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09/24/85

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: PRICELESS GROUP

ALTERNATE NAMES:

PRICE
MOHAVE MINING & MILLING
JOHN CARR CLAIMS

MOHAVE COUNTY MILS NUMBER: 367B

LOCATION: TOWNSHIP 11 N RANGE 13 W SECTION 12 QTR. NW
LATITUDE:N 34DEG 18MIN 42SEC LONGITUDE:W 113DEG 34MIN 08SEC
TOPO MAP NAME: ARTILLERY PEAK - 15 MIN

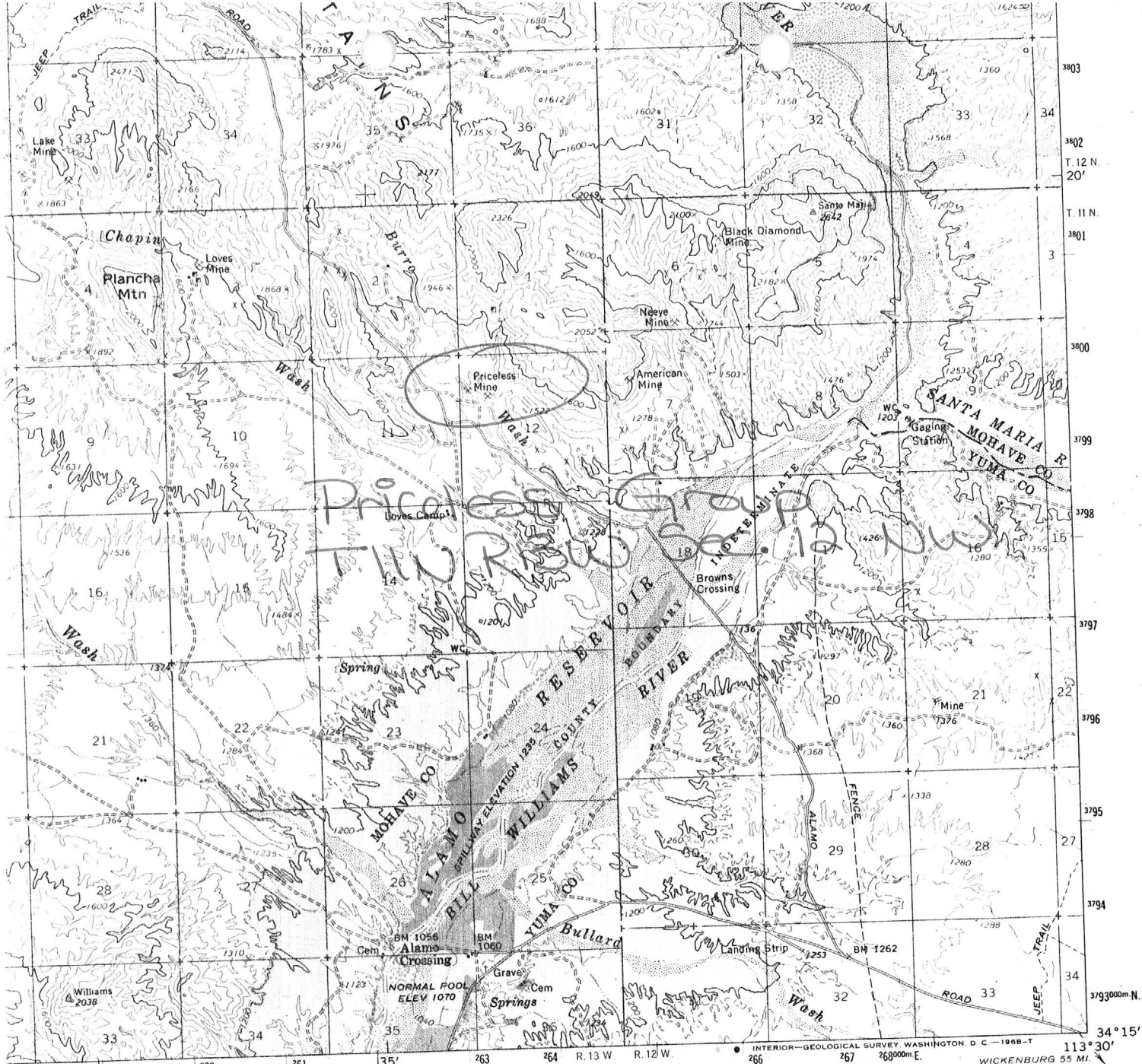
CURRENT STATUS: PAST PRODUCER

COMMODITY:

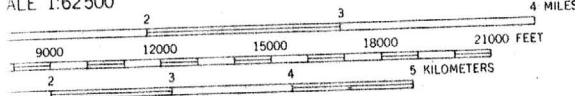
MANGANESE - PRIMARY

BIBLIOGRAPHY:

