



# Columbus

News for SAPREF employees, neighbours and stakeholders



AUGUST 2018

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**67 minutes of gratitude & grace.**

# Our Three Anchors Set Us Up For Success

*Managing Director Ton Wielers considers the refinery's performance against the anchors of Vision 2022.*



**Ton Wielers – SAPREF's Managing Director**



**Grow Our People:** Addressing the nation on Youth Day, President Ramaphosa urged industries to open their doors to provide work opportunities for young people without work experience.

We are proud to have been able to do this, offering internships and in-service opportunities in many areas across our site.

We also continued to make investments in developing our future leadership through our Evolve programme, as well as growing technical competency through our technical skills building programmes, which will ensure that our staff have the skills set to meet the future head on.

**Safe, Reliable, Operation:** In the last quarter, we made good progress with our improvement journey.

In May, our plans were hindered by the longer than planned Single Buoy Mooring and Visbreaker outages. Unfortunately, we narrowly missed our target to reach 100 days 'No Leaks'.

Our teams executed a flawless, safe mini-shutdown of the North Zone complex, on time and within budget. Through our HDS catalyst change-outs, we are on track to meet our projected targets for the diesel D50 production.

Team SAPREF rises to the challenge to ensure we all go home safely everyday and that we keep all products within the pipes. Our reliability continues to improve through good focus on vulnerable, critical equipment and continuous field presence to 'find small, fix small'.

Indeed, we are well poised to get to the next safe reliable performance level.

**Grow Our Margin:** SAPREF is well into the planning and preparation phase of Turnaround 2019, and the implementation of our investment projects. The four Main Mechanical Contractors are now all on site.



*We continually consult with our shareholder representatives on our advancements.*



*This quarter we had a number of engagements with their senior leaders and we are assured of their continued support in our journey towards meeting our Vision 2022 objectives.*



# Securing Our Licence To Operate

*The R150 million investment into the newly constructed Liquid Liquid Extraction Plant will ensure that SAPREF meets its operating licence requirement for the treatment of effluent water.*

The plant was commissioned at the end of March 2018 and is now fully online removing BTEX compounds from the effluent water before it is discharged into the municipal water system.

Musa Dlamini, who was the Commission Lead says, “In 2015, we started to build this new plant as the old refinery effluent handling facilities were not designed to treat effluent water for BTEX removal.”

A spin off from this investment has been the employment of people involved in its construction as well as people who have now been trained and upskilled to run the new plant.

“We are also cognisant of the fact that meeting our operating licence will play a part in us being a responsible good neighbour,” adds Musa.

**Some interesting facts about the plant are:**

- 1. In addition to BTEX removal, the plant also removes phenol compounds from the effluent.**
- 2. The plant is designed to treat a maximum of 1300 t/d of refinery desalter effluent, which has a high BTEX content.**
- 3. The plant design configuration is unique within the Shell operated refineries worldwide, hence this made it intriguing to commission as we had no “cut and paste” procedures to work. We had to develop them in-house using our own SAPREF home-made refinery experiences and best practices.**



*Many people contributed to the successful construction and commissioning of the new Liquid Liquid Extraction plant.*

## Growing Our People



- During May and June, SAPREF welcomed 17 Interns in the fields of Civil Engineering, Environmental Management, Finance, Human Resources, Inspection and Quantity Surveying. They will be at SAPREF for a two-year period to gain practical work experience.
- On 2 May, John Abbott, President of Shell's Global Downstream and one of the three Managing Directors of Shell, engaged with Production Unit Managers and Area Engineers when he visited SAPREF. They discussed improvements made in the Safe Reliable Operation journey.
- SAPREF showcased possible careers and skills development opportunities at the inaugural Youth Employability Indaba & Career Expo, held at the Durban Exhibition Centre.
- Three Talent Pipeline Learners and some of our 2017 in-service trainees graduated from the Mangosuthu University of Technology, Durban University of Technology and University of KwaZulu Natal.



