

# CAT<sup>®</sup> MAGAZINE

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## NEW RANGE. NEW RULES.

THE OPERATOR CHALLENGE  
CELEBRATES SKILL

CUSTOMER-DRIVEN POWER  
AND PERFORMANCE

## CAT<sup>®</sup> MINI EXCAVATORS

## LAKE KIVU, RWANDA

CONVERTING UNDERWATER GASES  
TO ELECTRICITY



شركة الزاهد للتراكتورات  
ZAHID TRACTOR

CAT<sup>®</sup>



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### CAT MAGAZINE WANTS YOUR OPINION

Don't miss our reader survey. We want to know what kind of information and articles are important to you.



## COLOPHON:

Above is just a taste of what's in this issue – you'll find plenty more news and views inside. If you have an idea for a story for a future issue, contact our publishers at [catmagazine@cat.com](mailto:catmagazine@cat.com).

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## DEAR READER,

Caterpillar and the Cat® dealer network are here to help our customers succeed. Whether it is for a large contractor or an independent owner-operator, we strive to help customers achieve their business objectives.

We know that for our customers, time is money. As a manufacturer of construction equipment, it is critical to ensure productivity features on Cat equipment are easy to operate and that customers can get an immediate return on their investments. With the ongoing launch of our next generation construction equipment, we continue to deliver integrated technology that increases ease of use by providing customers across a variety of industries the ability to give their operators the tools they need to be efficient.

In this edition of Cat Magazine, we are featuring our Cat Operator Challenge. In partnership with our dealers across Europe, Middle East and Eurasia, we hold local competitions to find the best operators in each country. The best win a trip to Malaga, Spain to compete in the European and CIS regional. We believe bringing together experienced operators and machine technology will continue to change the game

in the construction industry. Our strategy has been, and always will be, to help our customers be more competitive and productive. We have seen throughout our competitions in 2018, that operators who are proficient at using technology come out on top in the timed competitions.

We believe to truly reap the benefits of our integrated technology strategy, it is critical for us to focus on both the machines and the operators. Together, we can help rewrite the rules and help the construction industry take maximum advantage of the technology that's integral in driving business success.

**Herwig Peschl**  
**EAME Industry Sales Manager**  
**Global Construction and Infrastructure**

## WHAT INSPIRES OUR Contributors



### **Robyn Hatch, Caterpillar**

Robyn joined Caterpillar in 2013 bringing with her 15+ years of global strategic marketing experience across multiple industries. As part of her current role in marketing for heavy construction equipment, she is responsible for developing and driving the EAME marcom strategy to launch the next generation excavators. Robyn is an avid skier and enjoys cycling, kitesurfing and travelling.



### **Marie-Helene Mileto, Caterpillar**

Marie-Helene is the Global Construction & Infrastructure Equipment Marketing Consultant for the Africa & Middle East Region. She is responsible for driving lead generation across a diverse region through the Cat dealer network. This includes GCI products, technology and services. Key responsibilities include developing new product introduction campaigns. Marie-Helene holds a Master in Marketing. She is also a hypnotherapist and enjoys trekking and travelling.




### **Roxane Soussan, Caterpillar**

Roxane became a Marketing Communication Specialist at Caterpillar through a graduate program. Her responsibilities include creating content for European territories, helping dealers to promote and activate their sales channels. Some of her key projects involve launching marketing campaigns for the next generation mini excavator, managing the Europe Sales & Marketing Integration Summit and supporting Bauma 2019. She enjoys diving, travelling and skiing.



### **Jan Rudak, Bergerat Monnoyeur Poland**

Jan has spent the last 3.5 years as Marketing Communication Manager for Bergerat Monnoyeur Poland. He is responsible for a wide range of communications, including events as well as print and digital media. "I love this work because there is always something new happening and I can use my creativity to be a problem solver," he says. Jan is the father of two children and is a professional race driver who competes in rallycross.



THE CAT® OPERATOR CHALLENGE

# RAISING THE GAME, REWRITING THE RULES

#REWITETHERULES

*The entire line-up of Cat® machines runs from mini to massive. And, in Cat Magazine, we often focus on those machines, new product lines and how Cat equipment helps get the job done on a wide variety of projects across the world.*

But, none of that would be possible without the skills and precision of machine operators. That's where Caterpillar's Operator Challenge comes in. The Operator Challenge is an international competition run through Cat dealers. It focuses on and tests operators' skills in a series of demanding challenges that require agility, mental toughness and the ability to use integrated ease-of-use features such as Cat Production Measurement (CPM) and Slope Assist™, while measuring accuracy in loading, moving and driving – all against the clock. This year, Caterpillar upped its game by introducing new, more demanding elements under the campaign theme of "Rewrite the Rules" of operations.

"This competition is designed specifically to recognize operators and test them through a series of complex trials that represent real-life environments using a wide range of construction machines," said Robyn Hatch, Marketing Communications Consultant at Caterpillar. "They also can take advantage of integrated, on-board technology in Cat machines like next generation excavators, wheel loaders and articulated trucks. The Operator Challenge is really a celebration of the partnership between operators and machines, and how they can achieve the best performance together."

The winner of the 2018 challenge was German operator Sebastian Behr. Sebastian lives in Cologne and works

for family company Reuen GmbH, which specializes in renting operated equipment. After competing in a series of local, regional and national heats, Sebastian outlasted 18 highly skilled operators from nine nations across Europe, Middle East and Eurasia. The final competition was held at the Caterpillar Demonstration and Learning Centre in Malaga, Spain, October 1-4, 2018. Sebastian won an all-expenses paid VIP trip for two to the United States that includes a tour of several Caterpillar high-tech research and development facilities in Illinois. He then heads to Las Vegas for a well-deserved holiday.

