Chapman
ENGINEERING

CORPORATE OFFICE:
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Galvanic Cathodic Protection Survey

South West Texas Junior College

2401 Garner Field Road
Uvalde, TX
Facility ID #37195

Test Date
February 18, 2015

PASS

Presented to:
Oscar Garcia
South West Texas Junior College
2401 Garner Field Road
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By:
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Encl.
Site Summary
Data Interpretation & Site Recommendations

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Chapman Engineering NACE-certified personnel conducted a Cathodic Protection (CP) survey of the above mentioned facility on February 18, 2015. Two above ground storage tanks (AST's) are installed with underground piping to a single product dispenser roughly 40 feet away. One 10,000-gallon, double walled, regular unleaded AST and one 500-gallon, double walled, diesel AST is on location. Chapman Engineering recorded structure-to-soil (STS) voltages off of both fuel lines. Foreign STS voltages were recorded from the canopy and electrical conduit.

Chapman Engineering tested the fuel piping after Petroleum Solutions Inc., installed isolation unions on the gasoline and diesel fuel lines. Both fuel lines are currently isolated from the electrical conduit, AST's, and tank skids. The fuel piping appears to be fiberglass reinforced plastic piping. A single anode was installed on each fuel line to provide protection to the small amount of metal which is installed below grade.

The results of the survey indicate that the structure-to-soil voltage measurements for the fuel system **PASSED** the recognized criteria for cathodic protection as established by NACE International Standard Practice SP0285.

All measurements were taken on the fuel product lines at both AST's and at the product dispenser. Measurements are required by NACE at metallic components that routinely contain product.

PASS

Respectfully submitted,

Derek Moellendorf
Project Supervisor
NACE CP Tester #18337

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Galvanic System CP Test Results conducted with Structure to Soil (STS) Voltages from Structure to Copper-Copper-Sulfate (CSU) Reference Cell

Galvanic	Structure to Soil Voltage DC
10,000-Gallon Regular Unlead Fuel Line	-1.736
500-Gallon Diesel Fuel Line	-1.750
Dispenser	In Containment
Canopy	-0.125

According to the above readings, the system **PASSED** one or more of the following NACE criteria.

Criterion 1: "Immediate Off" STS Voltages < -0.850V (System on less IR drops)
Criterion 2: "Native" STS Voltages < -0.850V
Criterion 3: "Polarization Shift" > 0.100 V (Immed Off - Sys Off)

Comments: Chapman Engineering installed a 1 pound hi-potential, pre-packaged anode on the Regular Unleaded fuel line and a single 5-pound anode on the diesel fuel line. The anodes are only providing protection to the small amount of metallic structure at the steel to FRP transition.

Reviewed By:

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