Agenda – 3 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: Reference cells, voltmeters, etc.
Equipment calibration

3 LAB A – Metal to Soil potentials

4 CATHODIC PROTECTION TESTING
Reference cell placement
Making electrical connection to tanks and other equipment
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

CRITERIA

-850 mV on Criteria

Break for Lunch at around 12:30 PM

10	MEET AT GALVANIC SYSTEM SITE Safety discussion STI-P3 site testing Fixed Cell Moving Ground Continuity/Isolation Test Soil Resistivity Test	1:30 PM
Meet Back in Classroom		2:45 PM
11	Classroom review of what we learned at site	
12	Flex Connector Testing Use of 100mV polarization criteria when testing sacrificial anode systems	
13	Questions	

Day 2

1	REVIEW OF GALVANIC SYSTEMS	8:00 AM or earlier
2	IMPRESSED CURRENT CP Rectifier schematic Comparison design vs. galvanic anode Anode materials	
3	TESTING IMPRESSED CURRENT SYSTEMS Measuring rectifier outputs Shunts	
4	Lab D – Rectifier Outputs	
5	IMPRESSED CURRENT CATHODIC PROTECTION TESTING Instant off readings Reference cell placement Number of readings	
6	LAB E – Impressed Current CP Testing	
7	IMPRESSED CURRENT CP CRITERIA -850 mV polarization 100 mV polarization criteria, criteria graph	

8 BACK IN CLASSROOM
CONTINUITY TESTING
Point to Point Continuity Method

9 LAB F – Continuity Testing
Point to Point Contact

Break for Lunch **12:30 PM**

10 MEET AT IMPRESSED CURRENT SITE 1:30 PM
Safety Discussion
Point to Point Continuity/Isolation Test

Meet Back in Classroom 2:45 PM

11 Classroom review of what we learned at site

12 ADDITIONAL FIELD TESTS
Soil Resistivity
Current Requirement Test

13 Paperwork & state CP forms

14 Field Troubleshooting Methods
Soil Resistivity Test
Current Requirement Test
Coupons

15 STI R972-01 Supplemental Anodes

Day 3

1 Total review and question and answer session about any subject covered during both days of instruction 8:00 AM

2 Explanation of Exam and how it is graded

3 CATHODIC PROTECTION TESTER EXAM 10:00 AM (Approx.)
3 part exam, must pass each section to get certified, minimum 75% on written exam

NOTE: All exams must be completed and turned in by no later than 1:00 PM