"This was a really tough competition. I could sense my competitors were very close," said Sebastian, who won the





2  
Paul Heffernan, Ireland

1  
Sebastian Behr, Germany,  
Reuen GmbH

3  
Holger Quehl, Germany

18  
*highly skilled operators*

9  
*countries*

6  
*complex trials*

Malaga  
**SPAIN**

October  
**2018**

**GRAND  
PRIZE**  
*VIP trip Las Vegas*

## MORE AWARENESS

Not only does this competition highlight the value of having good operators, this marketing program is designed to bring more awareness to three areas:

- (A)** New products and technology
  - Hands-on, interactive experience of new products and technology
  - The gamification of real-world operator movements via a competitive leaderboard
- (B)** Introduce new customers to Cat dealerships
  - Showcase people, expertise and facilities by making dealerships accessible through an open house format
- (C)** Celebrate the skilled trades industry
  - Promote the trade and operator careers
  - Highlight operator skills

competition for a third time. "I am so happy to have won and had such an amazing experience during the Operator Challenge final in Malaga. I will never forget it." Congratulations are also in order for runner-up Paul Heffernan from Ireland and Holger Quehl from Germany, who claimed third place.

What started back in 1998 with 35 competitors from eight different countries, has truly evolved into a one-of-a-kind test of skills. And, while Cat machines may do the heavy lifting, it's only in combination with operators' talents and skills that true productivity can be realized.

"We are currently putting the finishing touches on the 2019 Operator Challenge

plans," added Robyn. "Expect more dealers, more territories and even more intense competition than ever before. We will communicate more of the details during our official launch at bauma in April. This competition is about more than just skills and machines, it helps attract new customers, extend the Cat brand and helps us interact with customers in fun and meaningful ways."







## » THE OPERATOR CHALLENGE FROM...

### A CAT DEALER PERSPECTIVE: ZEPPELIN

#### Why did you enter the Operator Challenge?

Our Zeppelin Operators Club is now 25 years old and we have more than 30,000 members who love the Cat brand. Naturally, we want to compete with other operators on different machines to prove our skills. As a dealer, the demand for the profession has increased. We want even aspiring operators to know we take them seriously and will be involved in their growth while increasing the attractiveness of the Cat brand.

#### What do you think of Sebastian's win?

We are very proud of him, especially since he has won for the third time in a row. It is easy to see that he has grown up as an operator. He's a great guy who's 100 percent proficient at his job. He continues to try to improve and integrate the technologies of new machines into his daily work, thereby increasing efficiency and effectiveness.

#### What does that mean for the dealership?

Through this shared experience with Sebastian, the partnership with him and Reuen GmbH has become even better.

#### How do Operator Challenge skills translate to jobsites and benefit customers?

The challenges simulate everyday work. Operators have to master the controls and technology, which increases efficiency and productivity. Both are advantages to customers.

#### Why can Cat operators be so precise?

It shows that Cat machines are designed to be very user-friendly. You can see that Caterpillar attaches great importance to this. Operators appreciate that, which is also reflected in the work they do.

#### What do you think of the New Range-New Rules theme?

It shows that there is a change in the industry. More and more technology is flowing into operators' jobs and Cat machines. Time is money, so efficiency and effectiveness are an absolute must to be competitive.

#### What would you say to other dealerships about the Operator Challenge?

Be sure to participate. The operators are the ones who work all day on machines. They know what great machines Caterpillar has and their advantages. For the operators, it is an absolute highlight to take part in the Operator Challenge and prove their skills. This not only makes an impression on the operators, but also on the companies and customers they work for.





## SIX DEMANDING TRIALS, BUT ONLY ONE WINNER



**Happy Handler:** Move and place three tires in different positions from the floor to tire trees as required, using an MH3022 material handler. Time to complete the task will be taken.



**Stay On Track:** Pass through a course with different tasks and obstacles, using a 299D2 skid steer. Time is measured.



**Load Me Up:** Load a 730 articulated truck with a 972M XE wheel loader in three passes. Time and payload will be measured and scored.



**The Articulator:** Run loaded on a haul road, using retarder when needed. Then, reverse the 745 articulated truck into loading position.



**Watch Your Weight:** Using CPM on the 323 next generation excavator and to load a 725 articulated truck to required payload within a tolerance of +/- 3 percent.



**Precision Push:** Track through a designated obstacle course to complete a variety of tasks, with a D6T XE track-type tractor.

Sebastian Behr, Germany,  
Reuen GmbH ▶



## AN OPERATOR PERSPECTIVE: SEBASTIAN BEHR

**Why did you participate in the Operator Challenge?**

I took part because I wanted to fight for the title. The title should stay in Germany.

**What was it like to compete?**

After a four-year break, it was nice to participate again. It's nerve-racking but exciting and fun to compete against other operators from different nations.

**How did you practice for the different challenges?**

It's a little hard to practice since you don't know which exercises to expect. I try to become more and more familiar with different machines so I can get a feel for them.

**How would you describe the competition?**

It's very difficult because different machines are used in all the exercises. Working against the clock puts you under additional pressure but you have to push yourself because you don't know which position you are occupying compared to how the others stand.

**What was the most difficult challenge and how did you complete it successfully?**

Definitely the skid steer loader exercise, because I have hardly any experience with this machine and it is not used that much in Germany.

**How do the skills you use during the challenge translate to the jobsite?**

I was able to profit most from the loading test. This is a situation that also occurs on construction sites. It was interesting to see the demo, which showed how to work effectively and efficiently and how to save fuel.

**What does it mean to win?**

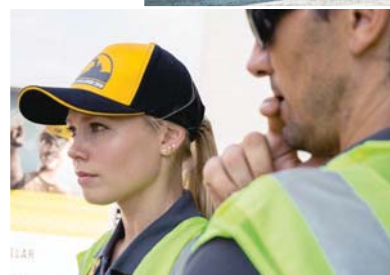
To have won a third time in a row and to have prevailed against the best operators from different nations is an indescribable feeling and gives me confidence.

**What would you like to say about Reuen GmbH for being able to compete?**

We rely on the latest generation of Cat machines and the company makes sure our operators are trained at least once a year. I'm glad to say the company makes sure operators handle the machines well. They also make sure the machines are visually impressive as well.

