

COMPANIES I'M BUYING: **ABAKAN INC. (OTCQB:ABKI)**



DISRUPTIVE TECHNOLOGY BEING DEPLOYED BY FORTUNE 500 PARTNERS

Today we venture way out onto a limb, as is my habit, to bring you a company that, though listed on the dubious OTC Bulletin Board, is going to be a major win. And since I'm actively involved in helping this company move to a top tier exchange, I'm on rather intimate terms with the business plans of the company. I've shared dinners, drinks and airplane trips with senior management, I've been privy to communications among Fortune 100 current and potential joint venture partners and customers, and I've interviewed the founders of the company about their technology, markets, and strategy no less than three times for Midas Letter Money, my new show that is distributed on the Reuters Insider platform. So while it may appear I venture out on a limb by talking about an OTC company, I do so with a high level of confidence. Even Forbes magazine selected their subsidiary as the highest-ranked nanotechnology company and the highest-ranked materials company in their December 2011 issue featuring "America's Most Promising Companies".

Abakan Inc. has majority interests in two companies founded by Abakan Director Andrew Sherman. Andy is a nano-scientist is passionate about developing technology for major market needs. According to Abakan's web site, he was "Chief Metallurgist and New Business Development Manager for Ultramet, Inc., a leading Chemical Vapor Deposition (CVD) company, in Pacoima, CA, where his technical and business developments resulted in a 10-fold growth in company revenues and the creation of three spinouts (including a \$100M plus exit). Mr. Sherman's developments have been the basis for the formation of eight successful companies to date."

Essentially, these two companies coat steel with nano-composite substances that extend the life of metal assets and structures at the best cost to benefit ratio. It extends the life of upstream oil and gas pipelines, protective coatings on ships, downhole drilling equipment, aircraft components (i.e., landing gear), heavy equip-

Salient Data

Shares Issued:	59.4 Million
Warrants and Options:	8.9 Million
Convertible Debentures (\$2.7m @ \$1.00 to 4/13)	2.7 Million
Fully Diltuted	71.1 Million
52 - Week Range:	\$0.17 - \$1.14
Average Volume (3 months):	32,674
Debt:	\$0.4 Million
Focus:	Nano-composite Technologies
Operating In:	Global
We Own:	100,000 shares
We're Planning to Own:	1 million shares

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ment parts, and just about anything made out of steel or steel composites. It is on average at least 80% more effective than its nearest competitor, while costing the same or less, and in many cases, completely replacing high toxicity processes (chrome plating, for example) with environmentally benign ones. Imagine if all the bridges, highways, and ports could have their core infrastructure built to last three to six times longer than they do now for the same money. Current deployments include Canadian oil sands, offshore drilling, U.S. Air Force applications, and heavy equipment manufacturers like Caterpillar.

Abakan is at a critical phase in a disruptive technology company's life: it is on the brink of widespread commercial adoption, and the possibility of near term sales contracts with Fortune 500 companies will drive value into the company's share price. And in contrast to the normal dubious OTC company, which generally focuses on sales of the company's shares to generate cash to grow the business, Abakan is growing the business organically and through grants (over 100 so far and counting), building revenue streams through partnerships with major industrial end-users of its products.

MESOCOAT

MesoCoat, founded by Sherman, is presently owned as to 71% by Abakan, with Sherman's other company, Powdermet, holding the remaining 29%. Abakan owns 41% of Powdermet, with Sherman controlling most of the balance, and plans to enhance Abakan's ownership in both companies are described in detail in S.E.C. filings here. In 2012, Abakan expects to control 85% of MesoCoat, with commensurate revenue split.

MesoCoat's principal product is CermaClad™, described as "High-Speed Large Area Fusion Cladding". This product coats the interior diameter of steel pipes used in oil and gas pipelines with a "nano-composite" ceramic/metallic layer that extends the life of such pipelines by at least six times over current technology. The average expected life of a section of pipe is 50 years, but ruptures in pipelines over the last decade have demonstrated reliability is not possible for greater than 30 years.

One of the most significant revenue opportunities exists

in the production of crude oil from new sources. I have a spreadsheet on my desktop which I am prevented from sharing publicly due to non-disclosure covenants, but the spreadsheet lists all of the oil and gas field development projects in the world from 2012 to 2015 that are either underway, or permitted, or imminent. There are 128 projects in the list, and the total number of kilometres CermaClad pipe required for these known projects alone totals over 1,000 kilometres of pipe.

