Yes Audited

No Certified

W[illegible] ANALYSIS SHEET - DMEA PROJECT[illegible]

Analysis as of
Incl. Voucher for ~~12/16/1954~~

Actual Cost

Yes Agreed Unit Costs

Name Ace Building and Roofing Supplies

Docket No. DMEA-2613

State Arizona

Commodity Manganese

Idm-E No. 494

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	~~300'~~	~~10,500.00~~	~~60'~~	35.00 ft. ~~2,100.00~~	~~2,122.00~~
Raising	~~100'~~	~~3,500.00~~			
Shafts	~~110'~~	~~8,250.00~~	~~60'~~	75.00 ft. ~~4,500.00~~	~~4,500.00~~
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		~~1,500.00~~		~~1,500.00~~	~~1,500.00~~
Other (Specify) Assaying		90.00		22.00	
Totals		~~23,840.00~~		~~8,122.00~~	~~8,122.00~~

Amendment No.1, limits Stage 111 to 60 feet of drifting

Prepared by Keating. TLC

71626

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

224 New Customhouse
Denver 2, Colorado

January 21, 1954

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region IV

Subject: Docket DMEA 2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Claim, Greenlee County, Arizona

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

1. Original and one copy of the operator's final report.

2. Original and three copies of the final geologic report by the U.S. Geological Survey.

3. Original and three copies of the final engineering report by the Bureau of Mines.

Final payment to the operator was processed by this office January 12, 1954, in conformance with the final report of review by the Contract Administration and Audit Division dated January 11, 1954.

The project work under a short form contract at agreed unit costs consisted of construction of a hoist house, shop, and headframe, 60 feet of shaft sinking, 60 feet of crosscutting, and eleven manganese assays at a total accepted cost of $8,122.00, in which the Government participated to the extent of 75% or an amount of $6,091.50.

The results of work under Stage I did not warrant approval of work under Stage II, however the work under Stage III was modified and limited by Amendment No. 2 which authorized 60 feet of crosscutting and six manganese assays.

The exploration work did not directly result in a discovery or development of manganese ore, however the work did provide information that resulted in a better understanding of the habit of the deposit, which is of considerable value to the operator and encouraged them in additional work at their own expense which resulted in a considerable tonnage of indicated and inferred low grade ore. As indicated in the geologist's and engineer's reports the operator is willing to repay the amount of Government participation in the exploration work.

As a decision relative to the issuance of a certificate of discovery or development appears to involve DMEA policy the matter is referred to the Washington office for review and appropriate action.

W. H. King

W. H. King

for E. M. Kaufman

A. H. Koschmann

Enclosures

Mining Division
Region IV

224 New Customhouse
Denver 2, Colorado

January 21, 1954

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Docket DMEA 2013 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Claim, Greenlee County, Arizona

Enclosed are the original and four copies of the operator's final report relative to work performed under Contract Idm-E494 and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, dated January 4, 1954.

W H King
W. H. King

Enclosures

January 4, 1954

Memorandum

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

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

Subject : Operator's Final Report, Contract Idm-E494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Claim, Greenlee County, Ariz.

Enclosed are original and 4 copies of the operator's final report for Contract Idm-E494. This report seems sufficient. Our engineering final report will be submitted as soon as it can be typed.

The operator's report was held in this office until W. R. Hardwick of the Bureau of Mines had completed his final report.

Walter R. Storms

Walter R. Storms

CC W. H. King (4)
DMEA-2613
DF

WRStorms:frj

Dec. 2-53
Docket DMEA-2613
Contract No.-IDM-2494
Raymond Godfrey
Ace Building & Roofing
Final Report:

Walter H. Storms-Chief
Bureau of Mines
Box 4097
Tucson Arizona

Dear Mr. Storms,

This is the final report for Docket No. DMEA-2613 Contract No. IDM E 494 (Manganese) Raymond Godfrey 620 Third St. Safford Arizona, Claim No. 5 Denton Mine located in the Ash Peak mining district about 12 miles west of Duncan Arizona.

Work started on this project April 19-53 and was completed October 23-53. The work consisted of building one hoist house, one shop and compressor building, erection of one 20 foot head frame, installation of shaft timbers to ground level, installation of water tank, hoist, sheave wheel, and water lines. An incline shaft 4 foot by 7 foot in the clear was completed to a depth of 60 feet. At this time we asked that the orginal contract be amended to drive a drift 60 feet north from the bottom of the shaft. Work started on this phase of the contract Sept. 10-53 and was completed October 22-53. This drift was 5X7 ft.

No ore was found of a per cent that could be concentrated. Ten feet out in the drift we found some white calcite with some black manganiferous calcite.

From all DMEA work we milled about ten tons of ore at about 53 Mn. content. This ore was taken from the start of the shaft. From open pit exploration work on claims under this loan but not included in this contract we mined approximately 50 tons of ore at about 53 Mn. content.

The total amount approved for the original contract was $23,040.00. $8,128.00 was spent on the project. The Government share of the project was 75% of the total spent. The value of the ore mined under this project is about $100.00. There has been no royalty paid to the government.

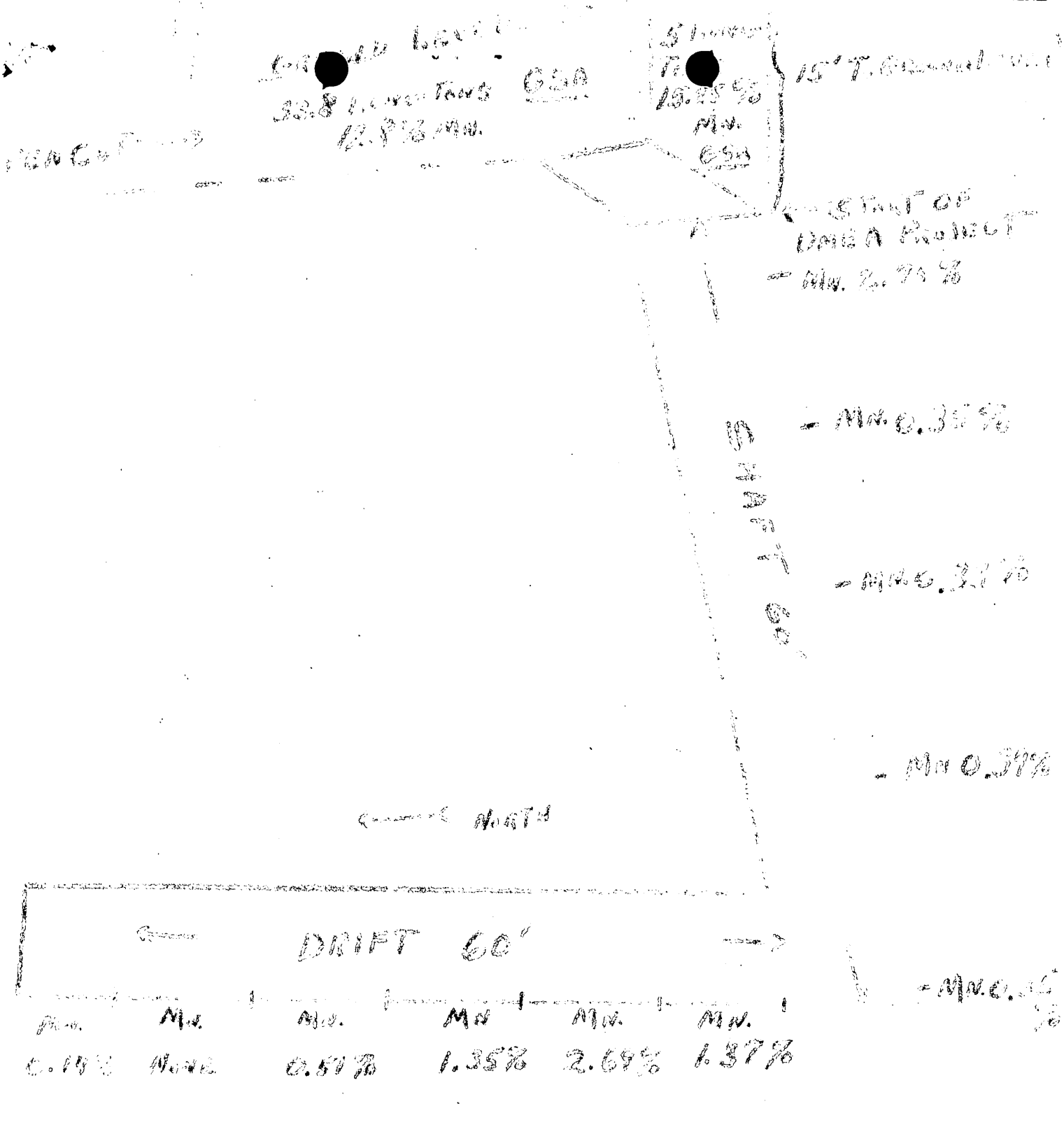
Additional exploration or development is not warrented in this particular location. Production is not possible in this particular location.

An assay sketch is included as a supplement to this report.

Respectfully submitted,

Raymond Godfrey

Raymond Godfrey
Partner



Docket No. DMEA 2613
Contract No. 1DM E 974
Final Report - Supplement
Dec. 1958

Raymond Hoffey
Engineer

DENTON MINE

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 28 1953

224 New Customhouse
Denver 2, Colorado

December 21, 1953.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee 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 pertaining to work under the subject contract for the period October - November 1953.

W. H. King

Enclosures

MF-104
Oct. Nov 1953

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION IV

DEC 28 1953

Administrative Audit Difference Statement

Date: December 16, 1953
Payee's
Reference: Progress Report

October & November, 1953

Ace Building & Roofing Supplies
620 - Third Street
Safford, Arizona
Idn-1194

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

75% of Amount Claimed $ 937.75

Difference $ 300.00

Amount Approved $ 637.75

The reason for the difference was due to:

$300 withheld pending receipt of Operator's Final Report and release of report of review of contract expenditures by Contract Administration and Audit Division.

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 28 1953

224 New Customhouse
Denver 2, Colorado

December 14, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona. Operator's Monthly Progress Report, for the period October-November 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 75 percent of the amount reported by the Operator on Form MF-104, contingent on your verification of arithmetical accuracy within the report.

An amount of $300.00 is to be withheld from payment from the total amount due the Operator pending receipt of the Operator's final report and release of the final Audit Report by the Contract Administration and Audit Division. (see Handwritten report) that Final report

It is requested also that an explanation be furnished the Operator regarding the reason this amount was withheld.

Remarks:

Date of Report	December 2, 1953.
Date Received in Field Office	December 7, 1953.
Date Received in Region Office	December 10, 1953.

W H King
W. H. King

Enclosures

RDB:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms; Chron.; JWTownsend

RECEIVED
DEC 28 1953

MINING DIVISION
REGION IV

December 8, 1953

Memorandum

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

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

Subject : October-November 1953 Progress Report, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz., Contract Idm-E494, Docket DMEA-2613.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report;

(3) Forms MF-104 and MF-104A.

Also enclosed are 2 extra copies of our engineer's report.

All work is in accordance with the terms of the contract and its amendments. As all contract work has been completed, I recommend that the operator be paid the Government's share of the costs with the usual amount being withheld until receipt of the operator's final report.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2613
MF

WRStorms:frj

MINING DIVISION
REGION IV

December 8, 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 : Progress Report for October and November 1953, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona, Contract Idm-8494, Docket DMEA-2613.

The Denton Manganese Prospect was visited on November 5, 1953 and at that time only 4 feet of drifting remained to be done in order to complete the contract. The operator did complete this work and included it in his Form MF-104 voucher for October. The prospect was again visited on November 25 and the final advance on the contract was measured.

On November 25, the advance in the crosscut was found to be 37 feet for October and November. This crosscut is in accordance with the terms of the contract and is approved. In addition the operator has taken 11 samples which were authorized by the contract and are approved.

No ore was discovered.

No further work is contemplated at this particular location. The operator has submitted a final report which is considered adequate.

The total expenditures on the contract are as follows:

New buildings and improvements - - - -	$1,500.00
Shaft - - - - - - - - - - - - - - - - - -	4,500.00
Crosscut - - - - - - - - - - - - - - - -	2,100.00
Assays - - - - - - - - - - - - - - - - -	22.00
Total - - - - - - - - - - - - - - - - - -	$8,122.00

CC W. H. King (orig. & 6)
DMEA-2613
BF

WRHardwick:frj

Of the total cost, the Government's agreed part is 75 percent, or $6,091.50. All of the Government's part has been paid with the exception of that for the following work:

37 feet of crosscut @ 35.00 per ft. - - - -	$1,295.00
11 assays @ $2.00 each - - - - - - - - - - - -	22.00
Total cost - - - - - - - - - - - - - - - - - -	$1,317.00
Government's part yet unpaid - - - - - - - -	$987.75

The operator has presented form MF-104 for this work. This is a short form contract and no improvement or equipment remains in which the Government has an interest. A final report is in process. It is recommended that the operator be paid after the final report has been received and approved.

William R. Hardwick

William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
DEC 28 1953

Decision of [illegible]
Project [illegible]
Contract No. [illegible]
Raymond Godfrey
Joe Building & Roofing Supplies

Walter H. Storrs-Chief
Bureau of Mines
Box 4007
Ewa R
Arizona

Receiving report:
October [illegible] 1953

Dear Mr. Storrs,

We have completed the sixty feet of drift(67 ft.) now going in the Hammerstrom Mine outcrop, and all indications are now that it would be uneconomic to drift further at this particular location.

The ore samples cut in the drift assayed as follows:

(1) Face chips of drift at depth 60ft. cent vein--Oz.	1.37
(2) 30 feet sample west wall of drift----------Oz.	0.60
(3) 30 feet sample east wall of drift----------Oz.	1.15
(4) 10 feet sample west wall of drift----------Oz.	.01
(5) 10 feet sample east wall of drift----------Oz.	.70
(6) 10 feet sample in back roof of drift----------Oz.	.30

Shipment shipped in the month of October: 11.00 long dry tons in the form of ore concentrates. (40.00 lb.) These three tons were from ore mined during exploration work on claims M-2 and F 8.

The total long dry tons shipped from the first day of January to the ending day of November 1953 is 07.07 at an average of about 60% Mn.

Sincerely yours,

Raymond Godfrey
Joe Building
Contractor

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
RECEIVED
DEC 28 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible] - Nov., 1953 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ [illegible] Government Participation: 75 % Amount, $ [illegible]

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	[illegible]	[illegible]	[illegible]			
Drifting						
[illegible]	None	[illegible]	[illegible]			
(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	[illegible]	[illegible]	[illegible]			
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance	[illegible]	None	[illegible]			
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	1317.00	6805.00	8122.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible]

Per Raymond [illegible] Title [illegible]

*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:

$ 687.75

Signature [illegible]
(Authorized Certifying Officer)

Date 12/16/53 Vou. No. 54-59

(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. Jan E 494 in accordance with the terms of the contract.

Signature William R. Hardwick Title Mining Engineer Date 12/8/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R. D.

Signature W H King Title Executive Officer Date DEC 14 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-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 28 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] Nov. 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

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								
Crosscutting	Foot	[illegible]	57	[illegible]	60	35.00	60	35.00
Raising								
Shafts	Foot	[illegible]	[illegible]	[illegible]	60	75.00	60	75.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
[illegible]	1	[illegible]	[illegible]	[illegible]	11	[illegible]	11	[illegible]
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		[illegible]	[illegible]	[illegible]				
TOTAL COSTS				[illegible]				[illegible]

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 [illegible] Operator [illegible]

Per Raymond [illegible] Title [illegible]

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

[redacted]-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 11-2

REFERRED TO:

1. [redacted]
2. Code 400
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: .....

Check (X) before the items needing attention.

Initials of sender.

GPO 16—63815-1

no M7-104 for August
yet received.

LS

LS

We might as well ask for it

No work in August A.P.

WBM

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

RECEIVED
OCT 30 1953

224 New Customhouse
Denver 2, Colorado

October 28, 1953.

2613

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104 - DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Greenlee 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 month of September 1953, pertaining to DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Greenlee County, Arizona.

W. H. King

W. H. King

Enclosures

Sept
104

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

224 New Customhouse
Denver 2, Colorado

October 22, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Greenlee County, Arizona. Operator's Monthly Progress Report for the period September 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 75 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	October 17, 1953.
Date Received in Field Office	October 19, 1953.
Date Received in Region Office	October 21, 1953.

John F. Shaw
John F. Shaw
For W. M. King

Enclosures

RDB:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
OCT 30 1953

MINING DIVISION
REGION IV

October 19, 1953

Memorandum

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

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

Subject : September 1953 Progress Report, Ace Building & Roofing Supplies, Denton Manganese Mine, Greenlee County, Ariz., Contract Idm-E494, Docket DMEA-2613.

Enclosed in quintuplicate are:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report;

(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.

The operator's narrative report and Forms MF-104 and MF-104A were received on October 14, but because of several errors on the forms, they were sent back to the operator for correction. The corrected Forms MF-104 and MF-104A were received in Tucson October 19.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2613
DF

WRStorms:frj

MINING DIVISION
REGION IV

October 14, 1953

Memorandum

To : Walter R. Storms, Chief, Mining Methods Br., Mining Division, Region IV, Tucson, Ariz.

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

Subject : Progress Report for September 1953, Docket DMEA-2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

The Denton Manganese prospect was visited on October 7, 1953. Raymond Godfrey was present and with three experienced miners was driving the crosscut authorized by Amendment No. 1 to the contract.

The crosscut had been advanced a distance of 27 feet from the north side of the shaft. Mr. Godfrey stated that of this amount, 23 feet had been completed in September.

The crosscut passed through approximately one foot of manganese-stained breccia, then fifteen feet of barren volcanic rock. From this point to the face of the crosscut, there were several seams of white calcite with some manganese. The manganese mineral is psilomelane in botryoidal crusts of the calcite. No assays have been made but the indications are encouraging.

The operator has produced and milled ore from the surface near the shaft and reports that to date he has shipped 46.19 tons of manganese concentrate which averaged more than 40 percent MnO_2. This concentrate would have a gross value of slightly more than $4,000.00; the Government's royalty would be approximately $200.00

The 23 feet of crosscut which were completed in September are in accordance with the provisions of the contract and are approved. The total estimated cost of 23 feet at $35.00 per foot is $805.00. The Government's agreed part is 75 percent, or $603.75. It is recommended that the operator be paid this amount in accordance with the terms of the contract.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 6)
DMEA-2613
DF

WRStorms:frj

ACE DRILLING & BLASTING SUPPLIES
Safford, Ariz.
Oct. 5, 1953

Project [illegible]
Contract No. [illegible]
Raymond Godfrey
Ace Drilling & Blasting Supplies
Safford Ariz.

Walter E. Stone, Chief
Bureau of Mines
Box 4007
Phoenix Ariz.

Dear Mr. Stone:

23 foot of drilling.

The hole was completed.

Since the signing of the above Contract, the Excavation which had to Drill Blasting Depot was 40,20' long dry tons.

Sincerely yours,

Raymond Godfrey

Raymond Godfrey

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT 30 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Sept., 1953 Docket No. DMEA 2613 Contract No. 16m-E494
Operator's Name Ace Building & Roofing Supplies Minerals Manganese
Address 620 - 3rd St., Safford, Ariz.
Contract Amount, $ 23,840.00 Government Participation: 75 % Amount, $ 17,880.00

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	805.00	None	805.00			
Drifting						
Shaft	None	4,500.00	4,500.00			
(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	None	1,500.00	1,500.00			
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	805.00	6,000.00	6,805.00	805.00	6,000.00	6,805.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Oct. 17 1953 *Payee Ace Building & Roofing Supplies
Per Raymond L. Godsey Title Partner

*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:

$ 603.75

Signature
(Authorized Certifying Officer)

Date 10/26/53 Vou. No. DMA 54-42

(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. dmE 494 in accordance with the terms of the contract.

Signature William R. Hardwick WRH Title Mining Engineer Date Oct 19, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: RDB.

Signature John F. Shaw for W. H. King Title Executive Officer Date OCT 22 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-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 30 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Sept. 195 3 Docket No. DMEA 2613 Contract No. Idm-2494
Operator's Name Ace Building & Roofing Supplies Minerals Manganese
Address 620 - 3rd St., Safford, Ariz.

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	805.00	23	805.00	23	35.00	60	35.00
Crosscutting								
Raising	Feet	-	-	4,500.00	60	75.00	60	75.00
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		805.00		5,305.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		-		1,500.00				
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		805.00		6,805.00				23,840.00

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 Oct. 17 1953 Operator Ace Building & Roofing Supplies

Per Raymond Godfrey Title Partner

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

Who did the operator ask for an amendment to the contract. Region IV?

WSM
10/14/53

Amendment approved by King 8-27-53

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

Defense Minerals Adm.
RECEIVED
OCT - 8 1953

224 New Customhouse
Denver 2, Colorado

October 5, 1953.

2613
WSM

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104 - DMEA Docket 2613, Contract Idm-B494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee 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 month of July 1953, pertaining to DMEA Docket 2613, Contract Idm-B494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

W. H. King
W. H. King

Enclosures

MF-104
July

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

224 New Customhouse
Denver 2, Colorado

September 28, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2613, Contract Idm-849 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona. Operator's Monthly Progress Report for the period July 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 75 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	August 11, 1953.
Date Received in Field Office	August 13, 1953.
Date Received in Region Office	August 17, 1953.

Held up pending formulation of Amendment Nos. 1 and 2 and resumption of work as allowed by same.

W. H. King
W. H. King

Enclosures
RDB:cwm

cc: Contract
WRStorms
Secretary to the Oper. Comm. (2)
Chron.

MINING DIVISION
REGION IV

August 14, 1953

Memorandum

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

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

Subject : July 1953 Progress Report, Contract Idm-2494 Docket BMKA-2613, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report;

(3) Forms MF-104 and MF-104A.

Also enclosed are two extra copies of our engineer's report.

The 12 feet of shaft sunk during July are in accordance with terms of the contract. This completes Stage I of the contract. Operator has asked for an amendment to the contract so it can drive a crosscut from near the bottom of the shaft. Until the operator submits his final report or until the proposed amendment is approved, I recommend that 10 percent of the Government's share of the July costs ($900.00) be withheld and the remainder paid to the company.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
BMKA-2613
BF

WRStorms:frj

DEPARTMENT OF ...
Defense Minerals Administration
RECEIVED
OCT - 8 1953

MINING DIVISION
REGION IV

August 14, 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 : Progress Report for July 1953, Docket DMEA-2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

The Denton Manganese Prospect was visited on August 4, 1953. Raymond Godfrey was present and assisted in measuring the progress. The shaft had been sunk to a depth of 60 feet below the starting point of the contract. This represents an advance of 12 feet for the period. This completes the shaft sinking authorized by Stage I of the contract.

The property has been examined and it has been recommended that no further sinking be done at this time. The Operator has requested assistance to drive a short crosscut from the bottom of the 60-foot shaft. This has been recommended. approved by King - amd #1 8-27-53

The operator has in operation a small mill consisting of a screen, crusher, and jig in which he is milling ore from open pit mining at a point southeast of the shaft. He has marketed approximately 35 tons of concentrates which contained an average of more than 40 percent manganese at the Deming manganese purchasing depot. The Operator stated that he intends to continue mining ore from the surface until he is informed as to whether his request for authorization for a short crosscut will or will not be approved. The Operator requested information on, and was informed how to make royalty payments on the ore which he is mining.

The mineralization in the bottom of the shaft was described to a depth of 58 feet in an interim report dated July 29, 1953 and is here repeated briefly. The shaft started in a lens of ore approximately 7 feet wide which narrowed rapidly, then pinched out. Assays at 58 feet showed some manganese but not in commercial quantities and examination of the material indicated that the manganese was not present in a recoverable form. By using samples and assays taken by W. Allison and assuming a depth of 15 feet, an indicated 1,500 tons of recoverable concentrates is postulated.

CC W. H. King (Orig. & 6)
DMEA-2613
DR

WRStorms:frj

The operator has presented a voucher for 12 feet of shaft, which were sunk in July. The 12 feet of shaft are in accordance with the provisions of the contract and are approved. The contract provides for payment to the contractor of 75 percent of an estimated cost of $75.00 per foot. The total cost of the 12 feet was $900.00 and the Government's part is $675.00. No further work on the contract is now authorized so it is recommended that at least 10 percent of the Government's share of the above amount be withheld until a final engineering report is presented by the operator.

William R. Hardwick

William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

G. T. GODFREY.

RAYMOND GODFREY

ACE BUILDING & ROOFING SUPPLIES

Concrete Blocks, Paints and Hardware

620 Third Street :: Phone 289

SAFFORD, ARIZONA

Defense Minerals Administration
RECEIVED
OCT - 8 1953

August 11, 1953

Docket DMEA-2613
Contract No. IDM-E494
Raymond Godfrey
Ace Building & Roofing Supplies
Period for July 1 to July 31

Walter R. Storms, Chief
Bureau of Mines
Box 4097
Tucson, Ariz.

Dear Mr. Storms:

12 ft. of shaft.

Ore found was manganese.

Production shipped to Deming Depot in July, 34,800 11
wet weight in form of jig concentrates.

Sincerely yours,

G. T. Godfrey - Partner
Raymond Godfrey

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
OCT - 8 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1953 Docket No. DMEA 2613 Contract No. IDM-E494
Operator's Name Raymond Godfrey Minerals Mn.
Address 620 3rd Street Safford, Ariz.
Contract Amount, $ 23,840 Government Participation: 75 % Amount, $ 17,880

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						
12 ft. of Shaft	$900.00	$3,600.00	$4,500.00			
(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.		$1,500.00	$1,500.00			
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$900.00	$5,100.00	$6,000.00	900.00	5,100.00	6,000.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Aug. 11-53 *Payee G. T. Godfrey

Per Ace Bldg. & Rfg. Sup. Titles Partner

*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:

$ 675.00

Signature [illegible]
(Authorized Certifying Officer)

Date 9/30/53 Vou. No. DMA 54-34
(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. 1/fm E492 in accordance with the terms of the contract.

Signature William R. Hardwick Title Mining Engineer Date 8/14/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature W. H. King Title Executive Officer Date SEP 28 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 MR-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
OCT - 6 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 195 3 Docket No. DMEA 2613 Contract No. IDM-E494
Operator's Name Raymond Godfrey Minerals Mn.
Address 620 3rd. Street Safford, Ariz.

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								
Raising							Stage I	
Shafts 12 ft.	ft.	$900.00	12	$4,500.00	60	75.00	60	75.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		$900	12	$4,500.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.				$1,500.00				
TOTAL COSTS		$900.00		$6,000.00				$23,640.00

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 Aug. 11-53 Operator G. T. Godfrey

Per Ace Bldg & Rfg Supplies Title Partner

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.

REMARKS:

(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

402

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

224 New Customhouse
Denver 2, Colorado

August 14, 1953

Memorandum

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee 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 June, 1953, pertaining to DMEA Docket 2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

W. H. King
W. H. King

Enclosures

MF-104
June

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

RECEIVED
JUL 30 1953

224 New Customhouse
Denver 2, Colorado

July 22, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2612, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona. Operator's Monthly Progress Report for the period June 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 75 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	July 9, 1953.
Date Received in Field Office	July 14, 1953.
Date Received in Region Office	July 20, 1953.
Date Processed for Payment	July 21, 1953.

W. H. King
W. H. King

Enclosures

RDB:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

July 15, 1953

Memorandum

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

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

Subject : June 1953 Progress Report, Contract Idm-E494, Docket DME.A-2613, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's Narrative Report;

(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.

As only 12 feet of shaft under Stage I remained to be sunk on July 1, W. R. Hardwick of the Bureau of Mines and R. F. Robinson of the Geological Survey visited the property yesterday to see if work under Stage II seemed justified. They probably will recommend termination of the contract after completion of Stage I.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DME.A-2613
DF

WRStorms:frj

MINING DIVISION
REGION IV

July 15, 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 : Progress Report for June 1953, Docket DMEA-2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Project, Greenlee County, Ariz.

The Denton manganese prospect was visited on July 7, 1953. Raymond Godfrey was present and assisted in measuring the progress for June. The shaft had been sunk to a depth of 48 feet. This represents an advance of 34 feet for the period.

A power line has been constructed to the mill location and some changes have been made in the flow-sheet. Mr. Godfrey stated that 8 tons of concentrates had been recovered from ore mined from various small surface pockets on the property. These concentrates were marketed at Deming, New Mexico to the General Services Administration Depot. No ore removed from the shaft was suitable for concentration.

When the property was visited on June 4, the fractured zone containing manganese ore which was full width of the shaft, or approximately six feet thick at the collar, had decreased to approximately 2 feet width at a depth of 12.5 ft. At this depth a sample ran 1.9 percent manganese. When the operation was visited on July 7, the fractured zone had decreased to a thin but definite crack, bounded on both walls by slickensides. From a depth of 18 feet to the bottom of the shaft at that time (48 feet) there was only an occasional indication of manganese mineralization. None of the material mined from the shaft, with the exception of that from the first 10 feet, has contained enough manganese to be classified as ore.

Raymond Godfrey stated that he intends to start mining the better surface ore indicated by the trenches which were bulldozed by W. Allison. This ore will be selectively mined by open cut.

CC W. H. King (Orig. & 6)
DMEA-2613
MF

WRHardwick:frj

The 34 feet which were completed in June are authorized by the contract and are approved. The contract provides for payment by the Government at the rate of 75 percent of an estimated cost of $75.00 per foot for the shaft. The total cost of the 34 feet that were completed in June is $2,550.00 of which the Government's part is 75 percent or $1,912.50. It is recommended that the contractor be paid this amount.

There remains 12 feet of shaft to complete Stage I of the contract. No significant amount of ore has been discovered by work on the first part of the contract to date and it is probable that Stage II will not be recommended. If the contract is terminated the Government's part of the cost of the remaining 12 feet will be $675.00.

William R. Hardwick

William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

G. T. GODFREY

RAYMOND GODFREY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1953

ACE BUILDING & ROOFING SUPPLIES

Concrete Blocks, Paints and Hardware

620 Third Street :: Phone 289

SAFFORD, ARIZONA

July 11, 1953

Docket DMA-2013
Contract No. Idm-2494
Raymond Godfrey
Ace Building & Roofing Supplies

Walter R. Storms, Chief
Bureau of Mines
Box 4007
Tucson, Ariz.

Dear Mr. Storms:

Shaft has been sunk 40 feet below stake level.

Ore found was Manganese.

