LA COLORADA SHAFT: FACING THE CHALLENGE

PT Redpath Indonesia Celebrates Achievement 15 Years in the Making!

Redpath Takes the Spotlight at Expomin 2016
SAFETY MESSAGE

“We MUST inspire our people to add value through continual improvement and innovation. In return, this will help us achieve Health, Safety, Environmental and Operational excellence”.

Graeme Christie - Manager, Health, Safety, Environment and Quality, Redpath Australia Pty Limited

Innovation brings new ideas, processes, methods or products that can change the way we do things in a positive way. It is also one of the key contributing factors to ongoing continual improvement strategies that helps our business achieve positive results in Health, Safety, Environmental and Operational performance.

It is important to ensure we harness the innovative creativity and knowledge of our people across the business and encourage them to work together to develop new ways to address current and future challenges.

The mining industry continues to struggle in the midst of the longest and deepest downturn anyone in the industry can recall. Metal prices started trending downward in 2011 and, given the weak economic outlook for global growth at the present time, no one is forecasting a rebound in the prices of economically-sensitive commodities anytime soon. It appears we are going to have to endure tough times for a while yet.

The good news is that Redpath is doing relatively well at present. Our Work-in-Hand (backlog) levels are reasonable, although not as well balanced by region as we’d like to see. Safety performance for the Group has been very encouraging for the first five months of 2016 and I remain optimistic that we can continue to do our work safely and productively.

We have recently been awarded additional work in South Africa (Maseve Mine), the United States (Stillwater), Australia (BHP Olympic Dam), Mongolia (Oyu Tolgoi), Chile (various Raiseboring projects), and in Europe we’ve been designated as the preferred contractor for the Sirius Minerals York Potash project. Thanks and congratulations to everyone involved in these and other projects we’ve been awarded recently!

As we move forward during these tough times, we need to focus on the things we can control such as our costs, our productivity and ensuring safe work practices are followed each and every day.

George Flumerfelt, President and CEO
The Redpath Group

PRESIDENT’S MESSAGE

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Table of Contents

Safety and President’s Message 02
Global Community 03
La Colorada Shaft: Facing the Challenge 06
Onsite: Miner Details 10
Safety - First, Last and Always. 12
Guest Spotlight 16

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Safety - First, Last and Always.
our future. At Redpath, we have a long list of great clients for whom we have had the privilege of serving for many years. We also have the teams around the world that I know will meet the ongoing needs of our customers.

The good news is that our business is cyclical and every day we get closer to the inevitable upturn. When we get there, Redpath will be well positioned to take advantage of the good times!

Dedication to Education Creates Success!

Congratulations to Lucas Malapane who graduated in March 2016 and received his B. Tech Degree in Human Resource Development.

Lucas has been with Redpath Mining South Africa since January 2007, where he commenced his employment as a PTV underground, which is an entry-level occupation in South Africa. He was promoted to training instructor in August 2007 and he became a trainee Training Officer in August 2008. In 2010, he had been appointed to his current position of Skills Development Facilitator, which is a fantastic achievement in itself!

It takes a lot of effort and courage to complete a tertiary qualification on a part-time basis and we commend Lucas for his perseverance and wish him all the best for his future career with Redpath.

Upon entering the water, the chilly 21 degree water fills your wetsuit and before you know it, you are 100 metres into the ocean. Stroke after stroke, swell after swell, you realize the beacons are nowhere in sight! Once you catch sight of the red beacon at Kings Beach, a glimpse of hope enters, but then you realize its only halfway in the swim and there is another 1.9 km that awaits (against the tide of course)!

Head down and in your pace, you manage to return to Hobie Beach and touch base with land.

What you don’t realize in hindsight is, that although you have just conquered the swim, what awaits you is a gruesome 180.2 km cycle. Once through the transition area, you set out on two 90 km laps, one of which is the most spectacular bike course on the IRONMAN Circuit. The route takes athletes along the coast at Marine Drive, among sweeping views of the ocean and rugged coastline along a marine protected area, before moving slightly inland at Seaview near scenic countryside. The wind offers a little assistance during the first 45 km, but once turning back, it is like cycling against a Mother Nature wall. After eight hours of cycling you cross the 180.2 km transition line.

