

**JSW**  
LEADERS THROUGH  
INNOVATION

**DrillTorque**

**WINTER 2019**

**03 HEART OF COMPETITIVE  
ADVANTAGE**

**04 CALLIDE REACHES  
100,000 MAN HRS**

**08 CUSTOMISED  
DRILLING**



# A MESSAGE FROM OUR CEO

**Welcome to the Winter 2019 edition of DrillTorque.**

We have enjoyed another period of growth since our last edition, with the recent increase in tendering activity providing positive indications of industry stabilisation and good further future growth opportunities for JSW.

In this edition, we look forward to updating you on the company's activities and our achievements in the past few months.

## INNOVATION

To support the growth of JSW, innovation has been at the core of the company's activities and this has been driven across all sectors of the business. This continues to strengthen our competitive advantage with our existing clients and on potential new projects.

Some notable initiatives include:

- The rollout of SMT 2.0 JSW's new billing and reporting systems: successfully launched company-wide in the first quarter of 2019 and continues to expand and integrate with our other cloud-based systems
- The introduction of rugged tablets: enabling a single source of data entry for all drilling and blasting reports, client data, invoicing, labour inputs, safety recording (PSI & pre-starts) plus incident reporting as well as collection of smart drill data from multiple sensor points on our drills
- The JSW Business Intelligence dashboards: recently finalised using the BI platform, an online project summary dashboard which sources data from Pronto, Lucidity and SMT 2.0 and summarises all data for projects.

## HEALTH AND SAFETY

The JSW Team at Solomon recently participated in a Fatigue Management Training refresher, whilst a Mental Health Awareness training program was completed at Callide and Solomon during March and April. In addition all JSW Trainers are progressively completing the new TAE16 training accreditation courses to ensure that our training deliverables are to the highest standards.

***SAFETY FIRST: 5-YEAR LTI FREE FOCUS FOR 1ST SEPTEMBER!***

## PROJECT UPDATE

- **Alcoa:** Safe sampling operations on 30+ degree slopes have been completed with high production rates achieved in the heavily wooded state forests. The Equus drills had no difficulty traversing this terrain despite the challenges for the drill crews in walking, standing and working on these steep slopes.



- **Fleet Additions:** Rig 86, a Cubex QXR920, has been a recent welcome inclusion to Bald Hill, adding value for our client through cost benefits with greater production capabilities than top hammer drills in wet drilling conditions and on bench flexibility with its small foot print.
- **New Nickel RC Grade Control works at Leinster and Yakabindie:** The mineral division has recently negotiated expanded services with BHP's Nickel West operations including grade control & RC exploration drilling at their Leinster and Yakabindie mines.
- **New Gold Blast Hole works at Ramone Gold Project:** The drill & blast division has commenced a new contract with BGC at Northern Star Resources Ramone Gold project. This is JSW's first contract with BGC and Northern Star Resources. Well done team!

## EMPLOYEE ACHIEVEMENTS

- Congratulations and thanks to Ash Radosevich who has achieved the milestone of 10 years of continuous service with JSW.
- We also wish to thank all staff who have worked conscientiously to maintain our industry leading LTI free safety record as we head towards our next milestone of five years company-wide, LTI free on 1st September 2019. Please continue to prioritise the safety of yourself and your workmates at each and every shift to ensure everyone can return home safely every day.



Live data technology at work at Alcoa

## INNOVATION – THE HEART OF OUR COMPETITIVE ADVANTAGE

*The application of new technologies and the increasing use of data are becoming commonplace in modern business and industry.*

More and more, our clients want to see benefits from the use of data, both in the planning and execution of their projects as well as for the purpose of delivering operational efficiencies and streamlining systems and processes.

The smart business systems we employ at JSW are not only improving the way we run our own business, they are influencing and shaping the manner in which we implement projects on behalf of our clients.

