Agenda – 2 Day
STI/SPFA Cathodic Protection Tester Certification Course

Day 1

1 INTRODUCTION 8:00 AM
Introduce speakers, review class book, review agenda
Exam pass/fail - 75%

2 FUNDAMENTALS OF CORROSION
Definition of corrosion terms
Corrosion examples
Galvanic and electrolytic corrosion
Galvanic series of metals
Equipment: Copper/copper sulphate reference cell, voltmeters, resistivity meter, test leads…
Equipment calibration

3 LAB A – Metal to Soil potentials

4 CATHODIC PROTECTION TESTING
Reference cell placement
Making electrical connection to tanks and other equipments
Structure to soil potential readings

5 SACRIFICIAL CATHODIC PROTECTION SYSTEMS
Fundamental corrosion cell
Sti-P3 system

6 LAB B – Sacrificial Anode CP

7 LOCAL AND REMOTE READINGS
What do they mean?
Why are they important?
Minimum number of readings per structure
Stainless Steel

8 CONTINUITY/ISOLATION TESTING
Fixed Cell Moving Ground

9 LAB C - Fixed Cell Moving Ground Continuity Test

10 CRITERIA
-850 mV on Criteria

LUNCH **12:30 Noon**

Afternoon

11 MEET AT GALVANIC SYSTEM SITE 1:30 PM

Safety Discussion

STI-P3 Site Test

Fixed Cell Moving Ground Continuity/Isolation Test

Soil Resistivity Test

12 RECONVENE AT CLASSROOM 2:30 PM

13 REVIEW OF WHAT WE LEARNED AT SITE

14 IMPRESSED CURRENT CP

Rectifier Schematic

Comparison Design vs. Galvanic Anode

Anode Materials

15 TESTING IMPRESSED CURRENT SYSTEMS

Measuring Rectifier Outputs

Shunts

16 Lab D – Rectifier Outputs

17 IMPRESSED CURRENT CATHODIC PROTECTION TESTING

Instant off readings

Reference cell placement

Number of readings

18 LAB E – Impressed Current CP Testing

Day 2

1	IMPRESSED CURRENT CP CRITERIA -850 mV polarization 100 mV Polarization Criteria, Criteria Graph	8:00 AM
2	CONTINUITY TESTING Point to Point Continuity Method	
3	LAB F – Continuity Testing Point to Point Contact	
4	ADDITIONAL FIELD TESTS Soil Resistivity Current Requirement Test	
5	STI R972-01 SUPPLEMENTAL ANODES	
6	PAPERWORK & STATE CP FORMS	
7	MEET AT IMPRESSED CURRENT SITE Safety Discussion Measure Rectifier Functionality Test Impressed Current System Point to Point Continuity/Isolation Test	10:00 AM
8	RECONVENE AT CLASSROOM	11:00 AM
9	REVIEW OF WHAT WE LEARNED AT SITE	
10	TOTAL REVIEW OF BOTH DAYS	

Afternoon

11	CATHODIC PROTECTION TESTER EXAM 3 part exam, must pass each section to get certified, minimum 75% on written exam	12:30 PM

NOTE: All exams must be completed and turned in by no later than 3:30 PM