Rm. 107 Howard Street
Spokane 8, Washington

April 18, 1951

Memorandum

To: Executive Officer, DMA Field Team, Region II

From: Thor Hillegrand, U.S.G.S. and E. A. Magill, U.S.B.M.

Subject: Docket DMA-281, Joe Kallas, Sr., Boise, Idaho

A DMA Examination Team appraisal of custom ore sources from the Boise area shows that:

1. Production of base metals from the Boise area has been limited (see attached production records for Ada, Boise, and Gem counties).

2. Base metal production from the Boise area has been principally a by-product from gold mining operations. The greatest production has been from the Pearl View (Pearl) District in Gem County. During recent years the properties of the Gem State Consolidated Mines, Inc., and the Idaho Consolidated, Inc., have been the principal producers in this district. Ore from the Gem State Consolidated mine at present is being concentrated in that company's 40-ton gravity concentrator built in 1949. The marketing of concentrates from the Pearl area is complicated by high iron, arsenic and bismuth contents.

3. Mr. George McDowell, Idaho State Mine Inspector, and Mr. Harry Marsh, Secretary of the Idaho Mining Association were questioned as to the possible sources of base metal ores within the Boise area. Neither gentleman believes that any appreciable tonnage is available for custom milling at the present time.

4. The applicant could not furnish exact information concerning sources of ore other than a dump in the Pearl area which reportedly contains some low grade lead ore.

The DMA Field Team interviewed the applicant, Mr. Joe Kallas, on April 16 and visited his mill about two miles west of Boise, Idaho. This mill consists of an old steam tractor (60 H.P.) driving a small 3 x 4 homemade ball mill, and a concentrating table. The water supply is pumped from a nearby ditch to a 10,000 gallon tank.

The mill was constructed in 1949 with test runs being made over several months during that year. A few hundred pounds of concentrates were

produced but were not marketed because of unfavorable smelting charges attending the high iron and arsenic content.

If the mill were to be operated efficiently it would have to be completely rebuilt. The only equipment which could be used in a new mill would be the water system.

Mr. Kallas proposed an expenditure of $7,500 for additional machinery. He is vague as to exactly how this amount is to be spent. The amount requested is not adequate for the additions necessary to rebuild the Kallas mill into an efficient plant.

It was the impression of the RFA Evaluation Team that Mr. Kallas is an honest, energetic man. However, it is felt that he does not have the technical experience requisite to the construction and operation of a custom mill as proposed. Moreover, the mill site at Kokos is unfavorably located on level ground with no facilities for ore bins and tailings disposal.

It is the recommendation of the RFA Evaluation Team that further consideration of this proposal for a custom mill in the Kokos area is not warranted.

WO: H.J.Bell

Ftg

Production of Copper, Lead, and Zinc from Boise, Area,
(Ada, Boise and Gem Counties*), Idaho

Ada County, in which Boise is located, has had no production of copper, lead, or zinc for the years shown in the table.

Year	Boise County			Gem County		
	Cu (lbs)	Pb (lbs)	Zn (lbs)	Cu (lbs)	Pb (lbs)	Zn (lbs)
1949	300	3,400	0	0	1,000	0
1948	0	1,000	0	800	7,000	3,700
1947	0	0	0	700	4,800	3,400
1946	0	800	0	0	600	1,600
1945	0	1,500	0	0	0	0
1944	1,000	9,000	0	200	11,000	9,600
1943	400	10,000	0	0	35,000	10,000
1942	2,100	25,000	0	11,000	89,700	5,000
1941	4,000	36,800	12,000	10,000	104,800	0
1940	4,000	62,000	0	4,831	23,000	0
1919	3,206	1,016	0	960	1,720	0
1918	2,017	30,501	0	0	2,206	0
1917	4,523	43,521	0	0	0	0
1916	83,260	42,360	0	100	0	0

No check was made of production of other years.