ADMMR PRICE-PRICELESS MINE FILE
FARNHAM, L.L. "MANGANESE DPSTS OF WESTERN AZ"
USBM IC 7843, P. 31-33; 1958
JONES, E.L. "MANANESE ORE OF AZ" USGS BULL
710-D, P. 149; 1920
LASKY, S.G. "MANGANESE RES. OF ARTILLERY MTNS
MOH. CO., AZ" USGS BULL 961, P. 78; 1949
MASSEY, E., AZ. STATE MINE INSP. RPT. 1955,
ANNUAL RPT. P. 8
LASKY, S. "MANGANESE DPSTS IN ARTILLERY MTNS,
MOH. CO., AZ" USGS BULL 936-R; 1944
ADDITIONAL WORKINGS SEC. 10 & 11
CONFLICTING INFO. IN USGS 871, R12W
MINING WORLD - SEPT. 1958, P 65; MARCH 1958,
P 58; MAY 1960



ARTILLERY PEAK
3252 II
SCALE 1:62500



INTERVAL 80 FEET
PRESENT 40-FOOT CONTOURS
S MEAN SEA LEVEL



QUADRANGLE LOCATION

ROAD CLASSIFICATION
Light-duty ————— Unimproved dirt - - - - -

ARTILLERY PEAK, ARIZ.
N3415—W11330/15

1966

AMS 3252 I—SERIES V798

NATIONAL MAP ACCURACY STANDARDS
INVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

6
M

Name of Mine or Prospect:	Township	Range	Section	Priority
Priceless	11N	13W	12	C
Principal Minerals:	1:250,000 Quad	7.5' - 15' Quad		
Psilomelane, Manganite	Prescott	Artillery Peak		
Associated Minerals:	District	Principal Product		
	Artillery Mtn.	Manganese		
Type of Operation:	County	State	Type of Deposit	
Surface: Open Pit	Mohave	Ar.	Sedimentary Host	
Ownership or Controlling Interest: Arizona Manganese Corp. (1958) ²				
Access: From Brown's Crossing proceed north on Alamo Road for 2 miles. Mine is shown on topographic quadrangle.				
Structural Control or Geological Association: "Manganiferous tuffs." ¹ "The deposit is in the upper manganiferous zone of the Chapin Wash formation. Numerous fractures have shattered the beds in a belt extending northwest. Supergene hard manganese oxides, mainly psilomelane and some manganite, have been deposited along these fractures." ²				
Age of Mineralization: Tertiary				
Production History			Geochemical Analyses	
Patented claims (12) Book #101 MS #4400 170,000 tons of raw ores (1953-1955) ¹ produced 51,000 long tons of concentrates at 29% Mn.				
References				
1) Hewitt et al. (1936) p. 83. 2) Farnham & Stewart (1958) p. 31-32.				

from: W.H. Crutchfield Jr. Mohave County Prospect Assessment Compilation (post 1982)

Name of Mine or Prospect:	Township	Range	Section	Priority
Price Group	11N	13W	12	C
Principal Minerals:	1:250,000 Quad		7.5' - 15' Quad	
Manganese Oxides	Prescott		Artillery Peak	
Associated Minerals:	District		Principal Product	
	Artillery Mtn.		Manganese	
Type of Operation:	County	State	Type of Deposit	
Surface: Open Pit	Mohave	Ar.	Sedimentary Host	

Ownership or Controlling Interest:
Consult tax assessment records

Access: From Brown's Crossing proceed north on Alamo Road for 2 miles. Mine is shown (unnamed) on topographic quadrangle.

Structural Control or Geological Association:

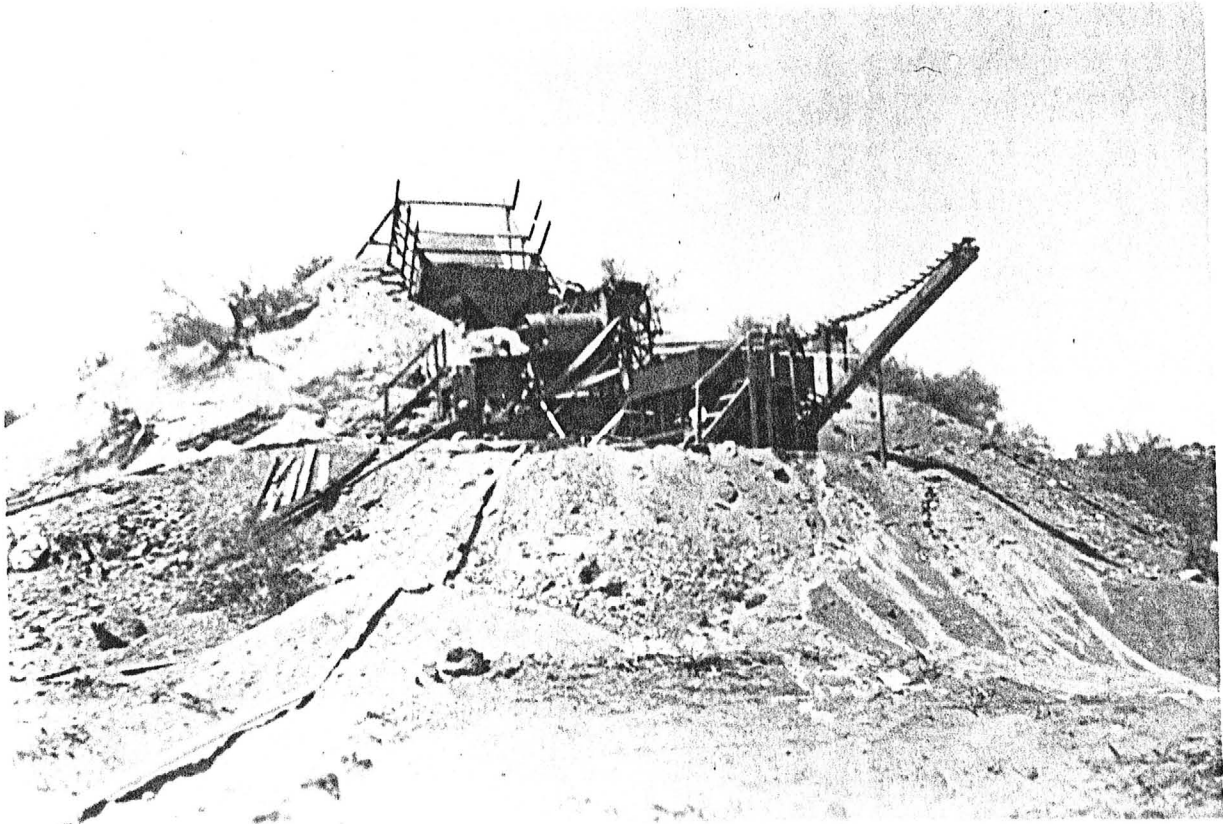
"A zone of manganiferous tuff is exposed for a distance of about 2000 feet. The zone trends east and dips south at a low angle. The thickness of the zone ranges from 20 feet at the east end to about 40 feet at the west end, but locally it is represented by two distinct beds separated by 12 to 30 feet of barren tuffaceous sand."¹

