

**HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CORROSION CONTROL TEST STATION
FIELD DATA SURVEY FORM**

Location: 25+50 Date Surveyed: 06/20/2007
 T/S #: 5 Surveyed by: AS/MJ
 T/S Type: IJ w/Anode Contract #: 44-4227
 Pipe Size: 48"
 Was the T/S located? YES / NO YES

TEST STATION CONDITION

Test Box: Above ground
 Terminal Board: 7 terminals in good condition
 Wires: Good
 Other: _____

SURVEY DATA

Test Wire Size/Description	Color	P/Cu-CuSO ₄ (V)		P/Zn (V)		Anode (mA)
		"On"	"Off"	"On"	"Off"	
1. #2 W. Anodes	Black	-0.828	-0.866	-0.105	-0.177	
2. #2 E. Anodes	Black	-0.846	-0.863	-0.102	-0.122	
3. #2 S. IJ	White	-0.770	-0.532	-0.183	-0.330	76
4. #8 S. IJ	Black	-0.820	-0.602	-0.141	-0.253	
5. #8 Reference	Black	-0.942	-0.780			
6. #8 N. IJ	White	-0.774	-0.537	-0.180	-0.323	
7. #2 E. Anodes	Black	-0.907	-0.901	-0.043	-0.202	
8. #2 W. Anodes	Black	-0.911	-0.892	-0.044	-0.293	
9. #2 N. IJ	Black	-0.841	-0.577	-0.135	-0.251	63

P/Cu-CuSO₄ = Pipe to Copper-Copper Sulfate Reference Electrode
 P/Zn = Pipe to Zinc Reference Electrode
 "On" = Reading with Anode(s) connected
 "Off" = Reading with Anode(s) disconnected
 Anode = Current output Anode(s)

TESTING THE EFFECTIVENESS OF INSULATING JOINTS

Groundbed: _____
 Connected to (B/W): _____

	Current (A)	Voltage (V)	Resistance (ohms)
ON:	0.94	0.313	0.42
OFF:	0.00	-0.080	
DELTA:	0.94	0.393	

TESTING IR DROP

IR Drop Calibrations	I (A)	E (mV)	K = $\frac{\Delta I \text{ (mA)}}{\Delta E \text{ (mV)}}$	Between Terminals	Resistance (ohms)
INITIAL:					
FINAL:					
DELTA:					

Direction: _____

REPAIRS MADE

Test Box: _____
 Terminal Board: _____
 Wires: _____
 Other: _____
 Comments/Recommendations: IJ appears to be failing.



Figure 238 - Location of Test Station 4227-5



Figure 239 - Test Station 4227-5 close-up