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Geochemistry of Shale Groundwaters: Survey of Available Data and Postulated Mineralogic Controls on Composition

K. L. Von Damm

Environmental Sciences Division
Publication No. 2941

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ENVIRONMENTAL SCIENCES DIVISION

GEOCHEMISTRY OF SHALE GROUNDWATERS: SURVEY OF AVAILABLE DATA AND POSTULATED MINERALOGIC CONTROLS ON COMPOSITION

K. L. Von Damm

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CONTENTS

Page No.

LIST OF TABLES v

LIST OF FIGURES vii

ABSTRACT. xi

INTRODUCTION. 1

METHODS 2
Literature Data 2
WATSTORE Data 4

RESULTS 6

DISCUSSION 11
General Interpretation 11
Mineral Modeling 41

CONCLUSIONS 42

ACKNOWLEDGMENTS 45

REFERENCES 47

APPENDIX I: Groundwater Data Retrieved from WATSTORE with Depths >200 ft (61 m) and 100 ft (30.5 m) in some cases 53

APPENDIX II: Edited Groundwater Data Retrieved from WATSTORE . . . 227

APPENDIX III: Results of Mineral Modeling 319

DISTRIBUTION 373

LIST OF TABLES

Table		Page No.
1	Summary of formations for which shale groundwater data were retrieved from WATSTORE	8
2	Summary of shale groundwater compositional data retrieved from WATSTORE	9
3	Summary of shale mineralogies	10
AI-1	Listing of all WATSTORE data for the Eastern Interior group	55
AI-2	Listing of all WATSTORE data for the Gulf Coast group	75
AI-3	Listing of all WATSTORE data for the Pierre and Bearpaw Formations	113
AI-4	Listing of all WATSTORE data for the Green River Formation	139
AI-5	Listing of all WATSTORE data for the Midcontinent group	195
AII-1	Listing of edited WATSTORE data for the Gulf Coast group	229
AII-2	Listing of edited WATSTORE data for the Pierre and Bearpaw Formations	247
AII-3	Listing of edited WATSTORE data for the Green River Formation	259
AII-4	Listing of edited WATSTORE data for the Midcontinent group	297
AIII-1	Results of mineral modeling for the Gulf Coast group	321
AIII-2	Results of mineral modeling for the Pierre and Bearpaw Formations	357
AIII-3	Results of mineral modeling for the Midcontinent group	369

LIST OF FIGURES

Figure		Page No.
1	Ternary plots for the Gulf Coast group; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1	12
2	Ternary plots for the Pierre and Bearpaw Formations; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.	13
3	Ternary plots for the Green River Formation; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.	14
4	Ternary plots for the Midcontinent group; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.	15
5a	SiO_2 versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.	16
5b	SiO_2 versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1	17
5c	SiO_2 versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.	18
5d	SiO_2 versus depth, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.	19
6a	Chloride versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.	21
6b	Chloride versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1	22
6c	Chloride versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1	23
6d	Chloride versus depth, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.	24
7a	Potassium versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.	25

LIST OF FIGURES
(continued)

Figure		Page No.
7b	Potassium versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1	26
7c	Potassium versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1	27
7d	Potassium versus depth, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.	28
8a	Sodium versus chloride, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.	29
8b	Sodium versus chloride, Gulf Coast group, expanded scale. Plot symbols are the formation data labels as listed in Table 1	30
8c	Sodium versus chloride, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1	31
8d	Sodium versus chloride, Pierre and Bearpaw Formations, expanded scale. Plot symbols are the formation data labels as listed in Table 1	32
8e	Sodium versus chloride, Green River Formation. Plot symbols are the formation data labels as listed in Table 1	33
8f	Sodium versus chloride, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.	34
9a	Calcium versus magnesium, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.	36
9b	Calcium versus magnesium, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1	37
9c	Calcium versus magnesium, Green River Formation. Plot symbols are the formation data labels as listed in Table 1	38

LIST OF FIGURES
(continued)

Figure		Page No.
9d	Calcium versus magnesium, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1	39

ABSTRACT

A literature search and the U.S. Geological Survey WATSTORE data base were used to create a data base of groundwater compositions from shale formations. Data on groundwaters from depths of 61 to 3627 m, from a total of more than 600 stations, were recovered. The waters show a wide range in composition, with the majority being Na-Cl-HCO_3 type waters and Na-HCO_3-Cl being next in abundance. In some waters, particularly those from the Green River and various Gulf Coast formations Ca > Na. The range in solution values is as follows: pH = 5.9-10.9, Na = 0.0783-3175 mmoles/l, K = 0.00512-8.95 mmoles/l, Ca = 0.0175-49.9 mmoles/l, Mg = 0.00535-23.0 mmoles/l, Cl = 0.0141-3385 mmoles/l, SO_4 = 0.00208-56.2 mmoles/l, alkalinity = 0.0300-304 meq/l, and SiO_2 = 0.00333-0.932 mmoles/l. None of the dissolved species show a simple relationship to depth, even within a single formation. The constancy of the Na:Cl ratio at 1:1 suggests that halite dissolution may be the ultimate source of these two ions. Small excesses of sodium over chloride in the smectite-rich shales suggest that a calcium for sodium ion exchange may be occurring on the clays. Similarly, the constancy of the Ca:Mg ratio in most of the samples at from 3:1 to 1:1 suggests that a carbonate may be the ultimate source of these two elements. Equilibrium model calculations suggest that the waters in all cases are undersaturated with halite, and in most cases are undersaturated with calcite and dolomite and saturated or supersaturated with one or more pure SiO_2 phases. The waters are undersaturated with respect to most other mineral phases. In most cases the saturation state of the waters could not be examined with respect to aluminosilicates

(e.g., clays) due to the paucity of available aluminum data. Limited data were also available regarding the redox state of the groundwaters. The composition of the waters cannot be related in a simple manner to the geologic formation, the mineralogy of the enclosing rocks, or the depth of sampling.

INTRODUCTION

The Sedimentary Rock Program (SERP) is part of the U. S. Department of Energy's (DOE) Repository Technology Program. The purpose of SERP is to examine sedimentary rocks as possible hosts for a second high level nuclear waste (HLW) repository. In an earlier study, (Croff et al. 1987) shales were identified as the sedimentary rock type having the best overall characteristics for hosting an HLW repository.

Brookins and Stow (1986), in the Proceedings of the First Geochemical Workshop on Shale, identified the determination of the organic and inorganic composition of shale groundwaters as a high priority task. Within a repository setting the chemistry of the groundwater is critical to the repository's performance as it is an important factor in determining canister corrosion behavior and waste form dissolution. Mobility and transport of the radionuclides will also be related to reactions occurring between the groundwater and the waste form, and between the groundwater and the enclosing rock.

The objective of the present study is to define the range of groundwater compositions present in shales as a function of the shale mineralogy and chemistry, the particular shale formation, the geographic location and the depth. Several approaches are being used to obtain data on shale groundwaters including literature and data base searches, laboratory leaching studies of shales, computer modeling of shale rock-water interactions and direct sampling of waters from shale formations on the Oak Ridge Reservation. This document presents results from the literature and data base searches, including a preliminary interpretation of the

data in terms of controls on the groundwater chemistry. A more detailed interpretation of the data, as well as results from the other parts of this study, will be presented in several subsequent reports.

METHODS

LITERATURE DATA

A literature search for data on shale groundwater compositions was conducted using several on-line services including: Chemical Abstracts, GEOREF, and the National Technical Information Service (NTIS). In a somewhat enigmatic situation, although much has been written regarding the controls on shale groundwater composition (Graf et al. 1966; Hitchon, Billings, and Klovan 1971; Kharaka and Berry 1974; Wallace 1976; Carpenter 1978; Graf 1982), very few actual data have been reported. White, Hem, and Waring (1963) and White (1965) present a few analyses of water from various shale formations, and Jackson et al. (1975) present some data from the Green River Formation. Dickey, Collins, and Fajardo (1972) present data from a well in southwestern Louisiana, but it is not clear which water samples are from shale and which are from sandstone. Long and Larson (1983) report data on fluids from south-central Michigan, but again it is difficult to discern which of their samples are from shale and which are from other formations in the section. An oft-quoted data set reported by Schmidt (1973), comes from a core taken from the Gulf Coast with the specific purpose of determining the groundwater/interstitial water composition. Unfortunately, the core largely dried out before the

water was extracted. To obtain a fluid composition, the core was leached with water and then an original fluid composition was back-calculated. Osmaston (1975) has pointed out several errors in the Schmidt (1973) paper, and, in addition to these, the probable oxidation of the core would have resulted in elevated sulfate values as well as other chemical artifacts. Hence, these data are highly unreliable. The data in Weaver and Beck (1971) were obtained in a similar manner, making them subject to the same difficulties in interpretation. Dickey and Baharlou (1973) used a similar procedure for some Paleozoic shales from Oklahoma, but they maintained somewhat better controls on their leaching conditions.

A large literature exists on the postulated controls on the composition of shale groundwaters. It has been proposed by several authors that shales act as semipermeable membranes and that waters in shales and waters which have passed through shales will show a change in composition as a result of shale membrane filtration. This theory suggests that waters in shales should be more dilute than waters in coexisting sandstones. That this mechanism <u>can</u> occur has been verified experimentally (Kharaka and Berry 1973; Kharaka and Smalley 1976 and references therein), but it is still debated whether the conditions under which it would occur are ever achieved in a geologic setting (Manheim and Horn, 1968; F. T. Manheim, U. S. Geological Survey, personal communication, 1987). Nevertheless, it has been invoked to explain several observed groundwater compositions, primarily those from sandstones, in sections containing both shale and sandstone.

In summary, the shale groundwater data available from the literature are extremely limited in extent, much of the data are of questionable

value because of potential experimental artifacts, and they are often poorly identified as to the geologic formation from which they were collected.

WATSTORE DATA

The U. S. Geological Survey (USGS) maintains the WATSTORE (national WATer data STORage and REtrieval system) data base, which contains groundwater analyses from the entire United States on a formation specific basis, organized by state. Data retrievals were made from WATSTORE for several hundred shale formations. The shale formations of interest were selected using maps prepared by Gonzalez and Johnson (1985, 1987) of shale formations in the United States which were thick enough ($\geq$75 m), deep enough (300-1500 m), and of sufficient lateral extent that they could potentially serve as hosts for HLW repositories. Data retrievals were then made on a state-by-state basis for groundwater analyses from these formations. Groundwater data were not obtained from every formation for which a retrieval was made, but several thousand analyses were obtained (Appendix I). Chemical analyses present in WATSTORE ranged from determination of just a few species (e.g., Cl and SO_4) to complete major and trace element analyses. Samples with reported depths greater than 200 ft (61 m), and in a few cases with depths greater than 100 ft (30.5 m), were entered into several spreadsheets for further data manipulation. The 200 ft (61 m) depth was selected in an attempt to eliminate waters with very recent meteoric interactions (i.e., very brief residence times in the shale formations) while maximizing the amount of data and formations considered. The data set was then edited so that only those samples with

charge balances in which the sum of the cations differed from the sum of the anions by <20% were included (The total cationic milliequivalents were divided by the total anionic milliequivalents, and these calculated values are given in Appendix II.) In fact, most of the charge balances agreed within better than 5%. This edited data set contains approximately 600 samples and is the one used for all further analysis and interpretation based on the WATSTORE data (Appendix II).

The data obtained from WATSTORE are free from several of the uncertainties attributed to the data from the literature search: (1) they are direct water samples, not leachates from the solids; (2) control on the source (i.e., geologic formation and geographic location) is good; and (3) analytical data were required to meet USGS standards for inclusion in the data base which should aid in ensuring internal consistency. (The samples were collected and analyzed over an almost 40 year timespan and this undoubtedly results in changes in sample collection and analytical procedures, which will particularly affect the quality of the trace metal data.) The WATSTORE data are the only data used in the following discussion.

Although the WATSTORE data do not have many of the same problems associated with the literature data, there are other limitations in their interpretation. Much of the previous interpretation of shale water data has focused on comparing the groundwater compositions of interlayered shales and sandstones at a single site. This study was designed to collect shale water data, and since no sandstone data were collected, this type of interpretation could not be made. The depths given in the WATSTORE data base represent the depth of sampling in some cases and the total depth of the well in others. The maximum depth of sampling was

used in those cases for which it was available. Where an explicit sampling depth was not given, the depth of the well was used. Hence, all depths are maximum values, and the samples may be from a shallower depth, or may represent a mix of waters from deeper and shallower depths. This circumstance is unavoidable as a result of the way in which the data are included in the WATSTORE data base. Details regarding the open interval in the well, etc., are not given in WATSTORE.

RESULTS

Due to the limitations and uncertainties inherent in the literature data, the following results and discussion are based only on data obtained from WATSTORE. The data are divided into five large groups ("group" is used here in its general sense, and not to mean a set of specific geologic formations) based primarily on geographical area: the Gulf Coast, the Northern Great Plains, the Midcontinent, the Eastern Interior, and the Green River. The Green River group is based on the geologic formation rather than geographical area and contains data only for this formation. The Gulf Coast group contains data from nine formations. Since the Northern Great Plains group contains data mostly from the Pierre Formation with a few additional samples from the Bearpaw Formation, it is hereafter referred to as the Pierre and Bearpaw group. The Midcontinent group contains data from 11 formations and series. However, due to the large number of thinly interbedded shales and sandstones in much of this geographic region, the Gonzalez and Johnson (1985, 1987) maps did not include any

classification finer than the series name. Hence, there is a strong possibility that much of the data retrieved is not from shales, but rather from sandstones or shale sandstone mixtures; in fact only five of the samples can be unequivocally identified as being from shale formations. Appendices I and II contain a unique station identifier number for each sample, as well as listing the state in which it was collected. Table 1 presents a summary of the formations for which data were retrieved from WATSTORE, and Table 2 presents a summary of the chemical data.

A complete listing of all the data retrieved from WATSTORE is given in the appendices. Appendix I contains all of the data retrieved from WATSTORE for samples with depths >200 ft (61 m), and in some cases with depths >100 ft (30.5 m), organized into five tables by the groups described above. All data, including those expressed only as upper limits (e.g., less than some value) are included. Appendix II lists the edited data sets containing only those samples meeting the charge balance criteria and with depths >200 ft (61 m). No upper limit data are included in these tables. Since the Eastern Interior data contained no samples which met these selection criteria, primarily as a result of incomplete chemical analyses, the number of data groups was reduced to four. Only these remaining four groups are discussed in detail. A summary of the mineralogy for these four groups is provided in Table 3.

The results are discussed with respect to several criteria in addition to the chemical composition of the groundwaters. It should be emphasized that although the Midcontinent data are inclused in the discussion, some, and possibly most, of this data may not be from shales.

Table 1. Summary of formations for which shale groundwater data were retrieved from WATSTORE.

Group	Formation Code	Formation Name	Formation[1] Data-Label	Age
Gulf Coast				
	125MDWY	Midway Grp	M	Paleocene
	124CKMN	Cook Mountain Frm[2]	C	Eocene
	124CLBR	Claiborne Grp[2]	L	Eocene
	124RKCZ	Reklaw Frm & Carrizo Sand[2]	R	Eocene
	124CRVR	Cane River Frm[2]	V	Eocene
	124RKLW	Reklaw Frm[2] of Claiborne Grp	K	Eocene
	124BSCC	Basic City Shale Mem of Tallahatta Frm	B	Eocene
	124CCKFJ	Cockfield through Jackson undivided	F	Eocene
	124JCKS	Jackson Grp		
Pierre & Bearpaw				
	211PIRR	Pierre Shale	P	Upper Cretaceous
	211BRPW	Bearpaw Shale	B	Upper Cretaceous
Green River				
	124GRRV	Green River Frm	G	Eocene
	124PCCK	Parachute Creek Mem of Green River Frm	P	Eocene
	124DGCK	Douglas Creek Mem of Green River Frm	D	Eocene
Midcontinent				
	200MNCS	Mancos Shale	M	Mesozoic
	326ATOK	Atoka Frm	A	Atokan
	320PSLV	Pennsylvania System	L	Pennsylvanian
	322VMOS	Vamoosa Frm	V	Virgilian
	325CHRK	Cherokee Grp	C	Desmoinesian
	318HNSS	Hennessey Shale	H	Leonardian
	325DSMS	Desmoinesian Series	D	Desmoinesian
	318WCHT	Wichita Frm or Grp	W	Leonardian
	330STNL	Stanley Shale	S	Mississippian
	310PMPV	Permian-Pnnsylvanian Series	P	Permian
	313ELRN	El Reno Grp	E	Guadalupian
	322ADA	Ada Frm	X	Virgilian
	319CHSE	Chase Grp	Z	Wolfcampian
	313DGCK	Dog Creek Shale	Y	Guadalupian
Eastern Interior				
	341GENS	Genesse Frm	-[3]	Upper Devonian

[1] Formation Data Labels are used in all plots of the data.
[2] Within Claiborne Group.
[3] No label assigned, as these data are not plotted.

Table 2. Summary of WATSTORE Data

	Units	Gulf Coast	Pierre & Bearpaw	Green River	Mid-Continent
Maximum Depth	m	1834.9	701.0	3627.1	1895.9
Number of Samples		114	54	249	169
pH		5.9-9.4	7.0-8.7	7.3-10.9	6.7-9.4
Ca	mmoles/l	0.0250-49.9	0.0973-17.2	0.0175-37.4	0.020-12.7
Mg	mmoles/l	0.00823-23.0	0.0535-6.58	0.00823-15.2	0.00823-7.82
Na	mmoles/l	0.0783-3175	2.74-783	3.39-870	0.100-78.3
K	mmoles/l	0.00512-6.65	0.0512-5.63	0.00767-8.95	0.00512-1.59
Cl	mmoles/l	0.0197-3385	0.166-790	0.0310-959	0.0141-73.3
Alkalinity	meq/l	0.0300-23.6	5.89-20.0	2.88-304	2.20-21.6
SO_4	mmoles/l	0.00208-27.1	0.00833-20.8	0.0312-56.2	0.00833-32.3
SiO_2	mmoles/l	0.00333-0.932	0.0666-0.716	0.0383-0.466	0.0166-0.416

Table 3. Summary of shale mineralogy.

GULF COAST SHALE FORMATIONS

Midway Group - In general: smectite > illite = kaolinite >> mixed layer clays >> chlorite. Some units also have high quartz or cristobalite.
Cane River - Predominately montmorillonite >> illite = kaolinite.
Other units have similar mineralogies.

PIERRE & BEARPAW SHALE FORMATIONS

Generally 60-80% clay, with mixed-layer illite-montmorillonite dominant, with moderate amounts of montmorillonite and illite, and minor amounts of kaolinite and chlorite. Other phases which may be present include quartz and feldspar, with minor amounts of calcite, dolomite, biotite, pyrite, jarosite, clinoptilolite and organic matter.

GREEN RIVER SHALE FORMATION

Carbonaceous-rich formation containing much organic matter, calcite, dolomite, clay minerals, and a variety of unusual Na- and Ca-carbonate minerals. Among the clay minerals illite > montmorillonite = kaolinite.

MIDCONTINENT FORMATIONS

Clay-rich shales interbedded with sandstones and limestones. Wide variety in relative clay abundances. Organic matter abundant in may of the shales.

(after Gonzales and Johnson [1985])

DISCUSSION

GENERAL INTERPRETATION

Figures 1 to 4 are ternary plots for the groundwaters from each geographical group or formation, with the cations and anions expressed in milliequivalents. Since K is much less abundant than Na, the Na + K apex is primarily Na. In the pH range of most of the samples the alkalinity is predominantly HCO_3. It is not clear whether the alkalinity values in WATSTORE are for total or for carbonate alkalinity. Where data are given for HCO_3 and CO_3 as well as for alkalinity, their sum in milliequivalents is approximately equal to the alkalinity, suggesting that the alkalinity value is that for the carbonate alkalinity. Where no alkalinity data were given, the sum of HCO_3 and CO_3 in milliequivalents is used for this apex. In many natural waters, the carbonate alkalinity is approximately equal to the total alkalinity. No data are given on the concentrations of organic acids, which could increase the total alkalinity of the groundwaters. Most of the shale groundwaters are of the Na-Cl-HCO_3 type, although in some Gulf Coast and Green River waters $HCO_3 > Cl$. In a very few cases $HCO_3 = SO_4 > Cl$. In some of the waters, primarily those from the Gulf Coast, Ca > Na > Mg while in the Green River Formation Mg > Ca in some samples.

A general observation by most previous authors has been that the total ionic strength of shale waters increases with depth and that many ions show a depth related trend (Graf et al. 1966; Kharaka and Berry 1974). In Fig. 5 the concentration of SiO_2 is plotted versus depth for

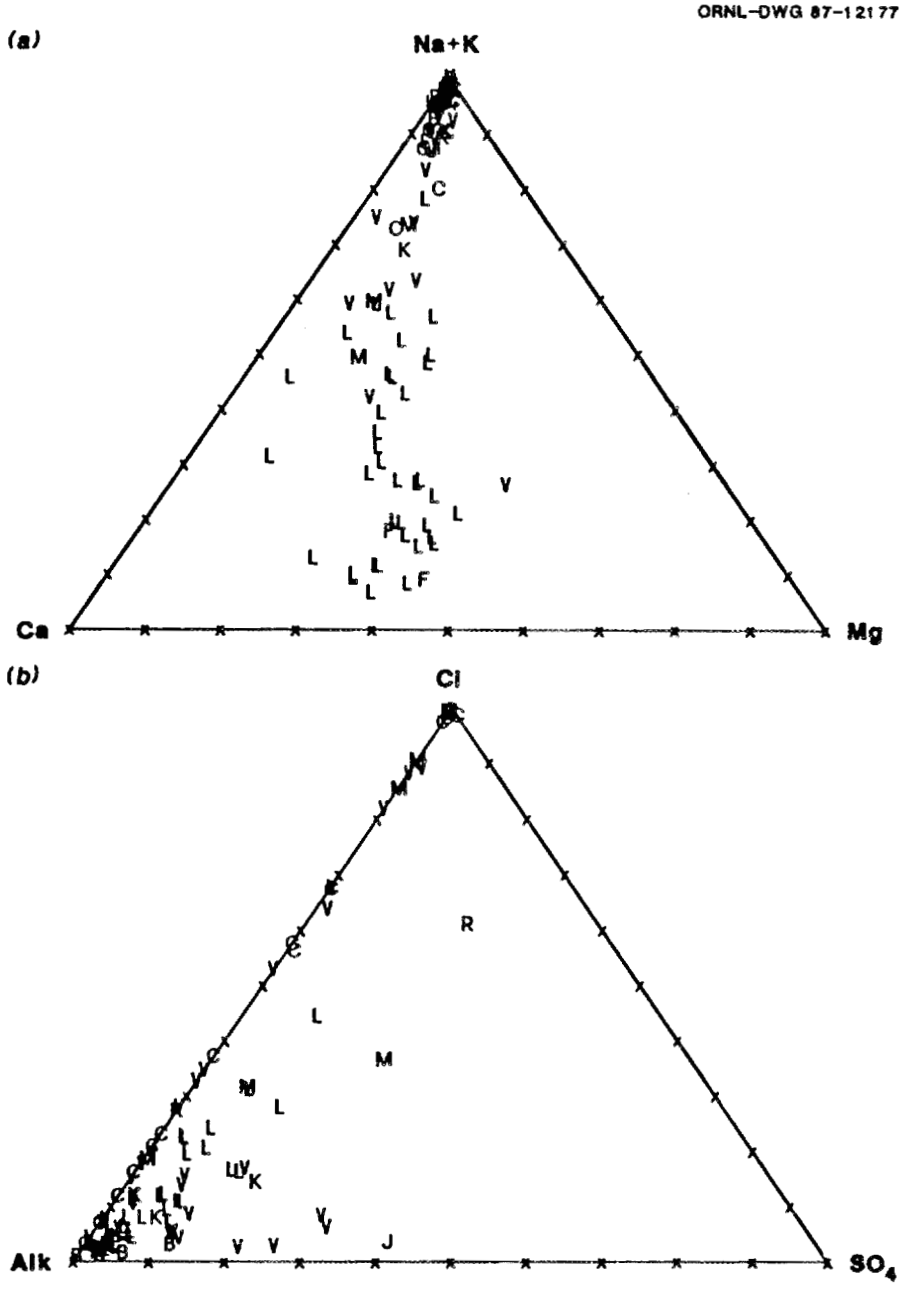

Fig. 1. Ternary plots for the Gulf Coast group; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.

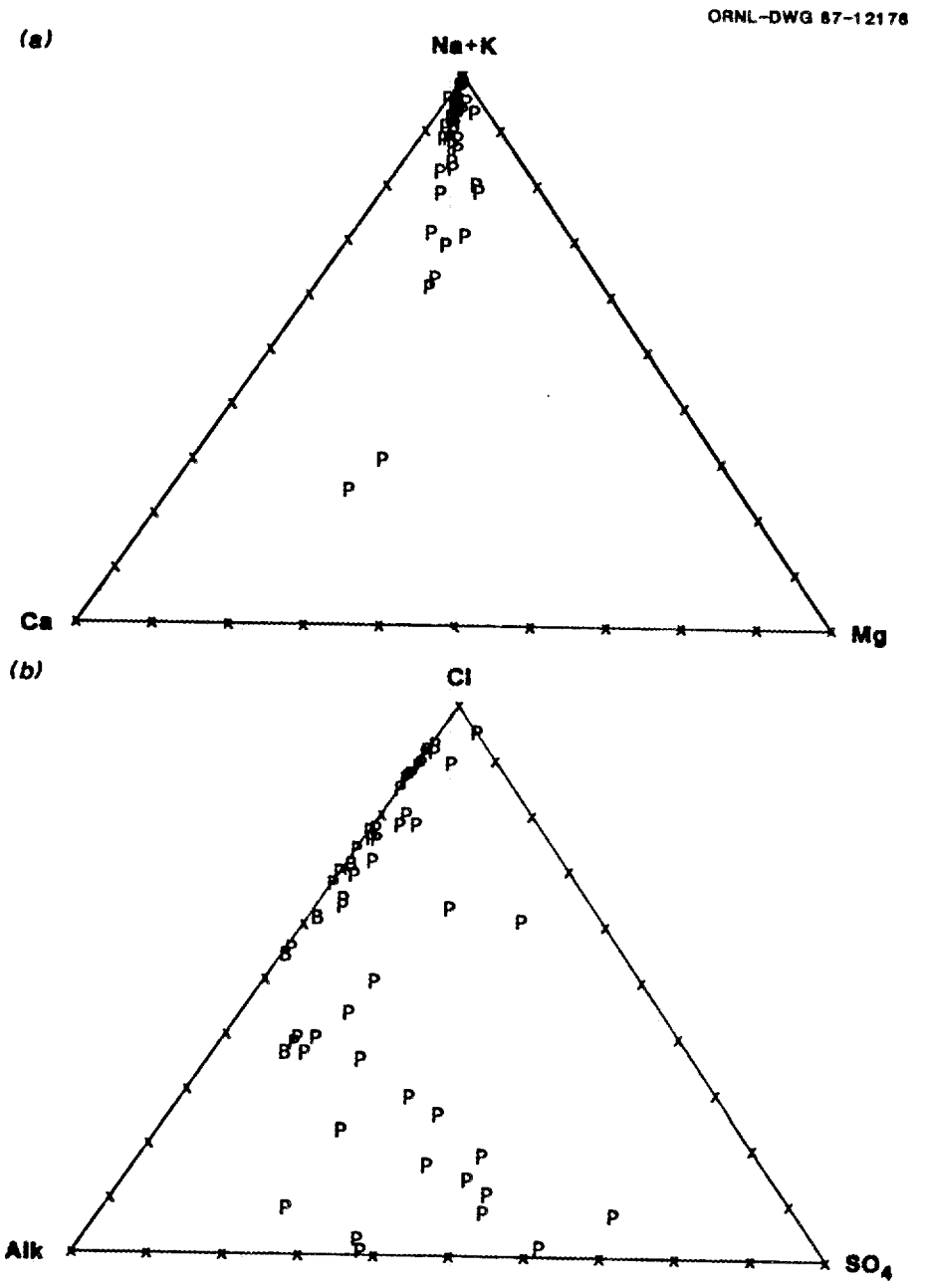

Fig. 2. Ternary plots for the Pierre and Bearpaw Formations; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.

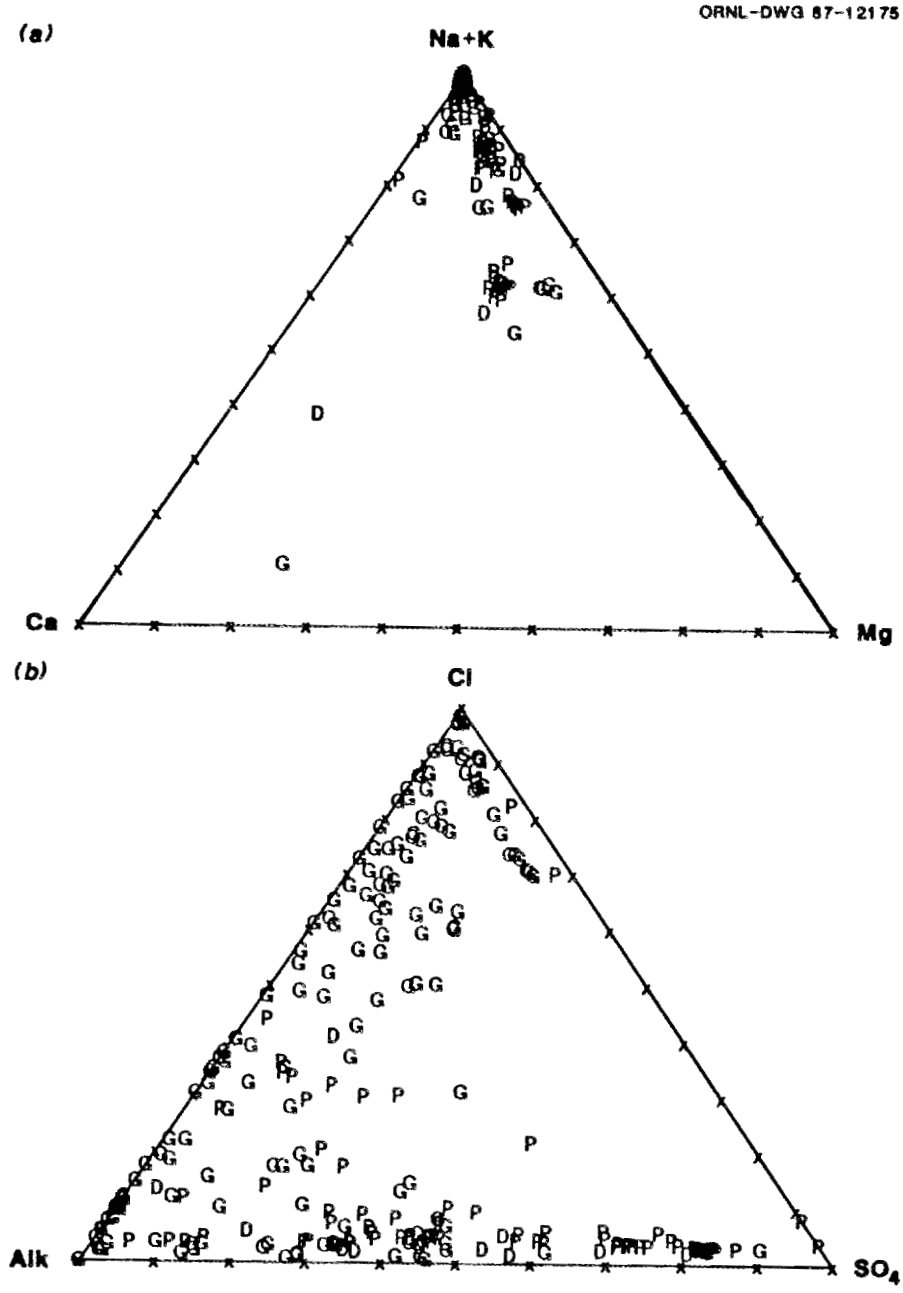

Fig. 3. Ternary plots for the Green River Formation; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.

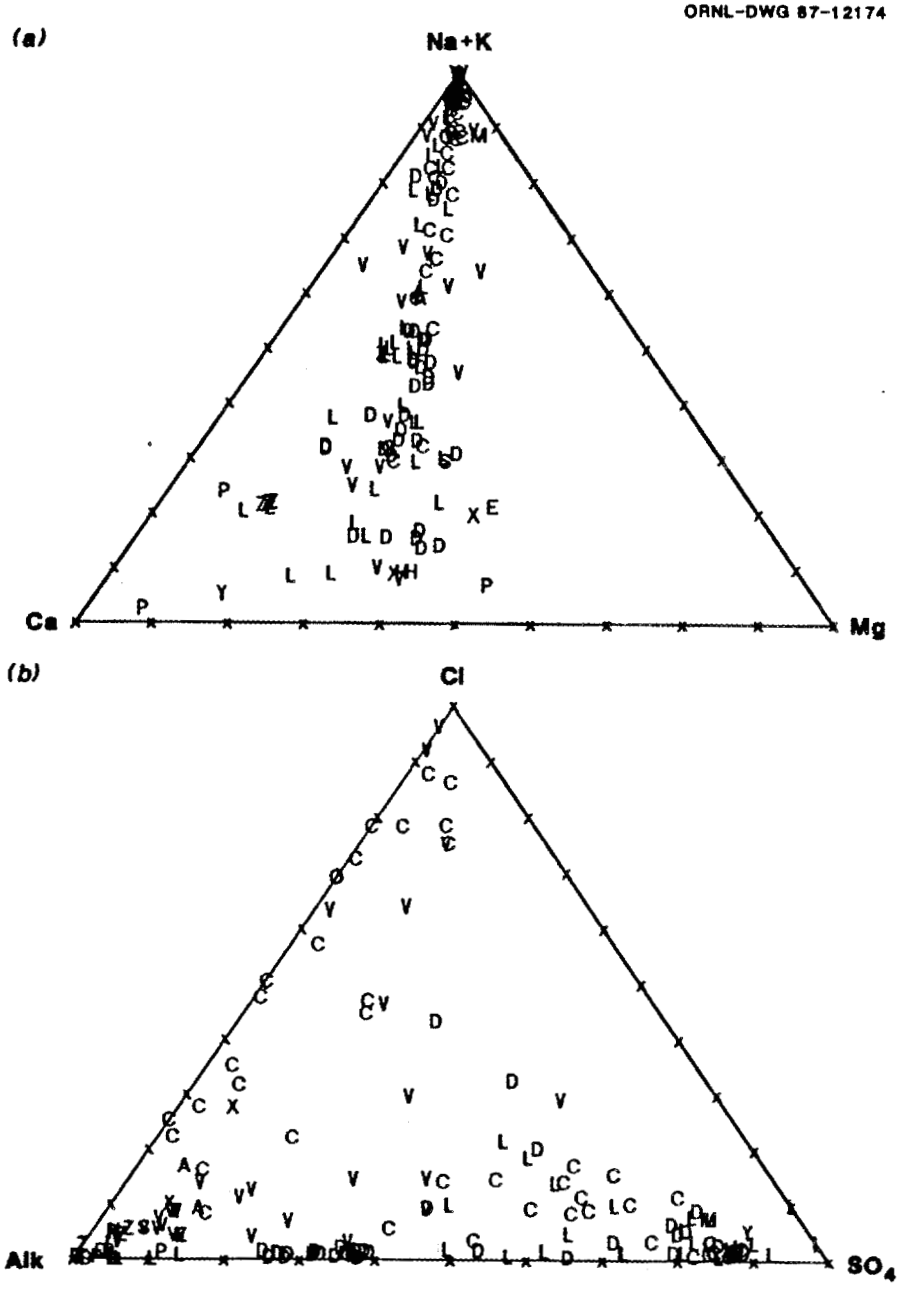

Fig. 4. Ternary plots for the Midcontinent group; (a) cations, (b) anions. Plot symbols are the formation data labels as listed in Table 1.

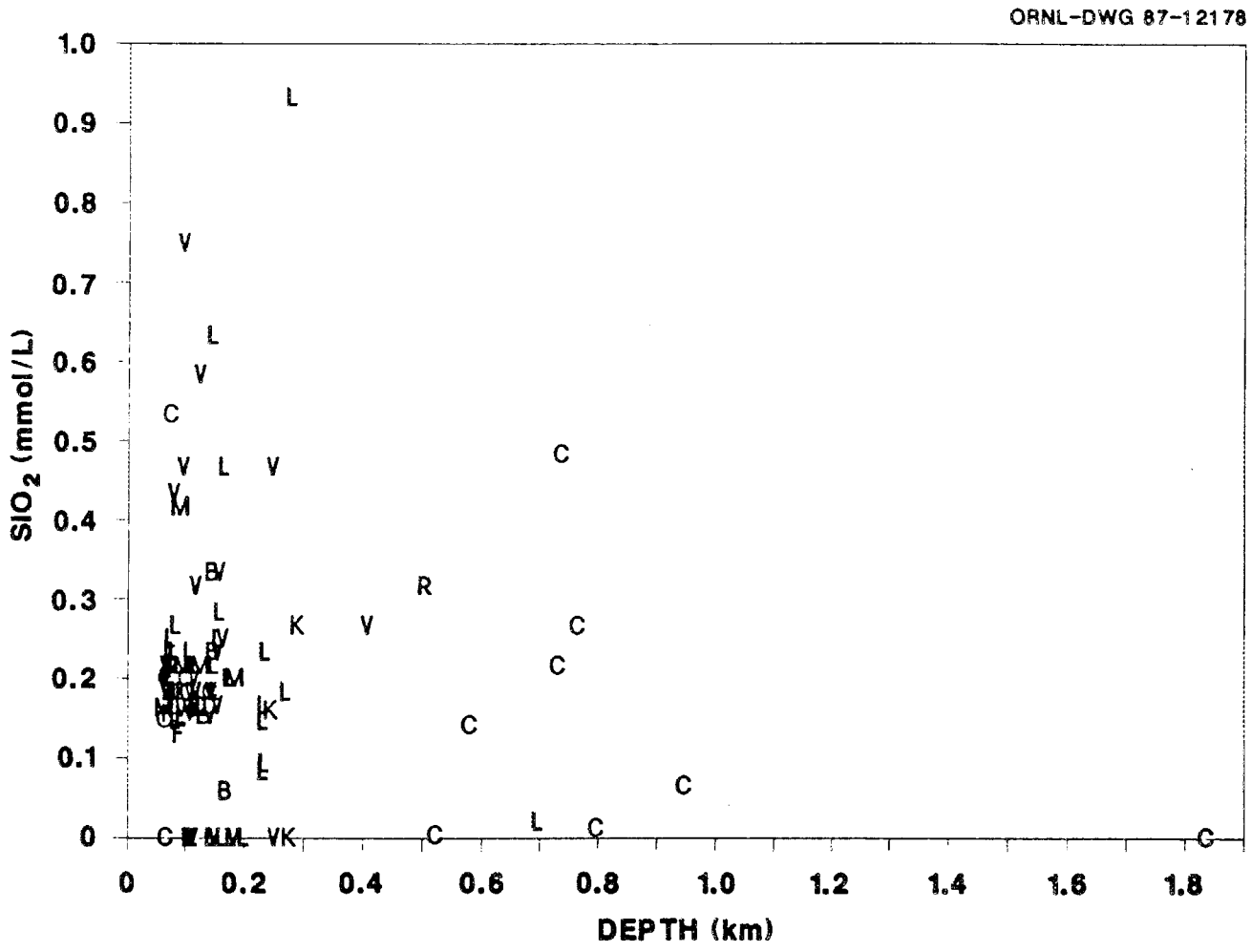

Fig. 5a. SiO_2 versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.

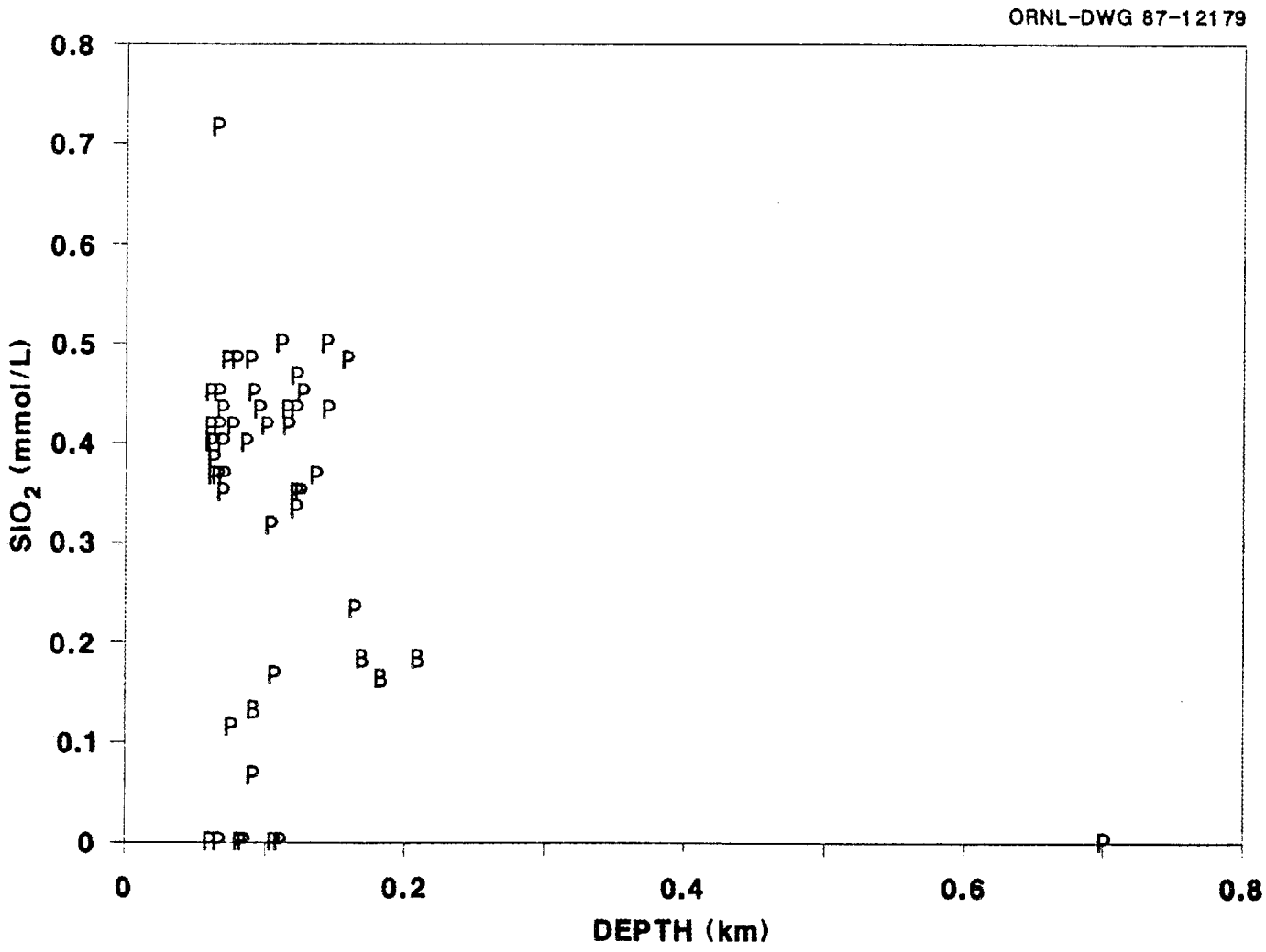

Fig. 5b. SiO_2 versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1.

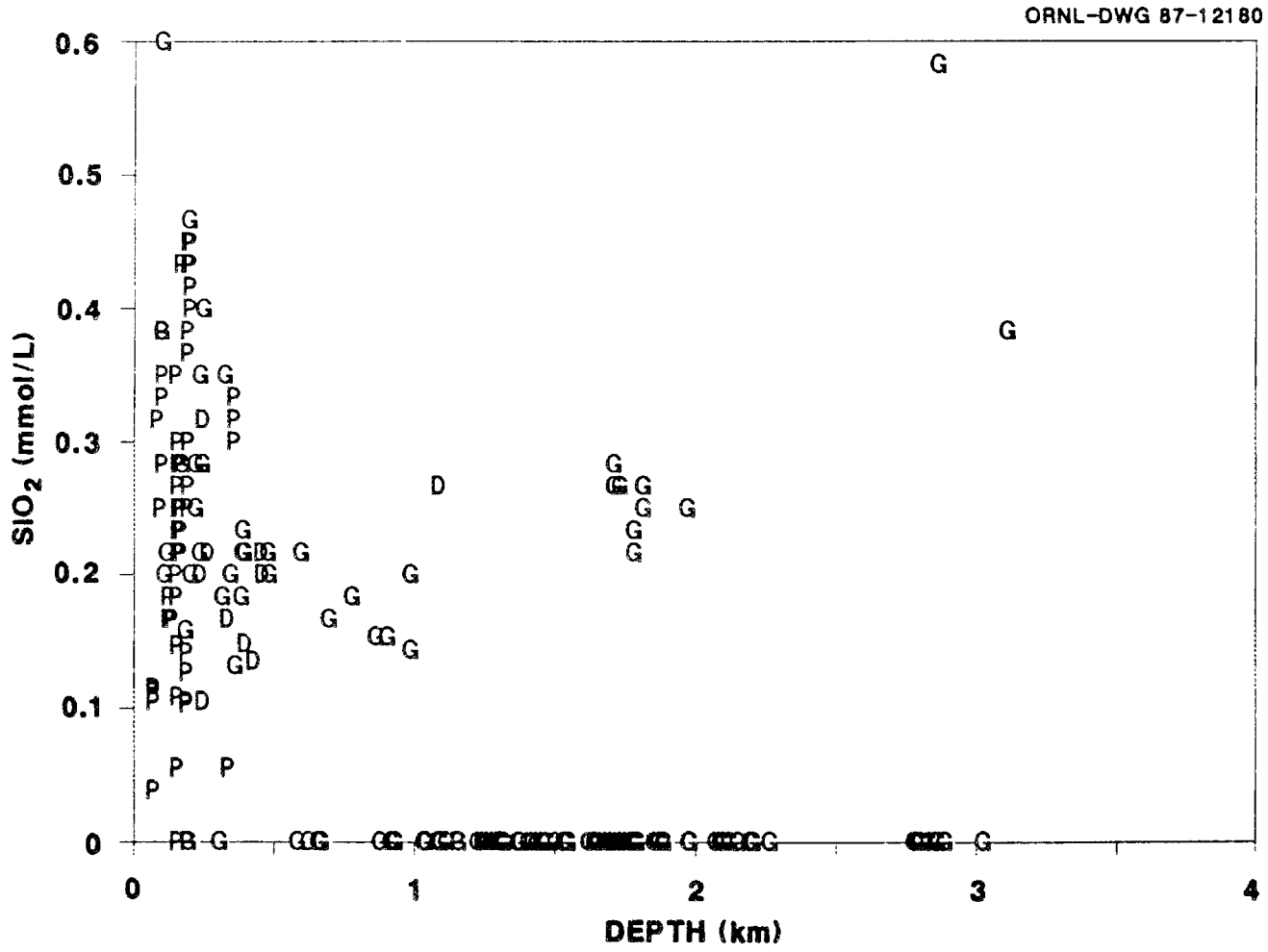

Fig. 5c. SiO_2 versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.

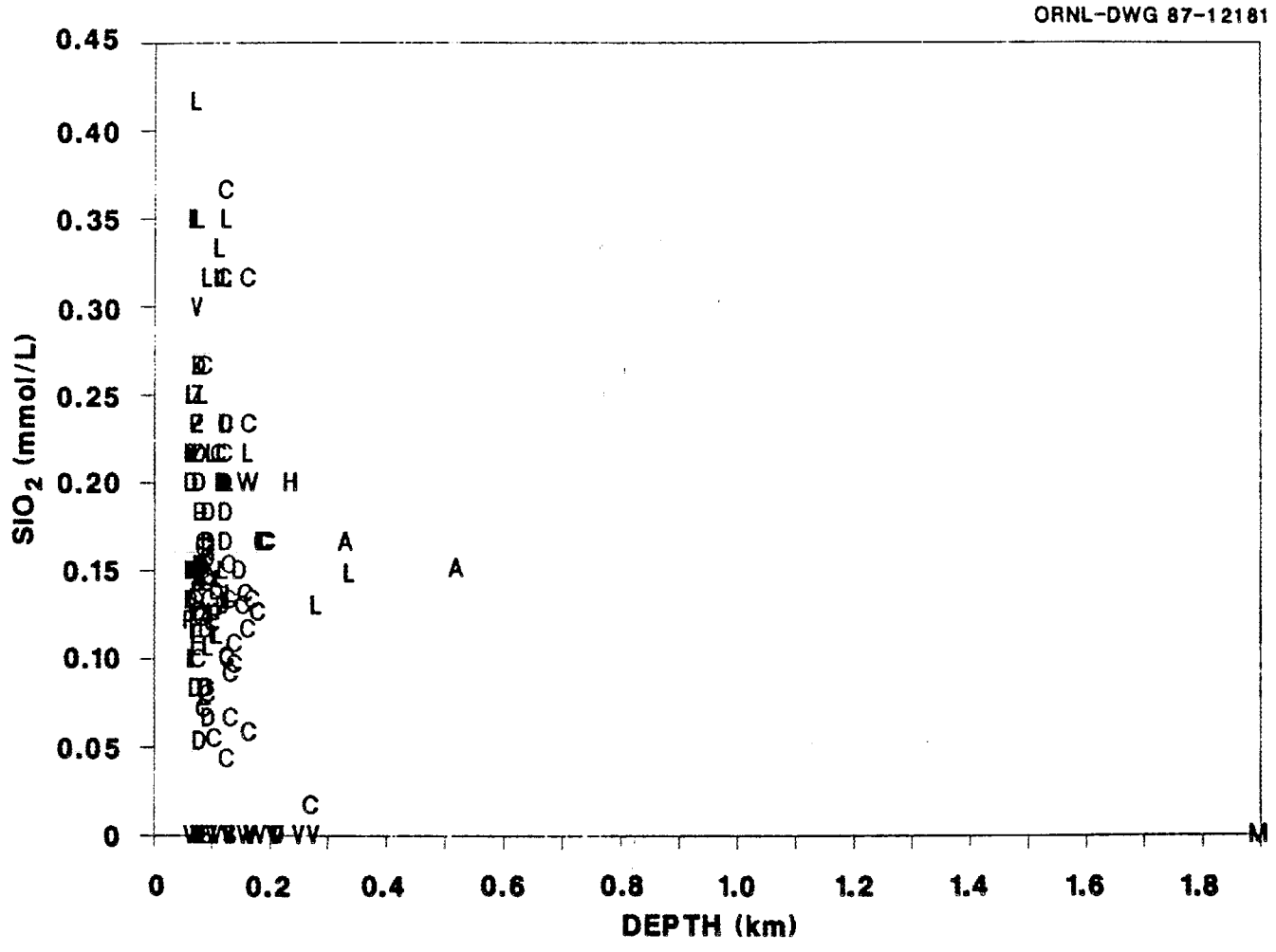

Fig. 5d. SiO_2 versus depth, Mid-continent group. Plot symbols are the formation data labels as listed in Table 1.

each group. Since dissolved SiO_2 is often a function of the solubility of quartz or another SiO_2 phase, it may be expected to show an increase with depth as temperature and/or pressure increase. The data show no trend with depth, even within a single formation such as the Green River or Pierre. In Fig. 6 the Cl data are presented versus depth. Since Cl is the predominant anion in most groundwaters, this plot can be considered representative of one for total ionic strength. Again, it can be seen that there is no simple trend with depth, and certainly not a simple increase, even within a single formation. In Fig. 7 the K data are presented versus depth. This figure is of special interest as some earlier authors (e.g., Weaver and Beck 1971) have observed an increase of illite with respect to montmorillonite with depth and have postulated that, as a result of this, the K in solution should show a decrease with increasing depth. Potassium concentrations in solution are not observed to follow any trend with increasing depth in this data set. In summary, despite the uncertainties in the depth data addressed earlier, none of the chemical parameters examined show a simple relationship to depth.

The examination of elemental ratios shows that certain regularities do exist within this data set. In Fig. 8 Na is plotted versus Cl. It can be seen that in most cases the molar ratio of Na:Cl is close to 1:1. An equimolar ratio for these two elements is most consistent with a halite source. Halite is not reported to be present in most of these geologic formations (Table 3). The waters are undersaturated with respect to halite suggesting that either there was insufficient halite available in the section for these solutions to reach saturation and/or that the waters have been diluted since reacting with halite. The equimolar ratio

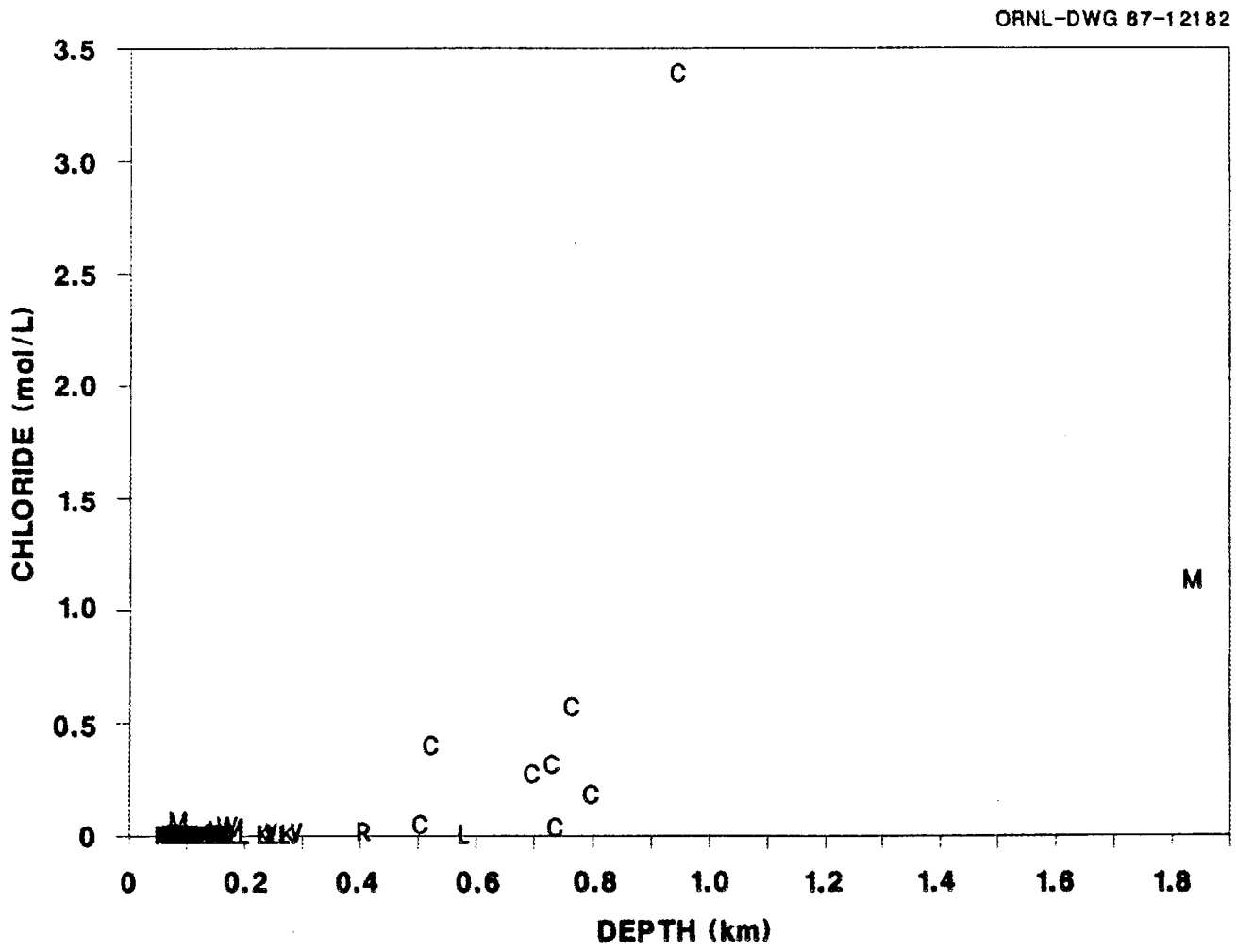

Fig. 6a. Cl versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.

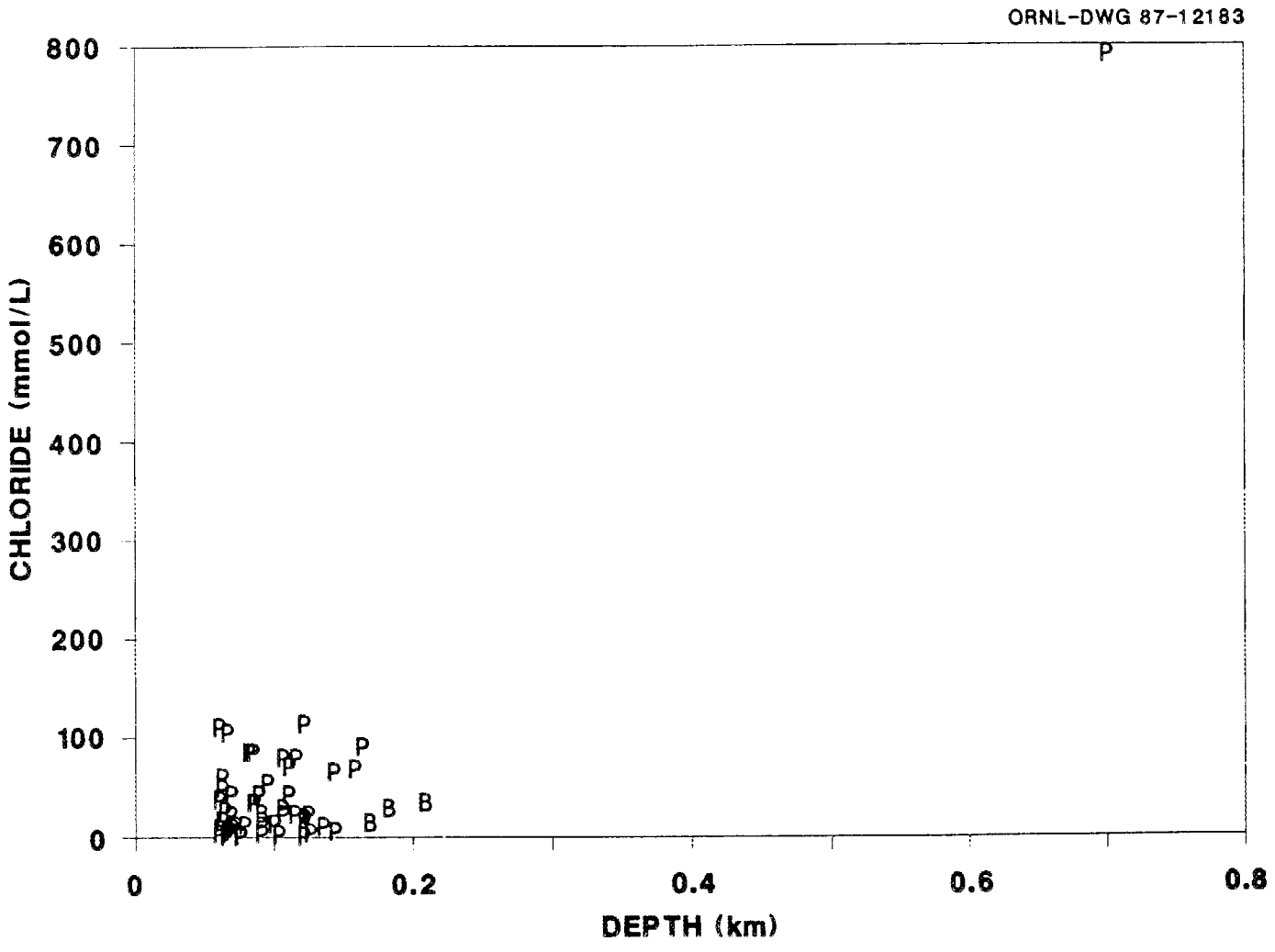

Fig. 6b. Cl versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1.

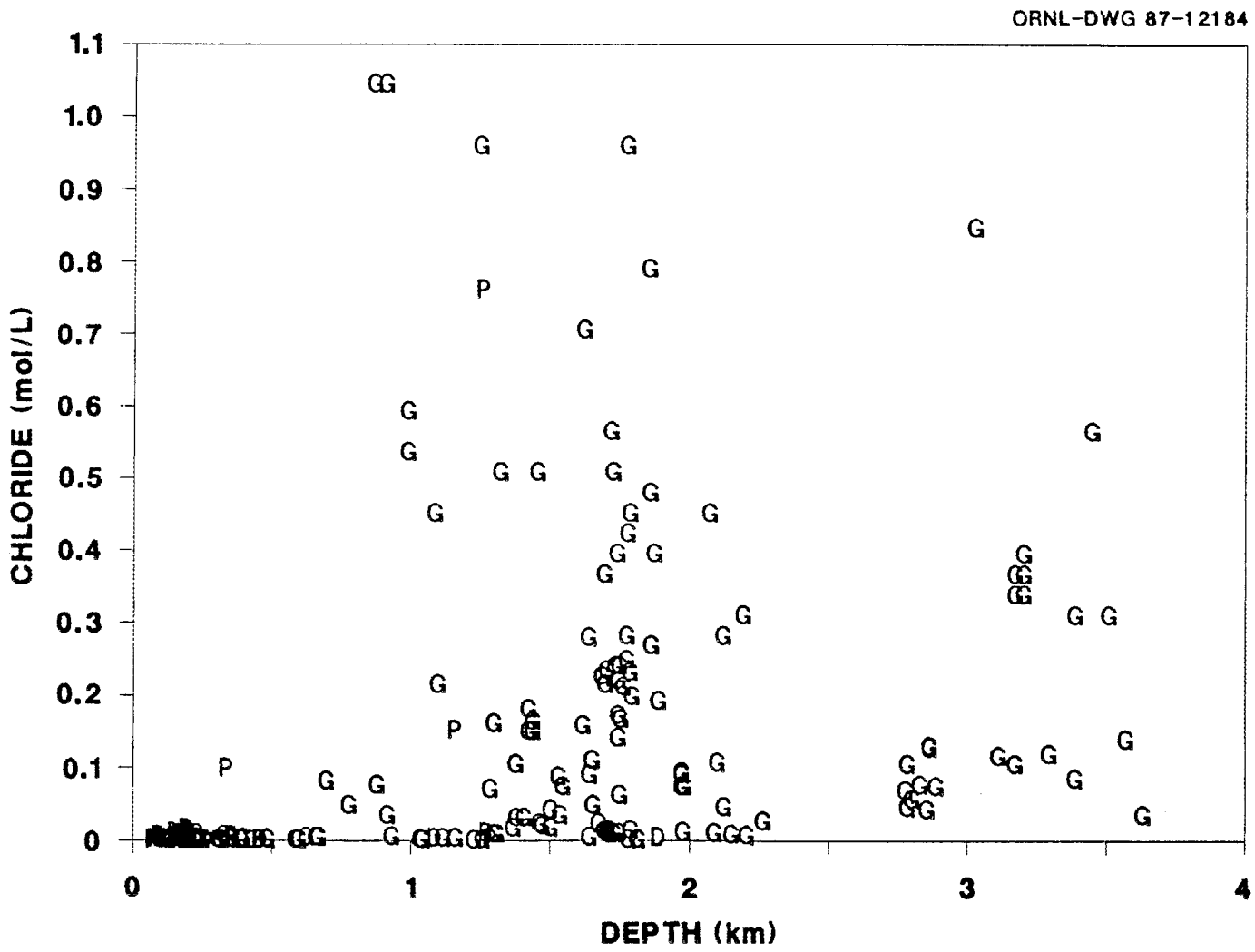

Fig. 6c. Cl versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.

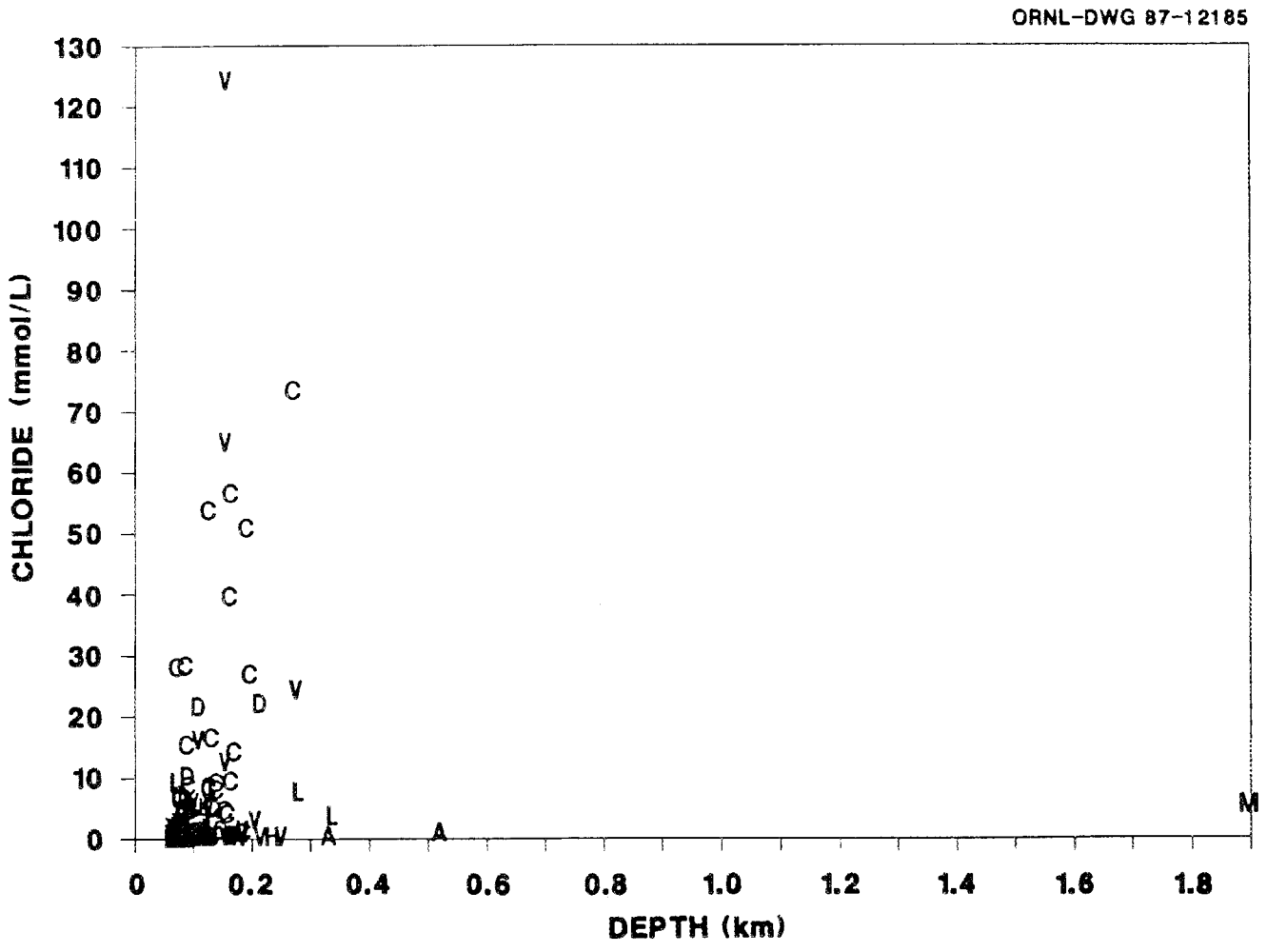

Fig. 6d. Cl versus depth, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.

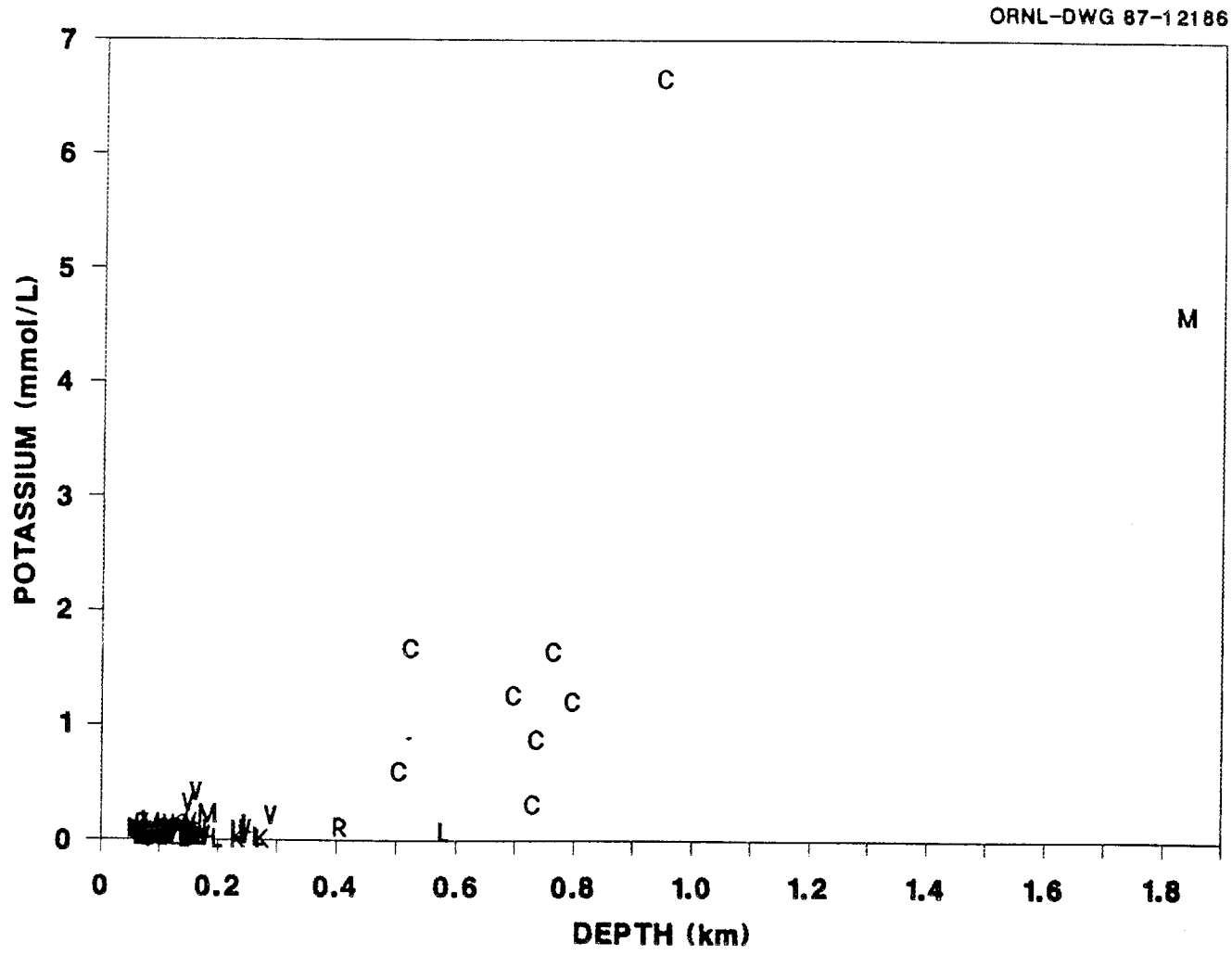

Fig. 7a. Potassium versus depth, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.

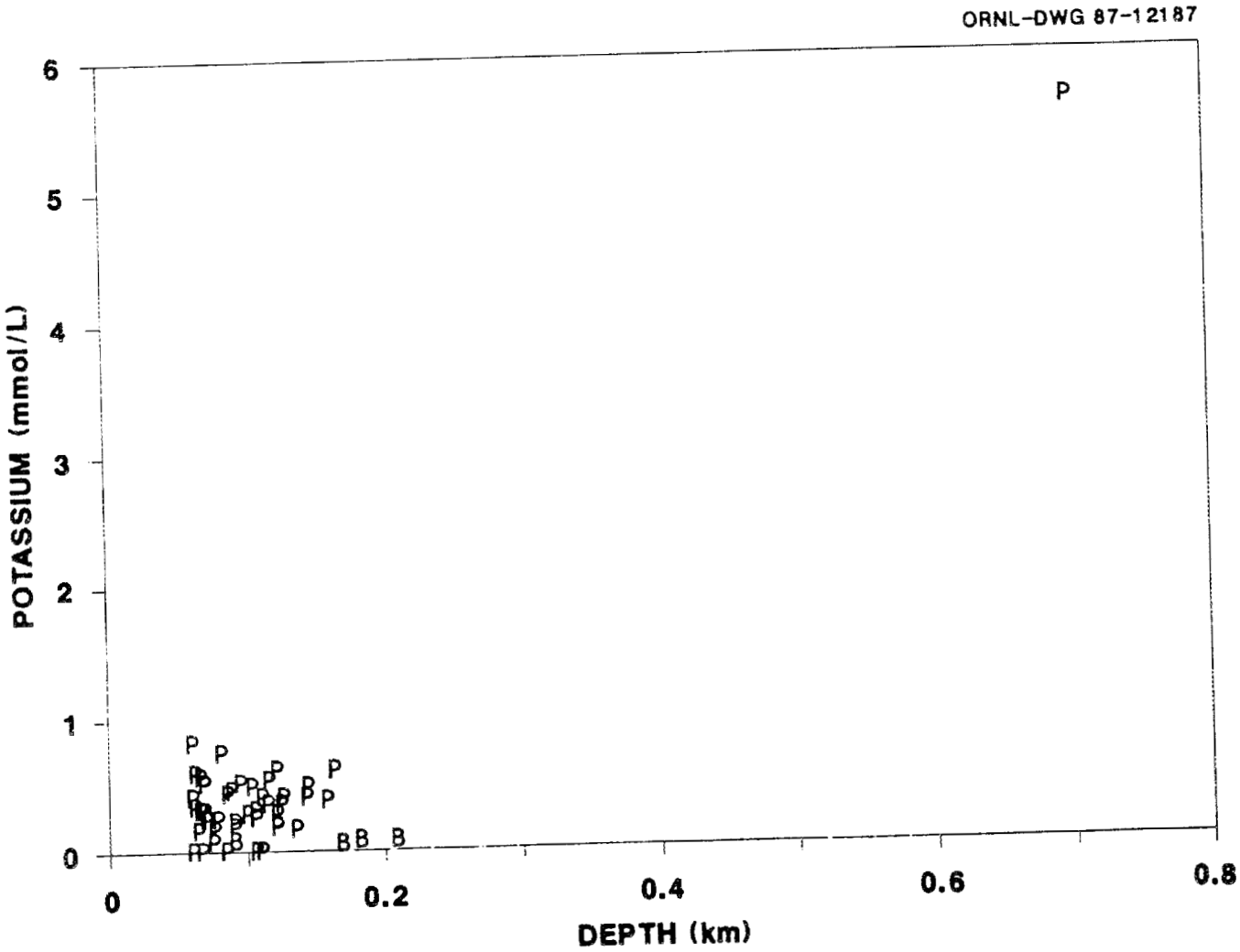

Fig. 7b. Potassium versus depth, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1.

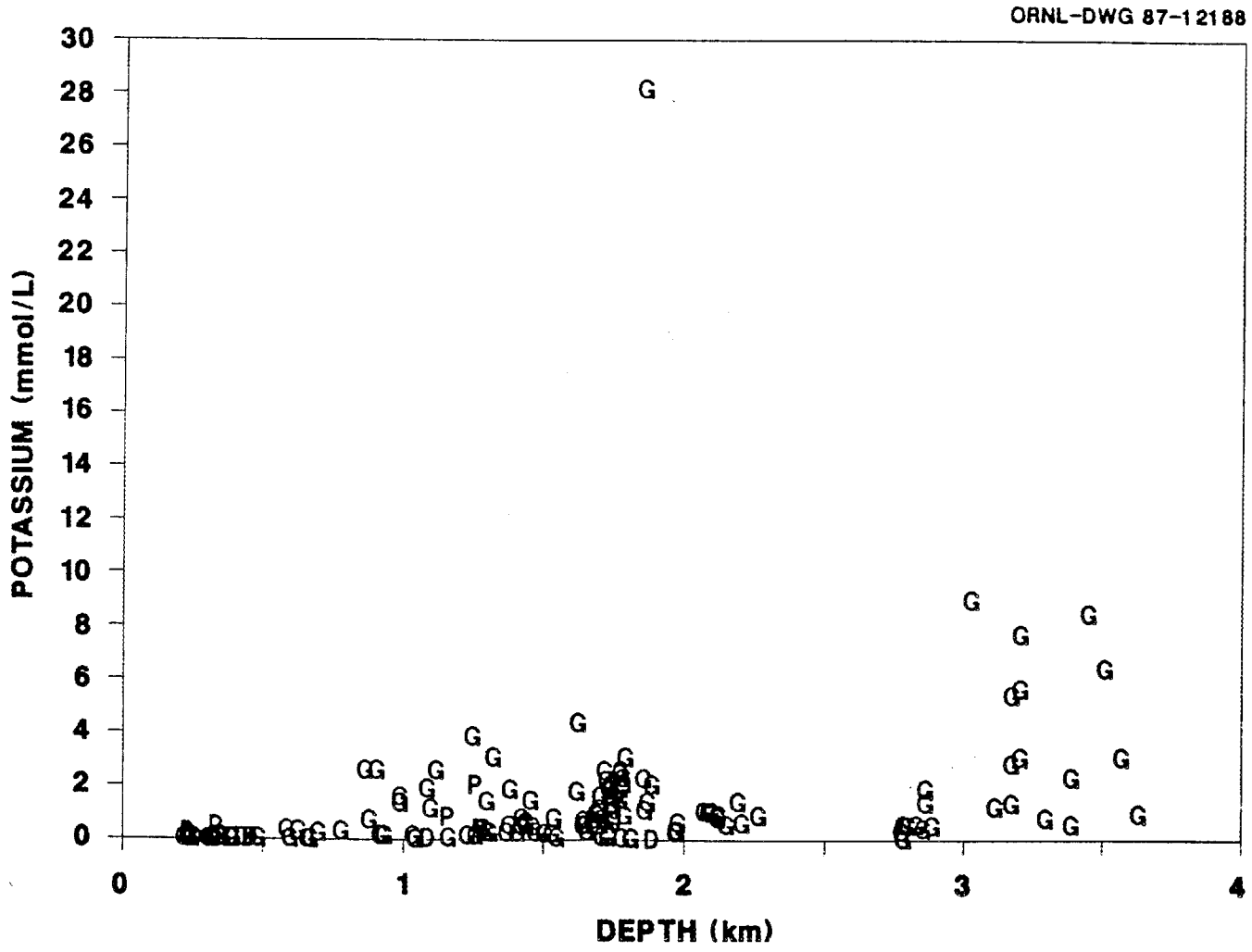

Fig. 7c. Potassium versus depth, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.

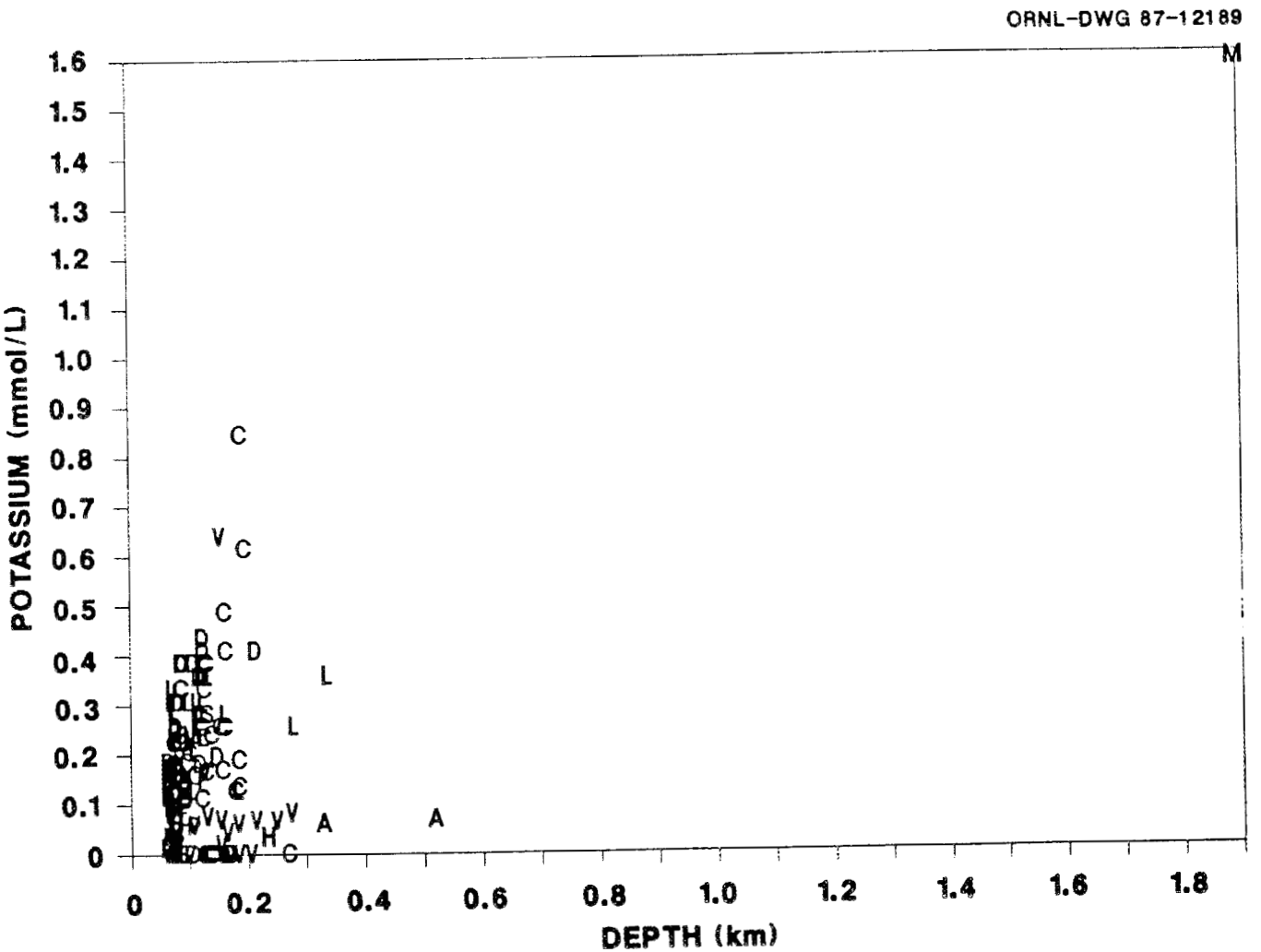

Fig. 7d. Potassium versus depth, Mid-continent group. Plot symbols are the formation data labels as listed in Table 1.

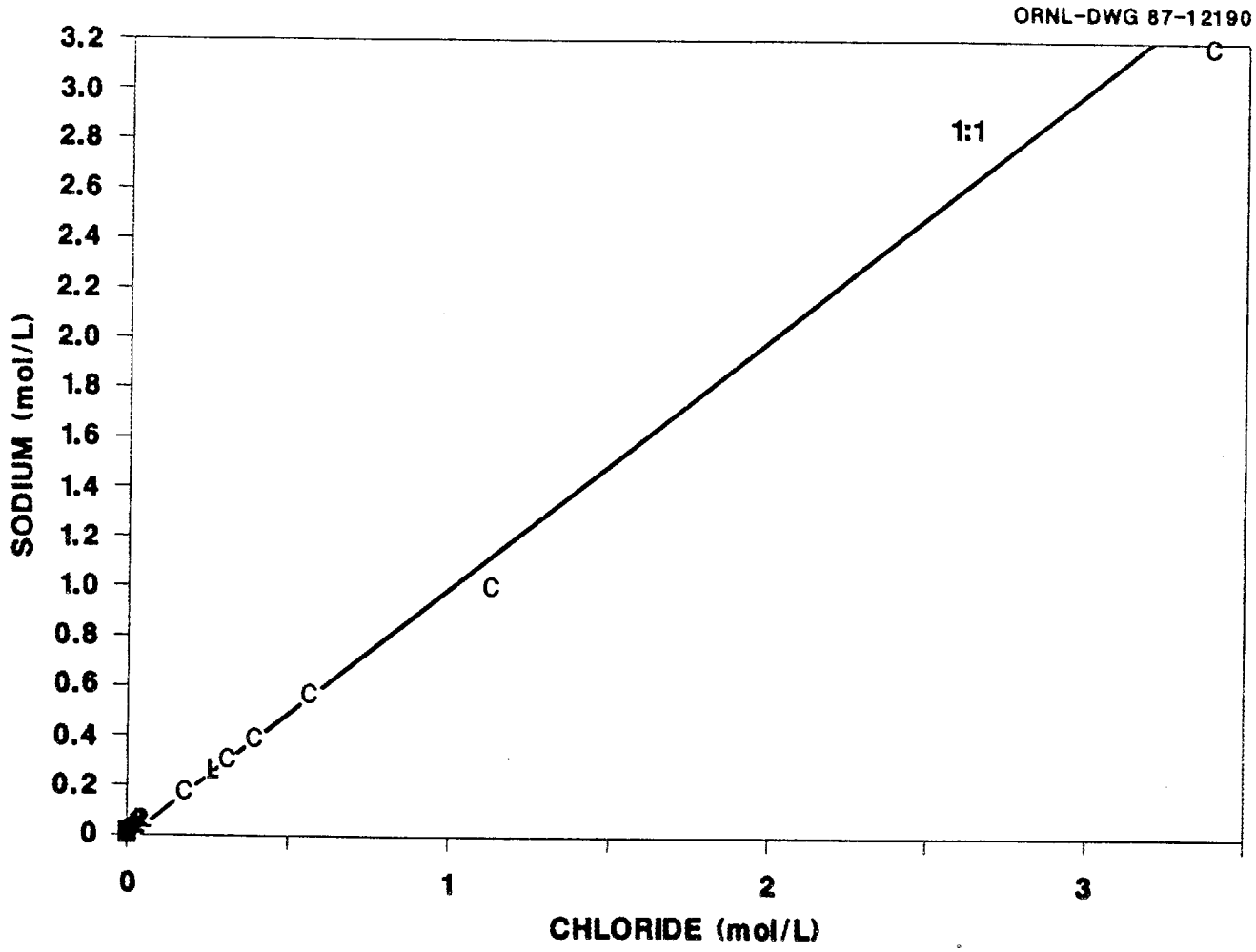

Fig. 8a. Na versus Cl, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.

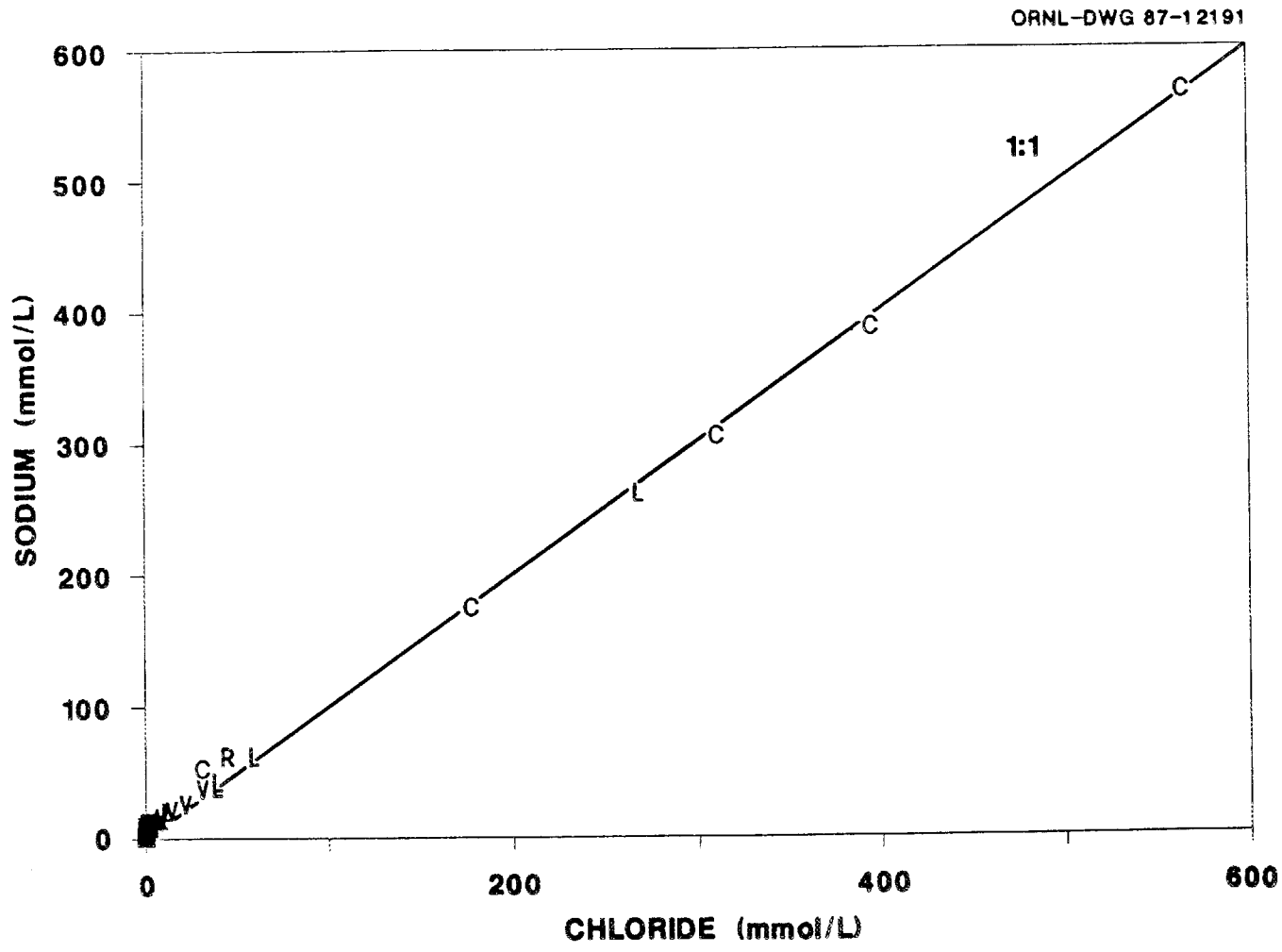

Fig. 8b. Na versus Cl, Gulf Coast group, expanded scale. Plot symbols are the formation data labels as listed in Table 1.

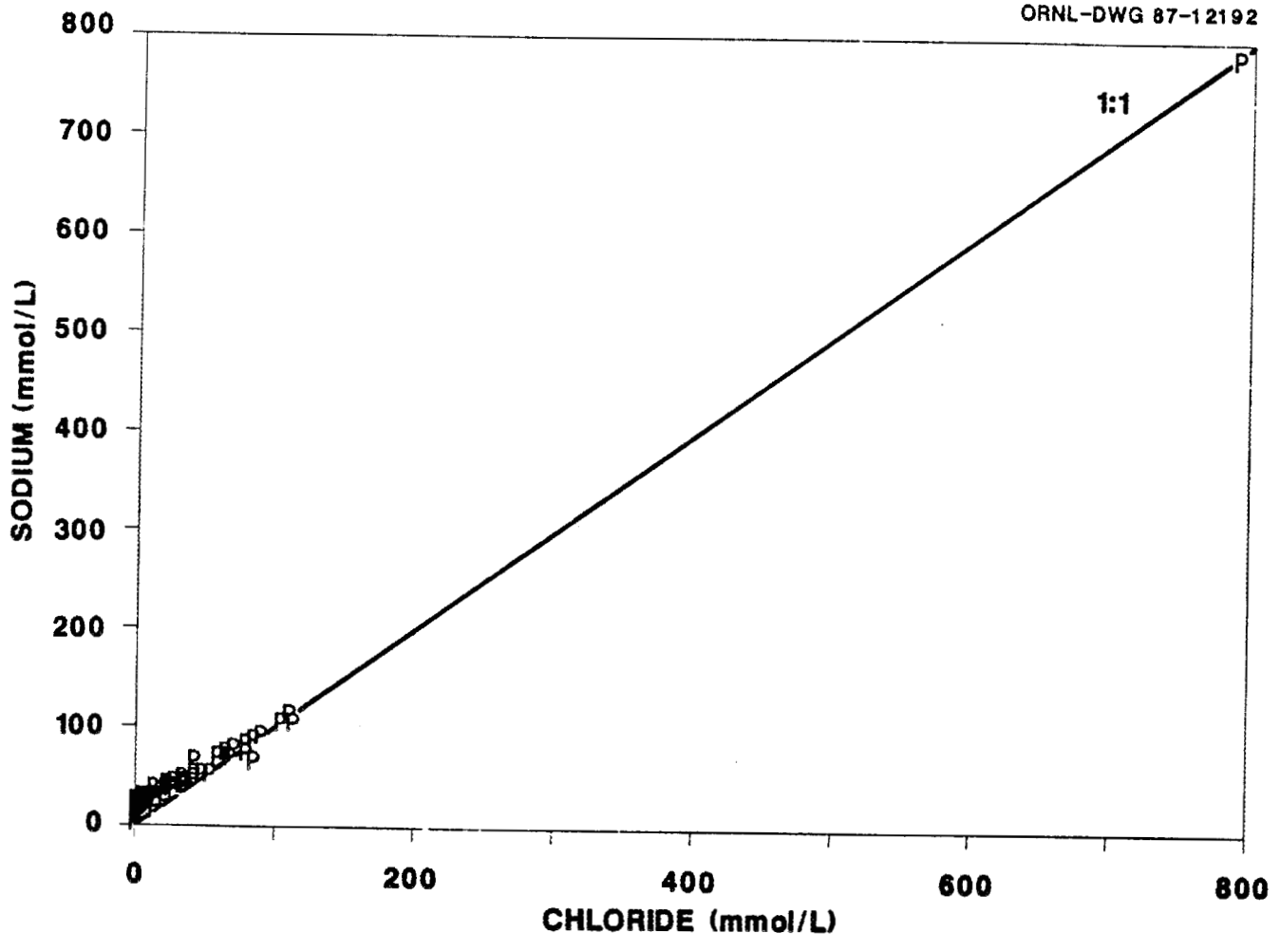

Fig. 8c. Na versus Cl, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1.

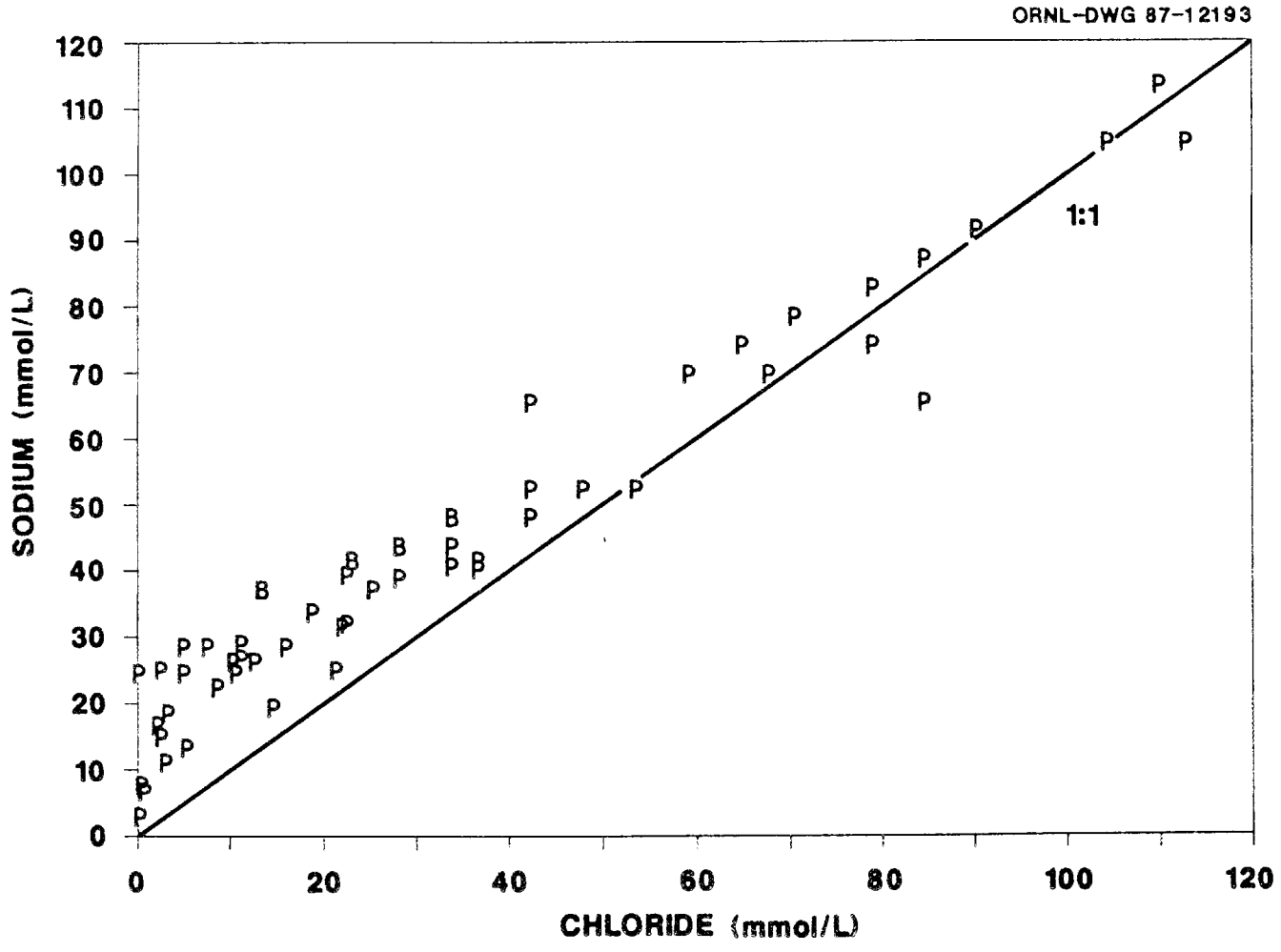

Fig. 8d. Na versus Cl, Pierre and Bearpaw expanded scale. Plot symbols are the formation data labels as listed in Table 1.

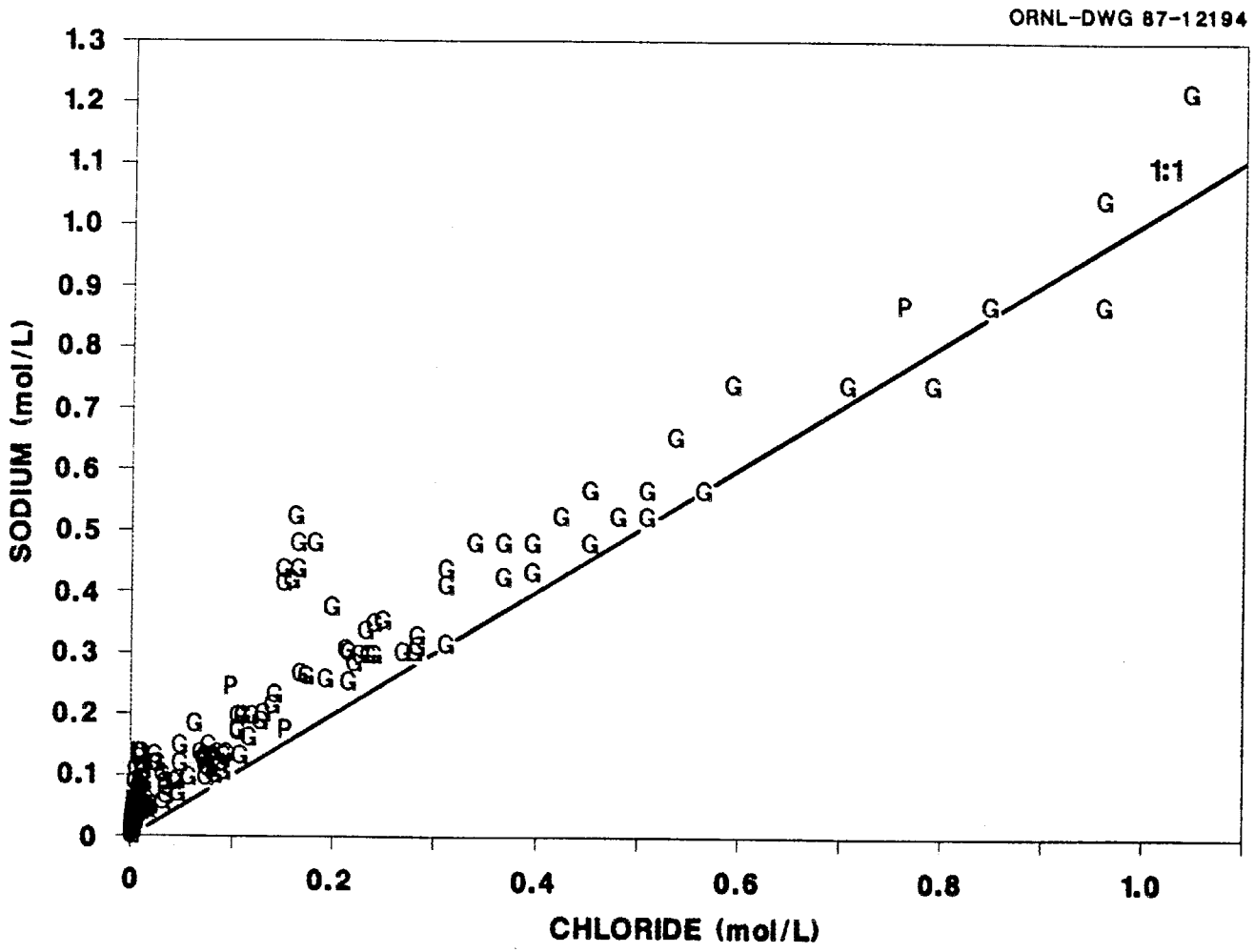

Fig. 8e. Na versus Cl, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.

