



CONTACT INFORMATION

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PRINTED: 09/06/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: WAR EAGLE

ALTERNATE NAMES:

IRON KING GROUP
VETA GRANDE

LA PAZ COUNTY MILS NUMBER: 268

LOCATION: TOWNSHIP 10 N RANGE 16 W SECTION 7 QUARTER SW
LATITUDE: N 34DEG 13MIN 07SEC LONGITUDE: W 113DEG 58MIN 22SEC
TOPO MAP NAME: SWANSEA - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE

BIBLIOGRAPHY:

FARNHAM, L.L., & STEWART, L.A., 1958,
USBM IC 7843, P. 67
ADM MR WAR EAGLE FILE
AZBM BULL 127, P 99
USGS BULL 710, P 181
AZ GEOLOGICAL SOCIETY - 1980 SPNG FIELD TRIP,
P 40 (ADM MR GEOLOGY FILE)

ADDITIONAL REFERENCES

- See: IC 7843 p. 67
See: AEM Bull. 127, p. 99
See: USGS Bull 710, p. 181

MILS Sheet sequence number 0040270400

Arizona Geological Society 1980 Spring Field Trip
page 40, Geology File

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

LaPazCO.

near Quartzsite

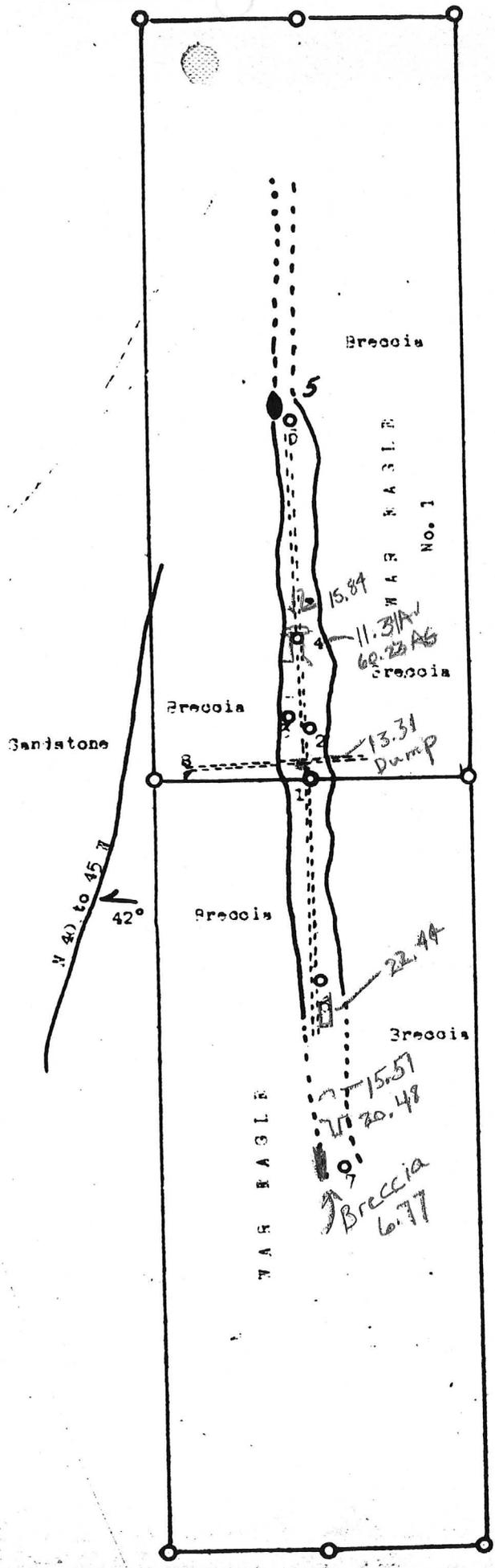
MM-7208 APATITE with quartz, hematite,
siderite.

Veta Grande Claim

MILS # 268

2- AKA's

WAR EAGLE (file)



LEGEND

- 1 Location War Eagle claim
 - 2 Location War Eagle No.1 claim
 - 3 Shaft, 30-ft.
 - 4 Short tunnels
 - 5 Crest to north
 - 6 Point from which photo was taken.
 - 7 South prospect pits
 - 8 Portal proposed crosscut tunnel
- In area between 1 and 5 greatest number of prospect pits sunk

Figures in red assays from ssamples taken by Harmon E. Keyes in April and May 1953.

KAISER COMPANY, INC.

IRON AND STEEL DIVISION
BOX 217
FONTANA, CALIFORNIA

December 3, 1946



Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona

Attention: Mr. Chas. H. Dunning
Director

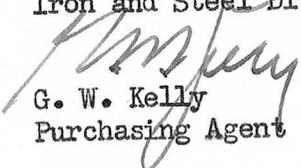
Gentlemen:

Reference is made to your letter of November 29, 1946.

The price of 40¢ per unit of contained manganese, f.o.b. Kaiser, California, is correct, as quoted in our letter of November 27, 1946.

Yours very truly,

KAISER COMPANY, INC.
Iron and Steel Division


G. W. Kelly
Purchasing Agent

GWK/ehh

CC: Mr. T. O. Evans
Mr. S. J. Curtis

The Atchison, Topeka and Santa Fe Railway Company

W. M. BALLING,
Consulting Mining Engineer
T. O. EVANS,
Mining Engineer

DEPARTMENT OF MINERAL RESOURCES

Telephone Mutual 0111

~~500 SOUTH MAIN ST.~~

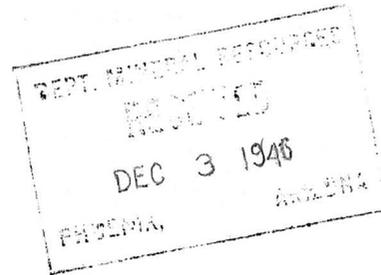
Los Angeles, ~~CA~~, California
Zone 14
121 East Sixth Street
December 2nd, 1946.