Manganese ore shipped to Deming Depot, Month of June was 16739# Dry Basis.

Sincerely yours,

Raymond Godfrey

Raymond Godfrey

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

Defense Minerals Administration
RECEIVED
AUG 10 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1953 Docket No. DMEA 3613 Contract No. IDM-5494
Operator's Name Raymond Godfrey Minerals Manganese
Address 620 3rd street Safford, Arizona
Contract Amount, $23,840.00 Government Participation: 75 % Amount, $17,880.00

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						
34 feet of shaft	$2,550.00	$1,050.00	$3,600.00			
(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.		$1,500.00	$1,500.00			
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2,550.00	$2,550.00	$5,100.00	2,550.00	2,550.00	5,100.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 9, 1953 Payee Raymond Godfrey

Per Ace Bldgr Roofing Co. Title Partner

*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:

$1912.50

Signature [illegible]
(Authorized Certifying Officer)

Date 8/5/53 Voucher DMA 54-12

(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. IdmE A94 in accordance with the terms of the contract. WRH

Signature William R. Hardwick Title Mining Engineer Date July 15, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.D.B.

Signature W. H. Kerr Title Executive Officer Date JUL 22 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.

DEPARTMENT OF THE INTERIOR
Defense Minerals
DEC.
AUG 20 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1953 Docket No. DMEA 2613 Contract No. DMI-E194
Operator's Name Raymond Godfrey Minerals Manganese
Address 620 3rd Street Safford, 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								
Raising								
Shafts	Ft.	$2,550.00	34	$3,600.00	48	75.00	60	4,500.00
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
								TOTAL COSTS AUTHORIZED BY CONTRACT
TOTAL DISTRIBUTED COSTS								
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.				$1,500.00				
TOTAL COSTS		$2,550.00		$5,100.00				$23,840.00

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 July 9, 1953 Operator Raymond Godfrey

Per Raymond Godfrey Title Partner

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.

REMARKS:

(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.

224 New Customhouse
Denver 2, Colorado

July 6, 1953

Memorandum

Note: 9 Tons Shipped to Deming Depot 1954

To: Secretary to the Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2613, Contract Idm-2494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee 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 May, 1953, pertaining to DMEA Docket 2613, Contract Idm-2494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

W. H. King

W. H. King

Enclosures

MF-104 May

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

224 New Customhouse
Denver 2, Colorado

June 23, 1953

Memorandum

To: T. A. Christensen

From: Executive Offiser, DMEA Field Team, Region IV

Subject: DMEA Docket 2513 Contract 1dm-2494 (Manganese), Ace Building and Roofing Supplies, Lenton Manganese Prospect, Greenlee County, Arizona - Operator's Monthly Progress Report, for the period May 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 75 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	May 31, 1953
Date Received in Field Office	June 8, 1953
Date Received in Region Office	June 11, 1953
Date Processed for Payment	June 23, 1953

W. H. King
W. H. King

Enclosure

RDB:fwe
cc See Oper Comm (2)
WRStorms
Contract
Chron

MINING DIVISION
REGION IV

June 9, 1953

Memorandum

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

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

Subject : May 1953 Progress Report, Contract Idm-2494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Claims, Greenlee County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report;

(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-2613
DF

WRStorms:frj

MINING DIVISION
REGION IV

June 9, 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 : Progress Report for May 1953, Docket DMEA-2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

The Denton Manganese prospect was visited on June 4, 1953. Both G. T. Godfrey and Raymond Godfrey were on the property. A headframe was completed, a compressor and hoistwere installed. Water and air lines were installed and two experienced miners were working in the shaft.

The shaft had reached a depth of 14 feet. At this point the fractured zone was approximately 2 feet wide. Manganese minerals were evident. Raymond Godfrey reported that from the material removed from the 14 feet of shaft, approximately 5 tons of concentrates were recovered and shipped to Deming. The concentrates were reported to average better that 40 percent manganese.

The 20-foot headframe, water tank, hoist, sheave wheel, and air and water lines were in accordance with the provisions of the contract which allows a cost of $800.00 for this work. The 14 feet of shaft work were in accordance with the provisions of the contract which provides for a cost of $75.00 per foot, or a total of $1,050.00. This makes a total cost of $1,850.00 for the month of which the Government's agreed part is 75 percent or $1,387.50. This cost appears reasonable and is approved. It is recommended that the contractor be paid in accordance with the provisions of the contract for the work completed in May.

William R Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

G. T. GODFREY

RAYMOND GODFREY

ACE BUILDING & ROOFING SUPPLIES

Concrete Blocks, Paints and Hardware

620 Third Street :: Phone 289

SAFFORD, ARIZONA

May 31, 1953

Docket DMA-2613
Contract No. IGx-2494
Raymond Godfrey
Ace Building & Roofing supplies
Period for- May 1 to May 31.

Walter R. Storms, Chief
Bureau of Mines
Box 4007
Tucson, Ariz.

Dear Mr. Storms:

One 20 feet head frame, air and water lines installed, including pressure water tank and storage tank. Shaft timbered to ground level. Shaft sunk 14 feet.

Ore found was manganese

Production shipped to Deming Depot in May 20,580# wet weight in the form of concentrate. (Jig)

Sincerely yours,

Raymond Godfrey

Raymond Godfrey

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

Month of May, 195 3 Docket No. DMEA 2613 Contract No. IDM-E494
Operator's Name Raymond Godfrey Minerals MN
Address 620 3rd Street, Safford, Arizona
Contract Amount, $ 23,840.00 Government Participation: 75 % Amount, $ 17,880.00

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						
14ft Shaft Sinking	$1,050.00		$1,050.00			
(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.	$800.00	$700.00	$1,500.00			
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1,850.00	$700.00	$2,550.00	1850.00	700.00	2,550.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date May 31/53 *Payee Raymond Godfrey

Per Ace Bldgr. Supply Co Title Partner

*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:

$ 1387.50

Signature [illegible]
(Authorized Certifying Officer)

Date 6/30/53 Vou. No. 54-1

(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. Adm E 494 in accordance with the terms of the contract.

Signature William R. Hardwick Title Mining Engineer Date June 9, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: R.E.O. Executive Officer

Signature W. H. King Title Date JUN 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

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1953 Docket No. DMEA 6123 Contract No. IDM-E494
Operator's Name Raymond Godfrey Minerals MN
Address 620 3d Street, Safford, 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								
Crosscutting								
Raising								
Shafts	Ft.	1,050.00	14	1,050.00	14	75	60	75
Winzes							Stage 1	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		$800.00		$1,500.00				$1,500.00
TOTAL COSTS		$1,850.00		$2,550.00				$25,840.00

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 May 31/53 Operator Raymond Godfrey
Per Ace Bldg & Roofing Co. Title Partner

REMARKS: 1-20 foot head frame timber and lagging to ground level. Air and water tanks set and pipe in place and 14 foot of shaft sunk.

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.

400

224 New Customhouse
Denver 2, Colorado

June 3, 1953.

WSM

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Form MF-104, DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee 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 month of April 1953, pertaining to DMEA Docket 2613, Contract Idm-E494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

W. H. King

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

May 27, 1953.

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket 2613, Contract Idm-2494 (Manganese), Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona. Operator's Monthly Progress Report for the period April 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 75 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	April 30, 1953.
Date Received in Field Office	May 18, 1953.
Date Received in Region Office	May 21, 1953.
Date Processed for Payment	May 27, 1953.

W. H. King
W. H. King

Enclosures

RDB:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.

MINING DIVISION
REGION IV

May 18, 1953

Memorandum

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

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

Subject : April 1953 Progress Report, Contract Idm-5494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's Narrative report;

(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.

Forms MF-104 and 104A originally were received in this office on May 8 but were returned to the operator for correction.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2613
DF

WRStorms:frj

MINING DIVISION
REGION IV

May 18, 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 : Progress Report for April 1953, DMEA Docket 2613, Contract Idm-5494, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

The Denton Manganese claims were visited on May 5, 1953. Both G. T. Godfrey and Raymond Godfrey were on the property and with three employees were working on the contract. Raymond Godfrey stated that work on the contract had been actively started on April 22, 1953. On May 5 the work in progress consisted of leveling the ground preparatory to erecting a headframe over the location of the proposed shaft. A 16-feet by 18-feet shop building and an 8-feet by 10-feet hoist house were completed, and the operator stated that these two buildings were completed in April.

Some rumor had been prevalent that the Godfrey berthers had sold the Denton Manganese claims. They were questioned about this. Raymond Godfrey stated that they had given a 30-day option to W. Allison who had trenched the mineralized area with a bulldozer and taken samples. Allison had been interested only in a deposit that would support a 300-ton per day operation. The option has now been dropped. Raymond Godfrey stated that he expected to get the results of the Allison sampling and would include them with his narrative report.

The 16-by 18-feet shop building and the 8- by 10-feet hoist house that were completed in April were in accordance with the contract and are approved. The contract provides for payment at the rate of $500.00 for the shop building and $200.00 for the hoist house. The Government's part of this would be 75 percent or $466.67. It is recommended that the operator be paid this amount in accordance with the terms of the contract.

700 x .75 = $525.00 Berk.

William R Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. M. King (Orig. & 6)
DMEA-2613
MF

WRHardwick:frj

G. T. GODFREY

RAYMOND GODFREY

ACE BUILDING & ROOFING SUPPLIES

Concrete Blocks, Paints and Hardware

620 Third Street :: Phone 289

SAFFORD, ARIZONA

May 7, 1953

Contract Idm-E464
Docket DMEA-2613

U. S. Storm
University Station
U. S. Bureau of Mines
Tucson, Arizona

Dear Sir

We have completed 1- 16 x 10 shop bldg. and 1- 8 x 10 hoist house at The Denton Mine.

The ground has been leveled and work will start on head frame and shaft at once.

Yours very truly

Raymond Godfrey

Raymond Godfrey

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

Month of April/30 1953 Docket No. DMEA 2613 Contract No. Idm-E494

Operator's Name Raymond Godfrey (Ace Building & Roofing Supplies) Minerals Mn

Address 620 - 3rd Street, Safford, 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								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		700	Jobs	700				1,500
TOTAL COSTS		$700		$700				23,840

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 april 30/53 Operator Raymond Godfrey

Per _____ Title Partner

REMARKS: Buildings include 1 - 8x10 ft. hoist house at $200 and 1 - 16x18 ft. shop building at $500.

→ 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

Month of April/30, 1953 Docket No. DMEA 2613 Contract No. Idm-1494
Operator's Name Raymond Godfrey (Ace Building & Roofing Supplies) Minerals Mn
Address 620 - 3rd Street, Safford, Arizona
Contract Amount, $ 23,840 Government Participation: 75% Amount, $ 17,880

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) [redacted] Short Form } Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(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.	700	0	700			
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$700	0	$700	700.00	0	700.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date April 30/53 *Payee Raymond Godfrey

Per _____ Title Partner

*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:

$ 525.00

Signature _____
(Authorized Certifying Officer)

Date 6/1/53 Vou. DMEA 53-140
(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. Tdm-F494 in accordance with the terms of the contract.

Signature William R. Hardwick Title Mining Engineer Date May 18, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: L.B.B.

Signature W. H. King Title Executive Officer Date MAY 27 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

Yes Audited

No Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/16/1954
Incl. Voucher for

Actual Cost

Yes Agreed Unit Costs

Name Ace Building and Roofing Supplies

Docket No. DMEA-2613

State Arizona

Commodity Manganese

Idm-E No. 494

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	300'	10,500.00	60'	35.00 ft. 2,100.00	2,122.00
Raising	100'	3,500.00			
Shafts	110'	8,250.00	60'	75.00 ft. 4,500.00	4,500.00
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		1,500.00		1,500.00	1,500.00
Other (Specify) Assaying		90.00		22.00	
Totals		23,840.00		8,122.00	8,122.00

Amendment No.1, limits Stage 111 to 60 feet of drifting

Prepared by Keating. TLC

71626

Mr. Raymond Godfrey and Mr. Turner Godfrey
Ace Building and Roofing Supplies
Safford, Arizona

Re: Docket No. DMEA-2613 (Manganese)
Denton Manganese Claims
Graham County, Arizona
Contract No. Idm-E494

Gentlemen:

We are pleased to advise you that your performance of exploration work under the subject contract has been satisfactory to the Government and the account relating thereto has been closed. The final audited and settled account shows:

Total claimed for units of work performed $8,122.00
Total Government contribution of 75 percent 6,091.50

Your attention is called to the provision of the contract which requires you to keep and preserve your records and accounts of this transaction for a period of three years for possible future reference.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the exploration contract. In the absence of such certification, the Government retains no lien against the property or any production therefrom.

The Government is grateful for your participation in the exploration program of the Defense Minerals Exploration Administration.

Sincerely yours,

C. O. Mittendorf

Administrator

cc to: Docket
Code 400
Admr. Reading File
Operating Comm.
FT. Reg. IV
Gilbert DeRuff, USBM
Louis Pavlides, USGS

400

May 3, 1954

Memorandum

To: Administrator

From: Iron and Ferro-Alloys Division

Subject: General Summary of Contract and Results obtained
Docket No. DMEA 2613 - Manganese
Denton Manganese Mine
Greenlee County, Arizona
Contract No. Idm-2494

Operator - Ace Building and Roofing Supplies
630 Third Street
Safford, Arizona

Operator's Property Rights -
Lessee. Owner's Consent to Idm dated July 24, 1952.

Contract - Dated February 27, 1952

(a) Work authorized

STAGE I

1. Construct a 16 x 18 foot, frame-construction compressor and shop building.

2. Construct a 8 by 10 foot, frame-construction hoist house.

3. Construct a 20 foot headframe and install shaft timbers to ground level, water tank, hoist sheave wheel and air and water lines.

4. Sink inclined 2 compartment shaft 60 feet.

STAGE II

1. Deepen above shaft to 110 feet - allowing 10 feet for sump below 100 feet level.

STAGE III

1. Drive 5' x 7' drift 300 feet on 100-foot level.

2. Drive 100 feet raises - 5' x 7' at points to be approved by Field Team. No raise to exceed 50 feet in length.

Estimated Cost of Project

Agreed Unit Costs

STAGE I

1,	16x18 foot Compressor & Shop building	$ 500.00
1,	8x10 foot Hoist House	200.00
1,	20 foot headframe with installations	800.00
60,	feet of shaft @ $75.00 per foot	4,500.00
5,	Manganese Assays @ $2.00	10.00
	Cost - Stage I	$6,010.00

STAGE II

50	feet of shaft @ $75.00 per foot	$3,750.00
5	Manganese Assays @ $2.00	10.00
	Cost - Stage II	$3,760.00

STAGE III

300	feet of drift @ $35.00 per foot	$10,500.00
100	feet of raises @ $35.00 per foot	3,500.00
35	Manganese Assays @ $2.00	70.00
	Cost - Stage III	$14,070.00

Total estimated agreed unit cost of project	$23,840.00
Government's participation @ 75%	$17,880.00

Amendments:

No. 1 - Dated August 27, 1953, modifies the work under Stage III as follows:

1. Crosscut from bottom of shaft completed under Stage I, to the southern limits of the mineralized zone, not to exceed 60 feet @ $35.00 per foot - Total $2,100.00

2. 6 Manganese Assays @ $2.00 12.00

$2,112.00

Number 2 changes the word "southern" in Amendment No. 1 to the word "northern".

Both Amendments were not to be construed as to increase the estimated total cost of the project.

Work Completed:

New Buildings	$1,500.00
Shaft sinking 60 feet @ $75.00	4,500.00
Crosscutting 60 feet @ $35.00	2,100.00
Assays 11 @ $2.00	22.00
Total Cost	$8,122.00
Government's participation @ 75%	6,091.50

Work was completed October 28, 1953.

Audit: Report of Review dated January 11, 1954

Certification: Certification not recommended.

Comments:

This property formerly known as the Thurston and Hardy mine is reported to have produced 1000 tons of manganese ore containing 45% manganese.

The present Operators produced approximately 55 tons of jig concentrates which were sold in small lots averaging about 40 percent manganese. The exploration project was established to explore a series of parallel fractures for manganese by means of an inclined shaft sunk on the ore zone at the most favorable location. Which was in a trench where 33.8 tons of ore averaging 12.8 percent manganese was mined.

As the shaft was deepened the lens of ore thinned rapidly and at a depth of 14 feet the ore had disappeared. The shaft was bottomed at 60 feet, then a 60-foot crosscut was driven normal to the strike of the fractured zone. The Operator has sampled all underground work and found no area with sufficient manganese to be classed as ore.

Stage III of the contract authorized 300 feet of drifts, 100 feet of raises, and 35 manganese assays, but was dropped because of the ore and vein structure followed by the shaft pinches out completely at 60 feet in depth.

All ore that was discovered by the DMEA project has been mined. This ore consisted of a wedge, starting at the collar of the shaft, 6 feet wide and tapering to a point of a depth of 14 feet. The manganese content at the start was 6.7 percent and at the finish 1.9 percent.

Assuming that the manganese ore persists to an average depth of 15 feet and accepting the Allison assays as correct, there is an area [illegible]t of the shaft, approximately 200 feet long, 40 to 60 feet wide which [illegible] contain 11,400 tons of indicated ore at a grade of 5.7% manganese. [illegible]uld probably be milled to yield 1220 tons of concentrates with an [illegible]e grade of 40 percent manganese. In addition there are other [illegible]es that could probably be mined and milled to yield 280 tons of con[illegible]ntrates making a total of 1500 tons having an average grade of 40 percent [illegible]anganese.

However, the Field Team Mining Engineer concludes that no ore was discovered by the DMEA work, and this work will serve no useful purpose in the future. It is believed that "no discovery or development has resulted from work under the contract", and it is recommended that no certification should be made.

The Field Team geologist, while agreeing essentially with above estimate of indicated ore, concludes that the project did not directly result in the discovery of ore as no commercial ore was found in the shaft or crosscut. However, the exploration resulted in a better understanding of the habit of these manganese deposits; thus has been of benefit in recent mining. Therefore, because the DMEA project was beneficial to the Denton manganese deposit, the geologist recommends that the project be certified as successful.

The Field Team appears to be non-committal. In a memorandum to the Operating Committee, it is stated, "As a decision relative to the issuance of a certificate of discovery or development appears to involve DMEA policy the matter is referred to the Washington office for review and appropriate action."

A letter from the Field Team dated January 21, 1954, indicated that the Operator was willing to repay the amount of Government participation in the exploration work. Such repayment would have had to come from royalty on ore not discovered by work under the DMEA contract, but mined on ground that was subordinated under the contract.

We have considered the various recommendations and statements summarized in the paragraphs above that discuss the possibility of certification. We find, however, that this is clearly not a proper project to certify because no discovery or development was made within the terms of the exploration contract.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

W
JHOPKINS:foc
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.

April 26, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division

Subject: Denial of Application by Field Team, Region IV
Docket No. DMEA 2613 - Manganese (Amended)
(Formerly Docket No. DMEA 3223, cancelled)
Ace Building and Roofing Supplies Company
Denton manganese claims Nos. 1, 2 and 3
Greenlee County, Arizona

The applicant requested exploration assistance in the amount of $23,660.00 to explore the South ore zone for manganese on the Denton Claims, Greenlee County, Arizona.

The company originally obtained a contract Idm-Ch94 in February 1953, to explore the manganese deposit on the Denton Nos. 5 and 6 claims by shaft sinking, drifting and crosscutting. This project was terminated by mutual consent of the Operator and the Government in November 1953, without the discovery of any significant quantity of manganese ore.

The south zone, exposed in several places throughout a strike distance of about 2500 feet, is localized along a fault zone in grayish-brown vesicular basalt.

The ore consists of granular and vein-like masses of psilomelane which are concentrated along fractures in the basalt. The psilomelane formed as a result of supergene alteration of manganiferous calcite, which is the dominant mineral in the deeper parts of the ore zone.

Experience of the north ore zone has shown that commercial concentrations of manganese ore are localized only near the surface and do not extend to depths greater than a few tens of feet.

The south shear zone was exploited during World War I when about 1000 tons of concentrate were produced.

reserves of manganese in the zone for which exploration is proposed, and therefore recommends that the application be denied.

We concur in the denial.

The vein has been prospected by several other shallow shafts, but there is no evidence to indicate that significant amounts of manganese concentrate have been produced other than the 1000 tons mentioned above.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Analyses of 6 samples from the South ore zone are as follows:

Number	Description	Width in feet	Percent Mn
12946	West end of ore zone	10.6	4.2
12948	Estimated 1000 tons stockpile	-	2.6
12752	Shaft Pillar	2.0 (?)	15.5
12949	Central part of ore zones	9.6	2.5
12950	Eastern part of ore zone	3.0	1.9
13001	Grab sample of dump		1.4

The ore, consisting of several thousand tons of material containing 2 or 3 percent manganese, is too low grade to be minable, as the Operator's experience shows the minimum minable grade is about 5 percent manganese under very favorable operating conditions.

The Field Team concludes that the Denton claims have been adequately prospected and there is no opportunity to discover significant reserves of manganese in the zone for which exploration is proposed, and therefore recommends that the application be denied.

We concur in the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

JHopkins:foc
4-26-54
cc to: Docket
Code 400
Adm. Reading File

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

400

224 New Customhouse
Denver 2, (1954.)
?

March 30, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration, Attention: 200

From: Field Team, Region IV

Subject: Report of Examination - DMEA Docket 2613 (formerly DMEA-3223 cancelled) (Manganese), Ace Building and Roofing Supplies, Denton Mining Claims, Greenlee County, Arizona.

Enclosed are four copies of the report of examination on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

W H King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

(Date)

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

COPY

224 New Customhouse
Denver 2, Colorado

March 30, 1954.

Mr. Raymond Godfrey and Mr. Turner Godfrey
Ace Building & Roofing Supplies
Safford, Arizona

Re: Docket DMEA-2613 -
Cancelled DMEA-3223

Gentlemen:

Reference is made to your application for Government aid on the Denton Mining claims.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of Manganese is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. King
Field Team, Region IV

/s/ A. H. Koschmann
Field Team, Region IV

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

March 30, 1954.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Report of Examination - DMEA Docket 2613 (formerly DMEA-3223 cancelled) (Manganese), Ace Building and Roofing Supplies, Denton Mining Claims, Greenlee County, Arizona.

Enclosed are six copies of the engineering report of examination on the subject docket.

The applicant requested $23,660.00 to explore the south fracture zone on the Denton claims.

The examining engineer believes that the proposed exploration would not result in the discovery of a significant amount of manganese and he recommends that the application be denied. We concur in this recommendation.

W. H. King

W. H. King

Enclosures

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

March 1, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: Geologic Report, Ace Building and Roofing Supplies Company, Greenlee County, Arizona (manganese), DMEA 2613 (amended) or DMEA 3223 (cancelled)

Enclosed are 9 copies of a geologic report by John N. Faick of the U. S. Geological Survey covering the above subject.

It has been recommended that the application be denied.

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 4126, University Station
Tucson 5, Arizona

February 26, 1954

Memorandum

To: A. H. Koschmann

From: J. N. Faick, Tucson, Arizona

Subject: Geologic Report, Ace Building and Roofing Supplies Company, Greenlee County, Arizona (Manganese), DMEA 2613 (amended) or DMEA 3223 (cancelled).

Enclosed are the original and 8 copies of a report on the above subject by John N. Faick.

This report recommends denial of the application for Government assistance because the proposed exploration probably will not result in discovery of significant reserves of manganese.

John N. Faick
Geologist

JNFaick:mvt

Copies to Koschmann (8)
Sterns
Shride

February 25, 1954

Memorandum

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

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

Subject : Proposed Amendment, Contract Idm-8494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Claims, Greenlee County, Ariz. (Application originally docketed as DMEA-3223).

Enclosed are original and 5 copies of a report by W. R. Hardwick of the Bureau of Mines on the request of Ace Building & Roofing Supplies to do $23,660.00 worth of additional exploratory work on the Denton manganese claims in Greenlee County, Ariz. This company originally obtained a contract in February 1953 to explore the manganese deposit on the Denton Nos. 5 and 6 claims by shaft sinking, drifting and crosscutting. This project was terminated by mutual consent of the operator and the Government in November 1953 without the discovery of any significant quantity of manganese ore.

In December 1953, Ace Building & Roofing Supplies again applied to the Defense Minerals Exploration Administration for assistance to explore the manganese deposits on the Denton Nos. 1, 2 and 3 claims. This application originally was docketed as DMEA-3223, but this docket number later was cancelled by the Washington office and combined with the original Docket DMEA-2613, contract Idm-8494, as a requested amendment. In this request, the applicant proposed to explore the manganese-bearing zone by first clearing surface debris with a bulldozer, then sinking 30 test pits along the zone, each pit to be 4 by 6 by 10 feet in size, for a total cost of $23,660.00.

On January 28, 1954, I visited the Denton claims with William R. Hardwick of the Bureau of Mines. On February 2 and 3, 1954, I had Hardwick and John F. Haynes of the Bureau of Mines visit the property, survey the surface and all of the principal mine workings and sample all outcrops on Denton Claims 1, 2 and 3.

CC W. H. King (5)
DMEA-2613 (3223)
DF

WRStoeme:frj

Although the manganese-bearing fracture zone on the Denton Nos. 1, 2 and 3 claims is very narrow, some ore was mined from it during World War I. The property was known then as the Thurston and Hardy mine and was described by Jones and Ransome in U. S. Geological Survey Bulletin 710-D, pages 130-132. Some of these old workings are shown in figures 2 and 3. Much or most of the near surface ore was mined at that time so it seems doubtful if any further exploration work on the surface would uncover additional significant quantities of ore. Sampling by Hardrick and Haynes seems to indicate that the remaining surface ore probably would average only about 2.5 percent manganese. As explained by Hardrick, it would seem impossible for the operators to make a profit on this grade ore.

I concur with Hardrick's report and recommend that further exploratory assistance be denied.

Walter R. Storms

Walter R. Storms

ACE BUILDING and ROOFING SUPPLIES COMPANY

(MANGANESE)

DENTON MINING CLAIMS

GREENLEE COUNTY, ARIZONA

DMEA 2613 (amended) or DMEA 3223 (cancelled)

by

John M. Faick

Geologist, U. S. Geological Survey

ACK BUILDING and ROOFING SUPPLIES COMPANY

(MANGANESE)

GREENLEE COUNTY, ARIZONA

DMEA 2613 (amended) or DMEA 3223 (canceled)

by

John N. Faick

Geologist, U. S. Geological Survey

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CONCLUSIONS AND RECOMMENDATIONS	4

ILLUSTRATIONS

Figure 1 LOCATION MAP	See Engineering Report
Figure 2 SURVEY OF DENTON CLAIMS	See Engineering Report
Figure 3 SECTION - SOUTH ORE ZONE	See Engineering Report

INTRODUCTION

The Defense Minerals Exploration Administration has received an application from the Ace Building and Roofing Supplies Company for Government assistance in exploring the South ore zone on the Denton claims (see fig. 2) near Duncan, Arizona. The application was originally docketed as DMEA 3323, but this was later canceled by DMEA and the application was combined with a previous contract, Idm-X 494, DMEA 2613. The original application (DMEA 2613) and the owner's consent to lien covered all of the Denton claims, and included the claims upon which exploration is proposed by the new application.

The applicant proposes to explore the ore zone by stripping overburden from the outcrop with a bulldozer, and by sinking 30 prospect pits, each 10 feet deep into the ore zone. The applicant estimates the proposed exploration will cost $23,660, of which the Government's share will be 75 percent.

This writer is familiar with the geology of the Denton claims, as a result of previous examinations, therefore did not re-examine the property for the current application. This report is based on data previously collected by this writer and on data obtained from the examiner for the Bureau of Mines, and from data submitted by the applicant.

GEOLOGY

The south zone (see fig. 2) for which exploration is proposed is exposed in several places throughout a strike distance of about 2500 feet. The ore zone, which is localized along a fault zone in grayish-brown vesicular basalt, strikes

easterly and dips steeply northward. The ore consists of granular and vein-like masses of psilomelane which are concentrated along fractures in the basalt. The psilomelane formed as a result of supergene alteration of manganiferous calcite, which is the dominant mineral in the deeper parts of the ore zone. Experience at the north ore zone has shown that commercial concentrations of manganese ore are localized only near the surface and do not extend to depths greater than a few tens of feet.

Ore in the south shear zone was exploited on a small scale during World War I when about 1000 tons of concentrate were produced. Ransome and Jones report developments of the shear zone as follows:

"Two shafts 30 and 84 feet deep have been sunk on the east end of the shear zone, and in addition open cuts and drifts have explored the zone and proved it to be ore-bearing for 200 feet. Here the shear zone is about 10 feet wide, and the ore is found in discontinuous or lenslike veinlets, which in places are 2 feet wide. At the west end of this shear zone there is a shaft 60 feet deep and open cuts and drifts aggregating 200 feet. Here the ore is contained in a fairly distinct vein about 14 inches wide."

The vein has been prospected by several other shallow shafts and test pits, but there is no evidence to indicate that significant amounts of manganese concentrate have been produced other than the 1000 tons mentioned above. The old dumps, and some of the near surface material on the west end of the ore zone have been reworked by the applicant. The ore tends to be localized in shoots, and is not everywhere present along the shear zone. Some of the old workings are caved and inaccessible.

Jones, E. L., Jr. and Ransome, F. L., Deposits of manganese ore in Arizona: U. S. Geological Survey Bull. 710-D, pp. 130-132, 1920.

GRADE AND RESERVES OF ORE

Analyses of 6 samples from the south ore zone are as follows:

Number	Description	Width in feet	Percent Mn
12946	West end of ore zone	10.6	4.2
12948	Estimated 1000 ton stockpile	----	2.6
12752	Shaft Pillar	2.0 (?)	15.5
12949	Central part of ore zone	9.6	2.5
12950	Eastern part of ore zone	3.0	1.9
13801	Grab sample of dump		1.4

These samples indicate the grade of ore the applicant proposes to mine. It is possible to up-grade this material by selective mining, sorting, or milling. The concentrate produced from this ore zone, reported to be about 1000 tons, resulted from mining and milling the highest grade ore that was found at or near the surface. Locations of the samples are shown on Figure 2.

The highest grade ore, and the largest ore bodies appear to be practically mined out, and the remaining material is very low grade as indicated by the above samples. The content of manganese in the ore undoubtedly decreases with increasing depth, as was proved to be the case on the north ore zone now being mined. Recent development at the west ore shoot in the south zone exposed manganiferous calcite, or protore, within about 10 feet of the surface, a condition nearly identical to conditions found in the north ore zone. The ore in the south zone is too low grade to be minable, as the operator's experience shows the minimum minable grade is about 5 percent manganese under very favorable operating conditions.