We are able to strengthen our competitive advantage through innovation and provide tangible improvements to our clients in the areas of productivity, efficiency, safety and cost control.

### ***Harnessing our data automation and live data capabilities***

An area where we are making an impact is in data automation and the use of live data. Our clients want access to automation technology and services that leverage and apply live and historical data for better project outcomes.

A proactive approach to innovation and our position as an industry leader in customised drilling services is allowing the setting of new benchmarks in data automation.

JSW smart business systems deliver fast and accurate drill and production data in real-time to facilitate meaningful resource definition, analysis and reporting. They also provide a single point of entry and verification for accurate and timely information, have the ability to work within rigorous frameworks and can be easily integrated with corporate systems.

Smart Drill Data (SDD) delivers significant time and cost efficiencies by enabling more accurate and timely data capture and transfer from site. It also reduces processing times and facilitates greater visibility of project progress and productivity.

#### **Smart Drill Data (SDD)**

- Single point of data entry
- From sensors to high speed communications



The SMT production database 2.0 works in tandem with SDD, seamlessly providing direct and timely access to the drilling data via our client portal. This includes access to productivity and efficiency data, record of works, including fees and revenue.

#### **SMT 2.0**

- Direct portal to production databases
- Secure web or mobile APP interface
- Drill down analysis and reporting



### ***Planning for future development***

While these tools are effective in adding value it is important that there must be an on-going evolution of systems and processes that enable the further development of customised solutions.

We are in the process of patenting several new technologies that will further enhance our capabilities in drill automation and the application of live data and keep us at the forefront of innovation.

#### **The real time transfer of data from site to office**



WINTER 2019 – JSW DRILLTORQUE



Rig 86 in operation at Bald Hill

## BUSINESS UPDATE

### VERSATILE RIG 86 GETS RESULTS AT BALD HILL

With a flexible yet robust drill fleet required for Bald Hill, Rig 86 has been a welcome inclusion.

The fleet now consists of four GD5000's, a Sandvik DR580 and a Reichdrill RD350.

The Bald Hill crew predominantly drills 127mm blast holes in its ore shots and 165mm holes in waste, both of which are capable with Rig 86 with the simple change of the hammer.

This additional firepower is adding value for our client through cost benefits, greater production capabilities and flexibility.

## CALLIDE REACHES LTI FREE MILESTONE

*The team at Callide recently reached the significant milestone of 100,000 man hours LTI free since the start of operations in March 2018.*

The team currently has 49 employees on site, 65 percent of whom are local to the region, which is fantastic for the surrounding communities.

The LTI milestone achievement is a credit to all project staff who actively and consistently assess workplace risks, implement preventative actions and ensure effective communication on site.

Great work team Callide.



**100,000  
MAN HOURS  
LTI FREE**

Members of the Callide team





## UNLOCKING THE POWER OF OUR BUSINESS SYSTEMS

***The words Pronto, Lucidity and SMT 2.0 have become part of our everyday vocabulary at JSW over the past few years.***

The systems and processes that we use daily at JSW are a sign of the ever-changing dynamics of our work environment. They are also essential building blocks that assist us to manage and continually improve every facet of our business, whether it be on site, in the workshop or in the office.

The JSW business system connects all of our integrated process steps, enabling them to work together to support and achieve the business strategy by:

- Improving performance - providing up-to-date information on areas and processes requiring improvement and creating a better understanding of how to meet the needs of customers.
- Meeting customer expectations - improving JSW's brand and how it is presented to our community, including customers, employees and suppliers.

- Employee engagement - enabling all employees to work more efficiently and effectively, and harnessing the ideas and creativity of our employees to increase engagement.
- Reducing cost and increasing profits and efficiency - providing real time access to data in order to allow timely and well-informed decision making.

### **BI Dashboards**

The BI platform is an online project summary dashboard which sources data from Pronto, Lucidity and SMT 2.0 and summarises all data for projects.

