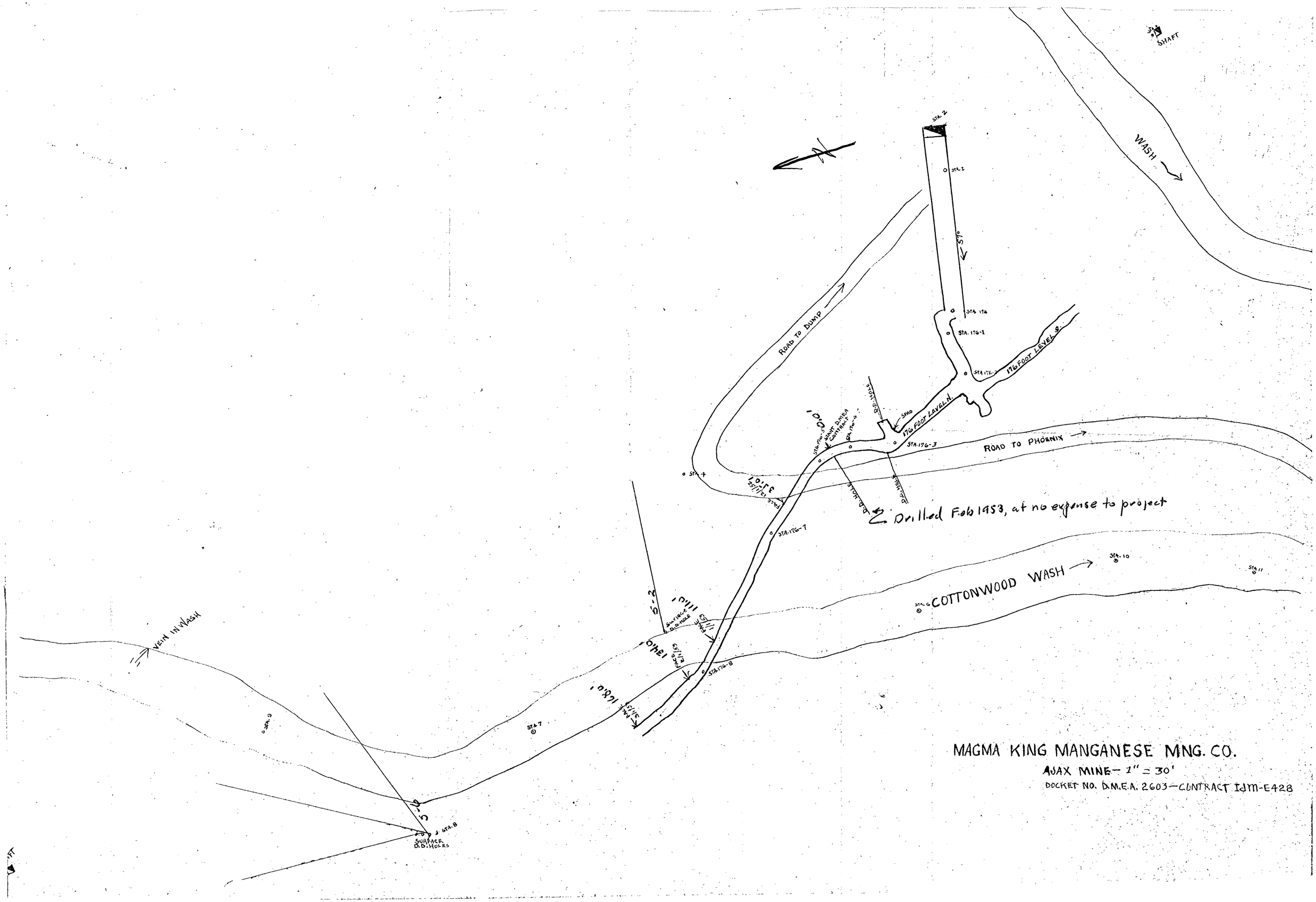
MAGMA KING MANGANESE MINING CO.

