



CONTACT INFORMATION

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PRINTED: 02-11-2010

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: HOUGH MANGANESE

ALTERNATE NAMES:

LITTLE DAISY

MARS

BLACK CAT

COCONINO COUNTY MILS NUMBER: 246

LOCATION: TOWNSHIP 13 N RANGE 10 E SECTION 6 QUARTER C

LATITUDE: N 34DEG 32MIN 30SEC LONGITUDE: W 111DEG 19MIN 37SEC

TOPO MAP NAME: LONG VALLEY - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE

BIBLIOGRAPHY:

ADMMR HOUGH MANGANESE MINE FILE

RANSOME, F.L., & BURCHARD, E.F., USGS BULL.

710, P. 126

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date: June 1, 1942

1. Mine: Hough Manganese.
2. Mining District & County: Long Valley - Coconino Co.
3. Former name:
5. Owner: Mrs. M. R. Linesba - Agt.
6. Address (Owner) P. O. Box 1026
Florence Jct.,
7. Operator:
8. Address (Operator)
9. President:
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals: Manganese
14. Men Employed:
15. Production Rate
16. Mill - Type & Cap.:
17. Power - Amt. & Type:
18. Operations - Present:
19. Operations Planned:
20. Number Claims, Title, Etc.: Three claims - unpatented.
Little Daisy - Mars - Black Cat
21. Description - Topography & Geography: At about 7,000 feet elevation - slightly
rolling country - heavily timbered with
pine.
22. Mine Workings - Amt. & Condition: Shallow pits - trenches and shafts, deepest
of which is 20 ft.

(over)

23. Geology & Mineralization: Capped with limestone and manganese ore - occurs as replacement in lime.

24. Ore - Positive & Probable, Ore Dumps, Tailings: 24,000 tons probable tonnage in three blocks - partially developed - figuree to a depth of 20 feet.

24-A. Vein Width, Length, Value, etc. Three cars shipped to E. J. Lavino Co., Phila.
Ran 44.6% - 43.28% and 47.15%. Sample ran FE - 1.05%;
P - .096; SiO₂ - 8.48; Al₂O₃ - 3.59;

25. Mine, Mill Equipment & Flow Sheet: None

26. Road Conditions, Route: Good right to property. Can be reached via Pine - Flagstaff - Winslow.

27. Water Supply: Ample

28. Brief History: Mined and shipped ore in 1940.

29. Special Problems, Reports Filed: Report by W. W. Linesba in files.

30. Remarks:

31. If property for sale - Price, terms and address to negotiate: For sale - \$30,000 on terms, or lease on \$2.00 per ton royalty to apply. Wish small good faith down payment.

32. Signed: Given by Mrs. M. R. Linesba.

REPORT ON HOUGH MANGANESE PROPERTY

This is a very brief summary on a manganese deposit which has not had sufficient geological or physical study as yet to cause absolutely definite conclusions, hence the following must be taken as more or less problematical.

Property - The property consists of three mining claims, recently located, in Long Valley, Coconino County, Arizona. They lie in a section as yet unorganized for any mining districts, and are, therefore, described as to location, as being about two miles northwest of the Long Valley Store and near the Long Valley, Flagstaff Highway about sixty miles from Flagstaff by said Highway and about fifty-seven miles from Winslow, Arizona, via Long Valley, Winslow Highway. The names of these claims are the "Little Daisy," "Mars" and "Black Cat".

Transportation - Winslow, fifty-seven miles distant by first class highway would be the proper shipping point. There is a slight even down grade from property to Winslow, allowing truck and trailer haulage at reasonable truck rate. Haulage from property to shipping point (Winslow, Arizona) is estimated to not exceed \$4.00 per ton, and should be either contracted for, at considerably less upon a fairly sizable tonnage basis, or done for much less by property owned trucks.

Topography - The altitude is around seven thousand feet. The country is slightly rolling, almost level, and is heavily timbered with sizable pine timber.

Development - A map is submitted herewith which sets up as approximate the work done to date on the property. This, however, can be said to be little, and consists of shallow pits, cuts, trenches and shafts, none of which have reached greater than 20 feet in depth.