*Some of the Second Quarter Highlights for 2018 (from top): SAPREF welcomed 17 Interns; John Abbott visits SAPREF; Chem Eng in-service trainee graduate Nothando Ngomane.*

## Faster Welding Technology For Tanks

*In May, the 'flux cored arc' welding process, a new semi-automatic welding technology for tanks, was used for the first time at SAPREF on tank T1118.*

This technology welds approximately four to five times faster than conventional methods. Welding Engineer, Donovan Govender worked closely with the Aveng-GLTA team, who tested and applied the technology. He said, "I was pleased with the results and acknowledge the contribution of the Aveng-GLTA team. Using this technology reduces the turnaround times of tanks being out of service, whilst maintaining a high level of welding quality. This translates into significant time and cost savings if applied correctly."



*Donovan Govender (second from left) worked with the Aveng-GLTA team on introducing new welding technology for tanks.*

# Waves Of Success For Challenging SBM Project

*It is difficult enough executing maintenance tasks under the sea. Throw into the mix currents moving in opposite directions at different sea levels, high swells, inclement weather and you have on your hands a job that is not for the faint hearted!*

Two vessels; The AMAZON and the DEEP CYGNUS, carrying out two different projects simultaneously, had to be dynamically positioned in close proximity to each other and to the Single Buoy Mooring Unit (SBM). The projects entailed the trenching of the 48" subsea pipeline and replacement of one of the two SBM subsea hoses which connect the SBM to the pipeline on the ocean floor.



**The DEEP CYGNUS**

SAPREF's Marine Manager and Subject Matter Expert (SME) – Maritime Safety Captain; Rajan Dandekar, who is usually land based, boarded the diving vessel, The AMAZON for the duration of the outage. He shares some of the technicalities of these multimillion rand projects.

"It took nine months of planning and preparation work to adhere to Shell's diving, dynamic positioning and maritime safety assurance requirements. This would ensure that the risk was reduced to as low as reasonably practicable (ALARP) and everything was in place to carry out this work safely and efficiently," explains Rajan.

"We introduced saturated diving for the first time at the SBM. This technology places six divers into a saturated chamber and diving bell which is pressurised to the same pressure of the sea depth that they will be working at – 45 metres for this project. Using saturated diving is efficient as

divers worked on the seabed for three and a half hours at a time, in rotational shifts in the chamber. This work took 25 days to complete. Previously we used air diving, where divers could only work for 10 minutes at a time before needing to surface for decompression," said Rajan.

"We had two Shell Diving SME's on board during the outage so we could assure operational diving compliance 24 hours. We monitored the project progress closely and signed off key milestones as and when they were achieved. When planning projects such as these, the weather is a major factor in determining the schedule. Metrological charts spanning over the past 25 years were studied to show expected weather patterns. Based on these patterns the month of May was selected as the best time of the year to carry out this work. However, as we know weather prediction is not an exact science and we faced many more inclement weather days than had been charted. When the inclement weather struck, we had to move the dynamically positioned vessels away from the SBM to avoid the possibility of them colliding into the SBM. We also had to carry out integrity tests to check for damage to the maintenance work scope already executed," added Rajan.

"We used the opportunity of this SBM outage to engage our primary SBM service provider AMSOL to remedy the blocked floating hoses which had restricted discharge from tankers at a lower rate since Nov 2017. AMSOL also provided local expertise for both projects. The successful execution of such major projects are possible because all parties involved understand their roles and responsibilities and are adaptable to dealing with constant changes as the project unfolds. We

## Five facts about the two SBM projects:

- A subsea hose string (70 meters long, 24" diameter double carcass flexible) was replaced with a new one.
- The seabed was trenched over a distance of 800 meters and the 48" pipeline lowered by 1.5 meters in order to rest this critical pipeline on a harder layer of sand, which optimises the pipeline's design life.
- The floating hoses were removed and worked on in a dry dock in the port.
- Dynamic positioning (DP) is a computer-controlled system to automatically maintain a vessel's position and heading by using its own thrusters. This was used instead of a conventional anchor spread.
- The SBM is positioned 2.5 km east of the refinery. 80% of South Africa's crude oil is supplied through the SBM.

acknowledge everyone involved in these multimillion rand projects, in whatever role and capacity they held. They can proudly say that despite the challenging conditions, they completed the projects without injury or any incidents," Rajan concluded.



