

Stop 2-36, Quarry near Jaguariaiva, near Ponta Grossa

DATE	LOCATION	COORDINATION				SAMPLE No.	ROCK
2001/09/25		EASTING		NORTHING		KN040	
09:46		22J	0,627,876	UTM	7,318,777	Height	1,020 m

Quarry taking dolerite of sill

Uppermost sill contacted to sandstone; Altered, weathered gabbro, like sediment, reddish yellow Altered, argilized gabbro, foliated.

Middle to lowwer Gabbro, vertical jointed, 50 to 200 cm width, columnnar.

Gabbro has few pyrite, chlorite, and calcite along fissure. Pyrite also in matrix few.

Intruded sandstone; white to reddish gray sandstone

Photos: 333-337



Stop Mina do Recreio, COPELMI MINERAÇÃO S.A.					
DATE	LOCATION	COORDINATION		SAMPLE No.	ROCK
2001/10/04	Butiá	Latitude	Longitude	AS020	Coal
16:00		S30 06 58.8	W051 54 24.0	Height	66 m
<p>We have a mention to compare the sulfur isotopes between the sulfide in basalt intrusion and in coal deposit in Rio Bonito formation that is underlain the flood basalt volcanics.</p> <p>The coal mine is active, which excavate flat area from Butia to Mina ????. The long of the extension of the deposit is around 12 km of east west direction.</p> <p>The coal deposit near east end has 2 coal seams. The sequences is; the first coal seam have a thickness of 90 cm which covered by siltstone, and 100 to 150 cm of interbeded sandstone, and the second coal seam of 100 to 200 cm in thickness.</p> <p>Both coal seams in the area have around 5 percent of pyrite, the energy of fire has 4,000 to 6,000 Kilo calorie.</p> <p>They crush and wash the ore to separate the pyrite and to increase the quality of coal before feed to the farness or to use as reduction material to make steel.</p> <p>Waste ratio in the mine 10 cubic meters per 1 ton of coal that is, 30 meters of over burden is permitted.</p> <p>Number of worker in the mine is around 5,000 peoples.</p>					