Suggested Periodic Maintenance for Automatic Tank Gauges and Sensors

As published by Colorado Department of Labor and Employment, Division of Oil and Public Safety, July, 2001

Maintenance Operation	What To Do or Check	Check if done
Automatic Tank Gauge Console	**Owner or Station Attendant** 1. Check printer for paper. 2. Print out or check system inventory and verify to actual inventory. 3. Print out or record system setup values, then verify if battery backup is working by powering the unit down and then back up with the circuit breaker. If programming is lost, the battery is bad and the unit needs service. 4. Verify in-tank tests are being performed as required by printing reports. 5. Press Alarm/Test button to verify power, warning and alarm indicators light and audible alarm sounds. 6. Verify line leak tests are being performed if line leak installed.	
Automatic Tank Gauge Probes	**Owner or Station Attendant** 1. Inspect probe cables for any cracking or swelling. **Vendor Technician** 2. Replace probe cables if necessary. 3. Verify epoxy kits have been installed on field wiring. 4. Magnetostrictive probes only – Inspect floats and probe shaft for any residue build up. Clean if necessary. 5. Capacitance probes only – Run diagnostic check on probe and verify there are no open or shorted segments.	
Volumetric Line Leak Detection System	**Owner or Station Attendant** 1. During or immediately after running a 3.0 gph self-test, visually inspect the flexible fuel lines for leakage. 2. Check flexible fuel control lines for any chafing or excessive corrosion. **Vendor Technician** 3. Replace check valve filters if necessary. 4. Verify epoxy kits have been installed on field wiring.	
Pressurized Line Leak Detector	**Owner or Station Attendant** 1. Check submersible pump head for leakage at PLLD port and functional element with pump on. 2. Check line leak sensor cable for any cracking or damage. **Vendor Technician** 3. Verify epoxy kits have been installed on field wiring. 4. Replace sensor if cables are cracked or damaged.	

Wireless Pressurized Line Leak Detector	**Owner or Station Attendant** 1. Check submersible pump head for leakage at WPLLD port and functional element with pump on.	
Piping Sump Sensor (float type)	**Owner or Station Attendant** 1. Inspect sensors to verify float moves freely. 2. Turn sensor upside down to verify the monitor liquid alarm is activated. **Vendor Technician** 3. Verify epoxy kits have been installed on field wiring.	
Dispenser Pan Sensor	**Owner or Station Attendant** 1. Inspect sensor cables for any cracking or swelling. 2. Verify sensor is firmly secured in an upright position on the bottom of the pan. **Vendor Technician** 3. Verify epoxy kits have been installed on field wiring. 4. Replace sensor if cables are cracked or damaged.	
Containment Sump Sensor	**Owner or Station Attendant** 1. Inspect sensor cables for any cracking or swelling. 2. Verify sensor is firmly secured in an upright position on the bottom of the containment sump. **Vendor Technician** 3. Verify epoxy kits have been installed on field wiring. 4. Replace sensor if cables are cracked or damaged.	
Vapor Sensor	**Owner or Station Attendant** 1. Inspect sensor cables for any cracking or swelling. **Vendor Technician** 2. Verify epoxy kits have been installed on field wiring. 3. Replace sensor if cables are cracked or damaged.	
Groundwater Sensor	**Owner or Station Attendant** 1. Inspect sensor cables for any cracking or swelling. 2. Lift sensor above water level in the well and verify the system activates a "Water Out" alarm. **Vendor Technician** 3. Verify epoxy kits have been installed on field wiring. 4. Replace sensor if cables are cracked or damaged. 5. If the sensor does not alarm (item 2 above) replace the sensor.	
Hydrostatic Sensor	**Owner or Station Attendant** 1. Inspect sensor cables for any cracking or swelling. **Vendor Technician** 2. Remove sensor from brine reservoir and verify floats move freely. With sensor in its upright position, the system should activate a "Fuel Alarm". Turn the sensor upside down to be sure the system activates a "Water Alarm". If the sensor does not alarm in both conditions, replace the sensor.	

	3. Verify epoxy kits have been installed on field wiring. 4. Replace sensor if cables are cracked or damaged.	