# GEODIAL USERS GUIDE

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OPEN FILE REPORT 1986 - 21

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# INTRODUCTION

GEODIAL, a bibliographic data base of Alberta geoscience reports is operated by the Alberta Geological Survey Department of the Alberta Research Council. It is made publicly available through the Stanford Public Information Retrieval System (SPIRES), a data base management system on the University of Alberta's Amdahl computer. All on-line users must have a valid sign-on with the University's Computing Services Department.

This report is intended to briefly convey how a GEODIAL literature search is conducted. It assumes the reader has basic familiarity with the operation of a computer terminal. For more specific information on any aspect, please contact the Geological Survey Department of the Alberta Research Council. The references listed at the end of this manual are useful for more detailed information on MTS and SPIRES.

GEODIAL shares its data with, and receives data from GEOSCAN, the national geologic data base managed by the Geological Survey of Canada.

# PRELIMINARIES

## GETTING CONNECTED

Direct connection to the University computer is available through the following dial-ups: 300 baud, 432-4811; 1200 baud, 432-2266. To establish contact at 300 baud hit the return key: RETURN for 1200 baud use either the capital C or ].

Remote access to the computer is also available through Datapac, which provides networking services throughout North America. Datapac phone numbers for Alberta are:

| | 300 Baud | 1200 Baud |
|---|---|---|
| EDMONTON | 420-0185 | 423-4463 |
| CALGARY | 264-9340 | 232-0213 |
| RED DEER | 343-7200 | 342-2208 |
| LETHBRIDGE | 329-8655 | 327-2004 |
| GRANDE PRAIRIE | 539-5990 | - |
| FORT McMURRAY | 791-2884 | - |

When a high-pitch tone is received either place the phone in the acoustic-coupler or press the data button on the data phone. Operation will be dependent on the type of modem used. To connect with Datapac enter: . RETURN . Set either the local echo of the terminal on, or after Datapac replies enter the command: SET 2:1. The access code for the University of Alberta is 6010 0010. After entering this the University computer will issue a greeting message.

SIGNING ON

After having established contact with the University computer it will request that you identify the terminal by entering a terminal I.D. A list of the terminal I.D.s available and their characteristics follows:

| Terminal I.D. | Terminal Type | Line Length | Page Size |
|---|---|---|---|
| AED512 | AED 512 | 63 | 39 |
| AJ832 | Anderson Jacobsen 832 | 132 | 20 |
| AJ510 | Anderson Jacobsen 510 | 255/79 | 23 |
| APPLE | Apple II | 39/255 | 23 |
| APPLEIIC | Apple IIc | 79/255 | 23 |
| CYBAPL | Cybernex APL 100 | 79 | 23 |
| C64 | Commodore 64 | 38/255 | 23 |
| DM1520 | Datamedia 1520 | 79 | 23 |
| DATP | Datapoint | 72 | 24 |
| DIABLO | Diablo type mechanisms | 132 | 20 |
| DECGT40 | Digital Equipment GT40 | 73 | 31 |
| DECGT44 | Digital Equipment GT44 | 132 | 1 |
| HYPERION | Hyperion | 80 | 24 |
| IBMPC | IBM PC | 80 | 24 |
| LA36 | IBM Equipment LA36 | 132 | 20 |
| LA120 | IBM Equipment LA120 | 132 | - |
| GE300 | General Electric 300 | 118 | 20 |
| HP2641 | Hewlett Packard 2641 | 79 | 23 |
| HP2648A | Hewlett Packard 2648A | 79 | 23 |
| HP9845 | Hewlett Packard 9845 | 79 | 20 |
| LEK100 | Lectromedia 100 series | 79 | 23 |

