The aim of this paper is to develop on the 1-jet space $J^1\left(\mathbb{R}, M^4\right)$ *the jet Generalized Lagrange Geometry*

([13, 12]) for the rheonomic Chernov metric

$$F_{[3]}(t, y) = \sqrt{h^{11}(t)} \cdot \sqrt[3]{y_1^1 y_1^2 y_1^3 + y_1^1 y_1^2 y_1^4 + y_1^1 y_1^3 y_1^4 + y_1^2 y_1^3 y_1^4}$$

The associated gravitational and electromagnetic field equations of the model are determined, and the Physical relevance is emphasized.