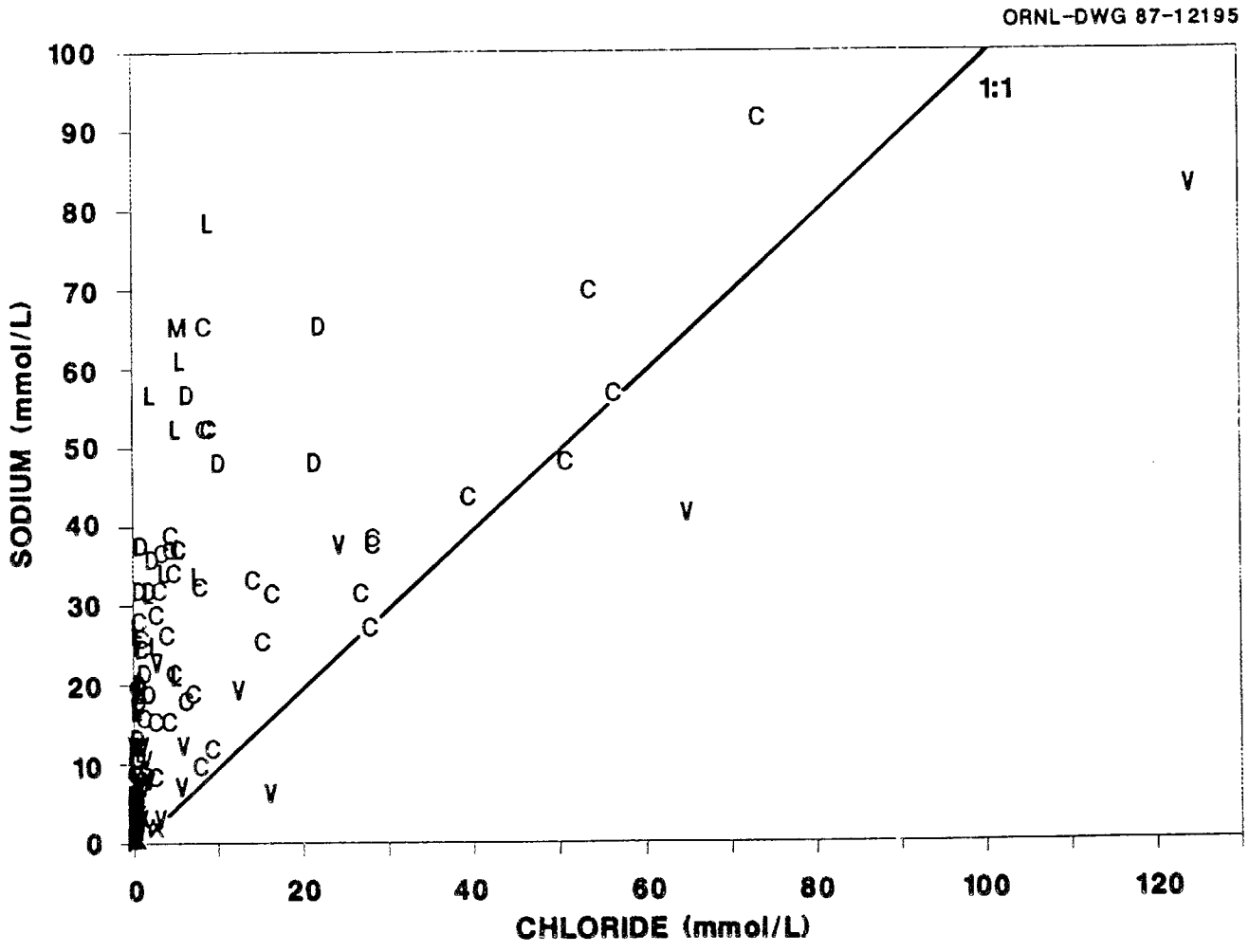

Fig. 8f. Na versus Cl, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.

also suggests that shale membrane filtration is not an important geochemical control on the composition of these waters as Na and Cl would be retarded by different amounts by this process (Long and Larson 1983). In the waters from smectite-rich sections (e.g., Gulf Coast, and Pierre and Bearpaw), there is often an excess of Na over Cl at low concentrations. The excess Na in solution is most likely a result of cation exchange of Na for Ca on the clays. Alternatively it may be the result of a small amount of membrane filtration. Several of the other cations (K, Ca and Mg) show a weak relationship to Cl in several of the shale groups. This relationship is most likely a result of Cl being the major anion combined with the requirement for electroneutrality in the solutions.

Another strong relationship observed in these waters is between Ca and Mg (Fig. 9). In every group, except for the Green River formation, the Ca:Mg ratio varies between 3:1 and 1:1 for most samples. This suggests a calcite or dolomite source for these two elements. In the Green River Formation, Mg > Ca in many cases. The Green River Formation is a lacustrine deposit, compared to a marine or brackish deposit in the other areas considered. The mineralogy of the Green River formation is somewhat unique and contains, among other minerals, many mixed Ca-Na carbonate-bicarbonate minerals (Eugster and Hardie 1978). These additional Ca sinks may explain the relatively elevated levels of Mg compared to Ca in this particular formation. Calcite and/or dolomite are not major mineral phases in the formations considered (Table 3), and most of the waters are undersaturated with respect to calcite and dolomite. This undersaturation suggests, as was also the case for halite, that there may be insufficient carbonates in the sections for the waters to have reached equilibrium

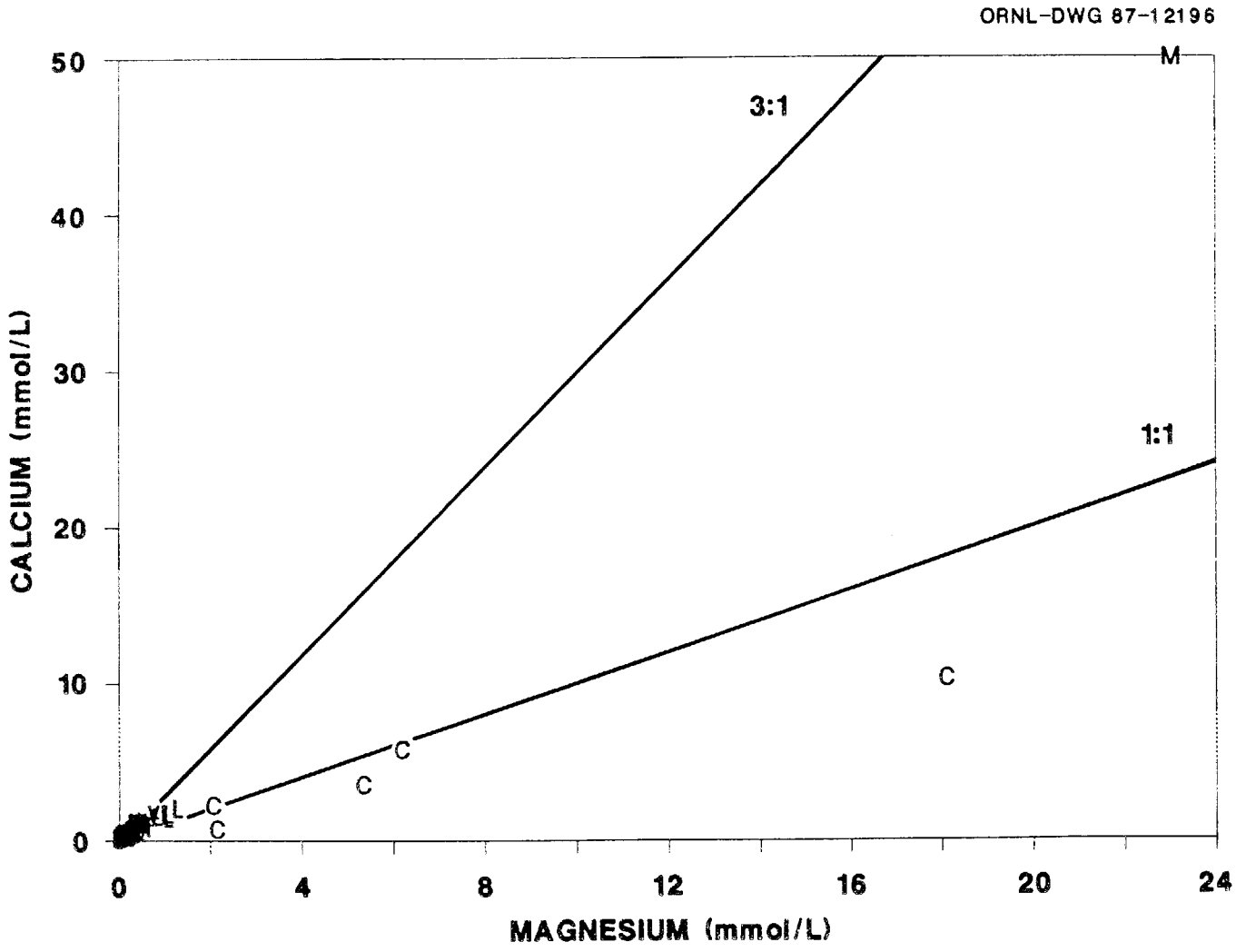

Fig. 9a. Ca versus Mg, Gulf Coast group. Plot symbols are the formation data labels as listed in Table 1.

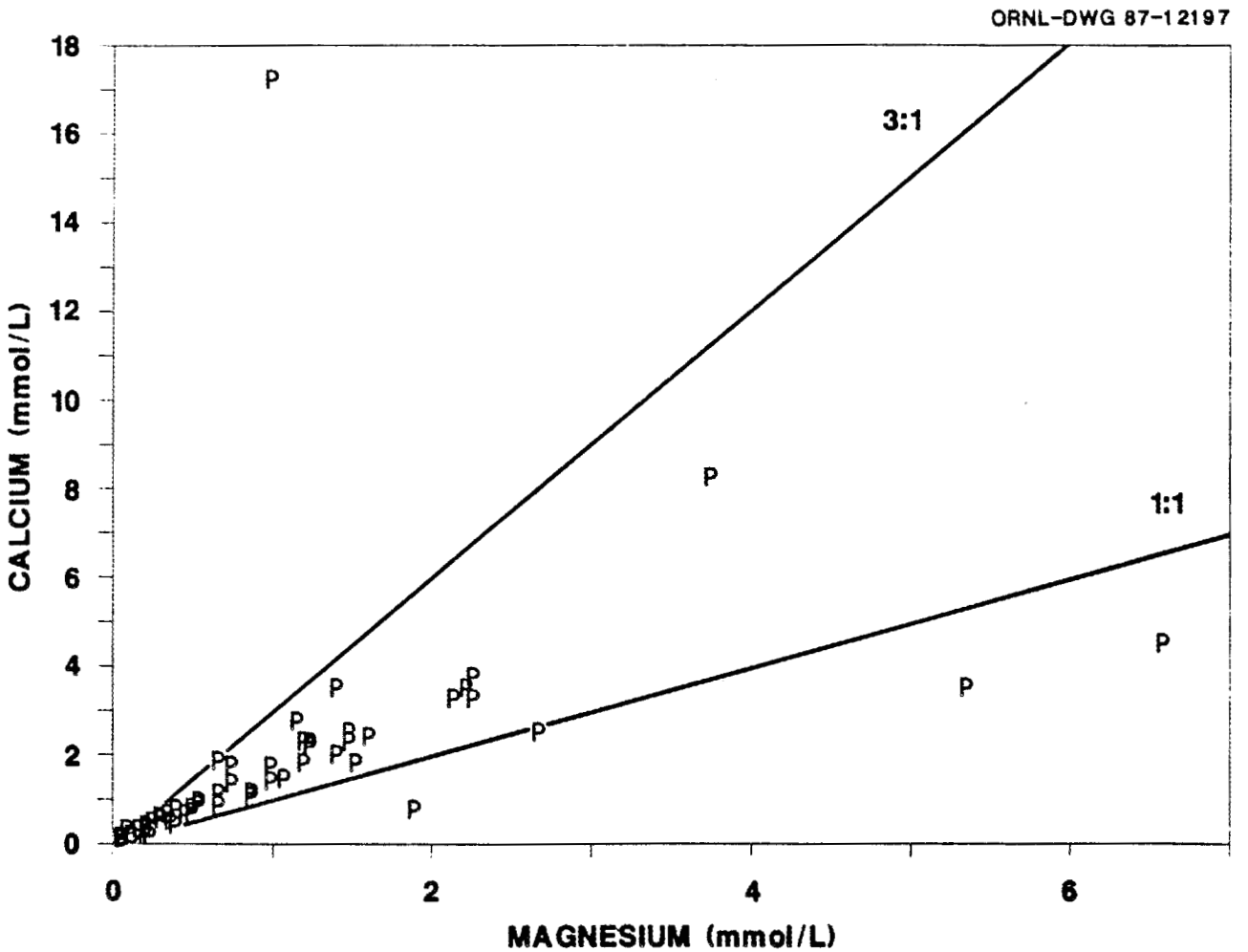

Fig. 9b. Ca versus Mg, Pierre and Bearpaw Formations. Plot symbols are the formation data labels as listed in Table 1.

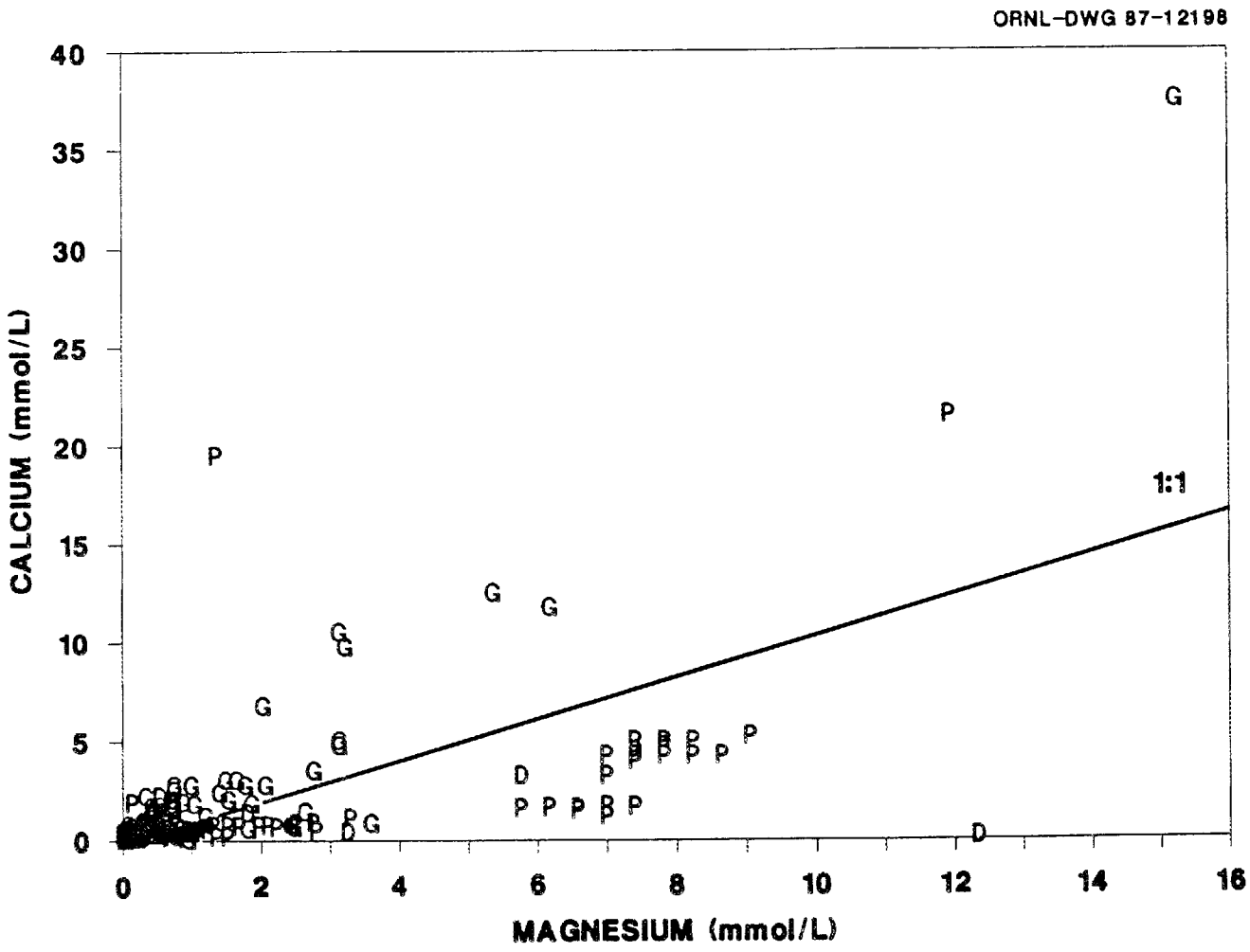

Fig. 9c. Ca versus Mg, Green River Formation. Plot symbols are the formation data labels as listed in Table 1.

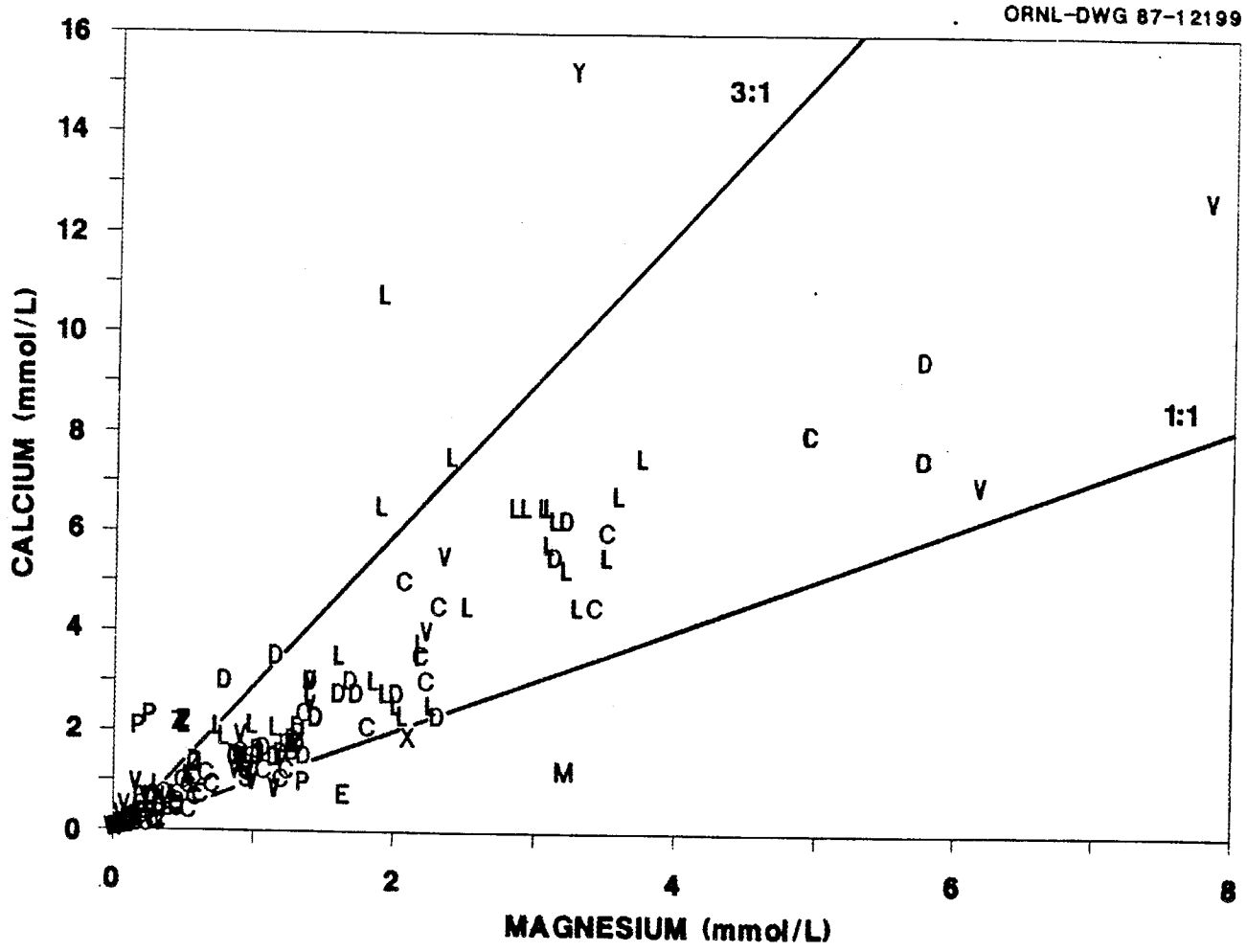

Fig. 9d. Ca versus Mg, Midcontinent group. Plot symbols are the formation data labels as listed in Table 1.

with them and/or that the waters have been diluted since the dissolution occurred. An additional possibility also exists in the case of the carbonates, since their solubility is strongly pH dependent. The pH data used in the solubility calculations are the field data listed in WATSTORE, in contrast to laboratory data which were also given for some samples, and should help to minimize sampling artifacts. The degassing of CO_2 from the solutions will cause the pH to rise, and the oxidation of reduced species will cause the pH to decrease. Carbonates are less soluble at higher pH; hence, if the pH of these solutions decrease as a result of sampling, the solutions would appear to be undersaturated with respect to carbonates when they may in actuality be at saturation. A final possibility is that ion exchange of Ca for Na on the clays has resulted in a decrease of Ca in solution which has in turn resulted in undersaturation with respect to the carbonates. This would suggest that an insufficient amount of calcite/dolomite was available for the waters to re-equilibrate with.

Other elemental ratios were also examined. There is no clear trend in the Na:Ca ratio, which might be expected if anorthite were being converted to albite or as a consequence of ion exchange on clays. In some cases, there appears to be a weak relationship between K and Na which may be related to feldspar transformations or evaporite dissolution, among other reactions.

Several of the figures suggest that formation-related trends may exist. Alternatively, this could be a result of sampling biases. Examination of formation-related trends remains to be examined in greater detail.

MINERAL MODELING

All of the waters from the Gulf Coast group, and Pierre and Bearpaw formations were modeled using EQ3 (Wolery 1983). Five waters from the Midcontinent group which could be definitively identified as being from shales were also modeled. Since the mineral data base for EQ3 does not contain many of the minerals found in the Green River Formation, these waters were not modeled because the results would have been subject to large errors. EQ3 was used to calculate the minerals with which the groundwaters were undersaturated, saturated or supersaturated. Appendix III contains the results of these calculations. Redox data were not available for most of the waters; hence, certain assumptions were made. If no data were available on the redox state, the water was modeled twice - once assuming that it was in equilibrium with air at approximately 25°C, and once assuming that the concentration of sulfide in the solution was equal to the measured sulfate value on a molar basis. This gave two limiting conditions - one very oxic and one very reducing. It should be noted that for those waters for which both sulfate and sulfide data were available, the sulfate was usually 100 times more abundant than the sulfide. The results from both cases are given in Appendix III. The paucity of aluminum data limited evaluation of the saturation indices of aluminosilicates, especially clays which are the predominant mineralogy in most shales. Groundwaters for which aluminum data were available were calculated to be in equilibrium with several clay minerals, including illite, kaolinite and smectite as well as, in many cases, several feldspars. Since water samples are easily contaminated with aluminum during sample collection and preparation, these data should be viewed with caution,

especially those for the older samples. The model calculations suggest that most of the waters are undersaturated with respect to all minerals, except pure SiO_2 phases (e.g., quartz, cristobalite, tridymite, amorphous silica). Only those waters with higher pH values (e.g., >8.2) especially in the Gulf Coast, are saturated with respect to carbonates (calcite and dolomite). Most of the waters are also undersaturated with respect to sulfate minerals, particularly gypsum. The calculated saturations of many of the iron silicates are probably artifacts, due to the inability to consider iron aluminosilicate minerals. In addition to the minerals discussed above, in the reduced cases, the waters are usually saturated with respect to pyrite and/or pyrrhotite. Except for a few sulfide minerals, changing the redox assumption from oxic to reducing does not affect the calculated mineral solubilities.

CONCLUSIONS

A wide range of compositions is observed in groundwaters from shales. Except for the Green River Formation, which is a lacustrine deposit, the range of compositions for the other formations and geographic areas is overlapping. In most of the waters, sodium is the major cation and chloride the major anion, although exceptions do exist. In some cases alkalinity (carbonate and bicarbonate) is greater than chloride and calcium is greater than sodium. The compositional data show no simple relationship to depth, even within a single formation. The dissolution of halite and carbonates may have had a major effect on the composition

of these waters, although most of them are now undersaturated with respect to these phases. Geochemical modeling shows that most of the waters are saturated or supersaturated with respect to one or more SiO_2 phases, but are undersaturated with respect to most other minerals considered. An exception to this is that the higher pH waters are in some cases saturated or supersaturated with respect to carbonate phases. This occurs more commonly in the Gulf Coast formations. Since a wide variability in shale groundwater compositions exists within even a single formation (e.g., the Pierre Shale) and appears to be independent of depth, a shale groundwater composition cannot be predicted on the basis of other available data. Although certain chemical consistencies do exist within the groundwater data, they are also too limited to allow a good estimate of the composition to be extrapolated from the analysis of only a few elements.

ACKNOWLEDGMENTS

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APPENDIX I

Listing of all groundwater data retrieved from WATSTORE with depths >200 ft (61 m) or 100 ft (30.5 m) in some cases.

TABLE AI-1

Listing of all WATSTORE data
for the Eastern Interior group

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
1	423511076561701	NY	341GENS	240	73.2	79-01-01						
2	423511076561701	NY	341GENS	240	73.2	78-12-01						
3	423511076561701	NY	341GENS	240	73.2	80-07-01						
4	423511076561701	NY	341GENS	240	73.2	78-11-01						
5	423511076561701	NY	341GENS	240	73.2	80-06-18						
6	423511076561701	NY	341GENS	240	73.2	80-06-19						
7	423511076561701	NY	341GENS	240	73.2	78-07-30		9840				
8	423511076561701	NY	341GENS	240	73.2	78-10-01						
9	423524076562201	NY	341GENS	227	69.2	78-10-15						
10	423524076562201	NY	341GENS	227	69.2	79-01-15						
11	423524076562201	NY	341GENS	227	69.2	75-09-18		869				
12	423524076562201	NY	341GENS	227	69.2	75-10-08		866				
13	423524076562201	NY	341GENS	227	69.2	83-08-05						
14	423524076562201	NY	341GENS	227	69.2	75-07-15		881				
15	423524076562201	NY	341GENS	227	69.2	81-03-26		1200				
16	423524076562201	NY	341GENS	227	69.2	78-09-01		5410				
17	423524076562201	NY	341GENS	227	69.2	80-06-22						
18	423524076562201	NY	341GENS	227	69.2	78-05-25		2240				
19	423524076562201	NY	341GENS	227	69.2	80-06-05		2330				
20	423524076562201	NY	341GENS	227	69.2	78-02-16		2180				
21	423524076562201	NY	341GENS	227	69.2	79-07-27		1320		8.1		
22	423524076562201	NY	341GENS	227	69.2	77-12-15		815				
23	423524076562201	NY	341GENS	227	69.2	78-12-10						
24	423524076562201	NY	341GENS	227	69.2	77-08-29		2600				
25	423524076562201	NY	341GENS	227	69.2	78-11-01						
26	423524076562201	NY	341GENS	227	69.2	77-05-20		747				
27	423524076562201	NY	341GENS	227	69.2	75-08-13		828				
28	423524076562201	NY	341GENS	227	69.2	77-03-30		1030				
29	423524076562201	NY	341GENS	227	69.2	81-08-26		1600				
30	423524076562201	NY	341GENS	227	69.2	77-02-01		796				
31	423524076562201	NY	341GENS	227	69.2	80-06-18						
32	423524076562201	NY	341GENS	227	69.2	76-11-22		848				
33	423524076562201	NY	341GENS	227	69.2	78-12-26						
34	423524076562201	NY	341GENS	227	69.2	76-09-15		842				
35	423524076562201	NY	341GENS	227	69.2	78-10-01						
36	423524076562201	NY	341GENS	227	69.2	76-05-20		909				
37	423524076562201	NY	341GENS	227	69.2	80-10-22		1540				
38	423524076562201	NY	341GENS	227	69.2	76-03-24		978				
39	423524076562201	NY	341GENS	227	69.2	78-11-15						
40	423524076562201	NY	341GENS	227	69.2	80-01-22		1160		8.2		
41	423524076562201	NY	341GENS	227	69.2	75-12-03		869				
42	423524076562201	NY	341GENS	227	69.2	76-01-22		806				

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l	TOC mg/l
1	423511076561701										
2	423511076561701										
3	423511076561701										
4	423511076561701										
5	423511076561701										
6	423511076561701										
7	423511076561701										
8	423511076561701										
9	423524076562201										
10	423524076562201										
11	423524076562201										
12	423524076562201										
13	423524076562201										
14	423524076562201										
15	423524076562201				0.23	1	0.29				
16	423524076562201										
17	423524076562201										
18	423524076562201										
19	423524076562201										
20	423524076562201										
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29	423524076562201										
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31	423524076562201										
32	423524076562201										
33	423524076562201										
34	423524076562201										
35	423524076562201										
36	423524076562201										
37	423524076562201										
38	423524076562201										
39	423524076562201										
40	423524076562201										
41	423524076562201										
42	423524076562201										

	STN NO.	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l	Ba ug/l
1	423511076561701					4200					
2	423511076561701					5700					
3	423511076561701					2000					
4	423511076561701					5000					
5	423511076561701					3900					
6	423511076561701					2100					
7	423511076561701					3200					
8	423511076561701					5500					
9	423524076562201					860					
10	423524076562201					430					
11	423524076562201					38					
12	423524076562201					41					
13	423524076562201					1100					
14	423524076562201					50					
15	423524076562201	120	33	59	1.9	120	87	0.2	11		
16	423524076562201					1500					
17	423524076562201					520					
18	423524076562201					530					
19	423524076562201					620					
20	423524076562201					480					
21	423524076562201					420					
22	423524076562201										
23	423524076562201					960					
24	423524076562201					660					
25	423524076562201					510					
26	423524076562201					43					
27	423524076562201					36					
28	423524076562201					90					
29	423524076562201					270					
30	423524076562201					42					
31	423524076562201					690					
32	423524076562201					51					
33	423524076562201					600					
34	423524076562201					40					
35	423524076562201					1100					
36	423524076562201					110					
37	423524076562201					460					
38	423524076562201					94					
39	423524076562201					450					
40	423524076562201					270					
41	423524076562201					46					
42	423524076562201					42					

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
1	423511076561701										
2	423511076561701										
3	423511076561701										
4	423511076561701										
5	423511076561701										
6	423511076561701										
7	423511076561701										
8	423511076561701										
9	423524076562201										
10	423524076562201										
11	423524076562201										
12	423524076562201										
13	423524076562201										
14	423524076562201										
15	423524076562201										
16	423524076562201										
17	423524076562201										
18	423524076562201										
19	423524076562201										
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22	423524076562201										
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35	423524076562201										
36	423524076562201										
37	423524076562201										
38	423524076562201										
39	423524076562201										
40	423524076562201										
41	423524076562201										
42	423524076562201										

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
1	423511076561701										
2	423511076561701										
3	423511076561701										
4	423511076561701										
5	423511076561701										
6	423511076561701										
7	423511076561701										
8	423511076561701										
9	423524076562201										
10	423524076562201										
11	423524076562201										
12	423524076562201										
13	423524076562201										
14	423524076562201										
15	423524076562201										
16	423524076562201										
17	423524076562201										
18	423524076562201										
19	423524076562201										
20	423524076562201										
21	423524076562201										
22	423524076562201										
23	423524076562201										
24	423524076562201										
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26	423524076562201										
27	423524076562201										
28	423524076562201										
29	423524076562201										
30	423524076562201										
31	423524076562201										
32	423524076562201										
33	423524076562201										
34	423524076562201										
35	423524076562201										
36	423524076562201										
37	423524076562201										
38	423524076562201										
39	423524076562201										
40	423524076562201										
41	423524076562201										
42	423524076562201										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
1	423511076561701					
2	423511076561701					
3	423511076561701					
4	423511076561701					
5	423511076561701					
6	423511076561701					
7	423511076561701					
8	423511076561701					
9	423524076562201					
10	423524076562201					
11	423524076562201					
12	423524076562201					
13	423524076562201					
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15	423524076562201					
16	423524076562201					
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36	423524076562201					
37	423524076562201					
38	423524076562201					
39	423524076562201					
40	423524076562201					
41	423524076562201					
42	423524076562201					

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
43	423518076562002	NY	341GENS	205	62.5	80-06-18						
44	423518076562002	NY	341GENS	205	62.5	78-05-25		1110				
45	423518076562002	NY	341GENS	205	62.5	77-12-15		744				
46	423518076562002	NY	341GENS	205	62.5	77-08-29		1180				
47	423506076561501	NY	341GENS	150	45.7	79-01-01						
48	423506076561501	NY	341GENS	150	45.7	81-03-26		1770				
49	423506076561501	NY	341GENS	150	45.7	77-12-15		1860				
50	423506076561501	NY	341GENS	150	45.7	81-08-25		1500				
51	423506076561501	NY	341GENS	150	45.7	80-06-18						
52	423506076561501	NY	341GENS	150	45.7	79-01-22		1770		8		
53	423506076561501	NY	341GENS	150	45.7	77-05-20		1470				
54	423506076561501	NY	341GENS	150	45.7	78-02-16		2280				
55	423506076561501	NY	341GENS	150	45.7	78-09-01		1170				
56	423506076561501	NY	341GENS	150	45.7	79-02-01						
57	423506076561501	NY	341GENS	150	45.7	78-12-09						
58	423506076561501	NY	341GENS	150	45.7	80-06-05		2600				
59	423506076561501	NY	341GENS	150	45.7	78-11-01						
60	423506076561501	NY	341GENS	150	45.7	78-05-25		2170				
61	423506076561501	NY	341GENS	150	45.7	77-08-29		1540				
62	423506076561501	NY	341GENS	150	45.7	79-07-27		3400		7.9		
63	423506076561501	NY	341GENS	150	45.7	78-10-01						
64	423527076562601	NY	341GENS	149	45.4	77-12-15		885				
65	423527076562601	NY	341GENS	149	45.4	80-06-18						
66	423527076562601	NY	341GENS	149	45.4	80-07-01						
67	423527076562601	NY	341GENS	149	45.4	78-05-25	11	828				
68	423527076562601	NY	341GENS	149	45.4	80-06-07		730				
69	423526076563001	NY	341GENS	115	35.1	81-03-26		1900				
70	423526076563001	NY	341GENS	115	35.1	75-04-29		1410				
71	423526076563001	NY	341GENS	115	35.1	80-10-22		1800				
72	423526076563001	NY	341GENS	115	35.1	75-06-24		1920				
73	423526076563001	NY	341GENS	115	35.1	72-07-21		1200				
74	423526076563001	NY	341GENS	115	35.1	72-10-05						
75	423526076563001	NY	341GENS	115	35.1	80-06-22						
76	423526076563001	NY	341GENS	115	35.1	73-07-23						
77	423526076563001	NY	341GENS	115	35.1	80-06-05		1750				
78	423526076563001	NY	341GENS	115	35.1	73-07-24						
79	423526076563001	NY	341GENS	115	35.1	79-07-29						
80	423526076563001	NY	341GENS	115	35.1	73-08-15		1270		7.5	32	518
81	423526076563001	NY	341GENS	115	35.1	79-01-31						
82	423526076563001	NY	341GENS	115	35.1	74-10-03						
83	423526076563001	NY	341GENS	115	35.1	79-01-01						
84	423526076563001	NY	341GENS	115	35.1	74-12-03		3530				
85	423526076563001	NY	341GENS	115	35.1	78-12-01						
86	423526076563001	NY	341GENS	115	35.1	75-01-14		1590				
87	423526076563001	NY	341GENS	115	35.1	78-10-31						
88	423526076563001	NY	341GENS	115	35.1	75-03-05		1460				
89	423526076563001	NY	341GENS	115	35.1	78-05-25		1500				
90	423526076563001	NY	341GENS	115	35.1	77-10-11						
91	423526076563001	NY	341GENS	115	35.1	82-09-22		1610				
92	423526076563001	NY	341GENS	115	35.1	77-08-29		1940				
93	423526076563001	NY	341GENS	115	35.1	78-02-16		1550				
94	423526076563001	NY	341GENS	115	35.1	75-08-13		3290				
95	423526076563001	NY	341GENS	115	35.1	71-07-21						
96	423526076563001	NY	341GENS	115	35.1	75-09-04						
97	423526076563001	NY	341GENS	115	35.1	80-06-18						

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l	TOC mg/l
43	423518076562002										
44	423518076562002										
45	423518076562002										
46	423518076562002										
47	423506076561501										
48	423506076561501				0.07	0.3	0.1				
49	423506076561501										
50	423506076561501										
51	423506076561501										
52	423506076561501										
53	423506076561501										
54	423506076561501										
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57	423506076561501										
58	423506076561501										
59	423506076561501										
60	423506076561501										
61	423506076561501										
62	423506076561501										
63	423506076561501										
64	423527076562601										
65	423527076562601										
66	423527076562601										
67	423527076562601										
68	423527076562601										
69	423526076563001						0.19				
70	423526076563001										
71	423526076563001										
72	423526076563001										
73	423526076563001										
74	423526076563001										
75	423526076563001										
76	423526076563001										
77	423526076563001										
78	423526076563001										
79	423526076563001										
80	423526076563001	630		0	1.2	5.3	1.2				
81	423526076563001										
82	423526076563001										
83	423526076563001										
84	423526076563001										
85	423526076563001										
86	423526076563001										
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93	423526076563001										
94	423526076563001										
95	423526076563001										
96	423526076563001										
97	423526076563001										

	STN NO.	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l	Ba ug/l
43	423518076562002					9.9					
44	423518076562002					140					
45	423518076562002										
46	423518076562002					180					
47	423506076561501					380					
48	423506076561501	100	29	230	1.8	410	52	0.2	11		
49	423506076561501					390					
50	423506076561501					200					
51	423506076561501					760					
52	423506076561501					310					
53	423506076561501					230					
54	423506076561501					490					
55	423506076561501					130					
56	423506076561501					400					
57	423506076561501					450					
58	423506076561501					610					
59	423506076561501					400					
60	423506076561501					460					
61	423506076561501					200					
62	423506076561501					960					
63	423506076561501					450					
64	423527076562601										
65	423527076562601					5.9					
66	423527076562601					1300					
67	423527076562601					19					
68	423527076562601					20					
69	423526076563001	170	120	40	2.9	280	79	0.2	14		
70	423526076563001					130					
71	423526076563001					550					
72	423526076563001					320					
73	423526076563001					80					
74	423526076563001					75					
75	423526076563001					200					
76	423526076563001					130					
77	423526076563001					240					
78	423526076563001					53					
79	423526076563001					300					
80	423526076563001	72	82	38	2.4	82	6.5	0.4	9.2		
81	423526076563001					380					
82	423526076563001					160					
83	423526076563001					240					
84	423526076563001					950					
85	423526076563001					540					
86	423526076563001					190					
87	423526076563001					360					
88	423526076563001					140					
89	423526076563001					180					
90	423526076563001					100					
91	423526076563001					360					
92	423526076563001					310					
93	423526076563001					160					
94	423526076563001					770					
95	423526076563001					48					
96	423526076563001					270					
97	423526076563001					170					

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
43	423518076562002										
44	423518076562002										
45	423518076562002										
46	423518076562002										
47	423506076561501										
48	423506076561501										
49	423506076561501										
50	423506076561501										
51	423506076561501										
52	423506076561501										
53	423506076561501										
54	423506076561501										
55	423506076561501										
56	423506076561501										
57	423506076561501										
58	423506076561501										
59	423506076561501										
60	423506076561501										
61	423506076561501										
62	423506076561501										
63	423506076561501										
64	423527076562601										
65	423527076562601										
66	423527076562601										
67	423527076562601										
68	423527076562601										
69	423526076563001										
70	423526076563001										
71	423526076563001										
72	423526076563001										
73	423526076563001										
74	423526076563001										
75	423526076563001										
76	423526076563001										
77	423526076563001										
78	423526076563001										
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93	423526076563001										
94	423526076563001										
95	423526076563001										
96	423526076563001										
97	423526076563001										

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
43	423518076562002										
44	423518076562002										
45	423518076562002										
46	423518076562002										
47	423506076561501										
48	423506076561501										
49	423506076561501										
50	423506076561501										
51	423506076561501										
52	423506076561501										
53	423506076561501										
54	423506076561501										
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60	423506076561501										
61	423506076561501										
62	423506076561501										
63	423506076561501										
64	423527076562601										
65	423527076562601										
66	423527076562601										
67	423527076562601										
68	423527076562601										
69	423526076563001										
70	423526076563001										
71	423526076563001										
72	423526076563001										
73	423526076563001										
74	423526076563001										
75	423526076563001										
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92	423526076563001										
93	423526076563001										
94	423526076563001										
95	423526076563001										
96	423526076563001										
97	423526076563001										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
43	423518076562002					
44	423518076562002					
45	423518076562002					
46	423518076562002					
47	423506076561501					
48	423506076561501					
49	423506076561501					
50	423506076561501					
51	423506076561501					
52	423506076561501					
53	423506076561501					
54	423506076561501					
55	423506076561501					
56	423506076561501					
57	423506076561501					
58	423506076561501					
59	423506076561501					
60	423506076561501					
61	423506076561501					
62	423506076561501					
63	423506076561501					
64	423527076562601					
65	423527076562601					
66	423527076562601					
67	423527076562601					
68	423527076562601					
69	423526076563001					
70	423526076563001					
71	423526076563001					
72	423526076563001					
73	423526076563001					
74	423526076563001					
75	423526076563001					
76	423526076563001					
77	423526076563001					
78	423526076563001					
79	423526076563001					
80	423526076563001					
81	423526076563001					
82	423526076563001					
83	423526076563001					
84	423526076563001					
85	423526076563001					
86	423526076563001					
87	423526076563001					
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89	423526076563001					
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91	423526076563001					
92	423526076563001					
93	423526076563001					
94	423526076563001					
95	423526076563001					
96	423526076563001					
97	423526076563001					

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
98	423526076563001	NY	341GENS	115	35.1	75-09-18		1900				
99	423526076563001	NY	341GENS	115	35.1	79-02-28						
100	423526076563001	NY	341GENS	115	35.1	75-10-08		1690				
101	423526076563001	NY	341GENS	115	35.1	78-12-15						
102	423526076563001	NY	341GENS	115	35.1	75-12-03		1790				
103	423526076563001	NY	341GENS	115	35.1	78-09-01						
104	423526076563001	NY	341GENS	115	35.1	76-01-22		1960				
105	423526076563001	NY	341GENS	115	35.1	81-08-25		1800				
106	423526076563001	NY	341GENS	115	35.1	76-05-20		1670				
107	423526076563001	NY	341GENS	115	35.1	77-05-20		1550				
108	423526076563001	NY	341GENS	115	35.1	76-09-15		1720				
109	423526076563001	NY	341GENS	115	35.1	79-01-15						
110	423526076563001	NY	341GENS	115	35.1	76-11-22		1730				
111	423526076563001	NY	341GENS	115	35.1	83-08-05						
112	423526076563001	NY	341GENS	115	35.1	77-02-01		1910				
113	423526076563001	NY	341GENS	115	35.1	80-01-22		1190		8.5		
114	423526076563001	NY	341GENS	115	35.1	77-12-15		1450				
115	423526076563001	NY	341GENS	115	35.1	78-11-15						
116	423526076563001	NY	341GENS	115	35.1	77-03-30		1500				
117	423524076561701	NY	341GENS	105	32.0	75-03-05		710				
118	423524076561701	NY	341GENS	105	32.0	79-01-01						
119	423524076561701	NY	341GENS	105	32.0	75-06-24		767				
120	423524076561701	NY	341GENS	105	32.0	78-09-01		808				
121	423524076561701	NY	341GENS	105	32.0	82-09-22		818				
122	423524076561701	NY	341GENS	105	32.0	77-12-15		725				
123	423524076561701	NY	341GENS	105	32.0	82-08-25		840				
124	423524076561701	NY	341GENS	105	32.0	77-03-30		769				
125	423524076561701	NY	341GENS	105	32.0	80-10-22		740				
126	423524076561701	NY	341GENS	105	32.0	76-09-15		782				
127	423524076561701	NY	341GENS	105	32.0	80-01-22		490		8.4		
128	423524076561701	NY	341GENS	105	32.0	76-03-24		747				
129	423524076561701	NY	341GENS	105	32.0	75-01-15		672				
130	423524076561701	NY	341GENS	105	32.0	75-12-03		749				
131	423524076561701	NY	341GENS	105	32.0	81-03-26		900				
132	423524076561701	NY	341GENS	105	32.0	75-10-08		753				
133	423524076561701	NY	341GENS	105	32.0	79-07-27						
134	423524076561701	NY	341GENS	105	32.0	80-06-05		860				
135	423524076561701	NY	341GENS	105	32.0	83-08-05						
136	423524076561701	NY	341GENS	105	32.0	75-09-18		765				
137	423524076563101	NY	341GENS	105	32.0	80-06-18						
138	423524076563101	NY	341GENS	105	32.0	78-11-22						
139	423524076563101	NY	341GENS	105	32.0	78-10-31						
140	423524076563101	NY	341GENS	105	32.0	79-02-01						
141	423524076563101	NY	341GENS	105	32.0	78-05-25	11	35800				
142	423524076563101	NY	341GENS	105	32.0	79-01-01						
143	423524076563101	NY	341GENS	105	32.0	77-08-29	15	24600				
144	423524076563101	NY	341GENS	105	32.0	80-06-22						
145	423524076563101	NY	341GENS	105	32.0	78-12-15						
146	423524076563101	NY	341GENS	105	32.0	79-01-15						

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l	TOC mg/l
98	423526076563001										
99	423526076563001										
100	423526076563001										
101	423526076563001										
102	423526076563001										
103	423526076563001										
104	423526076563001										
105	423526076563001										
106	423526076563001										
107	423526076563001										
108	423526076563001										
109	423526076563001										
110	423526076563001										
111	423526076563001							<0.030			
112	423526076563001										
113	423526076563001										
114	423526076563001										
115	423526076563001										
116	423526076563001										
117	423524076561701			<0.010							
118	423524076561701										
119	423524076561701										
120	423524076561701										
121	423524076561701										
122	423524076561701										
123	423524076561701										
124	423524076561701										
125	423524076561701										
126	423524076561701										
127	423524076561701										
128	423524076561701										
129	423524076561701										
130	423524076561701										
131	423524076561701				0.16	0.7	0.17				
132	423524076561701										
133	423524076561701										
134	423524076561701										
135	423524076561701										
136	423524076561701										
137	423524076563101										
138	423524076563101										
139	423524076563101										
140	423524076563101										
141	423524076563101										
142	423524076563101										
143	423524076563101										
144	423524076563101										
145	423524076563101										
146	423524076563101										

	STN NO.	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l	Ba ug/l
98	423526076563001					300					
99	423526076563001					230					
100	423526076563001					240					
101	423526076563001					150					
102	423526076563001					270					
103	423526076563001					590					
104	423526076563001					320					
105	423526076563001					230					
106	423526076563001					230					
107	423526076563001					180					
108	423526076563001					160					
109	423526076563001					260					
110	423526076563001					240					
111	423526076563001					450					
112	423526076563001					310					
113	423526076563001					250					
114	423526076563001										
115	423526076563001					300					
116	423526076563001					160					
117	423524076561701					30					
118	423524076561701					40					
119	423524076561701					28					
120	423524076561701					32					
121	423524076561701					63					
122	423524076561701										
123	423524076561701					49					
124	423524076561701					23					
125	423524076561701					49					
126	423524076561701					20					
127	423524076561701					48					
128	423524076561701					19					
129	423524076561701					30					
130	423524076561701					17					
131	423524076561701	110	38	23	1.4	59	46	0.2	17		
132	423524076561701					21					
133	423524076561701					45					
134	423524076561701					60					
135	423524076561701					70					
136	423524076561701					19					
137	423524076563101					3600					
138	423524076563101					13000					
139	423524076563101					6000					
140	423524076563101					10000					
141	423524076563101					14000					
142	423524076563101					12000					
143	423524076563101					9400					
144	423524076563101					6600					
145	423524076563101					12000					
146	423524076563101					13000					
						14					

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
98	423526076563001										
99	423526076563001										
100	423526076563001										
101	423526076563001										
102	423526076563001										
103	423526076563001										
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106	423526076563001										
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114	423526076563001										
115	423526076563001										
116	423526076563001										
117	423524076561701										
118	423524076561701										
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120	423524076561701										
121	423524076561701										
122	423524076561701										
123	423524076561701										
124	423524076561701										
125	423524076561701										
126	423524076561701										
127	423524076561701										
128	423524076561701										
129	423524076561701										
130	423524076561701										
131	423524076561701										
132	423524076561701										
133	423524076561701										
134	423524076561701										
135	423524076561701										
136	423524076561701										
137	423524076563101										
138	423524076563101										
139	423524076563101										
140	423524076563101										
141	423524076563101										
142	423524076563101										
143	423524076563101										
144	423524076563101										
145	423524076563101										
146	423524076563101										

	STN NO.	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l	Ag ug/l
98	423526076563001										
99	423526076563001										
100	423526076563001										
101	423526076563001										
102	423526076563001										
103	423526076563001										
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105	423526076563001										
106	423526076563001										
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112	423526076563001										
113	423526076563001										
114	423526076563001										
115	423526076563001										
116	423526076563001										
117	423524076561701										
118	423524076561701										
119	423524076561701										
120	423524076561701										
121	423524076561701										
122	423524076561701										
123	423524076561701										
124	423524076561701										
125	423524076561701										
126	423524076561701										
127	423524076561701										
128	423524076561701										
129	423524076561701										
130	423524076561701										
131	423524076561701										
132	423524076561701										
133	423524076561701										
134	423524076561701										
135	423524076561701										
136	423524076561701										
137	423524076563101										
138	423524076563101										
139	423524076563101										
140	423524076563101										
141	423524076563101										
142	423524076563101										
143	423524076563101										
144	423524076563101										
145	423524076563101										
146	423524076563101										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
98	423526076563001					
99	423526076563001					
100	423526076563001					
101	423526076563001					
102	423526076563001					
103	423526076563001					
104	423526076563001					
105	423526076563001					
106	423526076563001					
107	423526076563001					
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112	423526076563001					
113	423526076563001					
114	423526076563001					
115	423526076563001					
116	423526076563001					
117	423524076561701					
118	423524076561701					
119	423524076561701					
120	423524076561701					
121	423524076561701					
122	423524076561701					
123	423524076561701					
124	423524076561701					
125	423524076561701					
126	423524076561701					
127	423524076561701					
128	423524076561701					
129	423524076561701					
130	423524076561701					
131	423524076561701					
132	423524076561701					
133	423524076561701					
134	423524076561701					
135	423524076561701					
136	423524076561701					
137	423524076563101					
138	423524076563101					
139	423524076563101					
140	423524076563101					
141	423524076563101					
142	423524076563101					
143	423524076563101					
144	423524076563101					
145	423524076563101					
146	423524076563101					

TABLE AI-2

Listing of all WATSTORE data
for the Gulf Coast group

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
1	284803097295501	TX	124RKLW	7570	2307.3	56-09-17				7.8	28	895
2	284138097463201	TX	124RKLW	6600	2011.7	57-08-06				7.6	53	1080
3	302705088291502	MS	125MDWY	6020	1834.9	70-08-19		82000		7.6		476
4	310510089000302	MS	124CKMN	3100	944.9	79-10-05	29	200000		8.1	1	64
5	310749089345805	MS	124CKMN	2610	795.5	63-02-12	20	18000		7.8		
6	310906089412404	MS	124CKMN	2500	762.0	80-01-22	32	50000		7.5	15	240
7	285906098520901	TX	125MDWY	2450	746.8	57-02-05				8.1	2.7	171
8	285906098520901	TX	125MDWY	2450	746.8	57-02-05				8.1	2.4	152
9	312555089430004	MS	124CKMN	2410	734.6	80-03-12	22	5250		9.4	0.9	1180
10	310856089333405	MS	124CKMN	2390	728.5	61-06-09	35.5	28900		7.8		
11	310429089182204	MS	124CKMN	2280	694.9	80-03-12	24	27000		8.8	0.7	230
12	351330090473202	AR	124CLBR	1900	579.1	57-08-14		616		7.9	8.1	330
13	311516088585004	MS	124CKMN	1710	521.2	80-03-11	19	39000		9	0.2	90
14	312451089184704	MS	124CKMN	1650	502.9	80-03-13	22	6460		8.6	5.3	1080
15	311928088595004	MS	124CKMN	1610	490.7	79-11-26	20	11600		9.4	0.7	900
16	284351098385200	TX	124RKLW	1560	475.5	64-08-18		1030		8.2	8.4	682
17	283442099342301	TX	124RKCZ	1350	411.5	57-07-15		1860				
18	282031099370901	TX	124RKCZ	1330	405.4	69-04-09		2350		8.1	3.1	200
19	281954099364301	TX	124RKCZ	1170	356.6	57-07-19		1030				
20	343714091342801	AR	124CRVR	946	288.3	50-05-24	24	1390		7.3	22	230
21	300043097092402	TX	124RKLW	903	275.2	64-07-09		326		8.6	0.7	137
22	300043097092402	TX	124RKLW	903	275.2	64-02-07				8	10	517
23	300043097092402	TX	124RKLW	903	275.2	52-05-15				8.3	5.3	545
24	285635098244800	TX	124RKLW	885	269.7	64-08-05		1650		8.2	13	1060
25	353839089493501	TN	124CLBR	879	267.9	65-11-10		356		8.1		
26	335955091435001	AR	124CLBR	817	249.0	56-04-12		202		7.7	4	102
27	344203090411603	AR	124CRVR	806	245.7	64-08-27	21	1640		7.9		
28	330117093582001	AR	124CRVR	800	243.8	68-10-23	21	379		8.6		
29	285836098284100	TX	124RKLW	790	240.8	69-04-22		830		8.2	6.9	564
30	285836098284100	TX	124RKLW	790	240.8	69-04-22		580		7.7	16	420
31	285836098284100	TX	124RKLW	790	240.8	64-08-05		793		7.6	27	561
32	295928097105201	TX	124RKLW	765	233.2	65-12-29		504		7.7	6.8	176
33	295935097104901	TX	124RKLW	765	233.2	65-12-29		504		7.7	6.8	176
34	351330090422201	AR	124CLBR	759	231.3	57-08-14		489		7.4	20	262
35	354437089315002	TN	124CLBR	755	230.1	61-10-03	18.5	175		6.8		
36	354437089315001	TN	124CLBR	755	230.1	51-07-23	18.5	182		6.5		
37	354437089315002	TN	124CLBR	755	230.1	51-07-23	18.5	187		6.5		
38	353945089442001	TN	124CLBR	656	199.9	60-04-28	18	183		7.5		
39	340100091390001	AR	124CLBR	650	198.1	56-06-11	19.5	344		8.6	0.9	174
40	314655088495001	MS	124CLBR	600	182.9	65-06-17		811		7.3		
41	310010086191401	AL	124CLBR	597	182.0	65-01-07	20			8.1	2.3	149
42	334517093061501	AR	125MDWY	596	181.7	59-04-08	18	3970		8	5.1	262
43	333350092465601	AR	124CRVR	580	176.8	59-04-08	21.5	4610		8	5.1	262
44	362033088510001	TN	124CLBR	560	170.7	66-11-15	16.5	45		7		
45	362033088510001	TN	124CLBR	560	170.7	58-06-23	16.5	44		6.1		
46	350719089555900	TN	124CLBR	547	166.7	70-09-00		146		6.8		69
47	322722089162002	MS	124BSCC	538	164.0	69-05-07	21.5	379		8.2		

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
1	284803097295501	1090	0			0				
2	284138097463201	1320	0							
3	302705088291502	580	0							
4	310510089000302	78	0				0.08			
5	310749089345805	71	0							
6	310906089412404	290	0				0.04			
7	285906098520901	210	0							
8	285906098520901	190	0			1.8				
9	312555089430004	1130	150				0.02			
10	310856089333405	510	0			0				
11	310429089182204	250	15				0.02			
12	351330090473202	400	0		0.02	0.07				
13	311516088585004	110	0				0.02			
14	312451089184704	1140	84				0.04			
15	311928088595004	1080	9				0.01			
16	284351098385200	420	200		0					
17	283442099342301									
18	282031099370901	240								
19	281954099364301									
20	343714091342801	280	0		0.68	3				
21	300043097092402	170								
22	300043097092402	630				0.4				
23	300043097092402	660			0.09	0				
24	285635098244800	650	320		0					
25	353839089493501	230	0							
26	335955091435001	120	0		0.07	0.3				
27	344203090411603	460	0			0				
28	330117093582001	210	8							
29	285836098284100	340	170		0.4	0.9				
30	285836098284100	260	130		0.4	1.8				
31	285836098284100	340	170		0.2	0				
32	295928097105201	210			0	0.9				
33	295935097104901	210			0	0				
34	351330090422201	320	0		0.29	1.3				
35	354437089315002	110	0							
36	354437089315001	110	0							
37	354437089315002	110	0							
38	353945089442001	120	0							
39	340100091390001	200	8		0.59	2.6				
40	314655088495001	410	0			0.4				
41	310010086191401	180	0							
42	334517093061501	320	0		0.34	1.5				
43	333350092465601	320	0		0.18	0.8				
44	362033088510001	28	0							
45	362033088510001	23	0							0
46	350719089555900	84	0							
47	322722089162002	240	0			0.2				

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
1	284803097295501		5	1			1200	270			
2	284138097463201		410	140			28000	130			
3	302705088291502		2000	560	23000	180	40000				
4	310510089000302		410	440	73000	260	120000	2600	0.8	3.9	
5	310749089345805		42	11	4000	47	6300	0	1.4	0.7	
6	310906089412404		230	150	13000	64	20000	120	16	16	
7	285906098520901		92	76			5800	100			
8	285906098520901		92	71			5400	130			
9	312555089430004		1.9	1	1200	34	1100	29	4.7	29	
10	310856089333405		87	50	7000	12	11000	25	3	13	
11	310429089182204		26	52	6000	49	9500	42	2.2	1.2	
12	351330090473202		79	31	18	2.4	21	11		8.5	
13	311516088585004		140	130	8900	65	14000	58	1.8	0.2	
14	312451089184704		4.2	5.3	1400	23	1600	10	3.9	19	
15	311928088595004		37	901	2600	24	3300	17	4.9	2.7	
16	284351098385200		3	1	250		73	93	0.5	17	
17	283442099342301						290				
18	282031099370901		29	13	470	4	500	240	0.6	16	
19	281954099364301						120				
20	343714091342801		5.7	1.6	300	8	300	11	0.1	16	
21	300043097092402		3		71		9	11	0.2		
22	300043097092402		13	6	250		51	12	0.2		
23	300043097092402		13	7	260		53	15	0.9	56	
24	285635098244800		3	1	400		170	97	1	14	
25	353839089493501		47	12	11	0.6	1.4	7.4	0.2	11	
26	335955091435001		1.2	0.2	45	4.7	2.5	3			
27	344203090411603		2.9	0.8	360	3.2	300	0.2	0.7	28	
28	330117093582001		3	0.9	88	1.4	11	0.8	0.3	9.6	
29	285836098284100		10	6	160		87	4	0.5		
30	285836098284100		68	11	30		29	24	0.4		
31	285836098284100		10	5	160	5	91	0	0.6	16	
32	295928097105201		22	6.1	81		26	42	0.2	14	
33	295935097104901		22	6.1			26	42	0.2	14	
34	351330090422201		64	25	7.3	2.2	5	5.2		5.6	
35	354437089315002		17	9.3	6.3	1.9	2	3.2	0.6	5	
36	354437089315001		18	9.5	7.3	2.9	3.8	3.4	0	8.8	
37	354437089315002		19	8.8	6.5	2.4	2.2	3.5	0	10	
38	353945089442001		18	11			3	1.2			
39	340100091390001		1.4	0.2	80		3.8	1.6			
40	314655088495001		2	0.2	190	3.1	27	30	0.5	12	
41	310010086191401						11				
42	334517093061501		13	3.1	840	8.4	1100	6.2			
43	333350092465601		42	11	960	1.3	1400	6.8			
44	362033088510001		2.7	1.3	4	0.4	0.8	1	0.1	12	
45	362033088510001		3.2	1.3	4.2	0.6	4	0.9	0.1	12	
46	350719089555900		4.2	1.4	26	1.2	2.9	3.6	0	3.5	
47	322722089162002		4.9	0.9	88	2.3	2.3	12	0.1	28	

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
1	284803097295501	0									
2	284138097463201	5000									
3	302705088291502									560	
4	310510089000302		5000					2700		1000	
5	310749089345805										
6	310906089412404		3300					2800		100	
7	285906098520901										
8	285906098520901										
9	312555089430004		3100					940		10	
10	310856089333405										
11	310429089182204		3400					110		30	
12	351330090473202							0			
13	311516088585004		3200					230		460	
14	312451089184704		3200					360		70	
15	311928088595004		3300					30		30	
16	284351098385200										
17	283442099342301										
18	282031099370901		800								
19	281954099364301										
20	343714091342801							140			
21	300043097092402										
22	300043097092402							130			
23	300043097092402							1700			
24	285635098244800										
25	353839089493501		0								
26	335955091435001							40			
27	344203090411603									130	
28	330117093582001										
29	285836098284100										
30	285836098284100										
31	285836098284100		300								
32	295928097105201							260			
33	295935097104901							260			
34	351330090422201							0			
35	354437089315002										
36	354437089315001										
37	354437089315002										
38	353945089442001										
39	340100091390001							40			
40	314655088495001										
41	310010086191401										
42	334517093061501							10			
43	333350092465601							20			
44	362033088510001										
45	362033088510001										
46	350719089555900										
47	322722089162002										

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
1	284803097295501										
2	284138097463201										
3	302705088291502										
4	310510089000302			68000							
5	310749089345805										
6	310906089412404			3100							
7	285906098520901										
8	285906098520901										
9	312555089430004			500							
10	310856089333405										
11	310429089182204			8700							
12	351330090473202										
13	311516088585004			19000							
14	312451089184704			660							
15	311928088595004			860							
16	284351098385200										
17	283442099342301										
18	282031099370901										
19	281954099364301										
20	343714091342801							4000			
21	300043097092402										
22	300043097092402										
23	300043097092402										
24	285635098244800										
25	353839089493501										
26	335955091435001										
27	344203090411603										
28	330117093582001								0		
29	285836098284100										
30	285836098284100										
31	285836098284100										
32	295928097105201										
33	295935097104901										
34	351330090422201										
35	354437089315002										
36	354437089315001							400			
37	354437089315002							600			
38	353945089442001										
39	340100091390001										
40	314655088495001										
41	310010086191401										
42	334517093061501										
43	333350092465601										
44	362033088510001										
45	362033088510001							0			
46	350719089555900										
47	322722089162002										

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
1	284803097295501						
2	284138097463201						
3	302705088291502						
4	310510089000302				8.7	220	
5	310749089345805						
6	310906089412404				11	50	
7	285906098520901						
8	285906098520901						
9	312555089430004				0.68	4.5	
10	310856089333405						
11	310429089182204				2.2	40	
12	351330090473202						
13	311516088585004				3.8	36	
14	312451089184704				0.62	4	
15	311928088595004				0.92	11	
16	284351098385200						
17	283442099342301						
18	282031099370901						
19	281954099364301						
20	343714091342801						
21	300043097092402						
22	300043097092402						
23	300043097092402						
24	285635098244800						
25	353839089493501						
26	335955091435001						
27	344203090411603						
28	330117093582001						
29	285836098284100						
30	285836098284100						
31	285836098284100						
32	295928097105201						
33	295935097104901						
34	351330090422201						
35	354437089315002						
36	354437089315001						
37	354437089315002						
38	353945089442001						
39	340100091390001						
40	314655088495001						
41	310010086191401						
42	334517093061501						
43	333350092465601						
44	362033088510001						
45	362033088510001						
46	350719089555900						
47	322722089162002						

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
48	350020090471101	AR	124CLBR	530	161.5	60-07-28	18.5	414		6.8	71	230
49	333950092452801	AR	124CRVR	528	160.9	59-01-16	20.5	4360		8.2	2.6	210
50	352047089523000	TN	124CLBR	512	156.1	68-09-00		196		7.6		
51	352047089523000	TN	124CLBR	512	156.1	67-03-31		203		7.2	1.2	100
52	313316086233401	AL	125PRCK	508	154.8	64-07-16	21			8	1.4	74
53	330707093592401	AR	124CRVR	500	152.4	68-02-29	15	278		8	1.7	85
54	314210088184001	AL	124CLBR	500	152.4	66-07-19	21	719		7.5	23	366
55	330707093592401	AR	124CRVR	500	152.4	64-10-07		274		7.4		
56	332634093104001	AR	124CRVR	500	152.4	50-08-29	20	522		8.3	2.1	215
57	360733088590001	TN	124CLBR	500	152.4	51-07-24	15.5	130		6.8		
58	351546090335502	AR	124CLBR	491	149.7	57-08-15		194		7.3	10	103
59	332440093031701	AR	124CRVR	490	149.4	59-04-09		832		8.3	2.9	294
60	333550092473201	AR	124CRVR	485	147.8	59-04-07	21	2740		7.9	5.9	241
61	330952093472301	AR	124CRVR	483	147.2	68-03-08	18	658		7.6		
62	312828086240001	AL	125PRCK	480	146.3	64-07-14	21					
63	354015089342501	TN	124CLBR	480	146.3	51-07-23	18	200		6.6		
64	350912090014901	TN	124CLBR	477	145.4	65-06-17	18	123		7.4		
65	315758088434002	MS	124BSCC	472	143.9	67-11-30	21	510		7.7		
66	315758088434002	MS	124BSCC	472	143.9	67-03-29	21	1060		7.9		
67	340132091350201	AR	124CLBR	466	142.0	56-05-16	18	596		8.8	1	314
68	362031088505801	TN	124CLBR	465	141.7	51-08-23	16.5	46		6.2		
69	330530093390801	AR	124CRVR	460	140.2	68-02-29	20	1150		8.3	4	410
70	330530093390801	AR	124CRVR	460	140.2	64-10-06	22	1190		8.8		
71	325418091505302	LA	124CKMN	452	137.8	66-10-26						
72	325418091505302	LA	124CKMN	452	137.8	61-01-13	22	1970		7.8		
73	325738091383801	LA	124CKMN	450	137.2	64-02-05						
74	334033092440001	AR	124CRVR	450	137.2	59-01-16	19.5	2490		8.2		
75	313052087191001	AL	124CLBR	443	135.0	50-06-13				7.6	3.8	78
76	361320088371701	TN	124CLBR	425	129.5	66-11-15		128		6.5		
77	350540090061700	TN	124CLBR	415	126.5	85-09-11	18	183		6.4		89
78	350540090061700	TN	124CLBR	415	126.5	80-09-04	18	185		6.6		87
79	350540090061700	TN	124CLBR	415	126.5	84-08-27	18	162		6.6		88
80	350540090061700	TN	124CLBR	415	126.5	83-09-07	18	185				84
81	350540090061700	TN	124CLBR	415	126.5	81-09-22	18.5	200		6		
82	350540090061700	TN	124CLBR	415	126.5	79-09-18	18	189		6.4		
83	325826091370101	LA	124CKMN	410	125.0	63-09-17						
84	325826091370101	LA	124CKMN	410	125.0	55-04-26				7.7	0	555
85	361724088424101	TN	124CLBR	405	123.4	66-10-11	15.5	34		6.2		
86	312435096381401	TX	125MDWY	400	121.9	81-04-27	22.5	609		7.4		190
87	330025091594601	LA	124CKMN	400	121.9	66-10-26						
88	292348097461800	TX	124RKLW	393	119.8	63-03-13		221		5.9	177	72
89	330306093553701	AR	124CRVR	390	118.9	68-10-23	21	325		7.9		
90	324634091515502	LA	124CKMN	381	116.1	65-11-18	22	639		7.4	23	297
91	324634091515502	LA	124CKMN	381	116.1	65-11-00		660		8.3	3	303
92	332129093294502	AR	124CRVR	378	115.2	68-03-07		218		7.5	5.3	85
93	350615090480801	AR	124CLBR	378	115.2	61-08-04	18.5	515		7.6	14	282
94	332632093103801	AR	124CRVR	376	114.6	50-08-29	20	497		7.7	8.7	224
95	320924092593101	LA	124CRVR	372	113.4	74-08-16	22.5	1000		9		358
96	330334093490501	AR	124CRVR	370	112.8	68-10-25		386		8.5	0.9	141
97	333723092454301	AR	124CRVR	362	110.3	59-04-08	19	210		7.5	5.8	94

	STN NO.	HCO3	CO3	NH4(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
48	350020090471101	280	0		0.14	0.6				
49	333950092452801	260	0		0.43	1.9				
50	352047089523000	120	0							
51	352047089523000	120	0							
52	313316086233401	90	0							
53	330707093592401	100	0		0.47					
54	314210088184001	450	0							
55	330707093592401	98	0							
56	332634093104001	260	0		0.38					
57	360733088590001	81	0							
58	351546090335502	130	0		0.43	1.9				
59	332440093031701	350	4		0.05					
60	333550092473201	290	0		0.23	1				
61	330952093472301	370	0							
62	312828086240001									
63	354015089342501	120	0							
64	350912090014901	73	0							
65	315758088434002	290	0			0.1				
66	315758088434002	720	0			0				
67	340132091350201	350	16		1	4.5				
68	362031088505801	24	0							
69	330530093390801	490	4		0.05					
70	330530093390801	430	34							
71	325418091505302									
72	325418091505302	520	0						1	
73	325738091383801									
74	334033092440001		0		0.29	1.3				
75	313052087191001	94	0							
76	361320088371701	16	0							
77	350540090061700									
78	350540090061700						0.01			
79	350540090061700									
80	350540090061700									
81	350540090061700						0.15	<0.010		
82	350540090061700				0.06					
83	325826091370101									
84	325826091370101	490	67							
85	361724088424101	17	0							
86	312435096381401									
87	330025091594601									
88	292348097461800	44	22		0					
89	330306093553701	200	0							
90	324634091515502	360	0		0.16				0.1	
91	324634091515502	340	15		0.05					
92	332129093294502	100	0		0					
93	350615090480801	340	0		0.2	0.9				
94	332632093103801	270	0		0.07					
95	320924092593101	400	20			0.18				
96	330334093490501	160	4		0.36					
97	333723092454301	110	0		0.27	1.2				

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
48	350020090471101		58	20	10	1.2	7	7.2	0.2	15	
49	333950092452801		65	18	870	16	1400	31			
50	352047089523000		19	9.6	6.6	0.7	1.4	2.6	0.2	17	
51	352047089523000		18	10	6.9	0.7	1.6	3.2	0.3	20	
52	313316086233401						7.6				
53	330707093592401		15	3.8	36	5.2	8	37	0	14	
54	314210088184001						9.8				
55	330707093592401		12	4.5	35	5.5	5.6	37	0.2	15	
56	332634093104001						40	1			
57	360733088590001		13	4.7	10	0.6	2.5	2.8	0	10	
58	351546090335502		12	41	25	5.8	3.2	1.6		7.4	
59	332440093031701		6	1.7	190	4.2	110	0.2			
60	333550092473201		27	6	570	12	770	0.4			
61	330952093472301		2.3	0.4	160	2.3	38	0.6	0.6	11	
62	312828086240001						30				
63	354015089342501		17	11	8.7	3.4	4.8	3.7	0.1	13	
64	350912090014901		11	4.6	7.6	0.5	1	1.6	0.2	14	
65	315758088434002		4	0	120	2.1	6.2	30	0.1	20	
66	315758088434002		2.2	0.7	270	2.7	3.5	0.8	1.1	38	
67	340132091350201		3.7	0.4	150		8	1.2			
68	362031088505801		3.6	1.2	3.6	0.9	2	1.3	0	11	
69	330530093390801		7.1	1.1	270	2.7	140	0.6	1.1	9.2	
70	330530093390801		5.7	1.6	260	3.4	140	0	1	11	
71	325418091505302						470				
72	325418091505302		6.8	0.7	450	4.7	410	1.4	2.4	10	
73	325738091383801						400				
74	334033092440001		48	11	460	13	610	1.6			
75	313052087191001		45	5.6			7.1	2		35	
76	361320088371701		3.7	1.9	16	0.3	18	3.4	0.3	20	
77	350540090061700		18	8	8.1	0.8	3.1	2.9	0.1	9.8	<1
78	350540090061700	1.7	19	8.1	8.4	0.8	2.8	2.2	0.1	11	0
79	350540090061700		17	7.2	7.7	0.7	3	5.3	0.1	9.2	<1
80	350540090061700		18	7.7	8	0.8	2.9	3	0.1	10	3
81	350540090061700	0	18	7.2	7.7	0.7	3.1	2.8	0.1	9.3	2
82	350540090061700	0.5									
83	325826091370101						410				
84	325826091370101						480				
85	361724088424101		1.8	0.4	3.7	0.6	0.9	0.8	0	13	
86	312435096381401		45	9.9	67	2.3	69	22	0.4	35	
87	330025091594601						220		0.2		
88	292348097461800		19	3	20		28	24	0.1	18	
89	330306093553701		8	2.2	65	2.4	8.7	0.8	0.2	10	
90	324634091515502		7.2	3.9	140	2.7	28	0.2	0.7	11	
91	324634091515502		8	3		4	32	13	0.2		
92	332129093294502		15	2	28	3.8	12	7.4	0.3	13	
93	350615090480801		65	26	15	1.6	5.5	12	0.3	19	
94	332632093103801		10	2.8	110	4.8	34	0.7	0.1	11	
95	320924092593101		1.2	0.5	230	2.9	10	120	0.5	12	
96	330334093490501		5	0.9	68	1.3	6.3	17	0.3	9.7	
97	333723092454301		7.6	2.2	34	3.6	8	2.8			

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
48	350020090471101										
49	333950092452801							40			
50	352047089523000										
51	352047089523000										
52	313316086233401										
53	330707093592401							2500		20	
54	314210088184001										
55	330707093592401							1500		0	
56	332634093104001										
57	360733088590001										
58	351546090335502										
59	332440093031701							40			
60	333550092473201							40			
61	330952093472301							0		20	
62	312828086240001										
63	354015089342501										
64	350912090014901										
65	315758088434002										
66	315758088434002										
67	340132091350201							110			
68	362031088505801										
69	330530093390801							0		20	
70	330530093390801							160		0	
71	325418091505302										
72	325418091505302		860								
73	325738091383801										
74	334033092440001							0			
75	313052087191001										
76	361320088371701										
77	350540090061700	72		<1		<3	<10	700	1	11	
78	350540090061700	0		1			2	570	0	10	
79	350540090061700	98		<1		<3	<10	300	2	11	
80	350540090061700	78		<1			66	410	<1	11	
81	350540090061700	100		2			1	780	3	<10	
82	350540090061700										
83	325826091370101										
84	325826091370101										
85	361724088424101										
86	312435096381401							420			
87	330025091594601										
88	292348097461800										
89	330306093553701										
90	324634091515502							1100		0	
91	324634091515502							500		50	
92	332129093294502							390		50	
93	350615090480801							70		10	
94	332632093103801										
95	320924092593101							150			
96	330334093490501										
97	333723092454301							370			

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
48	350020090471101										
49	333950092452801										
50	352047089523000										
51	352047089523000										
52	313316086233401										
53	330707093592401							0	10		
54	314210088184001										
55	330707093592401										
56	332634093104001										
57	360733088590001							700			
58	351546090335502										
59	332440093031701										
60	333550092473201										
61	330952093472301							0	0		
62	312828086240001										
63	354015089342501							700			
64	350912090014901										
65	315758088434002										
66	315758088434002										
67	340132091350201										
68	362031088505801							700			
69	330530093390801							0	10		
70	330530093390801										
71	325418091505302										
72	325418091505302										
73	325738091383801										
74	334033092440001										
75	313052087191001										
76	361320088371701										
77	350540090061700					<3					
78	350540090061700	0	0			0				0	
79	350540090061700					4					
80	350540090061700	2	1			6				<1	
81	350540090061700	2	<1			30				<1	
82	350540090061700										
83	325826091370101										
84	325826091370101										
85	361724088424101										
86	312435096381401										
87	330025091594601										
88	292348097461800										
89	330306093553701								0		
90	324634091515502										
91	324634091515502										
92	332129093294502							0	0		
93	350615090480801										
94	332632093103801							500			
95	320924092593101										
96	330334093490501								0		
97	333723092454301										

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
48	350020090471101						
49	333950092452801						
50	352047089523000						
51	352047089523000						
52	313316086233401						
53	330707093592401						
54	314210088184001						
55	330707093592401						
56	332634093104001						
57	360733088590001						
58	351546090335502						
59	332440093031701						
60	333550092473201						
61	330952093472301						
62	312828086240001						
63	354015089342501						
64	350912090014901						
65	315758088434002						
66	315758088434002						
67	340132091350201						
68	362031088505801						
69	330530093390801						
70	330530093390801						
71	325418091505302						
72	325418091505302						
73	325738091383801						
74	334033092440001						
75	313052087191001						
76	361320088371701						
77	350540090061700						
78	350540090061700						
79	350540090061700						
80	350540090061700						
81	350540090061700						
82	350540090061700						
83	325826091370101						
84	325826091370101						
85	361724088424101						
86	312435096381401						
87	330025091594601						
88	292348097461800						
89	330306093553701						
90	324634091515502						
91	324634091515502						
92	332129093294502						
93	350615090480801						
94	332632093103801						
95	320924092593101						
96	330334093490501						
97	333723092454301						

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
98	350950090434801	AR	124CLBR	361	110.0	61-10-19		436		7.2	29	235
99	331317093472601	AR	124CRVR	350	106.7	64-10-06	20	246		7.9	2.9	119
100	331858093394801	AR	124CRVR	350	106.7	64-10-06		682		7.8		
101	350342090073101	TN	124CLBR	348	106.1	58-12-12	16.5	142		7.7		
102	334119093012601	AR	124CRVR	346	105.5	58-08-21		261		7.6	6	122
103	330017093533201	LA	124CRVR	345	105.2	73-07-31	21	243		8.4	0.8	106
104	330017093533201	LA	124CRVR	345	105.2	73-08-01	21	243		6.9	26	106
105	330017093533201	LA	124CRVR	345	105.2	73-07-31	21	243		8.4	0.8	106
106	355022089244101	TN	124CCKFJ	345	105.2	82-08-05	17.5	249		6.5		
107	313716086252401	AL	125PRCK	342	104.2	64-07-20	23					
108	313728086284001	AL	125PRCK	341	103.9	64-06-17	21					
109	360919088475801	TN	124CLBR	340	103.6	58-06-23	15.5	41		5.9		
110	360919088475801	TN	124CLBR	340	103.6	66-10-11		58		6.2		
111	360919088475801	TN	124CLBR	340	103.6	58-03-23	15.5	41		5.9		
112	361355088375501	TN	124CLBR	340	103.6	66-11-15		24		6.6		
113	351202090462701	AR	124CLBR	336	102.4	61-09-20		437		7.9	6.2	251
114	350732090053203	AR	124CLBR	335	102.1	64-06-18	16.5	149		6.5	40	65
115	325121091522202	LA	124CKMN	334	101.8	66-01-27	21	837		7.9		
116	320924092593103	LA	124CRVR	325	99.1	84-08-31	23	956		8.7		390
117	325214091393601	LA	124CKMN	320	97.5	63-09-17						
118	324352091531003	LA	124CKMN	312	95.1	68-08-08	20.5	821		8.2		
119	312456096323501	TX	125MDWY	310	94.5	81-12-05	21	725		7.1		150
120	332337093513501	AR	124CRVR	310	94.5	64-10-07		49		6.6	7.2	15
121	324059091502401	LA	124CKMN	300	91.4	64-02-07						
122	325816092224301	LA	124CKMN	300	91.4	69-08-07						
123	330226093481001	AR	124CRVR	300	91.4	68-10-25		399		8.6	0.9	181
124	332129093392701	AR	124CRVR	300	91.4	68-02-29	16	480		7.6		
125	332153093275501	AR	124CRVR	300	91.4	52-07-07		129		7.4		
126	361533090175702	AR	124CLBR	298	90.8	56-06-19	23.5	213		7.1	16	100
127	313220086192401	AL	125PRCK	290	88.4	64-07-06				7.4	16	210
128	345947089472601	TN	124CLBR	290	88.4	62-08-17	17	151		6.2		
129	354308089331101	TN	124CCKFJ	289	88.1	82-08-11	17	320		6.6		180
130	332746093283201	AR	124CLBR	287	87.5	67-04-04		167		7.1	0.9	6
131	332746093283201	AR	124CLBR	287	87.5	66-12-28		153		7.3	5.2	53
132	355126089241501	TN	124CCKFJ	285	86.9	82-08-06	17	315		6.4		
133	330549093055401	AR	124CKMN	280	85.3	50-08-29	21.5	429		8.3	1.7	172
134	312759096324201	TX	125MDWY	275	83.8	81-04-24	23.5	6560		7.8		310
135	354645089304501	TN	124CCKFJ	272	82.9	82-08-11	16.5	370		6.8		220
136	313342086183001	AL	125PRCK	270	82.3	64-07-06				7.4	18	226
137	313452086151601	AL	125PRCK	270	82.3	64-08-11	20					
138	350234089394502	TN	124CLBR	267	81.4	62-07-27	17	59		6.1		
139	350234089394502	TN	124CLBR	267	81.4	64-05-01	17	33		6.2		
140	314755095175600	TX	124RKLW	267	81.4	57-04-19		1220		8	7	359
141	350234089394502	TN	124CLBR	267	81.4	51-06-08	16.5	50		5.9		
142	351406088380201	TN	124CLBR	260	79.2	66-11-15		26		6.8		
143	361358088492902	TN	124CLBR	260	79.2	66-10-11	15.5	38		6.4		
144	323300091572601	LA	124CKMN	256	78.0	65-02-12	20.5					
145	361358088492901	TN	124CLBR	255	77.7	52-07-08	16	39		6.1		
146	354941090421101	AR	124CLBR	254	77.4	50-05-03	16	230		7	15	79
147	313830086233401	AL	125PRCK	252	76.8	64-07-20	24					

	STN NO.	HCO3	CO3	NH4(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
98	350950090434801	290	0		0.02	0.09				
99	331317093472601	140	0		0.14					
100	331858093394801	280	0							
101	350342090073101	87	0						0.1	
102	334119093012601	150	0			1				
103	330017093533201	130	0			0.2				
104	330017093533201	130	0			0.2				
105	330017093533201	130	0			0.2				
106	355022089244101						<0.10	<0.01		
107	313716086252401									
108	313728086284001									
109	360919088475801	20	0			0.2			0	
110	360919088475801	20	0							
111	360919088475801	20	0						0	
112	361355088375501	9	0							
113	351202090462701	310	0		0.79	3.5				
114	350732090053203	79	0		0.25	1.1				
115	325121091522202	320	1							
116	320924092593103									
117	325214091393601									
118	324352091531003	400	0							
119	312456096323501									
120	332337093513501	18	0		0					
121	324059091502401									
122	325816092224301									
123	330226093481001	200	8		0.43					
124	332129093392701	240	0							
125	332153093275501	70	0							
126	361533090175702	120	0		0.09	0.4				
127	313220086192401	260	0							
128	345947089472601	39	0							
129	354308089331101						0.35	0.02		
130	332746093283201	7	0		0					
131	332746093283201	65	0		0					
132	355126089241501						<0.10	<0.01		
133	330549093055401	210	0		0.56					
134	312759096324201									
135	354645089304501									
136	313342086183001	280	0							
137	313452086151601									
138	350234089394502	20	0							
139	350234089394502	17	0							
140	314755095175600	220	110							
141	350234089394502	17	0							
142	351406088380201	14	0							
143	361358088492902	21	0							
144	323300091572601									
145	361358088492901	21	0							
146	354941090421101	96	0		0.18	0.8				
147	313830086233401									

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
98	350950090434801		58	20	9.6	3.3	7.2	6.4			
99	331317093472601		1.2	0.4	54	1.4	3.7	0.2	0.3	11	
100	331858093394801		5.9	1.5	140	3.1	63	0.2	0.4	13	
101	350342090073101		12	5.8	8.2	1.3	3.5	1.3	0	9.5	
102	334119093012601		4	1.2	52	3.2	5.8	3.8			
103	330017093533201		1	0.6	55	1.4	8	14	<0.1	13	
104	330017093533201		1	0.6	55	1.4	8	14	<0.1	13	
105	330017093533201		1	0.6	55	1.4	8	14	<0.1	13	
106	355022089244101	0.6	23	11	8.3	4	2.4	<1.0	0.1	17	1
107	313716086252401						5				
108	313728086284001						5.2				
109	360919088475801		2.9	1	4.1	0.5	3.3	1.6	0.1	13	
110	360919088475801		5	0.4	5.1	0.6	2.7	2.8	0.1	14	
111	360919088475801		2.9	1	4.1	0.5	3.3	1.6	0.1	13	
112	361355088375501		1	0.5	2.5	0.4	0.7	0.8	0.1	13	
113	351202090462701		54	26	8.8	2.1	2	7.2			
114	350732090053203		12	6.6	7.9	0.8	4	6.8	0	11	
115	325121091522202		17	3.1	170	3.1	110	0.2	0.4	10	
116	320924092593103		2.4	0.43	210	1	9.5	100	0.5	12	1
117	325214091393601						390				
118	324352091531003		20	9.2	160	1.1	69	1	0.4	13	
119	312456096323501		44	9.2	98	2.7	95	81	0.2	45	
120	332337093513501		2.5	2.3	1.8	1.3	2.6	3	0	28	
121	324059091502401						220				
122	325816092224301						24				
123	330226093481001		6	1.2	86	1.4	7.8	21	0.2	9.7	
124	332129093392701		3.4	0.6	110	1.9	34	1.6	0.4	11	
125	332153093275501						4.2	6			
126	361533090175702		4.1	0.7	45	1.5	9.2	2.6	0.1	9.2	
127	313220086192401						5.2				
128	345947089472601		8.6	4.2	16	1	22	6.8	0	7.8	
129	354308089331101	0.2	34	18	7.1	0.2	2.2	4	0.2	25	1
130	332746093283201		18		6.4	3.6	3	25		29	
131	332746093283201		15		6	3.4	3.4	19		31	
132	355126089241501	0.4	34	16	9.8	1.3	3.5	2	0.2	20	1
133	330549093055401						21	23			
134	312759096324201		19	6	1400	5.3	2100	7	1.5	11	
135	354645089304501	0.4	41	20	6.2	2.4	2.4	4	0.2	20	1
136	313342086183001						5.4				
137	313452086151601						5				
138	350234089394502		4.3	0.7	6.9	0.6	5.5	3.6	0	8.8	
139	350234089394502		2	1	3.9	0.4	3	0.6	0	16	
140	314755095175600				210		41	370	0.6		
141	350234089394502		2.8	0.8	6	0.6	5	1.7	0	9.9	
142	351406088380201		1.4	0.5	2.5	0.5	0.7	0.4	0.4	13	
143	361358088492902		4.4	0.5	2.2	0.9	0.6	1	0	14	
144	323300091572601						180				
145	361358088492901		3.5	1.2	2.4	1.2	1.8	1.2	0.1	11	
146	354941090421101		19	9.4	13	2.9	13	15	0	26	
147	313830086233401						4				

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
98	350950090434801									20	
99	331317093472601							50		0	
100	331858093394801							70		0	
101	350342090073101										
102	334119093012601							390			
103	330017093533201										
104	330017093533201							540			
105	330017093533201							540		30	
106	355022089244101			<1	20		2	16000	7	320	
107	313716086252401										
108	313728086284001										
109	360919088475801							90		0	
110	360919088475801										
111	360919088475801										
112	361355088375501										
113	351202090462701									20	
114	350732090053203									40	
115	325121091522202							830			
116	320924092593103	66				1	2	56	9	12	1
117	325214091393601										
118	324352091531003							20			
119	312456096323501							<10			
120	332337093513501							300		50	
121	324059091502401										
122	325816092224301										
123	330226093481001										
124	332129093392701							90		0	
125	332153093275501										
126	361533090175702										
127	313220086192401										
128	345947089472601										
129	354308089331101			<1	10		2	16	<1	5	
130	332746093283201										
131	332746093283201										
132	355126089241501			1	10		3	1400	4	47	
133	330549093055401										
134	312759096324201										
135	354645089304501			<1	10		2	8300	7	140	
136	313342086183001										
137	313452086151601										
138	350234089394502										
139	350234089394502										
140	314755095175600										
141	350234089394502										
142	351406088380201										
143	361358088492902										
144	323300091572601										
145	361358088492901										
146	354941090421101							20			
147	313830086233401										

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
98	350950090434801										
99	331317093472601										
100	331858093394801										
101	350342090073101							0			
102	334119093012601										
103	330017093533201										
104	330017093533201										
105	330017093533201										
106	355022089244101					20				<1	
107	313716086252401										
108	313728086284001										
109	360919088475801							0	0		
110	360919088475801										
111	360919088475801							0			
112	361355088375501										
113	351202090462701										
114	350732090053203										
115	325121091522202										
116	320924092593103	1	<1			430		40	8	<1	
117	325214091393601										
118	324352091531003										
119	312456096323501										
120	332337093513501										
121	324059091502401										
122	325816092224301										
123	330226093481001								0		
124	332129093392701							0	10		
125	332153093275501										
126	361533090175702										
127	313220086192401										
128	345947089472601										
129	354308089331101					40				<1	
130	332746093283201										
131	332746093283201										
132	355126089241501					10				<1	
133	330549093055401										
134	312759096324201										
135	354645089304501					20				<1	
136	313342086183001										
137	313452086151601										
138	350234089394502										
139	350234089394502										
140	314755095175600										
141	350234089394502							10			
142	351406088380201					30					
143	361358088492902										
144	323300091572601										
145	361358088492901							200			
146	354941090421101							3500			
147	313830086233401										

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
98	350950090434801						
99	331317093472601						
100	331858093394801						
101	350342090073101						
102	334119093012601						
103	330017093533201						
104	330017093533201						
105	330017093533201						
106	355022089244101			<0.1			
107	313716086252401						
108	313728086284001						
109	360919088475801						
110	360919088475801						
111	360919088475801						
112	361355088375501						
113	351202090462701						
114	350732090053203						
115	325121091522202						
116	320924092593103			<0.1			0.16
117	325214091393601						
118	324352091531003						
119	312456096323501						
120	332337093513501						
121	324059091502401						
122	325816092224301						
123	330226093481001						
124	332129093392701						
125	332153093275501						
126	361533090175702						
127	313220086192401						
128	345947089472601						
129	354308089331101						
130	332746093283201						
131	332746093283201						
132	355126089241501			0.1			
133	330549093055401						
134	312759096324201						
135	354645089304501			<0.1			
136	313342086183001						
137	313452086151601						
138	350234089394502						
139	350234089394502						
140	314755095175600						
141	350234089394502						
142	351406088380201						
143	361358088492902						
144	323300091572601						
145	361358088492901						
146	354941090421101						
147	313830086233401						

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
148	320910092051501	LA	124CKMN	250	76.2	65-08-31	21.5				0.7	
149	335620092505401	AR	124CRVR	250	76.2	79-07-16	22	1410		8	4	207
150	323232091574401	LA	124CKMN	248	75.6	64-10-15						
151	344215092200801	AR	125MDWY	245	74.7	51-09-11		153		7.5	1.8	30
152	325937093535401	LA	124CRVR	243	74.1	73-08-07	20.5	259		8	31	125
153	323148091592701	LA	124CKMN	241	73.5	65-06-24	23.5	1650				
154	323148091592701	LA	124CKMN	241	73.5	65-06-14		1900				
155	323148091592701	LA	124CKMN	241	73.5	65-06-12						
156	313028087314001	AL	124CLBR	240	73.2	67-07-26		360		8.2	2.2	176
157	331250093080801	AR	124CKMN	238	72.5	50-08-29	20	300		7.7	6.2	158
158	313506086271601	AL	125PRCK	235	71.6	64-07-16						
159	354956090425001	AR	124CLBR	235	71.6	50-05-03	15.5	165		6.7	20	52
160	325643092284901	LA	124CKMN	233	71.0	69-01-08		426		8.4	1.7	225
161	325643092284901	LA	124CKMN	233	71.0	68-09-11						
162	313704086204001	AL	125PRCK	231	70.4	64-07-20	23					
163	322354092043602	LA	124CKMN	231	70.4	65-08-16	23.5	1120				
164	300211097114201	TX	124RKLW	230	70.1	52-11-11		1190		8.6	2.2	453
165	362024089094001	TN	124CCKFJ	230	70.1	84-10-11	16	362		6.6		199
166	325456093400502	LA	124CKMN	226	68.9	77-03-11				7.8		
167	361708088422001	TN	124CLBR	222	67.7	51-08-23	15.5	44		5.9		
168	323936092582401	LA	124CKMN	220	67.1	63-06-20						
169	350658089131001	TN	124CLBR	211	64.3	51-06-14	16.5	28		5.9		
170	322233092031401	LA	124CKMN	210	64.0	66-06-16		912		8		407
171	330009093533901	LA	124CRVR	210	64.0	59-08-06	21.5	250		7.5	6.5	105
172	313450086154601	AL	125PRCK	210	64.0	65-07-21				7.4		
173	333220093142001	AR	124CRVR	210	64.0	68-03-07		230		7		
174	313450086154601	AL	125PRCK	210	64.0	64-06-01	20			7.8	3.9	126
175	313732086193801	AL	125PRCK	210	64.0	64-07-20	21			7.6	11	220
176	322233092031401	LA	124CKMN	210	64.0	63-10-11						
177	330009093533901	LA	124CRVR	210	64.0	59-08-06	21.5	250		7.5	6.5	105
178	330318092022501	AR	124JCKS	210	64.0	59-08-14	20	734		7.9	5.5	223
179	333220093142001	AR	124CRVR	210	64.0	64-10-08	19	221		7.4		
180	333820092020601	AR	124JCKS	210	64.0	59-08-14	20	734		7.9	5.5	223
181	361411089194801	TN	124CCKFJ	210	64.0	60-04-28	15.5	252		6.8		
182	312749093272401	LA	124CKMN	206	62.8	64-09-03						
183	293826097311600	TX	124RKLW	205	62.5	63-04-17		543		7	47	243
184	325931092114001	LA	124CKMN	204	62.2	68-12-16		712		8.1	4.8	308
185	314408086111801	AL	125PRCK	202	61.6	64-07-30	23.5					
186	325229092154401	LA	124CKMN	202	61.6	69-01-09		369		8.1	3	192
187	293906097302000	TX	124RKLW	200	61.0	63-04-17		949		7	86	443
188	300846097290001	TX	125MDWY	200	61.0	66-08-03		1160		6.8	80	259
189	343013092375701	AR	125MDWY	200	61.0	63-03-14	16	415				179
190	323921092191102	LA	124CKMN	198	60.4	72-09-15	21	241		6.8		
191	312518093402803	LA	124CRVR	197	60.0	71-04-30						
192	312518093402803	LA	124CRVR	197	60.0	70-11-18						
193	312518093402801	LA	124CRVR	196	59.7	70-03-25	20.5	717		7.4		
194	355229089234001	TN	124CCKFJ	196	59.7	83-02-02	17.5	235		6.7		140
195	313412086195901	AL	125PRCK	195	59.4	64-07-06				7.9	5.1	206
196	355612089345001	TN	124CLBR	193	58.8	60-04-28	15.5	507		7.4		
197	313404086135601	AL	125PRCK	192	58.5	64-07-03				7.4	17	214

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
148	320910092051501									
149	335620092505401	250	0	0.59	0	0		0.32	0.83	
150	323232091574401									
151	344215092200801	36	0		1.1	4.7				
152	325937093535401	150	0			0.2				
153	323148091592701									
154	323148091592701									
155	323148091592701									
156	313028087314001	210	0							
157	331250093080801	190	0		0.27					
158	313506086271601									
159	354956090425001	64	0		1.9	8.6				
160	325643092284901	270	3			2.1				
161	325643092284901									
162	313704086204001									
163	322354092043602									
164	300211097114201	550			0					
165	362024089094001									
166	325456093400502									
167	361708088422001	23	0			0.5				
168	323936092582401									
169	350658089131001	10	0						2.5	
170	322233092031401	500	0							
171	330009093533901	130	0			1.4				
172	313450086154601									
173	333220093142001	140	0			0.5				
174	313450086154601	150	0							
175	313732086193801	270	0							
176	322233092031401									
177	330009093533901	130	0		0.32				0.3	
178	330318092022501	270	0		0.86					
179	333220093142001	130	0			0				
180	333820092020601	270	0		0.86	3.8				
181	361411089194801	270	0							
182	312749093272401									
183	293826097311600	150	73		0	2.2				
184	325931092114001	380	0			0.7				
185	314408086111801									
186	325229092154401	230	0			3				
187	293906097302000	270	130		0	0				
188	300846097290001	320			0	0				
189	343013092375701	220	0			0				
190	323921092191102	120	0		0.02	0.1				
191	312518093402803									
192	312518093402803									
193	312518093402801	280	0			0				
194	355229089234001									
195	313412086195901	250	0							
196	355612089345001	360	0							
197	313404086135601	260	0							

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
148	320910092051501						38				
149	335620092505401		4.3	0.7	290	2.5	310	1.8	0.8	13	
150	323232091574401						180				
151	344215092200801						12	18			
152	325937093535401		2	1.5	60	1.7	4.4	17	<0.1	13	
153	323148091592701										
154	323148091592701										
155	323148091592701						130				
156	313028087314001						2.2				
157	331250093080801		14	2.7	55	2.2	4	6.7	0.1	15	
158	313506086271601						5.6				
159	354956090425001		12	4	11	1.4	9.5	3.6	0	32	
160	325643092284901		3	0.9	100	1.9	5.1	0.2	0.3	9.3	
161	325643092284901						10				
162	313704086204001						3.2				
163	322354092043602						20				
164	300211097114201		5.6	3.8	270	4.2	120	1		12	
165	362024089094001		36	15	12	5.2	4.6	5.9	0.2	14	1
166	325456093400502						<10	9			
167	361708088422001		4.5	1.5	2.8	0.6	1.8	1.9	0	11	
168	323936092582401						8				
169	350658089131001		1.8	0.6	2.4	0.6	2	0.7	0	11	
170	322233092031401		1.5	0.6	220	2.3	55	0.2	1.6	13	
171	330009093533901		21	6	24	2.9	13	9.6	0.1	12	
172	313450086154601						5				
173	333220093142001		11	0.9	41	2.6	3.4	3.6	0.3	11	
174	313450086154601						4.4				
175	313732086193801						7				
176	322233092031401						60				
177	330009093533901		21	6	24	2.9	13	9.6	0.1	12	
178	330318092022501		14	3.9		6	9.8	150			
179	333220093142001				41	2	1.5	3.4	0.1	10	
180	333820092020601		14	3.9	150	6	9.8	150			
181	361411089194801		16	11			4	4.5			
182	312749093272401						38				
183	293826097311600		68	8	32		46	81	0.2	28	
184	325931092114001		7	1.1	170	2.3	57	0.6	0.6	8.9	
185	314408086111801						4				
186	325229092154401		6.3	1	86	1.9	10	0.2	0.2	9.8	
187	293906097302000		79	36	72		100	130	0.6	26	
188	300846097290001		130	22	69	3.4	170	78	0.4	49	
189	343013092375701		16	4.1	70	3.6	29	1.2	0.5	8.9	
190	323921092191102		11	4	34	2.2	5.4	15	0.1	20	
191	312518093402803						42				
192	312518093402803						35				
193	312518093402801		55	18	72	7.2	35	98	0.2	43	
194	355229089234001	0.4	28	14	8.7	1.7				17	1
195	313412086195901						4.4				
196	355612089345001		74	17			3	0.3			
197	313404086135601						4.8				

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
148	320910092051501										
149	335620092505401							80	<10	4	
150	323232091574401										
151	344215092200801							120			
152	325937093535401							40		<10	
153	323148091592701										
154	323148091592701										
155	323148091592701										
156	313028087314001										
157	331250093080801										
158	313506086271601										
159	354956090425001							10			
160	325643092284901							90		30	
161	325643092284901										
162	313704086204001										
163	322354092043602										
164	300211097114201		420								
165	362024089094001	700		<1	10	<3	<10	12000	9	300	
166	325456093400502							200			
167	361708088422001							10			
168	323936092582401										
169	350658089131001										
170	322233092031401							310			
171	330009093533901										
172	313450086154601										
173	333220093142001										
174	313450086154601										
175	313732086193801										
176	322233092031401										
177	330009093533901		90								
178	330318092022501							0			
179	333220093142001										
180	333820092020601										
181	361411089194801										
182	312749093272401										
183	293826097311600										
184	325931092114001							80		70	
185	314408086111801										
186	325229092154401							70		10	
187	293906097302000										
188	300846097290001							76000			
189	343013092375701							70		50	
190	323921092191102							1800		70	
191	312518093402803										
192	312518093402803										
193	312518093402801							1400		300	
194	355229089234001			5	10		7	490	3	72	
195	313412086195901										
196	355612089345001										
197	313404086135601										

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
148	320910092051501										
149	335620092505401					<20				<1	
150	323232091574401										
151	344215092200801										
152	325937093535401										
153	323148091592701										
154	323148091592701										
155	323148091592701										
156	313028087314001										
157	331250093080801							600			
158	313506086271601										
159	354956090425001							3100			
160	325643092284901										
161	325643092284901										
162	313704086204001										
163	322354092043602										
164	300211097114201										
165	362024089094001					<3					
166	325456093400502										
167	361708088422001							0			
168	323936092582401										
169	350658089131001							300			
170	322233092031401										
171	330009093533901										
172	313450086154601										
173	333220093142001							0			
174	313450086154601										
175	313732086193801										
176	322233092031401										
177	330009093533901										
178	330318092022501										
179	333220093142001										
180	333820092020601										
181	361411089194801										
182	312749093272401										
183	293826097311600										
184	325931092114001										
185	314408086111801										
186	325229092154401										
187	293906097302000										
188	300846097290001										
189	343013092375701										
190	323921092191102										
191	312518093402803										
192	312518093402803										
193	312518093402801										
194	355229089234001					10				<1	
195	313412086195901										
196	355612089345001										
197	313404086135601										