Dashboard information includes daily, monthly or YTD summaries with monthly target, forecast and budget data, and informs management of expected progress, cost and performance information.

On demand reports can be designed by contacting the Business Intelligence Team at [support@jswaustralia.com](mailto:support@jswaustralia.com).

## TRAINING IMPROVES UNDERSTANDING OF MENTAL HEALTH

All JSW Staff at Callide and Solomon took part in a mental health awareness program which was launched during March.

Training, included a two-hour session for all employees and a six-hour Mental Health Awareness Program for Leaders session for Supervisors and Managers in April.

The training is supplemented by a series of toolbox presentations that aim to maintain awareness of mental health and facilitate on-going communication with staff on this very important community wide issue.

The training highlighted the many aspects of mental health, including its ever-changing nature and the hidden issues that people face both in the workplace and their personal lives.

If not checked, mental health issues could affect our zero compromise approach to safety and increase workplace risk.

Anyone who works in mining, resources or remote construction knows mental health problems can be a big issue. The travel and rosters can be hard, the work even harder, and worksites can be very challenging – all of which can dent even the toughest of us. Mental health problems have a huge impact on individuals, families and business.

Smart companies recognise that professionally designed and implemented mental health and suicide prevention programs make a significant positive difference to staff safety and wellbeing, productivity and profitability.

If your company takes mental health seriously, Resource Minds really is the only program you need to consider.

**Investing in the mental health of your staff just makes good business sense.**



## TRAINING RAISES FATIGUE AWARENESS

Solomon staff recently took part in FMG's fatigue management refresher training course, which examined all aspects of fatigue.

Topics covered during the four-hour course included defining fatigue and understanding its symptoms and associated risks, to the impact of fatigue on sleep patterns and how it could be managed.

The course offered practical advice to staff to raise their awareness of fatigue and the impact it can have on their lives as well as the business.

The training illustrates our commitment to collaborating with our clients to protect our valuable human, physical and material resources and to ensure that our core value of SAFETY remains a top priority across the entire business.

## RIG 10 STAYS BUSY AT MT MAGNET

The first RC Grade Control program for Ramelius' newest open pit, Eridanus, is underway at Mt Magnet.

Rig 10 crews completed the first of several 18,000m drill programs in May. There will be several similar programs completed over the coming months in pursuit of the planned target of over 140,000m for the pit.

The focus is on ensuring the completion of safe high-quality samples and productive metres with the rig more than 2,000m in front of the planned target. All crews must be commended for their unwavering dedication to SAFETY with the highest quality samples.

### Safety Innovation

Rig 10 is pioneering innovation in safety at Mt Magnet with the implementation of a new sample table design.

The new design has a hanging platform from the splitter.

From the trials completed with Rig 10 this design has now been rolled out across the fleet.



The new sample table

## SOLOMON CREW SALVAGES SURVEY TOOL

**Rig 6 crew members at Solomon recently assisted Pilbara Wireline Services in retrieving a survey tool which had become stuck down an open hole.**

The tool is used to measure the hole for deviation from the direction of hole, magnetic susceptibility and natural gamma after the hole has been drilled and the drill pad cleared. The survey tool is lowered down the hole using a wireline.

At times, the walls of the hole cave in on top of the tool and it gets wedged or 'bogged', which requires the use of a 'fishing tool' to retrieve it.

These survey tools can cost hundreds of thousands of dollars. Depending on the type of tool and its radioactive content, if a tool is lost down the hole, ore within 50m of the tool cannot



Mount Sheila

Wittenoom

Mulga Downs

Karijini National Park  
Karijini

be mined for many years, which can have a costly impact for clients and the development of the mine... so it's a big deal when we retrieve it!

The supervisor on site, Jamie Pitman, has extensive experience drilling in the Pilbara and has 'fished' survey tools at Solomon in the past with a 100 percent success rate. Working under a JHA developed between JSW and Pilbara Wireline Services, Jamie, with the assistance of Offsider Lachlan White successfully fished the tool out from 50m deep down a hole.

