PAPUA NEW GUINEA CHAMBER OF MINES AND PETROLEUM

The Chamber is a proud supporter and member of the PNG Extractive Industry Transparency Initiative Multi-stakeholder Group

MINING AND PETROLEUM Review

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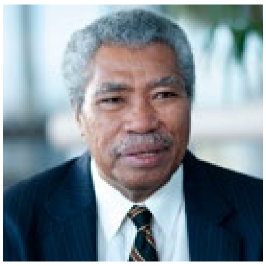
President's message



Gerea Aopi CBE

Hello Members and readers,

Welcome to the second edition of our newsletter for this year.

This year, so far, has been interesting for Papua New Guinea, and more particularly the Chamber and the resource industry.

For PNG, it is the election year and by the time you read this newsletter, we should be well and truly into the polling period where every eligible voter will be casting their votes for their elected representative to the 10th National Parliament of Papua New Guinea. The Chamber and the industry are observing closely the election and are looking forward to working with the new Government on addressing concerns relating to the revised Mining Act, the Mineral Resources Authority Act, Tax changes, and the establishment of the Petroleum Resources Authority.

We cannot emphasis enough the importance of the resource industry to the PNG economy and why it is paramount that PNG maintains its investment attractiveness, and ensure we have globally competitive fiscal, legislative and regulatory regimes that will help drive further economic growth. (Read more on Page 4)

On another note, many of you may have read our recent circular announcing the retirement of Greg Anderson, the founding Executive Director, and the appointment of the former Vice Chancellor of the University of Papua New Guinea, Professor Albert Mellam as his successor. I sincerely thank Greg for his long and distinguished service, not only to the Chamber, its Members and the industry, but also to PNG. I also welcome Prof. Mellam to the Chamber and look forward to working with him.

Finally, the PNG Mining and Petroleum Conference will be held on November 28-30 in Port Moresby at the Stanley Hotel. Early bird registrations have opened so please get in touch with the Chamber if you would like to attend. Sponsorship packages and trade exhibition opportunities are also available.

With that, vote wisely and enjoy your reading!

Executive Director's viewpoint

PNG is gearing up for new era of resource development

Greg Anderson

There has been a significant pause in new resource project development since construction began in 2010 on the PNG LNG Project.

In this constantly changing world, new projects can face a more competitive and difficult environment.

The private sector, as well as Government, need to be constantly aware of the cyclical nature of mineral and petroleum commodities and to stand ready to remain effective and competitive when commodity prices hit their lows, generally as a result of oversupply or slowing demand due to global factors.

For Papua New Guinea, we must not lose sight that opportunities exist even when markets may be down, allowing for a robust performance when an upturn occurs. It could be argued that the Special Mining Lease applications by the Wafi-Golpu and Frieda River copper-gold projects are in that category.

In the case of the PNG LNG Project, it started production in May 2014 at the height of the market but by the start of the following year export prices had halved. However, because it is such a good project, with a relatively low cost structure and a high quality product, the project owners are gearing up for the challenge of expanding the project.

Of course, in some instances an economic downturn can be prolonged due to structural reasons, like the extended recessionary period in the 1970s and early 1980s when oil prices first began their upward spiral.

There are analysts who believe the upsurge in production of oil and gas from shale in the United States will result in a situation of prices that are "lower for longer"

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as traditional oil exporters attempt to curtail their normal production.

In addition, expectations that coal-fired power generation would be replaced by gas is proving inaccurate as solar and wind begin to improve their competitiveness. Potentially this could boost the amount of gas exported from America.

The fact that there are three mega-projects in the resource arena on the drawing board augurs well for PNG. The national and provincial governments, along with the private sector, would do well to learn from the past and to nurture broader economic growth and increased prosperity for people throughout this vast country.

Minerals overtake LNG: PNG's gold sector, in particular, has performed very well from the downturn of five years ago.

Although export levels have stagnated in recent years, the 57.6 tonnes of gold PNG exported last year fetched a record K7.04 billion in export revenue.

While LNG had been expected to totally dominate PNG's resource export landscape, the downturn in gas prices has meant that in 2016 PNG's export of gold (K6.77 billion), copper (K1.1 billion), nickel (K668 million) and cobalt (K195.2 million) were worth K8.71 billion, compared with the K8.19 billion fetched by LNG exports.

For the first time in PNG's history total resource exports earned by this country topped just over K20 billion out of total exports worth K24.8 billion, according to official data released by the Bank of Papua New Guinea.

Farewell: This is the last time I will pen this column as Executive Director.

There has never been a dull moment since the days I came onboard to firmly establish the Chamber in 1989 after its formation in late 1987.

While nurturing of project activity has been our 'bread and butter', the Chamber has strived to put PNG on the global resources map through its national and international conferences and other industry events such as workshops and technical meetings on industry practices, workplace and community health and safety initiatives, and its community outreach programmes.

Together with our member companies the resource sector has strived to improve educational standards, particularly at the technical and tertiary level.

Much of the time our focus narrows in on day to day challenges posed by the ups and downs in the industry and in dealing with ever-increasing demands of the regulatory regime. We often take for granted some of the wider impacts that benefit workers, their families and communities.

Entire townships such as Tabubil, Kiunga, Paiam and Lihir owe their existence to resource ventures. I dare say there are more well-trained Papua New Guineans from the resources sector, than any other segment of the economy, who now hold technical and executive positions in projects in Australia, Asia and Africa; not just geologists, geophysicists and engineers, but also accountants, environmentalists, heavy diesel mechanics, drillers, and project and policy planners.

While much of the past developments are regarded by economists and others as "enclave" projects, I feel confident that the next generation of resource projects is about to change that perception.

The PNG LNG Project and the mega-projects now on PNG's drawing boards will distribute prosperity to a much larger proportion of Papua New Guineans.