According to Anupam Ghildyal, Senior Business Development Associate at MesoCoat:

"These 128 projects mentioned represent roughly 40-50% of the total clad pipe market between now and 2015, and nearly 1500 km's of clad pipe requirements (average 12km/project, or \$40M/project), with a total identified market of \$4.8B in clad pipe requirements over the next four years. We estimate, that we can get placed on the bidders list of 1 in 3 (prospect to quote), with a win rate of 1 in 5 (quote to win), for an overall win ratio of 1 in 15, for a typical annual book in the initial years. This 'Pwin' (probability of win) will start lower (lower qualification rate), but increase over time with increase in the percentage of projects that become prospects (should increase to 80-90% of total opportunities). We also anticipate that in 2 years, marketing efforts to develop preferences (e.g., move the specifications in our favor based on the higher performance over current technologies) will improved Pwin significantly, from 1 in 15 to 1 in 8, resulting in a most probably market share of 10% overall, with an annual book projection of \$750M for clad pipe by 2015.

Project/Order size ranges from \$30 million to \$100 million, and in terms of volume are 5-20 miles of clad pipe per order. We have been consistent in our documentation/publications that the annual clad pipe market size is \$1.8 billion, which roughly translates to 350 kms of clad pipe. We have also projected the market to double in size over the next 3 years which would translate to 650-700 kms of clad pipe requirement annually around 2015."

The implications for revenue from just this one application (i.e., upstream pipelines and offshore, "sour" oil and gas fields globally) are in the hundreds of millions of

dollars for MesoCoat and Abakan. Looking forward, the vast majority of major new fields that will be brought on stream in this list of 140 projects, is from sources that are either a) more corrosive (i.e., higher sulphur content); b) much less viscous; c) under extreme pressure d) at extreme temperatures; or e) all of the above.

In the Canadian Oil Sands, by way of example, the conservative estimate for pipes carrying the slurry comprised of oil-bearing sand and hot water in the production phase, or that carry the tailings slurry to the settling ponds in the waste treatment phase, is 15 months. Currently, there are 1.2 million barrels per day of oil being produced. It takes 2 metric tonnes of oil sands, on average, to make a single barrel of oil. Planned production capacity is expected to grow to 3.5 million barrels a day within the next five years. That means over 10 kilometres of clad pipe needing replacement every year now, growing to 3 times that amount in the next five years. So, at \$3000/linear foot, this currently represents a \$98 million market opportunity. At a 3X growth rate in mining operations in 5 years, this represents a \$366 million market opportunity in 2016.

One mile of 14" pipe clad with 3mm of Alloy 625 has a sale price of \$6.94 million, with gross earnings of 59-50% EBIT.

PETROBRAS

In January 2011, MesoCoat signed a Cooperation Agreement with Petroleo Brasileiro S.A. (Petrobras), to develop and qualify MesoCoat's "CermaClad™" process to meet API 5LD specification for the application of proprietary CRA (corrosion resistant alloys) materials to the internal and external surfaces of pipes using High Density InfraRed (HDIR) lamp technology.

Results from tests conducted at DNV-Columbus (known globally for their expertise in the areas of corrosion, materials, and structural integrity) using development funding provided by Petroleo Brasileiro S.A. (Petrobras) demonstrated 6 times lower corrosion rate and thus 6 times longer life compared to the incumbent technology laser cladding and weld overlay technologies, which are much slower and more expensive than CermaClad. The purpose of the tests was to complete a critical

milestone of the Cooperation Agreement with Petrobras to develop and qualify the CermaClad™ process for the application of CRA (corrosion resistant alloys) to the internal and external surfaces of pipes using proprietary High Density InfraRed (HDIR) lamp technology. Petrobras is a leading integrated oil and gas company headquartered in Rio de Janeiro, Brazil which has announced \$220B worth of Oil and Gas exploration and production projects over the next 5 years, many of which would require huge quantities of clad pipe.

Abakan is pursuing a wide range of joint venture opportunities with other industry leaders, and much of the news and results that will establish Abakan's subsidiaries as game-changing, commercially adopted technologies will come from these partnerships.

POWDERMET

Abakan's other subsidiary, also founded by Andrew Sherman, is Powdermet Inc. Powdermet has a range of products that are best described by the company's own web site:

Powdermet develops, matures, and transitions breakthrough materials innovations that enable reduced weight, resource consumption, environmental footprint and life-cycle costs, while increasing energy-efficiency based on value-creation gained through engineered nano-scale features and hierarchically structures of metal and/or ceramic phases in a structure. Powdermet has an extensive proprietary technology base and application data in materials compositions, structures, and manufacturing processes incorporating nano-scale and submicron features into engineering materials through powder metallurgy and ceramic processing techniques.

Today, Powdermet is primarily focusing its efforts on three revolutionary technology platforms including: SComP™; a family of hierarchically structured syntactic metal and ceramic composites known for their light weight properties and ability to absorb energy, and (in the ceramic versions), their high temperature structural and insulation values.

MComP™; a family of micro-nanocomposite, hierarchically-structured metal composites having extremely high strength-to-weight ratios while retaining high toughness.