Ore reserves are relatively small; however, several thousand tons of material containing 2 or 3 percent manganese are present along the ore zone.

CONCLUSIONS AND RECOMMENDATIONS

The south ore zone on the Denton claims has been adequately prospected and whatever ore remains can be mined by shallow trenches and open stopes without additional exploration. The minable ore occurs in narrow zones at very shallow depths and there is no opportunity to discover significant reserves of manganese in the zone for which exploration is proposed; therefore it is recommended that the application be denied.

February 25, 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 : Pending Amendment to Contract, Docket DMEA-3223 (cancelled by Washington office, and combined with DMEA-2613, - terminated contract E494).

Raymond and Turner Godfrey, acting as partners under the name of Ace Building and Roofing Supplies, 620 Third Street, Safford, Arizona, received Government assistance to explore Denton manganese claims Nos. 5 & 6 for manganese ore under contract Idm-E494, Docket DMEA-2613. The exploration work did not directly result in a discovery or development of manganese ore, but did result in a better understanding of the habit of the deposit. Working at their own expense, the operators have discovered a considerable tonnage of indicated and inferred low-grade manganese ore along the north fracture zone (see figure 2).

Encouraged by these discoveries along the north fracture zone, the Operators have presented an application for Government assistance to explore the south fracture zone. This application, docketed as DMEA-3223, Manganese, Ace Building & Roofing Supplies, was forwarded to the Tucson office of the U. S. Bureau of Mines by the Defense Minerals Exploration Administration Field Team, Region IV, for a suitable field examination and report. In a letter, dated February 15, 1954, the Chairman of the Defense Minerals Exploration Administration Operating Committee indicates that Docket DMEA-3223, Manganese, will be cancelled and the Operators' request will be handled as an amendment to Contract Idm-E494, Docket DMEA 2613.

The Denton claims were visited on January 28, 1954 by Walter R. Storms and the undersigned. All cuts and openings in which the south fracture zone is exposed, were examined. The proposed project was discussed briefly with Turner Godfrey. On February 2 and 3, 1954 the property was visited by John F. Haynes, Mining Engineer, Bureau of Mines, and the undersigned. Denton claims Nos. 1, 2, and 3 were mapped by a stadia and transit survey, and samples were taken at suitable locations where the south fracture zone was exposed. The proposed project was discussed with Raymond Godfrey who had been absent when the property was visited on January 28, 1954.

CC W. H. King (Orig. & 5)
DMEA-2613 (3223)
DF

WHHardwick:frj

Docket DMA-2613, Contract Idm-E404, which has just recently been completed, dealt with the exploration of the north fracture zone. This new proposal contemplates exploration work on the south fracture zone. The south fracture zone differs from the north zone in that the total width is much less. The lenses and nodules of manganese minerals are larger individually, but occur only along a single narrow zone.

Manganese minerals were observed in the south fracture zone at a point 100 feet west of the west end line of Denton No. 1 claim (figure 2). From this point, ore has been mined at intervals along the strike of the fracture for a distance of 2,400 feet to the east, in only one place is there an interval of any considerable length where the vein is not exposed, and that is an interval of about 600 feet at the east end line of Denton No. 1 claim.

As indicated on figure 2, the fracture zone is exposed at numerous points along its strike, and with very little hand work, it could be sampled at these points. On February 2, 1953, five samples were taken at points as indicated on the attached figure 2. These samples are believed to be indicative of the grade of ore that could be mined by the method proposed by the operator. These samples are as follows:

Sample No.	Percent Mn	Width Sampled
13046	4.2	10 ft. 6 in.
13048	2.6	grab sample
13049	2.5	9 ft. 6 in.
13050	1.9	3 ft. 2 in.
13051	1.4	grab sample
Average	2.5	

During 1917 and 1918 this south fracture zone was worked quite extensively by shallow underground methods. With the low priced labor then available, shallow shafts and cuts were dug along the fracture zone and the hard lumps of manganese ore were sorted out and washed by hand to give a shipping product reported to run 45 percent manganese.

The dumps from these early operations have been the source of some of the 98 tons of concentrates which the operator has reported for 1953. The ground along the fracture zone is soft and all of the old workings have caved.

Assuming that the fractured zone could be mined to a depth of 15 feet and a width of 12 feet, 12 tons of ore per linear foot is inferred. Furthermore, assuming that the fracture zone will be productive for two thirds of its length, or 2,000 feet, 24,000 tons of ore might be discovered.

In taking the samples reported above, the mining plan of the operator was considered, and these samples are believed to represent the probable grade of the material that will be mined, or 2.5 percent manganese.

PROPOSED EXPLORATION PLAN AND COSTS

The operator proposes to clean all overburden from the fracture zone and sink 4 by 6 by 10 feet test pits at favorable points along the strike of the fracture zone. The costs proposed by the operator are as follows:

30 - 4 by 6 by 10 foot test holes @ $750.00 each	$22,500.00
30 - Manganese assays @ $2.00 each	60.00
100 Hours bulldozer rental @ $11.00	1,100.00
Total cost estimated by operator	$23,660.00

The cost proposed by the operator for assay and bulldozer seems reasonable. In the type of terrain involved, a length of vein approximately 300 feet long could be stripped in an 8-hour shift. Allowing two shifts for preliminary roads, the 100 hours requested by the operator would permit stripping approximately 3,000 feet of vein.

The cost of $750.00 proposed by the operator for sinking 4 by 6 by 10 foot test pits appears to be excessive. A 4 by 6 by 10 pit is the ordinary requirement for annual assessment work on a mining claim and has been traditionally valued at $100.00. Using a compressor, and paving breaker, it is estimated that two men could excavate these pits at the rate of one-half foot per hour or 4 feet per shift and the costs might be as follows:

	Est. Cost per Shift
Tools & Equipment	
Compressor rental	$4.00
Paving Breaker, hose, points, etc.	3.00
Labor	
Operator @ $2.00 per hour	16.00
Helper @ $1.50 per hour	12.00
Miscellaneous supplies	
Gasoline & grease	2.20
Insurance	2.80
Total estimated cost per shift	$40.00

Assuming an advance of 4 feet per shift and allowing one-half shift per pit for moving, three shifts would be required for each pit for a total cost of $120.00, or $12.00 per foot. Adding $3.00 per foot for Supervision and Contingencies, a total cost of $15.00 per foot, or $150.00 per test pit would seem reasonable.

Using the above costs and restating the bulldozer work on a per foot basis, a reasonable estimate of the costs of the project would be as follows:

Clear overburden from 3000 feet of vein or fault zone @ 40¢ per linear ft.	$1,200.00
Dig 30 test pits 4 x 6 x 10 @ $150.00 each	4,500.00
30 manganese assays @ $2.00	60.00
Total estimated cost of project	$5,760.00

PROPERTION COSTS

Based on costs developed in the completion report for DMEA-2613, the project just completed, a cost of $6.83 per ton of ore is indicated. This cost includes mining, milling and depreciation. Assuming a price of $2.20 per unit and a recovery of 75 percent, an ore with a manganese content of 4 percent would be required to break even. Thus, the average of the samples taken during the examination (2.5 percent manganese) indicates that the expected ore would not be economical.

CONCLUSIONS

Based on the examination of the property and the above analysis of the problems involved, the following conclusions are indicated:

1. The south fracture zone (see figure 2) is already exposed at numerous points where it could be sampled.

2. Samples taken during the field examination indicate that the ore discovered would probably average below an economical grade.

3. All high-grade sections of this fracture zone have been mined by "gambusine" methods.

4. The operator has based his evaluation of the project on the batches of dump material that was rejected from mining high-grade lenses.

5. Considering the already numerous exposures of the vein or fracture zone, and the proposed method of mining, further stripping of overburden should be considered development rather than exploration.

6. The nodules and lenses of manganese minerals are concentrated in one relatively narrow zone. Although they have occurred in larger single masses than they did along the northern fracture zone, the narrow zone in which they do occur makes excessive dilution unavoidable.

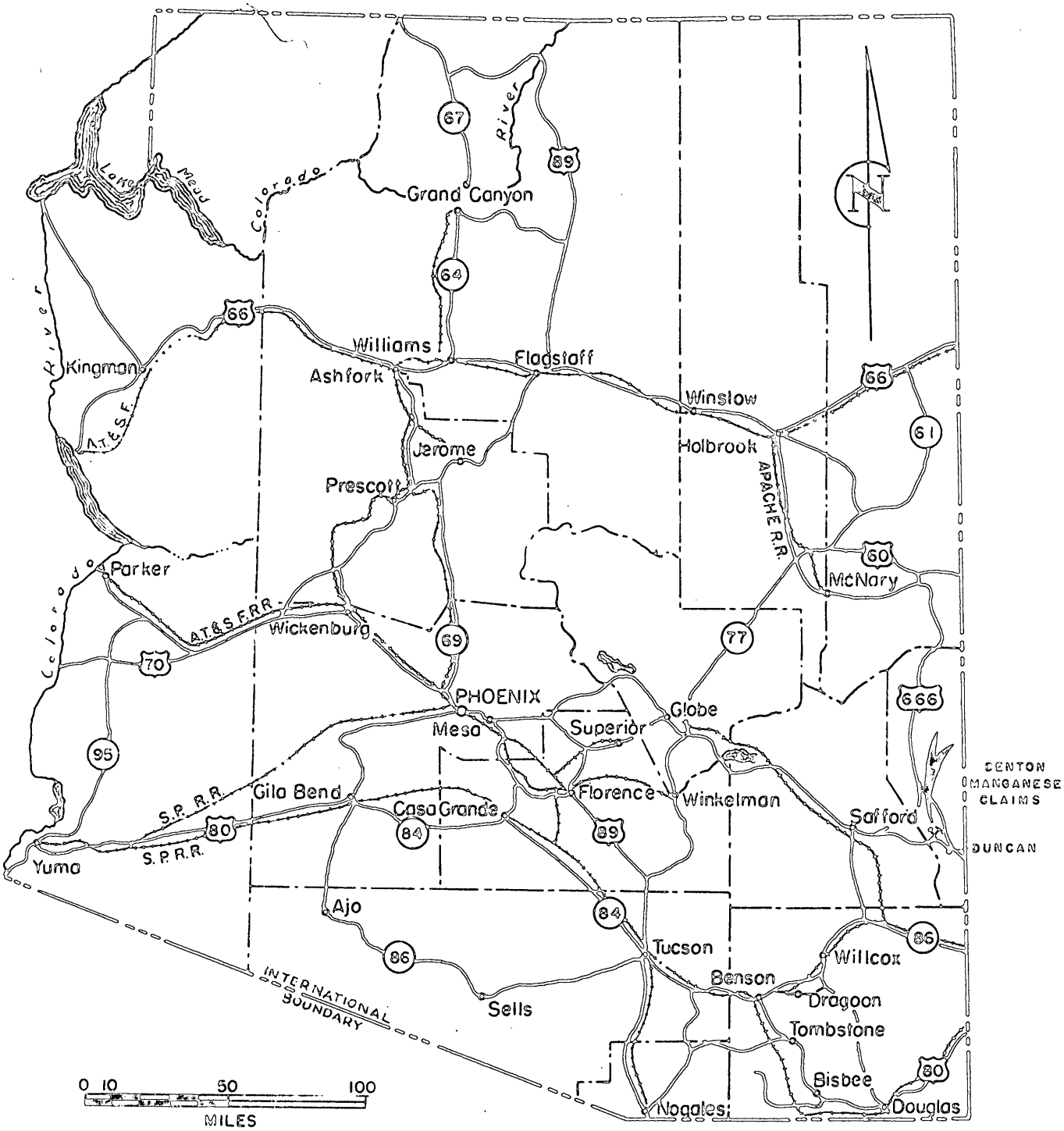
7. Although no samples were taken, visual observation indicates that many of the remaining dumps from old underground workings can be recovered and milled at a profit by the operator in his present mill.

RECOMMENDATIONS

It is believed that the proposed exploration project will not result in the discovery of a significant deposit of ore and furthermore, it is believed that the proposed project is partly development. Therefore, it is recommended that the operator's request be denied.

William R. Hardwick

William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV



DMEA 2613

FEB. 1954

FIGURE I. - LOCATION MAP

DENTON MANGANESE CLAIMS GREENLEE COUNTY, ARIZONA

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?_____

Reviewed by:_____

Date_____

71

Final Audit made
Jan. 11, 1934.

Offered [illegible] $8,122.00

Credit participation $6,091.50

FEB 15 1954

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

Re: Docket No. DMEA 2613 - Manganese
Ace Building and Roofing Supplies
Denton #5 and #6 claims
Greenlee County, Arizona
Contract No. Idm-E494

Dear Mr. King:

Reference is made to the subject docket and the final reports enclosed with your memorandum of January 21, 1954. Tentatively we do not now plan to certify the subject project.

However, your reference to a request by the Operator for additional work was noted. Docketing the Operator's request for additional work as a new application appears on review to have been an error. Both the original application and the Owner's Consent to Lien covered all the Denton claims. We are, therefore, cancelling Docket No. DMEA 3223 - Manganese, Ace Building and Roofing Supplies, and transferring the contained data to Docket No. DMEA 2613. This case will be handled like that of the Lupton Mining Company (Docket No. DMEA 115, Contract No. Idm-E6).

Because a Field Team examination of the proposed exploration has been scheduled, we will hold the subject docket in abeyance until we receive the Field Team's report.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Philip W. Guild

Member, Geological Survey

cc: DOCKET
FT, REGION IV
CODE 400
OPER. COMMITTEE
ADM. READ. FILE
LOUIS PAVLIDES, USGS
GILBERT DeHUFF, USBM

FARutledge/ls 2/12/54

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

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

Re: Docket No. DMEA 2613 - Manganese
Ace Building and Roofing Supplies
Denton #5 and #6 claims
Greenlee County, Arizona
Contract No. Idm-E494

Dear Mr. King:

Reference is made to the subject docket, the final reports of the Operator and Field Team, and the question of payment by the Operator of the Government's royalty where a discovery or development under the contract was not made.

Because no discovery or development from which production may be made has resulted from the work under the subject contract, no certification may be issued. Therefore no royalty will be due the Government on future production from the lands described under Article 2 of the contract. However, if the Operator requests additional work which is warranted in the opinion of the Field Team and meets with our approval, such work may be added to the subject contract. In case a discovery results from the additional work, royalty up to the total amount of the funds expended would be due the Government.

Please, therefore, advise us whether the Operator has requested additional work, and let us have your comments.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

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

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

Re: Docket No. DMEA 2613 - Manganese
Ace Building and Roofing Supplies
Denton #5 and #6 claims
Greenlee County, Arizona
Contract No. Idm-E494

Dear Mr. King:

Reference is made to the subject docket and the final reports enclosed with your memorandum of January 21, 1954. Tentatively we do not now plan to certify the subject project.

However your reference to a request by the Operator for additional work was noted. Because we have not received copies of this request, it would be appreciated if you would give us details of the additional work and the sums of money required. Your comments and recommendations on the merits of the additional exploration proposed will also be appreciated.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Martin
Selfridge
Hoffman

Mr. Robert E. Adams, Chief
Operations Control and Statistics Division

February 12, 1954

Administrator, DMEA

dmea 2613

Region IV delegation applications

In order to familiarize the divisions with the Region IV delegation projects at the earliest possible moment, please route for surnaming by the divisions concerned all letters to Region IV assigning contract numbers for such applications.

C. O. Mittendorf

Administrator

WSMartin/ls

cc: [redacted]
Code 400
Adm. Read. File

400

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

February 8, 1954

Memorandum

To: [illegible] Martin, [illegible]

From: F.... Guild, USGS

Subject: Docket [illegible]-2019 (Manganese), Contract [illegible]-1494, Ace Building and Roofing Supplies, Senton Manganese Claim, Greenlee County, Arizona

Summary: The final engineering report by [illegible] Hendrick, [illegible], and the final geologic report by J.[illegible] Welch, [illegible], cover work done to explore the subject property. The two reports agree that no ore was found as a direct result of the [illegible] exploration, and that the work did indirectly lead to the discovery of a relatively large body of low-grade ore through the stimulation that the [illegible] program gave to other types of exploration in the property. The operators believe that the loan was advantageous to them and feel obligated to pay royalties on all ore produced from the subordinated area. The Bureau of Mines report recommends that no certification of discovery be made, but the Survey report recommends certification.

Discussion: Evidence for the alleged ore discoveries consists of some eight trenches spaced 50 feet apart across the ore zone east and west of the exploration shaft. Sampling is said to have shown manganese contents of 2 to 9 percent across widths of 40 to 60 feet, but precise data do not seem to be available. The written descriptions do not tally well with the sketch maps (Fig. 4, [illegible] report; Fig. 3, [illegible] report) and the maps do not correspond very closely. There seems little doubt that some manganese can be concentrated and sold from this deposit, although it would probably not be worthwhile to attempt to block it out more precisely in

in advance of mining, since it lies close to the surface and can be easily mined and concentrated.

Recommendation: The question of certification seems to be a legal one. If more exact data are needed, the problem should probably be referred to the field for remapping and perhaps sampling, but the tonnage involved is not great and complete data can only be gained by a considerable expenditure of funds. This reviewers inclination would be not to certify.

... Guild

402

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

COPY

224 New Customhouse
Denver 2, Colorado

January 21, 1954

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region IV

Subject: Docket DMEA 2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Claim, Greenlee County, Arizona

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

1. Original and one copy of the operator's final report.

2. Original and three copies of the final geologic report by the U. S. Geological Survey.

3. Original and three copies of the final engineering report by the Bureau of Mines.

Final payment to the operator was processed by this office January 12, 1954, in conformance with the final report of review by the Contract Administration and Audit Division dated January 11, 1954.

The project work under a short form contract at agreed unit costs consisted of construction of a hoist house, shop, and headframe, 60 feet of shaft sinking, 60 feet of crosscutting, and eleven manganese assays at a total accepted cost of $8,122.00, in which the Government participated to the extent of 75% or an amount of $6,091.50.

The results of work under Stage I did not warrant approval of work under Stage II, however, the work under Stage III was modified and limited by Amendment No. 2 which authorized 60 feet of crosscutting and six manganese assays.

The exploration work did not directly result in a discovery or development of manganese ore, however the work did provide information that resulted in a better understanding of a habit of the deposit, which is of considerable value to the operator and encouraged them in additional work at their own expense which resulted in a considerable tonnage of indicated and inferred low grade ore. As indicated in the geologist's and engineer's reports the operator is willing to repay the amount of Government participation in the exploration work.

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(Date)

As a decision relative to the issuance of a certificate of discovery or development appears to involve DMEA policy the matter is referred to the Washington office for review and appropriate actions.

/s/ W. H. King

/s/ E. N. Harshman for
A. H. Koschmann

Enclosures

Mining Division
Region IV

224 New Customhouse
Denver 2, Colorado

January 21, 1954

Memorandum

To: DMEA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Docket DMEA 2013 (Manganese), Contract Idm-5494, Ace Building and Roofing Supplies, Denton Manganese Claim, Greenlee County, Arizona

Enclosed are the original and eight copies of the final engineering report by R. J. Hardwick, Bureau of Mines, and transmittal thereof from the Chief, Mining Methods Branch, Mining Division, Region IV, dated January 7, 1954 pertaining to work under the subject contract.

This report has my approval.

W. E. King

Enclosures

Final eng. Report

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(date)

400

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

224 New Customhouse
Denver 2, Colorado

January 12, 1954.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB -1 1954

WSM

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket No. 2613 (Manganese), Contract No. Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona. **FINAL PAYMENT**

Reference is made to our memorandum of December 14, 1953 whereby we transmitted the final Form MF-104, Operator's Monthly Progress Report and Voucher for the period October - November 1953, and instructed you to withhold the amount of $300.00 from reimbursement to the Operator pending receipt of the Operator's final report and a release of the Report of Review by the Contract Administration and Audit Division.

We now recommend that final payment to the Operator be made in conformance with the Report of Review by the Contract Administration and Audit Division, dated January 11, 1954.

Basis for Final Payment

Total accepted cost by Report of Review	$8,122.00
Government participation at 75%	6,091.50
Total prior payments	5,791.50
Balance due the Operator	$ 300.00

W. H. King

300.00
1/20/54 Donna 54

JWT:cwm

cc: Contract
Secretary to the Oper. Comm. (2)
WRStorms
Chron.
JWTownsend

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

224 New Customhouse
Denver 2, Colorado

January 28, 1954.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Docket No. 2613 (Manganese), Contract No. Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Arizona.

Enclosed are two copies of a memorandum to Mr. T. A. Christensen, dated January 12, 1954, relative to final payment under the terms of the subject contract.

Final payment to the Operator in the amount of $300.00 has now been made in conformance with the Report of Review by the Contract Administration and Audit Division, dated January 11, 1954.

W. H. King

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1954

January 7, 1954

Memorandum

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

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

Subject : Final Engineering Report, Contract Idn-E494, Docket DMEA-2613, Ace Building & Roofing Supplies, Benton Manganese Prospect, Greenlee County, Ariz.

Enclosed are original and 8 copies of a final engineering report by W. R. Hardwick of the Bureau of Mines for work done under DMEA Contract Idn-E494. This report has my approval.

Walter R. Storms

Walter R. Storms

cc W. H. King (8)
DMEA-2613
DF

WRStorms:frj

Final Engineering Report

Reviewed by
DMEA OPERATING COMMITTEE

2-1-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

FINAL ENGINEERING REPORT

Contract Idm-6484, Docket DMEA-2813

Ace Building and Roofing Supplies' Denton Manganese Prospect

Ash Peak Mining District

Greenlee County, Arizona

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

January 1954

Reviewed by
DMEA CLEARING OFFICE
2-1-54

CONTRACT Idm-2494, DOCKET DMEA-2613
ACE BUILDING AND ROOFING SUPPLIES' DENTON MANGANESE PROSPECT
ASH PEAK MINING DISTRICT
GREENLEE COUNTY, ARIZONA

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ILLUSTRATIONS

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Raymond and Turner Godfrey, acting as partners under the name of Ace Building and Roofing Supply, applied for Government aid to the Defense Minerals Exploration Administration to explore for manganese on their Denton claims in Greenlee County, Ariz. Assistance was granted under the terms of DMEA Contract Ida-2494, Docket DMA-2613, on February 27, 1953.

The first stage of the proposed project was disappointing and only a part of the second stage was completed. No ore was found by the project. After the initial examination, but prior to the start of the DMEA project, an option was given to W. Allison who discovered an indicated 11,400 tons of ore estimated to contain 5.7 percent manganese. An estimated total of 1,500 tons of concentrate containing 40 percent manganese is indicated and inferred.

Conclusions are as follows:

1. Ore does not extend more than 15 feet deep.

2. No ore was discovered by the DMEA project, but 11,400 tons of 5.7 percent manganese ore are indicated by other work.

3. The low-grade ore can be readily concentrated.

4. The Godfrey brothers can make a profit by operating on a small scale.

5. The Godfrey brothers are willing to pay back the cost of this project from royalty even though no ore was discovered by the project.

Since no ore was discovered by the project and the property was not benefited by the work accomplished it is recommended that no certification be made.

INTRODUCTION

Raymond and Turner Godfrey, acting as partners under the name of Ace Building and Roofing Supplies, applied for Government aid to explore for manganese ore on the Denton manganese claim near Duncan in Greenlee County, Ariz. The assistance was recommended by the examining engineers and approved by the Acting Administrator, Defense Minerals Exploration Administration, on February 27, 1953. The application was assigned DMEA Docket No. 2613 and the contract which resulted was numbered Idm-2494.

ACKNOWLEDGMENTS

The operators, Raymond and G. T. Godfrey, have been particularly helpful in supplying information. Acknowledgment also is made to members of the Arizona Bureau of Mines whose names are mentioned elsewhere in this report.

LOCATION

The Denton manganese claims are in two groups about 1,200 feet apart and are situated in sections 27, 34, and 35, T. 7 S., R. 30 E., Greenlee County, Ariz. The DMEA contract involved only the northernmost group, or the unpatented Denton No. 5 and Denton No. 6 claims. They are reached by turning north off of U. S. Highway 70 at a point 30 miles east of Safford and driving 1½ miles over a serviceable dirt road to the claims.

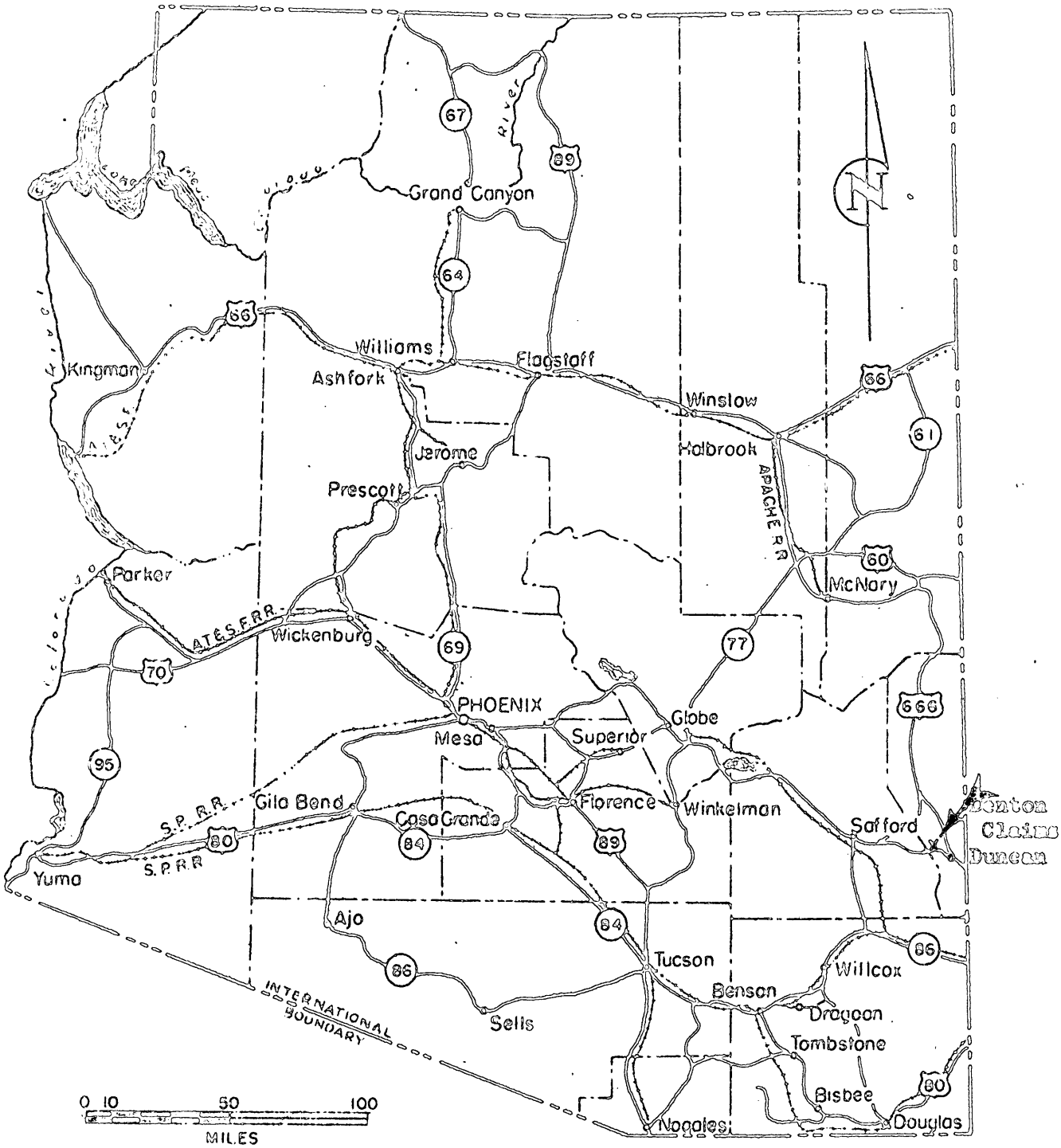


Figure 1 - Location Map, Denton Mining Claims, Greenlee County, Arizona

DMEA 2613. Aco Building and Roofing Supplies Company

The area is one of rolling hills. The drainage flows northward to the Gila River. There are no permanent streams, but a drilled well half a mile south of the claims is reported to supply 30 gallons of water per minute. The nearest railroad point is Sheldon, Ariz., 8 miles east of the project. There is a Government manganese purchasing depot at Deming, N. Mex. approximately 100 miles from the prospect. Supplies and labor are available in Safford.

HISTORY AND PRODUCTION

As the Thurston and Hardy mine, the property was operated during 1917 and 1918 and is reported to have produced about 1,000 tons of ore containing 45 percent manganese. An unsuccessful attempt was made to reopen the property in 1942 and one car of ore is reported to have been produced at that time. All of this ore came from the southernmost fracture zone which was mined to a depth of 80 feet.

In 1953, the present operators secured control of the property and produced approximately 55 tons of jig concentrates which were sold in small lots and probably averaged 40 percent manganese. At that time the operators discovered a favorable outcrop on claim No. 5 in the northern group and mined 13.8 tons from an open-cut which averaged 12.8 percent manganese. This lot was rejected by the General Services Administration at Deming, but tests by G. H. Gonevear, metallurgist, Arizona Bureau of Mines, indicated that this ore could be concentrated in a jig to make a concentrate containing plus 40 percent manganese.

The operators and the DMEA examining engineers agreed that the northernmost fracture zone appeared favorable and an exploration program was set up that provided for sinking and drifting at that location. The open-cut from which the above mentioned 33.8 tons of 12.8 percent manganese ore was mined was chosen as the most favorable location.

During the life of the contract the operators produced concentrates in their mill from ore taken from the southern fractured zone, from a small open pit approximately 200 feet south of the project shaft, and from other points on the property. A total of 87.67 tons of concentrates were produced with an average content of about 43 percent manganese. Raymond Godfrey stated that not over 10 tons of ore were milled from the DMEA project and that this ore produced concentrates with a value of $100.00.

DESCRIPTION OF WORK COMPLETED

The work completed consisted of building a small temporary hoist-house, shop, and headframe; sinking 60 feet of shaft; and driving 60 feet of crosscut. Eleven manganese assays also were included.

Work on the contract was started on April 22, 1953 and completed in November of the same year. Although the operators knew nothing about mining when the project was started, they employed experienced labor and actively pushed the work with the result that the objective was accomplished in a satisfactory manner.

