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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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PROGRAM
FILE COPY

June 26, 1990

Mr. Grant Pinkerton
Mine Manager
North Lily Mining Company
P. O. Box 421
Eureka, Utah 84628

Dear Mr. Pinkerton:

Re: Mammoth and Jesse Knight Waste Dump Reclamation, M/023/007, Juab County, Utah

This letter is in reference to the advice you have requested from the Division regarding the reclamation of the two old ore/waste dumps which North Lily has been salvaging for leach ore.

As we discussed, the old Jesse Knight waste area, which you have already regraded and mulched, should not be seeded until this fall. Drill seeding this site is highly recommended. This type of seeding will provide you with a much higher success rate. Please use the seed mixture found under E 3 Seeding Mixtures and Planting Rates in the November 1987 MRP for this site. Scarification of the ground surface before and after seeding should not be necessary if you drill seed. If you do broadcast, increase the seeding rate 2 times and scarify the ground surface before and after seeding.

Regarding the Mammoth tailings site, I will make the following suggestions: As we discussed, the ore pile is to be removed back to the original contour. This will expose the original soils as well as leaving a steep grade on the northwest side of the dump area. The original soil will help a great deal in achieving a successful plant cover on the site. The steep slopes, approximately 1:1, on the northwest side of the dump, will present a problem in regard to plant establishment. We discussed terracing the steep slopes (those greater than 2:1) with 1 - 2 foot benches and spaced at 3 - 4 foot intervals.

I suggest using an alfalfa mulch over the site and drill seeding areas of less than 3:1 slopes. Please use the seed mixture found in the MRP for this site. The mulch should be crimped into the soil with a disc plow or extra long dozer cleats. For best

results, planting should take place in the late fall. For areas which will be inaccessible later, I have attached another seed mixture (attachment #1).

Make sure all seed is certified. All sacks should have attached tags indicating the species present and the amount of pure live seed for each species.

We discussed taking a composite soil sample of the remaining material to be used as planting medium at the Mammoth site. A composite sample should consist of several samples taken across the site, then mixed in a bucket. About 12 ounces (volume) is all that is necessary for a laboratory analysis. Evaluate the sample for the following: pH, EC, SAR, Acid-Base Potential, NO_3-N, P and K.

Please contact me if you have further questions.

Sincerely,

Holland Shepherd
Reclamation Specialist

jb
Attachment
cc: Wayne Hedberg
Tony Gallegos
MNM2307/3-4

Attachment #1

Scientific Name	Common Name	Seeding Rate lb/ac *
Secale Cereal	Annual Rye	5
Agropyron elongatum	Tall Wheatgrass	3
Agropyron smithii	Western Wheatgrass	3
Medicago sativa (ladak)	Alfalfa	3
Melilotus officinalis	Yellow Sweetclover	3

* This is a broadcast rate. After broadcasting, the seeds should be racked into the ground so that the majority are covered with 1/4 - 1/2 inches of soil.

jb
MNM2307/5