**What advice can you give other operators about the challenge?**

Try it and do it. If they have the opportunity operate different machines, try them out. During the challenge, it is best to control any nervousness and really concentrate on the task at hand. ■



**Additional details at:** [www.zahidcat.com](http://www.zahidcat.com)



## NEXT GENERATION HYDRAULIC EXCAVATOR (NGH) EVENTS

# A look at the next era of Cat® PRODUCTS and TECHNOLOGIES from around the world



### PARENIN – TUNISIA

Parenin hosted its event for its most important construction customers. Around 70 customers came to the event, where Parenin introduced technology through a demonstration of an NGH, and used a simulator to showcase the high-tech cab monitor. The presentations showed how technology can help customers increase efficiency, reduce fuel consumption and lower maintenance costs. The event took place in a VIP space with a stunning view of Lake of Tunis.



### JA DELMAS – IVORY COAST

JA Delmas held their event with 3,000 people attending the exhibition and about 50 people viewing each of the five demonstration sessions. The event took place at the Félix-Houphouët-Boigny International Airport in Abidjan with the goal of revealing NGHs in Ivory Coast. Guests were given the opportunity to experience machines and their technology.



### BARLOWORLD EQUIPMENT – SOUTH AFRICA

Barloworld Equipment kicked off in more than eight regions, including Johannesburg, Middleburg, Cape Town, Durban, Port Elizabeth, Bloemfontein, East London and Polokwane. More than 500 customers from different regions were in attendance.

Each event gave guests a unique experience featuring a road truck, which was fully branded

in NGH creative. The truck travelled to four cities and transformed into a giant stage set up with surrounding screens, while customers were seated under an open marquee structure. Even though the event focused on NGHs, other segments, such as aftersales support, technology and rental were also on display. The objectives were to create awareness of the new generation of excavators, share

information, and to showcase new technology. Barloworld even sold machines during events.



### TRACTAFRIC – MOROCCO, CAMEROON, REPUBLIC OF THE CONGO AND RWANDA

Tractafric events included sites in Casablanca, Kigali, Pointe-Noire, Brazzaville, Douala, Yaoundé and Libreville. In total there were more than 800 guests for the seven events. Each event a different focus, such as an operator challenge, to introduce new machines, improve the dealer's visibility or to promote products, parts and services. Exhibits also featured live demonstrations and displayed the 320NG, 426F2 and 320GC.

### MANTRAC – NIGERIA

Mantrac held events over several days, including a press conference, operator challenge days, a 26-kilometer NGH procession and a VIP event. Attendees included journalists, dozens of operators and 40 customers from 32 companies, plus four new customers. The focus was to present the capabilities of NGHs from a client's perspective to the decision makers. The Cat® 320 was revealed and operated by a nine-year-old boy to emphasize its ease of use.







#### AL-BAHAR – UNITED ARAB EMIRATES

Al-Bahar launched the NGH at the Big 5 Heavy Exhibition. It's the largest dedicated infrastructure event in the Middle East. Attending were 6,459 visitors from around 80 countries. Themed "New Range. New Rules.", the dealer's exhibit highlighted how the latest Cat range, including wheel loaders, dozers and excavators, gives customers powerful advantages.



#### JALLAD – JORDAN

Jallad's event took place at their new, main facility in Amman and had more than 400 customers in attendance. The goal of the event was to introduce the NGHs, such as the Cat 320, along with their features and benefits, while improving sales. At the event, customers were able to engage with the machines, one machine was sold, and more than 25 leads were generated.



#### BORUSAN – TURKEY

Four NGH events gave Borusan the opportunity to grab the attention of influencers, potential and existing customers. The shows in Diyarbakir, Adana, Ankara and Izmir attracted nearly 520 guests. Participants also received specially branded NGH photos and were able to see demonstrations, operate an excavator smart screen simulator and experience the Cat 320GC and 320.



#### SCOMAT – MAURITIUS

The Scomat event took place in the dealer's yard where there is sufficient space to erect a marquee and install a big screen. The main objective was to help current and potential customers discover these new products and their benefits through live digging demonstrations with an NGH machine. Three NGH machines were at the event. More than 100 people had a first-hand look at the event's three NGHs. Scomat celebrates 90 years as a Cat dealer in 2019.



#### SUTRAC – SUDAN

Cat dealer Sutrac held a large occasion in a private garden area on the outskirts of Khartoum. To launch the new NGHs, Sutrac's evening centered on technology, to portray the brand image to customers as forward thinking and to keep them up to date on new developments. The occasion's biggest success was the level of engagement the dealer achieved with its target base. More than 700 guests attended, and positive feedback about the machines was given throughout the event.

Machines featured at the event were displayed in creative ways. A 140K grader and two D8R dozers were displayed on the road 6 km, 5 km and 4 km away, so they could be seen as guests approached. A 50Kva



(sound proof) genset, a 160K grader, a D8R dozer and a 950 GC loader were all displayed at the event's venue. Finally, stick time was given on a 320 GC excavator and a demonstration, stick time and reveal were provided on a 320 excavator.

The dealer successfully sold 10 x 320 NGHs post the event. The next planned event is a roadshow to display the machines throughout Sudan and to reach customers at their working sites.





THE NEXT GENERATION OF CAT® MINI EXCAVATORS

# CUSTOMER INSPIRED

*After having Cat® mini excavators in EAME since 1998, Caterpillar has had the opportunity to listen to, absorb and incorporate customer feedback into its newest line of machines. This next generation of mini excavators is vastly customer driven.*

## OPERATOR COMFORT

The cab is now sealed and pressurized, quieter and a more pleasant environment. Operators can control heating and the radio while listening to music or talking on the phone through Bluetooth®. There's cruise control, too. And Caterpillar is offering cab aircon for the first time in the 1-2 ton size class.

*"It gets very hot in the summer. I believe it must be one of the only one-meter-wide compact machines that has air conditioning, so that's a big advantage."*  
Samuel Portaud, Agriculture Entrepreneur, France

## STICK STEER

Drive and steer using the joystick. Customers can now choose whether they utilize Stick Steer or the traditional levers and pedals for travel.