Please refer to

File No. 19.0004

AIR MAIL

Mr. Chas. H. Dunning, Director,
Department of Mineral Resources,
State of Arizona,
304 Home Builders Building,
Phoenix, Arizona.



Dear Mr. Dunning:

Copies of Mr. G. W. Kelly's letter to you dated November 27th and your November 29th reply to him about the Curtis manganese deposit near Bouse, were read this morning.

I immediately telephoned Mr. Kelly and he repeated that the price per unit of contained manganese was to be 40 cents per unit f.o.b. Kaiser, California, and not in railroad cars at point of shipment as I had previously informed Mr. Curtis.

Please accept my sincere apology for this error which was, I assure you, completely unintentional.

Yours truly,

T. O. Evans
Mining Engineer.

cc - Mr. G. W. Kelly, Purchasing Agent,
Iron and Steel Division,
Kaiser Company Inc.,
Box 217.
Fontana, California.

cc - Mr. S. G. Curtis,
Bouse, Arizona.

Handwritten note:
Mr. Kelly
12/1/46

November 29, 1946

AIRMAIL

Mr. G. W. Kelly, Purchasing Agent
Iron and Steel Division
Kaiser Company, Inc.
Box 217
Fontana, California

Dear Mr. Kelly:

We have your letter of the 27th regarding
the Curtis manganese deposit near Bouse, Arizona.

One clause in your letter hits us right
between the eyes. You say: "Our price is 40¢ per
unit of contained manganese, f.o.b. Kaiser, California."
Mr. Evans in his letter of October 30 said: "They
will pay 40¢ per unit.....in railroad cars at point of
shipment."

There is a lot of difference between the two.
Please advise us which is right before worrying about
other details.

Yours very truly,

Chas. E. Dunning
Director

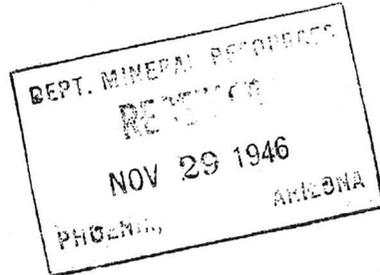
CED:LP

CC: Mr. T. O. Evans
Mr. S. J. Curtis

KAISER COMPANY, INC.

IRON AND STEEL DIVISION
BOX 217
FONTANA, CALIFORNIA

November 27, 1946



Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona

Attention: Mr. Chas. H. Dunning
Director

Gentlemen:

Reference is made to your letter of November 16, 1946, regarding the availability of manganese ore from Mr. S. J. Curtis of Bouse, Arizona.

Our price is 40¢ per unit of contained manganese, f.o.b. Kaiser, California. The minimum grade acceptable is 20% manganese with a maximum of 30% silica. The silica content must not exceed the manganese by more than 50%. Any shipments that fall below such grade will be rejected and not accepted. We are interested in acquiring a tonnage of approximately 500-600 tons per month. This company will not be interested in supplying any capital for operations of manganese mines.

Before we would make any definite commitment, we would like to know the approximate analysis of the ore which we are to receive, the ability of the supplier to furnish the tonnage required, and the extent of the deposit from which it is being furnished.

We trust that this information will enable you to determine if it is feasible to develop the property.

Yours very truly,

KAISER COMPANY, INC.
Iron and Steel Division


G. W. Kelly
Purchasing Agent

GWK:ehh

CC: Mr. T. O. Evans
Mr. S. J. Curtis

Return to me

War Eagle

November 16, 1946

Mr. J. W. Kelly, Purchasing Agent
Iron and Steel Division
Kaiser Company, Inc.
Fontana, California

Dear Mr. Kelly:

Mr. T. O. Evans, mining engineer for the Santa Fe Railroad, has written Mr. S. J. Curtis of Bouse, Arizona, under date of October 30, regarding your possible purchase of manganese ore, and asked if Mr. Curtis could get his property in production.

Mr. Curtis has come to us to assist him in finding a suitable operator-contractor or help him make other arrangements for getting the property in operation.

We have examined the property and probably your engineers have also. However, before planning any operation it is necessary to know the picture in more detail than Mr. Evans sets forth.

May we therefore submit the following questions:

- 1) Would the 40 cents per unit price apply to all grades?
- 2) What would be the minimum grade of acceptable material?
- 3) If some shipments fell below such grade, would they be rejected or merely penalized?
- 4) How much total tonnage could the contract cover?
- 5) Would the Kaiser Company be interested in supplying the initial capital (possibly \$10,000) and then receiving a rebate of \$1.00 per ton until it was returned, if they had assurance that operations would be skillful and as adequate as the property will permit?

Mr. J. W. Kelly

-2-

November 16, 1946

We are anxious to help Mr. Curtis all possible, but the property will require considerable outlay in preparation for production, and therefore there must be assurance that this outlay is returned, unless due to lack of skill by the operator.

Thanking you for your reply, and may we suggest copies to Mr. Curtis and Mr. Evans.

Yours very truly,

Chas. E. Dunning
Director

CHD:LP

CC: Mr. T. O. Evans
Mr. S. J. Curtis
Mr. F. J. Elliott

*Curtis Manganese
(War Eagle) Fontana Co*

Copy of letter from

Santa Fe RR

Department of Mineral Resources
121 East sixth st. L.A. 14, Calif.
Oct. 30, 1946.

Mr. Jack Curtis,
Bouse, Arizona,

Mr. J.W. Kelly, Purchasing Agent, Iron and Steel Division, Kaiser Co. Inc., at Fontana, Calif., informed me yesterday that his company is prepared to purchase manganese ores containing from 20 to 30% manganese. They will pay 40¢ per ~~mt~~ unit for the 30% grade in rr cars at point of shipment.

The silica content should not exceed 40%, sulphur 5%, lead and zinc less than 1- $\frac{1}{2}$ %

They will purchase all or any part of 500 to 800 tons monthly.