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
148	320910092051501						
149	335620092505401			0.4			
150	323232091574401						
151	344215092200801						
152	325937093535401						
153	323148091592701						
154	323148091592701						
155	323148091592701						
156	313028087314001						
157	331250093080801						
158	313506086271601						
159	354956090425001						
160	325643092284901						
161	325643092284901						
162	313704086204001						
163	322354092043602						
164	300211097114201						
165	362024089094001			<0.1			
166	325456093400502						
167	361708088422001						
168	323936092582401						
169	350658089131001						
170	322233092031401						
171	330009093533901						
172	313450086154601						
173	333220093142001						
174	313450086154601						
175	313732086193801						
176	322233092031401						
177	330009093533901						
178	330318092022501						
179	333220093142001						
180	333820092020601						
181	361411089194801						
182	312749093272401						
183	293826097311600						
184	325931092114001						
185	314408086111801						
186	325229092154401						
187	293906097302000						
188	300846097290001						
189	343013092375701						
190	323921092191102						
191	312518093402803						
192	312518093402803						
193	312518093402801						
194	355229089234001			<0.1			
195	313412086195901						
196	355612089345001						
197	313404086135601						

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
198	314050087255601	AL	124CLBR	190	57.9	67-08-08		68		6.7	5.7	15
199	333634092064201	AR	124JCKS	190	57.9	59-08-19	21	403		8	3.4	174
200	313241096355501	TX	125MDWY	188	57.3	81-04-24	22	831		7.7		340
201	324129092212001	LA	124CKMN	186	56.7	69-01-07		376		7.7	7.6	195
202	324129092212001	LA	124CKMN	186	56.7	64-03-18						
203	314026086142001	AL	125PRCK	185	56.4	64-07-23				8.1	2.1	135
204	355225089233801	TN	124CLBR	185	56.4	51-07-23	17	229		7.4		
205	355045089315001	TN	124CCKFJ	181	55.2	82-08-10	16.5	480		7.1		280
206	361216089112802	TN	124CCKFJ	181	55.2	84-10-11	16.5	385		6.4		126
207	323105092374802	LA	124CKMN	180	54.9	70-09-04		408				
208	325556092391901	LA	124CKMN	180	54.9	68-11-07		518		8.1	3.9	254
209	361215089112501	TN	124CLBR	180	54.9	52-07-09	16	170		7		
210	313840096333201	TX	125KNCD	177	53.9	81-04-25	21	701		7.1		350
211	292838097434200	TX	124RKLW	176	53.6	63-04-18		960		6.2	278	226
212	292901097423700	TX	124RKLW	172	52.4	63-04-18		1710		6.8	120	387
213	311652086474001	AL	124YZOO	170	51.8	65-09-03		297		7.4	10	132
214	311652086474001	AL	124YZOO	170	51.8	65-06-07	20.5			7.7	5.1	131
215	314424086255201	AL	125PRCK	170	51.8	64-07-09	21.5			7.6	9.4	193
216	335741091481601	AR	124JCKS	170	51.8	56-10-17		1260		7.8	6.9	223
217	360651089155601	TN	124CLBR	170	51.8	52-07-09	16	237		6.4		
218	351942089085001	TN	124CLBR	168	51.2	51-06-11		216		5.7		
219	360952089215101	TN	124CLBR	168	51.2	55-04-29	17	344		6.5		
220	354229089051701	TN	124CLBR	165	50.3	51-07-24	16	49		6.6		
221	313618086123001	AL	125PRCK	160	48.8	64-07-01						
222	360035088275801	TN	125MDWY	160	48.8	53-01-13	16	97		6.5		
223	314202086163001	AL	125PRCK	155	47.2	64-07-21	24					
224	341718092441501	AR	124CRVR	153	46.6	64-06-17	18	41		4.7	32	1
225	340210091593001	AR	124JCKS	150	45.7	66-11-30		1420		7.9		
226	314329093062801	LA	124CRVR	149	45.4	77-04-05		839				430
227	335735091533701	AR	124JCKS	147	44.8	56-05-16	19	476		6.5	32	52
228	360657089153101	TN	124CCKFJ	144	43.9	84-10-12	16	198		6.1		55
229	323903093012401	LA	124CKMN	140	42.7	62-10-26						
230	324140092015001	LA	124CKMN	140	42.7	64-08-14						
231	324224092001801	LA	124CKMN	140	42.7	64-08-13						
232	350900089353001	TN	124CLBR	140	42.7	60-05-05	16.5	312		7		
233	323627092030501	LA	124CKMN	132	40.2	64-09-03						
234	355037090422701	AR	124CLBR	132	40.2	50-05-03	16	217				51
235	333809092020201	AR	124JCKS	130	39.6	59-08-14	21.5	676		7.3	21	212
236	354652089065002	TN	124CLBR	128	39.0	51-07-24	17	202		6.2		
237	354652089070601	TN	124CLBR	128	39.0	51-07-24	16	331		6.1		
238	321938092484901	LA	124CKMN	126	38.4	62-10-24						
239	355758089201001	TN	124CCKFJ	125	38.1	84-12-11	16	140		6.1		46
240	361252088364701	TN	124CLBR	125	38.1	53-08-21	16.5	154				
241	315436092424301	LA	124CRVR	123	37.5	78-11-13	19.5	129		6.4	38	48
242	294925097222200	TX	124RKLW	120	36.6	64-01-14				6.1	122	79
243	320835093052201	LA	124CRVR	116	35.4	72-05-01		1840		7.7		
244	340633092492901	AR	124CRVR	115	35.1	63-06-27	18	35		7.3		
245	351630089013901	TN	124CLBR	114	34.7	58-05-16	16.5	47		6.3		
246	333216093243501	AR	124CRVR	111	33.8	64-10-07	18	44		6		
247	314006086160801	AL	125PRCK	110	33.5	64-07-21	20.5					

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
198	314050087255601	18	0							
199	333634092064201	210	0			0.8				
200	313241096355501									
201	324129092212001	240	0			2				
202	324129092212001									
203	314026086142001	170	0							
204	355225089233801	140	0							
205	355045089315001						2.1	<0.01		
206	361216089112802									
207	323105092374802	230	0			0				
208	325556092391901	310	0		0					
209	361215089112501	86	0							
210	313840096333201									
211	292838097434200	140	68		1.2	0				
212	292901097423700	240	120		0.5	5.3				
213	311652086474001	160	0		1.11					
214	311652086474001	160	0							
215	314424086255201	240	0							
216	335741091481601	270	0		1.2	5.3				
217	360651089155601	92	0							
218	351942089085001	12	0							
219	360952089215101	210	0							
220	354229089051701	24	0							
221	313618086123001									
222	360035088275801	51	0							
223	314202086163001									
224	341718092441501	0	0		0	0				
225	340210091593001	300	0			3				
226	314329093062801	520	0			0.24				
227	335735091533701	64	0		0.09	0.4				
228	360657089153101									
229	323903093012401									
230	324140092015001									
231	324224092001801									
232	350900089353001	110	0							
233	323627092030501									
234	355037090422701	62	0		0.63	2.8				
235	333809092020201	260	0		0.68	3				
236	354652089065002	49	0							
237	354652089070601	53	0			44				
238	321938092484901									
239	355758089201001									
240	361252088364701	22	0							
241	315436092424301	59	0			0.15				
242	294925097222200	48	24		0.2	8				
243	320835093052201	240	0		0	0				
244	340633092492901	14	0			0				
245	351630089013901	13	0							0.8
246	333216093243501	4	0							
247	314006086160801									

STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
198 314050087255601						1.8				
199 333634092064201		45	9.8	29	5.5	13	32			
200 313241096355501		18	5.8	170	2.4	67	16	0.2	19	
201 324129092212001		8.9	1.4	80	1.9	3.8	6.4	0.3	13	
202 324129092212001						8				
203 314026086142001						6.4				
204 355225089233801		24	12	7.9	1.4	1.8	5.9	0	19	
205 355045089315001	0.7	54	28	6.7	0.4	5	2	0.3	18	1
206 361216089112802		33	16	23	0.9	20	31	<0.1	21	<1
207 323105092374802		8.4	3.6	78	5.1	4	20	0.2	14	
208 325556092391901		8.2	1.1	120	1.7	17	0	0.3	11	
209 361215089112501		16	7.5	9.6	1.2	6.2	2.6	0.1	20	
210 313840096333201		55	11	98	2.9	30	0.8	0.3	25	
211 292838097434200		82	24	76		170	100	0.4	16	
212 292901097423700		180	55	110		320	250	0.4	17	
213 311652086474001		52	3.7	2.8	0.3	6.8	1.6	0	1.6	
214 311652086474001						5				
215 314424086255201						7				
216 335741091481601		18	3.5	260		34	330			
217 360651089155601		22	11	10	1	11	17	0.1	33	
218 351942089085001		9	3.2	26	4.8	40	17	0	20	
219 360952089215101		29	17	10	5.8	1.5	10	0	22	
220 354229089051701		3.4	0.9	5.8	0.2	3.5	0.9	0	15	
221 313618086123001						6				
222 360035088275801		9.4	5.2	5.2	2.8	1.8	13	0.2	25	
223 314202086163001						7				
224 341718092441501		1.9	0.5	1.2	0.8	2.5	8.4		16	
225 340210091593001		61	20	230	11	55	410	0.1	23	
226 314329093062801		5.8	0.4	200	2	12	11	0.4	16	
227 335735091533701		44	20	20		9	170			
228 360657089153101		16	7.6	11	0.6	9.8	17	<0.1	43	<1
229 323903093012401						16				
230 324140092015001						24				
231 324224092001801						38				
232 350900089353001		16	9.4			310	63			
233 323627092030501						60				
234 355037090422701		12	7	17	1.8	14	26	0	26	
235 333809092020201		37	13	98	8.2	15	140			
236 354652089065002		9.3	3.5	29	0.7	26	6.1	0	22	
237 354652089070601		17	5.7	41	2.1	42	17	0	21	
238 321938092484901						24				
239 355758089201001		9.4	5	9	0.3	4.5	10	0.1	36	<1
240 361252088364701		7	3.1	17	1.7	19	9.7	0	17	
241 315436092424301		11	1.6	8.6	1.8	4	2.8	0.1	31	
242 294925097222200		39	19	110		140	190	0.1	76	
243 320835093052201		200	85	100	15	100	740	0.1	30	
244 340633092492901		2.4	1.7	0.8	1	1.8	3.2	0.2	13	
245 351630089013901		3.8	0.5	3.9	0.6	6.2	1.2	0.1	16	
246 333216093243501		1.8	1	2	1	3	0	0	11	
247 314006086160801						5.8				

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
198	314050087255601										
199	333634092064201										
200	313241096355501										
201	324129092212001							100			
202	324129092212001										
203	314026086142001										
204	355225089233801										
205	355045089315001			2	10		13	44	1	2	
206	361216089112802	83		<1	20	<3	<10	200	3	6	
207	323105092374802									100	
208	325556092391901							30			
209	361215089112501										
210	313840096333201							570			
211	292838097434200										
212	292901097423700										
213	311652086474001										
214	311652086474001										
215	314424086255201										
216	335741091481601							0			
217	360651089155601										
218	351942089085001										
219	360952089215101										
220	354229089051701										
221	313618086123001										
222	360035088275801										
223	314202086163001										
224	341718092441501							860		40	
225	340210091593001							1100		370	
226	314329093062801							120		<10	
227	335735091533701							50			
228	360657089153101	78		<1	20	<3	<10	3	2	<1	
229	323903093012401										
230	324140092015001										
231	324224092001801										
232	350900089353001										
233	323627092030501										
234	355037090422701							20			
235	333809092020201										
236	354652089065002										
237	354652089070601							20			
238	321938092484901										
239	355758089201001	42		<1	<10	<3	<10	6	<1	<1	
240	361252088364701										
241	315436092424301							930		180	
242	294925097222200										
243	320835093052201							1600		100	
244	340633092492901										
245	351630089013901										
246	333216093243501										
247	314006086160801										

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
198	314050087255601										
199	333634092064201										
200	313241096355501										
201	324129092212001										
202	324129092212001										
203	314026086142001										
204	355225089233801							400			
205	355045089315001					260				<1	
206	361216089112802					<3					
207	323105092374802										
208	325556092391901										
209	361215089112501							400			
210	313840096333201										
211	292838097434200										
212	292901097423700										
213	311652086474001										
214	311652086474001										
215	314424086255201										
216	335741091481601										
217	360651089155601							300			
218	351942089085001										
219	360952089215101										
220	354229089051701							400			
221	313618086123001										
222	360035088275801										
223	314202086163001										
224	341718092441501										
225	340210091593001										
226	314329093062801										
227	335735091533701										
228	360657089153101					3					
229	323903093012401										
230	324140092015001										
231	324224092001801										
232	350900089353001										
233	323627092030501										
234	355037090422701							2900			
235	333809092020201										
236	354652089065002							400			
237	354652089070601							0			
238	321938092484901										
239	355758089201001			14		8					
240	361252088364701										
241	315436092424301										
242	294925097222200										
243	320835093052201										
244	340633092492901										
245	351630089013901							0			
246	333216093243501										
247	314006086160801										

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
198	314050087255601						
199	333634092064201						
200	313241096355501						
201	324129092212001						
202	324129092212001						
203	314026086142001						
204	355225089233801						
205	355045089315001			<0.1			
206	361216089112802			0.1			
207	323105092374802						
208	325556092391901						
209	361215089112501						
210	313840096333201						
211	292838097434200						
212	292901097423700						
213	311652086474001						
214	311652086474001						
215	314424086255201						
216	335741091481601						
217	360651089155601						
218	351942089085001						
219	360952089215101						
220	354229089051701						
221	313618086123001						
222	360035088275801						
223	314202086163001						
224	341718092441501						
225	340210091593001						
226	314329093062801						
227	335735091533701						
228	360657089153101			<0.1			
229	323903093012401						
230	324140092015001						
231	324224092001801						
232	350900089353001						
233	323627092030501						
234	355037090422701						
235	333809092020201						
236	354652089065002						
237	354652089070601						
238	321938092484901						
239	355758089201001			<0.1			
240	361252088364701						
241	315436092424301						
242	294925097222200						
243	320835093052201						
244	340633092492901						
245	351630089013901						
246	333216093243501						
247	314006086160801						

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
248	334152093013701	AR	124CRVR	110	33.5	58-08-21		83		7.4	2.8	36
249	343641092215501	AR	124CRVR	107	32.6	67-06-10		72		5.9	44	18
250	314224086193001	AL	125PRCK	106	32.3	64-07-10	21.5			7.6	5.8	118
251	322734092520501	LA	124CKMN	100	30.5	67-11-16						
252	322734092520501	LA	124CKMN	100	30.5	67-11-15		117		6.3		
253	292249097521201	TX	124RKLW	100	30.5	64-06-04		1100		7.4	12	158
254	294913097233801	TX	124RKLW	100	30.5	64-06-20		1730		6.1	119	77
255	294914097234600	TX	124RKLW	100	30.5	64-06-20		1730		6.1	239	154
256	300919097125101	TX	124RKLW	100	30.5	65-07-30		311		4.4	0	0
257	313706086162401	AL	125PRCK	100	30.5	64-06-22				7.7	8.3	213
258	321827088461401	MS	124BSCC	100	30.5	61-09-01	20.5			8.2	0	
259	322734092520501	LA	124CKMN	100	30.5	62-10-24						
260	331902093505401	AR	124CRVR	100	30.5	68-10-24		284		8.4		

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
248	334152093013701	44	0		0.05	0.2				
249	343641092215501	22	0		0.02	0.1				
250	314224086193001	140	0							
251	322734092520501									
252	322734092520501	42	0							
253	292249097521201	190								
254	294913097233801	94				0				
255	294914097234600	94	46		1.8					
256	300919097125101	0				0				
257	313706086162401	260	0							
258	321827088461401									
259	322734092520501									
260	331902093505401	120	4							

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
248	334152093013701		4.9	5.6	3.4	0.6	4	1.6			
249	343641092215501		7.3	1.5	3.3	1.6	0.7	15	0.2	20	
250	314224086193001						4.6				
251	322734092520501						16				
252	322734092520501		6	2.2	14	1.8	11	4.4	0.1	53	
253	292249097521201		97	26			110	260	0.2	29	
254	294913097233801		120	57			450	99	0.2	25	
255	294914097234600		120	57	130		450	99	0.2	25	
256	300919097125101						31	80			
257	313706086162401						3.8				
258	321827088461401		9.9	3.4			4	8.8	0.1	2.4	
259	322734092520501						24				
260	331902093505401		15	3.3	26	4.3	7.1	1.6	1.8	11	

	STN NO.	Ba ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l
248	334152093013701							100			
249	343641092215501							2300		200	
250	314224086193001										
251	322734092520501										
252	322734092520501							2000			
253	292249097521201										
254	294913097233801										
255	294914097234600										
256	300919097125101							17000			
257	313706086162401										
258	321827088461401										
259	322734092520501										
260	331902093505401										

	STN NO.	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l
248	334152093013701										
249	343641092215501										
250	314224086193001										
251	322734092520501										
252	322734092520501										
253	292249097521201										
254	294913097233801										
255	294914097234600										
256	300919097125101										
257	313706086162401										
258	321827088461401										
259	322734092520501										
260	331902093505401								0		

	STN NO.	Zr ug/l	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
248	334152093013701						
249	343641092215501						
250	314224086193001						
251	322734092520501						
252	322734092520501						
253	292249097521201						
254	294913097233801						
255	294914097234600						
256	300919097125101						
257	313706086162401						
258	321827088461401						
259	322734092520501						
260	331902093505401						

TABLE AI-3

Listing of all WATSTORE data
for the Pierre and Bearpaw Formation

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
1		SD	211PIRR	2300	701.0	74-0-				7.7		
2	400939105591100	CO	211PIRR	2070	630.9	74-08-28	9	1850				770
3	455759108452201	MT	211BRPW	712	217.0	80-09-04	16	3500		8.7		860
4	480755106233101	MT	211BRPW	685	208.8	78-08-19	15	5700		8.2	8.4	680
5	480758106431901	MT	211BRPW	600	182.9	78-08-15	10.5	4880		8.1	13	870
6	480805106370301	MT	211BRPW	555	169.2	78-08-16	13	3890		8.3	9.8	1000
7	465114103233401	ND	211PIRR	540	164.6	83-08-30	12	1450	5.6	8.3		
8	461926099032501	ND	211PIRR	538	164.0	77-11-03	7	8000		7.9	11	433
9	462902099124801	ND	211PIRR	520	158.5	79-07-19	9	8000		7.3	52	532
10	484229099182001	ND	211PIRR	474	144.5	80-05-22	7.5	3200		7.4	59	758
11	463007099083201	ND	211PIRR	470	143.3	79-07-19		8000		7.4	45	584
12	472256099362101	ND	211PIRR	445	135.6	65-07-30	8.5	2560		8.1		
13	483605099184101	ND	211PIRR	415	126.5	80-06-04	12	2550		7.1	81	521
14	462137098572901	ND	211PIRR	410	125.0	75-07-30		3080		7.8	12	381
15	463602099133301	ND	211PIRR	400	121.9	77-10-27	8.5	2400		7.6	21	387
16	472625099382601	ND	211PIRR	400	121.9	66-06-01	9.5	3300		8.1		
17	481355099070201	ND	211PIRR	400	121.9	73-06-04		866		8	5.8	295
18	484453099225801	ND	211PIRR	400	121.9	80-05-14	9			7.8	12	403
19	481022106425501	MT	211BRPW	395	120.4	78-08-14	9.5	4700		8.9		850
20	485059099245601	ND	211PIRR	381	116.1	80-05-07	6			7.7	19	482
21	484548099211401	ND	211PIRR	379	115.5	80-05-14	7	3600		7.9	8.5	346
22	442110096305401	SD	211PIRR	364	110.9	78-06-14	19	2750				
23	462915099141301	ND	211PIRR	364	110.9	79-08-01		8000		8.2	6.2	501
24	484447099261501	ND	211PIRR	348	106.1	80-05-08		4100		8.7	2.3	596
25	484538099191001	ND	211PIRR	340	103.6	80-05-14	5	2400		7.8	17	542
26	463655099155501	ND	211PIRR	330	100.6	79-08-09	8.5	3000		7.9	15	608
27	485329099224801	ND	211PIRR	314	95.7	80-05-05	7	6100		7	79	404
28	481151106424701	MT	211BRPW	300	91.4	76-12-18	12	3870		8.3	9.4	960
29	481546099120401	ND	211PIRR	300	91.4	69-05-14	6.5	1540		8.7		
30	485151099272301	ND	211PIRR	300	91.4	80-05-07	5.5	2600		8.2	8.6	696
31	484013099244201	ND	211PIRR	293	89.3	80-06-03	7	5500		8	15	760
32	483940099174101	ND	211PIRR	283	86.3	80-05-22	8	5850		8	10	526
33	480238098205101	ND	211PIRR	280	85.3	49-09-09						
34	481805099235201	ND	211PIRR	270	82.3	58-04-03	6	8460		8.1		
35	483737099222701	ND	211PIRR	260	79.2	80-06-04	13	2600		8.3	6.8	698
36	372015104340501	CO	211PIRR	252	76.8	81-08-06	18	6430		8.2		
37	480448098343901	ND	211PIRR	250	76.2	73-05-08		889		7.9	7.9	320
38	483750099222701	ND	211PIRR	237	72.2	80-04-04	14	2900		8	15	790
39	483755099122801	ND	211PIRR	230	70.1	80-05-21	8.5	2650		8.5	3.4	550
40	482658099242301	ND	211PIRR	228	69.5	80-06-24	11	6000		8.2	5.2	377
41	483704099122701	ND	211PIRR	228	69.5	80-06-05	14	2450		8	11	517
42	483612099122701	ND	211PIRR	227	69.2	80-06-05	10	3000		7.9	13	557
43	482827098525301	ND	211PIRR	219	66.8	72-07-21		1790		7.6	19	385
44	483843099263001	ND	211PIRR	219	66.8	80-06-03	11			8	8.2	421
45	474939099050502	ND	211PIRR	217	66.1	63-07-01		11400		7.6	19	384
46	485925099465301	ND	211PIRR	217	66.1	78-06-14	7.5	2400		7	116	597
47	483640099553401	ND	211PIRR	213	64.9	78-06-07		4000		8.4	5.4	615
48	474850098411802	ND	211PIRR	207	63.1	65-03-10	9	6950		8	12	618
49	484722099103701	ND	211PIRR	207	63.1	80-05-20	7	5800		7.7	20	504
50	483810099220502	ND	211PIRR	205	62.5	80-06-03	14	3050		8	11	580
51	481704099114401	ND	211PIRR	200	61.0	72-11-17		4950		7.8	17	550
52	480224098204101	ND	211PIRR	200	61.0	49-09-09						

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l	TOC mg/l
1											
2	400939105591100	760	86				0.1		0.03		
3	455759108452201									0.2	
4	480755106233101	800	14		0.1					1.4	
5	480758106431901	800	14		0.1					0.5	
6	480805106370301	1220			0.4					1	
7	465114103233401										
8	461926099032501	530	0		0	0					
9	462902099124801	650	0		0.23	1					
10	484229099182001	920	0		0.23	1					
11	463007099083201	710	0		0.23	1					
12	472256099362101	860	0			2.6					
13	483605099184101	640	0		0.23	1					
14	462137098572901	470	0		0.23	1					
15	463602099133301	470	0		0.23	1					
16	472625099382601	910	0			1.6					
17	481355099070201	360	0		0.56	2.5					
18	484453099225801	490	0		0.23	1					
19	481022106425501		22		0.8					1.1	
20	485059099245601	590	0		0.23	1					
21	484548099211401	420	0		0.23	1					
22	442110096305401										
23	462915099141301	610	0		0.23	1					
24	484447099261501	730	0		0	0					
25	484538099191001	660	0		0.23	1					
26	463655099155501	740	0		0.02	0.1					
27	485329099224801	490	0		0	0					
28	481151106424701	1170			0.04			0.062			
29	481546099120401	400	20			1					
30	485151099272301	850	0		0.27	1.2					
31	484013099244201	930	0		0.23	1					
32	483940099174101	640	0		0.23	1					
33	480238098205101	770									
34	481805099235201	460				10					
35	483737099222701	850	0		0.18	0.8					
36	372015104340501						0.12		0.06		
37	480448098343901	390	0		0.93	4.1					
38	483750099222701	960	0		0.23	1					
39	483755099122801	640	13		0.23	1					
40	482658099242301	460	0		0.23	1					
41	483704099122701	630	0		0.23	1					
42	483612099122701	680	0		0.23	1					
43	482827098525301	470	0		0.18	0.8					
44	483843099263001	510	0		0.23	1					
45	474939099050502	470	0		0.23	1					
46	485925099465301	730	0		0.23	1					
47	483640099553401	750	0		0.23	1					
48	474850098411802	750	0		0	0					
49	484722099103701	620	0		0.23	1					
50	483810099220502	710	0		0.23	1					
51	481704099114401	670	0		0.23	1					
52	480224098204101	710				6.5					

	STN NO.	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As	Ba
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l
1		690	24	18000	220	28000	2000				
2	400939105591100	10	<.1	480	1.1	50	8	6.2	6.4		
3	455759108452201	3.7	1.2	870	2.8	250	670	0.3	8.2		
4	480755106233101	5.7	1.6	1100	3	1200	19	1.4	11		
5	480758106431901	7.5	3	1000	3	1000	28	2	9.8		
6	480805106370301	4.5	1.3	850	2	480	170	2.5	11		
7	465114103233401	1.1	0.2	300	0.9	62	160		4.8		32
8	461926099032501	110	28	2100	24	3200	12	0.2	14		
9	462902099124801	91	30	1600	15	2400	0.8	0.2	29		
10	484229099182001	100	36	650	19	180	810	0.3	26		
11	463007099083201	54	18	1700	16	2300	7.4	0.2	30		
12	472256099362101	16	5.1	600	6.5	370	130	0.5	22		
13	483605099184101	130	55	420	16	120	810	0.2	27		
14	462137098572901	56	24	570	14	760	48	0.2	21		
15	463602099133301	46	21	440	11	520	40	<0.1	26		
16	472625099382601	12	4	770	7.5	670	12	0.3	28		
17	481355099070201	88	30	63	7.2	9.4	170	0.2	20		
18	484453099225801	150	55	2400	24	4000	40	0.2	21		
19	481022106425501	4.6	1.4	970	3	900	39	2	6.2		480
20	485059099245601	80	34	1900	21	2800	23	0.3	25		
21	484548099211401	32	12	730	14	800	310	0.2	26		
22	442110096305401										
23	462915099141301	70	18	1800	16	2500	13	0.2	30		
24	484447099261501	13	5	890	12	1000	44	0.5	10		
25	484538099191001	130	52	380	19	78	750	0.3	19		
26	463655099155501	24	7.1	600	11	450	200	0.2	25		
27	485329099224801	92	29	1200	20	1900	9.1	0.2	26		
28	481151106424701	6.1	1.4	950	3	820	12	2.3	7.9	2	
29	481546099120401	6.4	5.6	340	7.1	93	300	0.2	4		
30	485151099272301	20	8.8	560	8.6	380	130	0.4	27		
31	484013099244201	45	16	1200	18	1500	3.3	0.6	29		
32	483940099174101	38	13	930	17	1200	25	0.5	24		
33	480238098205101	140	130	1500		3000	8				
34	481805099235201	180	160	2000	29	3000	7	0			
35	483737099222701	26	11	610	9.3	400	170	0.5	29		
36	372015104340501	5.1	5.2	1500	3.6	1500	1	2.1	16		
37	480448098343901	34	16	150	6.4	28	110	0.2	25		
38	483750099222701	21	7.4	660	9.5	400	180	0.6	29		
39	483755099122801	16	9.5	510	9.3	310	240	0.4	22		
40	482658099242301	58	26	1500	20	1500	960	0.2	21		
41	483704099122701	34	13	560	12	180	610	0.6	24		
42	483612099122701	28	12	720	12	780	49	0.5	26		
43	482827098525301	69	24	300	12	190	270	0.4	25		
44	483843099263001	92	36	2400	22	3700	70	0.2	27		
45	474939099050502					3300	580				
46	485925099465301	330	91	170	12	16	970	0.1	22		
47	483640099553401	12	2.2	850	5.9	900	4.1	0.5	43		
48	474850098411802	30	46	1600	23	2100	210	0.2	22		
49	484722099103701	96	39	1200	23	1700	100	0.2	23		
50	483810099220502	42	21	650	13	570	230	0.3	24		
51	481704099114401	72	37	950	16	1300	3.3	0.3	27		
52	480224098204101	19	6	650		270	510	0.2			

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
1											
2	400939105591100	760					550		<10		
3	455759108452201						220		20		
4	480755106233101						30		<10		
5	480758106431901						70		20		
6	480805106370301						100		<10		
7	465114103233401	930		<4	4	14	43		<2	5	6
8	461926099032501	2900					15000		480		
9	462902099124801	2500					380		240		
10	484229099182001	950					660		300		
11	463007099083201	2100					490		100		
12	472256099362101	3400					180				
13	483605099184101	660					8100		430		
14	462137098572901	980					370		560		
15	463602099133301	50					410		260		
16	472625099382601	4000					180				
17	481355099070201	<20					420		420		
18	484453099225801	3100					7400		330		
19	481022106425501	3800					90		<10		
20	485059099245601	3700					2700		190		
21	484548099211401	360					330		110		
22	442110096305401										
23	462915099141301	1900					670		160		
24	484447099261501	2600					30		10		
25	484538099191001	300					4300		320		
26	463655099155501	1900					410		60		
27	485329099224801	2100					1400		210		
28	481151106424701	4700				<20	70	50	<10		10
29	481546099120401	630					1800				
30	485151099272301	2400					300		40		
31	484013099244201	3000					680		150		
32	483940099174101	1900					70		100		
33	480238098205101						3000				
34	481805099235201	5100					8000				
35	483737099222701	1100					490		40		
36	372015104340501	860				1	50	1	10		2
37	480448098343901	570					200		700		
38	483750099222701	1700					170		40		
39	483755099122801	1800					90		20		
40	482658099242301	1700					40		290		
41	483704099122701	1200					40		100		
42	483612099122701	2200					30		90		
43	482827098525301	960					3000		580		
44	483843099263001	3000					4100		170		
45	474939099050502										
46	485925099465301	490					15000		420		
47	483640099553401	2200					830		60		
48	474850098411802	0									
49	484722099103701	1600					4000		430		
50	483810099220502	1200					110		80		
51	481704099114401	4400					3900		500		
52	480224098204101						1000				

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
1											
2	400939105591100										
3	455759108452201										
4	480755106233101							170			
5	480758106431901							170			
6	480805106370301							140			
7	465114103233401	<2	46	<4	37		<10	48	0		
8	461926099032501										
9	462902099124801										
10	484229099182001										
11	463007099083201										
12	472256099362101										
13	483605099184101										
14	462137098572901										
15	463602099133301										
16	472625099382601										
17	481355099070201										
18	484453099225801										
19	481022106425501		310					160			
20	485059099245601										
21	484548099211401										
22	442110096305401										
23	462915099141301										
24	484447099261501										
25	484538099191001										
26	463655099155501										
27	485329099224801										
28	481151106424701		350		60	60	60	180	2		
29	481546099120401										
30	485151099272301										
31	484013099244201										
32	483940099174101										
33	480238098205101										
34	481805099235201										
35	483737099222701										
36	372015104340501			31	60		10				
37	480448098343901										
38	483750099222701										
39	483755099122801										
40	482658099242301										
41	483704099122701										
42	483612099122701										
43	482827098525301										
44	483843099263001										
45	474939099050502										
46	485925099465301										
47	483640099553401										
48	474850098411802										
49	484722099103701										
50	483810099220502										
51	481704099114401										
52	480224098204101										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
1						
2	400939105591100					
3	455759108452201					
4	480755106233101					
5	480758106431901					
6	480805106370301					
7	465114103233401					
8	461926099032501					
9	462902099124801					
10	484229099182001					
11	463007099083201					
12	472256099362101					
13	483605099184101					
14	462137098572901					
15	463602099133301					
16	472625099382601					
17	481355099070201					
18	484453099225801					
19	481022106425501					
20	485059099245601					
21	484548099211401					
22	442110096305401					
23	462915099141301					
24	484447099261501					
25	484538099191001					
26	463655099155501					
27	485329099224801					
28	481151106424701					
29	481546099120401					
30	485151099272301					
31	484013099244201					
32	483940099174101					
33	480238098205101					
34	481805099235201					
35	483737099222701					
36	372015104340501		3.8			
37	480448098343901					
38	483750099222701					
39	483755099122801					
40	482658099242301					
41	483704099122701					
42	483612099122701					
43	482827098525301					
44	483843099263001					
45	474939099050502					
46	485925099465301					
47	483640099553401					
48	474850098411802					
49	484722099103701					
50	483810099220502					
51	481704099114401					
52	480224098204101					

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
53	480606098213001	ND	211PIRR	200	61.0	49-09-19						
54	481704099114401	ND	211PIRR	200	61.0	72-08-03		4840		7.7	22	558
55	483511098384005	ND	211PIRR	200	61.0	70-07-08		12600		8		385
56	473420098584602	ND	211PIRR	199	60.7	65-02-11	6	2500		8.1	7.1	456
57	473420098584602	ND	211PIRR	199	60.7	64-10-16	8	2570		8.1	5.9	384
58	473420098584601	ND	211PIRR	195	59.4	65-02-11	5.5	3000		8.2	5.4	438
59	483737099054401	ND	211PIRR	194	59.1	80-06-10	8.5	3000		8.1	12	750
60	480304098382301	ND	211PIRR	193	58.8	73-05-08		2700		7.9	13	517
61	484445099134501	ND	211PIRR	191	58.2	80-05-20	6	5900		7.8	12	376
62	481249098212001	ND	211PIRR	190	57.9	72-08-04		2450		8	9.6	492
63	483841099043701	ND	211PIRR	186	56.7	81-05-13	7	3700		8.1		
64	483841099043701	ND	211PIRR	186	56.7	81-05-13						
65	472025098434801	ND	211PIRR	186	56.7	64-10-14	9.5	3610		8.2	9.3	759
66	483841099043701	ND	211PIRR	186	56.7	80-05-21	6.5	3900		8	12	627
67	483234098392101	ND	211PIRR	182	55.5	72-11-09		6200		7.9	18	730
68	470132098210301	ND	211PIRR	180	54.9	63-10-09	11	6580		8.2	5.4	442
69	472644098541101	ND	211PIRR	180	54.9	64-10-30	7	1990		8	12	623
70	481559099114402	ND	211PIRR	180	54.9	74-08-23		2330		7.8	15	484
71	481946098071301	ND	211PIRR	180	54.9	69-05-24		7530		7.5		
72	482909099274001	ND	211PIRR	174	53.0	80-06-17	7	5500		8.4	3.7	476
73	473726099014702	ND	211PIRR	170	51.8	65-01-20	8.5	1320		8.1	7.3	470
74	480224098204102	ND	211PIRR	170	51.8	49-09-15						
75	483632099230701	ND	211PIRR	169	51.5	80-06-04	7	1650		8.7	2.1	552
76	482810099230501	ND	211PIRR	168	51.2	80-06-17	7	2450		7.3	62	639
77	482819098422701	ND	211PIRR	168	51.2	72-07-21		3290		7.8	16	509
78	475438098234201	ND	211PIRR	165	50.3	49-09-24						
79	484023098500601	ND	211PIRR	165	50.3	69-12-01						
80	480515098530701	ND	211PIRR	162	49.4	74-08-13		607		8	5.3	271
81	460000109274501	MT	211BRPW	160	48.8	79-08-02	11	7000		8.2		
82	480224098203101	ND	211PIRR	160	48.8	49-09-15						
83	480238098211001	ND	211PIRR	160	48.8	49-09-25						
84	483151099200901	ND	211PIRR	157	47.9	80-06-13	12	3500		8.5	4.3	697
85	475942098303001	ND	211PIRR	156	47.5	67-08-22		3130		8.4		
86	482658099221501	ND	211PIRR	153	46.6	80-06-24	11.5	4900		8.1	9.1	586
87	483743099054401	ND	211PIRR	153	46.6	80-06-10	11	4000		8.4	5.7	732
88	473558099214801	ND	211PIRR	152	46.3	66-08-03	10	2480		8		
89	480915098270001	ND	211PIRR	150	45.7	71-08-25		7090		7.7	24	615
90	480915098270001	ND	211PIRR	150	45.7	72-11-10		7000		7.6	31	628
91	481230098283801	ND	211PIRR	150	45.7	72-08-04		5030		7.6	21	435
92	482219098140301	ND	211PIRR	150	45.7	69-05-24		8300		7.3		
93	482635098300101	ND	211PIRR	150	45.7	72-07-20		5130		7.9	19	779
94	482859098425601	ND	211PIRR	150	45.7	69-04-08		6950		8.1	9.8	632
95	483743099055401	ND	211PIRR	149	45.4	80-06-10	8	2900		8.1	12	780
96	481605098474401	ND	211PIRR	147	44.8	73-05-24		5060		7.9	16	640
97	482551098565603	ND	211PIRR	146	44.5	74-08-29		9040		7.4	50	640
98	484359099142401	ND	211PIRR	145	44.2	80-05-20	6.5	3500		7.9	9.7	397
99	483421099242501	ND	211PIRR	141	43.0	70-06-04	9	8000		7.5	35	565
100	475432098210801	ND	211PIRR	140	42.7	67-08-24		2730		8.3		
101	475432098210801	ND	211PIRR	140	42.7	49-09-20						
102	480113098162201	ND	211PIRR	140	42.7	49-09-19						

	STN NO.	HCO3	CO3	NH4(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)	TOC
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
53	480606098213001	440				6.5					
54	481704099114401	680	0		0.23	1					
55	483511098384005	470	0			0					
56	473420098584602	560	0		2.3	10					
57	473420098584602	470	0		2.1	9.3					
58	473420098584601	530	0		1.4	6.4					
59	483737099054401	910	0		0.23	1					
60	480304098382301	630	0		2	9					
61	484445099134501	460	0		0.23	1					
62	481249098212001	600	0		0.45	2					
63	483841099043701						>0.01		0.4		
64	483841099043701										
65	472025098434801	930	0		2.5	11					
66	483841099043701	760	0		2	8.7					
67	483234098392101	890	0		0.14	0.6					
68	470132098210301	540	0		0	0					
69	472644098541101	760	0		0.34	1.5					
70	481559099114402	590	0		0.23	1					
71	481946098071301	830	0			2.4					
72	482909099274001	580	0		0.23	1					
73	473726099014702	570	0		0	0					
74	480224098204102	620	36			4.3					
75	483632099230701	670	0		0.23	1					
76	482810099230501	780	0		0.23	1					
77	482819098422701	620	0		0.43	1.9					
78	475438098234201	480									
79	484023098500601										
80	480515098530701	330	0		0.07	0.3					
81	460000109274501			0.81	0.14					12	
82	480224098203101	660	27			4.3					
83	480238098211001	590	49								
84	483151099200901	830	10		0.32	1.4					
85	475942098303001	810	9			6.1					
86	482658099221501	710	0		0.23	1					
87	483743099054401	890	0		0.11	0.5					
88	473558099214801	860	0			2.8					
89	480915098270001	750	0		0.81	3.6					
90	480915098270001	770	0								
91	481230098283801	530	0		14	62					
92	482219098140301	490	0			36					
93	482635098300101	950	0		2.9	13					
94	482859098425601	770	0		0.32	1.4					
95	483743099055401	950	0		0.23	1					
96	481605098474401	780	0		0.23	1					
97	482551098565603	780	0		0.23	1					
98	484359099142401	480	0		0.11	0.5					
99	483421099242501	670	11		0.23	1					
100	475432098210801	700	4			10					
101	475432098210801	690	34			8.6					
102	480113098162201	770				120					

	STN NO.	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l	Ba ug/l
53	480606098213001	100	65	570		91	1200				
54	481704099114401	72	29	920	16	1300	42	0.3	25		
55	483511098384005	140	54	2600	32	3900	270	0.1	24		
56	473420098584602					580	57				
57	473420098584602	18	11	580	13	620	70	0.5	21		
58	473420098584601					870	72				
59	483737099054401	10	4.1	710	8.6	550	68	0.7	27		
60	480304098382301	67	30	540	12	190	670	0.2	24		
61	484445099134501	130	50	920	21	870	1000	0.1	24		
62	481249098212001	74	36	450	8	130	640	0.3	15		
63	483841099043701	17	6.5	810	11	930	20	0.4	25	1	200
64	483841099043701										
65	472025098434801	11	6.8	850	15	790	37	0.6	21		
66	483841099043701	16	6.1	830	11	890	16	0.5	26		
67	483234098392101	30	14	1300	17	1700	1.2	0.3	25		
68	470132098210301	50	43	1400	15	2000	56	0.5	24		
69	472644098541101	37	18	420	12	140	270	0.4	19		
70	481559099114402	32	15	480	9.6	210	420	0.5	28		
71	481946098071301	58	25	1600	21	2100	82	0.1	26		
72	482909099274001	23	13	1300	14	1700	110	0.4	29		
73	473726099014702	18	6.8	300	9	44	210	0.4	24		
74	480224098204102	48	64	630		130	960	0.3			
75	483632099230701	14	5.1	380	7.3	47	270	0.4	24		
76	482810099230501	23	13	580	10	540	25	0.5	52		
77	482819098422701	11	4.3	720	7.8	710	130	0.6	17		
78	475438098234201	180	66	310		32	940				
79	484023098500601										
80	480515098530701	9.4	8.4	120	4.4	6.4	41	0.6	21		
81	460000109274501	52	10	1700	3	79	3200	1.4	8.1		
82	480224098203101	43	48	540		32	750				
83	480238098211001	210	52	210		20	640	0.7			
84	483151099200901	11	4.7	860	10	820	120	0.8	31		
85	475942098303001	18	3.7	740	7.2	130	790	0.4	26		
86	482658099221501	20	6.8	1000	13	1200	0	0.6	39		
87	483743099054401	15	6.4	900	11	960	0	0.6	29		
88	473558099214801	44	11	530	11	380	54	0.2	28		
89	480915098270001	36	16	1500	16	1900	120	0.4	27		
90	480915098270001	35	15	1500	4.3	1900	77	0.4	26		
91	481230098283801	300	170	750	16	360	2100	0.2	19		
92	482219098140301	360	280	1400	23	1300	2700	0.2	28		
93	482635098300101	33	3.3	1200	13	1100	320	0.3	25		
94	482859098425601	35	16	1500		2000	33	0.4	25		
95	483743099055401	9.4	4	690	8	500	93	0.7	30		
96	481605098474401	22	10	1100	11	1300	14	0.3	24		
97	482551098565603	57	24	1900	17	2700	16	0.1	14		
98	484359099142401	82	35	690	13	640	540	0.1	26		
99	483421099242501	49	21	1700	20	2300	31	0.3	28		
100	475432098210801	76	18	540	10	280	450	0.2	26		
101	475432098210801	57	67	620		510	460				
102	480113098162201	26	12	1200		1300		0.2			

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
53	480606098213001						400				
54	481704099114401	2900					0		220		
55	483511098384005	2800					220		1000		
56	473420098584602										
57	473420098584602	0									
58	473420098584601										
59	483737099054401	2400					110		40		
60	480304098382301	1000					1700		680		
61	484445099134501	530					1400		1000		
62	481249098212001	1400					200		30		
63	483841099043701	2900	1	10	0	1	40	1	50	0	2
64	483841099043701										
65	472025098434801	0									
66	483841099043701	2400					40		40		
67	483234098392101	4300					<10		320		
68	470132098210301	0									
69	472644098541101	0									
70	481559099114402	1400							380		
71	481946098071301	4200					2000				
72	482909099274001	1300					30		140		
73	473726099014702	0									
74	480224098204102						300				
75	483632099230701	720					350		140		
76	482810099230501	2300					250		120		
77	482819098422701	1800					0		50		
78	475438098234201						300				
79	484023098500601										
80	480515098530701	550					490		120		
81	460000109274501	590					50		<10		
82	480224098203101						4400				
83	480238098211001						5000				
84	483151099200901	2200					70		50		
85	475942098303001	3400					80				
86	482658099221501	2200					10		60		
87	483743099054401	2600					40		40		
88	473558099214801	1700					90				
89	480915098270001						2900		120		
90	480915098270001						3100		120		
91	481230098283801	430					160		560		
92	482219098140301	1400					1800				
93	482635098300101	2900					80		80		
94	482859098425601						940				
95	483743099055401	2300					60		50		
96	481605098474401	4600					<10		80		
97	482551098565603	4200							260		
98	484359099142401	480					640		550		
99	483421099242501	3200					1200		130		
100	475432098210801	2200					720				
101	475432098210801						1400				
102	480113098162201						1500				

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
53	480606098213001										
54	481704099114401										
55	483511098384005										
56	473420098584602										
57	473420098584602										
58	473420098584601										
59	483737099054401										
60	480304098382301										
61	484445099134501										
62	481249098212001										
63	483841099043701	0	330	21	830		0	250			
64	483841099043701										
65	472025098434801										
66	483841099043701										
67	483234098392101										
68	470132098210301										
69	472644098541101										
70	481559099114402										
71	481946098071301										
72	482909099274001										
73	473726099014702										
74	480224098204102										
75	483632099230701										
76	482810099230501										
77	482819098422701										
78	475438098234201										
79	484023098500601										
80	480515098530701										
81	460000109274501		3400					290			
82	480224098203101										
83	480238098211001										
84	483151099200901										
85	475942098303001										
86	482658099221501										
87	483743099054401										
88	473558099214801										
89	480915098270001										
90	480915098270001										
91	481230098283801										
92	482219098140301										
93	482635098300101										
94	482859098425601										
95	483743099055401										
96	481605098474401										
97	482551098565603										
98	484359099142401										
99	483421099242501										
100	475432098210801										
101	475432098210801										
102	480113098162201										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
53	480606098213001					
54	481704099114401					
55	483511098384005					
56	473420098584602					
57	473420098584602					
58	473420098584601					
59	483737099054401					
60	480304098382301					
61	484445099134501					
62	481249098212001					
63	483841099043701					
64	483841099043701					
65	472025098434801					
66	483841099043701					
67	483234098392101					
68	470132098210301					
69	472644098541101					
70	481559099114402					
71	481946098071301					
72	482909099274001					
73	473726099014702					
74	480224098204102					
75	483632099230701					
76	482810099230501					
77	482819098422701					
78	475438098234201					
79	484023098500601					
80	480515098530701					
81	460000109274501					
82	480224098203101					
83	480238098211001					
84	483151099200901					
85	475942098303001					
86	482658099221501					
87	483743099054401					
88	473558099214801					
89	480915098270001					
90	480915098270001					
91	481230098283801					
92	482219098140301					
93	482635098300101					
94	482859098425601					
95	483743099055401					
96	481605098474401					
97	482551098565603					
98	484359099142401					
99	483421099242501					
100	475432098210801					
101	475432098210801					
102	480113098162201					

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
103	480501098251401	ND	211PIRR	140	42.7	68-08-05		5710		8.1		
104	482702098522101	ND	211PIRR	140	42.7	72-07-21		2480		8.2	6.2	500
105	482900098095901	ND	211PIRR	137	41.8	68-07-17	5.5	2720		8.3		
106	475516098242701	ND	211PIRR	136	41.5	49-09-26						
107	481052098363401	ND	211PIRR	136	41.5	73-05-08		4340		8.1	11	697
108	485646099001701	ND	211PIRR	135	41.1	80-04-29	8	3500		8	7.9	404
109	483520099095001	ND	211PIRR	134	40.8	80-06-05	8	2500		8.1	11	700
110	481744098320901	ND	211PIRR	133	40.5	72-08-03		8620		7.6	24	492
111	483750099055401	ND	211PIRR	133	40.5	80-06-10	7	3000		8	13	676
112	480639098233601	ND	211PIRR	132	40.2	49-09-20						
113	480915098270001	ND	211PIRR	131	39.9	71-08-25		8220		7.5	28	459
114	480915098270001	ND	211PIRR	131	39.9	72-11-10		7900		7.4	39	500
115	480915098270001	ND	211PIRR	131	39.9	69-04-28		7830		7.9	12	476
116	474752098534202	ND	211PIRR	130	39.6	61-07-01						531
117	481131098391001	ND	211PIRR	130	39.6	72-11-09		7140		7.6	28	566
118	481552098530401	ND	211PIRR	130	39.6	73-05-23		7650		7.8	14	459
119	481841098130301	ND	211PIRR	130	39.6	69-05-24		6850		8		
120	483939099043701	ND	211PIRR	130	39.6	80-05-21	7	3450		7.9	15	626
121	480928098515902	ND	211PIRR	129	39.3	74-09-03		4480		7.9	17	681
122	481138098392901	ND	211PIRR	129	39.3	72-11-09		4930		8	10	533
123	481651098523502	ND	211PIRR	127	38.7	74-08-29		4840		7.9	17	697
124	474627098132801	ND	211PIRR	125	38.1	69-07-23	5.5	8380		8		
125	480631098065501	ND	211PIRR	125	38.1	69-05-10	8	3440		7.9		
126	480724098515901	ND	211PIRR	125	38.1	50-02-17						532
127	482557098434201	ND	211PIRR	125	38.1	72-07-21		4180		8.2	8.4	681
128	480448098483401	ND	211PIRR	124	37.8	73-05-09		3790		8	11	560
129	480448098483401	ND	211PIRR	124	37.8	73-05-08						558
130	480417098582801	ND	211PIRR	122	37.2	74-08-14		1150		7.6	19	386
131	461756107212001	MT	211BRPW	120	36.6	76-08-10	11	2780				290
132	480205098192301	ND	211PIRR	120	36.6	49-09-09						
133	480751098574901	ND	211PIRR	120	36.6	73-05-23		3090		8.3	6.1	629
134	480816098014601	ND	211PIRR	120	36.6	69-05-10	6	7940		7.7		
135	481052098142201	ND	211PIRR	120	36.6	68-07-15	9	4020		7.8		
136	481052098455901	ND	211PIRR	120	36.6	73-05-08		2870		8.1	8.1	525
137	480311098424501	ND	211PIRR	119	36.3	73-05-09		1180		7.7	15	377
138	481144098595301	ND	211PIRR	119	36.3	73-05-23		3040		8.1	13	837
139	482248098515201	ND	211PIRR	118	36.0	74-08-29		3720		7.9	17	697
140	471001098074001	ND	211PIRR	115	35.1	63-10-10	19	8080		7.9	15	610
141	480138098073201	ND	211PIRR	115	35.1	67-09-20	10.5	2100		8.2		
142	481901098015101	ND	211PIRR	115	35.1	68-08-06	9.5	2670		7.9		
143	474841099074802	ND	211PIRR	114	34.7	64-10-15	7	12400		8	8.9	456
144	480954098330001	ND	211PIRR	114	34.7	73-05-08		5750		8	12	591
145	484301099094101	ND	211PIRR	114	34.7	80-05-21	7	5000		8.1	6.2	397
146	483122098400001	ND	211PIRR	113	34.4	74-09-05		4630		7.8	22	705
147	484307099035201	ND	211PIRR	113	34.4	80-05-20	9	3500		8.1	8.6	552

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l	TOC mg/l
103	480501098251401	750	0			1.8					
104	482702098522101	610	0		0.07	0.3					
105	482900098095901	810	10			2.5					
106	475516098242701	950				4.3					
107	481052098363401	850	0		1.9	8.4					
108	485646099001701	490	0		0.14	0.6					
109	483520099095001	850	0		0.23	1					
110	481744098320901	600	0		0.23	1					
111	483750099055401	770	25		0.23	1					
112	480639098233601	880				6.5					
113	480915098270001	560	0		0.88	3.9					
114	480915098270001	610	0								
115	480915098270001	580	0		0	0					
116	474752098534202	650	0		0	0					
117	481131098391001	690	0		0.23	1					
118	481552098530401	560	0		0.23	1					
119	481841098130301	1020	0			2.4					
120	483939099043701	760	0		0.45	2					
121	480928098515902	830	0		0.23	1					
122	481138098392901	650	0								
123	481651098523502	850	0		0.23	1					
124	474627098132801	450	0			13					
125	480631098065501	970	0			2.9					
126	480724098515901	610	19		0.47	2.1					
127	482557098434201	830	0		0.23	1					
128	480448098483401	680	0		0.25	1.1					
129	480448098483401	680									
130	480417098582801	470	0		0.23	1					
131	461756107212001	350			0.02						
132	480205098192301	430									
133	480751098574901	750	8		1.9	8.2					
134	480816098014601	690	0			1.7					
135	481052098142201	510	0			1.3					
136	481052098455901	640	0		1.8	7.9					
137	480311098424501	460	0		1.2	5.4					
138	481144098595301	1020	0		0.56	2.5					
139	482248098515201	850	0		0.29	1.3					
140	471001098074001	740	0		0	0					
141	480138098073201	590	0			2.5					
142	481901098015101	550	0			8.6					
143	474841099074802	560	0		0.23	1					
144	480954098330001	720	0		2.5	11					
145	484301099094101	480	0		0.23	1					
146	483122098400001	860	0		0.18	0.8					
147	484307099035201	670	0		0.23	1					

	STN NO.	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l	Ba ug/l
103	480501098251401	35	9.1	1200	16	1500	64	0.4	23		
104	482702098522101	19	6.2	560	5.4	120	610	0.4	24		
105	482900098095901	24	6.6	610	9.1	390	220	0.2	22		
106	475516098242701	7	2	750		140	670	0.2			
107	481052098363401	18	8.8	940	8.7	830	290	0.6	24		
108	485646099001701	34	11	810	12	76	1400	0.4	27		
109	483520099095001	10	8.8	640	8.5	500	56	0.8	27		
110	481744098320901	67	28	1800	20	2500	41	0.2	21		
111	483750099055401	21	7.4	680	9.3	350	410	0.6	28		
112	480639098233601	55	120	1200			1800	0.2			
113	480915098270001	62	24	1700	17	2400	37	0.3	27		
114	480915098270001	60	24	1600	19	2300	17	0.3	25		
115	480915098270001	61	24	1700		2400	3.5	0.2	26		
116	474752098534202										
117	481131098391001	7.5	3.3	1600	16	2100	120	0.4	26		
118	481552098530401	53	30	1600	17	2300	15	0.2	24		
119	481841098130301	40	15	1400	18	1800	27	0.1	25		
120	483939099043701	20	7.1	740	10	630	200	0.4	26		
121	480928098515902	19	9.6	960	11	1100	9.1	0.4	18		
122	481138098392901	17	13	1100	11	1100	370	0.5	25		
123	481651098523502	20	8.3	1100	11	1200	47	0.7	18		
124	474627098132801	320	120	1800	25	240	4400	0.1	18		
125	480631098065501	19	5.5	760	11	670	34	0.3	27		
126	480724098515901	71	80			150	760	0.2			
127	482557098434201	16	7.1	920	9.7	940	120	0.4	20		
128	480448098483401	15	6.4	840	8.2	680	350	0.6	25		
129	480448098483401			840		680	350				
130	480417098582801	99	35	120	9	17	240	0.6	23		
131	461756107212001	9	3.2	570	2	76	820	1.9	9.2		
132	480205098192301	250	93	240		76	1000				
133	480751098574901	14	6.6	710	8	83	850	0.6	28		
134	480816098014601	65	22	1600	25	2400	11	0.1	26		
135	481052098142201	200	49	760	16	270	1600	0.2	24		
136	481052098455901	22	9.7	610	12	340	440	0.5	26		
137	480311098424501	89	38	140	7.1	10	270	0.1	21		
138	481144098595301	9.8	4.7	690	7.7	450	95	0.7	26		
139	482248098515201	13	6.7	810	7.5	780	98	0.5	17		
140	471001098074001	22	26	1900	19	2700	30	0.3	25		
141	480138098073201	11	2.1	470	6.3	170	350	0.7	27		
142	481901098015101	270	120	240	12	54	1100	0.1	21		
143	474841099074802	99	62	2700	43	4100	270	0.3	17		
144	480954098330001	30	16	1200	12	1400	170	0.4	25		
145	484301099094101	62	21	980	16	180	1700	0.4	30		
146	483122098400001	26	11	1000	13	740	610	0.5	17		
147	484307099035201	14	7.5	820	8.5	630	400	0.6	26		

	STN NO.	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Mo	Ni
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
103	480501098251401	4000					260		90		
104	482702098522101	1300					90		100		
105	482900098095901	360					120		120		
106	475516098242701						400				
107	481052098363401	2800					140		40		
108	485646099001701	1400					40		230		
109	483520099095001	2700					30		60		
110	481744098320901	2800					420		160		
111	483750099055401	2100					20		110		
112	480639098233601						200				
113	480915098270001						3900		220		
114	480915098270001						3700		200		
115	480915098270001						900				
116	474752098534202										
117	481131098391001	3800					270		120		
118	481552098530401	4800					100		140		
119	481841098130301	290					1800				
120	483939099043701	1700					90		90		
121	480928098515902	4500					880		100		
122	481138098392901	3000					<10		180		
123	481651098523502	3700					180		100		
124	474627098132801	1300					26000		1600		
125	480631098065501	3600					0		30		
126	480724098515901										
127	482557098434201	2400					0		100		
128	480448098483401	2700					260		80		
129	480448098483401										
130	480417098582801	750					4700		220		
131	461756107212001	800				<20	880	120	40		
132	480205098192301						4700				
133	480751098574901	3600					100		120		
134	480816098014601	3800					4800		360		
135	481052098142201	1400					4200		1100		
136	481052098455901	2400					570		160		
137	480311098424501	470							1100		
138	481144098595301	3400					280		100		
139	482248098515201	3600					610		20		
140	471001098074001	0									
141	480138098073201	370					120				
142	481901098015101	490					2700		900		
143	474841099074802	0									
144	480954098330001	2600					120		60		
145	484301099094101	990					1500		220		
146	483122098400001	3700					1100		100		
147	484307099035201	2900					220		60		

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
103	480501098251401										
104	482702098522101										
105	482900098095901										
106	475516098242701										
107	481052098363401										
108	485646099001701										
109	483520099095001										
110	481744098320901										
111	483750099055401										
112	480639098233601										
113	480915098270001										
114	480915098270001										
115	480915098270001										
116	474752098534202										
117	481131098391001										
118	481552098530401										
119	481841098130301										
120	483939099043701										
121	480928098515902										
122	481138098392901										
123	481651098523502										
124	474627098132801										
125	480631098065501										
126	480724098515901										
127	482557098434201										
128	480448098483401										
129	480448098483401										
130	480417098582801										
131	461756107212001		200		16000			80			
132	480205098192301										
133	480751098574901										
134	480816098014601										
135	481052098142201										
136	481052098455901										
137	480311098424501										
138	481144098595301										
139	482248098515201										
140	471001098074001										
141	480138098073201										
142	481901098015101										
143	474841099074802										
144	480954098330001										
145	484301099094101										
146	483122098400001										
147	484307099035201										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
103	480501098251401					
104	482702098522101					
105	482900098095901					
106	475516098242701					
107	481052098363401					
108	485646099001701					
109	483520099095001					
110	481744098320901					
111	483750099055401					
112	480639098233601					
113	480915098270001					
114	480915098270001					
115	480915098270001					
116	474752098534202					
117	481131098391001					
118	481552098530401					
119	481841098130301					
120	483939099043701					
121	480928098515902					
122	481138098392901					
123	481651098523502					
124	474627098132801					
125	480631098065501					
126	480724098515901					
127	482557098434201					
128	480448098483401					
129	480448098483401					
130	480417098582801					
131	461756107212001					
132	480205098192301					
133	480751098574901					
134	480816098014601					
135	481052098142201					
136	481052098455901					
137	480311098424501					
138	481144098595301					
139	482248098515201					
140	471001098074001					
141	480138098073201					
142	481901098015101					
143	474841099074802					
144	480954098330001					
145	484301099094101					
146	483122098400001					
147	484307099035201					

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
148	483746099054901	ND	211PIRR	112	34.1	80-06-10	11	2250		8	11	556
149	483056098435501	ND	211PIRR	111	33.8	72-07-21		4090		7.9	13	541
150	473438098353002	ND	211PIRR	110	33.5	64-09-30	9	3070		7.8	16	528
151	475653097553501	ND	211PIRR	110	33.5	69-05-10		2280		7.8		
152	480724098174601	ND	211PIRR	110	33.5	69-05-10		9530		7.6	26	537
153	481836098472301	ND	211PIRR	110	33.5	72-08-03		1660		7.8	12	377
154	483147098273601	ND	211PIRR	110	33.5	72-07-20		6890		7.5	50	812
155	484346099012401	ND	211PIRR	110	33.5	80-05-20	5	1500		7.8	16	516
156	482905098321001	ND	211PIRR	107	32.6	72-11-10		8020		7.9	15	615
157	483142098380301	ND	211PIRR	105	32.0	72-07-20		3160		8	13	673
158	483704099031801	ND	211PIRR	105	32.0	80-06-10	7	2550		8.3	5	513
159	483003098305201	ND	211PIRR	104	31.7	72-07-20		6580		7.6	36	738
160	480626099054501	ND	211PIRR	103	31.4	50-11-20						
161	480600098071201	ND	211PIRR	102	31.1	67-09-19	6.5	1790		8.1		628
162	480626098543401	ND	211PIRR	101	30.8	74-08-13		4360		7.8	16	533
163	472628098025203	ND	211PIRR	100	30.5	72-07-14		4580		7.5		
164	475510098105101	ND	211PIRR	100	30.5	69-05-10		2130		7.5		
165	480231098182501	ND	211PIRR	100	30.5	49-09-09						
166	480238098210101	ND	211PIRR	100	30.5	49-09-25						
167	480534098240601	ND	211PIRR	100	30.5	69-05-10		4580		7.7		
168	481809098585401	ND	211PIRR	100	30.5	72-08-03		5950		7.7	25	632
169	482419098372001	ND	211PIRR	100	30.5	72-07-20		3860		7.9	18	722
170	482455098140301	ND	211PIRR	100	30.5	69-05-24		6390		7.5		

	STN NO.	HCO3	CO3	NH4(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)	TOC
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
148	483746099054901	680	0		0.23	1					
149	483056098435501	660	0		0.43	1.9					
150	473438098353002	640	0		0.23	1					
151	475653097553501	560	0			6					
152	480724098174601	660	0		5	22					
153	481836098472301	460	0		1.2	5.1					
154	483147098273601	990	0		0.72	3.2					
155	484346099012401	630	0		0.14	0.6					
156	482905098321001	750	0		0.45	2					
157	483142098380301	820	0		2.2	9.8					
158	483704099031801	630	0		0.11	0.5					
159	483003098305201	900	0		0.72	3.2					
160	480626099054501	730	0								
161	480600098071201	770	0			3.8					
162	480626098543401	650	0		0.45	2					
163	472628098025203	390	0			1					
164	475510098105101	580	0			6.1					
165	480231098182501	530				4.3					
166	480238098210101	560									
167	480534098240601	560	0			0.9					
168	481809098585401	770	0		0.23	1					
169	482419098372001	880	0		2.1	9.3					
170	482455098140301	560	0			2.6					

	STN NO.	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As	Ba
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l
148	483746099054901	65	21	440	11	140	460	0.4	30		
149	483056098435501	17	7.4	920	11	720	540	0.5	24		
150	473438098353002	14	5.4	720	12	730	99	0.6	25		
151	475653097553501	52	14	480	6.5	10	730	0.2	27		
152	480724098174601	210	68	2300	28	210	4900	0.2	25		
153	481836098472301	81	25	260	10	87	380	0.2	26		
154	483147098273601	48	23	1600	18	1800	420	0.2	25		
155	484346099012401	45	16	310	7.2	37	310	0.2	25		
156	482905098321001	43	31	1700	18	2400	4.9	0.3	26		
157	483142098380301	20	8.8	760	9.6	87	970	0.6	26		
158	483704099031801	25	9.1	540	9.4	360	280	0.3	32		
159	483003098305201	38	17	1500	17	1900	150	0.3	25		
160	480626099054501	9	66	460		100	490				
161	480600098071201	7.7	2.9	420	7.2	100	170	0.7	27		
162	480626098543401	80	36	870	17	760	680	0.5	21		
163	472628098025203	30	13	920	16	1200	170	0.5	19		
164	475510098105101	170	43	300	11	9.1	750	0.1	26		
165	480231098182501	270	180	720		38	2500	0.4			
166	480238098210101	15	8	750		53	1100	0.2			
167	480534098240601	97	29	950	15	410	1400	0.2	26		
168	481809098585401	38	26	12	14	1700	37	0.4	24		
169	482419098372001	23	18	890	13	340	890	0.3	25		
170	482455098140301	170	69	1300	20	410	2500	0.1	25		

	STN NO.	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l	Mo ug/l	Ni ug/l
148	483746099054901	850					960		560		
149	483056098435501	2400					80		90		
150	473438098353002	0									
151	475653097553501	1100					0		30		
152	480724098174601	2900					200		220		
153	481836098472301	500					0		400		
154	483147098273601	3200					40		120		
155	484346099012401	360					1800		590		
156	482905098321001	4300					640		240		
157	483142098380301	1500					0		10		
158	483704099031801	1500					190		190		
159	483003098305201	3000					0		90		
160	480626099054501										
161	480600098071201	3100					80				
162	480626098543401	1800					1400		880		
163	472628098025203	2100					0		300		
164	475510098105101	700					0		560		
165	480231098182501						3300				
166	480238098210101						2500				
167	480534098240601	2000					0		230		
168	481809098585401	2900					0		90		
169	482419098372001	2600					0		200		
170	482455098140301	2600					12000				

	STN NO.	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l	Ti ug/l	Zr ug/l
148	483746099054901										
149	483056098435501										
150	473438098353002										
151	475653097553501										
152	480724098174601										
153	481836098472301										
154	483147098273601										
155	484346099012401										
156	482905098321001										
157	483142098380301										
158	483704099031801										
159	483003098305201										
160	480626099054501										
161	480600098071201										
162	480626098543401										
163	472628098025203										
164	475510098105101										
165	480231098182501										
166	480238098210101										
167	480534098240601										
168	481809098585401										
169	482419098372001										
170	482455098140301										

	STN NO.	Sc ug/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
148	483746099054901					
149	483056098435501					
150	473438098353002					
151	475653097553501					
152	480724098174601					
153	481836098472301					
154	483147098273601					
155	484346099012401					
156	482905098321001					
157	483142098380301					
158	483704099031801					
159	483003098305201					
160	480626099054501					
161	480600098071201					
162	480626098543401					
163	472628098025203					
164	475510098105101					
165	480231098182501					
166	480238098210101					
167	480534098240601					
168	481809098585401					
169	482419098372001					
170	482455098140301					

TABLE AI-4

Listing of all WATSTORE data
for the Green River Formation

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
1	402424110092401	UT	124GRRV	11900	3627.1	70-01-27		7860		8.1	26	1680
2	402424110092401	UT	124GRRV	11700	3566.2	70-01-26		19300		8.2	25	2040
3	402424110092401	UT	124GRRV	11500	3505.2	70-01-25		36100		7.4	96	1230
4	402424110092401	UT	124GRRV	11500	3505.2	70-01-24		36100		7.5	74	1200
5	402424110092401	UT	124GRRV	11300	3444.2	70-05-06		51200		8	13	670
6	402424110092401	UT	124GRRV	11300	3444.2	70-05-01				7.6	134	688
7	402457110045901	UT	124GRRV	11100	3383.3	68-04-26		12200		8.1	29	1860
8	402457110045901	UT	124GRRV	11100	3383.3	67-12-04		35500		8	28	1410
9	402524110053401	UT	124GRRV	10800	3291.8	68-03-13		16900		7.7	78	2000
10	402457110045902	UT	124GRRV	10500	3200.4	69-04-18		39300		8	25	1270
11	402457110045902	UT	124GRRV	10500	3200.4	70-02-26		39600		8.1	21	1380
12	402524110053401	UT	124GRRV	10500	3200.4	68-03-11		38600		8	27	1380
13	402632110053901	UT	124GRRV	10500	3200.4	70-05-01				8	34	1740
14	402444110010201	UT	124GRRV	10400	3169.9	63-11-30		15100		7.8		1810
15	402524110053401	UT	124GRRV	10400	3169.9	70-02-26		40700		8.1	23	1490
16	402524110053401	UT	124GRRV	10400	3169.9	68-04-25		37900		7.9	33	1330
17	402536110082801	UT	124GRRV	10300	3139.4	50-10-01		12800		8.3	19	1900
18	402327109570401	UT	124GRRV	10200	3109.0	59-11-05		13000		8.5	12	1880
19	402327109570401	UT	124GRRV	10200	3109.0	60-05-04		14600		8.5		
20	402424110092401	UT	124GRRV	9920	3023.6	70-01-23		73300		8.5	14	2240
21	402457110045901	UT	124GRRV	9470	2886.5	67-10-03		10800		8.4	15	1920
22	401714110292401	UT	124GRRV	9420	2871.2	60-04-01		9000		8.7	14	3690
23	402249109530601	UT	124GRRV	9390	2862.1	65-08-25		17300				
24	402249109530601	UT	124GRRV	9390	2862.1	60-05-04		16800		8.6	14	2880
25	402249109530601	UT	124GRRV	9390	2862.1	59-11-05		17900		8.5	15	2350
26	402249109533901	UT	124GRRV	9390	2862.1	52-08-28		17200		8.6		
27	402249109533901	UT	124GRRV	9390	2862.1	67-08-24		13700		8.3	20	2080
28	402524110053401	UT	124GRRV	9360	2852.9	68-03-06		7800		8.7	7.6	1950
29	402457110045901	UT	124GRRV	9280	2828.5	67-10-02		11200		8.4	12	1490
30	402524110053401	UT	124GRRV	9180	2798.1	68-02-09		9170		8.3	17	1770
31	402444110010201	UT	124GRRV	9130	2782.8	63-11-07		16200		8.5		
32	402524110053401	UT	124GRRV	9130	2782.8	68-02-10		8150		8.5		1780
33	402535110060701	UT	124GRRV	9110	2776.7	69-04-18		10200		8.5		1940
34	402535110060701	UT	124GRRV	9110	2776.7	67-12-04		10700		8.2	27	2170
35	401447110375501	UT	124GRRV	8760	2670.0	62-02-08		8470		7.6	171	3490
36	401447110375501	UT	124GRRV	8570	2612.1	62-02-08		8470		7.9	88	3600
37	401907109390401	UT	124GRRV	7980	2432.3	57-09-10						919
38	403157109354501	UT	124GRRV	7680	2340.9	68-03-20		21000				
39	401223110392801	UT	124GRRV	7420	2261.6	70-04-09		8460		8.1		
40	401223110392801	UT	124GRRV	7230	2203.7	70-03-27		4690		8.1		
41	401538109331001	UT	124GRRV	7180	2188.5	65-04-20		29700		8.2	8.5	691
42	401223110392801	UT	124GRRV	7040	2145.8	70-03-26		5000		8.1		
43	401445109322101	UT	124GRRV	7020	2139.7	68-03-20		29900				
44	401234109341801	UT	124GRRV	7010	2136.6	57-09-10						308
45	401526109323901	UT	124GRRV	6950	2118.4	65-01-16		6880		8.1	17	1100
46	401551109323701	UT	124GRRV	6940	2115.3	65-03-08		28900		7.4	47	600
47	402437109420601	UT	124GRRV	6910	2106.2	51-03-19		2620		8.9		
48	401526109323901	UT	124GRRV	6870	2094.0	65-01-16		12500		8.5	5.8	940
49	401226110350301	UT	124GRRV	6840	2084.8	69-10-22		7050		8.1	66	4270
50	401539109314602	UT	124GRRV	6780	2066.5	65-03-04		43100		7.8	36	1170
51	395233109151601	UT	124GRRV	6560	1999.5	77-04-27						
52	395233109151601	UT	124GRRV	6560	1999.5	77-05-12						

	STN NO.	HCO3	CO3	NH4(as N)	NO2(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1	402424110092401	2050									
2	402424110092401	2490	0								
3	402424110092401	1500									
4	402424110092401	1460									
5	402424110092401	820									
6	402424110092401	840									
7	402457110045901	2270									
8	402457110045901	1720									
9	402524110053401	2440									
10	402457110045902	1550									
11	402457110045902	1680									
12	402524110053401	1680									
13	402632110053901	2120									
14	402444110010201	2210	0								
15	402524110053401	1810									
16	402524110053401	1620									
17	402536110082801	1950	180								
18	402327109570401	2100	93			2.3	10				
19	402327109570401	2320	150				5.4				
20	402424110092401	1880	420								
21	402457110045901	2150	96								
22	401714110292401	3640	420								
23	402249109530601										
24	402249109530601	2660	420			1.2	5.3				
25	402249109530601	2590	140			2.3	10				
26	402249109533901	1830	200								
27	402249109533901	2470	27			0	0				
28	402524110053401	1920	230			0.68	3				
29	402457110045901	1650	84								
30	402524110053401	1380	380								
31	402444110010201	2500	110								
32	402524110053401	1750	200								
33	402535110060701	2280	35								
34	402535110060701	2640	0								
35	401447110375501	4250	0								
36	401447110375501	4390	0								
37	401907109390401	1120									
38	403157109354501										
39	401223110392801	5420	0								
40	401223110392801	3480									
41	401538109331001	840	<0								
42	401223110392801	3610									
43	401445109322101										
44	401234109341801	380									
45	401526109323901	1340	0								
46	401551109323701	730	0								
47	402437109420601	1080	140								
48	401526109323901	1000	72								
49	401226110350301	5200									
50	401539109314602	1430	0								
51	395233109151601										
52	395233109151601										

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
1	402424110092401		25	3	1800	36	1200	580			
2	402424110092401		35	9	4900	120	4900	1900			
3	402424110092401		100	18	10000	250	11000	5100			
4	402424110092401		100	18	10000	250	11000	5300			
5	402424110092401		270	49	13000	330	20000	2100			
6	402424110092401		250	47			18000	2000			
7	402457110045901		6	1	3100	21	3000	530			
8	402457110045901		68	13	9400	90	11000	4000			
9	402524110053401		17	4	4500	30	4200	1800			
10	402457110045902		52	11	11000	300	14000	3300			
11	402457110045902		44	9	11000	220	13000	3800			
12	402524110053401		66	18	11000	120	12000	5400			
13	402632110053901		38	32			6700	2900			
14	402444110010201		14	3	3900	52	3700	1600			
15	402524110053401		36	12	11000	210	13000	4900			
16	402524110053401		87	8	11000	110	12000	4800			
17	402536110082801						3200	790			
18	402327109570401		13	5.4			3400	56		27	
19	402327109570401		27	10	3700	47	4100	17		23	
20	402424110092401		15	6	20000	350	30000	4100			
21	402457110045901		7	2	2900	19	2600	620			
22	401714110292401		19				1400	34			
23	402249109530601						4200				
24	402249109530601		12	6.6	4600	53	4600	430			
25	402249109530601		14	3.6			4500	1000		10	
26	402249109533901						4800	840			
27	402249109533901		8	5	4300	73	4500	1400	24	35	
28	402524110053401		19	3	2000	15	1500	350			
29	402457110045901		7	2	2500	21	2700	750			
30	402524110053401		19	4	2200	19	2000	410			
31	402444110010201		11	5	4000		3700	1300			
32	402524110053401		17	3	2100	21	1600	720			
33	402535110060701		3.2	1			2300	550			
34	402535110060701		0	0	3100	11	2400	1200			
35	401447110375501		11	3			1200	<1.0			
36	401447110375501		10	5			1300	<1.0			
37	401907109390401		100	68			9000	150			
38	403157109354501						6900				
39	401223110392801		25	9	2700	34	920	170			
40	401223110392801		9	1	1400	23	210	20			
41	401538109331001		120	40	7200	54	11000	500			
42	401223110392801		8	3	1500	21	260	11			
43	401445109322101						12000				
44	401234109341801		3500	750			28000	45			
45	401526109323901		31	8	1600	35	1600	280			
46	401551109323701		71	25	7100	30	10000	680			
47	402437109420601						180	140			
48	401526109323901		45	14	3000	40	3800	430			
49	401226110350301		14	1	2100	39	350	10			
50	401539109314602		190	76	11000	40	16000	1100			
51	395233109151601										
52	395233109151601										

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
1	402424110092401								0		
2	402424110092401								0		
3	402424110092401								0		
4	402424110092401								0		
5	402424110092401								0		
6	402424110092401			16000							
7	402457110045901								0		
8	402457110045901								0		
9	402524110053401								0		
10	402457110045902								0		
11	402457110045902								0		
12	402524110053401										
13	402632110053901			200000							
14	402444110010201										
15	402524110053401								0		
16	402524110053401								0		
17	402536110082801										
18	402327109570401										
19	402327109570401			29000							
20	402424110092401								0		
21	402457110045901								0		
22	401714110292401										
23	402249109530601										
24	402249109530601			48000							
25	402249109530601										
26	402249109533901										
27	402249109533901			8600				180	90	0	0
28	402524110053401								0		
29	402457110045901								0		
30	402524110053401										
31	402444110010201										
32	402524110053401										
33	402535110060701										
34	402535110060701								0		
35	401447110375501										
36	401447110375501										
37	401907109390401										
38	403157109354501										
39	401223110392801								0		
40	401223110392801								0		
41	401538109331001								0		
42	401223110392801								0		
43	401445109322101										
44	401234109341801										
45	401526109323901								0		
46	401551109323701								0		
47	402437109420601										
48	401526109323901										
49	401226110350301										
50	401539109314602								0		
51	395233109151601										
52	395233109151601										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
1	402424110092401										
2	402424110092401										
3	402424110092401										
4	402424110092401										
5	402424110092401										
6	402424110092401										0
7	402457110045901										
8	402457110045901										
9	402524110053401										
10	402457110045902										
11	402457110045902										
12	402524110053401										
13	402632110053901										
14	402444110010201										
15	402524110053401										
16	402524110053401										
17	402536110082801										
18	402327109570401										
19	402327109570401										
20	402424110092401										
21	402457110045901										
22	401714110292401										
23	402249109530601										
24	402249109530601										
25	402249109530601										
26	402249109533901										
27	402249109533901						50				
28	402524110053401										
29	402457110045901										
30	402524110053401										
31	402444110010201										
32	402524110053401										
33	402535110060701										
34	402535110060701										
35	401447110375501										
36	401447110375501										
37	401907109390401										
38	403157109354501										
39	401223110392801										
40	401223110392801										
41	401538109331001									7000	
42	401223110392801										
43	401445109322101										
44	401234109341801										
45	401526109323901									1000	
46	401551109323701									2000	
47	402437109420601										
48	401526109323901									3000	
49	401226110350301										
50	401539109314602									5000	
51	395233109151601										
52	395233109151601										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
1	402424110092401								
2	402424110092401								
3	402424110092401								
4	402424110092401								
5	402424110092401								
6	402424110092401								
7	402457110045901								
8	402457110045901								
9	402524110053401								
10	402457110045902								
11	402457110045902								
12	402524110053401								
13	402632110053901								
14	402444110010201								
15	402524110053401								
16	402524110053401								
17	402536110082801								
18	402327109570401								
19	402327109570401								
20	402424110092401								
21	402457110045901								
22	401714110292401								
23	402249109530601								
24	402249109530601								
25	402249109530601								
26	402249109533901								
27	402249109533901								
28	402524110053401								
29	402457110045901								
30	402524110053401								
31	402444110010201								
32	402524110053401								
33	402535110060701								
34	402535110060701								
35	401447110375501								
36	401447110375501								
37	401907109390401								
38	403157109354501								
39	401223110392801								
40	401223110392801								
41	401538109331001								
42	401223110392801								
43	401445109322101								
44	401234109341801								
45	401526109323901								
46	401551109323701								
47	402437109420601								
48	401526109323901								
49	401226110350301								
50	401539109314602								
51	395233109151601								
52	395233109151601								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
53	395233109151601	UT	124GRRV	6560	1999.5	76-12-31	26	1600				
54	395233109151601	UT	124GRRV	6560	1999.5	77-05-26	27	1620				
55	395233109151601	UT	124GRRV	6560	1999.5	77-01-17	26.5	1590				
56	402437109420601	UT	124GRRV	6490	1978.2	51-03-08		3790		8.9		
57	400856110261501	UT	124GRRV	6480	1975.1	72-01-04				8.7	10	228
58	401223110392801	UT	124GRRV	6470	1972.1	70-03-25		5000		9.4		
59	395715109272001	UT	124GRRV	6450	1966.0	76-11-28	19	15000				
60	395715109272001	UT	124GRRV	6450	1966.0	77-05-03	23	10400				
61	395715109272001	UT	124GRRV	6450	1966.0	75-01-22	21	15000				
62	395715109272001	UT	124GRRV	6450	1966.0	75-05-21	21.5	12000				
63	395715109272001	UT	124GRRV	6450	1966.0	78-07-03	23.5	10300		8	37	1920
64	395715109272001	UT	124GRRV	6450	1966.0	74-12-24	20.5	11000				
65	395715109272001	UT	124GRRV	6450	1966.0	74-08-21	21.5	>8000		8.3	6.2	639
66	395715109272001	UT	124GRRV	6450	1966.0	75-06-19	22	12500				
67	395715109272001	UT	124GRRV	6450	1966.0	76-10-20	21	15000				
68	395715109272001	UT	124GRRV	6450	1966.0	75-08-21	33.5	>8000				
69	395715109272001	UT	124GRRV	6450	1966.0	75-11-20	20.5					
70	395715109272001	UT	124GRRV	6450	1966.0	76-12-31	20	10500				
71	395715109272001	UT	124GRRV	6450	1966.0	75-03-20	22	12000				
72	395715109272001	UT	124GRRV	6450	1966.0	75-02-19	22	13000				
73	395715109272001	UT	124GRRV	6450	1966.0	75-07-25	21	13500				
74	395715109272001	UT	124GRRV	6450	1966.0	75-06-25	22	11900		8.5	13	2110
75	400601111100401	UT	124DGCK	6185	1885.2	80-02-04				7.8	6.4	208
76	401117109274901	UT	124GRRV	6180	1883.7	71-07-16		21200		8	53	2700
77	401450109272301	UT	124GRRV	6130	1868.4	63-06-11		36700		8.3	4.8	490
78	401049109232401	UT	124GRRV	6090	1856.2	65-07-07		28600		8	12	641
79	401155109252401	UT	124GRRV	6080	1853.2	70-05-01		46000		8.4	11	1470
80	401024109254001	UT	124GRRV	6060	1847.1	65-06-16		66700		7.5	31	500
81	400918109263701	UT	124GRRV	5980	1822.7	62-02-26		62900		7.4	107	1380
82	395318109162101	UT	124GRRV	5940	1810.5	75-06-03	29	1800				
83	395318109162101	UT	124GRRV	5940	1810.5	74-11-14		1590				
84	395318109162101	UT	124GRRV	5940	1810.5	77-05-12						
85	395318109162101	UT	124GRRV	5940	1810.5	75-08-05	27	1740				
86	395318109162101	UT	124GRRV	5940	1810.5	77-02-08						
87	395318109162101	UT	124GRRV	5940	1810.5	74-10-08	28.5	1600				
88	395318109162101	UT	124GRRV	5940	1810.5	75-03-03	28	1650				
89	395318109162101	UT	124GRRV	5940	1810.5	77-01-17	28	1580				
90	395318109162101	UT	124GRRV	5940	1810.5	77-02-29						
91	395318109162101	UT	124GRRV	5940	1810.5	76-12-31	27	1650				
92	395318109162101	UT	124GRRV	5940	1810.5	77-04-27						
93	395318109162101	UT	124GRRV	5940	1810.5	75-01-06	27	1750				
94	395318109162101	UT	124GRRV	5940	1810.5	75-09-12	29	1600				
95	395318109162101	UT	124GRRV	5940	1810.5	75-06-26	28	1720		9	0.9	475
96	395318109162101	UT	124GRRV	5940	1810.5	74-12-23	28	1650				
97	395318109162101	UT	124GRRV	5940	1810.5	75-07-10	28.5	1800				
98	395318109162101	UT	124GRRV	5940	1810.5	75-10-09	25	1850				
99	395318109162101	UT	124GRRV	5940	1810.5	75-04-07	26	1600				
100	395318109162101	UT	124GRRV	5940	1810.5	75-02-03	27					

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) ml/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
53	395233109151601										
54	395233109151601										
55	395233109151601										
56	402437109420601	1450	180								
57	400856110261501	3220									
58	401223110392801	900	740								
59	395715109272001										
60	395715109272001										
61	395715109272001										
62	395715109272001										
63	395715109272001	2340	0					0.11		0.12	
64	395715109272001										
65	395715109272001	780	0	8.1	<0.010	0.03	0.13	0.03		0.06	6.5
66	395715109272001										
67	395715109272001										
68	395715109272001										
69	395715109272001										
70	395715109272001										
71	395715109272001										
72	395715109272001										
73	395715109272001										
74	395715109272001	1950	310	6.7	0.01	0	0	0.01		0.34	6.7
75	400601111100401	250	0								
76	401117109274901	3290	0								
77	401450109272301	480	60								
78	401049109232401	780									
79	401155109252401	1520	130								
80	401024109254001	610	0								
81	400918109263701	1680	0								
82	395318109162101										
83	395318109162101										
84	395318109162101										
85	395318109162101										
86	395318109162101										
87	395318109162101										
88	395318109162101										
89	395318109162101										
90	395318109162101										
91	395318109162101										
92	395318109162101										
93	395318109162101										
94	395318109162101										
95	395318109162101	510	34	0.87	0.04	0	0	0.04		0.03	6.7
96	395318109162101										
97	395318109162101										
98	395318109162101										
99	395318109162101										
100	395318109162101										

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
53	395233109151601										
54	395233109151601										
55	395233109151601										
56	402437109420601		21	<1.0			470	21			
57	400856110261501		20	16	3000	24	2600	72			
58	401223110392801		15		1500	12	400	670			
59	395715109272001										
60	395715109272001										
61	395715109272001										
62	395715109272001										
63	395715109272001		2.8	0.9	2600	10	2600	38	21	15	
64	395715109272001										
65	395715109272001		2.1	1.2	2400	11	3200	140		15	<1
66	395715109272001										
67	395715109272001										
68	395715109272001										
69	395715109272001										
70	395715109272001										
71	395715109272001										
72	395715109272001										
73	395715109272001										
74	395715109272001		4	1	3100	11	3300	100	25	15	
75	400601111100401		88	13	78		130	57			
76	401117109274901		47	29	5900	80	6800	790			
77	401450109272301		110	43	9900	54	14000	1400			
78	401049109232401		95	34	6900	42	9500	1500			
79	401155109252401		72	45	12000	88	17000	1700			
80	401024109254001		500	130	17000	1100	28000	640			
81	400918109263701		210	81			29000	1700			
82	395318109162101										
83	395318109162101										
84	395318109162101										
85	395318109162101										
86	395318109162101										
87	395318109162101										
88	395318109162101										
89	395318109162101										
90	395318109162101										
91	395318109162101										
92	395318109162101										
93	395318109162101										
94	395318109162101										
95	395318109162101		1.7	0.5	410	0.9	31	390	2	16	
96	395318109162101										
97	395318109162101										
98	395318109162101										
99	395318109162101										
100	395318109162101										

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
53	395233109151601										
54	395233109151601										
55	395233109151601										
56	402437109420601										
57	400856110261501								0		
58	401223110392801										
59	395715109272001										
60	395715109272001										
61	395715109272001										
62	395715109272001										
63	395715109272001			18000					60		30
64	395715109272001										
65	395715109272001			20000					90		
66	395715109272001										
67	395715109272001										
68	395715109272001										
69	395715109272001										
70	395715109272001										
71	395715109272001										
72	395715109272001										
73	395715109272001										
74	395715109272001	1900		21000		<50	<100	<20	60	<50	<45
75	400601111100401										
76	401117109274901										
77	401450109272301								0		
78	401049109232401								0		
79	401155109252401								0		
80	401024109254001								0		
81	400918109263701										
82	395318109162101										
83	395318109162101										
84	395318109162101										
85	395318109162101										
86	395318109162101										
87	395318109162101										
88	395318109162101										
89	395318109162101										
90	395318109162101										
91	395318109162101										
92	395318109162101										
93	395318109162101										
94	395318109162101										
95	395318109162101	30		620		<8	<8	<2	20	<8	<7
96	395318109162101										
97	395318109162101										
98	395318109162101										
99	395318109162101										
100	395318109162101										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
53	395233109151601										
54	395233109151601										
55	395233109151601										
56	402437109420601										
57	400856110261501										
58	401223110392801										
59	395715109272001										
60	395715109272001										
61	395715109272001										
62	395715109272001										
63	395715109272001										
64	395715109272001										
65	395715109272001				810		<20			590	<1
66	395715109272001										
67	395715109272001										
68	395715109272001										
69	395715109272001										
70	395715109272001										
71	395715109272001										
72	395715109272001										
73	395715109272001										
74	395715109272001	110	<45	<5	970	<45	<20	<70	20	620	
75	400601111100401										
76	401117109274901										
77	401450109272301									300	
78	401049109232401									9000	
79	401155109252401										
80	401024109254001									30000	
81	400918109263701										
82	395318109162101										
83	395318109162101										
84	395318109162101										
85	395318109162101										
86	395318109162101										
87	395318109162101										
88	395318109162101										
89	395318109162101										
90	395318109162101										
91	395318109162101										
92	395318109162101										
93	395318109162101										
94	395318109162101										
95	395318109162101	20	<8	<2	110	<8			10	100	
96	395318109162101										
97	395318109162101										
98	395318109162101										
99	395318109162101										
100	395318109162101										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
53	395233109151601								
54	395233109151601								
55	395233109151601								
56	402437109420601								
57	400856110261501								
58	401223110392801								
59	395715109272001								
60	395715109272001								
61	395715109272001								
62	395715109272001								
63	395715109272001								
64	395715109272001								
65	395715109272001					<0.5			
66	395715109272001								
67	395715109272001								
68	395715109272001								
69	395715109272001								
70	395715109272001								
71	395715109272001								
72	395715109272001								
73	395715109272001								
74	395715109272001	<20	<70					13	
75	400601111100401								
76	401117109274901								
77	401450109272301								
78	401049109232401								
79	401155109252401								
80	401024109254001								
81	400918109263701								
82	395318109162101								
83	395318109162101								
84	395318109162101								
85	395318109162101								
86	395318109162101								
87	395318109162101								
88	395318109162101								
89	395318109162101								
90	395318109162101								
91	395318109162101								
92	395318109162101								
93	395318109162101								
94	395318109162101								
95	395318109162101	<4	<10					0.2	
96	395318109162101								
97	395318109162101								
98	395318109162101								
99	395318109162101								
100	395318109162101								

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
101	395318109162101		1.9	0.8	400	1.1	33	360	2	15	1
102	395318109162101										
103	395318109162101										
104	395318109162101										
105	400748110163801		16	7			5300	79			
106	401130109255601		22	12	8600	120	7000	1200			
107	401241109161901		13	4	2000	35	460	5			
108	401050109275601		0	0	13000	81	16000	1700			
109	401051109272201		110	18	7700	89	8200	1100			
110	395228109163401										
111	395228109163401										
112	395228109163401										
113	395228109163401										
114	395228109163401										
115	395228109163401										
116	395228109163401										
117	395228109163401										
118	395228109163401		3.4	0.4	420	1.1	23	290	3.8	14	<1
119	395228109163401										
120	395228109163401										
121	395228109163401										
122	395228109163401										
123	395228109163401										
124	395228109163401										
125	395228109163401										
126	395228109163401										
127	395228109163401										
128	395228109163401										
129	395228109163401										
130	395228109163401										
131	395228109163401										
132	395228109163401		1.9	0.7	430	1	22	300	4.7	13	
133	395228109163401										
134	401036109270401		80	18	12000	100	15000	2100			
135	400857109254101		1500	370	20000	57	34000	230			
136	401051109272201		420	76	7500	96	10000	900			
137	401117109274901		33	14	8100	74	8800	900			
138	401227109174501		23	0			190	0			
139	401055109192701		<1.0	9	4100	93	4500	180			
140	401117109274901		27	18	7000	70	7500	1000			
141	401502109274701		32	20			15000	230			
142	400318110080701						4700				
143	401123109185301		22	9	6100	42	5900	230			
144	401155109252401		0	1			7200	190			
145	401031109212601		40	16	6800	61	8500	690			
146	401149109160701		7	2	4200	25	2200	5			
147	401226109173001		31	2	3100	50	360	5			
148	401031109212601		15	7	5300	50	5000	340			
149	401158109244701		18	16	6000	49	6100	870			
150	401206109253901		28	18	6500	52	7800	910			
151	400932109265201		150	49			26000	1200			
152	401301109244801		80	37	11000	71	14000	2100			

	STN NO.	HCO3	CO3	NH4(as N)	NO2(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
101	395318109162101	570	0	1.1	<0.010	0.01	0.04	0.01		0.12	8.1
102	395318109162101										
103	395318109162101										
104	395318109162101										
105	400748110163801	1730	250								
106	401130109255601	9520	0								
107	401241109161901	3900	360								
108	401050109275601	2890	520								
109	401051109272201	5380	<0								
110	395228109163401										
111	395228109163401										
112	395228109163401										
113	395228109163401										
114	395228109163401										
115	395228109163401										
116	395228109163401										
117	395228109163401										
118	395228109163401	740	0	1.3	<0.01	0	0	<0.10		0.12	1.9
119	395228109163401										
120	395228109163401										
121	395228109163401										
122	395228109163401										
123	395228109163401										
124	395228109163401										
125	395228109163401										
126	395228109163401										
127	395228109163401										
128	395228109163401										
129	395228109163401										
130	395228109163401										
131	395228109163401										
132	395228109163401	690	30	1.1	0.04	0.01	0	0.05		0.06	0
133	395228109163401										
134	401036109270401	4330	0								
135	400857109254101	650	0								
136	401051109272201	3920	0								
137	401117109274901	4090	640								
138	401227109174501	6350									
139	401055109192701	4030	1270								
140	401117109274901	3420	580								
141	401502109274701	3250	16								
142	400318110080701										
143	401123109185301	4030	960								
144	401155109252401	2660	270								
145	401031109212601	2760	<0								
146	401149109160701	4640	1320								
147	401226109173001	6220	720								
148	401031109212601	5150	<0								
149	401158109244701	2730	890								
150	401206109253901	2570	240								
151	400932109265201	1930									
152	401301109244801	1400	0								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
101	395318109162101	UT	124GRRV	5940	1810.5	74-09-10	28.5	1600		8.3	4.6	466
102	395318109162101	UT	124GRRV	5940	1810.5	75-05-05	27.5	1730				
103	395318109162101	UT	124GRRV	5940	1810.5	77-05-26	28.5	1630				
104	395318109162101	UT	124GRRV	5940	1810.5	75-11-04	26	1720				
105	400748110163801	UT	124GRRV	5930	1807.5	52-04-11		15700		8.5	11	1840
106	401130109255601	UT	124GRRV	5870	1789.2	71-06-15		32400		8	152	7810
107	401241109161901	UT	124GRRV	5860	1786.1	69-02-03		6010		8.6	19	3800
108	401050109275601	UT	124GRRV	5850	1783.1	68-11-01		44200		8.8	10	3230
109	401051109272201	UT	124GRRV	5850	1783.1	70-05-29		28600		8.2	54	4410
110	395228109163401	UT	124GRRV	5830	1777.0	77-03-18						
111	395228109163401	UT	124GRRV	5830	1777.0	77-05-12						
112	395228109163401	UT	124GRRV	5830	1777.0	76-10-19	24	2000				
113	395228109163401	UT	124GRRV	5830	1777.0	75-08-05	25.5	1780				
114	395228109163401	UT	124GRRV	5830	1777.0	76-11-23	26	1800				
115	395228109163401	UT	124GRRV	5830	1777.0	74-11-14		1600				
116	395228109163401	UT	124GRRV	5830	1777.0	76-12-31	26.5	1600				
117	395228109163401	UT	124GRRV	5830	1777.0	75-09-12	27.5	1650				
118	395228109163401	UT	124GRRV	5830	1777.0	74-09-10	26.5	1700		8.3	6	609
119	395228109163401	UT	124GRRV	5830	1777.0	75-01-06	25	1800				
120	395228109163401	UT	124GRRV	5830	1777.0	77-01-17	27	1550				
121	395228109163401	UT	124GRRV	5830	1777.0	75-10-09	25	1900				
122	395228109163401	UT	124GRRV	5830	1777.0	75-07-10	27	1850				
123	395228109163401	UT	124GRRV	5830	1777.0	75-03-03	26.5	1600				
124	395228109163401	UT	124GRRV	5830	1777.0	74-10-08	27	1670				
125	395228109163401	UT	124GRRV	5830	1777.0	77-04-27						
126	395228109163401	UT	124GRRV	5830	1777.0	77-05-26	27.5	1980				
127	395228109163401	UT	124GRRV	5830	1777.0	75-04-07	25.5	1600				
128	395228109163401	UT	124GRRV	5830	1777.0	75-02-03	26	1670				
129	395228109163401	UT	124GRRV	5830	1777.0	75-11-04	24.5	1720				
130	395228109163401	UT	124GRRV	5830	1777.0	74-12-23	26	1720				
131	395228109163401	UT	124GRRV	5830	1777.0	75-05-05	22.5	1750				
132	395228109163401	UT	124GRRV	5830	1777.0	75-06-26	26.5	1770		8.8	1.9	618
133	395228109163401	UT	124GRRV	5830	1777.0	75-06-03	26.5	1900				
134	401036109270401	UT	124GRRV	5820	1773.9	70-03-27		44000		7.9	87	3550
135	400857109254101	UT	124GRRV	5810	1770.9	65-05-27		79100		7.3	52	531
136	401051109272201	UT	124GRRV	5810	1770.9	70-05-29		32200		8.1	50	3220
137	401117109274901	UT	124GRRV	5810	1770.9	71-07-06		29000		8.7	17	4410
138	401227109174501	UT	124GRRV	5810	1770.9	57-09-10						5210
139	401055109192701	UT	124GRRV	5790	1764.8	70-06-29		19200		9	15	5420
140	401117109274901	UT	124GRRV	5770	1758.7	71-07-07		26200		9.1	5.8	3760
141	401502109274701	UT	124GRRV	5760	1755.6	63-11-00		42900		8.6	13	2690
142	400318110080701	UT	124GRRV	5750	1752.6	68-03-20		31000				
143	401123109185301	UT	124GRRV	5740	1749.6	69-02-03		22000		8.7	19	4900
144	401155109252401	UT	124GRRV	5740	1749.6	57-09-10						2630
145	401031109212601	UT	124GRRV	5730	1746.5	69-09-18		26400		8.2	28	2260
146	401149109160701	UT	124GRRV	5730	1746.5	69-02-03		13700		8.7	23	6000
147	401226109173001	UT	124GRRV	5720	1743.5	69-01-31		9320		8.7	25	6300
148	401031109212601	UT	124GRRV	5710	1740.4	69-09-18		18800		8.2	52	4220
149	401158109244701	UT	124GRRV	5710	1740.4	70-05-01		22000		8.7	14	3720
150	401206109253901	UT	124GRRV	5710	1740.4	70-05-01		24700		8.5	15	2510
151	400932109265201	UT	124GRRV	5700	1737.4	61-10-30		61100		7.5	98	1580
152	401301109244801	UT	124GRRV	5700	1737.4	70-05-01		40300		8	22	1150