| | | | |
|---|---|---|---|
| LANP400 | Lanparscope 400 | 78 | 24 |
| OP1R | Ontel OP1/R | 255 | - |
| ORION | ORION | 62 | 31 |
| PET | Commodore PET | 39/255 | 23 |
| TTY | Teletype (default type) | 72 | 20 |
| T4010 | Tektronix 4010 | 73 | 35 |
| TI700 | Texas Instruments 700 | 79 | 20 |
| TI745 | Texas Instruments 745 | 80 | 20 |
| TRS80 | Radio Shack TRS80 | 64 | 15 |
| TVI | TeleVideo | 79 | 23 |
| T4015 | Tektronix 4015 | 73 | 35 |
| T4013 | Tektronix 4013 | 73 | 35 |
| VC414 | Volker-Craig 414 | 79 | 23 |
| VT61 | Digital Equipment VT61 | 79 | 23 |
| VT100 | Digital Equipment VT100 | 132 | 32 |
| VUCOM1 | Vucom1 | 80 | 15 |
| WS78 | Digital Equipment WS78 (Work Station 78) | 79 | 23 |

If the terminal I.D. is unknown enter a carriage return and the computer will default to the teletype I.D. (TTY). As this list is being updated by the University on an irregular basis a new listing may be generated by issuing the command: LIST *TERMINALIDS. To reset the terminal I.D. after signon use the command: %TERMINAL=XXXX, where XXXX represents the terminal I.D.

Signon I.D.'s are available from Computing Services at the University of Alberta. Also issued with the I.D. is a password that the user may change at any time. The password provides security for the account and changing it periodically is recommended. The command: SET PASSWORD will lead the user through a series of prompts that will allow the user to change the password. An example of a signon to the University of Alberta computer follows, XXXX represents the signon I.D. and YYYY the password.

```
UNIV OF ALBERTA COMPUTING SERVICES (B)
MTS (15496-BF04/OE/CD)
%Enter Terminal ID vt100
%OK.
%OK.
#signon XXXX
#Password?
? YYYY
#Term,Low,External/Educational
#last signon was at 13:24:40, Thu Mar 27/86
```

```
#User HAME signed on at 10:21:12, Fri Mar 28/86
#
```

The University of Alberta's operating system is known as MTS, the Michigan Terminal System. All MTS commands are prompted by #. When this prompt is returned after signon the SPIRES program may be run.

## SELECTING GEODIAL

GEODIAL is one of a number of data bases in the University of Alberta's SPIRES (Standard Public Information Retrieval System) data base management system. To run SPIRES enter the command: RUN *SPIRES. The computer will reply with the version of SPIRES being run, any messages that may be present, and the SPIRES prompt. If at any time the prompt reverts to # it will be necessary to start over again with the RUN *SPIRES command as you will have lost SPIRES and returned to the command language MTS. To select GEODIAL enter the command: SELECT GEODIAL. When the prompt -> returns the data base has been selected and searching may commence.

An example of running the SPIRES program and selecting the GEODIAL data base follows:

```
#RUN *SPIRES
#10:23:37
-Welcome to SPIRES 86.02
->SELECT GEODIAL
->
```

# DATA BASE STRUCTURE

## ELEMENTS AND INDICIES

GEODIAL contains bibliographic information on geoscience reports in Alberta. To organize this information the reports are broken down into their component elements. A list of these elements may be obtained by issuing the command: SHOW ELEMENT NAME. Note that both the full term and the abbreviation for each element is given.

*-> SHOW ELEMENT NAME*
*Subfile GEODIAL*
*IDENTIFIER, ID*
*DATE-ADDED, DA*
*DATE-UPDATED, DU*
*DATE, D*
*TITLE, T, TI*
*AVAILABILITY, AV*
*AUTHOR, A, AU*
*PERMIT-NO, PERMIT, PN*
*LOCALE, DLS, L, NTS*
*GROUP-CODE, DOCUMENT-TYPE, DT, GC*
*OUTPUT-CONTROLS, OC*
*OBSELETE*
*COMMODITY, C, CO*
*KEYWORDS, K, KE*
*REPORT-NO, REPORT, RN*
*REMARKS, R, REM*
*CORP-AUTHOR, CA*
*JOURNAL, JO*

A brief explanation of each of these elements follows.