The operators have presented a final report which is considered satisfactory. This was a short form contract and there is no remaining property or equipment in which the Government has an interest.

The progress and cost of the project by month is summarized as follows:

Time Schedule - Work Completed

Month	Work completed		Cost
April	Hoist house	$200.00	
	Shop	500.00	$700.00
May	Head frame	800.00	
	14 ft. shaft @ $75.00	1,050.00	1,850.00
June	34 ft. shaft @ $75.00		2,550.00
July	12 ft. shaft @ $75.00		900.00
August	No work on project pending approval of amendment		0.00
Sept.	23 ft. crosscut @ $35.00		805.00
Oct.	33 ft. crosscut @ $35.00		1,155.00
Nov.	4 ft. crosscut	140.00	
	11 assays	22.00	162.00
Total cost			$8,122.00

The operators did much of the work on the project themselves. They hired two experienced miners during the time the shaft was being sunk and during the time the crosscut was being driven.

GEOLOGY

A separate report will be submitted on the geology by John N. Faick, geologist, U. S. Geological Survey, so the subject is covered only briefly here.

A brownish vesicular basalt is cut by a series of parallel fractures for a width of 40 to 60 feet. Some of these fractures have been penetrated by mineralizing solutions that have deposited silica, barite, and white calcite. Locally, a black calcite that owes its black color to finely disseminated crystals of pyrolusite is

abundant. When this material is exposed to weathering the manganese is altered to psilomelane and deposited in thin seams as a crust on the basalt. The seams vary in thickness from a thin film to a maximum of one half an inch thick, and are scattered over the entire width of the fractured zone. Occasionally many seams occur closely together to form a thick zone of ore, as for example the location where the shaft was started. The gangue separates easily from the manganese minerals.

When the property was originally examined, much of the fracture zone was covered with detritus. The only good exposure was an open cut from which 33.8 tons of crude ore containing 12.8 percent manganese had been mined. The shaft was collared in the bottom of this trench. The trench was still in ore although the grade had dropped from 12 to 16 percent at the surface to 6.7 percent at this elevation. As the shaft was deepened the lense of ore thinned rapidly, and at depth of 14 feet the ore had disappeared.

The shaft was bottomed at 60 feet, then a 60-foot crosscut was driven normal to the strike of the fractured zone. This crosscut cut several fractures, only one of which was mineralized. The mineralized fracture was located from 25 to 30 feet north of the shaft. The mineralization consisted of quartz, barite, fluorite, white calcite, and a black manganiferous calcite, which according to Eldred D. Wilson, geologist, Arizona Bureau of Mines, is probably the primary source of the manganese. The operator has sampled all underground work and found no area with sufficient manganese to be classed as ore. Assay results are shown on figure 3.

ORE RESERVES

All ore that was discovered by the DMEA project has been mined. This ore consisted of a wedge, starting at the collar of the shaft, 6 feet wide, and tapering to a point at a depth of 14 feet. The manganese content at the start was 6.7 percent and at the finish 1.9 percent.

On the Denton No. 5 mining claim, one of the claims subordinated under this contract, some surface trenching and sampling was done by W. Allison after the original DMEA examination, but before work was started on this contract. The work consisted of trenches cut across the fractured zone at intervals of 50 feet. The approximate location of these trenches and the assay value as reported by the operator is shown on figure 2.

At the location of the DMEA shaft, ore of good quality persisted to a depth of 15 feet below the original surface. Assuming that the manganese ore persists to an average depth of 15 feet and accepting the Allison assays as correct, there is an area east of the shaft, approximately 200 feet long and from 40 to 60 feet wide, which will contain 11,400 tons of indicated ore at a grade of 5.7 percent manganese. Assuming a recovery of 75 percent and a final concentrate containing 40 percent manganese, 1,220 tons of concentrate are indicated. West of the DMEA shaft, several larger lenses of ore were exposed by the trenching. They are widely separated by barren material so the average grade is low and a cheap mining method is not applicable. It is probable that some of these lenses can be selectively mined and 200 tons of concentrates are inferred from this

area. This makes a total reserve of approximately 1,500 tons of concentrate. While this ore was found on ground which was subordinated by the RMA contract it was not found by the project.

No appraisal is made of the ore reserves on the southern fracture zone as this ground was not subordinated under the contract.

PRODUCTION COSTS

When the application examination was made the deposit was partly covered by detritus and the examiners conceived a manganese zone 350 feet long and 20 inches to 14 feet wide with ore containing 12 percent manganese. The RMA project proved that this type of deposit does not exist. However, the trenching by Allison has indicated a wide, thin body of surface ore with a grade of 5.7 percent manganese.

This ore, while it has less value, can be mined at a low cost. The operator has not kept records but believes that he will be able to mine this ore for less than $1.00 per ton. The operator also expects to eliminate some of the waste by selective mining, and raise the grade of the ore to be milled. In addition, the operator has reduced his milling costs by discarding oversize from a 2-inch screen. Rejecting this oversize has resulted in increasing the capacity of the mill which now has a capacity of about 35 tons per shift.

The mine and mill are operated by three men (the two Godfrey brothers and one additional hired man). These men expect to process 35 tons per day and recover approximately 3,000 pounds of 40 percent manganese concentrates. When equipment requires repairs, one man repairs the equipment while the other drives a truck load of concentrates (5 tons) to Deming.

The equipment used for the operation is as follows:

1	1945 Chevrolet 1½-ton truck	$1,000.00
1	Compressor, 225 cu. ft.	[illegible]
1	Jackhammer	145.00
1	Ferguson tractor with loader and blade	3,000.00
1	1953 Chevrolet 5-ton dump truck	3,200.00
1	Arc welding rig with attachments	[illegible]
	Various pumps and miscellaneous	1,200.00
	Mill, including screens, jigs and accessories	[illegible]
	Total	$19,145.00

In addition the operator expects to purchase a bulldozer and a wagon drill which he expects to buy second-hand for approximately $6,000.00. This makes a total invested capital value of $19,145.00, or assuming a straight line depreciation rate of one-sixtieth, a cost of $319.08 per month for equipment.

Based on the above reasoning, the operating costs, including depreciation, might be as follows:

Depreciation 1/60 x 19,145.00	$319.08
Labor, 4 men @ $[illegible] x 25 days	2,[illegible]
Power and fuel	160.00
Pay roll tax, insurance, etc.	60.00
Miscellaneous supplies, powder, etc.	1,[illegible]
Total cost per month	$3,[illegible]

Assuming that the mine actually operates 60 percent of the time, or 15 days per month, and that it produces 35 tons per day the production will be 525 tons per month at a cost of $6.85 per ton.

With an ore containing 5.7 percent manganese and assuming a recovery of 75 percent (George H. Rasmussen, metallurgist, Arizona Bureau of Mines, stated 80 percent was indicated by laboratory tests) a recoverable manganese content of 4.27 percent is indicated. At $2.30 per unit this give a value of $9.39 per ton of ore. This indicates a profit of $2.54 per ton of ore before taxes and royalty are deducted.

If a certification is made on the ore discovered by Allison on subordinated ground prior to the start of the DMEA project, the return to the Government is estimated to equal $4.40 per ton of concentrates, or $0.46 per ton of ore. This would amount to a $6,600.00 return on the indicated 1,500 tons of concentrates discovered on the subordinated ground, or slightly more than the $6,091.50 actually expended by the Government.

It should be noted that the above costs are made possible by the ability and willingness of the partners to serve both as operator and repairman for the equipment used, by their working long hours, and by their mechanical experience and ability to improvise and hold the capital investment to a minimum. It should be noted also that the above costs are based on a production of 55.8 tons of concentrates per month while the largest production in any one month so far has been 11.66 tons.

PRODUCTION PLAN

As indicated in the history of the property, the southern fracture zone has produced a larger tonnage of ore over the years than the northern zone. The operator believes that he has large reserves of minable ore in this area in addition to the reserves indicated in the northern zone. The operator has milled ore from the dumps of earlier workings and made a good recovery.

The operator has no engineering information, such as systematic samples to support the above beliefs. He has requested a new DMEA project which will involve sampling surface areas by trenches and test pits. By this method he expects to prove sufficient ore to justify expanding his operation and increasing production. If insufficient ore is found to justify expanding the operation, the partners expect to continue mining dumps and high-grade areas as long as the operation is profitable.

EXPENDITURES

This contract was a short form contract, set up in three stages with total agreed unit costs as follows:

Stage I	$6,010.00
Stage II	3,760.00
Stage III	14,070.00
Total estimated agreed unit cost	$23,840.00

The results under Stage I of the contract were discouraging and only a part of Stage II funds were used. The actual expenditures were as follows:

Stage I	6,010.00
Stage II	2,112.00
Stage III	0.00
Total actually expended	$8,122.00

The Government's part was 75 percent of the agreed estimated unit cost of $23,840.00, or $17,880.00. The amount actually expended was 75 percent of $8,122.00, or $6,091.50, thus leaving an unexpended balance of $11,788.50. All of the $6,091.50 has been paid to the operator except $300.00, which has been withheld pending a final report.

The actual production from the DMEA project is estimated by the operator to be valued at $100.00. Actually the operator kept no records. The records from the General Service Administration's Manganese Purchasing Depot at Deming, N. Mex. show that 87.67 tons of concentrates with a grade of over 40 percent manganese were sold by the operator during the life of this contract. Based on observed, but not measured volume and grade, this production is estimated by the writer to be divided as follows:

	Tons ore	Concentrates	Value
Mined under DMEA project	15	5	$400.00
Mined from subordinated claims	75	10	800.00
Mined from dumps from south zone	—	72.67	[illegible]
Total estimated gross returns	90	87.67	$7,013.60

No royalty has been paid to the Government. The operators have indicated that they are willing to pay royalty on all ore mined from the ore body discovered on subordinated claims even though this ore was not discovered by the DMEA project. John Faick geologist, U. S. Geological Survey, has recommended that a certification of discovery be issued on this basis.

CONCLUSIONS

Based on the above facts the following conclusions are indicated:

1. Along the northern fracture zone the recoverable manganese minerals do not extend more than 15 feet deep as compared with a reported depth of 80 feet on the south fractured zone.

2. No ore was discovered by the DMEA project, but a reserve of 1,500 tons of recoverable manganese concentrates had been indicated on subordinated ground by other work before DMEA project started.

3. The gangue, or weathered basalt parts readily from the ore mineral, psilomelane, when screened wet in a vibrating screen and is easily discarded in a jig to give a marketable product.

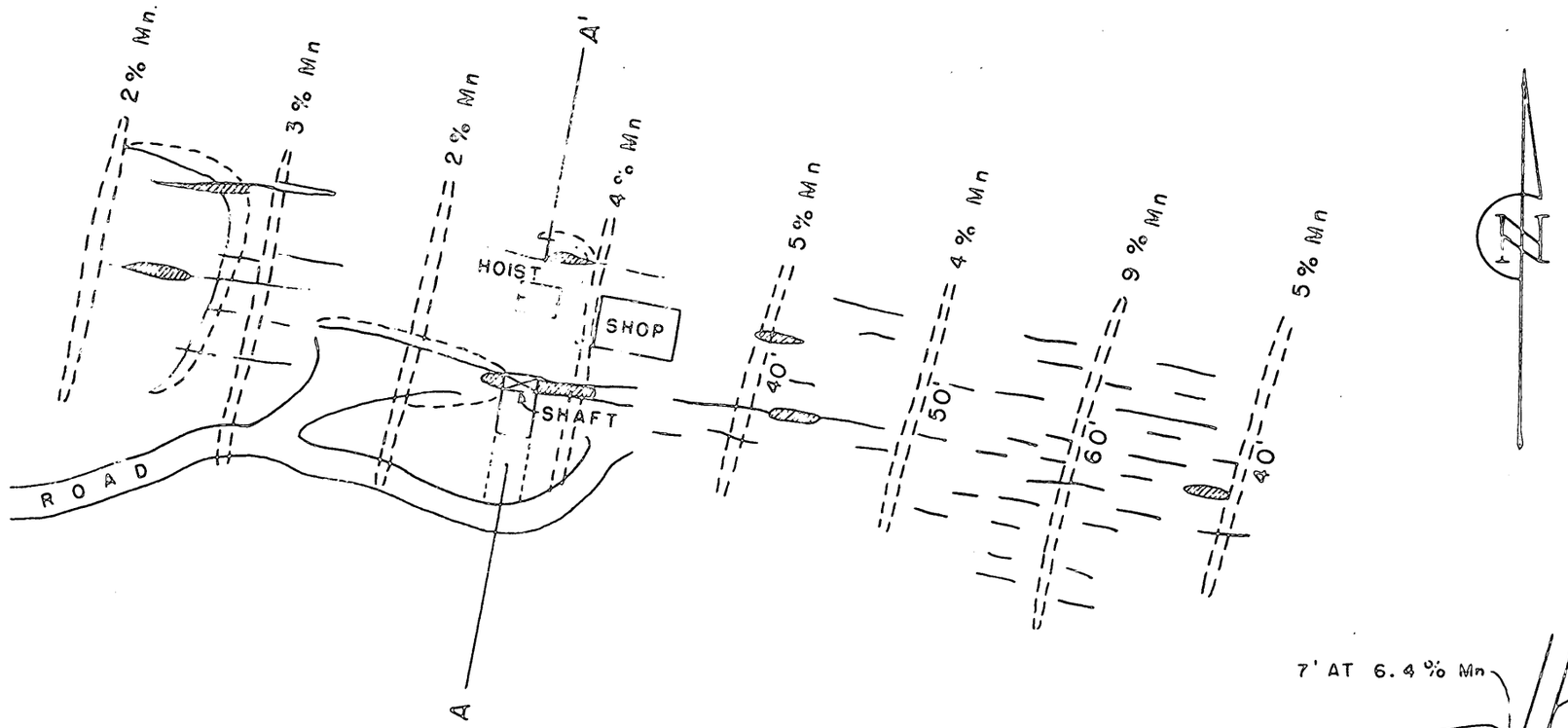
4. The Godfrey brothers can expect to operate at a profit because of low capital investment and highly efficient application of their own labor.

5. The Godfrey brothers have asked for a new project which they believe will prove sufficient ore to justify building a larger mill.

6. Raymond Godfrey, one of the partners, stated that they, the partners, are willing to pay back the Government money. This payment would come from royalty on ore not discovered by work under the DMEA contract, but mined on ground that was subordinated under the contract.

RECOMMENDATIONS

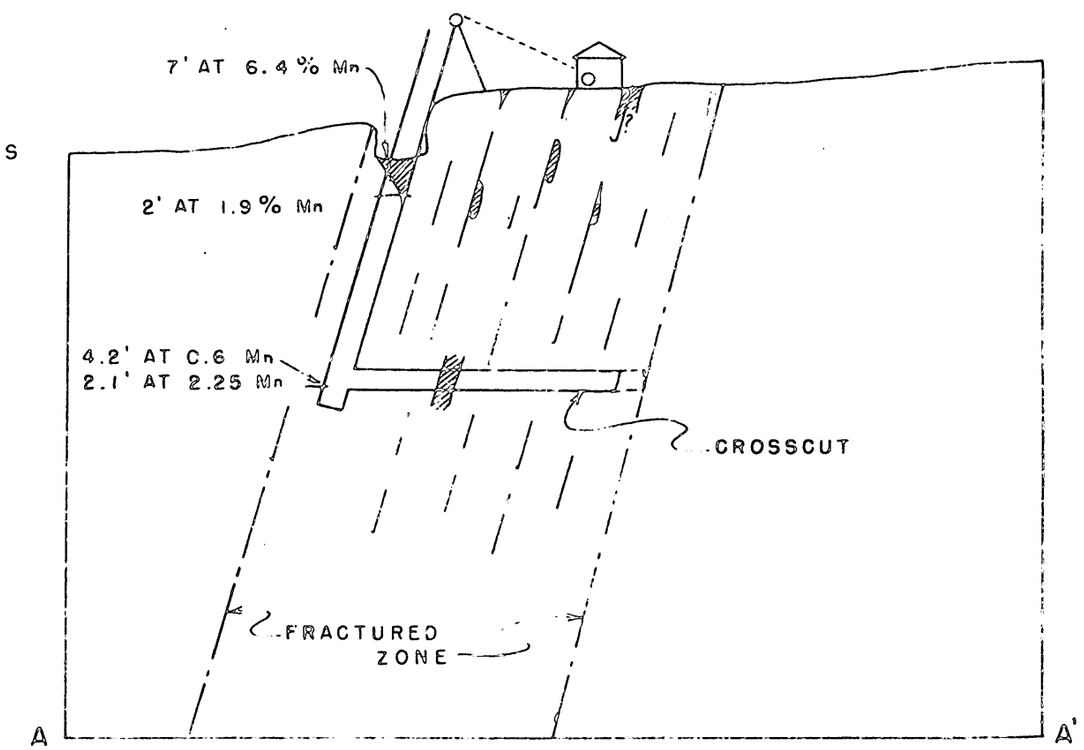
DMEA Circular 26 states: "In suitable cases, the Administrator will certify to the operator, as provided in the contract form, that a discovery or development has resulted from the work under the contract". In view of the fact that no ore was discovered by the DMEA work and this work will serve no useful purpose in the future, it is believed that no "discovery or development has resulted from work under the contract", and it is recommended that no certification should be made.



- MANGANESE MINERALS
- BULLDOZER TRENCH

PLAN OF FRACTURED ZONE

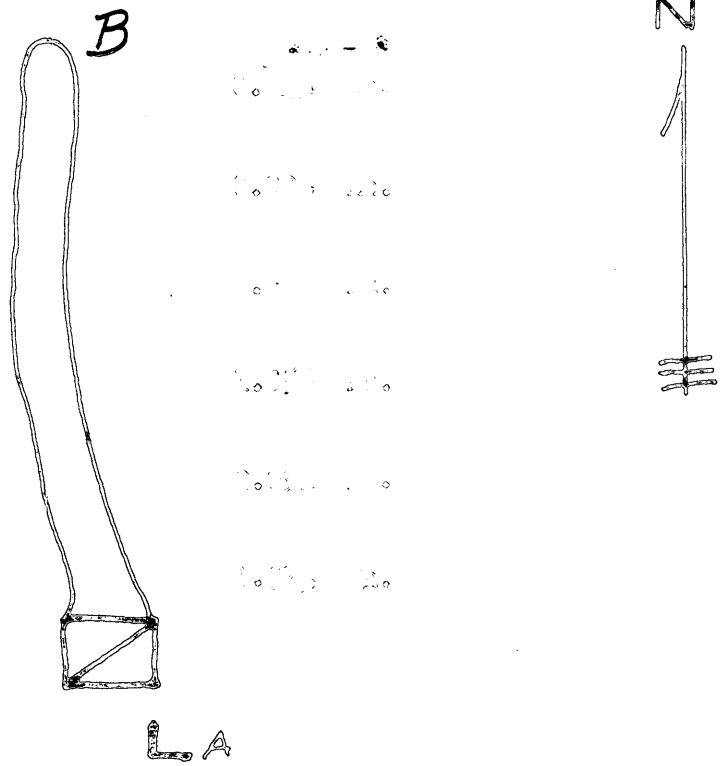
SCALE 1" = 40'



CROSS SECTION

D M E A 2613 FIGURE 4. - ACE BUILDING & ROOFING SUPPLIES JULY 1953

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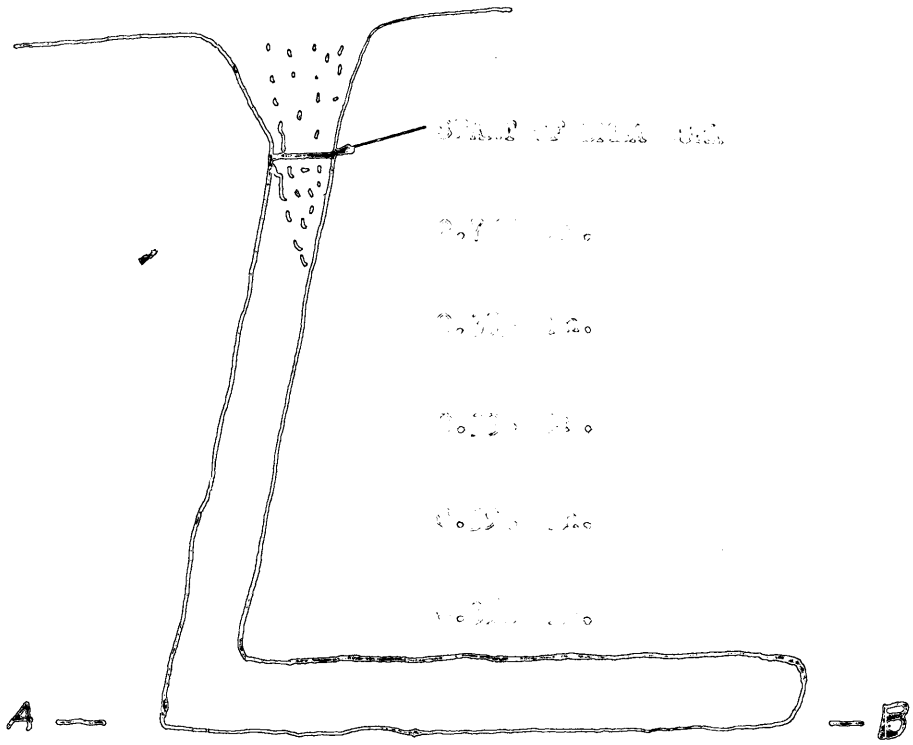
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DEFENSE ELECTRIC POWER ADMINISTRATION
WASHINGTON 25, D. C.

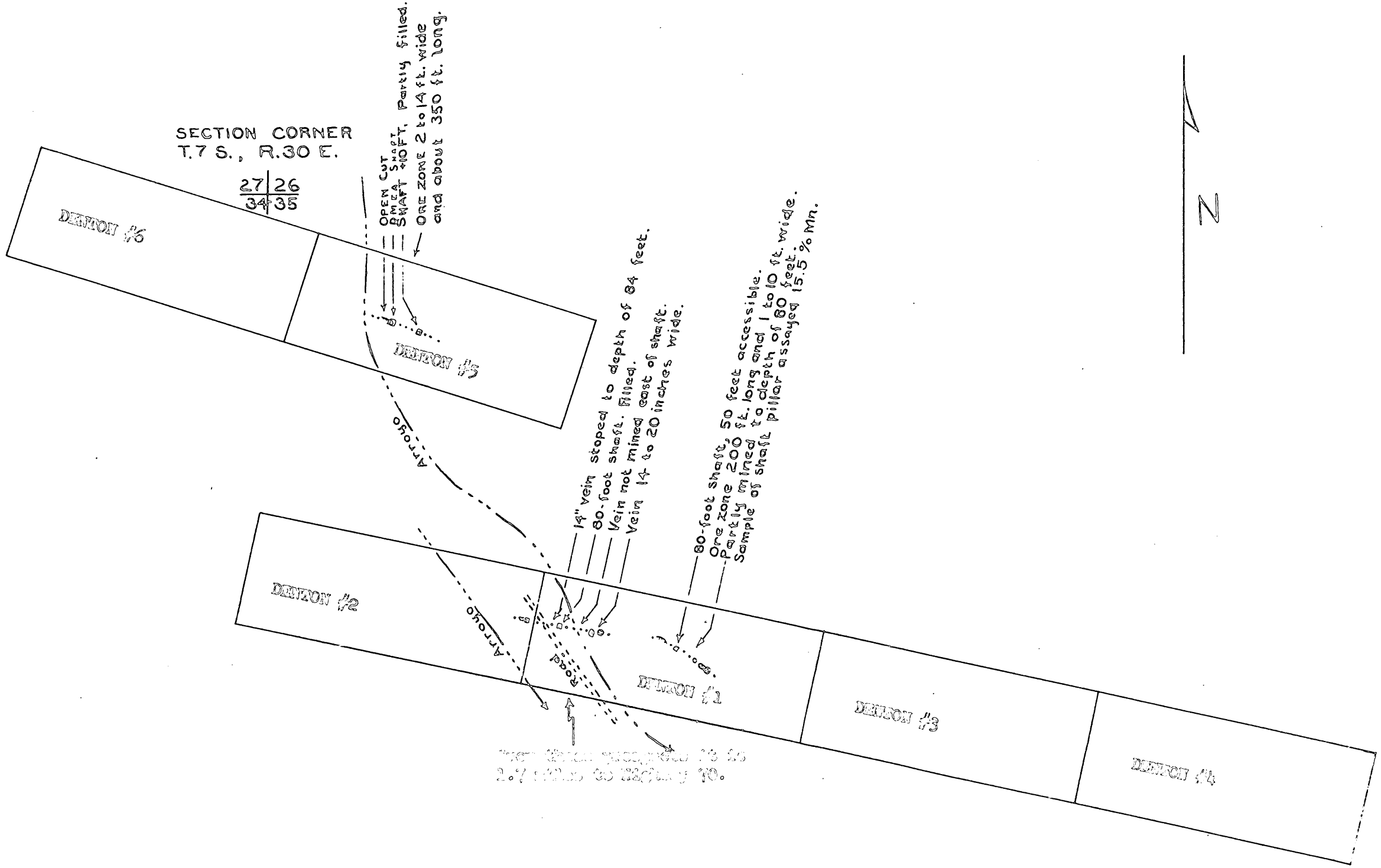

Figure 2 - Sketch Map, showing relationship of Denton Claims and prospect workings, Greenlee County, Arizona

DMEA 2613. Ace Building and Roofing Supplies Company
Scale 1" = 600 Ft.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

January 19, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. M. Koschmann

Subject: Final Geologic Report, DMEA Docket 2613, Contract Ida-6434, Denton Claims, Greenlee County, Arizona

Enclosed are 9 copies of a final geologic report by John N. Falck of the U. S. Geological Survey covering the above docket.

It has been recommended that the project be certified as successful.

A. M. Koschmann
A. M. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

Final Geologic Report

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 4125, University Station
Tucson 5, Arizona

January 14, 1954

Memorandum

To: A. E. Koschmann

From: A. F. Shride

Subject: Completion Geologic Report, Contract Ida-249h (DMEA-8613), Boston Claims (Manganese), Ace Building and Roofing Supplies Company, Greenlee County, Arizona.

Enclosed are the original and 8 copies of the above report by J. E. Faich. The corrections noted in your January 5 memorandum have been taken care of. Your comments are attached.

The report recommends certification as noted on page 7.

A. F. Shride

A. F. Shride
Acting District Supervisor
Arizona - New Mexico

AFShride:mrt

Copies to Koschmann (8)
Storms
Shride

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(date)

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

FINAL GEOLOGICAL REPORT

DMEA DMRA 2513, CONTRACT Idm-2494

ACE BUILDING AND ROOFING SUPPLIES

G.T. GODFREY AND RAYMOND GODFREY, OPERATORS

DENTON MINING CLAIMS

GREENLEE COUNTY, ARIZONA

by

John M. Faick

Geologist, U. S. Geological Survey

November 1953

Reviewed by
DMEA OPERATING COUNCIL
2-1-54
(Date)

FINAL GEOLOGICAL REPORT

DENTON CLAIMS, GREENLEE COUNTY, ARIZONA

ACE BUILDING AND ROOFING SUPPLIES

G. T. GODFREY AND RAYMOND GODFREY, OPERATORS

DMRA 2513, CONTRACT I4m-E194

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INTRODUCTION	1
GEOLOGY	1
ORE RESERVES AND GRADE	4
FUTURE EXPLORATION	6
CONCLUSIONS AND RECOMMENDATIONS	7

ILLUSTRATIONS

Figure 1	Location Map	See Engineering Report
Figure 2	Plan and Section	See Engineering Report
Figure 3	Geological Map of Part of Denton No. 5 Claim	Following Page 2

TABLES

Table 1	Samples and Analyses	Following Page 5

INTRODUCTION

The Denton Mining Claims in Greenlee County, Arizona, (see Figure 1) were explored with assistance from the Defense Minerals Exploration Administration as Project DMEA 2613, Contract Idm-2494. The work was started April 15, 1953, and was terminated October 28, 1953. The exploration work (see Figure 2) consisted of sinking a shaft to a depth of 60 feet and driving a crosscut northward about 60 feet from the bottom of the shaft.

The shaft, which was sunk on a mineralized zone, was inclined southward at 75 degrees. From the bottom of the shaft the crosscut was driven 60 feet northward across mineralized zone which are parallel to the main zone.

The total cost of the DMEA project is $8,122.00, of which the Government's share is 75 percent, or $6,091.50.

In addition to this DMEA project, the surface was explored with trenches dug by Allison Steel Company, and by small pits and trenches dug by the operator.

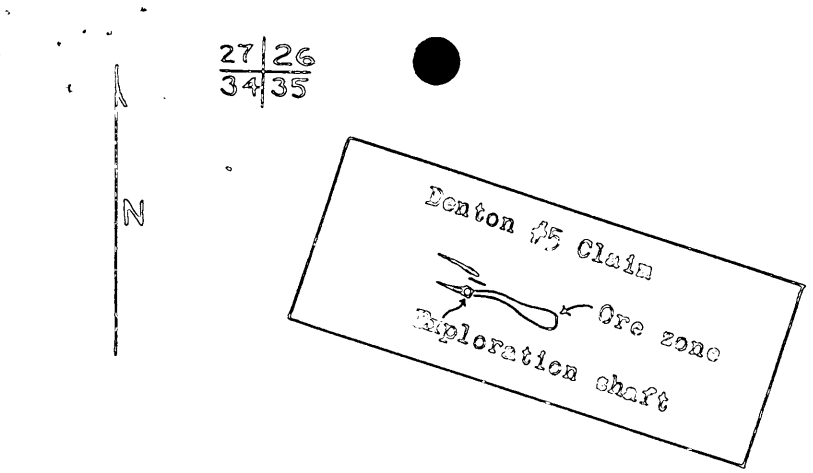
GEOLOGY

The Denton Manganese Mining Claims are situated in T. 7 S., R. 30 E., in the Ash Peak district, about 12 miles west of Duncan, Arizona (see Figure 1). The claims are situated at an altitude of about 4300 feet, in a moderately dissected area near the summit of the Peloncillo Mountains.

