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FINAL REPORT ON

**TOTAL DISSOLVED SOLIDS MONITORING
NEAR THE FISH HABITAT COMPENSATION
AREAS IN SNAP LAKE, 2008**

Submitted to:

**De Beers Canada Inc.
Yellowknife, Northwest Territories**

2008

08-1349-0003/6170



SUMMARY

Why Do We Monitor Total Dissolved Solids?

The amount of material, for example sodium and chloride, that is dissolved in water is called the total dissolved solids. The amount of solids dissolved in natural water varies with water type. The salt water in oceans, for instance, has a much higher concentration of total dissolved solids than the freshwater in arctic lakes, such as Snap Lake. High concentrations of total dissolved solids can be harmful to fish and other aquatic organisms if they are not adapted to these levels.

An increase in the concentration of total dissolved solids in Snap Lake water was predicted in the Snap Lake Mine environmental assessment. Most of the water flowing from the Water Treatment Plant into Snap Lake is groundwater, which was predicted to have higher concentrations of total dissolved solids than the lake water. The environmental assessment predicted that over the life of the Snap Lake Mine, the average concentration of total dissolved solids in Snap Lake would remain below 350 mg/L. The concentration of total dissolved solids in Snap Lake is monitored on an ongoing basis to confirm it will remain below the 350 mg/L maximum that was predicted in the environmental assessment.

What Did We Do in 2007 and 2008?

Water samples and water column profile measurements (profiles) were collected during ice free and ice cover conditions, from July 2007 to May 2008. Water samples and profile measurements were collected in July, August and September, during ice free conditions of 2007. During the month of August 2007, water samples and profile measurements were only collected at the Surveillance Network Program (SNP) stations, which consist of the three closest stations to the diffuser that discharges treated effluent. During 2008 ice cover conditions, water samples and profile measurements were collected monthly at the SNP stations. Profile measurements, at most other stations, and water quality samples, at a fewer number of stations, were collected at the following frequency:

- once at the beginning of the ice cover period (between January and February); and
- once in the later part of the ice cover period (between the end of March and April) at most other stations in Snap Lake.

Extremely cold weather conditions prevented collection of water samples and profiles at some stations in January, February and at the beginning of March 2008. Safety concerns (i.e., unsafe ice conditions) prevented sampling from October to December 2007.

Profile measurements from May 2007 to May 2008 are included in this report. Laboratory results of the May 2008 water quality samples are not presented in this report because the final data were not available at the time of report preparation.

What Did We Learn?

Monitoring during the ice free period of 2007, and during the 2008 ice cover period, confirmed that the concentrations of total dissolved solids near the three fish habitat compensation structures, and throughout Snap Lake, were below 350 mg/L. To confirm that the concentration remains below the predicted maximum and within a healthy range for aquatic life in Snap Lake, monitoring of total dissolved solids in Snap Lake will continue over the life of the mine.

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ACRONYMS

AEMP	Aquatic Effects Monitoring Plan
De Beers	De Beers Canada Inc.
DFO	Department of Fisheries and Oceans Canada
EAR	Environmental Assessment Report
EMS	Environmental Management System
GPS	global positioning system
Mine	Snap Lake Mine
QA/QC	quality assurance and quality control
SNP	Surveillance Network Program
TDS	total dissolved solids
UTM	Universal Transverse Mercator

UNITS

%	percent
$\mu\text{S}/\text{cm}$	microSiemens per centimetre
km	kilometre
L	litre
m	metre
mg/L	milligrams per litre

1 INTRODUCTION

De Beers Canada Inc. (De Beers) owns and operates the Snap Lake Mine (Mine), which is located 220 kilometres (km) northeast of Yellowknife, NT. De Beers is required by the Mine's Fisheries Authorization to monitor total dissolved solids (TDS) concentrations near each of the three fish habitat compensation works in Snap Lake, and to report the concentrations annually on July 31st to the Department of Fisheries and Oceans Canada (DFO).

1.1 REGULATORY REQUIREMENTS

An Environmental Assessment Report (EAR) for the Mine (De Beers 2002) was submitted to the Mackenzie Valley Environmental Impact Review Board in February 2002. In 2004, De Beers received the Water License (MV2001L2-0002 [Mackenzie Valley Land and Water Board 2004]), Fisheries Authorization (SC00196 [Fisheries and Oceans Canada 2006a]), and Environmental Agreement (Minister of Indian Affairs and Northern Development et al. 2004) required to begin operations at Snap Lake.

In July 2004, De Beers submitted the Aquatics Effects Monitoring Plan (AEMP) (De Beers 2004) for Snap Lake. The AEMP was amended in July 2005 (De Beers 2005a). On May 29, 2006 treated effluent began discharging to Snap Lake through the permanent diffuser. Discharge triggered the TDS monitoring required by the Fisheries Authorization. The requirements for TDS monitoring are described in Section 5.2 of the Fisheries Authorization:

5.6 A Fisheries Authorization Total Dissolved Solids (TDS) Monitoring Plan shall be developed and subject to DFO approval, to harmonize with the existing TDS monitoring plan in the Water License-Aquatic Effects Monitoring Program (AEMP) and submitted to DFO for review, at least 6 months prior to the anticipated initiation of effluent discharge via the diffuser to Snap Lake.

