

OYO GEOSPACE @ WORK

PRODUCTS AND SERVICES

AT WORK IN THE WORLD

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Shooting for safety

For a major potash exploration company working in Canada, everything has a safety implication. Every pound of weight. Every hour of daylight. Every minute spent in a vehicle. An unwavering health, safety, environmental and community (HSEC) commitment drives major business decisions and investments for this company, including the choice of seismic contractor Eagle Canada, Inc. and OYO Geospace's GSR System for a recent 2D survey in Yorkton, Saskatchewan.



A mutual choice

Eagle Canada, Inc., now part of Tidelands Geophysical, is a leading provider of seismic data acquisition services to the Canadian energy industry. Considered at the forefront of "no-footprint seismic" in Canada, they are experts in acquiring data in technically complex, logistically difficult and environmentally sensitive areas. Tidelands currently owns one of the the largest fleets of GSR units in the

industry, which proved fortunate when Eagle's customer wanted to take its survey safety to the next level.

"This exploration company had been evaluating cable-free systems for months. They had independently decided on GSR technology at the same time Tidelands was expanding our GSR fleet. So it all came together very well," said Rob Wood, president of Eagle Canada. "I think it helped them to know we were as committed to GSR technology as they were."

Eliminating cables – and risk

This minerals company's decision to shift to cable-free seismic was primarily an effort to eliminate the safety hazards of heavier, more labor and vehicle-intensive cabled systems. The safety benefits of operating cable-free are wide-ranging.

- **Less weight:** This customer had in place a strict 20 lb. carrying weight limit to protect its crews from injury. That made it virtually impossible to neck-carry a cabled device and meant cabled systems had to be deployed using reels – safer yes, but also slow and cumbersome. Each GSR and battery unit, on the other hand, weighs just under 5 lbs.
- **Fewer vehicles:** Small, light GSR systems could be deployed using two-man UTV vehicles instead of large trucks, reducing safety risks, rutting and other damage to the Yorkton landscape. While many resource companies use helicopters to get equipment in and out of remote areas, this company wanted its crews safely on the ground. And the small size and weight of the GSR made this completely practical.

continued on next page

Only GSR made the cut

Technical advisor **Chris Tonish of Astonish Geo-Technical Services**, was the driving force behind this potash resource company's decision to choose a cable-free system. He spent more than a year exhaustively evaluating cable-free seismic systems, looking for the one that could meet the company's operational and HSEC criteria. From a field of eight solutions, several were disqualified immediately as unproven. Manufacturers without adequate financial strength and resources were eliminated as well. Anything not rated to performance at -40°C was out. And finally, it came down to size, with the GSR winning the contract.



The multiple rail crossings, roadways and landowner crossings of Yorkton's rolling farmlands created no obstacles for the GSR. Even the epic rains and hundred-year flooding that struck the area during the survey didn't stop the GSR. Crews simply went around flooded areas and continued on the other side. For a cabled deployment, the rains would have been disastrous.

- **Less exposure:** The fewer people on a crew and the less time they spend out in the elements, the lower the risk of a safety incident. With the GSR, this project was conducted with half the crew of a typical 2D survey. In addition, the GSR eliminated hours of troubleshooting and line walks each day, reducing vehicle hours and the opportunity for injuries from ankle twists on up.
- **More daylight:** For this safety-conscious operator, nighttime operation was out of the question because the risk of vehicle and other accidents increases significantly once the sun goes down. But that also limits working hours available – even during Saskatchewan's long summer days.

Troubleshooting time can account for 40%-60 of project downtime, according to the project team at OYO Canada, and by eliminating that time-consuming activity, survey crews could be far more productive and efficient during safe daylight hours.

Shooting blind

One of the biggest cultural hurdles this customer had to overcome in moving to a cable-free system was the idea of "shooting blind," i.e. not actually seeing the data as you shoot it and thus relying heavily on the reliability of your stations.

For Eagle and its customer, this shoot provided reassurance that the GSR could be counted upon for performance. According to Tonish's analysis, dead traces averaged 0.733% based on 154,078 total possible recordable traces for the project – well under the 3.0% maximum acceptable level.

OYO Geospace's GS-One geophones performed just as reliably. Eagle tested them side-by-side with a much heavier and more cumbersome three-phone-per-trace system and saw no difference in data quality.

Welcome to winter in Saskatchewan

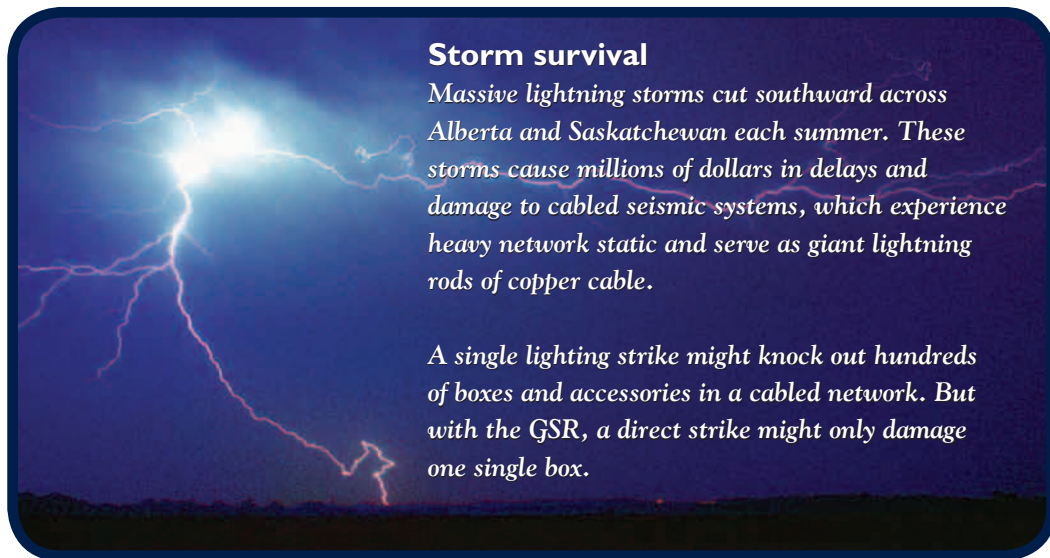
Based on the excellent performance and zero-injury results of this summer's 2D shoot, this customer and Eagle will tackle a much larger 3D project this winter using GSR technology and GS-One geophones. Better, safer maneuverability in winter's snow and ice and over the course of this resource company's (possible multi-year) 10-year exploration plan will be the ultimate demonstration of the GSR System's superiority as a safe and sound technology.



Storm survival

Massive lightning storms cut southward across Alberta and Saskatchewan each summer. These storms cause millions of dollars in delays and damage to cabled seismic systems, which experience heavy network static and serve as giant lightning rods of copper cable.

A single lightning strike might knock out hundreds of boxes and accessories in a cabled network. But with the GSR, a direct strike might only damage one single box.



PRESIDENT'S PAGE



Gary Owens

Innovation 2.0

Several years ago Clayton Christiansen published a book entitled “The Innovator’s Dilemma” which highlighted the need for corporations to create disruptive technologies. For some of us, that’s been our life’s work as we seek not just to make incremental improvements in products; but wholesale changes in the way our clients do business.

The GSR is the perfect example of our technology team’s newest disruptive technology. It outperforms cable systems in almost every conceivable dimension: it is substantially lighter weight, so it takes far fewer people to deploy; which means fewer people in the field and fewer injuries or accidents.

It doesn’t require cables, so crews are up and working at the start of the day; they no longer have to track down cable-related issues and waste time making repairs. It’s also virtually invisible to landowners or communities. It’s about as “green” a solution to seismic data acquisition as you can imagine.

It’s also highly reliable and the data is the high quality expected by the exploration companies. It’s nodal and scalable, so crews can combine and recombine units to fit the requirements of any seismic survey.

I could go on and on about the outstanding features and benefits of the GSR (and will if you ask me), but what’s most gratifying is that our customers are doing that for us. You can read about it in this or other issues of *OYO Geospace@Work*, see videos on our website or talk with our customers. But they’re not only talking about the GSR, they are adding to their inventory. And that’s the best advertisement for the power of a successful disruptive technology I can see. When you provide reliable solutions to long-standing problems, when your system does what it says it will – and more – that’s when you see a seismic change in the marketplace.



Ask about OYO Geospace’s newest video and watch the GSR System at work in an eco-friendly green seismic acquisition program in upstate New York.

OYO GEOSPACE *in the* COMMUNITY

The Buzz from Canada



Dave Grindell (left)
and Mike Dahl

Evidently two shaved heads are better than one, because OYO Geo Space Canada's Dave Grindell and Mike Dahl raised a whopping \$38,820.00 with theirs.

The head-shaving and associated golf tournament to benefit the Kids Cancer Care Foundation of Alberta's (KCCFA) Camp Kindle program are a long-tradition in Calgary put together by a committee of members on behalf of the Canadian Association of Geophysical Contractors (CAGC). Although record-breaking rains in the area canceled the 25th year of the golf tournament, the buzzing went forward,

drawing a crowd of more than 200 people to an OYO Geo Space-sponsored breakfast during the Calgary Stampede in August.

KCCFA camps give young people across Alberta a chance to trade the rigors of cancer treatment for fun-filled adventure outdoors. After months of bedridden isolation, children at camp soon discover they are not alone in their struggles and always come home smiling.

Hair and hats off to event organizer Clair Dow, to Dave and Mike for sacrificing their tresses, and to their friends, families and colleagues for giving so generously to the KCCFA.

The gentleman wielding the shears is Don Chamberlain – former owner and founder of ARAM System, Geo-X Processing. In the hot seat is Dave Grindell, President of OYO Geo Space Canada.



Visit KCCFA on the Web at
www.kidscancercare.ab.ca/.

Two Heads are Better than One!

Help **MIKE DAHL**
and **DAVE GRINDELL**

continue the *tradition of the shave*

and raise their goal amount of **\$32,000** at the

25th Annual Tough Times Golf Tournament Banquet June 17, 2010.

Funds raised will be donated to

THE KIDS CANCER CARE FOUNDATION OF ALBERTA

Online donations go to:

<https://secure.csfm.com/kidscancer/donate/general/index.php>

1 Fill out your information and donation amount.

2 Third section: *I would like to direct my donation to:* Click on "CAMP & COMMUNITY OUTREACH"

3 Fourth section: *I heard about the Kids Cancer Care Foundation through:* Type in: Tough Times Golf Tourney

THANK YOU FOR YOUR SUPPORT!



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