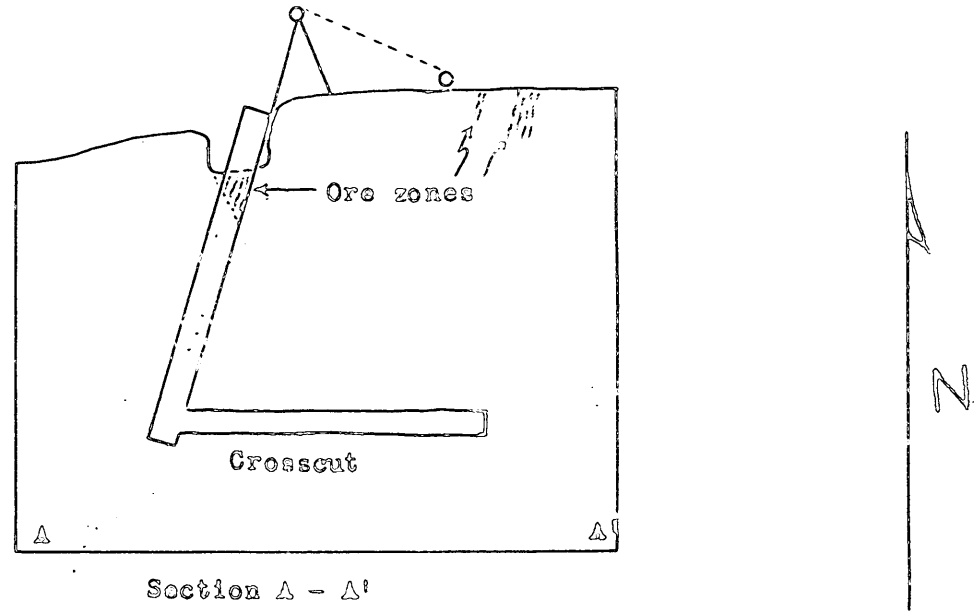
The country rocks in the vicinity of the manganese deposits are tuff and gray to brown vesicular basalt overlain by a pinkish rhyolite which forms the capping of a small hill near the mine. The basalt is much decomposed, and in shear and fracture zones is altered to a crumbly and clayey material from which the manganese oxides can be readily separated by washing or jigging. Several manganese deposits are present in the area but only the largest have been explored or developed.

The principle manganese deposits on the Denton claims are contained in 2 easterly trending shear zones about 1200 feet apart. Only the northernmost shear zone was explored with DMEA assistance.

Exploration and open pit mining proved the existence of a relatively large mineralized zone containing low grade manganese ore. The principle ore zone (see Figure 3) trends about N. 70° W. and is from 40 to 60 feet wide and about 250 feet long. The west end of the ore zone pinches to a narrow vein-like zone, and several narrow stringers extend westward from the main ore body. These veins and stringers of ore extend as far as 130 feet west of the main mineralized area; thus the over-all exposed length of the mineralized zone is about 400 feet. The mineralized zone apparently extends eastward beneath a deposit of cobbles and boulders and alluvial breccia, which appears to be a remnant of a dissected alluvial fan or cone.



Index map to show location of exploration project
Scale 1" = 600'



Section A - A'

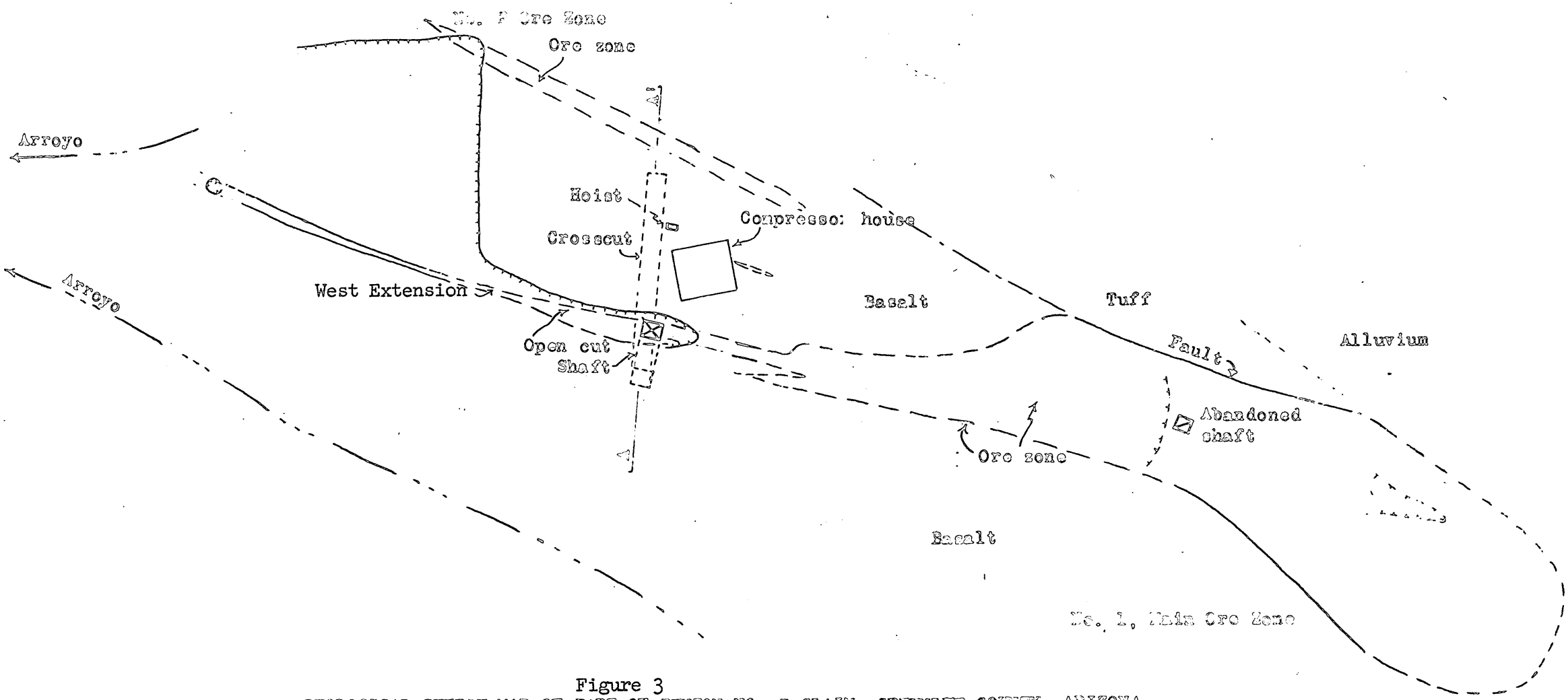


Figure 3
GEOLOGICAL SKETCH MAP OF PART OF DENTON NO. 5 CLAIM, GREENLEE COUNTY, ARIZONA

DMEA 2613 12/15/53 Scale 1= 40 Ft.

The manganese ore consists of the oxide minerals psilomelane and pyrolusite which occur as veinlets, fillings in breccia, or nodules and grains in the soft, altered basalt along the shear zones. The veinlets of manganese oxides, of which most of the ore is composed, range from about 1/3 to 3/4 inch in width and are discontinuous and occupy irregular fracture zones in the shattered basalt. The nodules appear to be restricted to within a few feet of the surface and occur as grains from about 1/4 to 1/2 inch in diameter. Occasionally larger masses of almost pure psilomelane are found, and relatively pure masses weighing from 50 to 100 pounds have been reported.

The mineral deposit is of supergene origin and formed by the oxidation of manganiferous calcite, and by concentration of the manganese in the small, near surface fractures. Oxidation was very shallow, and the commercial manganese ore grades into submarginal manganiferous calcite at shallow depths.

In the shaft sunk with DMEA assistance the richer or minable concentration of ore minerals extends to a depth of about 20 feet below the pre-mining erosion surface, and this is assumed to be the average depth of the ore. Traces of psilomelane extended to the bottom of the winze, and small amounts were found in the 60-foot level crosscut.

This crosscut passed through approximately one foot of manganese stained breccia near the shaft, then penetrated a mineralized zone from 15 to 27 feet north of the shaft. This latter zone contained several vein-like masses of both white calcite, and black manganiferous calcite, and traces of pollemalene. Minable grade material was not found in that part of the shaft sunk under the BMBA contract.

ORE RESERVES AND GRADE

The main body of ore (see Figure 3) is about 250 feet long and ranges in width from about 40 feet to 60 feet wide. The western extension of this ore body narrows to a vein-like zone from 2 to 5 feet wide and extends a few tens of feet west of the shaft. Another vein-like zone lies about 60 feet north of the shaft and is about 125 feet long and 5 feet wide.

The grade of the ore is not accurately known because samples were not systematically taken and because accurate production records were not kept. The operators estimate the mine-run ore contains about 5 percent manganese, which is a reasonable estimate. Eight samples taken from trenches dug across the ore zone by Allison Steel Company contained from 2 to 9 percent manganese and averaged about 4.2 percent, according to reports.

All of the available samples and analyses are listed in Table I and are indicative of the grade of the mineralized zone.

The ore reserves are estimated at 16,100 tons. This estimate is based upon the assumption that the ore averages 13 cubic feet per ton, and that minable ore extends 20 feet below the old erosion surface. The estimate is based on the following data:

Ore Zone	Dimensions	Tons/ft. depth	Total Tons
#1, Main Zone	250 x 60 x 20	746	15,000
North or #2 Zone	125 x 5 x 20	49	980
West extension #1	52 x 3 x 10	12	120
		Total tons	16,100

These 16,100 tons of ore are considered as indicated reserves, although the estimate also includes measured and inferred reserves.

Production from the project since the Government contract started is about 88 tons of concentrate which contained an average of 43 percent manganese. The ore is concentrated in a small jig plant and the concentrates

TABLE I

SAMPLES AND ANALYSES

Description	Width or Length in Ft.	Percent Mn
West end of main north vein	4	10.7
Open cut, near present shaft	7	6.4
Old shaft, east wall	4.4	16.6
Shipment of 33.8 long tons from open cut near present shaft		12.8
Shipment of 5 long tons from open cut near shaft		15.85
Dump, NW of No. 2 vein zone		7.6
Manganiferous calcite from vein at depth of 6 feet; from deposit 700 to 800 feet west of shaft		6.3
Shaft, collar, bottom of open cut, 14 feet below original surface	7	6.7
Shaft, 12 ft. below collar or 26 feet below original surface	2	1.9
Northwest corner of shaft at depth of 54 feet below bottom of open cut	4.2	0.6
Southwest corner of shaft at depth of 54 feet below bottom of open cut	2.4	2.25
East wall of shaft at collar	4.0	2.75
East wall of shaft, depth 10 feet	4.0 ?	0.35
East wall of shaft, depth 30 feet	4.0	0.33
East wall of shaft, depth 40 feet	4.0	0.39
East wall of shaft, depth 50 feet	4.0	0.34
East wall of crosscut, 0-10 feet	8.0	1.37
East wall of crosscut, 10-20 feet	10.0	2.69
East wall of crosscut, 20-30 feet	10.0	1.35
East wall of crosscut, 30-40 feet	10.0	0.51
East wall of crosscut, 40-50 feet	10.0	Nil
East of crosscut, 50-60 feet	10.0	0.14

contain about 45 percent manganese. The ratio of concentration is about 1 ton of concentrate to 10 tons of ore; thus the deposit should supply about 1600 tons of concentrate.

It is possible that ore of minable grade might not extend as deep as 20 feet, and that the reserve therefore might be less than estimated. This reduction, however, might be offset by a possible extension of ore eastward beneath a gravel cover, and may be partly compensated for by recovery of manganese from small veins and stringers near the main zone, but which are not included in this estimate.

FUTURE EXPLORATION

The operators have recently submitted another application to RFCA for assistance in exploring the south ore zone, and are contemplating expanding their operations. Deep exploration in the area of the Benton claims is not warranted; however, there are in the area a few other manganiferous outcrops that justify exploration at shallow depths. The north ore zone, now being worked, should be prospected along the strike extension, and the south ore zone justifies exploration by stripping and test pitting. Another potential ore zone, about 3000 feet east of the zone now being worked, and about on the strike of the south zone probably should be explored, although the locality was seen only from considerable distance and was not visited by this writer.

CONCLUSIONS AND RECOMMENDATIONS

This project did not directly result in the discovery of ore as no commercial ore was found in the shaft or crosscut. However, the exploration resulted in a better understanding of the habit of these manganese deposits; thus has been of benefit in recent mining. The operators are agreed that without Government aid they probably would not have been encouraged on their own account to strip, expose and mine ore which is adjacent to the part of the manganese-bearing zone explored. The operators hold the opinion that the project was advantageous to them, and feel obligated to pay royalties on all of the ore produced from the subordinated area. As the DMEA project was beneficial to the Denton manganese deposit, it is recommended that the project be certified as successful.

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Ace Building and Roofing Supplies
A Partnership composed of
G. T. Godfrey and Raymond Godfrey
620 Third Street
Safford, Arizona

pertaining to Exploration Project Contract No. Idm-2494, Docket No. 2613, and including amendments No. 1 to 2, covering a project for exploration of Manganese, located in Greenlee County, Arizona, commonly known as the Denton Mine, for the months of April, 1953 to November, 1953.

My review included an examination of the Monthly Reports (Form MF-104), comparison of costs claimed with the contract and pertinent schedules, consultation with the Executive Officer of the Field Team in charge of the project, 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 reasons:

The contract provides 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	$8,122.00
Exceptions:	
By DMEA Finance Officer (See attached)	
Herewith (schedule attached) - -	
Total Accepted Cost	$8,122.00

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Six-Thousand Ninety-One and 50/100 Dollars

- $6,091.50 -

is considered valid and proper.

Date: January 11, 1954

T. H. Brading, Auditor

Ace Building and Roofing Supplies
A Partnership composed of
G. T. Godfrey and Raymond Godfrey
620 Third Street
Safford, Arizona

Contract No. Idm-E494, Docket No. 2613

Finance Officer withheld $300.00 from payment of final (November MF-104) pending receipt of Operator's Final Report. This report has been received and approved, and $300.00 is accordingly reinstated.

T. H. Brading, Auditor

Reg. 4 - August Report

E-494 DMEA-2613, Ace Building & Roofing Supplies, Greenlee County, Ariz.

Stage I was unfavorable so it was recommended that 60 feet of crosscutting be done from the 60-foot level, instead of further shaft sinking, drifting and raising.

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

29R.

August 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2613, Ace Building and Roofing Supplies, Greenlee County, Arizona

Enclosed are 9 copies of a memorandum report by R. F. Robinson of the U. S. Geological Survey and William Hardwick of the U. S. Bureau of Mines covering an inspection trip to the Denton manganese mine.

It has been recommended, if an amendment is not sought by the operators, that the contract be terminated at this point on the grounds that no significant amount of ore exists below the 60 foot level.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O. Box 412, University Station
Tucson 5, Arizona

July 29, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: R. F. Robinson, Tucson, Arizona

Subject: DMEA Docket 2613 (Manganese) Ace Building and Roofing Supplies, Greenlee Co., Arizona

On July 14, 1953, the writer and Mr. William Hardwick of the U. S. Bureau of Mines made an inspection trip to the Denton manganese mine. Shaft sinking here on the DMEA exploration loan had reached the depth of 53 feet. According to the terms of the contract, when the shaft had reached the depth of sixty feet, an inspection by the examining team was necessary to ascertain if the findings therein warranted going into the second stage of the contract in which sinking was to be resumed to the 110 foot level.

The surface ore on which the shaft had been started pinched out along the footwall fault in the shaft at about 15 20 feet. There was little or no manganese mineralization from that point to the bottom, according to the operators. None was seen by the examiners. The operators did think that the mineralization had picked up in the last round but the bottom of the shaft appeared to be very low grade to the examining team. Nevertheless two samples were taken which assayed as follows:

4.2'	0.60% Mn on north side of west end
2.4'	2.25% Mn on south side of west end

The material at the bottom of the shaft was a poor grade of manganese mineralization. It consisted of coarse-grained black manganiferous calcite and thin coatings of pyrolusite which were probably derived from it by weathering. Some white calcite and a light tan or cream colored chalcedony were conspicuous. The black and reddish brown shattered vesicular basalt (according to Wilson and Butler) in which the calcite occurred had thin pyrolusite coatings on some of the fracture planes.

It is evident that the chemical action which was responsible for the formation of the manganese ore above did not penetrate deeply in the fracture on which the shaft was sunk and no further sinking is warranted. No drifting is recommended on the 60 foot horizon because the operator can mine that deeply by open pit methods. He could not profitably mine the ore by underground methods that he is mining on the surface.

There is a possibility that the wide zone of mineralization south of the shaft might contain one or more deeply permeable fractures on which the ore may go deeper than it did on the one on which the shaft was sunk. The examiners suggested that the operators ask for an amendment to the contract which would permit them to drive a crosscut south from the shaft on the 60 level about 60 feet to the southern limits of the mineralized zone. If the crosscut showed that ore in places went below the 60 level, further sinking of the shaft might be warranted. If nothing of significance was found in the crosscut the contract could be terminated.

If an amendment is not sought by the operators, it is recommended that the contract be terminated at this point on the grounds that no significant amount of ore exists below the 60 level.

R. F. Robinson

R. F. Robinson
Acting District Supervisor
Arizona New Mexico

MINING DIVISION
REGION IV

July 29, 1953

Memorandum

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

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

Subject : Interim Report, Contract Idm-E494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

Enclosed are original and 6 copies of an interim report on Stage 1 of Contract Idm-E494, where the examiner recommends that Stage 2 of the contract should not be done. I believe R. F. Robinson of the Geological Survey will submit a report with a similar recommendation. I concur with this recommendation that the shaft should be stopped at 60 feet (it was 58 feet deep on July 14), and that the contract should be terminated.

Walter R. Storms

Walter R. Storms

CC W. H. King (6)
DMEA-2613
DF

WRStormsefrj

MINING DIVISION
REGION IV

July 29, 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-2613, Contract Idm-E494, Ace Building and Roofing Supplies, Denton Manganese Prospect, Greenlee County, Ariz.

The Denton Manganese prospect was visited on July 14 by R. F. Robinson, U. S. Geological Survey, and the undersigned engineer for the purpose of examining the results of stage I of the contract and determining whether additional work was warranted. The depth of the shaft at that time was 58 feet. The total depth allowed by Stage I is 60 feet.

The shaft was collared in a lens of manganese ore. This lens is reported to have contained 12 to 16 percent manganese at the surface. Before the shaft was started, an open cut had been made along the lens and the elevation of the collar was approximately 14 feet below the original surface. At this elevation the lens measured 7 feet thick and contained 6.7 percent manganese. The lens thinned rapidly, and at a 12-foot depth in the shaft it was 2 feet thick and contained only 1.9 percent manganese. At a 14-foot depth the lens had completely disappeared and only a thin seam of clay gouge between slickenside walls remained. This condition persisted to the bottom of the shaft at 58 feet. The hanging wall of the shaft follows a similar seam.

Two samples were taken in the shaft at a depth of 54 feet, one in the northwest corner of the shaft which ran 0.6 percent manganese for a width of 4.2 feet, and one in the southwest corner of the shaft which ran 2.25 percent manganese for a width of 2.4 feet.

Some surface trenching and sampling was done by W. Allison after the original examination but before work was started on this contract. The work consisted of trenches cut across the

CC W. H. King (orig. & 6)
DMEA-2613
DF

WRHardwick:frj

fractured zone at intervals of 50 feet. The approximate location of these trenches and the assay value as reported by the operator is shown on figure 1. From the occurrences of manganese exposed by these trenches there seems to be an increase in the size of manganese ore pockets from east to west. At the eastern end of the fractured zone where the first and second trenches were cut by Allison, the manganese occurs in many closely spaced veinlets or seams, while at the western end the lenses are larger and more widely spaced.

Near the surface the voids in the brecciated volcanics are filled with psilomelane. West of the shaft the operator has started an open cut and has mined several of these lenses. In most cases the high-grade ore does not persist for more than several feet in depth. At a distance of 700 or 800 feet west of the shaft, an outcrop occurs which, when first uncovered, appeared to be solid psilomelane for a width of 18 inches. Five or six feet below the surface this particular lens consisted almost entirely of a black manganiferous calcite in which the manganese occurs as minute specks of pyrolusite. A selected clean piece of this calcite assayed 6.3 percent manganese. Ore of this nature is of questionable value since it probably could not be concentrated. Generally the recoverable mineral psilomelane persists to a depth of approximately 15 feet.

Assuming that the manganese ore persists to an average depth of 15 feet and accepting the Allison assays as correct, there is an area east of the shaft, approximately 200 feet long and from 40 to 60 feet wide, which will contain 11,400 tons of indicated ore at a grade of 5.7 percent manganese. While the manganese content of this ore is very low it could be mined very cheaply. Indicated metallurgical results are good. A profit could be expected from ore of this type when it contained 5 percent or more recoverable manganese. Assuming a recovery of 75 percent and a final concentrate containing 40 percent manganese, 1,220 tons of concentrate are indicated.

The larger lenses of ore are probably so widely scattered, and the average grade indicated so low, that much of the area west of the shaft will not produce ore by a cheap mining method. It is probable that some of these lenses can be selectively mined at a high cost per ton and 280 tons of concentrates are inferred from this area. This makes a total reserve of approximately 1,500 tons of concentrate containing 40 percent manganese.

Summarizing the above facts the following conclusions are reached:

1. The recoverable manganese content of the area cut by the shaft shows a marked decrease with depth;

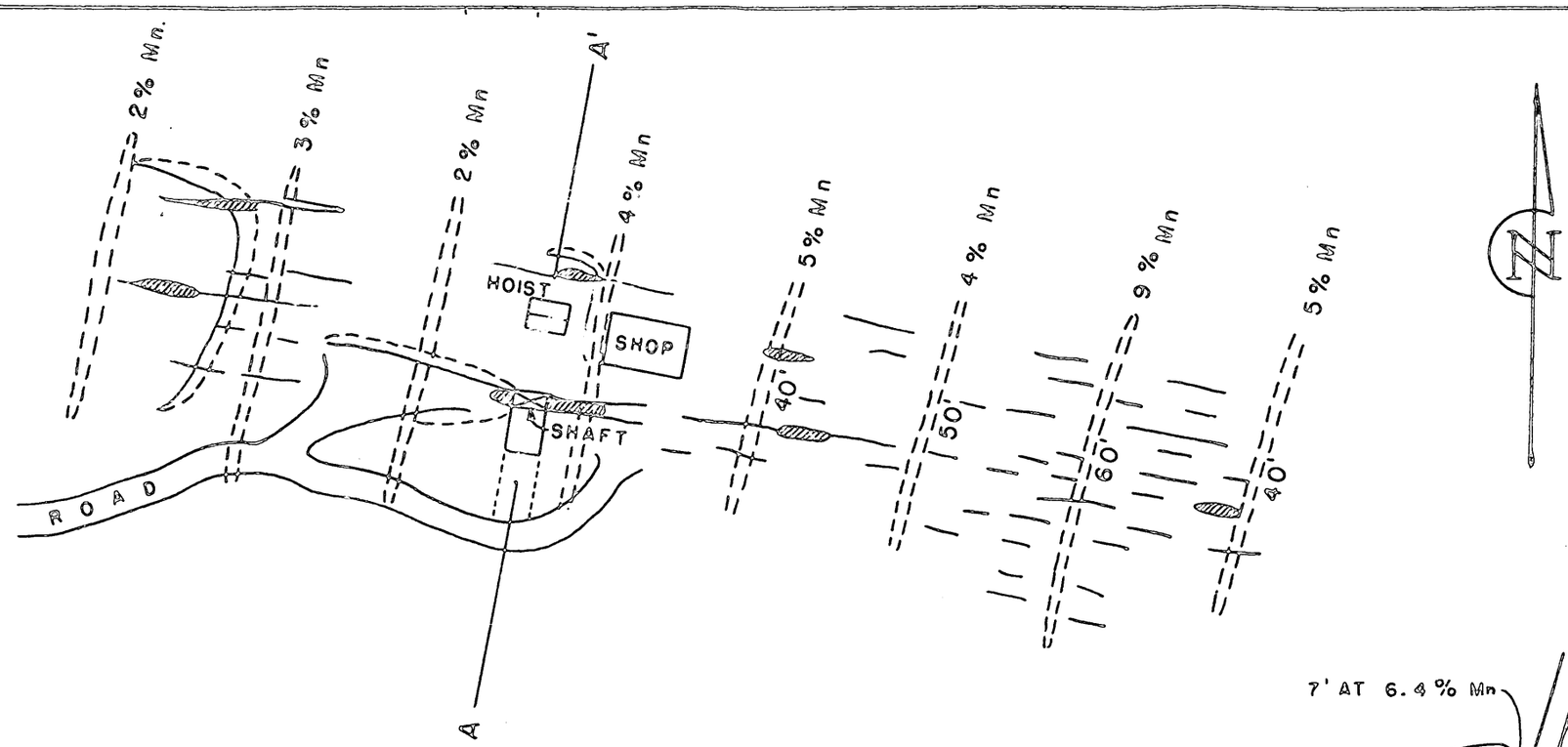
2. The trenching and sampling of the surface indicates a reserve of approximately 1,500 tons of recoverable concentrate containing 40 percent manganese.

The unfavorable showing in the shaft was discussed with the operator on July 14 and he pointed out that the shaft is on the hanging wall side of the fractured zone. He suggested that a crosscut be driven to cut the fractured zone at right angles to the strike. This crosscut, he suggested, should be driven from the 60-foot level of the shaft. The operator has been informed by letter that the contract does not provide for a crosscut and that it will be necessary for him to request an amendment to the contract to authorize this work. It is possible that, in some of the fractures parallel to the one which forms the footwall of the shaft, the ore may extend to a greater depth.

It is recommended that the contract be terminated when the shaft reaches 60 feet, the depth authorized by stage 1. If the operator requests an amendment to authorize a crosscut in lieu of a drift at a depth of 60 feet, it is recommended that a crosscut toward the footwall of the fractured zone not to exceed 50 feet in length be authorized.

William R. Hardwick

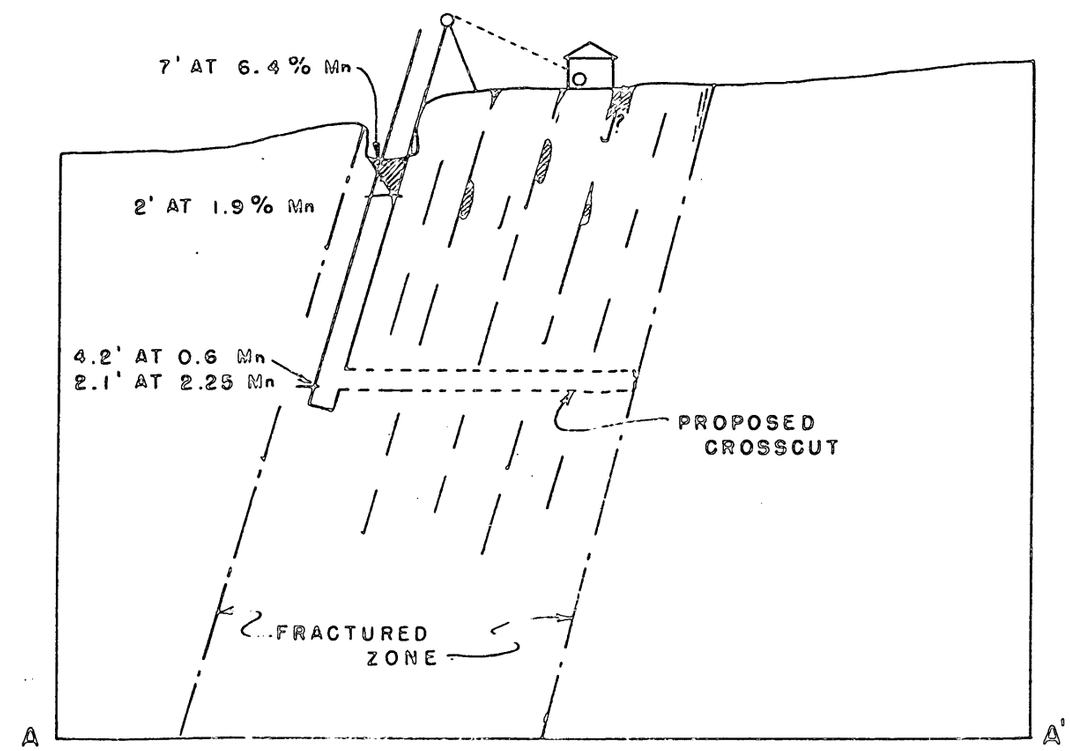
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV



- ORE
- BULLDOZER TRENCH

PLAN OF FRACTURED ZONE

SCALE 1" = 40'



CROSS SECTION

DMEA 2613 FIGURE 1. - ACE BUILDING & ROOFING SUPPLIES JULY 1953

MINING WORLD May 1953

The Denton manganese property, located 12 miles west of Duncan, Arizona, is now under 30-day option for the purpose of exploration by the Allison Steel Company of Phoenix. About 4,000 tons of overburden have been removed. A face is being cut on the property, 82 feet long and 10 feet high. Previously, Raymond Godfrey had concentrated some ore by means of a small mill, consisting of crusher, screens, and a jig. About one ton of concentrates were produced per day, averaging over 40 percent manganese content.

Work on a small scale is continuing at the Denton manganese property, located 12 miles west of Duncan and operated by Raymond Godfrey of Safford, Arizona. Ore from the open pit is said to run from 7 to 15 percent manganese and is concentrated by means of a small mill consisting of crusher, screens, and a jig. About one ton of concentrates per day, averaging over 40 percent manganese content, is produced.

MAR 2 7 1953

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

Re: Docket No. DMEA 2613 - Manganese
Ace Building & Roofing Supplies
Denton #5 and #6 claims
Greenlee County, Arizona
Contract No. Idm-W-404

Dear Mr. King:

We are enclosing an extra copy of the above-referenced contract for use of your field representatives in making their examinations and reports.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure
CC: DOCKET
ADMN. READ. FILE
FT, REG. IV
CODE 400
N. B. MELCHER, USBM
M. D. CRITTENDEN, USGS

400

FEB 27 1953

Mr. [illegible] H. King, Executive Officer
[illegible] Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Project No. [illegible] 2013 - Sangamo
Ace Building and Roofing Supplies
Denton Mining Claims
Greenlee County, Arizona

Dear Mr. King:

We are enclosing the original and six copies of the above referenced contract signed by the Contractor for the Government, together with exhibit "A" (3 pages), Surety's consent to lien, and one map.

If the terms and conditions of this contract are satisfactory to you and the Contractor, all six copies should be signed and the usual distribution made.

If any part of this contract is not satisfactory to either party or if the Contractor and Contracting Officer are not delegated authority, the original and all copies of the contract are to be returned to this office, together with proposed changes for consideration.

Please note that the following changes have been made in the contract as originally outlined:

1. The [illegible] is restricted to [illegible] mineralized zone.

2. The project work is set up in blocks of one-third of the two acres originally outlined.

3. The cost of new [illegible] has been decreased from the $1,800.00 [illegible] to the $1,500.00 recommended by the Field Team.

4. The cost of shaft sinking has been reduced from $100.00 a foot to $75.00 a foot as recommended by the Field Team.

5. The cost of assays has been reduced from [illegible] per foot for sampling, drilling, and preparation to show a [illegible] unit cost.

The above changes have reduced the amount of the proposed contract from $20,500.00 to $23,840.00.

Under Article 3, the starting date has been left blank and is to be filled in when the contract is signed by the operator.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

Approved:

J. H. Hodges

Director, Bureau of Mines

T. P. Thayer

Director, Geological Survey

cc: Docket
Field Team, Region 4
Code 400
Adm. Asst. File
Operating Committee
H. E. Melcher, KMM
H. F. Crittenden, USGS

GRutledge/hhb
9/24/53

140

400

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

February 19, 1953

Memorandum

To: Administrator

Through: W. S. Martin

From: Chief Counsel

Subject: Ace Building and Roofing Supplies - Docket No. DMEA-2613

There is attached, in satisfactory legal form for execution, a contract covering the above-described project.

Your attention is called to the fact that the Owner's Consent to Lien covers unpatented lode claims Denton No. 1 to 6 inclusive, while the contract refers only to Denton No. 5 and Denton No. 6. I am informed that the Denton claims No. 1 to 4 are not contiguous with No. 5 and 6, are not related in any way to them and no exploration work will be performed upon them. Therefore, reference in the contract to Denton claims No. 1 to 4 was deliberately omitted.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

Chief Counsel, DMEA

February 12, 1953

Iron and Ferro-Alloy Division

Review and preparation of Exploration Project Contract
Docket No. DMEA 2613 - Manganese
Ace Building and Roofing Supplies
Denton Manganese Claims
Greenlee County, Arizona

Transmitted herewith is the rough draft of a proposed exploration contract for your use in preparing the contract in final form. Additional copies of the map attached to this rough draft are being prepared.

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

cc: Docket
Code 400
Admn. Read. File

MF-200 (A)
(February 1952)

DOCKET NO. DMEA: 2613

COMMODITY Manganese

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ace Building and Roofing Supplies, a partnership composed of G. T. Godfrey and Raymond Godfrey, 620 Third Street, Safford, 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 Greenlee, described as follows:[3] Two unpatented lode claims in Secs. 27, 34, and 35; T. 7 S.; R. 30 E.; Gila-Salt River Meridian. These claims, Denton # 5 and # 6, are recorded in book 6 of the Location Notices, page 311, Greenlee County Court House, Clifton, Arizona

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner, in possession and entitled to possession, and that the property, as subject only to the following exceptions, liens or 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 ..... days from the date of this contract shall commence work on a project of exploration for[5] Manganese

in or upon the described land; and shall bring the project to completion within a period of twelve 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 75 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 $17,880.00, which is 75 percent of $23,840.00 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

_____
(Operator)

By _____

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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.

_____ [CORPORATE SEAL]

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

ACE BUILDING AND ROOFING SUPPLIES
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA 2613

EXHIBIT "A"

DESCRIPTION OF THE WORK

The exploration work on this project is to be done in three stages as is indicated on the map attached hereto and made a part hereof entitled "Figure 1 - Proposed exploration of Denton Number 5 Claim, Greenlee County, Arizona".

STAGE I

Time Schedule: 0 - 3 months

1. Construct a 16- by 18-foot, frame-construction compressor and shop building.
2. Construct a 8- by 10-foot, frame-construction hoist house.
3. Construct a 20-foot headframe and install shaft timbers to ground level, water tank, hoist, sheave wheel, and air and water lines.
4. Sink a two-compartment inclined shaft in the ore zone 60 feet. The shaft will be timbered to 4 by 7 feet in the clear and lagged where necessary.

STAGE II

Time Schedule: 4 - 5 months

Stage II is to be undertaken only after the completion of Stage I, if in the opinion of the Government, the results of Stage I warrant it.

1. Sink the above shaft an additional 50 feet to 10 feet below the 100-foot level to provide for a sump, the shaft to be two compartment and timbered to 4 by 7 feet in the clear. Lagging will be used where necessary.

STAGE III

Time Schedule: 6 - 9 months

Stage III is to be undertaken only after the completion of Stage II, if in the opinion of the Government, the results of Stage II warrant it. However, if the results of Stage I are such that Stage II is not approved by the Government, the Field Team may approve a limited amount of the drifting under Stage III to follow Stage I at a higher level to be determined and approved by the Field Team.

1. Drive 300 feet of drift on the 100-foot level. The drift will be 5 by 7 feet in cross section and timbered where necessary.
2. Drive 100 feet of raises at locations to be approved by the Field Team. None of the raises are to exceed 50 feet in length. The raises are to be 5 by 7 feet in cross section and timbered where necessary.

Estimated Cost of Project

Unit Costs

Stage I

1. 16- by 18-foot compressor and shop building	$ 500.00	
1 8- by 10-foot hoist house	200.00	
1 20-foot headframe, including installation of shaft timbers to ground level, water tank, hoist, sheave wheel, and air and water lines	800.00	
60 Feet of shaft @ $75.00 per foot	4,500.00	
5 Manganese assays @ $2.00 per assay	10.00	
		$6,010.00

	Stage II		
50	Feet of shaft @ $75.00 per foot	$3,750.00	
5	Manganese assays @ $2.00 per assay	10.00	$3,760.00
	Stage III		
300	Feet of drift @ $35.00 per foot	10,500.00	
100	Feet of raises @ $35.00 per foot	3,500.00	
35	Manganese assays @ $2.00 per assay	70.00	14,070.00
	TOTAL ESTIMATED COST FOR PROJECT		23,840.00
	GOVERNMENT PARTICIPATION AT 75 PERCENT		17,880.00

IN REPLY REFER TO:

G-MD-CT

400

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

February 5, 1953

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1953

To: W. S. Martin

From: M. D. Crittenden

Subject: DMSA-2613, Manganese
Ace Building and Roofing Supplies
Greenlee County, Arizona

The Field Team, Region IV, recommends exploration assistance in the amount of $26,500. The work is to consist of a 110-foot shaft, 300 feet of drifting, 100 feet of raises. They believe that geologic conditions are favorable for the discovery of 16,000 tons of material averaging about 12 percent Mn. The mill tests reported indicate that this should yield about 3,000 tons of concentrates containing from 40 to 45 percent Mn. The value of this at the Deming, New Mexico, stockpile is theoretically sufficient to repay a large part of the Government's participation.

In view of this, I concur in the recommendation.

M. D. Crittenden

AUG 5 1952

Ace Building and Roofing Supplies
Raymond Godfrey, Partner
620 Third Street
Safford, Arizona

Re: Docket No. DMEA 2613 - Manganese
Ace Building and Roofing Supplies
Denton Mining Claims
Graham County, Arizona

Dear Mr. Godfrey:

Your application for assistance in exploring a manganese occurrence on the Denton Mining Claims has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration and has been referred to Mr. W. H. King, Executive Officer, DMEA Field Team, Region IV, 224 New Customhouse Building, Denver 2, Colorado, for a field examination.

The Regional Office will contact you at an early date in regard to the examination of your property. Any assistance that you can render the members of the field team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

FARutledge'lm
7/29/52

cc: Admn. Reading File
Docket
M. R. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. IV
O. C. Selfridge
F. A. Rutledge

Ace Building and Roofing Supplies
Raymond Godfrey, Partner
620 Third Street
Safford, Arizona

Re: Docket No. DMEA 2413 - Manganese
Ace Building and Roofing Supplies
Denton Mining Claims
Graham County, Arizona

Dear Mr. Godfrey:

In a review of the above docket, it was found that certain data were not included that will be required to process the application. It also appears that exploration, development, and production are included in your proposals. Since only exploration is allowable under the Defense Minerals Exploration Administration program, it will be necessary to confine your project to work of that type. For your information, please refer to DMEA Order-1 and Questions and Answers on the Defense Minerals Exploration Program which are attached.

It was noted also that you propose to furnish your share of the expenditures through the labor of two men, use of equipment, and sale of ore. These are all allowable, but there is usually a lapse of several weeks after presentation of the monthly cost data before reimbursement is made by the Government for its participation in the period's expenditures. Therefore, the Operator should have the necessary funds available to cover at least two months operations. The use of the Operator's equipment is repayable on a depreciation basis not rental. Monthly payment is based at 1/60 of the equipment's present value.

The following additional data will be required before your application may be further considered:

1. A copy of the contract to purchase the Denton Mining Claims.

2. Executed Owner's Consent to Lien from the owners of the Denton Mining Claims. Please return six completed copies.

3. Claim map of the Denton Mining Claims showing mineralized zones, existing mine workings and proposed exploration.

4. If a geologic or mining report on this property is available, it should be submitted for our consideration. Reports will be returned if requested.

5. Supply more detailed information concerning estimated tonnage and grade of ore reserves if available.

6. A more detailed plan of exploration, with the location, amount of work requested, and unit costs.

7. The estimated value of tractor, Chevrolet truck, and jeep truck with an explanation for their use.

Sincerely yours,

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Enclosures

FARutledge:lm
7/18/52

cc: Admn. Reading File
Docket
M. B. Melcher, USBM
M. D. Crittenden, USGS
Field Team Reg. IV
G. C. Selfridge
F. A. Rutledge

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

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

Box New Customhouse
Denver 2, Colorado

January 27, 1953

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2613, (Manganese) Ace Building and Roofing Supplies, Greenlee County, Arizona

Enclosed are four copies of the final report on the subject docket.

The applicant requested $48,000.00 and the field examiners recommend the application in the amount of $26,800.00. The project as recommended allowed $100 per foot for sinking 110 feet, $35.00 per foot for drifting 300 feet, $35.00 per foot for raising 100 feet, and $1800.00 for new buildings and improvements. We believe that the contract should be prepared on the short form, but that the cost figures for new buildings and for shaft sinking are too high, since we will not have an equity in the new buildings. We believe that this figure should be reduced to $1500 and that the cost for sinking should be reduced to $75.00 per foot because it is not necessary in the short form to allow for speculative contingencies.

The amount of the contract we would recommend is within the delegated authority of Region IV but because the Washington Office has the file containing the Owner's Consent to Lien and other pertinent data forwarded by the applicant we recommend that the Washington office prepare the short form contract.

W. H. King
W. H. King

A. H. Koechman
A. H. Koechman

2-6-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

Mining Division
Region IV

January 27, 1953

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMEA Docket 2613 (Manganese) Ace Building and Roofing Supplies, Greenlee County, Arizona

Enclosed are nine copies of the final report on the subject docket.

The field examiners recommend exploration assistance in the amount of $26,500, Government participation - $20,100. The proposed work consists of sinking a 110-foot shaft, drifting 300 feet, and 100-feet of raises. We concur in the recommendation of the examining engineer.

W. H. King
W. H. King

Enclosures

Received by
DMEA (BUREAU OF MINES)
2-6-53
(Date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

[illegible]

[illegible] 1953

[illegible]

To : [illegible]

From : [illegible]

Subject : Final Report, Lead [illegible], [illegible] Mining Supplies, [illegible] Express Works, [illegible] County, [illegible]

Enclosed are original and 3 copies of the section on summary, conclusions and recommendations by [illegible] of the Bureau of Mines and [illegible] of the Geological Survey, and the section on [illegible] by [illegible].

The examiners have recommended a level of [illegible] to which a [illegible]-foot shaft, drive [illegible] feet of drifts on the [illegible]-foot level, and [illegible] feet of raises above this level. I concur with their recommendations.

[illegible] be enclosed.

Walter R. Simms

Walter R. Simms

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

WRSimms:ale

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

December 29, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2613, Denton Claims, Ace Building and Roofing Supplies Company, Greenlee County, Arizona.

Enclosed are the original and 8 copies of the geologic report by J. N. Falck 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 5, Arizona

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 1953

December 24, 1952

Memorandum

To: A. R. Kaechmann, Denver, Colorado

From: A. F. Shride, Tucson, Arizona

Subject: Geologic Report, Dantzu Claims, Ace Building and Roofing Supplies Company, Greenlee County, Arizona (Manganese) - DMEA 2613

Enclosed are the original and 8 copies of the above report by J. B. Faick of the Geological Survey.

This report and the favorable recommendation of the exploration project, as revised, have my approval.

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 9

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] for [illegible] Disposal Facility

[illegible] Nuclear Plant

[illegible], [illegible]

[illegible]

[illegible]

[illegible]

January 1983

[illegible] Mines

by [illegible] and [illegible]

The [illegible] Mining Claims, [illegible] County, Ariz. were examined in October 1952 by the Defense Minerals Exploration Administration in connection with an application for Government aid in exploring for manganese ore. The application was submitted by the Building and Supplies, Griffith, Ariz. and was docketed as [illegible]. It proposed a rather indefinite exploratory program that could be completed at an estimated cost of $[illegible]. During the field investigations, a definite program for exploration of a portion of the property was planned. This program involved sinking of a 200-foot shaft, drifting 300 feet on the 300-foot level, and the driving of 200 feet of raises from favorable sites developed by drifting. The cost of this program was placed at $[illegible].

The [illegible] shaft were worked during [illegible] for 5 with a production of 2,500 tons of concentrates. They [illegible] were worked in 1944, with a production of one carload of ore, when an attempt was made to reopen old workings. The property then remained idle to January 1954 when it was acquired by the applicant. To Oct. 31, 1954, the applicant had produced 99 tons of 44 percent manganese concentrates and 33 tons of crude ore containing 32 percent manganese. Concentrates were produced at a mill on the property, and were marketed at [illegible], [illegible].

Manganese oxides, psilomelane and pyrolusite, fill the openings of a shear zone in basalt. Prior to 1954 all production came from the

---

1/ Mining Engineer, U. S. Bureau of Mines
2/ Geologist, U. S. Geological Survey

most southerly zone that strikes northwesterly and dips steeply northward. This zone, about 20 feet wide and 200 feet long, contained discontinuous or lens-like veinlets up to 6 feet wide. It was developed to a vertical depth of 45 feet and it is assumed that the ore persists below the explored depth. The other ocher zone, the potential ore zone of the proposed explorations, trends northwesterly and dips steeply to the south. It was been explored by an open cut, a few pits, and a smallow shaft. The zone appears to be about 250 feet long and varies in width from 20 inches to about 17 feet. Nearby is a recently discovered similar ore zone that can be traced for approximately 75 feet and at one place has an exposed width of 10 feet. The ore occurrence at the northern zone is similar to that of the southern zone except that the thickness of the veinlets seldom exceeds one-half inch.

The ore reserves in the zone covered by the proposed explorations have been estimated at 14,000 tons containing 18 percent iron oxide. Total ore reserves for the project may be a few times the estimated tonnage.

At present, mining operations are confined to removing the open cut to the site of the shaft proposed in the application. Ore from this operation is only stock-piled near the mill. When sufficient ore is available, mining across while the mill is operated for a few days. Other for that operations consists of two men. The mill, consisting of a small crusher, screens, a jig, and water pumps, can handle about 3 tons of ore daily. The principal mining equipment includes a compressor, a jackhammer, a tractor-loader, and dump truck.

Testing of the ore by the Arizona Bureau of Mines indicates that 40-percent manganese concentrates can be produced by gravity milling with a recovery of 4[illegible] percent and a ratio of concentration of [illegible] to 1. The ratio of concentration, somewhat lower than that reportedly obtained by the applicant, was used in estimates that indicated development of the estimated ore reserves could lead to profitable operation of the property.

The proposed explorations have been set up so that they may be carried out under the short form contract. They consist of the following 4 operations:

New buildings and improvements	1,[illegible].00
Shaft sinking, 116-feet @ $164 a foot	11,[illegible].00
Drifting, 200 feet @ $35.00 a foot	10,[illegible].00
Raising, 100 feet @ $35.00 a foot	3,[illegible].00
Total cost of project	$2[illegible],[illegible].00

The applicant has indicated that it will be able to finance its share of the cost of the project, 29 percent of $2[illegible],[illegible], or $[illegible],7[illegible].

Approval of the proposed project, that can be completed in 9 months, is recommended for the following reasons:

1. Geologic conditions are favorable for the development of an estimated 2[illegible],000 tons of 42 percent manganese ore by the project. Similar conditions at nearby places indicate that the total reserves of the property may be a few times the estimated reserves.

2. The ore is amenable to concentration.

3. Development of the estimated reserves could result in the production of about 3,000 tons of concentrates that are readily marketable at mills, i. ker. This production would result in repayment to the Government of about 7 percent of the requested loan.

4. The applicant will probably be able to finance its share of the costs of the project.

5. The unit costs for which the applicant has offered to do the work are equitable.

DENTON MINING CLAIMS
ACE BUILDING AND ROOFING SUPPLIES COMPANY
GRAHAM COUNTY, ARIZONA
(MARIANNE)

SMRA 2613

Geology

By
John H. Feick
Geologist, U. S. Geological Survey

DENTON MINING CLAIMS
ACE BUILDING AND ROOFING SUPPLIES COMPANY
GREENLEE COUNTY, ARIZONA
(MANGANESE)

DMA 2613

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Proposed Exploration	7
Summary and Conclusions	8
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Fig. 2	Denton Claims and Workings	2
Fig. 3	Geological Map of Denton Claims	5
Fig. 4	Proposed Exploration	See Engineering Report

INTRODUCTION

The Denton Mining Claims, Nos. 1 through 6, situated in Greenlee County, Arizona, were examined by the writer October 10-11, 1952, in connection with an application for Government aid in exploration for manganese. The application to the Defense Minerals Exploration Administration was submitted by Ace Building and Roofing Supplies, 680 Third Street, Safford, Arizona, and the application is designated as DMEA 2613. The exploration proposals originally submitted by the applicant were very indefinite and the estimated cost was given as $40,000. After conference with the applicant some of the less desirable aspects of the proposed exploration were eliminated and a revised program estimated to cost $26,300 was submitted.

The Denton claims are situated about 12 miles west of Duncan, Arizona and about 30 miles east of Safford, Arizona (Fig. 1). From Safford the claims are easily reached by driving eastward over paved U. S. Highway 70, a distance of 27.7 miles to the Ash Peak Store, thence going 1.7 miles further to a dirt road which branches northward off the highway, and thence over the dirt road 0.9 mile to a ranch house which now serves as a residence for the mine employees. The Denton claims are located a few thousand feet northwest of the ranch house. The nearest railroad shipping point is at Shelden, Arizona about 8 miles east of the claims.

The manganese deposits are located in the Ash Peak district in a moderately dissected area near the summit of the Peloncillo Mountains, at an altitude of about 4500 feet. The area is drained eastward to the Gila River. Precipitation, estimated at about 12 inches per year, occurs mainly as heavy rainstorms during July and August. Light rainfalls and snow flurries occur during the winter months. There is little vegetation in the area.

The property consists of 6 unpatented claims in two groups (Fig. 2). The Denton claims numbers 1 to 4 are in one group and about 1800 feet north of these are the Denton claims numbered 5 and 6. All of the claims are in Sections 27, 34, and 35, T. 7 S., R. 30 E. According to the applicant the claims are recorded in Location Notice Book 6, page 311, at Clifton, the County seat for Greenlee County, Arizona. The applicant owns part interest in the 6 unpatented Denton Mining claims and controls the remaining part by means of a lease with option to purchase.

PRODUCTION AND GRADE

The manganese prospects on the Denton claims are the same prospects that were previously described[1] as the Thurston and Hardy Mine. In 1930 the same report was republished[2] and in addition records the total production to that time as about 1000 tons of concentrate. In 1942, the property was briefly examined[3] and inferred ore reserves were estimated at about 1000 tons.

During World War I about 1000 tons of jig concentrates were produced and these averaged about 45 percent manganese. The property was idle between wars but about 1942, an attempt was made to re-open some of the old workings. One carload of ore resulted from this period of operation,

---

1/ Jones, E. L., Jr., and Ransome, F. L., Deposits of Manganese Ore in Arizona: U. S. Geol. Survey Bull. 710-D, pp. 130-132, 1920.

2/ Wilson, Eldred and Butler, G. M., Manganese Ore Deposits in Arizona, Arizona Bur. of Mines Bull. No. 32, pp. 62-64, 1930.

3/ Crittenden, M. D., The Thurston and Hardy Manganese Mine: U. S. Geol. Survey Memorandum Report, pp. 1-2, April, 1943.

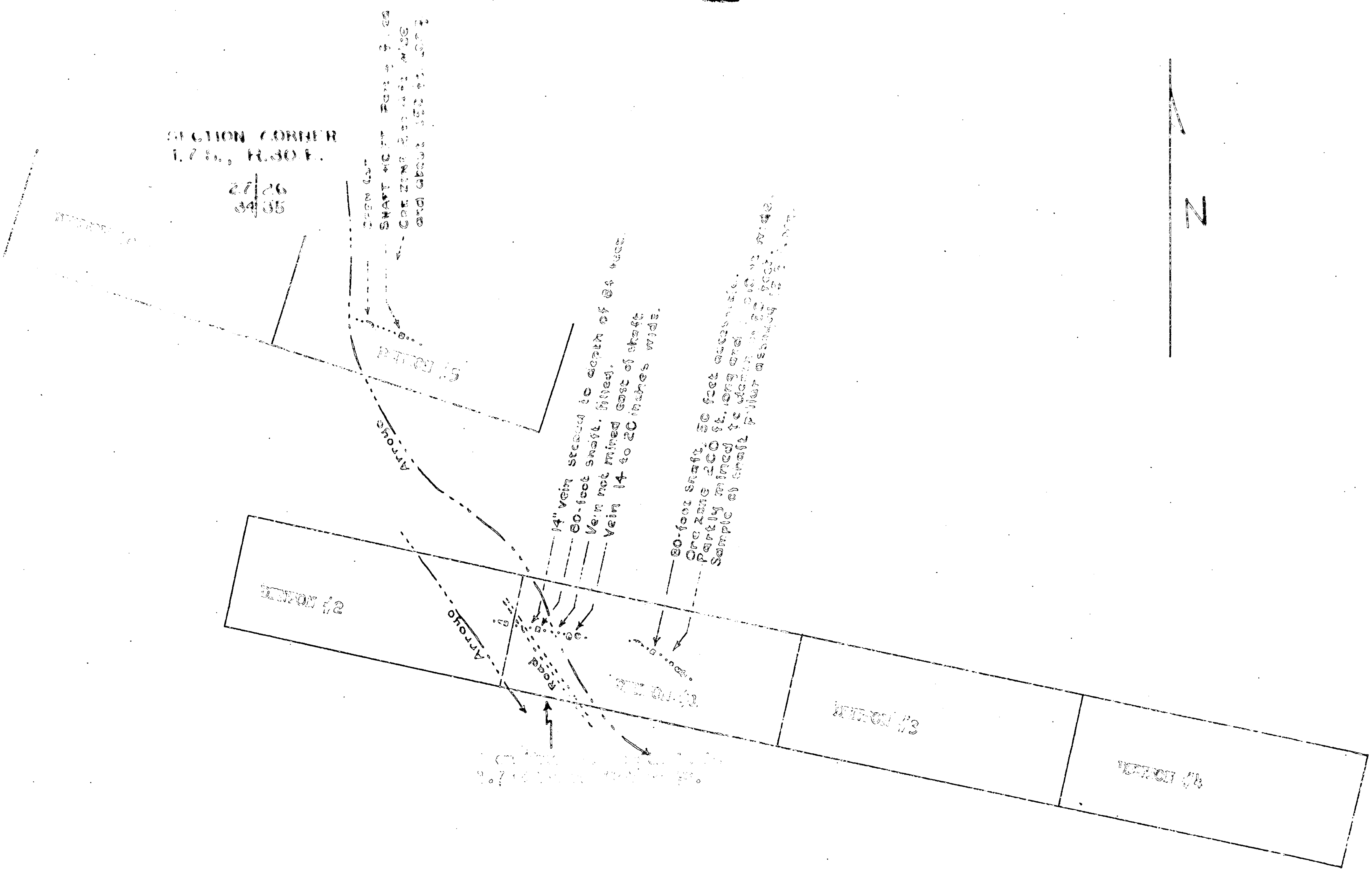

Figure 2 - Sketch Map, showing relationship of Benton Claims and prospect workings, Greenlee County, Arizona

DMEA 2613. Ace Building and Roofing Supplies Company
Scale 1" = 600 Ft.

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No._____

Commodity_____

Total Amount_____

Govt. Participation_____

1. Name and Address of Applicant_____

_____

2. Location of Property_____

_____

_____

3. Mineral or metal_____ Is it listed in Section 9 of MO-5?

If not, application will be rejected.

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

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

a) Good_____

b) Poor_____

c) None_____

d) Don't know--needs field examination_____

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

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

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

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

productive period?_____

*question numbers are those of MF-103

but the operation was soon terminated. The property then remained idle until acquired by the Ace Building and Roofing Supplies Company about January, 1952.

Eight small shipment of jig concentrates were made to the Government stockpile at Deming, New Mexico by the applicant during the first 10 months of 1952. The shipments were mined ores obtained from the old dumps and from an open cut on the Denton No. 5 claim. These shipments as shown by ore acceptance sheets are as follows:

Date	Long Dry Tons	Percent Manganese	Per Unit Payment*	Payment per Long Ton*	Gross Return
1/12/52	5.02	33.4	1.29	43.15	216.61
4/12/52	11.46	42.7	1.96	83.69	959.11
6/18/52	8.81	35.35	1.48	53.00	466.93
7/21/52	6.29	43.25	2.26	97.53	613.46
8/20/52	5.94	46.25	2.30	106.37	631.87
9/10/52	6.01	22.9	0.32	18.85	113.29
9/19/52	5.01	43.6	2.23	99.19	503.89
10/20/52	5.91	42.05	2.24	94.19	556.63

* Calculated by this writer where not available.

In addition to the above shipments a 33 ton lot was mined and shipped from the open cut on Denton Claim No. 5. This contained 12 percent manganese, therefore was refused at the Deming stockpile, and was sold elsewhere for $4.00 per ton, but payment has not yet been received.

The shipments given above are jig concentrates. These contain from 1.7 percent to 4.0 percent iron and a small premium is paid at the stockpile for this low iron content. The concentrates contain about 5 percent silica plus alumina, about 0.2 percent copper plus lead plus zinc, and from 0.01 to 0.05 percent phosphorous; all of these being within allowable limits for stockpile specifications without invoking penalties.

GEOLOGY OF THE DEPOSITS

The country rocks in the vicinity of the manganese deposits consist of Tertiary lava flows, a gray to brown vesicular basalt overlain by a pinkish rhyolite which forms the capping of a small hill near the mine. The basalt is much decomposed and in the shear zones is altered to a crumbly and clayey material from which the manganese oxides can be readily separated by washing. Several manganese deposits are present in the area but only the largest have been explored or developed.

The principal manganese deposits are contained in 2 shear zones about 1200 feet apart. The north shear zone trends about N.70° W. and dips steeply to the south. At the west end the south shear zone strikes N.80° W. and on the east end it strikes N. 55° W., and in both places it dips northward about 70 degrees. The south shear zone has a strike length of at least 900 feet.

All of the ore produced prior to about July, 1952 was obtained from the south shear zone, where there are two ore shoots, one at the west end and one near the east end. Ransome and Jones[h/] report developments of these ore shoots as follows:

> Two shafts 30 and 34 feet deep have been sunk on the east end of the shear zone, and in addition open cuts and drifts have explored the zone and proved it to be ore bearing for 200 feet. Here the shear zone is about 10 feet wide, and the ore is found in discontinuous or lenticular veinlets, which in places are 2 feet wide. At the west end of this shear zone there is a shaft 60 feet deep, and open cuts and drifts aggregating 200 feet. Here the ore is contained in a fairly distinct vein about 14 inches wide.

In 1952 these workings were found to be inaccessible except for about 60 feet of shaft on the east end of the south vein. It is rumored among local people that both ore shoots on the south vein were mined out to a

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h/ Op. cit. p. 131.

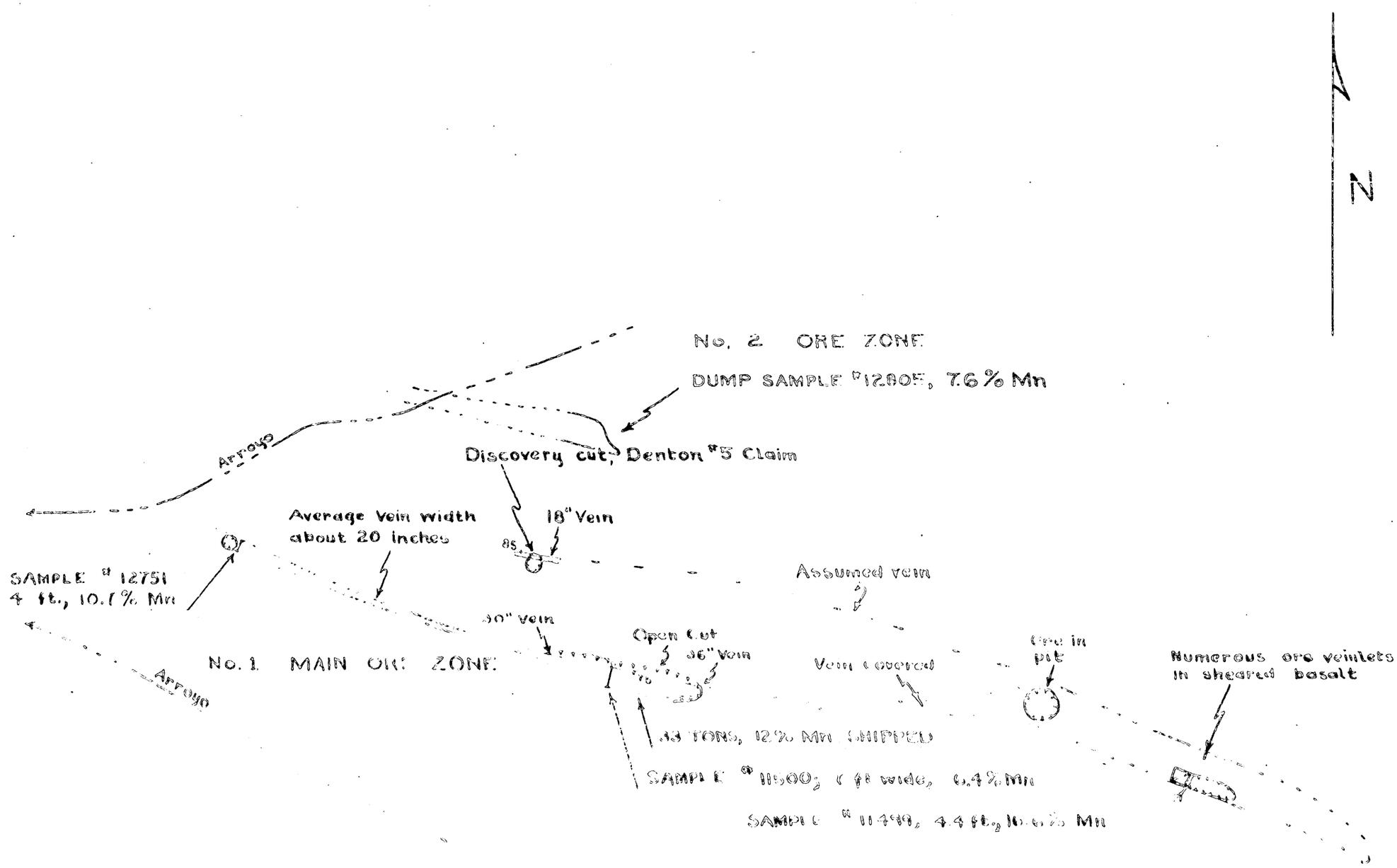
depth of about 50 feet but that ore remained in the bottom of the old stopes. Additional ore probably remains in the eastern part of the ore shoot on the western end of the south vein where the vein is covered by alluvium and does not appear to have been mined.