The sense of feeling one gets once you set out on the last major hurdle of the IRONMAN is unexplainable. The amount of support you receive on the 42 km run is outstanding. Supporters come down in massive droves (80,000
plus), encouraging participants to keep moving forward. They are there from the start of the race until the cut off time. Braais (ed. note: BBQs) are going, music is playing and everyone is having a great time. By this time it becomes mind over matter; your body is sore and all that keeps you going is a positive mind that says ‘you are going to finish!’

The realization kicks in when you see there are two kilometers to go with supporters clapping, cheerleaders cheering, everybody screaming. For a moment you forget all the pain and you keep moving forward. You come around the last corner and in front of you, awaits the red carpet. This is the first time you say to yourself ‘I have completed the toughest triathlon in the world!’ At this stage it is tough to hold back the emotions flowing through your body and once across the finish line the announcer calls to you and says “You are an IRONMAN!”.

The 2016 event was well organized and everything went according to plan, thanks to all organizers of the race! Despite it being the most difficult endurance race they’ve yet experienced, Kyle and Johan will be back next year to take on the challenge!

**PT Redpath Indonesia Tackles Ngga Pulu Mountain**

by Denny Dyatmoko

Papua is one of the largest provinces in Indonesia, boasting a beautiful mountain range along the North. Among these famous peaks lies one unique mountain in particular: Ngga Pulu. Ngga Pulu is part of the Sudirman mountain range, also known as Puncak Jaya / Soekarno with an altitude of 4,862 meters above sea level (15,951 feet). A peak at the northernmost edge of the mountains is Carstensz, famous for the Carstensz pyramid which is one of the seven summits of the world.

This mountain stands out because of the everpresent snow at its peak, (a very unique trait in a tropical country!) but the height has declined in recent time, due to glacial melting.

The Redpath expedition team consisted of 27 members; 18 Redpath employees and nine escorts. The group began the journey from Tembagapura on March 5th, 2016.

This trip took approximately four hours from the starting point of the climb up to the basecamp (meeting point and a place to rest) traversed by walking along approximately eight kilometers, and continued by a hiking trail to the Ngga Pulu glacier; a distance of three kilometers.

The travel time is affected not only by the distance factor, but also the level of oxygen, environmental temperature (around ten degrees Celcius) and an inclined slope. But, as any Redpath employee can attest, ‘Challenge is an important part of Life.’

The team’s core knowledge of the environment, combined with a high level of enthusiasm, made this trip both safe and successful.

The most important lesson learned during this journey is that teamwork is far more valuable than personal gain. Reaching the peak alone doesn’t carry the same honour as reaching it with your team by your side, and truly, the bonding and comraderie gained during this adventure is priceless!
Ore Handling Technical Paper delivered during MassMin Conference
by Bruce Mennie
PT Redpath Indonesia’s Grasberg Block Cave Engineering Superintendent, Made Pasek recently attended the MassMin conference in Sydney, Australia. He delivered a technical paper presentation for PTRI/PT

Made Pasek speaks during the MassMin conference in Sydney.

Freeport Indonesia covering the Ore Handling System at the Grasberg Block Cave Mine at Freeport. The Ore Handling System is complex consisting of rail haulage, crushing and conveyance systems. PTRI is responsible for rock excavation including lateral, vertical and numerous mass excavation requirements.

PT Redpath Indonesia Strategy Session

A group photo of the attendees at the PTRI Strategy Session

Following four days of discussions on National matters, the National and Expatriate HR team in Tembagapura celebrated with a BBQ, some refreshments and some light-hearted conversation to mark the end of a very busy session.

Australian Innovation Wins OMCSA Award
by Chris Betsill

The Ontario Mine Contractors Safety Association’s Safety Innovation Award is given out annually. Member firms have the opportunity to share their innovations through presentations during quarterly meetings. Each firm is allowed one vote to determine the year’s best safety innovation using a rating system based on hazards

Redpath Australia Lends a Hand in Rescue Effort
by Allan Brady

With news of a trapped worker at the Newcrest Gosowong Project in Indonesia, Redpath Australia was called upon to lend equipment and personnel as back-up to planned rescue efforts. Newcrest intended to reach the miner by drilling a down hole at 700 mm diameter by 40 m long with one of their on-site raisedrills. As insurance, Newcrest requested a Redbore 40 and crew to be on-site and fully ready, in Indonesia, in a matter of days. Significant choreography over the next 48 hours, lead by Raisebore Manager, Allan Brady ensued. Allan and his team of Dana, Pete and Scotty, actioned the release of the drill and accessories by current clients; arranged personnel; drill cleaning; disassembly; crating;

The Redbore 40 is assembled on site at the Gosowong Project.