Geology - This entire section is capped with limestone, and the veins showing have come up into the limestone from a lower source. Erosion and break down have exposed the veins in places, but some of them are still covered with a thin limestone capping. No study has been made of the original thickness of this limestone, and it is possible that the manganese deposits are not from any deep seated vein occurrence, but merely a replacement in the limestone. If they are found to be simply a local surface replacement the tonnage will be limited to something around that set forth on the map accompanying herewith. However, if work discloses permanent vein structure and filling, quite a large tonnage is possible. The estimates hereafter furnished are based upon a surface replacement basis to a depth not exceeding twenty feet on an average. The figures, however, are to be considered only as estimates of possible ore.

Deposits - From a brief and incomplete inspection, the deposits are placed on accompanying map as Veins. On the "Little Daisy" claim a vein striking from Northwest to Southeast apparently runs the entire length of the claim. However, much of this vein is still covered with a thin layer of limestone and is not exposed. Where work has penetrated this lime cap, on a true strike of vein, from any exposed part, the vein is found strong and true to course. From the development done and ore exposed, and as per map, it is reasonable to set up a probable tonnage in Block B of 7,500 Tons, and a possible tonnage in Block A can be expected but is not set up as development does not yet show it.

On the "Mars" claim the vein is more pronounced and persistent and is either opened up by development or exposed in outcrops for most of its entire course through the claim. The showing here is strong and a good positive tonnage is now available for shipping. There can be set up as positive and probable in Block A, 6,666 Tons,

On the "Black Cat" claim where there is an apparent contact of the "Mars" vein with the "Black Cat" vein, a large deposit is indicated from numerous pits and shafts shown in Block A. A positive and probable tonnage of 10,000 Tons is set up for this block of ground. A possible tonnage of 6,666 Tons is set up for Block B, on the "Black Cat" claim. A summary of tonnages on the property as represented and indicated from development and outcropping is set up as follows:

<u>Claim</u>	<u>Positive & Probable Ore</u>	<u>Possible Ore</u>
"Little Daisy"	7,500 Tons	
"Mars"	6,666 "	3,666 Tons
"Black Cat"	10,000 "	<u>6,666 "</u>
TOTALS	24,166 "	10,332 "

The above estimates are only figured to a depth of twenty feet. If the ore is permanent to depth quite a large tonnage is possible.

Mining - Mining of the ore exposed by development is simple and cheap. The ore can be mined to a depth of the estimates set up by stripping the lower side and caving down for a total mining cost not to exceed \$1.50 per ton.

Analysis of Ore - The following is set up as a representative average of the ore developed and exposed:

Manganese	44.0%
Iron	1.0%
Silica Si O ₂	11.3%
Alumina Al ₂ O ₃	2.5%
Phosphorus P.	0.15%
Zinc	Trace
Arsenic	0.14%
Antimony	0.11%

Conclusion - It would appear from the foregoing that the property merits development to ascertain both continuity of ore through entire vein course, and depth, and that considerable production and shipment can begin immediately.

Respectfully submitted

October 29, 1939

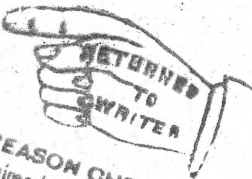
W. W. Linesba

Shipments:

10/30/40	44.65 Tons	47.15% Mn.
11/12/40	44.09 "	44.59% "
11/26/40	51.57 "	43.28% "

Shipments		
11/12/40	44.09 tons	44.59% <u>Mon</u>
11/26/40	51.57 "	43.28% "
10/30/40	44.65 "	47.15% "

Make Pencil in report by
 11.11. Rucita — List in Settlement
 Sheets, —
 Add-shipments to Rucita Report.


 RETURNED TO WRITER
 REASON CHECKED
 Unclaimed _____
 Unknown _____
 For better address _____
 Moved. Left no address _____
 No one in area ✓

PHOENIX, ARIZ.
 FEB 25
 7-PM
 79 58

Mrs. M. R. Linesba
 P. O. Box 1026
 Florence Jct., Arizona

E. J. LAVINO AND COMPANY

MANGANESE AND CHROME ORES
FERRO MANGANESE
REFRACTORIES

1528 WALNUT STREET
PHILADELPHIA

TO W. W. Linesba,
Florence Junction, Arizona.

