

Titanium Metals Corporation of America

P. O. Box 2128, Henderson, Nevada

November 26, 1957

Mr. Herb J. Miller, President
Western Aniline and Chemical Company
Tucson, Arizona

Dear Mr. Miller:

This letter is intended to outline the agreement we discussed November 26, 1957, in regard to purchase of equipment from the property formerly operated by Pioche Manganese Company and proposed lease of the property.

It is intended that you be provided fifteen (15) days to consider this agreement and that, at that time, enter into a purchase option for the electrical equipment described on Pages 1, 2 and 3 of Attachment #1, for the sum of \$150,000 for a period of one hundred and eighty (180) days. The option price of \$10,000, when exercised, is to apply toward the total of the purchase price. (Excluded is ore handling equipment listed in same tabulation.)

It was also further discussed and agreed that the property would be leased for approximately one (1) year for the sum of \$22,000 per month, of which \$10,000 each month is to apply against the above purchase agreement.

It is further agreed that Western Aniline and Chemical Company will provide liability coverage required by General Services Administration in their lease with Titanium Metals Corporation of America and the National Lead Company in the same amount as required by General Services Administration. Further, that Western Aniline and Chemical Company will comply with the housekeeping and maintenance requirements established by Factory Mutual Engineering, the organization inspecting for Titanium Metals Corporation's fire and extended coverage insurance.

It is further agreed that Western Aniline and Chemical Company will accept the property and equipment for the purpose of the lease in its present condition, will be responsible for putting the equipment into operating condition and for returning the property in the same condition as received, less normal wear and tear, at the expiration of the lease agreement.

It is agreed that Titanium Metals Corporation of America will supply water to the building for a cost of \$100.00 per million gallons and that Western Aniline and Chemical Company will be responsible for the delivery of water to any equipment site from the mains entering the building.

It is agreed that Western Aniline and Chemical Company will reimburse Titanium Metals Corporation of America for any charges for switching rail cars incurred by the Western Aniline and Chemical Company.

It is agreed that Titanium Metals Corporation of America will supply power within limits of their ability to obtain power through the Colorado River Commission to the operation of Western Aniline and Chemical Company. The point of delivery is to be the main switch gear feeding the transformer banks located at the building known as J-2. The cost of this power is to be determined in a study to be made by Mr. Lloyd Compton, power consultant. Any disagreement in regard to power is to be resolved on a basis of equitable costs with the decision to rest with Mr. Compton and an appointed representative of the Colorado River Commission Engineering Office. A deposit equal to one month's power bill will be maintained with Titanium Metals Corporation of America.

It is intended that the parties will enter into an option agreement by December 12, 1957. Otherwise, the above agreement is void. It is recognized by the parties that General Services Administration, Colorado River Commission and other parties, a party to the lease agreement now held by Titanium Metals Corporation of America must approve any option before it becomes final.

Very truly yours,

TITANIUM METALS CORPORATION OF AMERICA



R. J. Maddex
Plant Manager

PJM:jal

HAILE MINES, INC.

500 FIFTH AVENUE

NEW YORK 36, N. Y.

November 7, 1957

Mr. Herb J. Miller
Western Aniline & Chemical Co.
Box 6304
Tucson, Arizona

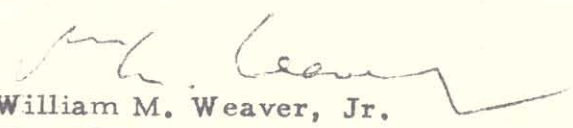
Dear Mr. Miller:

Based on our conversation today we estimate that we can supply you with three carloads per day of minimum 40% manganese ore from Mexico at about \$1.00 per unit, f.o.b. cars, El Paso, ex USA duty.

This, of course, is subject to our having adequate warning to divert ores from shipment to our plant at Brownsville, Texas.

Yours sincerely,

HAILE MINES, INC.


William M. Weaver, Jr.
President

WMW:ed

HAILE MINES, INC.

500 FIFTH AVENUE

NEW YORK 36, N. Y.

December 2, 1957

Mr. Herb Miller, President
Western Anilene & Chemical Co.
Box 6304
Tucson, Arizona

Dear Herb:

It was a pleasure to talk to you on the phone this morning and discuss with you the purchase of the electric furnaces in Henderson, Nevada.


