



## AUSROCKS NEWSLETTER No 19 Summer 2015/2016

### Welcome...

to the Ausrocks Summer Newsletter. Things have gotten even tougher all round since our last Newsletter and it looks like we have a way to go before employment demands in the mining and quarrying industries increase.

2016 heralds some interesting changes at Ausrocks and Caged Rocks. Firstly, I will step down as Managing Director of Ausrocks on 3 February 2016. I have much pleasure in announcing that Carl Morandy will become the Managing Director. Carl and our team including myself as a Director will continue the great vision and accomplishments that Ausrocks has achieved to date.

I will maintain my role as Director of Caged Rock and will work with Nick Virisheff to develop this exciting business.

Kind Regards, Alan Robertson, Director Mob 0402 445 418

### Caged Rock News



Our caged rock business continues to utilise our unbridled enthusiasm, artistic talent and design skills.. Recent installations have included:

- A gabion wall in Arndale constructed by Dennis Attrill.
- A gabion wall in Rockhampton
- A front feature wall and letterbox surround for a luxury home in Carindale.
- Supply of screened washed sandstone for the Degani Restaurant at the new Westfield NorthLakes.
- A unique set of gabion steps with basalt caps for treads.



**Top Gun Gabion Installer Dale Brown in Action**

If you want to see some of our gabion products or discuss your requirements, do not hesitate to visit the Ausrocks office. Ring 07 3376 6839 and ask for Alan or Nick on (07) 3376 6839.

### Tunnelling News

#### ATS Short Course Brisbane

The Australasian Tunnelling Society Queensland Branch hosted "The ATS Tunnel Design & Construction Short Course 2015" over 2 days at the Marriot Hotel Brisbane and a half day workshop at Mt Coot-tha Quarry. Over 125 delegates attended, with the topics covered as follows:

- Underground Excavations by Road header;
- Managing Risk in Construction;
- Geotechnical Models and Interpretation for Tunnel Projects;
- Tunnel; Design Overview;
- Design of Rock Tunnels;
- Design Precast Segment Tunnel Linings;
- State of the Art Vertical Development – Civil Projects;
- Management of Geotechnical Risks Associated with TBMs in Urban Areas;
- Comparative Australian Procurement Models for Tunnel Projects;
- Testing, Exercising and Operational Readiness;
- Mine Support Design and Implementation;
- Building Settlement, Instrumentation and Monitoring;
- Micro tunnelling & HDD Methods; and
- Groundwater Control.
- Discussion on Tunnelling-Quarrying Interface
- Geotechnical Features and Challenges of the Brisbane Neranleigh Fernvale Group

The Short Course was targeted at tunnelling practitioners who wanted to bring their knowledge up to date, learn about related fields in which they not have direct experience and for young engineers and students to gain an understanding of the work involved in the design and construction of tunnels.

Ausrocks, with the assistance of Rob Bell, Quarry Manager and a number of tunnelling equipment supply companies, consumable suppliers and geotechnical consultants, coordinated the half day workshop on the Friday of the conference. This was at Mt Coot-tha Quarry, featuring a number of practical tunnelling applications around the Conveyor Tunnel Portal that was used to transport spoil from Legacy Way into the Western end of the Quarry. The workshop completed practical demonstrations in shotcreting, rock bolting, membrane installation and fire safety. As part of the Workshop, In his Friday presentation, Alan Robertson presented a number of scenarios whereby existing quarries in or around the CBDs of major cities could be used for placement of waste from a nearby tunnelling infrastructure project. Uses of this waste vary from placement as a fill material to providing material for recycling as road base or even aggregates.

Author: Dale Brown, Mining Engineer

On 1<sup>st</sup> September 2015, Dale Brown took a position as Mining Engineer for Ausrocks. Dale also assists in Caged Rock fabrication using his wide practical experience gained in the quarrying and mining industry over the past six years.



# AUSROCKS



Presentations made at the Marriot Hotel



Fire Demonstration by Stacey Agnew

## ATS Golf Day

Ausrocks once again sponsored a hole at the ATS Queensland Branch Charity Golf Day supporting the RBWH. The weather held out for a cracking day of golf with over \$12,000 raised for the Royal Brisbane Women's Hospital Foundation.



Rock Bolting completed by Team Rock Anchors and Bluey



Photo of the Ausrocks team at the Sponsored Hole

## **“Clever Innovation in the Mining and Quarrying Industry”**

In all industries, innovation of real time solutions has been the drive for productivity efficacy. In the mining and quarrying industries, continuous improvement of reporting systems, coupled with the economic downfall has resulted in a drive to improve the methods for production reconciliation and site planning. The introduction of Unmanned Aerial Vehicles (UAV) commonly referred to as 'drones' as a viable alternative to traditional surveying methods is a ground breaking innovation that is resulting in a rapidly changing landscape. Although the initial introduction of UAV's has been met with resistance by the surveying industry as another destructive innovation, this technology has now been widely embraced as a



Herrenknecht-Hilti Corbel Drilling Display



Shotcreting completed by Jemna and Holcim



viable alternative for some site surveying and inspection tasks.

As part of our progressive innovation, service improvement and desire to serve our clients better, Ausrocks has added a drone surveying system to our surveying capability. Using our new Phantom 3 Advanced UAV system will cut down the turnaround time and cost of doing stockpile volume estimates and pit design modelling. Our investigation and test runs with the drone shows an impressive level of accuracy in stockpile volume reporting with about 50% improvement in turnaround time compared to conventional methods.