* Source of Information: Minerals Year Books (1916-1919) and (1940-1949)

[redacted] [redacted]y, 4/16/51

Dear Al:

Enclosed herewith is the docket on the Kallas property, Boise, Idaho, together with a report on our conclusions. You will note that as expected, the proposed custom mill is a sorry affair located on a vacent lot in the outskirts of Boise.

We did not deem it advisable to visit the proposed mill-feed sites, particularly inasmuch as Kallas was vague as to their location. We did check on the ore production from near by areas, as shown in the accompanying report, but concluded that the possible production coupled with the distance from the mining properties to the proposed mill site would nullify any chance for a successful custom mill operation.

I was suprised to learn of the amount of lead, zinc, and copper produced as a by-product of gold mining operations in the Pearl district. There is evidently a small operation going on at the Gem State Consolidated mine at the present time. They have milled about 200 tons in the past year but are having trouble marketing their iron-rich and arsenic-bearing ores. Both Harry Marsh and George McDowell suggested that we visit the property, but we informed them that the Gem State application had been denied, and that in view of our heavy schedule we didn't wish to spare the time for such an examining trip. If you desire that we do so, we can drop by there on our way back to Spokane.

Saturday we went to the Oberbillig Antimony property near Atlanta, and stayed until Sunday afternoon (yesterday). This property is active and has produced a suprising amount of antimony. Sunday night we drove as far as Gooding where we are currently holed-up working on our reports. We expect to reach Hailey this afternoon.

Hoping that the hot-scoop on pending DMA programs is awaiting us in Hailey, I remain

Very truly yours
Thor Kiilsgaard
Thor Kiilsgaard

cc: Glenn Reed

March 18th 1946

The Idaho Daily Statesman

Boise, Idaho, Monday Morn

DMA-261

PICTURED ABOVE with their "shaker sump" and other gold mining apparatus are Joseph F. Kallas, right, and Dan Johnson of Boise. The two miners are testing their "one-man mine" on the Boise river.

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Boisean to Start Operating Portable One-Man Gold Mine

Confident that there is gold in them thar hills, a Boise veteran of World War I will leave for the Burnt river district in Baker county, Oregon, in two weeks to put in operation what he considers to be the answer to the disabled soldier's prayer—a portable, one-man gold mine.

He is Joseph F. Kallas, 1606 North Thirteenth street, and his gold mining apparatus is now being tested on the Boise river west of the Eighth street bridge.

Kallas, formerly postmaster and general storekeeper at Bridgeport, Ore., believes that his mining machine will revolutionize gold panning. In fact, he says, his invention is merely a power driven, automatic gold pan. Actuated by a small gasoline engine, Kallas' contraption consists of a "shaker sump" of his own invention, two sluice boxes and a suction pump mounted on a trailer. The "shaker sump" is a shallow metal box, with an ingenious device to draw off sand and water after the fines have been screened. The sump is agitated by the gasoline engine, and as the suction pump sucks up sand from the river bed, Kallas has nothing to do but watch the machine pan gold.

Saturday Kallas and his partner, Dan Johnson, 1311 Ada street, set up their machinery on the Boise river. Both miners declared that the machine worked "successfully."

Kallas is exceptionally proud of his "shaker sump" because it salvages gold finer than can be seen with the naked eye. To illustrate the efficiency of this invention, he actually salvaged gold from the sands of the Boise river, where the pay dirt only pays off 17 cents a yard.

Shortly after March 27, Kallas and Johnson will move their apparatus to the junction of Burnt river and Clark's creek, near Bridgeport, Ore., where they have obtained mining rights. Kallas said that he expects to net at least $30 a day from his workings on Burnt river, once the "shaker sump" is installed.

Kallas, who won the Purple Heart in the first world war, thinks his "one-man mine" would provide a livelihood for many disabled veterans.

"The machine runs itself," he said. "All I do is watch it, and then get the gold out of the sump with mercury. It's easy work, and veterans would do well to take up 'one-man mining'."