Identifier - Each record is assigned a unique number. This is used for data base management and is of little interest for those searching the data base.

Date-added - The date the record was added to the data base.

Date-updated - The date of the most recent modification to the record.

Date - Publication date of the report.

Title - Report title plus additional information on author, type of publication, number of pages and figures.

Availability - Where a copy of the report may be reviewed.

Author - The author or authors of the report.

Permit-no - The exploration permit number assigned to assessment reports.

Locale - The NTS map sheets covered by the report. For reports on smaller areas such as assessment reports, the township and range is also given.

Group-code/document-type - The type of document the report is. Examples include published reports, theses, serial literature.

Output/controls - Broad subject categories, examples include

stratigraphy, surficial geology, geophysics.

Obsolete - This element is a spare element not in current use in the data base.

Commodity - The economic mineral commodity referred to within a report.

Keywords - Concept terms within the report.

Report-no - An internal filing number assigned by the Alberta Geological Survey.

Remarks - Any comments, such as release dates, that may be of importance concerning the record.

Corp-author - The corporate association of the author, or the company responsible for the report when the author is not named. This element is now obselete and should not be used in searching.

Journal - The journal in which the report is published.

Not all of these elements can be applied to any one report. All reports have an identifier, a data-added, date-updated, date and title. The other elements are used where they are applicable.

For efficient searching of GEODIAL some elements are organized as indices. A SPIRES index may be compared directly to an index in the back of a book. Instead of having to examine every page of a book to see if a certain topic is covered, one can look in the index at the back and be referred to specific pages. A bibliographic data base's indices operate in the same fashion. Rather than searching record by record to see if it contains a specific term, an index may be used that refers directly to those records that are relevant. In this way searching can proceed in an orderly manner. A list of the GEODIAL indices may be obtained by the command: SHOW INDEX.

```
-> SHOW INDEX
Goal Records:  REPORT
Simple Index:  DOCUMENT-TYPE, DT
Simple Index:  A, AUTHOR
   Sub-Index:  NULL
Simple Index:  DLS, L, LOCALE, NTS
Simple Index:  K, KEYWORD
Simple Index:  C, CO, COMMODITY
```

*Simple Index: CA, CORP-AUTHOR*

The first information displayed by the show index command is the goal record. This is the type of record the data base contains. GEODIAL is bibliographic in nature so each record is a report. The document type, author, locale, commodity and corporate author indicies contain the information as explained within the preceding description of elements. The keyword indice combines the output controls and the keyword elements.

THE BROWSE COMMAND

To examine the contents of any one index the BROWSE command is used. This command may take a number of forms. It is possible to examine a sample of the index, to examine the entire index either forwards or backwards, or to examine the index for any one specific value. Examples and explanations of the various BROWSE commands follow.

BROWSE index name - This command will list eight terms from the index selected. It is a useful command if one is unsure of what an index contains.

```
->BROWSE LOCALE
TP001 R28W4M
TP043 R17W4M
TP098 R04W4M
TP111 R04W4M
031J/SE
074M/16
084N/SE
```

BROWSE FIRST index name - A list of the first ten occurrences within the index will be produced and the computer will issue the prompt -MORE? If a reply of YES is given an additional ten occurrences will be listed and the prompt will once again appear. If NO is given, the browse will terminate.

```
->BROWSE FIRST COMMODITY
ABSORBENTS
ALUM
ALUMINA
BARITE
BENTONITE
CLAY AND SHALE
COAL
COPPER
```

*COQUINA*
*DIATOMITE*
*-More?YES*
*DIMENSION STONE*
*DOLOMITE*
*FLY ASH*
*FORMATION WATER*
*GENERAL*
*GOLD*
*GYPSUM*
*INDEX*
*IRON*
*LEAD-ZINC*
*-More?NO*

BROWSE LAST index name - This command will produce a list of the last ten occurrences of the index. A YES reply to the -MORE? prompt will list the ten preceeding occurrences.

