

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

Location: 12+75 Date Surveyed: 06/21/2007  
 T/S #: 3 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 <sub>4</sub> (V)		P/Zn (V)		Anode (mA)
		"On"	"Off"	"On"	"Off"	
1. #2 W. Anodes	Black	-1.133	-1.100	-0.053	-0.026	30
2. #2 E. Anodes	Black	-1.124	-1.108	-0.053	-0.026	32.5
3. #2 S. IJ	White	-0.960	-0.946	-0.110	-0.143	
4. #8 S. IJ	Black	-0.816	-0.804	-0.258	-0.299	
5. #8 Reference	Black	-1.074	-1.096			
6. #8 N. IJ	White	-0.962	-0.949	-0.110	-0.140	
7. #2 E. Anodes	Black	-1.589	-1.575	-0.523	-0.490	115
8. #2 W. Anodes	Black	-1.060	-1.096	-0.000	-0.000	58
9. #2 N. IJ	Black	-0.810	-0.801	-0.262	-0.299	

P/Cu-CuSO<sub>4</sub> = 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:	0.98	0.111	0.26
OFF:	0.00	-0.145	
DELTA:	0.98	0.256	

**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: It appears that connectors C and I are not connected to the anodes due to the plastic washers used on the bus-bar. They were removed. IJ appears to be failing.



Figure 234 - Location of Test Station 4227-3



Figure 235 - Test Station 4227-3 close-up