

9 VEGETATION

9.1 SCOPE

A reference area, approximately one acre in size was selected in July 1983, encompassing pinyon-juniper-grass and riparian vegetation types (Plate 9-1). The reference area was selected on the basis of similarity with vegetation types which were believed to have occurred within the disturbed area before mining. This was done in conjunction with Mr. Lynn Kunzler of the Utah Division of Oil, Gas and Mining (DOG M). Further discussion with the D.O.G.M. has determined that there are better reference areas nearer to the mine site, therefore this area will no longer be used as a reference area.

In 1993, reference areas were selected for the Shower House Pad disturbance and the Tank Seam Access Road disturbance. The areas were selected in conjunction with Susan White of the D.O.G.M. These areas are also shown on Plate 9-1. The Shower House Pad reference area will also be used for the shop, sediment pond A, scale house, and coal storage areas. The Tank Seam Access Road reference area will also be used for the mine access road.

In 1996, a reference area was selected by Patrick Collins for the proposed Wild Horse Ridge disturbance. In 2001 he selected an area for the Wild Horse Ridge Tank Seam Pad area. These areas are shown on Plate 9-1.

Shrub density and height were estimated along the same transects used for cover data. The height, number and species of shrubs whose stems rise within 50 cm on either side of the 50 m transect was recorded. Shrub heights were measured and recorded by two classes: less than 1 ft and equal to or greater than 1 ft. All data was recorded on standard forms.

9.2.5 Tree Density and Basal Area Estimation

A total count of all trees within the reference area was done.

9.2.6 Additional Reference Areas

Similar methodologies were used in measuring the Shower House Pad Reference Area, the Tank Seam Access Road Reference Area, and the Wild Horse Ridge Reference Area. The exact methodologies are described in Appendix 9-D (Shower House Pad), Appendix 9-A (Tank Seam Access Road) and Appendix 9-G (Wild Horse Ridge). All of these surveys were conducted by Patrick Collins. A summary of the reference areas are presented in Table 9.2-1.

Table 9.2-1 Vegetation Reference Areas

<u>Reference Areas</u>	<u>Reference Type</u>
Main Reference Area	Pinyon-Juniper-Grass
Shower House Pad	Grass-Pinyon-Shrub
Tank Seam Access Road Reference Area	Pinyon-Juniper-Grass-Mt. Mahogany
Wild Horse Ridge Reference Area	Pinyon-Grass-Conifer

9.3 EXISTING RESOURCE

9.3.1 SCS Productivity Estimates

Productivity estimates and range condition for the reference were obtained from the local SCS Range Conservationist. (See Appendix 9-B.)