The ore body (Fig. 3) on the west end of the north shear zone has been explored by an open cut, a few pits and a shallow shaft which has been filled to within about 10 feet of the surface. The ore zone which is about 350 feet long is very irregular and ranges in width from about 20 inches to about 14 feet.

The ore in the north zone consists of oxide minerals psilomelane and pyrolusite which occur as veinlets, fillings in breccia, or nodules and grains in soft altered basalt along the shear zones. The veinlets of manganese oxides, observed by this writer, range in width from about 1/8 to 3/4 inches in thickness and are very irregular and discontinuous and occupy fracture zones in the shattered basalt. The nodules appear to be more-or-less restricted to within a few feet of the surface and occur as grains from about 1/4 to ½ inch in diameter. Occasionally larger masses of almost pure manganese ore are found, and relatively pure masses containing from 50 to 100 pounds have been reported.

Scattered pieces of black calcite are associated with the ore and it is possible that this may have been the source of the manganese which was concentrated by secondary processes to form the present ore bodies. White calcite, which formed later than the manganese oxides, is locally present and in a few parts of the ore shoot on the north vein may constitute about 5 percent of the vein filling.

The maximum depth to which the manganese oxides extend is unknown, although ore was mined to a depth of about 80 feet in the south zone and, according to reports, there is still ore in the bottom of the old workings.


N
No. 2 ORE ZONE
DUMP SAMPLE #12805, 7.6% Mn
Arroyo
Discovery cut, Denton #5 Claim
Average Vein width
about 20 inches
18" Vein
85
SAMPLE # 12751
4 ft., 10.1% Mn
Assumed vein
30" vein
Open Cut
36" Vein
Vein covered
Tree in
pit
Numerous ore veinlets
in sheared basalt
No. 1 MAIN ORE ZONE
Arroyo
43 TONS, 12% Mn SHIPPED
SAMPLE # 11500, 6 ft wide, 6.4% Mn
SAMPLE # 11499, 4.4 ft., 10.6% Mn

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

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

(All exploration must be completed within two years)

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

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?_____

Reviewed by:_____

Date_____

It is assumed that the manganese oxides extend to a depth of at least 125 feet, the depth to which the applicants propose to explore the north ore zone.

Parallel to the west end of the main north ore zone and about 70 feet north of it another ore zone has been recently discovered and is exposed in a small cut (Fig. 3). The ore zone has a maximum width of about 10 feet near the east end and can be traced westward about 70 feet by means of float. The ore is quite similar to that in the main ore zone and consists of manganese oxides filling small fractures and cementing breccia masses in shattered basalt. A representative grab sample of the dump yielded 7.4 percent manganese. Exploration of this recent discovered ore zone is not proposed at present.

The manganese ore is readily separated from the altered basalt by jigging and yields an excellent concentrate. Shipping records reveal that it is practical to produce concentrate containing 40 to 45 percent Mn, 2 to 4 percent Fe, 3 to 5 percent SiO_2 plus Al_2O_3, 0.2 to 0.3 percent Cu plus Pb plus Zn and 0.02 percent phosphorous. The applicants report they were advised that these are the best concentrates received at the Deming, New Mexico stockpile.

The applicant reports that the old mine dumps now being worked yield about 1 ton of concentrate for every 5 tons treated, but data supplied by George Beneveare, Arizona Bureau of Mines, indicates that the ore in the new workings on the north vein will have a concentration ratio of about 1 to 6. The manganese content of a 33 ton shipment of assorted ore for the north ore zone was about 12 percent, which is thought to be representative of the average grade of material in this zone.

ORE RESERVES

Ore reserves are estimated only for the zone near the center of Denton Claim No. 5, where prospecting has exposed an ore zone more-or-less continuously for a distance of about 350 feet. This zone is very irregular and ranges from about 20 inches to 14 feet in width. It contains about 160 tons of vein material per foot of depth and it is assumed that the ore will extend at least to the bottom of the proposed 100-foot shaft. The depth to be explored is from 100 to 122 feet depending on the natural slope of the outcrop.

In the ore zone to be explored by the proposed exploration above the 100 level, it is estimated that there is 16,000 long tons of ore containing about 12 percent manganese. About 10 percent of this is indicated, the remainder is inferred. This should yield about 3000 tons of concentrate containing between 40 and 45 percent manganese. It is possible that dilution with waste during mining will increase the amount of ore to be mined to about 18,000 tons with a consequent reduction in grade to about 10 percent manganese.

PROPOSED EXPLORATION

The applicant's revised proposal is to sink an inclined shaft to explore the ore zone exposed on the Denton No. 5 claim. This shaft is to be 118 feet deep and is to be supplemented by 300 feet of drift on the 100-foot level, and by 100 feet of exploration raises. The proposed exploration is shown on Fig. 4. The shaft is to be located near the east end of the open cut, and the drift is to extend 100 feet west of the shaft and 200 feet east of it on the 100-foot level. This proposed exploration work is adequate to explore most of the known ore zone and if successful will indicate the presence of about 16,000 tons of ore.

The cost of the proposed exploration project is estimated by Mr. T. M. Rennie, Engineer, U. S. Bureau of Mines to cost about $85,000, of which $20,100 is the Government's share. The applicant will finance their share of the cost by contributing labor, and by proceeds received from current production. The proposed project is feasible from an engineering aspect.

SUMMARY AND CONCLUSIONS

Examination of the Denton claims, formerly the Thurston and Hardy mines, reveals that small amounts of ore remain in some of the ore zones previously worked, and that larger amounts of ore are exposed at the surface on the Denton No. 5 claim. Near the center of this claim is an irregular ore zone trending about S. 80° E. for a strike length of about 350 feet and it ranges from about 20 inches to about 14 feet wide. The ore consists of manganese oxides in altered basalt along a shear zone. The ore contains about 12 percent manganese and is amenable to concentration by jigging and yields a concentrate that contains about 42 percent manganese and is free from deleterious materials.

It is proposed to explore this ore zone by sinking a 110-foot exploration shaft and by driving a drift 100 feet west of the shaft and 200 feet east of it on the 100-foot level. The zone to be explored is estimated to contain about 15,000 tons of ore that will yield about 3,000 tons of concentrate. Other potentially productive deposits are present in the area and the total production may be considerably greater than this estimate.

RECOMMENDATIONS

It is recommended that the revised exploration proposals be approved because it is believed that exploration will prove the existence of enough ore to sustain a very small mining and milling operation capable of supplying about 3,000 tons or more of excellent concentrate to the Deming, New Mexico stockpile.

DMA-2013, ACE BRIGHT & RUFUS SUPPLY
[illegible] CALL
[illegible] COUNTY, [illegible]

Engineering Report

By T. M. Ronello
Mining Engineer
U. S. Bureau of Mines

January 1953

[illegible]-[illegible], [illegible]
[illegible]
[illegible]
[illegible], [illegible].

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Present status	8
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2	Denton Claims and workings (See Geology Report)	
3	Geological map of Denton claims (See Geology Report)	
4	Proposed exploration	10

[illegible]

The [illegible] plants, [illegible], [illegible] were examined by the [illegible] [illegible] [illegible] in connection with an application for [illegible] [illegible] in [illegible] for [illegible] use. The applicants were [illegible] by the [illegible] and [illegible] [illegible], the [illegible] [illegible], [illegible], [illegible], and was decided as [illegible]. A process that [illegible] is carried out at an estimated cost of [illegible] but was [illegible] to see if the work should be done.

Initial [illegible] prices were made October [illegible], [illegible] [illegible]. Price, [illegible] survey, accompanied by [illegible], one of the owners of the plants, and [illegible], [illegible]'s [illegible]. Production data were obtained, [illegible] [illegible] and [illegible] was made, and a desirable program was worked out [illegible] the [illegible] price. The final [illegible] were completed on October [illegible] by the [illegible] of this [illegible], accompanied by [illegible]. Costs of the program were estimated at [illegible], and additional [illegible] and production data were obtained.

[illegible]

The [illegible] stream of [illegible] was corrected by [illegible], at the [illegible]'s [illegible], in an effort to obtain [illegible] [illegible]. This resulted in a visit to the [illegible] by [illegible] [illegible], [illegible] [illegible] of that [illegible]. Recovery was [illegible] since [illegible] in the [illegible] [illegible] that would [illegible] [illegible] in improved recovery and later [illegible] costs. Later, the [illegible] [illegible] [illegible] learned that one of [illegible]'s [illegible] was [illegible]

out with favorable results, and that the other samples were contaminated. Jasperoro also obtained a sample of the ore for metallurgical tests that were completed Jan. 19.

The writer, supplied with the metallurgical data for inclusion in this report, plans to treat the financial terms of Jiles for its consideration in the forecast price.

LOCATION, ACCESS, ETC.

The Orion claims are about 2 miles east of Jefferson, Fla. (61 map 2). Only 20 to access from Jefferson by travelling eastward for 20.4 miles on U. S. 1 Hwy 90 to a dirt road that branches northwest from the highway at a point 1.7 miles beyond the Fla. Peak store, thence 0.9 mile to a ranch house located a few thousand feet southwest of the claims. The ranch house presently serves as a residence for mine employees.

Madison, Fla., about 3 miles east of the claims, is the nearest railroad shipping point.

The claims are near the summit of the northerly trending Polomolle Mountains at an average altitude of about 4,300 feet. At the claims, the area is moderately dissected with drains eastward to the Fla River.

Heavy rainstorms, mild, dry, duly and August, and light rain and snowfalls during the winter must account for an estimated 22 inches of annual precipitation.

No claims in the area is sparse.

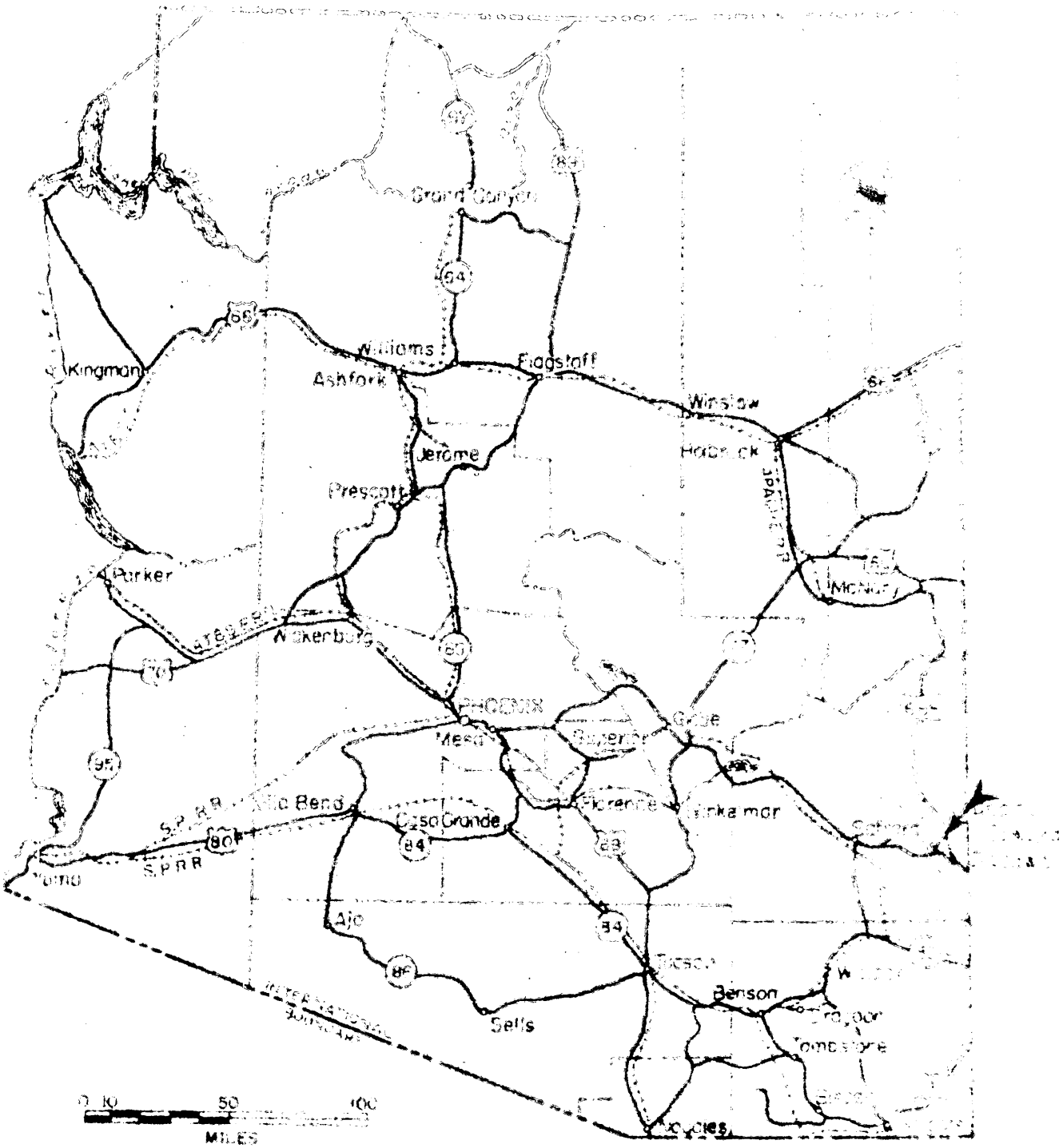


Figure 1. - Location Map, Denton Mining Claims, Greenlee County, Arizona
T.25S., R.29E.

Ace Building and Roofing Supplies Company

[illegible]

The [illegible] property comprises [illegible] unpatented lode mining claims in [illegible] groups, situated in secs. [illegible] 24 and [illegible], T. [illegible], R. [illegible], [illegible] county, [illegible]. According to the applicant the claims were recorded in [illegible]

[illegible] and [illegible], each own one-half of claims [illegible] and [illegible], and one-third of claims 3, 4, 5, and 6. The remaining one-third of claims 3, 4, 5 and 6 is owned by [illegible].

[illegible] has entered into an agreement whereby he will [illegible] of the [illegible] claims through the payment to [illegible] of [illegible] at the rate of 5 percent of net mill returns, and the payment of [illegible] to [illegible] at the rate of [illegible] percent of net mill returns. The agreement stipulates that no royalties are to be paid on the ore [illegible] as long as the manganese content is less than [illegible] percent, and that no royalties will be paid on the ore [illegible] if the ore contains [illegible] percent or less manganese.

The [illegible], the applicant, is a partnership composed of [illegible] and [illegible] of [illegible].

[illegible]

The manganese deposits of the [illegible] claims have been described by [illegible] 1/, [illegible] 2/, and Crittenden 3/.

1/ [illegible] Deposits in [illegible] manganese [illegible] [illegible]
2/ [illegible] manganese deposits in [illegible] [illegible]
3/ Crittenden, [illegible] manganese [illegible], [illegible] 1943.

Production during World War I was about 1,000 tons of Mn concentrates containing approximately 45 percent manganese. The property was idle to 1946 when an attempt was made to reopen some of the old workings. Production from this operation which soon was terminated, amounted to about one carload of ore. The property remained idle until January 1954 when it was acquired by Joe Wilkins and Leslie Supplee, the applicant and present operator.

The applicant's operations to October 26, 1954 have resulted in the production and shipment of about 55 tons of Mn concentrates and 22 tons of crude ore to the Government stockpile at Henderson, Nev. The shipments of Mn concentrates follow

Date 1954	Mn, percent	Percent increase	Payment per unit	Payment, dollars	Gross tonnage
2/16	5.62	33.4	(1.65)	(43.15)	216.21
4/22	21.47	42.7	1.9[illegible]	43.09	359.21
5/13	1.21	35.55	1.65	53.66	[illegible].99
7/22	6.29	43.25	2.[illegible]	97.53	133.[illegible]
[illegible]	5.24	41.65	2.32	101.37	131.57
9/16	6.62	44.9	2.[illegible]	15.[illegible]	113.69
9/19	5.6[illegible]	43.[illegible]	2.43	93.19	103.[illegible]
10/26	5.97	45.65	2.44	94.19	55.[illegible]

The concentrates are from deep ore taken from several places on the property. They contain 1.7 to 4.6 percent iron, 9 percent alumina, about [illegible] percent combined copper, lead and zinc, and 0.03 to 0.05 percent phosphorus. A small premium is received for the concentrates because of its low iron content. No penalties are levied because the content of color elements are within the allowable limits of stockpile specifications.

The 22 tons of crude ore containing 18 percent Mn, since, after being refused at the stockpile, was sold elsewhere for 4.05 a ton.

DESCRIPTION OF THE DEPOSITS

The country rock of the manganese deposits is a gray to brown vesicular basalt that is overlain by a pinkish rhyolite that forms the capping of a small hill near the deposits.

The principal manganese deposits occur in 2 shear zones about 1,200 feet apart that are called the south and north zones.

The south shear zone, which accounted for all production prior to 1952, strikes northwesterly and dips steeply northward. At its east end it has been developed by 2 shafts, 20 and 24 feet deep, and by open-cuts and drifts. The shear zone, containing discontinuous or lens-like veinlets up to 2 feet thick, has a width of about 10 feet over a strike length of 200 feet. At the west end, the ore occurs as a fairly distinct vein, about 14 inches wide, and has been explored by a 10-foot shaft, open-cuts, and 200 feet of drifts. According to rumors, the ore persists below stopes carried to the explored depths.

The north shear zone, the potential ore zone of the proposed explorations, trends N. 70 W. and dips steeply to the south (figure 3). It has been explored by an open-cut, a few pits, and a shallow shaft presently filled with debris to within about 10 feet of the surface. The manganese zone appears to be about 350 feet long and ranges in width from 24 inches to approximately 14 feet.

Parallel to the zone of the proposed explorations is a recently discovered similar ore zone. It can be traced westward about 70 feet and where exposed has a maximum width of 10 feet.

The ore of the north zone occurs as irregular and discontinuous veinlets of psilomelane and pyrolusite, up to one-half inch in thickness. Grains of the minerals, one-fourth to one-half inch in diameter, are found near the surface. Occasional masses of ore, containing from 10 to 100 pounds, have been found according to the applicant and the old reports. White, and black calcite are locally present in the zone.

ORE RESERVES

The ore reserves in the zone covered by the proposed explorations have been estimated at 16,000 tons containing 12 percent manganese. Possibly 10 percent of the 16,000 tons is classified as indicated ore and the remainder is inferred ore.

The possibility, that total ore reserves of the property may be a few times the estimated 16,000 tons, is favorable. This is indicated by: (1) The probable extension along the strike of the main ore body, (2) the ore zone recently discovered near the main zone; and (3) ore remaining in the south shear zone.

It is estimated that the 16,000 tons of 12 percent ore will be diluted in mining to yield about 19,000 tons of 10 percent ore.

PRESENT STATUS

Operations

Present mining operations are confined to advancing the open cut in the main ore zone to the site of the proposed shaft. Mined ore is loaded into a truck with a tractor-loader, then is hauled to a small stockpile at the nearby mill. When sufficient ore is available, mining ceases while the mill is operated for a few days. Labor for both operations consists of Raymond Godfrey and his brother.

Equipment

Equipment owned by the applicant and located at the mine or in Safford, consists of the following:

1 - Water tank, 500 gal. capacity
3 - Small water pumps
1 - Kohler light plant
1 - Ferguson tractor with loader and blade
1 - Ore box, 24- by 24-inch
1 - 1945 Chevrolet 1½-ton dump truck.
1 - 1949 Willys jeep truck and dump bed
1 - Electric hoist, ½-ton
2 - Electric drill
1 - Electric grinder
1 - Jaw crusher
2 - Gasoline engines - [illegible] H.P.
1 - Jackhammer, medium weight
1 - Air compressor, 225 cubic feet with 150 feet of air hose and attachments
1 - Arch welding rig, with accessory attachments
1 - Stover gasoline engine, 3 H.P.

Mill Operation

The mill consists of a small jaw crusher, screens, jig, and water pumps. At capacity it can probably treat about 5 tons of ore daily.

Economics of Operations

Although complete records are not available for the present operations, it is evident that returns from the sale of concentrates will not cover storm e wages after providing for other expenses. However, sufficient work has been done to indicate that operations can be developed to a profitable stage if adequate ore reserves can be found.

According to the applicant, the milling of 5 truck loads of dump ore has consistently yielded about one truck load of concentrates, a concentration ratio of approximately 5 to 1. This data could not be used in predicating results on mine ore because it is based on estimated weights and because the dump and mined ore are physically dissimilar. As a basis for estimating probable recoveries, the following mill results by the Arizona Bureau of Mines were used.

A sample from about 25 tons of ore mined from the main ore zone was crushed to form 2 products, plus 20 mesh, and minus 20 mesh. The coarse product was treated by heavy-media (2.95 sp. gr.) concentration and the minus 20 mesh material was treated by tabling. The coarse ore yielded a concentrate containing 39.9 percent manganese that represented 15.9 percent by weight of the ore. Recovery was 60.2 percent. The table concentrate assayed 35.4 percent manganese and represented 0.8 percent by weight of the ore for a recovery of 3.7 percent. The combined concentrates averaged 33.7 percent manganese. Total recovery was 63.9 percent and the ratio of concentration was 6 to 1. Calculated head was 7.7 percent manganese. Roseveare 4/ told the writer that milling of similar ore at the applicant's mill, after minor alterations, could be expected to result in the production of 46 percent manganese concentrates with a recovery of 50 percent and a concentration ratio of 6 to 1. His tests indicated the higher grade concentrate could be attained by finer crushing and a change in the specific gravity of the heavy-media solution. He has informed the applicant of the results of his tests and pointed out that the question of additional recovery by tabling of the fines is an economic problem that could be determined at the applicant's mill.

Roseveare said that a 50 ton mill probably could be built for $10,000 and that milling costs would be around $2.50 a ton of ore.

4/ Previously cited.

Estimates, that indicate a profitable operation might be developed, are based on the following:

1. The developed reserves will yield 10,000 tons of 18 percent ore, sufficient to justify operation at 50 tons a day.
2. The ore can be mined at a cost of $9.00 a ton by open stoping and/or shrinkage methods.
3. A mill can be constructed at a cost of $25,000 that includes power installations and water development (sufficient water for the operation reportedly has been developed in a nearby deep well that can be equipped with a pump.)

Selling value per ton of 40 percent concentrates ..... $ 55.00

Costs per ton of concentrate with concentration ratio of 6 to 1:

Mining ($9.00) (6) 30.00

Milling ($4.50) (6) 15.00

Mill and water supply ($25,000/10,000) (6) 4.75

Royalties - Government and owners 6.40

Administration and overhead ..... [illegible] $ 62.15

Profit a ton of conc. before taxes ..... $ 29.85

Profit a ton of ore before taxes 4.92

* Government's royalty of $4.40 a ton, 8 percent of $55.00, would amount to about $ 16,000 from production of 3,600 tons of concentrate.

PROPOSED DEVELOPMENT

The applicant proposes to sink a shaft on the vein to an inclined depth of 150 feet, to drift easterly for 200 feet and 100 feet westerly

from the shaft on the 100-foot level, and to drive 100 feet of raises, none to exceed 50 feet in length (figure 4). The shaft, to be timbered with 6- by 8-inch sets and space-lagged, would be 4- by 7-feet in the clear and contain hoisting and manway compartment. Drifts and raises would be driven 5 by 7 feet, and would be timbered where necessary.

The sequence of the operations would be approximately as follows:

(1) Move in necessary equipment, install water tank, construct 16- by 12-foot frame building, open on one side, for compressor, light-plant, change-room, and shop, and an 8- by 16-foot hoist house of frame construction.

(2) Start shaft by sinking 5 to 10 feet, place collar timbers, timber upward to ground-line, erect headframe, and install hoist and hoisting accessories.

(3) Sink shaft to 20 feet below 100-foot level to provide room for hoist bucket or skip and for sump.

(4) Drive 200 feet of drifts and run 100 feet of raises, if justified.

During phase No. 2 of the above operations, the applicant intended to erect a bin at the shaft in order to facilitate transportation of ore to the mill. Construction of the bin has been removed from the project by the writer because it is not a necessary part of the exploratory project.

The applicant indicated that it would hire an experienced miner who is capable of supervising the project and assisting with the mining and timbering operations.

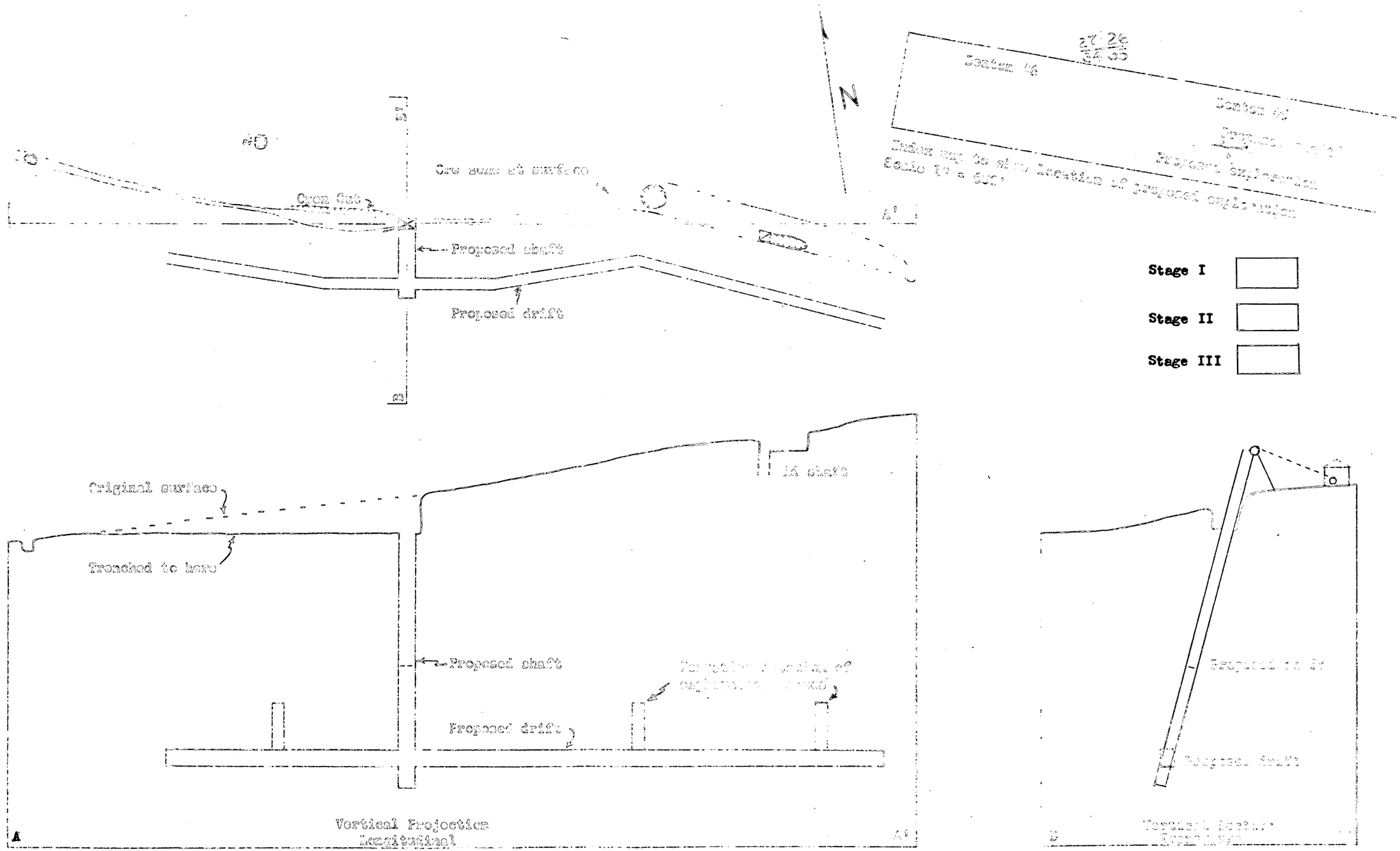


Figure 1 - Proposed Exploration of Boston Number 5 Claim, Greenlee County, Arizona.

ACE BUILDING AND ROOFING SUPPLIES

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

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

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

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

c) Is a field check needed?_____

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

a) Is it applicable?_____

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

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____

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

a) Are there sufficient data?_____

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

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

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

Costs of Project

The proposed project is set up so that it may be carried out under the Short Form Contract (TP-220, revised Feb. 1952). It consists of the following 4 operations, reportable under Item 1 of Form TP-1A4, with unit and total costs.

New buildings and improvements ..... $ 1,[illegible].00

Shaft sinking, 220 ft. @ $[illegible] a foot 11,000.00

Drifting, 200 ft. @ $36.00 a foot 10,200.00

Raising, 200 feet @ $35.00 a foot ..... 2,[illegible]

Total cost of project ..... $[illegible]

The cost units for which the applicant has agreed to do the work are equitable on the basis of the following estimates prepared by the writer.

