

# GROUND BREAKING

DECEMBER 2014 NEWS

MAKING  
MINING  
SAFER



INTRODUCING FOLLOW-THE-SUN

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



**CEO MESSAGE:  
OUR DEDICATED SERVICE**

Customer service is at the heart of everything we do.

This is why the last few months have been an exciting period for our Global Operations team, who have implemented our industry's first global support centre; follow-the-sun.

At any time, day or night, one of our offices around the world will be open. When you call your local technical support hotline and your local office is closed, your calls are automatically diverted to another region. Already, we have seen this reduce downtime and increase the return on your investment.

Intended to provide customers with the highest quality service, follow-the-sun has been developed to ensure queries and emergencies are immediately attended to - ensuring undelayed service response time.

In other news, Brazil's Herculano Mining have made the most of our rapid deployment service - beginning a monitoring campaign within days of a slope failure. As you'll read in the case study on pages 5 and 6, GroundProbe has worked in partnership with the site to provide an end-to-end risk management system, with radar at its core.

To ensure we provide the best possible service to our customers, we are proud to introduce our latest software advancement - SSR-Viewer 8.2 - which has been designed in response to customer feedback to help further improve your user experience, and save you time as a result.

As CEO, service starts with me. So if you have any feedback on what we are doing well, or where improvement is needed, I would love to hear from you.

## FOLLOW-THE-SUN:

***“No matter where you are in the world, and no matter what time of day it is, follow-the-sun endeavours to ensure that when you call, an expert is ready to help.”***

*Neil Cordon, Group Technical Support & Development Manager, GroundProbe*

We are proud to introduce our latest customer service feature. Follow-the-sun is a 24/7 customer support service that routes your calls to the optimal time zone.

Group Technical Support & Development Manager, Neil Cordon, says follow-the-sun is a positive improvement to the quality of support service offered to customers.

“Previously, each office had their own support desk, whereby Support Desk Officers were on call 24/7 to respond to their region-specific customer queries and emergencies,” Neil explains. “Follow-the-sun allows your call to be diverted, free of charge, to the next operating support desk, meaning that a specialist working within business hours, and with full resources, is ready to respond immediately.”

Linking to each regional office, follow-the-sun allows you to contact one of our highly qualified and experienced Support Desk Officers (SDOs) within business hours of the operating office. Being in their office, our SDOs have everything they need to support you, such as access to your radar log files, spare parts, and additional staff to help - ultimately providing you with virtually anything you may need at hand.

Implemented in July this year, follow-the-sun uses technologies and tools to provide a globally centralised support network. Neil explains that this global support network is not only reactive, but also highly proactive.

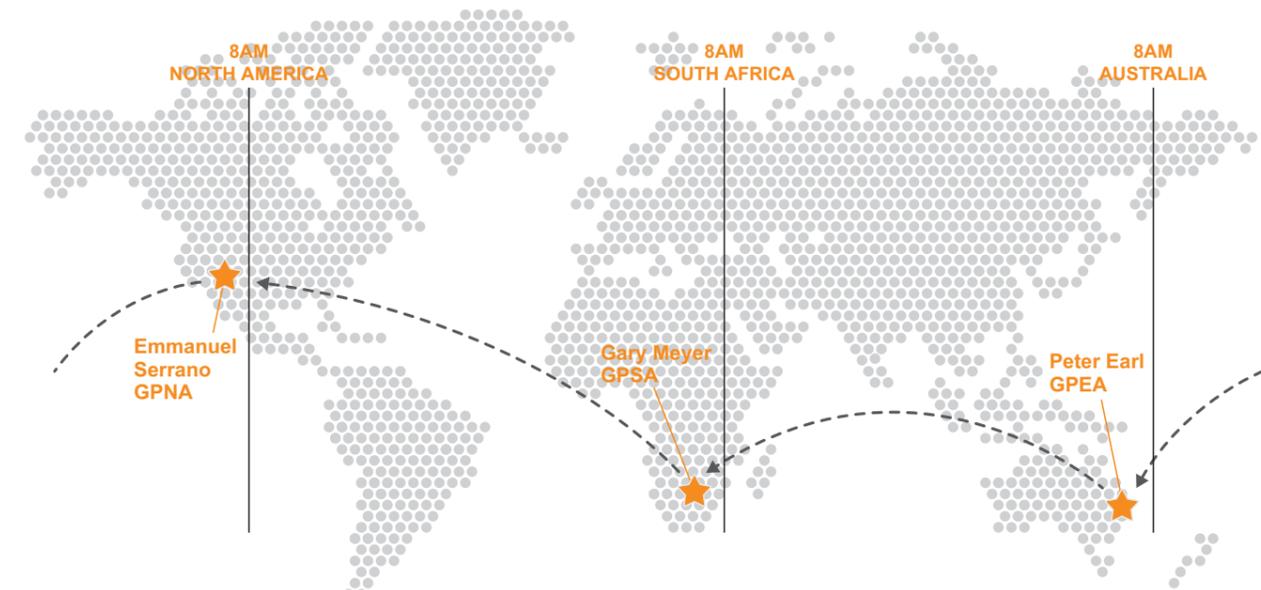
“With our automated issue tracking system, we can detect issues with your radar before they cause problems on site. If two issues arise on opposite sides of the world, we can link and track - allowing one of us to find the same root cause - promising to provide the best solution to your needs.”

