ASX ANNOUNCEMENT

20 August 2024

GEOPOLYMER BACKING BLOCKS 28-DAY STRENGTH TEST RESULTS RECEIVED

HIGHLIGHTS

- Suvo has received the 28-day compressive strength test results for the geopolymer backing blocks which were delivered to a major Government infrastructure project in late July.
- The 28-day compressive strengths ranged from 31 to 35 Megapascals (**MPa**).
- Compressive strength tests were carried out by an independent external NATA accredited laboratory.
- Testing of concrete specimens was carried out in accordance with the Australian standard for determining the compression strength of concrete (AS1012.9).

Suvo Strategic Minerals Limited (ASX: SUV) ("Suvo" or "the Company") is pleased to announce that it has received the 28-day compressive strength test results following the successful production and delivery of its first low carbon geopolymer precast product, a series of 1000mm x 350mm x 350mm backing blocks.

Results	Spec ID A	Spec ID B	Spec ID C	Spec ID D	Spec ID E
7-Day	16.0MPa	13.5MPa	n/a	n/a	n/a
28-Day	n/a	n/a	32.0MPa	35.0MPa	31.0MPa

The 28-day compressive strength required to meet the specifications of the end use application, being hardscaping, for a major Government infrastructure project, was 15MPa.

The production and subsequent delivery of the backing blocks was the first milestone under the Joint Development Agreement with JV Partner, PERMAcast.

The JV parties are continuing the other work streams as outlined in the JDA, being;

a. Prepare and test a range of GPC formulations to meet concrete strength requirements of nominally 10, 20, 30 and 40 MPa, and determine maximum strength attainable;
b. Characterise and assess applications and products that can utilise the different GPC strength formulations;
c. Test and demonstrate suitability of different GPC formulations for different applications and products; and
d. Assess cost and performance of different GPC applications and products to determine preferred route for commercialisation.

Below is a list of potential applications and pre-cast products that can utilise different GPC strength formulations.

10MPa	32MPa	40MPa
Retaining Wall Blocks	Retaining Wall Sleepers	Stormwater Pit Bases
Concrete Paving Slabs	Leech Drains	Septic Tanks
Garden Kerbs	Water Troughs	Stormwater Side Entry
Decking Foundation Blocks	Pipeline Supports	Stormwater Headwalls
	Gravity Anchors Blocks	Junction Pit Covers
	Transportable Foundations	L-Shape Retaining Walls
	Cyclone Tie Down Blocks	Road Barriers
	Lighting Pole Foundation	Soak Wells
	Cattle Grids	Foundations
	Feed Troughs	Stormwater Pits
	Burial Vaults	Electrical Pits
	Tree Rings	Noise Walls
	Street Furniture	Grease Arrestors / Traps
	Wheel Stops	Bridge Parapets

Executive Chairman Aaron Banks commented:

"*We are coming up the curve quickly now that we are set up at PERMAcast. We have produced a series of geopolymer pre-cast backing blocks in a short period, using our licensed proprietary geopolymer mix design. Importantly, these pre-cast backing blocks have exceeded the strength requirements of their end-use application.*

This is an outstanding milestone and one we could not have reached without PERMAcast. We have successfully manufactured and delivered a new geopolymer product on time and to specification, but most importantly the independent NATA testing results opens the door to a variety of products which we can now consider in our commercial roll out strategy. To put this into perspective, 40 MPa will provide an opportunity to manufacture a sustainable amount of commodity products that are currently available in the market.

Our next step is to categorise products by level of demand, and from inquiries received, which will allow us to fine tune the scale up approach of the business.

A great effort by the team and thanks again to our partners, PERMAcast."

Chief Executive Officer of PERMAcast Darren Hedley commented:

"What an awesome result! Hitting the required 15 MPa and upwards to 35 MPa isn't just good news—it's a huge win for the Suvo Strategic Minerals and PERMAcast partnership.

This goes beyond the numbers; it strengthens the case for bringing our solutions out of the lab and into real-world applications. You don't have to compromise quality or performance to be sustainable.

Exciting times ahead! We're building momentum and will continue innovating with new materials and by-products, customizing solutions to meet different strength needs, and expanding into new applications.

We are only just getting started."

Approved for release by the Board

-ENDS-

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Company Profile

Suvo Strategic Minerals Limited is an Australian hydrous kaolin producer listed on the Australian Securities Exchange (ASX:SUV). Suvo is focused on expanding sales of hydrous kaolin produced at its 100% owned Pittong operation located 40km west of Ballarat in Victoria. Suvo is also progressing commercialisation of the 'Murdoch Technology', namely Intellectual Property for a geopolymer concrete batching plant a low carbon geopolymer concrete formulation known as 'Colliecrete', which it licenses under a worldwide and exclusive Intellectual Property License Agreement.

Pittong Operations

The 100% owned Pittong Operations, located in Victoria 40km west of Ballarat, is the sole wet kaolin mine and processing plant in Australia and has been in operation since 1972. Pittong comprises the Pittong, Trawalla and Lal Lal deposits located on approved Mining Licences MIN5408, MIN5365 and MIN5409 respectively. The Pittong processing plant has a name-plate capacity of 60,000 tonnes per annum.

At Pittong mining contractors deliver crude kaolin ore to stockpiles from the two currently operating mines, Pittong and Lal Lal. The plant takes its feedstock from the ROM and it is processed into four separate product forms for end users. These product forms are 10% moisture lump, high solids slurry, 1% moisture powder and 1% moisture pulverised powder. The solids slurry is used in paper and board manufacturing. The other products are used in paper, coatings, paint and specialist industries including rubber and pharmaceutical applications.

Geopolymer Concrete IP and Commercialisation

Suvo licenses the 'Murdoch Technology' from Murdoch University under a worldwide and exclusive Intellectual Property License Agreement. The Murdoch Technology is namely Intellectual Property for a geopolymer concrete batching plant a low carbon geopolymer concrete formulation known as 'Colliecrete'.

Geopolymer concrete is a low carbon concrete that is made by reacting aluminate and silicate bearing materials with a caustic activator, such as metakaolin, flyash, ground blast furnace slag and other waster derived materials. Geopolymer concrete is a suitable replacement for concrete made using the traditional binder known as Ordinary Portland Cement (**OPC**). The manufacture of OPC is a highly emitting process representing 8% of global CO_2 emissions which is equivalent to the entire global car fleet.

Utilising the licensed IP, in a laboratory setting, Suvo has successfully produced three new geopolymer concrete formulations using caustic activators, metakaolin and flyash. The laboratory trials ran tests comprising five samples in each test returning an average compressive strength of 27 megapascal (**MPa**) up to 52MPa. The trials indicated the geopolymer concrete formulations using metakaolin and flyash showed a potential greenhouse gas emission reduction of up to ~70% compared to concrete made using OPC.

Suvo has entered into a binding Joint Development Agreement (**JDA**) with PERMAcast and is now in the process of incorporating a joint venture entity (**SPV Entity**) to develop and commercialize low-carbon geopolymer concrete (**GPC**) products. Under the binding JDA, Suvo and PERMAcast will prepare and test various formulations, assess their suitability for different applications, and determine the best route for commercialization through the jointly-owned special purpose vehicle.