ALKANE RESOURCES LTD

Company Insight
the intelligent market update

## Alkane Resources Ltd — Date of Lodgement: 29/11/11

## Title: "Company Insight – Strong Product Markets & Projects Update"

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**Highlights of Interview**

- **Revenue assumptions unchanged for Dubbo Zirconia Project.**
- **Market remains strong for main products.**
- **NPV for project of $1.2 billion confirmed.**
- **Exploration program at the DZP.**
- **Process for final approval of Environmental Assessment report at Tomingley.**
- **Updates on Tomingley & McPhillamys.**
- **Big year expected for Alkane in 2012.**

**Record of interview:**

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Alkane Resources Ltd (ASX code: ALK; market cap of ~$260m) is forecasting to be in production from its Dubbo Zirconia Project ('DZP' - ALK 100%) in 2014. The share prices of current and future rare earth producers look to have fallen fairly drastically over recent months. Can you reiterate the expected revenue streams from each of your products and the products which are already subject to signed Memorandums of Understanding? What is your current expectation of total revenue at the 1mtpa ore case? Does the NPV of $1.207 billion announced earlier this year, for the 1mtpa base case, remain robust?

**Managing Director Ian Chalmers**
The revenue streams as we determined in the Definitive Feasibility Study remain the same. Zirconium revenue is forecast at up to $200 million per annum, niobium is about $110 million, light rare earths about $110 million and heavy rare earths about $90 million per annum. That makes a total of around $500 million per annum of revenue. We've stated this consistently, but we believe we've generally used conservative pricing throughout our analysis of the DZP. Zirconium chemical prices are linked to the zircon price and these continued to strengthen during the last 12 months. For niobium we use the current market

price, but that's set by the major Brazilian producer so we believe it's appropriate to use the market price.

Certainly the light and heavy rare earths are generally below the high levels they spiked to mid this year but the drops are not uniform.  However, they are currently still very good prices and we believe the current prices are sustainable in the long term.

Yes, the NPV of $1.2 billion remains intact.  Nothing has influenced us to change the assumptions used in the analysis.  We are reviewing the capital and operating cost numbers for the 1 million tonne per year operation and we still think the costs we've used are conservative.  The capital cost includes a large contingency and a large EPCM figure and we believe there is a good chance to reduce the overall capital cost.

It's probably also worth restating here that the apparent difference between the 'back of the envelope capital costs' which were escalation of the 2002 costs used in presentations earlier this year did not include the sulphuric acid plant or the rare earth recovery circuit.  The addition of the rare earth circuit also added significant residue storage requirements, which were not previously anticipated.  I think that overall we saw a 25-30% increase in costs, which is probably in keeping with industry observations.

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Can you outline the market dynamics over recent months for each of your major products?

**Managing Director Ian Chalmers**
Up until about two months ago prices for all our products were cruising along very nicely. They were exhibiting the steady gains that you would expect to see in a tight market. However, there is no doubt that the current world debt crisis will impact prices and it has already started to do so.  For example, demand for zircon is currently flat and, as already mentioned, some rare earth prices have retreated.

Looking to next year though, the majority of industry experts believe that demand will start to improve around the middle of the year and prices for zircon, and hence zirconium chemicals, should resume that strong upward trend.  The niobium demand is driven by the steel industry and demand for steel has been strong – so we don't see any major longer term issues for niobium.

The market for rare earths has been different though and demand has dropped off more significantly because of the global financial situation, but also because of potential over supply of certain rare earths.  Despite acknowledging that, we believe there has been an overreaction.  There has been a lot of media hype about rare earths 'crashing'.  In reality, a couple such as lanthanum and cerium have fallen quite dramatically in the last two months, but even after those falls they are still at levels comparable to those at the beginning of the year when industry experts would have regarded the prices as very good!  My opinion is that current prices for light rare earths are fantastic when compared to long term averages.  Also, we can see some of the critical rare earths – the big value drivers for the industry - being supply constrained for several years.  Neodymium, dysprosium, terbium and yttrium prices have all come off a little recently, but they're still well above what we saw even in the middle of the year and I cannot see those retreating too far.

