

JOHN F. DULING  
MINING ENGINEER  
CENTRAL BUILDING  
LOS ANGELES

June 12, 1930

Col. Louis R. Ball  
Western Precipitation Co.  
1016 West 9th St.  
Los Angeles, California.

Dear Sir:

IN RE: BLACK CLOUD MINE AND PRESENT LEAD PRICES

The Black Cloud Mine, a very attractive lead property lying between two large developed holdings remained idle up to recent years for the following reasons:

1st. This well known district was active from the early seventies until shortly after 1900, when the district died down for the reason that there was at that time no satisfactory way of separating the lead-zinc ores which were of high milling grade but could not bear the penalties then imposed by the smelters when shipped to a smelting works.

The richer lead carbonate running 20% and upward was smelted and there being no satisfactory way of concentrating the lead carbonate ores below smelting grade they were left in the mine.

The development of the flotation process has again put this district on the map by providing a way of concentrating the large tonnage of milling grade ores in these properties. Outside of the Black Cloud only one other property in the district (the Ozark Mine - zinc only) has installed flotation.

The flotation process makes a clean separation of the lead-zinc sulphide and the zinc becomes a by-product instead of an interfering penalized element. The sulphide ore averages from 12 to 15% lead and some 20% zinc. This is a high grade mill ore and the lead content alone will pay a good profit at prices far below the present market. The zinc is considered merely as a by-product.

In addition we have gold and silver values of \$2.50 to \$7.00 per ton and copper is present in commercial amounts.

As to the lead carbonate ores they extend to a depth of approximately 300 feet and will run in grade from 6% to 30%. These ores are amenable to concentration by sulphidizing and flotation.

N.M. Bureau of Land  
& Mineral Resources  
Socorro, N.M. 87801 File Data

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Just previous to our taking over the Black Cloud Mine a large tonnage of 14% carbonate ores had been taken out by leasers and a number of cars running 23% to 25% lead had been shipped. At the time the Mistletoe group was taken over leasers were shipping surface ores running 16% lead.

The mill grade on these ores can be kept between 8% and 10% lead and with careful mining could be kept near the latter figure, which will show a good profit on lead at any price above 5 cents per lb. when tonnages in excess of 100 tons per day are milled. The silver and gold content will run close to \$2 per ton. The present mill with an additional water supply made available by the extension of the present pipe lines, etc. and other specific improvements will handle over 100 tons daily.

By systematic development of the present ore bodies this tonnage could be brought up to 200 to 300 tons daily within two years and the prospective life of the property would exceed twenty years.

As a comparison with other districts, about one third of the United States production comes from the Tri-State fields (Missouri, Kansas and Arkansas) from sulphide ores averaging 3-1/2% lead. Approximately one fourth of the United States production comes from the Coeur d'Alene field in Idaho where the sulphide ores average 10% lead.

The cost of producing lead in New Mexico, because of the lower labor cost, better climatic conditions and more economical mining methods is considerably less than under similar conditions in the Coeur d'Alene district, but of course exceeds the low costs reached in the Tri-State field.

The present low market, 5-1/2 cents, is below the cost of production for many mines and has caused the restriction of production and the closing of several mines in both districts. This is also the case in foreign fields, particularly the silver mines of Mexico where a large tonnage of lead is produced as a by-product.

The present depression, it is believed by those well acquainted with the industry, will only be of short duration, because there are no large reserves of lead on hand. Normally the United States produces less lead than it consumes, and the import duty of 1-1/2 cents protects us from an oversupply of foreign metal.

A New York price of 6 cents is considered as about the dead line on lead, as below that price many of our domestic pro-



ducers must close their mines, automatically restricting production. Unquestionably the present prices will be forced up by demand within a few months.

There is also a seasonal depression in the spring due to lack of industrial demands at that season of the year. This is followed by a seasonal rise in the early fall. Personally I feel that we can expect a rise in the lead market not later than September or October.

The production of the Tri-State field has been on the wane for a number of years. The Coeur d'Alene section has also passed its maximum and is faced with higher costs due to the deep mining conditions to be overcome. No new domestic lead districts of any consequence are being brought in. Outside of some moderate increase in the Canadian fields there is no increase in foreign production.

In the past ten years the consumption curve of lead has steadily climbed upward and with a constant increase in demand over production.

For these reasons lead properties are among the most attractive mining investments of today.

I am enclosing two diagrams illustrating the earning on the property under varying metal prices.

Plate I is a diagram illustrating earnings on Carbonate Ore. Our Carbonate Ore runs from 6% to shipping grade of 25%. We can keep our mill head between 8 and 10% without great difficulty. At the present price of  $5\frac{1}{2}\%$  for lead, 9% mill ore would net us \$1.45 per ton of ore. My plans are first to increase the present mill to handle 100 tons daily. This will give a net return of \$145.00 daily or \$43,500 per annum upon our low grade ores.

Referring to Plate 2 which is based upon the average sulphide ore for the district. With present prices of lead at  $5\frac{1}{2}\%$  and Zinc at 4-7/10¢ we would get a net return per ton of lead -  $\$9.00 + \text{Zinc } \$6.70 = \$15.70$  less mining and milling  $\$5.20 - \$10.50$  per ton or \$1050.00 per day, or \$315,000 per annum. In computing these diagrams freight and smelter returns have been deducted. Computations of lead are based upon actual smelter contracts. The zinc schedule is based upon prices paid for 60% Zn flotation concentrates over a period of years. Milling losses are deducted.

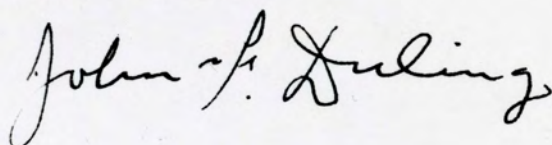
These diagrams are interesting in showing that our property is attractive even under the lowest prices of lead and zinc that can be anticipated because the grade of the ore found in this district is high compared with other districts. I visited the property the first of the month and found the old Kelly mine just



north of us being operated under lease and shipping ore carrying 40% combined lead and zinc content, the ratio being approximately  $1/3$  lead to  $2/3$  zinc. Our property so far as I have been able to determine runs somewhat higher in lead. This district is due for a strong come-back due to improved metallurgical conditions through flotation. Ours is the second flotation plant to be erected in the district.

With our high grade milling ores at the Black Cloud and favorable conditions for low cost operations, we are in a position to make a very satisfactory profit at the present market with every prospect of a much better price for lead in the near future.

Yours sincerely,

A handwritten signature in cursive script, reading "John F. Duling". The signature is written in dark ink and is positioned to the right of the typed name "John F. Duling".

JFD:FP



# DIAGRAM

## ILLUSTRATING

Relationship Between  
PRICE OF LEAD  
And  
COST OF PRODUCTION

ACK CLOUD MINE  
Magdalena, N. Mex.

VALUE OF ORE PER TON

\$12.00  
\$11.00  
\$10.00  
\$9.00  
\$8.00  
\$7.00  
\$6.00  
\$5.00  
\$4.00

6%

7%

8%

9%

10%

11%

12%

13%

PERCENTAGE OF LEAD IN ORE

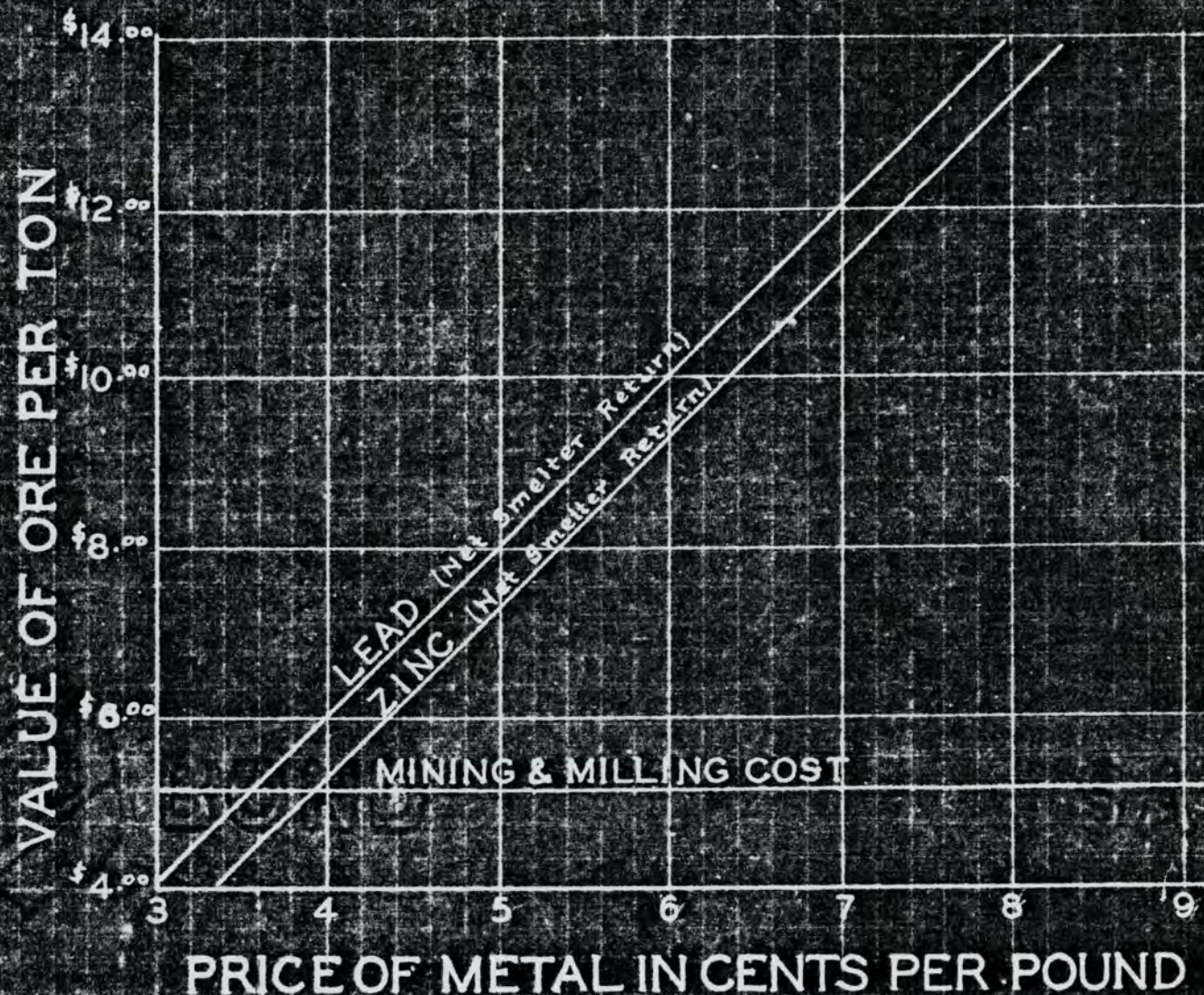
NOTE: This diagram is computed for Oxidized Mill Ores based on an average concentrate assaying 53% Lead, 0.14 oz. gold, 7.9 oz. silver at 40¢ and 0.7% copper at 14¢. Smelting and freight charges are deducted.

SMELTER RETURNS LEAD BY  
LEAD 7c  
LEAD 6c  
LEAD 5c

MINING & MILLING COST



**DIAGRAM  
ILLUSTRATING  
PROFIT PER TON  
of  
AVERAGE SULPHIDE ORE  
for  
VARYING METAL PRICES  
BLACK CLOUD MINE  
Magdalena, N. Mex.**

**NOTE:**

THE SULPHIDE ORE FOR THE DISTRICT AVERAGES 12% LEAD, 21% ZINC, 0.16 OZ. GOLD, 8.00Z. SILVER AND 1% COPPER. CALCULATIONS ARE BASED UPON A 90% LEAD AND 85% ZINC RECOVERY, BY FLOTATION.

FREIGHT AND SMELTER CHARGES ARE DEDUCTED.



JOHN F. DULING  
MINING ENGINEER  
CENTRAL BUILDING  
LOS ANGELES

June 16, 1930

Col. Louis R. Ball,  
Western Precipitation Co.,  
1016 W. 9th St.,  
Los Angeles, Calif.

IN RE: BLACK CLOUD AND ROSEDALE MINE FINANCING

Dear Sir:

I am submitting for your consideration full reports on the above properties with the objective of getting your assistance in financing them. You well know the high character of the men already connected with the project.

The Black Cloud Mining & Milling Corporation was originally incorporated under the laws of Arizona for 175,000 shares par value \$1.00, of which a little over 100,000 were issued and a large amount of money advanced by the present stockholders on corporation notes.

In the beginning the corporation controlled only the Black Cloud Group of five claims. We have since added the properties of the Mistletoe Mining Corporation and the Magdalena Tunnel Company, properties totaling in all some 400 acres of the most valuable mining ground in the district.

We now propose to increase our capitalization to a million shares par value \$1.00 and take up all of the outstanding notes with stock at 80¢ per share, which our stockholders are willing to do. This will leave the corporation entirely free from debt and with approximately 213,000 shares of stock issued.

I personally hold a very favorable option on the Rosedale Mine, which if desired I am willing to turn into the corporation for 50,000 shares of stock.

We wish to raise

For Black Cloud Property	\$100,000
For Rosedale Property	<u>175,000</u>

or a total of

\$275,000

This I propose to do by selling the Black Cloud stock to net the corporation 80¢ per share. The stock would then stand as follows:

Col. Louis R. Ball.  
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Issued to original stockholders	213,000 shares
Paid for Rosedale option	<u>50,000</u> "
	263,000 "
To be sold for \$275,000	<u>343,750</u> "
Total	606,750 "

Balance of issue Treasury Stock.

In this proposal the incoming capital will come in on the same basis as the original capital.

With the above funds available it will place us in position to put both properties on a combined net earning of over \$300,000 per year. The purchase price of the properties will automatically be cared for out of earnings.

These are proven properties of unusual merit and warrant the careful consideration of your associates.

Yours very truly,

*John A. Deuling*

JFD:FP



1930

File into file  
of Col. Ball

**BLACK CLOUD AND ROSEDALE MINES**

**Socorro County, New Mexico**

The following is a short summary of the Black Cloud and Rosedale Mines, located in Socorro County, New Mexico.

**BLACK CLOUD MINE**

Something over two years ago I interested Mr. A. C. Robbins of Greer-Robbins Company (Chrysler Distributors), and Mr. F. E. Eckhart, President of the Los Angeles Y. M. C. A. and retired capitalist, in the Black Cloud Mine, an exceptionally attractive lead-silver mine located at Magdalena, in the State of New Mexico.

At the time of our taking over control, the Black Cloud Mining and Milling Corporation had been organized for 175,000 shares, par value \$1.00; this company had an option on between sixty and seventy acres of attractive mining ground.

I have been in active management during this period. We have expended something like \$115,000 of outside capital in developing the property and in erecting a splendid milling and power plant. During this period we have shipped over \$37,000 of lead-silver concentrate, these funds being also spent in developing the property.

I increased our holdings from time to time until we had nearly 200 acres. On my trip to St. Louis last November I negotiated a further increase until we now hold favorable lease and options on some 400 acres of exceptional mining ground, lying in the heart of the well-known Magdalena or Kelly Mining District.

We are now increasing our incorporation to one million shares par value \$1.00, of which only a little over 200,000 shares will have been issued. In other words, there is no water or promotion stock in this deal.

We now propose to put on a \$100,000 development campaign in order to open up the property on a scale commensurate with its size and worth.

At the present time we have practically a closed corporation, only seven stockholders, including myself. Mr. Mactavish of the firm of Becker-Mactavish, a large chain mercantile firm with branch store at Magdalena, is our local director and representative in New Mexico.

Two other local men, Mr. Stevens, formerly of the Stevens Manufacturing Company, and a Mr. Cooper, retired business man,



friends of mine, have invested in the property. All funds have been judiciously expended in well planned improvements.

The property can be put in production in from 90 to 120 days after funds are available.

After spending more than ten years in examining and appraising mining properties for mining investors in the western states and Old Mexico, this is one property that I am thoroughly sold on, and my opinion is corroborated by other engineers of mature judgment.

This is an exceptional mining property developed beyond the speculative stage and a sound investment. I have secured very low operating costs and have attained very satisfactory results in operations thus far, and with the additional equipment added, the plant will be in ideal condition.

We have expended much money in developing and perfecting a satisfactory milling process and have demonstrated that our lower grade ores can be mined and milled at a very satisfactory profit.