## DISPLAY SCREEN

An easily navigable, state-of-the-art monitor comes standard on all machines through which optional Cat quick-couplers can also be controlled.

*"Basically, any driver can get on it and set up their control modules and they can just drive the machine."*  
David Unsworth, Plant Operator, Worth Plant Hire, UK

## SAFETY FEATURES

- A highly visible, orange retractable seat belt
- All hydraulics functions and machine starting are disabled when the left hand console is raised
- Machine operation is similar throughout the line-up
- Enhanced visibility
- Additional tie-down points

*"This machine is much more robust, more responsive, more stable than the previous one."*  
Sandro Zoppellaro, Operator, VPS, Italy

## TECHNOLOGY

Across all the models, Product Link can be included to provide valuable diagnostic, location and service information. The new monitor positioned in front of the operator also provides Bluetooth connectivity for calls and music from mobile devices, radio and even DAB can be specified as an option.

## HYDRAULICS OVERHAUL

The hydraulic system and machine controls throughout the range have been updated, including functionality that allows the hydraulic flow to be changed using the cab's advanced monitor.

*"The machine has got a lot more lift and power, plus the hydraulics are a lot faster than the old one."*  
James Langton, Owner/Operator, JA Langton, UK





*"They are perfect rental equipment, especially for customers who want to operate the machines themselves."*

Dave Wood, Product Specialist for the Cat Mini Hydraulic Excavator in the EAME

#### CUSTOMIZABLE HYDRAULIC CONTROL

"We have something that you don't get with the competition. It's the ability to modify implement speeds," says Dave. "If an operator is grading and wants to drag a bucket just above ground level, slower front linkage operation would provide more control. But the operator might also want faster joystick response. On our machines, you can do both to get the very best control. We want to provide the most efficient performance and the best operator experience." Additionally, operators can switch the hydraulics into continuous hydraulic flow so tools continue to run and operators can concentrate on directing the machine.

"We felt it was time to take the opportunity to use customer responses and work with our engineers to put new ideas into place," said Dave Wood, Product Specialist for the Cat Mini Hydraulic Excavator in EAME. "It's all about helping customers get the job done."

Previously, machine design varied by region. But now, Caterpillar is taking a more streamlined approach, regional regulations and customer needs are still taken into consideration, but commonality has also been a priority.

"We've taken the full line up and created a common look and feel throughout the range," added Dave. "We wanted a modular design with fewer components. And, we wanted to provide different regions around the world with a similar product and build while being extremely flexible with the way we put machines together. This way we can satisfy markets from a manufacturing point of view and distribute as close as possible to the customer."

#### GROWING DEMAND

When mini excavators first came to market in Europe, they were mainly used for trenching. Today, mini excavators are still ideal for those types of tasks. And, because they are so easy to use, newer operators can work with them quite comfortably in an array of industries.

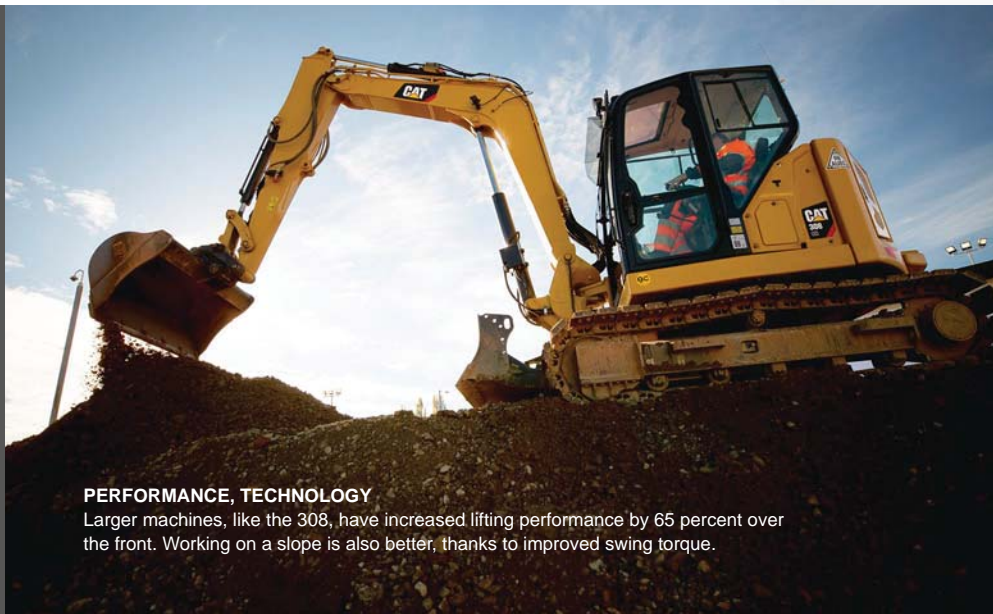
"The type of applications these machines are being used for grows all the time. That includes our new line of Cat mini excavators," said Dave. "They are perfect rental equipment, especially for customers who want to operate the machines themselves. Plus, the availability of different work tools is making mini excavators even more desirable and versatile. They add to the number of applications and put more demands on machine performance. But, that drives us to improve and enhance our product line to perform even better, which is exactly what we did with the new line of Cat mini excavators."

Caterpillar has been working with this customer-focused approach for about three years. It's something they take seriously. "We gathered a lot of information from customers. Then the engineers came out with some things we didn't think we could do. So, we had focus groups, dealer advisory groups and asked customers from around the world to try the machines. The feedback was extremely positive and the improvements we've made make a difference. We're offering things customers and operators may have never thought they would get on a machine in this class. That makes me proud," Dave said with a smile. ■

**Additional details at:**  
[www.zahidcat.com](http://www.zahidcat.com)

#### OWNING & OPERATING COSTS

Even though these machines are relatively new to the market, there are promising figures when it comes to owning and operating costs. "Benchmarking against our current machines, we're seeing 15 percent lower operating costs on the 1-2 ton Next Generation models and 10 percent on the 7-10 ton machines. We also have better serviceability. And, when we look at performance, we've raised that throughout the range," Dave explained.



#### PERFORMANCE, TECHNOLOGY

Larger machines, like the 308, have increased lifting performance by 65 percent over the front. Working on a slope is also better, thanks to improved swing torque.





The operator's view from his office isn't bad. Photo take in Al Ulla, Saudi Arabia.







LAKE KIVU, RWANDA

# TURNING DANGEROUS GAS INTO ELECTRICITY

*The sandy beaches of Rwanda's Lake Kivu look like a picture-perfect, tranquil waterfront. However, the lake actually poses both a significant threat and an opportunity for the citizens of rural Rwanda.*

## Rwanda facts:

- Known as the Land of a Thousand Hills.
- Capital city of Kigali is Africa's cleanest city thanks to community cleaning days.
- Rwanda's Parliament has more female members than any other parliament in the world.
- A no-plastic-bags-allowed policy and they are confiscated at entry.

Depth = 350m



Gases from volcanic activity in Mount Nyiragongo contribute to the danger of an overturn in Lake Kivu.

Kivu, which straddles Rwanda and the Democratic Republic of the Congo, holds approximately 60 million cubic meters of methane and 300 billion cubic meters of carbon dioxide.

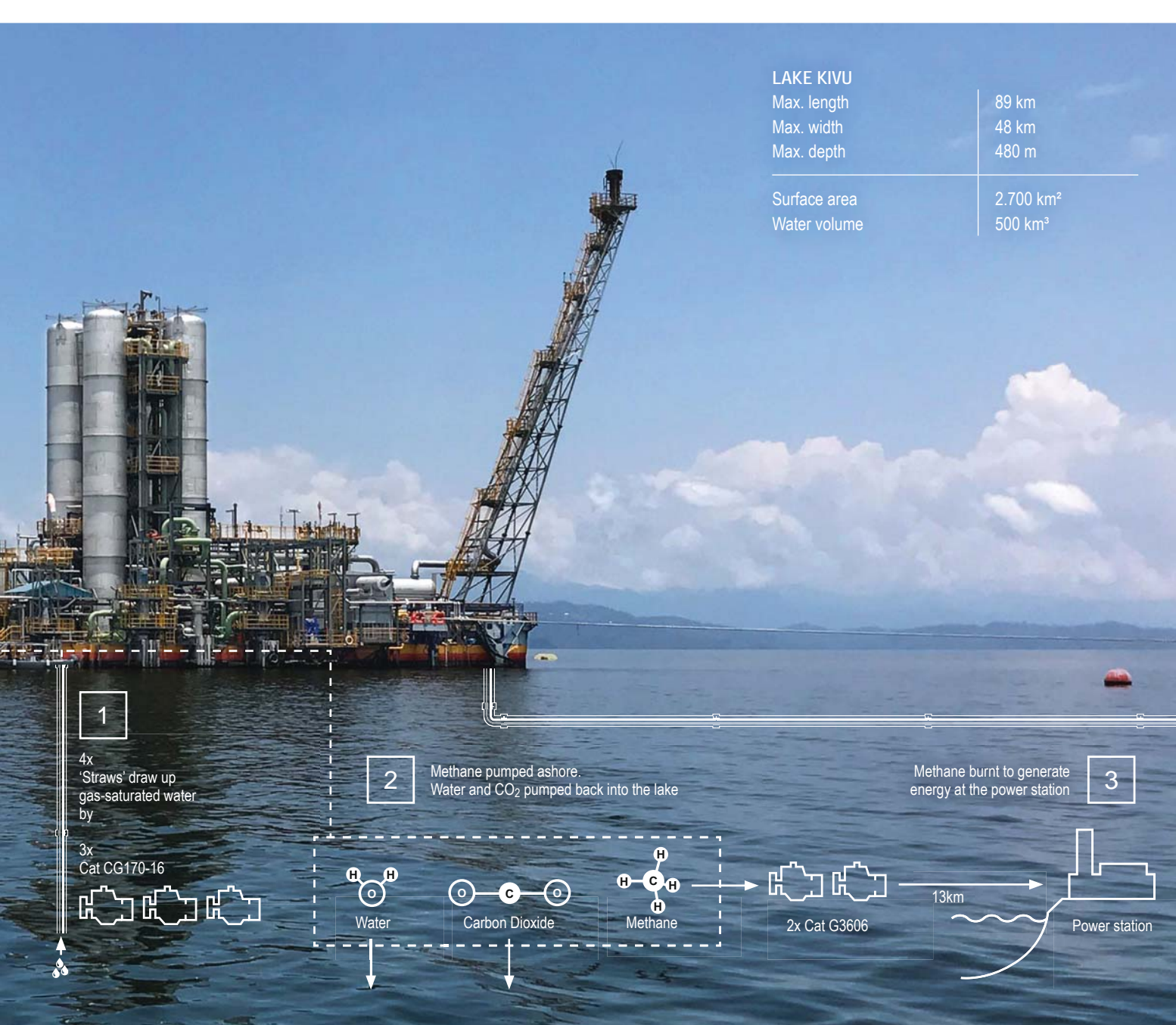
These gases come from a combination of decomposing organic material on the lake bed and nearby volcanic activity. Left alone, Mother Nature would most likely take its eventual course and create a deadly phenomenon known as an overturn, or a limnic eruption. Explosions like these occur when the pressure of the gases, in lakes like Kivu, exceeds the pressure of the water at particular depths. When that happens, the resulting chain reaction releases the gases with violent force. For the two million residents who live around Kivu's coast, it's a sizeable

risk. However, only two deadly eruptions are known to have ever occurred globally. Neither were at lake Kivu.

In 2006, U.S. energy firm Contour Global began a lengthy, \$200 million engineering project called KivuWatt to produce up to 100 megawatts of electric power from the methane gas. An initial platform, made with 3,000 tons of concrete and stainless steel, is currently extracting and supplying enough gas to produce 26 megawatts of electricity. The overall volume of methane in the lake could provide up to 960 megawatts. That's more than five times Rwanda's current grid capacity. In fact, more than 80 percent of Rwanda's 12 million people are still not connected to the grid.