**The AMAZON**

# SAPREF Lends A Hand To Support #Be The Legacy Campaign

*As the world celebrates the 100 centenary of the birth of the late President Nelson Mandela, we are reminded of his quote from his autobiography, Long Walk to Freedom that states, “A nation should not be judged by how it treats its highest citizens, but its lowest ones.”*

Embracing this call to help others, teams across SAPREF went out into neighbouring communities to assist others. SAPREF matched all donations raised and matched time spent on the projects as part of their SERVE initiative, which encourages staff members to do community work.

Some teams were not able to take time off to interact with community organisations due to work urgencies, but still donated cash and goods to the initiatives.

**Here is what teams did:**



The HR and Engineering teams spent time at the Bambisandla Siyanakekela Care Centre, based in Umlazi.

The centre provides residential care for 25 children aged between 2 and 18. The teams provided groceries, crockery, a set of kitchen cupboards and curtains. They distributed winter jackets and provided and served lunch to the children. They also painted the house.



Members of the HSSE and ICT teams raised funds for the Bobbi Bear organisation – a non-governmental organisation committed to helping sexually abused children in the Durban South. They visited three outreach centres and donated kitchen equipment, including fridges, stoves and microwaves, food, clothes and toys, and planted gardens at the centres.



Partnering with Food for Life, 2200 hot meals were delivered to organisations within the Wentworth area. These included John Dunn House – a residential facility for pensioners. Teams from SAPREF including SAPREF retirees and friends, served the meals and donated food items. Other organisations visited were Wentworth Organisation of Women – a facility providing outreach to communities and a nursery school and Malibongwe Senior Citizens Service Centre – a day facility for pensioners. There was enough left over to give to school pupils waiting for their transport home.



The Projects team conducted a clean up at the beach adjacent to the Single Buoy Mooring facility, where they picked up bags of debris.



Once again, the Commercial team supported the Mzamo Child and Guidance Training organisation, which provides care for children with mental and physical disabilities. They bought nappies and gave the organisation a voucher to be used for items they need.



The Electrical, Instrumentation and Mechanical teams collected funds for the Vusikhona Community Centre, in U section Umlazi. The Centre which is run by elderly ladies, provides meals twice a day to 256 children. With the money donated, they bought a wooden 'wendy house' structure from which children would be served during sunny and rainy days. The teams plan to further raise funds for chairs, tables and food parcels.



G4S Security teamed up with teams from Mahlase Cleaning Services, SAPREF's Central Stores and South African Defence Force to clean up a corridor space between rows of classrooms at the Platt Primary School in Isipingo. They also helped clean out a park home to be donated to another school. They will return to help the school to erect a plaque honouring Madiba.

The Fluor team raised money to buy blankets. They also prepared and served sandwiches at the Prince Mshiyeni Memorial Hospital in Umlazi.

# Investing In Our Leaders

*Who better to facilitate Production Supervisor Development workshops with 55 years of experience between them.*

Dave Gruber with 35 years' experience in Shell downstream manufacturing and the Global Process Owner for Ensuring Safe Production and STORM training as well as Antoinet van Schaijk who has 20 years experience in Shell manufacturing sites and technology, facilitated three development workshops giving attendees practical hands on training.

Chris Williams, Production Capacity Development Manager, says, "Each year SAPREF conducts a People Survey, giving employees a chance to share their views. Our Front Line Leaders identified a need for such developmental training. Bart Voet, one of SAPREF previous Managing Directors, expedited the training by identifying expert facilitators – at no cost to SAPREF. We acknowledge this spirit of collaboration with our shareholders. Through such initiatives, we continually grow our people."

Lucia Govender, OMUTDE Team Leader/ SHEQ who attended the course, declares, "It was practical and realistic. The one thing I learnt was how to practice teachable point of view in leadership. This is a good tool in order to see the outcome of any situation in a more structured manner as a leader."



*Shell experts facilitated Production Supervisor Development workshops.*

Central Zone Team Leader Siyanda Sishi also attended the course. "I was reminded of the importance of setting expectations upfront with the team and holding them accountable for work executed. This training is a must for all supervisors."

"To ensure sustainability of the course and continue the rollout across site we have already embarked on a 'train the trainer' programme to ensure that we will have a pool of trained SAPREF Supervisors to facilitate the workshops into the future," adds Chris.



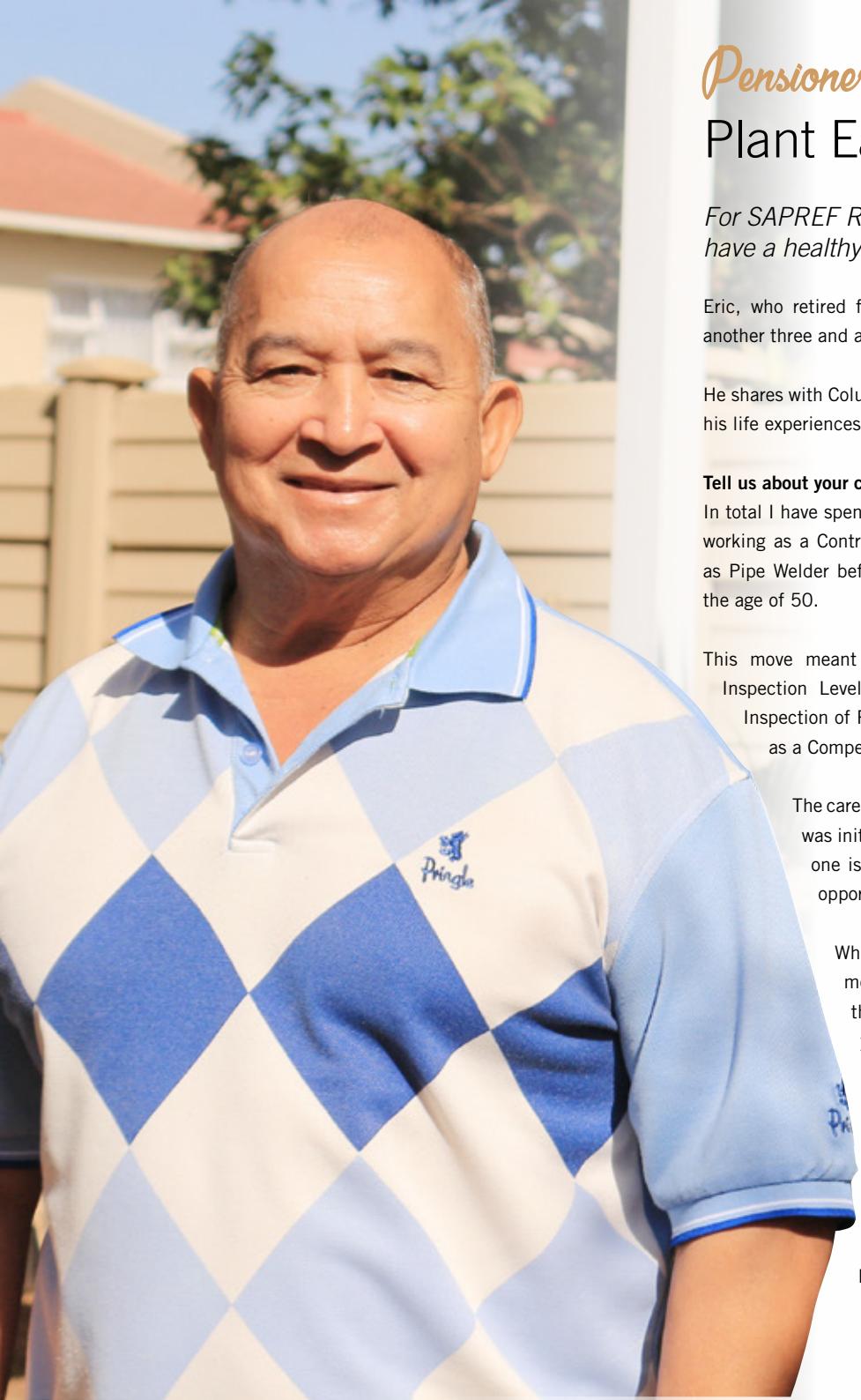
# In Loving Memory Of Ma Doris

*SAPREF Community Liaison Forum (CLF) members mourned the passing of one of the stalwarts of community development in Umlazi.*



Ma Doris Cele was the manager of the Maskey Health Services was an active member of the CLF and the Umlazi Resource Centre. She was well known for her commitment to community development and rolling up her sleeves to get things done.

Rest in peace Ma Doris...You will be sorely missed.



## Pensioner's Feature

# Plant Early To Reap Later

*For SAPREF Retiree Eric Lortan, “Retirement is wonderful! Old age not so. Good if you still have a healthy body and mind, and you have to put in the effort to prepare for this over time.”*

Eric, who retired from SAPREF in 2008 aged 60, spent another three and a half years on an extended contract.

He shares with Columns readers some words of wisdom from his life experiences.

### **Tell us about your career at SAPREF.**

In total I have spent 30 years at SAPREF, the first ten years working as a Contractor, then being employed by SAPREF as Pipe Welder before moving into the Inspection team at the age of 50.

This move meant ‘Back to School’ where I completed Inspection Levels 1 and 2, (both in the same year), Inspection of Pressured Equipment (IPE) and qualified as a Competent Person (CP).

The career change and needing to learn new things was initially daunting, but I quickly realised that one is never too old to learn. I embraced this opportunity as an upward career move.

When I consider why I was identified to move into the Inspection team, I realise that people are watching you, even though you don't know it. So my advice from that is always put your best foot forward, no matter what you are doing.

I worked on many Turnarounds, accepted new reactors, regenerators, boilers and heat exchangers, as fit for purpose. I was also a part of the Pipeline Replacement Project, which

involved the replacement of the transfer lines from the refinery to Island View.

My long career at SAPREF was not only about work. I remember fondly the many team relays we participated in, and through this I developed a passion for walking. You will now often find me walking along our shores. Working at SAPREF was also securing the future for my family through the numerous benefits. I was able to educate our three daughters, pay off a bond and save for retirement. It is really about making use of the opportunities offered and making informed decisions along the way that will help one secure one's retirement.

### **Tell us what you have been doing since you left SAPREF.**

I left SAPREF in December 2011 armed with these Inspection qualifications and experience, which capacitated me to work on refineries and sugar mill shutdowns throughout the country. I travelled our beautiful country. Even now, whenever we go on holiday as a family, we select different parts of the country to explore. Fishing is one of the first things we look for on the list of attractions when selecting a holiday destination.

It is a mistake to think retirement is about putting up one's feet. Instead, it is an opportunity to do things you were not able to do when you were working. I would say one needs to keep active, mentally, physically and spiritually, as well as build a support base of family and friends that will bear fruit if you put in the effort.

There are no shortcuts in cultivating these, so start early. This will make the transition to retirement easier to embrace.

# SAPREF Commemorates Women's Day

*On Wednesday 8 August, the women of SAPREF wore black clothing and covered their heads with doeks and scarves.*



They also held up placards at refinery entrances, raising awareness about harassment and discrimination.