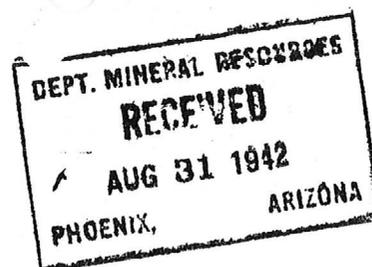
Please write to me, or contact Mr. Kelly direct at his office at Fontana if you are in position to supply manganese ores conforming to the above specifications.

Yours truly,

T.O. Evans,

Mining Engineer.

August 28, 1942



WAR EAGLE MN MINE
Typographical Error

To: J. S. Coupal
From: Elgin B. Holt

This is merely to call to your attention a typographical error in my ORIGINAL report on the WAR EAGLE Mn mine, belonging to S. J. Curtis, Bouse, Arizona; said report being dated May 15, 1941.

On the reverse side of the front page of our mimeographed copy of this report and under the heading "ORE RESERVES", you will note the following statement: "There are no positive ore reserves blocked out in the mine due to the lack of development work. Engineers estimate, however, that the mine should produce around 1,000,000 tons of medium grade ore to a depth of 100 feet from surface". The error is the figures "100" feet, and which should be "200" feet. Kindly have this correction made on said report.

Also, under date of July 7, 1942, I made a revised report on this same property for the MANGANESE SURVEY, which you have in your files. By referring to this last report, you will note I have corrected the said error in the statement: "However, engineers have estimated roughly that the main ore shoot of property, which is assumed to be 1,000 feet long by 50 feet wide by 200 feet deep, should produce around 1,000,000 tons of low grade Mn ore, etc."

You will also note, in the last report, I have qualified the above statement by "guessing" the tonnage at 500,000 instead of 1,000,000 tons.

Elgin B. Holt.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

413 Home Builders Bldg.

May 26, 1942

Mr. Frank Phelps
338 W. Vernon Avenue
Phoenix, Arizona

Dear Mr. Phelps:

I am enclosing a copy of the last information concerning purchase of domestic manganese ores issued May 4, 1942 by the Metals Reserve Company. It is possible that this change in price and dropping the specification limit to 35 per cent manganese may bring out a lot of necessary manganese ores.

We are conducting a survey by Elgin B. Holt, our field engineer, in the western districts of the manganese properties between Wickenburg and the Colorado River with an object of checking up on the feasibility of a customs manganese beneficiation plant to handle those ores which cannot be shipped to the government stock pile. If we do get a large increased production of manganese, it is going to be absolutely necessary to handle these deposits which by themselves probably would not stand for the large investment such as the plant at Artillery Peak.

I am also enclosing a copy of a letter from the U. S. Bureau of Mines at Salt Lake City, Utah, showing what results can be obtained on the War Eagle manganese property owned by S. J. Curtis of Bouse, Arizona. This property is claimed to have about a half million tons of 20 per cent manganese ore as a probably tonnage.

When we complete our survey we believe it will be necessary to get some strong operating group to take over the sponsoring of a plant so that they might lease and operate it after the Defense Plant Corporation or some other federal agency provides the plant and financing for same. Our object on the present survey is to determine the facilities of such a plant and we will then submit it to some strong operating group who could further investigate and, if possible, carry out the recommendations made. This may be of value to you in interesting someone to follow through on the work we have started.

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

May 25, 1942

Mr/ C. Travis Anderson
The U. S. Bureau of Mines
Salt Lake City, Utah

Dear Mr. Travis:

Many thanks for your letter of May 19 with
the analysis of War Eagle ore and the results of your
testing by the SO₂ leaching method.

Very truly yours,

J. S. Coupal,

Director

JSC:GS

XXXXXXXXXXXXXXXXXXXX

413 Home Builders Bldg.

May 21, 1942

Mr. S. J. Curtis
Bouse, Arizona

Dear Mr. Curtis:

I am enclosing a copy of a letter which I have just received from the U. S. Bureau of Mines at Salt Lake City regarding the tests on your War Eagle Group, which I know will be of interest to you.

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

CC: Elgin B. Holt

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

METALLURGICAL DIVISION

INTERMOUNTAIN EXPERIMENT STATION

SALT LAKE CITY, UTAH

May 19, 1942

Mr. J. S. Coupal, Director
Department of Mineral Resources
413 Home Builders Building
Phoenix, Arizona



Dear Mr. Coupal:

Your letter of May 8, regarding the amenability of the War Eagle Ore to either the SO_2 or NO_2 leaching processes has been referred to me for reply.

We have conducted a number of leaching tests on a sample of ore which was obtained by the Mining Division of the United States Bureau of Mines. The ore had the following analysis:

<u>Mn</u>	<u>SiO₂</u>	<u>Insol.</u>	<u>Fe</u>	<u>CaO</u>	<u>P</u>	<u>MgO</u>	<u>Al₂O₃</u>	<u>Ba</u>
19.2	20.5	28.0	22.6	1.4	0.008	0.3	2.8	5.5

The tests that were made on this particular sample indicated that at least 90 percent of the Mn can be extracted by the SO_2 leaching method used here at the Bureau of Mines in which air is introduced along with the SO_2 to produce the sulfuric acid necessary for dissolving any MnO present. We have not carried out any experiments using NO_2 on this ore.

Yours very truly,

C. Travis Anderson
Senior Metallurgist

XXXXXXXXXXXX

518 Title & Trust Bldg.

March 26, 1942

War Eagle

Mr. S. J. Curtis
Bouse, Arizona

Dear Jack:

I am enclosing a copy of a letter I have just sent to Mr. H. H. Snow. I believe I wrote you before about the property asking you if it was still open for negotiation. I would suggest that you write Mr. Snow and let him know whether or not you wish to deal and on what terms. He has associates who are looking for a large manganese property and I believe will take it up with them as soon as he hears directly from you as to whether or not your property is available.

Please advise me of your action on this matter.

Very truly yours,

J. S. Coupal

JSC:LP
Enc.

4 March 1942

Mr. S. J. Curtis,
Bouse,
Arizona.

Dear Jack:

I have just talked with a man who has San Francisco people who are looking for a manganese property. Is your property open and roughly what would be your terms?