Age of Mineralization: Tertiary

Production History	Geochemical Analyses
Patented Claims Bk #101 (seven) MS #4400	Assay ¹ "Select" 12.0% Mn Average 75.0% Mn

References

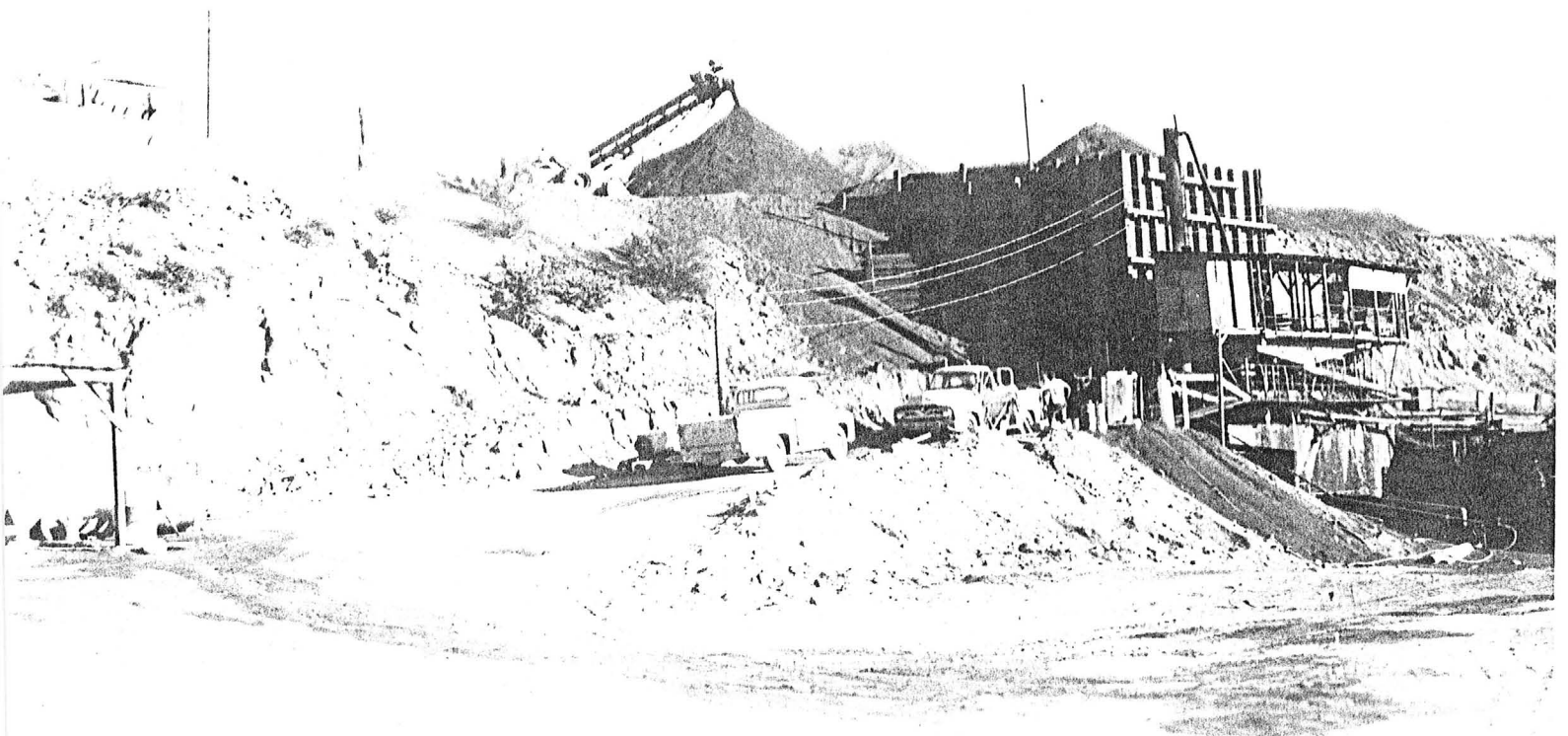
- 1) Hewitt, et al (1936) p. 83.
- 2) Farnham & Stewart (1958) p. 33.