*->BROWSE LAST AUTHOR*
*ZEMGALS*
*ZHELTONOGOVA*
*ZIEBARTH*
*ZIEGLAR*
*ZIEGLER*
*ZIEHLKE*
*ZIKMUNDOVA*
*ZINCHENKO*
*ZINKAN*
*ZUBTSOV*
*-More?NO*

BROWSE index name term - By issuing this command the browse will commence five occurrences before the term specified. The prompt -MORE? will be issued and the browse may continue.

*->BROWSE KEYWORD STRATIGRAPHY*
*STRATIGRAPHIC CORRELATIONS*
*STRATIGRAPHIC NOMENCLATURE*
*STRATIGRAPHIC SECTIONS*
*STRATIGRAPHIC TRAP*
*STRATIGRAPHIC TRAPS*
*STRATIGRAPHY*
*STREAM CHANNELS*
*STREAM FLOW*
*STREAM SEDIMENT GEOCHEMISTRY*
*STREAMFLOW*
*-More?NO*

## THE FIND COMMAND

In SPIRES the search statement asks the computer to locate all occurrences of a specified search term in an index. It takes the form FIND index name search term.

Example: To find all reports on the Bearpaw Formation:
*->FIND KEYWORD BEARPAW FM*
*- Result: 176 REPORTS*

This search locates all references in GEODIAL that are on the Bearpaw Formation. To carry it a step further, it could be required to add all the references that are on the Horseshoe Canyon Formation. A second search command can be issued that will add to the original result.

*->OR KEYWORD HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

A search completed in steps such as this is known as an iterative search. This search could be combined on a single line.

*->FIND KEYWORD BEARPAW FM OR KEYWORD HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

This search can be further simplified. As both search terms are from the same index, it is not necessary to specify the index both times.

*->FIND KEYWORD BEARPAW FM OR HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

## LOGICAL OPERATORS

The previous searches all make use of the logical operator "or". Within SPIRES, search statements may be combined by use of the logical operations and, or, and and not. A brief explanation of each of these follows.

AND — The AND operation requires that both conditions specified be present.

Example:

*->FIND KEYWORD BEARPAW FM AND HORSESHOE CANYON FM*

*-Result: 11 REPORTS*

This search will find all the records in GEODIAL that are on both the Bearpaw Fm and the Horseshoe Canyon Fm.

OR — The OR operation requires that only one of the conditions specified be present. This is an inclusive or, so it will also find those records where both conditions are present.

Example:

*FIND KEYWORD BEARPAW FM OR HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

All reports that contain either the Bearpaw Formation or the Horseshoe Canyon Formation or both are retrieved.

AND NOT — The AND NOT operation requires the first condition specified must be present and the next condition must be absent.

Example:

*->FIND KEYWORD BEARPAW FM AND NOT HORSESHOE CANYON FM*
*-Result: 165 REPORTS*

All reports on the Bearpaw Formation are located and then those with information on the Horseshoe Canyon Formation are excluded.

## THE USE OF PARENTHESES

It was mentioned earlier that in searching GEODIAL, individual commands may be given or the search combined into a single line.

Example:

*->FIND KEYWORD BEARPAW FM*
*-Result: 176 REPORTS*
*->OR HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

*->FIND KEYWORD BEARPAW FM OR HORSESHOE CANYON FM*
*-Result: 188 REPORTS*

If more than two conditions are specified for a search, special care must

be taken to avoid any logical errors. In single line searches parentheses are used to group logical expressions in much the same way as they are used in mathematics. A search statement without parentheses will be evaluated in a left to right order.

For example, a search is required of NTS map sheet 83H for all reports on the Bearpaw and Edmonton Formation. If the search statement is structured exactly as written without the use of parentheses we will get an erroneous result.

*->FIND LOCALE 083H# AND KEYWORD BEARPAW FM OR EDMONTON FM*
*-Result: 194 REPORTS*

As this statement is written, the data base is searched for all reports on Locale 83H that also contain the keyword Bearpaw Fm. Next all the reports in GEODIAL on the Edmonton Formation are added to the result. This is clearly not the original intent of the search. By using the parentheses to group the search concepts we can correct the problem.

*->FIND LOCALE 083H# AND (KEYWORD BEARPAW FM OR EDMONTON FM)*
*-Result: 24 REPORTS*

The computer will evaluate inside the parentheses first. This search will locate all the reports in GEODIAL on either the Bearpaw Formation, the Edmonton Formation or both and then retain only those that fall in 83H.

RATIONAL OPERATORS AND THE ALSO COMMAND

In addition to the logical operators AND, OR and AND NOT, search strategies may also employ the rational operators =,> , < and ≠. While the other operators have keys, ≠ may be entered as either = or = depending on the terminal used. If no rational operator is specified SPIRES will always default to =.

Example:

```
->FIND KEYWORD BEARPAW FM
-Result:  176 REPORTS
->FIND KEYWORD=BEARPAW FM
-Result:  176 REPORTS
```

The most common use in GEODIAL of the rational operators is when a search result is being narrowed by the use of its publication date. For example, a search is required to find all information on the Bearpaw Formation since 1975. In order to do this a new command, the ALSO command, must be used. The ALSO command is used for searching a non-indexed element, as date is in GEODIAL. It can be applied only to an already existing search result. It is further restricted in its usage in that it must appear at the beginning of a new line and may not be clustered within parentheses.

Example:

```
->FIND KEYWORD BEARPAW FM
-Result:  176 REPORTS
->ALSO DATE>1975
-Result:  13 REPORTS
```

In this search, all reports on the Bearpaw Formation are found. The result being 176 reports. The ALSO command then searches only this result to find all those reports with a date greater than 1975.

## THE BACKUP COMMAND

If uncertain about the search strategy being employed an iterative search may be conducted with one or more search terms per line. Should an error occur in such a search, the BACKUP command can be used to return to the previous result. If a search has a number of lines BACKUP may be used to return all the way to the original result.

For example, suppose we wish to perform a search that will find all reports on either the Bearpaw Formation or the Horseshoe Canyon Formation, and by mistake we use AND in the search instead of OR.

```
->FIND KEYWORD BEARPAW FM
-Result:  176 REPORTS
->AND KEYWORD HORSESHOE CANYON FM
-Result: 11 REPORTS
->BACKUP
-Result:  176 REPORTS
->OR KEYWORD HORSESHOE CANYON FM
-Result:  188 REPORTS
```

## DISPLAYING THE RESULT

### THE TYPE COMMAND

Having obtained a search result the next step is to display it. The TYPE command will display at the terminal all the records in a result.

Example:

```
->FIND KEYWORD HORSESHOE CANYON FM
-Result:  23 REPORTS
->TYPE

THE STRUCTURE AND RELATIONSHIPS OF THE HORNED DINOSAUR
ARRHINOCERATOPS PARKS (ORNOTHISCIA:CERATOPSIDAE).  H. TYSON,
CAN. J. EARCH SCI. VOL 18(8) PAGES 1241-1247 (1981), 17 REF.
ISSN. 0008-4077.  (702784)

SPOIL HYDROLOGY AND HYDROCHEMISTRY AT THE BATTLE RIVER SITE
IN THE PLAINS OF ALBERTA, BY S.R. MORAN AND M.R. TRUDELL,
ALBERTA RESEARCH COUNCIL CONTRIBUTION SERIES 1188, FROM 1982
SYMPOSIUM ON SURFACE MINING HYDROLOGY, SEDIMENTOLOGY AND
RECLAMATION, UNIVERSITY OF KENTUCKY, DECEMBER 5-10, 1982,
1983. (702627)
.
.
.
FACIES RELATIONSHIPS AND PALEOENVIRONMENTS OF A LATE
CRETACEOUS TIDE-DOMINATED DELTA, DRUMHELLER, ALBERTA.  A
FIELD GUIDE, BY R.A. RAHMANI, EDMONTON GEOL SOC FIELD
CONFERENCE GUIDE BOOK, OCTOBER 1981, 43 PAGES (801690)
```

### PRINT FORMATS

This display format, which includes the title, author, document

name, number of pages and figures, I.D. and remarks, is called the TITLE format and is the GEODIAL default print format. Other useful display formats are the EXPD-TITLE (expanded title) and the REPORT formats.

EXPD-TITLE This format displays the title, author, document name, number of pages and figures, I.D. and remarks in a block as did the title format. It also lists the output control, keywords and localities.

REPORT The REPORT format will list I.D., document type, title block, availability, report number, author, corporate author, localities, output controls and keywords.

To change the format enter the SET FORMAT format name command. In the following example, we will perform a search to find a reference for a report written by the author Don Macdonald and containing x-ray diffraction analyses of marl samples. The result will be displayed initially in the default title format and then the EXPD-TITLE and REPORT formats.

*->FIND AUTHOR MACDONALD AND (KEYWORD MARL AND X-RAY DIFFRACTION ANALYSES)*
*-Result: 1 REPORT*
*->TYPE*

*MARL RESOURCES OF ALBERTA, D.E. MACDONALD, ALBERTA RES COUN EARTH SCI REPT 82-1, 1982. 94PP, 38 FIG. (703000)*

*->SET FORMAT EXPD-TITLE*
*->TYPE*

*MARL RESOURCES OF ALBERTA, D.E. MACDONALD, ALBERTA RES COUN EARTH SCI REPT 82-1, 1982, 94PP, 38 FIG. (703000)*

*ALBERTA*
*ALBERTA RESEARCH COUNCIL*
*ECONOMIC GEOLOGY*
*INDUSTRIAL MINERALS*

*CALCITE*
*CROSS SECTIONS*
*MICRITES*
*SCANNING ELECTRON MICROGRAPHS*
*TUFA*
*X-RAY FLUORENSCENCE ANALYSES*
*CHEMICAL ANALYSES*
*MARL*
*MINERAL DEPOSITS*
*SURFICIAL GEOLOGY*
*X-RAY DIFFRACTION ANALYSES*

073D
073L
082P
083B
083E
083G
083I
083K
083M
084C
073E
082O
083A
083C
083F
083H
083J
083L
083N
084D

->SET FORMAT REPORT
->TYPE

IDENTIFIER: 70300

COMMODITY(S): MARL

DOCUMENT-TYPE: PUBLISHED REPORT

TITLE: MARL RESOURCES OF ALBERTA, D.E. MACDONALD, ALBERTA RES COUN EARTH SCI REPT 82-1, 1982. 94PP, 38 FIG.

AVAILABLE: ALBERTA RESEARCH COUNCIL, ALBERTA GEOLOGICAL SURVEY 438-0555

REPORT-NO: ALBERTA RES COUN EARTH SCI REPT 82-1

AUTHOR(S): MACDONALD, D.E.

CORP-AUTHOR(S):

LOCALE(S): 073D
073L
082P
083B
083E
083G
083I
083K
083M
084C
073E
0820
083A
083C
083F
083H
083J
083L
083N
084D

*OUTPUT-CONTROL(S): ALBERTA*
*ALBERTA RESEARCH COUNCIL*
*ECONOMIC GEOLOGY*
*INDUSTRIAL MINERALS*

*KEYWORD(S): CALCITE*
*CROSS SECTIONS*
*CHEMICAL ANALYSES*
*MARL*
*MINERAL DEPOSITS*
*MICRITES*
*SCANNING ELECTRON MICROGRAPHS*
*SURFICIAL GEOLOGY*
*TUFA*
*X-RAY DIFFRACTION ANALYSES*
*X-RAY FLUORESCENCE ANALYSES*

If a listing of the entire contents of a record is desired, all GEODIAL formats may be cleared and the default SPIRES format used. To clear the formats the CLEAR FORMATS command is used.