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
101	395318109162101			680					20		
102	395318109162101										
103	395318109162101										
104	395318109162101										
105	400748110163801										
106	401130109255601			35000					0		
107	401241109161901								0		
108	401050109275601								0		
109	401051109272201										
110	395228109163401										
111	395228109163401										
112	395228109163401										
113	395228109163401										
114	395228109163401										
115	395228109163401										
116	395228109163401										
117	395228109163401										
118	395228109163401			790					20		
119	395228109163401										
120	395228109163401										
121	395228109163401										
122	395228109163401										
123	395228109163401										
124	395228109163401										
125	395228109163401										
126	395228109163401										
127	395228109163401										
128	395228109163401										
129	395228109163401										
130	395228109163401										
131	395228109163401										
132	395228109163401	<100		880					40		
133	395228109163401										
134	401036109270401										
135	400857109254101										
136	401051109272201										
137	401117109274901										
138	401227109174501										
139	401055109192701										
140	401117109274901										
141	401502109274701										
142	400318110080701										
143	401123109185301								0		
144	401155109252401										
145	401031109212601										
146	401149109160701								0		
147	401226109173001								0		
148	401031109212601								0		
149	401158109244701								0		
150	401206109253901								0		
151	400932109265201										
152	401301109244801										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
101	395318109162101				100		<20			80	<1
102	395318109162101										
103	395318109162101										
104	395318109162101										
105	400748110163801										
106	401130109255601									2800	
107	401241109161901										
108	401050109275601										
109	401051109272201										
110	395228109163401										
111	395228109163401										
112	395228109163401										
113	395228109163401										
114	395228109163401										
115	395228109163401										
116	395228109163401										
117	395228109163401										
118	395228109163401				120					100	1
119	395228109163401										
120	395228109163401										
121	395228109163401										
122	395228109163401										
123	395228109163401										
124	395228109163401										
125	395228109163401										
126	395228109163401										
127	395228109163401										
128	395228109163401										
129	395228109163401										
130	395228109163401										
131	395228109163401										
132	395228109163401				120				<100	120	
133	395228109163401										
134	401036109270401										
135	400857109254101									10000	
136	401051109272201										
137	401117109274901										
138	401227109174501										
139	401055109192701										
140	401117109274901										
141	401502109274701										
142	400318110080701										
143	401123109185301										
144	401155109252401										
145	401031109212601										
146	401149109160701										
147	401226109173001										
148	401031109212601										
149	401158109244701										
150	401206109253901										
151	400932109265201										
152	401301109244801										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
101	395318109162101					<0.5			
102	395318109162101								
103	395318109162101								
104	395318109162101								
105	400748110163801								
106	401130109255601								
107	401241109161901								
108	401050109275601								
109	401051109272201								
110	395228109163401								
111	395228109163401								
112	395228109163401								
113	395228109163401								
114	395228109163401								
115	395228109163401								
116	395228109163401								
117	395228109163401								
118	395228109163401					<0.5			
119	395228109163401								
120	395228109163401								
121	395228109163401								
122	395228109163401								
123	395228109163401								
124	395228109163401								
125	395228109163401								
126	395228109163401								
127	395228109163401								
128	395228109163401								
129	395228109163401								
130	395228109163401								
131	395228109163401								
132	395228109163401							0.2	
133	395228109163401								
134	401036109270401								
135	400857109254101								
136	401051109272201								
137	401117109274901								
138	401227109174501								
139	401055109192701								
140	401117109274901								
141	401502109274701								
142	400318110080701								
143	401123109185301								
144	401155109252401								
145	401031109212601								
146	401149109160701								
147	401226109173001								
148	401031109212601								
149	401158109244701								
150	401206109253901								
151	400932109265201								
152	401301109244801								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
153	401215109223401	UT	124GRRV	5690	1734.3	57-09-10						3760
154	401117109274901	UT	124GRRV	5680	1731.3	71-07-08		28200		9	9.2	4700
155	395433109381701	UT	124GRRV	5670	1728.2	77-05-09	30.5	4500				
156	395433109381701	UT	124GRRV	5670	1728.2	83-09-01	29	3400		8.6		
157	395433109381701	UT	124GRRV	5670	1728.2	76-12-31	29	4500				
158	395433109381701	UT	124GRRV	5670	1728.2	74-08-20	31	3250		8.6	7.3	1490
159	395433109381701	UT	124GRRV	5670	1728.2	76-10-20	29.5	5600				
160	395433109381701	UT	124GRRV	5670	1728.2	76-11-28	29	4900				
161	401208109250601	UT	124GRRV	5650	1722.1	70-05-01		46000		8.2	13	1080
162	401229109185401	UT	124GRRV	5650	1722.1	66-12-12		8460		8.8	16	5100
163	400719109220201	UT	124GRRV	5630	1716.0	65-01-15		51200		8.3	5.9	600
164	401240109171601	UT	124GRRV	5610	1709.9	69-01-31		8660		8.5	38	6100
165	395657109325401	UT	124GRRV	5600	1706.9	75-08-21	23	3020				
166	395657109325401	UT	124GRRV	5600	1706.9	75-06-20		4000				
167	395657109325401	UT	124GRRV	5600	1706.9	75-02-19	27	4000				
168	395657109325401	UT	124GRRV	5600	1706.9	75-01-22	23.5	4000				
169	395657109325401	UT	124GRRV	5600	1706.9	76-10-20	32.5	3800				
170	395657109325401	UT	124GRRV	5600	1706.9	75-06-25	21.5	4060		8.6	6.6	1350
171	395657109325401	UT	124GRRV	5600	1706.9	75-03-20	31	3400				
172	395657109325401	UT	124GRRV	5600	1706.9	74-08-21	27	3750		8.3	13	1310
173	395657109325401	UT	124GRRV	5600	1706.9	77-05-03	33.5	3400				
174	395657109325401	UT	124GRRV	5600	1706.9	75-05-21	30	3450				
175	395657109325401	UT	124GRRV	5600	1706.9	76-11-28	32.5	3500				
176	395657109325401	UT	124GRRV	5600	1706.9	74-12-24	21	2500				
177	395657109325401	UT	124GRRV	5600	1706.9	75-07-25	31	3400				
178	395657109325401	UT	124GRRV	5600	1706.9	76-12-31	32.5	3200				
179	401233109244201	UT	124GRRV	5580	1700.8	70-05-01		26300		8.4	15	1900
180	401044109200101	UT	124GRRV	5560	1694.7	69-02-03		25100		8.5	25	4100
181	400932109265201	UT	124GRRV	5550	1691.6	61-10-31		42300		7.7	27	697
182	401222109252201	UT	124GRRV	5550	1691.6	66-09-23		33700		8.5	7.6	1240
183	401253109163901	UT	124GRRV	5550	1691.6	69-01-31		7050		8.4	36	4600
184	401447110375501	UT	124GRRV	5550	1691.6	61-12-26		29700		9.6	7	14300
185	401031109191001	UT	124GRRV	5520	1682.5	69-02-03		25500		8.7	12	3100
186	401240109172101	UT	124GRRV	5490	1673.4	69-01-31		9650		8.6	27	5500
187	401334109140601	UT	124GRRV	5490	1673.4	57-09-10						4690
188	401447110375501	UT	124GRRV	5450	1661.2	61-12-26		20400		9.3	7.6	7790
189	401538109331001	UT	124GRRV	5420	1652.0	65-04-20		10000		7.9	87	3550
190	401024109254001	UT	124GRRV	5410	1649.0	65-06-15		16300		8.3	31	3210
191	401308109194501	UT	124GRRV	5390	1642.9	64-05-18		8400		8.7	12	3080
192	401110109160501	UT	124GRRV	5380	1639.8	70-12-30		12600		7.8	89	2870
193	401238109185401	UT	124GRRV	5380	1639.8	69-02-03		7330		8.5	33	5300
194	400719109220201	UT	124GRRV	5370	1636.8	65-03-04		26500		8.1	5.6	360
195	401450109272301	UT	124GRRV	5340	1627.6	63-06-11		4890		10	0	230
196	401215109122401	UT	124GRRV	5320	1621.5	57-09-10						5950
197	400759109561001	UT	124GRRV	5310	1618.5	69-04-10		57100		8.4	16	2050

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) ml/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
153	401215109223401	4240	170								
154	401117109274901	4510	600								
155	395433109381701										
156	395433109381701			2	<0.020			<0.10	0.04		
157	395433109381701										
158	395433109381701	1480	170	2	<0.010	0.02	0.09	0.02		0.15	1
159	395433109381701										
160	395433109381701										
161	401208109250601	1320	<0								
162	401229109185401	5470	370								
163	400719109220201	730	<0								
164	401240109171601	6710	360								
165	395657109325401										
166	395657109325401										
167	395657109325401										
168	395657109325401										
169	395657109325401										
170	395657109325401	1500	73	3.7	0.01	0	0	0.01		0.12	0.6
171	395657109325401										
172	395657109325401	1590	0	4.3	<0.010	0.08	0.35	0.08		0.18	0.7
173	395657109325401										
174	395657109325401										
175	395657109325401										
176	395657109325401										
177	395657109325401										
178	395657109325401										
179	401233109244201	1900	200								
180	401044109200101	4270	360								
181	400932109265201	850									
182	401222109252201	1170	170								
183	401253109163901	5120	240								
184	401447110375501	5750	5760								
185	401031109191001	3050	360								
186	401240109172101	4760	960								
187	401334109140601	5710	0								
188	401447110375501	3900	2760								
189	401538109331001	4330	0								
190	401024109254001	3790	60								
191	401308109194501	3380	190								
192	401110109160501	3500	0								
193	401238109185401	5730	360								
194	400719109220201	440	0								
195	401450109272301	85	96								
196	401215109122401	5690	770								
197	400759109561001	2090	200								

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
153	401215109223401		2	1			420	8			
154	401117109274901		23	21	8000	74	8500	910			
155	395433109381701										
156	395433109381701		1.8	0.7	880	2.1	350	18	28	17	4
157	395433109381701										
158	395433109381701		1.6	0.8	900	3.4	300	16		16	<1
159	395433109381701										
160	395433109381701										
161	401208109250601		110	50	13000	86	18000	2100			
162	401229109185401		2	5	2600	27	370	5			
163	400719109220201		470	150	13000	100	20000	250			
164	401240109171601		16	5	2900	30	260	5			
165	395657109325401										
166	395657109325401										
167	395657109325401										
168	395657109325401										
169	395657109325401										
170	395657109325401		3.8	0.5	1000	2.8	500	130	27	16	
171	395657109325401										
172	395657109325401		1.5	0.2	900	3.6	380	110		17	<1
173	395657109325401										
174	395657109325401										
175	395657109325401										
176	395657109325401										
177	395657109325401										
178	395657109325401										
179	401233109244201		42	15	6800	63	8300	1400			
180	401044109200101		10	10	6900	45	7600	390			
181	400932109265201		240	92			15000	2900			
182	401222109252201		110	24	9700	35	13000	1900			
183	401253109163901		13	3	2400	20	430	3			
184	401447110375501		12	5			5400	46			
185	401031109191001		20	4	6800	37	8000	570			
186	401240109172101		18	<1.0	3000	28	820	5			
187	401334109140601		3	2			700	2			
188	401447110375501		3	3			3300	26			
189	401538109331001		13	3	2700	11	1700	28			
190	401024109254001		7	6	4500	22	3900	1100			
191	401308109194501		6	1			1000	0			
192	401110109160501		200	76	3000	28	3200	16			
193	401238109185401		17	3	2500	20	160	10			
194	400719109220201		120	36	6900	20	9900	1100			
195	401450109272301		420	<1.0	100	90	1300	290			
196	401215109122401		2	2			380	9			
197	400759109561001		22	20	17000	170	25000	580			

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
153	401215109223401										
154	401117109274901										
155	395433109381701										
156	395433109381701	2400		18000	<1	<1	1	1	20	<1	10
157	395433109381701										
158	395433109381701			17000					60		
159	395433109381701										
160	395433109381701										
161	401208109250601										
162	401229109185401								0		
163	400719109220201										
164	401240109171601								0		
165	395657109325401										
166	395657109325401										
167	395657109325401										
168	395657109325401										
169	395657109325401										
170	395657109325401	900		12000		<20	<20	<4	130	<20	<20
171	395657109325401										
172	395657109325401			11000					100		
173	395657109325401										
174	395657109325401										
175	395657109325401										
176	395657109325401										
177	395657109325401										
178	395657109325401										
179	401233109244201								0		
180	401044109200101								0		
181	400932109265201										
182	401222109252201										
183	401253109163901								0		
184	401447110375501										
185	401031109191001								0		
186	401240109172101								0		
187	401334109140601										
188	401447110375501										
189	401538109331001								0		
190	401024109254001								0		
191	401308109194501										
192	401110109160501										
193	401238109185401								0		
194	400719109220201								0		
195	401450109272301								0		
196	401215109122401										
197	400759109561001								0		

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
153	401215109223401										
154	401117109274901										
155	395433109381701										
156	395433109381701		1	1			<10		20	420	<1
157	395433109381701										
158	395433109381701				480					420	<1
159	395433109381701										
160	395433109381701										
161	401208109250601										
162	401229109185401										
163	400719109220201									10000	
164	401240109171601										
165	395657109325401										
166	395657109325401										
167	395657109325401										
168	395657109325401										
169	395657109325401										
170	395657109325401	45	<20	<2	650	<20		<20	30	410	
171	395657109325401										
172	395657109325401				390					390	<1
173	395657109325401										
174	395657109325401										
175	395657109325401										
176	395657109325401										
177	395657109325401										
178	395657109325401										
179	401233109244201										
180	401044109200101										
181	400932109265201										
182	401222109252201									7000	
183	401253109163901										
184	401447110375501										
185	401031109191001										
186	401240109172101										
187	401334109140601										
188	401447110375501										
189	401538109331001									4000	
190	401024109254001									4000	
191	401308109194501										
192	401110109160501										
193	401238109185401										
194	400719109220201									2000	
195	401450109272301									1000	
196	401215109122401										
197	400759109561001										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
153	401215109223401								
154	401117109274901								
155	395433109381701								
156	395433109381701					<0.1		0.11	
157	395433109381701								
158	395433109381701					<0.5			
159	395433109381701								
160	395433109381701								
161	401208109250601								
162	401229109185401								
163	400719109220201								
164	401240109171601								
165	395657109325401								
166	395657109325401								
167	395657109325401								
168	395657109325401								
169	395657109325401								
170	395657109325401	<10	<30					0.7	
171	395657109325401								
172	395657109325401					<0.5			
173	395657109325401								
174	395657109325401								
175	395657109325401								
176	395657109325401								
177	395657109325401								
178	395657109325401								
179	401233109244201								
180	401044109200101								
181	400932109265201								
182	401222109252201								
183	401253109163901								
184	401447110375501								
185	401031109191001								
186	401240109172101								
187	401334109140601								
188	401447110375501								
189	401538109331001								
190	401024109254001								
191	401308109194501								
192	401110109160501								
193	401238109185401								
194	400719109220201								
195	401450109272301								
196	401215109122401								
197	400759109561001								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
198	401424110353501	UT	124GRRV	5300	1615.4	68-09-16		28900		8.5	81	13100
199	400556109384601	UT	124GRRV	5290	1612.4	68-03-20		32400				
200	401331109180301	UT	124GRRV	5280	1609.3	67-08-00		12200				
201	401135110240101	UT	124GRRV	5260	1603.2	53-05-08		6670		9.9	0.7	2770
202	400354110021201	UT	124GRRV	5220	1591.1	68-03-20		13700				
203	401215109111501	UT	124GRRV	5220	1591.1	61-04-11		5230		8.1	51	3280
204	400147110064701	UT	124GRRV	5180	1578.9	68-03-20		21600				
205	401447110375501	UT	124GRRV	5160	1572.8	61-12-26		36600		9.9	4.6	18800
206	401215109111501	UT	124GRRV	5120	1560.6	61-04-09		3190		8	37	1920
207	400227110172801	UT	124GRRV	5100	1554.5	68-03-20		20500				
208	401017109091701	UT	124GRRV	5070	1545.3	65-03-02		9650		8	21	1100
209	401308109111701	UT	124GRRV	5030	1533.1	65-11-08		5790		9.1	2.5	1620
210	400223110044501	UT	124GRRV	5020	1530.1	68-03-20		42500				
211	401005109151401	UT	124GRRV	5010	1527.0	63-04-17		11000		8.2	18	1420
212	401017109091701	UT	124GRRV	4920	1499.6	65-03-02		4890		8.5	11	1740
213	401214109180201	UT	124GRRV	4920	1499.6	65-01-15		8150		8.8	7	2270
214	401447110375501	UT	124GRRV	4840	1475.2	61-12-26		30600		10		
215	401003109104401	UT	124GRRV	4820	1469.1	65-10-29		4680		8.3	12	1190
216	400506109370101	UT	124DGCK	4800	1463.0	66-06-21	57.5	65100				
217	401238109185401	UT	124GRRV	4790	1460.0	71-01-25		8460		8.9	12	4690
218	400857109254101	UT	124GRRV	4760	1450.8	65-05-12		50000		8.3	34	3480
219	401330110364301	UT	124GRRV	4710	1435.6	65-11-19		34400		9	30	15200
220	401330110364301	UT	124GRRV	4710	1435.6	65-11-01		32800		8.8	44	14100
221	401330110364301	UT	124GRRV	4710	1435.6	66-01-07		30600		7.8	405	13100
222	401045110235701	UT	124GRRV	4700	1432.6	53-10-01		13000		9.4	3	3900
223	400014109114701	UT	124GRRV	4670	1423.4	63-02-01		2090				
224	401330110364301	UT	124GRRV	4660	1420.4	65-09-30		32800		8.3	145	14800
225	401330110364301	UT	124GRRV	4660	1420.4	65-10-01		32800		8.2	174	14100
226	400819109151301	UT	124GRRV	4610	1405.1	65-10-29		8090		8.4	13	1730
227	400506109370101	UT	124GDGC	4570	1392.9	66-06-19	52	79800				
228	401045110235701	UT	124GRRV	4560	1389.9	53-09-01		20800		10	0.2	9770
229	395737110050101	UT	124GRRV	4520	1377.7	64-10-18		5640		8.6	4.6	940
230	400845109262601	UT	124GRRV	4510	1374.6	65-03-28		16100		8.2		4000
231	400845109262601	UT	124GRRV	4480	1365.5	65-04-08		4180		8.3	13	1320
232	400223109473301	UT	124GRRV	4420	1347.2	68-03-20		98300				
233	395737110050101	UT	124GRRV	4320	1316.7	64-10-01		45800		8.2	5.7	460
234	395658109520001	UT	124GRRV	4310	1313.7	61-04-04		83300		8.1	8.2	531
235	401136109124101	UT	124GRRV	4290	1307.6	65-01-14		7280		8.6	19	3860
236	401136109124101	UT	124GRRV	4250	1295.4	65-01-13		7280		8.6	16	3310
237	401317110362701	UT	124GRRV	4250	1295.4	66-04-13		33300		9.6		
238	395327110070101	UT	124PCCK	4220	1286.3	67-09-11		4230		8.9	6.1	2490
239	400857109254101	UT	124GRRV	4210	1283.2	65-05-12		11700		8.8	9	2920
240	395327110070101	UT	124PCCK	4170	1271.0	67-09-11		8730		8.7	9.7	2500
241	403341110082601	UT	124GRRV	4140	1261.9	56-08-31		579		8.2		
242	395512110031901	UT	124PCCK	4120	1255.8	67-08-10		73300		7.6	45	910
243	401135109131501	UT	124GRRV	4120	1255.8	65-08-05		2470		9.1	2	1310
244	401447110375501	UT	124GRRV	4090	1246.6	62-02-08		3000		9		
245	395620109504001	UT	124GRRV	4080	1243.6	61-11-04		78500		7.9	8.6	349
246	400759109561001	UT	124GRRV	4080	1243.6	69-04-10		76900		8.3	39	4030
247	401135109131501	UT	124GRRV	4020	1225.3	65-08-06		1400		8.9	2	830
248	395433109381701	UT	124GRRV	4000	1219.2	64-07-24		3340		9	2.9	1480
249	395658109520001	UT	124GRRV	3910	1191.8	61-04-02		98200		8.1	11	720
250	401005109151401	UT	124GRRV	3800	1158.2	63-04-17		3530		8.5	12	1990
251	395512110031901	UT	124PCCK	3790	1155.2	67-08-10		19600		7.2	31	250
252	395658109520001	UT	124GRRV	3750	1143.0	61-04-01		91700		8.4	3.2	410

	STN NO.	HCO3	CO3	NH4(as N)	NO2(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
198	401424110353501	13300	1320								
199	400556109384601										
200	401331109180301										
201	401135110240101	810	1260								
202	400354110021201										
203	401215109111501	4000	0			0.72	3.2				
204	400147110064701										
205	401447110375501	4400	9110								
206	401215109111501	2340	0			0.29	1.3				
207	400227110172801										
208	401017109091701	1340	0								
209	401308109111701	1540	220								
210	400223110044501										
211	401005109151401	1590	72								
212	401017109091701	1920	96								
213	401214109180201	2450	160								
214	401447110375501	1100	9460								
215	401003109104401	1400	24								
216	400506109370101										
217	401238109185401	4720	490								
218	400857109254101	4250	<0								
219	401330110364301	13700	2400								
220	401330110364301	12600	2280								
221	401330110364301	16000									
222	401045110235701	1980	1370								
223	400014109114701										
224	401330110364301	17800	130								
225	401330110364301	17200	0								
226	400819109151301	1910	96								
227	400506109370101										
228	401045110235701	1200	5270								
229	395737110050101	1000	72								
230	400845109262601	4880	0								
231	400845109262601	1610	0								
232	400223109473301										
233	395737110050101	560									
234	395658109520001	650									
235	401136109124101	3950	370								
236	401136109124101	3280	370								
237	401317110362701	8050	7080								
238	395327110070101	2430	300								
239	400857109254101	2660	440								
240	395327110070101	2440	300								
241	403341110082601	130									
242	395512110031901	1110	0								
243	401135109131501	870	360								
244	401447110375501	1110	550								
245	395620109504001	420									
246	400759109561001	4350	280								
247	401135109131501	500	250								
248	395433109381701	1420	190			0.07	0.3				
249	395658109520001	880									
250	401005109151401	2160	130								
251	395512110031901	300									
252	395658109520001	430	36								

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
198	401424110353501		16	3	9600	70	5600	25			
199	400556109384601						11000				
200	401331109180301						680				
201	401135110240101			<1.0			620	81			
202	400354110021201						13000				
203	401215109111501		18	12			51	52		0.5	
204	400147110064701						6900				
205	401447110375501		9	7			7000	13			
206	401215109111501		9.2	16			78	120		3.8	
207	400227110172801						6300				
208	401017109091701		14	3	2200	2	2600	150			
209	401308109111701		55	15	1500	30	1200	150			
210	400223110044501						4800				
211	401005109151401		17	3	2700	8	3100	74			
212	401017109091701		11	9	1300	8	590	400			
213	401214109180201		19	16	2000	8	1500	25			
214	401447110375501		11	2			5100	67			
215	401003109104401		36	7	1100	10	680	430			
216	400506109370101						31000				
217	401238109185401		12	5	2700	18	800	63			
218	400857109254101		27	5	13000	57	18000	120			
219	401330110364301		8	2	11000	25	5800	10			
220	401330110364301		7	2	10000	21	5800	10			
221	401330110364301		9	2	9500	25	5300	210			
222	401045110235701			5			2500	440			
223	400014109114701						130				
224	401330110364301		67	10	11000	20	6400	25			
225	401330110364301		73	17	10000	30	5300	10			
226	400819109151301		39	7	2300	10	1100	1700			
227	400506109370101						20000				
228	401045110235701		2	4			4600	120			
229	395737110050101		14	5	1300	73	1100	570			
230	400845109262601		12	5	4500	20	3700	93			
231	400845109262601		59	18	980	10	590	220			
232	400223109473301						26000				
233	395737110050101		140	67	12000	120	18000	220			
234	395658109520001		1900	360			35000	3700			
235	401136109124101		8	2	1900	10	300	0			
236	401136109124101		8	0	1800	10	300	0			
237	401317110362701		4	1	12000	55	5700	0			
238	395327110070101		10		1200	6	100	10			
239	400857109254101		39	12	2900	16	2500	120			
240	395327110070101		27	10	2400	16	380	2300			
241	403341110082601		63	26			0	180			
242	395512110031901		860	290	20000	80	27000	7000			
243	401135109131501		8	2	610	5	20	27			
244	401447110375501		4	1			80	0			
245	395620109504001		2100	270			38000	3600			
246	400759109561001		17	<1.0	24000	150	34000	100			
247	401135109131501		2	0	380	5	0	0			
248	395433109381701		0	7.3			290	9.1		15	
249	395658109520001		990	270			41000	2800			
250	401005109151401		<1.0	0	1000	2	120	12			
251	395512110031901		780	33	4000	33	5400	2900			
252	395658109520001		590	310			37000	12000			

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
198	401424110353501								0		
199	400556109384601										
200	401331109180301										
201	401135110240101										
202	400354110021201										
203	401215109111501										
204	400147110064701										
205	401447110375501										
206	401215109111501										
207	400227110172801										
208	401017109091701								0		
209	401308109111701								0		
210	400223110044501										
211	401005109151401										
212	401017109091701								0		
213	401214109180201								0		
214	401447110375501										
215	401003109104401								0		
216	400506109370101										
217	401238109185401										
218	400857109254101										
219	401330110364301								0		
220	401330110364301								0		
221	401330110364301								0		
222	401045110235701										
223	400014109114701										
224	401330110364301										
225	401330110364301								0		
226	400819109151301								0		
227	400506109370101										
228	401045110235701										
229	395737110050101										
230	400845109262601								0		
231	400845109262601								0		
232	400223109473301										
233	395737110050101										
234	395658109520001										
235	401136109124101								0		
236	401136109124101								0		
237	401317110362701								0		
238	395327110070101								0		
239	400857109254101								0		
240	395327110070101								0		
241	403341110082601										
242	395512110031901										
243	401135109131501								0		
244	401447110375501										
245	395620109504001										
246	400759109561001								0		
247	401135109131501								0		
248	395433109381701										
249	395658109520001										
250	401005109151401										
251	395512110031901										
252	395658109520001										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
198	401424110353501										
199	400556109384601										
200	401331109180301										
201	401135110240101										
202	400354110021201										
203	401215109111501										
204	400147110064701										
205	401447110375501										
206	401215109111501										
207	400227110172801										
208	401017109091701									0	
209	401308109111701										
210	400223110044501										
211	401005109151401									0	
212	401017109091701									1000	
213	401214109180201										
214	401447110375501										
215	401003109104401										
216	400506109370101										
217	401238109185401										
218	400857109254101									10000	
219	401330110364301									3000	
220	401330110364301									1000	
221	401330110364301									2000	
222	401045110235701										
223	400014109114701										
224	401330110364301									2000	
225	401330110364301									1000	
226	400819109151301									2000	
227	400506109370101										
228	401045110235701										
229	395737110050101										
230	400845109262601									2000	
231	400845109262601									2000	
232	400223109473301										
233	395737110050101										
234	395658109520001										
235	401136109124101									1000	
236	401136109124101									1000	
237	401317110362701									6000	
238	395327110070101										
239	400857109254101									6000	
240	395327110070101										
241	403341110082601										
242	395512110031901										
243	401135109131501										
244	401447110375501										
245	395620109504001										
246	400759109561001										
247	401135109131501										
248	395433109381701										
249	395658109520001										
250	401005109151401									0	
251	395512110031901										
252	395658109520001										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
198	401424110353501								
199	400556109384601								
200	401331109180301								
201	401135110240101								
202	400354110021201								
203	401215109111501								
204	400147110064701								
205	401447110375501								
206	401215109111501								
207	400227110172801								
208	401017109091701								
209	401308109111701								
210	400223110044501								
211	401005109151401								
212	401017109091701								
213	401214109180201								
214	401447110375501								
215	401003109104401								
216	400506109370101								
217	401238109185401								
218	400857109254101								
219	401330110364301								
220	401330110364301								
221	401330110364301								
222	401045110235701								
223	400014109114701								
224	401330110364301								
225	401330110364301								
226	400819109151301								
227	400506109370101								
228	401045110235701								
229	395737110050101								
230	400845109262601								
231	400845109262601								
232	400223109473301								
233	395737110050101								
234	395658109520001								
235	401136109124101								
236	401136109124101								
237	401317110362701								
238	395327110070101								
239	400857109254101								
240	395327110070101								
241	403341110082601								
242	395512110031901								
243	401135109131501								
244	401447110375501								
245	395620109504001								
246	400759109561001								
247	401135109131501								
248	395433109381701								
249	395658109520001								
250	401005109151401								
251	395512110031901								
252	395658109520001								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
253	395625110070701	UT	124GRRV	3650	1112.5	63-04-00		9320		7.8	12	400
254	401056109125801	UT	124GRRV	3590	1094.2	66-01-06		21600		8	42	2170
255	400808110212501	UT	124GRRV	3580	1091.2	62-06-07		44600		9.6	8.2	16700
256	400748110163801	UT	124GRRV	3570	1088.1	52-02-23		4070		9	3.4	1720
257	395034109342501	UT	124DGCK	3560	1085.1	77-04-16	22	1600	0	7.8	24	730
258	400544109350401	UT	124GRRV	3550	1082.0	69-07-16		45800		8	121	6200
259	395657109325401	UT	124GRRV	3520	1072.9	64-04-02		3080		8.8	4.4	1430
260	395737109412901	UT	124GRRV	3510	1069.8	62-07-12		40300		8	28	1410
261	400808110220301	UT	124GRRV	3410	1039.4	64-11-30		93500		9.6		53000
262	401003109104401	UT	124GRRV	3410	1039.4	65-10-29		1010		8.8	1.7	550
263	395715109272001	UT	124GRRV	3400	1036.3	64-05-11		16400		8.5	14	2300
264	395715109272001	UT	124GRRV	3400	1036.3	65-10-28		22800				
265	400506109370101	UT	124PCCK	3390	1033.3	66-06-13	43.5	53700				
266	401017109091701	UT	124GRRV	3380	1030.2	65-03-02		2970		8.7	5.4	1400
267	400808110202001	UT	124GRRV	3350	1021.1	62-03-00				9.7	25	65000
268	395737109412901	UT	124GRRV	3340	1018.0	62-07-10		3330		8.8	4.8	1560
269	395507110314401	UT	124GRRV	3260	993.6	61-11-00		14500		8.8	16	5320
270	395906109362801	UT	124GRRV	3230	984.5	69-07-30	24.5	48000		8.9	11	4570
271	395906109362801	UT	124GRRV	3230	984.5	69-07-31	23.5	54000		8.6	26	5400
272	395728109425701	UT	124GRRV	3140	957.1	60-10-21		4000		8.7	5.8	1490
273	395626109165401	UT	124GRRV	3070	935.7	61-10-15		2480		8.9	2.4	964
274	401317110362701	UT	124GRRV	3050	929.6	66-03-29		2590		9.3		
275	395817109403701	UT	124GRRV	3000	914.4	53-07-00		7430		8.9	6.2	2530
276	395906109362801	UT	124GRRV	2960	902.2	69-07-29	23	82000		8.8	19	6070
277	395823109440801	UT	124GRRV	2870	874.8	63-10-15		12900		8.4	17	2130
278	395906109362801	UT	124GRRV	2820	859.5	69-07-31	27.5	85000		8.9	17	6900
279	395850109305201	UT	124GRRV	2540	774.2	67-08-15		7060				
280	395850109305201	UT	124GRRV	2540	774.2	75-06-25	17	12000		8.5	31	5000
281	395228109163401	UT	124GRRV	2400	731.5	65-08-26		1720		8.2	7	567
282	395658109520001	UT	124GRRV	2280	694.9	61-03-26		10500		8.6	10	2100
283	395238109160801	UT	124GRRV	2270	691.9	76-07-18	26.5	10300		8.2	12	968
284	395318109162101	UT	124GRRV	2210	673.6	65-08-26		1800		8.2	6.5	528
285	401003109104401	UT	124GRRV	2180	664.5	65-10-29		2100		8.5	4.9	800
286	400819109151301	UT	124GRRV	2150	655.3	65-10-28		2970		8.7	5.8	1480
287	395728109425701	UT	124GRRV	2100	640.1	60-10-16		109000		9.7	8.4	21700
288	401226110350301	UT	124GRRV	2040	621.8	69-09-03		2900		9.1		
289	400353109231802	UT	124PCCK	2020	615.7	81-12-16	28	116000		7.5		
290	393934109182501	UT	124GRRV	2000	609.6	60-06-00				7.6	10	209
291	395238109160801	UT	124GRRV	1950	594.4	83-07-21	25	1580		9.1		460
292	395238109160801	UT	124GRRV	1950	594.4	83-06-10	25			9		
293	393434109432101	UT	124GRRV	1910	582.2	63-07-22		1170		8.7	1.2	320
294	400834109124101	UT	124GRRV	1840	560.8	56-05-01		3860		8.3	6.4	657
295	400122109183802	UT	124GRRV	1750	533.4	81-11-10	26	100000		9.5		
296	395238109160801	UT	124GRRV	1580	481.6	76-12-31	24	1500				
297	395238109160801	UT	124GRRV	1580	481.6	79-03-23	25	1800		9		430

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) ml/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
253	395625110070701	490									
254	401056109125801	2640									
255	400808110212501	4760	7680								
256	400748110163801	1550	270								
257	395034109342501	890	0	2.7	0.01	0	0	0.01		0.18	55
258	400544109350401	7560	0								
259	395657109325401	1480	130			0.16	0.7				
260	395737109412901	1720									
261	400808110220301	21400	21300			4.5	20				
262	401003109104401	550	60								
263	395715109272001	2270	260			1.9	8.2				
264	395715109272001										
265	400506109370101										
266	401017109091701	1560	72								
267	400808110202001	51200	13800								
268	395737109412901	1440	230								
269	395507110314401	5120	670								
270	395906109362801	3830	860				<0.10				
271	395906109362801	5940	320				<0.10				
272	395728109425701	1380	220								
273	395626109165401	1080	48								
274	401317110362701	630	260								
275	395817109403701	2720	180								
276	395906109362801	5710	830				<0.10				
277	395823109440801	2450	72								
278	395906109362801	5910	1230				<0.10				
279	395850109305201										
280	395850109305201	4140	960	21	0.04	0	0	0.04		0.55	0.5
281	395228109163401	690	0			0.32	1.4				
282	395658109520001	1340	600								
283	395238109160801	1180		12	<0.010	0	0	<0.10			0.2
284	395318109162101	640	0			0.36	1.6				
285	401003109104401	730	120								
286	400819109151301	1510	140								
287	395728109425701	9150	8520								
288	401226110350301	1120	430								
289	400353109231802										
290	393934109182501	250									
291	395238109160801			0.96	0.03			<0.10	0.04		
292	395238109160801			0.8	<0.020			<0.10	0.01		
293	393434109432101	370	12								
294	400834109124101	630	84								
295	400122109183802							<0.09	8		
296	395238109160801										
297	395238109160801							0.03			

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
253	395625110070701		390	78	2000	100	120	5100			
254	401056109125801		75	21	5800	45	7600	10			
255	400808110212501		37				13000	230			
256	400748110163801		<1.0	<1.0			380	160			
257	395034109342501		1.2	0.9	420	1.2	82	32	4.4	16	<1
258	400544109350401		<1.0	23	13000	74	16000	25			
259	395657109325401		0	2.4			190	14		13	
260	395737109412901		270	92			13000	3900			
261	400808110220301		0	80			32000	680			
262	401003109104401		6	3	270	<1.0	16	50			
263	395715109272001		0	97			4800	120		3.4	
264	395715109272001						7000				
265	400506109370101						11000				
266	401017109091701		9	3	760	5	40	240			
267	400808110202001		8	3			66000	350			
268	395737109412901		6				300	54			
269	395507110314401		32	8			2400	58			
270	395906109362801		4.1	1.2	15000	53	19000	35	54	8.6	
271	395906109362801		2	1.2	17000	62	21000	400	46	12	<46
272	395728109425701		11	1			140	110			
273	395626109165401		2	1			99	140			
274	401317110362701		9	3	660	5	180	260			
275	395817109403701		6	2	2000	5	1200	130			
276	395906109362801		4.1	1.2	28000	100	37000	920	60	9.2	
277	395823109440801		11	10	3400	28	2700	1600			
278	395906109362801		2.8	0.8	28000	100	37000	460	70	9.2	<46
279	395850109305201						810				
280	395850109305201		1.1	0.5	3400	11	1700	58	120	11	
281	395228109163401		3.2	0.5			21	310		12	
282	395658109520001		10	3			2500	26			
283	395238109160801		8.5	5.3	2300	9.5	2900	270	4.9	10	3
284	395318109162101		3.2	0.5			60	330		12	
285	401003109104401		9	1	550	<1.0	150	200			
286	400819109151301		25	5	830	0	150	110			
287	395728109425701		11	8			45000	520			
288	401226110350301		7	3	960	12	150	280			
289	400353109231802		0.2	0.2	41000	60	650	3500	450	<2.0	50
290	393934109182501		10	7.1			17	420		41	
291	395238109160801		1.4	0.45	360	0.8	22	340	1.1	13	<1
292	395238109160801		1.4	0.4	360	0.8	32	350	1.1	14	1
293	393434109432101		10	7	270	13	32	290			
294	400834109124101		35	9			850	200			
295	400122109183802		3	1	34000	39	3100	7400	26	<2.0	
296	395238109160801										
297	395238109160801		1.3	0.5	390	0.9	22	390	1.1	12	

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
253	395625110070701										
254	401056109125801								0		
255	400808110212501										
256	400748110163801										
257	395034109342501	300		770					210	2	20
258	400544109350401								0		
259	395657109325401										
260	395737109412901										
261	400808110220301										
262	401003109104401								0		
263	395715109272001										
264	395715109272001										
265	400506109370101										
266	401017109091701								0		
267	400808110202001										
268	395737109412901										
269	395507110314401										
270	395906109362801			300000				80			
271	395906109362801	3100		360000	<10	<0.00	<2	60		3	
272	395728109425701										
273	395626109165401										
274	401317110362701								0		
275	395817109403701								0		
276	395906109362801			640000				110			
277	395823109440801								0		
278	395906109362801	3100		620000	<10	<0.00	<2	80		3	
279	395850109305201										
280	395850109305201	3000		33000					50		
281	395228109163401										
282	395658109520001										
283	395238109160801	300		3200	<2			2	160	5	30
284	395318109162101										
285	401003109104401								0		
286	400819109151301								0		
287	395728109425701										
288	401226110350301										
289	400353109231802	600		240000		3			300		30
290	393934109182501										
291	395238109160801	27		190	<1	<1	<1	<1	11	8	17
292	395238109160801	31		190	<1	<1	<1	1	7	1	17
293	393434109432101										
294	400834109124101										
295	400122109183802			180000					320		20
296	395238109160801										
297	395238109160801			200							

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
253	395625110070701										
254	401056109125801									2000	
255	400808110212501										
256	400748110163801										
257	395034109342501	<1			80	5	20		120	340	<1
258	400544109350401										
259	395657109325401										
260	395737109412901										
261	400808110220301										
262	401003109104401										
263	395715109272001										
264	395715109272001										
265	400506109370101										
266	401017109091701									1000	
267	400808110202001										
268	395737109412901										
269	395507110314401										
270	395906109362801				440		20			590	2
271	395906109362801	10	<5	4	700		40			650	7
272	395728109425701										
273	395626109165401										
274	401317110362701										
275	395817109403701										
276	395906109362801				700		20			710	<0
277	395823109440801										
278	395906109362801	120	<5	4	730000		10			740	<0
279	395850109305201										
280	395850109305201				340				<100	1000	
281	395228109163401										
282	395658109520001										
283	395238109160801	8			1200	1	80		280	530	<1
284	395318109162101										
285	401003109104401										
286	400819109151301										
287	395728109425701										
288	401226110350301										
289	400353109231802						70			250	
290	393934109182501										
291	395238109160801		<1	<1			<3		10	100	<1
292	395238109160801		<1	<1			<3		10	97	<1
293	393434109432101										
294	400834109124101										
295	400122109183802										
296	395238109160801										
297	395238109160801								50		

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
253	395625110070701								
254	401056109125801								
255	400808110212501								
256	400748110163801								
257	395034109342501				0.17	<0.5	0.2	0.4	
258	400544109350401								
259	395657109325401								
260	395737109412901								
261	400808110220301								
262	401003109104401								
263	395715109272001								
264	395715109272001								
265	400506109370101								
266	401017109091701								
267	400808110202001								
268	395737109412901								
269	395507110314401								
270	395906109362801				1.9				0.2
271	395906109362801	7	9		19				0.1
272	395728109425701								
273	395626109165401								
274	401317110362701								
275	395817109403701								
276	395906109362801				11				0.4
277	395823109440801								
278	395906109362801	6	20		12				0.4
279	395850109305201								
280	395850109305201							6.2	
281	395228109163401								
282	395658109520001								
283	395238109160801					<0.5		12	
284	395318109162101								
285	401003109104401								
286	400819109151301								
287	395728109425701								
288	401226110350301								
289	400353109231802								
290	393934109182501								
291	395238109160801					0.3			
292	395238109160801					<0.1			
293	393434109432101								
294	400834109124101								
295	400122109183802								
296	395238109160801								
297	395238109160801								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
298	395238109160801	UT	124GRRV	1580	481.6	77-01-17	24.5	1410				
299	395238109160801	UT	124GRRV	1580	481.6	77-03-18						
300	395238109160801	UT	124GRRV	1580	481.6	77-04-27						
301	395238109160801	UT	124GRRV	1580	481.6	77-02-08						
302	395238109160801	UT	124GRRV	1580	481.6	77-05-12	25	1460				
303	395238109160801	UT	124GRRV	1570	478.5	76-07-19	26	2070		8.8	1.6	511
304	394835109243901	UT	124DGCK	1500	457.2	78-04-07	23.5	1370				509
305	394835109243901	UT	124DGCK	1490	454.2	83-07-21		1460		9.1		510
306	394527109162001	UT	124DGCK	1400	426.7	78-03-26		400				
307	394527109162001	UT	124DGCK	1400	426.7	78-03-28						
308	394527109162001	UT	124DGCK	1400	426.7	78-03-28	22	1300		8.6	1.5	300
309	393929109185001	UT	124DGCK	1290	393.2	78-07-07	18.5	1130		7.2	24	200
310	395238109160801	UT	124GRRV	1290	393.2	76-07-19	26	2070		8.7	2.1	530
311	395233109151601	UT	124GRRV	1270	387.1	76-10-17	26	2000				
312	395233109151601	UT	124GRRV	1270	387.1	74-12-23	25	1670				
313	395233109151601	UT	124GRRV	1270	387.1	75-01-06	24	1710				
314	395233109151601	UT	124GRRV	1270	387.1	61-09-06		1820		8.5	3.2	517
315	395233109151601	UT	124GRRV	1270	387.1	74-11-14		1550				
316	395233109151601	UT	124GRRV	1270	387.1	75-09-12	27	1620				
317	395233109151601	UT	124GRRV	1270	387.1	75-10-09	24.5	1800				
318	395233109151601	UT	124GRRV	1270	387.1	75-06-26	26	1770		8.9	1.2	475
319	395233109151601	UT	124GRRV	1270	387.1	75-08-05	25	1720				
320	395233109151601	UT	124GRRV	1270	387.1	75-04-07	25	1670				
321	395233109151601	UT	124GRRV	1270	387.1	75-03-03	26	1620				
322	395233109151601	UT	124GRRV	1270	387.1	75-02-03	25	1620				
323	395233109151601	UT	124GRRV	1270	387.1	75-07-10	27	1850				
324	395233109151601	UT	124GRRV	1270	387.1	76-11-22	26.5	1950				
325	395233109151601	UT	124GRRV	1270	387.1	74-10-08	26.5	1650				
326	395233109151601	UT	124GRRV	1270	387.1	75-06-03	26	1810				
327	395233109151601	UT	124GRRV	1270	387.1	75-05-05	25	1700				
328	395233109151601	UT	124GRRV	1270	387.1	75-11-04	25	1700				
329	395233109151601	UT	124GRRV	1270	387.1	74-09-10	26.5	1700		8.3	4.6	471
330	395755108211400	CO	124GRRV	1260	384.0	75-08-21	20	975		8.7	2	502
331	395238109160801	UT	124GRRV	1250	381.0	76-11-12	22	1720				395
332	395310108050400	CO	124GRRV	1180	359.7	75-09-18	15	1490				812
333	395548109080701	UT	124PCCK	1170	356.6	75-11-12	13.5	1630		9	1	490
334	395548109080701	UT	124PCCK	1170	356.6	75-06-26	14.5	1600		10.7	0	509
335	395548109080701	UT	124PCCK	1170	356.6	76-09-14	14.5	1680		8	9.4	482
336	395238109160801	UT	124GRRV	1130	344.4	76-11-11	21.5	1800				501
337	400146109064601	UT	124PCCK	1100	335.3	75-08-22		21000				6020
338	394229109325601	UT	124DGCK	1090	332.2	78-03-22	16.5	900		8.1	3.6	230
339	400218108170600	CO	124GRRV	1060	323.1	75-11-23	16	3570		8.4	12	1520
340	395712108243402	CO	124GRRV	1030	313.9	75-07-23	18	1030		8.7	1.6	401
341	400757110540401	UT	124GRRV	1000	304.8	71-01-25		590		8.9		390
342	394835109243901	UT	124DGCK	860	262.1	78-05-05	23.5	1350		9	1.2	599
343	395255108154200	CO	124GRRV	810	246.9	75-09-09	16	1510		8.9	1.2	509
344	394527109162001	UT	124DGCK	800	243.8	78-03-26	10			9.2	1.3	1040
345	395021109044501	UT	124DGCK	798	243.2	78-05-23	16.5	3680	0	7.4	31	400
346	395549108060900	CO	124GRRV	790	240.8	76-01-26	11	850		8.3	3.8	386
347	400218108170600	CO	124GRRV	772	235.3	75-11-22	14.5	1350		8	12	594

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) ml/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
298	395238109160801										
299	395238109160801										
300	395238109160801										
301	395238109160801										
302	395238109160801										
303	395238109160801	570	24	0.76	<0.010	0	0	<0.10		0.18	0
304	394835109243901	620						<0.10		0.03	
305	394835109243901			0.31	<0.020			<0.10	0.04		1.1
306	394527109162001										
307	394527109162001										
308	394527109162001	370						0.02		0	
309	393929109185001	240	0	0.01	0.01	0.38	1.7	0.39		0.03	0.2
310	395238109160801	610	19	0.79	<0.010	0	0	<0.10		0.15	0.2
311	395233109151601										
312	395233109151601										
313	395233109151601										
314	395233109151601	610	12			0.14	0.6				
315	395233109151601										
316	395233109151601										
317	395233109151601										
318	395233109151601	500	40	0.92	0.03	0.03	0.1	0.06		0.09	2.7
319	395233109151601										
320	395233109151601										
321	395233109151601										
322	395233109151601										
323	395233109151601										
324	395233109151601										
325	395233109151601										
326	395233109151601										
327	395233109151601										
328	395233109151601										
329	395233109151601	570	0	1.1	<0.010	0	0	<0.10		0.09	1.7
330	395755108211400	570	22					0.02		0.15	
331	395238109160801	480						0.01		0.03	
332	395310108050400	990						0.03		0.06	
333	395548109080701	510	43	3.5	0.01	0	0	0.01		0.61	10
334	395548109080701	620	0	2.5	0.01	0	0	0.01		0.4	10
335	395548109080701	590	0	2.7	<0.010	0.1	0.44	0.1		0.15	9.8
336	395238109160801	610						0.01		0	
337	400146109064601	7080	130					0.01		0.06	
338	394229109325601	280						0.08		0	
339	400218108170600	1850	0					0.08		0.15	
340	395712108243402	410	39					0.02		0	
341	400757110540401	380	48								
342	394835109243901	700	15					0.03		0.09	
343	395255108154200	620	0	0.17				0		0.03	
344	394527109162001	1270						0.2		0	
345	395021109044501	490	0	0.69	<0.010	0.01	0.04	0.01		0	0
346	395549108060900	470	0					0.11		0.03	
347	400218108170600	720	0					0		0.03	

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
298	395238109160801										
299	395238109160801										
300	395238109160801										
301	395238109160801										
302	395238109160801										
303	395238109160801		2.3	1	480	1.4	59	440	2	13	0
304	394835109243901		4.5	0.7	360	1.5	13	260	1.2	12	
305	394835109243901		1.3	0.48	360	0.8	12	280	1.2	13	1
306	394527109162001										
307	394527109162001										
308	394527109162001		4.5	1.8	340	1	7.4	400	0.5	8.1	
309	393929109185001	2.4	54	44	190	0.7	12	470	0.3	8.9	1
310	395238109160801		2.2	0.9	480	1.6	110	380	2.1	13	0
311	395233109151601										
312	395233109151601										
313	395233109151601										
314	395233109151601		3.6	1.5	440	1.6	4	420	1.8	13	
315	395233109151601										
316	395233109151601										
317	395233109151601										
318	395233109151601		3	0.2	390	0.9	25	380	2.1	14	
319	395233109151601										
320	395233109151601										
321	395233109151601										
322	395233109151601										
323	395233109151601										
324	395233109151601										
325	395233109151601										
326	395233109151601										
327	395233109151601										
328	395233109151601										
329	395233109151601		1.9	0.2	390	1.1	27	350	2	14	1
330	395755108211400		2.4	1.6	250	0.3	12	11	18	13	20
331	395238109160801		1.3	0.2	350	0.7	13	360	0.9	11	
332	395310108050400		1.1	0.3	390	1.4	12	13	9.7	7.9	42
333	395548109080701		9.9	22	320	3.4	210	98	2.1	20	1200
334	395548109080701		9.3	22	350	3.9	220	86	2.2	18	950
335	395548109080701	17	10	27	320	3.4	180	130	1.7	19	800
336	395238109160801		1.1	0.2	360	0.8	38	250	1.4	12	
337	400146109064601	60	6.6	37	5600	18	3500	320	11	3.3	
338	394229109325601		17	15	190	0.9	9.3	270	0.2	10	
339	400218108170600		22	44	810	1.3	220	180	2.8	21	80
340	395712108243402		2.7	0.6	250	0.9	10	120	13	11	3
341	400757110540401		10	13	210		12	120			
342	394835109243901		1.7	0.4	360	0.8	32	150	1.9	13	
343	395255108154200		24	60	230	0.6	17	230	3.1	24	5
344	394527109162001		15	79	760	4.6	39	820	0.4	6.3	
345	395021109044501	3.9	130	140	690	1.9	33	1800	0.8	19	5
346	395549108060900		18	16	160	0.6	5.1	55	3.8	17	2
347	400218108170600		29	59	230	0.3	7.7	230	0.5	21	90

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
298	395238109160801										
299	395238109160801										
300	395238109160801										
301	395238109160801										
302	395238109160801										
303	395238109160801	<100		310					70	5	90
304	394835109243901			250					170		20
305	394835109243901	28		240	<1	<1	<1	<1	8	5	2
306	394527109162001										
307	394527109162001										
308	394527109162001			130					2100		60
309	393929109185001	200		170	<2	<20			1600	5	20
310	395238109160801	<100		380				<2	130	4	<10
311	395233109151601										
312	395233109151601										
313	395233109151601										
314	395233109151601			410							
315	395233109151601										
316	395233109151601										
317	395233109151601										
318	395233109151601	<100		500					30		
319	395233109151601										
320	395233109151601										
321	395233109151601										
322	395233109151601										
323	395233109151601										
324	395233109151601										
325	395233109151601										
326	395233109151601										
327	395233109151601										
328	395233109151601										
329	395233109151601			540					20		
330	395755108211400	500		210					60	<2	<10
331	395238109160801			140							
332	395310108050400	<200		1300					3400	<2	60
333	395548109080701	300	<10	5200		<20			210		20
334	395548109080701	200	<2.0	5100		<8	<8	2	75	<8	15
335	395548109080701	300	<10	4500		<9			180		<10
336	395238109160801			370							
337	400146109064601			160000							
338	394229109325601			630					40		<10
339	400218108170600	700		280					360	<2	5
340	395712108243402	<100		150					20	2	20
341	400757110540401										
342	394835109243901			460					<10		<10
343	395255108154200	<200		170				<2	2400		100
344	394527109162001			1800					40		60
345	395021109044501	<100		770	<2			5	2100	4	700
346	395549108060900	400		260					60	2	20
347	400218108170600	<100		210					40	<2	20

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
298	395238109160801										
299	395238109160801										
300	395238109160801										
301	395238109160801										
302	395238109160801										
303	395238109160801	0			220	0	20		30	100	<1
304	394835109243901										
305	394835109243901		<1	<1			3		10	110	<1
306	394527109162001										
307	394527109162001										
308	394527109162001										
309	393929109185001	2				0	30		<100	40	<1
310	395238109160801	<1			200	0	20		140	110	<1
311	395233109151601										
312	395233109151601										
313	395233109151601										
314	395233109151601										
315	395233109151601										
316	395233109151601										
317	395233109151601										
318	395233109151601				110				10	110	
319	395233109151601										
320	395233109151601										
321	395233109151601										
322	395233109151601										
323	395233109151601										
324	395233109151601										
325	395233109151601										
326	395233109151601										
327	395233109151601										
328	395233109151601										
329	395233109151601				120					90	<1
330	395755108211400	13			550				70	130	<1
331	395238109160801										
332	395310108050400	28			110		<20		30	220	<1
333	395548109080701	160	70		4200	8	<20	<0	30	670	<1
334	395548109080701	80	<8	<2	4600	<8	<20	<10	40	680	<1
335	395548109080701	54	11		4800	9	20	<10	70	720	<1
336	395238109160801										
337	400146109064601										
338	394229109325601										
339	400218108170600	8			9100		20		0	190	<1
340	395712108243402				460		20		220	200	1
341	400757110540401										
342	394835109243901										
343	395255108154200	<1			3800				<100	30	<1
344	394527109162001										
345	395021109044501	11			6800	0	300		<100	260	<1
346	395549108060900	2			1200		<20		10	60	<1
347	400218108170600	44			12000		<20		20	90	<1

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
298	395238109160801								
299	395238109160801								
300	395238109160801								
301	395238109160801								
302	395238109160801								
303	395238109160801					<0.5		0.4	
304	394835109243901								
305	394835109243901					<0.1			
306	394527109162001								
307	394527109162001								
308	394527109162001								
309	393929109185001				0.7	<0.1		0.1	
310	395238109160801					<0.5		0.6	
311	395233109151601								
312	395233109151601								
313	395233109151601								
314	395233109151601								
315	395233109151601								
316	395233109151601								
317	395233109151601								
318	395233109151601							0.2	
319	395233109151601								
320	395233109151601								
321	395233109151601								
322	395233109151601								
323	395233109151601								
324	395233109151601								
325	395233109151601								
326	395233109151601								
327	395233109151601								
328	395233109151601								
329	395233109151601					<0.5			
330	395755108211400					<0.5		0.1	
331	395238109160801								
332	395310108050400					<0.5		0.1	
333	395548109080701	<5	<20		0.32	<0.5			2.1
334	395548109080701	<4	<20		<0.40	<0.5			1.2
335	395548109080701	<5	<20		0.42	<0.5		0.6	1.3
336	395238109160801								
337	400146109064601								
338	394229109325601								
339	400218108170600					<0.5		0.3	
340	395712108243402							0.1	
341	400757110540401								
342	394835109243901								
343	395255108154200					<0.5		0.1	
344	394527109162001								
345	395021109044501				0.25	<0.1		0.2	
346	395549108060900					<0.5		0.1	
347	400218108170600					<0.5		0.1	

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
348	395238109160801	UT	124GRRV	765	233.2	76-07-20	25	1970		8.6	2.5	514
349	394835109243901	UT	124DGCK	764	232.9	78-04-03	18	10900		9.2	3.8	3070
350	394904109363601	UT	124GRRV	711	216.7	75-02-20	15	2200				
351	394904109363601	UT	124GRRV	711	216.7	75-09-23	14.5	1550				
352	394904109363601	UT	124GRRV	711	216.7	74-12-24	15	1500				
353	394904109363601	UT	124GRRV	711	216.7	75-03-17	16	1500				
354	394904109363601	UT	124GRRV	711	216.7	75-11-17	16	1500				
355	394904109363601	UT	124GRRV	711	216.7	74-08-20	18	1450		9.3	0.5	541
356	394904109363601	UT	124GRRV	711	216.7	75-05-07	15.5	1370				
357	394904109363601	UT	124GRRV	711	216.7	75-01-21	16	1340				
358	394904109363601	UT	124GRRV	711	216.7	75-07-23	17	1420				
359	394904109363601	UT	124GRRV	711	216.7	75-06-16	17	1550				
360	394904109363601	UT	124GRRV	711	216.7	75-05-19	16.5	1450				
361	394904109363601	UT	124GRRV	711	216.7	71-08-31	16	1490		8.7	2.2	569
362	394904109363601	UT	124GRRV	711	216.7	75-08-19	17	1750				
363	394904109363601	UT	124GRRV	711	216.7	75-04-15	15	1500				
364	394540108191201	CO	124GRRV	655	199.6	75-06-12	17	3000		7.9	39	1580
365	395208110325001	UT	124GRRV	650	198.1	65-07-22		942		7.8	9.9	322
366	395614109111401	UT	124PCCK	650	198.1	75-05-13	19	6000		8	10	518
367	395614109111401	UT	124PCCK	650	198.1	76-09-17	18	6100		8.4	2.8	365
368	395614109111401	UT	124PCCK	650	198.1	74-12-13	15.5	5600		7.5	37	603
369	395614109111401	UT	124PCCK	650	198.1	75-06-26	17.5	6070		7.8	14	468
370	395614109111401	UT	124PCCK	650	198.1	74-11-25	17	5900		7.5	38	610
371	395614109111401	UT	124PCCK	650	198.1	75-12-09	15.5	6070		8.3	5.8	595
372	395136108210000	CO	124GRRV	640	195.1	75-12-13	15	1400		8.3	4.5	463
373	395707110011001	UT	124GRRV	631	192.3	69-12-19		4400		9.2	1.8	1430
374	395500109124401	UT	124PCCK	627	191.1	75-06-25	17.5	2900		8.3	9.7	989
375	395500109124401	UT	124PCCK	627	191.1	76-09-20	19	2600		8.9	2.1	839
376	395500109124401	UT	124PCCK	627	191.1	74-12-11	16.5	1270		8.4	3.2	417
377	395500109124401	UT	124PCCK	627	191.1	76-06-28	19	2770		9.4	1	1300
378	395500109124401	UT	124PCCK	627	191.1	75-05-14	18.5	2500		8.8	3.2	1050
379	395603109120801	UT	124PCCK	620	189.0	75-03-17	16.5	4200		8.8	3.7	1210
380	395603109120801	UT	124PCCK	620	189.0	76-09-17	17.5	2400		9.2	0.5	400
381	395603109120801	UT	124PCCK	620	189.0	75-11-24	16.5	2400		9	1.9	957
382	395603109120801	UT	124PCCK	620	189.0	74-12-13	16.5	4200		8.2	9.1	742
383	395603109120801	UT	124PCCK	620	189.0	74-11-25	17.5	4700		8	23	1160
384	395603109120801	UT	124PCCK	620	189.0	75-06-26	17			8.2	11	894
385	395530109134901	UT	124PCCK	612	186.5	74-12-30				10.7	0	887
386	395530109134901	UT	124PCCK	612	186.5	76-06-26	16	2280		9.5	1.1	1790
387	395530109134901	UT	124PCCK	612	186.5	76-09-20	16.5	2200		9.5	0.7	1160
388	395530109134901	UT	124PCCK	612	186.5	75-04-04	15	2090		9.2	1.3	1050
389	395530109134901	UT	124PCCK	612	186.5	75-05-14	19	2200		9.4	0.8	1050
390	402418110040801	UT	124GRRV	600	182.9	71-11-22		353		7.8	4.4	144
391	395549108060900	CO	124GRRV	560	170.7	76-01-23	11	800		8.5	2.2	359
392	395453109111001	UT	124PCCK	540	164.6	74-11-27	16	2050		8.2	9.7	785
393	395453109111001	UT	124PCCK	540	164.6	76-06-29	18.5	2350		8.5	5	816
394	395453109111001	UT	124PCCK	540	164.6	75-06-25	17	2050		8.7	2.6	655
395	395453109111001	UT	124PCCK	540	164.6	75-12-11	13	6460		9.5	1.9	3010
396	395453109111001	UT	124PCCK	540	164.6	74-12-12	15.5	2000		7.4	61	787
397	395453109111001	UT	124PCCK	540	164.6	76-03-17	15.5	3370		9.6	0.5	1060

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) ml/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
348	395238109160801	600	12		<0.010	0	0	<0.10		0.21	1.1
349	394835109243901	1200	1250					0.05			
350	394904109363601										
351	394904109363601										
352	394904109363601										
353	394904109363601										
354	394904109363601										
355	394904109363601	530	62		<0.010	0.03	0.13	0.03		0.12	20
356	394904109363601										
357	394904109363601										
358	394904109363601										
359	394904109363601										
360	394904109363601										
361	394904109363601	560	65					0.07		0.06	
362	394904109363601										
363	394904109363601										
364	394540108191201	1930	0					0.01		0.06	
365	395208110325001	390	0			0.02	0.1				
366	395614109111401	630	0	2.2	<0.010	0	0	<0.10		1.2	10
367	395614109111401	440	5	2.2	<0.010	0	0	<0.10		0.03	96
368	395614109111401	740	0	2.9	0.01	0.01	0.04	0.02		0	150
369	395614109111401	570	0	2.5	<0.010	0.02	0.09	0.02		0.18	100
370	395614109111401	740	0	2.6	0.01	0	0	0.01		0.06	62
371	395614109111401	730	0	1.9	<0.010	0	0	<0.10		0.12	80
372	395136108210000	570	0					0.01		0.06	
373	395707110011001	650	540								
374	395500109124401	860	170	0.96	0.02	0.01	0.04	0.03		0.25	340
375	395500109124401	450	280	1.1							85
376	395500109124401	510	0	1.2	<0.010	0	0	<0.10		0.21	3.3
377	395500109124401	1270	160	0.64	<0.010	0	0	<0.10		0.25	120
378	395500109124401	860	210	0.95							100
379	395603109120801	1270	98	2.3	0.01	0	0	<0.10		0.98	240
380	395603109120801	420	34	0.79	<0.010	0	0	<0.10		0.15	180
381	395603109120801	920	120	1	<0.010	0.02	0.09	0.02		0.15	29
382	395603109120801	910	0	2.8	0.02	0.01	0.04	0.03		0.03	93
383	395603109120801	1410	0	2.9	<0.010	0	0	<0.10		0.46	220
384	395603109120801	1090	0	1.4	0.01	0.03	0.13	0.04		0.18	160
385	395530109134901	740	170	0.92	0.01	0.24	1.1	0.25		0.25	0.1
386	395530109134901	1470	350	0.67	0.01	0.02	0.09	0.03		0.25	0.6
387	395530109134901	750	330	1	<0.010	0.01	0.04	0.01		0.28	2.2
388	395530109134901	720	280	0.84	<0.010	0.01	0.04	0.01		0.21	0.2
389	395530109134901	830	220	0.74	<0.010	0	0	<0.10		0.31	9
390	402418110040801	170	0					0.03		0	
391	395549108060900	380	28					0.06		0	
392	395453109111001	960	0	0.94	<0.010	0.01	0.04	0.01		0.09	18
393	395453109111001	830	82	0.54	<0.010	0	0.04	0.02		0	1.5
394	395453109111001	660	67	0.69	<0.010	0	0	<0.10		0.09	18
395	395453109111001	1320	1160	4.8	<0.010	0.11	0.49	0.11		1.4	74
396	395453109111001	960	0	1.1	0.01	0	0	<0.10		0.12	23
397	395453109111001	1190	52	5.6	<0.010	0.06	0.27	0.06		1.4	3

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
348	395238109160801		3.2	1.2	450	1.8	92	350	2.2	13	0
349	394835109243901		6.6	300	3100	10	280	4300	2.2	12	
350	394904109363601										
351	394904109363601										
352	394904109363601										
353	394904109363601										
354	394904109363601										
355	394904109363601		1.5	0.3	340	1	5.8	210		17	<1
356	394904109363601										
357	394904109363601										
358	394904109363601										
359	394904109363601										
360	394904109363601										
361	394904109363601		0.7	0.7	370	0.9	9.3	220	0.9	15	
362	394904109363601										
363	394904109363601										
364	394540108191201		13	23	860	2.1	260	52	15	12	6
365	395208110325001		6.4	4.4			5.1	180		9.8	
366	395614109111401		66	150	1200	4.1	78	2700	1	24	2
367	395614109111401	11	69	170	1300	4.9	75	3100	1.2	24	1
368	395614109111401		64	160	1200	3.4	110	2700	1	27	1
369	395614109111401		67	180	1300	4.3	80	3000	1	25	2
370	395614109111401		64	140	1200	5.9	140	2600	0.9	26	3
371	395614109111401		48	170	1200	3.9	89	2700	1.2	25	<1
372	395136108210000		28	60	230	0.4	6.9	320	1.5	28	2
373	395707110011001		30	6	1000	15	320	440			
374	395500109124401		1.9	2.6	630	1.9	140	250	2.1	16	95
375	395500109124401	21	1.4	1.6	680	2.2	55	500	2.6		34
376	395500109124401		11	7.8	300	3.4	45	230	1	18	65
377	395500109124401		13	1.8	710	2	55	640	2	16	19
378	395500109124401		4.8	2.6	610	2.1					75
379	395603109120801		7.6	17	950	4.3	540	400	2.3	23	6
380	395603109120801	5.8	1.8	2.2	580	1.8	50	740	1.3	15	100
381	395603109120801		75	3.5	660	1.9	240	350	1.2	15	210
382	395603109120801		17	28	1100	3.2	390	1200	2.3	26	1
383	395603109120801		14	23	1100	8.1	580	710	1.4	27	10
384	395603109120801		3.7	8.4	860	2.7	400	410	2.2	22	150
385	395530109134901		4	1.1	480	2.4	35	150	1.5	6.2	2
386	395530109134901		0.1	0.3	590	1.1	32	23	2.1	7.5	5
387	395530109134901	22	1	0.3	580	1.4	32	61	2.1	7.6	4
388	395530109134901		1.7	22	520	4.1	32	120	2	6.3	3
389	395530109134901		1.3	1	570	1.4	31	150	2.1	8.5	4
390	402418110040801		52	9.9	7.3	4.3	1.1	52	0.6	9.5	
391	395549108060900		15	16	150	0.6	6.8	58	4	17	<1
392	395453109111001		4.4	8.2	490	2.1	31	310	2	14	52
393	395453109111001	5.2	6.5	6.9	560	1.7	43	500	2.7	13	30
394	395453109111001		3.1	4.2	470	1.6	53	300	5.1	14	60
395	395453109111001		1	1.6	1700	5.2	310	290	21	17	12
396	395453109111001		4.8	8.6	520	2.3	32	320	1.8	14	4
397	395453109111001		2.9	4.2	790	3	110	470	8.1	15	10

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
348	395238109160801	<100		430	<2			2	140	13	<10
349	394835109243901			12000					730		40
350	394904109363601										
351	394904109363601										
352	394904109363601										
353	394904109363601										
354	394904109363601										
355	394904109363601			320					20		
356	394904109363601										
357	394904109363601										
358	394904109363601										
359	394904109363601										
360	394904109363601										
361	394904109363601			290					30		20
362	394904109363601										
363	394904109363601										
364	394540108191201	600		8200					110	2	30
365	395208110325001										
366	395614109111401	23	<10	3700					180	2	40
367	395614109111401	<100	<10	3800		<30			220		60
368	395614109111401	<100	10	4000		<20	2		70		<10
369	395614109111401	<100	<10	3700			<2		90		40
370	395614109111401	<100	<10	3800				<2	20	2	<10
371	395614109111401	<20	<10	3000		<90	<90	<20	320	<85	40
372	395136108210000	<100		140					40		<10
373	395707110011001										
374	395500109124401	<100	<10	2300				<2	80		<10
375	395500109124401	<100	<10	2600		<10	2	18	280	<2	20
376	395500109124401	<100	<10	1200		<20	2	<2	80	<2	<10
377	395500109124401	<100	10	1000		<40			210		20
378	395500109124401	90	<10	2000			<2	<2	210	<2	<10
379	395603109120801	200	<10	8200		30			60	<2	50
380	395603109120801	<100	<10	1800		<10		<2	90		20
381	395603109120801	<100	<10	2200		<20	<2		100	3	20
382	395603109120801	300	<10	8000		<20	2	<2	80	2	20
383	395603109120801	300	<10	6900	<2		2	12	110	2	20
384	395603109120801	600	<10	6500	0			2	60	<2	60
385	395530109134901	<100	<10	910	<2			28	100	<2	<10
386	395530109134901	<100	10	920		<30		8	180		<10
387	395530109134901	<100	<10	1000		<10	2	13	230	<2	<10
388	395530109134901	<100	<10	1100			<2	44	60	2	<10
389	395530109134901	12	<10	880				3	410	2	<10
390	402418110040801								20		60
391	395549108060900	400		250					<10	2	20
392	395453109111001	<100	<10	1400		<20	3	37	60	<2	<10
393	395453109111001	<100	<10	1900		<30		4	280		40
394	395453109111001	200	<10	2400			<2		190	2	<10
395	395453109111001	<100	10			<20		3	70	2	<10
396	395453109111001	<100	<10	1300		<20	2	5	110		<10
397	395453109111001	<100	<10	880				12	140	2	30

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
348	395238109160801	<1			180	0	40		0	110	<1
349	394835109243901										
350	394904109363601										
351	394904109363601										
352	394904109363601										
353	394904109363601										
354	394904109363601										
355	394904109363601				110		7			130	<1
356	394904109363601										
357	394904109363601										
358	394904109363601										
359	394904109363601										
360	394904109363601										
361	394904109363601										
362	394904109363601										
363	394904109363601										
364	394540108191201				4300				<10	1000	<1
365	395208110325001										
366	395614109111401	1			13000	0	40	<20	10	1000	<1
367	395614109111401	<1	<2		12000	0	40	60	30	970	<1
368	395614109111401	<1	6		11000	2	20	<80	<100	990	<1
369	395614109111401	<1	5		13000	3		,40	<100	920	<1
370	395614109111401	1	<2	<2	11000	3	20	<20	<100	960	<1
371	395614109111401	23	<84		9700	4	150	<90	200	970	<1
372	395136108210000	1			7400				<100	70	<1
373	395707110011001										
374	395500109124401	1	5		520	3		<10	50	470	<1
375	395500109124401	3	<2		360	2	<20	<20	60	530	<1
376	395500109124401	10	26		1500	0	50	<20	<100	250	1
377	395500109124401	<1			450	0	<20	<40	140	540	<1
378	395500109124401	2	8		530	0	6	<0	30	470	<1
379	395603109120801	<1	3	<2	2900	5	<20	<20	20	890	<1
380	395603109120801	<1	2		860	1	30	40	40	680	<1
381	395603109120801	1	5		1100	28		<30	20	610	<1
382	395603109120801	2	18		4800	20	20	<50	<100	960	<1
383	395603109120801	3	7	<2	4800	<11	30	<20	20	940	<1
384	395603109120801	0	6		2100	0	20	<20	30	720	<1
385	395530109134901	30	12		60	5	20	<20	20	360	<1
386	395530109134901	5			190	0	40	<30	70	470	<1
387	395530109134901	1	<2		100	0	60	<20	50	460	<1
388	395530109134901	6	2		90	0	6		30	440	<1
389	395530109134901	<1	<2		150	0	60	<0	50	450	<1
390	402418110040801										
391	395549108060900	1			1100				10	70	<1
392	395453109111001	6	42		1100	1	<20	<30	<100	530	2
393	395453109111001	4	<2		1000	5	30	<30	<100	680	<1
394	395453109111001	0	6		1200	2	<20	<10	40	710	<1
395	395453109111001	9	2		240	4	30	<60	60	530	<1
396	395453109111001	23	<2		1100	0	20	<20	<100	550	2
397	395453109111001	4	4		310	6	60	<50	10	580	<1

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
348	395238109160801					<0.5		0.4	
349	394835109243901								
350	394904109363601								
351	394904109363601								
352	394904109363601								
353	394904109363601								
354	394904109363601								
355	394904109363601					<0.5			
356	394904109363601								
357	394904109363601								
358	394904109363601								
359	394904109363601								
360	394904109363601								
361	394904109363601								
362	394904109363601								
363	394904109363601								
364	394540108191201							0.9	
365	395208110325001								
366	395614109111401	<10	<30		0.13	<0.5			0.05
367	395614109111401	<20	<70		0.12	<0.5		9.3	0.07
368	395614109111401	<50	<100		0.22	<0.1			<0.02
369	395614109111401	<10	<60		<0.40	<0.5			0.33
370	395614109111401	<20	<40		0.18	<0.5			0.08
371	395614109111401	<60	<200		0.18				0.03
372	395136108210000					<0.5		0.1	
373	395707110011001								
374	395500109124401	20	<10			<0.5			1.3
375	395500109124401	<8	<30			<0.5		0.2	1.5
376	395500109124401	<10	<20			<0.1			5.6
377	395500109124401	<30	<80			<0.5		0.3	1.1
378	395500109124401	<4	<10			<0.5			2.8
379	395603109120801	<20	<20		<0.40	<0.5			0.21
380	395603109120801	<7	<30		0.07	<0.5		0.2	0.8
381	395603109120801	<20	<80		0.07	<0.5			1.2
382	395603109120801	<30	<70		0.11	<0.1			0.13
383	395603109120801	<20	<20		0.1	<0.5			1.1
384	395603109120801	<6	<20		<0.40	<0.5			0.93
385	395530109134901	<20	<40		<0.40	<0.5			0.41
386	395530109134901	<30	<60			<0.5		0.1	
387	395530109134901	<7	<30		0.04	<0.5		0	0.3
388	395530109134901				<0.40	<0.5			0.15
389	395530109134901	<4	<10		<0.01	<0.5			0.26
390	402418110040801								
391	395549108060900					<0.5		0.1	
392	395453109111001	<20	<40			<0.1			1.7
393	395453109111001	<30	<60			<0.5		0.3	1
394	395453109111001	<4	<10			<0.5			1.1
395	395453109111001	<40	<130			<0.5			1.1
396	395453109111001	<10	<30			<0.1			1.5
397	395453109111001	<40	<80					0.6	1.5

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
398	395614109111401	UT	124PCCK	540	164.6	83-12-08	18	5900		7.4		
399	395453109111001	UT	124PCCK	532	162.2	75-08-16	19.5	2150				755
400	395500109124401	UT	124PCCK	532	162.2	75-12-10	14.5	2640		8.4	6	778
401	395453109111001	UT	124PCCK	505	153.9	75-04-03	14.5	1950		9	1	535
402	395614109111401	UT	124PCCK	505	153.9	83-08-31	18	3800		9.6		
403	395617109134402	UT	124PCCK	504	153.6	76-09-19	15	1950		8.7	1.9	500
404	395617109134402	UT	124PCCK	504	153.6	74-11-27	14.5			9.2	0.6	526
405	395617109134402	UT	124PCCK	504	153.6	75-09-11	16	2200		8.2	4.5	368
406	395617109134402	UT	124PCCK	504	153.6	74-12-11	14.5	2060		8.3	4.9	496
407	395617109134402	UT	124PCCK	504	153.6	75-03-13	15	2050		8.9	1.5	606
408	395617109134402	UT	124PCCK	504	153.6	74-10-19		2050		8.9		536
409	395617109134402	UT	124PCCK	504	153.6	74-10-18		2370		7.8		434
410	395617109134402	UT	124PCCK	504	153.6	76-06-26	16.5	2000		8.8	2.4	760
411	395617109134402	UT	124PCCK	504	153.6	75-05-12	16	2000		8.8	2.8	892
412	395617109134402	UT	124PCCK	504	153.6	77-04-24	16.5	1840		8.2	4.5	369
413	395617109134402	UT	124PCCK	504	153.6	75-11-13	14	1800		9.7	0.2	529
414	395617109134402	UT	124PCCK	504	153.6	75-09-12	16	1800		8	8	413
415	395603109120801	UT	124PCCK	495	150.9	83-08-31	17.5	2330		9.4		
416	395733109095401	UT	124PCCK	488	148.7	75-11-14	13.5	5120		7.3	44	452
417	395733109095401	UT	124PCCK	488	148.7	75-03-18	14	5200		7.8	13	428
418	395733109095401	UT	124PCCK	488	148.7	77-04-18	15	5000		7.4	35	450
419	395733109095401	UT	124PCCK	488	148.7	75-05-13	16	5100		7.6	22	447
420	395733109095401	UT	124PCCK	488	148.7	75-06-26	15	4870		8.1	6.8	440
421	395733109095401	UT	124PCCK	488	148.7	74-11-20	14	5100		7.5	27	445
422	395733109095401	UT	124PCCK	488	148.7	76-06-24	15	5200		8	8.9	456
423	395603109120801	UT	124PCCK	483	147.2	75-05-15	17	3620		10.2	0.2	1290
424	395733109095401	UT	124PCCK	440	134.1	75-08-17		5170				443
425	395635109101501	UT	124PCCK	400	121.9	76-03-21	15.5	5100		8	9.4	480
426	395635109101501	UT	124PCCK	400	121.9	74-11-22	14	5100		7.6	-	463
427	395635109101501	UT	124PCCK	400	121.9	76-06-30	16.5	4960		7.9	10	430
428	395635109101501	UT	124PCCK	400	121.9	75-11-13	14	5020		7.4	36	460
429	395635109101501	UT	124PCCK	400	121.9	76-09-14	15.5	5200		8.1	7.1	456
430	395635109101501	UT	124PCCK	400	121.9	74-12-13	14.5	5000		7.3	46	470
431	395635109101501	UT	124PCCK	400	121.9	75-03-14	13.5	5510		7.6	22	453
432	400218108170600	CO	124GRRV	380	115.8	75-11-19	12	900		8.1	7.2	463
433	395755108211400	CO	124GRRV	350	106.7	75-10-21	11	1550		7.8	8.8	285
434	395136108210000	CO	124GRRV	320	97.5	75-12-12	12	1480		8.4	4.2	479
435	395617109134401	UT	124PCCK	317	96.6	76-03-17	15	3800		8	11	545
436	395617109134401	UT	124PCCK	317	96.6	76-06-26	15	4260		8	11	551
437	395617109134401	UT	124PCCK	317	96.6	75-05-12	16	3700		7.9	12	492
438	395617109134401	UT	124PCCK	317	96.6	77-04-19	15	4480		7.8	17	550
439	395617109134401	UT	124PCCK	317	96.6	76-09-19	15	4200		7.9	14	554
440	395617109134401	UT	124PCCK	317	96.6	75-03-13	15	3500		8	9.2	474
441	395617109134401	UT	124PCCK	317	96.6	75-07-27	16.5	3600		8.5	3.3	534
442	395617109134401	UT	124PCCK	317	96.6	75-11-13	13.5	3600		8.1	7.7	499
443	394540108191201	CO	124GRRV	314	95.7	75-06-05	16	1620		8		640
444	395548109080701	UT	124PCCK	300	91.4	75-05-15	15.5	1720		10.9	0	500
445	395617109134401	UT	124PCCK	263	80.2	75-08-19	16	3730		8.3	5	516
446	395751109094501	UT	124PCCK	220	67.1	74-12-17		2260				649
447	395751109094501	UT	124PCCK	220	67.1	76-06-24	13.5	2010		8.3	7.4	753
448	395751109094501	UT	124PCCK	220	67.1	76-09-14	13.5	2140		8.2	9.3	753
449	395751109094501	UT	124PCCK	220	67.1	75-11-12	12.5	2070		9.3	0.7	734

	STN NO.	HCO3	CO3	NH4(as N)	NO2(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
398	395614109111401			2.8	<0.010			<0.10			
399	395453109111001	820	52	1.8	<0.010	0	0	<0.10		0	20
400	395500109124401	810	68	0.83	<0.010	0	0	<0.10		0.06	120
401	395453109111001	560	48	0.62	0.01	0.01	0.04	0.02		0	68
402	395614109111401										
403	395617109134402	470	71	0.58	<0.010	0	0	<0.10		0.06	50
404	395617109134402	570	34	0.46	<0.010	0.02	0.09	0.02		0.03	1
405	395617109134402	450	0	1	<0.010	0	0	<0.10		0.03	53
406	395617109134402	600	0	0.53	0.01	0	0	0		0.03	18
407	395617109134402	640	47	0.55	<0.010	0.01	0.04	0.01		0.09	66
408	395617109134402	550	51	1.9				0.07		0.15	55
409	395617109134402	530	0	3.9	0.04	0	0	<0.10		0.06	6.3
410	395617109134402	790	67	0.43	0.04	0.02	0.09	0.06		0.25	34
411	395617109134402	980	54	0.43	<0.010	0	0	<0.10		0.15	75
412	395617109134402	450	0	0.69	<0.010	0	0	<0.10		0.12	30
413	395617109134402	390	130	0.59	0.01	0	0	0.01		0.06	7
414	395617109134402	500	0	0.94	<0.010	0	0	<0.10		0.12	35
415	395603109120801										
416	395733109095401	550	0	0.41	0.01			0.01		0.03	4.8
417	395733109095401	520	0	0.31	<0.010	0	0	<0.10		0.15	4.7
418	395733109095401	550	0	0.46	<0.010	0.01	0.04	0.01		0.06	9.2
419	395733109095401	550	0	0.33	<0.010	0	0	<0.10		0.03	0
420	395733109095401	540	0	0.35	<0.010	0.02	0.09	0.02		0.09	4.3
421	395733109095401	540	0	0.32	<0.010	0	0	<0.10		0	6.6
422	395733109095401	560	0	0.38	0.009	0	0	0.01		0.03	5.6
423	395603109120801	1220	170	1.6	<0.010	0	0	<0.10		0.03	130
424	395733109095401	540		1.2	<0.010	0	0	<0.10		0	0.6
425	395635109101501	590	0	<0.010	0.01	0.27	1.2	0.28		0.03	0.6
426	395635109101501	570	0	0.02	0.08	0.31	1.4	0.39		0.09	0
427	395635109101501	520	0	0.03	0.01	0.51	2.3	0.52		0	0
428	395635109101501	560	0	<0.010	0.02			0.18		0	0.2
429	395635109101501	560	0	<0.010	0.009	0.17	0.75	0.18		0.03	0
430	395635109101501	570	0	0.1	0.06	0.2	0.89	0.26		0.12	0
431	395635109101501	550	0	0.03	0.009	0.1	0.44	0.11		0.09	0.2
432	400218108170600	560	0					0.22		0	
433	395755108211400	350	0					<0.10		0	
434	395136108210000	580	0					0.03		0.12	
435	395617109134401	660	0	2	<0.010	0.02	0.09	0.02		0.03	0.1
436	395617109134401	670	0	2	<0.010	0.04	0.18	0.04		0.06	0.2
437	395617109134401	600	0	1.7	<0.010	0	0	<0.10		0.15	4.4
438	395617109134401	670	0	2.3	<0.010	0.01	0.04	0.01		0.12	1.8
439	395617109134401	680	0	2.2	<0.010	0	0	<0.10		0.06	0.8
440	395617109134401	580	0	1.8	<0.010	0.01	0.04	0.01		0.15	14
441	395617109134401	650	0	2	0.01	0.01	0.04	0.02		0	1
442	395617109134401	610	0	2.2	0.01	0	0	0.01		0.03	1
443	394540108191201	780						0.01		0	
444	395548109080701	520	43	2.8	<0.010	0	0	<0.10		0.46	4.8
445	395617109134401	630	0	1.8	<0.010	0	0	<0.10		0.03	3.2
446	395751109094501	180	300	20	0.02	0.05	0.22	0.07		0.09	0.8
447	395751109094501	920	0	2	0.021	0.03	0.13	0.05		0.09	0
448	395751109094501	920	0	2	<0.010	0.01	0.04	0.01		0.12	0.2
449	395751109094501	720	85	3.7	0.01	0	0	0.01		0.18	0

	STN NO.	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l
398	395614109111401	11	60	160	1200	3.5	78	2700	1	26	1
399	395453109111001		2.5	3.6	590	2.5	59	440	5.3	14	45
400	395500109124401		2.4	3.7	640	1.8	170	350	2.6	15	<1
401	395453109111001		3.6	5.5	450	2	34	400	3.5	13	65
402	395614109111401		6	33	1200	4.8	140	2100	0.6	<1.2	
403	395617109134402	2.9	7.6	20	440	1.8	32	440	1.3	15	3
404	395617109134402		14	26	420	1.4	36	450	1	6.5	2
405	395617109134402		21	24	420	1.7	38	570	1	17	8
406	395617109134402		20	30	450	2.1	76	540	1.1	18	13
407	395617109134402		9.8	22	450	2.6	64	410	1.2	15	9
408	395617109134402		20	23	420	2.5	55	470	1	8.8	2
409	395617109134402		30	32	460	3.3	36	730	0.9	18	19
410	395617109134402		6.5	20	450	1.4	33	400	1.2	14	3
411	395617109134402		8.7	19	430	2	64	400	1.3	16	5
412	395617109134402		20	27	450	1.6	30	640	1.1	18	1
413	395617109134402		5.1	16	410	1.8	33	440	1.2	3.3	2
414	395617109134402		25	30	420	1.4	32	610	1	16	10
415	395603109120801		1.6	0.6	620	1.7	61	17	9.7	9.1	
416	395733109095401		130	170	900	7.5	62	2400	1.1	11	6
417	395733109095401		170	190	910	9	59	2700	0.9	11	8
418	395733109095401		180	180	940	6.7	61	2700	1.2	12	7
419	395733109095401		170	190	910	6.3	56	2500	1.1	11	5
420	395733109095401		170	190	910	7.3	60	2500	1.2	12	3
421	395733109095401		170	170	930	7.4	58	2400	1	12	18
422	395733109095401	11	170	200	900	6	57	2700	1.2	12	9
423	395603109120801		3.4	5.9	870	3	370	91	2.8	21	28
424	395733109095401		170	210	940	9.2	59	2700	1.2	10	1
425	395635109101501		200	180	900	9.1	65	2500	0.9	11	6
426	395635109101501		200	190	870	9.4	68	2500	0.8	11	19
427	395635109101501	5	160	180	820	7.8	56	2500	1.2	11	7
428	395635109101501		190	190	890	9.3	66	2600	1	10	16
429	395635109101501	9.7	170	180	880	9.8	59	2400	1.1	10	7
430	395635109101501		200	200	940	7.1	71	2800	1	11	10
431	395635109101501		210	220	950	11	74	2800	1.1	11	11
432	400218108170600		8.7	18	210	0.5	12	71	0.5	13	6
433	395755108211400		11	18	320	0.6	12	470	0.3	12	16
434	395136108210000		56	64	210	0.6	7.2	380	0.3	36	1
435	395617109134401		33	61	850	1.9	54	1600	0.6	20	<1
436	395617109134401		36	67	890	1.5	59	1700	0.5	21	1
437	395617109134401		27	41	770	2.2	64	1300	0.5	20	10
438	395617109134401		44	80	950	1.7	61	1900	0.4	23	2
439	395617109134401	1.7	19	68	940	2.2	59	1800	0.4	21	1
440	395617109134401		29	37	790	3.1	82	1300	0.8	20	25
441	395617109134401		30	51	840	11	59	1500	0.4	21	1
442	395617109134401		28	48	840	2	53	1500	0.6	17	3
443	394540108191201		32	87	310	1.1	72	230	2.2	23	1
444	395548109080701		8.1	21	360	4.5	230	76	2.4	15	400
445	395617109134401		25	54	810	2.2	47	1400	0.4	19	16
446	395751109094501		4.1	0.4	500	6.8	39	460	3.2	2.3	9
447	395751109094501	14	0.8	0.3	520	1.6	25	370	1.2	6.7	2
448	395751109094501	8.1	2.1	0.4	520	1.6	25	380	1.2	6.3	3
449	395751109094501		1.6	0.2	520	1.8	29	390	1.5	6.9	4

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
398	395614109111401	<100	<10	3700	<1	10		<1	80	3	20
399	395453109111001	<100	<10	5000		20		4	730	3	<10
400	395500109124401	300	10	2000				7	100	<2	20
401	395453109111001	<100	<10	2000				8	60		<10
402	395614109111401			9000							
403	395617109134402	<100	<10	780		<10			120		60
404	395617109134402	<100	<10	670		<20	3	2	60		250
405	395617109134402	<100	10	740		<20	<2		<10		<10
406	395617109134402	<100	<10	1100		<20	2		90		130
407	395617109134402	25	<10	1200		10			60	<2	40
408	395617109134402			620					140		
409	395617109134402			360					90		
410	395617109134402	<100	<10	440		<20			320		50
411	395617109134402	25	<10	790				<2	60	<2	20
412	395617109134402	<100		650					<10		<10
413	395617109134402	<100	20	580		<20			50		40
414	395617109134402	<100	10	590		<20	<2		<10		<10
415	395603109120801			9500							
416	395733109095401	<100	<10	1200		<20			410	<2	50
417	395733109095401	<100	<10	2200		6		2	290	<2	40
418	395733109095401	<100		2300		<20			50		30
419	395733109095401	25	<10	2300					710		60
420	395733109095401	32	<10	2200			<2		1000		70
421	395733109095401	<100	<10	2400				<2	100	2	<10
422	395733109095401	<100	20	2100		<70			420		30
423	395603109120801	500	<10	7500		<20		2	120	<2	60
424	395733109095401	30	<10	2300		20	3	4	30		40
425	395635109101501	<100	10	3300		<20	3	7	190		20
426	395635109101501	<100	<10	3100	<2			<2	410	<2	<10
427	395635109101501	<100	<10	1800		<70	3	6	580		<10
428	395635109101501	<100	<10	3200		<20	2	3	600		30
429	395635109101501	<100	<10	2900		<10	2	7	900		30
430	395635109101501	<100	10	3300		<20	6	2	1100		20
431	395635109101501	<100	<10	3500		10	<2	6	420	<2	20
432	400218108170600	<100		80					40	2	<10
433	395755108211400	<100		90	<2				<10	<2	20
434	395136108210000	<100		100				<2	<10		30
435	395617109134401	<100	<10	310				2	40	<2	30
436	395617109134401	<100	<10	180		<60			40		30
437	395617109134401	30	<10	340			<2		280	2	60
438	395617109134401	<100		330	<2	<20			200	<2	20
439	395617109134401	<100	<10	320		<20		<2	200		30
440	395617109134401	45	<10	320		10			160	<2	60
441	395617109134401	<100	<10	330				3	<10	<2	30
442	395617109134401	<100	20	310		<20			90	<2	40
443	394540108191201	<100		1200					20	<2	80
444	395548109080701	170	<10	5200				<2	110	2	20
445	395617109134401	20	<10	280			<2	4	100		20
446	395751109094501	20	<10	790	<2	<20	3	3900	260	400	<10
447	395751109094501	<100	20	1100		<30		43	40	40	<10
448	395751109094501	<100	<10	670		<10		21	60	18	<10
449	395751109094501	20	10	680		<20		50	80	31	5

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
398	395614109111401	<1	<1	1	11000	1	30		<10		<1
399	395453109111001	8	2		760	10	280		30	810	<1
400	395500109124401	2	2		460	1	20	<40	30	470	<1
401	395453109111001	2	4		1000	0	<20		40	700	<1
402	395614109111401										
403	395617109134402	<1	2		1500	0	<20	<20	<100	290	<1
404	395617109134402	140	3		2100	3	<20	<30	<100	260	<1
405	395617109134402	1	2		2900	1	<20		20	360	<1
406	395617109134402	14	16		2600	1		<20	<100	270	<1
407	395617109134402	2	2		2000	0	20	<0	10	310	<1
408	395617109134402				3100		<20			280	<1
409	395617109134402				3100		80			240	<1
410	395617109134402	<1			1300	0	20	<20	10	300	<1
411	395617109134402	<1	<2		2300	0	20	<0	<10	290	<1
412	395617109134402	<1			2700	0	20		20	270	<1
413	395617109134402	4	2		950	0		<20	<100	230	<1
414	395617109134402	31			3300	6	<20	<0	<100	360	<1
415	395603109120801										
416	395733109095401	5	2		6300	0	20	<80	20	170	<1
417	395733109095401	14	2		6500	0	60	<20	<10	220	1
418	395733109095401	2			6600	0	50		30	180	1
419	395733109095401	5			8700	0	30	<20	10	190	<1
420	395733109095401	3	4		7600	0	<20	<40	0	180	<1
421	395733109095401	8		<2	6600	2	30	<20	10	160	<1
422	395733109095401	4	7		4500	1	20	<70	20	200	<1
423	395603109120801	<1	<2		1600	3	20	<0	10	640	<1
424	395733109095401	67	7		7200	2	90	<30	<100	210	<1
425	395635109101501	48	5		4400	1	260	<80	10	170	5
426	395635109101501	90	5	<2	4300	3	30	<20	10	150	2
427	395635109101501	40	15		3800	1	50	<70	20	140	8
428	395635109101501	62	16		4300	1	70	<80	10	140	4
429	395635109101501	65	11		4200	0	130	<20	30	160	3
430	395635109101501	85	50		4400	0	70	<70	<100	190	1
431	395635109101501	62	8		4300	0	120	<20	<10	210	2
432	400218108170600	8			1900				0	50	<1
433	395755108211400	6			1600		30		10	80	<1
434	395136108210000	2			7900				<100	70	<1
435	395617109134401	29			5600	0	20	<40	10	350	<1
436	395617109134401	14			4600	0	<20	<60	20	380	<1
437	395617109134401	11	<2		4500	0	30	<10	10	310	<1
438	395617109134401	25			2700	2	70		20	370	<1
439	395617109134401	18			6400	0	<20	<30	<100	370	<1
440	395617109134401	29	2		4000	1	20	<10	10	330	1
441	395617109134401	57	4		5100	1	<20		30	300	<1
442	395617109134401	34	2		4600	0	20	<50	10	300	<1
443	394540108191201				14000		<20		<10	520	<1
444	395548109080701	100	<2		3800	2	30	<0	20	680	<1
445	395617109134401	74			4600	2	<20	<20	10	360	<1
446	395751109094501	100	2		60	22	20	<30	4900	210	5
447	395751109094501	15			100	0	260	<30	70	350	<1
448	395751109094501	20			170	2	30	<20	80	350	<1
449	395751109094501	26	7		160	2	20	<0	10	320	<1

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
398	395614109111401					0.2			
399	395453109111001					<0.5			
400	395500109124401	<20	<80			<0.5			0.8
401	395453109111001					<0.5			1.3
402	395614109111401								
403	395617109134402	<5	<20		0.16	<0.5		0.2	0.2
404	395617109134402	<20	<40		0.07	<0.1			0.05
405	395617109134402				0.75	<0.5			0.9
406	395617109134402	<10	<30		0.12	<0.0			1
407	395617109134402	<9	<9		<0.40	<0.5			0.1
408	395617109134402					<0.5			
409	395617109134402					<0.5			
410	395617109134402	<20	<50		0.11	<0.5		0.1	0.09
411	395617109134402	<4	<10		0.18	<0.5			0.15
412	395617109134402				0.77	0.5	0.01	0.1	
413	395617109134402	<20	<50		0.06	<0.5			0.04
414	395617109134402	<4	<20		0.71	<0.5			0.3
415	395603109120801								
416	395733109095401	<50	<150		0.36	<0.5			13
417	395733109095401	<20	<20		0.5	<0.5			
418	395733109095401				0.54	<0.5	0.01	0.2	
419	395733109095401	<10	<30		0.47	<0.5			9.5
420	395733109095401	<10	<60		<0.40	<0.5			11
421	395733109095401	<20	<30		0.35	<0.5			
422	395733109095401	<60	<130		0.4	<0.5		0.3	11
423	395603109120801	<6	<20		0.61	<0.5			0.72
424	395733109095401	<10	<50		0.38	<0.5			11
425	395635109101501	<50	<100		0.13	<0.5		0.5	21
426	395635109101501	<20	<30		0.21	<0.5			14
427	395635109101501	<60	<140		0.15	<0.5		0.4	20
428	395635109101501	<50	<150		0.16	<0.5			20
429	395635109101501	<6	<20		0.15	<0.5		0.4	16
430	395635109101501	<40	<100		0.21	<0.1			20
431	395635109101501	<20	<20		<0.40	<0.5			20
432	400218108170600					<0.5		0.1	
433	395755108211400					<0.5		0.1	
434	395136108210000					<0.5		0.1	
435	395617109134401	<30	<70		0.1	<0.5		0.3	0.2
436	395617109134401	<50	<120		0.12	<0.5		0.2	
437	395617109134401	<8	<20		0.13	<0.5			0.24
438	395617109134401				0.08	<0.5	0.04	0	
439	395617109134401	<10	<50		0.13	<0.5		0.9	0.2
440	395617109134401	<10	<10		<0.40	<0.5			0.26
441	395617109134401					<0.5			
442	395617109134401	<30	<100		0.08	<0.5			0.2
443	394540108191201							0.4	
444	395548109080701	<3	<9		<0.40	<0.5			0.66
445	395617109134401	<8	<40		0.09	<0.5			0.3
446	395751109094501	<20	<40		0.02	<0.1			<0.01
447	395751109094501	<20	<40		0.08	<0.5		0.1	0.2
448	395751109094501	20	<20		0.07	<0.5		0.2	0.4
449	395751109094501	<7	<20		0.04	<0.5			0.2

TABLE AI-5

Listing of all WATSTORE data
for the Midcontinent group

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
1	395035109062201	UT	200MNCS	6220	1895.9	61-08-01		6470		7.6	15	308
2	344205099455501	OK	313DGCK	2000	609.6	61-11-19		3940		7.8	6.4	207
3	345926092002501	AR	326ATOK	1700	518.2	56-03-06	20	512		7.4	16	202
4	402200095320001	MO	325CHRK	1590	484.6	50-10-19				8		432
5	355319094574001	OK	331BOON	1490	454.2	82-12-28	13.5	500		6.1		
6	404424093444302	IA	320PSLV	1100	335.3	56-11-26		3590		7.8	12	354
7	404424093444302	IA	320PSLV	1100	335.3	49-09-08		3630		7.7	15	380
8	345925092003301	AR	326ATOK	1080	329.2	56-03-06	21	416		7.6	8.4	171
9	343620098163001	OK	318HNSS	1000	304.8	64-08-03		1870		8.3	2.6	269
10	412835094093501	IA	320PSLV	910	277.4	73-08-01	15	3800		8	8.8	448
11	365230096342001	OK	322VMOS	900	274.3	75-03-26	12.5	4000				459
12	392930094410001	MO	325CHRK	883	269.1	50-04-04				8		551
13	343031096560101	OK	322ADA	850	259.1	50-04-13		1320		7.5	18	295
14	351445096413001	OK	322VMOS	816	248.7	75-01-22	16.5	483		7.3	17	171
15	351445096413014	OK	322VMOS	816	248.7	75-01-22	16.5	483		7.3	19	171
16	352410099221201	OK	318HNSS	770	234.7	51-10-10		422		7.7	8.5	217
17	352403097221801	OK	318HNSS	764	232.9	51-10-10		438		7.6	11	224
18	331558104315501	NM	313ARTS	700	213.4	70-01-07	19.5	980		7.3	19	197
19	331625104315401	NM	313ARTS	700	213.4	70-01-12	20	1010		7.4	14	182
20	355855096451001	OK	322VMOS	697	212.4	75-10-15	20	575				182
21	411741094041801	IA	325DSMS	696	212.1	51-09-28		6350		7.8	9.6	312
22	411741094041801	IA	325DSMS	696	212.1	53-03-30		5560		8	7.2	330
23	395342092441201	MO	325CHRK	680	207.3	63-09-24						380
24	350735096470001	OK	322VMOS	668	203.6	74-11-15		2090				797
25	384420094041501	MO	325CHRK	640	195.1	68-09-18				7.6		494
26	380530094345001	MO	325CHRK	620	189.0	70-07-28				7.7		276
27	412923094072302	IA	325CHRK	603	183.8	59-06-25	15.5	2840		7.8	5.8	186
28	412923094072302	IA	325CHRK	603	183.8	62-06-13	15.5	2840		7.8	5.9	189
29	351115096363001	OK	322VMOS	600	182.9	74-11-22		398				190
30	360245096344501	OK	322VMOS	600	182.9	75-04-01	21	1300		7.8	6.7	218
31	412925094072101	IA	320PSLV	600	182.9	59-06-25	15.5	2840		8	4	204
32	412902094051101	IA	325CHRK	582	177.4	73-07-31	16	2600		8.1	4.1	264
33	390255093502001	MO	325CHRK	575	175.3	61-03-22				8.1		429
34	350830096403001	OK	322VMOS	550	167.6	74-11-22		770				394
35	393300093360001	MO	325CHRK	550	167.6	51-06-25				8.8		620
36	365921096371601	OK	322VMOS	538	164.0	75-10-30		654				224
37	384320094070001	MO	325CHRK	530	161.5	71-03-12				7.8		507
38	384710094164501	MO	325CHRK	530	161.5	55-05-09				7.4	19	240
39	405817093191001	IA	325CHRK	526	160.3	68-05-17	14.5	3200		7.2	29	238
40	341130097360001	OK	318WCHT	525	160.0	51-08-21		1080		9.2	0.6	496
41	385015094040001	MO	325CHRK	525	160.0	68-11-18				8.1		547
42	413114094241401	IA	320PSLV	525	160.0	71-05-09						326
43	411919093434501	IA	325CHRK	512	156.1	68-08-27	12	2800		7.8	19	622
44	344620098021001	OK	313ELRN	500	152.4	66-07-01		574		8.1	4.6	299
45	350930096375501	OK	322VMOS	500	152.4	75-12-15	12	650		8.6	1.6	320
46	350930096375501	OK	322VMOS	500	152.4	74-11-22		674				311
47	350930096380001	OK	322VMOS	500	152.4	74-11-22		6750				266

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
1	395035109062201	370									
2	344205099455501	250	0			1.8	8				
3	345926092002501	250	0			0.05	0.2				
4	402200095320001	500	12								
5	355319094574001										
6	404424093444302	430	0			0.8	3.5				
7	404424093444302	460	0			0	0				
8	345925092003301	210	0			0.16	0.7				
9	343620098163001	320	2			0.11	0.5				
10	412835094093501	550	0			0.18	0.8				
11	365230096342001	560							0.01		
12	392930094410001	670	8								
13	343031096560101	360	0			0.11	0.5				
14	351445096413001	210	0								
15	351445096413014	210	0						17		
16	352410099221201	260	0			0.18					
17	352403097221801	270	0			0.16					
18	331558104315501	240	0			1.1	4.7				
19	331625104315401	220	0			0.9	4.2				
20	355855096451001	220						0.76	<0.010		
21	411741094041801	360	10			0.7	3.1				
22	411741094041801	340	31			0	0				
23	395342092441201	440	14								
24	350735096470001	900	38					0.49			
25	384420094041501	600	0			0					
26	380530094345001	340	0			0					
27	412923094072302	230	0			0.9	4				
28	412923094072302	230	0			0.25	1.1				
29	351115096363001	230						0.04			
30	360245096344501	270	0								
31	412925094072101	250	0			4	18				
32	412902094051101	320	0				<0.10				
33	390255093502001	480	24			0.05					
34	350830096403001	450	13					0.32			
35	393300093360001	670	42								
36	365921096371601	270						0.25	<0.010		
37	384320094070001	620	0			14					
38	384710094164501	300	0								
39	405817093191001	290	0			0.09	0.4				
40	341130097360001	490	57			0.18	0.8				
41	385015094040001	600	32			0					
42	413114094241401	400	0			0.5	2.2				
43	411919093434501	760	0			0.63	2.8				
44	344620098021001	360	0								
45	350930096375501	350	22					0.18	<0.010		
46	350930096375501	350	15					0.03			
47	350930096380001	320						0.04			

	STN NO,	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
1	395035109062201		49	78	1500	62	190	2900			
2	344205099455501		140	140			330	2000			
3	345926092002501		27	10	70	2.7	31	16	0.6	9.1	
4	402200095320001		98	50	4900			9.9		5.3	
5	355319094574001				5.2		5.8	10	0.1		
6	404424093444302		43	13	780	14	130	1300	3.3	8.9	
7	404424093444302		44	9.9			130	1300	2.8		
8	345925092003301		22	7.9	59	2.4	14	25	0.3	10	
9	343620098163001						390	62			
10	412835094093501		75	19	770	10	270	1200	2.7	7.8	
11	365230096342001		8.1	3.4	860	3.2	860	220			
12	392930094410001		36	17	2100		2600	450		1	
13	343031096560101		32		160	10	240	24		13	
14	351445096413001		25	5.7	83	2.6	6.5	48			
15	351445096413014		25	5.7	83	2.6	6.5	48			
16	352410099221201		49	23	9.4	1.3	8.5	6.6	0.1	12	
17	352403097221801		52	23	9.6	1.4	7.8	7.4	0.1	12	
18	331558104315501		140	38	32*		30	280	0.9	17	
19	331625104315401		130	38	34*		50	290	0.9	16	
20	355855096451001		37	3.8	90	2.6	6.5	98			
21	411741094041801		56	15			820	1900	1.8		
22	411741094041801		55	14	1500	16	780	1900	2.2		
23	395342092441201						220		1.6		
24	350735096470001		2	0.8	520		100	190			
25	384420094041501		48	26	720	24	950	17	3.7	10	
26	380530094345001		120	54	1100	33	1800	83	1.2	10	
27	412923094072302		42	14	560	5.3	33	1200	0.75	10	
28	412923094072302		45	16	590	7.4	33	1200	0.75	10	
29	351115096363001		48	21	8.3		8.4	14			
30	360245096344501		19	1.9	190	2.4	49	180			
31	412925094072101		36	14	560	5	32	1100	0.75	10	
32	412902094051101		14	5.5	560	5	30	960	1.2	7.6	
33	390255093502001						4200	6.1	1.4		
34	350830096403001		1.7	0.2	190		9.2	18			
35	393300093360001		4.7	2.9	760		500	250		8	
36	365921096371601		11	1.2	140	1.7	16	79			
37	384320094070001		62	22	270	16	330	8.8	0.5	14	
38	384710094164501		180	56	1300		2000	210		3.5	
39	405817093191001		180	83	410	10	20	1400	0.7	19	
40	341130097360001		0.8	0.3	280		18	66	1.3	12	
41	385015094040001		22	11	1000	19	1400	4.2	1.6	7	
42	413114094241401		100	49	620	11	16	1400	0.25	13	<10
43	411919093434501		14	4.9	600	6.6	140	570	2.6	8.2	
44	344620098021001						12	23			
45	350930096375501		3.6	2	160	0.8	16	32			
46	350930096375501		2.9	1.7	160		14	29			
47	350930096380001		280	150	950		2300	21			