As I told you over the phone, we will be very glad to represent your company and handle the sales in the western United States of the ferro-manganese produced by your company. I will expect to hear from you shortly.

I will look forward to hearing from you in the near future advising your progress on getting the plant set up.

Best regards,

Sincerely,

HAILE MINES, INC.


William M. Weaver, Jr.
President

WMW:ed

WESTERN ANILINE & CHEMICAL CO.

COST DATA: Pioche Manganese, Henderson, Nevada
 Electric Furnace Smelting of Ferromanganese
 2 - 7,500 K.V.A., 6 Electrode Furnaces, Installed
 6,000 K.V.A., Actually Used.
 Smelting Rate: 2 Tons Per Hour Per Furnace.

MATERIALS COSTS: 1.7 Tons of Manganese Ore (43% Mn-2% Fe) \$1/Unit \$50/T \$85.00
 .5 Tons of Coke 28/T 14.00
 .33 Tons of Manganese Iron Ore (18% Mn-40% Fe) 20/T 6.67
 .33 Tons of Dolomitic Lime Stone 3/T 1.00
 \$106.67/T

Manganese Ore on Haile Mines Contract-Cost
 \$1.00 Per Unit Delivered to El Paso, Plus \$7.00 Est.
 Freight to Henderson, Nevada
 Manganese - Iron Ore - Prosperity Group, Mammoth, Arizona - Delivered to Plant

OPERATIONAL COSTS:
 Service Labor \$ 5.30
 Furnace Labor 3.07
 Henderson Office 2.06
 Shop Maintenance 2.74
 Furnace and Materials Repair and Maintenance 4.00
 Electrodes 50 lb. at 13 1/2 Cents/lb. 6.75
 Miscellaneous Supplies 2.50
 Direct Furnace Power 3,000 KWH at 3.3 mils 9.90
 Indirect Power 7.3 Mils 2.82
 Indirect Overhead - Company Offices, etc. 6.06
 Taxes .67
 Total operational costs \$45.87 Per/T

Plant Rental or Amortization 10.00
 55.87 Per/T
 Total Manufacturing Cost 55.87
 Freight to Los Angeles Est. \$5/T Ferro 5.00
 Total Cost Delivered to Market \$167.54/T

Present Value of Ferromanganese Delivered to Markets
 1.1225/lb. or \$245/T Plus Freight (Equalized from Portland, Oregon)
 of \$23 or \$268.00 Per Ton Delivered
 74 - 78% Mn Content, 6% C 268.00/T
 Estimated Net Profit \$100.46/T

One Furnace Basis - Economics		1,200T/Mo	3,600T/Quar.	14,400T/yr
Per 48T/DA				
Materials Cost	\$5,120.6	\$128,004.00	\$ 384,012	\$1,536,048
Operational Cost	2,201.76	55,044.00	165,132	660,528
Plant Rental	480.00	12,000.00	36,000	144,000
Freight on FEMN	240.00	6,000.00	18,000	72,000
Total Costs	\$8,041.92	\$201,048.00	\$ 603,144	\$2,412,576
Value of Fe-Mn	\$12,864.00	\$321,600.00	\$ 964,800	\$3,859,200
Estimated Net Profit	4,822.08	120,552.00	361,656	1,446,624



