TABLE 1
STRAY CURRENT INVESTIGATION
ROSETTE TEST DATA (Millivolts)

Direction	Test Location		
	212+50	**230+00***	**247+00**
0 Degrees	-18.5	-13.9	-8.9
45 Degrees	-23.5	-9.4	-14.5
90 Degrees	+3.3	-9.7	-50.7
135 Degrees	-6.5	-19.6	-57.4
180 Degrees	-9.1	+0.8	-32.7
225 Degrees	-27.4	+20.8	-34.2
270 Degrees	-5.6	+24.5	-30.3
315 Degrees	-28.7	-25.5	-18.8
RESULTANT	33.1	65.3	73.3
DIRECTION	132.5°	321.4°	332.6°

* BGE rectifier located near station 230+00.

Analysis of the above data indicates that significant stray current effects exist along the proposed water main's alignment.

5.2 Field Soil Resistivity

The ability of an electrolyte to conduct current is primarily governed by resistivity, which is expressed in ohm-centimeters. Generally, the lower the resistivity, the more corrosive the environment. More specifically, resistivities below 2,000 ohm-centimeters can be considered to be very corrosive to ferrous metals, whereas values above 10,000 ohm-centimeters can be considered mildly corrosive. Common soil resistivity classifications are shown in Table 2.