A number of male colleagues also supported their female colleagues, joining the placard demonstrations both at the refinery and at Island View.

The Women's Month programme aims to encourage all employees to be their Sister's Keeper. This is to encourage both male and female employees to be alert and report cases

of harassment and discrimination.

Looking out for our sisters does not start and end within SAPREF premises as Zama Cele, Weighbridge Clerk explains; "SAPREF sisterhood is about offering support to each other both inside and outside of the work place. We therefore sometimes meet outside of work to celebrate each other's birthdays, baby showers and bridal showers."

For Nokwanda Zulu, Mechanical in-service trainee, being your sister's keeper is about encouraging women at SAPREF to conquer the world.



She says, "Our noble women who are older than us and have worked longer at SAPREF, are our role models and they encourage us to achieve great things. We also look out for each other's health and well-being hence the creation of SAPHILA programme, and by participating in the women's races. These give us a chance to interact with each other, whilst keeping healthy."

"So I can boldly say women at SAPREF are inspired and *'INSPIRED WOMEN INSPIRE WOMEN'*, adds Nokwanda.

# Long Service Awards

Columns takes this opportunity to acknowledge the SAPREF staff listed below on their long service award milestones, achieved in April, May, June and July 2018.



Ton Wielers and Lori Reyerkerk congratulate Graeme Merrick, who joined SAPREF in 1977. He received the wooden spoon for the longest serving member of staff.



Rutger van der Kloes and John van Belkum congratulate Stephen Ndlovu for his 20 years of service to SAPREF.

## Honouring Dedication

### 30 YEARS

Morgan Govender	Area Focal Point
Prega Govender	Operations Maintenance Supervisor
Maya Sanpath	Treasury Assistant

### 20 YEARS

Vic de Sousa e Sá	Process Safety Manager
Lucky Lukhozi	Solvents Loader
Lushane Moodley	Process Technician
Stephen Ndlovu	Process Technician

### 10 YEARS

Ravin Ramesh	Projects Control and QS Lead
Samantha Stephenson	Tankage Engineer
Lindo Zondi	Performance Analyst
Nozipho Ndhlovu	HR Administration Manager
Colin Muthusami	Finance Manager
Raj Hooblal	Environmental Technologist
David Radebe	Safety Manager
Kumaran Naicker	Instrument Supervisor
Melusi Ntuli	Alkylation Technologist
William Qwabe	Team Leader
Ivan Govender	Process Technician
Reginald Mkhize	QMI Technician
Kevin Govender	Fire Officer

## Saphila: We Live!

This year SAPREF made a decision to recruit more females into its pipeline programme. This resulted in 70% of the new recruits into learnerships and apprenticeships being female.

The organisation engaged the new learners in determining what support they will need in order to cope with the transition from school to the world of work. The result of those engagement is a wellness programme named; SAPHILA (We Live). This programme has two components to it.

The health component is administered in partnership with Isipingo Clinic. They offer family planning services on-site on a weekly basis. There is also a psycho-social component which offers coping strategies for all our learners. This covers topics such as financial management and dealing with substance abuse. Through this programme SAPREF hopes to support and retain learners in order to have a talent pipeline for the future of the refinery.



## Team SAPREF Don Their Takkies For Health

This quarter many members of Team SAPREF participated in three sporting events.



Nine people ran the annual 90.18km Comrades down run from Durban to Pietermaritzburg, with Talent Nxumalo and Ben Swart being first time Comrades runners.

Fifty-eight SAPREF women signed up to participate in the Spar Women's Race, running or walking five or ten kilometres along the scenic Durban Golden Mile.

The Totalsports Women's Race was an opportunity to join the thousands of women participants 'painting the town pink' in support of women affected by breast cancer. Team SAPREF came out in full support of the event.

**SAPREF Toll-free number: 0800 3300 90**

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### Changed your address?

Pensioners, has your address changed?

Email us at [public@sapref.com](mailto:public@sapref.com) so that we can amend our mailing list.