Well done team!

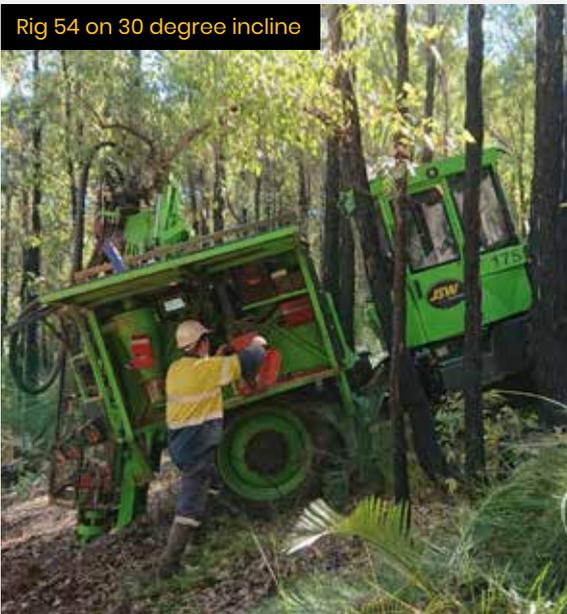
## THE 30 DEGREE CHALLENGE

**Innovation and determination go hand in hand with our Equus rig crews at Alcoa.**

JSW crews operating Equus rigs have proven they can be operated in steep terrain whilst maintaining production. Despite the terrain creating a challenge for crews when standing and working, Rig 54 (pictured below) was able to work on slopes steeper than 30 degrees.

The crews showed DETERMINATION and persistence to ensure that the work area was successfully drilled out.

Rig 54 on 30 degree incline



127mm bits – Black Diamond (left), Epiroc (right)

## EQUIPMENT TRIALS SHOW POSITIVE RESULTS

**The trialling of several brands of bits and hammers at Bald Hill is providing valuable information that will help improve efficiency and ultimately reduce costs.**

The trials are ongoing with the primary purpose of increasing the life expectancy of our drilling consumables, reducing costs, and minimising the occurrence of broken consumables or metal being left in the ground.

Improving the quality of our drilling consumables ensures that we minimise the chances of them entering the crushing circuit when lost in ore zones. Should this happen, reclamation may be required post-blast at a specialised GET (Ground Engaging Tools) reclaim stockpile using a metal detector.

## CUSTOMISED DRILLING SOLUTIONS SUPPORT SAFE AND EFFICIENT DEWATERING PROGRAMS

*Customised drilling solutions, including some bores pushed out to over 500m horizontal depths, have enabled the successful completion of multiple dewatering programs for BHP, Citic Pacific, Mineral Resources and Regis Resources in recent months.*

Deep depressurisation bores drilled to up to 500m in gold, iron ore and nickel



The Vermeer drill completing horizontal dewatering bores at Nickel West

In keeping with our commitment to best-practice, we have ensured that these programs have been carried out safely, without an environmental impact, on schedule and within budget.

Versatile Vermeer D100X120 drill rigs were used to deliver a comprehensive solution, including the drilling of the holes at a distance of over eight metres away from pit wall, installation of casing, grouting, and well-head connectors. The rigs are capable of drilling both air hammer, air rotary and mud rotary holes dependent on ground conditions.

Specialist Tatra hook trucks supported all of the drilling activities, eliminating the need to access the back of the truck and bringing the trays containing all of the compressors, drill rods, water and service modules and other support items down to ground level. The use of the single hook truck further enhanced safety by reducing vehicle numbers in the active mining area.

### **Impact at Nickel West**

A horizontal depressurisation drilling program was successfully implemented at Nickel West Mt Keith.

The Vermeer D100X120 drilled 127mm holes to +150m at minus 5 degrees inclination, with each 150 metre hole completed within a single shift.