5.6.1 The Fisheries Authorization TDS Monitoring Plan shall include monitoring of TDS concentrations at discrete depth intervals (1 m intervals) in close proximity to the freshwater intake (section 4.1.1), treated minewater outlet (section 4.1.2.), and the artificial reef (Fisheries Act Authorization/DFO File No. DC-99-123) structures within Snap Lake.

5.6.2 Sampling shall occur once per month under ice and at least two times during open water conditions to allow a determination of seasonal TDS concentrations with depth at each location.

5.6.3 *Implementation of the approved monitoring plan shall commence coincident with the initiation of effluent discharge via the diffuser to Snap Lake.*

5.6.3.1 *De Beers shall ensure and demonstrate to DFO, prior to the initiation of effluent discharge via the diffuser to Snap Lake, that De Beers has collected to DFO's satisfaction appropriate, discrete depth baseline TDS concentrations, from the locations described in 5.2.1, to which monitoring data can be compared.*

5.6.4 *Results of monitoring are to be provided to DFO by July 31st each year and are to include results of all under ice sampling for the year being reported on, as well as a plain language summary suitable for dissemination to affected Aboriginal groups.*

5.6.5 *If the monitoring results indicate that discrete depth concentrations of TDS exceed 350 mg/L at any depth in 3 consecutive sampling events at any of the sampling locations, De Beers shall develop a study plan within 3 months of the most recent exceedance to determine the potential impacts on egg development and larval fish survival that shall be subject to DFO review and approval. Should any adverse impacts be identified, De Beers shall identify actions for mitigating these impacts and De Beers will implement any such mitigation measures as soon as practicable as approved by DFO.*

To comply with Section 5.6 of the Fisheries Authorization, De Beers submitted to DFO the "Sampling Plan for Total Dissolved Solids, Calcium and Chloride" (De Beers 2005b), and the Technical Memorandum "TDS Data for the Snap Lake Mine" (Golder Associates Ltd. 2005). The TDS Sampling Plan expands on the TDS monitoring that is part of the Snap Lake AEMP and Surveillance Network Program (SNP). The Technical Memorandum describes in detail how the TDS Sampling Plan ensures compliance with Section 5.6.3.1 of the Fisheries Authorization. In a letter, DFO approved of the TDS Sampling Plan and Technical Memorandum, subject to a several conditions (DFO 2006b).

The recommendations regarding compliance that were presented in the Technical Memorandum and the letter of reply from DFO included the following:

- Calculated TDS instead of measured TDS will be used as the measure of TDS concentration in Snap Lake.
- A more inclusive equation will be used for the determination of calculated TDS.

- Due to the strong correlation between field conductivity and calculated TDS, field measurements of conductivity will be used as a surrogate measure of calculated TDS to estimate TDS at 1 metre (m) depth intervals under-ice.
- The correlation between conductivity and TDS will be updated and provided in each annual report.
- The existing monitoring stations SNAP12 and SNAP05, which are part of the current AEMP monitoring plan, were proposed as appropriate to monitor TDS near the artificial reef compensation works.
- In July 2006, the new monitoring station SNAP28, which is at the deepest point near the toe of the mine water outlet embankment, was selected to monitor TDS near the outlet embankment compensation works.
- In July 2006, the new monitoring station SNAP29, which is located near the freshwater intake, was selected to monitor TDS near the intake embankment compensation works.
- In the future, the location of the proposed monitoring locations may change based on DFO requirements and the TDS sampling results.

These recommendations have been followed. Additional details about the locations of the stations selected to monitor TDS concentrations near the fish habitat compensation works are provided in the methods section of this report.

1.2 TOTAL DISSOLVED SOLIDS

The concentration of TDS is a measure of the amount of material, for instance sodium and chloride, which is dissolved in water, and specific conductivity is an indirect electrical measurement of TDS. The EAR for the Mine (De Beers 2002) predicted that TDS concentrations in Snap Lake would increase due to the discharge of treated effluent. Treated effluent contains groundwater which has higher TDS concentrations than the water in Snap Lake. The EAR predicted that the whole lake average concentration of TDS in Snap Lake would remain below 350 mg/L (De Beers 2002). Concentration of TDS below 350 mg/L in Snap Lake is specified as a condition in the Water License for the Mine.

