

RAPID AUTOMATED POSTING OF SUBSURFACE DATA ON A MICROCOMPUTER SYSTEM

Marc B. Edwards¹

ABSTRACT

One of the most time-consuming phases of a subsurface study is the posting of data to maps. Even after a map is posted, additional time is required to check the data, make revisions, keep it up to date, and, not infrequently, to make entirely new maps as objectives change with time. Other principle tasks in a subsurface geological study include the storage of geological data and the selection of parameters such as depth, production and T.D. for posting on maps.

Advantages of performing these tasks with a microcomputer system include: 1) the capacity to store thousands of pieces of information on just a few discs; 2) the ability to sort and select data according to virtually any criteria (e.g., depth ranges, by formation, etc.), capacity to combine selection criteria (e.g., depth of all penetrations of a particular formation in a certain area, that have certain production limits); and 3) greatly reducing the possibility of introducing errors during the posting process.

In particular, computer-posted maps can: 1) be created in one or two minutes; 2) display several parameters on the same map, such as isopach, net sandstone and depth; 3) display computed values automatically, such as percentages, ratios, etc.; 4) be created in various scales; and 5) display only wells with data present, or with data within certain specified ranges, such as having production from a particular stratigraphic horizon. In addition, maps can be posted to the screen for initial checking and revision, prior to creating hardcopy on a printer.

At the present time, prices for such systems start below \$3000.00, including hardware and software. Thus, for data-intensive subsurface mapping applications, such systems pay for themselves in a few months.

¹Consulting Geologist, 42 Eagle Court, Spring, Texas 77380.

Poster session presentation