The use of a directional drill rig, where the operator is well clear of the high wall during drilling, ensured that high safety standards were applied at all times. A number of working at heights issues were overcome by locating drill-hole collars about a metre above the bench level, which assisted the efficient installation of casing and dewatering plumbing.

The drilling program was completed on time and within budget and was endorsed by BHP.



## DRIVING INNOVATION WITH SMT 2.0

*JSW continues to drive innovation with development of its new proprietary production, billing and reporting system, SMT 2.0.*

The idea for the system was conceived in late 2017 when JSW began migrating all of its major software systems to cloud-based solutions. Development began in early 2018 and included the purchase of rugged, fit-for-purpose tablets for use by drillers, supervisors and site administrators to input a vast range of data.

Following ten months of development and testing, SMT 2.0 was successfully launched company-wide at the beginning of 2019. Since then, the system has continued to expand and integrate with other cloud-based systems to form a cornerstone of production, billing and reporting.

Since inception, JSW has had a continued vision to streamline and maximize efficiency of its data recording, processing and reporting. The EMS system was developed in 2004 and redeveloped as SMT in 2007, forming a solid bedrock of data handling from which JSW was able to rapidly expand.

As part of its core drive to be a leading innovator in the drilling industry, JSW continues to plan and implement solutions for a future with greater integration of systems, technology, machinery and automation.



## NEW DIGITAL RECORDING SYSTEM ROLLED OUT

*Drilling crews and Supervisors at Callide and Bald Hill are being trained in the use of our new tablet-based information recording system.*

The new system, which has been operating at the two sites since April, is used for daily production reports, pre-start inspections, supervisor timesheets, leave forms, and pre-start instruction meetings.

On-going training and refinement is taking place to integrate the system as a seamless reporting tool across the entire business

This change will eventually lead to the phasing out of paper-based recording and reporting.



## BLAST OPTIMISATION IMPACT AT BALD HILL

*A high degree of success has been achieved in blast optimisation projects at Bald Hill.*

This has enabled site teams to expand burden and spacing in waste shots, which has decreased powder factors and literally given our clients 'more bang for their buck'.

The team has been able to deliver a saving in the overall cost of blasted bulk waste materials with no impact on dig rates for the excavator fleet.

A classic win-win outcome.



## OUR CULTURE – HOW OUR VALUES DRIVE SUCCESS

*JSW's reputation is built on our ability to exceed clients' requirements, utilise best practice principles and apply our broad industry experience to solve challenges and deliver commercial advantages to our clients.*

Our ability to consistently achieve and replicate positive outcomes across our business is underpinned by a strong and vibrant culture, built as much on 'mateship' as it is on entrepreneurship. Team work and innovation, operating safely, and embracing technology through data analysis to add value to our clients are all hallmarks of our culture.

## OUR VALUES

### **PASSION**

We are passionate about doing what's right

### **COLLABORATION**

There are no limits to what we can achieve together

### **DETERMINATION**

We are persistent in our pursuit of continuous improvement and the delivery of our objectives

### **SAFETY**

Zero compromises

In turn, our VALUES guide us in everything we do, further strengthening this culture.

The safety of our people is paramount. This is highlighted by our dedication to safety awareness and incident prevention and enabled us to achieve an industry-leading milestone of 1700 days TRIFR free as at 29 April 2019.

As an organisation, we have a clear expectation of continuous improvement which is demonstrated by the creation of purpose-built drilling equipment and the implementation of a number of new business systems and processes which have greatly improved efficiency across the business.

We appreciate the efforts of all staff who work as a team to consistently achieve outstanding results for our clients and ensure that we remain competitive as a leader in the Australian drilling industry.





## INCREASED SAFETY FOCUS AT BALD HILL

We continue to seek ways to continually improve all aspects of our business. At Bald Hill the site leadership team has been focusing hard on our lead safety indicators.

As a result of this focus task observations were increased by almost 50 percent over the last three months.

