1440 0001

Eureka County Item 6

SODIUM SULPHATE DEPOSIT IN DIAMOND VALLEY EUREKA COUNTY.

File Na-m-n

per Mr Clarence Johnson.

This is a copy of the report mailed to Mr. W. S. Palmer, University of Nevada.

24N, 54E (2 maps in map files)

SODIUM SULPHATE
Deposits

LOCATION.

This Sodium Sulphate depositis located in Diamond Valley about 29 miles north of the town of Eureka, Eureka County, Nev.

The Eureka Nevada Railway, connecting Eureka with the Sourthern and Western Pacific roads at Palisade crosses Diamond Valley within 13 miles of the deposit, The road from the deposits to the railroad is across the level Valley and is ideal for trucking.

OCCURRENCE.

The deposits of Sodium Sulphate occur in ponds which were formedby spring action, The springs are still active and the deposition is still continuing. There are two large ponds of the Sulphate and many small ones. There is little or no overburden over the Sulphate; in places there is a little silt that has been washed into the ponds but only from 3 to 4 inches thick.

TONNAGE AND ANALYSIS:

The ponds have been sampled by putting down drill holes at the corners of 100 foot squares. The holes were sunk by jumper drill's with 4 inch bits and all the material from the holes used for the analysis. Each hole was measured and the average thickness determined from averaging the drill holes giving the following tonnages;

POND "A"	Cu. ft.	Av. Width
Large beds	1,061,400	3.17ft.

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Large beds	1,061,400	3.17ft.
Small cakes	406,000	1.60ft.
Total Pond "A"	1,467,000	

POND "B"		
Large bed	913,250	4.01 ft.
Small bed	196,433	3.03 ft.
Small cakes	250,000	1.00 ft.
Total Pond "B"	1,359,000	

Total Pond "A"	1,467,000	cubic feet.
" " "B"	1,359,000	" "
Grand total	2,826,000	" "

TONNAGE

At 21 cubic feet to the Ton 134,571 Tons

The above estimate does not include any of the small ponds or the possible tonnage from Sodium Sulphate in solution in the spring.

AMLYSIS.

An average analysis of the crude Sodium Sulphate is as follows.

	Hydrated	Anhydrated	Refined Product.
Iron	Trace	Trace	
Lime	Nil	Nil	
Zinc	Nil	Nil	
Magnesium Sulphate	0.57%	0,81%	0,90%.
Sodium Sulphate	62,16%	90,00%	96,60%
Potassium Sulphate	0,50%	0,70%	0,77%
Sodium Chloride	0,76%	1,01%	0,50%
" Carbonate	0,25%	0,35%	0,38%

Continued.

	Hydrated	Anhydrated	Refined Product.
Insoluble in water, clay, etc.	5,00%	7,13%	0,75%
Water of crystallization	30,76%		
	100,00%	100,00%	

NOTE.

The sample exhibited here was not part of the borings but was picked up in a sack later on while looking over the deposit one day and none of it has been analyzed.

C. B. Sexton.