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
1	395035109062201								154000		
2	344205099455501			160							
3	345926092002501								700		
4	402200095320001										
5	355319094574001				8	<10		<12	130	<5	40
6	404424093444302								440		90
7	404424093444302										0
8	345925092003301								40		
9	343620098163001										
10	412835094093501								2500		30
11	365230096342001								<10		
12	392930094410001										
13	343031096560101										
14	351445096413001										
15	351445096413014								90		
16	352410099221201										
17	352403097221801										
18	331558104315501										
19	331625104315401										
20	355855096451001								<10		
21	411741094041801										0
22	411741094041801										90
23	395342092441201										
24	350735096470001										
25	384420094041501										
26	380530094345001										
27	412923094072302								80		<50
28	412923094072302								200		<50
29	351115096363001										
30	360245096344501										
31	412925094072101								240		<50
32	412902094051101								940		<10
33	390255093502001										
34	350830096403001										
35	393300093360001										
36	365921096371601								<10		
37	384320094070001										
38	384710094164501										
39	405817093191001								14000		80
40	341130097360001										
41	385015094040001										
42	413114094241401	<100			<10	<10		<10	3200	<10	<50
43	411919093434501								1900		<50
44	344620098021001			50							
45	350930096375501								60		
46	350930096375501										
47	350930096380001										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
1	395035109062201										
2	344205099455501										
3	345926092002501										
4	402200095320001										
5	355319094574001						550		<100		
6	404424093444302										
7	404424093444302										
8	345925092003301										
9	343620098163001										
10	412835094093501										
11	365230096342001										
12	392930094410001										
13	343031096560101										
14	351445096413001										
15	351445096413014										
16	352410099221201										
17	352403097221801										
18	331558104315501										
19	331625104315401										
20	355855096451001										
21	411741094041801										
22	411741094041801										
23	395342092441201										
24	350735096470001										
25	384420094041501								100		
26	380530094345001								100		
27	412923094072302										
28	412923094072302										
29	351115096363001										
30	360245096344501										
31	412925094072101										
32	412902094051101										
33	390255093502001										
34	350830096403001										
35	393300093360001										
36	365921096371601										
37	384320094070001										
38	384710094164501										
39	405817093191001										
40	341130097360001										
41	385015094040001										
42	413114094241401						<10				
43	411919093434501										
44	344620098021001										
45	350930096375501										
46	350930096375501										
47	350930096380001										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
1	395035109062201								
2	344205099455501								
3	345926092002501								
4	402200095320001								
5	355319094574001								
6	404424093444302								
7	404424093444302								
8	345925092003301								
9	343620098163001								
10	412835094093501								
11	365230096342001							4.5	
12	392930094410001								
13	343031096560101								
14	351445096413001							0	
15	351445096413014							0	
16	352410099221201								
17	352403097221801								
18	331558104315501								
19	331625104315401								
20	355855096451001							0.1	
21	411741094041801								
22	411741094041801								
23	395342092441201								
24	350735096470001							0.5	
25	384420094041501								
26	380530094345001								
27	412923094072302								
28	412923094072302								
29	351115096363001							0	
30	360245096344501							0.2	
31	412925094072101								
32	412902094051101								
33	390255093502001								
34	350830096403001							0	
35	393300093360001								
36	365921096371601							0.1	
37	384320094070001								
38	384710094164501								
39	405817093191001								
40	341130097360001								
41	385015094040001								
42	413114094241401								
43	411919093434501								
44	344620098021001								
45	350930096375501							0.1	
46	350930096375501							0.1	
47	350930096380001							8.2	

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
48	350930096380001	OK	322VMOS	500	152.4	75-12-14	27	13000		7.5	15	251
49	365516096272601	OK	322VMOS	500	152.4	75-03-06	12	2070		8.5	2.1	340
50	412223093355201	IA	325CHRK	498	151.8	68-10-07	13.5	4400		8	7.2	370
51	413339092092001	IA	325DSMS	480	146.3	61-07-25		2720		7.9	5.4	220
52	403100093320001	MO	325CHRK	450	137.2	56-01-05	14.5			7.9		1080
53	411254093380801	IA	325CHRK	450	137.2	73-06-27	14.5	5000		7.9	11	454
54	341550093281701	AR	330STNL	430	131.1	58-02-05		472		7.8	7.7	248
55	343017096561701	OK	322ADA	430	131.1	72-08-03		668		8.1	4.8	307
56	383550093510001	MO	325CHRK	430	131.1	52-09-16				8.4		824
57	384740093425001	MO	325CHRK	430	131.1	66-10-19				8.1		324
58	411310093135201	IA	320PSLV	430	131.1	73-08-01	15.5	6700		7.6	12	252
59	355744096353201	OK	322VMOS	425	129.5	75-11-19		1020				252
60	384327093564001	MO	325CHRK	423	128.9	67-08-18	15.5	3430		8		660
61	412325093333201	IA	325CHRK	420	128.0	69-07-24	15	4100		7.9	11	410
62	405757093261201	IA	320PSLV	415	126.5	68-05-01	11	3200		7.4	9.2	118
63	352840096400001	OK	322VMOS	412	125.6	75-05-27	19	1040		7.5	13	208
64	384430093503001	MO	325CHRK	411	125.3	66-02-15				7.4		273
65	412344093460401	IA	325CHRK	410	125.0	68-10-22	14	5300		7.9	10	370
66	400115093440001	MO	325CHRK	408	124.4	56-01-17				8.2		465
67	413839095183001	IA	320PSLV	403	122.8	65-04-19	13					204
68	413839095183001	IA	320PSLV	403	122.8	69-05-13	12					208
69	405732093183101	IA	325CHRK	401	122.2	68-05-17	14.5	3000		7	57	294
70	410210095150001	IA	320PSLV	401	122.2	57-08-02	13	3090		8.3	2.3	235
71	340930097360001	OK	318WCHT	400	121.9	63-09-09	13	1840		8.2	12	943
72	410657093324101	IA	325CHRK	400	121.9	68-06-19	12	3100		7.5	14	222
73	420950094151101	IA	325DSMS	400	121.9	59-12-14	11	1170		7.3	42	428
74	420950094151101	IA	325DSMS	400	121.9	59-12-14	11	1170		7.4	37	422
75	420950094151101	IA	325DSMS	400	121.9	82-04-22	11	1180		7.5		
76	420950094151101	IA	325DSMS	400	121.9	72-04-24	11	1200		6.9	104	421
77	420950094151101	IA	325DSMS	400	121.9	77-09-22		1200		7.1	79	453
78	420950094151101	IA	325DSMS	400	121.9	68-06-03		1200		7.4	35	404
79	420950094151101	IA	325DSMS	400	121.9	62-06-20	10.5	1180		7.7	16	416
80	420953094151201	IA	320PSLV	400	121.9	68-06-03						416
81	420953094151201	IA	320PSLV	400	121.9	77-09-22						486
82	382955094151001	MO	325CHRK	395	120.4	67-08-18	15.5	1240		8.2		
83	410002093084301	IA	325CHRK	391	119.2	68-05-06	12	2800		7.4	21	244
84	410007093262401	IA	325DSMS	386	117.7	68-05-03	13.5	3700		8.4	2.1	236
85	412620093272501	IA	320PSLV	386	117.7	69-07-23	11	5600		7.3	34	348
86	410534093114401	IA	320PSLV	380	115.8	68-05-13	12	2800		7.9	4	162
87	405558093183501	IA	325DS,S	378	115.2	68-05-02	14	3800		7.3	23	230
88	413839095183501	IA	320PSLV	368	112.2	56-07-11	14.5					204
89	413839095183501	IA	320PSLV	368	112.2	60-08-25	13					218
90	413839095183501	IA	320PSLV	368	112.2	67-12-26	12					222
91	413839095183501	IA	320PSLV	368	112.2	69-05-13	13					220
92	412103093422701	IA	325CHRK	360	109.7	68-10-21	13	1600		7.5	24	386
93	405958093072801	IA	320PSLV	356	108.5	68-05-07	11	2100		7.2	17	138
94	344600098020001	OK	318HNSS	350	106.7	67-02-03		1210		7.4	6.9	89
95	362830096293501	OK	322VMOS	350	106.7	75-04-04	11	3000				144
96	390922107145300	CO	310PMPV	350	106.7	75-04-11	3	440		8.6	1	213
97	404046093060601	IA	325DSMS	350	106.7	68-06-19	14	4900		7.8	24	760

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
48	350930096380001	310	0					<0.10	<0.010		
49	365516096272601	410	2								
50	412223093355201	450	0			0.68	3				
51	413339092092001	270	0				<0.40				
52	403100093320001	1240	37			0					
53	411254093380801	550	0			0.11	0.5				
54	341550093281701	300	0			0					
55	343017096561701	370	0			0	0				
56	383550093510001	940	31								
57	384740093425001	380	10			0					
58	411310093135201	310	0			1.8	8				
59	355744096353201	310						0.53			
60	384327093564001	800	0			0.11					
61	412325093333201	500	0			0.47	2.1				
62	405757093261201	140	0			1.6	6.9				
63	352840096400001	250	0						0.15		
64	384430093503001	330				0.05					
65	412344093460401	450	0			0.11	0.5				
66	400115093440001	530	17			0					
67	413839095183001	250	0			0.09	0.4				
68	413839095183001	250	0			0.11	0.5			<0.10	
69	405732093183101	360	0			0.05	0.2				
70	410210095150001	260	14				<0.44				
71	340930097360001	1150	0			0.09	0.4				
72	410657093324101	270	0			1.3	5.7				
73	420950094151101	520	0				<0.44				
74	420950094151101	510	0			0.3	1.3				
75	420950094151101							0.09			
76	420950094151101	510	0				<0.10				
77	420950094151101	550	0			0.32	1.4				
78	420950094151101	490	0			0.32	1.4				
79	420950094151101	510	0				<0.44				
80	420953094151201	510	0			0.11	0.5				
81	420953094151201	590	0			0.02	0.1				
82	382955094151001	450	0			0.34					
83	410002093084301	300	0			0.27	1.2				
84	410007093262401	270	10			0.32	1.4				
85	412620093272501	420	0			0.47	2.1				
86	410534093114401	200	0				<0.10				
87	405558093183501	280	0			0.36	1.6				
88	413839095183501	250	0				<0.44				
89	413839095183501	270	0			0.1	0.44				
90	413839095183501	270	0				<0.10				
91	413839095183501	270	0			0.11	0.5			<0.10	
92	412103093422701	470	0			0.79	3.5				
93	405958093072801	170	0			0.9	4				
94	344600098020001	110	0			0.09	0.4				
95	362830096293501	180	0						0.01		
96	390922107145300	260	1					0.21		0.06	
97	404046093060601	930	0				<0.10				

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
48	350930096380001		510	190	1900	25	4400				
49	365516096272601		4.7	2	440	2.7	440	20			
50	412223093355201		48	30	890	10	160	1600	2.4	7.8	
51	413339092092001		66	26	490	7.7	47	1100	1.5	9	
52	403100093320001		41	29	740		280	310	1.6	6.5	
53	411254093380801		39	12	1200	9.4	320	1700	1.6	5.8	
54	341550093281701		41	23	31	11	11	18			
55	343017096561701		36	43			18	43			
56	383550093510001		5	5.7	490		170	22		5.5	
57	384740093425001		11	5.1	190		91	13	1.5	4	
58	411310093135201		150	53	1300	14	75	3100	2.2	8.2	
59	355744096353201		100	34	69	2.9	33	210			
60	384327093564001		28	15	720	15	580	260	1.8	8	
61	412325093333201		27	11	850	6.5	190	1200	3.5	9.2	
62	405757093261201		140	39	600	11	14	1600	1.2	12	
63	352840096400001		160	54	160	6.5	200	470			
64	384430093503001		46	23	220	13	280	25	2	6	
65	412344093460401		59	21	1200	9.2	300	1900	0.8	6.1	
66	400115093440001		26	14	1600		1900	410	1.3	2.6	
67	413839095183001		260	74	410	9.2	20	1600	0.2	19	
68	413839095183001		260	75	430	12	22	1600	0.3	21	
69	405732093183101		300	140	280	10	16	1600	0.4	22	
70	410210095150001		10	3.6	720	5.6	63	1300	2.6	8	
71	340930097360001						67	35			
72	410657093324101		140	53	450	15	14	1300	0.2	14	
73	420950094151101		140	28	89	17	5	230	1.2	12	
74	420950094151101		140	28	91	16	5	230	1.2	11	
75	420950094151101		110	41	92	17	6	130	0.55	7.1	<5
76	420950094151101		120	41	89	17	6	260	0.9	10	<10
77	420950094151101		110	42	94	14	5	210	0.5	14	<10
78	420950094151101		92	56	85	14	7.5	230	0.85	12	
79	420950094151101		110	49	98	17	7	250	1	11	
80	420953094151201		100	55	85	14	7.5	240	0.95	12	
81	420953094151201		120	45	94	14	5	220	0.5	14	<10
82	382955094151001		53	23	200	4.4	26	250	0.2	13	
83	410002093084301		320	120	240	10	8.5	1600	0.7	19	
84	410007093262401		26	6.3	860	7.1	36	1600	2.4	7.8	
85	412620093272501		180	61	1200	11	180	2600	3	9	
86	410534093114401		140	53	400	11	20	1200	1.1	13	
87	405558093183501		300	140	460	14	24	2000	0.5	12	
88	413839095183501		260	71	400	10	23	1600	0.2	19	
89	413839095183501		260	69	430	9.4	21	1600	0.4	19	
90	413839095183501		250	76	440	11	18	1600	0.3	8.7	
91	413839095183501		230	75	460	12	20	1600	0.3	20	
92	412103093422701		94	33	240	6.2	21	450	0.9	13	
93	405958093072801		180	80	200	8	9	1000	0.3	6.8	
94	344600098020001				63	3.8	30	530			410
95	362830096293501		220	57	140	2.3	570	120			
96	390922107145300		3.5	1.3	100	2.2	2.2	26	0.6	7.5	1
97	404046093060601		19	11	1100	15	760	630	1.5	8.3	

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
48	350930096380001								30		
49	365516096272601										
50	412223093355201								2900		50
51	413339092092001								520		170
52	403100093320001										
53	411254093380801								2900		30
54	341550093281701								450*		
55	343017096561701										
56	383550093510001										
57	384740093425001										
58	411310093135201								7400		60
59	355744096353201								<10		
60	384327093564001										
61	412325093333201								760		<50
62	405757093261201								640		70
63	352840096400001								<10		
64	384430093503001										
65	412344093460401								40		<50
66	400115093440001										
67	413839095183001								2600		90
68	413839095183001										130
69	405732093183101								3800		<50
70	410210095150001								60		<50
71	340930097360001			3800							
72	410657093324101								1500		150
73	420950094151101								1200		<50
74	420950094151101								120		<50
75	420950094151101	19			<2	<5		<10	670	<50	15
76	420950094151101	<100			<10	<10		<10	1000	<10	20
77	420950094151101	<100			<20	<20		<20	730	<10	<10
78	420950094151101								8400		90
79	420950094151101								1100		<50
80	420953094151201								1200		<50
81	420953094151201	<100			<10	<10		10	1800	<10	10
82	382955094151001										
83	410002093084301								2600		230
84	410007093262401								740		70
85	412620093272501								2100		50
86	410534093114401								1200		50
87	405558093183501								60		200
88	413839095183501								2600		80
89	413839095183501								2700		100
90	413839095183501								1800		110
91	413839095183501										110
92	412103093422701								40		50
93	405958093072801								210		590
94	344600098020001										
95	362830096293501								40		
96	390922107145300								60		<10
97	404046093060601								2600		<50

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
48	350930096380001										
49	365516096272601										
50	412223093355201										
51	413339092092001										
52	403100093320001										
53	411254093380801										
54	341550093281701										
55	343017096561701										
56	383550093510001										
57	384740093425001										
58	411310093135201										
59	355744096353201										
60	384327093564001										
61	412325093333201										
62	405757093261201										
63	352840096400001										
64	384430093503001								100		
65	412344093460401										
66	400115093440001										
67	413839095183001										
68	413839095183001										
69	405732093183101										
70	410210095150001										
71	340930097360001										
72	410657093324101										
73	420950094151101										
74	420950094151101										
75	420950094151101		<10	<5			<20		<20		<5
76	420950094151101						<10				
77	420950094151101			<20			<20				<10
78	420950094151101										
79	420950094151101										
80	420953094151201										
81	420953094151201			<10			<10				<10
82	382955094151001										
83	410002093084301										
84	410007093262401										
85	412620093272501										
86	410534093114401										
87	405558093183501										
88	413839095183501										
89	413839095183501										
90	413839095183501										
91	413839095183501										
92	412103093422701										
93	405958093072801										
94	344600098020001										
95	362830096293501										
96	390922107145300										<1
97	404046093060601										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
48	350930096380001							2.6	
49	365516096272601							0.7	
50	412223093355201								
51	413339092092001								
52	403100093320001								
53	411254093380801								
54	341550093281701								
55	343017096561701								
56	383550093510001								
57	384740093425001								
58	411310093135201								
59	355744096353201							1.1	
60	384327093564001								
61	412325093333201								
62	405757093261201								
63	352840096400001							0.5	
64	384430093503001								
65	412344093460401								
66	400115093440001								
67	413839095183001								
68	413839095183001								
69	405732093183101								
70	410210095150001								
71	340930097360001								
72	410657093324101								
73	420950094151101					<1.0			
74	420950094151101					<1.0			
75	420950094151101				1	0			
76	420950094151101								
77	420950094151101				2.2	<1.0			
78	420950094151101					<1.0			
79	420950094151101					<0.0			
80	420953094151201								
81	420953094151201				2.3	<1.0			
82	382955094151001								
83	410002093084301								
84	410007093262401								
85	412620093272501				4.9				
86	410534093114401								
87	405558093183501								
88	413839095183501								
89	413839095183501								
90	413839095183501								
91	413839095183501								
92	412103093422701								
93	405958093072801								
94	344600098020001								
95	362830096293501							3.3	
96	390922107145300								
97	404046093060601								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
98	411000093545801	IA	325CHRK	350	106.7	73-07-31	15.5					
99	412832093413001	IA	320PSLV	350	106.7	51-08-08	13.5	3470		7.8	20	568
100	411231093563401	IA	320PSLV	340	103.6	73-08-01	14.5	2400		8.1	6	388
101	343855098120001	OK	318HNSS	339	103.3	71-07-13	30.5	2450		8	4.5	231
102	410014093191501	IA	320PSLV	339	103.3	68-05-07	13.5	2800		7.4	28	356
103	383935093331501	MO	325CHRK	335	102.1	58-09-30				8.4		610
104	351119094432101	OK	326ATCK	331	100.9	80-01-09	7	320		8.2		244
105	412446093333301	IA	325CHRK	325	99.1	68-09-25	12	4000		7.8	19	534
106	404946093063911	IA	320PSLV	324	98.8	65-06-18		6940		7.9	8	325
107	350330097383501	OK	322VMOS	321	97.8	74-11-15		1340				230
108	413745095041501	IA	320PSLV	319	97.2	59-04-19	13					246
109	345545098362501	OK	318HNSS	312	95.1	67-03-16		1690		8.2	2.5	207
110	412307093243101	IA	325CHRK	306	93.3	68-09-23	13.5	3800		7.8	13	435
111	413118093063201	IA	325DSMS	305	93.0	84-08-23	13	1040		7.4		
112	413118093063201	IA	325DSMS	305	93.0	72-05-15		1000		7.4	30	384
113	413118093063201	IA	325DSMS	305	93.0	71-05-10		1000		9.4	0.3	374
114	413118093063201	IA	325DSMS	305	93.0	60-04-06		916		7.5	23	366
115	413118093065501	IA	325DSMS	305	93.0	57-10-14		917		7.5	20	356
116	413118093065501	IA	325DSMS	305	93.0	71-05-10		1000		7.1	59	380
117	413118093065501	IA	325DSMS	305	93.0	79-06-01		1100		7.5	23	375
118	413118093065501	IA	325DSMS	305	93.0	60-07-06		916		7.4	25	368
119	413118093065501	IA	325DSMS	305	93.0	72-05-15		1000		7.5	23	377
120	423710094470001	IA	325DSMS	305	93.0	66-10-27	11.5	1800		7.1	53	386
121	412340093333401	IA	320PSLV	302	92.0	73-06-27	14.5	3800		7.9	11	444
122	344425099533501	OK	313DGCK	300	91.4	63-08-29	26.5	10700		7.5	5.9	95
123	345420097462501	OK	313ELRN	300	91.4	50-07-13	18	510				248
124	365630096254501	OK	322VMOS	300	91.4	73-04-10		1010		7.8	9.6	310
125	412649093352601	IA	325CHRK	298	90.8	69-08-20	13.5	3200		7.8	18	524
126	405937093054701	IA	320PSLV	296	90.2	73-09-26		970		7.1	55	352
127	412045093291501	IA	325CHRK	292	89.0	73-06-28		6900		7.4	26	334
128	411141093521301	IA	325DSMS	290	88.4	73-07-31	14	4700		8	9.2	474
129	382200094084001	MO	325CHRK	285	86.9	69-08-14				7.5		748
130	413237093065601	IA	320PSLV	283	86.3	55-05-06	10.5	1590		7.5	25	402
131	410025093082001	IA	325CHRK	282	86.0	68-05-14	13	2200		7.3	24	243
132	412623093375801	IA	320PSLV	280	85.3	69-08-20	13	2600		7.7	26	587
133	412832093325301	IA	325DSMS	280	85.3	73-06-27	14	6300		7.4	25	316
134	382940094041001	MO	325CHRK	276	84.1	69-04-08				7.9		632
135	382940094041001	MO	325CHRK	276	84.1	58-11-13				7.7	25	630
136	405354095411401	IA	320PSLV	276	84.1	53-07-16		1780		6.8		376
137	382410093415001	MO	325CHRK	275	83.8	65-09-22				8.1		630
138	410119093273501	IA	325CHRK	274	83.5	68-05-02	13	2900		7.8	4.9	158
139	410119093273501	IA	325CHRK	274	83.5	67-06-29		3100		7.7		
140	405810093571301	IA	320PSLV	269	82.0	69-10-08	13	3300		7.4	15	194
141	410843093143001	IA	325DSMS	268	81.7	68-05-03	11	3600		7.5	18	266
142	412622093265801	IA	325CHRK	265	80.8	69-07-23	12	3600		7.9	15	500
143	344510099414001	OK	313DGCK	263	80.2	65-08-03	23	4870		8	2.6	135
144	343520099423501	OK	313DGCK	260	79.2	59-12-01		30200		7.6	7.3	148
145	343930099480501	OK	313DGCK	260	79.2	58-08-25		3590		7.5	13	213
146	344215099570301	OK	313ELRN	260	79.2	66-06-01		4870		7.5	10	164
147	344945098195501	OK	318HNSS	260	79.2	71-02-01				7.9	155	6310

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
98	411000093545801										
99	412832093413001	690	0			0.86	3.8				
100	411231093563401	470	0			4.1	18				
101	343855098120001	280	0			0.05	0.2				
102	410014093191501	430	0			0.09	0.4				
103	383935093331501	670	35			0.02					
104	351119094432101										
105	412446093333301	650	0			0.32	1.4				
106	404946093063911	400	0			0.43	1.9				
107	350330097383501	280						0.8			
108	413745095041501	300	0				<0.10				
109	345545098362501	250	0			0.02	0.1				
110	412307093243101	530	0			0.36	1.6				
111	413118093063201							0.09			
112	413118093063201	470	0				<0.10				
113	413118093063201	460	0			1.2	5.3				
114	413118093063201	450	0				<0.44				
115	413118093065501	430	0			2.4	11				
116	413118093065501	460	0			1.1	4.9				
117	413118093065501	460	0			0.14	0.6				
118	413118093065501	450	0				<0.44				
119	413118093065501	460	0				<0.10				
120	423710094470001	470	0				<0.10				
121	412340093333401	540	0			0.32	1.4				
122	344425099533501	120	0								
123	345420097462501	290	8			0.5	2.2				
124	365630096254501	380	0			2.7	12				
125	412649093352601	640	0			0.61	2.7				
126	405937093054701	430	0				<0.10				
127	412045093291501	410	0			0.23	1				
128	411141093521301	580	0			0.05	0.2				
129	382200094084001	910	0			0					
130	413237093065601	490	0			1.8	8				
131	410025093082001	300	0			0.09	0.4				
132	412623093375801	720	0			1.1	4.8				
133	412832093325301	390	0			0.05	0.2				
134	382940094041001	770	0			0					
135	382940094041001	770	0								
136	405354095411401					0.02	0.11				
137	382410093415001	730	19			0					
138	410119093273501	190	0			0.25	1.1				
139	410119093273501		0								
140	405810093571301	240	0			0.11	0.5				
141	410843093143001	320	0			0.27	1.2				
142	412622093265801	720	0			0.27	1.2				
143	344510099414001	160	0								
144	343520099423501	180	0								
145	343930099480501	260	0			5.2	23				
146	344215099570301	200	0								
147	344945098195501	7700									

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
98	411000093545801										
99	412832093413001		28	11			190	1200	3.4		
100	411231093563401		26	9.2	480	5	180	530	3.1	6.8	
101	343855098120001						480	290	3.2		
102	410014093191501		220	130		14	18	1300	0.7	16	
103	383935093331501		8.1	7.1	360		45	100	1.6	3.3	
104	351119094432101		12	8	26	0.4	4	8.6	0.6	13	<15
105	412446093333301		35	13	840	8	120	1300	3.5	7.2	
106	404946093063911		260	46	1400	9.4	200	3100	1.3	7.6	
107	350330097383501		8.1	3.6	280		210	110			
108	413745095041501		320	120	380	12	14	1700	0.2	13	
109	345545098362501				110	5.2	22	740			370
110	412307093243101		29	8.7	850	7.2	160	1300	2.5	8	
111	413118093063201		87	32	120	4.8	2	220	0.7	9	<10
112	413118093063201		73	31	120	5.6	9	200	0.7	8.6	<10
113	413118093063201		69	30	140	5.2	2	190	0.65	9.4	<10
114	413118093063201		60	21	120	4.5	3	130	0.75	10	
115	413118093065501		62	29	110	5	5	160	0.7	11	
116	413118093065501		83	32	140	5.3	1	220	0.7	9.8	<10
117	413118093065501		90	35	100	4.3	3	210	0.7	4	<10
118	413118093065501		69	32	110	4.6	3	140	0.75	11	
119	413118093065501		78	32	110	5.6	1.5	220	0.7	8.8	<10
120	423710094470001		250	78	76	8.8	3	710	0.5	10	
121	412340093333401		22	9.1	850	7	190	1200	3.3	6.4	
122	344425099533501						2600	2400			
123	345420097462501		29	40	29	0	8.8	35			
124	365630096254501		8.7	1.8	19		110	40			
125	412649093352601		27	6.8	730	5.4	110	1000	2.7	4.8	
126	405937093054701		92	50	54	2.9	3	200	0.45	19	
127	412045093291501		200	50	1500	15	300	2900	2.3	5	
128	411141093521301		16	8.1	1100	9.4	360	1500	3.5	7	
129	382200094084001		17	9.6	580	13	540	4	1.6	9.2	
130	413237093065601		180	61	100	5	3	530	0.4		
131	410025093082001		240	85	200	5.8	5.5	1100	0.3	16	
132	412623093375801		11	3.9	570	3.9	90	560	3.8	4.7	
133	412832093325301		220	76	1300	15	230	2900	2.2	5	
134	382940094041001		16	13	880	13	1000	1.9	2.4	9	
135	382940094041001		17	11	860		1000	0	2.4	10	
136	405354095411401						400	5.4	0.15		
137	382410093415001		7.9	4.4	350		150	0.8	1.8	4.3	
138	410119093273501		59	24	640	8.8	24	1400	1.2	9.8	
139	410119093273501										
140	405810093571301		270	87	440	7.2	35	1700	0.55	15	
141	410843093143001		120	19	730	12	70	1500	2.2	9.2	
142	412622093265801		26	4.9	780	6.4	170	900	3	7.4	
143	344510099414001		580	200			460	2300			
144	343520099423501		1200	430			9900	3200			
145	343930099480501		600	160			200	2000			
146	344215099570301		610	210			510	2300			
147	344945098195501		500	190			9600	4900	1	7	

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
98	411000093545801										<10
99	412832093413001								900		0
100	411231093563401								1600		30
101	343855098120001										
102	410014093191501								280		90
103	383935093331501										
104	351119094432101			70	<10	<20		<10	<100	<100	120
105	412446093333301								9		120
106	404946093063911								40		<50
107	350330097383501										
108	413745095041501								2700		180
109	345545098362501										
110	412307093243101								920		<50
111	413118093063201	<100			<1	<10		<10	280	<10	30
112	413118093063201	<100			<10	<10		40	500	<10	10
113	413118093063201	100			<10	<10		<10	300	<10	<50
114	413118093063201								1400		<50
115	413118093065501								860		<50
116	413118093065501	100			<10	<10		110	1100	<10	<50
117	413118093065501	<100			<2	<20		<20	410	<10	20
118	413118093065501								1500		<50
119	413118093065501	<100			<10	<10		<10	300	<10	10
120	423710094470001								15000		490
121	412340093333401								2100		40
122	344425099533501			3000							
123	345420097462501										
124	365630096254501										
125	412649093352601								2700		<50
126	405937093054701								5100		60
127	412045093291501								2100		60
128	411141093521301								810		20
129	382200094084001										
130	413237093065601										100
131	410025093082001								5800		420
132	412623093375801								1400		<50
133	412832093325301								5800		90
134	382940094041001										
135	382940094041001										
136	405354095411401								30000		90
137	382410093415001										
138	410119093273501								240		70
139	410119093273501								<20		<50
140	405810093571301								80		2300
141	410843093143001								2400		110
142	412622093265801								600		100
143	344510099414001			4900							
144	343520099423501										
145	343930099480501			1900							
146	344215099570301			4200							
147	344945098195501										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
98	411000093545801										
99	412832093413001										
100	411231093563401										
101	343855098120001										
102	410014093191501										
103	383935093331501										
104	351119094432101	<1					150		<100		
105	412446093333301										
106	404946093063911										
107	350330097383501										
108	413745095041501										
109	345545098362501										
110	412307093243101										
111	413118093063201			<10			10				<10
112	413118093063201						50				
113	413118093063201						<10				
114	413118093063201										
115	413118093065501										
116	413118093065501						20				
117	413118093065501			<20			30				<10
118	413118093065501										
119	413118093065501						50				
120	423710094470001										
121	412340093333401										
122	344425099533501										
123	345420097462501										
124	365630096254501										
125	412649093352601										
126	405937093054701										
127	412045093291501										
128	411141093521301										
129	382200094084001										
130	413237093065601										
131	410025093082001										
132	412623093375801										
133	412832093325301										
134	382940094041001								100		
135	382940094041001								100		
136	405354095411401										
137	382410093415001										
138	410119093273501										
139	410119093273501										
140	405810093571301										
141	410843093143001										
142	412622093265801										
143	344510099414001										
144	343520099423501										
145	343930099480501										
146	344215099570301										
147	344945098195501										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
98	411000093545801								
99	412832093413001								
100	411231093563401								
101	343855098120001								
102	410014093191501								
103	383935093331501								
104	351119094432101					<0.5			
105	412446093333301								
106	404946093063911								
107	350330097383501							0.7	
108	413745095041501								
109	345545098362501								
110	412307093243101								
111	413118093063201				1.9	<1.0			
112	413118093063201								
113	413118093063201								
114	413118093063201								
115	413118093065501								
116	413118093065501								
117	413118093065501					<1.0			
118	413118093065501								
119	413118093065501								
120	423710094470001								
121	412340093333401								
122	344425099533501								
123	345420097462501								
124	365630096254501								
125	412649093352601								
126	405937093054701								
127	412045093291501								
128	411141093521301								
129	382200094084001								
130	413237093065601								
131	410025093082001								
132	412623093375801								
133	412832093325301								
134	382940094041001								
135	382940094041001								
136	405354095411401								
137	382410093415001								
138	410119093273501								
139	410119093273501								
140	405810093571301								
141	410843093143001								
142	412622093265801								
143	344510099414001								
144	343520099423501								
145	343930099480501								
146	344215099570301								
147	344945098195501								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
148	363510096183001	OK	322VMOS	260	79.2	75-04-02	15	1060				423
149	372305107344700	CO	310PMPV	260	79.2	75-04-14	10	580				302
150	410852093163901	IA	325DSMS	256	78.0	69-04-23	13	3600		7.6	11	204
151	411213092493002	IA	320PSLV	256	78.0	81-08-19	15	2750		7.2		
152	363610096182501	OK	322VMOS	255	77.7	73-02-22		1090		7	42	215
153	405832092243601	IA	325DSMS	255	77.7	67-03-23	13.5	3700		7.6	15	268
154	413118093065502	IA	325DSMS	251	76.5	57-10-14		909		7.5	23	370
155	413118093065502	IA	325DSMS	251	76.5	79-06-01		1000		7.4	30	384
156	413118093065502	IA	325DSMS	251	76.5	55-03-30	12	887		7.7	15	378
157	413118093065502	IA	325DSMS	251	76.5	61-12-28		950		7.5	21	376
158	413118093065502	IA	325DSMS	251	76.5	72-05-15		940		7.3	34	388
159	341615099452401	OK	313DGCK	250	76.2	67-08-25		6370		7.9	4.6	185
160	344055099585001	OK	313DGCK	250	76.2	70-08-04	20	3120		7.7	6.5	167
161	344210099460001	OK	313DGCK	250	76.2	66-06-01		5340		7.5	12	197
162	344218099520601	OK	313DGCK	250	76.2	67-07-21		6830		7.8	5.6	182
163	344430097450001	OK	313ELRN	250	76.2	50-07-15	20	462				209
164	354030099400001	OK	313DGCK	250	76.2	61-01-13		8100				195
165	364740100390001	OK	310PRMN	250	76.2	64-01-03		24600				
166	412953093123701	IA	320PSLV	250	76.2	73-11-15	13	650		7.2	50	360
167	412953094341401	IA	325DSMS	250	76.2	69-11-13		1300		6.7	72	185
168	412953094341401	IA	325DSMS	250	76.2	74-03-25		3200		7.1	63	406
169	351620096470001	OK	322VMOS	248	75.6	75-01-06	18.5	5720				166
170	413004094184701	IA	320PSLV	247	75.3	62-04-25		2950		7.4	35	449
171	413004094184701	IA	320PSLV	247	75.3	58-02-10		2910		7.7	17	448
172	382750094001001	MO	325CHRK	246	75.0	64-12-09				8.2	7.6	614
173	382750094001001	MO	325CHRK	246	75.0	70-12-19				8.1	9.5	620
174	410050092572501	IA	320PSLV	243	74.1	73-09-26	13.5	730		7.2	46	370
175	345742096391001	OK	322ADA	242	73.8	80-01-31	7	480		6.9		210
176	380813094062501	MO	325CHRK	241	73.5	67-08-18	15.5	1460		8.2	7.5	605
177	410627093030401	IA	320PSLV	241	73.5	73-09-26		1300		7.3	27	278
178	343630098464501	OK	318HNSS	240	73.2	71-02-17				8.9		
179	363750096171501	OK	322VMOS	240	73.2	72-11-16		978		8	7.7	394
180	373212096414901	KS	319CHSE	240	73.2	85-07-23	16	505		7.1		298
181	373212096414901	KS	319CHSE	240	73.2	84-07-17	16.5	580		7.2		305
182	373212096414901	KS	319CHSE	240	73.2	79-04-25	18	510		7	58	295
183	373212096414901	KS	319CHSE	240	73.2	79-07-25	17.5	580		7.6	15	303
184	373212096414901	KS	319CHSE	240	73.2	63-09-25	23.5	470		8.2		
185	373212096414901	KS	319CHSE	240	73.2	80-09-24	16	655		7.5	19	312
186	373212096414901	KS	319CHSE	240	73.2	78-07-25	20	540		7	59	303
187	373212096414901	KS	319CHSE	240	73.2	83-08-30	18	575		7.4		
188	391416106004800	CO	310PMPV	240	73.2	74-07-25	10	443		8.1	3.6	233
189	411607093062601	IA	320PSLV	240	73.2	73-08-01	13.5	3600		7.1	35	226
190	412725093443101	IA	325CHRK	240	73.2	68-10-23	13	2900		7.8	12	352
191	345225096381001	OK	322VMOS	236	71.9	74-11-12		1220				349
192	345919096401001	OK	322ADA	236	71.9	80-01-31	5	965		7.3		310
193	354223096345501	OK	322VMOS	236	71.9	80-03-03	17	720		7.6		310
194	351314096380601	OK	322VMOS	235	71.6	80-01-29	7	457		7		230
195	411119093103801	IA	320PSLV	233	71.0	73-11-14	13	1400		7.8	11	371
196	381220094020001	MO	325CHRK	230	70.1	56-03-01				7.3		313
197	412426093412801	IA	325DSMS	230	70.1	69-08-19	13	1900		7.9	12	476

	STN NO.	HCO3 mg/l	CO3 mg/l	NH4(as N) mg/l	NO2(as N) mg/l	NO3 (as N) mg/l	NO3asNO3 mg/l	N(NO2+NO3) mg/l	P mg/l	PO4 mg/l	H2S(as S) mg/l
148	363510096183001	420	47						0.01		
149	372305107344700	370						0.82		0.12	
150	410852093163901	250	0				<0.10				
151	411213092493002			2.1	0	0.11	0.5	0.11		0	
152	363610096182501	260	0			13	58				
153	405832092243601	330	0			0.36	1.6				
154	413118093065502	450	0			2.1	9.3				
155	413118093065502	470	0			0.36	1.6				
156	413118093065502	460	0			0	0				
157	413118093065502	460	0				<0.44				
158	413118093065502	470	0				<0.10				
159	341615099452401	230	0			2.7	12				
160	344055099585001	200	0			3.4	15				
161	344210099460001	240	0								
162	344218099520601	220	0			2.5	11				
163	344430097450001	240	9			0.38	1.7				
164	354030099400001	240	0								
165	364740100390001										
166	412953093123701	440	0				<0.10				
167	412953094341401	230	0			2.2	9.9				
168	412953094341401	490	0			2.9	13				
169	351620096470001	200	0								
170	413004094184701	550	0				<0.44				
171	413004094184701	550	0			0.2	0.89				
172	382750094001001	750	0			0	0				
173	382750094001001	750	0								
174	410050092572501	450	0			0.68	3				
175	345742096391001										
176	380813094062501	740	0			0.18	0.8				
177	410627093030401	340	0				<0.10				
178	343630098464501					0.18	0.8				
179	363750096171501	480	0			0.23	1				
180	373212096414901			0				1.3			
181	373212096414901			<0.000				1.7			
182	373212096414901	360	0			2.1	9.3				
183	373212096414901	370	0			2.3	10				
184	373212096414901					13	58				
185	373212096414901	380	0			2.7	12				
186	373212096414901	370	0			3.2	14				
187	373212096414901			0.17				1.3			
188	391416106004800	280						0.47		0.03	
189	411607093062601	280	0			0.07	0.3				
190	412725093443101	430	0			0.56	2.5				
191	345225096381001	430						19			
192	345919096401001										
193	354223096345501										
194	351314096380601										
195	411119093103801	450	0			0.11	0.5				
196	381220094020001	380	0								
197	412426093412801	580	0			0.77	3.4				

	STN NO.	TOC mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	Cl mg/l	SO4 mg/l	F mg/l	SiO2 mg/l	As ug/l
148	363510096183001		5.1	3.1	240	1.5	54	53			
149	372305107344700		92	6.2	36	1	11	9.3	0.6	11	<1
150	410852093163901		110	39	730	12	27	1700	1.4	11	
151	411213092493002		270	30	400	11	22	1300	0.6	24	0
152	363610096182501		120	34	67		110	150			
153	405832092243601		3.2	2.9	820	12	82	1400	1.4	8.6	
154	413118093065502		60	25	120	5.8	4	130	0.95	9.2	
155	413118093065502		91	35	89	4.7	3	170	0.75	3.2	<10
156	413118093065502		59	22	120	4.8	5	120	1		
157	413118093065502		66	26	110	4.9	1	140	0.85	13	
158	413118093065502		59	25	110	6	1	130	0.95	7.6	<10
159	341615099452401				780	11	950	2500			
160	344055099585001						130	1700			
161	344210099460001						680	2200			
162	344218099520601				890	11	1100	2500			
163	344430097450001		12	36			26	11			
164	354030099400001		600	440			1300	3200			
165	364740100390001						8000				
166	412953093123701		82	28	26	2.5	<0.50	22	0.3	21	
167	412953094341401		120	34	120	3.1	16	500	0.2	12	
168	412953094341401		380	140	300	10	18	1600	0.4	16	<10
169	351620096470001						71	2100	1		
170	413004094184701		220	85	390	11	15	1200	0.3	13	
171	413004094184701		210	78	380	8.8	12	1200	0.45	13	
172	382750094001001		4.8	3.9	410	9.6	220	58	4.5	9	
173	382750094001001		5.6	7.8	430	9	250	34	3.3	6	
174	410050092572501		69	31	54	4.5	2	57	0.4	21	
175	345742096391001	1.5	52	22	9.1	1.4	18	19	0.2	8.8	
176	380813094062501		6.1	7.1	350	7.1	92	71	1.8	8.2	
177	410627093030401		110	47	120	4.8	8	460	0.7	21	
178	343630098464501			1			32	150	16		
179	363750096171501		33	28	160		43	86			
180	373212096414901		84	12	31	0.2	5.3		0.15	14	
181	373212096414901		84	12	33	0.3	5.8	<10	0.2	16	
182	373212096414901		85	12	33	0.4	10	13	0.2	15	<1
183	373212096414901		86	11	32	0.6	10	14	<0.10	15	
184	373212096414901		43	18			41	5			
185	373212096414901		53	14	83	0.7	23	33	0.4	13	
186	373212096414901		88	12	34	0.2	13	15	0.1	16	<1
187	373212096414901		81	11	35	0.2	3.8	8	0.2	14	
188	391416106004800		39	33	6.8	1.9	2.3	9.7	0.4	14	
189	411607093062601		430	46	140	11	5	1300	1.2	6.8	
190	412725093443101		19	4.8	660	8.7	95	1000	1.1	7.6	
191	345225096381001		76	22	180		64	180			
192	345919096401001	19	75	51	42	3.5	92	34	0.2	8.6	
193	354223096345501		39	24	71	6.9	19	27	0.4	18	
194	351314096380601	3.5	58	22	10	3.6	17	23	0.2	8.9	
195	411119093103801		35	7.6	300	5.8	9.5	350	2.6	6.4	
196	381220094020001		83	44	620		990	74		8	
197	412426093412801		8	3.9	430	3.8	64	400	3.6	5	

	STN NO.	Ba ug/l	Be ug/l	B ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Fe ug/l	Pb ug/l	Mn ug/l
148	363510096183001								70		
149	372305107344700								<10		60
150	410852093163901								1200		60
151	411213092493002	100			1	1		50	2000		50
152	363610096182501										
153	405832092243601								160		<50
154	413118093065502								200		<50
155	413118093065502	<100			<2	<20		<20	230	<10	20
156	413118093065502								500		0
157	413118093065502								140		<50
158	413118093065502	<100			<10	<10		<10	180	<10	10
159	341615099452401			3900							
160	344055099585001			400							
161	344210099460001			2700							
162	344218099520601			3500							
163	344430097450001										
164	354030099400001			5100							
165	364740100390001										
166	412953093123701								3100		70
167	412953094341401								20		580
168	412953094341401	<100			<20	<20		70	1400	<10	1100
169	351620096470001										
170	413004094184701								240		100
171	413004094184701										<50
172	382750094001001										
173	382750094001001										
174	410050092572501								950		20
175	345742096391001										
176	380813094062501										
177	410627093030401								3900		50
178	343630098464501										
179	363750096171501										
180	373212096414901										
181	373212096414901										10
182	373212096414901	200						<20	<10		<10
183	373212096414901										
184	373212096414901										
185	373212096414901										
186	373212096414901	<100							<10		<10
187	373212096414901								0		0
188	391416106004800								20		1400
189	411607093062601								3800		60
190	412725093443101								520		<50
191	345225096381001										
192	345919096401001										
193	354223096345501										
194	351314096380601										
195	411119093103801								600		<10
196	381220094020001										
197	412426093412801								100		<50

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
148	363510096183001										
149	372305107344700										1
150	410852093163901										
151	411213092493002						550				0
152	363610096182501										
153	405832092243601										
154	413118093065502										
155	413118093065502			<20			<20				<10
156	413118093065502										
157	413118093065502										
158	413118093065502						60				
159	341615099452401										
160	344055099585001										
161	344210099460001										
162	344218099520601										
163	344430097450001										
164	354030099400001										
165	364740100390001										
166	412953093123701										
167	412953094341401										
168	412953094341401			<20			270				
169	351620096470001										
170	413004094184701										
171	413004094184701										
172	382750094001001										
173	382750094001001								100		
174	410050092572501										
175	345742096391001				140					20	
176	380813094062501										
177	410627093030401										
178	343630098464501										
179	363750096171501										
180	373212096414901										
181	373212096414901										
182	373212096414901						30				<1
183	373212096414901										
184	373212096414901										
185	373212096414901										
186	373212096414901						70				<1
187	373212096414901										
188	391416106004800						500		<100		
189	411607093062601										
190	412725093443101										
191	345225096381001										
192	345919096401001				550					30	
193	354223096345501				850					40	
194	351314096380601				890					20	
195	411119093103801										
196	381220094020001										
197	412426093412801										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
148	363510096183001							0.3	
149	372305107344700								
150	410852093163901								
151	411213092493002					0			
152	363610096182501								
153	405832092243601								
154	413118093065502								
155	413118093065502					<1.0			
156	413118093065502								
157	413118093065502								
158	413118093065502								
159	341615099452401								
160	344055099585001								
161	344210099460001								
162	344218099520601								
163	344430097450001								
164	354030099400001								
165	364740100390001								
166	412953093123701								
167	412953094341401								
168	412953094341401					<1.0			
169	351620096470001							0.3	
170	413004094184701								
171	413004094184701								
172	382750094001001								
173	382750094001001								
174	410050092572501								
175	345742096391001							0.2	
176	380813094062501								
177	410627093030401								
178	343630098464501								
179	363750096171501								
180	373212096414901								
181	373212096414901								
182	373212096414901								
183	373212096414901								
184	373212096414901								
185	373212096414901								
186	373212096414901								
187	373212096414901								
188	391416106004800								
189	411607093062601								
190	412725093443101								
191	345225096381001							0.2	
192	345919096401001						0.02	0.6	
193	354223096345501							0.1	
194	351314096380601							0.1	
195	411119093103801								
196	381220094020001								
197	412426093412801								

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	O2 mg/l	pH	CO2 mg/l	ALKALINITY mg/l CaCO3
198	415449094173201	IA	320PSLV	230	70.1	82-08-26	12	650		7.4	39	500
199	345404094071601	AR	326ATOK	227	69.2	82-10-04	18.5	1580				
200	412007093011201	IA	320PSLV	226	68.9	81-08-12	14	2580		7.2		
201	411916093145601	IA	320PSLV	225	68.6	81-08-11	14.5	7700		7.5		
202	410935093084501	IA	325DSMS	222	67.7	68-05-08	11.5	1300		8.2	4.2	303
203	410603095443001	IA	320PSLV	220	67.1	53-07-16	12	618		7.6	16	330
204	343930099480502	OK	313DGCK	217	66.1	59-09-05		3590		7	11	54
205	343955099500001	OK	313DGCK	215	65.5	64-12-23		3620		7.7	7	180
206	343955099500001	OK	313DGCK	215	65.5	64-02-07		3580		7.7	7.4	190
207	380800093595001	MO	325CHRK	215	65.5	65-12-23						64
208	344610098033001	OK	313ELRN	214	65.2	66-07-01	15.5	597		7.7	12	312
209	350000098404501	OK	318HNSS	212	64.6	71-08-03	20	1700		8	4.8	244
210	411229093071501	IA	320PSLV	212	64.6	73-08-02	14	2300		8	6.7	342
211	412534093050911	IA	320PSLV	210	64.0	70-05-20		1500		7.1	42	274
212	415111094332401	IA	325DSMS	210	64.0	67-12-25	10					
213	415111094332401	IA	325DSMS	210	64.0	52-03-06						
214	415111094332401	IA	325DSMS	210	64.0	74-11-14	10					
215	415111094332401	IA	325DSMS	210	64.0	79-08-15						
216	415111094332401	IA	325DSMS	210	64.0	61-08-22						
217	411930093092701	IA	320PSLV	206	62.8	73-11-15	13	510		7.1	43	276
218	415118094331301	IA	325DSMS	205	62.5	67-12-25	10	570		7.4	24	311
219	415118094331301	IA	325DSMS	205	62.5	79-08-15		600		7.6	18	330
220	415118094331301	IA	325DSMS	205	62.5	61-08-16		575		7.4	24	306
221	415118094331301	IA	325DSMS	205	62.5	82-04-19	12	564		7.5		
222	415118094331301	IA	325DSMS	205	62.5	74-11-14	13	600		7.5	22	323
223	415118094331301	IA	325DSMS	205	62.5	61-08-16		582		7.5	19	300
224	415118094331301	IA	325DSMS	205	62.5	79-08-15		600		7.6	18	330
225	345920097563001	OK	313ELRN	204	62.2	58-12-02		520		7.6	13	274
226	343405099461201	OK	313DGCK	202	61.6	64-08-26		6280		7	21	110
227	343556099505601	OK	313DGCK	201	61.3	53-10-15	18.5	2680		7.2	14	110
228	372217107353500	CO	310PMPV	201	61.3	75-04-14	7	460				221
229	343000099472001	OK	313DGCK	200	61.0	64-08-24		1240				153
230	343340099421501	OK	313DGCK	200	61.0	59-01-13		7830		7.5	10	166
231	343725098412501	OK	318WCHT	200	61.0	70-11-01				8.8		
232	343740099401501	OK	313DGCK	200	61.0	59-12-01		8890		7.7	4.7	120
233	344125099491001	OK	313DGCK	200	61.0	59-03-13		8520		8.1	2.1	135
234	344200099432501	OK	313DGCK	200	61.0	59-08-11		10300		7.8	3.7	119
235	345400098250501	OK	318HNSS	200	61.0	71-02-09				7.7		
236	345500098250501	OK	318HNSS	200	61.0	71-04-01				7.7		
237	362235096221001	OK	322VMOS	200	61.0	73-01-18	17.5	770		8	6.7	341

	STN NO.	HCO3	CO3	NH4(as N)	NO2(as N)	NO3 (as N)	NO3asNO3	N(NO2+NO3)	P	PO4	H2S(as S)
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
198	415449094173201	610	0				<0.10	<0.02			
199	345404094071601										
200	412007093011201			2	0.02	0.11	0.5	0.13		0.06	0.2
201	411916093145601			3.2	0.02	1.7	7.5	1.7		0.06	
202	410935093084501	370	0				<0.10				
203	410603095443001	400	0			0.4	1.8				
204	343930099480502	66	0			1	0				
205	343955099500001	220	0								
206	343955099500001	230	0			6.1	27				
207	380800093595001	79	0			0.41					
208	344610098033001	380	0								
209	350000098404501	300	0			0.05	0.2				
210	411229093071501	420	0			0.18	0.8				
211	412534093050911	330	0			0.72	3.2				
212	415111094332401					0.05	0.2				
213	415111094332401										
214	415111094332401						<0.10				
215	415111094332401						<0.10				
216	415111094332401						<0.44				
217	411930093092701	340	0			0.16	0.7				
218	415118094331301	380	0			0.05	0.2				
219	415118094331301	400	0				<0.10				
220	415118094331301	370	0				<0.44				
221	415118094331301							0.04			
222	415118094331301	390	0				<0.10				
223	415118094331301	370	0			0.3	1.3				
224	415118094331301	400	0				<0.10				
225	345920097563001	330	0			0.23	1				
226	343405099461201	130	0								
227	343556099505601	130	0			1.3	5.8				
228	372217107353500	270						0.02		0.21	
229	343000099472001	190	0								
230	343340099421501	200	0								
231	343725098412501					2.3	10				
232	343740099401501	150	0			0.72	3.2				
233	344125099491001	160	0								
234	344200099432501	150	0								
235	345400098250501					7.9	35				
236	345500098250501					2.4	11				
237	362235096221001	420	0			0.09	0.4				

	STN NO.	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l
198	415449094173201		110	34	38	6.8	0.5	4.6	0.26	25	<10
199	345404094071601						260				
200	412007093011201		300	58	260	13	30	1300	1.3	7.4	1
201	411916093145601		300	91	1800	12	320	4000	2.5	7	1
202	410935093084501		18	8.3	280	3.7	8	350	2.3	9	
203	410603095443001		84	24	12	3.2	7	12	0.3	21	
204	343930099480502						260	1900			
205	343955099500001						230	1900			
206	343955099500001						200	1900			
207	380800093595001						3.2	130			
208	344610098033001						7	17			
209	350000098404501						350	62	3.2		
210	411229093071501		21	6.1	470	6.4	37	720	2.5	6	
211	412534093050911		170	390	110	5.4	28	520	0.9	9.2	
212	415111094332401		61	32	19	7.6	<0.50	53	0.55	9.8	
213	415111094332401		55	29	17	6.5	2	11	0.25		
214	415111094332401		58	36	18	6.2	<0.50	54	0.55	8	<10
215	415111094332401		55	29	40	5	32	16	0.6	5.8	<10
216	415111094332401		58	29	20	7.3	3	19	0.6	10	
217	411930093092701		83	18	11	1.4	<0.50	31	0.9	15	
218	415118094331301		64	25	18	7.2	<0.50	18	0.6	12	
219	415118094331301		63	31	18	4.5	1	0.8	0.4	8	<10
220	415118094331301		59	28	18	6.5	<0.50	5.3	0.6	13	
221	415118094331301		61	30	17	8	<1.0	6	0.55	5.2	<5
222	415118094331301		60	33	18	5.9	<0.50	17	0.6	9	<10
223	415118094331301		58	28	20	6.8	3	9.3	0.6	12	
224	415118094331301		63	31	18	4.5	1	0.8	0.4	8	<10
225	345920097563001		50	23			3	7.8			
226	343405099461201						1100	2000			
227	343556099505601		610	79	43	5.1	66	1600	0.5	13	
228	372217107353500		83	4.3	2.3	0.5	0.6	6.8	0.3	7.3	1
229	343000099472001						3600	1900			
230	343340099421501		690	310			1500	2400			
231	343725098412501		16	8			95	140	0.9	24	
232	343740099401501		720	280			2000	2600	0.7	3	
233	344125099491001		630	270			1600	2800			
234	344200099432501		970	280			2400	2500			
235	345400098250501		110	31			64	840			
236	345500098250501		370	56			490	2600			
237	362235096221001		6	8	180		25	38			

	STN NO.	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
198	415449094173201	400			<1	<10		<10	500	<10	60
199	345404094071601										
200	412007093011201	100			0	2		50	3300		80
201	411916093145601	100			0	2		50	1900		70
202	410935093084501								60		<50
203	410603095443001										0
204	343930099480502			1400							
205	343955099500001			140							
206	343955099500001			1100							
207	380800093595001										
208	344610098033001			100							
209	350000098404501										
210	411229093071501								860		<10
211	412534093050911								80		850
212	415111094332401								440		90
213	415111094332401										
214	415111094332401	200			<10	<10		<10	540	<10	40
215	415111094332401	500			<1	<10		<10	780	<10	60
216	415111094332401								80		<50
217	411930093092701								2000		50
218	415118094331301								540		140
219	415118094331301	700			<2	<20		<20	150	<10	60
220	415118094331301								720		110
221	415118094331301	600			<2	<5		<10	360	<50	67
222	415118094331301	400			<20	<20		<20	480	<10	40
223	415118094331301								300		220
224	415118094331301	700			<2	<20		<20	150	<10	60
225	345920097563001			790							
226	343405099461201										
227	343556099505601			1100							
228	372217107353500								<10		<10
229	343000099472001			1200							
230	343340099421501			3900							
231	343725098412501										
232	343740099401501			4900							
233	344125099491001			9800							
234	344200099432501			3700							
235	345400098250501										
236	345500098250501										
237	362235096221001										

	STN NO.	Mo ug/l	Ni ug/l	Ag ug/l	Sr ug/l	V ug/l	Zn ug/l	Sn ug/l	Al ug/l	Li ug/l	Se ug/l
198	415449094173201			<10			<10				<10
199	345404094071601										
200	412007093011201						40				0
201	411916093145601						30				0
202	410935093084501										
203	410603095443001										
204	343930099480502										
205	343955099500001										
206	343955099500001										
207	380800093595001										
208	344610098033001										
209	350000098404501										
210	411229093071501										
211	412534093050911										
212	415111094332401										
213	415111094332401										
214	415111094332401			<10			<10				
215	415111094332401			<10			250				<10
216	415111094332401										
217	411930093092701										
218	415118094331301										
219	415118094331301			<20			<20				<10
220	415118094331301										
221	415118094331301		<10	<5			<20				<5
222	415118094331301			<20			<20				
223	415118094331301										
224	415118094331301			<20			<20				<10
225	345920097563001										
226	343405099461201										
227	343556099505601										
228	372217107353500										<1
229	343000099472001										
230	343340099421501										
231	343725098412501										
232	343740099401501										
233	344125099491001										
234	344200099432501										
235	345400098250501										
236	345500098250501										
237	362235096221001										

	STN NO.	Ti ug/l	Zr ug/l	Sc ug/l	Ra-226 pci/l	Hg ug/l	I mg/l	Br mg/l	U ug/l
198	415449094173201				6	<1.0			
199	345404094071601								
200	412007093011201					0			
201	411916093145601					0.3			
202	410935093084501								
203	410603095443001								
204	343930099480502								
205	343955099500001								
206	343955099500001								
207	380800093595001								
208	344610098033001								
209	350000098404501								
210	411229093071501								
211	412534093050911								
212	415111094332401								
213	415111094332401								
214	415111094332401								
215	415111094332401								
216	415111094332401								
217	411930093092701								
218	415118094331301								
219	415118094331301					<1.0			
220	415118094331301								
221	415118094331301				2.3				
222	415118094331301				4.3	<1.0			
223	415118094331301								
224	415118094331301								
225	345920097563001								
226	343405099461201								
227	343556099505601								
228	372217107353500								
229	343000099472001								
230	343340099421501								
231	343725098412501								
232	343740099401501								
233	344125099491001								
234	344200099432501								
235	345400098250501								
236	345500098250501								
237	362235096221001								

APPENDIX II

Edited groundwater data
retrieved from WATSTORE.

TABLE AII-1

Listing of edited WATSTORE data
for the Gulf Coast group

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
1	302705088291502	MS	125MDWY	M	6020	1834.9	70-08-19		82000	7.6		9.5115347
2	310510089000302	MS	124CKMN	C	3100	944.9	79-10-05	29	200000	8.1	0.0227222	1.2788618
3	310749089345805	MS	124CKMN	C	2610	795.5	63-02-12	20	18000	7.8		
4	310906089412404	MS	124CKMN	C	2500	762.0	80-01-22	32	50000	7.5	0.3408331	4.7957317
5	312555089430004	MS	124CKMN	C	2410	734.6	80-03-12	22	5250	9.4	0.0204499	23.579014
6	310856089333405	MS	124CKMN	C	2390	728.5	61-06-09	35.5	28900	7.8		
7	310429089182204	MS	124CKMN	C	2280	694.9	80-03-12	24	27000	8.8	0.0159055	4.5959096
8	351330090473202	AR	124CLBR	L	1900	579.1	57-08-14		616	7.9	0.1840499	6.5941312
9	311516088585004	MS	124CKMN	C	1710	521.2	80-03-11	19	39000	9	0.0045444	1.7983994
10	312451089184704	MS	124CKMN	C	1650	502.9	80-03-13	22	6460	8.6	0.1204277	21.580793
11	282031099370901	TX	124RKCZ	R	1330	405.4	69-04-09		2350	8.1	0.0704388	3.9964431
12	343714091342801	AR	124CRVR	V	946	288.3	50-05-24	24	1390	7.3	0.4998886	4.5959096
13	300043097092402	TX	124RKLW	K	903	275.2	64-07-09		326	8.6	0.0159055	2.7375635
14	300043097092402	TX	124RKLW	K	903	275.2	64-02-07			8	0.2272221	10.330805
15	300043097092402	TX	124RKLW	K	903	275.2	52-05-15			8.3	0.1204277	10.890307
16	353839089493501	TN	124CLBR	L	879	267.9	65-11-10		356	8.1		
17	335955091435001	AR	124CLBR	L	817	249.0	56-04-12		202	7.7	0.0908888	2.0381860
18	344203090411603	AR	124CRVR	V	806	245.7	64-08-27	21	1640	7.9		
19	330117093582001	AR	124CRVR	V	800	243.8	68-10-23	21	379	8.6		
20	295928097105201	TX	124RKLW	K	765	233.2	65-12-29		504	7.7	0.1545110	3.5168699
21	351330090422201	AR	124CLBR	L	759	231.3	57-08-14		489	7.4	0.4544442	5.2353405
22	354437089315002	TN	124CLBR	L	755	230.1	61-10-03	18.5	175	6.8		
23	354437089315001	TN	124CLBR	L	755	230.1	51-07-23	18.5	182	6.5		
24	354437089315002	TN	124CLBR	L	755	230.1	51-07-23	18.5	187	6.5		
25	340100091390001	AR	124CLBR	L	650	198.1	56-06-11	19.5	344	8.6	0.0204499	3.4769055
26	314655088495001	MS	124CLBR	L	600	182.9	65-06-17		811	7.3		
27	334517093061501	AR	125MDWY	M	596	181.7	59-04-08	18	3970	8	0.1158832	5.2353405
28	333350092465601	AR	124CRVR	V	580	176.8	59-04-08	21.5	4610	8	0.1158832	5.2353405
30	362033088510001	TN	124CLBR	L	560	170.7	58-06-23	16.5	44	6.1		
31	350719089555900	TN	124CLBR	L	547	166.7	70-09-00		146	6.8		1.3787728
32	322722089162002	MS	124BSCC	B	538	164.0	69-05-07	21.5	379	8.2		
33	350020090471101	AR	124CLBR	L	530	161.5	60-07-28	18.5	414	6.8	1.6132770	4.5959096
34	333950092452801	AR	124CRVR	V	528	160.9	59-01-16	20.5	4360	8.2	0.0590777	4.1962653
35	352047089523000	TN	124CLBR	L	512	156.1	68-09-00		196	7.6		
36	352047089523000	TN	124CLBR	L	512	156.1	67-03-31		203	7.2	0.0272666	1.9982215
37	330707093592401	AR	124CRVR	V	500	152.4	68-02-29	15	278	8	0.0386277	1.6984883
38	330707093592401	AR	124CRVR	V	500	152.4	64-10-07		274	7.4		
39	360733088590001	TN	124CLBR	L	500	152.4	51-07-24	15.5	130	6.8		
40	332440093031701	AR	124CRVR	V	490	149.4	59-04-09		832	8.3	0.0658944	5.8747714
41	333550092473201	AR	124CRVR	V	485	147.8	59-04-07	21	2740	7.9	0.1340610	4.8157140
42	330952093472301	AR	124CRVR	V	483	147.2	68-03-08	18	658	7.6		
43	354015089342501	TN	124CLBR	L	480	146.3	51-07-23	18	200	6.6		
44	350912090014901	TN	124CLBR	L	477	145.4	65-06-17	18	123	7.4		
45	315758088434002	MS	124BSCC	B	472	143.9	67-11-30	21	510	7.7		
46	315758088434002	MS	124BSCC	B	472	143.9	67-03-29	21	1060	7.9		
47	340132091350201	AR	124CLBR	L	466	142.0	56-05-16	18	596	8.8	0.0227222	6.2744157
48	362031088505801	TN	124CLBR	L	465	141.7	51-08-23	16.5	46	6.2		

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l	TOC mmol/l	Ca mmol/l
1	302705088291502	9.5055476	0								49.900199
2	310510089000302	1.2783322	0				0.0057115				10.229540
3	310749089345805	1.1636101	0								1.0479041
4	310906089412404	4.7527738	0				0.0028557				5.7385229
5	312555089430004	18.519429	2.4996167				0.0014278				0.0474051
6	310856089333405	8.3583263	0								2.1706586
7	310429089182204	4.0972188	0.2499616				0.0014278				0.6487025
8	351330090473202	6.5555500	0		0.0014278	0.0011289					1.9710578
9	311516088585004	1.8027762	0				0.0014278				3.4930139
10	312451089184704	18.683317	1.3997853				0.0028557				0.1047904
11	282031099370901	3.9333300	0								0.7235528
12	343714091342801	4.5888850	0		0.0485481	0.0483823					0.1422155
13	300043097092402	2.7861087	0								0.0748502
14	300043097092402	10.324991	0			0.0064509					0.3243512
15	300043097092402	10.816657	0		0.0064254						0.3243512
16	353839089493501	3.7694413	0								1.1726546
17	335955091435001	1.9666650	0		0.0049976	0.0048382					0.0299401
18	344203090411603	7.5388826	0								0.0723552
19	330117093582001	3.4416637	0.1333128								0.0748502
20	295928097105201	3.4416637	0			0.0145147					0.5489021
21	351330090422201	5.2444400	0		0.0207043	0.0209656					1.5968063
22	354437089315002	1.8027762	0								0.4241516
23	354437089315001	1.8027762	0								0.4491017
24	354437089315002	1.8027762	0								0.4740518
25	340100091390001	3.2777750	0.1333128		0.0421226	0.0419313					0.0349301
26	314655088495001	6.7194388	0			0.0064509					0.0499001
27	334517093061501	5.2444400	0		0.0242740	0.0241911					0.3243512
28	333350092465601	5.2444400	0		0.0128509	0.0129019					1.0479041
30	362033088510001	0.3769441	0								0.0798403
31	350719089555900	1.3766655	0								0.1047904
32	322722089162002	3.9333300	0			0.0032254					0.1222554
33	350020090471101	4.5888850	0		0.0099952	0.0096764					1.4471057
34	333950092452801	4.2611075	0		0.0306995	0.0306421					1.6217564
35	352047089523000	1.9666650	0								0.4740518
36	352047089523000	1.9666650	0								0.4491017
37	330707093592401	1.6388875	0		0.0335553						0.3742514
38	330707093592401	1.6061097	0								0.2994011
39	360733088590001	1.3274988	0								0.3243512
40	332440093031701	5.7361063	0.0666564		0.0035697						0.1497005
41	333550092473201	4.7527738	0		0.0164207	0.0161274					0.6736526
42	330952093472301	6.0638838	0								0.0573852
43	354015089342501	1.9666650	0								0.4241516
44	350912090014901	1.1963878	0								0.2744510
45	315758088434002	4.7527738	0			0.0016127					0.0998003
46	315758088434002	11.799990	0								0.0548902
47	340132091350201	5.7361063	0.2666257		0.0713944	0.0725735					0.0923153
48	362031088505801	0.3933330	0								0.0898203

	STN NO.	Mg	Na	K	Cl	SO4	F	SiO2	As	Ba	B
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l	umol/l	umol/l
1	302705088291502	23.040526	1000.4436	4.6037807	1128.2543						
2	310510089000302	18.103270	3175.3212	6.6499054	3384.7629	27.066980	0.0421088	0.0649091			462.53469
3	310749089345805	0.4525817	173.99020	1.2020983	177.70005		0.0736904	0.0116503			
4	310906089412404	6.1715696	565.46816	1.6368998	564.12715	1.2492452	0.8421761	0.2662938			305.27289
5	312555089430004	0.0411437	52.197061	0.8696030	31.026993	0.3019009	0.2473892	0.4826576			286.77150
6	310856089333405	2.0571898	304.48285	0.3069187	310.26993	0.2602594	0.1579080	0.2163637			
7	310429089182204	2.1394774	260.98530	1.2532514	267.96039	0.4372358	0.1157992	0.0199720			314.52358
8	351330090473202	1.2754577	0.7829559	0.0613837	0.5923335	0.1145141		0.1414686			
9	311516088585004	5.3486936	387.12820	1.6624763	394.88900	0.6038018	0.0947448	0.0033286			296.02220
10	312451089184704	0.2180621	60.896571	0.5882608	45.130172	0.1041037	0.2052804	0.3162239			296.02220
11	282031099370901	0.5348693	20.443849	0.1023062	14.103178	2.4984904	0.0315816	0.2662938			74.005550
12	343714091342801	0.0658300	13.049265	0.2046124	8.4619073	0.1145141	0.0052636	0.2662938			
13	300043097092402		3.0883261		0.2538572	0.1145141	0.0105272				
14	300043097092402	0.2468627	10.874387		1.4385242	0.1249245	0.0105272				
15	300043097092402	0.2880065	11.309363		1.4949369	0.1561556	0.0473724	0.9320284			
16	353839089493501	0.4937255	0.4784730	0.0153459	0.0394889	0.0770367	0.0105272	0.1830770			
17	335955091435001	0.0082287	1.9573897	0.1202098	0.0705158	0.0312311					
18	344203090411603	0.0329150	15.659118	0.0818449	8.4619073	0.0020820	0.0368452	0.4660142			
19	330117093582001	0.0370294	3.8277844	0.0358071	0.3102699	0.0083283	0.0157908	0.1597763			
20	295928097105201	0.2509771	3.5233016		0.7333653	0.4372358	0.0105272	0.2330071			
21	351330090422201	1.0285949	0.3175321	0.0562684	0.1410317	0.0541339		0.0932028			
22	354437089315002	0.3826373	0.2740345	0.0485954	0.0564127	0.0333132	0.0315816	0.0832168			
23	354437089315001	0.3908660	0.3175321	0.0741720	0.1071841	0.0353952		0.1464616			
24	354437089315002	0.3620654	0.2827340	0.0613837	0.0620539	0.0364363		0.1664336			
25	340100091390001	0.0082287	3.4798040		0.1071841	0.0166566					
26	314655088495001	0.0082287	8.2645347	0.0792873	0.7615716	0.3123113	0.0263180	0.1997203			
27	334517093061501	0.1275457	36.537942	0.2148431	31.026993	0.0645443					
28	333350092465601	0.4525817	41.757649	0.0332495	39.488900	0.0707905					
30	362033088510001	0.0534869	0.1826897	0.0153459	0.1128254	0.0093693	0.0052636	0.1997203			
31	350719089555900	0.0576013	1.1309363	0.0306918	0.0817984	0.0374773		0.0582517			
32	322722089162002	0.0370294	3.8277844	0.0588260	0.0648746	0.1249245	0.0052636	0.4660142			
33	350020090471101	0.8228759	0.4349755	0.0306918	0.1974445	0.0749547	0.0105272	0.2496504			
34	333950092452801	0.7405883	37.842869	0.4092249	39.488900	0.3227216					
35	352047089523000	0.3949804	0.2870838	0.0179035	0.0394889	0.0270669	0.0105272	0.2829372			
36	352047089523000	0.4114379	0.3001331	0.0179035	0.0451301	0.0333132	0.0157908	0.3328673			
37	330707093592401	0.1563464	1.5659118	0.1329981	0.2256508	0.3851839		0.2330071			
38	330707093592401	0.1851470	1.5224142	0.1406710	0.1579556	0.3851839	0.0105272	0.2496504			
39	360733088590001	0.1933758	0.4349755	0.0153459	0.0705158	0.0291490		0.1664336			
40	332440093031701	0.0699444	8.2645347	0.1074215	3.1026993	0.0020820					
41	333550092473201	0.2468627	24.793604	0.3069187	21.718895	0.0041641					
42	330952093472301	0.0164575	6.9596081	0.0588260	1.0718415	0.0062462	0.0315816	0.1830770			
43	354015089342501	0.4525817	0.3784286	0.0869603	0.1353905	0.0385183	0.0052636	0.2163637			
44	350912090014901	0.1892614	0.3305813	0.0127882	0.0282063	0.0166566	0.0105272	0.2330071			
45	315758088434002		5.2197061	0.0537107	0.1748794	0.3123113	0.0052636	0.3328673			
46	315758088434002	0.0288006	11.744338	0.0690567	0.0987222	0.0083283	0.0578996	0.6324479			
47	340132091350201	0.0164575	6.5246326		0.2256508	0.0124924					
48	362031088505801	0.0493725	0.1565911	0.0230189	0.0564127	0.0135334		0.1830770			

	STN NO.	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
1	302705088291502						10.193308				
2	310510089000302				48.346374		18.202337	776.07852			
3	310749089345805										
4	310906089412404				50.136981		1.8202337	35.380050			
5	312555089430004				16.831700		0.1820233	5.7064597			
6	310856089333405										
7	310429089182204				1.9696671		0.5460701	99.292398			
8	351330090473202										
9	311516088585004				4.1183949		8.3730751	216.84546			
10	312451089184704				6.4461833		1.2741636	7.5325268			
11	282031099370901										
12	343714091342801				2.5068490					148.24950	
13	300043097092402										
14	300043097092402				2.3277884						
15	300043097092402				30.440310						
16	353839089493501										
17	335955091435001				0.7162425						
18	344203090411603						2.3663038				
19	330117093582001										
20	295928097105201				4.6555768						
21	351330090422201										
22	354437089315002										
23	354437089315001									14.824950	
24	354437089315002									22.237426	
25	340100091390001				0.7162425						
26	314655088495001										
27	334517093061501				0.1790606						
28	333350092465601				0.3581212						
30	362033088510001										
31	350719089555900										
32	322722089162002										
33	350020090471101										
34	333950092452801				0.7162425						
35	352047089523000										
36	352047089523000										
37	330707093592401				44.765161		0.3640467				1.4407145
38	330707093592401				26.859097						
39	360733088590001									25.943663	
40	332440093031701				0.7162425						
41	333550092473201				0.7162425						
42	330952093472301						0.3640467				
43	354015089342501									25.943663	
44	350912090014901										
45	315758088434002										
46	315758088434002										
47	340132091350201				1.9696671						
48	362031088505801									25.943663	

	STN NO.	Hg umol/l	I mmol/l	Br mmol/l	U umol/l	Tot.Cat mmol/l	Tot. An mmol/l	Cat/An	ALK diff mmol/l
1	302705088291502					1150.9289	1137.7598	1.0115745	0.0059870
2	310510089000302		0.0685554	2.7533039		3238.7334	3440.1752	0.9414443	0.0005295
3	310749089345805					178.19327	178.86366	0.9962519	-1.163610
4	310906089412404		0.0866793	0.6257509		591.02552	571.37841	1.0343854	0.0429579
5	312555089430004		0.0053583	0.0563175		53.277425	55.149457	0.9660552	2.5599689
6	310856089333405					313.24547	319.14878	0.9815029	-8.358326
7	310429089182204		0.0173358	0.5006007		267.81885	273.43201	0.9794714	0.2487291
8	351330090473202					7.3373708	7.3780408	0.9944877	0.0385811
9	311516088585004		0.0299437	0.4505406		406.48233	397.89938	1.0215706	-0.004376
10	312451089184704		0.0048855	0.0500600		62.143429	66.821268	0.9299947	1.4976899
11	282031099370901					23.062999	23.033489	1.0012811	0.0631131
12	343714091342801					13.674982	13.328203	1.0260184	0.0070245
13	300043097092402					3.2380267	3.2689943	0.9905268	-0.048545
14	300043097092402					12.021471	12.019815	1.0001377	0.0058141
15	300043097092402					12.594959	12.623905	0.9977070	0.0736499
16	353839089493501					3.8265795	3.9630037	0.9655755	-3.769441
17	335955091435001					2.1553698	2.1044814	1.0241809	0.0715209
18	344203090411603					15.951504	16.004954	0.9966604	-7.538882
19	330117093582001					4.0873511	4.0352161	1.0129200	-3.574976
20	295928097105201					5.1323715	5.0640154	1.0134983	0.0752061
21	351330090422201					5.6246032	5.5147054	1.0199281	-0.009099
22	354437089315002					1.9362080	1.9258154	1.0053964	-1.802776
23	354437089315001					2.0716398	1.9807509	1.0458860	-1.802776
24	354437089315002					2.0163524	1.9377029	1.0405890	-1.802776
25	340100091390001					3.5675543	3.7268295	0.9572625	0.0658176
26	314655088495001					8.4600799	8.1120841	1.0428984	-6.719438
27	334517093061501					37.656938	36.424713	1.0338293	-0.009099
28	333350092465601					44.792586	44.887823	0.9978783	-0.009099
30	362033088510001					0.4646901	0.5085082	0.9138301	-0.376944
31	350719089555900					1.4864116	1.5334186	0.9693449	0.0021073
32	322722089162002					4.2051803	4.2512792	0.9891564	-3.933330
33	350020090471101					5.0056308	4.9459154	1.0120736	0.0070245
34	333950092452801					42.978216	44.426093	0.9674093	-0.064842
35	352047089523000					2.0430521	2.0602878	0.9916342	-1.966665
36	352047089523000					2.0391162	2.0784216	0.9810888	0.0315565
37	330707093592401					2.8496361	2.6349062	1.0814942	0.0596008
38	330707093592401					2.6859001	2.5344332	1.0597635	-1.606109
39	360733088590001					1.4857757	1.4563128	1.0202311	-1.327498
40	332440093031701					8.8126788	8.9762827	0.9817737	0.0720086
41	333550092473201					26.942986	26.496125	1.0168651	0.0629401
42	330952093472301					7.1661197	7.1482178	1.0025043	-6.063883
43	354015089342501					2.2188559	2.1790923	1.0182477	-1.966665
44	350912090014901					1.2707948	1.2579074	1.0102450	-1.196387
45	315758088434002					5.4730177	5.5538886	0.9854388	-4.752773
46	315758088434002					11.980777	11.915369	1.0054894	-11.79999
47	340132091350201					6.7461177	6.5925671	1.0232914	0.2716836
48	362031088505801					0.4579959	0.4768127	0.9605363	-0.393333

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
49	330530093390801	AR	124CRVR	V	460	140.2	68-02-29	20	1150	8.3	0.0908888	8.1927084
50	330530093390801	AR	124CRVR	V	460	140.2	64-10-06	22	1190	8.8		
51	325418091505302	LA	124CKMN	C	452	137.8	61-01-13	22	1970	7.8		
52	350540090061700	TN	124CLBR	L	415	126.5	85-09-11	18	183	6.4		1.7784172
53	350540090061700	TN	124CLBR	L	415	126.5	84-08-27	18	162	6.6		1.7584349
54	350540090061700	TN	124CLBR	L	415	126.5	83-09-07	18	185			1.6785061
55	361724088424101	TN	124CLBR	L	405	123.4	66-10-11	15.5	34	6.2		
56	312435096381401	TX	125MDWY	M	400	121.9	81-04-27	22.5	609	7.4		3.7966210
57	330306093553701	AR	124CRVR	V	390	118.9	68-10-23	21	325	7.9		
58	324634091515502	LA	124CKMN	C	381	116.1	65-11-18	22	639	7.4	0.5226108	5.9347181
59	332129093294502	AR	124CRVR	V	378	115.2	68-03-07		218	7.5	0.1204277	1.6984883
60	350615090480801	AR	124CLBR	L	378	115.2	61-08-04	18.5	515	7.6	0.3181109	5.6349848
61	332632093103801	AR	124CRVR	V	376	114.6	50-08-29	20	497	7.7	0.1976832	4.4760163
62	320924092593101	LA	124CRVR	V	372	113.4	74-08-16	22.5	1000	9		7.1536332
63	330334093490501	AR	124CRVR	V	370	112.8	68-10-25		386	8.5	0.0204499	2.8174924
64	333723092454301	AR	124CRVR	V	362	110.3	59-04-08	19	210	7.5	0.1317888	1.8783282
65	350950090434801	AR	124CLBR	L	361	110.0	61-10-19		436	7.2	0.6589441	4.6958207
66	331317093472601	AR	124CRVR	V	350	106.7	64-10-06	20	246	7.9	0.0658944	2.3778836
67	331858093394801	AR	124CRVR	V	350	106.7	64-10-06		682	7.8		
68	350342090073101	TN	124CLBR	L	348	106.1	58-12-12	16.5	142	7.7		
69	334119093012601	AR	124CRVR	V	346	105.5	58-08-21		261	7.6	0.1363332	2.4378303
70	330017093533201	LA	124CRVR	V	345	105.2	73-08-01	21	243	6.9	0.5907775	2.1181148
71	330017093533201	LA	124CRVR	V	345	105.2	73-07-31	21	243	8.4	0.0181777	2.1181148
72	330017093533201	LA	124CRVR	V	345	105.2	73-07-31	21	243	8.4	0.0181777	2.1181148
73	360919088475801	TN	124CLBR	L	340	103.6	66-10-11		58	6.2		
74	360919088475801	TN	124CLBR	L	340	103.6	58-06-23	15.5	41	5.9		
75	360919088475801	TN	124CLBR	L	340	103.6	58-03-23	15.5	41	5.9		
76	361355088375501	TN	124CLBR	L	340	103.6	66-11-15		24	6.6		
77	351202090462701	AR	124CLBR	L	336	102.4	61-09-20		437	7.9	0.1408777	5.0155361
78	350732090053203	AR	124CLBR	L	335	102.1	64-06-18	16.5	149	6.5	0.9088884	1.2988440
79	325121091522202	LA	124CKMN	C	334	101.8	66-01-27	21	837	7.9		
80	320924092593103	LA	124CRVR	V	325	99.1	84-08-31	23	956	8.7		7.7930641
81	324352091531003	LA	124CKMN	C	312	95.1	68-08-08	20.5	821	8.2		
82	312456096323501	TX	125MDWY	M	310	94.5	81-12-05	21	725	7.1		2.9973323
83	332337093513501	AR	124CRVR	V	310	94.5	64-10-07		49	6.6	0.1635999	0.2997332
84	330226093481001	AR	124CRVR	V	300	91.4	68-10-25		399	8.6	0.0204499	3.6167810
85	332129093392701	AR	124CRVR	V	300	91.4	68-02-29	16	480	7.6		
86	361533090175702	AR	124CLBR	L	298	90.8	56-06-19	23.5	213	7.1	0.3635553	1.9982215
87	345947089472601	TN	124CLBR	L	290	88.4	62-08-17	17	151	6.2		
88	354308089331101	TN	124CCKFJ	F	289	88.1	82-08-11	17	320	6.6		3.5967988
89	312759096324201	TX	125MDWY	M	275	83.8	81-04-24	23.5	6560	7.8		6.1944869
90	350234089394502	TN	124CLBR	L	267	81.4	64-05-01	17	33	6.2		
91	350234089394502	TN	124CLBR	L	267	81.4	62-07-27	17	59	6.1		
92	350234089394502	TN	124CLBR	L	267	81.4	51-06-08	16.5	50	5.9		
93	351406088380201	TN	124CLBR	L	260	79.2	66-11-15		26	6.8		
94	361358088492902	TN	124CLBR	L	260	79.2	66-10-11	15.5	38	6.4		
95	361358088492901	TN	124CLBR	L	255	77.7	52-07-08	16	39	6.1		
96	354941090421101	AR	124CLBR	L	254	77.4	50-05-03	16	230	7	0.3408331	1.5785950
97	335620092505401	AR	124CRVR	V	250	76.2	79-07-16	22	1410	8	0.0908888	4.1363186
98	325937093535401	LA	124CRVR	V	243	74.1	73-08-07	20.5	259	8	0.7043885	2.4977769

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l	TOC mmol/l	Ca mmol/l
49	330530093390801	8.0305488	0.0666564		0.0035697						0.1771457
50	330530093390801	7.0472163	0.5665797								0.1422155
51	325418091505302	8.5222151	0						0.0105294		0.1696606
52	350540090061700		0								0.4491017
53	350540090061700		0								0.4241516
54	350540090061700		0								0.4491017
55	361724088424101	0.2786108	0								0.0449101
56	312435096381401		0								1.1227544
57	330306093553701	3.2777750	0								0.1996007
58	324634091515502	5.8999950	0		0.0114231				0.0010529		0.1796407
59	332129093294502	1.6388875	0								0.3742514
60	350615090480801	5.5722175	0		0.0142788	0.0145147					1.6217564
61	332632093103801	4.4249963	0		0.0049976						0.2495009
62	320924092593101	6.5555500	0.3332822			0.0029029					0.0299401
63	330334093490501	2.6222200	0.0666564		0.0257019						0.1247504
64	333723092454301	1.8027762	0		0.0192764	0.0193529					0.1896207
65	350950090434801	4.7527738	0		0.0014278	0.0014514					1.4471057
66	331317093472601	2.2944425	0		0.0099952						0.0299401
67	331858093394801	4.5888850	0								0.1472055
68	350342090073101	1.4258321	0						0.0010529		0.2994011
69	334119093012601	2.4583312	0			0.0161274					0.0998003
70	330017093533201	2.1305537	0			0.0032254					0.0249500
71	330017093533201	2.1305537	0			0.0032254					0.0249500
72	330017093533201	2.1305537	0			0.0032254					0.0249500
73	360919088475801	0.3277775	0								0.1247504
74	360919088475801	0.3277775	0			0.0032254					0.0723552
75	360919088475801	0.3277775	0								0.0723552
76	361355088375501	0.1474998	0								0.0249500
77	351202090462701	5.0805513	0		0.0564015	0.0564460					1.3473053
78	350732090053203	1.2947211	0		0.0178486	0.0177401					0.2994011
79	325121091522202	5.2444400	0.0166641								0.4241516
80	320924092593103		0								0.0598802
81	324352091531003	6.5555500	0								0.4990019
82	312456096323501		0								1.0978043
83	332337093513501	0.2949997	0								0.0623752
84	330226093481001	3.2777750	0.1333128		0.0306995						0.1497005
85	332129093392701	3.9333300	0								0.0848303
86	361533090175702	1.9666650	0		0.0064254	0.0064509					0.1022954
87	345947089472601	0.6391661	0								0.2145708
88	354308089331101		0				0.0249880	0.0006457		0.0166514	0.8483033
89	312759096324201		0								0.4740518
90	350234089394502	0.2786108	0								0.0499001
91	350234089394502	0.3277775	0								0.1072854
92	350234089394502	0.2786108	0								0.0698602
93	351406088380201	0.2294442	0								0.0349301
94	361358088492902	0.3441663	0								0.1097804
95	361358088492901	0.3441663	0								0.0873253
96	354941090421101	1.5733320	0		0.0128509	0.0129019					0.4740518
97	335620092505401	4.0972188	0	0.0421226				0.0103313	0.0087394		0.1072854
98	325937093535401	2.4583312	0			0.0032254					0.0499001

	STN NO.	Mg	Na	K	Cl	SO4	F	SiO2	As	Ba	B
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l	umol/l	umol/l
49	330530093390801	0.0452581	11.744338	0.0690567	3.9488900	0.0062462	0.0578996	0.1531189			
50	330530093390801	0.0658300	11.309363	0.0869603	3.9488900		0.0526360	0.1830770			
51	325418091505302	0.0288006	19.573897	0.1202098	11.564606	0.0145745	0.1263264	0.1664336			79.555966
52	350540090061700	0.3291503	0.3523301	0.0204612	0.0874397	0.0301900	0.0052636	0.1631049		0.5242845	
53	350540090061700	0.2962353	0.3349311	0.0179035	0.0846190	0.0551749	0.0052636	0.1531189		0.7136095	
54	350540090061700	0.3168072	0.3479804	0.0204612	0.0817984	0.0312311	0.0052636	0.1664336	0.0400418	0.5679749	
55	361724088424101	0.0164575	0.1609409	0.0153459	0.0253857	0.0083283		0.2163637			
56	312435096381401	0.4073235	2.9143359	0.0588260	1.9462386	0.2290282	0.0210544	0.5825178			
57	330306093553701	0.0905163	2.8273408	0.0613837	0.2453953	0.0083283	0.0105272	0.1664336			
58	324634091515502	0.1604608	6.0896571	0.0690567	0.7897780	0.0020820	0.0368452	0.1830770			
59	332129093294502	0.0822875	1.2179314	0.0971909	0.3384762	0.0770367	0.0157908	0.2163637			
60	350615090480801	1.0697387	0.6524632	0.0409224	0.1551349	0.1249245	0.0157908	0.3162239			
61	332632093103801	0.1152026	4.7847306	0.1227674	0.9590161	0.0072872	0.0052636	0.1830770			
62	320924092593101	0.0205718	10.004436	0.0741720	0.2820635	1.2492452	0.0263180	0.1997203			
63	330334093490501	0.0370294	2.9578334	0.0332495	0.1777000	0.1769764	0.0157908	0.1614406			
64	333723092454301	0.0905163	1.4789167	0.0920756	0.2256508	0.0291490					
65	350950090434801	0.8228759	0.4175764	0.0844026	0.2030857	0.0666264					
66	331317093472601	0.0164575	2.3488677	0.0358071	0.1043635	0.0020820	0.0157908	0.1830770			
67	331858093394801	0.0617156	6.0896571	0.0792873	1.7770005	0.0020820	0.0210544	0.2163637			
68	350342090073101	0.2386340	0.3566799	0.0332495	0.0987222	0.0135334		0.1581119			
69	334119093012601	0.0493725	2.2618726	0.0818449	0.1635968	0.0395594					
70	330017093533201	0.0246862	2.3923653	0.0358071	0.2256508	0.1457452		0.2163637			
71	330017093533201	0.0246862	2.3923653	0.0358071	0.2256508	0.1457452		0.2163637			
72	330017093533201	0.0246862	2.3923653	0.0358071	0.2256508	0.1457452		0.2163637			
73	360919088475801	0.0164575	0.2218375	0.0153459	0.0761571	0.0291490	0.0052636	0.2330071			
74	360919088475801	0.0411437	0.1783399	0.0127882	0.0930809	0.0166566	0.0052636	0.2163637			
75	360919088475801	0.0411437	0.1783399	0.0127882	0.0930809	0.0166566	0.0052636	0.2163637			
76	361355088375501	0.0205718	0.1087438	0.0102306	0.0197444	0.0083283	0.0052636	0.2163637			
77	351202090462701	1.0697387	0.3827784	0.0537107	0.0564127	0.0749547					
78	350732090053203	0.2715490	0.3436306	0.0204612	0.1128254	0.0707905		0.1830770			
79	325121091522202	0.1275457	7.3945836	0.0792873	3.1026993	0.0020820	0.0210544	0.1664336			
80	320924092593103	0.0176918	9.1344857	0.0255765	0.2679603	1.0410377	0.0263180	0.1997203	0.0133472	0.4805941	
81	324352091531003	0.3785229	6.9596081	0.0281342	1.9462386	0.0104103	0.0210544	0.2163637			
82	312456096323501	0.3785229	4.2627600	0.0690567	2.6796039	0.8432405	0.0105272	0.7489514			
83	332337093513501	0.0946307	0.0782955	0.0332495	0.0733365	0.0312311		0.4660142			
84	330226093481001	0.0493725	3.7407893	0.0358071	0.2200095	0.2186179	0.0105272	0.1614406			
85	332129093392701	0.0246862	4.7847306	0.0485954	0.9590161	0.0166566	0.0210544	0.1830770			
86	361533090175702	0.0288006	1.9573897	0.0383648	0.2594984	0.0270669	0.0052636	0.1531189			
87	345947089472601	0.1728039	0.6959608	0.0255765	0.6205398	0.0707905		0.1298182			
88	354308089331101	0.7405883	0.3088326	0.0051153	0.0620539	0.0416415	0.0105272	0.4160841	0.0133472		
89	312759096324201	0.2468627	60.896571	0.1355557	59.233351	0.0728726	0.0789540	0.1830770			
90	350234089394502	0.0411437	0.1696404	0.0102306	0.0846190	0.0062462		0.2662938			
91	350234089394502	0.0288006	0.3001331	0.0153459	0.1551349	0.0374773		0.1464616			
92	350234089394502	0.0329150	0.2609853	0.0153459	0.1410317	0.0176976		0.1647693			
93	351406088380201	0.0205718	0.1087438	0.0127882	0.0197444	0.0041641	0.0210544	0.2163637			
94	361358088492902	0.0205718	0.0956946	0.0230189	0.0169238	0.0104103		0.2330071			
95	361358088492901	0.0493725	0.1043941	0.0306918	0.0507714	0.0124924	0.0052636	0.1830770			
96	354941090421101	0.3867516	0.5654681	0.0741720	0.3666826	0.1561556		0.4327275			
97	335620092505401	0.0288006	12.614289	0.0639413	8.7439708	0.0187386	0.0421088	0.2163637			
98	325937093535401	0.0617156	2.6098530	0.0434801	0.1241079	0.1769764		0.2163637			

	STN NO.	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
49	330530093390801						0.3640467				1.4407145
50	330530093390801				2.8649703						
51	325418091505302										
52	350540090061700				12.534245	0.0048262	0.2002257				
53	350540090061700				5.3718194	0.0096525	0.2002257		0.0611807		
54	350540090061700			1.0386176	7.3414865		0.2002257		0.0917711		
55	361724088424101										
56	312435096381401				7.5205472						
57	330306093553701										
58	324634091515502				19.696671						
59	332129093294502				6.9833652		0.9101168				
60	350615090480801				1.2534245		0.1820233				
61	332632093103801									18.531188	
62	320924092593101				2.6859097						
63	330334093490501										
64	333723092454301				6.6252439						
65	350950090434801						0.3640467				
66	331317093472601				0.8953032						
67	331858093394801				1.2534245						
68	350342090073101										
69	334119093012601				6.9833652						
70	330017093533201				9.6692749						
71	330017093533201										
72	330017093533201				9.6692749		0.5460701				
73	360919088475801										
74	360919088475801				1.6115458						
75	360919088475801										
76	361355088375501										
77	351202090462701						0.3640467				
78	350732090053203						0.7280934				
79	325121091522202				14.862033						
80	320924092593103		0.0169683	0.0314732	1.0027396	0.0434362	0.2184280		6.5769348	1.4824950	1.1525716
81	324352091531003				0.3581212						
82	312456096323501										
83	332337093513501				5.3718194		0.9101168				
84	330226093481001										
85	332129093392701				1.6115458						1.4407145
86	361533090175702										
87	345947089472601										
88	354308089331101	0.1923224		0.0314732	0.2864970		0.0910116		0.6118078		
89	312759096324201										
90	350234089394502										
91	350234089394502										
92	350234089394502									0.3706237	
93	351406088380201								0.4588559		
94	361358088492902										
95	361358088492901									7.4124753	
96	354941090421101				0.3581212					129.71831	
97	335620092505401				1.4324851		0.0728093				
98	325937093535401				0.7162425						

	STN NO.	Hg	I	Br	U	Tot.Cat	Tot. An	Cat/An	ALK diff
		umol/l	mmol/l	mmol/l	umol/l	mmol/l	mmol/l		mmol/l
49	330530093390801					12.258203	12.125244	1.0109654	0.0955031
50	330530093390801					11.818144	12.129266	0.9743495	-7.613796
51	325418091505302					20.091030	20.115970	0.9987601	-8.522215
52	350540090061700					1.9543642	1.9262371	1.0146021	1.7784172
53	350540090061700					1.8043524	1.9534040	0.9236964	1.7584349
54	350540090061700					1.9149427	1.8227668	1.0505692	1.6785061
55	361724088424101					0.2990222	0.3206532	0.9325410	-0.278610
56	312435096381401					6.0483592	6.2009162	0.9753976	3.7966210
57	330306093553701					3.4689588	3.5398269	0.9799797	-3.277775
58	324634091515502					6.8783102	6.6939372	1.0275432	0.0347230
59	332129093294502					2.2421672	2.1314373	1.0519507	0.0596008
60	350615090480801					6.0788830	5.9917162	1.0145478	0.0627672
61	332632093103801					5.6369053	5.3985870	1.0441445	0.0510200
62	320924092593101					10.185004	10.005571	1.0179333	0.2648009
63	330334093490501					3.3146428	3.2871858	1.0083527	0.1286159
64	333723092454301					2.1445170	2.1060781	1.0182514	0.0755520
65	350950090434801					5.0419426	5.0905638	0.9904487	-0.056953
66	331317093472601					2.4792608	2.4029702	1.0317484	0.0834411
67	331858093394801					6.5892939	6.3700497	1.0344179	-4.588885
68	350342090073101					1.4659998	1.5516213	0.9448180	-1.425832
69	334119093012601					2.6560302	2.7171744	0.9774971	-0.020500
70	330017093533201					2.5467837	2.6509206	0.9607167	-0.012438
71	330017093533201					2.5274452	2.6509206	0.9534216	-0.012438
72	330017093533201					2.5467837	2.6509206	0.9607167	-0.012438
73	360919088475801					0.5195994	0.4622327	1.1241078	-0.327777
74	360919088475801					0.4213495	0.4573971	0.9211895	-0.327777
75	360919088475801					0.4181264	0.4541716	0.9206351	-0.327777
76	361355088375501					0.2100184	0.1839009	1.1420197	-0.147499
77	351202090462701					5.2705774	5.3433195	0.9863863	-0.065015
78	350732090053203					1.5059924	1.5668678	0.9611483	0.0041228
79	325121091522202					8.6069900	8.3846317	1.0265197	-5.261104
80	320924092593103				0.0006721	9.3172119	10.143099	0.9185763	7.7930641
81	324352091531003					8.7435084	8.5226095	1.0259191	-6.555550
82	312456096323501					7.2844713	7.3634174	0.9892786	2.9973323
83	332337093513501					0.4363007	0.4307985	1.0127720	0.0047334
84	330226093481001					4.1747428	4.2016462	0.9935969	0.2056931
85	332129093392701					5.0555824	4.9256594	1.0263767	-3.933330
86	361533090175702					2.2579467	2.2867484	0.9874049	0.0315565
87	345947089472601					1.4962869	1.4012871	1.0677947	-0.639166
88	354308089331101					3.4923044	3.7421358	0.9332382	3.5967988
89	312759096324201					62.473956	59.379096	1.0521203	6.1944869
90	350234089394502					0.3619590	0.3757224	0.9633683	-0.278610
91	350234089394502					0.5876512	0.5578671	1.0533890	-0.327777
92	350234089394502					0.4818818	0.4550379	1.0589927	-0.278610
93	351406088380201					0.2325362	0.2575170	0.9029937	-0.229444
94	361358088492902					0.3794181	0.3819109	0.9934729	-0.344166
95	361358088492901					0.4084818	0.4199227	0.9727546	-0.344166
96	354941090421101					2.3619636	2.2652279	1.0427046	0.0052630
97	335620092505401	0.0019941				12.953268	12.878667	1.0057926	0.0390998
98	325937093535401					2.8779974	2.9396175	0.9790380	0.0394456

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
99	331250093080801	AR	124CKMN	C	238	72.5	50-08-29	20	300	7.7	0.1408777	3.1571901
100	354956090425001	AR	124CLBR	L	235	71.6	50-05-03	15.5	165	6.7	0.4544442	1.0390752
101	325643092284901	LA	124CKMN	C	233	71.0	69-01-08		426	8.4	0.0386277	4.4959985
102	300211097114201	TX	124RKLW	K	230	70.1	52-11-11		1190	8.6	0.0499888	9.0519437
103	362024089094001	TN	124CCKFJ	F	230	70.1	84-10-11	16	362	6.6		3.9764609
104	361708088422001	TN	124CLBR	L	222	67.7	51-08-23	15.5	44	5.9		
105	350658089131001	TN	124CLBR	L	211	64.3	51-06-14	16.5	28	5.9		
106	330009093533901	LA	124CRVR	V	210	64.0	59-08-06	21.5	250	7.5	0.1476943	2.0981326
107	322233092031401	LA	124CKMN	C	210	64.0	66-06-16		912	8		8.1327618
108	333220093142001	AR	124CRVR	V	210	64.0	68-03-07		230	7		
109	330009093533901	LA	124CRVR	V	210	64.0	59-08-06	21.5	250	7.5	0.1476943	2.0981326
110	333220093142001	AR	124CRVR	V	210	64.0	64-10-08	19	221	7.4		
111	333820092020601	AR	124JCKS	J	210	64.0	59-08-14	20	734	7.9	0.1249721	4.4560341
112	325931092114001	LA	124CKMN	C	204	62.2	68-12-16		712	8.1	0.1090666	6.1545224
113	325229092154401	LA	124CKMN	C	202	61.6	69-01-09		369	8.1	0.0681666	3.8365854
114	343013092375701	AR	125MDWY	M	200	61.0	63-03-14	16	415			3.5768166

	STN NO.	HCO3	CO3	NH4	NO3(asN)	NO3(asNO3)	N(NO2+NO3)	P	PO4	TOC	Ca
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
99	331250093080801	3.1138862	0		0.0192764						0.3493013
100	354956090425001	1.0488880	0		0.1356493	0.1386960					0.2994011
101	325643092284901	4.4249963	0.0499923			0.0338676					0.0748502
102	300211097114201	9.0138813	0								0.1397205
103	362024089094001		0								0.8982035
104	361708088422001	0.3769441	0			0.0080637					0.1122754
105	350658089131001	0.1638887	0					0	0.0263237		0.0449101
106	330009093533901	2.1305537	0			0.0225784					0.5239520
107	322233092031401	8.1944376	0								0.0374251
108	333220093142001	2.2944425	0			0.0080637					0.2744510
109	330009093533901	2.1305537	0		0.0228462				0.0031588		0.5239520
110	333220093142001	2.1305537	0								
111	333820092020601	4.4249963	0		0.0613991	0.0612842					0.3493013
112	325931092114001	6.2277725	0			0.0112892					0.1746506
113	325229092154401	3.7694413	0			0.0483823					0.1571856
114	343013092375701	3.6055525	0								0.3992015