The mining ventures, as well as the quantities of gas that is available, will see a vast increase in electricity generation so that most people living in towns and some villages will have access to power in the next ten to fifteen years.

Running the affairs of the Chamber has been very exciting for me and I am sure my successor will also face many exciting times and challenges in the years ahead.

The Chamber is honoured and privileged that the former Vice Chancellor of the University of Papua New Guinea, Prof Albert Mellam, has agreed to move from academia into the hurly burly of relationship building for the resources sector.

Mr Anderson visiting the Frieda River project in the Sandaun Province.

Chamber welcomes new CEO

Professor Albert Mellam

The former Vice Chancellor of the University of Papua New Guinea Professor Albert Mellam has been appointed as the new Executive Director of the PNG Chamber of Mines and Petroleum.

Professor Albert Mellam took over the reign from Mr Greg Anderson who has been at the helm of the resource industry association for 28 years.

Chamber President Mr Gerea Aopi welcomed Professor Mellam's appointment and thanked Mr Anderson for his tireless service to the Chamber and the PNG resource industry.

Professor Albert Mellam brings to the Chamber a wealth of experience having worked as a senior academic and Vice Chancellor for more than 29 years at the University of Papua New Guinea.

He also holds adjunct Professorial positions in a number of Australasian universities. As well as having a vast public sector experience, he is also well placed to draw on his private sector exposure as a director of Nambawan Super Limited, Credit Corporation (PNG), Brian Bell & Co Ltd, and the Investment Promotion Authority Board.

His distinguished career includes serving as a key advisor to the PNG Vision 2050, and other Government projects such as the PNG LNG project.

His applied research areas have included the extractive industry, for example, research on Mine Closure arrangements and involvement in the Misima Mine Closure Project.

"The Council is confident Professor Mellam will continue the good work Mr Anderson has done in developing the Chamber into a highly respected peak industry body that has served the interest of its members with distinction. We would also like to sincerely thank Mr Anderson for his contribution, not only to the industry but to the country as a whole," Mr Aopi said.

Mr Anderson was first appointed as Executive Director of the Chamber in 1989 and since then he has been involved in numerous consultations on Government policies and legislation which have underwritten PNG's world-class resource industry.

"Through his role at the Chamber, Mr Anderson was also instrumental in fostering investment and growth in the mining and petroleum sectors through Chamber-organised international and domestic investment conferences, and the commissioning of a wide range of studies and reports that have benefited many projects and industry stakeholders.

He also played a pivotal role in advancing developments in the areas of taxation, education and training, health and community development," Mr Aopi said.

Chamber looking forward to working with new government

The PNG Chamber of Mines and Petroleum is looking forward to working with the new government to address concerns relating to legislation and policies affecting the resource industry in Papua New Guinea.

Addressing the Chamber's 29th Annual General Meeting in Port Moresby on April 27, Chamber President Mr Gerea Aopi said the industry's concerns relate to the revised Mining Act, the Mineral Resources Authority Act and the recent changes on the Taxation law contained in the 2017 National Budget.

The Chamber has emphasised on numerous instances that stable government policies and a favourable investment climate will drive the future growth of the mining and petroleum sectors and continued investment in the social and economic development programs.

Hence, Mr Aopi said, it was important that Papua New Guinea maintained its investment attractiveness by fostering globally competitive fiscal, legislative and regulatory regimes that can underpin the development of existing resource projects and attract further investments.

The amendments to the revised Mining Act have been put on hold until after the general elections.

The Chamber has indicated that the new Government should take a fresh look at the legislation and renew consultation with the industry through a multi-disciplinary team drawn from relevant key government organisations, with meetings chaired by an eminent, independent chairperson.

The Chamber has also raised with the Government its concerns on the substantial realignment of taxes for the mining and petroleum sectors contained in the 2017 National Budget which it says will significantly increase the tax burden on the resource industry.

"Let me emphasis that the Chamber and the industry will support tax reforms, provided it is applied equitably across all companies and investors, and that it does not impose unintended impacts for individual entities and does not reduce the attractiveness of PNG as a place to invest and do business," Mr Aopi said.

Many rural communities are benefiting significantly from resource projects in terms of community assistance programs such as water supply, classrooms, and aid posts.

New inclusion to the Chamber Council

New Chamber Councillor, John Chambers

Santos PNG General Manager, Mr John Chambers has been elected as a new Councillor of the PNG Chamber of Mines and Petroleum.

Mr Chambers' election was announced at the Chamber annual general meeting held in Port Moresby on April 27.

The remaining vacant positions on the Council were filled by incumbent Councillors who were re-elected. They include ExxonMobil PNG Managing Director Mr Andrew Barry, Nautilus Minerals Country Manager, Mr Mel Togolo, Highlands Pacific General Manager Port Moresby, Mr Ron Gawi, and Head of Tax and Business Services, Deloitte Touche Tohmatsu, Mr Andrew Harris.

Oil Search Executive General Manager Mr Gerea Aopi was re-elected as President for a fifth consecutive term while Newcrest Mining Country Manager Mr Peter Aitsi and Total E&P PNG Corporate Affairs Director Mr Richard Kassman were each also re-elected for a fifth consecutive term as Senior Vice President and Vice President respectively.

Refer to Page 7 for a full listing of the Chamber Council.

Downturn in exploration affecting local jobs and businesses

The exploration sector employs hundreds of Papua New Guineans and supports many small to large scale businesses. Pictured above is a worker arriving at the Kili Teke camp site in Hela Province. Inset: Auger drilling at Orokolo Bay, Gulf Province.

The very significant drop in mineral exploration is a major concern to the PNG Chamber of Mines and Petroleum.

The Chamber is concerned that the long-term sustainability of the country's mining sector could be severely impacted if mineral exploration continues to decline.

Speaking at the Chamber's 29th Annual General Meeting held in Port Moresby on April 27, Chamber President Mr Gerea Aopi said the Chamber's concern is exacerbated by the Government's proposed changes to the Mining Act.