Example:

```
->CLEAR FORMATS
->TYPE

IDENTIFIER = 703000;
DATE-ADDED = 03/28/86;
DATE-UPDATED = 03/28/86;
DATE = 1982;
TITLE = MARL RESOURCES OF ALBERTA, D E MACDONALD, ALBERTA
RES COUN EARTH SCI REPT 82-1, 1982, 94PP, 38 FIG.;
AVAILABILITY = ALBERTA RESEARCH COUNCIL, ALBERTA GEOLOGICAL
SURVEY 438-0555;
AUTHOR = MACDONALD, D E;
LOCALE = 073D
LOCALE = 073L;
LOCALE = 082P;
LOCALE = 083B;
LOCALE = 083E;
LOCALE = 083G;
LOCALE = 083I;
LOCALE = 083K;
LOCALE = 083M;
LOCALE = 084C;
LOCALE = 073E;
LOCALE = 082O;
LOCALE = 083A;
LOCALE = 083C;
LOCALE = 083F;
LOCALE = 083H;
LOCALE = 083J;
LOCALE = 083L;
```

*LOCALE = 083N;*
*LOCALE = 084D;*
*GROUP-CODE = PUBLISHED REPORT;*
*OUTPUT-CONTROLS = ALBERTA;*
*OUTPUT-CONTROLS = ALBERTA RESEARCH COUNCIL;*
*OUTPUT-CONTROLS - ECONOMIC GEOLOGY;*
*OUTPUT-CONTROLS - INDUSTRIAL MINERALS;*
*COMMODITY = MARL;*
*KEYWORDS = CALCITE;*
*KEYWORDS = CROSS SECTIONS;*
*KEYWORDS = CHEMICAL ANALYSES;*
*KEYWORDS = MARL;*
*KEYWORDS = MINERAL DEPOSITS;*
*KEYWORDS = MICRITES;*
*KEYWORDS = SCANNING ELECTRON MICROGRAPHS;*
*KEYWORDS = SURFICIAL GEOLOGY;*
*KEYWORDS = TUFA;*
*KEYWORDS = X-RAY DIFFRACTION ANALYSES;*
*KEYWORDS = X-RAY FLUORESCENCE ANALYSES;*
*REPORT-NO = ALBERTA RES COUN EARTH SCI REPT 82-1;*

To return to one of the GEODIAL formats the SET FORMAT format name command reviewed earlier is used.

## SIGNING OFF

Having completed the search, the sign off procedure consists of first exiting SPIRES and then signing off and disconnecting from the University computer. To exit SPIRES, issue the command: STOP. This will end the SPIRES program and return you to MTS. To sign off from MTS enter SIGNOFF and the computer will display the user statistics for that session and disconnect.

## SEARCH ASSIST FEATURES

### ABBREVIATION AND TRUNCATION

All common SPIRES searching commands may be abbreviated to the first three letters. For example, FIND may be FIN, TYPE becomes TYP and FORMATS is FOR. In addition to the commands the elements and indexes may

be shortened to the terms specified by the SHOW ELEMENT NAMES (SHO ELE NAM) command. ID may be used for IDENTIFIER, K for KEYWORDS, or C for COMMODITY.

Within GEODIAL, search terms may also be shortened by use of a truncation symbol #. This symbol will cause SPIRES to search for all search terms with the root that has been specified.