	STN NO.	Mg	Na	K	Cl	SO4	F	SiO2	As	Ba	B
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l	umol/l	umol/l
99	331250093080801	0.1110882	2.3923653	0.0562684	0.1128254	0.0697495	0.0052636	0.2496504			
100	354956090425001	0.1645751	0.4784730	0.0358071	0.2679603	0.0374773		0.5325877			
101	325643092284901	0.0370294	4.3497551	0.0485954	0.1438524	0.0020820	0.0157908	0.1547833			
102	300211097114201	0.1563464	11.744338	0.1074215	3.3847629	0.0104103		0.1997203			38.852913
103	362024089094001	0.6171569	0.5219706	0.1329981	0.1297492	0.0614212	0.0105272	0.2330071	0.0133472	5.0972110	
104	361708088422001	0.0617156	0.1217931	0.0153459	0.0507714	0.0197797		0.1830770			
105	350658089131001	0.0246862	0.1043941	0.0153459	0.0564127	0.0072872		0.1830770			
106	330009093533901	0.2468627	1.0439412	0.0741720	0.3666826	0.0999396	0.0052636	0.1997203			
107	322233092031401	0.0246862	9.5694612	0.0588260	1.5513496	0.0020820	0.0842176	0.2163637			
108	333220093142001	0.0370294	1.7833995	0.0664990	0.0959016	0.0374773	0.0157908	0.1830770			
109	330009093533901	0.2468627	1.0439412	0.0741720	0.3666826	0.0999396	0.0052636	0.1997203			8.3256244
110	333220093142001		1.7833995	0.0511531	0.0423095	0.0353952	0.0052636	0.1664336			
111	333820092020601	0.1604608	6.5246326	0.1534593	0.2764223	1.5615565					
112	325931092114001	0.0452581	7.3945836	0.0588260	1.6077623	0.0062462	0.0315816	0.1481259			
113	325229092154401	0.0411437	3.7407893	0.0485954	0.2820635	0.0020820	0.0105272	0.1631049			
114	343013092375701	0.1686895	3.0448285	0.0920756	0.8179843	0.0124924	0.0263180	0.1481259			

	STN NO.	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
99	331250093080801									22.237426	
100	354956090425001				0.1790606					114.89336	
101	325643092284901				1.6115458		0.5460701				
102	300211097114201										
103	362024089094001	0.1923224			214.87277	0.0434362	5.4607011				
104	361708088422001				0.1790606						
105	350658089131001									11.118713	
106	330009093533901										
107	322233092031401				5.5508800						
108	333220093142001										
109	330009093533901										
110	333220093142001										
111	333820092020601										
112	325931092114001				1.4324851		1.2741636				
113	325229092154401				1.2534245		0.1820233				
114	343013092375701				1.2534245		0.9101168				

	STN NO.	Hg	I	Br	U	Tot.Cat	Tot. An	Cat/An	ALK diff
		umol/l	mmol/l	mmol/l	umol/l	mmol/l	mmol/l		mmol/l
99	331250093080801					3.3694130	3.3662107	1.0009512	0.0433038
100	354956090425001					1.4425911	1.5304991	0.9425625	-0.009812
101	325643092284901					4.6253330	4.7068651	0.9826780	0.0210099
102	300211097114201					12.443894	12.419465	1.0019670	0.0380623
103	362024089094001					4.1154353	4.2290526	0.9731341	3.9764609
104	361708088422001					0.4854794	0.4753387	1.0213337	-0.376944
105	350658089131001					0.2589329	0.2348759	1.1024241	-0.163888
106	330009093533901					2.6597430	2.7196940	0.9779566	-0.032421
107	322233092031401					9.7636119	9.7499514	1.0014010	-0.061675
108	333220093142001					2.4728596	2.4733625	0.9997966	-2.294442
109	330009093533901					2.6597430	2.6971156	0.9861434	-0.032421
110	333220093142001					1.8345527	2.2436538	0.8176629	-2.130553
111	333820092020601					7.6976164	7.8858160	0.9761344	0.0310378
112	325931092114001					7.8960924	7.8593166	1.0046792	-0.073250
113	325229092154401					4.1885505	4.1040513	1.0205892	0.0671441
114	343013092375701					4.2751933	4.4485218	0.9610368	-0.028735

TABLE AII-2

Listing of edited WATSTORE data
for the Pierre and Bearpaw Formations

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
1		SD	211PIRR	P	2300	701.0	74-0-			7.7		
2	480755106233101	MT	211BRPW	B	685	208.8	78-08-19	15	5700	8.2	0.1908665	13.587906
3	480758106431901	MT	211BRPW	B	600	182.9	78-08-15	10.5	4880	8.1	0.2953887	17.384527
4	480805106370301	MT	211BRPW	B	555	169.2	78-08-16	13	3890	8.3	0.2226776	19.982215
5	461926099032501	ND	211PIRR	P	538	164.0	77-11-03	7	8000	7.9	0.2499443	8.6522994
6	462902099124801	ND	211PIRR	P	520	158.5	79-07-19	9	8000	7.3	1.1815550	10.630538
7	484229099182001	ND	211PIRR	P	474	144.5	80-05-22	7.5	3200	7.4	1.3406105	15.146519
8	463007099083201	ND	211PIRR	P	470	143.3	79-07-19		8000	7.4	1.0224995	11.669614
9	472256099362101	ND	211PIRR	P	445	135.6	65-07-30	8.5	2560	8.1		
10	483605099184101	ND	211PIRR	P	415	126.5	80-06-04	12	2550	7.1	1.8404991	10.410734
11	462137098572901	ND	211PIRR	P	410	125.0	75-07-30		3080	7.8	0.2726665	7.6132242
12	463602099133301	ND	211PIRR	P	400	121.9	77-10-27	8.5	2400	7.6	0.4771664	7.7331175
13	472625099382601	ND	211PIRR	P	400	121.9	66-06-01	9.5	3300	8.1		
14	481355099070201	ND	211PIRR	P	400	121.9	73-06-04		866	8	0.1317888	5.8947536
15	484453099225801	ND	211PIRR	P	400	121.9	80-05-14	9		7.8	0.2726665	8.0528329
16	485059099245601	ND	211PIRR	P	381	116.1	80-05-07	6		7.7	0.4317220	9.6314280
17	484548099211401	ND	211PIRR	P	379	115.5	80-05-14	7	3600	7.9	0.1931388	6.9138466
18	462915099141301	ND	211PIRR	P	364	110.9	79-08-01		8000	8.2	0.1408777	10.011090
19	453846099254201	SD	211PIRR	P	363	110.6	71-06-23	10	5500	7.7	0.4317220	
20	453705099423401	SD	211PIRR	P	350	106.7	62-05-11		3700			9.9911079
21	453915099062501	SD	211PIRR	P	350	106.7	71-06-24	9.5	8930	7.6	0.4998886	8.9919971
22	484447099261501	ND	211PIRR	P	348	106.1	80-05-08		4100	8.7	0.0522610	11.909400
23	484538099191001	ND	211PIRR	P	340	103.6	80-05-14	5	2400	7.8	0.3862776	10.830360
24	463655099155501	ND	211PIRR	P	330	100.6	79-08-09	8.5	3000	7.9	0.3408331	12.149187
25	485329099224801	ND	211PIRR	P	314	95.7	80-05-05	7	6100	7	1.7950547	8.0728151
26	481151106424701	MT	211BRPW	B	300	91.4	76-12-18	12	3870	8.3	0.2135887	19.182927
27	481546099120401	ND	211PIRR	P	300	91.4	69-05-14	6.5	1540	8.7		
28	485151099272301	ND	211PIRR	P	300	91.4	80-05-07	5.5	2600	8.2	0.1954110	13.907622
29	484013099244201	ND	211PIRR	P	293	89.3	80-06-03	7	5500	8	0.3408331	15.186484
30	483940099174101	ND	211PIRR	P	283	86.3	80-05-22	8	5850	8	0.2272221	10.510645
31	453636099403901	SD	211PIRR	P	280	85.3	71-06-28		4890	7.8	0.3408331	9.6713924
32	480238098205101	ND	211PIRR	P	280	85.3	49-09-09					
33	481805099235201	ND	211PIRR	P	270	82.3	58-04-03	6	8460	8.1		
34	483737099222701	ND	211PIRR	P	260	79.2	80-06-04	13	2600	8.3	0.1545110	13.947586
35	480448098343901	ND	211PIRR	P	250	76.2	73-05-08		889	7.9	0.1795054	6.3943090
36	435520104322001	WY	211PIRR	P	248	75.6	74-10-3	10	2200	7.4	1.3633327	15.446252
37	483750099222701	ND	211PIRR	P	237	72.2	80-04-04	14	2900	8	0.3408331	15.785950
38	483755099122801	ND	211PIRR	P	230	70.1	80-05-21	8.5	2650	8.5	0.0772555	10.990218
39	482658099242301	ND	211PIRR	P	228	69.5	80-06-24	11	6000	8.2	0.1181555	7.5332953
40	483704099122701	ND	211PIRR	P	228	69.5	80-06-05	14	2450	8	0.2499443	10.330805
41	483612099122701	ND	211PIRR	P	227	69.2	80-06-05	10	3000	7.9	0.2953887	11.130094
42	454549099164202	SD	211PIRR	P	221	67.4	71-06-17	7.5	1340	8		7.3334732
43	482827098525301	ND	211PIRR	P	219	66.8	72-07-21		1790	7.6	0.4317220	7.6931530
44	483843099263001	ND	211PIRR	P	219	66.8	80-06-03	11		8	0.1863221	8.4125128
45	485925099465301	ND	211PIRR	P	217	66.1	78-06-14	7.5	2400	7	2.6357765	11.929382
46	483640099553401	ND	211PIRR	P	213	64.9	78-06-07		4000	8.4	0.1226999	12.289062
47	474850098411802	ND	211PIRR	P	207	63.1	65-03-10	9	6950	8	0.2726665	12.349009

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	H2S mmol/l	Ca mmol/l	Mg mmol/l
1			0						17.215568	0.9874511
2	480755106233101	13.111100	0.2332975	0.0071394				0.0436681	0.1422155	0.0658300
3	480758106431901	13.111100	0.2332975	0.0071394				0.0155957	0.1871257	0.1234313
4	480805106370301	19.994427	0	0.0285577				0.0311915	0.1122754	0.0534869
5	461926099032501	8.6861038	0						2.7445109	1.1520263
6	462902099124801	10.652768	0	0.0164207	0.0161277				2.2704590	1.2343139
7	484229099182001	15.077765	0	0.0164207	0.0161277				2.4950099	1.4811767
8	463007099083201	11.636101	0	0.0164207	0.0161277				1.3473053	0.7405883
9	472256099362101	14.094432	0		0.0419321				0.3992015	0.2098333
10	483605099184101	10.488880	0	0.0164207	0.0161277				3.2435129	2.2629088
11	462137098572901	7.7027713	0	0.0164207	0.0161277				1.3972055	0.9874511
12	463602099133301	7.7027713	0	0.0164207	0.0161277				1.1477045	0.8640197
13	472625099382601	14.913876	0		0.0258044				0.2994011	0.1645751
14	481355099070201	5.8999950	0	0.0399808	0.0403193				2.1956087	1.2343139
15	484453099225801	8.0305488	0	0.0164207	0.0161277				3.7425149	2.2629088
16	485059099245601	9.6694363	0	0.0164207	0.0161277				1.9960079	1.3988891
17	484548099211401	6.8833275	0	0.0164207	0.0161277				0.7984031	0.4937255
18	462915099141301	9.9972138	0	0.0164207	0.0161277				1.7465069	0.7405883
19	453846099254201	9.9972138	0						1.8463073	0.6583007
20	453705099423401	16.224986	0.9998466						0.1996007	0.2057189
21	453915099062501	9.0138813	0			0.0057115			3.4930139	1.3988891
22	484447099261501	11.963878	0						0.3243512	0.2057189
23	484538099191001	10.816657	0	0.0164207	0.0161277				3.2435129	2.1394774
24	463655099155501	12.127767	0	0.0014278	0.0016127				0.5988023	0.2921209
25	485329099224801	8.0305488	0						2.2954091	1.1931701
26	481151106424701	19.174984	0	0.0028557			0.0020016		0.1521956	0.0576013
27	481546099120401	6.5555500	0.3332822	0	0.0161277				0.1596806	0.2304052
28	485151099272301	13.930543	0	0.0192764	0.0193533				0.4990019	0.3620654
29	484013099244201	15.241653	0	0.0164207	0.0161277				1.1227544	0.6583007
30	483940099174101	10.488880	0	0.0164207	0.0161277				0.9481037	0.5348693
31	453636099403901	9.6694363	0						0.6487025	0.3456078
32	480238098205101	12.619433	0						3.4930139	5.3486936
33	481805099235201	7.5388826	0		0.1612775				4.4910179	6.5830076
34	483737099222701	13.930543	0	0.0128509	0.0129022				0.6487025	0.4525817
35	480448098343901	6.3916613	0	0.0663967	0.0661238				0.8483033	0.6583007
36	435520104322001	15.405542				0.0364111			0.0973053	0.0617156
37	483750099222701	15.733320	0	0.0164207	0.0161277				0.5239520	0.3044641
38	483755099122801	10.488880	0.2166334	0.0164207	0.0161277				0.3992015	0.3908660
39	482658099242301	7.5388826	0	0.0164207	0.0161277				1.4471057	1.0697387
40	483704099122701	10.324991	0	0.0164207	0.0161277				0.8483033	0.5348693
41	483612099122701	11.144435	0	0.0164207	0.0161277				0.6986027	0.4937255
42	454549099164202	7.3749938	0			0.0999521			0.7734530	0.3949804
43	482827098525301	7.7027713	0	0.0128509	0.0129022				1.7215568	0.9874511
44	483843099263001	8.3583263	0	0.0164207	0.0161277				2.2954091	1.4811767
45	485925099465301	11.963878	0	0.0164207	0.0161277				8.2335329	3.7440855
46	483640099553401	12.291656	0	0.0164207	0.0161277				0.2994011	0.0905163
47	474850098411802	12.291656	0						0.7485029	1.8926146

	STN NO.	Na	K	Cl	SO4	F	SiO2	As	B	Fe	Pb
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l	umol/l	umol/l	umol/l
1		782.95591	5.6268431	789.77801	20.820754						
2	480755106233101	47.847306	0.0767296	33.847629	0.1977971	0.0736904	0.1830770			0.5371819	
3	480758106431901	43.497551	0.0767296	28.206357	0.2914905	0.1052720	0.1631049			1.2534245	
4	480805106370301	36.972918	0.0511531	13.539051	1.7697641	0.1315900	0.1830770			1.7906064	
5	461926099032501	91.344857	0.6138374	90.260344	0.1249245	0.0105272	0.2330071		268.27012	268.59097	
6	462902099124801	69.596081	0.3836483	67.695258	0.0083283	0.0105272	0.4826576		231.26734	6.8043046	
7	484229099182001	28.273408	0.4859546	5.0771443	8.4324054	0.0157908	0.4327275		87.881591	11.818002	
8	463007099083201	73.945836	0.4092249	64.874622	0.0770367	0.0105272	0.4993009		194.26456	8.7739717	
9	472256099362101	26.098530	0.1662476	10.436352	1.3533490	0.0263180	0.3661540		314.52358	3.2230916	
10	483605099184101	18.268971	0.4092249	3.3847629	8.4324054	0.0105272	0.4493708		61.054579	145.03912	
11	462137098572901	24.793604	0.3580718	21.436831	0.4996980	0.0105272	0.3495106		90.656799	6.6252439	
12	463602099133301	19.138922	0.2813421	14.667306	0.4164150		0.4327275		4.6253469	7.3414865	
13	472625099382601	33.493114	0.1918241	18.898259	0.1249245	0.0157908	0.4660142		370.02775	3.2230916	
14	481355099070201	2.7403457	0.1841512	0.2651397	1.7697641	0.0105272	0.3328673			7.5205472	
15	484453099225801	104.39412	0.6138374	112.82543	0.4164150	0.0105272	0.3495106		286.77150	132.50487	
16	485059099245601	82.645347	0.5371077	78.977801	0.2394386	0.0157908	0.4160841		342.27567	48.346374	
17	484548099211401	31.753212	0.3580718	22.565086	3.2272168	0.0105272	0.4327275		33.302497	5.9090013	
18	462915099141301	78.295591	0.4092249	70.515894	0.1353349	0.0105272	0.4993009		175.76318	11.997063	
19	453846099254201	47.847306		42.309536	0.9785754					8.9530323	
20	453705099423401	39.147795	0.2557655	22.565086							
21	453915099062501	73.945836		78.977801	0.2706698					100.27396	
22	484447099261501	38.712820	0.3069187	28.206357	0.4580565	0.0263180	0.1664336		240.51803	0.5371819	
23	484538099191001	16.529069	0.4859546	2.2000959	7.8077827	0.0157908	0.3162239		27.752081	76.996078	
24	463655099155501	26.098530	0.2813421	12.692860	2.0820754	0.0105272	0.4160841		175.76318	7.3414865	
25	485329099224801	52.197061	0.5115311	53.592079	0.0947344	0.0105272	0.4327275		194.26456	25.068490	
26	481151106424701	41.322673	0.0767296	23.129213	0.1249245	0.1210628	0.1314825	0.0266945	434.78260	1.2534245	0.2413127
27	481546099120401	14.789167	0.1815935	2.6231912	3.1231131	0.0105272	0.0665734		58.279370	32.230916	
28	485151099272301	24.358628	0.2199584	10.718415	1.3533490	0.0210544	0.4493708		222.01665	5.3718194	
29	484013099244201	52.197061	0.4603780	42.309536	0.0343542	0.0315816	0.4826576		277.52081	12.176124	
30	483940099174101	40.452722	0.4348015	33.847629	0.2602594	0.0263180	0.3994407		175.76318	1.2534245	
31	453636099403901	43.497551		33.847629	0.1769764					7.8786685	
32	480238098205101	65.246326		84.619073	0.0832830					53.718194	
33	481805099235201	86.995102	0.7417202	84.619073	0.0728726				471.78538	143.24851	
34	483737099222701	26.533506	0.2378620	11.282543	1.7697641	0.0263180	0.4826576		101.75763	8.7739717	
35	480448098343901	6.5246326	0.1636899	0.7897780	1.1451414	0.0105272	0.4160841		52.728954	3.5812129	
36	435520104322001	24.358628	0.0664990	0.1664175	4.7887734	0.0368452	0.1148392			0.7162425	
37	483750099222701	28.708383	0.2429773	11.282543	1.8738678	0.0315816	0.4826576		157.26179	3.0440310	
38	483755099122801	22.183751	0.2378620	8.7439708	2.4984904	0.0210544	0.3661540		166.51248	1.6115458	
39	482658099242301	65.246326	0.5115311	42.309536	9.9939619	0.0105272	0.3495106		157.26179	0.7162425	
40	483704099122701	24.358628	0.3069187	5.0771443	6.3503300	0.0315816	0.3994407		111.00832	0.7162425	
41	483612099122701	31.318236	0.3069187	22.000959	0.5101084	0.0263180	0.4327275		203.51526	0.5371819	
42	454549099164202	10.874387		3.1026993	1.6656603					3.9393342	
43	482827098525301	13.049265	0.3069187	5.3592079	2.8108018	0.0210544	0.4160841		88.806660	53.718194	
44	483843099263001	104.39412	0.5626843	104.36352	0.7287263	0.0105272	0.4493708		277.52081	73.414865	
45	485925099465301	7.3945836	0.3069187	0.4513017	10.098065	0.0052636	0.3661540		45.328399	268.59097	
46	483640099553401	36.972918	0.1509017	25.385721	0.0426825	0.0263180	0.7156647		203.51526	14.862033	
47	474850098411802	69.596081	0.5882608	59.233351	2.1861791	0.0105272	0.3661540				

	STN NO.	Mn	Ni	Sr	Zn	Sn	Al	Li	Se	Tot.Cat	Tot.An
		umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	mmol/kg	mmol/kg
1										824.98880	831.41952
2	480755106233101							24.492148		48.341201	47.820918
3	480758106431901	0.3640467						24.492148		44.197901	42.367034
4	480805106370301							20.170004		37.359177	37.073007
5	461926099032501	8.7371218								100.28895	99.196297
6	462902099124801	4.3685609								77.002884	78.380811
7	484229099182001	5.4607011								36.735372	37.035848
8	463007099083201	1.8202337								78.548397	76.680925
9	472256099362101									27.489294	27.279415
10	483605099184101	7.8270049								29.981118	30.754581
11	462137098572901	10.193308								29.934239	30.155127
12	463602099133301	4.7326076								23.458396	23.219035
13	472625099382601									34.619337	34.087789
14	481355099070201	7.6449816								9.7993834	9.7449824
15	484453099225801	6.0067712								117.28381	121.70493
16	485059099245601	3.4584440								90.068941	89.142243
17	484548099211401	2.0022570								34.707359	35.918975
18	462915099141301	2.9123739								83.703001	80.799905
19	453846099254201									52.874428	54.263901
20	453705099423401									40.214201	40.789766
21	453915099062501									83.930190	88.533022
22	484447099261501	0.1820233								40.080954	41.086349
23	484538099191001	5.8247478								27.934997	28.648446
24	463655099155501	1.0921402								28.176402	28.986392
25	485329099224801	3.8224908								59.735888	61.812097
26	481151106424701		0.1703577	3.9945217	0.9177118	0.5055185	2.223742	25.932862	0.0253292	41.821503	42.554046
27	481546099120401									15.815394	16.107659
28	485151099272301	0.7280934								26.311465	27.375011
29	484013099244201	2.7303505								56.243902	57.636026
30	483940099174101	1.8202337								43.855977	44.873156
31	453636099403901									45.501929	43.871018
32	480238098205101									83.037178	97.405073
33	481805099235201									110.17137	92.464978
34	483737099222701	0.7280934								28.991484	28.765517
35	480448098343901	12.741636								9.7086933	9.5378461
36	435520104322001									24.744602	25.149507
37	483750099222701	0.7280934								30.614281	30.779726
38	483755099122801	0.3640467								24.004971	24.679226
39	482658099242301	5.2786777								70.792979	69.852470
40	483704099122701	1.8202337								27.433325	28.118923
41	483612099122701	1.6382103								34.010886	34.181738
42	454549099164202									13.219133	13.809013
43	482827098525301	10.557355								18.881636	18.696485
44	483843099263001	3.0943973								112.65680	114.19543
45	485925099465301	7.6449816								32.193921	32.627439
46	483640099553401	1.0921402								37.933379	37.778871
47	474850098411802									75.466577	75.897365

	STN NO.	Cat/An	ALK diff mmol/kg
1		0.9922653	0
2	480755106233101	1.0108798	0.2435090
3	480758106431901	1.0432144	4.0401300
4	480805106370301	1.0077190	-0.012211
5	461926099032501	1.0110150	-0.033804
6	462902099124801	0.9824200	-0.022230
7	484229099182001	0.9918868	0.0687543
8	463007099083201	1.0243537	0.0335126
9	472256099362101	1.0076936	-14.09443
10	483605099184101	0.9748504	-0.078145
11	462137098572901	0.9926749	-0.089547
12	463602099133301	1.0103088	0.0303461
13	472625099382601	1.0155934	-14.91387
14	481355099070201	1.0055824	-0.005241
15	484453099225801	0.9636734	0.0222841
16	485059099245601	1.0103957	-0.038008
17	484548099211401	0.9662680	0.0305190
18	462915099141301	1.0359294	0.0138762
19	453846099254201	0.9743941	-9.997213
20	453705099423401	0.9858894	-7.233725
21	453915099062501	0.9480100	-0.021884
22	484447099261501	0.9755296	-0.054478
23	484538099191001	0.9750963	0.0137033
24	463655099155501	0.9720562	0.0214195
25	485329099224801	0.9664109	0.0422663
26	481151106424701	0.9827855	0.0079431
27	481546099120401	0.9818555	-6.888832
28	485151099272301	0.9611490	-0.022921
29	484013099244201	0.9758462	-0.055169
30	483940099174101	0.9773321	0.0217653
31	453636099403901	1.0371751	0.0019560
32	480238098205101	0.8524933	-12.61943
33	481805099235201	1.1914929	-7.538882
34	483737099222701	1.0078554	0.0170427
35	480448098343901	1.0179125	0.0026477
36	435520104322001	0.9839000	
37	483750099222701	0.9946248	0.0526302
38	483755099122801	0.9726792	0.2847051
39	482658099242301	1.0134642	-0.005587
40	483704099122701	0.9756179	0.0058141
41	483612099122701	0.9950016	-0.014340
42	454549099164202	0.9572829	-0.041520
43	482827098525301	1.0099030	-0.009618
44	483843099263001	0.9865264	0.0541864
45	485925099465301	0.9867130	-0.034496
46	483640099553401	1.0040898	-0.002593
47	474850098411802	0.9943240	0.0573529

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
48	484722099103701	ND	211PIRR	P	207	63.1	80-05-20	7	5800	7.7	0.4544442	10.071036
49	483810099220502	ND	211PIRR	P	205	62.5	80-06-03	14	3050	8	0.2499443	11.589685
50	481704099114401	ND	211PIRR	P	200	61.0	72-11-17		4950	7.8	0.3862776	10.990218
51	480224098204101	ND	211PIRR	P	200	61.0	49-09-09					
52	480606098213001	ND	211PIRR	P	200	61.0	49-09-19					
53	481704099114401	ND	211PIRR	P	200	61.0	72-08-03		4840	7.7	0.4998886	11.150076
54	483511098384005	ND	211PIRR	P	200	61.0	70-07-08		12600	8		7.6931530

	STN NO.	HCO3	CO3	NO3(asN)	NO3(asNO3)	N(NO2+NO3)	P	H2S	Ca	Mg
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
48	484722099103701	10.161102	0	0.0164207	0.0161277				2.3952095	1.6046081
49	483810099220502	11.636101	0	0.0164207	0.0161277				1.0479041	0.8640197
50	481704099114401	10.980546	0	0.0164207	0.0161277				1.7964071	1.5223205
51	480224098204101	11.636101	0		0.1048304				0.4740518	0.2468627
52	480606098213001	7.2111051	0		0.1048304				2.4950099	2.6743468
53	481704099114401	11.144435	0	0.0164207	0.0161277				1.7964071	1.1931701
54	483511098384005	7.7027713	0						3.4930139	2.2217650

	STN NO.	Na	K	Cl	SO4	F	SiO2	As	B	Fe	Pb
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l	umol/l	umol/l	umol/l
48	484722099103701	52.197061	0.5882608	47.950808	1.0410377	0.0105272	0.3827974		148.01110	71.624259	
49	483810099220502	28.273408	0.3324952	16.077623	2.3943867	0.0157908	0.3994407		111.00832	1.9696671	
50	481704099114401	41.322673	0.4092249	36.668265	0.0343542	0.0157908	0.4493708		407.03052	69.833652	
51	480224098204101	28.273408		7.6157165	5.3092923	0.0105272				17.906064	
52	480606098213001	24.793604		2.5667785	12.492452					7.1624259	
53	481704099114401	40.017747	0.4092249	36.668265	0.4372358	0.0157908	0.4160841		268.27012		
54	483511098384005	113.09363	0.8184499	110.00479	2.8108018	0.0052636	0.3994407		259.01942	3.9393342	

	STN NO.	Mn	Ni	Sr	Zn	Sn	Al	Li	Se	Tot.Cat	Tot.An
		umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	mmol/kg	mmol/kg
48	484722099103701	7.8270049								60.928206	60.210113
49	483810099220502	1.4561869								32.433690	32.518626
50	481704099114401	9.1011685								48.509021	47.733647
51	480224098204101									29.751049	29.975233
52	480606098213001									35.146642	34.867619
53	481704099114401	4.0045141								46.406126	48.703299
54	483511098384005	18.202337								125.34951	123.32917

	STN NO.	Cat/An	ALK diff mmol/kg
48	484722099103701	1.0119264	-0.090065
49	483810099220502	0.9973880	-0.046416
50	481704099114401	1.0162437	0.0096723
51	480224098204101	0.9925210	-11.63610
52	480606098213001	1.0080023	-7.211105
53	481704099114401	0.9528333	0.0056412
54	483511098384005	1.0163817	-0.009618

TABLE AII-3

Listing of edited WATSTORE data
for the Green River Formation

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
1	402424110092401	UT	124GRRV	G	11900	3627.1	70-01-27		7860	8.1	0.5907775	33.570122
2	402424110092401	UT	124GRRV	G	11700	3566.2	70-01-26		19300	8.2	0.5680552	40.763720
3	402424110092401	UT	124GRRV	G	11500	3505.2	70-01-25		36100	7.4	2.1813323	24.578125
4	402424110092401	UT	124GRRV	G	11500	3505.2	70-01-24		36100	7.5	1.6814436	23.978658
5	402424110092401	UT	124GRRV	G	11300	3444.2	70-05-06		51200	8	0.2953887	13.388084
6	402457110045901	UT	124GRRV	G	11100	3383.3	67-12-04		35500	8	0.6362219	28.174924
7	402457110045901	UT	124GRRV	G	11100	3383.3	68-04-26		12200	8.1	0.6589441	37.166921
8	402524110053401	UT	124GRRV	G	10800	3291.8	68-03-13		16900	7.7	1.7723325	39.964431
9	402457110045902	UT	124GRRV	G	10500	3200.4	69-04-18		39300	8	0.5680552	25.377414
10	402457110045902	UT	124GRRV	G	10500	3200.4	70-02-26		39600	8.1	0.4771664	27.575457
11	402524110053401	UT	124GRRV	G	10500	3200.4	68-03-11		38600	8	0.6134997	27.575457
12	402444110010201	UT	124GRRV	G	10400	3169.9	63-11-30		15100	7.8		36.167810
13	402524110053401	UT	124GRRV	G	10400	3169.9	70-02-26		40700	8.1	0.5226108	29.773501
14	402524110053401	UT	124GRRV	G	10400	3169.9	68-04-25		37900	7.9	0.7498329	26.576347
15	402327109570401	UT	124GRRV	G	10200	3109.0	60-05-04		14600	8.5		
16	402424110092401	UT	124GRRV	G	9920	3023.6	70-01-23		73300	8.5	0.3181109	44.760163
17	402457110045901	UT	124GRRV	G	9470	2886.5	67-10-03		10800	8.4	0.3408331	38.365854
18	402249109530601	UT	124GRRV	G	9390	2862.1	60-05-04		16800	8.6	0.3181109	57.548781
19	402249109533901	UT	124GRRV	G	9390	2862.1	67-08-24		13700	8.3	0.4544442	41.563008
20	402524110053401	UT	124GRRV	G	9360	2852.9	68-03-06		7800	8.7	0.1726888	38.965320
21	402457110045901	UT	124GRRV	G	9280	2828.5	67-10-02		11200	8.4	0.2726665	29.773501
22	402524110053401	UT	124GRRV	G	9180	2798.1	68-02-09		9170	8.3	0.3862776	35.368522
23	402444110010201	UT	124GRRV	G	9130	2782.8	63-11-07		16200	8.5		
24	402524110053401	UT	124GRRV	G	9130	2782.8	68-02-10		8150	8.5		35.568344
25	402535110060701	UT	124GRRV	G	9110	2776.7	67-12-04		10700	8.2	0.6134997	43.361408
26	401223110392801	UT	124GRRV	G	7420	2261.6	70-04-09		8460	8.1		
27	401223110392801	UT	124GRRV	G	7230	2203.7	70-03-27		4690	8.1		
28	401538109331001	UT	124GRRV	G	7180	2188.5	65-04-20		29700	8.2	0.1931388	13.807711
29	401223110392801	UT	124GRRV	G	7040	2145.8	70-03-26		5000	8.1		
30	401526109323901	UT	124GRRV	G	6950	2118.4	65-01-16		6880	8.1	0.3862776	21.980437
31	401551109323701	UT	124GRRV	G	6940	2115.3	65-03-08		28900	7.4	1.0679439	11.989329
32	401526109323901	UT	124GRRV	G	6870	2094.0	65-01-16		12500	8.5	0.1317888	18.783282
33	401226110350301	UT	124GRRV	G	6840	2084.8	69-10-22		7050	8.1	1.4996659	85.324061
34	401539109314602	UT	124GRRV	G	6780	2066.5	65-03-04		43100	7.8	0.8179996	23.379192
35	400856110261501	UT	124GRRV	G	6480	1975.1	72-01-04			8.7	0.2272221	4.5559452
36	401223110392801	UT	124GRRV	G	6470	1972.1	70-03-25		5000	9.4		
37	395715109272001	UT	124GRRV	G	6450	1966.0	75-06-25	22	11900	8.5	0.2953887	42.162475
38	395715109272001	UT	124GRRV	G	6450	1966.0	78-07-03	23.5	10300	8	0.8407218	38.365854
39	395715109272001	UT	124GRRV	G	6450	1966.0	74-08-21	21.5	>8000	8.3	0.1408777	12.768635
40	400601111100401	UT	124DGCK	D	6185	1885.2	80-02-04			7.8	0.1454221	4.1563008
41	401117109274901	UT	124GRRV	G	6180	1883.7	71-07-16		21200	8	1.2042772	53.951982
42	401450109272301	UT	124GRRV	G	6130	1868.4	63-06-11		36700	8.3	0.1090666	9.7912857
43	401049109232401	UT	124GRRV	G	6090	1856.2	65-07-07		28600	8	0.2726665	12.808600
44	401155109252401	UT	124GRRV	G	6080	1853.2	70-05-01		46000	8.4	0.2499443	29.373857
45	401024109254001	UT	124GRRV	G	6060	1847.1	65-06-16		66700	7.5	0.7043885	9.9911079
46	395318109162101	UT	124GRRV	G	5940	1810.5	74-09-10	28.5	1600	8.3	0.1045221	9.3117125
47	395318109162101	UT	124GRRV	G	5940	1810.5	75-06-26	28	1720	9	0.0204499	9.4915525

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l
1	402424110092401	33.597194	0							
2	402424110092401	40.808299	0							
3	402424110092401	24.583312	0							
4	402424110092401	23.927757	0							
5	402424110092401	13.438877	0							
6	402457110045901	28.188865	0							
7	402457110045901	37.202746	0							
8	402524110053401	39.988855	0							
9	402457110045902	25.402756	0							
10	402457110045902	27.533310	0							
11	402524110053401	27.533310	0							
12	402444110010201	36.219414	0							
13	402524110053401	29.663864	0							
14	402524110053401	26.549977	0							
15	402327109570401	38.022190	2.4996167				0.0870898			
16	402424110092401	30.811085	6.9989268							
17	402457110045901	35.236081	1.5997547							
18	402249109530601	43.594408	6.9989268			0.0856732	0.0854771			
19	402249109533901	40.480521	0.4499310							
20	402524110053401	31.466640	3.8327456			0.0485481	0.0483832			
21	402457110045901	27.041644	1.3997853							
22	402524110053401	22.616647	6.3323623							
23	402444110010201	40.972188	1.8330522							
24	402524110053401	28.680531	3.3328223							
25	402535110060701	43.266630	0							
26	401223110392801	88.827703	0							
27	401223110392801	57.033285	0							
28	401538109331001	13.766655	0							
29	401223110392801	59.163839	0							
30	401526109323901	21.961092	0							
31	401551109323701	11.963878	0							
32	401526109323901	16.388875	1.1998160							
33	401226110350301	85.222151	0							
34	401539109314602	23.436091	0							
35	400856110261501	52.772178	0							
36	401223110392801	14.749987	12.331442							
37	395715109272001	31.958306	5.1658745	0.4783425	0.0007139			0.0007139		0.0035800
38	395715109272001	38.349968	0					0.0078533		0.0012635
39	395715109272001	12.783322	0	0.5782946		0.0021418	0.0020966	0.0021418		0.0006317
40	400601111100401	4.0972188	0							
41	401117109274901	53.919399	0							
42	401450109272301	7.8666601	0.9998466							
43	401049109232401	12.783322	0							
44	401155109252401	24.911090	2.1663344							
45	401024109254001	9.9972138	0							
46	395318109162101	9.3416588	0	0.0785338		0.0007139	0.0006451	0.0007139		0.0012635
47	395318109162101	8.3583263	0.5665797	0.0621131	0.0028557			0.0028557		0.0003158

	STN NO.	H2S mmol/l	TOC mmol/l	Ca mmol/l	Mg mmol/l	Na mmol/l	K mmol/l	Cl mmol/l	SO4 mmol/l	F mmol/l	SiO2 mmol/l
1	402424110092401			0.6237524	0.1234313	78.295591	0.9207561	33.847629	6.0380186		
2	402424110092401			0.8732534	0.3702941	213.13800	3.0691871	138.21115	19.779716		
3	402424110092401			2.4950099	0.7405883	434.97551	6.3941398	310.26993	53.092923		
4	402424110092401			2.4950099	0.7405883	434.97551	6.3941398	310.26993	55.174998		
5	402424110092401			6.7365269	2.0160460	565.46816	8.4402646	564.12715	21.861791		
6	402457110045901			1.6966067	0.5348693	408.87698	2.3018903	310.26993	41.641508		
7	402457110045901			0.1497005	0.0411437	134.84240	0.5371077	84.619073	5.5174998		
8	402524110053401			0.4241516	0.1645751	195.73897	0.7672967	118.46670	18.738678		
9	402457110045902			1.2974051	0.4525817	478.47306	7.6729678	394.88900	34.354244		
10	402457110045902			1.0978043	0.3702941	478.47306	5.6268431	366.68265	39.559432		
11	402524110053401			1.6467065	0.7405883	478.47306	3.0691871	338.47629	56.216036		
12	402444110010201			0.3493013	0.1234313	169.64044	1.3299810	104.36352	16.656603		
13	402524110053401			0.8982035	0.4937255	478.47306	5.3710775	366.68265	51.010847		
14	402524110053401			2.1706586	0.3291503	478.47306	2.8134215	338.47629	49.969809		
15	402327109570401			0.6736526	0.4114379	160.94093	1.2020983	115.64606	0.1769764		0.3827974
16	402424110092401			0.3742514	0.2468627	869.95102	8.9517958	846.19073	42.682545		
17	402457110045901			0.1746506	0.0822875	126.14289	0.4859546	73.336530	6.4544337		
18	402249109530601			0.2994011	0.2715490	200.08873	1.3555576	129.74924	4.4764621		
19	402249109533901			0.1996007	0.2057189	187.03946	1.8670888	126.92860	14.574527	1.2632642	0.5825178
20	402524110053401			0.4740518	0.1234313	86.995102	0.3836483	42.309536	3.6436319		
21	402457110045901			0.1746506	0.0822875	108.74387	0.5371077	76.157165	7.8077827		
22	402524110053401			0.4740518	0.1645751	95.694612	0.4859546	56.412715	4.2682545		
23	402444110010201			0.2744510	0.2057189	173.99020		104.36352	13.533490		
24	402524110053401			0.4241516	0.1234313	91.344857	0.5371077	45.130172	7.4954714		
25	402535110060701					134.84240	0.2813421	67.695258	12.492452		
26	401223110392801			0.6237524	0.3702941	117.44338	0.8696030	25.949849	1.7697641		
27	401223110392801			0.2245508	0.0411437	60.896571	0.5882608	5.9233351	0.2082075		
28	401538109331001			2.9940119	1.6457519	313.18236	1.3811342	310.26993	5.2051885		
29	401223110392801			0.1996007	0.1234313	65.246326	0.5371077	7.3336530	0.1145141		
30	401526109323901			0.7734530	0.3291503	69.596081	0.8951795	45.130172	2.9149055		
31	401551109323701			1.7714570	1.0285949	308.83261	0.7672967	282.06357	7.0790564		
32	401526109323901			1.1227544	0.5760131	130.49265	1.0230623	107.18415	4.4764621		
33	401226110350301			0.3493013	0.0411437	91.344857	0.9974858	9.8722251	0.1041037		
34	401539109314602			4.7405189	3.1269286	478.47306	1.0230623	451.30172	11.451414		
35	400856110261501			0.4990019	0.6583007	130.49265	0.6138374	73.336530	0.7495471		
36	401223110392801			0.3742514		65.246326	0.3069187	11.282543	6.9749526		
37	395715109272001	0.2089831		0.0998003	0.0411437	134.84240	0.2813421	93.080980	1.0410377	1.3159002	0.2496504
38	395715109272001			0.0698602	0.0370294	113.09363	0.2557655	73.336530	0.3955943	1.1053562	0.2496504
39	395715109272001	0.2027448		0.0523952	0.0493725	104.39412	0.2813421	90.260344	1.4574527		0.2496504
40	400601111100401			2.1956087	0.5348693	3.3928089		3.6668265	0.5933914		
41	401117109274901			1.1726546	1.1931701	256.63555	2.0461247	191.80323	8.2241978		
42	401450109272301			2.7445109	1.7691832	430.62575	1.3811342	394.88900	14.574527		
43	401049109232401			2.3702594	1.3988891	300.13310	1.0742155	267.96039	15.615565		
44	401155109252401			1.7964071	1.8514708	521.97061	2.2507372	479.50808	17.697641		
45	401024109254001			12.475049	5.3486936	739.45836	28.134215	789.77801	6.6626413		
46	395318109162101	0.2526512		0.0474051	0.0329150	17.399020	0.0281342	0.9308098	3.7477357	0.1052720	0.2496504
47	395318109162101	0.2089831		0.0424151	0.0205718	17.833995	0.0230189	0.8743970	4.0600470	0.1052720	0.2662938

	STN NO.	As umol/l	Ba umol/l	Be umol/l	B umol/l	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l
1	402424110092401										
2	402424110092401										
3	402424110092401										
4	402424110092401										
5	402424110092401										
6	402457110045901										
7	402457110045901										
8	402524110053401										
9	402457110045902										
10	402457110045902										
11	402524110053401										
12	402444110010201										
13	402524110053401										
14	402524110053401										
15	402327109570401				2682.7012						
16	402424110092401										
17	402457110045901										
18	402249109530601				4440.3330						
19	402249109533901				795.55966			2.8325937	1.6115458		
20	402524110053401										
21	402457110045901										
22	402524110053401										
23	402444110010201										
24	402524110053401										
25	402535110060701										
26	401223110392801										
27	401223110392801										
28	401538109331001										
29	401223110392801										
30	401526109323901										
31	401551109323701										
32	401526109323901										
33	401226110350301										
34	401539109314602										
35	400856110261501										
36	401223110392801										
37	395715109272001		13.835287		1942.6456				1.0743638		
38	395715109272001				1665.1248				1.0743638		0.5460701
39	395715109272001				1850.1387				1.6115458		
40	400601111100401										
41	401117109274901										
42	401450109272301										
43	401049109232401										
44	401155109252401										
45	401024109254001										
46	395318109162101	0.0133472			62.904717				0.3581212		
47	395318109162101		0.2184519		57.354301				0.3581212		

	STN NO.	Mo umol/l	Ni umol/l	Ag umol/l	Sr umol/l	V umol/l	Zn umol/l	Sn umol/l	Al umol/l	Li umol/l	Se umol/l
1	402424110092401										
2	402424110092401										
3	402424110092401										
4	402424110092401										
5	402424110092401										
6	402457110045901										
7	402457110045901										
8	402524110053401										
9	402457110045902										
10	402457110045902										
11	402524110053401										
12	402444110010201										
13	402524110053401										
14	402524110053401										
15	402327109570401										
16	402424110092401										
17	402457110045901										
18	402249109530601										
19	402249109533901						0.7647598				
20	402524110053401										
21	402457110045901										
22	402524110053401										
23	402444110010201										
24	402524110053401										
25	402535110060701										
26	401223110392801										
27	401223110392801										
28	401538109331001									1008.5002	
29	401223110392801										
30	401526109323901									144.07145	
31	401551109323701									288.14291	
32	401526109323901									432.21437	
33	401226110350301										
34	401539109314602									720.35729	
35	400856110261501										
36	401223110392801										
37	395715109272001	1.1465499			11.070531				0.7412475	89.324304	
38	395715109272001										
39	395715109272001				9.2444647					85.002161	
40	400601111100401										
41	401117109274901										
42	401450109272301									43.221437	
43	401049109232401									1296.6431	
44	401155109252401										
45	401024109254001									4322.1437	
46	395318109162101				1.1412919					11.525716	
47	395318109162101	0.2084636			1.2554211				0.3706237	14.407145	

	STN NO.	Ti umol/l	Zr umol/l	Hg umol/l	I mmol/l	Br mmol/l	U umol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.
1	402424110092401								80.710715	79.493789	1.0153084
2	402424110092401								218.69428	218.53430	1.0007320
3	402424110092401								447.84084	441.03390	1.0154340
4	402424110092401								447.84084	444.59859	1.0072925
5	402424110092401								591.41357	621.23882	0.9519906
6	402457110045901								415.64182	421.72787	0.9855687
7	402457110045901								135.76120	132.82099	1.0221366
8	402524110053401								197.68373	195.90849	1.0090615
9	402457110045902								489.64600	488.97491	1.0013724
10	402457110045902								487.03610	473.37697	1.0288546
11	402524110053401								486.31683	478.48382	1.0163704
12	402444110010201								171.91589	173.84454	0.9889059
13	402524110053401								486.62799	498.47784	0.9762279
14	402524110053401								486.28610	464.99225	1.0457939
15	402327109570401								164.31321	154.02220	1.0668150
16	402424110092401								880.14504	976.31598	0.9014960
17	402457110045901								127.14272	124.61125	1.0203149
18	402249109530601								202.58619	196.25095	1.0322813
19	402249109533901								189.71719	198.90393	0.9538131
20	402524110053401								88.573717	88.562121	1.0001309
21	402457110045901								109.79486	121.54623	0.9033176
22	402524110053401								97.457821	100.31774	0.9714913
23	402444110010201								174.95054	172.40269	1.0147784
24	402524110053401								92.977131	95.689459	0.9716548
25	402535110060701								135.12375	136.04157	0.9932533
26	401223110392801								120.30108	118.31708	1.0167685
27	401223110392801								62.016221	63.373036	0.9785900
28	401538109331001								323.84302	334.48802	0.9681752
29	401223110392801								66.429498	66.726520	0.9955486
30	401526109323901								72.696468	72.940420	0.9966554
31	401551109323701								315.20001	308.21101	1.0226760
32	401526109323901								134.91325	134.92036	0.9999472
33	401226110350301								93.123233	95.404494	0.9760885
34	401539109314602								495.23101	497.58374	0.9952716
35	400856110261501								133.42109	127.60780	1.0455559
36	401223110392801								66.301748	64.645321	1.0256233
37	395715109272001					0.1626952			135.40563	138.64143	0.9766607
38	395715109272001								113.56317	113.59892	0.9996852
39	395715109272001								104.87900	105.94388	0.9899485
40	400601111100401								8.8537652	9.0099103	0.9826696
41	401117109274901								263.41332	262.20361	1.0046136
42	401450109272301								441.03427	433.82934	1.0166077
43	401049109232401								308.74561	312.00012	0.9895688
44	401155109252401								531.51710	544.27722	0.9765558
45	401024109254001								803.24007	813.09440	0.9878804
46	395318109162101								17.587795	17.843265	0.9856825
47	395318109162101					0.0025030			17.982988	18.591315	0.9672789

	STN NO.	Alk.Diff. meq/l
1	402424110092401	-0.027071
2	402424110092401	-0.044579
3	402424110092401	-0.005187
4	402424110092401	0.0509011
5	402424110092401	-0.050793
6	402457110045901	-0.013941
7	402457110045901	-0.035825
8	402524110053401	-0.024423
9	402457110045902	-0.025342
10	402457110045902	0.0421474
11	402524110053401	0.0421474
12	402444110010201	-0.051603
13	402524110053401	0.0263691
14	402524110053401	0.1096374
15	402327109570401	-43.02142
16	402424110092401	-0.048775
17	402457110045901	-0.069736
18	402249109530601	-0.043480
19	402249109533901	0.1826250
20	402524110053401	-0.166810
21	402457110045901	-0.067713
22	402524110053401	0.0871494
23	402444110010201	-44.63829
24	402524110053401	0.2221679
25	402535110060701	0.0947777
26	401223110392801	-88.82770
27	401223110392801	-57.03328
28	401538109331001	0.0410559
29	401223110392801	-59.16383
30	401526109323901	0.0193446
31	401551109323701	0.0254505
32	401526109323901	-0.005224
33	401226110350301	0.1019103
34	401539109314602	-0.056899
35	400856110261501	-48.21623
36	401223110392801	-39.41287
37	395715109272001	-0.014686
38	395715109272001	0.0158863
39	395715109272001	-0.127580
40	400601111100401	0.0325832
41	401117109274901	-0.075067
42	401450109272301	0.0252776
43	401049109232401	0.1300979
44	401155109252401	-0.006105
45	401024109254001	-0.029946
46	395318109162101	0.0390134
47	395318109162101	0.0000665

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
48	401130109255601	UT	124GRRV	G	5870	1789.2	71-06-15		32400	8	3.4537762	156.06110
49	401241109161901	UT	124GRRV	G	5860	1786.1	69-02-03		6010	8.6	0.4317220	75.932420
50	401050109275601	UT	124GRRV	G	5850	1783.1	68-11-01		44200	8.8	0.2272221	64.542557
51	401051109272201	UT	124GRRV	G	5850	1783.1	70-05-29		28600	8.2	1.2269994	88.121571
52	395228109163401	UT	124GRRV	G	5830	1777.0	74-09-10	26.5	1700	8.3	0.1363332	12.169169
53	395228109163401	UT	124GRRV	G	5830	1777.0	75-06-26	26.5	1770	8.8	0.0431722	12.349009
54	401036109270401	UT	124GRRV	G	5820	1773.9	70-03-27		44000	7.9	1.9768324	70.936866
55	400857109254101	UT	124GRRV	G	5810	1770.9	65-05-27		79100	7.3	1.1815550	10.610556
56	401051109272201	UT	124GRRV	G	5810	1770.9	70-05-29		32200	8.1	1.1361105	64.342734
57	401117109274901	UT	124GRRV	G	5810	1770.9	71-07-06		29000	8.7	0.3862776	88.121571
58	401117109274901	UT	124GRRV	G	5770	1758.7	71-07-07		26200	9.1	0.1317888	75.133131
59	401123109185301	UT	124GRRV	G	5740	1749.6	69-02-03		22000	8.7	0.4317220	97.912857
60	401031109212601	UT	124GRRV	G	5730	1746.5	69-09-18		26400	8.2	0.6362219	45.159807
61	401149109160701	UT	124GRRV	G	5730	1746.5	69-02-03		13700	8.7	0.5226108	119.89329
62	401226109173001	UT	124GRRV	G	5720	1743.5	69-01-31		9320	8.7	0.5680552	125.88795
63	401031109212601	UT	124GRRV	G	5710	1740.4	69-09-18		18800	8.2	1.1815550	84.324950
64	401158109244701	UT	124GRRV	G	5710	1740.4	70-05-01		22000	8.7	0.3181109	74.333842
65	401206109253901	UT	124GRRV	G	5710	1740.4	70-05-01		24700	8.5	0.3408331	50.155361
66	401301109244801	UT	124GRRV	G	5700	1737.4	70-05-01		40300	8	0.4998886	22.979548
67	401117109274901	UT	124GRRV	G	5680	1731.3	71-07-08		28200	9	0.2090443	93.916414
68	395433109381701	UT	124GRRV	G	5670	1728.2	74-08-20	31	3250	8.6	0.1658721	29.773501
69	401208109250601	UT	124GRRV	G	5650	1722.1	70-05-01		46000	8.2	0.2953887	21.580793
70	401229109185401	UT	124GRRV	G	5650	1722.1	66-12-12		8460	8.8	0.3635553	101.90930
71	400719109220201	UT	124GRRV	G	5630	1716.0	65-01-15		51200	8.3	0.1340610	11.989329
72	401240109171601	UT	124GRRV	G	5610	1709.9	69-01-31		8660	8.5	0.8634440	121.89151
73	395657109325401	UT	124GRRV	G	5600	1706.9	75-06-25	21.5	4060	8.6	0.1499665	26.975991
74	395657109325401	UT	124GRRV	G	5600	1706.9	74-08-21	27	3750	8.3	0.2953887	26.176702
75	401233109244201	UT	124GRRV	G	5580	1700.8	70-05-01		26300	8.4	0.3408331	37.966210
76	401044109200101	UT	124GRRV	G	5560	1694.7	69-02-03		25100	8.5	0.5680552	81.927084
77	401222109252201	UT	124GRRV	G	5550	1691.6	66-09-23		33700	8.5	0.1726888	24.777947
78	401253109163901	UT	124GRRV	G	5550	1691.6	69-01-31		7050	8.4	0.8179996	91.918192
79	401031109191001	UT	124GRRV	G	5520	1682.5	69-02-03		25500	8.7	0.2726665	61.944869
80	401240109172101	UT	124GRRV	G	5490	1673.4	69-01-31		9650	8.6	0.6134997	109.90218
81	401538109331001	UT	124GRRV	G	5420	1652.0	65-04-20		10000	7.9	1.9768324	70.936866
82	401024109254001	UT	124GRRV	G	5410	1649.0	65-06-15		16300	8.3	0.7043885	64.142912
83	401110109160501	UT	124GRRV	G	5380	1639.8	70-12-30		12600	7.8	2.0222768	57.348959
84	401238109185401	UT	124GRRV	G	5380	1639.8	69-02-03		7330	8.5	0.7498329	105.90574
85	400719109220201	UT	124GRRV	G	5370	1636.8	65-03-04		26500	8.1	0.1272443	7.1935976
86	400759109561001	UT	124GRRV	G	5310	1618.5	69-04-10		57100	8.4	0.3635553	40.963542
87	401424110353501	UT	124GRRV	G	5300	1615.4	68-09-16		28900	8.5	1.8404991	261.76702
88	401017109091701	UT	124GRRV	G	5070	1545.3	65-03-02		9650	8	0.4771664	21.980437
89	401308109111701	UT	124GRRV	G	5030	1533.1	65-11-08		5790	9.1	0.0568055	32.371189
90	401005109151401	UT	124GRRV	G	5010	1527.0	63-04-17		11000	8.2	0.4089998	28.374746
91	401017109091701	UT	124GRRV	G	4920	1499.6	65-03-02		4890	8.5	0.2499443	34.769055
92	401214109180201	UT	124GRRV	G	4920	1499.6	65-01-15		8150	8.8	0.1590554	45.359629
93	401003109104401	UT	124GRRV	G	4820	1469.1	65-10-29		4680	8.3	0.2726665	23.778836
94	401238109185401	UT	124GRRV	G	4790	1460.0	71-01-25		8460	8.9	0.2726665	93.716592
95	400857109254101	UT	124GRRV	G	4760	1450.8	65-05-12		50000	8.3	0.7725552	69.538111
96	401330110364301	UT	124GRRV	G	4710	1435.6	66-01-07		30600	7.8	9.2024958	261.76702
97	401330110364301	UT	124GRRV	G	4710	1435.6	65-11-19		34400	9	0.6816663	303.72968

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l
48	401130109255601	156.02209	0							
49	401241109161901	63.916613	5.9990801							
50	401050109275601	47.363849	8.6653379							
51	401051109272201	88.172148	0							
52	395228109163401	12.127767	0	0.0928127						0.0012635
53	395228109163401	11.308323	0.4999233	0.0785338	0.0028557	0.0007139		0.0035697		0.0006317
54	401036109270401	70.963829	0							
55	400857109254101	10.652768	0							
56	401051109272201	64.244390	0							
57	401117109274901	67.030499	10.665031							
58	401117109274901	56.049953	9.6651846							
59	401123109185301	66.047167	15.997547							
60	401031109212601	45.233295	0							
61	401149109160701	76.044381	21.996627							
62	401226109173001	101.93880	11.998160							
63	401031109212601	84.402707	0							
64	401158109244701	44.741629	14.831059							
65	401206109253901	42.119409	3.9993867							
66	401301109244801	22.944425	0							
67	401117109274901	73.913827	9.9984669							
68	395433109381701	24.255535	2.8328989	0.1427888		0.0014278	0.0014514	0.0014278		0.0015794
69	401208109250601	21.633315	0							
70	401229109185401	89.647147	6.1657212							
71	400719109220201	11.963878	0							
72	401240109171601	109.96935	5.9990801							
73	395657109325401	24.583312	1.2164801	0.2641592	0.0007139			0.0007139		0.0012635
74	395657109325401	26.058311	0	0.3069959		0.0057115	0.0056447	0.0057115		0.0018953
75	401233109244201	31.138862	3.3328223							
76	401044109200101	69.980497	5.9990801							
77	401222109252201	19.174984	2.8328989							
78	401253109163901	83.911041	3.9993867							
79	401031109191001	49.986069	5.9990801							
80	401240109172101	78.011046	15.997547							
81	401538109331001	70.963829	0							
82	401024109254001	62.113837	0.9998466							
83	401110109160501	57.361063	0							
84	401238109185401	93.908255	5.9990801							
85	400719109220201	7.2111051	0							
86	400759109561001	34.252749	3.3328223							
87	401424110353501	217.97204	21.996627							
88	401017109091701	21.961092	0							
89	401308109111701	25.238867	3.6661045							
90	401005109151401	26.058311	1.1998160							
91	401017109091701	31.466640	1.5997547							
92	401214109180201	40.152744	2.6662578							
93	401003109104401	22.944425	0.3999386							
94	401238109185401	77.355491	8.1654146							
95	400857109254101	69.652719	0							
96	401330110364301	262.22200	0							
97	401330110364301	224.52759	39.993867							

	STN NO.	H2S mmol/l	TOC mmol/l	Ca mmol/l	Mg mmol/l	Na mmol/l	K mmol/l	Cl mmol/l	SO4 mmol/l	F mmol/l	SiO2 mmol/l
48	401130109255601			0.5489021	0.4937255	374.07893	3.0691871	197.44450	12.492452		
49	401241109161901			0.3243512	0.1645751	86.995102	0.8951795	12.974924	0.0520518		
50	401050109275601					565.46816	2.0717013	451.30172	17.697641		
51	401051109272201			2.7445109	0.7405883	334.93114	2.2763138	231.29213	11.451414		
52	395228109163401	0.0592638		0.0848303	0.0164575	18.268971	0.0281342	0.6487462	3.0190093	0.2000168	0.2330071
53	395228109163401			0.0474051	0.0288006	18.703946	0.0255765	0.6205398	3.1231131	0.2473892	0.2163637
54	401036109270401			1.9960079	0.7405883	521.97061	2.5576559	423.09536	21.861791		
55	400857109254101			37.425149	15.223205	869.95102	1.4578638	959.01616	2.3943867		
56	401051109272201			10.479041	3.1269286	326.23163	2.4553497	282.06357	9.3693393		
57	401117109274901			0.8233532	0.5760131	352.33016	1.8926654	248.21594	9.3693393		
58	401117109274901			0.6736526	0.7405883	304.48285	1.7903591	211.54768	10.410377		
59	401123109185301			0.5489021	0.3702941	265.33506	1.0742155	166.41751	2.3943867		
60	401031109212601			0.9980039	0.6583007	295.78334	1.5601701	239.75404	7.1831601		
61	401149109160701			0.1746506	0.0822875	182.68971	0.6394139	62.053986	0.0520518		
62	401226109173001			0.7734530	0.0822875	134.84240	1.2788279	10.154288	0.0520518		
63	401031109212601			0.3742514	0.2880065	230.53702	1.2788279	141.03178	3.5395282		
64	401158109244701			0.4491017	0.6583007	260.98530	1.2532514	172.05878	9.0570280		
65	401206109253901			0.6986027	0.7405883	282.73408	1.3299810	220.00959	9.4734431		
66	401301109244801			1.9960079	1.5223205	478.47306	1.8159357	394.88900	21.861791		
67	401117109274901			0.5738522	0.8640197	347.98040	1.8926654	239.75404	9.4734431		
68	395433109381701	0.0311915		0.0399201	0.0329150	39.147795	0.0869603	8.4619073	0.1665660		0.2662938
69	401208109250601			2.7445109	2.0571898	565.46816	2.1995841	507.71443	21.861791		
70	401229109185401			0.0499001	0.2057189	113.09363	0.6905671	10.436352	0.0520518		
71	400719109220201			11.726546	6.1715696	565.46816	2.5576559	564.12715	2.6025942		
72	401240109171601			0.3992015	0.2057189	126.14289	0.7672967	7.3336530	0.0520518		
73	395657109325401	0.0187149		0.0948103	0.0205718	43.497551	0.0716143	14.103178	1.3533490	1.4211723	0.2662938
74	395657109325401	0.0218340		0.0374251	0.0082287	39.147795	0.0920756	10.718415	1.1451414		0.2829372
75	401233109244201			1.0479041	0.6171569	295.78334	1.6113232	234.11276	14.574527		
76	401044109200101			0.2495009	0.4114379	300.13310	1.1509451	214.36831	4.0600470		
77	401222109252201			2.7445109	0.9874511	421.92624	0.8951795	366.68265	19.779716		
78	401253109163901			0.3243512	0.1234313	104.39412	0.5115311	12.128733	0.0312311		
79	401031109191001			0.4990019	0.1645751	295.78334	0.9463327	225.65086	5.9339149		
80	401240109172101			0.4491017		130.49265	0.7161436	23.129213	0.0520518		
81	401538109331001			0.3243512	0.1234313	117.44338	0.2813421	47.950808	0.2914905		
82	401024109254001			0.1746506	0.2468627	195.73897	0.5626843	110.00479	11.451414		
83	401110109160501			4.9900199	3.1269286	130.49265	0.7161436	90.260344	0.1665660		
84	401238109185401			0.4241516	0.1234313	108.74387	0.5115311	4.5130172	0.1041037		
85	400719109220201			2.9940119	1.4811767	300.13310	0.5115311	279.24294	11.451414		
86	400759109561001			0.5489021	0.8228759	739.45836	4.3480151	705.15894	6.0380186		
87	401424110353501			0.3992015	0.1234313	417.57649	1.7903591	157.95560	0.2602594		
88	401017109091701			0.3493013	0.1234313	95.694612	0.0511531	73.336530	1.5615565		
89	401308109111701			1.3722554	0.6171569	65.246326	0.7672967	33.847629	1.5615565		
90	401005109151401			0.4241516	0.1234313	117.44338	0.2046124	87.439708	0.7703679		
91	401017109091701			0.2744510	0.3702941	56.546816	0.2046124	16.641751	4.1641508		
92	401214109180201			0.4740518	0.6583007	86.995102	0.2046124	42.309536	0.2602594		
93	401003109104401			0.8982035	0.2880065	47.847306	0.2557655	19.180323	4.4764621		
94	401238109185401			0.2994011	0.2057189	117.44338	0.4603780	22.565086	0.6558537		
95	400857109254101			0.6736526	0.2057189	565.46816	1.4578638	507.71443	1.2492452		
96	401330110364301			0.2245508	0.0822875	413.22673	0.6394139	149.49369	2.1861791		
97	401330110364301			0.1996007	0.0822875	478.47306	0.6394139	163.59687	0.1041037		

	STN NO.	As umol/l	Ba umol/l	Be umol/l	B umol/l	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l
48	401130109255601				3237.7428						
49	401241109161901										
50	401050109275601										
51	401051109272201										
52	395228109163401				73.080481				0.3581212		
53	395228109163401				81.406105				0.7162425		
54	401036109270401										
55	400857109254101										
56	401051109272201										
57	401117109274901										
58	401117109274901										
59	401123109185301										
60	401031109212601										
61	401149109160701										
62	401226109173001										
63	401031109212601										
64	401158109244701										
65	401206109253901										
66	401301109244801										
67	401117109274901										
68	395433109381701				1572.6179				1.0743638		
69	401208109250601										
70	401229109185401										
71	400719109220201										
72	401240109171601										
73	395657109325401		6.5535571		1110.0832				2.3277884		
74	395657109325401				1017.5763				1.7906064		
75	401233109244201										
76	401044109200101										
77	401222109252201										
78	401253109163901										
79	401031109191001										
80	401240109172101										
81	401538109331001										
82	401024109254001										
83	401110109160501										
84	401238109185401										
85	400719109220201										
86	400759109561001										
87	401424110353501										
88	401017109091701										
89	401308109111701										
90	401005109151401										
91	401017109091701										
92	401214109180201										
93	401003109104401										
94	401238109185401										
95	400857109254101										
96	401330110364301										
97	401330110364301										

	STN NO.	Mo umol/l	Ni umol/l	Ag umol/l	Sr umol/l	V umol/l	Zn umol/l	Sn umol/l	Al umol/l	Li umol/l	Se umol/l
48	401130109255601									403.40008	
49	401241109161901										
50	401050109275601										
51	401051109272201										
52	395228109163401				1.3695503					14.407145	0.0126646
53	395228109163401				1.3695503					17.288575	
54	401036109270401										
55	400857109254101									1440.7145	
56	401051109272201										
57	401117109274901										
58	401117109274901										
59	401123109185301										
60	401031109212601										
61	401149109160701										
62	401226109173001										
63	401031109212601										
64	401158109244701										
65	401206109253901										
66	401301109244801										
67	401117109274901										
68	395433109381701				5.4782013					60.510012	
69	401208109250601										
70	401229109185401										
71	400719109220201									1440.7145	
72	401240109171601										
73	395657109325401	0.4690431			7.4183976				1.1118713	59.069298	
74	395657109325401				4.4510385					56.187869	
75	401233109244201										
76	401044109200101										
77	401222109252201									1008.5002	
78	401253109163901										
79	401031109191001										
80	401240109172101										
81	401538109331001									576.28583	
82	401024109254001									576.28583	
83	401110109160501										
84	401238109185401										
85	400719109220201									288.14291	
86	400759109561001										
87	401424110353501										
88	401017109091701										
89	401308109111701										
90	401005109151401										
91	401017109091701									144.07145	
92	401214109180201										
93	401003109104401										
94	401238109185401										
95	400857109254101									1440.7145	
96	401330110364301									288.14291	
97	401330110364301									432.21437	

	STN NO.	Ti umol/l	Zr umol/l	Hg umol/l	I mmol/l	Br mmol/l	U umol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.
48	401130109255601								379.23338	378.49051	1.0019627
49	401241109161901								88.868134	89.011448	0.9983899
50	401050109275601								567.53986	551.23956	1.0295702
51	401051109272201								344.17765	342.31653	1.0054368
52	395228109163401								18.499681	19.055951	0.9708086
53	395228109163401					0.0025030			18.881935	19.463164	0.9701369
54	401036109270401								530.00146	537.75581	0.9855801
55	400857109254101								976.70559	974.41549	1.0023502
56	401051109272201								355.89892	365.14499	0.9746783
57	401117109274901								357.02156	355.07619	1.0054787
58	401117109274901								309.10169	307.50156	1.0052036
59	401123109185301								268.24766	269.11914	0.9967617
60	401031109212601								300.65612	299.28016	1.0045975
61	401149109160701								183.84300	182.05138	1.0098412
62	401226109173001								137.83271	136.14635	1.0123864
63	401031109212601								233.14036	232.43579	1.0030312
64	401158109244701								264.45336	264.50668	0.9997984
65	401206109253901								286.94244	289.11183	0.9924963
66	401301109244801								487.32565	461.55701	1.0558298
67	401117109274901								352.74881	352.61734	1.0003728
68	395433109381701								39.380426	38.568540	1.0210504
69	401208109250601								577.27114	573.01881	1.0074209
70	401229109185401								114.29543	112.44975	1.0164133
71	400719109220201								603.82205	581.32167	1.0387055
72	401240109171601								128.12003	129.32927	0.9906499
73	395657109325401					0.0087605			43.799930	45.207040	0.9688740
74	395657109325401								39.331179	39.185401	1.0037202
75	401233109244201								300.72479	301.22803	0.9983293
76	401044109200101								302.60592	304.41549	0.9940555
77	401222109252201								430.28534	431.02003	0.9982954
78	401253109163901								105.80121	104.10938	1.0162505
79	401031109191001								298.05683	299.46356	0.9953025
80	401240109172101								132.10700	133.13550	0.9922747
81	401538109331001								118.62029	119.47065	0.9928822
82	401024109254001								197.14469	197.05053	1.0004778
83	401110109160501								147.44269	147.94243	0.9966220
84	401238109185401								110.35057	110.62696	0.9975015
85	400719109220201								309.59501	309.33936	1.0008264
86	400759109561001								746.54993	758.19852	0.9846365
87	401424110353501								420.41211	420.24314	1.0004020
88	401017109091701								96.691231	98.440080	0.9822343
89	401308109111701								69.992448	69.341932	1.0093812
90	401005109151401								118.74316	117.35519	1.0118271
91	401017109091701								58.040919	59.739108	0.9715732
92	401214109180201								89.464419	88.189685	1.0144544
93	401003109104401								50.475492	51.912084	0.9723264
94	401238109185401								118.91400	117.59338	1.0112303
95	400857109254101								568.68477	579.75104	0.9809120
96	401330110364301								414.47982	415.63308	0.9972253
97	401330110364301								479.67625	467.53476	1.0259691

	STN NO.	Alk.Diff. meq/l
48	401130109255601	0.0176464
49	401241109161901	-0.151968
50	401050109275601	-0.050576
51	401051109272201	0.0414017
52	395228109163401	0.0408387
53	395228109163401	-0.026963
54	401036109270401	-0.042212
55	400857109254101	0.0983440
56	401051109272201	-0.238990
57	401117109274901	-0.247191
58	401117109274901	-0.129403
59	401123109185301	-0.073487
60	401031109212601	-0.144340
61	401149109160701	-0.047164
62	401226109173001	-0.077756
63	401031109212601	-0.069904
64	401158109244701	0.0371788
65	401206109253901	0.0351228
66	401301109244801	0.0056532
67	401117109274901	-0.147831
68	395433109381701	-0.052522
69	401208109250601	-0.069289
70	401229109185401	0.0254505
71	400719109220201	-0.075996
72	401240109171601	-0.040281
73	395657109325401	0.1183911
74	395657109325401	0.1617025
75	401233109244201	-0.051572
76	401044109200101	-0.062834
77	401222109252201	0.0083781
78	401253109163901	-0.039360
79	401031109191001	-0.103953
80	401240109172101	-0.026963
81	401538109331001	0.0293822
82	401024109254001	-0.012103
83	401110109160501	-0.000671
84	401238109185401	-0.017507
85	400719109220201	0.0451486
86	400759109561001	-0.198267
87	401424110353501	0.0193446
88	401017109091701	-0.199887
89	401308109111701	-0.083197
90	401005109151401	0.1029056
91	401017109091701	-0.125630
92	401214109180201	0.0345341
93	401003109104401	0.0302718
94	401238109185401	-0.114608
95	400857109254101	-0.454976
96	401330110364301	-0.785645
97	401330110364301	-0.317853

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
98	401330110364301	UT	124GRRV	G	4710	1435.6	65-11-01		32800	8.8	0.9997773	281.74924
99	401330110364301	UT	124GRRV	G	4660	1420.4	65-10-01		32800	8.2	3.9536648	281.74924
100	401330110364301	UT	124GRRV	G	4660	1420.4	65-09-30		32800	8.3	3.2947207	295.73679
101	400819109151301	UT	124GRRV	G	4610	1405.1	65-10-29		8090	8.4	0.2953887	34.569233
102	395737110050101	UT	124GRRV	G	4520	1377.7	64-10-18		5640	8.6	0.1045221	18.783282
103	400845109262601	UT	124GRRV	G	4510	1374.6	65-03-28		16100	8.2		79.928863
104	400845109262601	UT	124GRRV	G	4480	1365.5	65-04-08		4180	8.3	0.2953887	26.376524
105	395737110050101	UT	124GRRV	G	4320	1316.7	64-10-01		45800	8.2	0.1295166	9.1918192
106	401136109124101	UT	124GRRV	G	4290	1307.6	65-01-14		7280	8.6	0.4317220	77.131353
107	401136109124101	UT	124GRRV	G	4250	1295.4	65-01-13		7280	8.6	0.3635553	66.141134
108	401317110362701	UT	124GRRV	G	4250	1295.4	66-04-13		33300	9.6		
109	395327110070101	UT	124PCCK	P	4220	1286.3	67-09-11		4230	8.9	0.1386054	49.755717
110	400857109254101	UT	124GRRV	G	4210	1283.2	65-05-12		11700	8.8	0.2044999	58.348070
111	395327110070101	UT	124PCCK	P	4170	1271.0	67-09-11		8730	8.7	0.2204054	49.955539
112	395512110031901	UT	124PCCK	P	4120	1255.8	67-08-10		73300	7.6	1.0224995	18.183816
113	401135109131501	UT	124GRRV	G	4120	1255.8	65-08-05		2470	9.1	0.0454444	26.176702
114	400759109561001	UT	124GRRV	G	4080	1243.6	69-04-10		76900	8.3	0.8861662	80.528329
115	401135109131501	UT	124GRRV	G	4020	1225.3	65-08-06		1400	8.9	0.0454444	16.585239
116	401005109151401	UT	124GRRV	G	3800	1158.2	63-04-17		3530	8.5	0.2726665	39.764609
117	395512110031901	UT	124PCCK	P	3790	1155.2	67-08-10		19600	7.2	0.7043885	4.9955539
118	395625110070701	UT	124GRRV	G	3650	1112.5	63-04-00		9320	7.8	0.2726665	7.9928863
119	401056109125801	UT	124GRRV	G	3590	1094.2	66-01-06		21600	8	0.9543328	43.361408
120	395034109342501	UT	124DGCK	D	3560	1085.1	77-04-16	22	1600	7.8	0.5453330	14.587017
121	400544109350401	UT	124GRRV	G	3550	1082.0	69-07-16		45800	8	2.7493876	123.88973
122	401003109104401	UT	124GRRV	G	3410	1039.4	65-10-29		1010	8.8	0.0386277	10.990218
123	401017109091701	UT	124GRRV	G	3380	1030.2	65-03-02		2970	8.7	0.1226999	27.975102
124	395906109362801	UT	124GRRV	G	3230	984.5	69-07-30	24.5	48000	8.9	0.2499443	91.318726
125	395906109362801	UT	124GRRV	G	3230	984.5	69-07-31	23.5	54000	8.6	0.5907775	107.90396
126	401317110362701	UT	124GRRV	G	3050	929.6	66-03-29		2590	9.3		
127	395817109403701	UT	124GRRV	G	3000	914.4	53-07-00		7430	8.9	0.1408777	50.555006
128	395906109362801	UT	124GRRV	G	2960	902.2	69-07-29	23	82000	8.8	0.4317220	121.29205
129	395823109440801	UT	124GRRV	G	2870	874.8	63-10-15		12900	8.4	0.3862776	42.562119
130	395906109362801	UT	124GRRV	G	2820	859.5	69-07-31	27.5	85000	8.9	0.3862776	137.87728
131	395850109305201	UT	124GRRV	G	2540	774.2	75-06-25	17	12000	8.5	0.7043885	99.911079
132	395238109160801	UT	124GRRV	G	2270	691.9	76-07-18	26.5	10300	8.2	0.2726665	19.342784
133	401003109104401	UT	124GRRV	G	2180	664.5	65-10-29		2100	8.5	0.1113388	15.985772
134	400819109151301	UT	124GRRV	G	2150	655.3	65-10-28		2970	8.7	0.1317888	29.573679
135	401226110350301	UT	124GRRV	G	2040	621.8	69-09-03		2900	9.1		
136	395238109160801	UT	124GRRV	G	1950	594.4	83-07-21	25	1580	9.1		9.1918192
137	393434109432101	UT	124GRRV	G	1910	582.2	63-07-22		1170	8.7	0.0272666	6.3943090
138	395238109160801	UT	124GRRV	G	1580	481.6	79-03-23	25	1800	9		8.5923528
139	395238109160801	UT	124GRRV	G	1570	478.5	76-07-19	26	2070	8.8	0.0363555	10.210912
140	394835109243901	UT	124DGCK	D	1500	457.2	78-04-07	23.5	1370			10.170947
141	394835109243901	UT	124DGCK	D	1490	454.2	83-07-21		1460	9.1		10.190930
142	394527109162001	UT	124DGCK	D	1400	426.7	78-03-28	22	1300	8.6	0.0340833	5.9946647
143	393929109185001	UT	124DGCK	D	1290	393.2	78-07-07	18.5	1130	7.2	0.5453330	3.9964431
144	395238109160801	UT	124GRRV	G	1290	393.2	76-07-19	26	2070	8.7	0.0477166	10.590574
145	395233109151601	UT	124GRRV	G	1270	387.1	75-06-26	26	1770	8.9	0.0272666	9.4915525
146	395233109151601	UT	124GRRV	G	1270	387.1	61-09-06		1820	8.5	0.0727110	10.330805
147	395233109151601	UT	124GRRV	G	1270	387.1	74-09-10	26.5	1700	8.3	0.1045221	9.4116236

	STN NO.	HCO3	CO3	NH4	NO2	NO3(asN)	NO3(asNO3)	N(NO2+NO3)	P	PO4
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
98	401330110364301	206.49982	37.994174							
99	401330110364301	281.88865	0							
100	401330110364301	291.72197	2.1663344							
101	400819109151301	31.302751	1.5997547							
102	395737110050101	16.388875	1.1998160							
103	400845109262601	79.977711	0							
104	400845109262601	26.386089	0							
105	395737110050101	9.1777701	0							
106	401136109124101	64.736057	6.1657212							
107	401136109124101	53.755510	6.1657212							
108	401317110362701	131.93044	117.98190							
109	395327110070101	39.824966	4.9992334							
110	400857109254101	43.594408	7.3322090							
111	395327110070101	39.988855	4.9992334							
112	395512110031901	18.191651	0							
113	401135109131501	14.258321	5.9990801							
114	400759109561001	71.291607	4.6659512							
115	401135109131501	8.1944376	4.1660278							
116	401005109151401	35.399970	2.1663344							
117	395512110031901	4.9166625	0							
118	395625110070701	8.0305488	0							
119	401056109125801	43.266630	0							
120	395034109342501	14.586098	0	0.1927648	0.0007139			0.0007139		0.0018953
121	400544109350401	123.89989	0							
122	401003109104401	9.0138813	0.9998466							
123	401017109091701	25.566645	1.1998160							
124	395906109362801	62.769392	14.331135							
125	395906109362801	97.349918	5.3325156							
126	401317110362701	10.324991	4.3326689							
127	395817109403701	44.577740	2.9995400							
128	395906109362801	93.580477	13.831212							
129	395823109440801	40.152744	1.1998160							
130	395906109362801	96.858252	20.496857							
131	395850109305201	67.849943	15.997547	1.4992824	0.0028557			0.0028557		0.0057912
132	395238109160801	19.338872	0	0.8567328						
133	401003109104401	11.963878	1.9996933							
134	400819109151301	24.747201	2.3329756							
135	401226110350301	18.355540	7.1655679							
136	395238109160801		0	0.0685386	0.0021418				0.0012914	
137	393434109432101	6.0638838	0.1999693							
138	395238109160801		0					0.0021418		
139	395238109160801	9.3416588	0.3999386	0.0542597						0.0018953
140	394835109243901	10.161102	0							0.0003158
141	394835109243901		0	0.0221322					0.0012914	
142	394527109162001	6.0638838	0					0.0014278		
143	393929109185001	3.9333300	0	0.0007139	0.0007139	0.0271298	0.0274171	0.0278438		0.0003158
144	395238109160801	9.9972138	0.3166181	0.0564015						0.0015794
145	395233109151601	8.1944376	0.6665644	0.0656828	0.0021418	0.0021418	0.0016127	0.0042836		0.0009476
146	395233109151601	9.9972138	0.1999693			0.0099952	0.0096766			
147	395233109151601	9.3416588	0	0.0785338						0.0009476

	STN NO.	H2S mmol/l	TOC mmol/l	Ca mmol/l	Mg mmol/l	Na mmol/l	K mmol/l	Cl mmol/l	SO4 mmol/l	F mmol/l	SiO2 mmol/l
98	401330110364301			0.1746506	0.0822875	434.97551	0.5371077	163.59687	0.1041037		
99	401330110364301			1.8213572	0.6994445	434.97551	0.7672967	149.49369	0.1041037		
100	401330110364301			1.6716566	0.4114379	478.47306	0.5115311	180.52068	0.2602594		
101	400819109151301			0.9730538	0.2880065	100.04436	0.2557655	31.026993	17.697641		
102	395737110050101			0.3493013	0.2057189	56.546816	1.8670888	31.026993	5.9339149		
103	400845109262601			0.2994011	0.2057189	195.73897	0.5115311	104.36352	0.9681650		
104	400845109262601			1.4720558	0.7405883	42.627600	0.2557655	16.641751	2.2902829		
105	395737110050101			3.4930139	2.7566344	521.97061	3.0691871	507.71443	2.2902829		
106	401136109124101			0.1996007	0.0822875	82.645347	0.2557655	8.4619073			
107	401136109124101			0.1996007		78.295591	0.2557655	8.4619073			
108	401317110362701			0.0998003	0.0411437	521.97061	1.4067107	160.77623			
109	395327110070101			0.2495009		52.197061	0.1534593	2.8206357	0.1041037		
110	400857109254101			0.9730538	0.4937255	126.14289	0.4092249	70.515894	1.2492452		
111	395327110070101			0.6736526	0.4114379	104.39412	0.4092249	10.718415	23.943867		
112	395512110031901			21.457085	11.931701	869.95102	2.0461247	761.57165	72.872639		
113	401135109131501			0.1996007	0.0822875	26.533506	0.1278827	0.5641271	0.2810801		
114	400759109561001			0.4241516		1043.9412	3.8364839	959.01616	1.0410377		
115	401135109131501			0.0499001		16.529069	0.1278827				
116	401005109151401					43.497551	0.0511531	3.3847629	0.1249245		
117	395512110031901			19.461077	1.3577453	173.99020	0.8440264	152.31433	30.190093		
118	395625110070701			9.7305389	3.2092162	86.995102	2.5576559	3.3847629	53.092923		
119	401056109125801			1.8712574	0.8640197	252.28579	1.1509451	214.36831	0.1041037		
120	395034109342501	1.7155333		0.0299401	0.0370294	18.268971	0.0306918	2.3129213	0.3331320	0.2315984	0.2662938
121	400544109350401				0.9463073	565.46816	1.8926654	451.30172	0.2602594		
122	401003109104401			0.1497005	0.1234313	11.744338		0.4513017	0.5205188		
123	401017109091701			0.2245508	0.1234313	33.058138	0.1278827	1.1282543	2.4984904		
124	395906109362801			0.1022954	0.0493725	652.46326	1.3555576	535.92079	0.3643631	2.8423446	0.1431329
125	395906109362801			0.0499001	0.0493725	739.45836	1.5857466	592.33351	4.1641508	2.4212565	0.1997203
126	401317110362701			0.2245508	0.1234313	28.708383	0.1278827	5.0771443	2.7066980		
127	395817109403701			0.1497005	0.0822875	86.995102	0.1278827	33.847629	1.3533490		
128	395906109362801			0.1022954	0.0493725	1217.9314	2.5576559	1043.6352	9.5775468	3.1581606	0.1531189
129	395823109440801			0.2744510	0.4114379	147.89167	0.7161436	76.157165	16.656603		
130	395906109362801			0.0698602	0.0329150	1217.9314	2.5576559	1043.6352	4.7887734	3.6845208	0.1531189
131	395850109305201	0.0155957		0.0274451	0.0205718	147.89167	0.2813421	47.950808	0.6038018	6.3163213	0.1830770
132	395238109160801	0.0062383		0.2120758	0.2180621	100.04436	0.2429773	81.798437	2.8108018	0.2579164	0.1664336
133	401003109104401			0.2245508	0.0411437	23.923653		4.2309536	2.0820754		
134	400819109151301			0.6237524	0.2057189	36.102967		4.2309536	1.1451414		
135	401226110350301			0.1746506	0.1234313	41.757649	0.3069187	4.2309536	2.9149055		
136	395238109160801			0.0349301	0.0185147	15.659118	0.0204612	0.6205398	3.5395282	0.0578996	0.2163637
137	393434109432101			0.2495009	0.2880065	11.744338	0.3324952	0.9026034	3.0190093		
138	395238109160801			0.0324351	0.0205718	16.964044	0.0230189	0.6205398	4.0600470	0.0578996	0.1997203
139	395238109160801			0.0573852	0.0411437	20.878824	0.0358071	1.6641751	4.5805659	0.1052720	0.2163637
140	394835109243901			0.1122754	0.0288006	15.659118	0.0383648	0.3666826	2.7066980	0.0631632	0.1997203
141	394835109243901	0.0343106		0.0324351	0.0197490	15.659118	0.0204612	0.3384762	2.9149055	0.0631632	0.2163637
142	394527109162001			0.1122754	0.0740588	14.789167	0.0255765	0.2087270	4.1641508	0.0263180	0.1348112
143	393929109185001	0.0062383	0.1998168	1.3473053	1.8103270	8.2645347	0.0179035	0.3384762	4.8928772	0.0157908	0.1481259
144	395238109160801	0.0062383		0.0548902	0.0370294	20.878824	0.0409224	3.1026993	3.9559432	0.1105356	0.2163637
145	395233109151601	0.0842170		0.0748502	0.0082287	16.964044	0.0230189	0.7051589	3.9559432	0.1105356	0.2330071
146	395233109151601			0.0898203	0.0617156	19.138922	0.0409224	0.1128254	4.3723583	0.0947448	0.2163637
147	395233109151601	0.0530255		0.0474051	0.0082287	16.964044	0.0281342	0.7615716	3.6436319	0.1052720	0.2330071

	STN NO.	As umol/l	Ba umol/l	Be umol/l	B umol/l	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l
98	401330110364301										
99	401330110364301										
100	401330110364301										
101	400819109151301										
102	395737110050101										
103	400845109262601										
104	400845109262601										
105	395737110050101										
106	401136109124101										
107	401136109124101										
108	401317110362701										
109	395327110070101										
110	400857109254101										
111	395327110070101										
112	395512110031901										
113	401135109131501										
114	400759109561001										
115	401135109131501										
116	401005109151401										
117	395512110031901										
118	395625110070701										
119	401056109125801										
120	395034109342501		2.1845190		71.230342				3.7602736	0.0096525	0.3640467
121	400544109350401										
122	401003109104401										
123	401017109091701										
124	395906109362801				27752.081			1.2589305			
125	395906109362801		22.573363		33302.497			0.9441979		0.0144787	
126	401317110362701										
127	395817109403701										
128	395906109362801				59204.440			1.7310294			
129	395823109440801										
130	395906109362801		22.573363		57354.301			1.2589305		0.0144787	
131	395850109305201		21.845190		3052.7289				0.8953032		
132	395238109160801	0.0400418	2.1845190		296.02220			0.0314732	2.8649703	0.0241312	0.5460701
133	401003109104401										
134	400819109151301										
135	401226110350301										
136	395238109160801		0.1966067		17.576318				0.1969667	0.0386100	0.3094397
137	393434109432101										
138	395238109160801				18.501387						
139	395238109160801				28.677150				1.2534245	0.0241312	1.6382103
140	394835109243901				23.126734				3.0440310		0.3640467
141	394835109243901	0.0133472	0.2038884		22.201665				0.1432485	0.0241312	0.0364046
142	394527109162001				12.025901				37.602736		1.0921402
143	393929109185001	0.0133472	1.4563460		15.726179				28.649703	0.0241312	0.3640467
144	395238109160801				35.152636				2.3277884	0.0193050	
145	395233109151601				46.253469				0.5371819		
146	395233109151601				37.927844						
147	395233109151601	0.0133472			49.953746				0.3581212		

	STN NO.	Mo umol/l	Ni umol/l	Ag umol/l	Sr umol/l	V umol/l	Zn umol/l	Sn umol/l	Al umol/l	Li umol/l	Se umol/l
98	401330110364301									144.07145	
99	401330110364301									144.07145	
100	401330110364301									288.14291	
101	400819109151301									288.14291	
102	395737110050101										
103	400845109262601									288.14291	
104	400845109262601									288.14291	
105	395737110050101										
106	401136109124101									144.07145	
107	401136109124101									144.07145	
108	401317110362701									864.42875	
109	395327110070101										
110	400857109254101									864.42875	
111	395327110070101										
112	395512110031901										
113	401135109131501										
114	400759109561001										
115	401135109131501										
116	401005109151401										
117	395512110031901										
118	395625110070701										
119	401056109125801									288.14291	
120	395034109342501				0.9130335	0.0981518	0.3059039		4.4474852	48.984296	
121	400544109350401										
122	401003109104401										
123	401017109091701									144.07145	
124	395906109362801				5.0216845		0.3059039			85.002161	0.0253292
125	395906109362801	0.1042318		0.0370823	7.9890435		0.6118078			93.646448	0.0886524
126	401317110362701										
127	395817109403701										
128	395906109362801				7.9890435		0.3059039			102.29073	
129	395823109440801										
130	395906109362801	1.2507817		0.0370823	8331.4311		0.1529519			106.61287	
131	395850109305201				3.8803926					144.07145	
132	395238109160801	0.0833854			13.695503	0.0196303	1.2236157		10.377465	76.357873	
133	401003109104401										
134	400819109151301										
135	401226110350301										
136	395238109160801								0.3706237	14.407145	
137	393434109432101										
138	395238109160801								1.8531188		
139	395238109160801				2.5108422		0.3059039		1.1118713	14.407145	
140	394835109243901										
141	394835109243901						0.0458855		0.3706237	15.847860	
142	394527109162001										
143	393929109185001	0.0208463					0.4588559			5.7628583	
144	395238109160801				2.2825838		0.3059039		5.1887327	15.847860	
145	395233109151601				1.2554211				0.3706237	15.847860	
146	395233109151601										
147	395233109151601				1.3695503					12.966431	

	STN NO.	Ti umol/l	Zr umol/l	Hg umol/l	I mmol/l	Br mmol/l	U umol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.
98	401330110364301								436.02649	445.55432	0.9786157
99	401330110364301								440.78441	431.45114	1.0216322
100	401330110364301								483.15078	476.77800	1.0133663
101	400819109151301								102.82225	100.99150	1.0181277
102	395737110050101								59.523946	61.678106	0.9650741
103	400845109262601								197.26075	186.22871	1.0592391
104	400845109262601								47.308654	47.598841	0.9939034
105	395737110050101								537.53909	521.48682	1.0307817
106	401136109124101								83.464889	85.593260	0.9751338
107	401136109124101								78.950559	74.603041	1.0582753
108	401317110362701								523.65921	528.67050	0.9905209
109	395327110070101								52.849522	52.784560	1.0012306
110	400857109254101								129.48568	131.36245	0.9857130
111	395327110070101								106.97352	108.56168	0.9853708
112	395512110031901								938.77472	925.50075	1.0143424
113	401135109131501								27.225165	27.302990	0.9971495
114	400759109561001								1048.6260	1041.6265	1.0067197
115	401135109131501								16.756752	16.585239	1.0103413
116	401005109151401								43.548704	43.399221	1.0034443
117	395512110031901								216.47187	217.69007	0.9944039
118	395625110070701								115.43226	117.56349	0.9818716
119	401056109125801								258.90729	257.93793	1.0037581
120	395034109342501				0.0015759	0.0050060		7.69E-16	18.433602	17.797801	1.0357235
121	400544109350401								569.25344	575.71198	0.9887816
122	401003109104401								12.290602	12.482558	0.9846221
123	401017109091701								33.881986	34.100337	0.9935968
124	395906109362801						0.0008402	8.60E-15	654.12215	630.81059	1.0369549
125	395906109362801	0.1461377	0.0986625				0.0004201	8.60E-14	741.24266	710.98703	1.0425543
126	401317110362701								29.532231	29.480869	1.0017421
127	395817109403701								87.586961	87.109333	1.0054830
128	395906109362801						0.0016804	4.98E-14	1220.7924	1187.2405	1.0282603
129	395823109440801								149.97959	152.03249	0.9864969
130	395906109362801	0.1252609	0.2192501				0.0016804	5.43E-14	1220.6946	1194.7745	1.0216945
131	395850109305201					0.0775931			148.26904	155.38581	0.9541994
132	395238109160801					0.1501802			101.14762	107.02074	0.9451216
133	401003109104401								24.455042	24.380877	1.0030419
134	400819109151301								37.761910	36.094916	1.0461836
135	401226110350301								42.660731	42.747440	0.9979715
136	395238109160801			0.0014955					15.786469	16.949315	0.9313927
137	393434109432101								13.151849	13.334931	0.9862704
138	395238109160801								17.093077	17.390886	0.9828755
139	395238109160801					0.0050060			21.111689	21.141491	0.9985903
140	394835109243901								15.979635	16.014189	0.9978422
141	394835109243901								15.783947	16.422380	0.9611242
142	394527109162001								15.187412	14.558011	1.0432339
143	393929109185001					0.0012515		3.17E-15	14.597703	14.136464	1.0326275
144	395238109160801					0.0075090			21.103586	21.715695	0.9718125
145	395233109151601					0.0025030			17.153221	18.219133	0.9414949
146	395233109151601								19.482917	19.283092	1.0103626
147	395233109151601								17.103447	17.565731	0.9736826

	STN NO.	Alk.Diff. meq/l
98	401330110364301	-0.738933
99	401330110364301	-0.139410
100	401330110364301	0.0669722
101	400819109151301	-0.005224
102	395737110050101	-0.048847
103	400845109262601	-0.009564
104	400845109262601	0.0140491
105	395737110050101	0.0638534
106	401136109124101	0.0541811
107	401136109124101	-367.8942
108	401317110362701	0.0892439
109	395327110070101	-0.079778
110	400857109254101	-0.095179
111	395327110070101	0.0587457
112	395512110031901	0.0319700
113	401135109131501	-0.037662
114	400759109561001	0.0947777
115	401135109131501	-0.010158
116	401005109151401	-0.023356
117	395512110031901	0.0088247
118	395625110070701	-0.110984
119	401056109125801	-0.112937
120	395034109342501	-18.99032
121	400544109350401	-0.021814
122	401003109104401	0.0491474
123	401017109091701	0.0097433
124	395906109362801	0.0253222
125	395906109362801	0.0660415
126	401317110362701	0.0039121
127	395817109403701	0.0225069
128	395906109362801	0.1605266
129	395823109440801	-32.68667
130	395906109362801	9.1918192
131	395850109305201	-0.069513
132	395238109160801	8.5923528
133	401003109104401	0.0693760
134	400819109151301	-0.039875
135	401226110350301	0.0699647
136	395238109160801	-0.066346
137	393434109432101	-0.036014
138	395238109160801	0.0263151
139	395238109160801	0.0138762
140	394835109243901	-0.034463
141	394835109243901	0.0375951
142	394527109162001	0.0257761
143	393929109185001	0.0579250
144	395238109160801	-0.075440
145	395233109151601	-0.031782
146	395233109151601	-0.067716
147	395233109151601	0.0913302

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
148	395755108211400	CO	124GRRV	G	1260	384.0	75-08-21	20	975	8.7	0.0454444	10.031072
149	395238109160801	UT	124GRRV	G	1250	381.0	76-11-12	22	1720			7.8929752
150	395310108050400	CO	124GRRV	G	1180	359.7	75-09-18	15	1490			16.225559
151	395548109080701	UT	124PCCK	P	1170	356.6	75-11-12	13.5	1630	9	0.0227222	9.7912857
152	395548109080701	UT	124PCCK	P	1170	356.6	75-06-26	14.5	1600	10.7		10.170947
153	395548109080701	UT	124PCCK	P	1170	356.6	76-09-14	14.5	1680	8	0.2135887	9.6314280
154	395238109160801	UT	124GRRV	G	1130	344.4	76-11-11	21.5	1800			10.011090
155	400146109064601	UT	124PCCK	P	1100	335.3	75-08-22		21000			120.29293
156	394229109325601	UT	124DGCK	D	1090	332.2	78-03-22	16.5	900	8.1	0.0817999	4.5959096
157	400218108170600	CO	124GRRV	G	1060	323.1	75-11-23	16	3570	8.4	0.2726665	30.372968
158	395712108243402	CO	124GRRV	G	1030	313.9	75-07-23	18	1030	8.7	0.0363555	8.0128685
159	400757110540401	UT	124GRRV	G	1000	304.8	71-01-25		590	8.9		7.7930641
160	394835109243901	UT	124DGCK	D	860	262.1	78-05-05	23.5	1350	9	0.0272666	11.969347
161	395255108154200	CO	124GRRV	G	810	246.9	75-09-09	16	1510	8.9	0.0272666	10.170947
162	394527109162001	UT	124DGCK	D	800	243.8	78-03-26	10		9.2	0.0295388	20.781504
163	395021109044501	UT	124DGCK	D	798	243.2	78-05-23	16.5	3680	7.4	0.7043885	7.9928863
164	395549108060900	CO	124GRRV	G	790	240.8	76-01-26	11	850	8.3	0.0863444	7.7131353
165	400218108170600	CO	124GRRV	G	772	235.3	75-11-22	14.5	1350	8	0.2726665	11.869436
166	395238109160801	UT	124GRRV	G	765	233.2	76-07-20	25	1970	8.6	0.0568055	10.270858
167	394835109243901	UT	124DGCK	D	764	232.9	78-04-03	18	10900	9.2	0.0863444	61.345402
168	394904109363601	UT	124GRRV	G	711	216.7	71-08-31	16	1490	8.7	0.0499888	11.369880
169	394904109363601	UT	124GRRV	G	711	216.7	74-08-20	18	1450	9.3	0.0113611	10.810378
170	394540108191201	CO	124GRRV	G	655	199.6	75-06-12	17	3000	7.9	0.8861662	31.571901
171	395614109111401	UT	124PCCK	P	650	198.1	75-06-26	17.5	6070	7.8	0.3181109	9.3516770
172	395614109111401	UT	124PCCK	P	650	198.1	74-12-13	15.5	5600	7.5	0.8407218	12.049276
173	395614109111401	UT	124PCCK	P	650	198.1	75-05-13	19	6000	8	0.2272221	10.350787
174	395614109111401	UT	124PCCK	P	650	198.1	75-12-09	15.5	6070	8.3	0.1317888	11.889418
175	395614109111401	UT	124PCCK	P	650	198.1	76-09-17	18	6100	8.4	0.0636221	7.2935087
176	395614109111401	UT	124PCCK	P	650	198.1	74-11-25	17	5900	7.5	0.8634440	12.189151
177	395136108210000	CO	124GRRV	G	640	195.1	75-12-13	15	1400	8.3	0.1022499	9.2517659
178	395707110011001	UT	124GRRV	G	631	192.3	69-12-19		4400	9.2	0.0408999	28.574568
179	395500109124401	UT	124PCCK	P	627	191.1	75-06-25	17.5	2900	8.3	0.2204054	19.762411
180	395500109124401	UT	124PCCK	P	627	191.1	74-12-11	16.5	1270	8.4	0.0727110	8.3325840
181	395500109124401	UT	124PCCK	P	627	191.1	76-09-20	19	2600	8.9	0.0477166	16.765079
182	395603109120801	UT	124PCCK	P	620	189.0	74-11-25	17.5	4700	8	0.5226108	23.179370
183	395603109120801	UT	124PCCK	P	620	189.0	75-11-24	16.5	2400	9	0.0431722	19.122980
184	395603109120801	UT	124PCCK	P	620	189.0	74-12-13	16.5	4200	8.2	0.2067721	14.826804
185	395603109120801	UT	124PCCK	P	620	189.0	76-09-17	17.5	2400	9.2	0.0113611	7.9928863
186	395603109120801	UT	124PCCK	P	620	189.0	75-03-17	16.5	4200	8.8	0.0840721	24.178481
187	395603109120801	UT	124PCCK	P	620	189.0	75-06-26	17		8.2	0.2499443	17.864100
188	395530109134901	UT	124PCCK	P	612	186.5	75-04-04	15	2090	9.2	0.0295388	20.981326
189	395530109134901	UT	124PCCK	P	612	186.5	75-05-14	19	2200	9.4	0.0181777	20.981326
190	395530109134901	UT	124PCCK	P	612	186.5	74-12-30			10.7		17.724225
191	395530109134901	UT	124PCCK	P	612	186.5	76-09-20	16.5	2200	9.5	0.0159055	23.179370
192	402418110040801	UT	124GRRV	G	600	182.9	71-11-22		353	7.8	0.0999777	2.8774390
193	395549108060900	CO	124GRRV	G	560	170.7	76-01-23	11	800	8.5	0.0499888	7.1736154
194	395453109111001	UT	124PCCK	P	540	164.6	75-12-11	13	6460	9.5	0.0431722	60.146469
195	395453109111001	UT	124PCCK	P	540	164.6	76-03-17	15.5	3370	9.6	0.0113611	21.181148
196	395453109111001	UT	124PCCK	P	540	164.6	75-06-25	17	2050	8.7	0.0590777	13.088351
197	395453109111001	UT	124PCCK	P	540	164.6	76-06-29	18.5	2350	8.5	0.1136110	16.305488