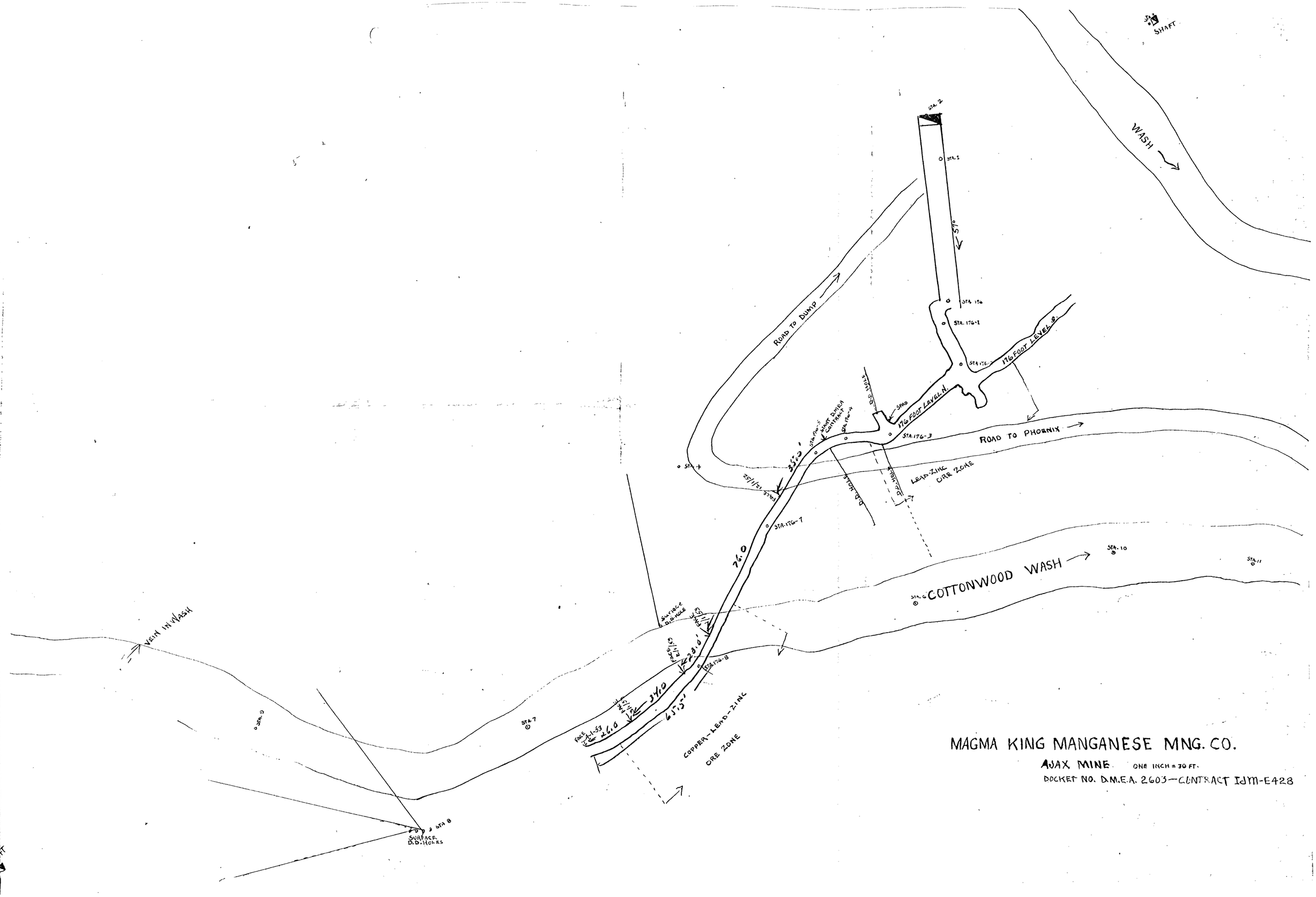
AJAX MINE

PLAN 176 FOOT LEVEL

Docket No. DMEA-7603, Contract No. Idm-E 478

ONE INCH = 20 FEET

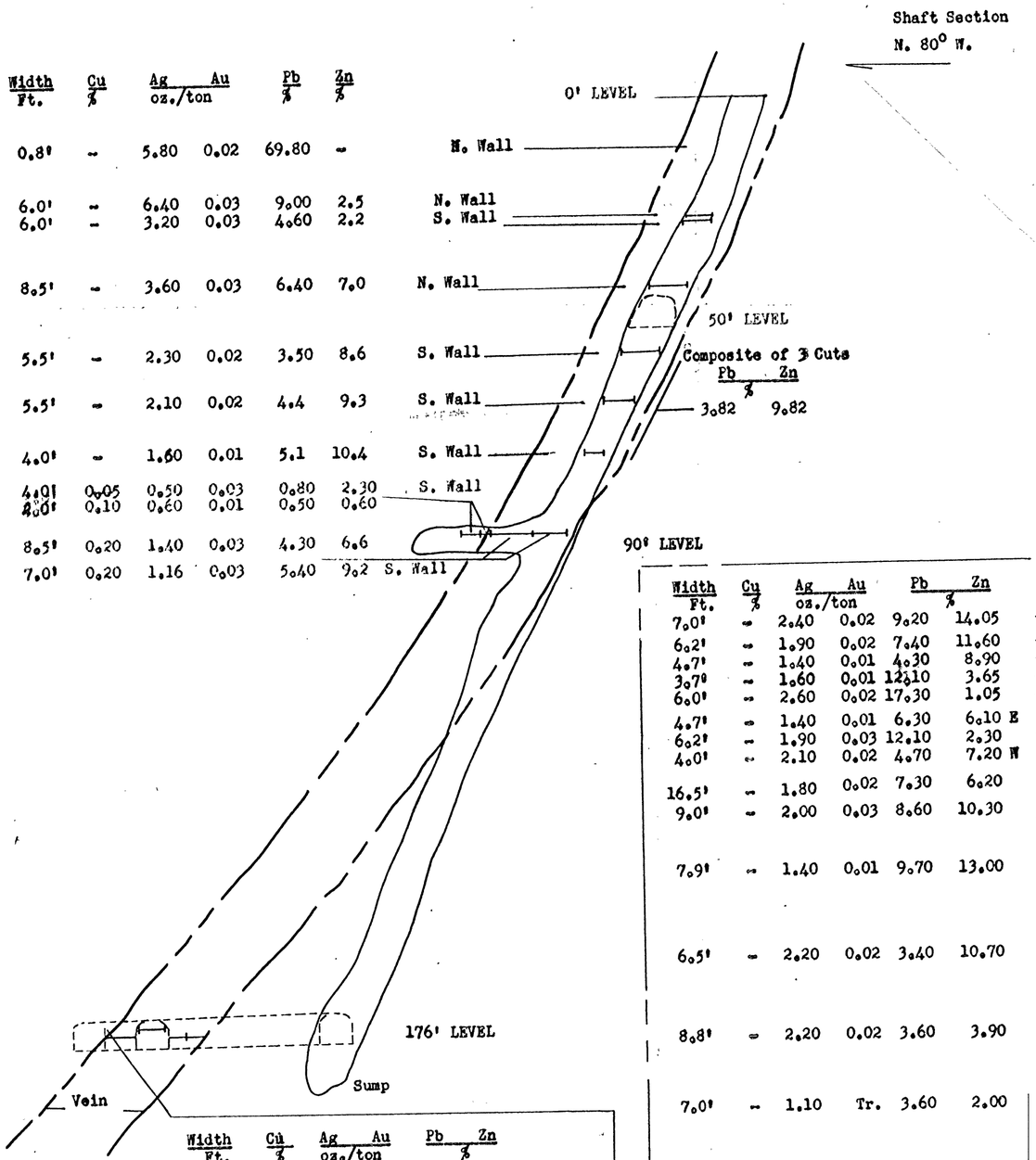

SHAFT
WASH
STA. 2
STA. 1
S 7°
STA. 176
STA. 176-1
STA. 176-2
176 FOOT LEVEL S.
ROAD TO DUMP
176 FOOT LEVEL N.
SPRD
STA. 176-3
ROAD TO PHOENIX
STA. 7
D.D. HOLE
Drilled Feb 1953, at no expense to project
STA. 176-7
COTTONWOOD WASH
STA. 10
STA. 11
VEIN IN WASH
STA. 176-8
STA. 7
STA. 8
SURFACE D.D. HOLES
MAGMA KING MANGANESE MNG. CO.
AJAX MINE — 1" = 30'
DOCKET NO. D.M.E.A. 2603 — CONTRACT IDM-E428



MAGMA KING MANGANESE MNG. CO.

