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Form SL-1035

KEEP THIS ON TOP

File No. Aa-16A.22.15

Subject: LAKESHORE GENERAL, Pinal County, Arizona



AMERICAN SMELTING AND REFINING COMPANY
SOUTHWESTERN EXPLORATION DEPARTMENT
P.O. BOX 5795, TUCSON, ARIZONA 85703

J. H. COURTRIGHT
CHIEF GEOLOGIST
L. P. ENTWISTLE
ASSISTANT CHIEF GEOLOGIST
W. E. SAEGART
ASSISTANT CHIEF GEOLOGIST

March 24, 1969

1150 NORTH 7TH AVENUE
TELEPHONE 602-792-3010

Mr. W.T. Hollis,
Manager Mining Division
El Paso Natural Gas Company
El Paso, Texas 79999

Dear Mr. Hollis:

We find that the map showing gravity contours of Lakeshore was by mistake not included with my letter of March 12. Accordingly, please find such a map enclosed herewith.

Yours very truly,

J.H. Courtright

JHC:lzb
Encl.

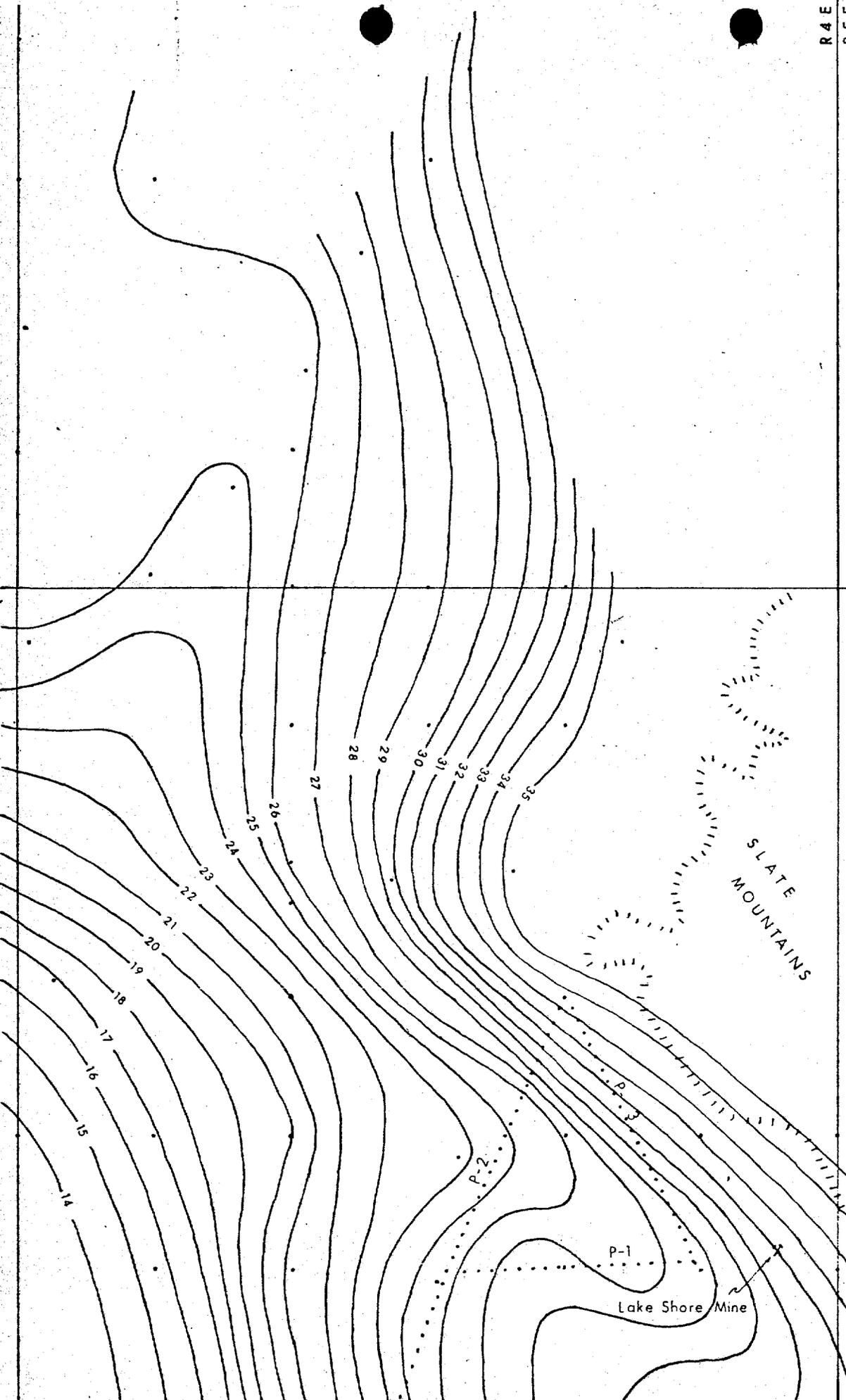
R 4 E
R 5 E

EXPLANATION

Contour Interval 1 m. gal

- ← Gravity Station
- ← Gravity Profile

T 9 S
T 10 S



SLATE
MOUNTAINS

ASARCO Relative Gravity

Santa Rosa Valley

SCALE 1"=1mile

W.G.F.

Dec. 1968

Lake Shore Mine

March 12, 1969

Mr. Richard F. Howlett
Computech Research, Limited
7107 North Oracle Road
Tucson, Arizona 85704

Dear Dick:

In reference to your letter of February 29, please be advised that you may release ASARCO's leaching results on Lakeshore to Hecla Mining Company.

Yours very truly,

J.H. Courtright

JHC:lzb

March 12, 1969

Mr. W.T. Hollis,
Manager Mining Division
El Paso Natural Gas Company
El Paso, Texas 79999

Dear Mr. Hollis:

Referring to your letter of March 3, 1969, please find enclosed (1) a copy of the Lakeshore metallurgical report on oxide copper ore, and (2) a map showing the gravity contours.

All other data accumulated, along with interpretations thereof (geologic and drill hole plans, sections, ore estimates, etc.) are contained in our report of January 2, 1969, three copies of which were sent to the El Paso Natural Gas Company.

No geophysical surveys other than gravity were conducted at Lakeshore.

Yours very truly,

J.H. Courtright

JHC:lzb
Encl.

cc: JJCollins
TASnedden
WGBossard
