Samples were taken to a depth of 18 inches in July 1986. The Division requested additional samples of waste, topsoil borrow and undisturbed topsoil to be taken to a depth of 36 inches in 1 foot increments. Sample locations 1 through 10 were taken in July 1986; sample locations 11 through 19 were taken in December 1986. Sample locations 1, 2, 17, 18 and 19 were taken at the Golden Eagle Mine; the remaining samples were taken at the New Elk Mine (see Map 9) .

Samples 5, 12 and 13 were taken from the topsoil borrow, area. Sample 5 was taken to a depth of 1.5 feet and exhibited a relatively high SAR for undisturbed soil. Samples 12 and 13 have no apparent limiting factors. The sandy clay loam texture of 5 indicates SAR should not pose significant problems in revegetation. The remaining undisturbed samples are generally fair to good for direct seeding and/or topsoil salvage. The topsoil pile at the New Elk (Sample 9) has a relatively high pH of 8.8.

Waste samples have high SAR's. The predominant textural classification is clay loam. The SAR effects on revegetation will be mitigated as WFC plans to topsoil these areas.

A pH of 4.6 was reported in the 3 foot depth increment at sample location 10. WFC suspects slight acid formation results from oxidation of coal.

2.04-10 Vegetation Information

A vegetation map has been prepared which shows the area which is affected by the New Elk Mine surface facilities and additional area which will be disturbed within the permit term. The various plant communities are delineated based on aerial mapping and field mapping which has been a:mpleted by Uniscale Corporation. Uniscale has conducted two extensive surveys of the areas around the surface facilities to determine species composition, cover, productivity, and woody plant density in 1980 and 1981. Map 10, Vegetation, has been prepared which delineates each plant community within the permit boundary.