A Chamber survey covering the years 2012 to 2015 showed that mineral exploration expenditure has dropped markedly from a peak of K944.3 million in 2011 to K325.5 million in 2015 after a near decade of high activity from 2003 - 2011.

Feasibility studies for the Frieda River and Wafi-Golpu projects increased exploration expenditure in 2015 (from 2014), but the overall expenditure was still well below 2013 levels. Preliminary results from the Chamber's 2016 mineral exploration survey indicate that total exploration expenditure has again fallen markedly (to ~K170 million) and grassroots exploration again shows the greatest decline (to ~K20million).

The downturn has already affected many rural Papua New Guineans through loss of direct employment, and potential new business opportunities.

Businesses and suppliers operating in provincial centres have also lost much-needed incomes as a result of many junior exploration companies ceasing their operations or significantly curtailing their expenditure because of difficulties raising funds on the financial market.

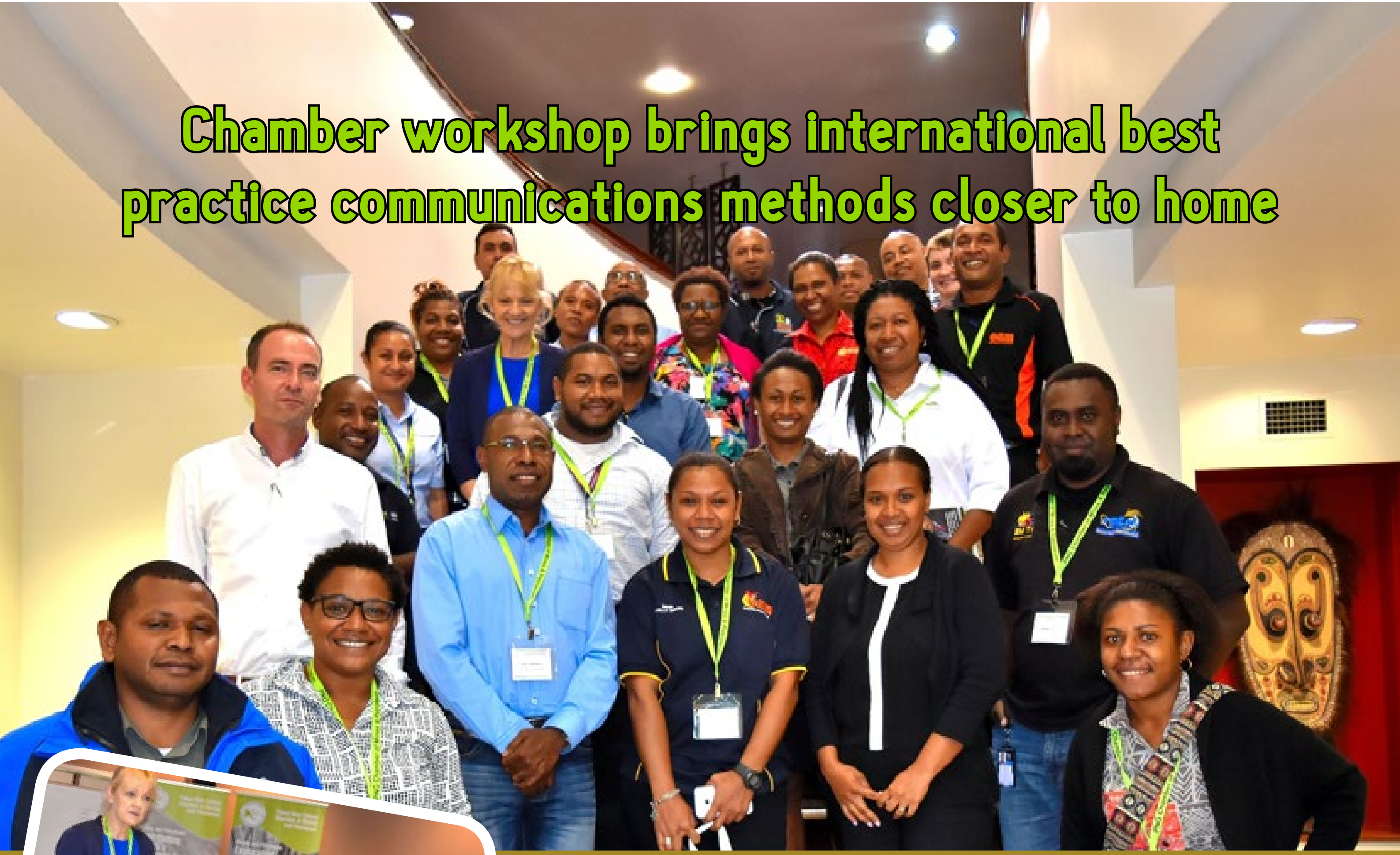
"We have to make every endeavour to ensure that this downward trend does not continue, although we have little or no control over the global commodity price market," Mr Aopi said.

"What PNG can control is the fiscal and legal frameworks that directly impact this sector. Our aim must be to ensure PNG can continue to grow existing projects and also foster an environment conducive to attract new investments."

Mr Aopi further added that the lodgment of Special Mining Lease applications for Frieda River, and Wafi Golpu projects last year is a clear indication why PNG must maintain its investment attractiveness.

"These projects are very important to the PNG economy as existing mines like Ok Tedi, Porgera and Lihir are in mature stages. Both projects, when developed will have positive economic impact for PNG and together with the operating mines could place PNG as one of the top copper and gold producers in the world," he said.

Chamber workshop brings international best practice communications methods closer to home



The annual PNG Resource Industry Communications Workshop was held again this year in Port Moresby from April 11 - 12 at the Crowne Plaza Hotel.

Organised by the PNG Chamber of Mines and Petroleum, the workshop was attended by 40 participants from the resource industry, as well as a handful of business reporters and editors from the local media outlets.

