



Automation | Valves | Measurement | Process Control

TruckVue™ Transfer System

Preventative Maintenance Agreement (PMA)

Prevent and reduce transfer system disruptions/outages over the entire life cycle



Built for Purpose

Spartan Controls offers a preventative maintenance program that customers can take advantage of over the entire life cycle of their existing TruckVue™ transfer system.

We strive to provide best-in-class service and support to our customers over the entire life cycle of the TruckVue™ transfer system and associated instrumentation.

Spartan's 24/7 emergency remote service, preventative maintenance program; and software development; and revision control, along with critical spare parts hardware inventory, are key differentiators in reducing and preventing transfer system disruptions/outages.



TruckVue™ NGL Transfer Point

Optimize System Performance



Preventative maintenance services provided by our certified factory-trained technicians can help to optimize system performance and minimize facility downtime. Our technicians can help protect and extend the life cycle of the hardware by identifying component or environmental problems early that may adversely affect future system operations. They will also identify system performance problems that may affect the ongoing measurement uncertainty of the systems' volume and water cut readings. With priority privileges to software hot fixes, service technicians, and our hot spare inventory, you can minimize potential system disruptions/outages.

Meet Regulatory Standards



The additional reporting tools provided under our Preventative Maintenance Agree (PMA) program will assist in providing you with the required documentation during Alberta Energy Regulator (AER) Directive 17, Saskatchewan Directive PNG017 and/or British Columbia Oil and Gas Commission (BCOGC) audits. In addition to a significant discount on our TruckVue™ hourly demand rates under the PMA program, you will be entitled to free emergency remote support services that may help in solving issues to the problem and in turn help to avoid unnecessary chargeable field service site visits.

Rely on Informed Support



To help us ensure we can support you, Spartan Controls maintains an internal customer database which contains the following: device configurations, watercut calibration reports, PMA check sheets, software logs, transactional data, configuration revisions, etc.

Planned Preventative Maintenance

Service Description



During the scheduled preventative maintenance site visit, the Spartan Controls Measurement Instrumentation technician will perform: hardware and software integrity checks, watercut device calibrations, software revision control and tracking; review any historical software and operating system log alarms; review historical transactional measurement data and assess any ongoing systematic or operational concerns.

Value

Prevent Problems

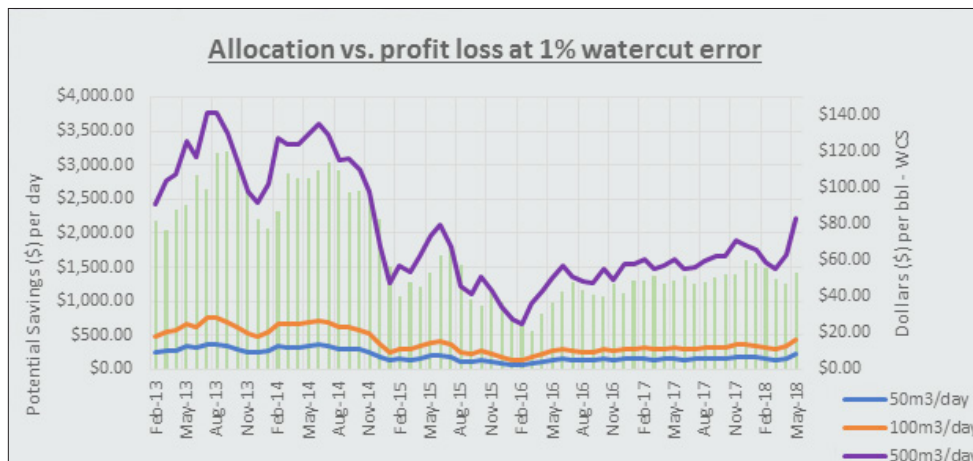


Planned TruckVue™ preventative maintenance site visits will assist in identifying systemic, hardware, software or measurement concerns and errors prior to them occurring. By focusing on the complete transfer system, our technicians will be able to assess potential hardware failures prior to development and propose an efficient hardware replacement/upgrade path.

Boost Efficiency and Accuracy



The Spartan technician will be able to review the event and alarm logs and inspect any transactional data that may be causing any measurement accuracy concerns affecting your production accounting and terminal prorations. With software revision control, measurement verifications, and regulatory compliance confirmation the Spartan technician will be able to confirm the TruckVue™ transfer system is operating as efficiently and accurately as possible while performing the most recent calculation routines. This is essential as small inaccuracies or performance problems may result in significant costs.



Market Evaluation collected from Government of Alberta (<http://economicdashboard.alberta.ca/OilPrice>) with a current conversion of \$1.32CAD/USD - 07/11/2018

Maximize Profitability



The TruckVue™ software is continuously improving with the addition of features, revised calculation routines and auditing diagnostics and reports. By upgrading to the latest software, the TruckVue™ system performance and reliability will be enhanced, with additional improvement and visibility in compliance reporting. Some of these report diagnostics tools may also be used to maximize profitability when buying or selling the measured commodity based upon product density, or to minimize well density sampling and allocation costs.

Cost



The Preventative Maintenance Agreement cost will be determined by transfer system functionality and type of measurement transfer points:

- Per TruckVue™ server license = \$2,250¹
- Each transfer point requiring API calculations, watercut measurement, or scale systems = \$750¹
- Each transfer point measuring produced water or an unmetered riser = \$375¹

When a maintenance agreement has been purchased, in addition to the services outlined in this document, the customer will also be entitled to TruckVue™ transaction editor tool discounts.

¹ Corporate or multi-year PMA contracts may be entitled to additional discounting. Please review with Spartan Controls Fluid Transport Group regarding potential options and cost savings.

