Archie's Equation:

$$S_{w} = \sqrt[n]{(F \times R_{w}) / R_{t}}$$

where: F = formation factor = a /  $\emptyset^m$ 

 $R_w$  = formation water resistivity

and m = cementation exponent, laboratory determined and n = saturation exponent, laboratory determined and a = a constant, normally found to be 1.0

then: 
$$S_w = \sqrt[n]{(a \cdot R_w) / \emptyset^m \cdot R_t}$$

Before The Oil Conservation Commission Case No. 11122 Exhibit No. <u>20</u> Submitted By: Amoco Hearing Date: Oct. 20, 1994