"The first platform was commissioned in 2016. With three large Mannheim-





## LAKE KIVU

Max. length	89 km
Max. width	48 km
Max. depth	480 m
Surface area	2.700 km <sup>2</sup>
Water volume	500 km <sup>3</sup>

built generators providing electricity for the extracting barge and two G3606 driving compressors that send methane to shore, Caterpillar is at the heart of the process and helps ensure 26 megawatts of electricity is added to the grid 24/7,” said Sylvain Prost, Business Unit Director for Energy & Transportation for Tractafric.

Leila Saidi, E&T Aftermarket Territory Manager for West and Central Africa, also had this to say, “Seeing the Kivu watt project platform operate successfully is truly a genuine example of how our engines are helping make the world a better, safer and cleaner place.”

Cat® dealer Tractafric has been engaged with Kivu watt since its inception. And, even though the project is set in the middle of Africa, it has many

similarities to an offshore oil and gas site, something with which Tractafric is very familiar. Deep expertise, close proximity and a dedicated, 24/7/365 project hotline are providing the customer with piece of mind.

While the gas extraction technology is very complex, the concept of how the methane is extracted is fairly basic. “The platform is anchored to the lake bed 13 kilometers off shore. Four pipes draw water up from a depth of 350 meters. Water and carbon dioxide are removed, and the resulting 85% methane rich gas is pressurized and sent to the on-shore power plant. The water and carbon dioxide are then returned to the lake, improving the conditions for the lake ecosystem,” added Sylvain.

The success of this project could have many positive impacts throughout the region. Producing power in this manner is less expensive than importing fossil fuels. The relationship between Rwanda and the Democratic Republic of the Congo could improve. Residents would have a better, more reliable connection to Rwanda's electric grid, especially those in rural communities. And, the lake's water quality, fishing industry and recreational opportunities would be enriched.

Kivu watt is currently producing 26 megawatts of electricity and an agreement was recently signed to produce an additional 75 megawatts of electricity and to construct three additional platforms. ■

**Additional details at:**  
[www.zahidcat.com](http://www.zahidcat.com)



# A NEWLY REFURBISHED SITE IMPROVES THE CUSTOMER EXPERIENCE

*To help Cat® dealer Bergerat Monnoyeur Poland increase its rental business, Jan Rudak, Marketing and Communications Manager, and his team upgraded the dealer's web presence to create an online digital suite. Now, when visiting [CatRentalStore.com](http://CatRentalStore.com), customers can browse through a variety of equipment and equipment sizes, request dates for machine use, get expert help and receive a quote.*

The new version of the site was launched in June 2017. It was promoted through a paid media campaign to help raise awareness of the Cat Rental Store brand in Poland and increase traffic to the dealer's site. Initially, there wasn't too much activity. That quickly changed, however.

"We added visibility with Google Adwords, using search terms like landscaping, articulated trucks, compactors and transport and material handlers," said Jan. "This way we could budget a specific amount of money and make adjustments so that we focused more on what was working better to create more click throughs at a lower cost per click rate. We also had promotions on Facebook and YouTube, which is the number one channel in Poland. There, we gained more than 700,000 views of our amazing, custom-made video in just

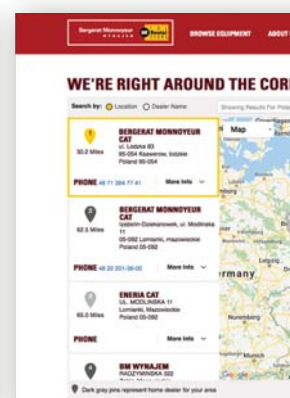
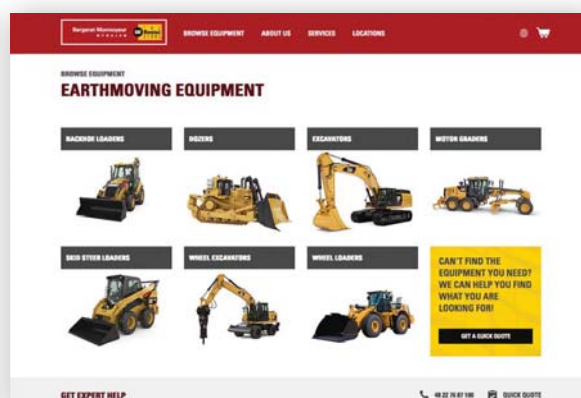
four months and that number continues to climb. Overall, the campaign is very successful in terms of generating traffic, leads and revenue," said Jan.

While the numbers for the site are impressive, Jan made sure it was created using a customer point of view, making it user friendly, and widely available to enhance the user's experience. On the back-end, the site is hosted through Adobe Experience Manager so content is easy to manage, functionalities are improved and lead management capabilities are enhanced.

"[CatRentalStore.com](http://CatRentalStore.com) uses a responsive design, which means users can access it from their mobile device," added Jan. "The site is also super easy to navigate. There is a dealer locator and right from the opening page there is information about what we have to offer. All it takes is a few clicks to place a starting rental date, an ending rental date or to ask questions and interact with the local dealer digitally."

Right now, the site is available in 18 different languages. And, in 2018, [CatRentalStore.com](http://CatRentalStore.com) generated more than two million visits, a 180 percent increase compared to 2017, as well as more than 12,000 leads, a 90 percent increase over the same time period.

"We couldn't be happier with the results. We managed to generate in three months much more than what





# ROVES

we saw over nine months,” said Jan. “We have 21 new customers and 30 leads that have had direct dealings with the Bergerat Monnoyeur sales team. All our customers have different needs. This way we can always be there for them. It’s also a great way to advise our customers. For example, if a customer chooses a larger excavator, we can tell them that a smaller machine might be more effective for the job. We can respond very quickly to requests or questions.”