## REVOLUTIONISING CUSTOMER SUPPORT

### PROACTIVE CAPABILITY FOR CUSTOMERS USING WEB UPLOAD

**Benefits:**

- Allows ongoing daily diagnostics and system health reports
- Creates a positive interaction with customers – SDOs proactively contact customers before a fault occurs
- Provides proactive collaboration with customers to ensure needs are met
- Ability to log short-term maintenance records
- Ensures handover to incoming support desk – our internal monitoring guarantees 24/7 support
- Data quality parameter report available on request to optimise SSR use.



### GLOBAL SUPPORT DESK CAPABILITY

**Benefits:**

- Ensures availability of immediate technical support for remote diagnostics and system optimisation
- Guaranteed point of contact for technical faults and technical specialists requiring assistance
- Ability to brief technical specialists on call-out events
- Ensures weekend coverage by on-call technical specialists
- Access to your log files, our fleet management system, spare parts, and other local experts
- Staff will always be working within business hours - ensuring the best possible service for you

### DEDICATED TO SUPPORTING YOU: SUPPORT DESK OFFICERS

***“I firmly believe in skills transfer, and enjoy helping my colleagues - allowing them to learn the invaluable skills I have acquired at GroundProbe.”***

*Gary Meyer, Support Desk Officer, GroundProbe*

In the last year, we have created the role of Support Desk Officer in each of our regional offices. This full-time permanent position has been filled by some of our most experienced and qualified technicians. Take Gary Meyer for example.

Gary has been with GroundProbe for over 10 years, and was our first employee in Africa. He has now taken up the role of Support Desk Officer in our African headquarters.

With experience in both the technical and operations teams, Gary has a wealth of knowledge in technical services, where he assists with all services on site. As one of our longest serving employees, Gary also supports our technicians in the field.



# RAPID RESPONSE TIME: HERCULANO CASE STUDY



GroundProbe's Brazil Business Manager, Antonio Rocha, said this is evidence of two companies working together, to provide a safer workplace for future operations.

***"I am proud to have played a small role in helping our partners at Herculano Mining, and ensuring our community stays safe."***

GroundProbe has developed a complete emergency plan which includes a control room and watchdog connected to office sirens and alarms - automatically messaging the mobile phone of key personnel.

The accident is still under investigation, and with the affected area being monitored, Herculano Mining have procedures in place to ensure complete safety of the mines, local community, and environment.

## BRAZILIAN MINE DEMONSTRATES THE IMPORTANCE OF RADAR TO GUARANTEE SAFETY

Herculano Mining has acquired an SSR-XT to assess further risks and ensure a safer tailings dump for continued operations.

On September 10, 2014, a tailings dam failure occurred in Retiro do Sapecado open pit mine, resulting in three fatalities, and damage to three mine trucks and two excavators. Preliminary investigations indicate the accident was caused by a geological phenomenon - inversion of relief - caused by underground channels.

This devastating accident shocked the mine's staff and community. The team at Herculano Mining needed a rapid response to secure the safety of their staff, and ensure such a failure would never again go undetected.

With GroundProbe's dedicated team in Brazil, stocked with a lease fleet of slope stability radars, Herculano Mining could rapidly collect the data they needed to restore safety on site.

Following the accident, Herculano Mining immediately responded by acquiring GroundProbe's SSR-XT to further monitor and assess risks during reinforcement work in affected areas, as well as desilting three dam tailings. Herculano Geotechnical Consultant, Antonio Augusto, said the radar is now imperative for site operations.

***"I think it would be impossible to operate the cleaning of dams without the presence of the radar."***

The radar is stationed on a frontal position to the area where the slide occurred, as seen in the photos.

GroundProbe's services did not stop there. A complete in-pit alarming solution was developed between GroundProbe and Herculano Mining, who worked

alongside new site procedures, to ensure site evacuation occurs when an alarm is raised.

Moreover, the data collected in Brazil is uploaded and checked each day, by one of GroundProbe's geotechnical engineers in Australia, who produce a daily report that highlights operational risks as they occur.