The trapped miner was rescued safely by means of the Newcrest raisebore work, resulting in the Redbore 40 not being required. This concerted industry team effort rescued the miner and delivered an opportunity to prove the tenacity, perseverance and capabilities of Redpath.

Scotty and the crew begin unloading the Redbore 40 to start assembly.

Accepting the award, from left to right: Kaitlin Elliott, Coordinator, Safety & Training; Kyla McKay, Coordinator, Safety & Training; Michelle Seguin, Supervisor, Health Promotions, Injury Claims & Environment and Chris Betsill, Superintendent, Health, Safety & Environment.

Continued on page 9
In 2014, Redpath was commissioned to complete all engineering for the La Colorada shaft hoisting plant, including the hoist room, headframe, surface ore bins and underground loading pocket. In early 2015, Pan Am awarded the construction work line, and equip and commission the shaft infrastructure for permanent skipping. This task included sourcing suppliers and subcontractors to fabricate the equipment required to complete the work, as well as to supply all of the headframe, shaft steel, surface ore bins, buildings and permanent equipment to provide a fully functioning production shaft.

La Colorada shaft has provided opportunities for Redpath’s workforce to develop innovative solutions to logistical and technical challenges.

To Redpath for of all of its surface facilities, as well as the installation of the Pan Am-supplied hoist. The hoist was required to complete the borehole to Redpath for of all of its surface facilities, as well as the installation of the Pan Am-supplied hoist. The hoist was required to complete the borehole

“It says so much about the team that was put on site back in August of last year, to be where they are now in terms of development, in less than a year.”
A few modifications were required along the way to a final methodology. The original scope of work included lining a 5.1 metre raisebore hole (completed by another contractor) full length with concrete, and equip the shaft with steel sets to accommodate a two-skip ore hoisting plant from the 588 metre level underground to the surface ore bin. Due to difficulties experienced by the raisebore to pilot the shaft from surface to the 618 metre level, the project start for Redpath was delayed by three and a half months, from August to November. These difficulties with ground conditions created discussion about the best hole diameter size to manage the questionable ground, and which variations in the sinking set up would be required. Because the area of concern was located in the upper section of the hole near surface, it was determined that the best approach was to ream full size at 5.1 metres in diameter from the 618 metre level to the 200 metre level, and then change reamers and reduce the diameter to 2.4 metres from 200 metres to surface. This meant a change to the sinking Galloway and the addition of two air Jumbos to be able to slash blast the walls in the upper section of the borehole. The approach for slashing with the Jumbos was proven very successful with actual sinking rates being greater than estimated at the onset of the project by approximately fifty percent.

Another challenge that had to be considered was the variability of the full size 5.1 metre raisebore hole once the top 200 metres of the 2.4 meter hole were completed. Borehole surveys indicated that the hole would be wandering, and there was potential for slash blasts to make the shaft plumb for final alignment. In actuality, the raisebore hole is not aligned, but the amount is consistent (approximately two feet), and confined to only one section of the shaft wall. This resulted in a constant drill and blast cycle in the barrel using hand held pluggers. The advance rate for this section of shaft has been outperforming estimates with the shaft progress averaging twenty percent better than expected.

A major change to the approach was in the shaft manpower. Originally, the crews were to be made up of a mix of Canadian shaft leaders in combination with local Mexican shaft miners to complete the sinking. The delays created by the raisebore contractor put pressure on the Pan Am project team to meet the shaft completion deadline of August 1st, 2016, which translated to a Redpath challenge! There was concern about the assimilation of National miners with Canadian leaders and the constrained time for training of the crews to perform to the level required and still meet the August 1st completion date. This concern, combined with a timely completion of the Éléonore shaft project in Canada, presented an opportunity. The crews were recruited, with permission from Pan Am, since the impact to budget would be a major change from the original scope. The total Expat shaft crew and support personnel; mechanics, electricians and technical support, consists of thirty-seven people. The remaining site positions, including procurement, safety, deck men, yard men and translators were made up of all local personnel, and amounts to another fifteen people.