Built-in versatility, ease of operation and value are all hallmarks of Cat solutions. This online platform for Bergerat Monnoyeur Poland features those same attributes and adds another layer of usability. ■

Additional details at: [www.CatRentalStore.com](http://www.CatRentalStore.com)



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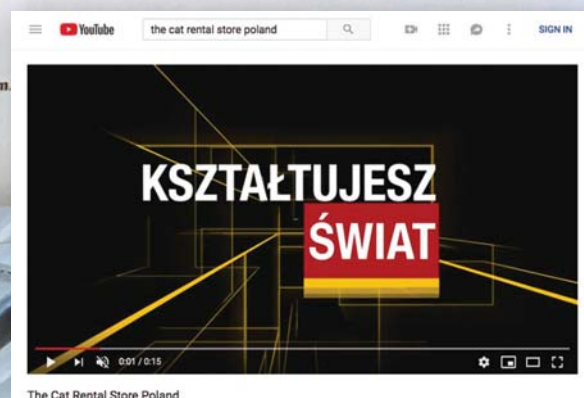
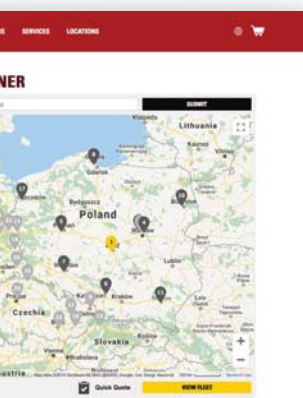
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# Al Osais: Our Aim Is to Continue Working Efficiently for The Good of Our Country and Our People

Businessman Ali al Osais:  
“Success might come easy  
sometime. What matters is  
maintaining and sustaining that  
success”

Al Osais was founded in 1972  
by our father (May he live long)  
and our uncle (may he rest in  
peace), and has under its  
umbrella several companies  
with trading and contracting  
activities.

The Group represents a family  
business led by an elite team of  
qualified professionals and a  
dedicated staff, who are keen to  
join forces and take responsibility  
of their actions, in addition to  
discuss different investment  
opportunities during board of  
directors' meetings.

In 2006, the Group grew into “Al  
Osais International Holding  
Company” under the  
second-generation manage-  
ment, aiming to achieve  
planned targets and shaping a  
vision of the future by: adopting  
collective action mechanism,  
promoting competition among  
the Group's members, increas-

ing staff efficiency through  
technical and administrative  
training courses in order to  
keep abreast with the local  
labor market' requirements.

Al Osais continues: “clear  
discipline, availability of  
qualified technical potentials,  
and the ability to face different  
challenges are the secrets to  
our Group's success. Al Osais  
enjoys a wide range of experi-  
ences, making it a role model  
to others in the market. Our  
main goals include success  
sustainability, looking for the  
best opportunities, and develop-  
ing our human resources.”

Al-Osais Group implements  
several projects in the Kingdom  
of Saudi Arabia, including  
projects supervised by the  
Royal Commission and others  
with Saudi Aramco, such as,  
the King Salman Energy City  
Infrastructure Project in Abqaiq  
City in the Eastern Province.  
Al-Zahid Group supplied  
Al-Osais with about 60  
machines from Caterpillar, the  
leading brand in heavy machin-

ery manufacturing worldwide.  
One of the main machines  
used in the project was the  
Articulated Dump Truck 745,  
along with other machines  
under the supervision of a  
specialized maintenance  
team of Al Zahid Tractor &  
Heavy Machinery. Our teams  
worked around the clock,  
achieving significant productiv-  
ity of 66,000 cubic meters per  
day in order to complete the  
work within 14 months,  
resulting in delivering the  
project prior to the planned  
deadline.

Mr. Ali al Osais concludes: “If  
we are to speak of strategic  
relationships between compa-  
nies, the longstanding relation-  
ship between Al- Osais and  
Al-Zahid, that is based on  
mutual respect and trust,  
reflects the depth of this  
fruitful relationship and the  
professionalism in all details  
of the work.”









CAT® MOBILE GENSETS, THE RENTAL  
MARKET AND EMISSIONS

# The transition from *EU STAGE IIIA* to *STAGE V*

*In late 1997, European legislation mandated emissions regulations for non-road mobile machinery.*

Since then, those regulations have progressively become stricter in an effort to limit and reduce harmful engine exhaust substances, including carbon monoxide, hydrocarbons, particulate matter and nitrogen oxides. Today, the standards have advanced from Stage I to Stage V, which is also known as EU Regulation 2016/1628.

The additional hardware and complexities needed to meet the updated Stage V requirements presents new challenges to the power rental market, especially when it comes to generator sets. The most notable is the increase in product costs and how quickly rental operators will be able to adjust rental rates to maintain a suitable financial utilization.

Gareth Osborne, a Product Definition Manager with Caterpillar for nearly 20 years is an expert in the subject. "The mobile genset market is moving from EU Stage IIIA to V, and our customers have not been able to adjust to the new product complexity and cost. Since the legislation skipped Stage IIIB and IV, a big jump in technology is required

including both engine modifications as well as off-engine aftertreatment. For example, a diesel oxidization catalyst (DOC) and diesel particulate filter (DPF) will be required for all high-pressure fuel system units over 19 kW, and, selective catalytic reduction (SCR) will be required for all units above 56 kW. SCR requires diesel emission fluid/AdBlue to convert oxides of nitrogen (NOx) to harmless compounds. While AdBlue is a common fluid in automotive and machine applications it is an additional item to consider for a power rental operator who may be operating in a remote location. As a result, in the years to come, rental rates will need to increase if rental companies are to maintain their return on investment."

To ease that change, however, Caterpillar is following the regulation's built-in transition structure. This allows companies like Caterpillar to continue to manufacture equipment using the previous emission tier for 18 months after Stage V becomes effective. There is also a six-month allowance for generators to be sold after the 18th month of manufacture.

Stage V becomes effective January 1, 2019 for all engines below 56 kW and above 130 kW. For engines in the 56 to 130 kW range, the effective date is January 1, 2020. ■

**Additional details at:**  
[www.cat.com/genseteu](http://www.cat.com/genseteu)

*"As stage IIIB and IV have been skipped, we have a big jump in technology and have to include engine modifications as well as off-engine aftertreatment."*

Gareth Osborne, Product Definition Manager with Caterpillar



# READERSHIP SURVEY – YOUR OPINION COUNTS

# CAT MAGAZINE

Just as we are working to improve Cat® equipment, we also work to enhance Cat Magazine and want this publication to be a valuable tool for you. So to help shape the magazine to your interest, could you please answer the few questions below. It only takes five minutes, and the first 10 respondents will receive a new Cat hat.