The workshop, which was held primarily for public relations professionals working with resource projects and other member companies, was jointly facilitated by the Chamber and Australia-based PR agency, Professionals Public Relations Australia.

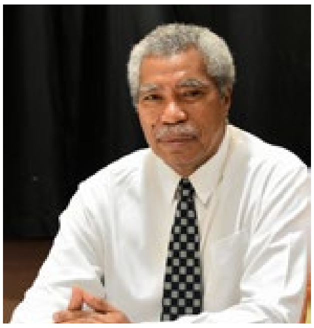
The workshop had presentations from resource companies, communications experts and media organisations speaking on various topics such as the *'The Role of Public Relations in Project Feasibility and Development', 'Improved Use of Social Media in Communications Strategies'* and *'How to Better Inform the Media on PNG's Resource Sector'.*

Lee McLean, General Manager Queensland for PPR Australia, who also assisted with last year's workshop as well covered topics on *'Identifying And Understanding The Interests Of All Stakeholders And How To Meet Their Needs With Your Communication', 'Brainstorming Techniques Which Help Deliver Good Angles And Great Events', 'Maximising Your Publicity Outcomes With The Right Story Presentation And A Prepared Spokesperson'* and *'How To Develop A Great Public Relations Strategy That Guides Your Communication Actions'.*

Since 2015, the focus of the workshop has changed from updating and informing journalists and editors about the industry to helping develop PR professionals in the industry. The modification was necessary taking into account the increasing change in communication methods worldwide and the need to help our PR people better understand the industry they work in.

Meet the Chamber Council

Executives



Gerea Aopi CBE, President
He is currently the Executive General Manager Stakeholder Engagement with Oil Search Ltd

Peter Aitsi, Senior Vice President
He is currently the PNG Country Manager with Newcrest Mining Ltd

Richard Kassman OBE, Vice President
He is currently the Director Corporate Affairs with Total E&P PNG Ltd

Councillors

Ron Gawi
General Manager, Highlands Pacific Ltd

Mel Togolo
PNG Country Manager, Nautilus Minerals Ltd

Mark McMonagle
Director, and Manager Constructions, Sun Engineering Ltd

Wapu Sonk
Managing Director, Kumul Petroleum Holdings Ltd

John Chambers
General Manager PNG, Santos

Anthony Smare
General Manager, Corporate and Legal, Barrick Niugini Ltd

Andrew Barry
Managing Director, ExxonMobil PNG

Johannes van Heerden
Chief Executive Officer, Harmony Gold South East Asia

Andrew Harris
Head of Tax and Business Services, Deloitte Touche Tohmatsu

'Edge' program helping Lihir to cut production costs

Frontline mine workers introduce key innovations

The Lihir operation in the New Ireland Province

Newcrest Mining Ltd's improvement program, *Edge*, has made great strides at the company's Lihir operations with reliable plant performance and technical innovation contributing to a steady rise in gold production and a steep drop in production costs.

Lihir's All-In-Sustaining-Cost (AISC) has been declining steadily from US$950 per ounce in the September quarter last year to US$883 in the December quarter and US$822 in the latest March quarter. Production has been rising steadily since the September quarter last year.

The mine's profit margin in the latest March quarter has risen to US$412 per ounce, up from US$346/oz in the December quarter and US$378/oz in the September quarter.

Mine production reached 229,572 ounces in the March quarter, taking output in the nine months to March to 663,830 ounces at an average AISC of US$883 per ounces. This compared with 227,498 ounce in the December quarter last year and 654,062 ounces for the comparable nine-month period last year.

Mill throughput on an annualised basis was 12.6 million tonnes during the March quarter. This was lower than the December quarter due to the shutdown of two of the three SAG (Semi-Autogenous Grinding) mills for replacement of the mill liners with an advanced design.

All three mill liners have now been replaced and the plant is on target to attain the 14 million tonnes per annum mark in December.

Cost reductions in the past three years have been due to the success Newcrest has had with improved plant reliability and its success in raising mill throughput to a targeted 12 million tonnes annually in 2015 and 13 million tonnes in December 2013. It has begun concept studies for throughput of 17 million tonnes a year.

Just three years ago Newcrest was struggling to keep production costs at Lihir below the sale price after gold prices plunged from US$1,800 in 2012 to around US$1,100 per ounce last year. It is currently just above US$1,200 per ounce.

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Frontline workers bring key improvements

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In a recent address to the Sydney Mining Club, Newcrest Managing Director Sandeep Biswas said much of the thrust for innovation in the past three years had come from frontline workers at the company's mines.

He said a young engineer at the Lihir mobile maintenance department started four initiatives which has led to a combined cost saving of US$1.5 million for the business.

"He came up with a plan to repair recoverable tyres, rather than writing them off, with a view to saving the business about US$850,000. He and his team also eliminated the main cause of engine breakdowns on our haul trucks by installing magnetic filters to prevent contamination from metallic debris," Biswas said.

He told his mining audience the Lihir mine was also facing multiple overload events each year, resulting in significant downtime.

It achieved a technical breakthrough after collecting 360 million lines of data across 130 variables with the use of modern computing technology to determine the reasons for plant breakdowns and developed machine learning algorithms to detect early warning signs that provided notice of about an hour.

Frontline workers at Lihir are driving change.

Such an event, that is now preventable, previously could cost tens of thousands of dollars in lost productivity.

By May this year, only four months after the introduction of the algorithms to the three mills, no overload has occurred.

Simberi achieves record production for March quarter

The Simberi gold mine in the New Ireland Province continues to perform well.

Its March quarter production of 30,430 ounces of gold was a record for the operator St Barbara Ltd compared to its December quarter production of 28,057 ounces.