I am asking Holt to write up a brief description of the property so that I may present it to this man at the end of the week.

With kindest personal regards, I am

Yours very truly,

J. S. Coupal

JSC-jrf

7 August 1941

Mr. S. J. Curtis,
Bouse,
Arizona.

My dear Mr. Curtis:

I am enclosing herewith for your records a
copy of Field Engineers Report on the War Eagle Mine.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf
encl.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

DEPT. MINERAL RESOURCES
RECEIVED
JUL 19 1941
PHOENIX, ARIZONA

Mine WAR EAGLE

Date May 15, 1941.

District Harcuvar, Yuma County.

Engineer Elgin B. Holt,
P. O. Box 288,
Kingman, Ariz.

Subject:

B R I E F R E P O R T

OWNER: S. J. Curtis, Bouse, Arizona.

FORMER NAME OF PROPERTY: IRON KING GROUP.

LOCATION: The War Eagle group of two manganese claims, located end to end on the vein, is in the Harcuvar Mining District, Yuma County, about 26 miles northwesterly from Bouse and four miles from the old Planet mine. All surrounding ground is vacant and open for location. The nearest shipping point is Bouse, located on the Santa Fe R. R., which is accessible by a good desert wagon or truck road.

METALS: Manganese: wad, manganite, hematite, silica and some barite are all constituents of the ore.

TOPOGRAPHY: The deposit occurs in an area of moderate relief marked by ridges and isolated peaks, with elevations a few hundred feet above the surrounding plain, drained by washes that flow north to the Williams River.

WATER: The nearest water supply is the Williams River, four miles to the north, with a difference in elevation between river and mine of about 1,000 feet.

GEOLOGY: "The rocks in the vicinity consist of an older series of granite gneiss overlain by bands of limestone and amphibolite, massive limestone, and metamorphosed shales; and a younger series of sandstone, calcareous sandstone, and detritus and wash material. The older rocks are probably pre-Cambrian; the younger rocks range from late Tertiary to Pleistocene. The manganese deposit is contained in sheared rocks along a fault zone, which strikes N. 45 degrees W. and apparently dips southwest. The fault marks the contact between conglomerate and wash material on the north-east or footwall side and silicified and serpentinized limestone and quartzite breccia on the hanging wall, in which manganese minerals occur. Overlying these rocks on the hanging wall side a short distance to the southwest is red sandstone, in part calcareous, which strikes N. 60 degrees W. and dips 30 degrees southwest." (Eldred D. Wilson and G. M. Butler: Ariz. Bureau of Mines Bulletin No. 127: Manganese Ore Deposits of Arizona - 1930.)

MANGANESE ORE ZONE: The zone of brecciation along the fault mentioned ranges from 100 to 500 feet, and for a distance of about 2,000 feet some manganese is found in outcroppings; but the occurrence of workable manganese consists of a more or less well-defined "shoot" about 1,000 feet in length, which has been superficially explored by shallow test pits and short tunnels. At the middle of this shoot there is an exposure of manganese ore 50 feet in width, assaying

U. S. G. S. Sum. Bul
710-D

MW-31

See Elgin B. Holt
Box 288

more or less as follows: Mr. Curtis, owner, advised me that a number of engineers had sampled the property, obtaining results ranging from 19 to 26 per cent manganese.

Also, during January, 1941, two engineers representing the Mining Division of the U. S. Bureau of Mines, visited property and took a two ton sample which was shipped to the Metallurgical Division of the Bureau at Salt Lake City, Utah, for testing purposes, in order to determine whether or not a ferrograde manganese concentrate could be made.

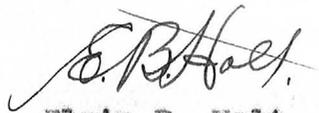
At the time this report is being prepared, the said tests have not been completed; but I received a letter from the Chief Engineer, or rather from the Acting Chief Engineer of the said Metallurgical Division stating that the two tons mentioned averaged 19.2 per cent manganese.

DEVELOPMENT WORK on property, as stated consists of shallow test pits and shallow tunnels on main ore shoot of mine; so property is now in the undeveloped state.

ORE RESERVES: There are no positive ore reserves blocked out in the mine due to the lack of development work. Engineers estimate, however, that the mine should produce around 1,000,000 tons of medium grade ore to a depth of 200 feet from surface.

PROPOSED DEVELOPMENT WORK: The following initial work is recommended: First, a cross-cut tunnel, 250 feet in length should be driven in order to intersect the main ore shoot at a depth of 100 feet, at which point of intersection, drifts should be run right and left on vein, or in southeasterly and northwesterly directions. The southeasterly drift would attain a maximum depth on vein of about 200 feet and the northwesterly drift about 300 feet on vein. Once this work is carried out, raises could be put through to the surface at intervals and mining started either by shrinkage stoping or by glory hole methods.

REMARKS: This property is recommended for investigation by any individual or company looking for a large low grade manganese mine, with large reserves of ore indicated, with a view to installing a proper beneficiating plant, so designed to produce a marketable ferrograde product.


Elgin B. Holt,
Field Engineer.

copy for terms

DEPARTMENT OF MINERAL RESOURCES

Service Report

Date June 11, 1942

Nature of Call Personal

Place Salome

Name A.C. Stoner, 540A Franklin

Address Ave., Los Angeles and

O.W. Hogsett, 939 So.

Olive St., Los Angeles,

Subject and

S.J. Curtis, Bouse, Ariz.

called on me and asked

my opinion concern-

ing the

Action "War Eagle Mn Mine"

belonging to Curtis.

—o—

I gave them copies of my

reports as well as letters

re the metallurgy.

Stoner is considering buying

this property.

Signed E. B. Hunt.