A-150-16

STOVALL MILL

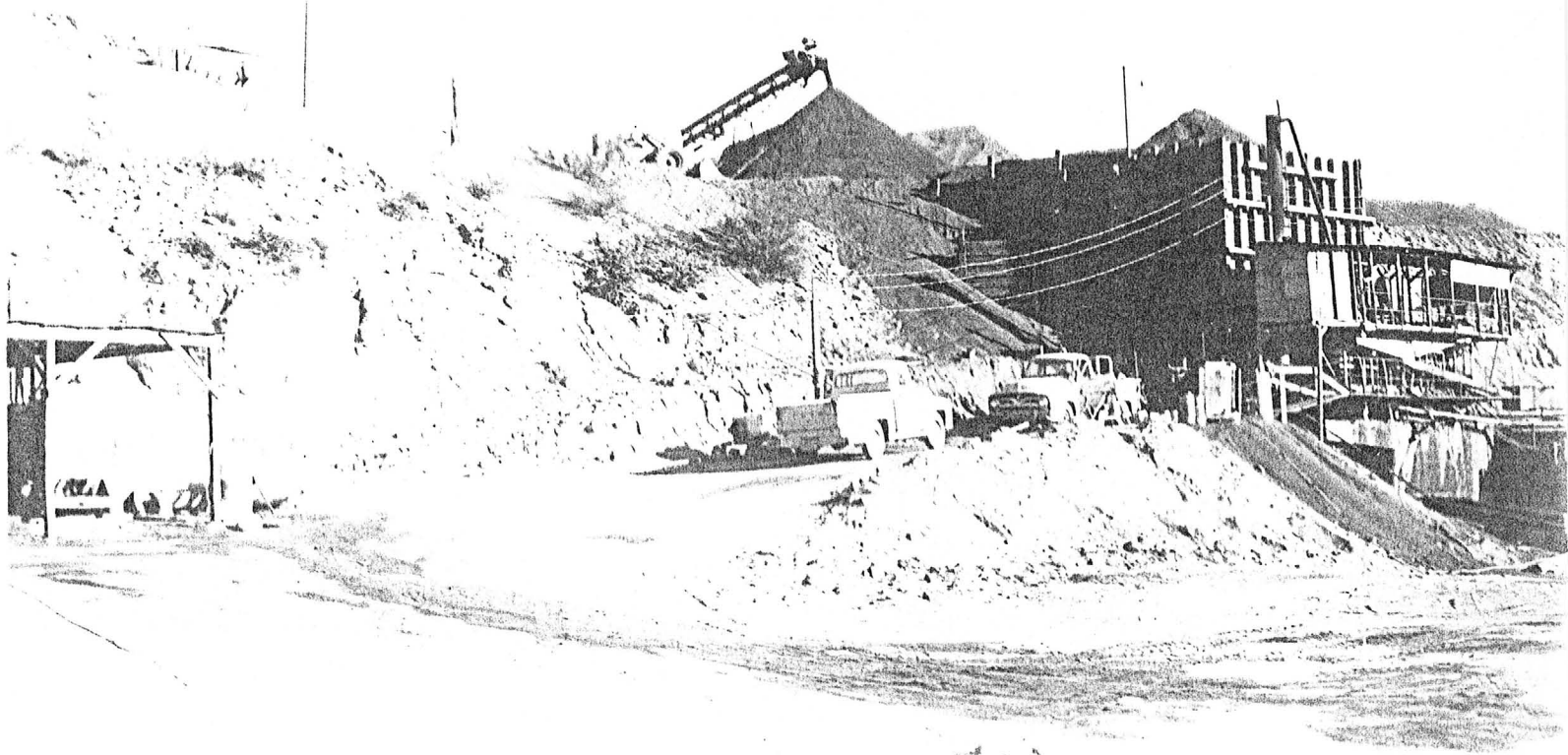
1953



A-150-17

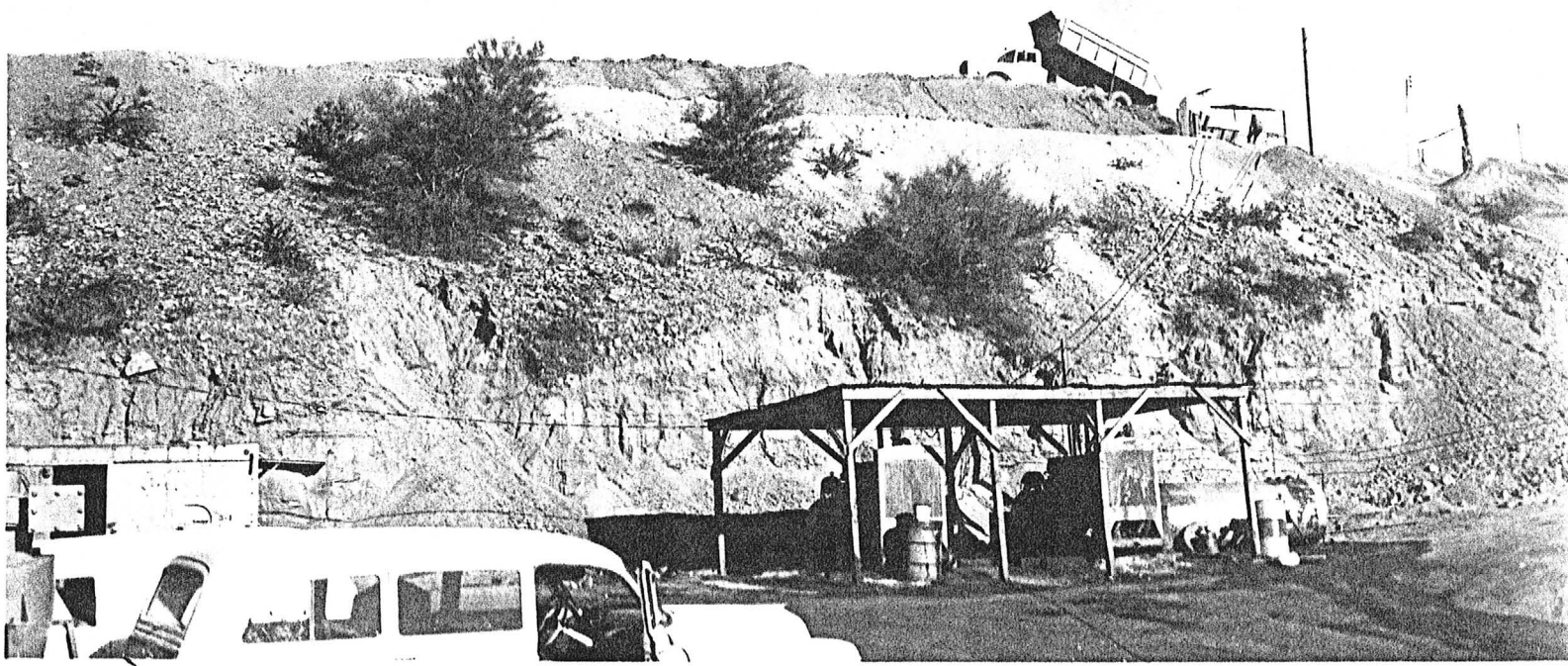
ROBINETTE MILL

1958



A-150-17

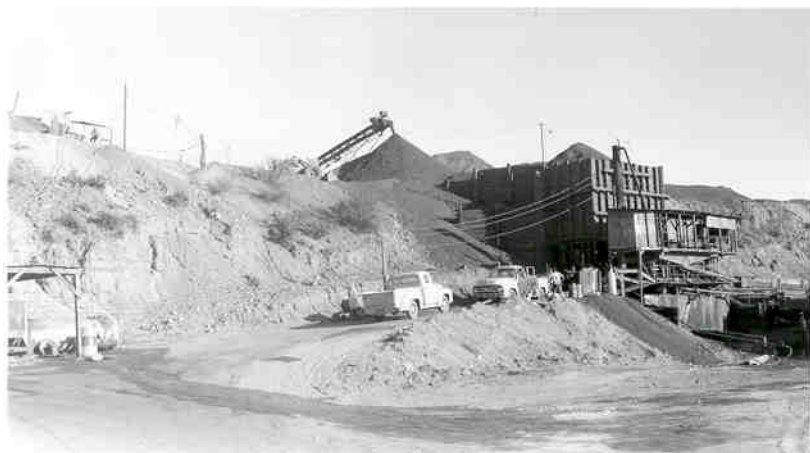
1958

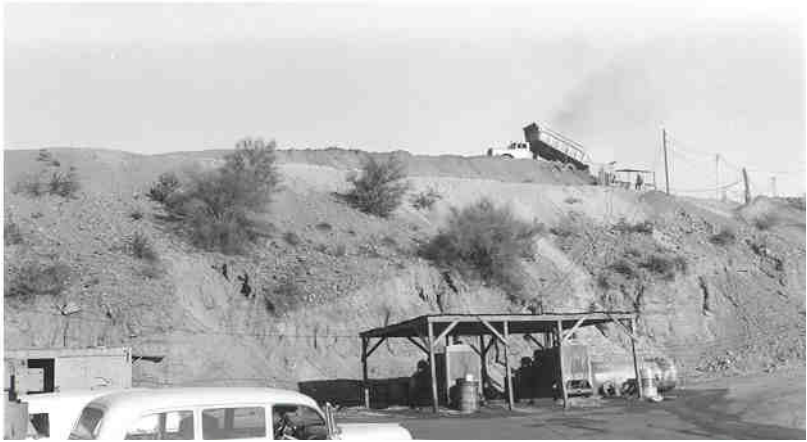


A-150-18

1958







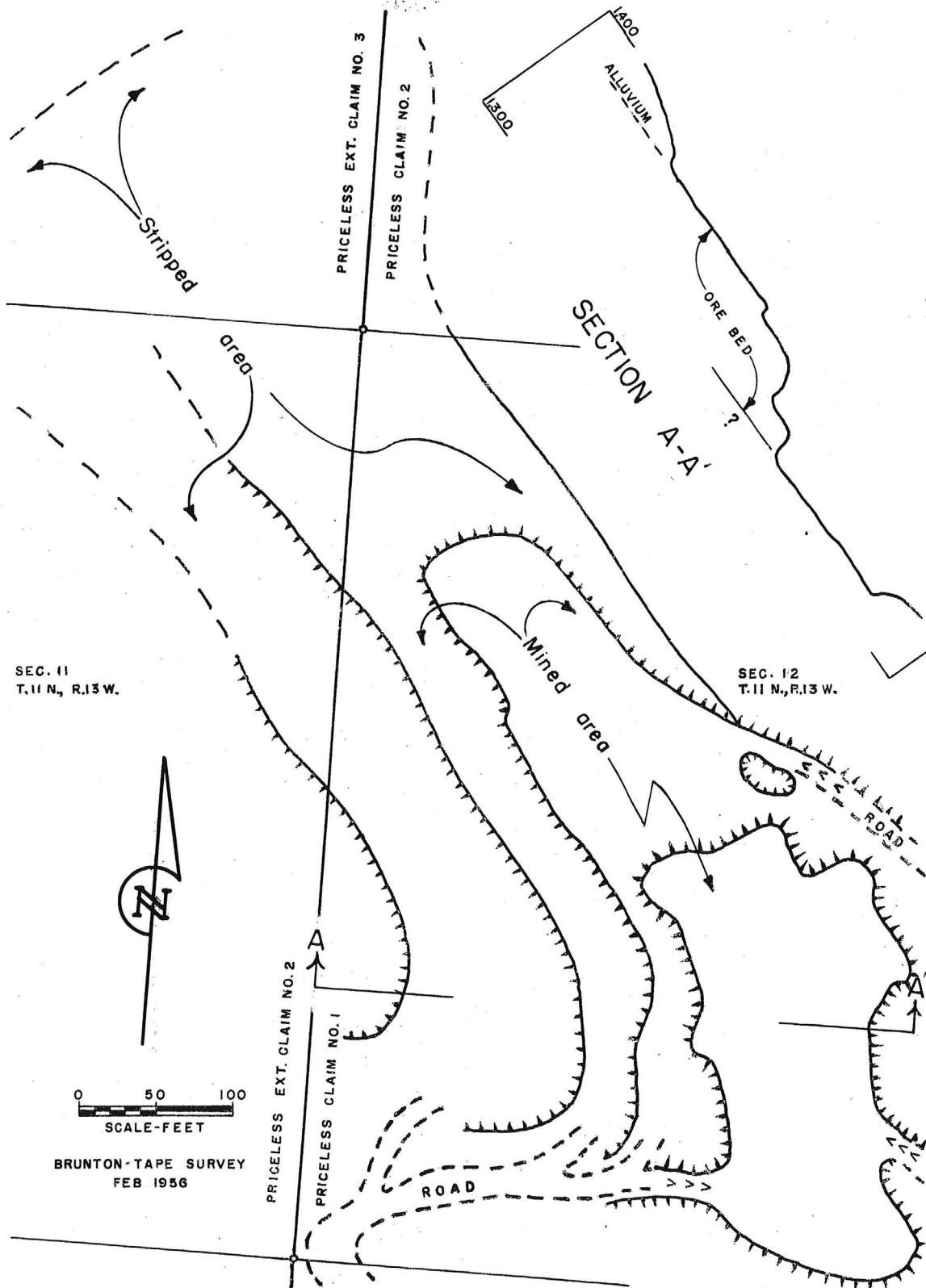


FIG. 12 PLAN AND SECTION, PRICELESS PIT

26 piers

Priceless P.L

135 1/2
70 1/2
2/10

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

ROBINETTE & WELLS CARGO,

Formerly-

Mine Brown & Robinette

Date Dec. 22, 1958

District Artillery Mtn., Mohave Co.

Engineer Travis P. Lane

Subject: Visit

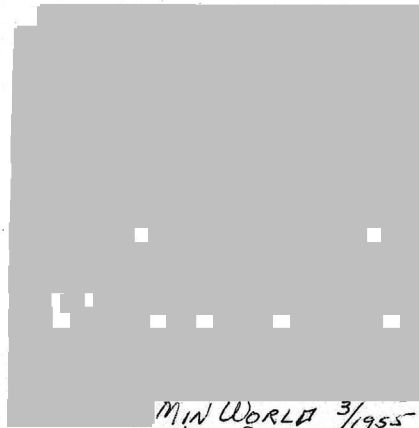
The plant was visited by Frank P. Knight and Travis Lane on Dec. 18, 1958.

The operations were normal. None of the principals was present. Floyd Brown is no longer a partner in the operation. The plant foreman advised that the current milling rate is about 15 TPH and that all the mill feed is from the Priceless pit, said to be averaging about 10% Mn.