FIGURE 1: Stationed radar at Retiro do Sapecado open pit mine

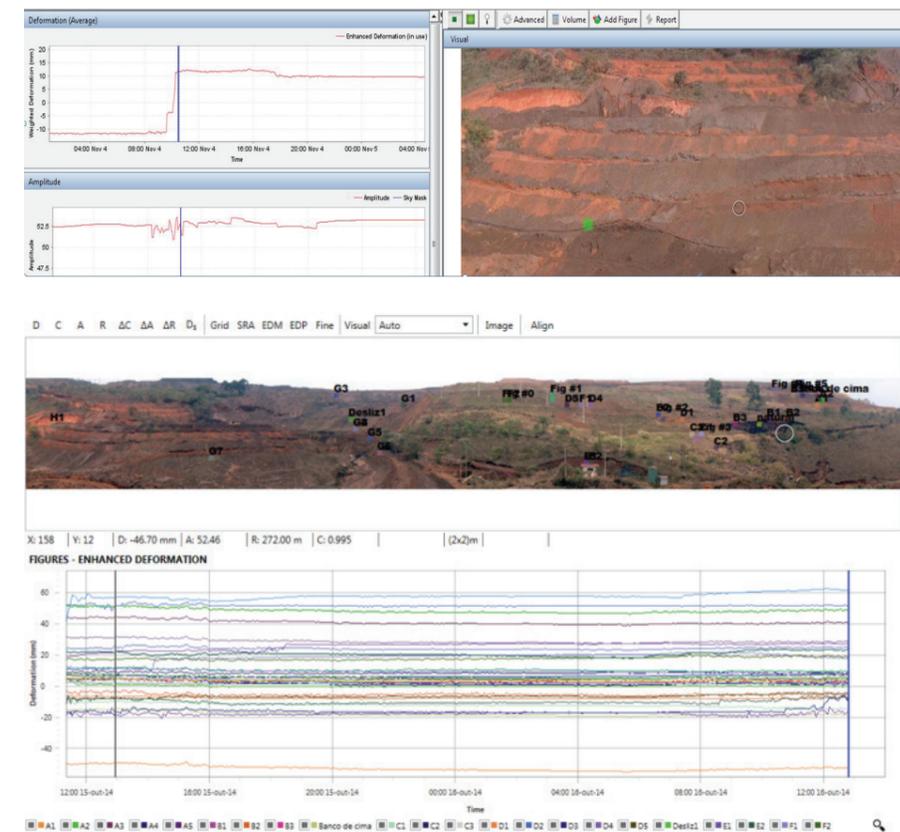


FIGURE 2: Graph of low linear and settlement deformation processes observed after the landslide

## ABOUT HERCULANO MINING

Herculano Mining owns Retiro do Sapecado open pit mine, located in Itabirito (55km west from Belo Horizonte). Founded in 1991 by three brothers, Retiro do Sapecado produces three megatonnes of iron ore annually.

The mine life is estimated to be until 2035.

## SSR-VIEWER 8.2: SAVING YOU TIME WITH INTEGRATED WIZARDS

We are proud to introduce our latest upgrade - SSR-Viewer 8.2 - now with an integrated feature guaranteed to save you time and effort.

An all-in-one smooth package, SSR-Viewer 8.2 now includes

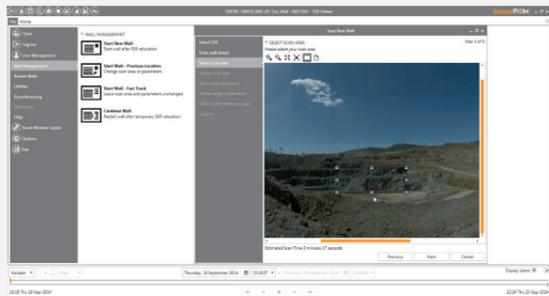
integrated wizards - a truly seamless piece of software.

Software Engineering Manager, James Usherwood, explains the benefits users will experience with SSR-Viewer 8.2. "We have integrated the wall creation and

continuation wizard, previously used in 8.1, into centralised software, saving you time and improving your useability as a result."

The user interface is now more advanced. "8.2's user interface ensures a hassle-free experience, allowing you to switch between functionality on the fly, and obtain a consolidated view of the system through a centralised user interface, improving user experience and interaction compared to 8.1," James says.

To learn more about the features of SSR-Viewer 8.2, please contact your local office.



## ELECTRIC JACKS: REDUCING SET-UP TIME AND POTENTIAL INJURIES

Introducing our latest piece of equipment - electric jacks - allowing you to deploy your radar with ease.

A significant upgrade from our manual winding jacks, our electric jacks assist with positioning the radar much more quickly than before, and with less effort - enabling you to smoothly move between locations within your pit.

Systems Engineering Manager, Greg Smyth, said the electric jacks are much safer to use than manual winding jacks. "Trained customers and technicians are in much safer hands when using the electric jacks, as there is no physical labour involved, preventing any potential injuries as a result."



