Attention ASX Company Announcements Platform
Lodgement of Open Briefing®

Alkane Exploration Ltd
129 Edward Street
Perth, Western Australia, 6000

Date of lodgement: 03-May-2005

Title: Open Briefing®. Alkane. Advancing Four Projects

Record of interview:

corporatefile.com.au
Alkane Exploration Ltd (ASX code – ALK) recently revised upwards the Wyoming resource at the Tomingley Gold Project (100%) to 7.13 million tonnes at 2.70 g/t containing 606,400 ounces. What are the main objectives with your pre-feasibility study?

Technical Director Ian Chalmers
The resource is a good size and we were very pleased to increase it recently by over 100,000 ounces. It gives us scope to consider a few development options. The fundamental objective of the study is to come up with the optimum development model including the dimensions of the open cut and the level at which we go underground. We still haven't completely eliminated the concept of a purely underground operation based around a higher grade resource.

Determining a valid underground concept requires more drilling and that's the basis for the drilling program we've just started.

corporatefile.com.au
Can you describe the deeper resource potential for Wyoming including the potential to mine high grade cores?

Technical Director Ian Chalmers
We are really starting to understand the deeper resource potential at Wyoming One. There are three major high grade zones; the Hangingwall Zone (HWZ), the cross cutting '376' structure and the mineralisation within the porphyry. The porphyry contains a bulk grade of up to 2 g/t, but you can't really mine that underground. However, there are several distinctive high grade zones

within the porphyry which we had difficulty understanding. We've found high grade zones scattered throughout the porphyry and we're starting to see the individual structures that control those zones and hence the three dimensional geometry. The initial target is the HWZ where the recent upgrade occurred and we hope to at least put defined resources around that high grade shoot after this current round of drilling. We'll then look at the porphyry zones and then on to Wyoming Three. From that aspect we think that there is still a lot of potential to develop high grade resources that are deeper than those defined so far.

We've also been working with the CSIRO's Predictive Mineral Discovery – Co-operative Research Centre to see if theoretical modelling of the ore system will help with predicting ore zones at depth and along strike from the known bodies. The pmd*CRC have had some good successes, such as at Stawell in Victoria.

corporatefile.com.au
Alkane also recently announced an initial shallow Indicated Resource at Galwadgere (within the Wellington project – ALK 100%) of 2.09 million tonnes at 0.99% copper and 0.30 g/t gold. What is the size, dimensions and depth of the Indicated Resource?

Technical Director Ian Chalmers
The section of the ore body within the Indicated Resource is about 350 metres in strike length, it ranges between about 5 metres and 35 metres in thickness with an average of about 20 metres, and it extends down plunge to around 150 metres vertical depth. It actually looks a bit like a flattened cylinder.

The total ore body is larger than the Indicated Resource, but we've only drilled part of the ore body so that we can define an initial JORC-compliant resource. We also haven't included any of the drilling done by other companies several years ago which they used to define a non-JORC resource.

corporatefile.com.au
What is the development strategy for Galwadgere? When could you be in production if the Indicated Resource supports an early development?

Technical Director Ian Chalmers
We are doing a scoping study now. We're waiting on the results of the metallurgical test work because they will govern how intensely we pursue the project. If the results indicate that we can produce a clean copper concentrate fairly easily, that'll encourage us to push on even with the relatively modest Indicated Resource we've identified so far.

The scoping study will broadly determine the dimensions of the open pit, the waste to ore ratio, whether we can build a small flotation plant and whether the economics stack up. It should take about three to four months. Right now I can't give you a more definitive answer on when production is possible other than to say that we could get this scale of project into production more quickly than larger projects, assuming we gain development consent from the NSW authorities within a reasonable time.

corporatefile.com.au
How far does the mineralisation extend beyond the boundaries of the Indicated Resource?