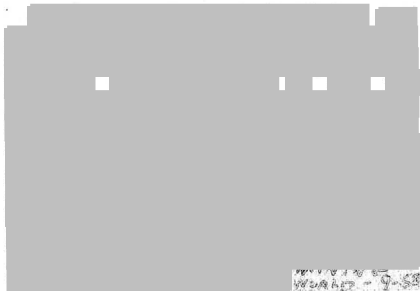
The concentrates, running from 25 to 30% Mn, are being shipped to the M & M plant at Wickenburg.



MINING WORLD-5-60



MIN WORLD 3/1955



MINING WORLD-7-58

PRICELESS

MOHAVE COUNTY
ARTILLERY MTN.

Visited the mill of Robinette & Wells Cargo. The crushing plant was sold and moved out at the end of May. Present operations consist of concentrating the remaining stockpile of crushed ore. The project will terminate about the middle of June. While some ore reserves remain in the Priceless deposit, stripping would be necessary and this is not justified at this stage of the Mn program.

Travis P. Lane - Wr - 6-13-59

Visited the Robinette & Wells Cargo plant. The crushing equipment is gone and the jigs are working on the remaining stockpile of crushed ore with perhaps 3 days run on hand.

TRAVIS P. LANE - WR - 6-30-59

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Priceless Mine & Brown & Robinette plant

Date

Oct. 27, 1958

District Artillery Mtn. District, Mohave Co.

Engineer

Travis P. Lane

Subject: Visit

The Brown and Robinette partnership operations were visited on Oct. 24. The mill was operating normally at 600 TPD. The operators have arranged to run the Sitton mill tailings of which a large tonnage is available. A test run is under way and if successful the full mill capacity will be devoted to these tailings.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Price, Priceless, etc.

Date September 29, 1958

District Artillery Mtn., Mohave County

Engineer Travis P. Lane

Subject: Mine and Mill activity (not visited)

Operator: Brown & Robinette

The writer contacted Mr. Robinette in Wenden on September 24th and obtained from him an account of the activities of the Brown & Robinette partnership operation of the manganese mine and mill at Brown's Crossing (near Alamo crossing). Also, some information was obtained at the Mohave Mining and Milling office in Wickenburg. The plant product is sent to Mohave Mining and Milling for further processing to meet marketable specifications.

The plant is putting through 25 tons per hour, and is making approximately 60 tons per day of about 30% manganese concentrate. Recovery is made by Pan American jigs -- 5 roughers and one cleaner. About 2/3 of the concentrate is jig bed product and 1/3 is Hutch product.

22 men are employed -- 4 mining and hauling, and 18 in mill operation, and general maintenance. Fred Kayser is the Plant Supt.

DEPARTMENT OF MINERAL RESOURCES

News Items

Date Dec. 10, 1954

Mine Price & Priceless

Location 1/4 m. north east Alamo Crossing

Owner Arizona Manganese Corporation

Address

Lessee

Operating Co. Mohave Mining & Milling Co.

Address Box 1106, Wickenburg, Ariz.

Pres. H. F. Lynn, Box 1106, Wickenburg

Genl. Mgr. Secy. A. B. Campbell "

Genl. Mine Supt. Ralph G. Godfrey "

Mill Supt.

Principal Metals Manganese

Men Employed 20

Production Rate 500 tons per Day, crude ore

Mill, Type & Capacity Log-washer and sinkfloat

500 tons crude ore

Power, Amt. & Type Diesel Electric at mill

Diesel comp. Power leader, Bulldozer
and Trucks

Signed Mark Gemmill

(Over)

Present Operations Mining and milling ore from
both properties - Open pit methods

New Work Planned additions of jigs, flotation
and sintering to mill in order to produce
40% plus product for direct shipment to
users.

Misc. Notes Operation appears to be well e-
quipped and managed

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Priceless & Price, and Brown &
Robinette Mill
District Artillery Peak

Date June 25, 1958

Engineer Travis Lane

Subject:

MEMO

Operator: Brown and Robinette

The mill was started up on June 18, and at the time of this visit operations were on a 2 shift per day basis putting through 30 tons per hour.

The jig concentrate is running approximately 36% Mn and the hutch product 22%. The operators expect to send the former to Stovall for blending to a marketable grade, and to send the hutch product to a plant having a float section for upgrading treatment, (probably to the Dasco plant at Wenden or, possibly, to the Holmes plant at Winterhaven, California).

The ore source is the Priceless pit some two miles northerly from the mill. The mining is being done on company account with equipment rented from Wells Cargo. A long bench has been stripped on one side of the pit and this bench is expected to furnish the quota output for this year with some excess, and the prospect seems good for further substantial extension of ore in depth and length and into one wall of the pit.

The mining and hauling crew comprises 5 men. 7 men are employed at the mill.

Information from MINE INSPECTOR'S OFFICE - August 15, 1957

✓ PRICELESS ADIT, Owens Dist., MOHAVE CO. 6-19-57
Wenden, Ariz.

✓ M. L. Pate, Contractor, Box 1106, Wickenburg, Ariz. (H.F.Lynn, Pres.)

DOWN

Robt. Pratt (Agent in Charge) " "

✓ MANGANESE 10,000 tons
26 men

L.A.S.