The mine's All-In Sustaining Cost (AISC) per ounce also fell to A$1,025 from A$1,277 in its second quarter due to higher production and improved grade and recovery, together with the benefit of lower ore handling costs in the quarter.

Total material moved for the quarter was 3.5 million tonnes, down on the previous quarter due to planned maintenance of the excavator fleet and lower strip ratio.

The strip ratio reduced to 2.4 during the December quarter, consistent with the life of mine plan, as the high intensity program of prestripping required to access new ore sources at Sorowar and Pigiput has been largely completed.

Plant recovery improved to 85 per cent from 82 per cent from the previous quarter due to ongoing improvement in ore and waste mining identification and selection, improved quality ore, as well as a number of incremental operational improvements in the processing plant.

St Barbara's Group gold production for the March 2017 quarter was 95,346 ounces compared to its December quarter production of 98,982 ounces while its group AISC was A$862 per ounce compared to A$876 per ounce in the previous quarter.

SPTs arrive in Papua New Guinea for trials

Trials to be conducted in an enclosed facility and not open ocean

Submerged trials for the three Seafloor Production Tools (SPTs) for the Solwara 1 Project have commenced in a facility in Papua New Guinea.

The SPTs were shipped to PNG in April and are undergoing trials in an existing enclosed facility on Motukea Island outside Port Moresby.

Nautilus Minerals says having the trials in PNG would not only inject K6 million into the country's economy but it will also provide community leaders of New Ireland, and East New Britain provinces an opportunity to see firsthand how the machines would operate the way Nautilus has said they would.

During the trials, the company will also train Papua New Guineans to become the first operators of the SPTs.

Nautilus' Chief Executive Officer Mike Johnston said it was also important that the trials were conducted in PNG so that the company's partner Kumul Mineral Holdings Ltd, as well as the Mineral Resources Authority, the Conservation and Environment Protection Authority, and the New Ireland, and East New Britain provincial governments can fully participate in the trials.

The machines will not be deployed into the ocean so there will be no impact on the seafloor around Motukea Island. Instead the machines will operate in an existing fully enclosed excavation on the island.

Soil Machine Dynamics who built the SPTs for Nautilus will be on site for the trials.

The objective of the submerged trials is to ensure that the SPTs meet the functional specification. The four key operating parameters to be trialed are stability, cutting efficiency, collection efficiency and visualisation.

The Solwara 1 project is a joint venture comprising Nautilus (85%), and Eda Kopa (Solwara) Limited (15%) which is a subsidiary of Kumul Mineral Holdings Ltd.

Although it involves mining deep underwater, the project benefits from grades about ten times that of most land-based mines, virtually no associated waste rock and no direct social disturbances.

Seafloor production has many advantages over typical land-based operations such as small extraction footprint, reusable production infrastructure, high grades compared to land operations, no tailings and no reloca-

Key Facts About the Trials

- The purpose of the trials is to clearly demonstrate to stakeholders that the machines can mine material without the use of blasting, explosives and other chemicals.
- Completing these trials in PNG instead of overseas will inject K6 million into the PNG economy, and provide employment opportunities.
- Design and fabrication engineers will train Papua New Guineans to be the first operators of the Seafloor Production Tools.
- Community Leaders from New Ireland and East New Britain will be invited to view the trials to verify that the machines operate the way Nautilus has said they would.
- The Trials will showcase intellectual property held jointly by Nautilus and the State of Papua New Guinea, putting PNG on the world stage as a leader in the development of deep sea mining.


Auxiliary Cutter

tion of communities.

Extracting resources from the seafloor in an environmentally responsible way will take pressure off the limited land resources.

Nautilus plans to extract copper and gold from the seafloor in Papua New Guinea and will do it using proven technology adapted from other industries (oil and gas, dredging, and land based mining operations).

How the SPTs will work?

Rock is disaggregated on the seafloor by the Auxiliary Cutter and the Bulk Cutter.

These machines excavate material by a continuous cutting process, similar to underground coal or other bulk continuous mining machines on land.

The Auxiliary Cutter is a preparatory machine that deals with rough terrain and creates benches for the other machines to work. It will operate on tracks with spud assistance and has a boom mounted cutting head for flexibility.

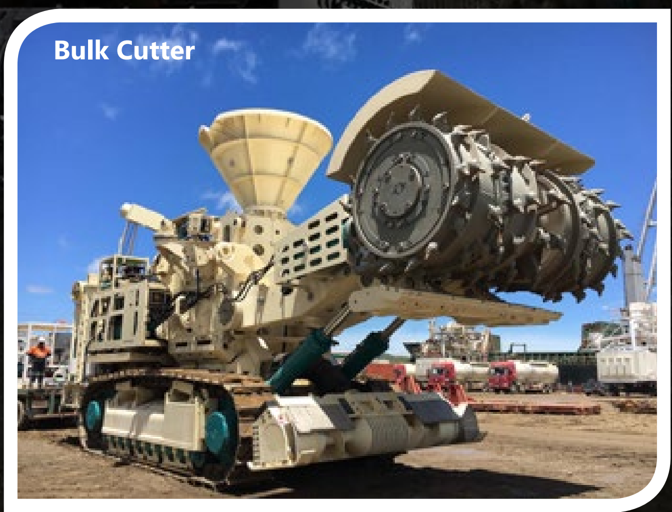
The second machine, the Bulk Cutter, has higher cutting capacity but will be limited to working benches created by the Auxiliary Cutter. Both machines leave cut material on the seafloor for collection by the Collecting Machine.

The Collecting Machine which is also a large robotic vehicle, will collect the cut material (sand, gravel, silt) by drawing it in as seawater slurry with internal pumps and pushing it through a flexible pipe to the Riser and Lifting System.

The SPT design is an extension of existing subsea trenching equipment combining hard rock mining technology with that of subsea remote system technology.

The SPTs will be deployed from the Production Support Vessel using a lifting frame and operated via a power and control umbilical.