This directly led to a reduction in the incident rate, with incidents per man hour to March 2019 dropping by a third against incidents for calendar year 2018.

Bald Hill commenced operations in January 2018 and reached 200,000 man-hours in March this year.

**FOCUSED  
TASK  
OBSERVATIONS  
INCREASED  
BY ALMOST  
50%**

## SOLOMON CREWS 'TAKE CONTROL' OF SAFETY

The FMG 'Take Control' safety system has been introduced at Solomon, replacing the former 'Take 5' system.

The implementation follows a workshop held to determine the six safety-related questions each crew must ask before starting any task relevant to their activities.

Before the workshop, members from the drilling and maintenance crews each suggested questions which were then combined and voted on by the crew to determine the top questions for each department.

The questions were then presented and discussed at the workshop before being agreed.

'Take Control' cards have been produced and the system is now being applied by the drill and maintenance teams.

Drillers offsider, Jeremy Wear represented Solomon at the workshop, which was held at FMG Head Office in Perth in April.

		<b>TAKE CONTROL</b> EXAMPLE	
NAME: _____		DATE: _____	
TASK: _____			
<b>MY EXPOSURES</b>		YES / NA	NO
Prior to working on any equipment, I have adhered to the Isolation process and ensured a zero energy state		<input type="checkbox"/>	<input type="checkbox"/>
I am Fit For Work and my equipment is safe and Fit For Purpose		<input type="checkbox"/>	<input type="checkbox"/>
I have identified and controlled all potential Line of Fire, Stored Energy and Dropped Objects hazards		<input type="checkbox"/>	<input type="checkbox"/>
I have a clear plan in mind that has been communicated to all crew members, and I will pause the job if the task or conditions change		<input type="checkbox"/>	<input type="checkbox"/>
I have considered alternative methods for Manual Handling		<input type="checkbox"/>	<input type="checkbox"/>
Is the work area free from hazards and obstructions, and exclusion zones / barricading are in place as required		<input type="checkbox"/>	<input type="checkbox"/>
<b>HOW I WILL TAKE CONTROL</b>			
_____ _____ _____ _____			
<b>Do the Task!</b>			
If "NO" to any of the above, complete a JHA or see your supervisor before you proceed.			



## MOCK EMERGENCY KEEPS SOLOMON TEAM SHARP

**A bi-annual mock emergency drill was undertaken with the Emergency Response Team (ERT) at Solomon during May.**

Lasting for 30 minutes, JSW staff and ERT members faced a scenario where a Supervisor had sustained a snake bite to his ankle.

Six JSW staff from Rig 5 and three FMG staff participated in the drill.

Members of Rig 5 were praised for responding well to the initial calls for assistance from the snake bite victim.

Their calm communication and team work during the exercise was commended and all crew members were recognised for their good application of first aid treatment.

The exercise was a good experience for new members of the team, who were given hands-on roles and were able to learn more about the emergency response system.

**CALM COMMUNICATION  
AND TEAM WORK**



Solomon team mock emergency drill

**PASSION  
COLLABORATION  
DETERMINATION  
SAFETY**



**PASSION**  
COLLABORATION  
DETERMINATION  
**SAFETY**

## **NO JOB TOO STEEP FOR BODDINGTON TEAM**

*The team at Boddington was challenged with some steep contour drilling recently with new drill areas opening around the mine.*

Initially the team encountered some spots that they thought they might not be able to drill, but they showed DETERMINATION to safely plan the works and get the job done.

The solution was to drill the entire pattern by approaching it from different angles while ensuring that drilling always took place well within the manufacturers operating guidelines.

This was done safely through application of JSW's contour drilling procedures.

**PASSION**  
COLLABORATION  
DETERMINATION  
**SAFETY**

## **ALCOA'S 'KNIGHTS IN SHINING ARMOUR' TO THE RESCUE!**

*Our Alcoa team came to the rescue of a lone traveller, bogged in a forest, and stranded for four days!*

The lone woman was bogged in a remote area of the Jarrahdale State Forest after she had taken a wrong turn and tried to manoeuvre her camper van around a fallen tree.