So, this media scare is a long way from the truth. I recently attended two industry conferences in Hong Kong; the TZMI Asia in Focus (zirconium and titanium industries) and the Roskill – Metal-Events Rare Earth conferences. The feeling at these conferences was that the zirconium and titanium markets should grow strongly for many years and, for rare earths, it was the same feeling except that the next six months or so could be challenging. When Lynas and Molycorp's projects come on-line they will certainly affect the demand/supply balance of the light rare earths such as lanthanum and cerium - and possibly to the extent that these markets will go into over-supply. However, neither Lynas nor Molycorp will be producing heavy rare earths and the markets of neodymium, dysprosium, terbium and yttrium should remain strong.

Whatever happens to the light rare earths market if several other producers come on stream, I must stress that lanthanum and cerium only account for a fraction of the revenue that will come from the DZP and we are confident that prices for our remaining products will remain strong for several years within tight markets. And again I say that we have been conservative with our pricing in the financial modeling for the DZP.

The fact that we will derive 60% of our revenue from zirconium (40%) and niobium (20%) really distinguishes the DZP from these pure rare earths projects. If lanthanum and cerium did go into over-supply, it won't have a major impact on the project.

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Why then do you think the Alkane share price has fallen so significantly (from a high of over $2.70 earlier this year to currently just less than $1.00) - even allowing for the world debt crisis?

**Managing Director Ian Chalmers**
It's an interesting question and it's likely due to a combination of events. Around the middle of the year, our share price really took off, but we can't say it was due to anything specific. Possibly the market realized that Alkane was a significant player in the rare earth and zirconium businesses and that the DZP was more advanced than previously recognised.

After such a dramatic increase it was likely that the share price would retrace through profit taking, particularly when combined with issues such as the concerns at the time with radioactive material in the Lynas deposit. Unfortunately when one company is dealing with such an issue it can flow through to the rest of the industry. It's not logical, but that's how the stock market operates sometimes. We don't have any radioactivity issues in the DZP, but still copped the backlash. The negative sentiment about the light rare earths has also affected our share price even though, as I've explained, most of the products we will be producing have a very robust market outlook.

When we look forward to what we plan to do in 2012 - advancing the two major projects (DZP and Tomingley) - we certainly didn't expect our share price to be hammered to the extent it has.

Even Iluka – the world's major zircon producer, which has operated in a very positive market this year, generating substantial returns, - has suffered at times from issues not relevant to their business.

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Earlier this month you announced an upgrade of Proved and Probable Ore Reserves (JORC compliant) to 35.9 million tonnes for the DZP. At what depth does the reserve begin? Will mining be relatively straightforward? Can you comment on the quality of the grades and any contaminants identified?

**Managing Director Ian Chalmers**
The deposit outcrops as a hill at surface and the current reserve extends to 45 metres below surface. So it won't really be a mine, but rather a quarrying operation and mining will constitute only around 3% of total operating costs. We will do a normal drill and blast for the ore, load it and transport it the three kilometres to the crusher and processing plant. The other great thing about the deposit is it is incredibly uniform in grade. We've drilled the deposit to around 100 metres vertical depth and the grades rarely differ by more than 10%. There are no contaminants of significance that will affect recoveries. We have tested the recoveries of all metals from ore at surface and at depth and the recoveries have been virtually the same.

It's quite an amazing deposit with surface dimensions of about 1 kilometre east-west and 600 metres north-south and being a vertical volcanic pipe, remains open at depth. As we are currently reviewing operating costs as part of the expanded operation we only classified a large part of the Measured Resource as Probable Ore Reserves. I think this will be reviewed again when the current study is completed.

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Given the Reserves underpin a mine life of at least 36 years and the Resource could underpin an operation for over 80 years, why are you doing further drill testing of the Toongi deposit and the nearby and previously untested Railway deposit?

**Managing Director Ian Chalmers**
It's a good question and I'm sure I will be asked that a few times. We're doing this to understand the broader geology, and will drill a core hole to around 250 metres to hopefully give us more information on the genesis of the minerals and the deposit in general. The additional drilling will also tell us whether the grades continue down to that depth. It's not an exercise that will drastically change the attributes of the project even if it eventually triples the resources because they are so large now anyway.