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(asN) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l
148	395755108211400	9.3416588	0.3666104					0.0014278		0.0015794
149	395238109160801	7.8666601	0					0.0007139		0.0003158
150	395310108050400	16.224986	0					0.0021418		0.0006317
151	395548109080701	8.3583263	0.7165567	0.2498804	0.0007139			0.0007139		0.0064229
152	395548109080701	10.161102	0	0.1784860	0.0007139			0.0007139		0.0042117
153	395548109080701	9.6694363	0	0.1927648		0.0071394	0.0070962	0.0071394		0.0015794
154	395238109160801	9.9972138	0					0.0007139		
155	400146109064601	116.03323	2.1663344					0.0007139		0.0006317
156	394229109325601	4.5888850	0					0.0057115		
157	400218108170600	30.319419	0					0.0057115		0.0015794
158	395712108243402	6.7194388	0.6499003					0.0014278		
159	400757110540401	6.2277725	0.7998773							
160	394835109243901	11.472212	0.2499616					0.0021418		0.0009476
161	395255108154200	10.161102	0	0.0121370						0.0003158
162	394527109162001	20.813871	0					0.0142788		
163	395021109044501	8.0305488	0	0.0492621		0.0007139	0.0006451	0.0007139		
164	395549108060900	7.7027713	0					0.0078533		0.0003158
165	400218108170600	11.799990	0							0.0003158
166	395238109160801	9.8333251	0.1999693							0.0022111
167	394835109243901	19.666650	20.830139					0.0035697		
168	394904109363601	9.1777701	1.0831672					0.0049976		0.0006317
169	394904109363601	8.6861038	1.0331749			0.0021418	0.0020966	0.0021418		0.0012635
170	394540108191201	31.630529	0					0.0007139		0.0006317
171	395614109111401	9.3416588	0	0.1784860		0.0014278	0.0014514	0.0014278		0.0018953
172	395614109111401	12.127767	0	0.2070437	0.0007139	0.0007139	0.0006451	0.0014278		
173	395614109111401	10.324991	0	0.1570676						0.0126353
174	395614109111401	11.963878	0	0.1356493						0.0012635
175	395614109111401	7.2111051	0.0833205	0.1570676						0.0003158
176	395614109111401	12.127767	0	0.1856254	0.0007139			0.0007139		0.0006317
177	395136108210000	9.3416588	0					0.0007139		0.0006317
178	395707110011001	10.652768	8.9986202							
179	395500109124401	14.094432	2.8328989	0.0685386	0.0014278	0.0007139	0.0006451	0.0021418		0.0026323
180	395500109124401	8.3583263	0	0.0856732						0.0022111
181	395500109124401	7.3749938	4.6659512	0.0785338						
182	395603109120801	23.108314	0	0.2070437						0.0048435
183	395603109120801	15.077765	1.9996933	0.0713944		0.0014278	0.0014514	0.0014278		0.0015794
184	395603109120801	14.913876	0	0.1999043	0.0014278	0.0007139	0.0006451	0.0021418		0.0003158
185	395603109120801	6.8833275	0.5665797	0.0564015						0.0015794
186	395603109120801	20.813871	1.6330829	0.1642071	0.0007139					0.0103189
187	395603109120801	17.863874	0	0.0999521	0.0007139	0.0021418	0.0020966	0.0028557		0.0018953
188	395530109134901	11.799990	4.6659512	0.0599712		0.0007139	0.0006451	0.0007139		0.0022111
189	395530109134901	13.602766	3.6661045	0.0528318						0.0032641
190	395530109134901	12.127767	2.8328989	0.0656828	0.0007139	0.0171346	0.0177405	0.0178486		0.0026323
191	395530109134901	12.291656	5.4991567	0.0713944		0.0007139	0.0006451	0.0007139		0.0029482
192	402418110040801	2.7861087	0					0.0021418		
193	395549108060900	6.2277725	0.4665951					0.0042836		
194	395453109111001	21.633315	19.330369	0.3426931		0.0078533	0.0079026	0.0078533		0.0147412
195	395453109111001	19.502761	0.8665337	0.3998086		0.0042836	0.0043544	0.0042836		0.0147412
196	395453109111001	10.816657	1.1164954	0.0492621						0.0009476
197	395453109111001	13.602766	1.3664571	0.0385529			0.0006451	0.0014278		

	STN NO.	H2S	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
148	395755108211400			0.0598802	0.0658300	10.874387	0.0076729	0.3384762	0.1145141	0.9474482	0.2163637
149	395238109160801			0.0324351	0.0082287	15.224142	0.0179035	0.3666826	3.7477357	0.0473724	0.1830770
150	395310108050400			0.0274451	0.0123431	16.964044	0.0358071	0.3384762	0.1353349	0.5105693	0.1314825
151	395548109080701	0.3119151		0.2470059	0.9051635	13.919216	0.0869603	5.9233351	1.0202169	0.1105356	0.3328673
152	395548109080701	0.3119151		0.2320359	0.9051635	15.224142	0.0997485	6.2053986	0.8952924	0.1157992	0.2995805
153	395548109080701	0.3056768	1.4153692	0.2495009	1.1108825	13.919216	0.0869603	5.0771443	1.3533490	0.0894812	0.3162239
154	395238109160801			0.0274451	0.0082287	15.659118	0.0204612	1.0718415	2.6025942	0.0736904	0.1997203
155	400146109064601		4.9954208	0.1646706	1.5223205	243.58628	0.4603780	98.722251	3.3313206	0.5789961	0.0549231
156	394229109325601			0.4241516	0.6171569	8.2645347	0.0230189	0.2623191	2.8108018	0.0105272	0.1664336
157	400218108170600			0.5489021	1.8103270	35.233016	0.0332495	6.2053986	1.8738678	0.1473808	0.3495106
158	395712108243402			0.0673652	0.0246862	10.874387	0.0230189	0.2820635	1.2492452	0.6842681	0.1830770
159	400757110540401			0.2495009	0.5348693	9.1344857		0.3384762	1.2492452		
160	394835109243901			0.0424151	0.0164575	15.659118	0.0204612	0.9026034	1.5615565	0.1000084	0.2163637
161	395255108154200			0.5988023	2.4686278	10.004436	0.0153459	0.4795080	2.3943867	0.1631716	0.3994407
162	394527109162001			0.3742514	3.2503600	33.058138	0.1176521	1.1000479	8.5365091	0.0210544	0.1048532
163	395021109044501		0.3247023	3.2435129	5.7601316	30.013310	0.0485954	0.9308098	18.738678	0.0421088	0.3162239
164	395549108060900			0.4491017	0.6583007	6.9596081	0.0153459	0.1438524	0.5725707	0.2000168	0.2829372
165	400218108170600			0.7235528	2.4274840	10.004436	0.0076729	0.2171889	2.3943867	0.0263180	0.3495106
166	395238109160801	0.0343106		0.0798403	0.0493725	19.573897	0.0460378	2.5949849	3.6436319	0.1157992	0.2163637
167	394835109243901			0.1646706	12.343139	134.84240	0.2557655	7.8977801	44.764621	0.1157992	0.1997203
168	394904109363601			0.0174650	0.0288006	16.094093	0.0230189	0.2623191	2.2902829	0.0473724	0.2496504
169	394904109363601	0.6238303		0.0374251	0.0123431	14.789167	0.0255765	0.1635968	2.1861791		0.2829372
170	394540108191201			0.3243512	0.9463073	37.407893	0.0537107	7.3336530	0.5413396	0.7895401	0.1997203
171	395614109111401	3.1191515		1.6716566	7.4058835	56.546816	0.1099792	2.2565086	31.231131	0.0526360	0.4160841
172	395614109111401	4.6787273		1.5968063	6.5830076	52.197061	0.0869603	3.1026993	28.108018	0.0526360	0.4493708
173	395614109111401	0.3119151		1.6467065	6.1715696	52.197061	0.1048638	2.2000959	28.108018	0.0526360	0.3994407
174	395614109111401	2.4953212		1.1976047	6.9944455	52.197061	0.0997485	2.5103658	28.108018	0.0631632	0.4160841
175	395614109111401	2.9943855	0.9158271	1.7215568	6.9944455	56.546816	0.1253251	2.1154768	32.272168	0.0631632	0.3994407
176	395614109111401	1.9338739		1.5968063	5.7601316	52.197061	0.1509017	3.9488900	27.066980	0.0473724	0.4327275
177	395136108210000			0.6986027	2.4686278	10.004436	0.0102306	0.1946238	3.3313206	0.0789540	0.4660142
178	395707110011001			0.7485029	0.2468627	43.497551	0.3836483	9.0260344	4.5805659		
179	395500109124401	10.605115		0.0474051	0.1069738	27.403457	0.0485954	3.9488900	2.6025942	0.1105356	0.2662938
180	395500109124401	0.1029320		0.2744510	0.3209216	13.049265	0.0869603	1.2692860	2.3943867	0.0526360	0.2995805
181	395500109124401	2.6512788	1.7483973	0.0349301	0.0658300	29.578334	0.0562684	1.5513496	5.2051885	0.1368536	
182	395603109120801	6.8621334		0.3493013	0.9463073	47.847306	0.2071701	16.359687	7.3913677	0.0736904	0.4493708
183	395603109120801	0.9045539		1.8712574	0.1440032	28.708383	0.0485954	6.7695258	3.6436319	0.0631632	0.2496504
184	395603109120801	2.9008109		0.4241516	1.1520263	47.847306	0.0818449	11.000479	12.492452	0.1210628	0.4327275
185	395603109120801	5.6144728	0.4828906	0.0449101	0.0905163	25.228579	0.0460378	1.4103178	7.7036790	0.0684268	0.2496504
186	395603109120801	7.4859638		0.1896207	0.6994445	41.322673	0.1099792	15.231433	4.1641508	0.1210628	0.3827974
187	395603109120801	4.9906425		0.0923153	0.3456078	37.407893	0.0690567	11.282543	4.2682545	0.1157992	0.3661540
188	395530109134901	0.0062383		0.0424151	0.9051635	22.618726	0.1048638	0.9026034	1.2492452	0.1052720	0.1048532
189	395530109134901	0.2807236		0.0324351	0.0411437	24.793604	0.0358071	0.8743970	1.5615565	0.1105356	0.1414686
190	395530109134901	0.0031191		0.0998003	0.0452581	20.878824	0.0613837	0.9872225	1.5615565	0.0789540	0.1031888
191	395530109134901	0.0686213	1.8316543	0.0249500	0.0123431	25.228579	0.0358071	0.9026034	0.6350330	0.1105356	0.1264895
192	402418110040801			1.2974051	0.4073235	0.3175321	0.1099792	0.0310269	0.5413396	0.0315816	0.1581119
193	395549108060900			0.3742514	0.6583007	6.5246326	0.0153459	0.1918032	0.6038018	0.2105440	0.2829372
194	395453109111001	2.3081721		0.0249500	0.0658300	73.945836	0.1329981	8.7439708	3.0190093	1.1053562	0.2829372
195	395453109111001	0.0935745		0.0723552	0.1728039	34.363065	0.0767296	3.1026993	4.8928772	0.4263516	0.2496504
196	395453109111001	0.5614472		0.0773453	0.1728039	20.443849	0.0409224	1.4949369	3.1231131	0.2684436	0.2330071
197	395453109111001	0.0467872	0.4329364	0.1621756	0.2838922	24.358628	0.0434801	1.2128733	5.2051885	0.1421172	0.2163637

	STN NO.	As umol/l	Ba umol/l	Be umol/l	B umol/l	Cr umol/l	Co umol/l	Cu umol/l	Fe umol/l	Pb umol/l	Mn umol/l
148	395755108211400	0.2669457	3.6408650		19.426456				1.0743638		
149	395238109160801				12.950971						
150	395310108050400	0.5605859			120.25901				60.880620		1.0921402
151	395548109080701	16.016742	2.1845190		481.03607				3.7602736		0.3640467
152	395548109080701	12.679921	1.4563460		471.78538			0.0314732	1.3429548		0.2730350
153	395548109080701	10.677828	2.1845190		416.28122				3.2230916		
154	395238109160801				34.227567						
155	400146109064601				14801.110						
156	394229109325601				58.279370				0.7162425		
157	400218108170600	1.0677828	5.0972110		25.901942				6.4461833		0.0910116
158	395712108243402	0.0400418			13.876040				0.3581212	0.0096525	0.3640467
159	400757110540401										
160	394835109243901				42.553191						
161	395255108154200	0.0667364			15.726179				42.974555		1.8202337
162	394527109162001				166.51248				0.7162425		1.0921402
163	395021109044501	0.0667364			71.230342			0.0786831	37.602736	0.0193050	12.741636
164	395549108060900	0.0266945	2.9126920		24.051803				1.0743638	0.0096525	0.3640467
165	400218108170600	1.2012557			19.426456				0.7162425		0.3640467
166	395238109160801				39.777983			0.0314732	2.5068490	0.0627413	
167	394835109243901				1110.0832				13.071427		0.7280934
168	394904109363601				26.827012				0.5371819		0.3640467
169	394904109363601				29.602220				0.3581212		
170	394540108191201	0.0800837	4.3690380		758.55689				1.9696671	0.0096525	0.5460701
171	395614109111401	0.0266945			342.27567				1.6115458		0.7280934
172	395614109111401	0.0133472		1.1096094	370.02775		0.0339367		1.2534245		
173	395614109111401	0.0266945	0.1674797		342.27567				3.2230916	0.0096525	0.7280934
174	395614109111401				277.52081				5.7299407		0.7280934
175	395614109111401	0.0133472			351.52636				3.9393342		1.0921402
176	395614109111401	0.0400418			351.52636				0.3581212	0.0096525	
177	395136108210000	0.0266945			12.950971				0.7162425		
178	395707110011001										
179	395500109124401	1.2679921			212.76595				1.4324851		
180	395500109124401	0.8675735			111.00832		0.0339367		1.4324851		
181	395500109124401	0.4538077			240.51803		0.0339367	0.2832593	5.0136981		0.3640467
182	395603109120801	0.1334728	2.1845190		638.29787		0.0339367	0.1888395	1.9696671	0.0096525	0.3640467
183	395603109120801	2.8029299			203.51526				1.7906064	0.0144787	0.3640467
184	395603109120801	0.0133472	2.1845190		740.05550		0.0339367		1.4324851	0.0096525	0.3640467
185	395603109120801	1.3347285			166.51248				1.6115458		0.3640467
186	395603109120801	0.0800837	1.4563460		758.55689	0.5769674			1.0743638		0.9101168
187	395603109120801	2.0020928	4.3690380		601.29509			0.0314732	1.0743638		1.0921402
188	395530109134901	0.0400418			101.75763			0.6924117	1.0743638	0.0096525	
189	395530109134901	0.0533891	0.0873807		81.406105			0.0472098	7.3414865	0.0096525	
190	395530109134901	0.0266945			84.181313			0.4406256	1.7906064		
191	395530109134901	0.0533891			92.506938		0.0339367	0.2045762	4.1183949		
192	402418110040801								0.3581212		1.0921402
193	395549108060900		2.9126920		23.126734					0.0096525	0.3640467
194	395453109111001	0.1601674		1.1096094				0.0472098	1.2534245	0.0096525	
195	395453109111001	0.1334728			81.406105			0.1888395	2.5068490	0.0096525	0.5460701
196	395453109111001	0.8008371	1.4563460		222.01665				3.4021523	0.0096525	
197	395453109111001	0.4004185			175.76318			0.0629465	5.0136981		0.7280934

	STN NO.	Mo umol/l	Ni umol/l	Ag umol/l	Sr umol/l	V umol/l	Zn umol/l	Sn umol/l	Al umol/l	Li umol/l	Se umol/l
148	395755108211400	0.1355013			6.2771056				2.5943663	18.729289	
149	395238109160801										
150	395310108050400	0.2918490			1.2554211				1.1118713	31.695721	
151	395548109080701	1.6677089	1.1925042		47.934261	0.1570428			1.1118713	96.527877	
152	395548109080701	0.8338544			52.499429				1.4824950	97.968592	
153	395548109080701	0.5628517	0.1873935		54.782013	0.1766732	0.3059039		2.5943663	103.73145	
154	395238109160801										
155	400146109064601										
156	394229109325601										
157	400218108170600	0.0833854			103.85756		0.3059039			27.373577	
158	395712108243402				5.2499429		0.3059039		8.1537228	28.814291	0.0126646
159	400757110540401										
160	394835109243901										
161	395255108154200				43.369093					4.3221437	
162	394527109162001										
163	395021109044501	0.1146549			77.607852		4.5885591			37.458579	
164	395549108060900	0.0208463			13.695503				0.3706237	8.6442875	
165	400218108170600	0.4586199			136.95503				0.7412475	12.966431	
166	395238109160801				2.0543254		0.6118078			15.847860	
167	394835109243901										
168	394904109363601										
169	394904109363601				1.2554211		0.1070663			18.729289	
170	394540108191201				49.075553					144.07145	
171	395614109111401		0.0851788		148.36795	0.0588910				132.54574	
172	395614109111401		0.1022146		125.54211	0.0392607	0.3059039			142.63074	
173	395614109111401	0.0104231			148.36795		0.6118078		0.3706237	144.07145	
174	395614109111401	0.2397331			110.70531	0.0785214	2.2942795		7.4124753	139.74931	
175	395614109111401				136.95503		0.6118078	0.5055185	1.1118713	139.74931	
176	395614109111401	0.0104231			125.54211	0.0588910	0.3059039			138.30860	
177	395136108210000	0.0104231			84.455603					10.085002	
178	395707110011001										
179	395500109124401	0.0104231	0.0851788		5.9347181	0.0588910			1.8531188	67.713585	
180	395500109124401	0.1042318	0.4429301		17.119379		0.7647598			36.017864	0.0126646
181	395500109124401	0.0312695			4.1086509	0.0392607			2.2237426	76.357873	
182	395603109120801	0.0312695	0.1192504		54.782013		0.4588559		0.7412475	135.42717	
183	395603109120801	0.0104231	0.0851788		12.554211	0.5496500			0.7412475	87.883590	
184	395603109120801	0.0208463	0.3066439		54.782013	0.3926072	0.3059039			138.30860	
185	395603109120801		0.0340715		9.8151107	0.0196303	0.4588559	0.3370123	1.4824950	97.968592	
186	395603109120801		0.0511073		33.097466	0.0981518			0.7412475	128.22359	
187	395603109120801		0.1022146		23.967130		0.3059039		1.1118713	103.73145	
188	395530109134901	0.0625390	0.0340715		1.0271627		0.0917711		1.1118713	63.391442	
189	395530109134901				1.7119379		0.9177118		1.8531188	64.832156	
190	395530109134901	0.3126954	0.2044293		0.6847751	0.0981518	0.3059039		0.7412475	51.865725	
191	395530109134901	0.0104231			1.1412919		0.9177118		1.8531188	66.272871	
192	402418110040801										
193	395549108060900	0.0104231			12.554211				0.3706237	10.085002	
194	395453109111001	0.0938086	0.0340715		2.7391006	0.0785214	0.4588559		2.2237426	76.357873	
195	395453109111001	0.0416927	0.0681431		3.5380050	0.1177821	0.9177118		0.3706237	83.561446	
196	395453109111001		0.1022146		13.695503	0.0392607			1.4824950	102.29073	
197	395453109111001	0.0416927			11.412919	0.0981518	0.4588559			97.968592	

	STN NO.	Ti umol/l	Zr umol/l	Hg umol/l	I mmol/l	Br mmol/l	U umol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.
148	395755108211400					0.0012515			11.133481	11.546025	0.9642696
149	395238109160801								15.323374	15.802501	0.9696802
150	395310108050400					0.0012515			17.079428	17.345274	0.9846732
151	395548109080701						0.0088224	1.45E-15	16.310515	17.865590	0.9129569
152	395548109080701						0.0050414		17.598290	18.282730	0.9625635
153	395548109080701					0.0075090	0.0054615	1.90E-15	16.726943	17.504751	0.9555658
154	395238109160801								15.750927	16.361810	0.9626640
155	400146109064601								247.42064	226.25682	1.0935389
156	394229109325601								10.370170	10.490359	0.9885429
157	400218108170600					0.0037545			39.984724	40.473483	0.9879239
158	395712108243402					0.0012515			11.081509	11.477690	0.9654825
159	400757110540401								10.703226	10.630030	1.0068857
160	394835109243901								15.797325	16.095072	0.9815007
161	395255108154200					0.0012515			16.154643	15.602401	1.0353946
162	394527109162001								40.425014	38.975625	1.0371870
163	395021109044501					0.0025030		1.13E-15	48.069194	46.443162	1.0350112
164	395549108060900					0.0012515			9.1897592	9.2021460	0.9986539
165	400218108170600					0.0012515			16.314183	16.901716	0.9652382
166	395238109160801					0.0050060			19.878361	20.268907	0.9807317
167	394835109243901								160.11379	158.88822	1.0077134
168	394904109363601								16.209644	16.260138	0.9968946
169	394904109363601								14.914280	15.346334	0.9718464
170	394540108191201					0.0112635			40.002921	40.777773	0.9809981
171	395614109111401						0.0013863		74.811876	74.123084	1.0092925
172	395614109111401							9.95E-16	68.643649	71.420647	0.9611177
173	395614109111401						0.0002100	5.88E-16	67.938477	68.819555	0.9871972
174	395614109111401						0.0001260	8.14E-16	68.680910	70.678983	0.9717303
175	395614109111401					0.1163896	0.0002940	5.43E-16	74.104146	74.016486	1.0011843
176	395614109111401						0.0003360	8.14E-16	67.061839	70.319374	0.9536751
177	395136108210000					0.0012515			16.349128	16.187985	1.0099545
178	395707110011001								45.871931	46.761734	0.9809715
179	395500109124401	0.4175365					0.0054615		27.760810	29.027025	0.9563780
180	395500109124401						0.0235265		14.326971	14.443279	0.9919472
181	395500109124401					0.0025030	0.0063017		29.836123	28.863659	1.0336916
182	395603109120801						0.0046212	4.52E-16	50.645693	54.395483	0.9310643
183	395603109120801						0.0050414	3.17E-16	32.787500	33.242933	0.9862998
184	395603109120801						0.0005461	4.98E-16	51.081507	50.933251	1.0029107
185	395603109120801					0.0025030	0.0033609	3.17E-16	25.545470	24.878989	1.0267889
186	395603109120801						0.0008822		43.210783	47.859278	0.9028715
187	395603109120801						0.0039070		38.352797	37.798952	1.0146523
188	395530109134901						0.0006301		24.618747	24.487692	1.0053518
189	395530109134901						0.0010923		24.976569	25.089372	0.9955039
190	395530109134901						0.0017224		21.230325	21.913515	0.9688233
191	395530109134901						0.0012603	1.81E-16	25.338973	25.462575	0.9951457
192	402418110040801								3.8369689	4.0227268	0.9538228
193	395549108060900					0.0012515			8.6050831	8.7835664	0.9796798
194	395453109111001						0.0046212		74.260395	76.033815	0.9766759
195	395453109111001					0.0075090	0.0063017		34.930113	34.495954	1.0125858
196	395453109111001						0.0046212		20.985070	21.097958	0.9946493
197	395453109111001					0.0037545	0.0042011		25.294244	28.070855	0.9010856

	STN NO.	Alk.Diff. meq/l
148	395755108211400	-0.043807
149	395238109160801	-0.007835
150	395310108050400	0.0005727
151	395548109080701	-0.000154
152	395548109080701	0.0098452
153	395548109080701	0.0788913
154	395238109160801	-0.038008
155	400146109064601	-0.072966
156	394229109325601	-0.084237
157	400218108170600	0.0535488
158	395712108243402	-0.006370
159	400757110540401	0.0613839
160	394835109243901	-0.074460
161	395255108154200	0.0098452
162	394527109162001	-0.078491
163	395021109044501	0.0100181
164	395549108060900	0.0103639
165	400218108170600	0.0694460
166	395238109160801	0.0257964
167	394835109243901	0.0021808
168	394904109363601	0.0581827
169	394904109363601	-0.025742
170	394540108191201	-0.058628
171	395614109111401	0.0002269
172	395614109111401	-0.023600
173	395614109111401	-0.169506
174	395614109111401	-0.087072
175	395614109111401	0.0710562
176	395614109111401	0.0458285
177	395136108210000	-0.089892
178	395707110011001	0.0984437
179	395500109124401	-0.069340
180	395500109124401	-0.150565
181	395500109124401	0.0463511
182	395603109120801	-0.054680
183	395603109120801	-0.047280
184	395603109120801	-0.147584
185	395603109120801	-0.007316
186	395603109120801	0.0387027
187	395603109120801	0
188	395530109134901	-0.085372
189	395530109134901	-0.087039
190	395530109134901	0.0048558
191	395530109134901	-0.030192
192	402418110040801	0
193	395549108060900	0.0126526
194	395453109111001	-0.077967
195	395453109111001	-0.153738
196	395453109111001	-0.003153
197	395453109111001	0.0778539

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
198	395453109111001	UT	124PCCK	P	540	164.6	74-12-12	15.5	2000	7.4	1.3860549	15.726003
199	395453109111001	UT	124PCCK	P	540	164.6	74-11-27	16	2050	8.2	0.2204054	15.686039
200	395614109111401	UT	124PCCK	P	540	164.6	83-12-08	18	5900	7.4		
201	395453109111001	UT	124PCCK	P	532	162.2	75-08-16	19.5	2150			15.086572
202	395500109124401	UT	124PCCK	P	532	162.2	75-12-10	14.5	2640	8.4	0.1363332	15.546163
203	395453109111001	UT	124PCCK	P	505	153.9	75-04-03	14.5	1950	9	0.0227222	10.690485
204	395614109111401	UT	124PCCK	P	505	153.9	83-08-31	18	3800	9.6		
205	395617109134402	UT	124PCCK	P	504	153.6	76-06-26	16.5	2000	8.8	0.0545333	15.186484
206	395617109134402	UT	124PCCK	P	504	153.6	74-11-27	14.5		9.2	0.0136333	10.510645
207	395617109134402	UT	124PCCK	P	504	153.6	75-03-13	15	2050	8.9	0.0340833	12.109222
208	395617109134402	UT	124PCCK	P	504	153.6	76-09-19	15	1950	8.7	0.0431722	9.9911079
209	395617109134402	UT	124PCCK	P	504	153.6	77-04-24	16.5	1840	8.2	0.1022499	7.3734376
210	395617109134402	UT	124PCCK	P	504	153.6	74-10-18		2370	7.8		8.6722816
211	395617109134402	UT	124PCCK	P	504	153.6	74-12-11	14.5	2060	8.3	0.1113388	9.9111790
212	395617109134402	UT	124PCCK	P	504	153.6	75-11-13	14	1800	9.7	0.0045444	10.570592
213	395617109134402	UT	124PCCK	P	504	153.6	74-10-19		2050	8.9		10.710467
214	395617109134402	UT	124PCCK	P	504	153.6	75-09-12	16	1800	8	0.1817776	8.2526551
215	395617109134402	UT	124PCCK	P	504	153.6	75-09-11	16	2200	8.2	0.1022499	7.3534554
216	395733109095401	UT	124PCCK	P	488	148.7	75-05-13	16	5100	7.6	0.4998886	8.9320504
217	395733109095401	UT	124PCCK	P	488	148.7	76-06-24	15	5200	8	0.2022276	9.1118904
218	395733109095401	UT	124PCCK	P	488	148.7	75-11-14	13.5	5120	7.3	0.9997773	9.0319615
219	395733109095401	UT	124PCCK	P	488	148.7	75-03-18	14	5200	7.8	0.2953887	8.5523883
220	395733109095401	UT	124PCCK	P	488	148.7	74-11-20	14	5100	7.5	0.6134997	8.8920860
221	395733109095401	UT	124PCCK	P	488	148.7	77-04-18	15	5000	7.4	0.7952774	8.9919971
222	395733109095401	UT	124PCCK	P	488	148.7	75-06-26	15	4870	8.1	0.1545110	8.7921749
223	395603109120801	UT	124PCCK	P	483	147.2	75-05-15	17	3620	10.2	0.0045444	25.777058
224	395733109095401	UT	124PCCK	P	440	134.1	75-08-17		5170			8.8521216
225	395635109101501	UT	124PCCK	P	400	121.9	76-06-30	16.5	4960	7.9	0.2272221	8.5923528
226	395635109101501	UT	124PCCK	P	400	121.9	74-11-22	14	5100	7.6		9.2517659
227	395635109101501	UT	124PCCK	P	400	121.9	76-03-21	15.5	5100	8	0.2135887	9.5914635
228	395635109101501	UT	124PCCK	P	400	121.9	74-12-13	14.5	5000	7.3	1.0452217	9.3916414
229	395635109101501	UT	124PCCK	P	400	121.9	75-03-14	13.5	5510	7.6	0.4998886	9.0519437
230	395635109101501	UT	124PCCK	P	400	121.9	75-11-13	14	5020	7.4	0.8179996	9.1918192
231	395635109101501	UT	124PCCK	P	400	121.9	76-09-14	15.5	5200	8.1	0.1613277	9.1118904
232	400218108170600	CO	124GRRV	G	380	115.8	75-11-19	12	900	8.1	0.1635999	9.2517659
233	395755108211400	CO	124GRRV	G	350	106.7	75-10-21	11	1550	7.8	0.1999554	5.6949315
234	395136108210000	CO	124GRRV	G	320	97.5	75-12-12	12	1480	8.4	0.0954332	9.5714813
235	395617109134401	UT	124PCCK	P	317	96.6	77-04-19	15	4480	7.8	0.3862776	10.990218
236	395617109134401	UT	124PCCK	P	317	96.6	75-05-12	16	3700	7.9	0.2726665	9.8312501
237	395617109134401	UT	124PCCK	P	317	96.6	75-03-13	15	3500	8	0.2090443	9.4715703
238	395617109134401	UT	124PCCK	P	317	96.6	76-03-17	15	3800	8	0.2499443	10.890307
239	395617109134401	UT	124PCCK	P	317	96.6	75-07-27	16.5	3600	8.5	0.0749832	10.670503
240	395617109134401	UT	124PCCK	P	317	96.6	76-06-26	15	4260	8	0.2499443	11.010200
241	395617109134401	UT	124PCCK	P	317	96.6	76-09-19	15	4200	7.9	0.3181109	11.070147
242	395617109134401	UT	124PCCK	P	317	96.6	75-11-13	13.5	3600	8.1	0.1749610	9.9711256
243	394540108191201	CO	124GRRV	G	314	95.7	75-06-05	16	1620	8		12.788618
244	395548109080701	UT	124PCCK	P	300	91.4	75-05-15	15.5	1720	10.9		9.9911079
245	395617109134401	UT	124PCCK	P	263	80.2	75-08-19	16	3730	8.3	0.1136110	10.310823
246	395751109094501	UT	124PCCK	P	220	67.1	75-11-12	12.5	2070	9.3	0.0159055	14.666946
247	395751109094501	UT	124PCCK	P	220	67.1	74-12-17		2260			12.968458
248	395751109094501	UT	124PCCK	P	220	67.1	76-06-24	13.5	2010	8.3	0.1681443	15.046608
249	395751109094501	UT	124PCCK	P	220	67.1	76-09-14	13.5	2140	8.2	0.2113165	15.046608

	STN NO.	HCO3	CO3	NH4	NO2	NO3(asN)	NO3(asNO3)	N(NO2+NO3)	P	PO4
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
198	395453109111001	15.733320	0	0.0785338	0.0007139					0.0012635
199	395453109111001	15.733320	0	0.0671107		0.0007139	0.0006451	0.0007139		0.0009476
200	395614109111401		0	0.1999043						
201	395453109111001	13.438877	0.8665337	0.1285099						
202	395500109124401	13.274988	1.1331595	0.0592573						0.0006317
203	395453109111001	9.1777701	0.7998773	0.0442645	0.0007139	0.0007139	0.0006451	0.0014278		
204	395614109111401		0							
205	395617109134402	12.947211	1.1164954	0.0306995	0.0028557	0.0014278	0.0014514	0.0042836		0.0026323
206	395617109134402	9.3416588	0.5665797	0.0328414		0.0014278	0.0014514	0.0014278		0.0003158
207	395617109134402	10.488880	0.7832132	0.0392669		0.0007139	0.0006451	0.0007139		0.0009476
208	395617109134402	7.7027713	1.1831519	0.0414087						0.0006317
209	395617109134402	7.3749938	0	0.0492621						0.0012635
210	395617109134402	8.6861038	0	0.2784381	0.0028557					0.0006317
211	395617109134402	9.8333251	0	0.0378390	0.0007139					0.0003158
212	395617109134402	6.3916613	2.1663344	0.0421226	0.0007139			0.0007139		0.0006317
213	395617109134402	9.0138813	0.8498696	0.1356493				0.0049976		0.0015794
214	395617109134402	8.1944376	0	0.0671107						0.0012635
215	395617109134402	7.3749938	0	0.0713944						0.0003158
216	395733109095401	9.0138813	0	0.0235601						0.0003158
217	395733109095401	9.1777701	0	0.0271298	0.0006425			0.0007139		0.0003158
218	395733109095401	9.0138813	0	0.0292717	0.0007139			0.0007139		0.0003158
219	395733109095401	8.5222151	0	0.0221322						0.0015794
220	395733109095401	8.8499926	0	0.0228462						
221	395733109095401	9.0138813	0	0.0328414		0.0007139	0.0006451	0.0007139		0.0006317
222	395733109095401	8.8499926	0	0.0249880		0.0014278	0.0014514	0.0014278		0.0009476
223	395603109120801	19.994427	2.8328989	0.1142310						0.0003158
224	395733109095401	8.8499926	0	0.0856732						
225	395635109101501	8.5222151	0	0.0021418	0.0007139	0.0364111	0.0370938	0.0371250		
226	395635109101501	9.3416588	0	0.0014278	0.0057115	0.0221322	0.0225788	0.0278438		0.0009476
227	395635109101501	9.6694363	0		0.0007139	0.0192764	0.0193533	0.0199904		0.0003158
228	395635109101501	9.3416588	0	0.0071394	0.0042836	0.0142788	0.0143537	0.0185625		0.0012635
229	395635109101501	9.0138813	0	0.0021418	0.0006425	0.0071394	0.0070962	0.0078533		0.0009476
230	395635109101501	9.1777701	0		0.0014278			0.0128509		
231	395635109101501	9.1777701	0		0.0006425	0.0121370	0.0120958	0.0128509		0.0003158
232	400218108170600	9.1777701	0					0.0157067		
233	395755108211400	5.7361063	0							
234	395136108210000	9.5055476	0					0.0021418		0.0012635
235	395617109134401	10.980546	0	0.1642071		0.0007139	0.0006451	0.0007139		0.0012635
236	395617109134401	9.8333251	0	0.1213704						0.0015794
237	395617109134401	9.5055476	0	0.1285099		0.0007139	0.0006451	0.0007139		0.0015794
238	395617109134401	10.816657	0	0.1427888		0.0014278	0.0014514	0.0014278		0.0003158
239	395617109134401	10.652768	0	0.1427888	0.0007139	0.0007139	0.0006451	0.0014278		
240	395617109134401	10.980546	0	0.1427888		0.0028557	0.0029029	0.0028557		0.0006317
241	395617109134401	11.144435	0	0.1570676						0.0006317
242	395617109134401	9.9972138	0	0.1570676	0.0007139			0.0007139		0.0003158
243	394540108191201	12.783322	0					0.0007139		
244	395548109080701	8.5222151	0.7165567	0.1999043						0.0048435
245	395617109134401	10.324991	0	0.1285099						0.0003158
246	395751109094501	11.799990	1.4164494	0.2641592	0.0007139			0.0007139		0.0018953
247	395751109094501	2.9499975	4.9992334	1.4278880	0.0014278	0.0035697	0.0035481	0.0049976		0.0009476
248	395751109094501	15.077765	0	0.1427888	0.0014992	0.0021418	0.0020966	0.0035697		0.0009476
249	395751109094501	15.077765	0	0.1427888		0.0007139	0.0006451	0.0007139		0.0012635

	STN NO.	H2S	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
198	395453109111001	0.7174048		0.1197604	0.3538366	22.618726	0.0588260	0.9026034	3.3313206	0.0947448	0.2330071
199	395453109111001	0.5614472		0.1097804	0.3373791	21.313800	0.0537107	0.8743970	3.2272168	0.1052720	0.2330071
200	395614109111401		0.9158271	1.4970059	6.5830076	52.197061	0.0895179	2.2000959	28.108018	0.0526360	0.4327275
201	395453109111001	0.6238303		0.0623752	0.1481176	25.663555	0.0639413	1.6641751	4.5805659	0.2789708	0.2330071
202	395500109124401	3.7429819		0.0598802	0.1522320	27.838432	0.0460378	4.7950808	3.6436319	0.1368536	0.2496504
203	395453109111001	2.1210230		0.0898203	0.2262908	19.573897	0.0511531	0.9590161	4.1641508	0.1842260	0.2163637
204	395614109111401			0.1497005	1.3577453	52.197061	0.1227674	3.9488900	21.861791	0.0315816	
205	395617109134402	1.0605115		0.1621756	0.8228759	19.573897	0.0358071	0.9308098	4.1641508	0.0631632	0.2330071
206	395617109134402	0.0311915		0.3493013	1.0697387	18.268971	0.0358071	1.0154288	4.6846696	0.0526360	0.1081818
207	395617109134402	2.0586400		0.2445109	0.9051635	19.573897	0.0664990	1.8052068	4.2682545	0.0631632	0.2496504
208	395617109134402	1.5595757	0.2414453	0.1896207	0.8228759	19.138922	0.0460378	0.9026034	4.5805659	0.0684268	0.2496504
209	395617109134402	0.9357454		0.4990019	1.1108825	19.573897	0.0409224	0.8461907	6.6626413	0.0578996	0.2995805
210	395617109134402	0.1965065		0.7485029	1.3166015	20.008873	0.0844026	1.0154288	7.5995752	0.0473724	0.2995805
211	395617109134402	0.5614472		0.4990019	1.2343139	19.573897	0.0537107	2.1436831	5.6216036	0.0578996	0.2995805
212	395617109134402	0.2183406		0.1272455	0.6583007	17.833995	0.0460378	0.9308098	4.5805659	0.0631632	0.0549231
213	395617109134402	1.7155333		0.4990019	0.9463073	18.268971	0.0639413	1.5513496	4.8928772	0.0526360	0.1464616
214	395617109134402	1.0917030		0.6237524	1.2343139	18.268971	0.0358071	0.9026034	6.3503300	0.0526360	0.2662938
215	395617109134402	1.6531503		0.5239520	0.9874511	18.268971	0.0434801	1.0718415	5.9339149	0.0526360	0.2829372
216	395733109095401			4.2415169	7.8173215	39.582771	0.1611323	1.5795560	26.025942	0.0578996	0.1830770
217	395733109095401	0.1746724	0.9158271	4.2415169	8.2287595	39.147795	0.1534593	1.6077623	28.108018	0.0631632	0.1997203
218	395733109095401	0.1497192		3.2435129	6.9944455	39.147795	0.1918241	1.7487941	24.984904	0.0578996	0.1830770
219	395733109095401	0.1466001		4.2415169	7.8173215	39.582771	0.2301890	1.6641751	28.108018	0.0473724	0.1830770
220	395733109095401	0.2058640		4.2415169	6.9944455	40.452722	0.1892665	1.6359687	24.984904	0.0526360	0.1997203
221	395733109095401	0.2869619		4.4910179	7.4058835	40.887698	0.1713629	1.7205878	28.108018	0.0631632	0.1997203
222	395733109095401	0.1341235		4.2415169	7.8173215	39.582771	0.1867088	1.6923814	26.025942	0.0631632	0.1997203
223	395603109120801	4.0548970		0.0848303	0.2427484	37.842869	0.0767296	10.436352	0.9473443	0.1473808	0.3495106
224	395733109095401	0.0187149		4.2415169	8.6401974	40.887698	0.2353043	1.6641751	28.108018	0.0631632	0.1664336
225	395635109101501		0.4162850	3.9920159	7.4058835	35.667991	0.1994971	1.5795560	26.025942	0.0631632	0.1830770
226	395635109101501			4.9900199	7.8173215	37.842869	0.2404196	1.9180323	26.025942	0.0421088	0.1830770
227	395635109101501	0.0187149		4.9900199	7.4058835	39.147795	0.2327466	1.8334132	26.025942	0.0473724	0.1830770
228	395635109101501			4.9900199	8.2287595	40.887698	0.1815935	2.0026513	29.149055	0.0526360	0.1830770
229	395635109101501	0.0062383		5.2395209	9.0516354	41.322673	0.2813421	2.0872704	29.149055	0.0578996	0.1830770
230	395635109101501	0.0062383		4.7405189	7.8173215	38.712820	0.2378620	1.8616196	27.066980	0.0526360	0.1664336
231	395635109101501		0.8075930	4.2415169	7.4058835	38.277844	0.2506502	1.6641751	24.984904	0.0578996	0.1664336
232	400218108170600			0.2170658	0.7405883	9.1344857	0.0127882	0.3384762	0.7391367	0.0263180	0.2163637
233	395755108211400			0.2744510	0.7405883	13.919216	0.0153459	0.3384762	4.8928772	0.0157908	0.1997203
234	395136108210000			1.3972055	2.6332030	9.1344857	0.0153459	0.2030857	3.9559432	0.0157908	0.5991611
235	395617109134401	0.0561447		1.0978043	3.2915038	41.322673	0.0434801	1.7205878	19.779716	0.0210544	0.3827974
236	395617109134401	0.1372426		0.6736526	1.6868957	33.493114	0.0562684	1.8052068	13.533490	0.0263180	0.3328673
237	395617109134401	0.4366812		0.7235528	1.5223205	34.363065	0.0792873	2.3129213	13.533490	0.0421088	0.3328673
238	395617109134401	0.0031191		0.8233532	2.5097716	36.972918	0.0485954	1.5231433	16.656603	0.0315816	0.3328673
239	395617109134401	0.0311915		0.7485029	2.0983336	36.537942	0.2813421	1.6641751	15.615565	0.0210544	0.3495106
240	395617109134401	0.0062383		0.8982035	2.7566344	38.712820	0.0383648	1.6641751	17.697641	0.0263180	0.3495106
241	395617109134401	0.0249532	0.1415369	0.4740518	2.7977782	40.887698	0.0562684	1.6641751	18.738678	0.0210544	0.3495106
242	395617109134401	0.0311915		0.6986027	1.9749022	36.537942	0.0511531	1.4949369	15.615565	0.0315816	0.2829372
243	394540108191201			0.7984031	3.5795103	13.484240	0.0281342	2.0308577	2.3943867	0.1157992	0.3827974
244	395548109080701	0.1497192		0.2020958	0.8640197	15.659118	0.1150945	6.4874622	0.7911886	0.1263264	0.2496504
245	395617109134401	0.0998128		0.6237524	2.2217650	35.233016	0.0562684	1.3256988	14.574527	0.0210544	0.3162239
246	395751109094501			0.0399201	0.0082287	22.618726	0.0460378	0.8179843	4.0600470	0.0789540	0.1148392
247	395751109094501	0.0249532		0.1022954	0.0164575	21.748775	0.1739206	1.1000479	4.7887734	0.1684352	0.0382797
248	395751109094501		1.1655982	0.0199600	0.0123431	22.618726	0.0409224	0.7051589	3.8518395	0.0631632	0.1115105
249	395751109094501	0.0062383	0.6743818	0.0523952	0.0164575	22.618726	0.0409224	0.7051589	3.9559432	0.0631632	0.1048532

	STN NO.	As	Ba	Be	B	Cr	Co	Cu	Fe	Pb	Mn
		umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l
198	395453109111001	0.0533891			120.25901		0.0339367	0.0786831	1.9696671		
199	395453109111001	0.6940588			129.50971		0.0509050	0.5822553	1.0743638		
200	395614109111401	0.0133472			342.27567	0.1923224			1.4324851	0.0144787	0.3640467
201	395453109111001	0.6006278			462.53469	0.3846449		0.0629465	13.071427	0.0144787	
202	395500109124401		2.1845190	1.1096094	185.01387			0.1101564	1.7906064		0.3640467
203	395453109111001	0.8675735			185.01387			0.1258930	1.0743638		
204	395614109111401				832.56244						
205	395617109134402	0.0400418			40.703052				5.7299407		0.9101168
206	395617109134402	0.0266945			61.979648		0.0509050	0.0314732	1.0743638		4.5505842
207	395617109134402	0.1201255	0.1820432		111.00832	0.1923224			1.0743638		0.7280934
208	395617109134402	0.0400418			72.155411				2.1487277		1.0921402
209	395617109134402	0.0133472			60.129509						
210	395617109134402	0.2535984			33.302497				1.6115458		
211	395617109134402	0.1735147			101.75763		0.0339367		1.6115458		2.3663038
212	395617109134402	0.0266945		2.2192188	53.654024				0.8953032		0.7280934
213	395617109134402	0.0266945			57.354301				2.5068490		
214	395617109134402	0.1334728		1.1096094	54.579093						
215	395617109134402	0.1067782		1.1096094	68.455134						
216	395733109095401	0.0667364	0.1820432		212.76595				12.713305		1.0921402
217	395733109095401	0.1201255		2.2192188	194.26456				7.5205472		0.5460701
218	395733109095401	0.0800837			111.00832				7.3414865		0.9101168
219	395733109095401	0.1067782			203.51526	0.1153934		0.0314732	5.1927587		0.7280934
220	395733109095401	0.2402511			222.01665				1.7906064	0.0096525	
221	395733109095401	0.0934309			212.76595				0.8953032		0.5460701
222	395733109095401	0.0400418	0.2330153		203.51526				17.906064		1.2741636
223	395603109120801	0.3737239	3.6408650		693.80203			0.0314732	2.1487277		1.0921402
224	395733109095401	0.0133472	0.2184519		212.76595	0.3846449	0.0509050	0.0629465	0.5371819		0.7280934
225	395635109101501	0.0934309			166.51248		0.0509050	0.0944197	10.385517		
226	395635109101501	0.2535984			286.77150				7.3414865		
227	395635109101501	0.0800837		1.1096094	305.27289		0.0509050	0.1101564	3.4021523		0.3640467
228	395635109101501	0.1334728		1.1096094	305.27289		0.1018101	0.0314732	19.696671		0.3640467
229	395635109101501	0.1468201			323.77428	0.1923224		0.0944197	7.5205472		0.3640467
230	395635109101501	0.2135565			296.02220		0.0339367	0.0472098	10.743638		0.5460701
231	395635109101501	0.0934309			268.27012		0.0339367	0.1101564	16.115458		0.5460701
232	400218108170600	0.0800837			7.4005550				0.7162425	0.0096525	
233	395755108211400	0.2135565			8.3256244						0.3640467
234	395136108210000	0.0133472			9.2506938						0.5460701
235	395617109134401	0.0266945			30.527289				3.5812129		0.3640467
236	395617109134401	0.1334728	0.2184519		31.452358				5.0136981	0.0096525	1.0921402
237	395617109134401	0.3336821	0.3276778		29.602220	0.1923224			2.8649703		1.0921402
238	395617109134401				28.677150			0.0314732	0.7162425		0.5460701
239	395617109134401	0.0133472			30.527289			0.0472098			0.5460701
240	395617109134401	0.0133472			16.651248				0.7162425		0.5460701
241	395617109134401	0.0133472			29.602220				3.5812129		0.5460701
242	395617109134401	0.0400418		2.2192188	28.677150				1.6115458		0.7280934
243	394540108191201	0.0133472			111.00832				0.3581212		1.4561869
244	395548109080701	5.3389142	1.2378941		481.03607				1.9696671	0.0096525	0.3640467
245	395617109134401	0.2135565	0.1456346		25.901942			0.0629465	1.7906064		0.3640467
246	395751109094501	0.0533891	0.1456346	1.1096094	62.904717			0.7868315	1.4324851	0.1496138	0.0910116
247	395751109094501	0.1201255	0.1456346		73.080481		0.0509050	61.372863	4.6555768	1.9305019	
248	395751109094501	0.0266945		2.2192188	101.75763			0.6766751	0.7162425	0.1930501	
249	395751109094501	0.0400418			61.979648			0.3304692	1.0743638	0.0868725	

	STN NO.	Mo	Ni	Ag	Sr	V	Zn	Sn	Al	Li	Se
		umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l
198	395453109111001	0.2397331			12.554211		0.3059039			79.239302	0.0253292
199	395453109111001	0.0625390	0.7155025		12.554211	0.0196303				76.357873	0.0253292
200	395614109111401			0.0092705	125.54211	0.0196303	0.4588559				
201	395453109111001	0.0833854	0.0340715		8.6738187	0.1963036	4.2826552		1.1118713	116.69788	
202	395500109124401	0.0208463	0.0340715		5.2499429	0.0196303	0.3059039		1.1118713	67.713585	
203	395453109111001	0.0208463	0.0681431		11.412919				1.4824950	100.85002	
204	395614109111401										
205	395617109134402				14.836795		0.3059039		0.3706237	43.221437	
206	395617109134402	1.4592453	0.0511073		23.967130	0.0588910				37.458579	
207	395617109134402	0.0208463	0.0340715		22.825838		0.3059039		0.3706237	44.662152	
208	395617109134402		0.0340715		17.119379					41.780723	
209	395617109134402				30.814882		0.3059039		0.7412475	38.899294	
210	395617109134402				35.380050		1.2236157			34.577150	
211	395617109134402	0.1459245	0.2725724		29.673590	0.0196303				38.899294	
212	395617109134402	0.0416927	0.0340715		10.842273					33.136435	
213	395617109134402				35.380050					40.340008	
214	395617109134402	0.3231186			37.662634	0.1177821				51.865725	
215	395617109134402	0.0104231	0.0340715		33.097466	0.0196303			0.7412475	51.865725	
216	395733109095401	0.0521159			99.292398		0.4588559		0.3706237	27.373577	
217	395733109095401	0.0416927	0.1192504		51.358137	0.0196303	0.3059039		0.7412475	28.814291	
218	395733109095401	0.0521159	0.0340715		71.901392		0.3059039		0.7412475	24.492148	
219	395733109095401	0.1459245	0.0340715		74.183976		0.9177118			31.695721	0.0126646
220	395733109095401	0.0833854			75.325268	0.0392607	0.4588559		0.3706237	23.051433	
221	395733109095401	0.0208463			75.325268		0.7647598		1.1118713	25.932862	0.0126646
222	395733109095401	0.0312695	0.0681431		86.738187					25.932862	
223	395603109120801				18.260671	0.0588910	0.3059039		0.3706237	92.205734	
224	395733109095401	0.6983531	0.1192504		82.173019	0.0392607	1.3765677			30.255006	
225	395635109101501	0.4169272	0.2555366		43.369093	0.0196303	0.7647598		0.7412475	20.170004	0.1013171
226	395635109101501	0.9380863	0.0851788		49.075553	0.0588910	0.4588559		0.3706237	21.610718	0.0253292
227	395635109101501	0.5003126	0.0851788		50.216845	0.0196303	3.9767513		0.3706237	24.492148	0.0633232
228	395635109101501	0.8859703	0.8517887		50.216845		1.0706638			27.373577	0.0126646
229	395635109101501	0.6462372	0.1362862		49.075553		1.8354236			30.255006	0.0253292
230	395635109101501	0.6462372	0.2725724		49.075553	0.0196303	1.0706638		0.3706237	20.170004	0.0506585
231	395635109101501	0.6775067	0.1873935		47.934261		1.9883756		1.1118713	23.051433	0.0379939
232	400218108170600	0.0833854			21.684546					7.2035729	
233	395755108211400	0.0625390			18.260671		0.4588559		0.3706237	11.525716	
234	395136108210000	0.0208463			90.162063					10.085002	
235	395617109134401	0.2605795			30.814882	0.0392607	1.0706638		0.7412475	53.306439	
236	395617109134401	0.1146549			51.358137		0.4588559		0.3706237	44.662152	
237	395617109134401	0.3022722	0.0340715		45.651677	0.0196303	0.3059039		0.3706237	47.543581	0.0126646
238	395617109134401	0.3022722			63.912348		0.3059039		0.3706237	50.425010	
239	395617109134401	0.5941213	0.0681431		58.205889	0.0196303			1.1118713	43.221437	
240	395617109134401	0.1459245			52.499429				0.7412475	54.747154	
241	395617109134401	0.1876172			73.042684					53.306439	
242	395617109134401	0.3543881	0.0340715		52.499429		0.3059039		0.3706237	43.221437	
243	394540108191201				159.78087					74.917158	
244	395548109080701	1.0423181			43.369093	0.0392607	0.4588559		0.7412475	97.968592	
245	395617109134401	0.7713154			52.499429	0.0392607			0.3706237	51.865725	
246	395751109094501	0.2710027	0.1192504		1.8260671	0.0392607	0.3059039		0.3706237	46.102867	
247	395751109094501	1.0423181	0.0340715		0.6847751	0.4318679	0.3059039		181.60564	30.255006	0.0633232
248	395751109094501	0.1563477			1.1412919		3.9767513		2.5943663	50.425010	
249	395751109094501	0.2084636			1.9401963	0.0392607	0.4588559		2.9649901	50.425010	

	STN NO.	Ti	Zr	Hg	I	Br	U	Ra-226	Tot.Cat.	Tot. An.	Cat./An.
		umol/l	umol/l	umol/l	mmol/l	mmol/l	umol/l	mol/l	meq/l	meq/l	
198	395453109111001						0.0063017		23.624746	23.385993	1.0102092
199	395453109111001						0.0071419		22.261829	23.120142	0.9628759
200	395614109111401			0.0009970					68.446606	58.468768	1.1706524
201	395453109111001								26.148482	26.190850	0.9983823
202	395500109124401						0.0033609		28.308695	27.765362	1.0195687
203	395453109111001						0.0054615		20.257273	20.162029	1.0047239
204	395614109111401								55.334720	47.704055	1.1599584
205	395617109134402					0.0012515	0.0003781	4.98E-16	21.579808	24.508758	0.8804937
206	395617109134402						0.0002100	3.17E-16	21.142858	20.948049	1.0092996
207	395617109134402						0.0004201		21.939746	22.514102	0.9744890
208	395617109134402					0.0025030	0.0008402	7.24E-16	21.209953	20.123269	1.0540013
209	395617109134402			0.0024926	0.0000787	0.0012515		3.48E-15	22.834589	21.602810	1.0570193
210	395617109134402								24.223485	24.934233	0.9714950
211	395617109134402						0.0042011	5.43E-16	23.094240	23.355969	0.9887939
212	395617109134402						0.0001680	2.71E-16	19.451126	20.725697	0.9385028
213	395617109134402								21.223531	22.100207	0.9603317
214	395617109134402						0.0012603	3.21E-15	22.020911	21.908554	1.0051284
215	395617109134402						0.0037810	3.39E-15	21.335258	20.345762	1.0486339
216	395733109095401						0.0399111	2.13E-15	63.861580	62.621391	1.0198045
217	395733109095401					0.0037545	0.0462128	1.81E-15	64.241808	66.998852	0.9588493
218	395733109095401						0.0546151	1.63E-15	59.815537	60.808465	0.9836712
219	395733109095401							2.26E-15	63.930637	66.479972	0.9616525
220	395733109095401							1.58E-15	63.113914	60.550500	1.0423351
221	395733109095401				0.0000787	0.0025030		2.44E-15	64.852864	66.991784	0.9680719
222	395733109095401						0.0462128		63.887157	62.599604	1.0205680
223	395603109120801						0.0030248	2.76E-15	38.574756	38.255480	1.0083458
224	395733109095401						0.0462128	1.72E-15	66.886431	66.795496	1.0013613
225	395635109101501					0.0050060	0.0840233	6.79E-16	58.663288	62.286957	0.9418229
226	395635109101501						0.0588163	9.50E-16	63.697972	63.263792	1.0068630
227	395635109101501					0.0062575	0.0882245	5.88E-16	64.172349	63.524134	1.0102042
228	395635109101501						0.0840233	9.50E-16	67.506850	69.745040	0.9679089
229	395635109101501						0.0840233		70.186328	69.495225	1.0099446
230	395635109101501						0.0840233	7.24E-16	64.066363	65.240035	0.9820099
231	395635109101501					0.0050060	0.0672187	6.79E-16	61.823296	60.803775	1.0167674
232	400218108170600					0.0012515			11.062582	11.094833	0.9970931
233	395755108211400					0.0012515			15.964641	15.834953	1.0081899
234	395136108210000					0.0012515			17.210648	17.702244	0.9722297
235	395617109134401				0.0003151			3.62E-16	50.144770	52.291293	0.9589506
236	395617109134401						0.0010082	5.88E-16	38.270479	38.729755	0.9881415
237	395617109134401						0.0010923		38.934099	38.893580	1.0010417
238	395617109134401					0.0037545	0.0008402	4.52E-16	43.687763	45.758239	0.9547518
239	395617109134401								42.512958	43.586863	0.9753617
240	395617109134401					0.0025030		5.43E-16	46.060861	48.095976	0.9576863
241	395617109134401					0.0112635	0.0008402	5.88E-16	47.487626	50.232734	0.9453522
242	395617109134401						0.0008402	3.62E-16	41.936106	42.728775	0.9814488
243	394540108191201					0.0050060			22.268202	19.724048	1.1289873
244	395548109080701						0.0027727		17.906444	18.187273	0.9845589
245	395617109134401						0.0012603	4.07E-16	40.980319	40.806632	1.0042563
246	395751109094501						0.0008402	1.81E-16	22.761062	23.683978	0.9610320
247	395751109094501							9.05E-17	22.160202	23.814488	0.9305344
248	395751109094501					0.0012515	0.0008402	3.62E-16	22.724255	23.518609	0.9662244
249	395751109094501	0.4175365				0.0025030	0.0016804	3.17E-16	22.797354	23.726817	0.9608264

	STN NO.	Alk.Diff. meq/l
198	395453109111001	-0.001556
199	395453109111001	0.0358270
200	395614109111401	0.0062816
201	395453109111001	-0.021538
202	395500109124401	0.0582175
203	395453109111001	0.0539161
204	395614109111401	-0.013822
205	395617109134402	-0.057817
206	395617109134402	-0.065879
207	395617109134402	0.0301732
208	395617109134402	-0.065879
209	395617109134402	-0.021884
210	395617109134402	0.0021289
211	395617109134402	0.0180801
212	395617109134402	0.0420934
213	395617109134402	0.1168327
214	395617109134402	0.0140491
215	395617109134402	-0.081830
216	395733109095401	0.0736499
217	395733109095401	-0.077972
218	395733109095401	0.0701376
219	395733109095401	-0.089892
220	395733109095401	-0.026088
221	395733109095401	0.0380623
222	395733109095401	0.0499825
223	395603109120801	-0.002074
224	395733109095401	0.0096723
225	395635109101501	0.0296545
226	395635109101501	-0.014168
227	395635109101501	0.0357792
228	395635109101501	0.0177343
229	395635109101501	-0.033977
230	395635109101501	0.0340572
231	395635109101501	-0.074287
232	400218108170600	0.0739957
233	395755108211400	-0.041174
234	395136108210000	0.0659337
235	395617109134401	-0.031156
236	395617109134401	0.0098452
237	395617109134401	10.190930
238	395617109134401	0.0590820
239	395617109134401	0.0009185
240	395617109134401	0.0199936
241	395617109134401	-0.031156
242	395617109134401	-0.069219
243	394540108191201	0.0052954
244	395548109080701	0.0631131
245	395617109134401	0.0070245
246	395751109094501	0.0184735
247	395751109094501	-0.037662
248	395751109094501	-0.032367
249	395751109094501	-0.002788

TABLE AII-4

Listing of edited WATSTORE data
for the Midcontinent group

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
1	395035109062201	UT	200MNCS	M	6220	1895.9	61-08-01		6470	7.6	0.3408331	6.1545224
2	345926092002501	AR	326ATOK	A	1700	518.2	56-03-06	20	512	7.4	0.3635553	4.0364075
3	404424093444302	IA	320PSLV	L	1100	335.3	56-11-26		3590	7.8	0.2726665	7.0737044
4	345925092003301	AR	326ATOK	A	1080	329.2	56-03-06	21	416	7.6	0.1908665	3.4169589
5	412835094093501	IA	320PSLV	L	910	277.4	73-08-01	15	3800	8	0.1999554	8.9520326
6	365230096342001	OK	322VMOS	V	900	274.3	75-03-26	12.5	4000			9.1718370
7	392930094410001	MO	325CHRK	C	883	269.1	50-04-04			8		11.010200
8	351445096413001	OK	322VMOS	V	816	248.7	75-01-22	16.5	483	7.3	0.3862776	3.4169589
9	351445096413014	OK	322VMOS	V	816	248.7	75-01-22	16.5	483	7.3	0.4317220	3.4169589
10	352410099221201	OK	318HNSS	H	770	234.7	51-10-10		422	7.7	0.1931388	4.3361408
11	352403097221801	OK	318HNSS	H	764	232.9	51-10-10		438	7.6	0.2499443	4.4760163
12	355855096451001	OK	322VMOS	V	697	212.4	75-10-15	20	575			3.6367632
13	411741094041801	IA	325DSMS	D	696	212.1	53-03-30		5560	8	0.1635999	6.5941312
14	350735096470001	OK	322VMOS	V	668	203.6	74-11-15		2090			15.925826
15	384420094041501	MO	325CHRK	C	640	195.1	68-09-18			7.6		9.8712146
16	380530094345001	MO	325CHRK	C	620	189.0	70-07-28			7.7		5.5150915
17	412923094072302	IA	325CHRK	C	603	183.8	59-06-25	15.5	2840	7.8	0.1317888	3.7166921
18	412923094072302	IA	325CHRK	C	603	183.8	62-06-13	15.5	2840	7.8	0.1340610	3.7766387
19	351115096363001	OK	322VMOS	V	600	182.9	74-11-22		398			3.7966210
20	360245096344501	OK	322VMOS	V	600	182.9	75-04-01	21	1300	7.8	0.1522388	4.3561230
21	412925094072101	IA	320PSLV	L	600	182.9	59-06-25	15.5	2840	8	0.0908888	4.0763720
22	412902094051101	IA	325CHRK	C	582	177.4	73-07-31	16	2600	8.1	0.0931610	5.2753049
23	350830096403001	OK	322VMOS	V	550	167.6	74-11-22		770			7.8729930
24	393300093360001	MO	325CHRK	C	550	167.6	51-06-25			8.8		12.388973
25	365921096371601	OK	322VMOS	V	538	164.0	75-10-30		654			4.4760163
26	384320094070001	MO	325CHRK	C	530	161.5	71-03-12			7.8		10.130983
27	384710094164501	MO	325CHRK	C	530	161.5	55-05-09			7.4	0.4317220	4.7957317
28	405817093191001	IA	325CHRK	C	526	160.3	68-05-17	14.5	3200	7.2	0.6589441	4.7557673
29	341130097360001	OK	318WCHT	W	525	160.0	51-08-21		1080	9.2	0.0136333	9.9111790
30	385015094040001	MO	325CHRK	C	525	160.0	68-11-18			8.1		10.930272
31	413114094241401	IA	320PSLV	L	525	160.0	71-05-09					6.5142023
32	411919093434501	IA	325CHRK	C	512	156.1	68-08-27	12	2800	7.8	0.4317220	12.428938
33	350930096375501	OK	322VMOS	V	500	152.4	74-11-22		674			6.2144691
34	350930096375501	OK	322VMOS	V	500	152.4	75-12-15	12	650	8.6	0.0363555	6.3943090
35	350930096380001	OK	322VMOS	V	500	152.4	75-12-14	27	13000	7.5	0.3408331	5.0155361
36	350930096380001	OK	322VMOS	V	500	152.4	74-11-22		6750			5.3152694
37	365516096272601	OK	322VMOS	V	500	152.4	75-03-06	12	2070	8.5	0.0477166	6.7939533
38	412223093355201	IA	325CHRK	C	498	151.8	68-10-07	13.5	4400	8	0.1635999	7.3934198
39	413339092092001	IA	325DSMS	D	480	146.3	61-07-25		2720	7.9	0.1226999	4.3960874
40	403100093320001	MO	325CHRK	C	450	137.2	56-01-05	14.5		7.9		21.580793
41	411254093380801	IA	325CHRK	C	450	137.2	73-06-27	14.5	5000	7.9	0.2499443	9.0719259
42	341550093281701	AR	330STNL	S	430	131.1	58-02-05		472	7.8	0.1749610	4.9555895
43	383550093510001	MO	325CHRK	C	430	131.1	52-09-16			8.4		16.465345
44	384740093425001	MO	325CHRK	C	430	131.1	66-10-19			8.1		6.4742379
45	411310093135201	IA	320PSLV	L	430	131.1	73-08-01	15.5	6700	7.6	0.2726665	5.0355183
46	355744096353201	OK	322VMOS	V	425	129.5	75-11-19		1020			5.0355183
47	384327093564001	MO	325CHRK	C	423	128.9	67-08-18	15.5	3430	8		13.188262

	STN NO.	HCO3	CO3	NH4	NO2	NO3(as N)	NO3(asNO3)	N(NO2+NO3)	P	PO4	H2S	TOC
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l
1	395035109062201	6.0638838	0									
2	345926092002501	4.0972188	0			0.0035697	0.0032255					
3	404424093444302	7.0472163	0			0.0571155	0.0564471					
4	345925092003301	3.4416637	0			0.0114231	0.0112894					
5	412835094093501	9.0138813	0			0.0128509	0.0129022					
6	365230096342001	9.1777701	0						0.0003228			
7	392930094410001	10.980546	0.1333128									
8	351445096413001	3.4416637	0									
9	351445096413014	3.4416637	0						0.5488516			
10	352410099221201	4.2611075	0			0.0128509						
11	352403097221801	4.4249963	0			0.0114231						
12	355855096451001	3.6055525	0					0.0542597				
13	411741094041801	5.5722175	0.5165874									
14	350735096470001	14.749987	0.6332362					0.0349832				
15	384420094041501	9.8333251	0									
16	380530094345001	5.5722175	0									
17	412923094072302	3.7694413	0			0.0642549	0.0645110					
18	412923094072302	3.7694413	0			0.0178486	0.0177405					
19	351115096363001	3.7694413	0					0.0028557				
20	360245096344501	4.4249963	0									
21	412925094072101	4.0972188	0			0.2855776	0.2902996					
22	412902094051101	5.2444400	0									
23	350830096403001	7.3749938	0.2166334					0.0228462				
24	393300093360001	10.980546	0.6998926									
25	365921096371601	4.4249963	0					0.0178486				
26	384320094070001	10.161102	0			0.9995216						
27	384710094164501	4.9166625	0									
28	405817093191001	4.7527738	0			0.0064254	0.0064511					
29	341130097360001	8.0305488	0.9498543			0.0128509	0.0129022					
30	385015094040001	9.8333251	0.5332515									
31	413114094241401	6.5555500	0			0.0356972	0.0354810					
32	411919093434501	12.455545	0			0.0449784	0.0451577					
33	350930096375501	5.7361063	0.2499616					0.0021418				
34	350930096375501	5.7361063	0.3666104					0.0128509				
35	350930096380001	5.0805513	0									
36	350930096380001	5.2444400	0					0.0028557				
37	365516096272601	6.7194388	0.0333282									
38	412223093355201	7.3749938	0			0.0485481	0.0483832					
39	413339092092001	4.4249963	0									
40	403100093320001	20.322205	0.6165721									
41	411254093380801	9.0138813	0			0.0078533	0.0080638					
42	341550093281701	4.9166625	0									
43	383550093510001	15.405542	0.5165874									
44	384740093425001	6.2277725	0.1666411									
45	411310093135201	5.0805513	0			0.1285099	0.1290220					
46	355744096353201	5.0805513	0					0.0378390				
47	384327093564001	13.111100	0			0.0078533						

	STN NO.	TOC mmol/l	Ca mmol/l	Mg mmol/l	Na mmol/l	K mmol/l	Cl mmol/l	SO4 mmol/l	F mmol/l	SiO2 mmol/l	As umol/l
1	395035109062201		1.2225548	3.2092162	65.246326	1.5857466	5.3592079	30.190093			
2	345926092002501		0.6736526	0.4114379	3.0448285	0.0690567	0.8743970	0.1665660	0.0315816	0.1514546	
3	404424093444302		1.0728542	0.5348693	33.928089	0.3580718	3.6668265	13.533490	0.1736988	0.1481259	
4	345925092003301		0.5489021	0.3250360	2.5663555	0.0613837	0.3948890	0.2602594	0.0157908	0.1664336	
5	412835094093501		1.8712574	0.7817321	33.493114	0.2557655	7.6157165	12.492452	0.1421172	0.1298182	
6	365230096342001		0.2020958	0.1398889	37.407893	0.0818449	24.257467	2.2902829			
7	392930094410001		0.8982035	0.6994445	91.344857		73.336530	4.6846696		0.0166433	
8	351445096413001		0.6237524	0.2345196	3.6102967	0.0664990	0.1833413	0.4996980			
9	351445096413014		0.6237524	0.2345196	3.6102967	0.0664990	0.1833413	0.4996980			
10	352410099221201		1.2225548	0.9463073	0.4088769	0.0332495	0.2397540	0.0687084	0.0052636	0.1997203	
11	352403097221801		1.2974051	0.9463073	0.4175764	0.0358071	0.2200095	0.0770367	0.0052636	0.1997203	
12	355855096451001		0.9231536	0.1563464	3.9147795	0.0664990	0.1833413	1.0202169			
13	411741094041801		1.3722554	0.5760131	65.246326	0.4092249	22.000959	19.779716	0.1157992		
14	350735096470001		0.0499001	0.0329150	22.618726		2.8206357	1.9779716			
15	384420094041501		1.1976047	1.0697387	31.318236	0.6138374	26.796039	0.1769764	0.1947532	0.1664336	
16	380530094345001		2.9940119	2.2217650	47.847306	0.8440264	50.771443	0.8640612	0.0631632	0.1664336	
17	412923094072302		1.0479041	0.5760131	24.358628	0.1355557	0.9308098	12.492452	0.0394770	0.1664336	
18	412923094072302		1.1227544	0.6583007	25.663555	0.1892665	0.9308098	12.492452	0.0394770	0.1664336	
19	351115096363001		1.1976047	0.8640197	0.3610296		0.2369334	0.1457452			
20	360245096344501		0.4740518	0.0781732	8.2645347	0.0613837	1.3821115	1.8738678			
21	412925094072101		0.8982035	0.5760131	24.358628	0.1278827	0.9026034	11.451414	0.0394770	0.1664336	
22	412902094051101		0.3493013	0.2262908	24.358628	0.1278827	0.8461907	9.9939619	0.0631632	0.1264895	
23	350830096403001		0.0424151	0.0082287	8.2645347		0.2594984	0.1873867			
24	393300093360001		0.1172654	0.1193170	33.058138		14.103178	2.6025942		0.1331469	
25	365921096371601		0.2744510	0.0493725	6.0896571	0.0434801	0.4513017	0.8224197			
26	384320094070001		1.5469061	0.9051635	11.744338	0.4092249	9.3080980	0.0916113	0.0263180	0.2330071	
27	384710094164501		4.4910179	2.3040526	56.546816		56.412715	2.1861791		0.0582517	
28	405817093191001		4.4910179	3.4149351	17.833995	0.2557655	0.5641271	14.574527	0.0368452	0.3162239	
29	341130097360001		0.0199600	0.0123431	12.179314		0.5077144	0.6870848	0.0684268	0.1997203	
30	385015094040001		0.5489021	0.4525817	43.497551	0.4859546	39.488900	0.0437235	0.0842176	0.1165035	
31	413114094241401		2.4950099	2.0160460	26.968481	0.2813421	0.4513017	14.574527	0.0131590	0.2163637	
32	411919093434501		0.3493013	0.2016046	26.098530	0.1688052	3.9488900	5.9339149	0.1368536	0.1364756	
33	350930096375501		0.0723552	0.0699444	6.9596081		0.3948890	0.3019009			
34	350930096375501		0.0898203	0.0822875	6.9596081	0.0204612	0.4513017	0.3331320			
35	350930096380001		12.724550	7.8173215	82.645347	0.6394139	124.10797				
36	350930096380001		6.9860279	6.1715696	41.322673		64.874622	0.2186179			
37	365516096272601		0.1172654	0.0822875	19.138922	0.0690567	12.410797	0.2082075			
38	412223093355201		1.1976047	1.2343139	38.712820	0.2557655	4.5130172	16.656603	0.1263264	0.1298182	
39	413339092092001		1.6467065	1.0697387	21.313800	0.1969395	1.3256988	11.451414	0.0789540	0.1497902	
40	403100093320001		1.0229540	1.1931701	32.188187		7.8977801	3.2272168	0.0842176	0.1081818	
41	411254093380801		0.9730538	0.4937255	52.197061	0.2404196	9.0260344	17.697641	0.0842176	0.0965315	
42	341550093281701		1.0229540	0.9463073	1.3484240	0.2813421	0.3102699	0.1873867			
43	383550093510001		0.1247504	0.2345196	21.313800		4.7950808	0.2290282		0.0915385	
44	384740093425001		0.2744510	0.2098333	8.2645347		2.5667785	0.1353349	0.0789540	0.0665734	
45	411310093135201		3.7425149	2.1806212	56.546816	0.3580718	2.1154768	32.272168	0.1157992	0.1364756	
46	355744096353201		2.4950099	1.3988891	3.0013310	0.0741720	0.9308098	2.1861791			
47	384327093564001		0.6986027	0.6171569	31.318236	0.3836483	16.359687	2.7066980	0.0947448	0.1331469	

	STN NO.	Ba umol/l	B umol/l	Cr umol/l	Cu umol/l	Fe umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
1	395035109062201					2757.5339					
2	345926092002501					12.534245					
3	404424093444302					7.8786685	1.6382103				
4	345925092003301					0.7162425					
5	412835094093501					44.765161	0.5460701				
6	365230096342001										
7	392930094410001										
8	351445096413001										
9	351445096413014					1.6115458					
10	352410099221201										
11	352403097221801										
12	355855096451001										
13	411741094041801						1.6382103				
14	350735096470001										
15	384420094041501									3.7062376	
16	380530094345001									3.7062376	
17	412923094072302					1.4324851					
18	412923094072302					3.5812129					
19	351115096363001										
20	360245096344501										
21	412925094072101					4.2974555					
22	412902094051101					16.831700					
23	350830096403001										
24	393300093360001										
25	365921096371601										
26	384320094070001										
27	384710094164501										
28	405817093191001					250.68490	1.4561869				
29	341130097360001										
30	385015094040001										
31	413114094241401					57.299407					
32	411919093434501					34.021523					
33	350930096375501										
34	350930096375501					1.0743638					
35	350930096380001					0.5371819					
36	350930096380001										
37	365516096272601										
38	412223093355201					51.927587	0.9101168				
39	413339092092001					9.3111536	3.0943973				
40	403100093320001										
41	411254093380801					51.927587	0.5460701				
42	341550093281701										
43	383550093510001										
44	384740093425001										
45	411310093135201					132.50487	1.0921402				
46	355744096353201										
47	384327093564001										

	STN NO.	Se umol/l	Hg umol/l	I mmol/l	Br mmol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.	Alk Diff. meq/l
1	395035109062201						75.695615	71.893917	1.0528792	0.0906386
2	345926092002501						5.2840666	5.2755183	1.0016203	-0.060811
3	404424093444302						37.501609	37.981210	0.9873726	0.0264880
4	345925092003301						4.3756156	4.3481575	1.0063148	-0.024704
5	412835094093501						39.054859	41.694771	0.9366848	-0.061848
6	365230096342001				0.0563175		38.173708	38.009870	1.0043104	-0.005933
7	392930094410001						94.540153	93.716070	1.0087934	-0.236971
8	351445096413001						5.3933400	4.5996964	1.1725426	-0.024704
9	351445096413014						5.3933400	4.5996964	1.1725426	-0.024704
10	352410099221201						4.7798509	4.7185754	1.0129860	0.0750332
11	352403097221801						4.9408087	4.8553631	1.0175981	0.0510200
12	355855096451001				0.0012515		6.1402788	5.8605385	1.0477328	0.0312107
13	411741094041801						69.552088	68.270322	1.0187748	-0.011261
14	350735096470001				0.0062575		22.784357	22.702405	1.0036098	-0.090634
15	384420094041501						36.466761	37.215960	0.9798688	0.0378894
16	380530094345001						59.122886	58.077821	1.0179942	-0.057126
17	412923094072302						27.742019	29.671883	0.9349598	-0.052749
18	412923094072302						29.414932	29.731830	0.9893414	0.0071974
19	351115096363001						4.4842787	4.3250449	1.0368166	0.0271797
20	360245096344501				0.0025030		9.4303686	9.4859703	0.9941385	-0.068873
21	412925094072101						27.434944	27.921282	0.9825818	-0.020846
22	412902094051101						25.637695	26.172582	0.9795630	0.0308649
23	350830096403001						8.3658225	8.5072651	0.9833739	0.0647322
24	393300093360001						33.531303	31.697341	1.0578585	0.0086420
25	365921096371601				0.0012515		6.7807846	6.5721576	1.0317440	0.0510200
26	384320094070001						17.057703	19.648622	0.8681373	-0.030119
27	384710094164501						70.136957	65.580805	1.0694738	-0.120930
28	405817093191001						33.901667	34.505795	0.9824919	0.0029935
29	341130097360001						12.243920	11.861490	1.0322413	-0.019078
30	385015094040001						45.986473	50.590837	0.9089881	0.0304437
31	413114094241401						36.271935	36.127718	1.0039918	-0.041347
32	411919093434501						27.369147	28.382511	0.9642961	-0.026606
33	350930096375501				0.0012515		7.2442076	7.2131600	1.0043043	-0.021560
34	350930096375501				0.0012515		7.3242853	7.5118749	0.9750275	-0.075018
35	350930096380001				0.0325390		124.36850	129.12351	0.9631747	-0.065015
36	350930096380001				0.1026231		67.637868	70.627127	0.9576754	0.0708293
37	365516096272601				0.0087605		19.607085	19.621165	0.9992823	0.0078580
38	412223093355201						43.832423	45.345970	0.9666222	0.0184260
39	413339092092001						26.943630	28.703569	0.9386856	-0.028908
40	403100093320001						36.620436	36.017224	1.0167478	0.0254435
41	411254093380801						55.371039	53.577460	1.0334763	0.0580446
42	341550093281701						5.5682891	5.6406330	0.9871745	0.0389269
43	383550093510001						22.032340	21.718483	1.0144511	0.0266282
44	384740093425001						9.2331036	9.3906403	0.9832240	-0.086816
45	411310093135201						68.751160	71.811132	0.9573886	-0.045032
46	355744096353201				0.0137665		10.863301	10.338686	1.0507428	-0.045032
47	384327093564001						34.333404	35.056090	0.9793848	0.0771622

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
48	412325093333201	IA	325CHRK	C	420	128.0	69-07-24	15	4100	7.9	0.2499443	8.1927084
49	405757093261201	IA	320PSLV	L	415	126.5	68-05-01	11	3200	7.4	0.2090443	2.3579014
50	352840096400001	OK	322VMOS	V	412	125.6	75-05-27	19	1040	7.5	0.2953887	4.1563008
51	384430093503001	MO	325CHRK	C	411	125.3	66-02-15			7.4		5.4551449
52	412344093460401	IA	325CHRK	C	410	125.0	68-10-22	14	5300	7.9	0.2272221	7.3934198
53	400115093440001	MO	325CHRK	C	408	124.4	56-01-17			8.2		9.2917303
54	413839095183001	IA	320PSLV	L	403	122.8	69-05-13	12				4.1563008
55	413839095183001	IA	320PSLV	L	403	122.8	65-04-19	13				4.0763720
56	405732093183101	IA	325CHRK	C	401	122.2	68-05-17	14.5	3000	7	1.2951660	5.8747714
57	410210095150001	IA	320PSLV	L	401	122.2	57-08-02	13	3090	8.3	0.0522610	4.6958207
58	410657093324101	IA	325CHRK	C	400	121.9	68-06-19	12	3100	7.5	0.3181109	4.4360519
59	420950094151101	IA	325DSMS	D	400	121.9	72-04-24	11	1200	6.9	2.3631100	8.4125128
60	420950094151101	IA	325DSMS	D	400	121.9	59-12-14	11	1170	7.3	0.9543328	8.5523883
61	420950094151101	IA	325DSMS	D	400	121.9	77-09-22		1200	7.1	1.7950547	9.0519437
62	420950094151101	IA	325DSMS	D	400	121.9	59-12-14	11	1170	7.4	0.8407218	8.4324950
63	420950094151101	IA	325DSMS	D	400	121.9	68-06-03		1200	7.4	0.7952774	8.0728151
64	420950094151101	IA	325DSMS	D	400	121.9	62-06-20	10.5	1180	7.7	0.3635553	8.3126017
65	420953094151201	IA	320PSLV	L	400	121.9	68-06-03					8.3126017
66	420953094151201	IA	320PSLV	L	400	121.9	77-09-22					9.7113568
67	382955094151001	MO	325CHRK	C	395	120.4	67-08-18	15.5	1240	8.2		
68	410002093084301	IA	325CHRK	C	391	119.2	68-05-06	12	2800	7.4	0.4771664	4.8756606
69	410007093262401	IA	325DSMS	D	386	117.7	68-05-03	13.5	3700	8.4	0.0477166	4.7158029
70	412620093272501	IA	320PSLV	L	386	117.7	69-07-23	11	5600	7.3	0.7725552	6.9538111
71	410534093114401	IA	320PSLV	L	380	115.8	68-05-13	12	2800	7.9	0.0908888	3.2371189
72	405558093183501	IA	325DSMS	D	378	115.2	68-05-02	14	3800	7.3	0.5226108	4.5959096
73	413839095183501	IA	320PSLV	L	368	112.2	69-05-13	13				4.3960874
74	413839095183501	IA	320PSLV	L	368	112.2	56-07-11	14.5				4.0763720
75	413839095183501	IA	320PSLV	L	368	112.2	67-12-26	12				4.4360519
76	413839095183501	IA	320PSLV	L	368	112.2	60-08-25	13				4.3561230
77	412103093422701	IA	325CHRK	C	360	109.7	68-10-21	13	1600	7.5	0.5453330	7.7131353
78	405958093072801	IA	320PSLV	L	356	108.5	68-05-07	11	2100	7.2	0.3862776	2.7575457
79	362830096293501	OK	322VMOS	V	350	106.7	75-04-04	11	3000			2.8774390
80	390922107145300	CO	310PMPV	P	350	106.7	75-04-11	3	440	8.6	0.0227222	4.2562119
81	404046093060601	IA	325DSMS	D	350	106.7	68-06-19	14	4900	7.8	0.5453330	15.186484
82	411231093563401	IA	320PSLV	L	340	103.6	73-08-01	14.5	2400	8.1	0.1363332	7.7530997
83	383935093331501	MO	325CHRK	C	335	102.1	58-09-30			8.4		12.189151
84	412446093333301	IA	325CHRK	C	325	99.1	68-09-25	12	4000	7.8	0.4317220	10.670503
85	404946093063911	IA	320PSLV	L	324	98.8	65-06-18		6940	7.9	0.1817776	6.4942201
86	350330097383501	OK	322VMOS	V	321	97.8	74-11-15		1340			4.5959096
87	413745095041501	IA	320PSLV	L	319	97.2	59-04-19	13				4.9156250
88	412307093243101	IA	325CHRK	C	306	93.3	68-09-23	13.5	3800	7.8	0.2953887	8.6922638
89	413118093063201	IA	325DSMS	D	305	93.0	60-04-06		916	7.5	0.5226108	7.3134909
90	413118093063201	IA	325DSMS	D	305	93.0	71-05-10		1000	9.4	0.0068166	7.4733487
91	413118093063201	IA	325DSMS	D	305	93.0	72-05-15		1000	7.4	0.6816663	7.6731708
92	413118093065501	IA	325DSMS	D	305	93.0	71-05-10		1000	7.1	1.3406105	7.5932420
93	413118093065501	IA	325DSMS	D	305	93.0	60-07-06		916	7.4	0.5680552	7.3534554
94	413118093065501	IA	325DSMS	D	305	93.0	57-10-14		917	7.5	0.4544442	7.1136688
95	413118093065501	IA	325DSMS	D	305	93.0	72-05-15		1000	7.5	0.5226108	7.5332953
96	413118093065501	IA	325DSMS	D	305	93.0	79-06-01		1100	7.5	0.5226108	7.4933309
97	423710094470001	IA	325DSMS	D	305	93.0	66-10-27	11.5	1800	7.1	1.2042772	7.7131353

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(as N) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l	H2S mmol/l
48	412325093333201	8.1944376	0			0.0335553	0.0338682				
49	405757093261201	2.2944425	0			0.1142310	0.1112815				
50	352840096400001	4.0972188	0						0.0048428		
51	384430093503001	5.4083288	0			0.0035697					
52	412344093460401	7.3749938	0			0.0078533	0.0080638				
53	400115093440001	8.6861038	0.2832898								
54	413839095183001	4.0972188	0			0.0078533	0.0080638				
55	413839095183001	4.0972188	0			0.0064254	0.0064511				
56	405732093183101	5.8999950	0			0.0035697	0.0032255				
57	410210095150001	4.2611075	0.2332975								
58	410657093324101	4.4249963	0			0.0928127	0.0919282				
59	420950094151101	8.3583263	0								
60	420950094151101	8.5222151	0								
61	420950094151101	9.0138813	0			0.0228462	0.0225788				
62	420950094151101	8.3583263	0			0.0214183	0.0209660				
63	420950094151101	8.0305488	0			0.0228462	0.0225788				
64	420950094151101	8.3583263	0								
65	420953094151201	8.3583263	0			0.0078533	0.0080638				
66	420953094151201	9.6694363	0			0.0014278	0.0016127				
67	382955094151001	7.3749938	0			0.0242740					
68	410002093084301	4.9166625	0			0.0192764	0.0193533				
69	410007093262401	4.4249963	0.1666411			0.0228462	0.0225788				
70	412620093272501	6.8833275	0			0.0335553	0.0338682				
71	410534093114401	3.2777750	0								
72	405558093183501	4.5888850	0			0.0257019	0.0258044				
73	413839095183501	4.4249963	0			0.0078533	0.0080638				
74	413839095183501	4.0972188	0								
75	413839095183501	4.4249963	0								
76	413839095183501	4.4249963	0			0.0071394	0.0070962				
77	412103093422701	7.7027713	0			0.0564015	0.0564471				
78	405958093072801	2.7861087	0			0.0642549	0.0645110				
79	362830096293501	2.9499975	0						0.0003228		
80	390922107145300	4.2611075	0.0166641					0.0149928		0.0006317	
81	404046093060601	15.241653	0								
82	411231093563401	7.7027713	0			0.2927170	0.2902996				
83	383935093331501	10.980546	0.5832439			0.0014278					
84	412446093333301	10.652768	0			0.0228462	0.0225788				
85	404946093063911	6.5555500	0			0.0306995	0.0306427				
86	350330097383501	4.5888850	0					0.0571155			
87	413745095041501	4.9166625	0								
88	412307093243101	8.6861038	0			0.0257019	0.0258044				
89	413118093063201	7.3749938	0								
90	413118093063201	7.5388826	0			0.0856732	0.0854771				
91	413118093063201	7.7027713	0								
92	413118093065501	7.5388826	0			0.0785338	0.0790260				
93	413118093065501	7.3749938	0								
94	413118093065501	7.0472163	0			0.1713465	0.1774053				
95	413118093065501	7.5388826	0								
96	413118093065501	7.5388826	0			0.0099952	0.0096766				
97	423710094470001	7.7027713	0								

	STN NO.	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l
48	412325093333201		0.6736526	0.4525817	36.972918	0.1662476	5.3592079	12.492452	0.1842260	0.1531189	
49	405757093261201		3.4930139	1.6046081	26.098530	0.2813421	0.3948890	16.656603	0.0631632	0.1997203	
50	352840096400001		3.9920159	2.2217650	6.9596081	0.1662476	5.6412715	4.8928772			
51	384430093503001		1.1477045	0.9463073	9.5694612	0.3324952	7.8977801	0.2602594	0.1052720	0.0998601	
52	412344093460401		1.4720558	0.8640197	52.197061	0.2353043	8.4619073	19.779716	0.0421088	0.1015245	
53	400115093440001		0.6487025	0.5760131	69.596081		53.592079	4.2682545	0.0684268	0.0432727	
54	413839095183001		6.4870259	3.0857848	18.703946	0.3069187	0.6205398	16.656603	0.0157908	0.3495106	
55	413839095183001		6.4870259	3.0446410	17.833995	0.2353043	0.5641271	16.656603	0.0105272	0.3162239	
56	405732093183101		7.4850299	5.7601316	12.179314	0.2557655	0.4513017	16.656603	0.0210544	0.3661540	
57	410210095150001		0.2495009	0.1481176	31.318236	0.1432287	1.7770005	13.533490	0.1368536	0.1331469	
58	410657093324101		3.4930139	2.1806212	19.573897	0.3836483	0.3948890	13.533490	0.0105272	0.2330071	
59	420950094151101		2.9940119	1.6868957	3.8712820	0.4348015	0.1692381	2.7066980	0.0473724	0.1664336	
60	420950094151101		3.4930139	1.1520263	3.8712820	0.4348015	0.1410317	2.3943867	0.0631632	0.1997203	
61	420950094151101		2.7445109	1.7280394	4.0887698	0.3580718	0.1410317	2.1861791	0.0263180	0.2330071	
62	420950094151101		3.4930139	1.1520263	3.9582771	0.4092249	0.1410317	2.3943867	0.0631632	0.1830770	
63	420950094151101		2.2954091	2.3040526	3.6972918	0.3580718	0.2115476	2.3943867	0.0447406	0.1997203	
64	420950094151101		2.7445109	2.0160460	4.2627600	0.4348015	0.1974445	2.6025942	0.0526360	0.1830770	
65	420953094151201		2.4950099	2.2629088	3.6972918	0.3580718	0.2115476	2.4984904	0.0500042	0.1997203	
66	420953094151201		2.9940119	1.8514708	4.0887698	0.3580718	0.1410317	2.2902829	0.0263180	0.2330071	
67	382955094151001		1.3223552	0.9463073	8.6995102	0.1125368	0.7333653	2.6025942	0.0105272	0.2163637	
68	410002093084301		7.9840319	4.9372557	10.439412	0.2557655	0.2397540	16.656603	0.0368452	0.3162239	
69	410007093262401		0.6487025	0.2592059	37.407893	0.1815935	1.0154288	16.656603	0.1263264	0.1298182	
70	412620093272501		4.4910179	2.5097716	52.197061	0.2813421	5.0771443	27.066980	0.1579080	0.1497902	
71	410534093114401		3.4930139	2.1806212	17.399020	0.2813421	0.5641271	12.492452	0.0578996	0.2163637	
72	405558093183501		7.4850299	5.7601316	20.008873	0.3580718	0.6769525	20.820754	0.0263180	0.1997203	
73	413839095183501		5.7385229	3.0857848	20.008873	0.3069187	0.5641271	16.656603	0.0157908	0.3328673	
74	413839095183501		6.4870259	2.9212096	17.399020	0.2557655	0.6487462	16.656603	0.0105272	0.3162239	
75	413839095183501		6.2375249	3.1269286	19.138922	0.2813421	0.5077144	16.656603	0.0157908	0.1447972	
76	413839095183501		6.4870259	2.8389220	18.703946	0.2404196	0.5923335	16.656603	0.0210544	0.3162239	
77	412103093422701		2.3453093	1.3577453	10.439412	0.1585746	0.5923335	4.6846696	0.0473724	0.2163637	
78	405958093072801		4.4910179	3.2915038	8.6995102	0.2046124	0.2538572	10.410377	0.0157908	0.1131748	
79	362830096293501		5.4890219	2.3451964	6.0896571	0.0588260	16.077623	1.2492452			
80	390922107145300		0.0873253	0.0534869	4.3497551	0.0562684	0.0620539	0.2706698	0.0315816	0.1248252	0.0133472
81	404046093060601		0.4740518	0.4525817	47.847306	0.3836483	21.436831	6.5585375	0.0789540	0.1381399	
82	411231093563401		0.6487025	0.3785229	20.878824	0.1278827	5.0771443	5.5174998	0.1631716	0.1131748	
83	383935093331501		0.2020958	0.2921209	15.659118		1.2692860	1.0410377	0.0842176	0.0549231	
84	412446093333301		0.8732534	0.5348693	36.537942	0.2046124	3.3847629	13.533490	0.1842260	0.1198322	
85	404946093063911		6.4870259	1.8926146	60.896571	0.2404196	5.6412715	32.272168	0.0684268	0.1264895	
86	350330097383501		0.2020958	0.1481176	12.179314		5.9233351	1.1451414			
87	413745095041501		7.9840319	4.9372557	16.529069	0.3069187	0.3948890	17.697641	0.0105272	0.2163637	
88	412307093243101		0.7235528	0.3579510	36.972918	0.1841512	4.5130172	13.533490	0.1315900	0.1331469	
89	413118093063201		1.4970059	0.8640197	5.2197061	0.1150945	0.0846190	1.3533490	0.0394770	0.1664336	
90	413118093063201		1.7215568	1.2343139	6.0896571	0.1329981	0.0564127	1.9779716	0.0342134	0.1564476	
91	413118093063201		1.8213572	1.2754577	5.2197061	0.1432287	0.2538572	2.0820754	0.0368452	0.1431329	
92	413118093065501		2.0708582	1.3166015	6.0896571	0.1355557	0.0282063	2.2902829	0.0368452	0.1631049	
93	413118093065501		1.7215568	1.3166015	4.7847306	0.1176521	0.0846190	1.4574527	0.0394770	0.1830770	
94	413118093065501		1.5469061	1.1931701	4.7847306	0.1278827	0.1410317	1.6656603	0.0368452	0.1830770	
95	413118093065501		1.9461077	1.3166015	4.7847306	0.1432287	0.0423095	2.2902829	0.0368452	0.1464616	
96	413118093065501		2.2455089	1.4400329	4.3497551	0.1099792	0.0846190	2.1861791	0.0368452	0.0665734	
97	423710094470001		6.2375249	3.2092162	3.3058138	0.2250737	0.0846190	7.3913677	0.0263180	0.1664336	

	STN NO.	Ba umol/l	B umol/l	Cr umol/l	Cu umol/l	Fe umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
48	412325093333201					13.608609					
49	405757093261201					11.459881	1.2741636				
50	352840096400001										
51	384430093503001									3.7062376	
52	412344093460401					0.7162425					
53	400115093440001										
54	413839095183001						2.3663038				
55	413839095183001					46.555768	1.6382103				
56	405732093183101					68.043046					
57	410210095150001					1.0743638					
58	410657093324101					26.859097	2.7303505				
59	420950094151101					17.906064	0.3640467				
60	420950094151101					21.487277					
61	420950094151101					13.071427					
62	420950094151101					2.1487277					
63	420950094151101					150.41094	1.6382103				
64	420950094151101					19.696671					
65	420953094151201					21.487277					
66	420953094151201				0.1573663	32.230916	0.1820233				
67	382955094151001										
68	410002093084301					46.555768	4.1865375				
69	410007093262401					13.250487	1.2741636				
70	412620093272501					37.602736	0.9101168				
71	410534093114401					21.487277	0.9101168				
72	405558093183501					1.0743638	3.6404674				
73	413839095183501						2.0022570				
74	413839095183501					46.555768	1.4561869				
75	413839095183501					32.230916	2.0022570				
76	413839095183501					48.346374	1.8202337				
77	412103093422701					0.7162425	0.9101168				
78	405958093072801					3.7602736	10.739378				
79	362830096293501					0.7162425					
80	390922107145300					1.0743638					
81	404046093060601					46.555768					
82	411231093563401					28.649703	0.5460701				
83	383935093331501										
84	412446093333301					0.1611545	2.1842804				
85	404946093063911					0.7162425					
86	350330097383501										
87	413745095041501					48.346374	3.2764206				
88	412307093243101					16.473579					
89	413118093063201					25.068490					
90	413118093063201	0.7281730				5.3718194					
91	413118093063201				0.6294652	8.9530323	0.1820233		0.7647598		
92	413118093065501	0.7281730			1.7310294	19.696671			0.3059039		
93	413118093065501					26.859097					
94	413118093065501					15.399215					
95	413118093065501					5.3718194	0.1820233		0.7647598		
96	413118093065501					7.3414865	0.3640467		0.4588559		
97	423710094470001					268.59097	8.9191452				

	STN NO.	Se umol/l	Hg umol/l	I mmol/l	Br mmol/l	Ra-226 mol/l	Tot.Cat. meq/l	Tot. An. meq/l	Cat./An.	Alk Diff. meq/l
48	412325093333201						39.391634	38.721047	1.0173184	-0.001729
49	405757093261201						36.575116	36.129160	1.0123433	0.0634589
50	352840096400001				0.0062575		19.553417	19.583326	0.9984727	0.0590820
51	384430093503001						14.089980	13.978715	1.0079595	0.0468160
52	412344093460401						57.104516	55.456868	1.0297104	0.0184260
53	400115093440001						72.045513	71.488746	1.0077881	0.0390466
54	413839095183001						38.156487	38.105838	1.0013291	0.0590820
55	413839095183001						37.132634	37.964232	0.9780952	-0.020846
56	405732093183101						38.925403	39.660334	0.9814693	-0.025223
57	410210095150001						32.256702	33.676655	0.9578357	-0.031881
58	410657093324101						31.304816	31.908448	0.9810823	0.0110556
59	420950094151101						13.667898	14.042519	0.9733224	0.0541864
60	420950094151101						13.596164	13.545356	1.0037509	0.0301732
61	420950094151101					9.95E-15	13.391942	13.591651	0.9853064	0.0380623
62	420950094151101						13.657582	13.425463	1.0172894	0.0741687
63	420950094151101						13.254287	13.117876	1.0103988	0.0422663
64	420950094151101						14.218675	13.767870	1.0327432	-0.045724
65	420953094151201						13.571201	13.571134	1.0000049	-0.045724
66	420953094151201					1.04E-14	14.137807	14.459272	0.9777675	0.0419205
67	382955094151001						13.349372	13.324074	1.0018986	-7.374993
68	410002093084301						36.537753	38.465466	0.9498845	-0.041001
69	410007093262401						39.405304	39.170764	1.0059876	-0.042475
70	412620093272501					2.22E-14	66.479982	66.322824	1.0023695	0.0704835
71	410534093114401						29.027633	28.844050	1.0063646	-0.040656
72	405558093183501						46.857268	46.940688	0.9982228	0.0070245
73	413839095183501						37.964407	38.289212	0.9915170	-0.028908
74	413839095183501						36.471257	38.048852	0.9585376	-0.020846
75	413839095183501						38.149171	38.272763	0.9967707	0.0110556
76	413839095183501						37.596262	38.282717	0.9820688	-0.068873
77	412103093422701						18.004096	17.722180	1.0159075	0.0103639
78	405958093072801						24.469166	23.847947	1.0260491	-0.028563
79	362830096293501				0.0412995		21.816920	21.453553	1.0169373	-0.072558
80	390922107145300						4.6876481	4.8911871	0.9583865	-0.038223
81	404046093060601						50.084221	49.819345	1.0053167	-0.055169
82	411231093563401						23.061158	24.028415	0.9597452	0.0503283
83	383935093331501						16.647551	15.624730	1.0654616	0.0421174
84	412446093333301						39.558801	41.306472	0.9576901	0.0177343
85	404946093063911						77.896272	76.748256	1.0149582	-0.061329
86	350330097383501				0.0087605		12.879741	12.809527	1.0054813	0.0070245
87	413745095041501						42.678563	40.716323	1.0481929	-0.001037
88	412307093243101						39.320077	40.403851	0.9731764	0.0061600
89	413118093063201						10.056852	10.144285	0.9913810	-0.061502
90	413118093063201						12.134396	11.519918	1.0533405	-0.065533
91	413118093063201						11.556564	12.128024	0.9528810	-0.029600
92	413118093065501						13.000132	12.238859	1.0622013	0.0543594
93	413118093065501						10.978699	10.392457	1.0564103	-0.021538
94	413118093065501						10.392766	10.622866	0.9783391	0.0664524
95	413118093065501						11.453377	12.193016	0.9393392	-0.005587
96	413118093065501						11.830818	11.987153	0.9869580	-0.045551
97	423710094470001						22.424369	22.606807	0.9919299	0.0103639

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
98	412340093333401	IA	320PSLV	L	302	92.0	73-06-27	14.5	3800	7.9	0.2499443	8.8721038
99	345420097462501	OK	313ELRN	E	300	91.4	50-07-13	18	510			4.9555895
100	412649093352601	IA	325CHRK	C	298	90.8	69-08-20	13.5	3200	7.8	0.4089998	10.470681
101	405937093054701	IA	320PSLV	L	296	90.2	73-09-26		970	7.1	1.2497216	7.0337399
102	412045093291501	IA	325CHRK	C	292	89.0	73-06-28		6900	7.4	0.5907775	6.6740600
103	411141093521301	IA	325DSMS	D	290	88.4	73-07-31	14	4700	8	0.2090443	9.4715703
104	382200094084001	MO	325CHRK	C	285	86.9	69-08-14			7.5		14.946697
105	413237093065601	IA	320PSLV	L	283	86.3	55-05-06	10.5	1590	7.5	0.5680552	8.0328507
106	410025093082001	IA	325CHRK	C	282	86.0	68-05-14	13	2200	7.3	0.5453330	4.8556784
107	412623093375801	IA	320PSLV	L	280	85.3	69-08-20	13	2600	7.7	0.5907775	11.729560
108	412832093325301	IA	325DSMS	D	280	85.3	73-06-27	14	6300	7.4	0.5680552	6.3143802
109	382940094041001	MO	325CHRK	C	276	84.1	58-11-13			7.7	0.5680552	12.588795
110	382940094041001	MO	325CHRK	C	276	84.1	69-04-08			7.9		12.628760
111	382410093415001	MO	325CHRK	C	275	83.8	65-09-22			8.1		12.588795
112	410119093273501	IA	325CHRK	C	274	83.5	68-05-02	13	2900	7.8	0.1113388	3.1571901
113	405810093571301	IA	320PSLV	L	269	82.0	69-10-08	13	3300	7.4	0.3408331	3.8765498
114	410843093143001	IA	325DSMS	D	268	81.7	68-05-03	11	3600	7.5	0.4089998	5.3152694
115	412622093265801	IA	325CHRK	C	265	80.8	69-07-23	12	3600	7.9	0.3408331	9.9911079
116	363510096183001	OK	322VMOS	V	260	79.2	75-04-02	15	1060			8.4524772
117	372305107344700	CO	310PMPV	P	260	79.2	75-04-14	10	580			6.0346291
118	410852093163901	IA	325DSMS	D	256	78.0	69-04-23	13	3600	7.6	0.2499443	4.0763720
119	363610096182501	OK	322VMOS	V	255	77.7	73-02-22		1090	7	0.9543328	4.2961764
120	405832092243601	IA	325DSMS	D	255	77.7	67-03-23	13.5	3700	7.6	0.3408331	5.3552338
121	413118093065502	IA	325DSMS	D	251	76.5	57-10-14		909	7.5	0.5226108	7.3934198
122	413118093065502	IA	325DSMS	D	251	76.5	72-05-15		940	7.3	0.7725552	7.7530997
123	413118093065502	IA	325DSMS	D	251	76.5	79-06-01		1000	7.4	0.6816663	7.6731708
124	413118093065502	IA	325DSMS	D	251	76.5	55-03-30	12	887	7.7	0.3408331	7.5532775
125	413118093065502	IA	325DSMS	D	251	76.5	61-12-28		950	7.5	0.4771664	7.5133131
126	412953093123701	IA	320PSLV	L	250	76.2	73-11-15	13	650	7.2	1.1361105	7.1935976
127	412953094341401	IA	325DSMS	D	250	76.2	69-11-13		1300	6.7	1.6359992	3.6967099
128	412953094341401	IA	325DSMS	D	250	76.2	74-03-25		3200	7.1	1.4314993	8.1127796
129	413004094184701	IA	320PSLV	L	247	75.3	58-02-10		2910	7.7	0.3862776	8.9520326
130	413004094184701	IA	320PSLV	L	247	75.3	62-04-25		2950	7.4	0.7952774	8.9720149
131	382750094001001	MO	325CHRK	C	246	75.0	70-12-19			8.1	0.2158610	12.388973
132	382750094001001	MO	325CHRK	C	246	75.0	64-12-09			8.2	0.1726888	12.269080
133	410050092572501	IA	320PSLV	L	243	74.1	73-09-26	13.5	730	7.2	1.0452217	7.3934198
134	345742096391001	OK	322ADA	X	242	73.8	80-01-31	7	480	6.9		4.1962653
135	380813094062501	MO	325CHRK	C	241	73.5	67-08-18	15.5	1460	8.2	0.1704165	12.089240
136	410627093030401	IA	320PSLV	L	241	73.5	73-09-26		1300	7.3	0.6134997	5.5550560
137	363750096171501	OK	322VMOS	V	240	73.2	72-11-16		978	8	0.1749610	7.8729930
138	373212096414901	KS	319CHSE	Z	240	73.2	84-07-17	16.5	580	7.2		6.0945758
139	373212096414901	KS	319CHSE	Z	240	73.2	79-07-25	17.5	580	7.6	0.3408331	6.0546113
140	373212096414901	KS	319CHSE	Z	240	73.2	85-07-23	16	505	7.1		5.9547003
141	373212096414901	KS	319CHSE	Z	240	73.2	79-04-25	18	510	7	1.3178882	5.8947536
142	373212096414901	KS	319CHSE	Z	240	73.2	80-09-24	16	655	7.5	0.4317220	6.2344513
143	373212096414901	KS	319CHSE	Z	240	73.2	78-07-25	20	540	7	1.3406105	6.0546113
144	391416106004800	CO	310PMPV	P	240	73.2	74-07-25	10	443	8.1	0.0817999	4.6558562
145	411607093062601	IA	320PSLV	L	240	73.2	73-08-01	13.5	3600	7.1	0.7952774	4.5159807
146	412725093443101	IA	325CHRK	C	240	73.2	68-10-23	13	2900	7.8	0.2726665	7.0337399
147	345225096381001	OK	322VMOS	V	236	71.9	74-11-12		1220			6.9737933