WESaegert (route file copy)



AMERICAN SMELTING AND REFINING COMPANY
EXPLORATION DEPARTMENT
120 BROADWAY, NEW YORK, N.Y. 10005

J. H. C.
MAR 12 1969

JOHN J. COLLINS
CHIEF GEOLOGIST

Air Mail

March 10, 1969

Back
Mr. J.H. Courtright
Tucson Office

Priority on Skin
Lakeshore, Arizona

Dear Mr. Courtright:

In reply to your letter of March 6th, we have no objection to Mr. Hewlett releasing our Lakeshore leaching test results to the Hecla Mining Company.

As for Mr. Hollis' request for geological, geophysical and metallurgical data on his property, it seems to me that your report of January 2nd contained everything that we did on the property and hence there is nothing additional to send. If I am wrong, please let me know.

Sincerely yours,

John J. Collins

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

March 6, 1969

Mr. J.J. Collins, Chief Geologist
ASARCO - New York Office

LAKESHORE

Dear sir:

Enclosed is a copy of a letter received from Mr. W.T. Hollis, Manager of El Paso Gas Mining Division, asking for any additional geological, geophysical and metallurgical data that we might have.

Also enclosed is a copy of a letter from Computech Research, Limited, asking permission to release leaching results to Hacia Mining Company.

Please advise as to whether or not we should comply with these requests.

Yours very truly,

J.H. Courtright

JHC:lzb
Encl.

El Paso Natural Gas Company

J. H. C.

MAR 6 1969

El Paso, Texas 79999

March 3, 1969

Mr. J. H. Courtright
Chief Geologist
Southwestern Exploration Dept.
American Smelting & Refining Co.
1150 North 7th Avenue
Tucson, Arizona

Dear Mr. Courtright:

When the Lakeshore property was submitted to your Company, El Paso Natural personnel requested a copy of your geological, geophysical, and metallurgical data that might be obtained during the evaluation of this property. If you have any such data, we again respectfully request a copy of it. We are particularly interested in induced polarization and any other geophysical results and metallurgical data from the copper oxide ore.