Technical Director Ian Chalmers
From the historic drilling, we know that the mineralisation extends down to at least 250 metres vertical depth. That's another 100 metres beyond the boundary of the Indicated Resource. One of the drill holes that hit the extremity of the known mineralisation was quite interesting. Although it indicated a broad, low grade zone, it also contained a thin zone of very high grade mineralisation. We have no doubt that the mineralisation is there; an economic development really depends on how cheaply we can mine it.

corporatefile.com.au
The diamond core hole at Galwadgere, GAL030D, was to be fairly important in understanding the geological parameters and extent of the resource, but this hole undershot the shallow north plunging mineralised zone and intersected only low grade copper values. Do you understand why you missed the mineralised zone? How has this affected your approach to the project?

Technical Director Ian Chalmers
We now understand why we missed the mineralised zone. We intended to drill GAL030D into the middle of what we thought was the plunging section of the ore zone. We thought that the shoot plunged at about 45 degrees to the north, but it now looks like it plunges at about 30 degrees and that explains why GAL030D went just underneath the shoot. Although we got a lot of good geological information, it was a bit frustrating that we didn't intersect the main ore zone. The shallower plunge might mean it gives us less tonnes per vertical metre, so it has an impact on the development scenario in that sense.

corporatefile.com.au
Historical drilling at Galwadgere resulted in a non-JORC resource of 6.0 million tonnes at 1.00% containing 60,000 tonnes of copper and included 1.7 million tonnes at 1.66% for 28,200 tonnes of copper. You were hopeful of defining a higher grade core at Galwadgere. Is that still the case?

Technical Director Ian Chalmers
Our assays have been returning grades around 30% to 50% below the grades defined from the historical drilling. We don't understand why there is such a discrepancy other than our drilling has all been RC whereas most of the historical work was done by coring and it's not clear how that core was sampled. We're therefore not so sure about whether we can define a higher grade core at Galwadgere.

Having said that, the Indicated Resource has provided us with the incentive to pursue the project. It contains about 21,000 tonnes of copper metal compared with around 28,000 tonnes within the higher grade section of the historic resource. We have slightly more tonnes at a lower grade than the historic resource. And, if you factor the gold grade of 0.30 g/t, the Indicated Resource is not very different to the historic high grade resource in terms of contained metal value. Finally, if you assume that the ore body extends to 250 metres, the copper content virtually doubles to about 40,000 tonnes of copper metal and that compares reasonably well with the original lower grade resource.

So in reality the new resource and the old resources are not too different in terms of contained metal, but there are obviously some subtle things that we have yet to understand.

corporatefile.com.au
Alkane has identified a channel iron deposit with a potential for 150 to 220 million tonnes within the Nullagine Diamond Project (60%) area in the Pilbara, Western Australia. Can you explain how you determined that potential? What is the quality of the iron ore? What's the forward program?

Technical Director Ian Chalmers
Alluvial diamonds were found at Nullagine around a hundred years ago almost by accident by prospectors who were panning for gold. We were presented with a credible geological model for primary diamond sources for the area by the Randolph Resources Syndicate (40%) and got involved in the project about twelve years ago.

During our work looking for kimberlitic indicator minerals and diamonds we noticed that the old palaeochannel river system had a pisolitic iron zone on top which varied between 5 metres and 20 metres in thickness. From our mapping, you can actually see these pisolitic iron deposits scattered all the way along the top of the old river system, probably over 30 or 40 kilometres of which we currently control about 26 kilometres. When we first drilled the river bed we didn't analyse it for iron because we weren't looking for it then. This current world iron ore scenario started to develop in the last year or two. We were aware of several companies looking for iron ore deposits in the region so we thought we'd have a look at the potential at Nullagine.

From our original mapping and assuming a specific gravity, which we're able to do by analogy to other channel iron deposits, we were able to estimate a tonnage range of 150 to 220 million tonnes. We've quoted a range because we haven't accurately measured the thickness of the channel deposit all the way, but we can estimate it from the early drilling and measurements of outcrop at residual mesas. What we don't have is an idea of the grade and that will govern the potential of this deposit. If the grade is up around 58% iron, you could start to say that this is a very significant resource. We're waiting for approvals to do some exploration work on the ground.

