

GEOLOGICAL AND LITHOGEOCHEMICAL DATA OF THE GRANITIC ARARAS MASSIF, NORTHEAST OF BAHIA STATE, BRAZIL

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The granitic Araras massif (GAM) locates in the northeast part of Bahia State, in the Serrinha Nucleus (SN). This body is intrusive in the archean gnaissic-migmatitic rocks of the SN and has coarsely elliptical shape, oriented N-S, with an area of c.a. 20km². Recent studies about granites intrusions, concentrated essentially in the central and south part of the SN, identified the presence of calcic-alkaline (with low and middle to high-K), shoshonitic and alkaline plutonism. In this intrusion it was identified two dominant petrographical facies: granitic and syenitic facies. Major elements chemical data, showed that the syenitic rocks presented values of SiO₂ with 59 to 65% and the granitic rocks with 70 to 76%. These rocks present low values, of TiO₂ (1.5%); Al₂O₃ (12 to 16%); alkalis total varying of 6 to 9; K₂O/Na₂O ratio between 1 and 2.4; MgO lower to 2, metaluminous character tending to peraluminous in some samples and major part in the of them the normative hypersthene is formed, reaching until 13%. The syenitic rocks positioned in the field of the alkaline rocks in the TAS diagram. The rocks present contents of traces elements (ppm) in the granites (Ba=842, Sr=152, Rb=229, Zr=217, Pb=38, Y=9, Th=51 and Nb=6) and syenites (Ba=3185, Sr=1220, Rb=205, Zr=1039, Pb=87, Y=90, Th=251 and Nb=75) distinguished. The new data indicate that the GAM is apparently a complex intrusion, in which there are rocks with distinguished alkalinity degree. Acknowledgments: Companhia Baiana de Pesquisa Mineral (CBPM), CAPES and CNPq. This is the contribution number 61 of the GPA-UFBA.