

CSL Services cuts engineering time by an average 25% on wastewater studies with FlowWorks I&I Analysis Tool from Carl Data Solutions

Engineering services firms of 50-250 employees is the FlowWorks sweet spot. They rely on Carl Data Solutions software expertise gained in over 70 municipal water utilities across North America

VANCOUVER, BC, Oct. 4, 2021 – Carl Data Solutions Inc.'s (CSE:CRL) (FSE: 7C5) (OTC: CDTAF) ("Carl Data Solutions") New Jersey-based customer CSL Services Inc. has stated that the FlowWorks I&I Analysis Tool is an invaluable component of its toolkit for temporary water treatment flow studies that typically last from 60 days to 6 months and can use as many as 50 or more flow meters. Since its inception, CSL Services has logged over two million meter-days and established itself as one of the leading flow monitoring and pipeline inspection companies in the United States.

For Bill Dawson, Vice President of New CSL Services Inc. with responsibility for the U.S. southeast, "FlowWorks has allowed our engineers to become much more efficient in generating these analyses," adding that his engineering time on flow monitoring studies has decreased by an "average of 25% with the FlowWorks I&I Analysis Tool, and up to 50% on larger projects involving 20 or more meters."

CSL is a 50-employee engineering field services company that specializes in wastewater collection systems flow monitoring and condition assessment. CSL is known for customer satisfaction, and a significant percentage of its work is repeat business. Dawson joined the company in 2009, having previously worked with CSL's Founder and President Bruce Cohen.

"Before the FlowWorks I&I Analysis Tool came along we would manually load I&I data into Excel spreadsheet templates we created," said Dawson, who fully understands the strategic value of accurate I&I data. This is why he "keeps the FlowWorks I&I Analysis Tool in my hip pocket."

"CSL Services is in what we call the 'sweet spot' of our North American partner network of engineering services firms," said Jean Charles Phaneuf, CEO of Carl Data Solutions. While we have much larger reseller partners, engineering services firms with 50-250 employees require an innovation edge, and rely on our software expertise and years of understanding the data requirements of over 70 municipal water installations across North America. We are very proud of their success with FlowWorks."

Dawson said he "discovered the FlowWorks I&I Analysis Tool five or six years ago." The Inflow and Infiltration tool is part of FlowWorks, a powerful Software-as-a-Service ("SaaS")-based application for collecting, monitoring and analyzing all types of environmental data. It collects data from any sensor or monitoring hardware, integrates with other monitoring systems, and utilizes historic and public data sets. All forms of data merge into a single platform that performs graphing, reporting and machine learning enabled analytics.

Inflow & Infiltration (I&I) quantification begins with accurate, reliable, and repeatable sewer flow data. I&I sources change both spatially and temporally, depending upon a range of local conditions including soils, pipe condition, materials and construction practices, storm drainage and presence of cross-connections, age of systems and climatic conditions. Uncontrolled I&I in sanitary sewer systems can have detrimental effects on social, economic, and environmental aspects of urban areas. Excessive flows as a result of I&I can result in health risks associated with sanitary overflows, increase operation and maintenance costs, and may limit capacity otherwise reserved in the existing sanitary sewer system to serve future populations.

Flexible, affordable and easy-to-use compared to competing software packages, water industry professionals often refer to FlowWorks as “a data Switzerland” for its unique ability to be an independent third-party software platform where smart water utilities can implement any data-driven solution they need to solve problems in their facilities.

The FlowWorks I&I Analysis Tool feature set includes an automated dry weather pattern generator and an automated storm event group finder for faster, more accurate analysis. An RDII (Rainfall Derived Inflow and Infiltration) chart provides a powerful, quantitative view of the collection system’s wet weather response. A correlation report provides a linear regression between rainfall and RDII to assist in forecasting wet weather impacts on the collection system. With the FlowWorks I&I Analysis Tool, the user has the ability to export both graphs and the underlying data to include into a report.

“This is a competitive differentiator for us,” said Dawson. “In many cases we work for engineering firms. Since they don’t do this kind of analysis every day, they hand that responsibility to us. We do this all day long with FlowWorks, so they’re happy for us to get it done for them. It seems to work well, and knock on wood, anybody we’ve ever done flow monitoring studies for with FlowWorks comes back to us again.”

Dawson stated that savings is measured in engineers’ labor cost, but emphasized there are bigger benefits involving the ability to easily scale over and analyze large datasets. He also said CSL Services is interested in seeing what else the FlowWorks platform can do for his company. “I know there’s more to discover there.”

Customer support is another high point for Dawson. “I have a Project Engineer that crunches the numbers on our flow monitoring studies,” he said, “and I get copied on all the emails. I know we always get a quick response and effective solutions to any little wrinkles with uploading the data or using the FlowWorks software. That’s why our companies have had a productive multi-year relationship.”

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About Carl Data Solutions Inc.

Carl Data Solutions Inc. (www.carlsolutions.com) is an Industrial IoT (IIoT) and Big Data as a Service (BDaaS) company that provides next-generation collection, storage and analytics solutions for data-centric organizations. Through its subsidiaries Astra Smart Systems Corp. and FlowWorks Inc., Carl Data Solutions helps clients analyze and model environmental data through a robust end-to-end network of custom sensor arrays combined with SaaS-based monitoring, reporting, and predictive modeling applications. Carl Data Solutions works with new cloud-based mass storage services and machine learning (AI) analytical tools to provide the scalability required to effectively monitor vast amounts of data collected by both government and industrial customers. The Company's software solutions save customers time and money by aggregating information from any sensor or source to create a real-time decision support system with deep insights into protecting infrastructure and assets.