When taking into account the harsh atmospheric mining environments, the electric jacks are guaranteed to not only save you time, but reduce the physical exertion required, allowing for a seamless and frustration-free set-up process.

To watch a demonstration video of our electric jacks being deployed in two minutes, please click this [link](#) or scan the QR code (right).

Alternatively, you can watch the video on [YouTube](#).

For further enquiries, please contact your local office.



## GEOTECHNICAL SUPPORT SERVICES (GSS): A VIRTUAL TRAINING ENVIRONMENT

Our GSS team are proud to introduce an extension of services - now offering remote geotechnical training and support.

Saving you time and money, our GSS team have worked hard to ensure this global service roll-out will allow you to be adequately trained in the comfort of your own office or boardroom.

With no requirement to pay for travel and transportation costs, this virtual training service is sure to provide flexibility to work around your schedule.

Using cutting-edge technology, such as online training packages, video conferencing and screen sharing, this certified training can be tailored to your

needs and can even be based on data from your site.

Ideal for time-poor customers who require ongoing training, you can rest assured your needs will be attended to at any time of day no matter where you are located, as one of our regional geotechnical engineers will be available for 24/7 assistance.

Our GSS team endeavour to prioritise service, provide requested reporting and improve training services to ensure your requirements are fully met.

For more information on remote geotechnical training and support, please contact [info@groundprobe.com](mailto:info@groundprobe.com).

## WE ARE LISTENING TO YOUR FEEDBACK

For more than 12 months, GroundProbe has been conducting monthly customer surveys to learn where we can improve our service, support and products.

We contact all people on site who we deal with - from technicians to geotechnical engineers, accounts to mine and corporate managers - to listen and respond to their concerns.

The survey is run independently, and your responses can be kept anonymous if you choose.

So if you are contacted soon, please be as honest and frank as you can, as the only way we can learn is by listening.

Of course, you do not need to wait to be contacted - you can contact your local office any time.



# + MAKING MINING SAFER

FROM THE PRODUCTS WE DEVELOP,  
TO THE SLOPE MONITORING SOLUTIONS WE OFFER,  
OUR VISION IS MAKING MINING SAFER

## AN OFFICE NEAR YOU

### AUSTRALASIA

**Brisbane, Australia**  
Head Office and Production  
72 Newmarket Road  
Windsor QLD 4030  
Australia

Tel +61 7 3010 8999  
[info@groundprobe.com](mailto:info@groundprobe.com)

**Perth, Australia**  
11 Agett Road  
Malaga WA 6090  
Australia

Tel +61 8 9378 8000  
[info@groundprobe.com](mailto:info@groundprobe.com)

### AFRICA & EUROPE

**Johannesburg, South Africa**  
Unit 1, 9 Reedbuck Crescent  
Corporate Park South  
Midrand, 1685  
South Africa

Tel +27 11 087 5300  
[infoSA@groundprobe.com](mailto:infoSA@groundprobe.com)

### ASIA

**Balikpapan, Indonesia**  
Geotechnical Support Center  
Jl. Kol. Syarifuddin Yoes RT.094  
Kel. Gunung Bahagia  
Balikpapan, Kalimantan Timur 76115  
Indonesia

Tel +62 542 758 1403  
[infoPT@groundprobe.com](mailto:infoPT@groundprobe.com)

**Nagpur, India**  
Sujoyoti India (P.) Ltd.  
"NEXUS POINT"  
IInd Floor, Vidhan Bhavan Square  
Civil Lines  
Nagpur 440001

Tel +91 712 6653333  
[info@groundprobe.com](mailto:info@groundprobe.com)

**Nanjing, China**  
No.33, Dongqi Road, Dongshan Street,  
Jiangning, Nanjing 211100  
China

Tel +86 25 84189710  
[infoCN@groundprobe.com](mailto:infoCN@groundprobe.com)

### NORTH AMERICA

**Tucson, USA**  
1230 E. Pennsylvania Street  
Suite 102  
Tucson, AZ 85714  
USA

Tel +1 520 393 8287  
[infoNA@groundprobe.com](mailto:infoNA@groundprobe.com)

### SOUTH AMERICA

**Belo Horizonte, Brazil**  
Rua Mantena 302  
Bairro Ouro Preto  
Belo Horizonte, MG 31.310-430  
Brazil

Tel +55 31 3245 5570  
[infoBR@groundprobe.com](mailto:infoBR@groundprobe.com)

**Santiago, Chile**  
Alonso de Córdova 5670, oficina 603  
Las Condes, Santiago 7560875  
Chile

Tel +56 2 2586 4200  
[infoCL@groundprobe.com](mailto:infoCL@groundprobe.com)