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(as N) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l	H2S mmol/l
98	412340093333401	8.8499926	0			0.0228462	0.0225788				
99	345420097462501	4.7527738	0.1333128			0.0356972	0.0354810				
100	412649093352601	10.488880	0			0.0435505	0.0435449				
101	405937093054701	7.0472163	0								
102	412045093291501	6.7194388	0			0.0164207	0.0161277				
103	411141093521301	9.5055476	0			0.0035697	0.0032255				
104	382200094084001	14.913876	0								
105	413237093065601	8.0305488	0			0.1285099	0.1290220				
106	410025093082001	4.9166625	0			0.0064254	0.0064511				
107	412623093375801	11.799990	0			0.0785338	0.0774132				
108	412832093325301	6.3916613	0			0.0035697	0.0032255				
109	382940094041001	12.619433	0								
110	382940094041001	12.619433	0								
111	382410093415001	11.963878	0.3166181								
112	410119093273501	3.1138862	0			0.0178486	0.0177405				
113	405810093571301	3.9333300	0			0.0078533	0.0080638				
114	410843093143001	5.2444400	0			0.0192764	0.0193533				
115	412622093265801	11.799990	0			0.0192764	0.0193533				
116	363510096183001	6.8833275	0.7832132						0.0003228		
117	372305107344700	6.0638838	0					0.0585434		0.0012635	
118	410852093163901	4.0972188	0								
119	363610096182501	4.2611075	0			0.9281272	0.9354099				
120	405832092243601	5.4083288	0			0.0257019	0.0258044				
121	413118093065502	7.3749938	0			0.1499282	0.1499881				
122	413118093065502	7.7027713	0								
123	413118093065502	7.7027713	0			0.0257019	0.0258044				
124	413118093065502	7.5388826	0								
125	413118093065502	7.5388826	0								
126	412953093123701	7.2111051	0								
127	412953094341401	3.7694413	0			0.1570676	0.1596648				
128	412953094341401	8.0305488	0			0.2070437	0.2096608				
129	413004094184701	9.0138813	0			0.0142788	0.0143537				
130	413004094184701	9.0138813	0								
131	382750094001001	12.291656	0								
132	382750094001001	12.291656	0								
133	410050092572501	7.3749938	0			0.0485481	0.0483832				
134	345742096391001		0								
135	380813094062501	12.127767	0			0.0128509	0.0129022				
136	410627093030401	5.5722175	0								
137	363750096171501	7.8666601	0			0.0164207	0.0161277				
138	373212096414901		0					0.1213704			
139	373212096414901	6.0638838	0			0.1642071	0.1612775				
140	373212096414901		0					0.0928127			
141	373212096414901	5.8999950	0			0.1499282	0.1499881				
142	373212096414901	6.2277725	0			0.1927648	0.1935330				
143	373212096414901	6.0638838	0			0.2284620	0.2257886				
144	391416106004800	4.5888850	0					0.0335553		0.0003158	
145	411607093062601	4.5888850	0			0.0049976	0.0048383				
146	412725093443101	7.0472163	0			0.0399808	0.0403193				
147	345225096381001	7.0472163	0					1.3564936			

	STN NO.	TOC mmol/l	Ca mmol/l	Mg mmol/l	Na mmol/l	K mmol/l	Cl mmol/l	SO4 mmol/l	F mmol/l	SiO2 mmol/l	As umol/l
98	412340093333401		0.5489021	0.3744085	36.972918	0.1790359	5.3592079	12.492452	0.1736988	0.1065175	
99	345420097462501		0.7235528	1.6457519	1.2614289		0.2482159	0.3643631			
100	412649093352601		0.6736526	0.2797778	31.753212	0.1381134	3.1026993	10.410377	0.1421172	0.0798881	
101	405937093054701		2.2954091	2.0571898	2.3488677	0.0741720	0.0846190	2.0820754	0.0236862	0.3162239	
102	412045093291501		4.9900199	2.0571898	65.246326	0.3836483	8.4619073	30.190093	0.1210628	0.0832168	
103	411141093521301		0.3992015	0.3332647	47.847306	0.2404196	10.154288	15.615565	0.1842260	0.1165035	
104	382200094084001		0.4241516	0.3949804	25.228579	0.3324952	15.231433	0.0416415	0.0842176	0.1531189	
105	413237093065601		4.4910179	2.5097716	4.3497551	0.1278827	0.0846190	5.5174998	0.0210544		
106	410025093082001		5.9880239	3.4972227	8.6995102	0.1483440	0.1551349	11.451414	0.0157908	0.2662938	
107	412623093375801		0.2744510	0.1604608	24.793604	0.0997485	2.5385721	5.8298111	0.2000168	0.0782238	
108	412832093325301		5.4890219	3.1269286	56.546816	0.3836483	6.4874622	30.190093	0.1157992	0.0832168	
109	382940094041001		0.4241516	0.4525817	37.407893		28.206357		0.1263264	0.1664336	
110	382940094041001		0.3992015	0.5348693	38.277844	0.3324952	28.206357	0.0197797	0.1263264	0.1497902	
111	382410093415001		0.1971057	0.1810327	15.224142		4.2309536	0.0083283	0.0947448	0.0715664	
112	410119093273501		1.4720558	0.9874511	27.838432	0.2250737	0.6769525	14.574527	0.0631632	0.1631049	
113	405810093571301		6.7365269	3.5795103	19.138922	0.1841512	0.9872225	17.697641	0.0289498	0.2496504	
114	410843093143001		2.9940119	0.7817321	31.753212	0.3069187	1.9744450	15.615565	0.1157992	0.1531189	
115	412622093265801		0.6487025	0.2016046	33.928089	0.1636899	4.7950808	9.3693393	0.1579080	0.1231609	
116	363510096183001		0.1272455	0.1275457	10.439412	0.0383648	1.5231433	0.5517499			
117	372305107344700		2.2954091	0.2550915	1.5659118	0.0255765	0.3102699	0.0968165	0.0315816	0.1830770	
118	410852093163901		2.7445109	1.6046081	31.753212	0.3069187	0.7615716	17.697641	0.0736904	0.1830770	
119	363610096182501		2.9940119	1.3988891	2.9143359		3.1026993	1.5615565			
120	405832092243601		0.0798403	0.1193170	35.667991	0.3069187	2.3129213	14.574527	0.0736904	0.1431329	
121	413118093065502		1.4970059	1.0285949	5.2197061	0.1483440	0.1128254	1.3533490	0.0500042	0.1531189	
122	413118093065502		1.4720558	1.0285949	4.7847306	0.1534593	0.0282063	1.3533490	0.0500042	0.1264895	
123	413118093065502		2.2704590	1.4400329	3.8712820	0.1202098	0.0846190	1.7697641	0.0394770	0.0532587	
124	413118093065502		1.4720558	0.9051635	5.2197061	0.1227674	0.1410317	1.2492452	0.0526360		
125	413118093065502		1.6467065	1.0697387	4.7847306	0.1253251	0.0282063	1.4574527	0.0447406	0.2163637	
126	412953093123701		2.0459081	1.1520263	1.1309363	0.0639413		0.2290282	0.0157908	0.3495106	
127	412953094341401		2.9940119	1.3988891	5.2197061	0.0792873	0.4513017	5.2051885	0.0105272	0.1997203	
128	412953094341401		9.4810379	5.7601316	13.049265	0.2557655	0.5077144	16.656603	0.0210544	0.2662938	
129	413004094184701		5.2395209	3.2092162	16.529069	0.2250737	0.3384762	12.492452	0.0236862	0.2163637	
130	413004094184701		5.4890219	3.4972227	16.964044	0.2813421	0.4230953	12.492452	0.0157908	0.2163637	
131	382750094001001		0.1397205	0.3209216	18.703946	0.2301890	7.0515894	0.3539528	0.1736988	0.0998601	
132	382750094001001		0.1197604	0.1604608	17.833995	0.2455349	6.2053986	0.6038018	0.2368620	0.1497902	
133	410050092572501		1.7215568	1.2754577	2.3488677	0.1150945	0.0564127	0.5933914	0.0210544	0.3495106	
134	345742096391001	0.1248855	1.2974051	0.9051635	0.3958277	0.0358071	0.5077144	0.1977971	0.0105272	0.1464616	
135	380813094062501		0.1521956	0.2921209	15.224142	0.1815935	2.5949849	0.7391367	0.0947448	0.1364756	
136	410627093030401		2.7445109	1.9337584	5.2197061	0.1227674	0.2256508	4.7887734	0.0368452	0.3495106	
137	363750096171501		0.8233532	1.1520263	6.9596081		1.2128733	0.8952924			
138	373212096414901		2.0958083	0.4937255	1.4354191	0.0076729	0.1635968		0.0105272	0.2662938	
139	373212096414901		2.1457085	0.4525817	1.3919216	0.0153459	0.2820635	0.1457452		0.2496504	
140	373212096414901		2.0958083	0.4937255	1.3484240	0.0051153	0.1494936		0.0078954	0.2330071	
141	373212096414901		2.1207584	0.4937255	1.4354191	0.0102306	0.2820635	0.1353349	0.0105272	0.2496504	
142	373212096414901		1.3223552	0.5760131	3.6102967	0.0179035	0.6487462	0.3435424	0.0210544	0.2163637	
143	373212096414901		2.1956087	0.4937255	1.4789167	0.0051153	0.3666826	0.1561556	0.0052636	0.2662938	
144	391416106004800		0.9730538	1.3577453	0.2957833	0.0485954	0.0648746	0.1009806	0.0210544	0.2330071	
145	411607093062601		10.728542	1.8926146	6.0896571	0.2813421	0.1410317	13.533490	0.0631632	0.1131748	
146	412725093443101		0.4740518	0.1974902	28.708383	0.2225160	2.6796039	10.410377	0.0578996	0.1264895	
147	345225096381001		1.8962075	0.9051635	7.8295591		1.8052068	1.8738678			

	STN NO.	Ba	B	Cr	Cu	Fe	Mn	Sr	Zn	Al	Li
		umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l	umol/l
98	412340093333401					37.602736	0.7280934				
99	345420097462501										
100	412649093352601					48.346374					
101	405937093054701					91.320930	1.0921402				
102	412045093291501					37.602736	1.0921402				
103	411141093521301					14.503912	0.3640467				
104	382200094084001										
105	413237093065601						1.8202337				
106	410025093082001					103.85517	7.6449816				
107	412623093375801					25.068490					
108	412832093325301					103.85517	1.6382103				
109	382940094041001									3.7062376	
110	382940094041001									3.7062376	
111	382410093415001										
112	410119093273501					4.2974555	1.2741636				
113	405810093571301					1.4324851	41.865375				
114	410843093143001					42.974555	2.0022570				
115	412622093265801					10.743638	1.8202337				
116	363510096183001					1.2534245					
117	372305107344700						1.0921402				
118	410852093163901					21.487277	1.0921402				
119	363610096182501										
120	405832092243601					2.8649703					
121	413118093065502					3.5812129					
122	413118093065502					3.2230916	0.1820233		0.9177118		
123	413118093065502					4.1183949	0.3640467				
124	413118093065502					8.9530323					
125	413118093065502					2.5068490					
126	412953093123701					55.508800	1.2741636				
127	412953094341401					0.3581212	10.557355				
128	412953094341401				1.1015642	25.068490	20.022570		4.1297032		
129	413004094184701										
130	413004094184701					4.2974555	1.8202337				
131	382750094001001									3.7062376	
132	382750094001001										
133	410050092572501					17.010761	0.3640467				
134	345742096391001							1.5978087			2.8814291
135	380813094062501										
136	410627093030401					69.833652	0.9101168				
137	363750096171501										
138	373212096414901						0.1820233				
139	373212096414901										
140	373212096414901										
141	373212096414901	1.4563460							0.4588559		
142	373212096414901										
143	373212096414901								1.0706638		
144	391416106004800					0.3581212	25.483272		7.6475986		
145	411607093062601					68.043046	1.0921402				
146	412725093443101					9.3111536					
147	345225096381001										

	STN NO.	Se	Hg	I	Br	Ra-226	Tot.Cat.	Tot. An.	Cat./An.	Alk Diff.
		umol/l	umol/l	mmol/l	mmol/l	mol/l	meq/l	meq/l		meq/l
98	412340093333401						38.998575	39.389915	0.9900649	0.0221112
99	345420097462501						6.0000385	5.9325318	1.0113790	-0.063810
100	412649093352601						33.798186	34.536251	0.9786292	-0.018199
101	405937093054701						11.128237	11.306196	0.9842601	-0.013476
102	412045093291501						79.724394	75.637217	1.0540365	-0.045378
103	411141093521301						49.552658	51.041216	0.9708361	-0.033977
104	382200094084001						27.199339	30.345631	0.8963181	0.0328209
105	413237093065601						18.479217	19.173523	0.9637882	0.0023018
106	410025093082001						27.818347	27.929433	0.9960226	-0.060984
107	412623093375801						25.763176	26.127772	0.9860456	-0.070429
108	412832093325301						74.162365	73.297828	1.0117948	-0.077281
109	382940094041001						39.161360	40.921480	0.9569878	-0.030637
110	382940094041001						40.478482	41.001003	0.9872558	0.0093264
111	382410093415001						15.980419	16.931151	0.9438472	-0.008319
112	410119093273501						32.982520	33.046361	0.9980681	0.0433038
113	405810093571301						39.955148	40.288004	0.9917380	-0.056780
114	410843093143001						39.611619	38.636644	1.0252344	0.0708293
115	412622093265801						35.792394	33.682775	1.0626319	-1.808882
116	363510096183001				0.0037545		10.987359	11.079120	0.9917176	0.0027232
117	372305107344700	0.0126646					6.6924898	6.5701137	1.0186261	-0.029254
118	410852093163901						40.758369	40.306916	1.0112003	-0.020846
119	363610096182501						11.700138	10.521988	1.1119702	0.0350688
120	405832092243601						36.373225	36.890901	0.9859673	-0.053094
121	413118093065502						10.419252	10.262947	1.0152299	0.0184260
122	413118093065502						9.9394916	10.538008	0.9432040	0.0503283
123	413118093065502						11.412475	11.336795	1.0066756	-0.029600
124	413118093065502						10.096912	10.245435	0.9855034	0.0143949
125	413118093065502						10.342946	10.501165	0.9849331	-0.025569
126	412953093123701						7.5907467	7.6674450	0.9899968	-0.017507
127	412953094341401						14.084795	14.568915	0.9667703	-0.072731
128	412953094341401						43.787370	41.954755	1.0436807	0.0822307
129	413004094184701						33.651617	34.299100	0.9811224	-0.061848
130	413004094184701						35.217876	34.395806	1.0239003	-0.041866
131	382750094001001						19.855420	20.322167	0.9770326	0.0973173
132	382750094001001						18.639973	19.918945	0.9357912	-0.022575
133	410050092572501						8.4579914	8.6576699	0.9769362	0.0184260
134	345742096391001				0.0025030		4.8367723	5.1101012	0.9465120	4.1962653
135	380813094062501						16.294369	16.257243	1.0022836	-0.038527
136	410627093030401						14.699012	15.395098	0.9547851	-0.017161
137	363750096171501						10.910367	10.876451	1.0031183	0.0063329
138	373212096414901						6.6221600	6.2686999	1.0563849	6.0945758
139	373212096414901						6.6038482	6.6281655	0.9963312	-0.009272
140	373212096414901						6.5326073	6.1120894	1.0688010	5.9547003
141	373212096414901						6.6746179	6.4580142	1.0335402	-0.005241
142	373212096414901						7.4249372	7.5913368	0.9780803	0.0066787
143	373212096414901						6.8627007	6.7388689	1.0183757	-0.009272
144	391416106004800						5.0059772	4.9437466	1.0125877	0.0669712
145	411607093062601						31.613314	31.787156	0.9945310	-0.072904
146	412725093443101						30.273984	30.591997	0.9896046	-0.013476
147	345225096381001				0.0025030		13.432301	12.526735	1.0722906	-0.073423

	STN NO.	STATE	FRM CODE	DATA LABEL	DEPTH ft	DEPTH m	DATE	T (deg C)	CONDUCT umhos	pH	CO2 mmol/l	ALKALINITY meq/l
148	345919096401001	OK	322ADA	X	236	71.9	80-01-31	5	965	7.3		6.1944869
149	354223096345501	OK	322VMDS	V	236	71.9	80-03-03	17	720	7.6		6.1944869
150	351314096380601	OK	322VMOS	V	235	71.6	80-01-29	7	457	7		4.5959096
151	411119093103801	IA	320PSLV	L	233	71.0	73-11-14	13	1400	7.8	0.2499443	7.4134020
152	381220094020001	MO	325CHRK	C	230	70.1	56-03-01			7.3		6.2544335
153	412426093412801	IA	325DSMS	D	230	70.1	69-08-19	13	1900	7.9	0.2726665	9.5115347
154	415449094173201	IA	320PSLV	L	230	70.1	82-08-26	12	650	7.4	0.8861662	9.9911079
155	412007093011201	IA	320PSLV	L	226	68.9	81-08-12	14	2580	7.2		
156	411916093145601	IA	320PSLV	L	225	68.6	81-08-11	14.5	7700	7.5		
157	410935093084501	IA	325DSMS	D	222	67.7	68-05-08	11.5	1300	8.2	0.0954332	6.0546113
158	410603095443001	IA	320PSLV	L	220	67.1	53-07-16	12	618	7.6	0.3635553	6.5941312
159	411229093071501	IA	320PSLV	L	212	64.6	73-08-02	14	2300	8	0.1522388	6.8339178
160	411930093092701	IA	320PSLV	L	206	62.8	73-11-15	13	510	7.1	0.9770551	5.5150915
161	415118094331301	IA	325DSMS	D	205	62.5	67-12-25	10	570	7.4	0.5453330	6.2144691
162	415118094331301	IA	325DSMS	D	205	62.5	79-08-15		600	7.6	0.4089998	6.5941312
163	415118094331301	IA	325DSMS	D	205	62.5	74-11-14	13	600	7.5	0.4998886	6.4542557
164	415118094331301	IA	325DSMS	D	205	62.5	79-08-15		600	7.6	0.4089998	6.5941312
165	415118094331301	IA	325DSMS	D	205	62.5	61-08-16		575	7.4	0.5453330	6.1145580
166	415118094331301	IA	325DSMS	D	205	62.5	61-08-16		582	7.5	0.4317220	5.9946647
167	343556099505601	OK	313DGCK	Y	201	61.3	53-10-15	18.5	2680	7.2	0.3181109	2.1980437
168	372217107353500	CO	310PMPV	P	201	61.3	75-04-14	7	460			4.4160696
169	362235096221001	OK	322VMOS	V	200	61.0	73-01-18	17.5	770	8	0.1522388	6.8139355

	STN NO.	HCO3 mmol/l	CO3 mmol/l	NH4 mmol/l	NO2 mmol/l	NO3(as N) mmol/l	NO3(asNO3) mmol/l	N(NO2+NO3) mmol/l	P mmol/l	PO4 mmol/l	H2S mmol/l
148	345919096401001		0								
149	354223096345501		0								
150	351314096380601		0								
151	411119093103801	7.3749938	0			0.0078533	0.0080638				
152	381220094020001	6.2277725	0								
153	412426093412801	9.5055476	0			0.0549736	0.0548343				
154	415449094173201	9.9972138	0								
155	412007093011201		0	0.1427888	0.0014278	0.0078533	0.0080638	0.0092812		0.0006317	0.0062383
156	411916093145601		0	0.2284620	0.0014278	0.1213704	0.1209581	0.1213704		0.0006317	
157	410935093084501	6.0638838	0								
158	410603095443001	6.5555500	0			0.0285577	0.0290299				
159	411229093071501	6.8833275	0			0.0128509	0.0129022				
160	411930093092701	5.5722175	0			0.0114231	0.0112894				
161	415118094331301	6.2277725	0			0.0035697	0.0032255				
162	415118094331301	6.5555500	0								
163	415118094331301	6.3916613	0								
164	415118094331301	6.5555500	0								
165	415118094331301	6.0638838	0								
166	415118094331301	6.0638838	0			0.0214183	0.0209660				
167	343556099505601	2.1305537	0			0.0928127	0.0935409				
168	372217107353500	4.4249963	0					0.0014278		0.0022111	
169	362235096221001	6.8833275	0			0.0064254	0.0064511				

	STN NO.	TOC	Ca	Mg	Na	K	Cl	SO4	F	SiO2	As
		mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	mmol/l	umol/l
148	345919096401001	1.5818832	1.8712574	2.0983336	1.8268971	0.0895179	2.5949849	0.3539528	0.0105272	0.1431329	
149	354223096345501		0.9730538	0.9874511	3.0883261	0.1764782	0.5359207	0.2810801	0.0210544	0.2995805	
150	351314096380601	0.2913995	1.4471057	0.9051635	0.4349755	0.0920756	0.4795080	0.2394386	0.0105272	0.1481259	
151	411119093103801		0.8732534	0.3126928	13.049265	0.1483440	0.2679603	3.6436319	0.1368536	0.1065175	
152	381220094020001		2.0708582	1.8103270	26.968481		27.924294	0.7703679		0.1331469	
153	412426093412801		0.1996007	0.1604608	18.703946	0.0971909	1.8052068	4.1641508	0.1894896	0.0832168	
154	415449094173201		2.7445109	1.3988891	1.6529069	0.1739206	0.0141031	0.0478877	0.0136853	0.4160841	
155	412007093011201		7.4850299	2.3863402	11.309363	0.3324952	0.8461907	13.533490	0.0684268	0.1231609	0.0133472
156	411916093145601		7.4850299	3.7440855	78.295591	0.3069187	9.0260344	41.641508	0.1315900	0.1165035	0.0133472
157	410935093084501		0.4491017	0.3414935	12.179314	0.0946332	0.2256508	3.6436319	0.1210628	0.1497902	
158	410603095443001		2.0958083	0.9874511	0.5219706	0.0818449	0.1974445	0.1249245	0.0157908	0.3495106	
159	411229093071501		0.5239520	0.2509771	20.443849	0.1636899	1.0436352	7.4954714	0.1315900	0.0998601	
160	411930093092701		2.0708582	0.7405883	0.4784730	0.0358071		0.3227216	0.0473724	0.2496504	
161	415118094331301		1.5968063	1.0285949	0.7829559	0.1841512		0.1873867	0.0315816	0.1997203	
162	415118094331301		1.5718562	1.2754577	0.7829559	0.1150945	0.0282063	0.0083283	0.0210544	0.1331469	
163	415118094331301		1.4970059	1.3577453	0.7829559	0.1509017		0.1769764	0.0315816	0.1497902	
164	415118094331301		1.5718562	1.2754577	0.7829559	0.1150945	0.0282063	0.0083283	0.0210544	0.1331469	
165	415118094331301		1.4720558	1.1520263	0.7829559	0.1662476		0.0551749	0.0315816	0.2163637	
166	415118094331301		1.4471057	1.1520263	0.8699510	0.1739206	0.0846190	0.0968165	0.0315816	0.1997203	
167	343556099505601		15.219560	3.2503600	1.8703946	0.1304404	1.8616196	16.656603	0.0263180	0.2163637	
168	372217107353500		2.0708582	0.1769183	0.1000443	0.0127882	0.0169238	0.0707905	0.0157908	0.1214965	0.0133472
169	362235096221001		0.1497005	0.3291503	7.8295591		0.7051589	0.3955943			

	STN NO.	Ba umol/l	B umol/l	Cr umol/l	Cu umol/l	Fe umol/l	Mn umol/l	Sr umol/l	Zn umol/l	Al umol/l	Li umol/l
148	345919096401001							6.2771056			4.3221437
149	354223096345501							9.7009815			5.7628583
150	351314096380601							10.157498			2.8814291
151	411119093103801					10.743638					
152	381220094020001										
153	412426093412801					1.7906064					
154	415449094173201	2.9126920				8.9530323	1.0921402				
155	412007093011201	0.7281730		0.0384644	0.7868315	59.090013	1.4561869		0.6118078		
156	411916093145601	0.7281730		0.0384644	0.7868315	34.021523	1.2741636		0.4588559		
157	410935093084501					1.0743638					
158	410603095443001										
159	411229093071501					15.399215					
160	411930093092701					35.812129	0.9101168				
161	415118094331301					9.6692749	2.5483272				
162	415118094331301	5.0972110				2.6859097	1.0921402				
163	415118094331301	2.9126920				8.5949110	0.7280934				
164	415118094331301	5.0972110				2.6859097	1.0921402				
165	415118094331301					12.892366	2.0022570				
166	415118094331301					5.3718194	4.0045141				
167	343556099505601		101.75763								
168	372217107353500										
169	362235096221001										

	STN NO.	Se	Hg	I	Br	Ra-226	Tot.Cat.	Tot. An.	Cat./An.	Alk Diff.
		umol/l	umol/l	mmol/l	mmol/l	mol/l	meq/l	meq/l		meq/l
148	345919096401001			0.0001575	0.0075090		9.8555974	9.5079046	1.0365688	6.1944869
149	354223096345501				0.0012515		7.1858144	7.3136224	0.9825246	6.1944869
150	351314096380601				0.0012515		5.2315897	5.5648222	0.9401180	4.5959096
151	411119093103801						15.569502	15.105480	1.0307187	0.0384082
152	381220094020001						34.730852	35.719463	0.9723229	0.0266609
153	412426093412801						19.521261	19.834532	0.9842057	0.0059870
154	415449094173201					2.71E-14	10.113627	10.114671	0.9998967	-0.006105
155	412007093011201						31.384598	27.981597	1.1216156	0
156	411916093145601		0.0014955				101.06074	92.440641	1.0932501	0
157	410935093084501						13.855138	13.688589	1.0121670	-0.009272
158	410603095443001						6.7703346	7.0572155	0.9593492	0.0385811
159	411229093071501						22.157397	23.000086	0.9633615	-0.049409
160	411930093092701						6.1371735	6.2079073	0.9886058	-0.057126
161	415118094331301						6.2179098	6.6208243	0.9391443	-0.013303
162	415118094331301						6.5926784	6.6600485	0.9898844	0.0385811
163	415118094331301					1.95E-14	6.6433602	6.8397901	0.9712812	0.0625943
164	415118094331301						6.5926784	6.6600485	0.9898844	0.0385811
165	415118094331301						6.1973679	6.2564896	0.9905503	0.0506742
166	415118094331301						6.2421358	6.3044984	0.9901082	-0.069219
167	343556099505601						38.940676	37.399187	1.0412171	0.0674899
168	372217107353500						4.6083858	4.5903654	1.0039257	-0.008926
169	362235096221001						8.7872611	8.3102831	1.0573961	-0.069391

APPENDIX III

Results of mineral modeling.

TABLE AIII-1

Results of mineral modeling
for the Gulf Coast group

The entry "S" designates saturated; "SS" designates supersaturated; no entry designates undersaturated. Data in "()" designates reduced conditions, all other entries are for oxidized conditions. An asterisk designates redox data were available for that sample, usually sulfide-sulfate and, hence, only a single redox case was run.

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Copper	Pyrrhotite	Sphalerite	Galena
1	302705088291502	MS	125MDWY	6020	1834.9	70-08-19		7.6				
2	310510089000302	MS	124CKMN	3100	944.9	79-10-05	29	8.1			(ss)	
3	310749089345805	MS	124CKMN	2610	795.5	63-02-12	20	7.8				
4	310906089412404	MS	124CKMN	2500	762.0	80-01-22	32	7.5			(ss)	
5	312555089430004	MS	124CKMN	2410	734.6	80-03-12	22	9.4			(ss)	
6	310856089333405	MS	124CKMN	2390	728.5	61-06-09	35.5	7.8				
7	310429089182204	MS	124CKMN	2280	694.9	80-03-12	24	8.8			(ss)	
8	351330090473202	AR	124CLBR	1900	579.1	57-08-14		7.9				
9	311516088585004	MS	124CKMN	1710	521.2	80-03-11	19	9			(ss)	
10	312451089184704	MS	124CKMN	1650	502.9	80-03-13	22	8.6			(ss)	
11	282031099370901	TX	124RKCZ	1330	405.4	69-04-09		8.1				
12	343714091342801	AR	124CRVR	946	288.3	50-05-24	24	7.3			(ss)	
13	300043097092402	TX	124RKLW	903	275.2	64-07-09		8.6				
14	300043097092402	TX	124RKLW	903	275.2	64-02-07		8			(ss)	
15	300043097092402	TX	124RKLW	903	275.2	52-05-15		8.3			(ss)	
16	353839089493501	TN	124CLBR	879	267.9	65-11-10		8.1				
17	335955091435001	AR	124CLBR	817	249.0	56-04-12		7.7			(ss)	
18	344203090411603	AR	124CRVR	806	245.7	64-08-27	21	7.9				
19	330117093582001	AR	124CRVR	800	243.8	68-10-23	21	8.6				
20	295928097105201	TX	124RKLW	765	233.2	65-12-29		7.7			(ss)	
21	351330090422201	AR	124CLBR	759	231.3	57-08-14		7.4				
22	354437089315002	TN	124CLBR	755	230.1	61-10-03	18.5	6.8				
23	354437089315001	TN	124CLBR	755	230.1	51-07-23	18.5	6.5				
24	354437089315002	TN	124CLBR	755	230.1	51-07-23	18.5	6.5				
25	340100091390001	AR	124CLBR	650	198.1	56-06-11	19.5	8.6			(ss)	
26	314655088495001	MS	124CLBR	600	182.9	65-06-17		7.3				
27	334517093061501	AR	125MDWY	596	181.7	59-04-08	18	8			(ss)	
28	333350092465601	AR	124CRVR	580	176.8	59-04-08	21.5	8			(ss)	
29	362033088510001	TN	124CLBR	560	170.7	66-11-15	16.5	7				
30	362033088510001	TN	124CLBR	560	170.7	58-06-23	16.5	6.1				
31	350719089555900	TN	124CLBR	547	166.7	70-09-00		6.8				
32	322722089162002	MS	124BSCC	538	164.0	69-05-07	21.5	8.2				
33	350020090471101	AR	124CLBR	530	161.5	60-07-28	18.5	6.8				
34	333950092452801	AR	124CRVR	528	160.9	59-01-16	20.5	8.2			(ss)	
35	352047089523000	TN	124CLBR	512	156.1	68-09-00		7.6				
36	352047089523000	TN	124CLBR	512	156.1	67-03-31		7.2				
37	330707093592401	AR	124CRVR	500	152.4	68-02-29	15	8			(ss)	
38	330707093592401	AR	124CRVR	500	152.4	64-10-07		7.4			(ss)	
39	360733088590001	TN	124CLBR	500	152.4	51-07-24	15.5	6.8				
40	332440093031701	AR	124CRVR	490	149.4	59-04-09		8.3			(ss)	
41	333550092473201	AR	124CRVR	485	147.8	59-04-07	21	7.9			(ss)	
42	330952093472301	AR	124CRVR	483	147.2	68-03-08	18	7.6				
43	354015089342501	TN	124CLBR	480	146.3	51-07-23	18	6.6				
44	350912090014901	TN	124CLBR	477	145.4	65-06-17	18	7.4				
45	315758088434002	MS	124BSCC	472	143.9	67-11-30	21	7.7				
46	315758088434002	MS	124BSCC	472	143.9	67-03-29	21	7.9				
47	340132091350201	AR	124CLBR	466	142.0	56-05-16	18	8.8			(ss)	

	STN NO.	Chalcocite	Cinnabar	Pyrite	Magnetite	Hematite	Antigorite	Daphnite	Phengite	Cuprite
1	302705088291502									
2	310510089000302			(ss)			ss(ss)			
3	310749089345805									
4	310906089412404			(ss)						
5	312555089430004			(ss)			ss(ss)			
6	310856089333405						ss(ss)			
7	310429089182204			(ss)			ss(ss)			
8	351330090473202									
9	311516088585004			(ss)			ss(ss)			
10	312451089184704			(ss)			ss(ss)			
11	282031099370901									
12	343714091342801			(ss)				ss(ss)	ss(ss)	
13	300043097092402									
14	300043097092402			(ss)						
15	300043097092402			(ss)			ss(ss)			
16	353839089493501									
17	335955091435001			(ss)						
18	344203090411603									
19	330117093582001									
20	295928097105201			(ss)						
21	351330090422201									
22	354437089315002									
23	354437089315001								s(s)	
24	354437089315002									
25	340100091390001			(ss)						
26	314655088495001									
27	334517093061501			(ss)						
28	333350092465601			(ss)						
29	362033088510001									
30	362033088510001									
31	350719089555900									
32	322722089162002									
33	350020090471101									
34	333950092452801			(ss)						
35	352047089523000									
36	352047089523000									
37	330707093592401			(ss)						
38	330707093592401			(ss)						
39	360733088590001								s(s)	
40	332440093031701			(ss)						
41	333550092473201			(ss)						
42	330952093472301									
43	354015089342501								ss(ss)	
44	350912090014901									
45	315758088434002									
46	315758088434002									
47	340132091350201			(ss)						

	STN NO.	Corundum	Gibbsite	Calcite	Magnesite	Siderite	Dolomite	Quartz	Maximum Microcline	Albite Low	Sepiolite
1	302705088291502										
2	310510089000302							s(s)			
3	310749089345805										
4	310906089412404							s(s)			
5	312555089430004			ss(ss)	s(s)	ss(ss)	ss(ss)	ss(ss)			ss(ss)
6	310856089333405							s(s)			
7	310429089182204			s(s)	s(s)	ss(ss)	ss(ss)				
8	351330090473202							s(s)			
9	311516088585004										
10	312451089184704			ss(ss)	s(s)	ss(ss)	ss(ss)	ss(ss)			s(s)
11	282031099370901							ss(ss)			
12	343714091342801	ss(ss)	ss(ss)					ss(ss)	ss(ss)	ss(ss)	
13	300043097092402										
14	300043097092402										
15	300043097092402							ss(ss)			ss(ss)
16	353839089493501							s(s)			
17	335955091435001										
18	344203090411603							ss(ss)			
19	330117093582001			s(s)			ss(ss)	s(s)			
20	295928097105201							ss(ss)			
21	351330090422201							s			
22	354437089315002							s(s)			
23	354437089315001	ss(ss)	ss(ss)					s(s)	ss(ss)		
24	354437089315002		ss(ss)					s(s)	s(s)		
25	340100091390001			s(s)		ss(ss)	s(s)				
26	314655088495001							ss(ss)			
27	334517093061501										
28	333350092465601										
29	362033088510001							ss(ss)			
30	362033088510001							ss(ss)			
31	350719089555900							s(s)			
32	322722089162002							ss(ss)			
33	350020090471101							ss(ss)			
34	333950092452801										
35	352047089523000							ss(ss)			
36	352047089523000							ss(ss)			
37	330707093592401							ss(ss)			
38	330707093592401							ss(ss)			
39	360733088590001	ss(ss)	ss(ss)					ss(ss)	ss(ss)	s(s)	
40	332440093031701			s(s)		ss(ss)	s(s)				
41	333550092473201										
42	330952093472301							ss(ss)			
43	354015089342501	ss(ss)	ss(ss)					ss(ss)	ss(ss)	ss(ss)	
44	350912090014901							ss(ss)			
45	315758088434002							ss(ss)			
46	315758088434002							ss(ss)			
47	340132091350201			ss(ss)		ss(ss)	ss(ss)				

	STN NO.	Amesite	Analcime	Kaolinite	Chrysotile	Pyro-phyllite	Talc	Meta-cinnabar	Na-beidellite	Muscovite	Illite
1	302705088291502										
2	310510089000302				ss(ss)		ss(ss)				
3	310749089345805										
4	310906089412404						ss(ss)				
5	312555089430004				ss(ss)		ss(ss)				
6	310856089333405				s(s)		ss(ss)				
7	310429089182204				ss(ss)		ss(ss)				
8	351330090473202						ss(ss)				
9	311516088585004				ss(ss)		ss(ss)				
10	312451089184704				s(s)		ss(ss)				
11	282031099370901						ss(ss)				
12	343714091342801	s(s)	ss(ss)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
13	300043097092402										
14	300043097092402										
15	300043097092402				s(s)		ss(ss)				
16	353839089493501						ss(ss)				
17	335955091435001										
18	344203090411603										
19	330117093582001						ss(ss)				
20	295928097105201										
21	351330090422201										
22	354437089315002										
23	354437089315001			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
24	354437089315002			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
25	340100091390001										
26	314655088495001										
27	334517093061501										
28	333350092465601										
29	362033088510001										
30	362033088510001										
31	350719089555900										
32	322722089162002						s(s)				
33	350020090471101										
34	333950092452801										
35	352047089523000										
36	352047089523000										
37	330707093592401										
38	330707093592401										
39	360733088590001		s(s)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
40	332440093031701										
41	333550092473201										
42	330952093472301										
43	354015089342501		s(s)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
44	350912090014901										
45	315758088434002										
46	315758088434002										
47	340132091350201										

	STN NO.	Annite	Tremolite	Kyanite	Zoisite	Fayalite	Prehnite	Huntite	Ripidolite	Wurtzite	K-feldspar
1	302705088291502										
2	310510089000302		ss(ss)			ss(ss)					
3	310749089345805										
4	310906089412404					ss(ss)					
5	312555089430004		ss(ss)			ss(ss)					
6	310856089333405										
7	310429089182204		s(s)			ss(ss)					
8	351330090473202										
9	311516088585004					ss(ss)					
10	312451089184704		s(s)			ss(ss)		s(s)			
11	282031099370901										
12	343714091342801	ss(ss)		ss(ss)					ss(ss)		ss(ss)
13	300043097092402										
14	300043097092402										
15	300043097092402		ss(ss)			ss(ss)					
16	353839089493501										
17	335955091435001										
18	344203090411603										
19	330117093582001										
20	295928097105201					ss(ss)					
21	351330090422201										
22	354437089315002										
23	354437089315001			ss(ss)							ss(ss)
24	354437089315002										s(s)
25	340100091390001										
26	314655088495001										
27	334517093061501										
28	333350092465601										
29	362033088510001										
30	362033088510001										
31	350719089555900										
32	322722089162002										
33	350020090471101										
34	333950092452801										
35	352047089523000										
36	352047089523000										
37	330707093592401					ss(ss)					
38	330707093592401					ss(ss)					
39	360733088590001			ss(ss)							ss(ss)
40	332440093031701										
41	333550092473201										
42	330952093472301										
43	354015089342501			ss(ss)							ss(ss)
44	350912090014901										
45	315758088434002										
46	315758088434002										
47	340132091350201										

	STN NO.	Sanidine High	Albite High	Stron-tianite	K-beidellite	Ca-beidellite	Mg-beidellite	H-beidellite	Amorphous Silica	Ferrous Oxide	Aragonite	Na-saponite	Ala
1	302705088291502												
2	310510089000302									s(s)			
3	310749089345805												
4	310906089412404												
5	312555089430004			ss(ss)						ss(ss)	ss(ss)		
6	310856089333405												
7	310429089182204			ss(ss)						s(s)	s(s)		
8	351330090473202												
9	311516088585004									s(s)			
10	312451089184704			ss(ss)						s(s)	ss(ss)		
11	282031099370901												
12	343714091342801	ss(ss)	ss(ss)		ss(ss)	ss(ss)	ss(ss)	ss(ss)					
13	300043097092402												
14	300043097092402												
15	300043097092402								s(s)	s(s)			
16	353839089493501												
17	335955091435001												
18	344203090411603												
19	330117093582001										s(s)		
20	295928097105201												
21	351330090422201												
22	354437089315002												
23	354437089315001	ss(ss)			ss(ss)	ss(ss)	ss(ss)	ss(ss)					
24	354437089315002				ss(ss)	ss(ss)	ss(ss)	ss(ss)					
25	340100091390001												
26	314655088495001												
27	334517093061501												
28	333350092465601												
29	362033088510001												
30	362033088510001												
31	350719089555900												
32	322722089162002												
33	350020090471101												
34	333950092452801												
35	352047089523000												
36	352047089523000												
37	330707093592401												
38	330707093592401												
39	360733088590001	ss(ss)			ss(ss)	ss(ss)	ss(ss)	ss(ss)					
40	332440093031701												
41	333550092473201												
42	330952093472301												
43	354015089342501	ss(ss)			ss(ss)	ss(ss)	ss(ss)	ss(ss)					
44	350912090014901												
45	315758088434002												
46	319758088434002												
47	340132091350201										s(s)		

	STN NO.	Clino-zoisite	Paragonite	Diaspore	Ca-saponite	Boehmite	Chalcedony	Mg-saponite	Alunite	Andalusite
1	302705088291502									
2	310510089000302									
3	310749089345805									
4	310906089412404						s(s)			
5	312555089430004						s(s)			
6	310856089333405						s(s)			
7	310429089182204									
8	351330090473202						s(s)			
9	311516088585004									
10	312451089184704						s(s)			
11	282031099370901						s(s)			
12	343714091342801		ss(ss)	ss(ss)		ss(ss)	s(s)			ss(ss)
13	300043097092402									
14	300043097092402									
15	300043097092402						ss(ss)			
16	353839089493501						s(s)			
17	335955091435001									
18	344203090411603						ss(ss)			
19	330117093582001						s(s)			
20	295928097105201						s(s)			
21	351330090422201						s			
22	354437089315002						s(s)			
23	354437089315001		ss(ss)	ss(ss)		ss(ss)	s(s)		s(s)	ss(ss)
24	354437089315002		ss(ss)	ss(ss)			s(s)			
25	340100091390001									
26	314655088495001						s(s)			
27	334517093061501									
28	333350092465601									
29	362033088510001						s(s)			
30	362033088510001						s(s)			
31	350719089555900									
32	322722089162002						ss(ss)			
33	350020090471101						s(s)			
34	333950092452801									
35	352047089523000						s(s)			
36	352047089523000						s(s)			
37	330707093592401						s(s)			
38	330707093592401						s(s)			
39	360733088590001		ss(ss)	ss(ss)		ss(ss)	s(s)			ss(ss)
40	332440093031701									
41	333550092473201									
42	330952093472301						s(s)			
43	354015089342501		ss(ss)	ss(ss)		ss(ss)	s(s)		s(s)	ss(ss)
44	350912090014901						s(s)			
45	315758088434002						s(s)			
46	315758088434002						ss(ss)			
47	340132091350201									

	STN NO.	H-saponite	Antho-phyllite	Albite	Heden-bergite	Quick-silver	Andradite	Cristo-balite	Dolomite Disordered	Dolomite Ordered	Ferro-silite
1	302705088291502										
2	310510089000302										ss(ss)
3	310749089345805										
4	310906089412404							s(s)			ss(ss)
5	312555089430004		ss(ss)		ss(ss)			s(s)	ss(ss)	ss(ss)	ss(ss)
6	310856089333405										
7	310429089182204								ss(ss)	ss(ss)	ss(ss)
8	351330090473202							s(s)			
9	311516088585004										s(s)
10	312451089184704							s(s)	ss(ss)	ss(ss)	ss(ss)
11	282031099370901							s(s)			
12	343714091342801			ss(ss)				s(s)			
13	300043097092402										
14	300043097092402										
15	300043097092402				ss(ss)			ss(ss)			ss(ss)
16	353839089493501							s(s)			
17	335955091435001										
18	344203090411603							s(s)			
19	330117093582001							s(s)		ss(ss)	
20	295928097105201							s(s)			ss(ss)
21	351330090422201										
22	354437089315002										
23	354437089315001							s(s)			
24	354437089315002							s(s)			
25	340100091390001									s(s)	
26	314655088495001							s(s)			
27	334517093061501										
28	333350092465601										
29	362033088510001							s(s)			
30	362033088510001							s(s)			
31	350719089555900										
32	322722089162002							s(s)			
33	350020090471101							s(s)			
34	333950092452801										
35	352047089523000							s(s)			
36	352047089523000							s(s)			
37	330707093592401							s(s)			ss(ss)
38	330707093592401							s(s)			ss(ss)
39	360733088590001			s(s)				s(s)			
40	332440093031701									s(s)	
41	333550092473201										
42	330952093472301							s(s)			
43	354015089342501			ss(ss)				s(s)			
44	350912090014901							s(s)			
45	315758088434002							s(s)			
46	315758088434002							s(s)			
47	340132091350201									ss(ss)	

	STN NO.	Wairakite	Laumontite	Margarite	Silli-manite	Barite	Fluorite	Kalsilite	Jadeite	Greenalite	Minne-sotaite
1	302705088291502										
2	310510089000302									ss(ss)	ss(ss)
3	310749089345805										
4	310906089412404						ss(ss)			ss(ss)	ss(ss)
5	312555089430004									ss(ss)	ss(ss)
6	310856089333405						s(s)				
7	310429089182204									ss(ss)	ss(ss)
8	351330090473202										
9	311516088585004									ss(ss)	ss(ss)
10	312451089184704									ss(ss)	ss(ss)
11	282031099370901										
12	343714091342801		ss(ss)	ss(ss)	ss(ss)			s(s)	ss(ss)	ss(ss)	ss(ss)
13	300043097092402										
14	300043097092402										
15	300043097092402									ss(ss)	ss(ss)
16	353839089493501										
17	335955091435001										
18	344203090411603										
19	330117093582001										
20	295928097105201									ss(ss)	ss(ss)
21	351330090422201										
22	354437089315002										
23	354437089315001		ss(ss)	ss(ss)	ss(ss)						
24	354437089315002										
25	340100091390001										
26	314655088495001										
27	334517093061501										
28	333350092465601										
29	362033088510001										
30	362033088510001										
31	350719089555900										
32	322722089162002										
33	350020090471101										
34	333950092452801										
35	352047089523000										
36	352047089523000										
37	330707093592401									ss(ss)	ss(ss)
38	330707093592401									ss(ss)	ss(ss)
39	360733088590001		ss(ss)	ss(ss)	ss(ss)						
40	332440093031701										
41	333550092473201										
42	330952093472301										
43	354015089342501		ss(ss)	ss(ss)	ss(ss)						
44	350912090014901										
45	315758088434002										
46	315758088434002										
47	340132091350201										

	STN NO.	Chamosite	Uraninite	U4O9(c)	MgF2(c)	PbF2	Hydroxy Apatite	Fluor Apatite	MnHPO4	Berlinite	Whit-lockite
1	302705088291502										
2	310510089000302										
3	310749089345805										
4	310906089412404										
5	312555089430004										
6	310856089333405										
7	310429089182204										
8	351330090473202										
9	311516088585004										
10	312451089184704										
11	282031099370901										
12	343714091342801	ss(ss)									
13	300043097092402										
14	300043097092402										
15	300043097092402										
16	353839089493501										
17	335995091435001										
18	344203090411603										
19	330117093582001										
20	295928097105201										
21	351330090422201										
22	354437089315002										
23	354437089315001										
24	354437089315002										
25	340100091390001										
26	314655088495001										
27	334517093061501										
28	333350092465601										
29	362033088510001										
30	362033088510001										
31	350719089555900										
32	322722089162002										
33	350020090471101										
34	333950092452801										
35	352047089523000										
36	352047089523000										
37	330707093592401										
38	330707093592401										
39	360733088590001										
40	332440093031701										
41	333550092473201										
42	330952093472301										
43	354015089342501										
44	350912090014901										
45	315758088434002										
46	315758088434002										
47	340132091350201										

	STN NO.	Lawsonite	Tridymite
1	302705088291502		
2	310510089000302		
3	310749089345805		
4	310906089412404		s(s)
5	312555089430004		s(s)
6	310856089333405		s(s)
7	310429089182204		
8	351330090473202		s(s)
9	311516088585004		
10	312451089184704		s(s)
11	282031099370901		s(s)
12	343714091342801	ss(ss)	s(s)
13	300043097092402		
14	300043097092402		
15	300043097092402		ss(ss)
16	353839089493501		s(s)
17	335955091435001		
18	344203090411603		ss(ss)
19	330117093582001		s(s)
20	295928097105201		s(s)
21	351330090422201		s
22	354437089315002		s(s)
23	354437089315001	ss(ss)	s(s)
24	354437089315002		s(s)
25	340100091390001		
26	314655088495001		s(s)
27	334517093061501		
28	333350092465601		
29	362033088510001		s(s)
30	362033088510001		s(s)
31	350719089555900		s(s)
32	322722089162002		ss(ss)
33	350020090471101		s(s)
34	333950092452801		
35	352047089523000		s(s)
36	352047089523000		ss(ss)
37	330707093592401		s(s)
38	330707093592401		s(s)
39	360733088590001	ss(ss)	s(s)
40	332440093031701		
41	333550092473201		
42	330952093472301		s(s)
43	354015089342501	ss(ss)	s(s)
44	350912090014901		s(s)
45	315758088434002		ss(ss)
46	315758088434002		ss(ss)
47	340132091350201		

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Copper	Pyrrhotite	Sphalerite	Galena
48	362031088505801	TN	124CLBR	465	141.7	51-08-23	16.5	6.2				
49	330530093390801	AR	124CRVR	460	140.2	68-02-29	20	8.3				
50	330530093390801	AR	124CRVR	460	140.2	64-10-06	22	8.8				
51	325418091505302	LA	124CKMN	452	137.8	61-01-13	22	7.8				
52	350540090061700	TN	124CLBR	415	126.5	85-09-11	18	6.4				
53	350540090061700	TN	124CLBR	415	126.5	84-08-27	18	6.6				
54	361724088424101	TN	124CLBR	405	123.4	66-10-11	15.5	6.2				
55	312435096381401	TX	125MDWY	400	121.9	81-04-27	22.5	7.4				
56	330306093553701	AR	124CRVR	390	118.9	68-10-23	21	7.9				
57	324634091515502	LA	124CKMN	381	116.1	65-11-18	22	7.4		(ss)		
58	332129093294502	AR	124CRVR	378	115.2	68-03-07		7.5		(ss)		
59	350615090480801	AR	124CLBR	378	115.2	61-08-04	18.5	7.6		(ss)		
60	332632093103801	AR	124CRVR	376	114.6	50-08-29	20	7.7				
61	320924092593101	LA	124CRVR	372	113.4	74-08-16	22.5	9		(ss)		
62	330334093490501	AR	124CRVR	370	112.8	68-10-25		8.5		(ss)		
63	333723092454301	AR	124CRVR	362	110.3	59-04-08	19	7.5		(ss)		
64	350950090434801	AR	124CLBR	361	110.0	61-10-19		7.2				
65	331317093472601	AR	124CRVR	350	106.7	64-10-06	20	7.9		(ss)		
66	331858093394801	AR	124CRVR	350	106.7	64-10-06		7.8		(ss)		
67	350342090073101	TN	124CLBR	348	106.1	58-12-12	16.5	7.7				
68	334119093012601	AR	124CRVR	346	105.5	58-08-21		7.6		(ss)		
69	330017093533201	LA	124CRVR	345	105.2	73-08-01	21	6.9		(ss)		
70	330017093533201	LA	124CRVR	345	105.2	73-07-31	21	8.4				
71	330017093533201	LA	124CRVR	345	105.2	73-07-31	21	8.4		(ss)		
72	360919088475801	TN	124CLBR	340	103.6	66-10-11		6.2				
73	360919088475801	TN	124CLBR	340	103.6	58-06-23	15.5	5.9		(ss)		
74	360919088475801	TN	124CLBR	340	103.6	58-03-23	15.5	5.9				
75	361355088375501	TN	124CLBR	340	103.6	66-11-15		6.6				
76	351202090462701	AR	124CLBR	336	102.4	61-09-20		7.9				
77	350732090053203	AR	124CLBR	335	102.1	64-06-18	16.5	6.5				
78	325121091522202	LA	124CKMN	334	101.8	66-01-27	21	7.9		(ss)		
79	320924092593103	LA	124CRVR	325	99.1	84-08-31	23	8.7	(ss)	(ss)	(ss)	(ss)
80	324352091531003	LA	124CKMN	312	95.1	68-08-08	20.5	8.2				
81	312456096323501	TX	125MDWY	310	94.5	81-12-05	21	7.1				
82	332337093513501	AR	124CRVR	310	94.5	64-10-07		6.6		(ss)		
83	330226093481001	AR	124CRVR	300	91.4	68-10-25		8.6				
84	332129093392701	AR	124CRVR	300	91.4	68-02-29	16	7.6		(ss)		
85	361533090175702	AR	124CLBR	298	90.8	56-06-19	23.5	7.1				
86	345947089472601	TN	124CLBR	290	88.4	62-08-17	17	6.2				
87	354308089331101	TN	124CCKFJ	289	88.1	82-08-11	17	6.6				
88	312759096324201	TX	125MDWY	275	83.8	81-04-24	23.5	7.8				
89	350234089394502	TN	124CLBR	267	81.4	64-05-01	17	6.2				
90	350234089394502	TN	124CLBR	267	81.4	62-07-27	17	6.1				
91	350234089394502	TN	124CLBR	267	81.4	51-06-08	16.5	5.9				
92	351406088380201	TN	124CLBR	260	79.2	66-11-15		6.8			(ss)	
93	361358088492902	TN	124CLBR	260	79.2	66-10-11	15.5	6.4				
94	361358088492901	TN	124CLBR	255	77.7	52-07-08	16	6.1				
95	354941090421101	AR	124CLBR	254	77.4	50-05-03	16	7		(ss)		
96	335620092505401	AR	124CRVR	250	76.2	79-07-16	22	8		(ss)		
97	325937093535401	LA	124CRVR	243	74.1	73-08-07	20.5	8		(ss)		

	STN NO.	Chalcocite	Cinnabar	Pyrite	Magnetite	Hematite	Antigorite	Daphnite	Phengite	Cuprite
48	362031088505801									
49	330530093390801									
50	330530093390801						ss			
51	325418091505302									
52	350540090061700									
53	350540090061700									
54	361724088424101									
55	312435096381401									
56	330306093553701									
57	324634091515502			(ss)						
58	332129093294502			(ss)						
59	350615090480801			(ss)						
60	332632093103801								ss(ss)	
61	320924092593101			(ss)			ss(ss)			
62	330334093490501			(ss)	ss(ss)	ss(ss)				
63	333723092454301			(ss)						
64	350950090434801									
65	331317093472601			(ss)						
66	331858093394801			(ss)						
67	350342090073101									
68	334119093012601			(ss)						
69	330017093533201			(ss)						
70	330017093533201									
71	330017093533201			(ss)						
72	360919088475801									
73	360919088475801			(ss)						
74	360919088475801									
75	361355088375501									
76	351202090462701									
77	350732090053203									
78	325121091522202			(ss)						
79	320924092593103	(ss)		(ss)				ss(ss)	ss(ss)	ss(ss)
80	324352091531003									
81	312456096323501									
82	332337093513501			(ss)						
83	330226093481001									
84	332129093392701			(ss)						
85	361533090175702									
86	345947089472601									
87	354308089331101									ss
88	312759096324201									
89	350234089394502									
90	350234089394502									
91	350234089394502									
92	351406088380201									
93	361358088492902									
94	361358088492901									
95	354941090421101			(ss)				ss(ss)	ss(ss)	
96	335620092505401		(ss)	(ss)						
97	325937093535401			(ss)						

	STN NO.	Corundum	Gibbsite	Calcite	Magnesite	Siderite	Dolomite	Quartz	Maximum Microcline	Albite Low	Sepiolite
48	362031088505801	ss(ss)	ss(ss)					ss(ss)	ss(ss)	s(s)	
49	330530093390801			s(s)			s(s)	s(s)			
50	330530093390801			ss	s	ss	ss	s			
51	325418091505302							s(s)			
52	350540090061700							s			
53	350540090061700							s			
54	361724088424101							ss(ss)			
55	312435096381401							ss			
56	330306093553701							s(s)			
57	324634091515502							s(s)			
58	332129093294502							ss(ss)			
59	350615090480801							ss(ss)			
60	332632093103801		ss(ss)					s(s)	ss(ss)	ss(ss)	
61	320924092593101			s(s)		ss(ss)	ss(ss)	s(s)			
62	330334093490501			s(s)		(ss)	s(s)	s(s)			
63	333723092454301										
64	350950090434801										
65	331317093472601							s(s)			
66	331858093394801							ss(ss)			
67	350342090073101							s(s)			
68	334119093012601										
69	330017093533201							ss(ss)			
70	330017093533201							ss(ss)			
71	330017093533201							ss(ss)			
72	360919088475801							ss(ss)			
73	360919088475801							ss(ss)			
74	360919088475801							ss(ss)			
75	361355088375501							ss(ss)			
76	351202090462701										
77	350732090053203							ss(ss)			
78	325121091522202					ss(ss)		s(s)			
79	320924092593103		s(s)					s(s)	ss(ss)		
80	324352091531003							ss			
81	312456096323501							ss(ss)			
82	332337093513501							ss(ss)			
83	330226093481001			s(s)			ss(ss)	s(s)			
84	332129093392701							ss(ss)			
85	361533090175702							s(s)			
86	345947089472601							s(s)			
87	354308089331101							ss			
88	312759096324201							s(s)			
89	350234089394502							ss(ss)			
90	350234089394502							s(s)			
91	350234089394502		ss(ss)					s(s)	s(s)		
92	351406088380201							ss(ss)			
93	361358088492902							ss(ss)			
94	361358088492901	s(s)	ss(ss)					ss(ss)	ss(ss)		
95	354941090421101	ss(ss)	ss(ss)					ss(ss)	ss(ss)	ss(ss)	
96	335620092505401							ss(ss)			
97	325937093535401							ss(ss)			

	STN NO.	Amesite	Analcime	Kaolinite	Chrysotile	Pyro-phyllite	Talc	Meta-cinnabar	Na-beidellite	Muscovite	Illite
48	362031088505801			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
49	330530093390801										
50	330530093390801				s		ss				
51	325418091505302										
52	350540090061700										
53	350540090061700										
54	361724088424101										
55	312435096381401										
56	330306093553701										
57	324634091515502										
58	332129093294502										
59	350615090480801						s(s)				
60	332632093103801		ss(ss)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
61	320924092593101				s		ss(ss)				
62	330334093490501						s(s)				
63	333723092454301										
64	350950090434801										
65	331317093472601										
66	331858093394801										
67	350342090073101										
68	334119093012601										
69	330017093533201										
70	330017093533201										
71	330017093533201										
72	360919088475801										
73	360919088475801										
74	360919088475801										
75	361355088375501										
76	351202090462701										
77	350732090053203										
78	325121091522202										
79	320924092593103			ss(ss)			ss(ss)		s(s)	ss(ss)	s(s)
80	324352091531003						ss				
81	312456096323501										
82	332337093513501										
83	330226093481001						ss(ss)				
84	332129093392701										
85	361533090175702										
86	345947089472601										
87	354308089331101										
88	312759096324201										
89	350234089394502										
90	350234089394502										
91	350234089394502			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
92	351406088380201										
93	361358088492902										
94	361358088492901			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
95	354941090421101	ss(ss)	ss(ss)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
96	335620092505401							(ss)			
97	325937093535401										

	STN NO.	Annite	Tremolite	Kyanite	Zoisite	Fayalite	Prehnite	Huntite	Ripidolite	Wurtzite	K-feldspar
48	362031088505801			ss(ss)							ss(ss)
49	330530093390801										
50	330530093390801					ss					
51	325418091505302										
52	350540090061700										
53	350540090061700										
54	361724088424101										
55	312435096381401					ss					
56	330306093553701										
57	324634091515502					ss(ss)					
58	332129093294502					ss(ss)					
59	350615090480801										
60	332632093103801										ss(ss)
61	320924092593101					ss(ss)					
62	330334093490501					(ss)					
63	333723092454301										
64	350950090434801										
65	331317093472601					s(s)					
66	331858093394801					s(s)					
67	350342090073101										
68	334119093012601										
69	330017093533201										
70	330017093533201										
71	330017093533201					ss(ss)					
72	360919088475801										
73	360919088475801										
74	360919088475801										
75	361355088375501										
76	351202090462701										
77	350732090053203										
78	325121091522202					ss(ss)					
79	320924092593103	ss(ss)				ss(ss)			ss(ss)	(ss)	ss(ss)
80	324352091531003					ss					
81	312456096323501										
82	332337093513501										
83	330226093481001										
84	332129093392701										
85	361533090175702										
86	345947089472601										
87	354308089331101										
88	312759096324201										
89	350234089394502										
90	350234089394502										
91	350234089394502										s(s)
92	351406088380201									(ss)	
93	361358088492902										
94	361358088492901			ss(ss)							ss(ss)
95	354941090421101	ss(ss)		ss(ss)	ss(ss)		s(s)		s(s)		ss(ss)
96	335620092505401					ss(ss)					
97	325937093535401					ss(ss)					

	STN NO.	Sanidine High	Albite High	Stron-tianite	K-beidellite	Ca-beidellite	Mg-beidellite	H-beidellite	Amorphous Silica	Ferrous Oxide	Aragonite	Na-saponite	Ala
48	362031088505801	ss(ss)			ss(ss)	ss(ss)	ss(ss)	ss(ss)					
49	330530093390801										s(s)		
50	330530093390801									s	ss		
51	325418091505302												
52	350540090061700												
53	350540090061700												
54	361724088424101												
55	312435096381401												
56	330306093553701												
57	324634091515502												
58	332129093294502												
59	350615090480801												
60	332632093103801	ss(ss)	s(s)		ss(ss)	ss(ss)	ss(ss)	ss(ss)					
61	320924092593101									s(s)	s(s)		
62	330334093490501										s(s)		
63	333723092454301												
64	350950090434801												
65	331317093472601												
66	331858093394801												
67	350342090073101												
68	334119093012601												
69	330017093533201												
70	330017093533201												
71	330017093533201									s(s)			
72	360919088475801												
73	360919088475801												
74	360919088475801												
75	361355088375501												
76	351202090462701												
77	350732090053203												
78	325121091522202												
79	320924092593103					s(s)	s(s)					ss(ss)	
80	324352091531003												
81	312456096323501												
82	332337093513501												
83	330226093481001										s(s)		
84	332129093392701												
85	361533090175702												
86	345947089472601												
87	354308089331101												
88	312759096324201												
89	350234089394502												
90	350234089394502												
91	350234089394502				ss(ss)	ss(ss)	ss(ss)	ss(ss)					
92	351406088380201												
93	361358088492902												
94	361358088492901	s(s)			ss(ss)	ss(ss)	ss(ss)	ss(ss)					
95	354941090421101	ss(ss)	ss(ss)		ss(ss)	ss(ss)	ss(ss)	ss(ss)					
96	335620092505401												
97	325937093535401												

	STN NO.	Clino-zoisite	Paragonite	Diaspore	Ca-saponite	Boehmite	Chalcedony	Mg-saponite	Alunite	Andalusite
48	362031088505801		ss(ss)	ss(ss)		ss(ss)	s(s)		ss(ss)	ss(ss)
49	330530093390801						s(s)			
50	330530093390801						s			
51	325418091505302						s(s)			
52	350540090061700						s			
53	350540090061700						s			
54	361724088424101						s(s)			
55	312435096381401						ss			
56	330306093553701						s(s)			
57	324634091515502						s(s)			
58	332129093294502						s(s)			
59	350615090480801						s(s)			
60	332632093103801		ss(ss)	ss(ss)		s(s)	s(s)			
61	320924092593101						s(s)			
62	330334093490501						s(s)			
63	333723092454301									
64	350950090434801									
65	331317093472601						s(s)			
66	331858093394801						s(s)			
67	350342090073101						s(s)			
68	334119093012601									
69	330017093533201						s(s)			
70	330017093533201						s(s)			
71	330017093533201						s(s)			
72	360919088475801						s(s)			
73	360919088475801						s(s)			
74	360919088475801						s(s)			
75	361355088375501						s(s)			
76	351202090462701									
77	350732090053203						s(s)			
78	325121091522202						s(s)			
79	320924092593103				ss(ss)		s(s)	ss(ss)		
80	324352091531003						s			
81	312456096323501						ss(ss)			
82	332337093513501						ss(ss)			
83	330226093481001						s(s)			
84	332129093392701						s(s)			
85	361533090175702						s(s)			
86	345947089472601						s(s)			
87	354308089331101						ss			
88	312759096324201						s(s)			
89	350234089394502						s(s)			
90	350234089394502						s(s)			
91	350234089394502		ss(ss)	ss(ss)		s(s)	s(s)			
92	351406088380201						s(s)			
93	361358088492902						s(s)			
94	361358088492901		ss(ss)	ss(ss)		ss(ss)	s(s)		s(s)	ss(ss)
95	354941090421101	ss(ss)	ss(ss)	ss(ss)		ss(ss)	ss(ss)		ss(ss)	ss(ss)
96	335620092505401						s(s)			
97	325937093535401						s(s)			

	STN NO.	H-saponite	Antho-phyllite	Albite	Heden-bergite	Quick-silver	Andradite	Cristo-balite	Dolomite Disordered	Dolomite Ordered	Ferro-silite
48	362031088505801			s(s)				s(s)			
49	330530093390801							s(s)		s(s)	
50	330530093390801				s			s	ss	ss	ss
51	325418091505302							s(s)			
52	350540090061700							s			
53	350540090061700							s			
54	361724088424101							s(s)			
55	312435096381401							s			ss
56	330306093553701							s(s)			
57	324634091515502							s(s)			ss(ss)
58	332129093294502							s(s)			s(s)
59	350615090480801							s(s)			s(s)
60	332632093103801			ss(ss)				s(s)			
61	320924092593101				s(s)			s(s)		ss(ss)	ss(ss)
62	330334093490501						ss	s(s)		s(s)	(ss)
63	333723092454301										
64	350950090434801										
65	331317093472601							s(s)			s(s)
66	331858093394801							s(s)			s(s)
67	350342090073101							s(s)			
68	334119093012601										
69	330017093533201							s(s)			
70	330017093533201							s(s)			
71	330017093533201							s(s)			ss(ss)
72	360919088475801							s(s)			
73	360919088475801							s(s)			
74	360919088475801							s(s)			
75	361355088375501							s(s)			
76	351202090462701										
77	350732090053203							s(s)			
78	325121091522202							s(s)			ss(ss)
79	320924092593103	s(s)						s(s)			ss(ss)
80	324352091531003							s			s
81	312456096323501							ss(ss)			
82	332337093513501							s(s)			
83	330226093481001							s(s)		ss(ss)	
84	332129093392701							s(s)			s(s)
85	361533090175702							s(s)			
86	345947089472601							s(s)			
87	354308089331101							s			
88	312759096324201							s(s)			
89	350234089394502							s(s)			
90	350234089394502							s(s)			
91	350234089394502							s(s)			
92	351406088380201							s(s)			
93	361358088492902							s(s)			
94	361358088492901							s(s)			
95	354941090421101			ss(ss)				s(s)			
96	335620092505401					(ss)		s(s)			ss(ss)
97	325937093535401							s(s)			s(s)

	STN NO.	Wairakite	Laumontite	Margarite	Silli-manite	Barite	Fluorite	Kalsilite	Jadeite	Greenalite	Minne-sotaite
48	362031088505801		ss(ss)	ss(ss)	ss(ss)						
49	330530093390801										
50	330530093390801									ss	ss
51	325418091505302										
52	350540090061700										ss
53	350540090061700										ss
54	361724088424101										
55	312435096381401									ss	ss
56	330306093553701										
57	324634091515502									ss(ss)	ss(ss)
58	332129093294502									ss(ss)	ss(ss)
59	350615090480801									ss(ss)	ss(ss)
60	332632093103801		ss(ss)	ss(ss)							
61	320924092593101									ss(ss)	ss(ss)
62	330334093490501									(ss)	(ss)
63	333723092454301						ss(ss)				
64	350950090434801										
65	331317093472601									ss(ss)	ss(ss)
66	331858093394801									ss(ss)	ss(ss)
67	350342090073101										
68	334119093012601										
69	330017093533201									ss(ss)	ss(ss)
70	330017093533201										
71	330017093533201									ss(ss)	ss(ss)
72	360919088475801										
73	360919088475801										
74	360919088475801										
75	361355088375501										
76	351202090462701										
77	350732090053203										
78	325121091522202									ss(ss)	ss(ss)
79	320924092593103					ss(ss)				ss(ss)	ss(ss)
80	324352091531003									ss	ss
81	312456096323501										
82	332337093513501									ss(ss)	ss(ss)
83	330226093481001										
84	332129093392701									ss(ss)	ss(ss)
85	361533090175702										
86	345947089472601										
87	354308089331101										
88	312759096324201										
89	350234089394502										
90	350234089394502										
91	350234089394502										
92	351406088380201										
93	361358088492902										
94	361358088492901		ss(ss)	ss(ss)	ss(ss)						
95	354941090421101	ss(ss)	ss(ss)	ss(ss)	ss(ss)			s(s)	s(s)		ss(ss)
96	335620092505401									ss(ss)	ss(ss)
97	325937093535401									ss(ss)	ss(ss)

	STN NO.	Chamosite	Uraninite	U4O9(c)	MgF2(c)	PbF2	Hydroxy Apatite	Fluor Apatite	MnHPO4	Berlinite	Whit-lockite
48	362031088505801										
49	330530093390801										
50	330530093390801										
51	325418091505302						ss(ss)	ss(ss)			ss(ss)
52	350540090061700					ss					
53	350540090061700					ss					
54	361724088424101										
55	312435096381401										
56	330306093553701										
57	324634091515502						ss(ss)	ss(ss)			ss(ss)
58	332129093294502										
59	350615090480801										
60	332632093103801										
61	320924092593101										
62	330334093490501										
63	333723092454301				s(s)						
64	350950090434801										
65	331317093472601										
66	331858093394801										
67	350342090073101						ss(ss)				ss(ss)
68	334119093012601										
69	330017093533201										
70	330017093533201										
71	330017093533201										
72	360919088475801										
73	360919088475801										
74	360919088475801										
75	361355088375501										
76	351202090462701										
77	350732090053203										
78	325121091522202										
79	320924092593103	ss(ss)	s(s)	ss		ss(ss)					
80	324352091531003										
81	312456096323501										
82	332337093513501										
83	330226093481001										
84	332129093392701										
85	361533090175702										
86	345947089472601										
87	354308089331101						ss	ss			s
88	312759096324201										
89	350234089394502										
90	350234089394502										
91	350234089394502										
92	351406088380201										
93	361358088492902										
94	361358088492901										
95	354941090421101	ss(ss)									
96	335620092505401						ss(ss)	ss(ss)	s(s)		ss(ss)
97	325937093535401										

	STN NO.	Lawsonite	Tridymite
48	362031088505801	ss(ss)	s(s)
49	330530093390801		s(s)
50	330530093390801		s
51	325418091505302		s(s)
52	350540090061700		s
53	350540090061700		s
54	361724088424101		s(s)
55	312435096381401		ss
56	330306093553701		s(s)
57	324634091515502		s(s)
58	332129093294502		s(s)
59	350615090480801		ss(ss)
60	332632093103801	ss(ss)	s(s)
61	320924092593101		s(s)
62	330334093490501		s(s)
63	333723092454301		
64	350950090434801		
65	331317093472601		s(s)
66	331858093394801		s(s)
67	350342090073101		s(s)
68	334119093012601		
69	330017093533201		s(s)
70	330017093533201		s(s)
71	330017093533201		s(s)
72	360919088475801		s(s)
73	360919088475801		s(s)
74	360919088475801		s(s)
75	361355088375501		s(s)
76	351202090462701		
77	350732090053203		s(s)
78	325121091522202		s(s)
79	320924092593103		s(s)
80	324352091531003		s
81	312456096323501		ss(ss)
82	332337093513501		ss(ss)
83	330226093481001		s(s)
84	332129093392701		s(s)
85	361533090175702		s(s)
86	345947089472601		s(s)
87	354308089331101		ss
88	312759096324201		s(s)
89	350234089394502		ss(ss)
90	350234089394502		s(s)
91	350234089394502		s(s)
92	351406088380201		s(s)
93	361358088492902		s(s)
94	361358088492901		s(s)
95	354941090421101	ss(ss)	ss(ss)
96	335620092505401		s(s)
97	325937093535401		s(s)

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Copper	Pyrrhotite	Sphalerite	Galena
98	331250093080801	AR	124CKMN	238	72.5	50-08-29	20	7.7				
99	354956090425001	AR	124CLBR	235	71.6	50-05-03	15.5	6.7		(ss)		
100	325643092284901	LA	124CKMN	233	71.0	69-01-08		8.4		(ss)		
101	300211097114201	TX	124RKLW	230	70.1	52-11-11		8.6				
102	362024089094001	TN	124CCKFJ	230	70.1	84-10-11	16	6.6				
103	361708088422001	TN	124CLBR	222	67.7	51-08-23	15.5	5.9				
104	350658089131001	TN	124CLBR	211	64.3	51-06-14	16.5	5.9				
105	330009093533901	LA	124CRVR	210	64.0	59-08-06	21.5	7.5				
106	322233092031401	LA	124CKMN	210	64.0	66-06-16		8		(ss)		
107	333220093142001	AR	124CRVR	210	64.0	68-03-07		7				
108	330009093533901	LA	124CRVR	210	64.0	59-08-06	21.5	7.5				
109	333220093142001	AR	124CRVR	210	64.0	64-10-08	19	7.4				
110	333820092020601	AR	124JCKS	210	64.0	59-08-14	20	7.9				
111	325931092114001	LA	124CKMN	204	62.2	68-12-16		8.1		(ss)		
112	325229092154401	LA	124CKMN	202	61.6	69-01-09		8.1		(ss)		

	STN NO.	Chalcocite	Cinnabar	Pyrite	Magnetite	Hematite	Antigorite	Daphnite	Phengite	Cuprite
98	331250093080801								ss(ss)	
99	354956090425001			(ss)				ss(ss)	ss(ss)	
100	325643092284901			(ss)						
101	300211097114201						ss(ss)			
102	362024089094001									
103	361708088422001									
104	350658089131001									
105	330009093533901									
106	322233092031401			(ss)						
107	333220093142001									
108	330009093533901									
109	333220093142001									
110	333820092020601									
111	325931092114001			(ss)						
112	325229092154401			(ss)						

	STN NO.	Corundum	Gibbsite	Calcite	Magnesite	Siderite	Dolomite	Quartz	Maximum Microcline	Albite Low	Sepiolite
98	331250093080801		ss(ss)					ss(ss)	ss(ss)	ss(ss)	
99	354956090425001	ss(ss)	ss(ss)					ss(ss)	ss(ss)	ss(ss)	
100	325643092284901					ss(ss)	s(s)	s(s)			
101	300211097114201							s(s)			
102	362024089094001							ss			
103	361708088422001							ss			
104	350658089131001		ss(ss)					ss(ss)			
105	330009093533901							s(s)			
106	322233092031401							ss(ss)			
107	333220093142001							s(s)			
108	330009093533901							s(s)			
109	333220093142001							s(s)			
110	333820092020601										
111	325931092114001							s(s)			
112	325229092154401							s(s)			

	STN NO.	Amesite	Analcime	Kaolinite	Chrysotile	Pyro-phyllite	Talc	Meta-cinnabar	Na-beidellite	Muscovite	Illite
98	331250093080801		ss(ss)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
99	354956090425001		ss(ss)	ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
100	325643092284901										
101	300211097114201				s(s)		ss(ss)				
102	362024089094001										
103	361708088422001										
104	350658089131001			ss(ss)		ss(ss)			ss(ss)	ss(ss)	ss(ss)
105	330009093533901										
106	322233092031401										
107	333220093142001										
108	330009093533901										
109	333220093142001										
110	333820092020601										
111	325931092114001										
112	325229092154401										

	STN NO.	Annite	Tremolite	Kyanite	Zoisite	Fayalite	Prehnite	Huntite	Ripidolite	Wurtzite	K-feldspar
98	331250093080801			s(s)							ss(ss)
99	354956090425001	ss(ss)		ss(ss)	ss(ss)	s(s)			ss(ss)		ss(ss)
100	325643092284901					ss(ss)					
101	300211097114201										
102	362024089094001					s					
103	361708088422001										
104	350658089131001										
105	330009093533901										
106	322233092031401					ss(ss)					
107	333220093142001										
108	330009093533901										
109	333220093142001										
110	333820092020601										
111	325931092114001					ss(ss)					
112	325229092154401					ss(ss)					

	STN NO.	Sanidine High	Albite High	Stron-tianite	K-beidellite	Ca-beidellite	Mg-beidellite	H-beidellite	Amorphous Silica	Ferrous Oxide	Aragonite	Na-saponite	Ala
98	331250093080801	ss(ss)	s(s)		ss(ss)	ss(ss)	ss(ss)	ss(ss)					
99	354956090425001	ss(ss)	ss(ss)		ss(ss)	ss(ss)	ss(ss)	ss(ss)					
100	325643092284901												
101	300211097114201												
102	362024089094001												
103	361708088422001												
104	350658089131001				ss(ss)	ss(ss)	ss(ss)	ss(ss)					
105	330009093533901												
106	322233092031401												
107	333220093142001												
108	330009093533901												
109	333220093142001												
110	333820092020601												
111	325931092114001												
112	325229092154401												

	STN NO.	K-saponite	Clino-zoisite	Paragonite	Diaspore	Ca-saponite	Boehmite	Chalcedony	Mg-saponite	Alunite	Andalusite
98	331250093080801			ss(ss)	ss(ss)		s(s)	s(s)			
99	354956090425001		ss(ss)	ss(ss)	ss(ss)		ss(ss)	ss(ss)		ss(ss)	ss(ss)
100	325643092284901							s(s)			
101	300211097114201							s(s)			
102	362024089094001							s			
103	361708088422001							s			
104	350658089131001			s(s)	ss(ss)			s(s)			
105	330009093533901							s(s)			
106	322233092031401							s(s)			
107	333220093142001							s(s)			
108	330009093533901							s(s)			
109	333220093142001							s(s)			
110	333820092020601										
111	325931092114001							s(s)			
112	325229092154401							s(s)			

	STN NO.	H-saponite	Antho-phyllite	Albite	Heden-bergite	Quick-silver	Andradite	Cristo-balite	Dolomite Disordered	Dolomite Ordered	Ferro-silite
98	331250093080801			ss(ss)				s(s)			
99	354956090425001			ss(ss)				s(s)			ss(ss)
100	325643092284901							s(s)		s(s)	ss(ss)
101	300211097114201							s(s)			
102	362024089094001							s			s
103	361708088422001							s			
104	350658089131001							s(s)			
105	330009093533901							s(s)			
106	322233092031401							s(s)			ss(ss)
107	333220093142001							s(s)			
108	330009093533901							s(s)			
109	333220093142001							s(s)			
110	333820092020601										
111	325931092114001							s(s)			ss(ss)
112	325229092154401							s(s)			ss(ss)

	STN NO.	Wairakite	Laumontite	Margarite	Silli-manite	Barite	Fluorite	Kalsilite	Jadeite	Greenalite	Minne-sotaite
98	331250093080801		ss(ss)	ss(ss)							
99	354956090425001	ss(ss)	ss(ss)	ss(ss)	ss(ss)				s(s)	ss(ss)	ss(ss)
100	325643092284901									ss(ss)	ss(ss)
101	300211097114201										
102	362024089094001						s			ss	ss
103	361708088422001										ss
104	350658089131001										
105	330009093533901										
106	322233092031401									ss(ss)	ss(ss)
107	333220093142001										
108	330009093533901										
109	333220093142001										
110	333820092020601										
111	325931092114001									ss(ss)	ss(ss)
112	325229092154401									ss(ss)	ss(ss)

	STN NO.	Chamosite	Uraninite	U4O9(c)	MgF2(c)	PbF2	Hydroxy Apatite	Fluor Apatite	MnHPO4	Berlinite	Whit-lockite
98	331250093080801										
99	354956090425001	ss(ss)									
100	325643092284901										
101	300211097114201										
102	362024089094001					ss					
103	361708088422001										
104	350658089131001									ss(ss)	
105	330009093533901										
106	322233092031401										
107	333220093142001										
108	330009093533901						ss(ss)	ss(ss)			ss(ss)
109	333220093142001										
110	333820092020601										
111	325931092114001										
112	325229092154401										

	STN NO.	Lawsonite	Tridymite
98	331250093080801	ss(ss)	s(s)
99	354956090425001	ss(ss)	ss(ss)
100	325643092284901		s(s)
101	300211097114201		s(s)
102	362024089094001		s
103	361708088422001		s
104	350658089131001		s(s)
105	330009093533901		s(s)
106	322233092031401		s(s)
107	333220093142001		s(s)
108	330009093533901		s(s)
109	333220093142001		s(s)
110	333820092020601		
111	325931092114001		s(s)
112	325229092154401		s(s)

TABLE AIII-2

Results of mineral modeling
for the Pierre and Bearpaw Formations

The entry "S" designates saturated; "SS" designates supersaturated; no entry designates undersaturated. Data in "()" designates reduced conditions, all other entries are for oxidized conditions. An asterisk designates redox data were available for that sample, usually sulfide-sulfate and, hence, only a single redox case was run.

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Pyrrhotite	Sphalerite	Galena	Pyrite
1		SD	211PIRR	2300	701.0	74-0-		7.7				
2	480755106233101	MT	211BRPW	685	208.8	78-08-19	15	8.2	ss*			ss
3	480758106431901	MT	211BRPW	600	182.9	78-08-15	10.5	8.1	ss*			ss
4	480805106370301	MT	211BRPW	555	169.2	78-08-16	13	8.3	ss*			ss
5	461926099032501	ND	211PIRR	538	164.0	77-11-03	7	7.9	(ss)			(ss)
6	462902099124801	ND	211PIRR	520	158.5	79-07-19	9	7.3	(ss)			(ss)
7	484229099182001	ND	211PIRR	474	144.5	80-05-22	7.5	7.4	(ss)			(ss)
8	463007099083201	ND	211PIRR	470	143.3	79-07-19		7.4	(ss)			(ss)
9	472256099362101	ND	211PIRR	445	135.6	65-07-30	8.5	8.1	(ss)			(ss)
10	483605099184101	ND	211PIRR	415	126.5	80-06-04	12	7.1	(ss)			(ss)
11	462137098572901	ND	211PIRR	410	125.0	75-07-30		7.8	(ss)			(ss)
12	463602099133301	ND	211PIRR	400	121.9	77-10-27	8.5	7.6	(ss)			(ss)
13	472625099382601	ND	211PIRR	400	121.9	66-06-01	9.5	8.1	(ss)			(ss)
14	481355099070201	ND	211PIRR	400	121.9	73-06-04		8	(ss)			(ss)
15	484453099225801	ND	211PIRR	400	121.9	80-05-14	9	7.8	(ss)			(ss)
16	485059099245601	ND	211PIRR	381	116.1	80-05-07	6	7.7	(ss)			(ss)
17	484548099211401	ND	211PIRR	379	115.5	80-05-14	7	7.9	(ss)			(ss)
18	462915099141301	ND	211PIRR	364	110.9	79-08-01		8.2	(ss)			(ss)
19	453846099254201	SD	211PIRR	363	110.6	71-06-23	10	7.7	(ss)			(ss)
20	453705099423401	SD	211PIRR	350	106.7	62-05-11						
21	453915099062501	SD	211PIRR	350	106.7	71-06-24	9.5	7.6	(ss)			(ss)
22	484447099261501	ND	211PIRR	348	106.1	80-05-08		8.7	(ss)			(ss)
23	484538099191001	ND	211PIRR	340	103.6	80-05-14	5	7.8	(ss)			(ss)
24	463655099155501	ND	211PIRR	330	100.6	79-08-09	8.5	7.9	(ss)			(ss)
25	485329099224801	ND	211PIRR	314	95.7	80-05-05	7	7	(ss)			(ss)
26	481151106424701	MT	211BRPW	300	91.4	76-12-18	12	8.3	(ss)	(ss)	(ss)	(ss)
27	481546099120401	ND	211PIRR	300	91.4	69-05-14	6.5	8.7	(ss)			(ss)
28	485151099272301	ND	211PIRR	300	91.4	80-05-07	5.5	8.2	(ss)			(ss)
29	484013099244201	ND	211PIRR	293	89.3	80-06-03	7	8	(ss)			(ss)
30	483940099174101	ND	211PIRR	283	86.3	80-05-22	8	8	(ss)			(ss)
31	453636099403901	SD	211PIRR	280	85.3	71-06-28		7.8	(ss)			(ss)
32	480238098205101	ND	211PIRR	280	85.3	49-09-09						
33	481805099235201	ND	211PIRR	270	82.3	58-04-03	6	8.1	(ss)			(ss)
34	483737099222701	ND	211PIRR	260	79.2	80-06-04	13	8.3	(ss)			(ss)
35	480448098343901	ND	211PIRR	250	76.2	73-05-08		7.9	(ss)			(ss)
36	435520104322001	WY	211PIRR	248	75.6	74-10-3	10	7.4	(ss)			(ss)
37	483750099222701	ND	211PIRR	237	72.2	80-04-04	14	8	(ss)			(ss)
38	483755099122801	ND	211PIRR	230	70.1	80-05-21	8.5	8.5	(ss)			(ss)
39	482658099242301	ND	211PIRR	228	69.5	80-06-24	11	8.2	(ss)			(ss)
40	483704099122701	ND	211PIRR	228	69.5	80-06-05	14	8	(ss)			(ss)
41	483612099122701	ND	211PIRR	227	69.2	80-06-05	10	7.9	(ss)			(ss)
42	454549099164202	SD	211PIRR	221	67.4	71-06-17	7.5	8	(ss)			(ss)
43	482827098525301	ND	211PIRR	219	66.8	72-07-21		7.6	(ss)			(ss)
44	483843099263001	ND	211PIRR	219	66.8	80-06-03	11	8	(ss)			(ss)
45	485925099465301	ND	211PIRR	217	66.1	78-06-14	7.5	7	(ss)			(ss)
46	483640099553401	ND	211PIRR	213	64.9	78-06-07		8.4	(ss)			(ss)
47	474850098411802	ND	211PIRR	207	63.1	65-03-10	9	8				

	STN NO.	Antigorite	Calcite	Magnesite	Siderite	Dolomite	Gypsum	Quartz	Sepiolite	Chrysotile	Talc
1							s(s)				
2	480755106233101		s		ss	ss		ss			
3	480758106431901		s		ss	ss		ss			
4	480805106370301							ss			
5	461926099032501							ss(ss)			s(s)
6	462902099124801							ss(ss)			
7	484229099182001							ss(ss)			
8	463007099083201							ss(ss)			
9	472256099362101							ss(ss)			s(s)
10	483605099184101							ss(ss)			
11	462137098572901							ss(ss)			ss(ss)
12	463602099133301							ss(ss)			
13	472625099382601							ss(ss)	ss(ss)	ss(ss)	ss(ss)
14	481355099070201	ss(ss)						ss(ss)			ss(ss)
15	484453099225801							ss(ss)			ss(ss)
16	485059099245601							ss(ss)			s(s)
17	484548099211401							ss(ss)			s(s)
18	462915099141301	ss(ss)						ss(ss)	s(s)	s(s)	ss(ss)
19	453846099254201										
20	453705099423401		ss	s		ss					
21	453915099062501										
22	484447099261501	ss(ss)						s(s)		ss(ss)	ss(ss)
23	484538099191001							ss(ss)			s(s)
24	463655099155501							ss(ss)			
25	485329099224801							ss(ss)			
26	481151106424701							s(s)			
27	481546099120401		ss(ss)	s(s)	ss(ss)	ss(ss)		ss(ss)	ss(ss)	ss(ss)	ss(ss)
28	485151099272301							ss(ss)			ss(ss)
29	484013099244201							ss(ss)			ss(ss)
30	483940099174101							ss(ss)			ss(ss)
31	453636099403901										
32	480238098205101										
33	481805099235201										
34	483737099222701							ss(ss)	s(s)		ss(ss)
35	480448098343901							ss(ss)			ss(ss)
36	435520104322001							s(s)			
37	483750099222701							ss(ss)			ss(ss)
38	483755099122801		ss(ss)	s(s)	ss(ss)	ss(ss)		ss(ss)	s		ss(ss)
39	482658099242301							ss(ss)			ss(ss)
40	483704099122701							ss(ss)			ss(ss)
41	483612099122701							ss(ss)			s(s)
42	454549099164202										
43	482827098525301							ss(ss)			s(s)
44	483843099263001							ss(ss)			ss(ss)
45	485925099465301						s(s)	ss(ss)			
46	483640099553401							ss(ss)			ss(ss)
47	474850098411802							ss(ss)			ss(ss)

	STN NO.	Tremolite	Diopside	Fayalite	Wurtzite	Huntite	Ferrous Oxide	Alabandite	Aragonite	Chalcedony	Antho-phyllite
1											
2	480755106233101			s					s	s	
3	480758106431901			s					s	s	
4	480805106370301			ss						s	
5	461926099032501			ss(ss)						ss(ss)	
6	462902099124801									ss(ss)	
7	484229099182001									ss(ss)	
8	463007099083201			s(s)						ss(ss)	
9	472256099362101			ss(ss)						ss(ss)	
10	483605099184101			ss(ss)						ss(ss)	
11	462137098572901			ss(ss)						s(s)	
12	463602099133301			s(s)						ss(ss)	
13	472625099382601	ss(ss)	ss(ss)	ss(ss)			s(s)			ss(ss)	ss(ss)
14	481355099070201	s(s)		ss(ss)				(s)		s(s)	
15	484453099225801			ss(ss)						ss(ss)	
16	485059099245601			ss(ss)						ss(ss)	
17	484548099211401			ss(ss)						ss(ss)	
18	462915099141301	ss(ss)		ss(ss)						ss(ss)	
19	453846099254201										
20	453705099423401					s			ss		
21	453915099062501										
22	484447099261501	ss(ss)		ss(ss)						s(s)	
23	484538099191001			ss(ss)				(s)		ss(ss)	
24	463655099155501			ss(ss)						ss(ss)	
25	485329099224801									ss(ss)	
26	481151106424701			ss(ss)	(ss)					s(s)	
27	481546099120401	ss(ss)		ss(ss)					ss(ss)	ss(ss)	
28	485151099272301			ss(ss)						ss(ss)	
29	484013099244201			ss(ss)						ss(ss)	
30	483940099174101			s(s)						ss(ss)	
31	453636099403901										
32	480238098205101										
33	481805099235201										
34	483737099222701	s(s)		ss(ss)						ss(ss)	
35	480448098343901			ss(ss)				(s)		ss(ss)	
36	435520104322001									s(s)	
37	483750099222701			ss(ss)						ss(ss)	
38	483755099122801			ss(ss)					s(s)	ss(ss)	
39	482658099242301			s(s)				(ss)		ss(ss)	
40	483704099122701			s(s)				(s)		ss(ss)	
41	483612099122701									ss(ss)	
42	454549099164202										
43	482827098525301			ss(ss)				(s)		ss(ss)	
44	483843099263001			ss(ss)						ss(ss)	
45	485925099465301			s(s)						ss(ss)	
46	483640099553401	s(s)		ss(ss)			s(s)			ss(ss)	
47	474850098411802									ss(ss)	

	STN NO.	Heden-bergite	Cristo-balite	Dolomite Disordered	Dolomite Ordered	Ferro-silite	Greenalite	Minne-sotaite	PbF2	Hydroxy Apatite	Fluor Apatite
1											
2	480755106233101		s		ss	s	ss	ss			
3	480758106431901		s		ss	s	ss	ss			
4	480805106370301		s			ss	ss	ss			
5	461926099032501		s(s)			ss(ss)	ss(ss)	(ss)			
6	462902099124801		ss(ss)				ss(ss)	ss(ss)			
7	484229099182001		s(s)			s(s)	ss(ss)	ss(ss)			
8	463007099083201		s(s)			s(s)	ss(ss)	ss(ss)			
9	472256099362101		s(s)			ss(ss)	ss(ss)	ss(ss)			
10	483605099184101		s(s)			ss(ss)	ss(ss)	ss(ss)			
11	462137098572901		s(s)			ss(ss)	ss(ss)	ss(ss)			
12	463602099133301		s(s)			s(s)	ss(ss)	ss(ss)			
13	472625099382601	ss(ss)	s(s)			ss(ss)	ss(ss)	ss(ss)			
14	481355099070201		s(s)			ss(ss)	ss(ss)	ss(ss)			
15	484453099225801		s(s)			ss(ss)	ss(ss)	ss(ss)			
16	485059099245601		s(s)			ss(ss)	ss(ss)	ss(ss)			
17	484548099211401		s(s)			ss(ss)	ss(ss)	ss(ss)			
18	462915099141301	s(s)	s(s)			ss(ss)	ss(ss)	ss(ss)			
19	453846099254201										
20	453705099423401			ss	ss						
21	453915099062501										
22	484447099261501		s(s)			ss(ss)	ss(ss)	ss(ss)			
23	484538099191001		s(s)			ss(ss)	ss(ss)	ss(ss)			
24	463655099155501		s(s)			ss(ss)	ss(ss)	ss(ss)			
25	485329099224801		s(s)				ss(ss)	ss(ss)			
26	481151106424701		s(s)			s(s)	ss(ss)	ss(ss)	ss(ss)	ss(ss)	ss(ss)
27	481546099120401	s(s)	s(s)	ss(ss)	ss(ss)	ss(ss)	ss(ss)	ss(ss)			
28	485151099272301		ss(ss)			ss(ss)	ss(ss)	ss(ss)			
29	484013099244201		ss(ss)			ss(ss)	ss(ss)	ss(ss)			
30	483940099174101		s(s)			s(s)	ss(ss)	ss(ss)			
31	453636099403901										
32	480238098205101										
33	481805099235201										
34	483737099222701		s(s)			ss(ss)	ss(ss)	ss(ss)			
35	480448098343901		s(s)			ss(ss)	ss(ss)	ss(ss)			
36	435520104322001		s(s)					ss(ss)			
37	483750099222701		s(s)			ss(ss)	ss(ss)	ss(ss)			
38	483755099122801		s(s)	s(s)	ss(ss)	ss(ss)	ss(ss)	ss(ss)			
39	482658099242301		s(s)			s(s)	ss(ss)	ss(ss)			
40	483704099122701		s(s)			s(s)	ss(ss)	ss(ss)			
41	483612099122701		s(s)			s(s)	ss(ss)	ss(ss)			
42	454549099164202										
43	482827098525301		s(s)			ss(ss)	ss(ss)	ss(ss)			
44	483843099263001		s(s)			ss(ss)	ss(ss)	ss(ss)			
45	485925099465301		s(s)			ss(ss)	ss(ss)	ss(ss)			
46	483640099553401	ss(ss)	s(s)			ss(ss)	ss(ss)	ss(ss)			
47	474850098411802		s(s)								

	STN NO.	Pb3(PO4)2 (c)	Hydroxy Pyromorphite	Chloro Pyromorphite	Pb4O(PO4)2 (c)	Whit-lockite	Tridymite
1							
2	480755106233101						s
3	480758106431901						s
4	480805106370301						s
5	461926099032501						(ss)
6	462902099124801						ss(ss)
7	484229099182001						ss(ss)
8	463007099083201						ss(ss)
9	472256099362101						ss(ss)
10	483605099184101						ss(ss)
11	462137098572901						ss(ss)
12	463602099133301						ss(ss)
13	472625099382601						ss(ss)
14	481355099070201						ss(ss)
15	484453099225801						ss(ss)
16	485059099245601						ss(ss)
17	484548099211401						ss(ss)
18	462915099141301						ss(ss)
19	453846099254201						
20	453705099423401						
21	453915099062501						
22	484447099261501						s(s)
23	484538099191001						ss(ss)
24	463655099155501						ss(ss)
25	485329099224801						ss(ss)
26	481151106424701	ss(ss)	ss(ss)	ss(ss)	ss(ss)	ss(ss)	s(s)
27	481546099120401						ss(ss)
28	485151099272301						ss(ss)
29	484013099244201						ss(ss)
30	483940099174101						ss(ss)
31	453636099403901						
32	480238098205101						
33	481805099235201						
34	483737099222701						ss(ss)
35	480448098343901						ss(ss)
36	435520104322001						s(s)
37	483750099222701						ss(ss)
38	483755099122801						ss(ss)
39	482658099242301						ss(ss)
40	483704099122701						ss(ss)
41	483612099122701						ss(ss)
42	454549099164202						
43	482827098525301						ss(ss)
44	483843099263001						ss(ss)
45	485925099465301						ss(ss)
46	483640099553401						ss(ss)
47	474850098411802						ss(ss)

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Pyrrhotite	Sphalerite	Galena	Pyrite
48	484722099103701	ND	211PIRR	207	63.1	80-05-20	7	7.7	(ss)			(ss)
49	483810099220502	ND	211PIRR	205	62.5	80-06-03	14	8	(ss)			(ss)
50	480224098204101	ND	211PIRR	200	61.0	72-11-17		7.8	(ss)			(ss)
51	480224098204101	ND	211PIRR	200	61.0	49-09-09						
52	480606098213001	ND	211PIRR	200	61.0	49-09-19						
53	481704099114401	ND	211PIRR	200	61.0	72-08-03		7.7				
54	483511098384005	ND	211PIRR	200	61.0	70-07-08		8	(ss)			(ss)

	STN NO.	Antigorite	Calcite	Magnesite	Siderite	Dolomite	Gypsum	Quartz	Sepiolite	Chrysotile	Talc
48	484722099103701							ss(ss)			s(s)
49	483810099220502							ss(ss)			ss(ss)
50	480224098204101							ss(ss)			ss(ss)
51	480224098204101										
52	480606098213001										
53	481704099114401							ss(ss)			ss(ss)
54	483511098384005	ss(ss)						ss(ss)	s(s)		

	STN NO.	Tremolite	Diopside	Fayalite	Wurtzite	Huntite	Ferrous Oxide	Alabandite	Aragonite	Chalcedony	Antho-phyllite
48	484722099103701			ss(ss)						ss(ss)	
49	483810099220502			ss(ss)						ss(ss)	
50	480224098204101			ss(ss)						ss(ss)	
51	480224098204101										
52	480606098213001										
53	481704099114401									ss(ss)	
54	483511098384005	ss(ss)		ss(ss)				(ss)		ss(ss)	

	STN NO.	Heden-bergite	Cristo-balite	Dolomite Disordered	Dolomite Ordered	Ferro-silite	Greenalite	Minne-sotaite	PbF2	Hydroxy Apatite	Fluor Apatite
48	484722099103701		s(s)			ss(ss)	ss(ss)	ss(ss)			
49	483810099220502		s(s)			ss(ss)	ss(ss)	ss(ss)			
50	480224098204101		s(s)			ss(ss)	ss(ss)	ss(ss)			
51	480224098204101										
52	480606098213001										
53	481704099114401		s(s)								
54	483511098384005		s(s)			ss(ss)	ss(ss)	ss(ss)			

	STN NO.	Pb3(PO4)2 (c)	Hydroxy Pyromorphite	Chloro Pyromorphite	Pb4O(PO4)2 (c)	Whit- lockite	Tridymite
48	484722099103701						ss(ss)
49	483810099220502						ss(ss)
50	480224098204101						ss(ss)
51	480224098204101						
52	480606098213001						
53	481704099114401						ss(ss)
54	483511098384005						ss(ss)

TABLE AIII-3

Results of mineral modeling
for the Midcontinent group

The entry "S" designates saturated; "SS" designates supersaturated; no entry designates undersaturated. Data in "()" designates reduced conditions, all other entries are for oxidized conditions. An asterisk designates redox data were available for that sample, usually sulfide-sulfate and, hence, only a single redox case was run.

	STN NO.	STATE	FRM CODE	DEPTH ft	DEPTH m	DATE	T (deg C)	pH	Pyrrhotite	Pyrite	Gypsum	Quartz
1	395035109062201	UT	200MNCS	6220	1895.9	61-08-01		7.6	(ss)	(ss)		
2	352410099221201	OK	318HNSS	770	234.7	51-10-10		7.7				ss(ss)
3	352403097221801	OK	318HNSS	764	232.9	51-10-10		7.6				ss(ss)
4	341550093281701	AR	330STNL	430	131.1	58-02-05		7.8				
5	343556099505601	OK	313DGCK	201	61.3	53-10-15	18.5	7.2			s(s)	ss(ss)

STN NO.	Talc	Ferrous Oxide	Chalcedony	Cristo-balite	Tridymite
1 395035109062201		ss(ss)			
2 352410099221201	s(s)		s(s)	s(s)	s(s)
3 352403097221801			s(s)	s(s)	s(s)
4 341550093281701					
5 343556099505601			s(s)	s(s)	s(s)

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