AJAX MINE. ONE INCH = 30 FT.

DOCKET NO. D.M.E.A. 2603—CONTRACT IDM-E428



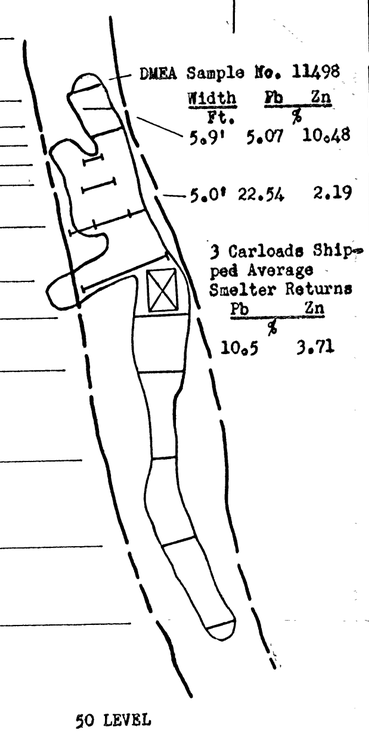
Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	
0.8'	-	5.80	0.02	69.80	-	
6.0'	-	6.40	0.03	9.00	2.5	
6.0'	-	3.20	0.03	4.60	2.2	
8.5'	-	3.60	0.03	6.40	7.0	
5.5'	-	2.30	0.02	3.50	8.6	
5.5'	-	2.10	0.02	4.4	9.3	
4.0'	-	1.60	0.01	5.1	10.4	
4.0'	0.05	0.50	0.03	0.80	2.30	
4.0'	0.10	0.60	0.01	0.50	0.60	
8.5'	0.20	1.40	0.03	4.30	6.6	
7.0'	0.20	1.16	0.03	5.40	9.2	

Composite of 3 Cuts

Pb %	Zn %
3.82	9.82

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	
7.0'	-	2.40	0.02	9.20	14.05	
6.2'	-	1.90	0.02	7.40	11.60	
4.7'	-	1.40	0.01	4.30	8.90	
3.7'	-	1.60	0.01	12.10	3.65	
6.0'	-	2.60	0.02	17.30	1.05	
4.7'	-	1.40	0.01	6.30	6.10	E
6.2'	-	1.90	0.03	12.10	2.30	
4.0'	-	2.10	0.02	4.70	7.20	W
16.5'	-	1.80	0.02	7.30	6.20	
9.0'	-	2.00	0.03	8.60	10.30	
7.9'	-	1.40	0.01	9.70	13.00	
6.5'	-	2.20	0.02	3.40	10.70	
8.8'	-	2.20	0.02	3.60	3.90	
7.0'	-	1.10	Tr.	3.60	2.00	