Customers who enroll in the TruckVue™ Preventative Maintenance Agreement will receive a preferred discount rate of 25% from the current TruckVue™ demand service hourly rates during planned or emergency onsite service requests.

Service Details/Scheduling



This service includes inspection, adjustment, calibration, cleaning, testing and repair or replacement of the TruckVue™ systems equipment supplied by Spartan Controls. Scheduled/planned site visits are not considered mandatory while enrolled in the PMA program and may be waived. At your convenience, Spartan Controls can schedule quarterly remote access maintenance and semi-annual planned preventive maintenance visits. If requested, the semi-annual visits may be undertaken after regular work hours to ensure minimal interference with plant operations. Required exceptions will be accommodated on a case-by-case basis.

The following PMA activities will be performed while onsite:

Semi-Annual Maintenance

- Calibrate and verify data of all applicable water cut instrumentation; i.e. Drexelbrook water cut monitor and/or Phase Dynamics analyzer
- Verify Micro Motion™ internal structural integrity diagnostic, Smart Meter Verification and passes on all applicable Micro Motion™ flow meters
- Inspection of 10 random transactional scan data files for each transfer point to ensure health and operation of the instrumentation, and validate the software calculation routines are within tolerance
- Review of TruckVue™ application and event log files to determine hardware and software integrity
- Verify TruckVue™ database archive feature is operational and confirm that archived database is current and available on the redundant server IPC, external or network hard drive/file system (if applicable)
- Review TruckVue™ operating system and software application diagnostics and alarms
- Inspect local and remote hard drive status and usage
- Installation of any applicable TruckVue™ application updates, with recorded revision control
- Check TCP/IP network communication integrity
- Inspect Windows operating system integrity; i.e. file management system, hard drive storage data consumption, user interface device driver installation and operating system bios revisions, etc.
- Calibrate touchscreen monitor

- Install any required Windows operating system software updates and review of Microsoft Windows event logs
- Verify operation of any file transfer protocol (FTP) Server/Client functionality residing within the TruckVue™ application or locally within the Windows operating system
- Address any ongoing terminal or operator concerns with the TruckVue™ system
- Record any hardware or software updates and backup of the customer configuration and database to the Spartan customer profile database
- Provide a maintenance document that includes calibration reports and configuration adjustments to meet regulatory compliance such as AER Directive 17, BGOGC Measurement Guideline for Upstream Oil and Gas Operations (MGUO&GO) or Saskatchewan PNG017
- Check and clean the computer and panel of dust and debris as necessary
- Provide purposed path mitigation for the TruckVue™ transfer systems hardware/software towards current generation of products

Software Tools and Reporting



This software service provides you with access to reporting and verification tools that are otherwise inaccessible such as:

- Scheduled Micro Motion™ Meter Verification reports
- Micro Motion™, Phase Dynamics and Drexelbrook configuration and calibration auditing and reports
- Meter factor and proving history reports
- AutoComp™ density trending and reports
- Transfer transaction density reports



Micro Motion™ Smart Meter Verification

Software Maintenance Details



This service includes software upgrades and revision control to the onsite TruckVue™ transfer system, priority software updates, TruckVue™ software recovery/reload support, annual configuration changes, hardware migration support and additional verification/reporting tools.

Configuration changes are at the discretion of Spartan Controls and does not include additions such as; transfer points, increasing transfer point commodity acceptance, enterprise functionality, and/or the transaction editor tool.

The software hot fixes, updates and configuration changes will be implemented during the scheduled or demand maintenance site visits provided by a certified Spartan Controls technician.


Customer Responsibilities



The customer shall be responsible for making the transfer system available for the Spartan Controls service technician at the scheduled time for the planned maintenance visits. On scheduled site visits, operations must align the required fluid commodity to be transferred through the measurement transfer point, this may include; sales spec oil, NGL, and/or produced water. The customer must provide spares or consumable materials necessary to replace worn, faulty, or unserviceable items. Alternatively, Spartan Controls may be able procure these items with sufficient notice (additional costs may apply).

If assistance is required, you can contact us at +1 (780) 468-5463 to arrange the required assistance. Please mention that the charges should reflect the preferred rates contained within the agreement.

Emergency Service Details

 This after-hours service provides you with prompt emergency service for unexpected events and assistance in system correction. Expert answers and advice are provided by telephone and, in some situations, may eliminate the need for on-site service. Calls are usually answered by a support tech immediately, but in some instances, the caller will be asked to leave a message for the on-call support technician to respond to within a timely manner.

The emergency services provide you with priority privileges to emergency phone support, 24/7 demand services and our TruckVue™ transfer system hot spare inventory.

Remote Access Software



In certain situations, a Spartan technician may be able to remotely connect to the TruckVue™ system. This would enable the technician to perform ticket analysis and system health checks without going to the facility.

Customer Requirements



If you require assistance at any time, please contact us at +1(780) 468-5463. We request that you please provide an explanation and details about the system problem.

Contract Terms



The term of this contract shall be valid for one year of the date of purchase, or as the contract specifies. Support will be provided as requested by an authorized customer employee or a representative of the customer only. The term of this contract will be renegotiated at the start of every contract term or as the customer deems fit.

24/7 Support



Our 24/7 technical telephone support service provides timely access to expert advice from our TruckVue™ technicians to help keep your system running and to potentially avoid the need for a site visit. Spartan Controls TruckVue™ technicians can answer technical questions, diagnose system problems, and provide skilled advice when needed.

24/7 +1 (877) 278-6404 | +1 (780) 468-5463
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Compliant with:

