LEAD PRODUCTION - NORTH WESTERN STATES

By

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Before answering the specific questions submitted by the Membership, a few general statistics for the area: All we in the "sticks" know is what we read in the papers and from the statistics prepared for us by the various Bureaus and Associations. Each time I start comparing statistics from several different sources, my blood pressure rises and I usually give up in disgust. No exception this time. For my statistics covering the lead production from the Northwestern States, Idaho, Montana, and Washington, I selected Lead Industries Association Form E and the Bureau of Mines Mineral Industries Surveys.

Lead Industries Form E carries these footnotes:

(1) This report is based upon the total content of ore or concentrates.

(2) The above figures are estimated to represent slightly over 90 percent of the total recoverable lead production of the country.

The Bureau of Mines reports mine production of recoverable lead.

I am inclined to accept the Bureau of Mines figures since I believe these are based on Smelter receipts:

	L.I.A. Form E			Bureau of Mines Mineral Industry Surveys (b)	
	1950	1951	1952	1951	1952
B.H.& S. M. & C. Co.		25,472	25,526		
Day Mines, Inc.		8,836	9,039		
Federal M. & S. Co.					
Frisco		1,554	1,773		
Galena			296		
Morning		4,672	4,450		
Page		7,676	7,249		
Hecla Mining Co.		65	13		
Sidney		2,904	1,525		
Spokane-Idaho		1,757	1,112		
Sullivan Mining Co.		7,630	6,229		
Sunset Minerals		796	391		
Sunshine Mining Co.		4,228	3,360		
Triumph Mining Co.		3,132	3,553		
Total Idaho		68,722	64,516	75,164	72,291
Anaconda Copper Mining Co.		12,044	11,588		
Jack Waite		714	741		
(a) Mike Horse		1,341	1,251		
Total Montana		14,099	13,580	21,736	21,131
American Zinc-Lead		2,194	4,053		
Pend Oreille		2,900	4,748		
Total Washington		5,094	8,801	7,957	11,376
Grand Total	114,042	87,915	86,897	104,857	104,798
(Pine Creek District of Idaho)		5,423	3,786		

(a) Shut down Nov. 1952
(b) Recoverable Lead

Using Lead Industries Form E, I have segregated the mines reported for Idaho, Montana, and Washington for the years 1951 and 1952 and opposite these I have set down the corresponding figures from the Bureau of Mines*Industry Surveys. For 1950, I have shown only the total from the three states from Form E. This is the banner year which I like to remember since it was that year that the Bunker Hill Smelter had its record lead production of somewhat in excess of 75,000 tons--the reason being in that year all the mines in the district had a full crew of miners during the entire year. This is the only year that this has happened for many years past. I have never been able to determine the reason. Some have suggested that there was a slight recession in that year.

That the Form E figures represent slightly over 90% of the total recoverable lead production is fairly true for the entire country. Comparing production figures from Form E with those of the Mineral Industry Surveys for 1951 and 1952, the percentages are 89.8% and 92.5%, respectively.

In comparing the statistics for individual states, the 90% holds well for Idaho--the percentages being 91.4% and 89.2% for the two years. For Montana, however, the percentages are only 65.0% and 64.2%, and for Washington, 64.0% and 77.3%. The reason for the discrepancy in the figures for Washington is quite evident since the Form E does not report production such as the Bonanza Mine and the Deep Creek Mine of the Goldfield Consolidated Mining Company. Because of lack of time to investigate, I cannot give the reason for the discrepancy in the figures for Montana.

Any further reference to the statistics will be to those of the Mineral Industry Surveys.

Now, the specific questions submitted to this Panel:

The idea of the Question Box may, or may not, be a good innovation. Certainly it is not having a fair trial this year. I received the questions less than a week before I started East. This did not allow time for Research but I did make a hurried poll of the mines in the district and submit my meager findings.

(Ques. 1) To what extent will the current combined metal price of 24-1/2¢ per pound affect lead and zinc production in your area?