ASSAY PLAN 50 LEVEL

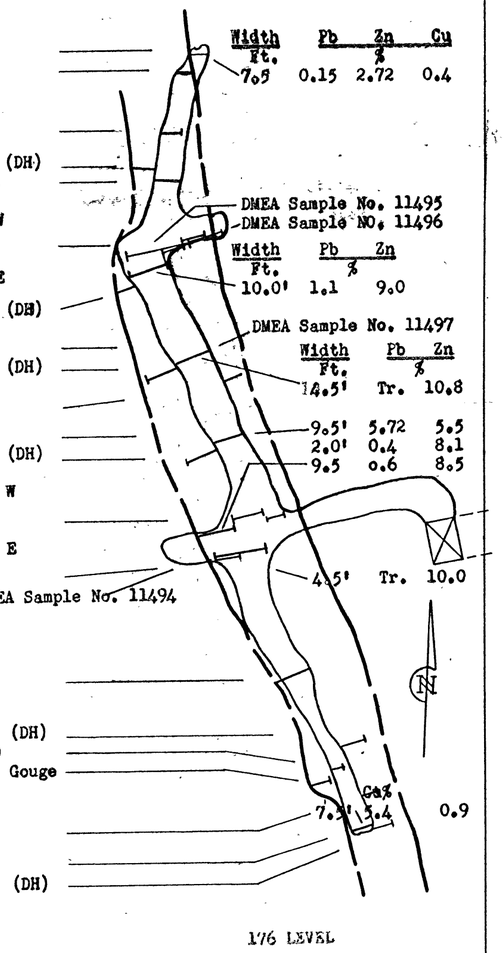


Width Ft.	Pb %	Zn %
5.9'	5.07	10.48
5.0'	22.54	2.19

Pb %	Zn %
10.5	3.71

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	
6.0'	0.50	4.80	0.08	0.20	0.80	
3.0'	1.10	3.20	0.09	1.20	3.10	
4.0'	0.90	2.30	0.04	1.40	4.60	
6.0'	Tested only for Zinc				5.30	(DH)
5.0'	0.60	0.01	0.04	2.10	3.40	
6.8'	0.40	1.40	0.02	2.70	11.40	W
3.0'	-	0.90	0.03	2.60	9.20	
4.9'	-	2.00	0.02	2.10	8.80	
2.6'	0.40	1.40	0.04	0.60	4.20	E
3.0'	-	1.50	0.01	2.20	11.00	(DH)
6.5'	-	1.40	0.03	1.90	10.40	
6.5'	-	1.40	0.02	3.9	10.90	(DH)
4.0'	-	2.60	0.03	5.70	6.30	
5.0'	-	0.20	0.01	1.90	8.20	
6.5'	-	1.10	0.01	3.40	17.90	(DH)
6.0'	0.10	1.60	0.02	3.60	18.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E
5.0'	-	-	-	2.90	14.90	
5.5'	-	-	-	3.50	4.60	
4.5'	-	5.40	0.20	5.80	3.60	(DH)
2.0	0.40	3.40	0.03	22.20	16.30	
4.0'	0.20	2.10	0.03	1.80	3.30	Gouge
2.5'	1.30	7.80	0.40	Not Tested		
5.0'	0.80	4.10	0.06	10.7	6.30	
3.0'	0.60	2.80	0.02	-	-	(DH)

(DH= Drill Hole)



Width Ft.	Pb %	Zn %	Cu %
7.5	0.15	2.72	0.4

Width Ft.	Pb %	Zn %
10.0'	1.1	9.0

Width Ft.	Pb %	Zn %
14.5'	Tr.	10.8
9.5'	5.72	5.5
2.0'	0.4	8.1
9.5	0.6	8.5
4.5'	Tr.	10.0
7.5'	3.4	0.9

ASSAY PLAN 176 LEVEL

DMEA SAMPLE No.	Sample Length	Au oz./ton	Ag oz./ton	%Pb Total	%Pb Oxide	%Cu Total	%Cu Oxide	%Zn Total	%Zn Oxide
11494	8.7'	0.01	0.55	0.85	0.05	0.07	0.02	5.5	1.70
11495	12.2'	0.01	0.4	0.22	0.01	0.17	0.05	8.15	0.05
11496	6.5'	0.01	0.7	0.7	0.04	0.65	0.12	1.7	0.01
11497	6.0'	0.01	0.2	0.4	0.01	0.07	0.02	3.95	0.03
11498	5.0'	0.02	1.3	5.6	3.25	0.15	0.06	8.65	4.05

Width Ft.	Cu %	Ag oz./ton	Au	Pb %	Zn %	
6.0'	0.10	1.60	0.02	3.60	8.20	W
5.0'	0.05	1.10	0.02	1.70	4.20	
4.0'	0.10	0.50	0.01	2.90	5.30	
3.0'	0.15	0.10	0.03	0.90	3.80	E

