

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

Location: 00+05 Date Surveyed: 5/21/2007
E OF 3725-4, N OF MD175 Surveyed by: MJ/DD
 T/S #: 4153-1 Contract #: 4153
 T/S Type: IJ/ANODE Pipe Size: 30"
 Was the T/S located? YES / NO YES

TEST STATION CONDITION

| | |
|-----------------|-------------|
| Test Box: | <u>GOOD</u> |
| Terminal Board: | <u>GOOD</u> |
| Wires: | <u>GOOD</u> |
| Other: | |

SURVEY DATA

| Test Wire Size/Description | Color | P/Cu-CuSO ₄ (mV) | | P/Zn (mV) | | Anode (mA) |
|-------------------------------|--------|-----------------------------|-------|-----------|-------|---------------|
| | | "On" | "Off" | "On" | "Off" | |
| 1. #8 AWG | Black | -1307 | -1645 | -1210 | -1547 | 4.5 |
| 2. #10 AWG | Blue | -1307 | -1199 | -1210 | -1104 | |
| 3. #10 AWG | Blue | -1307 | -1199 | -1210 | -1104 | |
| 4. #10 AWG | Yellow | -99 | -95 | | | |
| 5. #10 AWG | White | -1112 | -1055 | -1010 | -960 | |
| 6. #8 AWG | Black | -1307 | -1044 | -1210 | -1546 | |
| 7. #10 AWG | White | -1112 | -1055 | -1010 | -960 | |
| 8. | | | | | | |

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 (mV) | Resistance (ohms) |
| ON: | 0.53 | -1380 | 2.33 |
| OFF: | 0.00 | -143 | |
| DELTA: | | | |

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: | _____ |



Figure 48 - Location of Test Station 4153-1



Figure 49 - Test Station 4153-1 close-up