New Buildings and Improvements

Compressor and shop building -
16- by 10-foot, frame construction @ [illegible].00 sq. ft. .. $ 97.00

Cast house -
8- by 16-foot, frame construction @ [illegible].50 sq. ft. ... [illegible].00

Headframe -
Includes installation of shaft timbers to ground line - $400.00, and erection of 20-foot headframe - $300.00 .. 700.00

Installation of water tank, hoist, sheave wheel, air and water lines, and electric light plant 224.00

Total cost ..... $1,[illegible].00

Estimated time to complete: 2 months.

Shaft Sinking

The shaft will be started from the bottom of the trench and will be sunk on the vein to an inclined depth of 220 feet. It will contain

a hoisting and a manway compartment and will be timbered to 4 by 7 feet in the clear. Shaft sets will consist of 6- by 6-inch posts and plate timbers, and will be lagged where necessary with 2-inch planks. Excavations on the vein to date indicate approximately 50 percent of the shaft will require lagging.

These operations will be carried out 6 days per week on a 2-shift basis. The following estimates indicate that the cost of 1 foot can be attained by advancing the shaft at a rate of about 4.45 feet per day. On the basis of this advance, the shaft should be completed in a little over 4 months.

Labor and Supervision

	Cost/day	Cost/foot
1 - Shift-Foreman ($20.00 monthly	$ 20.00	
2 - Shaft men ($1.75 per hr.	21.00	
4 - Shaftman's helpers ($1.55 per hr. ...	26.04	
4 - Hoistmen ($1.75 per hr.	28.00	
2 - Drivers ($1.50 per hr.	24.00	
Cost, including overtime and 19 percent payroll taxes	$ 154.50	$77.00

Other costs

Timber and lagging rods	11.00
Pipe - 2-inch air line, 1-inch water line	6.00
Blasting supplies, ventilation pipe, and dynamite	[illegible]
Dynamite	1.00
Hoisting cable and skip	1.50
Air driven pump and pipe	2.00
Drilling supplies	3.00
Depreciation and/or purchase of equipment	2.00
Fuel and power	4.50
Repair parts for equipment	2.00
Small tools	6.50
Assays (full sample each 10 feet) including handling and transportation charges	[illegible]
Estimated cost per foot	$ 112.00

A small amount of water encountered at a depth of 47 feet in a nearby well indicates that a small pump installation may be necessary.

Equipment owned by the applicant and suitable for the job consists of the following:

	Value
1 - 1949 Chevrolet 1½-ton truck	$1,[illegible].00
1 - New Jackhammer	345.00
1 - Electric light plant	270.00
1 - Compressor, 225 cu. ft.	[illegible].00
1 - Stover gasoline engine (for ventilator)	[illegible].00
Total value	$2,[illegible].00
Depreciation for 3 months	[illegible]
Depreciation per foot	1.16

In addition to the above, the applicant will probably purchase a hoist for $[illegible].00, a ventilating fan for $[illegible].00, a mine car for $[illegible].00, and a Cyco air-drill for $750. Allowable depreciation on the hoist and fan for 3 months would be $[illegible].00, or at the rate of 30 cents per foot of shaft advance. This item, plus $1.16 for equipment owned, accounts for the $2.46 of the cost estimates. Depreciation on the mine car and air-drill are not included as this equipment will be for use in drifting and raising operations.

Drifting and Raising

Drifts and raises will be carried 5 by 7 feet in section, and will be timbered where necessary. These operations, also on a 6-day week, 2 shift basis, should advance at the rate of 5 feet per day and be completed in about 90 working days, or 4 months. Daily labor costs for these operations probably will be the same as for shaft sinking except that the 2 top men will be eliminated, or $124.50 (154.40-29.90). With advance at 5 feet per day, labor will amount to $24.90 per foot of advance. On this basis, with labor representing 70 percent of the overall costs, the cost per foot would be $35.70.

MINING FINANCE

The applicant has indicated that it will be able to finance its share of the project cost in accordance with Governmental regulations. Its share, 25 percent of [illegible], or [illegible], will be as available cash, monies derived from sale of concentrates, labor, and equipment.

CONCLUSIONS

Geologic conditions are favorable for the development by the proposed project of an estimated [illegible],000 tons of 32 percent manganese ore. Similar conditions at other nearby places indicate that the total reserves of the property may be a few times the estimated reserves.

The ore can be milled to yield 46 percent concentrates that are readily marketable at Deming, [illegible].

Development of the estimated ore reserves could result in the construction of a small concentrator, the production of about 9,[illegible] tons of concentrates, and economic operation of the property with a return to the Government of about 7[illegible] percent of the requested loan.

The project is technically feasible and can be completed in 9 months at an estimated cost of [illegible].

The applicant can be expected to finance [illegible] share of the project cost, 25 percent of [illegible], or [illegible].

RECOMMENDATIONS

The conclusions of this report are the bases for recommending approval of the proposed project.

Omea 2613, E-494. Amend. no 1, 2

402

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

224 New Customhouse
Denver 2, Colorado

October 7, 1953

WSM

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, a partnership composed of G. T. Godfrey and Raymond Godfrey, Greenlee County, Arizona

Enclosed are the original and two copies of Amendment No. 2 to the subject contract which we have had executed to correct the direction of the crosscut referred to in Amendment No. 1 dated August 27, 1953. Also enclosed are three sets of data relevant to the amendment.

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

Re Amend #2
(Amendment no 1, correction)

gb

RECEIVED

MINING DIVISION
REGION IV

September 1, 1953

Memorandum

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

From : Lincoln A. Stewart for Walter R. Storms, Chief
Mining Methods Br., Mining Div., Region IV

Subject : Amendment No. 1, Docket No. DMEA-2613 (Manganese), Contract Idm-E494, Ace Building and Roofing Supplies, Greenlee County, Arizona.

Enclosed find original and 5 copies of a memo by William R. Hardwick regarding an error in typing the direction of amended work in item 1 under Stage III.

Lincoln A. Stewart

Lincoln A. Stewart, Mining Engineer
for Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (5)
DMEA-2613
DF

LAStewart:frj

MINING DIVISION
REGION IV

August 31, 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 : Amendment No. 1, Docket No. DMEA-2613 (Manganese), Contract Idm-D494, Ace Building and Roofing Supplies, Greenlee County, Arizona.

Amendment No. 1 states, "Crosscut from the bottom of the shaft completed under Stage I, to the southern limits of the mineralized zone - - -". This should be, "- - - to the northern limits of the mineralized zone - - -".

The shaft bottoms in what is approximately the southern limits of the mineralized zone and it was the intention of the operator to crosscut to the footwall or northern limits of the mineralized or fractured zone. This should be corrected.

William R. Hardwick
William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

CC W. H. King (Orig. & 5)
DMEA-2613
MF

WRHardwick:frj

NO. 2

AMENDMENT OF CONTRACT: No. Idm-8494

Contract Docket No. DMEA 2613, dated February 27, 1953, between the United States of America and Ace Building and Roofing Supplies, a partnership composed of G. T. Godfrey and Raymond Godfrey, effective August 12, 1953:

> Referring to Amendment No. 1, dated August 27, 1953, which amended EXHIBIT "A" attached to Exploration Project Contract Form MF-200(A), further referring to said Amendment No. 1, item "1.", second line, change the word, "southern" to read "northern."

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: OCT 7 1953

ACE BUILDING AND ROOFING SUPPLIES

By G. T. Godfrey
G.T. Godfrey, Partner

By Raymond Godfrey
Raymond Godfrey, Partner

UNITED STATES OF AMERICA

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

#2

#2

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

224 New Customhouse
Denver 2, Colorado

August 27, 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-2613 (Manganese), Contract IDM-E494, Ace Building and Roofing Supplies, Greenlee County, Arizona

Enclosed are the original and two copies of Amendment No. 1 to the subject contract which modifies the description of the work under Stage III and limits the work performed thereunder. Also enclosed are four sets of data relative to the amendment.

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

Amend #1

#1

No. 1

AMENDMENT OF CONTRACT: No. IDM-E494

Contract Docket No. DMEA-2613, dated February 27, 1953, between the United States of America and Ace Building and Roofing Supplies, a partnership composed of G. T. Godfrey and Raymond Godfrey, is hereby amended as follows, effective August 12, 1953:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form MF-200(A), captions "Description of the Work" and "Estimated Costs of the Project", subheading "Stage III", under both captions.
>
> Whereas work under Stage I has been completed and whereas the performance of the work cited under Stage II is not approved by the Government, now therefore the work cited under Stage III is hereby modified as follows in accordance with stipulations cited in the description thereof.
>
> Work under Stage III is limited to the following:
>
> 1. Crosscut from the bottom of the shaft completed under Stage I, to the southern limits of the mineralized zone, not to exceed 60 feet at $35.00 per foot.... $2100.00
>
> 2. 6 Manganese assays @ $2.00 per assay..... 12.00
>
> $2112.00

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 AUG 27 1953

ACE BUILDING AND ROOFING SUPPLIES

By G. T. Godfrey
G. T. Godfrey, Partner

By Raymond Godfrey
Raymond Godfrey, Partner

UNITED STATES OF AMERICA

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

MINING DIVISION
REGION IV

Memorandum

August 5, 1953

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

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

Subject : Request for Amendment, Contract Idm-5494, Docket DMEA-2613, Ace Building & Roofing Supplies, Denton Manganese Mine, Greenlee County, Ariz.

Enclosed in sextuplicate are the following:

(1) Operator's request for an amendment to do 60 feet of crosscutting from the 60-foot level in the shaft;

(2) Bureau of Mines engineer's report and recommendation, with map.

The shaft was sunk for 60 feet under Stage 1 of this contract, but as the possibility of finding any significant amount of ore by sinking an additional 30 feet under Stage 2 seemed remote, it was recommended that no further shaft sinking be done.

Under Stage 3 of the contract, it provides: " ------ If, however, the results of Stage II so indicate, or if Stage II is not performed, Stage III at the optional of the Government may be modified to include only a limited amount of drifting on or below the 50-foot level. Etc."

As we can see no good reason for performing Stage II, we have recommended that that part of the project be eliminated. However, we do believe that a small amount of crosscutting from the 60-foot level might discover minable ore, so we recommend that Stage III of the contract be amended to read:

"Stage III will be undertaken after the completion of Stage II only if in the opinion of the Government, the results thereof warrant it. If, however, the results of Stage II so indicate, or if Stage II is not

CC W. H. King (5)
DMEA-2613
BF

WRStorms:frj

performed, Stage IIIat the option of the Government may be modified to include only a limited amount of crosscutting on or below the 50-foot level. In the event of such modification, all raising shall be eliminated.

"1. Drive 60 feet of crosscut on or below the 50-foot level. The crosscut will be 5 x 7 feet in cross section and timbered where necessary."

"2" under this stage would be eliminated.

Under"Estimated Costs of the Project", Stage III would be amended to provide only 60 feet of crosscutting at $35 per foot at a total cost of $2,100; and 6 manganese assays at $2 per assay or a total of $12. Stage III then would total $2,112.00.

Walter R. Storms

Walter R. Storms

MINING DIVISION
REGION IV

August 5, 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 : Request for Amendment to Contract Idm-2494, Docket DMEA-2613 Ace Building and Roofing Supplies' Denton Manganese Prospect, Greenlee County, Ariz.

The Denton manganese prospect was visited on July 14 by R. F. Robinson, U. S. Geological Survey, and the undersigned engineer for the purpose of examining the results of stage I of the contract and determining whether additional work was warranted. The depth of the shaft at that time was 58 feet. The total depth allowed by Stage I is 60 feet.

The shaft was collared in a lens of manganese ore. This lens is reported to have contained 12 to 16 percent manganese at the surface. Before the shaft was started, an open cut had been made along the lens and the elevation of the collar was approximately 14 feet below the original surface. At this elevation the lens measured 7 feet thick and contained 6.7 percent manganese. The lens thinned rapidly, and at a 12-foot depth in the shaft it was 2 feet thick and contained only 1.9 percent manganese. At a 14-foot depth the lens had completely disappeared and only a thin seam of clay gouge between slickenside walls remained. This condition persisted to the bottom of the shaft at 58 feet. The hanging wall of the shaft follows a similar seam.

About 25 feet north of the shaft on the surface there is a lens of ore exposed by the excavation for the hoist building. About 40 feet north of the shaft is another parallel seam which contains some manganese minerals. Some surface trenching and sampling was done by W. Allison after the original examination but before work was started on this contract. The work consisted of trenches cut across the fractured zone at intervals of 50 feet along the strike. In these trenches the ore zone appears to consist of a number of parallel fractures. The zone may be as much as 60 feet wide.

CC W. M. King (Orig. & 5)
DMEA-2613
DF

WRStorms:frj

The shaft has been sunk on one of these parallel fractures close to the hanging wall of the zone. It is possible that a fracture parallel to the one on which the shaft was sunk might contain better manganese mineralization. It also is possible that the footwall side of the fractured zone might be better than the hanging wall side.

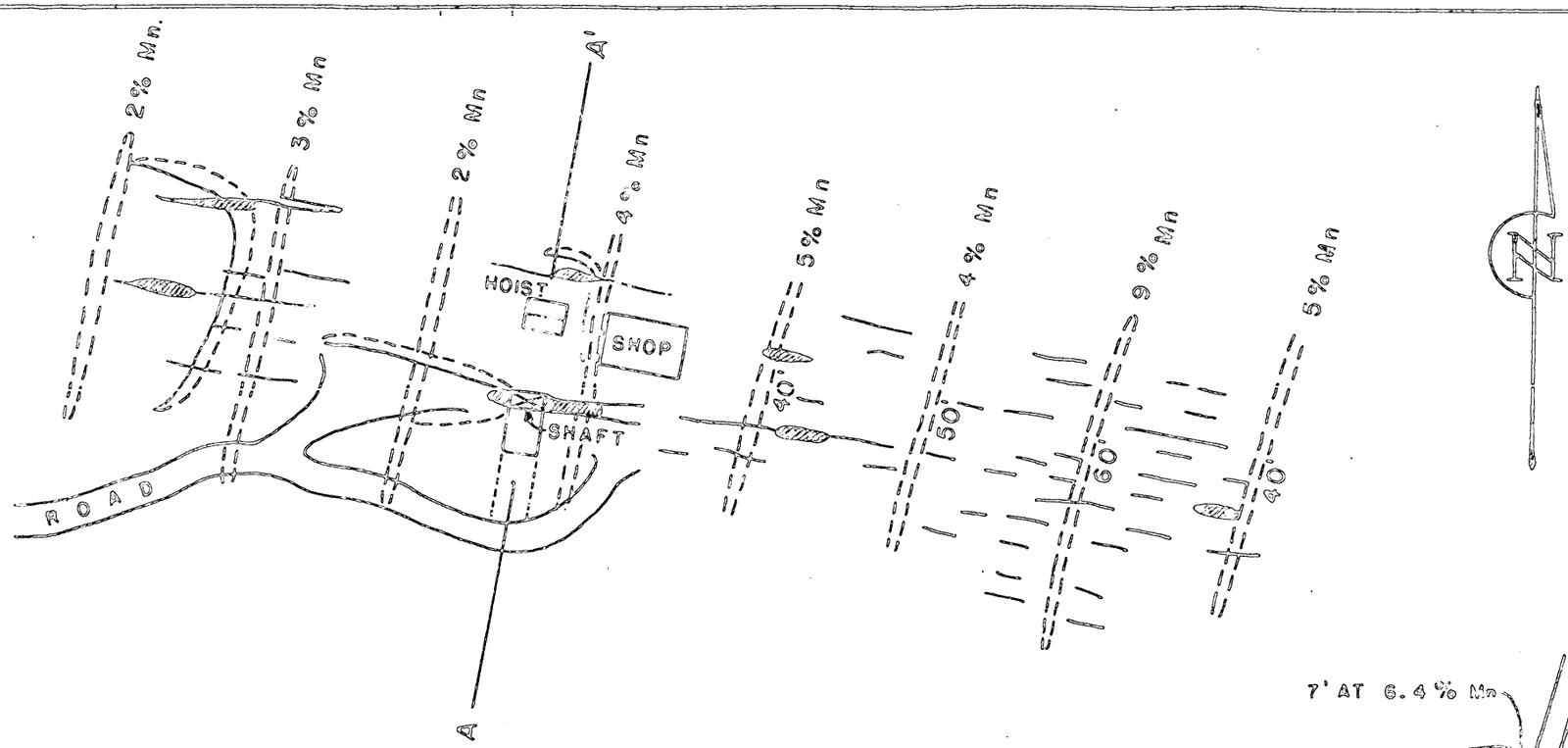
The trenching and sampling by W. Allison is shown on figure 1. Assuming that these assays are correct and that the recoverable manganese persists to a depth of 15 feet, there is an area east of the shaft approximately 200 feet long by 40 to 60 feet wide which will contain 11,400 tons of indicated ore with a grade of 5.7 percent manganese. While the manganese content of this ore is very low it could be mined very cheaply. Indicated metallurgical results are good. A profit could be expected from ore of this type when it contained 5 percent or more of recoverable manganese. Assuming a recovery of 75 percent and a final concentrate of 40 percent manganese, 1,220 tons of concentrate are indicated.

The unfavorable showing in the shaft was discussed with the operator on July 14, and he suggested that a crosscut be driven to cut the fractured zone at right angles to the strike. The operator has been informed by letter that the contract does not provide for a crosscut and that it will be necessary for him to request an amendment to the contract to authorize this work. The operator has written a letter requesting an amendment to authorize a crosscut. His request is not presented in proper form. It is suggested that essential information is contained in this report and it is recommended that the operator's request be processed.

It is recommended that an amendment be approved that will authorize the substitution of 50 feet of crosscut at a depth of 60 feet in lieu of drifting as specified by the contract. Costs and all other factors are to remain as specified in the contract.

William R. Hardwick

William R. Hardwick, Mining Engineer
Mining Methods Branch
Mining Division, Region IV

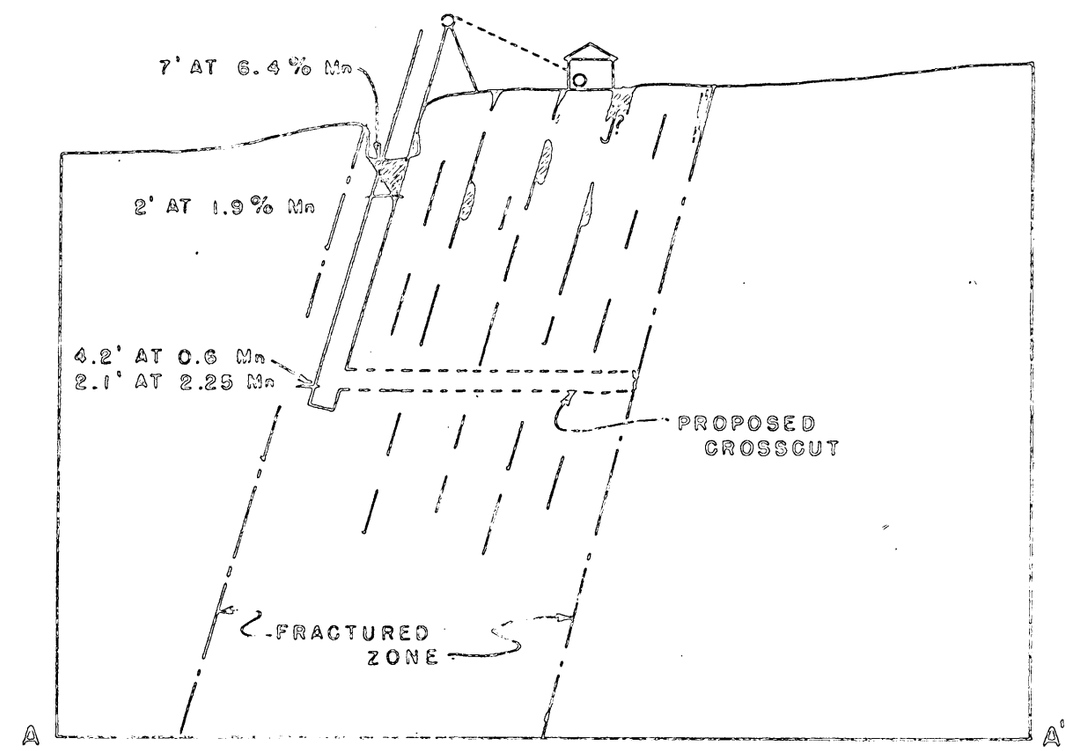


- ORE
- BULLDOZER TRENCH

5 NG
2 Marginal
1 Economic

PLAN OF FRACTURED ZONE

SCALE 1" = 40'



CROSS SECTION

DMEA 2613 FIGURE 1. - ACE BUILDING & ROOFING SUPPLIES JULY 1953

G. T. GODFREY

RAYMOND GODFREY

ACE BUILDING & ROOFING SUPPLIES

Concrete Blocks, Paints and Hardware

620 Third Street :: Phone 289

SAFFORD, ARIZONA

July 30, 1953

Re: Contract Idm-E494
Docket DMEA-2613

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

Dear Sir:

Consider this corresspondence our request for amendment of above contract. It is our desire to cross cut from the bottom of our shaft to cut some of the parallel fractures which are mineralized on the surface. We believe that a 60 feet cross cut would be adequate to determine if these fractures reach to the present depth of our shaft.

Thanking you in advance for any consideration shown us in this matter,

We remain,

G. T. Godfrey

G. T. Godfrey (Partner)
Ace Bldg. and Roofing Supplies
620 3rd Street
Safford, Arizona

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

224 New Customhouse
Denver 2, Colorado

March 20, 1953

REGISTERED #78604

WSM

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract IDM-E 494, Docket DMEA 2613, Ace Building and Roofing Supplies

Enclosed are the original and two copies of Contract IDM-E 494. 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

Contract

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2613

COMMODITY Manganese

Division Copy

IDM-E 494

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 27th day of February, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ace Building and Roofing Supplies, a partnership composed of G. T. Godfrey and Raymond Godfrey, 620 Third Street, Safford, 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 Greenlee, described as follows:[3] Two unpatented lode claims in Secs. 27, 34, and 35; T. 7 S.; R. 30 E.; Gila-Salt River Meridian. These claims, Denton #5 and #6, are recorded in book 6 of the Location Notices, page 311, Greenlee County Court House, Clifton, Arizona

the Operator represents and undertakes:[4]

(a) That the Operator has an assignment entitled to possession, and that the assignment is subject to the Owner's Consent to Lien 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] Manganese

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 75 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 $17,880.00 which is 75 percent of $23,840.00 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.

16—66329-1

Contract

(*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

Ace Building and Roofing Supplies
(Operator)

By Frank E. Salmon
Administrator, Defense Minerals Exploration Administration

ACTING

By G. T. Godfrey
Partner

By Raymond Godfrey
Partner

I, _____, certify that I am the secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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.

[CORPORATE SEAL]

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

ACE BUILDING AND ROOFING SUPPLIES
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2613

EXHIBIT "A"

Description of the Work

The exploration work on this project is to be done in three stages as is indicated on the map attached hereto and made a part hereof entitled "Figure 1- Proposed exploration of Denton Number 5 Claim, Greenlee County, Arizona".

Stage I

Time Schedule: 0 - 3 months

1. Construct a 16 by 18 foot, frame-construction compressor and shop building.

2. Construct a 8 by 10 foot, frame-construction hoist house.

3. Construct a 20 foot headframe and install shaft timbers to ground level, water tank, hoist, sheave wheel, and air and water lines.

4. Sink a two-compartment inclined shaft in the ore zone 60 feet. The shaft will be timbered to 4 by 7 feet in the clear and lagged where necessary.

Stage II

Time Schedule: 4 - 5 months

Stage II is to be undertaken only after the completion of Stage I, if in the opinion of the Government, the results of Stage I warrant it.

1. Sink the above shaft an additional 50 feet to 10 feet below the 100-foot level to provide for a sump, the shaft to be two-compartment and timbered to 4 by 7 feet in the clear. Lagging will be used where necessary.

Stage III

Time Schedule: 6 - 9 months

Stage III will be undertaken after the completion of Stage II only if in the opinion of the Government, the results thereof warrant it. If, however, the results of Stage II so indicate, or if Stage II is not performed, Stage III at the option of the Government may be modified to include only a limited amount of drifting on or below the 50-foot level. In the event of such modification, all raising shall be eliminated.

1. Drive 300 feet of drift on the 100-foot level. The drift will be 5 x 7 feet in cross section and timbered where necessary.

2. Drive 100 feet of raises at locations to be approved by the Field Team. None of the raises are to exceed 50 feet in length. The raises are to be 5 x 7 feet in cross section and timbered where necessary.

Estimated Costs of the Project

Agreed Unit Costs

Stage I

1 16 by 18 foot compressor and shop/ building	$ 500.00	
1 8 by 10 foot hoist house	200.00	
1 20 foot headframe, including installation of shaft timbers to ground level, water tank, hoist, sheave wheel, and air and water lines	800.00	
60 feet of shaft @ $75.00 per foot	4,500.00	
5 Manganese assays @ $2.00 per assay	10.00	
Total Estimated Agreed Unit Cost of Stage I		$6,010.00

Stage II		
50 feet of shaft @ $75.00 per foot	$3,750.00	
5 Manganese assays @ $2.00 per assay	10.00	
Total Estimated Agreed Unit Cost of Stage II		$3,760.00
Stage III		
300 feet of drift @ $35.00 per foot	$10,500.00	
100 feet of raises @ $35.00 per foot	3,500.00	
35 Manganese assays @ $2.00 per assay	70.00	
Total Estimated Agreed Unit Cost of Stage III		$14,070.00
Total Estimated Agreed Unit Cost of Project		$23,840.00
Government Participation @ 75%		$17,880.00

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 ~~Greenlee~~, described as follows:1/

Denton Mine No. One and Two Recorde Sept. 11,1951
Denton Mining Claims No's 1-2-3-4-5 and 6 Located
Approximately 12 miles woest of Duncan Arizona, in the
Ash Peak mining district. Recorded in book 6 Location
Notices, Page 311. Greenlee County Court House Clifton Ariz.
~~See Attached Annex.~~

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/ ~~Ace Building And Roofing Supplies. (A Partnership)~~

G. T. Godfrey & Raymond Godfrey

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/$ 35,720.45, 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 24 day of July, 1952

LaVar E. Olff [Seal]
Jerry A. Rodgers [Seal]
Raymond Godfrey [Seal]

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.

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

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

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

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

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

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

c) Is a field check needed?_____

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

a) Is it applicable?_____

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

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____

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

a) Are there sufficient data?_____

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

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

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

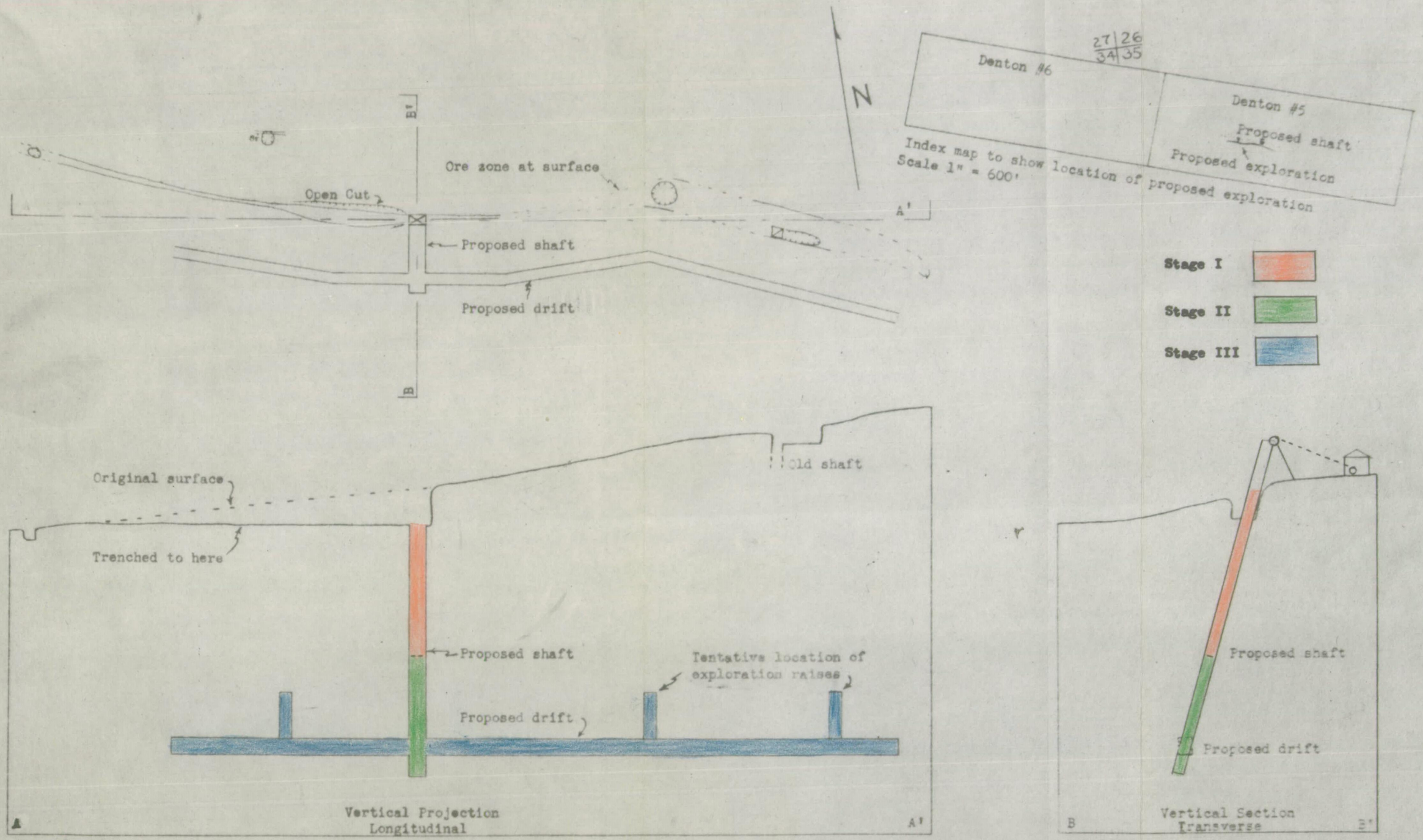


Figure 1 - Proposed Exploration of Denton Number 5 Claim, Greenlee County, Arizona

ACE BUILDING AND ROOFING SUPPLIES
DMEA 2613

Scale 1" = 40'