(Answer) B. H. & S. M. & C. Co., already has discontinued block caving, since this marginal ore has become sub-marginal at present metal prices. Likewise, tailings re-treatment has been discontinued. This will result in an annual reduction in production of approximately 4,000 tons of lead and 7,500 tons of zinc.

I am informed that the Star Mine of the Sullivan Mining Company is aiming to increase production rather than decrease production in order to reduce unit costs. A somewhat higher grade of ore is being mined, thus depleting the ore reserves at an accelerated rate. This practice, no doubt, will not be continued should the present low metal prices hold for an indefinitely long period.

Federal is continuing at its normal production rate--at least for the present.

Day Mines, Inc., has already curtailed its zinc output by 75% and could even go to no zinc production at 11¢ metal within six months. Lead production this year could well drop to a tonnage of only one-fourth to one-half of the 1952 production.

Lead production from the Pine Creek District of the Coeur d' Alenes was 5,423 tons in 1951 and 3,786 tons in 1952. Since the ore from this district generally carries a ratio of between 3 and 4 to 1 of zinc to lead, the reduction in zinc production was substantially greater than lead. Part of the reduction was caused because of lower grade ore mined and partly because of low metal prices. This district is historically a "high metal price" production district. Practically all of the mines now producing were in operation during World War I. Subsequently, all were closed down and not re-opened until the start of World War II. The ore is highly complex--resulting in poor separation of the lead and zinc. This results in increased production

*Mineral

costs and decreased value of the salable products. I believe most of these properties are presently operating at a loss, or at best, on an even-break basis and are merely hanging on hoping for improved metal prices. A consideration is the cost involved in shutting a mine down, keeping it unwatered, and in repair for re-opening when metal prices justify.

(Ques. 2) What, if any, reduction in U. S. A. mine production tonnage of lead in 1952 in your area was due solely to drop in the price of lead?

(Answer) From the Bureau of Mines Mineral Industry Surveys, lead production from the three Northwestern states in 1951 was 104,857 tons; in 1952, 104,798 tons, or practically identical tonnages.

(Ques. 3) Do you believe that a continuation of the present level of lead; that is to say, 13¢ to 14¢ over 1953, will result in a serious drop in lead production in your area? If so, when in your opinion, will a substantial curtailment in lead become apparent?

(Answer) This question is substantially answered under (1). What additional reduction in lead production in the area will result from a continued lead price of 13¢ to 14¢ for the balance of the year is anybody's guess. Some opinions expressed indicate that the total reduction for the year may be as high as 20% to 25%.

(Ques. 4) Are there any technological developments in progress which might lead to better recovery and lower cost and which might, therefore, add to potential production and reserves of lead in the reasonably near future?

(Answer) In this regard, I can speak only for the smelting industry. There is constant progress in improved metallurgy but I know of no developments so revolutionary which would result in an affirmative answer to the question. Rather extravagant claims have been made for the Chemico Process but, so far, they are not ready to even talk about its application to lead. Talking points have been: low plant cost, low operating costs, and highly refined metals issuing from the various spigots. I am unauthoritatively informed that, for plants which have been constructed, or are being constructed, the actual cost is greatly exceeding the estimate. Stainless steel has not proved satisfactory in certain applications and is being replaced with titanium metal. Some production has been had which is not marketable and will require further refining.

Those polled have no knowledge of such technological developments in mining and milling.

What we should strive for is a more reasonable relationship between wages, productivity per man, and metal prices. More and more mechanization is a partial solution.

Reasonable uniform prices for metals should be desirable to all--the producer, the consumer, and the foreign countries of whose metal production a considerable portion is imported to the United States. It is hoped that our legislators will consider favorably the proposed "so-called" sliding, or escalator, import tax on metals. This should, conceivably, result in more uniform and reasonable metal prices.

I believe the Industry should be most appreciative of the generosity of Mr. Felix Wormser and his Company, the St. Joseph Lead Company. To Felix for accepting, and to his Company for making him available to accept his new appointment in Washington. He will do a good job for the Industry.

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