The common perception of many when they think of Mexico, is the sand and warm weather that most North Americans would flee to when the weather turns to ice.
and snow. However, the location of this mine is in the middle area of Mexico; higher into the hills, at approximately 2,700 metres. The altitude has brought its own challenges, especially during the rainy season, which can span from June to October. The constant daily rain made things challenging when trying to complete civil work for the hoist and winches. Any hole that would hold water would require pumping after every rain, and it seemed like pumping the water out took longer than the rain did to fill the hole back in! The weather did play a role in pushing the concrete pour dates back, which lead to concern over delay on the hoist installation. The saving grace was a crew of electricians and mechanics that wasted no time in working together to make the install as efficient and timely as possible once the concrete was in place. The hoist was installed before Christmas - right on schedule.

“The saving grace was a crew of electricians and mechanics that wasted no time in working together to make the install as efficient and timely as possible…”

The most notable challenge to the project has been the ability to procure. While there are many supply stores, both locally owned and the typical North American-based suppliers that would normally supply tools, materials and equipment, the real change to Redpath’s normal procurement process was the way in which business is conducted in Mexico. It took time to build trust; even with familiar suppliers the company has long-standing relationships with in Canada and the United States. Once things were finally established, procurement of necessary tools and materials became an efficient process.

Presently, the project is nearing completion and will be at the loading pocket level this month. The surface bin house structure is almost complete and the forecast is to be placing the production skips in the shaft at the end of July.

It says so much about the team that was put on site back in August of last year, to be where they are now in terms of development, in less than a year. With the targeted completion date drawing near, there are certainly challenges still facing the team, but there is no reason to doubt that the work will continue to be completed to a high standard, safely, and with no lost time or medical aid injuries. The site has had many visitors from the Pan Am office; senior management,

Looking up the headframe at surface level.

Shaft buckets suspended from the ropes in the headframe.

other Pan Am site representation and outside mining people requesting to visit for various operational reasons. The comments from everyone have been very positive about the site condition and the work quality. This project is testament to the strong working relationships and dedication of all involved. Pan American Silver has been a very supportive client, only requesting of Redpath that we work to the highest standard of quality we are capable of, and doing it safely.
Global Community continued from p. 5…

eliminated, practicality, originality, Internal Responsibility System compatibility and population benefit. After a tally of all member firm votes from the March meeting, Redpath’s Agitator Sonar Discharging System was voted the 2015 OMCSA Safety Innovation winner! The award was presented at the annual Workplace Safety North’s Mining Health & Safety Conference.

Congratulations to the team from Redpath Australia who developed this important innovation which makes our miners safer!

Commercial Services Global Strategy Session

Representatives from all of Redpath’s regions were present; Africa, Asia, Australia, Europe, North America and South America.

Colleagues working in Commercial Services gathered recently for three and a half days to discuss regional and global approaches to estimating, strategic differentiation, tender materials, project controls, branding, contracts, insurance and more. The international contingent was impressed with Horseshoe Falls and enjoyed an up close and personal point of view from the Horn Blower boat!

Redpath Takes the Spotlight at Expomin 2016 in Chile

By Monica Salvo

Redpath had an important presence in April at South America’s largest mining exhibition, Expomin 2016 held in Santiago, Chile. Showcasing the Redbore 30 and 50, alongside the Redtrax in a 10’ x 10’ metre outdoor space, the attractive booth managed to survive rainy weather not typical for the region in April.

Laura Piché, Global Marketing Manager and Bryan Maille, Raisebore Superintendent, led the Canadian contingency that came for the show, working a busy booth and interacting with visitors around the two machines and the Redtrax. A separate private room was set aside for meetings with VIP clients.

The show attracted over 1,300 suppliers and 70,000 international and local professionals.

Overall, Expomin 2016 proved to be an excellent show for Redpath. For five days the event gathered a large number of attendees from diverse areas of the mining industry, and contacts with key members in the industry were made.

A high level of interest in the services Redpath offers as a company was apparent, and valuable time was spent strengthening both existing and new relationships with suppliers and mining industry professionals.

Redpath booth attendees included (L-R): Javier Salinas, Dagoberto Garcia, Monica Salvo, Raul Chaparro, Mike Kelly, Bryan Maille, Constanza Ramirez, Randy Grenon, Dave Hansman and Marcel Leclair, speaking with an attendee.

This Redbore 50MDUR machine was accompanied by the Redtrax Raisedrill Transporter and the Redbore 30.
**Kensington Mine Site Development**

By Jason Morrison

The scope of work includes 8,000 feet of exploration decline with several drilling platforms and construction projects.

To date, 2,500 feet of excavation has been completed. Noteworthy to this project, is that the discharge of water at project completion, cannot exceed 100 GPM, although water inflows of up to 600 GPM are being encountered.

