



Operational production of equipments in the topographic reconstruction of degraded areas for mineral exploration in the National Forest of Jamari-RO

A. Í. Ribeiro(1), A.J. da S. Maciel (1), R. M. Longo(2), W. J. de Melo(2)

¹*University of Campinas, Departamento de Máquinas Agrícolas/FEAGRI, UNICAMP, Brazil, admilson@agr.unicamp.br*

²*University State of São Paulo, UNESP, Jaboticabal, Departamento de Tecnologia Brazil, rmlongo@uol.com.br*

SUMMARY: The mining process promotes a land modification and a complete landscape alteration. Those alterations in the surface are shown more obviously in the esthetical aspect, for the line's visual elements, its form, texture, climbs, complexity and color which composes the landscape. As a consequence, they cause impacts in the topography, in the soil, in the vegetation and in the area's drainage with the direct influence of the enterprise. The topographic reconstruction of surfaces is the initial stage in a recovery's programs of degraded areas. Few studies exist in this knowledge area because geology forms associated to the landscape are not possible of be re-done. Areas of mine pit are usually quite irregular and compacted, this fact is associated with the intense traffic of machines in the mineral exploration. The present work had for objective evaluate the operational production of different equipments in the topographic reconstruction of degraded areas in the National Forest of Jamari/RO by means of a conjoint tractor-blade equipped with ripper, it was evaluated to following operations: leveling of the land, construction and terraces and subsoiling. The operational production of the equipments analyzed for topographic reconstruction presented high acting in mine pit, and the use of the studied equipments showed important for the recovery of the initial conditions of the physical properties of the soil. However, high operational acting, it cannot be considered as the only technical factor of selection of machines in the moment of the mechanization of a degraded soil, other factors

as: the final quality of the executed work and the interaction soil-plant can be decisive in the adoption and acting of the machines and recovery techniques.

KEY WORDS: recovery, equipments, degraded area