

THE CWLS R_w CATALOG ON DISC

by
E.R. (Ross) Crain, P.Eng.
Spectrum 2000 Mindware Ltd
Calgary AB

PREPRINT: Subject to Correction, Last revision 08 Oct 90

Introduction

For a number of years, the Canadian Well Logging Society has published a catalog of water resistivity values for Canada. Recently, this publication has been extensively revised and the catalog has been printed as a series of 8-1/2 x 11 inch maps covering Western Canada, Northwest Territories/Yukon, Arctic Islands, and East Coast Canada. Large scale wall maps are also available from the Society.

A number of requests for the CWLS R_w Database in digital form have been received over the last few years, and the Society has responded by publishing the database as an ASCII file for use by log analysts in their own databases, and as a Lotus 1-2-3 file for use as a standalone database.

The CWLS expects that users of the ASCII database will write their own search and retrieval programs using a database management program of their own choice. The Lotus 1-2-3 program is provided only as a guide to the contents of the database and is not intended as a complete search and retrieval program.

Contents of the CWLS R_w Database

The files on these discs are a CWLS Shareware program and may be copied and distributed to others upon payment of a fee of \$25.00 for each copy produced. CWLS is not responsible for errors or omissions in the data or programs on these discs. The data and programs are protected by the copyright laws of Canada and the United States and can only be reproduced under the terms and conditions described above.

The CWLS R_w Database contains 6000 records with the following fields:

MAP# REC# UNIQUE WELL ID LATITUDE LONGITUDE RW@25°C

Each record represents one water resistivity value which has passed a series of criteria for validity. Those interested in the criteria should refer to the introductory text of the paper version of the CWLS R_w Catalog (1987).

The data discs contain the following files:

Disc #1: RWREADME.DOC which contains a copy of this paper
 RWLIST .ASC which contains the ASCII file of the catalog
 RWINDEX .WK1 which contains the Lotus 1-2-3 catalog index,
 search macros, and print routines

Disc #2: RWCATL .WK1 which contains the same data as RWLIST.ASC, but
 in Lotus worksheet format

If an ASCII file of the index is required, it can be created by
 printing the appropriate portions of RWCATL.WK1 to a disc file.

Using the Lotus 1-2-3 Rw Catalog

To use the Lotus version of the CWLS Rw Catalog on a disc, create a
 directory called RWCAT on a disc drive of your choice. Copy RWCATL.WK1,
 RWINDEX.WK1, and RWREADME.DOC to this directory. Load your LOTUS 1-2-3
 program and change directory (/FD) to your RWCAT directory. Then load
 the RWINDEX.WK1 program with the Lotus File Retrieve (/FR) command. The
 following help screen will appear:

```
*****
*                                     *
*           CANADIAN WELL LOGGING SOCIETY           *
*                                     *
*           FORMATION WATER RESISTIVITY CATALOG           *
*           HELP FILE                                     *
*                                     *
*****
* INSTRUCTIONS:                                     *
* Press {Alt}S to search for and load individual map sets. *
* Press {Alt}P to print the loaded map set.             *
* Press {Alt}I to print indexes.                       *
* Press {Alt}H to return to this screen.               *
* Press /GV to view RW Map. Adjust scales to suit location desired.*
*****
```

If you press {Alt}S, the following screen appears:

```
*****
*                                     *
*           CANADIAN WELL LOGGING SOCIETY           *
*                                     *
*           FORMATION WATER RESISTIVITY CATALOG           *
*           MAP INDEXES                                     *
*                                     *
*** Move Cursor Down To Desired Map Number and Press {Return} *****
*                                     *
ALTA/BC           SASK/MAN           YUKON/NWT           *
*
ALBERTA           2 ALIDA           30 AKLAVIK           41
ARCS              15 AMARANTH       28 AKPAK            38
ARCTOMYS         20 ASHERN         34 ALMSTROM        41
BADHEART         2 ASHVILLE        22 ARCTIC RED      40
~~~~~
~~~~~
```

Move the cursor to the map number for the formation you want to view, and press {Return}. The screen will clear while the file loads (about 12 seconds for a fast hard disk). A new screen appears:

```
*****
*
*
*      CANADIAN WELL LOGGING SOCIETY      *
*
*      FORMATION WATER RESISTIVITY CATALOG      *
*      c. 1987 CWLS                          *
*
*****
*      MAP # XX                               *
*
* This section lists all the formation names included on the *
* map that was selected.                       *
*
*
***** Press {Page Down} To See Retrieved Data *****
```

If you press {Page Down}, the following screen appears:

```
*
*
* MAP# REC#  UNIQUE WELL ID  LATITUDE  LONGITUDE  RW@25'C *
*
* 34  44  100091300126W100  49.03822  -100.82439  0.075 *
* 34  883  100133600419W100  49.34906  -99.91835  0.040 *
* 34  1236  100051300522W100  49.38638  -100.32505  0.045 *
* 34  1249  100072700524W100  49.41550  -100.63008  0.082 *
*  ~~~~~ *
*  ~~~~~ *
```

You can scroll through the list with the arrow keys to find an RW near your well. To view a map of the data, press /GV to view the RWMAP. You may need to use Lotus commands to change X and Y scales and ranges to adjust map area.

DO NOT MESS WITH THE DATA OR MACROS UNLESS YOU KNOW LOTUS 1-2-3.

Press {Alt}I to print the index or {Alt}P to print the data from the map area that was loaded with {Alt}S. Press {Alt}H to return to the Help screen. If there is no data in the catalog near your well, try loading the maps adjacent to the one desired; ie. if you loaded Map #6, try Map #5 and Map #7 also.

Using the ASCII Rw Catalog

You may load the ASCII file into any database manager program you wish, such as dBase III or dBase IV, Oracle, Paradox, or any other SQL type product. Remember that CWLS expects you to pay the Shareware fee of \$25.00 for each copy of the file that you put into a database. The CWLS

does not charge for each user of a non-commercial networked database, which is a genuine bargain in today's software jungle.

To use the data, you would have to write some database programs to search and retrieve data from the database. The CWLS encourages users to share these programs with others, either as freeware, or as shareware at a nominal fee, or as a technical article in the CWLS Journal.

It also seems practical to load the Rw data file into a "Pop-up" or TSR program on a DOS or OS/2 based PC, so that the data can be searched while retaining control of a running log analysis program. This should be especially practical under Microsoft Windows 3.0 or Presentation Manager. TSR products such as Lotus Metro or Sidekick may also work. The CWLS invites contributions to the CWLS Journal describing any successful attempts at this approach.

Third parties who sell the CWLS Rw Catalog in conjunction with their database retrieval software must remit the CWLS Shareware fee or face possible penalties. Commercial database suppliers who wish to provide the CWLS Rw Catalog over their database networks should contact the CWLS for the appropriate licensing agreement.

If you receive a copy of the CWLS Rw Database from a friend or by downloading a database, please be sure to send the \$25.00 shareware fee to the CWLS at 229, 640 5 Ave SW, Calgary AB T2P 3G4.

Conclusions

The CWLS Rw Catalog on Disc provides the basis for database retrieval of high quality Canadian water resistivity values for the first time for many people at a very low price. The Lotus 1-2-3 program provides a quicklook retrieval program and the ASCII file provides access from more sophisticated DBMS programs. Third party programs are expected to enhance the utility of the data.

c. 1987 - 1990 CWLS

□