Since September 2015, over 2 million pounds of cement have been placed with curtain pressure grouting.

**High Scaling at Grasberg**

Lead by Paul Kotab, MRC General Foreman, PT Redpath Indonesia successfully completed a scaling project in the Grasberg Mine pit on March 21st, 2016. Due to the potential hazard of hanging boulders in the pit, as well as production delay concerns, the scaling team was requested to perform immediate action and successfully completed the work within 8 hours.

**High Scaling at Grasberg**

**Location:** Grasberg Open Pit Mine at an elevation of 3,535 feet.

**Description:** Scale hanging boulders and rocks between elevation 3,535 feet and 3,505 feet to ensure safe operation underground at 3,460 feet.

**Personnel:** Paul Kotab (MRC General Foreman), Hendrik Yambisa and Andri Yusnandri (MRC Crew)

Requested by client on March 20th and completed on March 21st.
A Muck Bay has been established near the existing conveyor belt which serves as a buffer zone between the development ends and the belt tipping point. The Muck Bay has an effective capacity of 100 m³.

LHD availability and use are affected by the following parameters:
• Diesel availability
• Hydraulic oil
• Operator availability
• Servicing of LHD
• Breakdowns

Four rail-bound diesel cars have been made available to ensure an efficient production cycle. Two cars can be heading to the fuel station on surface, while the other two are underground supplying the development equipment.

Scheduled maintenance is monitored, as it plays a crucial role in preventing breakdowns and reduces the consumption of resources required to keep the equipment running. Worker availability and the annual leave cycle of operators are also considered so production is not impacted negatively.

**Grasberg Block Cave Mine Scales Up Ventilation Capacity**

From high-scaling, to large scale operations, the Grasberg Block Cave (GBC) project is always pushing the boundaries of what is possible with mass excavation. The team recently reached another significant milestone in May when the third chamber for Redpath Mining South Africa (RMSA) is currently running a contract (Deepening Project) at Northam Platinum Ltd (Zondereinde Division). The scope of the project includes Decline Shaft Sinking, Lateral Development, Raise-line Development and Major Infrastructural Development.

In order to remain competitive in the contract mining industry, the company directive has been focused on the optimization of production at its current contracts.

A series of constraints, and variables affecting these constraints, have been identified. Broken rock buffers and Load Haul Dumpers (LHDs) have been identified as major constraints that impact production. To manage the entire set of constraints, an Operations Board chart (Ops Board) has been designed on which the behavior of every parameter is analyzed daily. The supervisory team gathers every morning to update the required information on the Ops Board. The board uses basic identification principles much like a robot (ed. note: streetlight); green, yellow and red color codes are used to identify efficiencies and areas of concern. Green reflects a system that is running efficiently, yellow indicates that action must be taken to normalize the system and red demands that immediate intervention be taken to bring back the system to optimum efficiency.

By looking at the Ops Board, one can immediately ‘see the picture’ of the underground conditions.

A Load Haul Dumper (LHD) loads from the buffer.

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• Diesel availability
• Hydraulic oil
• Operator availability
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• Breakdowns

Four rail-bound diesel cars have been made available to ensure an efficient production cycle. Two cars can be heading to the fuel station on surface, while the other two are underground supplying the development equipment. Scheduled maintenance is monitored, as it plays a crucial role in preventing breakdowns and reduces the consumption of resources required to keep the equipment running. Worker availability and the annual leave cycle of operators are also considered so production is not impacted negatively.

Grasberg Ventilation Drift 7 Fan Chamber Access (6.8 m x 9.0 m)
the largest underground fan in the world was completed. This chamber will house a 5,500 HP Howden fan, delivering 800 m$^3$/s (1.48M cfm) of fresh air for the mine. An additional four chambers are scheduled to be built to handle peak production at GBC in 2023.

The Grasberg Ventilation Drift 7 fan chamber consists of 6.8 m x 9.0 m x 190 m long access drift and 15 m x 12 m x 76 m long main chamber. The access drift was done with drill Jumbos for the first pass (6.8 m x 6.0 m) and bench with a solo drill to a final dimension of 6.8 m x 9.0 m, after all secondary support was completed. Excavation of the main fan chamber was completed in two sections and three phases.

The positive outcome of this challenging project was a result of the determination and commitment of the project team to deliver a quality product. GBC Team 1 celebrated 486 days without reportable injury at the end of May 2016.