A video animation showing how the SPTs will work is available on Nautilus Mineral's website www.nautilusminerals.com


Bulk Cutter


Collecting Machine

Ramu exceeds targets for March quarter production

Mining at the Ramu Nico Mine. Ongoing improvements to cobalt price and predictions nickel price will improve will see the mine achieve significant production results in coming months.

Production of nickel and cobalt at the Ramu Nico Mine in the Madang Province exceeded targets generating an unaudited net cash inflow of US$27.6 million for the March quarter, after capital expenditure of US$2.7 million.

The mine achieved total production of 7,884 tonnes of nickel and 755 tonnes of cobalt in concentrate in the quarter.

This positive result was achieved despite the maintenance shutdown of two of its three High Pressure Acid Leach trains in January and March this year which were successfully completed.

Highlands Pacific Managing Director, Craig Lennon said the company was making steady progress in the development of its asset portfolio, and was well positioned to benefit from increases in commodity prices over the medium term.

“The production levels and margins being achieved at Ramu are pleasing, especially at a time when forecasters are predicting an improving nickel price and we have an improving cobalt price driven by the electric battery market,” he said.

Adjusted for the maintenance shut-downs, the plant is running at an annual production rate of some 34,600 tonnes of nickel and more than 3,300 tonnes of cobalt per year, which is exceeding design capacity and demonstrates the success of recent initiatives to lift throughput rates.

Perotti appointed to Kula Gold’s board

Garry Perotti

Kula Gold has appointed its Chief Financial Officer, Garry Perotti as an executive director of the company.

Mr Perotti, who was Kula Gold’s CFO since 2014, was appointed following the resignation of Louis Rozman as a non-executive director of Kula Gold.

Mr Rozman was a director of Kula Gold since October 2010.

He will continue as an executive director of Pacific Road Capital Management Pty Ltd which manages the Pacific Road Resources Funds, a major shareholder of Kula Gold.

Mr Perotti has 25 years’ experience as a financial controller in the mining and associated service industries.

The company said in a statement released in March that Mr Perotti was already on the board of the company’s PNG subsidiary, Woodlark Mining Limited, where he has played a pivotal role in the discussions with government and landowners in PNG.

30 years and going strong

Ok Tedi celebrates three decades of shipment to Japanese smelters

OTML senior management and employees, and the Japanese customers during the mine tour. Insert: Japanese Ambassador to PNG, His Excellency Satoshi Nakajima (left), meeting with some of the Japanese customers in Port Moresby.

The Ok Tedi mine has sold in direct sales contract a total of 7.3 million tonnes of copper concentrate to Japanese smelter companies since 1987.

Ok Tedi Mining Limited Managing Director, Peter Graham said this during a visit to the mine by a Japanese delegation in March.

The visit was to commemorate the mine's 30th consecutive year of copper concentrate shipments to its Japanese smelter customers.

The Japanese delegation, comprised of six direct OTML customers, two buyers' agents, four Japanese trading companies and resource project investors, and two Japanese shipping companies.

They toured the Ok Tedi mine operations from March 22-24.

"What has been established between OTML and you as our customers is special and there are not too many companies that have such a long-standing relationship that we share," Mr Graham told the delegates.

"You assisted us during the suspension of the operation during the dry weather event and after we resumed operation in March 2016. It was a particularly challenging time but your understanding allowed OTML to quickly get back into normal operations. This is our way of showing our appreciation and also to reciprocate the hospitality you showed us when our senior managers visited your operations" he added.

Sumitomo Metal Mining Co. Ltd General Manager, Mr Toru Hugo on behalf of the delegation said the Japanese smelters will continue to remain a big buyer of copper concentrate from Ok Tedi.

"Ok Tedi has made a big contribution to the PNG economy. We consider OTML a typical success model of a mine owned by the government," he said.

Competitive power solution for Yandera project agreed

Era Resources has entered into a Memorandum of Understanding with Mayur Power Generation PNG Ltd to supply power to the Yandera project in Madang Province.

Under the MOU, Mayur Resources which has been actively developing new low cost, multi-fuel power projects in Papua New Guinea, and Era Resources have agreed to negotiate on a non-exclusive basis the terms of a development agreement to secure over-the-fence supply of power for the Yandera Project.

Mayur's Managing Director Paul Mulder said that his company was excited about the potential of the Yandera Project and the significance of it as a project of national interest in PNG.

"Mayur Power Generation is optimistic about our ability to provide a cost effective and reliable power solution."

Era's Vice President Global Operations, Andre Wessels added that Mayur's strategic approach to addressing some of the challenges in relation to power generation in PNG was impressive and that Era Resources will be looking forward to working with Mayur towards securing a competitive power solution for the Yandera Project.

Millions of eggs, thousands of chickens

Ok Tedi landowners and Israeli agro group to set up huge poultry project

OTDF CEO Ian Middleton officiating at the groundbreaking ceremony. Photo insert: IAI Executive Director Ilan Weiss (left) blessing the project with a vial containing Holy water and sand from Israel.

Six landowner villages of the Ok Tedi mine in Western Province will soon supply Tabubil, Bige and Kiunga with over 3.6 million eggs, and 26,000 broiler chickens each year through a project initiated by the Ok Tedi Development Foundation (OTDF).

OTDF has engaged Israeli agro-business company, Innovative Agro Industries (IAI) to implement the project. The six villages involved in the project are Atemkit, Finalbin, Bultem, Kavorabip, Migalsimbip, and Wangbin.

A ground-breaking ceremony signifying the start of the Mount Fubilan Agro-Industries poultry project was held on May 24 in Tabubil, where the chicken sheds, feed mill and other associated facilities will be built.

The project will generate revenue for the mine villages from egg sales but also support their food security needs with the sale of live chickens.

Following 18 months of planning, the project has gained a keen interest from the mine villages, especially the women-folk.

