PCS PHOSPHATE – WHITE SPRINGS

CATHODIC PROTECTION SURVEY

MAY 2007

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May, 2007

PCS Phosphate
Post Office Box 300
White Springs, Florida 32096
ATTN: Mr. Ron Spells
Project Representative

Suwannee River Chemical Plant
Effectiveness of Cathodic Protection
Survey Underground Natural Gas System

INTRODUCTION

The annual cathodic protection survey was conducted for PCS Phosphates during the month of May, 2007. During this survey, PCS Phosphates natural gas system was inspected for the effectiveness of cathodic protection, as applied. The cathodic protection system for PCS Phosphates consists essentially of Galvomag Magnesium anodes placed in various locations throughout the natural gas distribution system.

RESULTS AND ANALYSIS

A total of 3 readings were taken during this survey. As can be seen by the structure-to-soil potential measurements and the enclosed data sheet, all of the readings obtained were indicative of cathodic protection. A structure-to-soil potential of 850 millivolts or more negative is the basis used in this report to confirm cathodic protection.

RECOMMENDATIONS

PCS Phosphates – Suwannee River
Underground Natural Gas System
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The sacrificial anode arrangement designed to protect the coated and wrapped steel natural gas system is providing adequate current to afford cathodic protection to the steel distribution system. Structure-to-soil readings obtained from Cathodic Test Points and gas risers on the steel distribution system indicate complete cathodic protection, although CP levels are lower than previous surveys. One [1] Railroad casing was inspected during this survey. The Cathodic Test Point at the Scale House Drive casing is missing and should be replaced to allow CP readings in this area. Carrier casing pipes were found not to be isolated from the natural gas piping, but are being cathodically protected as well as the steel gas piping.

The two inch steel gas pipe supplying the Dical plant has been removed. The six inch steel gas pipe from the metering station to the limestone unloading area is cathodically protected at this time. Structure-to-soil readings at the limestone unloading area have dropped approximately 100 millivolts and should be closely monitored to prevent further decay in cathodic protection.

At this time, the Natural Gas Distribution System for the PCS Phosphates Suwannee River Chemical Plant complex is completely Cathodically Protected with no further action required. I trust the above information to be satisfactory and in sufficient detail, however, should you require additional information, please contact me.

Sincerely,

J. Scott Roberts
NACE C.P. Tester
Certification # 371

CATHODIC TEST POINTS

CATHODIC TEST POINTS

PCS Phosphates – Suwannee River
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CTP - #1

[1] Red Anode Wire -1.707 MV
[1] Black Gas Pipeline Wire -0.945 MV

CTP - #2

[1] Red Anode Wire -1.173 MV
[1] Black [Tape] Casing Pipeline Wire -0.804 MV
[1] Black [No Tape] Gas Pipeline Wire -0.854 MV
Anode and Gas Line Wires Together -0.945 MV

CTP - #3

[1] Red Anode Wire -1.732 MV
[1] Black [Tape] Casing Pipeline Wire -0.974 MV
[1] Black [No Tape] Gas Pipeline Wire -1.031MV
Anode and Gas Line Wires Together -0.974 MV

STRUCTURE-TO-SOIL POTENTIALS
GAS PIPE CASINGS

STRUCTURE-TO-SOIL POTENTIAL - GAS PIPE CASINGS

PCS Phosphates – Suwannee River
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Railroad Casing @ CTP #3	-0.940
Scale House Drive Casing @ CTP #2	-0.000

STRUCTURE - TO - SOIL POTENTIAL DATA

STRUCTURE – TO – SOIL POTENTIAL DATA

PCS Phosphates – Suwannee River
Underground Natural Gas System
May, 2007

Test Location	Energized Potentials Volts
Metering Station [6" Steel Line Outlet]	-0.998
Limestone Loading [6" Riser Inlet]	-0.852