In addition, real time pit face updates and geotechnical investigations can be carried out faster by using the drone system to access difficult or near impossible access areas. Trials have also been undertaken to use overlapping geotagged aerial photos from the drone to produce up to date aerial photos that can be used to update Google Earth or NearMap aerial photos for site layout plan, disturbed and stormwater management plans.

## Rally Car under Construction

Progress has been a little slow with the Renault but we are catching up on progress over the Christmas break. A few photos below will show you what the "beast" will look like when completed.



Thanks to Mobile Conveying Services for their ongoing support of this project in 2016.



## A Lance for when a Cannon is Overkill.

It goes without saying that dust is a factor in the mining and quarrying industry - it makes up half the word "industry" and dust suppression is a key component in keeping the workers, neighbours and regulators happy. However big and bulky equipment can cause more problems than they solve.

Tecpro Australia's new and first L3 Fogging Lance is the answer to bulky, turbine - operated dust cannons. Its design incorporates a spray nozzle rather than a cannon mechanism that allows close range suppression without the interference of air turbulence.

The spray nozzle mechanism provides the L3 Lance to have a choice of spray actions across various throwing distances, based on each application needed; making it perfect for close range indoor applications.



The L3 Fogging Lance used to reach a dusty pile indoors, accessing through supports.

# AUSROCKS

## Town Planning News from Wendy

For more information on Town Planning, contact Wendy Wood at Ausrocks in Buderim Tel 07 5746 9691 or Mobile 0418 405 006

Now available in Australia, the L3 Fogging Lance provides a powerful performance with low water usage and low energy consumption making it ideal for businesses requiring close range or indoor dust suppression.

For more information on the L3 Fogging Lance and other dust suppression equipment suitable for your situation, contact Tecpro on 1800 TECPRO (02 9634 3370) or visit [www.tecpro.com.au](http://www.tecpro.com.au)

## Feasibility Study Masterclass

On the 4<sup>th</sup> of November, Adebayo and Dale attended a Feasibility Study Masterclass hosted by The AusIMM and held at the University of Queensland.

The Masterclass involved a number of guest speakers providing real life examples and case studies across a number of key feasibility inputs covering topics such as:

- Feasibility Study Process Overview
- Geological, Metallurgical, Infrastructure, Financial and Environmental influences on Feasibility
- Oyu Tolgoi, Mongolia Case Study

Most of the presenters focused on the key changes in the requirements for feasibility studies at different phases of the mining cycle. At the peak of the cycle, a greater importance is placed on completing feasibility studies faster with lower levels of accuracy to take advantage of favorable market conditions. The risk is mitigated in these circumstances because if a feasibility study is inaccurate, more often than not high commodity prices will compensate and the project can still be profitable.

At the current phase in the cycle, a greater importance is placed on mitigating the risk of a project through careful analysis.

Finally there was a panel discussion with each of the guest speakers with questions opened to the floor. This enabled an informal discussion regarding a number of key presentation topics.

The Ausrocks project valuation team consists of Alan Robertson, Carl Morandy and Dale Brown. They have completed a number of valuations of large and small quarry projects over the past 6 months. For any assistance please contact Alan on 0402 445 418 and Dale on 0437 833 253

## For more information on Ausrocks and Caged Rock:

Visit: 17/71 Jijaws St, Sumner Park, Q4074

Ring: (Office Hours) 07 3376 6839

Ring: (After Hours) 0402 445 418

Email: [alan.robertson@ausrocks.com.au](mailto:alan.robertson@ausrocks.com.au)

Our Web-site is: [www.ausrocks.com.au](http://www.ausrocks.com.au)

Caged Rock: [www.cagedrock.com.au](http://www.cagedrock.com.au)

For Town Planning enquiries, please contact Wendy Wood at 32 Cottman St, Buderim, Q4556:

Mobile: 0418 405 006

Email: [wendy.wood@ausrocks.com.au](mailto:wendy.wood@ausrocks.com.au)

## Latest DEHP News:

For a while now we have been hearing that EHP have been transforming into a 'compliance based' regulator. Long gone are the days when officers would come to site and show operators how to work towards best practice. The general approach now is for the EHP to act like environmental police and take action when the rules are broken – but is this such a bad thing?

I would argue that in general terms the environmental compliance landscape is still the same as it ever was. Conditions of approval are given at the start of the project and if you break the rules then there may be consequences. The main difference now is that when EHP visit site, they go through the site's Environmental Authority (EA) with a fine toothed comb and take action where non-compliances are found whereas in the past a site visit would generally involve looking at the areas on site that pose the greatest risk of environmental harm and only taking action when needed. If you want a heads up on what EHP will be looking at next time they visit your site it would be worthwhile sitting down, grabbing a cup of tea and having a thorough read of your EA or discussing it with Ausrocks personnel (Alan, Carl, Adebayo, Wendy, Dale).

So what is the secret to keeping on the good side of the law? Comply with all of your Environmental Authority conditions of course! This is always easier said than done but with a structured approach compliance can be met by tackling the big issues first then working through the smaller items. EHP don't expect miracles overnight and are always willing to set realistic timeframes for meeting the conditions. All too often Ausrocks have been brought in late in the compliance process - we are here to help!!!

## Interesting Signs and Safety Procedures

If you have a funny sign or a sticker or a photo involving safety (or if it is just funny) that is just not quite right, please send to:

[Alan.Robertson@ausrocks.com.au](mailto:Alan.Robertson@ausrocks.com.au)

Check out the weather forecasting stone at John's Quarry,