We appreciate any consideration and time you give concerning this request.

Yours truly,



W. T. Hollis
Manager
Mining Division

WTH:dg

COMPUTECH RESEARCH, LIMITED

J. H. C.
MAR 4 1969

RICHARD F. HEWLETT
Chairman of the Board

Subsidiary of GFI Computer Industries

CORPORATE OFFICE
7107 NORTH ORACLE
TUCSON, ARIZONA 85704
602 / 297-1141

February 29, 1969

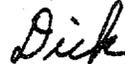
Mr. Harold Courtwright
ASARCO
1150 North 7th Avenue
Tucson, Arizona

Dear Harold:

I am writing in regards to the leaching results that ASARCO obtained from samples taken from the Lakeshore Property.

We would like to have your permission to release these leaching results to Hecla Mining Company.

Sincerely,



Richard F. Hewlett

RFH:jg

Hecla to Develop Copper Discovery

Large Ore Body Is on Arizona
Acreage Owned by El Paso;
Hecla to Operate Mines

Hecla Holder to Oppose Plan

By a WALL STREET JOURNAL Staff Reporter

HOUSTON—El Paso Natural Gas Co. and Hecla Mining Co., Wallace, Idaho, announced the signing of agreements to develop a "major new copper discovery" made by El Paso on its lakeshore properties near Casa Grande, Ariz.

The discovery, announced last September, has been described as one of the largest ore bodies discovered in the U.S. in recent years.

El Paso Natural said an independent mining consulting concern has confirmed that additional drilling on the properties has resulted in "substantially increased estimated reserves."

Following the announcement by the two companies, Golconda Mining Corp., Wallace, Idaho, which holds 661,000 shares of Hecla's 4,945,000 shares outstanding and is its largest shareholder, said it would oppose the transaction.

Opposition From Hecla Holder

Golconda said its vice president, H. F. Magnuson, who is a member of the Hecla board, told the Hecla directors at a meeting yesterday that Golconda opposed the agreements because "present projections indicate that the proposed transaction may result in decreased earnings per share for Hecla for the next five years."

Mr. Magnuson also told the Hecla board that the transaction represents "a radical departure from a long standing Hecla corporate policy."

Howard Boyd, chairman of El Paso, and L. J. Randall, chairman of Hecla, said the agreements provide that Hecla will operate the mining properties and will advance all funds necessary to put them into production. The two companies said it is estimated that this will require initial expenditures of about \$100 million, which will be recouped by Hecla out of future revenue from the properties.

William H. Love, president and general manager of Hecla, said the company wouldn't comment on the Golconda statement but said the company would go ahead with the agreement because, "we believe it's very important for us as far as the long-term earnings and growth of the company are concerned."

He said Golconda's ownership of Hecla stock is "about 13.5%."

FEB 13 1969

An Opinion From El Paso Natural

Mr. Boyd of El Paso Natural declined to comment on Golconda's opposition. He said, however, that "it is significant that the management and directors of Hecla concluded the venture is in the best interests of the company and that a competitive mining company thinks it is not in Hecla's interest."

The lakeshore properties are owned jointly by El Paso Natural and TransArizona Resources Inc., a subsidiary of Narragansett Wire Co. Narragansett was acquired by El Paso Natural in October 1967.

As part of the agreements, the two companies said Hecla will acquire TransArizona's 50% interest in the copper properties in exchange for one million shares of Hecla's common stock, subject to approval by shareholders of both Hecla and TransArizona.

El Paso Natural said the report of the independent mining consulting company confirmed that the drilling operations on the lakeshore properties, which have been continued by El Paso over recent months, have increased the estimated reserves to 472 million tons consisting of 24 million tons of tactite sulfide ore, averaging 1.69% copper; 241 million tons of porphyry sulfide ore, averaging 0.70% copper; and 207 million tons of copper oxide ore, averaging 0.71% copper.