Use other side if necessary
May 15, 1941

HOLF, ELGIN B.
Box 288
Kingman, Arizona

MW-31 - WAR EAGLE, Arizona - Yuma County

WAR EAGLE

Mn

Yuma

14 - 1

S. J. Curtis, Bouse

T 10 N, R 17 W

same deposit as

T 9 N, R 20 W, Sec 3

Dannie R. Curtis,

2339 North 30th Street, Phx.

Phone: AMherst 6-3⁸971

Arizona Farmer

AZ 36060

No. 215 De

Phoenix, Arizona,

CHAS. A. DIEHL

20 Nov 1946

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148

815 North First Street

Phone 3-4001

THIS CERTIFIES That samples submitted for assay by Department of Mineral Resources as follows per ton of 2000 lbs. Avair.

MARKS	SILVER		VALUE (oz.)	GOLD		VALUE (oz.)	TOTAL VALUE Of Gold & Silver	PERCENTAGE			REMARKS
	Ounces	Tenths		Ounces	Endths			%	Iron	Manganese	
								16.70	21.18	37.96	

Barro
Carton
Assay

Charges \$ 4.50

Assayer ARIZONA ASSAY OFFICE.

CAD

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine - WAR EAGLE GROUP

Date - May 5th, 1951

District - Maricopa District, Yuma County

Engineer - A. L. Flagg

Subject:

The essential information regarding location, extent and geological features of this property, are embodied in a report by Elgin B. Holt, made for this Department, May 15th, 1941.

This memorandum provides additional information regarding the extent of the main shoot of manganese and puts on record the results of sampling in late 1950 and early 1951.

The estimated tonnage of ore available above the crosscut tunnel recommended in the Holt report is 900,000 tons, distributed over a length of 1100 feet for an average width of 50 feet. Neither the hanging-wall nor the foot-wall breccia has been sampled or measured. The width of these breccia zones varies from 100 to 400 feet and possibly more. The length of these zones is greater than the length of the principal ore shoot. It is possible that this material could be mined profitably, if not as a mass at least by selective mining. The potential value can be determined only by extensive exploration and close sampling. The distribution of manganese minerals in these zones is sufficient to justify a careful exploratory program.

Prospecting should begin with the crosscut tunnel (approximately 200 feet in length) recommended in the Holt report. When the principal manganese ore shoot is reached drifting northwest and southeast should be undertaken to determine the volume and value of the material in this shoot. It would be very desirable to continue this initial crosscut into the foot-wall breccia for a distance to be determined by what is disclosed. Because the manganese content diminishes, on the surface, from the main shoot into the breccia it is quite impossible to estimate how far this crosscut should be driven. From the drifts other exploratory crosscuts should be made beyond both the foot-wall and the hanging-wall at intervals.

At the extreme northwest of the high-grade shoot there is no further out-crop of high-grade manganese. The shoot may persist below the masking surface features for some distance beyond this known outcrop.

Reference to the attached photograph, taken from a point approximately 300 feet southeast of A, looking in a northwesterly direction along the center line of the two claims, will give a better idea of the situation for a distance of from 700 to 1000 feet along the principal shoot.

- A Approximately the center of the common end line between the two claims.
- B Boundary between the hanging-wall breccia and ore shoot.
- CC Boundary between the foot-wall breccia and ore shoot.
- B-C Horizontal distance 61 feet.
- D Shallow exploratory tunnels near center of shoot.
- E-E' Boundary between sandstone on the left and breccia on the right.

- F-F' Boundary between hanging-wall breccia on left and the ore shoot on the right.
- G-G' Boundary between the ore shoot and the foot-wall breccia.
- G-2 Limit of breccia on the right.
- 1-4 Location of 50-b samples.
- 5 Not shown. Sample taken in open cuts to south-east about 300 feet from A.

The principal exploratory work, which consists of shallow shafts and numerous cuts are behind the knob B-C and on its crest. Numerous other cuts exist to the south-east and behind the highest point on the photograph.

The photograph was taken from a point about 300 feet south-east of A just a few feet south of the open cuts (Sample 5) on a slope facing the north-west.

Sample No. 1.	26.98 % Manganese
Sample No. 2.	35.25% Manganese
Sample No. 3.	23.10 % Manganese
Sample No. 4.	17.16 % Manganese
Sample No. 5.	21.78 % Manganese

A. L. FLAGG

A. L. Flagg

The Atchison, Topeka and Santa Fe Railway Company

W. M. BALLING,
Consulting Mining Engineer
T. O. EVANS,
Mining Engineer

DEPARTMENT OF MINERAL RESOURCES

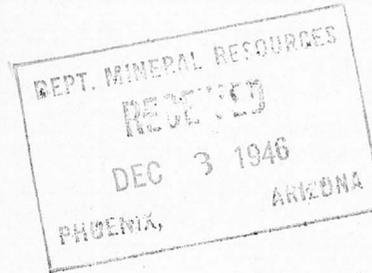
Telephone Mutual 0111

~~560 South Main St.~~
Los Angeles, ~~13~~, California
Zone 14
121 East Sixth Street
December 2nd, 1946.

Please refer to
File No. 19,0004

AIR MAIL

Mr. Chas. H. Dunning, Director,
Department of Mineral Resources,
State of Arizona,
304 Home Builders Building,
Phoenix, Arizona.



Dear Mr. Dunning:

Copies of Mr. G. W. Kelly's letter to you dated November 27th and your November 29th reply to him about the Curtis manganese deposit near Bouse, were read this morning.

I immediately telephoned Mr. Kelly and he repeated that the price per unit of contained manganese was to be 40 cents per unit f.o.b. Kaiser, California, and not in railroad cars at point of shipment as I had previously informed Mr. Curtis.

Please accept my sincere apology for this error which was, I assure you, completely unintentional.

Yours truly,

T. O. Evans
Mining Engineer.

cc - Mr. G. W. Kelly, Purchasing Agent,
Iron and Steel Division,
Kaiser Company Inc.,
Box 217.
Fontana, California.

cc - Mr. S. G. Curtis,
Bouse, Arizona.

