MINING APPLICATION
NO. ACT/047/011
Date 3-14-78

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN
(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company American Gilsonite Company

2. Proposed type of operation Mainly underground, but limited open cut in narrow veins.

3. (a) Prior Land Use(s) Natural game habitat, some grazing and old mines.

   (b) Current Land Use(s) _____

   (c) Possible or Prospective Future Land Use(s) Same as (a)

4. What vegetation exists on the land proposed to be affected (1) Grasses (cheatgrass, dropseed & galleta), (2) Shrubs (sagebrush, greasewood, & shadscale) (3) Conifers (juniper & pinyon)

   (a) Types and Estimated Percent cover or density: _____

5. What is the range pH of soil before mining? Samples avg. 8.5 pH

   Name of Person or Agency and method of determining pH R. E. Lamborn, Utah State University Saturated paste method

6. Site elevation above sea level 5000 min. 6000 max.

7. In case of coal, oil shale, and bituminous sandstone:

   Principal seam(s) and thickness(es) N.A.

8. Estimated duration of mining operations Indefinite (40 years est.)

9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (x) No
   Does the above material being moved have any other characteristics affecting revegetation? No

10. Will any underground workings or aquifers be encountered? (x) Yes ( ) No
    Describe See Attachment II A

    Is there an active discharge of water from abandoned deep mines on or crossing the land affected? (X) Yes ( ) No If yes, describe the quality of water being discharged. See Attachment II A

11. Describe specifically a detailed procedure for:

a) The mining sequence
b) The procedure for constructing and maintaining access roads, to include a typical cross-section and profile of the proposed road grades.
c) The procedure for site preparation including removal of trees and brush.
d) The method for removal and stockpiling topsoil or disturbed materials.
e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali producing and toxic materials.
f) A procedure for final stabilization of disturbed materials.

GRADING AND REGRADING

Specifically describe:

a) Typical cross-section of regrading.
b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
c) What type of soil treatment will be utilized.
d) The method of drainage control for the final regraded area.
e) Maximum slope grade.

TESTING

1. Describe method for testing stability of reclamation fill material.
Use of fill material not anticipated

Describe method for testing of soil that is intended to support vegetation
Saturated paste method for determining soil pH

2. Describe any soil treatment employed to aid revegetation _____
None Anticipated

3. Describe surface preparation of areas intended to support vegetation:
Grading and contouring and possibly some harrowing where needed.

REVEGETATION

1. Revegetation to be completed by:

(x) Operator
( ) Soil conservation district
( ) Private contractor
Name _____
( ) Other (specify) _____

( ) Hydroseeding
( ) Arial Seeding
(x) Conventional or Rangeland Drilling
( ) Other (specify) _____

2. Will Mulch be used? Not anticipated
Type _____ Rate/Acre _____ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
To be replanted in accordance with recommendations from the				
appropriate regulatory agency.				

4. Will affected area be subject to livestock or wildlife grazing? (x)Yes ( ) No Will vegetation protection be needed? None envisioned

5. Will irrigation be used? ( ) Yes (x) No Type _____

6. Describe maintenance procedures for revegetation if needed, until surety release is granted. No need for a formal maintenance procedure is anticipated; however, areas may have to be re-seeded if germination and/or growth is retarded for any reason.

I, the undersigned Operator, hereby submit this to be my Reclamation and Mining Plan for the area shown on the attached map. I further understand that the operation will be conducted in accordance with the Mined Land Reclamation Act of 1975, and all rules and regulations currently in effect thereunder.

Signed R. F. Dewey Operator Date 5/13/77
R. F. Dewey

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 13 day of May, 19 77.

Notary Public [illegible]

My Commission Expires: Dec. 19, 1978

11.

a) The mining sequence for Bonanza Operations is dependent on sales of gilsonite. Each vein contains ore of slightly different properties which our various customers specify based upon their needs. Mining is projected on the basis of a ten year plan which is based on anticipated sales.
Essentially, mining is started at a central shaft location where a shaft is sunk and drifts developed to adjacent shafts to provide a second means of egress for the miners. Then a slope is developed which allows cut ore to fall to the bottom where it is picked up by a pnuematic conveying system and lifted to storage bins on the surface. Mining is carried out to a midpoint between shafts and all the ore is extracted, less pillars left for ground support. Another shaft is then developed farther along the vein and drifts installed for the sequence to begin again.

b) Access roads are located in best possible locations on Company property. If a better route on BLM land is available, application for Right-of-Way is submitted. Road grades are kept as low as possible, but in no case do they exceed eight percent. Roads are constructed with a crowned center and bar ditching along the sides. Berms must be provided along elevated sections to comply with Federal safety laws. Crossings over washes are generally accomplished using dip type construction to prevent siltation and ponding. All roads are maintained with a motor grader which improves the roads as required.

c) Sites are prepared by stripping surface materials as required to provide level terraces for surface facilities. Where practical, topsoil is stockpiled as small mounds in a protected area for use after mining is complete. Each site is treated individually to acheive optimum mine set up conditions with minimal environmental damage.

d) Topsoil is moved and stockpiled with front end loaders, backhoes, or catapillar type equipment.

e) No acid or alkali toxic materials are involved or encountered in gilsonite mining or surface preparation work.

f) At the conclusion of a mines life, surface facilities are removed as quickly as practical and all materials associated with the mine are salvaged. A reenforced concrete cap is placed over the shaft and below grade, then topsoil is replaced and the site graded. Reseeding is carried out the following autumn with species reccommended by the local BLM.

GRADING AND REGRADING

a) Regrading varies from site to site but is kept consistant with local topography where grades are not steep enough to cause surface erosion.

b) Soil is respread with a backhoe of front end loader and regraded with a motor grader or tractor plow. The thickness of final material is dependent on the quantity stockpiled, but an attempt is made to be consistant with the local thickness in nearby undisturbed areas. In some cases, additional soil is transported in to cover rocks or high erosion surfaces.

c) No soil treatment is anticipated.

d) All matural drainage structures are returned to original condition.

e) Maximum graded slopes on areas with topsoil restabilization will be kept to two percent to minimize surface erosion during revegetation.