Example:

STRATI# includes STRATIFIED ORE DEPOSITS
STRATIGRAPHIC CHARTS
STRATIGRAPHIC CORRELATIONS
STRATIGRAPHIC NOMENCLATURE
STRATIGRAPHIC SECTIONS
STRATIGRAPHY

Care must obviously be taken when using the truncation sign to avoid the inclusion of irrelevent search terms. The following example is a search for all surficial geology reports in map sheet 83H. It makes use of both abbreviation and truncation.

*#RUN *SPIRES*
*#11:05:12*

*-Welcome to SPIRES 86.02*
*->SEL GEODIAL*
*->FIN K SURFIC# AND L 083H#*
*-Result: 72 REPORTS*
*->TYP*

*MARL RESOURCES OF ALBERTA, D E MACDONALD, ALBERTA RES COUN EARTH SCI REPT 82-1, 1982, 94PP, 38 FIG. (703000)*

*DETAILED SOIL SURVEY OF THE CALMAR, THORSBY, WARBURG, BRETON, AND DRAYTON VALLEY AREAS, M. SCHEELAR, ALBERTA RES. COUN. OPEN FILE 1983-025. 1983, 88 PAGES, 3 FIG., 24 REF. (702747)*

*THE WISCONSINAN DEGLACIATION OF SOUTHERN SASKATCHEWAN AND ADJACENT AREAS: DISCUSSION, D A ST-ONGE, CAN. J. EARTH SCI. VOL. 17(2) P287-288, 1980. 2 REF. ISSN 0008-4077 (702236)*

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*LATE PLEISTOCENE MAMMALS FROM CENTRAL ALBERTA, CANADA, BY W A FULLER AND L A BAYROCK, ALBERTA RESEARCH COUNCIL CONTRIBUTION SERIES 296, FROM VERTEBRATE PALEONTOLOGY IN ALBERTA - REPORT, CONFERENCE HELD AT THE UNIVERSITY OF ALBERTA, AUG-SEPT 1965, P 53-63, 1965 (702528)*

```
->STO
#11:06:09 T=0.264 RC=0
#SIG
```

HELP AND EXPLAIN FUNCTIONS

If, in conducting a SPIRES search, confusion arises as to what has been done or should be done next, the HELP command may be used. Upon entering HELP a list of the search steps to that point will be generated and a suggestion of what action to take next will be given.

```
->FIND K SURFICIAL GEOLOGY
-Result:  567 REPORTS
->AND L 083H#
-Result:  72 REPORTS
->OR L 083I#
-Result:  156 REPORTS
->HELP
*
* You have subfile "GEODIAL' selected.
* The 'TITLE' format is set.
*
-No stack exists
-Result:  156 REPORTS
*
* Your search result was obtained as follows:
FIND K SURFICIAL GEOLOGY
AND L 083H#
OR L 083I#
*
* To find out how to display your results, issue the commands:
*
* EXPLAIN TYPE COMMAND
->
```

In addition to the HELP function, SPIRES also will explain a number of terms. The EXPLAIN function operates by asking SPIRES to EXPLAIN term. It will list a number of terms if they share a similar root or will immediately explain the term asked for.

THE SEQUENCE COMMAND

It is possible to order a search result alphabetically or numerically in ascending or descending order by any element or combination of elements. This is accomplished with the SEQUENCE command.

The SEQUENCE command has the form: SEQUENCE element name, element name. SPIRES will sequence in ascending order by default. To sequence in descending order a (D) is appended to the term being ordered, SEQUENCE element name (D). If more than one element is specified the first one will be sequenced and where it has more than one occurrence the second element will be used.

Example: A search is to be conducted for information on the Leduc Fm. The result is to be arranged alphabetically by author, and where there is more than one paper by any author the date is to be sequenced in descending order.

```
->FIND K LEDUC FM
-Result:  50 REPORTS
->SEQUENCE AUTHOR DATE(D)
-Stack:  50 reports
```

A point to remember about the sequence command is that it operates only on the first occurrence of multiple occurring elements. If a report has more than one author, only the first author will be used in the sequencing.

# REFERENCES

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