## Fill in the survey online:

[www.catmagazinesurvey.com](http://www.catmagazinesurvey.com)

## Or mail this printed questionnaire to:

Zahid Tractor, Marketing Manager  
Mushrifa  
Mohammed Al Taweel Street  
11492  
Jeddah  
Kingdom of Saudi Arabia

- ☐ Waste and industrial applications
- ☐ Paving
- ☐ Mining
- ☐ Plant hire / rental
- ☐ Power Systems customers (electric power, marine, oil & gas, etc.)
- ☐ Other industries (please specify)

## YOUR PROFILE

### 1. Please tell us more about you

Company name: \_\_\_\_\_

First name, last name: \_\_\_\_\_

Country: \_\_\_\_\_

Email: \_\_\_\_\_

### 2. What best describes your profile and position?

- ☐ Owner operator (small enterprise)
- ☐ Operator
- ☐ Service technician
- ☐ Fleet manager
- ☐ Solution provider / Designer
- ☐ Managing director / Purchaser

If you are not part of an enterprise (customer of Caterpillar), please tick "Not relevant" below and go directly to question 5.

- ☐ Not relevant, I am (please specify): \_\_\_\_\_

### 3. Does your company have Cat machines in its fleet?

- ☐ Yes, Cat machines represent more than 50 percent of the fleet
- ☐ Yes, Cat machines represent less than 50 percent of the fleet
- ☐ No

### 4. What would best describe your company's main area of business and activities?

- ☐ Small scale construction
- ☐ Heavy machinery / large earthmoving or road works
- ☐ Quarry and aggregates

## INFORMATION VALUE

### 5. Do you take what you've learned about new machines, engines, services or technologies in Cat Magazine and share that knowledge with your local Cat dealer?

- ☐ Yes
- ☐ No

### 6a. How many people in your company read your copy of Cat Magazine?

- ☐ Just me
- ☐ Me and one other person
- ☐ 3 to 4 people
- ☐ 5 or more

### 6b. If other people read your copy, who are they? (multiple selections possible)

- ☐ Owner operator (small enterprise)
- ☐ Operator
- ☐ Service technician
- ☐ Fleet manager
- ☐ Solution provider / Designer
- ☐ Managing director / Purchaser
- ☐ Other (please specify)

### 7. Are you happy with how many Cat Magazine issues are published per year?

- ☐ Yes, 3 times per year is just right
- ☐ No, I would like Cat Magazine to be published \_\_\_\_ per year



8. When you read an article in Cat Magazine, is it typically the first time you hear about that story (new products, technologies, other customer projects, etc.)?
- ☐ Yes
  - ☐ No, I usually have discussed the same subject with my local dealer
  - ☐ No, I usually have discussed the same subject with other business partners (word of mouth)
  - ☐ No, I usually read about the stories on the Internet (cat.com, dealer website, press circle, etc.)

9. How would you like Cat Magazine delivered to you?

- ☐ Printed magazine
- ☐ Flipbook
- ☐ Cat Magazine App
- ☐ Printed and online magazine

- 10a. Are you aware of the online flipbook and/ or the Cat Magazine app?

- ☐ Yes, I know the online flipbook
- ☐ Yes, I know the Cat Magazine App
- ☐ Yes, I know both
- ☐ No. Please go to question 11.

- 10b. How would you describe convenience of also having an online magazine?

- ☐ Very helpful
- ☐ Somewhat helpful
- ☐ Not helpful at all
- ☐ I prefer the printed magazine to read

## ARTICLES AND SUBJECTS

11. Do articles and success stories covered in Cat Magazine influence your purchasing and repurchasing decisions? (multiple selections possible)

Yes, they have an impact on my decision to:

- ☐ purchase new products, used products or to rent equipment
- ☐ buy equipment management solutions (maintenance or service contracts, Product Link, etc.)
- ☐ buy genuine Cat parts (batteries, drive trains, etc.)
- ☐ buy advanced technologies to improve productivity (AccuGrade, Flexport tires, etc.)

Or

- ☐ No, they do not influence my purchasing decisions

12. Looking at the type of articles covered in Cat Magazine today, which are of greatest interest to you? (please tick)?

1 = Not interesting

2 = Average

3 = Interesting

Local, onsite projects and customers:

1 ☐ 2 ☐ 3 ☐

Projects and customers in other countries:

1 ☐ 2 ☐ 3 ☐

Projects in industries other than the one you belong to:

1 ☐ 2 ☐ 3 ☐

The short stories in "Spotlights":

1 ☐ 2 ☐ 3 ☐

Operator or maintenance tips:

1 ☐ 2 ☐ 3 ☐

New product introductions:

1 ☐ 2 ☐ 3 ☐

Service and maintenance success stories:

1 ☐ 2 ☐ 3 ☐

Caterpillar, dealer and customer profiles

(people, in-depth interviews):

1 ☐ 2 ☐ 3 ☐

13. What other topics would you like to see covered in Cat Magazine? (multiple selections possible)

- ☐ New technologies
- ☐ Sustainability progress
- ☐ Social responsibility
- ☐ Local dealer initiatives
- ☐ Corporate initiatives (e.g., Caterpillar building a new factory)
- ☐ Behind the scenes at Caterpillar
- ☐ Other (please specify)

14. Do you read magazines published by other manufacturers? if so, which manufacturer?

- ☐ Volvo (Volvo Spirit)
- ☐ Komatsu (Komatsu Times)
- ☐ Hitachi (Ground Control)
- ☐ JCB (Terrain)
- ☐ Other (please specify)

- ☐ No, I do not read magazines from other construction equipment manufacturers

15. In a few words, how would you describe and qualify Cat Magazine?

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THANK YOU FOR YOUR TIME.







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