N. Wall

V E R T I C A L S E C T I O N

THROUGH AJAX SHAFT

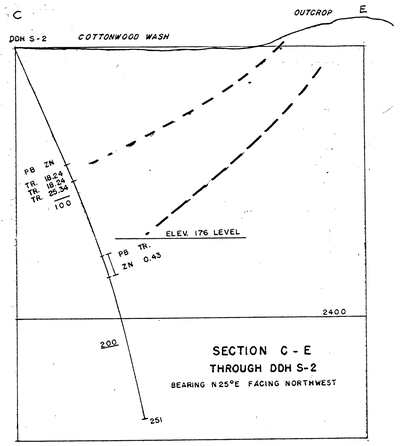
Fig. 6 S A M P L E M A P

MAGMA KING MANGANESE COMPANY'S, AJAX MINE
Pinal County, Arizona

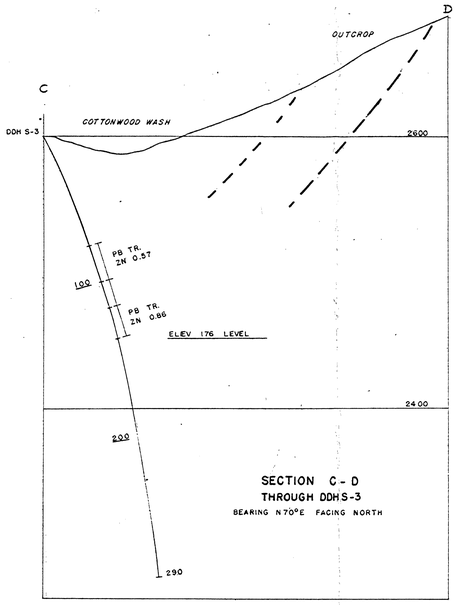
DMEA 2603 , Contract Idm-E428

Scale: 1" = 20'

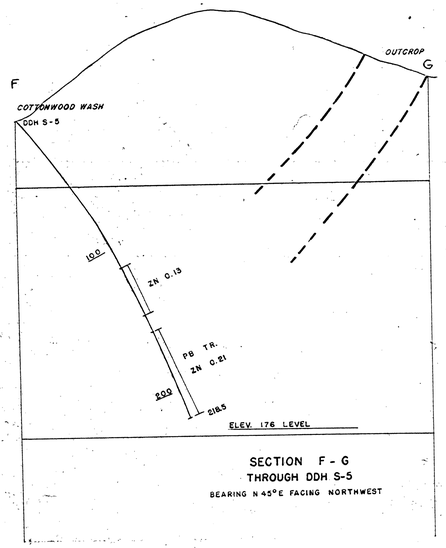
Data from applicant's map with the addition of 5 D.M.E.A. Samples



