

**TABLE 1
STRAY CURRENT INVESTIGATION
ROSETTE TEST DATA (Millivolts)**

Direction	Test Location Station 18+00
0 Degrees	-18.1
45 Degrees	-37.6
90 Degrees	-15.7
135 Degrees	-14.5
180 Degrees	+13.2
225 Degrees	+12.8
270 Degrees	-13.4
315 Degrees	-25.3
Resultant	80.4
Direction	202.1

Analysis of the above data indicates that only minor stray current activity exists along the pipeline right-of-way.

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.

**TABLE 2
SOIL CORROSIVITY/SOIL RESISTIVITY**

Soil Corrosivity	Soil Resistivity (Ohm-Cm)
Very Corrosive	0 to 2,000
Corrosive	2,000 to 5,000
Moderately Corrosive	5,000 to 10,000
Mildly Corrosive	Over 10,000