*Wm. E. Kyle
12/3/46*

November 29, 1946

War Eagle

AIRMAIL

Mr. G. W. Kelly, Purchasing Agent
Iron and Steel Division
Kaiser Company, Inc.
Box 217
Fontana, California

Dear Mr. Kelly:

We have your letter of the 27th regarding
the Curtis manganese deposit near Bouse, Arizona.

One clause in your letter hits us right
between the eyes. You say: "Our price is 40¢ per
unit of contained manganese, f.o.b. Kaiser, California."
Mr. Evans in his letter of October 30 said: "They
will pay 40¢ per unit.....in railroad cars at point of
shipment."

There is a lot of difference between the two.
Please advise us which is right before worrying about
other details.

Yours very truly,

Chas. R. Dunning
Director

CHD:LP

CC: Mr. T. O. Evans
Mr. S. J. Curtis

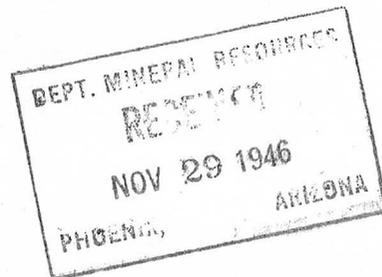
KAISER COMPANY, INC.

IRON AND STEEL DIVISION

BOX 217

FONTANA, CALIFORNIA

November 27, 1946



Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona

Attention: Mr. Chas. H. Dunning
Director

Gentlemen:

Reference is made to your letter of November 16, 1946, regarding the availability of manganese ore from Mr. S. J. Curtis of Bouse, Arizona.

Our price is 40¢ per unit of contained manganese, f.o.b. Kaiser, California. The minimum grade acceptable is 20% manganese with a maximum of 30% silica. The silica content must not exceed the manganese by more than 50%. Any shipments that fall below such grade will be rejected and not accepted. We are interested in acquiring a tonnage of approximately 500-600 tons per month. This company will not be interested in supplying any capital for operations of manganese mines.

Before we would make any definite commitment, we would like to know the approximate analysis of the ore which we are to receive, the ability of the supplier to furnish the tonnage required, and the extent of the deposit from which it is being furnished.

We trust that this information will enable you to determine if it is feasible to develop the property.

Yours very truly,

KAISER COMPANY, INC.
Iron and Steel Division


G. W. Kelly
Purchasing Agent

GNK:ehh

CC: Mr. T. O. Evans
Mr. S. J. Curtis

Return to me

War Eagle

November 16, 1946

Mr. J. W. Kelly, Purchasing Agent
Iron and Steel Division
Kaiser Company, Inc.
Fontana, California

Dear Mr. Kelly:

Mr. T. O. Evans, mining engineer for the Santa Fe Railroad, has written Mr. S. J. Curtis of Bouse, Arizona, under date of October 30, regarding your possible purchase of manganese ore, and asked if Mr. Curtis could get his property in production.

Mr. Curtis has come to us to assist him in finding a suitable operator-contractor or help him make other arrangements for getting the property in operation.

We have examined the property and probably your engineers have also. However, before planning any operation it is necessary to know the picture in more detail than Mr. Evans sets forth.

May we therefore submit the following questions:

- 1) Would the 40 cents per unit price apply to all grades?
- 2) What would be the minimum grade of acceptable material?
- 3) If some shipments fell below such grade, would they be rejected or merely penalized?
- 4) How much total tonnage could the contract cover?
- 5) Would the Kaiser Company be interested in supplying the initial capital (possibly \$10,000) and then receiving a rebate of \$1.00 per ton until it was returned, if they had assurance that operations would be skillful and as adequate as the property will permit?

Mr. J. W. Kelly

November 16, 1946

We are anxious to help Mr. Curtis all possible, but the property will require considerable outlay in preparation for production, and therefore there must be assurance that this outlay is returned, unless due to lack of skill by the operator.

Thanking you for your reply, and may we suggest copies to Mr. Curtis and Mr. Evans.

Yours very truly,

Chas. E. Dunning
Director

CHD:LP

- CC: Mr. T. O. Evans
- Mr. S. J. Curtis
- Mr. F. J. Elliott

Done by Kelly:

Done by Kelly:
Done by Kelly:
Done by Kelly:
Done by Kelly:

Curtis Manganese
(Warr Eagle) *Yuma Co*
Copy of letter from

Santa Fe RR

Department of Mineral Resources
121 East sixth st. L.A. 14, Calif.
Oct. 30, 1946.

Mr. Jack Curtis,
Bouse, Arizona,

Mr. J.W. Kelly, Purchasing Agent, Iron and Steel Division, Kaiser Co. Inc., at Fontana, Calif., informed me yesterday that his company is prepared to purchase manganese ores containing from 20 to 30% manganese. They will pay 40¢ per unit for the 30% grade in rr cars at point of shipment.

The silica content should not exceed 40%, sulphur 5%, lead and zinc less than 1- $\frac{1}{2}$ %

They will purchase all or any part of 500 to 800 tons monthly.

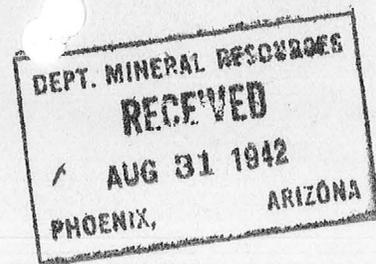
Please write to me, or contact Mr. Kelly direct at his office at Fontana if you are in position to supply manganese ores conforming to the above specifications.

Yours truly,

T.O. Evans,

Mining Engineer.

August 28, 1942



WAR EAGLE MN MINE
Typographical Error

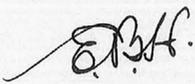
To: J. S. Coupal
From: Elgin B. Holt

This is merely to call to your attention a typographical error in my ORIGINAL report on the WAR EAGLE Mn mine, belonging to S. J. Curtis, Bouse, Arizona; said report being dated May 15, 1941.

On the reverse side of the front page of our mimeographed copy of this report and under the heading "ORE RESERVES", you will note the following statement: "There are no positive ore reserves blocked out in the mine due to the lack of development work. Engineers estimate, however, that the mine should produce around 1,000,000 tons of medium grade ore to a depth of 100 feet from surface". The error is the figures "100" feet, and which should be "200" feet. Kindly have this correction made on said report.