During this period we have extracted from the property approximately \$37,000 and expended approximately \$150,000, all of which has been spent in actual development and improvement of property under careful management, and no money has gone into excessive promotion or overhead expenses.

The assets of the property include:

Plant and equipment.....	\$ 90,000
Mine working of full value to the future development of the property.....	50,000
Estimate of ore in sight or probable ore reserve.....	<u>300,000</u>
Total.....	\$440,000

We are buying the Black Cloud Mine at a purchase price of \$24,500, due April 30, 1931. We are buying the Mistletoe and Magdalena Tunnel Company properties at a total purchase price of \$125,000, payable as follows:

	\$ 5,000	April 1, 1930,
	10,000	November 1, 1930,
	22,000	November 1, 1931,
and	22,000	each six months thereafter until fully

paid, covering a total period of four and one half years. The terms



of these leases and options are very favorable.

With funds available as required the mine can be brought into production on the low grade oxidized ores in from 90 to 120 days and can be expected to give a return on the investment at the rate of \$60,000 the first year.

Within one year this production will be increased by the addition of the richer sulphide ores and within eighteen months can be expected to give a return of \$150,000 to \$200,000 per annum with further increase as development proceeds.

That with the exception of the first \$5,000 payment the property can be expected to take care of all future payments in addition to paying a very satisfactory dividend on capital invested, out of the mine earnings.

Of the capital now required there should be advanced \$20,000 to start operations and then \$10,000 each thirty days thereafter until the total amount of \$100,000 provided for is paid in. When our reorganization is effected under present plans there will have been issued approximately 212,000 shares, thus leaving a very large treasury reserve and with the new capital available will place the corporation on a very sound financial footing. Each share on this basis should have an earning power of from 18 to 75 cents per share per annum.

The above estimate of earnings is based upon a 75-ton plant, which is a comparatively small mining unit. The property is so large that with sufficient development, it would be feasible to increase this operation to double the capacity of the present plant, with a corresponding increase in the earnings.

Judging from the working depths reached in neighboring properties, this property can be expected to have a life of twenty years or longer depending upon the scale of the operations at which it is developed.

#### ROSEDALE PROPERTY

The Rosedale is a very attractive gold property consisting of two mining claims and two mill sites all patented. There is now blocked in the property enough ore to run a 125-ton mill three years, giving a net return of \$265,000.

The limits of the present ore shoot have not been reached and there is known to be at least two other virgin ore shoots that give promise of equalling the present ore shoot.

This property when equipped with a 125-ton plant can be expected to give a net return of \$100,000 per annum and to have a life in excess of ten years.



My plan is to erect a mining and milling plant of 125 tons daily capacity. It will take a period of eight months to bring the property to production at a cost of \$175,000.

I hold an option on this property at a purchase price of \$35,000 to be paid out of a 10% royalty based on mill returns. At this price the property is a find, as the gross assets will total over \$640,000.

I propose to turn this property in to the Black Cloud Corporation for a purchase price of \$1,500. (money already expended) and 50,000 shares of Black Cloud stock. Our stock set up will then be for the Black Cloud Corporation: Incorporation one million shares par value one dollar, of which approximately 260,000 will be issued.

I want to raise for the development and equipment of these properties:

Black Cloud Mine	\$100,000
Rosedale Mine	<u>175,000</u>
Total	\$275,000

This investment will be protected by the following physical assets and gross ore reserves:

Black Cloud Mine	\$440,000
Rosedale Mine	<u>651,000</u>
Total	\$1,091,000

The prospective values of the properties are:

Black Cloud Mine	\$1,350,000
Rosedale Mine	<u>510,000</u>
Total	\$1,860,000

By prospective value I mean that these mines can be expected to return to the investors the above amount over a ten year period plus ten per cent interest on the total estimated value. In this case we have all future investment amply protected by large ore reserves. The investment of new capital is no longer a speculation, but one that is amply protected by present assets.

In the union of these two properties we have an excellent combination that can be economically operated under one management.

The operating conditions are excellent, resulting in some of the lowest costs that I have found in the west.



The present ore reserves amply protect future investment and the geological indications favorable for the formation of large undeveloped ore bodies give to these properties a particularly attractive speculative feature.

Respectfully,

John R. Duling  
Consulting Mining Engineer

Los Angeles  
March, 1930.

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