A number of companies approached us once we announced the potential of the project and we need to work through the proposals to come up with the best option for Alkane. That might mean outright sale, joint venture with an earn-in or doing work on it ourselves.

There's potential for us to generate fairly serious value from whichever option we take.

corporatefile.com.au
What other significant events do you expect for Alkane this year?

Technical Director Ian Chalmers
The other major opportunity for Alkane this year is with the Dubbo Zirconia Project (100%). Unfortunately we achieved absolutely nothing with the Astron joint venture and as it is now formally terminated, we have to look at a way to

go forward. One of the major options is listing our subsidiary, Australian Zirconia Ltd. That option is already being evaluated to see how we could raise the money to move the project to the next stage; more process optimisation test work and building and operating a demonstration plant.

We have also made significant progress with a possible joint venture at our three very good exploration properties in the Orange area. These are close to Newcrest's Cadia and Ridgeway operations. Over the last four or five years we've had several interesting hits on those projects and, had we not had so much focus on Wyoming and Galwadgere, we probably would have put a major effort into the Orange properties. We've advanced a significant joint venture opportunity which we which we hope to be able to finalise shortly. This could bring substantial expenditure to the project, targeting Ridgeway-style ore bodies.

corporatefile.com.au
Zirconia projects are not well understood in Australia. How valuable is the Dubbo Zirconia Project (100%)?

Technical Director Ian Chalmers
That is always a very difficult question. It's certainly a significant asset for which there is no value in the Alkane share price.

It's largely because, as you said, people don't understand these projects. But given the work over five or six years, we believe that the project has significant value particularly now that the zircon price has started to move upwards in the last twelve months because of world zircon shortages.

The project is world class. I'd say it's up with the top five or so world zirconium resources in terms of tonnages and grade. The major difference is that, to the best of our knowledge, we're the only company with a deposit where we can process the ore to get metals in solution and back into a saleable product. That is a major advantage.

corporatefile.com.au
Capital cost?

Technical Director Ian Chalmers
The feasibility study in 2002 came out at about $90 million to $100 million for the total capital cost and we think that was for a gold-plated operation. Our previous numbers had been about $60 million, but this will be subject to a revised feasibility study once we've run the demonstration plant.

corporatefile.com.au
What is the connection between zirconia and zircon? Do they supply the same markets?

Technical Director Ian Chalmers
No they don't really supply the same markets but nearly all of the world's zirconia and zirconium chemicals come from processing of zircon. However, zirconia and zirconium chemicals are a quantum leap in value from zircon because they are further down the process chain. The major applications for zirconia are high quality ceramics and pigments, electronics, specialty glasses,

solid oxide fuel cells and automobile catalysts. Zirconium and its associated metal, hafnium, have significant use as control rods and protective cladding in nuclear power stations, and we think the increase in demand in this area will also be important in the next five to ten years.

The actual minerals in the Dubbo ore are zirconium silicates, which are not unlike zircon, but they have things like water and rare earths in the chemical structure which renders them soluble in sulphuric acid. That is a distinct advantage over zircon which isn't soluble in sulphuric acid and therefore the processing of zircon into zirconia is quite complex.

We just crush up the rock and basically mix it with sulphuric acid to put the zirconium metal into solution. Once it's in solution, you can do almost anything with it. You can produce zirconium sulphate, zirconium carbonate, zirconium hydroxide and all these exotic chemicals that go into making all sorts of high quality end products, including zirconium metal. We can do the same thing with the niobium, tantalum, yttrium and rare earth elements in the deposit.

Zircon prices have risen substantially over the last year or so and that should ultimately translate into higher zirconia and zirconium chemicals prices. The Dubbo Zirconia Project is therefore quite a valuable and strategic asset.

corporatefile.com.au
Thank you Ian.

For further information on Alkane please call Ian Chalmers on (08) 9328 9411 or email ichalmers@alkane.com.au

To read other Open Briefings, or to receive future Open Briefings by email, please visit www.corporatefile.com.au