Redpath South Africa Secures Longhole Stoping Project

Redpath Mining South Africa (RMSA) was awarded a longhole stoping contract at the Maseve Platinum mine owned by Maseve Investments (The majority share of Maseve is owned by Platinum Group Metals, 83%). The mine is located on the Western limb of the Bushveld Complex, approximately 35 km NW of the town of Rustenburg in the Northwestern province of South Africa.

The scope of work entails the longhole stoping of the steep dipping Merensky Reef with initial efforts focused at the North Shaft Block 9 and 12 areas. Reef widths of between 1.0 m and 3.0 m are expected at a dip from 30° through to vertical. Although the initial contract is small, the technical difficulties related to the execution and the potential for scope growth makes this a significant prospect.

Mobilisation of resources commenced during the first week of April 2016, with the first underground shift starting up in early May 2016.

SAFETY - FIRST, LAST AND ALWAYS.

Hellas Gold Mine Rescue Training

By Wayne Grudzinski

Up along the coast of the Aegean Sea, in the district of Halkidiki Greece, situated above the third peninsula that is home to Mount Athos are three Eldorado Gold projects, known locally as the Hellas Gold mines. Less than half an hour West, along a winding coastal road is the Mavres Petres mine site and central hub of the three properties. Tucked below Mavres Petres is the mining village of Stratoni, with their seaport facility and Administrative offices for all three projects. Driving for another half hour West into the mountains brings you to the Skouries site, which most recently received a long-awaited permit allowing development activities to proceed again.

Mine Rescue Training teams gear up and participate in Mine Rescue simulations designed to develop critical thinking skills in real-life scenarios.

The region is steeped in history; it is also dotted with ancient mining activities dating back far enough to have supplied the armies of Alexander the Great. Despite the long history of mining in the region, today this is also a vacation destination where sun worshippers are drawn to the countless beaches along the Aegean Sea.

Sadly, and despite the enormous efforts by Eldorado to clean up, process and landscape the impacts of thousands of years of mining before their time, these efforts were overshadowed by protests and controversy of mining in tourist country.

Our client has persevered through a turbulent two years. There were violent protests, numerous disruptions, upsets and disappointments that led to a suspension of all work. Permitting became the attention of medial, political and interest groups, and the air was nearly celebratory when permits were finally approved. Since then, training has taken hold wholeheartedly and with purpose.

Jim Buckle, Training and Safety Supervisor, and Paul McParland, Safety Coordinator, have trained over 547 employees on our Fatality Prevention Program, Cardinal Rules and Five Point Safety Programs. Bruce Fraser, Manager of Safety, Training and Leadership Development, has educated over 60 staff on the Loss Control Leadership program, with Jim
“Win their hearts and minds. Lead by example. You can name any number of clichés, however it is undeniable that there is a momentum here that is building.”

Peter Small, ERT Training Coordinator (centre, white shirt) and his team of recent Mine Rescue Training graduates.

and Paul coordinating and delivering the Supervisor certificate programs. Fergus Kerr, Consultant, and Derek Budge, Director - Health, Safety and Environment, are booked for three Pathways to Excellence I sessions and a Project Management session in June.

Peter Small, ERT Training Coordinator, is leading a full-fledged Mine Rescue training school and seeing the site stations take shape. Three of five Mine Rescue teams have been taught basic mine rescue to date; a briefing officers course will follow and monthly practice days are being held now for the trained Mine Rescue members.

As always, there have been some unique challenges to be managed along the way. Coordinating Greek translations for training materials; teaching a subject that does not have a local lingo or meaning and building trust with a community who assumes we are just another Canadian company here to teach them about something they have done for thousands of years.

Win their hearts and minds. Lead by example. You can name any number of clichés, however it is undeniable that there is a momentum here that is building. It’s a busy agenda, and there are efforts underway that go well beyond a training schedule, but everyone is working to build new mines and are focused on doing it with a strong safety culture.

Redpath Mining South Africa Awarded International Safety Certificate

Redpath Mining South Africa was recently awarded with an international certificate from ISOQAR for: ISO 9001:2008, ISO 14001:2004 and ISO 18001:2007 which covers Safety, Health, Environmental and Quality Management Systems for Contracting Services, Shaft Sinking, Tunneling and Training of resources for the mining industry. Congratulations to all who played a role in this achievement!