Fortunately, a JSW drill crew was travelling in the vicinity and found her. Much to her relief, they could lend her a hand and get her out of this tricky situation.

The vehicle had no tow points, so the crew used jacks to raise the front of the van to free it and helped the woman on her way.

With SAFETY always at the forefront, our team left her with a friendly word of advice about the importance of having a communications device when travelling in remote areas. To our team, always travel safe!

## STAFF DONATE \$675 TO CANCER CAUSE

*Contributions by JSW and some of its staff during the Children's Big Day Out last Christmas has seen \$675 donated to the Lions Cancer Institute.*

On the Big Day Out, cancer, handicapped and special needs children leave hospital and are taken out for the day, which for some is a first-time experience.

The special little ones are given refreshments and show bags, watch a pre-released movie, and receive a visit and gifts from Santa Claus.

The Lions Cancer Institute does not receive Government funding and relies on donations to make the event happen.

We would like to thank all staff who generously contributed to this worthy cause.

## SUPPORTING THE LIONS CANCER INSTITUTE MEANS SUPPORTING:



**4278 PEOPLE WHO WERE SCREENED FOR SKIN CANCER IN 2018**



**12000KM THAT WERE TRAVELLED TO ASSIST THOSE IN REMOTE AREAS**

## 14 HR UPDATE



### HARD WORK IN STORE FOR NEW STARTER

*A full-time Storeman has been added to the Bald Hill team with the objective of optimising onsite stores, ordering and logistics.*

Danny Conroy joins the team at just over 12 months into the project. His appointment coincides with the roll out of Pronto across the business.

Significant improvements are evident across the board in the maintenance and stores department from implementation of the new systems.



## ASHLEY RADOSEVICH CELEBRATES 10 YEARS' SERVICE

***Congratulations to Ash Radosevich who has achieved the commendable milestone of 10 years of service at JSW Australia.***

Ash is an experienced Senior Driller currently based at the FMG, Solomon project. He first started with Strange Drilling in 2009 as an Offsider carrying out exploration drilling on Rig 8 at Menangina Station, located just outside Kalgoorlie.

After working at the Menangina Station Project, Ash went on to work as an Offsider during the exploration stage at FMG's Solomon, Bonniedoon, Delphine and Eliwana projects, before moving to grade control drilling for Crescent Gold and AI Minerals.

Following these projects, using the knowledge and experience gained in the field, Ash went on to work as a member of the Maintenance team at the Kalgoorlie workshop. It was during this time that Strange Drilling became JSW Australia.

In 2011 when JSW returned to FMG Solomon to complete resource definition drilling, Ash became a full-time Driller on Rig 5 before being transferred to Chichester.

We wish to recognise Ash's hard work and loyalty to the company over the past decade. Ash is a productive driller who has matured into his senior role and is very experienced in the challenging and differing ground conditions in the Pilbara. He is an asset to the company and always works well with his fellow crew members.

Please join us in congratulating Ash on his achievement.

## CELEBRATING OUR SERVICE MILESTONES

In each edition of DrillTorque we acknowledge team members who celebrate their fifth and tenth anniversaries with the company. Congratulations and thank you.

### TEN YEARS

NAME	START DATE
Ash Radosevich	6 June 2009

### FIVE YEARS

NAME	START DATE
Lance Pink	6 January 2014
Alistair Camm	5 March 2014
Mitchell Cunningham	18 March 2014
Dean Robins	1 April 2014
Michael Purcell	14 April 2014
Shane Higgins	15 April 2014
Jason Shanks	27 June 2014
Chris Smythe	2 July 2014



**JSW**

**PASSION  
COLLABORATION  
DETERMINATION  
SAFETY**

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