7-482 0491

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION II

ELECTROMETALLURGICAL
EXPERIMENT STATION

500 DATE STREET
BOULDER CITY, NEVADA

November 1, 1957

Western Aniline and Chemical Company
P. O. Box 6304
Tucson, Arizona

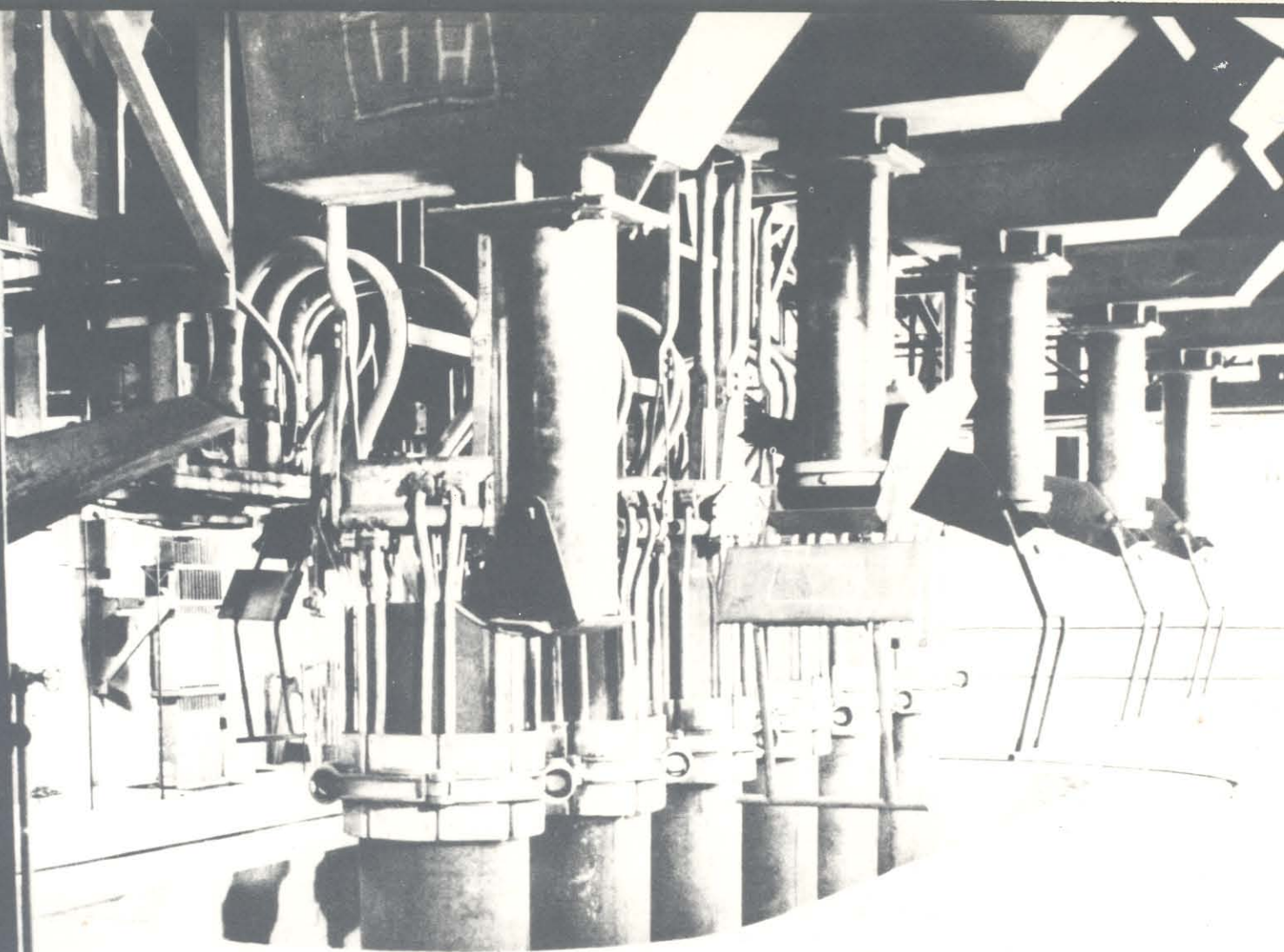
Gentlemen:

Enclosed is the report you left with us covering your proposed manganese smelting plant for the Southwest.

In reply to your request for a cooperative agreement, the first step in negotiating such an agreement with the Bureau of Mines, will be a letter to the Director of the U. S. Bureau of Mines, Marling J. Ankeny, Washington 25, D. C. This letter may be brief but should cover your plan to utilize the existing facilities of the old Pioche Manganese Company under lease with option to purchase from Titanium Metals to smelt your ore blended with other Southwestern ores to produce ferro-manganese. You should point out that a smelting operation in the Southwest could serve an already sizeable and expanding steel industry on the Coast and other parts of the area and in times of national emergency, could make this area independent of other sources of supply. You should state that you have contacted the Boulder City Station of the Bureau of Mines and desire a cooperative agreement to use our smelting facilities for research to develop optimum blends of domestic ores prior to and concurrently with the smelting on a commercial scale. The letter should also state either that there are no private facilities available for this testing or that they are not available at a reasonable cost and convenience as the case may be.

Very truly yours,

D. H. Baker, Jr., Acting for
D. D. Blue, Superintendent
Electrometallurgical Experiment
Station
Region II



WESTERN ANILINE AND CHEMICAL Co.