Safety Training Reaches Beyond the Classroom

One of Redpath’s training initiatives at the Hellas Gold Mine Projects in Greece is to help the client strengthen their emergency preparedness plan. Part of this plan is to train Mine Rescue personnel in the event of an underground emergency. Two full Mine Rescue teams have been trained to date, instructed by Pete Small (in the white shirt on the left in the following photo) who is a specialist in Mine Rescue.

P TRI Takes on Safety Management Training

The Government of Indonesia recently issued a Mining Safety Management System as a new safety standard for the mining industry in Indonesia. In order to enhance knowledge, understanding and accelerate its implementation into operations, PT Redpath Indonesia sent eight delegates to the 5-day Mining Safety Management System Training facilitated by the Ministry of Energy and Mineral Resources of Indonesia. The training was held in Balikpapan, Borneo in early February and involved comprehensive class and practical studies of the new safety regulation as a minimum requirement.
Rescue. The crews have spoken very highly of Pete’s excellent approach to training, and a dinner was held recently to recognize everyone’s achievements. At this recognition supper, the new Mine Rescue crew members were each given travel first aid kits from Redpath as a token of gratitude.

Dimitrios Gaganos, who is an Electrical Supervisor, was one of the new Mine Rescue certified crew members and also completed the Practical Loss Control program. At the end of the second day of that class, he was involved in a very serious incident. On his way home, Dimitrios came upon a two vehicle head-on collision, just seconds after it happened. There was a mother and two children in one vehicle and three teenagers in another vehicle.

Dimitrios was able to provide emergency care to the injured parties in the vehicles and put his new Redpath first aid kit, which he had recently placed in his car, to good use. While Dimitrios was attending the injured parties, a nurse who was there on vacation happened to come along and stopped to lend assistance. Dimitrios’ English skills are excellent, and he was able to assist with translation between the nurse and those involved in the collision. More than thirty minutes had elapsed before local emergency services arrived to take over the scene and get people to the hospital.

Coincidentally, Wayne Grudzinski, Manager of Health and Safety - Greece, also came upon the scene and Dimitrios asked him to thank Redpath; Pete Small for the training and Bruce Fraser for the first aid kit. Had he not been given both the skills and the tools necessary for such an incident, things may have turned out differently. As it were, everyone involved in the collision are doing very well, and the initial emergency response provided by Dimitrios played a big part in ensuring this event had a positive outcome. Congratulations to Dimitrios for his courage in acting in this situation!

This story reminds me again why I am proud to work for Redpath and is a great example of the kind of difference we are making in the mining industry around the world.

Redpath Zambia: Driving Safety Awareness

Safety First, Last and Always has been the guiding principle by which Redpath has done business since its inception in 1962, and it continues to influence all decisions in the company to this day.

Recently, the management teams of Redpath Zambia and Redpath Rig Resources took the initiative to pause operations and gather all employees together for Safety Awareness Day. In early April, the Safety, Health, Environment, Quality & Training (SHEQT) and Human Resources Departments developed programs for Safety Awareness Day and handled the necessary logistics to get every employee from all sites to and from the Moba Hotel, just outside of Kitwe.

Over 800 employees from all sites and projects were in attendance during Safety Awareness Day.

Lawrence Schultz emphasizes the need for all employees to remember that it is within their rights to refuse to work in unsafe conditions.

The day started with introductory remarks by Bennie Burger, General Manager for Redpath Zambia, who welcomed all delegates to the workshop and stressed the importance of the drive to ensure safety was continuing to be the top priority on all sites. The day’s proceedings were based on collective and organised sessions in order to get everyone’s unbiased input into identifying issues and generating solutions.
A group consisting of management and workers from the Mindola project scripted and enacted scenarios representing incidents; firstly depicting a poor safety attitude and consequences thereof, and then repeated showing a positive shift in attitude and decision making. Using these examples to reinforce the messages from Redpath's Fatal Risk Elimination Protocols and other related life-saving behaviours helped promote a good safety culture among the workers.

The aim was to recreate an optimum safety-orientated mindset among miners, using theatre to reinforce their knowledge of Fatal Hazards and related life-saving behaviors in their workplace.

At the conclusion of the proceedings, the Senior Management committed to the outcomes of the day and together with all employees, signed a Safety Commitment Pledge. This pledge will be the foundation upon which a positive safety culture is strengthened.

Jan Strydom, Contract Manager Redpath Rig Resources JV, presented a detailed Supervision Points checklist with a great deal of passion and commitment.

The feedback session allowed colleagues to offer their ideas and suggestions to a captive audience.

PT Redpath Indonesia Celebrates Vertical Development Achievement 15 Years in the Making!