Also, under date of July 7, 1942, I made a revised report on this same property for the MANGANESE SURVEY, which you have in your files. By referring to this last report, you will note I have corrected the said error in the statement: "However, engineers have estimated roughly that the main ore shoot of property, which is assumed to be 1,000 feet long by 50 feet wide by 200 feet deep, should produce around 1,000,000 tons of low grade Mn ore, etc."

You will also note, in the last report, I have qualified the above statement by "guessing" the tonnage at 500,000 instead of 1,000,000 tons.


Elgin B. Holt.

XXXXXXXXXXXXXXXXXXXXXX

413 Home Builders Bldg.

May 26, 1942

Mr. Frank Phelps
338 W. Vernon Avenue
Phoenix, Arizona

Dear Mr. Phelps:

I am enclosing a copy of the last information concerning purchase of domestic manganese ores issued May 4, 1942 by the Metals Reserve Company. It is possible that this change in price and dropping the specification limit to 35 per cent manganese may bring out a lot of necessary manganese ores.

We are conducting a survey by Elgin B. Holt, our field engineer, in the western districts of the manganese properties between Wickenburg and the Colorado River with an object of checking up on the feasibility of a customs manganese beneficiation plant to handle those ores which cannot be shipped to the government stock pile. If we do get a large increased production of manganese, it is going to be absolutely necessary to handle these deposits which by themselves probably would not stand for the large investment such as the plant at Artillery Peak.

I am also enclosing a copy of a letter from the U. S. Bureau of Mines at Salt Lake City, Utah, showing what results can be obtained on the War Eagle manganese property owned by S. J. Curtis of Bouse, Arizona. This property is claimed to have about a half million tons of 20 per cent manganese ore as a probably tonnage.

When we complete our survey we believe it will be necessary to get some strong operating group to take over the sponsoring of a plant so that they might lease and operate it after the Defense Plant Corporation or some other federal agency provides the plant and financing for same. Our object on the present survey is to determine the facilities of such a plant and we will then submit it to some strong operating group who could further investigate and, if possible, carry out the recommendations made. This may be of value to you in interesting someone to follow through on the work we have started.

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

May 25, 1942

Mr/ C. Travis Anderson
The U. S. Bureau of Mines
Salt Lake City, Utah

Dear Mr. Travis:

Many thanks for your letter of May 19 with
the analysis of War Eagle ore and the results of your
testing by the SO₂ leaching method.

Very truly yours,

J. S. Coupal,

Director

JSC:GS

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

413 Home Builders Bldg.

May 21, 1942

Mr. S. J. Curtis
Bouse, Arizona

Dear Mr. Curtis:

I am enclosing a copy of a letter which I have just received from the U. S. Bureau of Mines at Salt Lake City regarding the tests on your War Eagle Group, which I know will be of interest to you.

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

CC: Elgin B. Holt

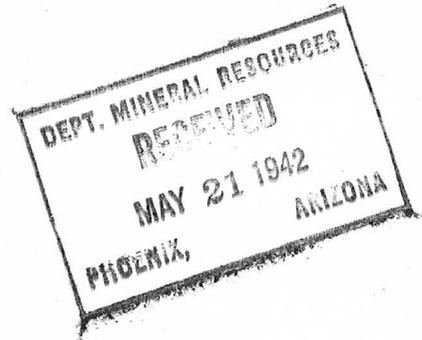
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

METALLURGICAL DIVISION

INTERMOUNTAIN EXPERIMENT STATION

SALT LAKE CITY, UTAH

May 19, 1942



Mr. J. S. Coupal, Director
Department of Mineral Resources
413 Home Builders Building
Phoenix, Arizona

Dear Mr. Coupal:

Your letter of May 8, regarding the amenability of the War Eagle Ore to either the SO_2 or NO_2 leaching processes has been referred to me for reply.

We have conducted a number of leaching tests on a sample of ore which was obtained by the Mining Division of the United States Bureau of Mines. The ore had the following analysis:

<u>Mn</u>	<u>SiO₂</u>	<u>Insol.</u>	<u>Fe</u>	<u>CaO</u>	<u>P</u>	<u>MgO</u>	<u>Al₂O₃</u>	<u>Ba</u>
19.2	20.5	28.0	22.6	1.4	0.008	0.3	2.8	5.5

The tests that were made on this particular sample indicated that at least 90 percent of the Mn can be extracted by the SO_2 leaching method used here at the Bureau of Mines in which air is introduced along with the SO_2 to produce the sulfuric acid necessary for dissolving any MnO present. We have not carried out any experiments using NO_2 on this ore.

Yours very truly,

C. Travis Anderson

C. Travis Anderson
Senior Metallurgist

XXXXXXXXXXXXXXXX

518 Title & Trust Bldg.

War Eagle

March 26, 1942

Mr. S. J. Curtis
Bouse, Arizona

Dear Jack:

I am enclosing a copy of a letter I have just sent to Mr. H. H. Snow. I believe I wrote you before about the property asking you if it was still open for negotiation. I would suggest that you write Mr. Snow and let him know whether or not you wish to deal and on what terms. He has associates who are looking for a large manganese property and I believe will take it up with them as soon as he hears directly from you as to whether or not your property is available.

Please advise me of your action on this matter.

Very truly yours,

J. S. Coupal

JSC:LP
Enc.

4 March 1942

Mr. S. J. Curtis,
Bouse,
Arizona.

Dear Jack:

I have just talked with a man who has San Francisco people who are looking for a manganese property. Is your property open and roughly what would be your terms?

I am asking Holt to write up a brief description of the property so that I may present it to this man at the end of the week.

With kindest personal regards, I am

Yours very truly,

J. S. Coupal

JSC-jrf

7 August 1941

Mr. S. J. Curtis,
Bouse,
Arizona.

