



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

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**DIVISION OF OIL GAS & MINING**  
**FIELD VISIT FORM**  
**TECHNICAL**

**Date:** August 12, 1996

**Time:** 9:30 AM to 3:15 PM

**Mine:** Castle Gate

**File Number:** ACT/007/004, Folder #2

**DOG M Staff:** Paul Baker, Steve Johnson, Bob Davidson

**Other Attendees:** Johnny Pappas and Bill Minchey

**Purpose:** Amax is beginning reclamation in Hardscrabble Canyon, and we looked at various details of the reclamation plan and how they may be altered. We also took five soil samples to check the suitability of substitute topsoil materials.

**Observations:** Three of the soil samples were taken from pits about six feet deep in an area to the east of the road leading to the Goose Island area. The soil in this area appeared to be good quality material.

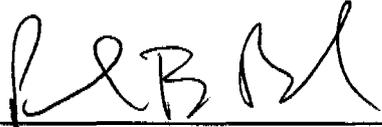
The other samples were taken in an area that had a shop building and some sheds. Amax previously identified sodic soils in this area, and we were trying to better delineate what soils had problems. In the area where the shop was, we could see salt on the side of the excavated area. We saw the same thing in one of the pits on a lower pad. We took samples from two pits in this area. Johnny Pappas documented the exact locations.

There is a chance it may be difficult to obtain seed this year. The weather has been very dry, and there have been some large fires on public lands. We may need to make some substitutions to species in the seed mix.

We talked about several areas where Amax may or may not have enough spoil to completely eliminate cuts. The cuts I definitely thought should be eliminated were those where shaley/coaley materials were exposed. Most exposed rock outcrops look natural, but there are a few where the rock is not very competent. There are some places where sandstone-derived soil is exposed. As long as these areas are not too large and are discontinuous, I thought it would be acceptable to leave them. In particular, one area near Goose Island is mostly revegetated, and I felt it would not be necessary to completely backfill it.

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I am concerned about some of the refuse in Dog Flat. We found evidence of sulfur, and it looked like there was a lot of trash buried in the refuse. Amax will need to remove at least some of this trash depending on what is uncovered.

Signature:  on August 13, 1996  
Paul B. Baker, Reclamation Biologist

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