"The limits of the ore body haven't yet been ascertained," Mr. Boyd said.

Mr. Randall stated that the transaction will make Hecla "one of the country's important copper producers." Hecla is a large domestic silver producer and has interests in lead, zinc and copper properties.

El Paso Natural is a diversified natural gas transmission company serving customers in 11 Western states through a 21,000-mile pipeline network. It also has interests in petrochemicals, plastics, fibers, textiles, agricultural chemicals, wire fabrication, oil and gas production, mining, and the use of nuclear explosives for industrial purposes.

Personal & Confidential
Meen
Courtright

J.H.C.
JAN 20 1969

WES
U. S. DEPARTMENT OF THE INTERIOR
JAN 20 1969
TULSA

New York, New York 10005
January 15, 1969

T. A. S.
JAN 20 1969

- Messrs. B. J. DiSanto
C. E. Nelson
C. P. Pollock
H. Smith
T. A. Snadden ✓
F. W. Archibald

Lakeshore Joint Venture Proposal

For your information I am attaching a copy of the Joint Venture Proposal we mailed to El Paso Natural Gas Company today, January 15. In addition we sent a copy of Mr. J. H. Courtright's geologic report and Mr. J. E. A. MacDonald's report of January 1, 1969 with pages 7 through 11 deleted.

We will be interested in any information anyone acquires with regard to El Paso's tender offer, the number of firms submitting bids, El Paso's reaction, etc.



R. L. Kennenbach

RHH/lam

Attachments

AMERICAN SMELTING AND REFINING COMPANY

120 BROADWAY

NEW YORK, N. Y. 10005

January 15, 1969

E. MCL. TITTMANN
CHAIRMAN

Mr. Cyrus L. Perkins, Senior Vice President
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Dear Mr. Perkins:

In accordance with your letter of December 24, 1968 to Mr. J. H. Courtright, we have examined the information you have made available to us and have endeavored to develop the optimum plan for exploiting the Lake Shore ore body. We have examined the possibility of recovering this ore by underground methods and by open pit mining, the latter is the most attractive. From the information you have given us, we have estimated an ore reserve of 100 million tons of oxide ore assaying .9 copper and 200 million tons of sulphide ore assaying .61 copper. We estimate 2½ years for mine preparation and plant construction followed by 12½ years to treat the oxide ore reserve. We estimate that six years after the beginning of production, sulphide ore would be available and that the reserve would be exhausted in nineteen years. We anticipate an oxide ore production of 22,500 tons per day which would produce 4,200 tons per month of refined copper. Six and one-half years after the beginning of mining, we anticipate a sulphide ore production of 30,000 tons per day which would produce approximately 6,200 tons of copper per month. Over the life of the mine, production would therefore be 4,200 tons per month for the first six and one-half years of production; 10,400 tons per month for the next six years of production and 6,200 tons per month for the final thirteen years of production.

The foregoing assumes construction of a vat leaching plant plus mine preparation and auxiliary facilities at a cost of \$74,000,000. An additional \$60,000,000 would be spent beginning with the 8th year to provide a 30,000 ton per day concentrator. Total capital cost is indicated at \$134,000,000. Because of the lack of detail design of mine and treatment facilities and the present rapidly rising cost of construction, I would add a contingency of \$26,000,000 bringing the total to \$160,000,000 plus working capital estimated at \$14,000,000.

We have considered the feasibility of constructing smelting and refining facilities for the indicated tonnage of concentrates as compared to treating these in facilities we now have available in the southwest. The additional \$40 to \$50,000,000 required for the construction of a smelter and an acid plant is not justified since we will have this capacity as well as the sulphuric acid (requirements 900 tons per day) available at competitive rates. We would be willing to supply you with refined copper in any proportion up to 50% of the then current production.