We have a diamond core rig and an RC rig drilling at our nearby projects and so we thought we'd do this additional drilling at the DZP. The Railway deposit is about four kilometres away and although it is around half the grades at surface of the Toongi (DZP) deposit, it's actually similar to grades of other projects being promoted around the world. We'll put four holes into the Railway deposit to around 150 metres vertical depth, examine the geology and do some process test work on the ore.

If we ever decided to scale up production, it may make sense to mine Railway rather than mining Toongi beyond a certain depth. In Railway's favour, it outcrops over a greater surface area than Toongi and would therefore deliver us more tonnes of ore per vertical metre.

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Earlier this month, Alkane received notification from the NSW Department of Planning and Infrastructure that the Environmental Assessment (EA) for the mine development at the Tomingley Gold Project (ALK 100%) has been assessed as adequate and you have submitted the documents for public exhibition until 19 December 2011. What is the process to get final approval to begin mine development and then get into production?

**Managing Director Ian Chalmers**
The public exhibition process gives anyone the ability to comment on or make an objection to the development. The Department of Planning and Infrastructure then collates that information and it may ask us to formally respond to any issue it deems important. Our response is then assessed by the Department and they will tell us whether we have satisfactorily addressed the issue. That process is a little open-ended, but I'm estimating it could take 2-3 months. We believe our EA is a very thorough document which addresses all relevant issues.

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What do you see as the major risks to achieving the calculated financial returns at Tomingley of EBITDA of around $250 million and an IRR of 32% (at a gold price of $1,700/oz and gold production of 50-60,000 ounces per annum over 7.5 years)?

**Managing Director Ian Chalmers**
The main risk is the gold price and the A$ exchange rate. We think we have been very conservative in estimating the Resources/Reserves, mining model and financials. I actually think we could do better in terms of the recovered grades, and therefore the project economics, once we're in production. We've minimized the downside yet have left some scope for upside and we will also hedge approximately 40% of initial gold production, once the approvals are given, to protect against a fall in the gold price.

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In March 2010, Newmont Australia Limited elected to proceed to acquire 75% of the Orange District Exploration Joint Venture by completing a Bankable Feasibility Study on the McPhillamys Project (which would leave ALK with 25% equity). Can you update the status and near term objectives at McPhillamys?

**Managing Director Ian Chalmers**
Newmont is currently reviewing different development options to generate the best returns from the project. We hope to have more to say in the New Year. The project is significant with a currently defined 3 million ounce resource. It already has significant value to Alkane at our 49% equity, even before it is developed, and if you do a '$ per resource ounce' valuation – that value could possibly be equivalent to half Alkane's current market capitalization.

We are maintaining our own exploration in the region including the Bodangora project where we expect to be drilling in December, the Comobella porphyry copper/gold system and the Galwadgere copper resource.

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Finally, you mentioned earlier that you are looking forward to 2012. What are Alkane's main objectives for 2012?

**Managing Director Ian Chalmers**
It will be a big year. The first objective is to get approval for Tomingley and start construction. It's important for Alkane's future and its share price to get cash flow coming back into the Company. In fact, you might say it is payback time for shareholders in the next few years with hopefully plenty of cash coming in from all of our projects.

At the DZP we hope to announce an MOU on the rare earth output by around end March quarter 2012 and that will give shareholders further confidence of the likelihood of crystallizing significant value from this project as we would then have theoretically 100% of revenue under MOUs. We then hope to submit an Environmental Impact Statement by mid-year with a view to commencing construction no later than early 2013 and production by the December half 2014.

That will then allow us to push on strongly with all the financing options for the DZP. We've been looking at a small strategic sell-down of the project to help fund our capital costs. It might be based on a multiplier of the NPV. For example, we think we might be able to get $300 million in cash by selling around 10% of the project. That stake won't necessarily be sold to one party. There has also been much interest from government agencies. Korean, Japanese and European governments have been very supportive in helping their companies gain access to strategic mineral resources. We would also then look at debt facilities. Overall we believe we could keep Alkane's equity exposure for the DZP to a totally manageable number in the vicinity of $200 million.

Overall, 2012 will be a big year for Alkane and we certainly have a lot of positive projects to work with.

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Thank you Ian.

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