DEPARTMENT OF MINERAL RESOURCES

News Items

Date 5/23/58

Mine Price & Priceless claims (30)

Location Artillery Peak Area 4 Mi. NE of

Owner Arizona Manganese Co. Alamo Crossing

Address

Operating Co. Brown & Robinette

Address Brown's Crossing, Arizona

Pres. Partnership

Genl. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Mn

Men Employed Construction 8, employ 17 operating mill

Production Rate Est. Max 700 TPD, Av. 500

Mill, Type & Capacity Jig Plant - 24" x 36" Jaw,
24"x52" Rolls, To-1/2", 5 Pan American Jigs

Power, Amt. & Type Diesel: 3 D13000 Cat,

1 200 Cummings

Signed

(Over)

Present Operations Constructing mill (new) 3/4
mile south of Brown's Crossing. Expect to
be operating about June 1st.

New Work Planned As soon as mill is oper-
ating will drill to block additional re-
serves in and around present pit.

Misc. Notes These are old competent operators -
no promotion.

Partners claim 25,000 tons blocked 10% Mn
(confidential) in Price and Priceless blocks
of claims. Information supplied by Floyd
Brown.

The mill will not handle custom ores.

LYNN, H. F. Pres.
MOHAVE MINING & MILLING COMPANY (LESSEE)
P. O. Box 1106,
Wickenburg, Arizona

12-54

SEE: ✓ PRICE AND PRICELESS MINES, ¼ Mi. NE of Alamo Crossing - & Mill.

OWNER: Arizona Manganese Corp.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine PRICE AND PRICELESS * Manganese

Date Dec. 10, 1954

District 4 miles northeast of Alamo Crossing

Engineer Mark Gemmill

Subject: Present Activity

OWNERSHIP

The properties are owned by the Arizona Manganese Corporation and leased to the Mohave Mining & Milling Company, H. F. Lynn, Pres. A. B. Campbell, Secy. Ralph G. Godfrey, Supt. Address for all, P. O. Box 1106, Wickenburg, Arizona

MINING OPERATIONS

Both mines are being operated by open pit methods and are well equipped. Production has been going on for about about 2 months. To date the Price has produced about 5000 tons and the Priceless 20000 tons. The average of the ore has been about 12%, all of which has been milled in the company's mill located near the property. The ore reserves appear to be quite large. Although the limits of the orebodies have not been found, Mr. Godfrey thinks they will greatly surpass tonnage estimate I made in Jan. 1952, of about 125,000 tons for the two properties.

MILLING OPERATIONS

The present plant which was completed about 2 months ago consists of crusher, log-washer, screen and sinkfloat. The ore is crushed to 1". It then goes to a log-washer which eliminates a lot of the clay. It is then screened over a $\frac{1}{4}$ " mesh screen. The oversize goes to the sinkfloat unit and the undersize is stockpiled. The sinkfloat product averages about 33%. The undersize about 20%. All of this as a combined product is being shipped to Wenden. Mr. Godfrey reports that the capacity of the plant in crude ore is 500 tons per 24 hr. day, and that they have been producing about 150 tons per day of combined product which has averaged 27% manganese, with no penalty materials.

FUTURE PLANS

Present plans include the installation of jigs and flotation and sintering in order to produce a concentrate of 40% plus for shipment direct to the users. In the meantime with the expected closing of the Wenden depot the company had expected to ship the sinkfloat product to Deming and stockpile the sands for further treatment.

FACILITIES

The mill is located near the Bill Williams river where ample water is available by pumping from a well in the river bed. Power is supplied by a Diesel-Electric Generator. Fairly good quarters have been provided for employees. About 20 men are currently employed.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Dalter

ROBINETTE & WELLS CARGO,
Formerly-

Mine Brown & Robinette

Date Dec. 22, 1958

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Engineer Travis P. Lane

Subject: Visit

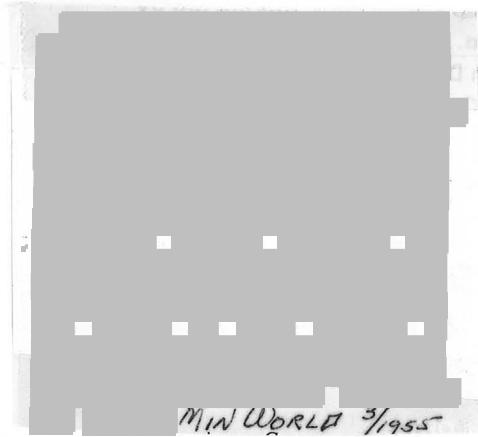
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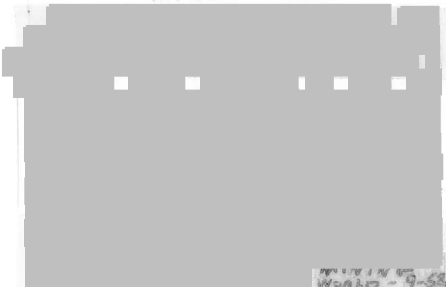
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MINING WORLD - 5-60



MIN WORLD 3/1955



MINING WORLD - 9-58

LYNN, H. F. Pres.
MOHAVE MINING & MILLING COMPANY (LESSEE)
P. O. Box 1106,
Wickenburg, Arizona

12-54

SEE: PRICE AND PRICELESS MINES, 4 Mi. NE of Alamo Crossing - & Mill.

OWNER: Arizona Manganese Corp.