```
================================
=  DEEP SEA DRILLING PROJECT  =
=   INTERSTITIAL WATER CHEM   =
================================
```

I. INTRODUCTION

A. BACKGROUND AND METHODS

Interstitial water was extracted aboard the R/V Glomar Challenger from sediment samples that were evenly spaced down the hole. The expressed fluids were normally divided into several aliquots, one of which was used immediately for shipboard determination of any or all of the following: pH, alkalinity, salinity, chlorinity, calcium, magnesium and rarely, ammonia, phosphate and silica. Remaining aliquots were packaged and shipped to participating investigators ashore. Please refer to the individual contributions from these investigators printed in the Initial Reports (see field= REFERENCE) and to the article listed in the bibliography below for detailed information about techniques of pore fluid extraction and analysis.

The information recorded in this database represents the overwhelming majority of pore water chemistry data published in the Initial Reports. However, certain types of results (e.g. isotope data) were not encoded, therefore reference to the Initial Reports is essential when utilizing these data. When no data or limited data from a site was published in the Initial Report then data was entered into the database directly from the lab notebook compiled aboard the vessel. Microfilm of most of these notebooks is available from the National Geophysical Data Center in Boulder, Colorado.

B. LEGS IN THE DATA SET

This database contains data from every Leg except:
46, 66, 83, 88, 90, and 94.

C. REFERENCES

Gieskes, J. M., 1973. Interstitial water studies Leg 15. Alkalinity, pH, Mg, Ca, Si, PO4, and NH4. In Initial Reports of the Deep Sea Drilling Project, Vol 20, pp 813-829.

II. FORMAT AND FIELD DESCRIPTIONS

A. DATA FORMAT

Record length is 96 characters (14718 records)

COLUMN	FIELD	FORMAT
1-2	LEG NUMBER	A2
3-5	SITE	A3
6-6	HOLE	A1
7-9	CORE	A3
10-11	SECTION	A2
12-15	TOP OF SAMPLED INTERVAL (cm)	F4.1
16-19	BOTTOM OF SAMPLED INTERVAL (cm)	F4.1
20-27	DEPTH TO CORE (meters)	F8.2
28-35	DEPTH TO SAMPLE (meters)	F8.2
	CARD IDENTIFIER:	
36	CARD TYPE *(see note below)	A1
37	CARD NUMBER	I1
38	pH ELECTRODE TYPE	A1
39-43	pH	F5.2
44	ALKALINITY MEASUREMENT TYPE	A1
45-49	ALKALINITY (meq/l)	F5.2
50-54	SALINITY (0/00)	F5.1
55-60	DATA FIELD #1	F6.2
61-66	DATA FIELD #2	F6.2
67-72	DATA FIELD #3	F6.2
73-78	DATA FIELD #4	F6.2
79-84	DATA FIELD #5	F6.2
85-91	DATA FIELD #6	F7.2
92-96	REFERENCE	A5

*NOTE: there are some comment cards... if CARDTYPE='C' then cols 38 - 96 A59

B. FIELD DESCRIPTIONS

The definition of leg, site, hole, core and section may be found in the explanatory notes. In addition, the special core designations, as well as the methods of sample labeling and calculating absolute sample depths are discussed.

TOP OF SAMPLED INTERVAL and BOTTOM OF SAMPLED INTERVAL:

The depth, in centimeters, within a section to the top or bottom of the sediment sample. Values are encoded with an implicit decimal point. An encoded value of 805 represents

80.5 centimeters.

DEPTH TO CORE: (see formulae at end of this document)

The subbottom depth in meters to the top of the core.

DEPTH TO SAMPLE: (see formulae at end of this document)

The subbottom depth in meters to the center of the sampled interval.

CARD IDENTIFIER:

CARD TYPE:
"A" = data card "C" = comment card

CARD NUMBER:

A logical data record consists of all of the "A" cards with the identical DSDP label (cols 1-19). The field identifiers are CARD NUMBER specific, as shown under DATA FIELD below.

Not every card is present within one logical record and duplicate card numbers exist, however these records are unique in that they have different REFERENCEs, indicating different sources. If the CARD NUMBER is greater than 4 then it will contain only additional pH and/or alkalinity values.

pH ELECTRODE TYPE:

"R" = combination "P" = punch-in "F" = flow-thru
See Gieskes, 1973 for further explanation.

pH:

Measured value of pH in units of pH.

ALKALINITY MEASUREMENT TYPE:

"C" = colorimetric "P" = potentiometric
See Gieskes, 1973 for further explanation.

ALKALINITY:

Calculated value of alkalinity.

SALINITY:

Salinity as measured with a hand-held Goldberg refractometer.

DATA FIELD #1 through #6:

Shown below is the ion name and the unit for each of the 24 CARD NUMBER-specific data fields.

DATA FIELD #	CARD IDENTIFIER A1	A2	A3	A4
1	Ca (mm/l)	Sr (mm/l)	P2O5 (um/l)	Br (mm/l)
2	Mg (mm/l)	K (mm/l)	Cu (um/l)	B (mm/l)
3	Cl (o/oo)	Mn (um/l)	Fe (um/l)	Rb (um/l)
4	NH4 (mm/l)	SO4 (mm/l)	Li (um/l)/10	Ni (um/l)
5	PO4 (um/l)	Ba (um/l)	Al (um/l)	unused
6	Si (um/l)	Zn (um/l)	Na (mm/l)	NO3 (um/l)

REFERENCE:

This five-character string holds the reference to the source of the data in the record. "LABNB" denotes values taken directly from the chemistry technician's shipboard notebook.

Otherwise:

COLUMN	FIELD	FORMAT
92-93	Initial Report volume (1.. 96)	I2
94	modifier for 2-part volume eg: '1', '2', 'A' or 'B'	A1
95-96	chapter number	I2

NGDC NOTE: The modifier is shifted into the chapter number field for a large number of entries from records 2112 through 4835.

NGDC NOTES: (list of deviations from field descriptions)

Description of deviation	Record Number(s)
Unidentified modifer for 2-part vol	between records 7086 and 7421

Additional Notes: Many cores in this file are "ssw" cores, which are in-situ measurements as described in this file. These "ssw" cores are not searchable using the CD-ROM select software as individual cores, but may be copied or browsed by selecting the entire hole in which they occur.