Mine Village Women's Representative, Alice Mumuyong said it was good that women had a share in the project and she encouraged them to put their cash into sustainable investments.

Given the lack of arable land in most of the mine villages, the project provides the villages an excellent agribusiness opportunity.

The project will cost K7 million with funding coming from the Village Planning Committee's (60%), Star Mountains Women's Association (20%) and IAI (20%).

The payback period is expected to be within four years and project returns are hoped to support future mine village education needs.

OTML's catering contractor and landowner company, Fubilan Catering Services, has indicated it will purchase 6,000 eggs everyday once the project starts.

OTDF Associate Director representing the North Fly and mine villages, Maino Lucas, encouraged his people to make use of opportunities the project will generate. "For 30 years, we the mine landowners have received direct benefits from OTML, yet we have little to show for it," said Mr Lucas.

"We must become the change that is needed in these communities. The important thing that will sustain us into the future is education, and we can realise this through agro-industries. This project will increase the benefits for our communities and provide employment, training, dividend payments, and project delivery. It will also be seen and touched by the grassroots in the communities," he added.

Present to witness the ground-breaking was OTML CEO and Managing Director, Peter Graham, OTML Deputy CEO and OTDF Board Chairman, Musje Werror, IAI Chairman and Executive Director, Ilan Weiss, OTDF Associate Directors, and mine village leaders.

Papua LNG is gearing up for a 2019 start

Discussions on Gas Agreement to start this year

The Antelope 7 site. ***Photo courtesy of Total E&P PNG***

The Elk-Antelope joint venture has been awarded a five-year extension of their Petroleum Retention Licence (PRL15) in the Gulf Province with a requirement that front-end engineering and design of PNG's second LNG project be completed by the end of next year.

The PRL 15 extension was awarded in December, Oil Search Managing Director Peter Botten told the company's recent annual general meeting.

He said the Papua LNG joint venture is expected to commence discussions with the National Government on a Gas Agreement that will provide the basis for development to commence, before the end of this year.

Following the 2016 appraisal program, the gross proven and probable reserve has been increased to 6.5 trillion cubic feet (tcf), up from 5.3tcf previously. The proven category, which is marketable, amounts to 5tcf.

The final Antelope 7 side-track completed in February did not result in any change in the resource estimate.

The final investment decision for the Papua LNG Project is expected to be made in late 2018 or early 2019.

The Elk-Antelope and P'nyang fields are capable of supporting two LNG trains of four million tonnes each with the partners in the venture – ExxonMobil, Total and Oil Search – expecting to present their development concept to the new PNG Government following the national election.

The P'nyang South 2 well is to be drilled in the second half of this year with the aim of increasing the proven category resource from 1.1tcf by upgrading the current 3.5 tcf 2C contingent resource.

As the second largest equity participant after ExxonMobil in the PNG LNG Project, Oil Search and ExxonMobil have now forged a close partnership in all key gas development areas. They have also jointly taken up deep water exploration leases in the Gulf of Papua.

PNG LNG project seeks contracts for additional 1.3 million tonnes of LNG annually

Market prospects brighten in coming decade due to supply gap

The PNG LNG Plant which is located few kilometres outside of Port Moresby.

The PNG LNG Project is seeking to contract an additional 1.3 million tonnes of LNG annually in addition to existing long-term contracts totaling 6.6 million tonnes annually in view of the recent upgrade in total available reserves and the outstanding production record.

Oil Search Chairman Richard Lee told the company's recent annual meeting in Port Moresby in May that ExxonMobil, the operator of the PNG LNG Project, was presently seeking to contract an additional 1.3 million tonnes of LNG annually.

This followed a reserves upgrade at the PNG LNG Project with Oil Search's proven reserves up by 50 per cent and proven and probable reserves by 12 per cent following independent certification.

The operation has also succeeded in increasing plant capacity well beyond nameplate capacity of 6.9 million tonnes annually with 7.9 million tonnes attained in 2016 and a rate of 8.3 million tonnes in the first quarter of 2017.

Meantime the PNG LNG Project continues to maintain its stellar operation, assisting unit production costs for Oil Search to fall by 16 per cent last year to a low of US$8.50 per barrel oil equivalent.

This is the third successive year of cost reductions, with unit production costs now 30 per cent lower than in 2014.

Mr Lee said that Oil Search's break-even cost after all operating costs, sustaining capital requirements, interest and principal repayments was just under US$28 a barrel.

Oil Search managed to attain a core profit of US$107 million on the basis of average oil and condensate prices in 2016 of US$45 a barrel, 12 per cent lower than in 2015, while gas prices had fallen by 33 per cent to US$6.36 per million British Thermal Units.

Global LNG demand is expected to exceed supply around 2024 with a number of new potential buyers on the market, including Thailand, Singapore, Bangladesh, Vietnam, Pakistan, Philippines, Egypt and Jordan.

Oil Search farms-in to acreage in onshore Papuan Gulf Basin

Oil Search has entered into arrangements with ExxonMobil to acquire a 30 per cent interest in each of PPLs (Petroleum Prospecting Licenses) 474, 475, 476 and 477, and PRL 39.

