

When customers call with a tricky industrial wastewater job, the crews from Canessco Services come running with a can-do attitude and top-flight equipment By Ken Wysocky



# TENACITY

ome contractors flinch at the prospect of tackling difficult, high-risk/high-reward projects. Others enthusiastically embrace them. Canessco Services Inc., an industrial cleaning and multifaceted wastewater services company in Edmonton, Alberta, falls squarely in the latter category.

It's not that company officials are foolhardy. They're just confident, which stems from operating a fleet of reliable and powerful equipment and assembling a group of operators with more than 130 years of collective experience. This can-do attitude, combined with customer-centric employees, explains how Canessco has thrived for 63 years – and why it has significantly expanded its service offerings during that time.

"We do a lot of work that no one else wants to do," says Nathan Gagnier, operations manager at Canessco. "The harder the jobs are, the more interested we are in doing them. And personally, I love a good challenge."

That's exactly what Gagnier faced when a customer asked Caness-co to clean out six 1,600-foot-long runs of 4-inch-diameter conduit that carry power lines under the North Saskatchewan River to a large water treatment plant. Plant officials had to install new electrical cables in the conduits, which first necessitated cleaning debris, such as sand and silt, that had collected in the lines.

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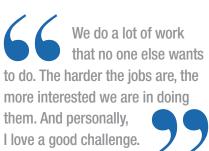


**Left:** When Canessco arrives on a job with the Vac-Con rigs, workers place cones and signs around the work site to protect technicians and passers-by.

**Below:** General Manager Gerald Lutz schedules an appointment with a customer at the company offices.

To access the conduit lines, crews had to climb down inside two vaults, one on each side of the river; one vault was 125 feet deep and another 250 feet deep. "The conduit lines end in these vaults, which are like manholes in sewer lines, where workers can splice cables and do repairs," Gagnier explains. "We used four 600-foot-long sections of hose to clean each conduit line.

"It was a doozy," he says of the project. "It took us three days to do all six runs. Safety and communications were huge factors. ... To get in the vaults, we had to use confined-space entry procedures." Workers inserted hose all the way to the other end of each conduit run, then jetted in reverse, pulling debris toward them. The silt and water then drained into a sump, one on the bottom of each vault. From there, vacuum trucks sucked up the debris, Gagnier explains.



— Nathan Gagnier

#### **EXPERIENCE, EQUIPMENT COUNTS**

Another tough job involved removing approximately 200 tons of silt from the bottoms of four water reservoirs located on the grounds of a decommissioned hydroelectric plant situated along the North Saskatchewan River. That may not sound very challenging, but the closest the vacuum truck could get to the reservoirs was about 150 feet away, with much of the run being vertical in nature. And the silt was about 15 feet deep in spots.

"We put the truck on the top of a nearby hill, and our crews were actually working about 10 feet below the surface of the river," Gagnier explains. "It took about 10 days to finish that project. It's pretty hard on the equipment if you don't know how to use it ... and it involves a lot of manual lifting of the hoses, so it's even harder on the employees."

In another difficult project, Canessco crews sucked approximately 40 tons of wet sand and gravel from an old freight-elevator shaft at a convention/conference center. The shaft, which was lined with a culvert-like casing, held a large piston that powered the elevator, "similar to a hydraulic ram," Gagnier explains. "When they installed the piston in the shaft, they held it in place by filling in with sand and gravel. After they removed the broken piston, we had to suck out all the sand and gravel to make room for a new piston."

The main challenge: The truck couldn't get any closer than about 200 feet away from the shaft. And the shaft was 50 feet straight down. But in the end, powerful equipment and employees' experience got the job done, Gagnier notes.

### **FINDING A MENTOR**

"You need to take (vacuum) material slower when you're so far from the truck," he says. "It's better to suck up a little at a time, not just throw the hose down the hole and expect it to quickly gulp all the material. ...

You have to finesse it a bit."

