

microbial buildups of the Precambrian and Phanerozoic Indian sedimentary basins will be studied extensively under the project.

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AN ADVANCED GEOCHEMICAL ASSAY LABORATORY AT BANGALORE

The following news item appearing in Economic Times dated 17th July will be read with interest by our readers.

Australian Indian Resources (AIR), a company set up by a consortium of mining companies in Western Australia to act a vehicle for mineral exploitation in India, has applied for prospecting licences for 50,000 sq. km in India. The break-up of the total area is 20,000 sq km in Karnataka, 20,000 sq km in Andhra Pradesh and 10,000 sq. km in Maharashtra.

AIR also proposes to invest in the setting up of a technologically-advanced geochemical assay laboratory in Bangalore, which can carry out low-level ppb (gold and other exploration elements in the ratio of 0.1 parts per billion) determination tests on stream sediments, soil samples, rock chips and drill samples. The company proposes to set up this laboratory in collaboration with the Indian mining and mineral industry, both private and public sector.

"We are" says Mr John Allfounder, AIR's director, "perhaps the first foreign company to respond to the opening up of the Indian mining and mineral sector. We had the advantage since one our directors had in an individual capacity, been looking at the potential for prospecting and mining in India for a few years, well before the ongoing liberalisation programme for this sector was announced".

The prospecting licences applied for by AIR would be for a period of three years, with the possibility of an extension of another two years. Since the present area-ceiling for a prospecting licence is 25 sq km and AIR's applications are for larger area, the applications have to be forwarded to the Central government for clearance.

Mr. Allfounder is optimistic that AIR can strike gold, as also base metals like copper, nickel, zinc and the platinum group, in the area as the company has identified for prospecting. "The basic advantage of India," he adds, "is that the potential is virtually unlimited since your mining sector is in the process of just opening up. The geological terrains in parts of India are very similar to that in Western Australia since millions of years ago both regions were once part of an entity called Gondwanaland before the landmasses separated. However, as against just about two operators for gold in India-the Bharath Gold Mines Ltd and the Hutti Gold Mines Ltd there are 200 operators in Western Australia. And against the Geological Survey of India's annual investment in prospecting of around \$ 2.5 million, about \$ 200 million a year is spent on prospecting in Western Australia".

Mr Allfounder says that Australian mining technology can facilitate better exploitation of mineral resources in India. "The present technology in India favours underground mining of higher grade, lower-tonnage reserves. The Australian technology is for open cast mining of higher tonnage, lower grade reserves.

Our technology is more viable when it comes to exploiting reserves with a much lower content of gold or other minerals".

The company plans, he adds, to use local resources and local equipment to the maximum extent possible. "For instance," he says, "we use a technology for rotary air-blast (BAB) drilling and we had originally planned to import the equipment from Australia. However, we find that there is a company in Bangalore which manufactures water drilling equipment which can with modifications, serve our purpose".

Asked whether AIR planned to go it alone or was looking for collaborations with local companies, he says, "We are open to discussions for collaborations in all areas".

Mr Allfounder, however, feels there is need for clarity in policy areas. "We anticipate that the present trickle of interest will become a flood of foreign investment once your mining sector opens up. At that stage, you may have any number of companies interested in bidding for prospecting licences for the same area. In Australia, we have a system where the first person to file the application gets the licences as long as he fulfils the basic criteria in terms of technology and viability. This is still one of the grey areas in India. However, we appreciate that the Indian mining sector is just opening up and that everyone still has to feel his way around."

NEXT SLIDE PLEASE !

"I thought that in the eight minutes I've got I'd bring you up to date on what our group has been doing in the last year; in a sense this is a progress report and updates the paper we gave here last year; I won't go over the nomenclature again; could I have the first slide please-oh, I think you have someone else's box-mine is the grey one with my name on the top, no, wait a minute, not my name, whose name was it now ? ah yes, you've found it; there's a red spot on the top right hand side of each slide that is the slide that becomes the bottom left when you project it OK, you've got it now, let's have a look, no that's the last slide not the first, yes, now you've got the right one but it's on its side, what about the red dot ? there are two ? well anyway turn it through ninety degrees, no, the other way, yes, now we're there, perhaps we could have the lights off, well I'm sorry there are probably too many words on this slide, and the printing is a bit thin; can you read it at the back ? you can't; well I'd better read it out; no I won't, it is all in the paper which should be published within a month or so, and anyone who wants I'll give a preprint to afterwards, anyway, for those who can read it, this slide is a block diagram of the purification process we used and before I go any further I should mention that there are couple of misprints: on the third row, fourth box from the left, well, of course that is the second box from the right, if you can read it, it says alkaline, now that should be acidic; also perhaps you can see the word membrane; now if I can have a look at the next slide - now which one is this ? ah, yes it's the scatter diagram, I haven't marked the quantities but we are plotting concentration against particles size; if I remember rightly this has been normalised; perhaps I could have the lights for a moment to check in the text, yes, here we are, well it doesn't actually say- we could work it out but it's probably not worth the time, so if I could have the lights off, let's have a look at the plot; well I think you can see a sort of linear relationship-there's a fair bit of scatter, of course, but I think the data are at least suggestive; perhaps if I held up a pointer you could see the relationship more clearly - I expect there's a pointer around somewhere, no I won't need the lights, yes here it is, now you can see the trend and there's just the hint of another trend running sub-parallel to it through this other cluster of points, you may see that more clearly, if I slide the pointer across to the other-no, I wasn't saying next slide, just that I would slide the pointer; anyway now the next slide is up let's keep it on the screen, now this is the sort of evidence on which the data in the last slide were based; this is a thin section-it could take just a bit of focusing-yes, that's better, it's difficult to get the whole slide in focus at once, now the scale is, well