Shipped From: Winslow, Ariz.
Shipped To: Sheridan, Pa.
Date Received: 11/12/40
Order No.: 7207-90

One Carload Manganese Ore

Car FMCK&Y 91891 - Gross 154,360 - Tare 48,300

Net 106,060 or 47.3482 Nat. Gr. Tons

Less Moisture @ 6.87% 3.2528 " " "

44.0954 Dry Gross Tons

Manganese Content Guarantee 48.00% Dry Basis

Manganese Content Received 44.59% " "

Penalty of .01¢ per unit or
fraction on

3.41% = .0340

Contract Price .5600¢

Less Penalty .0340¢

.5260¢

Average Metallic Manganese 44.59% Dry Basis
@ .5260¢ per unit Dry Basis or \$23.454 per Dry
Gross Ton

44.0954 Dry Gross Tons @ \$23.454 per ton \$1,034 21

Less Freight on minimum car weight
of 112,000#

528 00

\$506 21

E. J. LAVINO AND COMPANY

MANGANESE AND CHROME ORES
FERRO MANGANESE
REFRATORIES

1528 WALNUT STREET
PHILADELPHIA

TO W. W. Linesba,
Florence Junction, Arizona.

Shipped From:	Winslow, Ariz.
Shipped To:	Sheridan, Pa.
Date Received	11/26/40
Order Number:	7207-90

One Carload Manganese Ore

Car AT&SF 172680 - Gross 167,000 - Tare 46,700

Net 120,300 -or 53.7054 Nat. Gr. Tons

Less Moisture @ 3.97% 2.1321 " " "

51.5733 Dry Gross Tons

Manganese Content Guarantee	48.00% Dry Basis
Manganese Content Received	<u>43.28%</u> " "

Penalty of .01¢ per unit or
fraction on 4.72% = .0472¢

Contract Price	.5600¢
Less Penalty	<u>.0472¢</u>

.5128¢

Average Metallic Manganese 43.28% Dry Basis
@ .5128¢ per unit Dry Basis or \$22.194 per Dry
Gross Tons

51.5733 Dry Gross Tons @ \$22.194 per ton	\$1,144.62
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Less Freight	<u>567 13</u>
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\$577 49

E. J. LAVINO AND COMPANY

MANGANESE AND CHROME ORES
FERRO MANGANESE
REFRACTORIES

1528 WALNUT STREET
PHILADELPHIA

(CORRECTED INVOICE)

TO W. W. Linesba,
Florence Junction, Arizona.

Shipped From: Winslow, Ariz.
Shipped to: Sheridan, Pa.
Date Received: 10/30/40
Order No: 7207-90

One Carload Manganese Ore

Car AT&SF 83682 - Gross 155,660 - Tare 47,800

Net 107,860 or 48.1518 Nat. Gr. Tons

Less Moisture @ 7.27% 3.5006 " " "

44.6512 Dry Gross Tons

Manganese Content Guarantee 48.00% Dry Basis

Manganese Content Received 47.15% " "

Penalty of .01¢ per unit or
fraction on .85% = .0085 per unit

Contract Price .5600¢

Less Penalty .0085¢

.5515¢

Average Metallic Manganese 47.15% Dry Basis
@ .5515¢ per unit Dry Basis or \$26.00 per Dry
Gross Ton

44.6512 Dry Gross Tons @ \$26.00 per ton \$1,160 93

Less Freight on minimum car weight
of 112,000# 528 00

Less Amount retained against advances 632 93
61 49

Amount Paid - Voucher #10126 \$ 571 44
500 00

\$71 44

LABORATORY OF
E. J. LAVINO AND COMPANY
SHERIDAN, PA.

No. 480 Nov. 3, 1940 19
Sample of Manganese Ore - Arizona
From W. Linesba
Car Numbers AT & SF 03682
Marked
Date Rec'd 10/29 Sample Taken 10/30

REPORT OF ANALYSIS

	Dried	H.S.
Moisture	-	7.27
Mn	47.15	43.72
Fe	1.05	.97
P	.096	.089
Si O ₂	8.48	7.86
Al ₂ O ₃	3.59	3.53

Copies To:

Mr. M. D. Langhorne
Phila. (2)
Dr. Seil
Sheridan Plant

H. E. Fredrickson Chemist

ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

February 24, 1958

To the Owner or Operator of the Arizona Mining Property named below:

HOUGH MANGANESE
(Property)

MANGANESE
(ore)

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

XXXXXXXXXXXXXXXXXXXX

413 Home Builders Bldg.

June 9, 1942

Mrs. M. R. Linesba
P. O. Box 1026
Florence Jct., Arizona

Dear Mrs. Linesba:

I am enclosing a copy of Mine Owner's Report filed with this department covering the ROUGH MANGANESE MINE in Coconino County.

I shall be glad to submit this report to anyone making inquiry for a property such as yours.

Assuring you of my desire to be helpful, and with best wishes, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.