Gagnier says his mentor, Gerald Lutz – a general manager who's been with the company for 40 years – deserves all the credit for building Gagnier's confidence. "If he says it can be done, I take his word for it," Gagnier says. "He's been up and down the block more than just a few times. It's very hard to prove him wrong.

"Many times, when I think something can't be done, Gerald asks me if I want him to come down and do it," Gagnier continues. "Then I try it and have to call him back and tell him it worked. He's taught me everything I know about this business."

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# Be prepared, or harsh Canadian winters can kick your butt

During winter in Edmonton, Alberta, it's not unusual for temperatures to dip to 30 degrees below zero. That stops a lot of things from working well, from pipelines that freeze to hydraulic controls on equipment that barely function – even employees who work outdoors.

But despite the brutal conditions, which can run from late October through March or April, work rarely stops for employees at Canessco Services Inc., an industrial cleaning and wastewater services firm.

"When it's minus 30 degrees, you're just trying to keep water from becoming a giant ice cube," says Nathan Gagnier, operations manager. "We use water-recirculation systems in our vacuum trucks to keep water constantly moving. And the trucks are equipped with boilers to provide hot water for thawing pipelines and hydroexcavating frozen ground."

Dressing for success in such harsh conditions requires wearing insulated coveralls (good to 40 degrees below zero) made by Helly Hansen and Carhartt, balaclavas and toques (knit hats), waterproof gloves and insulated, steel-toed rubber boots from Dunlop. Gagnier says workers typically wear an insulated liner under their waterproof gloves for extra protection. Some workers prefer Ski-Doo mitts to gloves.

"But those (mitts) can be bulky, so if you're working on something that requires fingers, sometimes you have to take them off," he says.

Canessco workers take other steps to handle the cold, from taking breaks as needed inside trucks to constantly scrutinizing trucks' operations. "Everyone knows that things take longer in winter ... the trucks operate slower because the hydraulics slow down," he says. "Instead of using hydraulic fluid, we use automatic transmission fluid (as hydraulic fluid) year-round on our combo vac trucks because it's less viscous.

"You also have to pay more attention to your unit," he continues. "For example, if you try to extend a boom when it's frozen up, you might break it. Or if a pump freezes up, it might cost \$20,000 to fix it because you cracked the head."

What's the toughest cold-weather job Gagnier recalls? Hydroexcavating atop a hill a couple years ago, with wind chills of 22 to 31 degrees below zero. "We were trying to locate a pipeline on the side of a hill, so there was nothing to block the wind," he says. "We had to excavate a hole 35 feet deep. It was real cold, but it needed to be done. You just dress really warm and take microbreaks to warm up inside the truck."

In rare instances, sometimes it's just too bitterly frigid to work outside, he adds. "If it's too cold, we don't send our guys out – unless it's a real emergency," he says.

Can essco truck operators also like to test the limits of equipment. "If the trucks can do it, we'll do it," Gagnier says. "I've told manufacturers what we can do with their truck, and they say it can't do that. I tell them, 'Sure it can."

## **HUMBLE BEGINNINGS**

Canessco was founded in 1952 (the name is an abbreviated mash-up of Canadian Inductor Sales Service Co.). Gagnier's grandfather, Peter Fairbridge, bought the company in 1974, and it's been owned by the Fairbridge family ever since. The current owners are Mark Fairbridge and Michele Gagnier, Nathan Gagnier's uncle and mother.

When Fairbridge bought the company, it focused primarily on sewer cleaning. But services expanded dramatically, especially during the last decade. In addition to sewer and industrial cleaning, the company now tackles septic and grease-trap cleaning, pipeline inspections and hydroexcavating.

"When I started here 10 years ago, we had two combination sewer (vacuum) trucks and one truck-mounted jetter," Gagnier explains. "Since then, the whole fleet has changed.

"Basically, we got busier and busier and needed more equipment," he continues. "As we obtained more customers, we had to keep them happy by If the trucks can do it, we'll do it. I've told manufacturers what we can do with their truck, and they say it can't do that. I tell them, 'Sure it can.'

