



SAMPLE: Menadione, Vitamin K₃
 MEDIUM: 0.1 M acetate buffer, pH 4.75
 CONC: 6 mg/25 ml
 RATE: 350 mV/s
 ETRODE: CPE
 REF: RE-1, Ag/AgCl
 MODEL: CV-1A

This is typical voltammetric behavior for a molecule containing the quinone moiety. At lower pH both the oxidation and reduction peaks shift toward positive potentials and the peak potentials move closer together. The latter observation is consistent with a faster electron transfer process. Remember that quinones will reduce more easily at low pH and that the corresponding hydroquinone will be more difficult to oxidize as the pH drops. The pH dependence of many organic redox processes is extremely important. Fortunately the principles are easily understood.



2701 Kent Ave
 West Lafayette
 Indiana 47906