ENComp™; hierarchically structured nanocomposites for energy, including advanced materials for hydrogen production and storage; high surface area structures for fuel cells, hydrogen production membranes, and advanced filtration; and reactive materials solutions for improved active defense systems to protect US military personnel.

As mentioned, Powdermet owns 49% of MesoCoat (the other 51% being owned by Abakan), and Abakan owns 41% of Powdermet, which is how Abakan controls 71% of MesoCoat. As MesoCoat was a spin-out from Powdermet, the range of high-tech products under development by Powdermet may form the basis of future spinouts, or may be brought to market by Powdermet. At any rate, Powdermet could be viewed as a technology incubator that may continue to yield new product lines and potentially, new companies.

NEXT STEPS

It's a little bit complicated keeping the whole evolution of Abakan in a single view. CermaClad's commercial deployment is well under way. PComP, another product line developed by Powdermet and planned for commercialization through MesoCoat, is on hot idle right behind CermaClad, with a market opportunity at least as big if not bigger. And Powdermet continues to percolate out new materials and products as it identifies opportunities.

Understanding that the following are "forward looking statements" under the meaning of the Securities Acts of the United States, here is the next 24 months looking out as stipulated in Abakan's most recent PowerPoint:

December 2011: ID coating system operational;
January 2012: First test orders from 2-5 Alberta Oil Sands majors;
March 2012: Finalize JV with 1 of 4 bidders;
April 2012: Full CRA prototype independently verified and accepted by Fortune 50 customer;
May 2012: WRA SAM alloy product demonstration Production equipment ordered for first plant (50% deposit);
July 2012: 1-Line full scale production system (Euclid) operational;
August 2012: WRA SAM alloy prototype qualified 4-Line production site lease signed;

September 2012: Initial contingent purchase order received for >\$15M;
October 2012: Production equipment received on site;
November 2012: First large-scale order/bid won (35% down payment received);
January 2013: 4-Line offshore plant operational;
April 2013: First offshore order received;
2012: Impex, Ichthys Gas Field, 50 kms of offshore clad pipe;
July 2012: Brazil 4-Line CRA plant construction begins;
July 2012: Alberta 4-Line WR plant construction begins;
2013: Impex, Ichthys Gas Field, 50 kms of offshore clad pipe;
January 2013: Indonesia 4-Line CRA plant construction begins;
February 2013: Brazil 4-Line CRA plant production begins;
February 2013: Alberta 4-Line WR plant production begins;
August 2013: Indonesia 4-Line CRA plant production begins
2013-17: Petrobras, Brazil, 100 kms of offshore clad pipe;
2013-14: ExxonMobil, Natuna D-Alpha and Cepu, 20-30 kms offshore clad pipe for each (40-60 kms total);
2013-14: Chevron, NDD XIII, 20-30 kms of offshore clad pipe.

Of course, for these to happen on the operational side, there are a lot of pieces of the puzzle that have to fall into place. Petrobras is proceeding towards a "lead order" that will qualify the company for project financing to build a plant to fill the order. Four corporate entities have submitted joint venture proposals, of which Abakan is planning to select at least one. In the Canadian Oil Sands, negotiations are underway with the largest pipe coating company in the world, and a wide range of other corporate developments will drive the company's finances through partnerships as opposed to through equity offerings. Grants continue to be a steady stream of operational and developmental capital as well.

Abakan will likely do an equity raise at some point in 2012, as the strategy to bring in a sponsor to a senior exchange will require that entity to be positioned through a financing.

It would be disingenuous of me not to point out that the company's auditors, in the last 10K issued on May 31st of this year, were compelled to incorporate the following statement in the filing:

Going Concern - The Company's auditors have expressed an opinion as to its ability to continue as a going concern as a result of net losses of \$5,203,116 and a working capital deficit of \$510,868 as of May 31, 2011. Our ability to continue as a going concern is dependent on realizing a profit from operations and gains on investment or obtaining funding from outside sources. Management's plan to address the Company's ability to continue as a going concern includes: (i) obtaining funding from the private placement of debt or equity; (ii) realizing a gain from its investments in MesoCoat and Powdermet; (iii) converting debt to equity and (iv) obtaining loans and grants from financial or government institutions. Management believes that it will be able to obtain funding to allow the Company to remain a going concern through the methods discussed above, though there can be no assurances that such methods will prove successful.

Now with that out of the way, I am excited about this company. Its products are, at the end of the day, substantially beneficial to the market as a going concern, as maximizing finite resources are sure to be a major priority going forward into the next decades.

DUE DILIGENCE RESOURCES

Abakan's Most Recent 10 K (Annual Report);

Company Websites:

[Abakan Inc.](#)

[MesoCoat Inc.](#)

[Powdermet Inc.](#)

Abakan Press Release Archive;

Forbes Magazine's Selection of MesoCoat as one of America's most promising companies;