- Nathan Gagnier

providing better service. Certain customers came along and said they'd hire someone else if we didn't have all the equipment we needed ... and with more equipment, we can offer more services and serve customers faster."

#### **EQUIPMENT LIST**

Canessco owns four combination vacuum/hydroexcavation trucks made by Vac-Con Inc.; three are built on Sterling chassis and one on an International. They all feature vacuum power up to 200 Hg; a 1,500-gallon water tank; a water pump that generates 65 gpm at 3,000 psi; a 15-cubic-yard debris tank; telescoping booms that rotate 270 degrees; and an onboard



boiler for winter hydroexcavating and line thawing, as well as more effective grease-trap line cleaning. The trucks are used primarily for flushing sanitary and stormwater sewer lines (2 to 72 inches in diameter), hydroexcavating and cleaning catch basins and manholes.

**Left:** Employee Justin Sinnett accesses the municipal water supply to fill a Vac-Con combination truck being used on a cleaning job.

**Below:** Technician Stuart Dittrick gets supplies in order on the company's 2014 Freightliner vacuum truck built out by Cusco (owned by Wastequip LLC).





Right: Employee Darin Harkness hydroexcavates a trench using a Vac-Con rig.

Below: Technicians
Mike Denis and
Jason Drummond
inspect the pipes
under a refrigeration
warehouse using a
RIDGID SeeSnake
pipeline inspection
system.



The company also runs three conventional vacuum trucks: a 2006 Kenworth with a 3,000-gallon steel tank built by Foremost Vac Trucks; a 2007 Western Star outfitted by Westech Vac Systems with a 3,000-gallon steel tank; and a 2014 Freightliner built out by Cusco (owned by Wastequip

LLC). The three trucks use 1,400 cfm Hibon blowers and are used primarily for cleaning sumps, tanks, holding tanks and septic tanks, Gagnier says.

To service facilities where access is more limited, such as sumps in underground parking lots, the company bought a 2000 Ford F-450 that carries a 500-gallon steel tank made by Westech and relies on a 320 cfm pump from Fruitland Manufacturing.

For smaller drain-cleaning jobs, the company owns a RIDGID portable water jetter (3 gpm at 1,800 psi), capable of cleaning 1- to 4-inch-diameter lines. Last year, Canessco also invested in an IBAK mainline tractor camera made by RapidView LLC. It's capable of inspecting pipes ranging from 6 to 42 inches in diameter, and uses pipe-assessment and pipe-coding software made by PipeLogix Inc. The company also owns a RIDGID SeeSnake pipeline inspection system for televising lines from 2 1/2 to 6 inches in diameter.

# **SLOW, STEADY GROWTH**

Looking ahead, Gagnier says the company has reached a comfortable size. He expects work to remain steady because, unlike some other local industrial cleaners, Canessco doesn't serve the oil and gas markets. "We're pretty much recession-proof," he notes. "There's always sewage and infrastructure to be cleaned ... we've established a nice market niche."

Gagnier does not see significant growth ahead, but that's by design, not for lack of opportunity.

"We don't want to get too big," he says. "We don't want to employ 50 people and run 20 trucks. We're pretty happy where we are. We seem to do a little better each year revenue-wise, but we don't want to get so big that we can no longer provide quality service."

#### **MORE INFO**

Cusco 800/490-3541 www.wastequip-cusco.com

Foremost 403/295-5800 www.foremost.ca

Fruitland Manufacturing 800/663-9003 www.fruitlandmanufacturing.com (See ad page 62)

**Hibon Inc.** (a division of Ingersoll Rand) 888/704-4266 www.hibon.com

**PipeLogix, Inc.** 866/299-3150 www.pipelogix.com RapidView IBAK North America 800/656-4225 www.rapidview.com

RIDGID 800/769-7743 www.ridgid.com

Vac-Con, Inc. 855/336-2962 www.vac-con.com (See ad page 81)

Westech Vac Systems 780/955-3030 www.westechvac.com

Western Star Trucks www.westernstar.com