My dear Mr. Curtis:

I am enclosing herewith for your records a
copy of Field Engineers Report on the War Eagle Mine.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf
encl.

DEPARTMENT OF MINERAL RESOURCES

Service Report

Date June 11, 1942

Nature of Call Personal

Place Salome

Names A.C. Stoner, 540A Franklin

Address Ave., Los Angeles and

O.W. Hogsett, 939 So.

Olive St., Los Angeles,

Subject and

S.J. Curtis, Bouse, Ariz.

called on me and asked

my opinion concern-

ing the

Action "War Eagle Mn Mine"

belonging to Curtis.

I gave them copies of my
reports as well as letters
re- the metallurgy.

Stoner is considering buying
this property.

Signed

E. B. Hoelt.

Use other side if necessary

May 15, 1941

HOLT, ELGIN B.
Box 288
Kingman, Arizona

MW-31 - WAR EAGLE, Arizona - Yuma County

WAR EAGLE

Mn

Yuma

14 - 1

S. J. Curtis, Bouse

T 10 N, R 17 W

same deposit as
T 3 N, R 20 W, Sec 3

'42

Dannie R. Curtis,

2339 North 30th Street, Phx.

Phone: AMherst 6-3⁸971

Arizona Farmer
AL 36060

No. 215 De

Phoenix, Arizona,

CHAS. A. DIEHL

20 Nov 1946

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148

815 North First Street

Phone 3-4001

THIS CERTIFIES That samples submitted for assay by Department of Mineral Resources contains as follows per ton of 2000 lbs. Avoir.

MARKS	SILVER		VALUE (OZ.)	GOLD		VALUE (OZ.)	TOTAL VALUE Of Gold & Silver	PERCENTAGE			REMARKS	
	Ounces	Tenths		Ounces	Hndths			%	Iron	Manganese		Insol
								16.70	21.18		37.96	

*Curtis
Burr
Eagle
Manganese*

Charges \$ 4.50

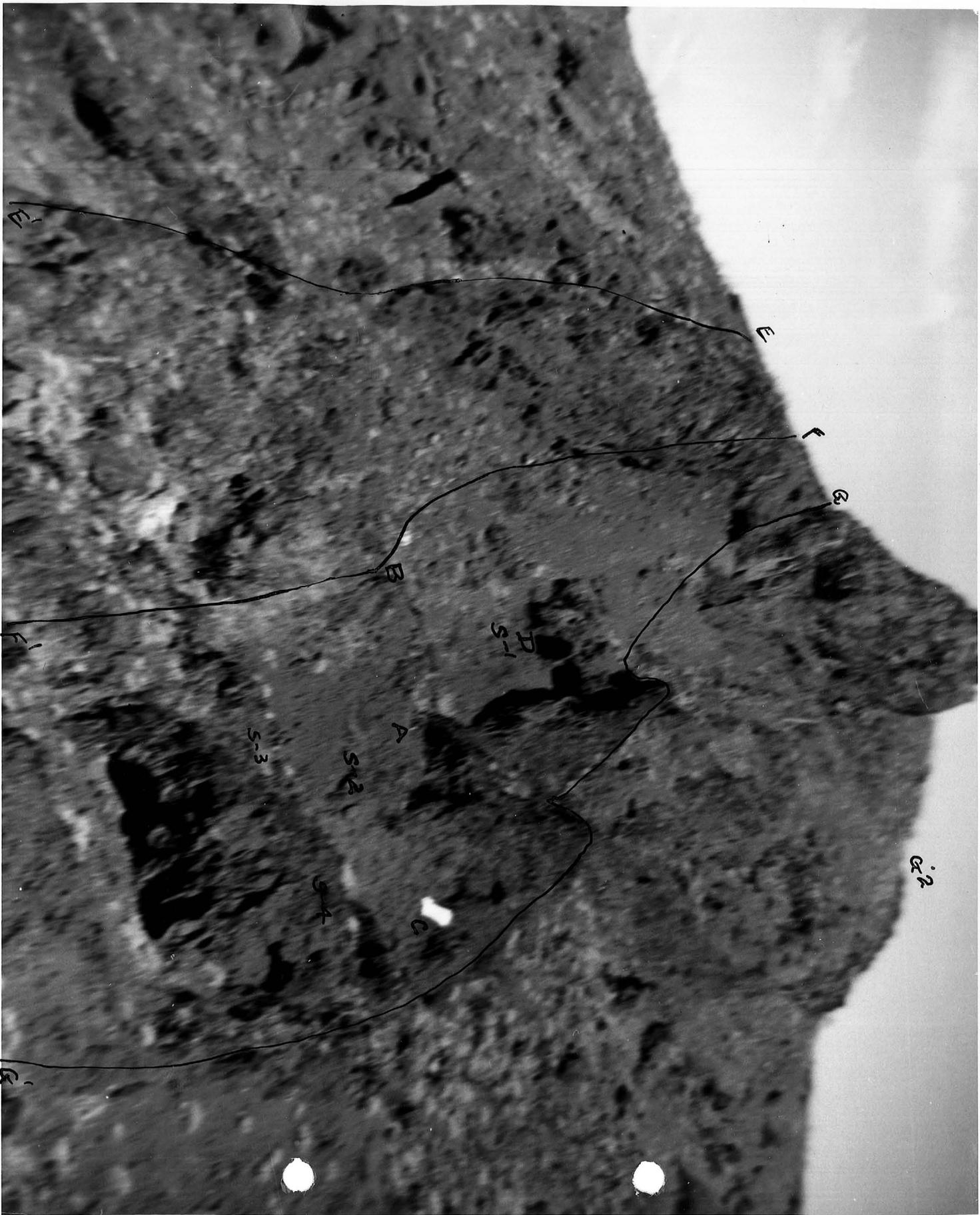
Assayer ARIZONA ASSAY OFFICE.

CHD

6-2



WAR Eagle - Yuma Co.



H

E

F

G

B

D
S-1

F

A

S-3

S-2

G-2

S-4

C

G

WAR Eagle - Yuma Co.