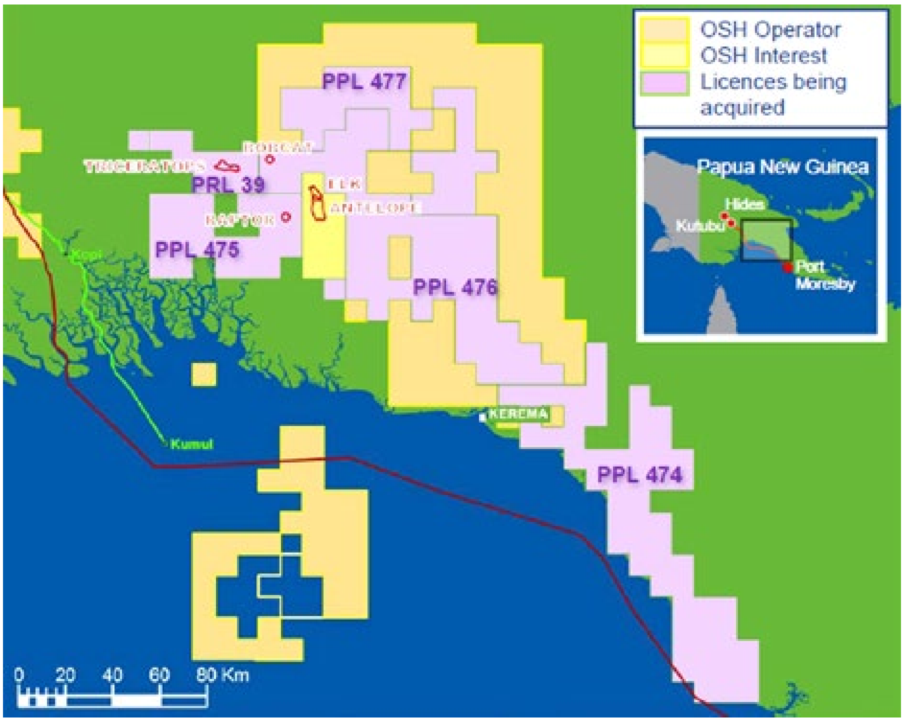
These licences were acquired by ExxonMobil earlier this year following its acquisition of InterOil Corporation.

The licences, which are located in the Eastern Foldbelt in the onshore Papuan Gulf Basin, adjacent to the Elk-Antelope fields in PRL 15, contain the Triceratops, Bobcat and Raptor discoveries.

As part of the proposed farm-in arrangements, Oil Search will undertake a seismic acquisition programme under the licences in the remainder of 2017 and early 2018, on behalf of the operator, ExxonMobil.

“Prior to our proposed bid for InterOil in 2016, Oil Search identified the onshore Papuan Gulf Basin as an area with not only discovered gas resources, but also significant further gas potential,” said Oil Search’s Managing Director, Peter Botten.

“The proposed farm-in to these licences materially enhances Oil Search’s exploration portfolio in this highly prospective area. Combined with our existing acreage position, Oil Search has a world class exploration portfolio in PNG, with multiple high potential play types close to infrastructure.”



Licence interest map. ***Extracted from OSL Announcement***

The onshore Gulf licences are in close proximity to the world class Elk-Antelope fields in PRL 15, which are expected to underpin the Papua LNG development, providing a potential route for future commercialisation. In addition to the existing gas discoveries, we have identified a number of additional leads and prospects have been identified in the acreage.

Entering these licences is consistent with Oil Search’s strategy to focus on areas that have the potential to support the continued expansion of the company’s LNG portfolio in PNG.

Oil Search’s acquisition of the licence interests is subject to due diligence, execution of binding agreements, conditions precedent and regulatory approvals. The terms of the agreement are confidential.

Remote communities and school children get access to health awareness

Over 600 school children and people from three remote villages in Kafa, Southern Highlands Province were recently given education awareness on family planning, tuberculosis (TB) and the dangers of illegal drugs, alcohol abuse and violence.

The Oil Search Foundation (OSF) working with Marie Stopes and the Pimaga District Hospital organised a two-day health patrol in April to deliver health services and awareness to the schools and communities.

The team provided immunisation for children, general outpatient screening, antenatal clinics for pregnant mothers, family planning services, HIV testing and distributed treated mosquito nets.

Michael Puma of the Pimaga District Hospital thanked the community for their hospitality saying; “your response shows the need for more health outreaches to people in rural areas. Besides providing health services, it’s very important to raise general awareness in the community on basic hygiene and social issues.”

The community and surrounding villages at Kafa have a total population of about 1,800 people serviced by one aid post manned by a lone Aid Post Orderly.

Mr Puma said local authorities have difficulty transporting medical supplies to the area so people have no choice but to wait. The last time a health patrol visited Kafa was more than 10 months ago.

Further south, along the border of Southern Highlands and Gulf, another patrol comprising OSF and partners from the Gulf Provincial Health office, Kikori District Health Services, Gulf Christian Health Services and Kikori Catholic Health Services visited the Foroba area.

The outreach provided similar health services to over 400 men, women and children from Negebare, Tetrabare, Saketo, Sirigi, Biagi and Bolo villages who have no road access.

“Working with district, provincial and national government health authorities to strengthen health service delivery is a vital part of the Oil Search Foundation program,” said OSF Public Health Officer, Damien Levi.

“The remoteness creates challenges for many communities. It often results in non-functioning health facilities, lacking basic health supplies and water. It’s a similar situation faced right across PNG and it’s the reason why working together with government and our partners is really important to keep reaching out”.

Oil Search Foundation Public Health Officer, Anna Jack serving a mother and daughter at Kafa.

About Us:

The PNG Chamber of Mines and Petroleum is a non-profit, peak industry association that represents the interests of the mining and petroleum industry and associated industries in Papua New Guinea.

The Chamber has a membership of about 220 companies. This includes most of the mining and petroleum companies active in PNG who comprise the Full Members. Associate and Service Members make up the balance of the membership and these are support companies with business connections to the mining and petroleum sectors in PNG.

About the publication:

The *Mining and Petroleum Review* is a bi-monthly e-newsletter that aims to inform Chamber members, the private and public sectors including the Government, interested groups and the general public about developments happening within the PNG resources industry.

General enquiries:

The Chamber commissions and publishes a wide range of reports on the mining and petroleum industry in the country. A number of these reports can be downloaded for free from the Chamber website while others can be purchased by completing an order form which is available on the website. Forms can be returned to info@pngchamberminpet.com.pg or can be dropped off at Level 1, The Lodge, Brampton Street, Port Moresby.

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