January 20th 2016, represents a historical day for the Redpath vertical work crews at Freeport with the final undercutting blast of the Deep Ore Zone (DOZ) block cave mine. This major milestone, 15 years in the making, brings to an end the development and expansion of one of the world's largest block cave mines, producing at times upwards of 80K tonnes / day. The existing development will sustain production levels in the DOZ until the year 2021.

Redpath's vertical development crews play an intricate role in the development and undercutting processes including Slot raises, Drawbell raises and Loading Pocket raises.

Drawbell and Slot raises are undertaken by the Core Projects MRC crews. A safe and efficient method meeting the specific needs and demands of numerous short raises of lengths of 10 to 50 meters was developed and applied with great success at Freeport. This included the design and fabrication of a portable MRC nest and methodology that saw the team develop over 980 raises totaling over 13,000 meters of raise development over the past 15 years. To put things into perspective, the distance is equal to driving your car at 100 km/hr for over 8 minutes!

The MRC Portable program initially consisted of a mix of Expatriate and Indonesian Raise Miners, which then quickly became a fully nationalized program that included Raise Miners, Supervisors, and a Maintenance team. These vital crews were tasked with operating and maintaining 14 MRC units; considered to be one of the world’s largest fleets.

Let's not think for one minute that this group has become obsolete from the DOZ mine's last completed undercut blast. Similar programs for both the Deep Mill Level Zone and GBC mines have commenced at Freeport, and more than five times as many Slot and Drawbell raises will be developed in comparison to the DOZ mine. That is comparable to a 40 minute long 100 km/hr car drive! The valuable expertise, knowledge and commitment will be handed down to future generations of Redpath miners in Indonesia.
GUEST SPOTLIGHT

“It is evident now more than ever, how the various geographic regions have come together combining regional expertise to provide unparalleled solutions to our global customers.”

Kevin Melong, Senior Manager - Shaft Services
The Redpath Group

Global manpower count as of May 31st 2016

5,032

If you are new to the Redpath family, be it as an employee or a new client, you are most certainly in for an exciting time, as Redpath is poised to embark on some of the most ambitious projects in the company’s history.

The new challenges put forth by our client partners have been met by a global team, unwavering in their commitments to lead the industry in safety, technology and performance. It is evident now more than ever, how the various geographic regions have come together combining regional expertise to provide unparalleled solutions to our global customers.

It is refreshing to see the high level of collaboration between our business units calling upon each other for concepts and methodologies that can be applied to their particular challenges, no matter where in the world they might be. The integration of this global knowledge, leading edge technologies and best practices has been a boon to providing solutions to the ever-changing challenges our customers are faced with. Our clients are looking for outside the box thinking, and in true Redpath spirit, we have delivered it in truckloads!

I personally have had the opportunity to work closely with a number of our divisions recently, and I am humbled by the level of skills and abilities that exist within the Redpath family. The breadth of experience in any one location is extensive, and when combined with the capability to integrate teams on an international scale, Redpath can respond to any challenge, anywhere, anytime!

Clients have sought out our teams to provide answers to a myriad of new projects including concepts, costing, scheduling and feasibility. Recent international collaborations have provided for unique solutions to complex challenges in England, Mexico, Mongolia and Greece among many others. These solutions have opened the door to potential work throughout the globe. The ‘Flying R’ can be, or has been seen, in most countries that operate mines, and a few that are new to the industry. We can be proud of the fact that Redpath is recognized globally as the team capable of stepping in to navigate some of the more challenging aspects of our industry. I believe we have now executed work in over 57 countries, which demonstrates the “go anywhere to solve anything” attitude that exists at Redpath. It is also a reflection of our people, who continue to pioneer new concepts in the business.

Something which is more prominent than ever, is the commitment to safety; doing things right and looking after our employees - no matter which country they might be working in. We continue to generate rewarding and challenging opportunities for our employees as a result of the “one team” approach we offer the industry. The industry recognizes it, and we should be thrilled at the prospect of what is to come.

I am excited about the future as we will continue to lead our industry through collaboration. These advances are a result of the innovative spirit that is instilled in our teams. We continue to challenge ourselves to find a better, safer way, and we aren’t afraid to be the first.

In the phrase, “Lead, follow, or get out of the way”, I think I know where our team will be positioned.

Safety - First, Last and Always.
Millions of Hours worked with no Lost-Time Injuries*

*Accurate as of May 31st, 2016.