

- neutron/sonic, compute density
porosity and sonic porosity
- plot histograms, crossplots, and log plots
- 4. Compute Formation Water Resistivity (RW) Using the RWA,
RWSP, and Resistivity Ratio Methods.
 - compute RW using the RWSP, RWA and
resistivity ratio (RWRAT) methods
corrected to 75 degrees fahrenheit
(see Note 2)
 - plot RW log
 - pick values and build RWF75 curve
- 5. Compute Water Saturation (SW) Using Archie, Modified Simandoux,
and Dual Water Methods.
 - compute SW using the Archie, Modified Simandoux
and Dual Water methods using the parameters
specified in the program set-up
(see Note 3)
- 6. Generate Summary Reports, and Plots.
 - generate Pay Summary report
 - generate Data Listing report
 - generate Summary Plots
- 7. Generate Reservoir Quality Plot
 - compute net thickness,
average total porosity,
and average effective porosity,
for all potential reservoir intervals
 - generate Reservoir Quality Plot and post
computed averages opposite each interval

Note 1: Lithology Discrimination

The lithology discrimination method used in the LOGEVAL program uses a cross correlation technique. A second order best-fit line is computed for the density and sonic logs. Minimum and maximum boundaries are then positioned on either side of the best-fit line (see DNMINCUT, DNMAXCUT, ACMINCUT and ACMAXCUT on logplot).