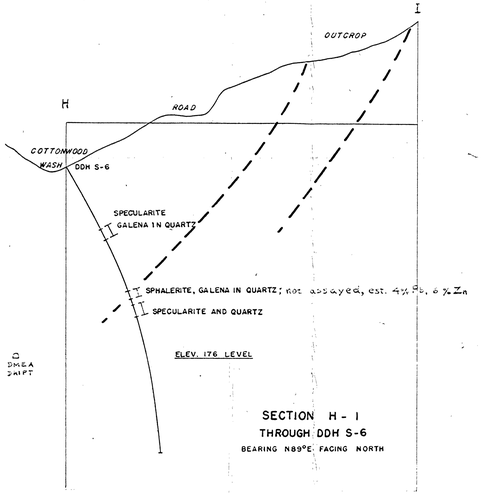
SECTION C - E
THROUGH DDH S-2
BEARING N 25°E FACING NORTHWEST



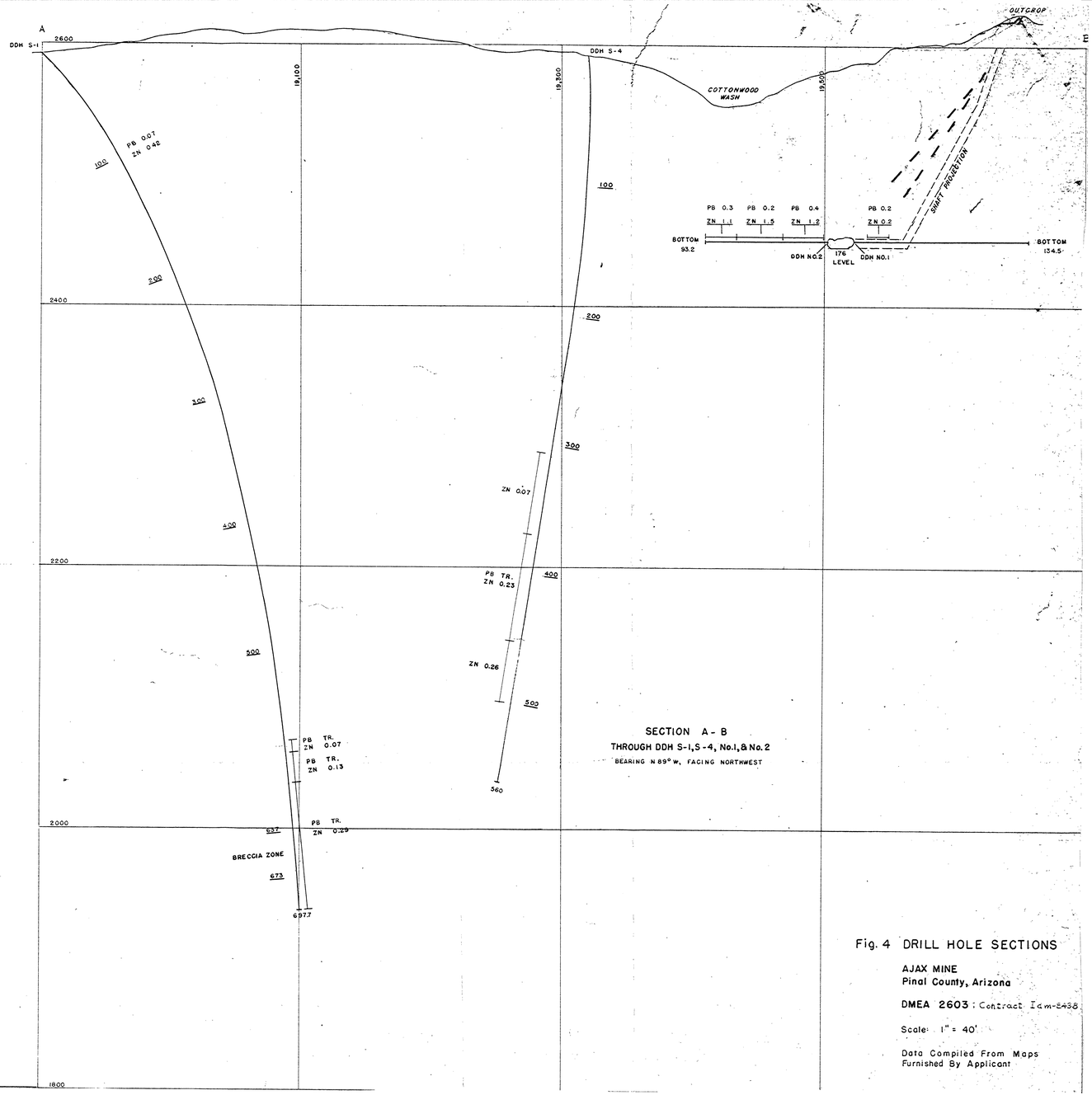
SECTION C - D
THROUGH DDH S-3
BEARING N 70°E FACING NORTH



SECTION F - G
THROUGH DDH S-5
BEARING N 45°E FACING NORTHWEST



SECTION H - I
THROUGH DDH S-6
BEARING N 89°E FACING NORTH



SECTION A - B
THROUGH DDH S-1, S-4, No.1, & No. 2
BEARING N 89° W, FACING NORTHWEST

Fig. 4 DRILL HOLE SECTIONS

AJAX MINE
Pinal County, Arizona

DMEA 2603 : Contract Idm-5438

Scale: 1" = 40'

Data Compiled From Maps
Furnished By Applicant