Minefile

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 15, 1988

Ms. Mary Lozano
Chevron Resources Company
Manila Star Route
Vernal, Utah 84078

Dear Ms. Lozano:

Re: Vernal Phosphate Operation - M/047/007 and
American Gilsonite Company - M/047/010

It was a pleasure to visit the Vernal Phosphate and American Gilsonite Operations on June 7, 1988. Chevron Resources is to be commended for maintaining these mines in a clean and safe condition, and in performing excellent reclamation of the mined out areas. Copies of our field reports are enclosed for your files. I also have several comments with regard to bonding and paperwork which are listed below.

Vernal Phosphate Operation

We were impressed by the relatively small amount of acreage which is left unreclaimed at any given time. Under our revised minerals bonding policy (copy enclosed) we can reduce the bond amount for mine operations which practice concurrent reclamation. It is recommended that Chevron continue to request bond releases for reclaimed areas as was done in 1987.

Eventually, the bond amount should reach a steady state level where the amount of new disturbance each year roughly equals the amount of acreage reclaimed each year.

American Gilsonite Company

The Little Emma 3 site was inspected and has met the necessary revegetation requirements and is hereby released from additional reclamation requirements. Any other sites which are eligible for release should be reviewed with Holland Shepherd, Soils Specialist.

It was noted that sites such as the Little Emma 4, which serve only as escapeways, gradually become overgrown with weeds. If these areas are to remain unreclaimed for an extended period of time, it may be worthwhile to rip and seed the pad areas in the interim.

The Little Emma 19 site, the Bonanza 12 Escape Shaft, and the roads to Pride of the West 5 and 6 have not been incorporated into the mine and reclamation plan. These sites and any others which are to be developed in the near future should be added to the existing notice by completing the enclosed Notice of Intention to Revise Large Mining Operations. The application will be treated as an amendment and no additional bonding is necessary.

The 1987 Annual Report for American Gilsonite lists the unreclaimed acreage at 42. This acreage refers only to the mine sites and does not include the roads and plant site. Future annual reports should include the total of all disturbed areas covered by the mine and reclamation plan. An update of the 1984 disturbed acreage list (copy enclosed) and a color coded map showing the entire operation should be submitted on three-year intervals starting with the 1988 Annual Report.

Please extend our thanks to Dennis Glines, John Larson, and Nelden Kuntz for showing us around the mine sites. Feel free to contact me if you should have any questions or need additional information.

Sincerely,

Frank J. Filas
Reclamation Engineer

clj
Enclosures
cc: L. Braxton
H. Shepherd
0842Q/2-3

June 14, 1988

TO: File

FROM: Frank J. Filas, Reclamation Engineer

RE: Site Inspection, M/047/007 - Vernal Phosphate Operation

On June 7, 1988, Holland Shepherd and I toured the above referenced site with Dennis Glines and John Larson of Chevron. We toured Camp Canyon, Panel A, and Panel C during our visit.

Camp Canyon covers approximately 110 acres of which 54 acres are considered postlaw. The entire area has been recontoured and seeded. Chevron has obtained surprising revegetation success in this area considering that no topsoil was available for reclamation. Vegetation consists primarily of alfalfa, but other desirable species are growing and will probably gradually take over. Chevron has also planted container stock in Camp Canyon which has an 85-90 percent survival rate.

Panel A was visited next. This area of the mine site was completely released from additional reclamation requirements in 1987. The entire panel has excellent vegetative cover and diversity of species. Some of the south slopes have not done quite as well as the other areas. Chevron has planted container stock in these areas, but these do not have the high survival rate as those in Camp Canyon.

The last area visited was Panel C where Chevron is mining and conducting concurrent reclamation. Approximately 30 acres are mined at a time. The topsoil and vegetation are stripped and applied directly to nearby recontoured areas. The overburden is then drilled, blasted, and pushed by dozer onto the area which was previously mined. The topsoiled areas are drill seeded and mulched in either the spring or fall. Approximately 150 #/acre of fertilizer is applied the year after seeding. Most of Panel C is in various stages of reclamation, with very little of the area disturbed at any one time.

The majority of the unreclaimed site disturbance consists of the processing facilities. The phosphate ore is mined by shovel and transported a short distance to a movable feeder and conveyor. The ore is conveyed to an autogenous grinding mill where it is ground and then transported in a slurry to the beneficiation plant. The phosphate is recovered in flotation cells and then pumped in a slurry pipeline 90 miles to Wyoming. The reject material is pumped to the tailings area south of the plant. Scrapers were building up the tailings embankments during our visit.

clj
cc: L. Braxton
W. Hedberg
H. Shepherd
0842Q/6

June 14, 1988

TO: File

FROM: Frank J. Filas, Reclamation Engineer

RE: Site Inspection, M/047/010- American Gilsonite Bonanza Operations

On June 7, 1988, Holland Shepherd and I toured the above referenced gilsonite operation with Nelden Kunz, Mine Manager. We visited some of the sites on the Bonanza, Independent, Little Emma, Wagonhound, and Eureka veins. The Pride of the West, Harrison, and Rainbow veins are located approximately 20 miles south of Bonanza and were not visited due to time constraints.

Mine sites on the Independent, Bonanza, and Little Emma veins are located near Zeigler's mines on the same vein. American Gilsonite has developed the B-16 site as was proposed in the mine and reclamation plan (MRP). An escape shaft, B-12, was also constructed and should be added to the MRP.

The Little Emma 3 (LE-3) site was reclaimed in 1983 and shows excellent vegetation cover with the following species present: cicer milkvetch, yellow sweet clover, Russian wild rye, crested wheat grass, western wheat grass, Indian rice grass, streambank wheat grass, alfalfa, sagebrush, bluebunch wheat grass, shadscale, and squirrel tail.

The LE-4 site has been dismantled and now serves as an emergency escapeway for LE-5. The LE-4 site is covered with cheatgrass and weeds. No reclamation work is proposed for LE-4 until it is no longer needed as an escapeway. LE-5 and LE-6 are currently inactive, but will be mined again as market demands warrant.

American Gilsonite has decided to remine an older area on the Little Emma vein and have recently started up LE-19 in this area. This site will have to be added to the MRP.

The Wagonhound 12 site was visited. It is fully operational, but currently inactive. The nearby Wagonhound 11 was the site of large scale, prelaw hydraulic mining. American Gilsonite has been able to blast the seam closed at the surface and reclaim most of this area. The revegetation in this area is much less successful than Little Emma 3 as only yellow mustard appears to the thriving.

The last area visited was the Eureka 21 site. This area is prelaw, but was reclaimed in 1983 and serves as a test plot area. The vein itself is fenced, but still open, and is used as a landfill for the mine operation. The reclaimed E-21 area shows good vegetative cover. The seed mix was probably slightly different than what was used at LE-3 in that rabbit brush and smooth brome are also abundant on the site. This site was mulched with straw at a rate of 1000#/acre when it was reclaimed. Little Emma 3, by contrast, was not mulched and shows greater vegetative cover. No definitive conclusions can be drawn at this time, but mulching might not be necessary for long term reclamation success.

clj
cc: L. Braxton
H. Shepherd
0842Q/7