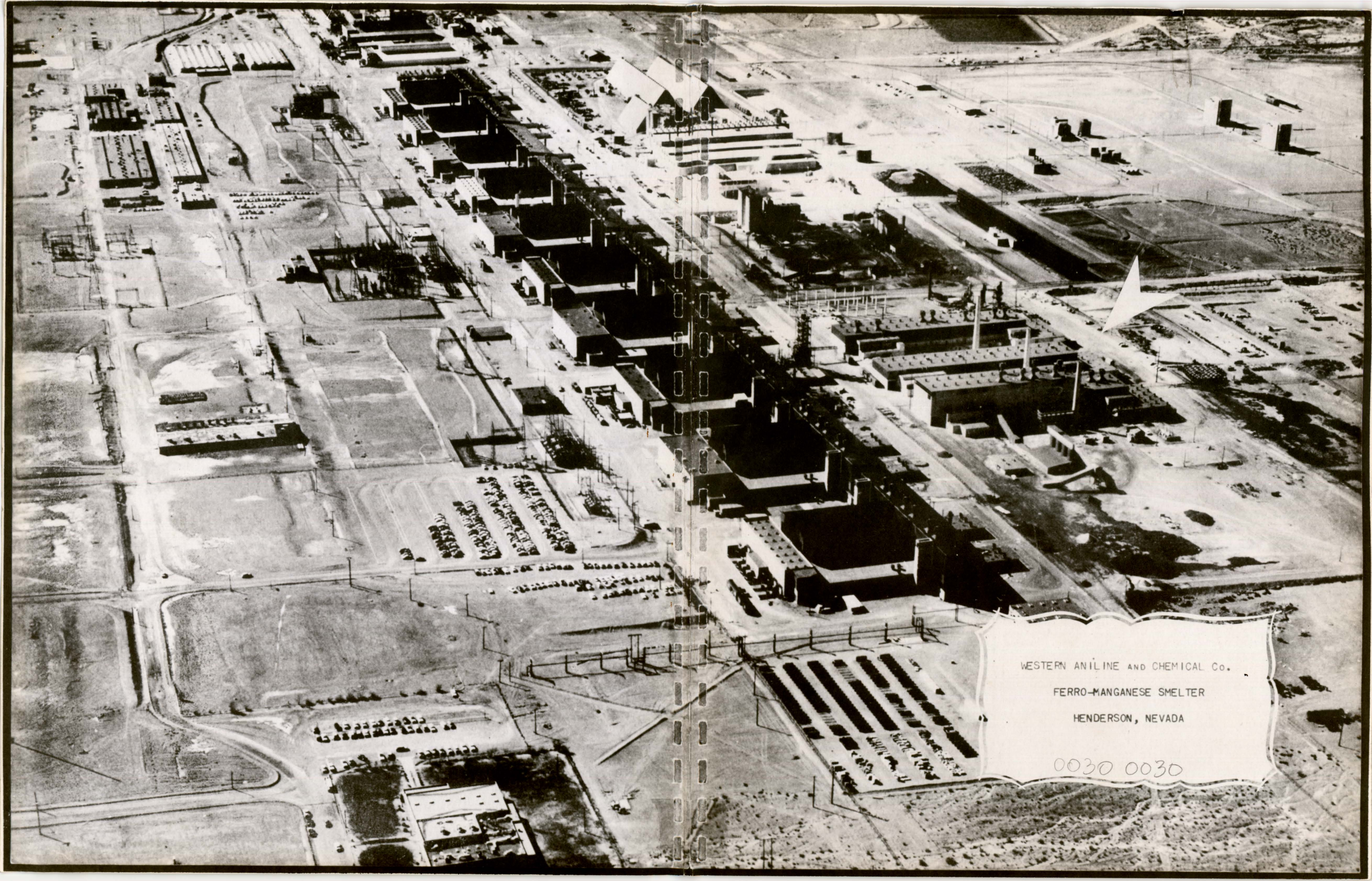
MANGANESE DIVISION

ELECTRIC FURNACE INSTALLATION
HENDERSON, NEVADA

TWO - 7,500 KVA 6 ELECTRODE ORE SMELTING FURNACES

CAPACITY: 90 - 100 TONS PER DAY
OF FERRO-ALLOYS

(ONE OF THE TWO FURNACES)



WESTERN ANILINE AND CHEMICAL Co.

FERRO-MANGANESE SMELTER

HENDERSON, NEVADA

0030 0030