January 15, 1969

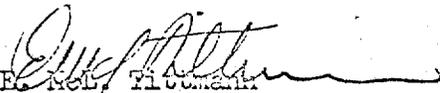
The foregoing outlines our thinking assuming that the ore body has been delimited and that the tonnages available are only those that have been outlined to date. As you know, exploration west of the fault indicates the possibility of a deep-seated, high-grade sulphide ore body which could be very substantial. While we are willing to proceed promptly with the detailed engineering and construction work to bring the present ore body into production, it seems to us that efforts should be concentrated on endeavoring to delimit the ore body west of the fault and that construction plans should be kept fluid until we know more about this deep-seated ore. For that reason, we would propose, say, up to eighteen months for further exploratory drilling particularly of the area west of the fault. In any event, our proposal would be a minimum undertaking and could be modified upward as the result of further exploration. On the other hand, I am sure you realize that all unfavorable contingencies such as excessive ground water, disappointing drilling results and excessive amounts of internal waste have not been eliminated. Should such contingencies develop we would, of course, not wish to continue with an uneconomic program.

In light of the foregoing, I am attaching hereto a proposal to El Paso Natural Gas Company for a joint venture for the exploitation of the Lake Shore copper deposits. I think you are well aware we are intensely interested in a joint venture with you and feel that we have mining, milling, smelting and refining capacity and know-how equal to that of any other company in the industry. Our interest is underlined by our proposal to obligate ourselves to substantial advance royalties against ore reserves.

Attached to our proposal and to this letter are two reports which, although incomplete because of lack of time and detailed data, provide the basic information upon which our estimates and conclusions were based.

Undoubtedly, you will have some questions regarding this proposal and we have people from our operating and engineering department available for discussion at any time agreeable to you. As is customary, any final agreement would be subject to approval by our Board of Directors.

Very truly yours,


E. H. Fittman

ET:mc
attachments

Lakeshore Joint Venture Proposal

1. We shall need a short period of, say, 30 days for our attorneys to check titles and leases to the property.

2. If we find them satisfactory, as we expect, then on or before the expiration of said 30-day period, we shall pay you a cash sum of \$10,000,000 as a minimum advance royalty. This advance royalty is based on our estimates of reserves developed by you to date, of 100 million tons of oxide ore containing .9% copper and 200 million tons of sulphide ore containing .81% copper. This advance royalty will be chargeable against a production royalty of one-quarter cent per pound of copper contained in electrowon copper, cement copper, and copper concentrates recovered from the ore bodies as they are known to date, and such production royalty will be payable promptly (monthly or quarterly) after production of said products.

3. We should have an interim period, the length of which we can mutually agree upon, but not to exceed, say, 18 months, for further necessary work to be done prior to proceeding with actual construction work for commercial production. We have in mind an intensive drilling program to determine possible extensions of the orebody and engineering studies and planning for development and operation. If you wish we shall cooperate with your personnel and arrive at a work program having our joint approval.

4. On or before the expiration of the above period for additional work and planning, we shall advise you whether we are prepared to proceed with equipment of the property for commercial production.

If we do so advise you, we shall proceed with due diligence to develop and equip the property for such operation and shall advance all funds, including necessary working capital, required therefor, and shall manage and operate the property.

5. If commercial production is delayed beyond 4 years after we advise you that we propose to put the property on an operating basis, we shall pay you as a delay rental, a monthly sum of \$20,000 in advance for each month thereafter until such production begins.

6. After commercial production begins, 90% of the net profits will be divided between us until reimbursement of your and our pre-production advances and expenditures, in the same proportion as the respective amounts thereof, plus an amount equal to interest at the rate of 6% per annum on such respective amounts outstanding at the end of each accounting period. During such reimbursement period, the other 10% of net profits will be paid to you. Also, during said reimbursement period, all capital expenditures for equipping the sulphide plant for operation will not be chargeable to operating costs but will be advanced by and be reimbursed to us from our share of the 90% of net profits. Thus, your 10% of net profits will not be unduly diminished if we should decide on a two-stage program for equipment of the plant, namely an oxide plant, followed after a few years by a sulphide plant when the sulphides are reached.

7. Until reimbursement of all advances and expenditures is completed, we shall be responsible for all costs. After such reimbursements, we shall divide the working interest with you in the proportion of 65% to

Asarco and 35% to El Paso, we shall each be responsible for costs in the same proportion, and we shall each have a right to take the mineral production in kind in the same proportions as our said participating interests.