TDS concentration can be measured directly by evaporating a known volume of filtered water and measuring the mass of the residue left after evaporation. Alternatively, TDS concentration can be calculated as the sum of all the major ions in the sample. For the Mine, TDS concentration is determined by calculation using the following equation:

Equation 1

$$\text{TDS}_{\text{calculated}} = \sum[\text{Ca}^{2+}, \text{Fe}^{2+}, \text{Fe}^{3+}, \text{K}^{+}, \text{Mg}^{2+}, \text{Na}^{2+}, \text{Cl}^{-}, \text{SO}_4^{2-}, 4.42 \bullet \text{NO}_3^{-} \text{ (as N)}, 0.6 \bullet \text{total alkalinity (as CaCO}_3\text{)}, \text{SiO}_{2(\text{aq})} \text{ (as reactive silica)}]$$

Equation 1 includes all of the inorganic ions that could measurably contribute to TDS in Snap Lake during the life of the Mine. Calculated TDS is used rather than measured TDS for the reasons provided below:

1. Results from Snap Lake have shown that calculated TDS is more precise than measured TDS, particularly at low TDS concentrations. Therefore, using calculated TDS concentration means that changes in the amount of TDS in Snap Lake will be detected earlier and with more certainty than if measured TDS concentrations were used.
2. The EAR used calculated TDS to predict the concentration of TDS in the effluent. In the EAR, De Beers reported measured and calculated TDS but only calculated TDS was used in the models predicting Snap Lake water quality over the life of the mine. To be consistent with the EAR predictions, calculated TDS will be reported and used in future reporting of monitoring results and modelling.
3. Forecasts of TDS concentrations in the treated effluent from the Snap Lake Mine must be based on calculated TDS to account for the contribution of the specific ions to mass releases associated with mine activities, such as blasting and grouting.

1.3 APPROACH

Measurements of field specific conductivity and calculated TDS concentration during the ice free (July to September 2007) and ice cover (January to May 2008) periods were reviewed to determine whether TDS concentrations were below 350 mg/L near each of the fish habitat compensation works in Snap Lake. The objective of this report is to provide an answer to the Key Question below:

Were concentrations of TDS near the existing fish habitat compensation works from July 2007 to May 2008 below 350 mg/L, as specified in the Fisheries Authorization?

In addition, this report reviewed the specific conductivity and TDS concentration data collected between July 2007 and May 2008 throughout Snap Lake to confirm that TDS concentrations were less than 350 mg/L throughout the Lake.

2 METHODS

2.1 MONITORING LOCATIONS

Three fish habitat compensation works have been constructed in Snap Lake (Table 2-1). The location of the artificial reef, water intake, and outlet embankment compensations works are shown in (Figure 2-1). The completion date, water depth and the station selected for total dissolved solids (TDS) monitoring at each of the compensation works are provided in Table 2-1.

Table 2-1 Fish Habitat Compensation Works Construction Dates, Water Depths, and TDS Monitoring Stations

Compensation Works	Water Depth (m)	Construction Completion Date	TDS Monitoring Stations	Water Depth at the Monitoring Station (m)
Artificial reef	1 - 7	March 2001	SNAP05 SNAP12	13 8
Fresh water intake embankment	0 - 7	October 2005	SNAP29 ⁽¹⁾	7
Treated effluent outlet embankment	0 - 2	October 2005	SNAP28 ⁽²⁾	7

Notes:

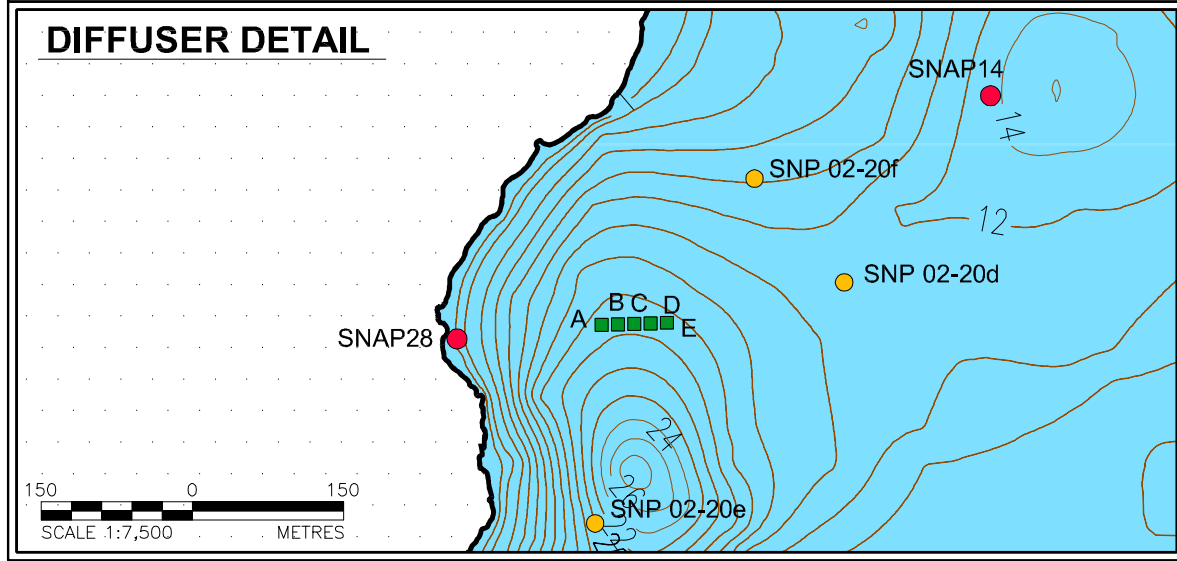
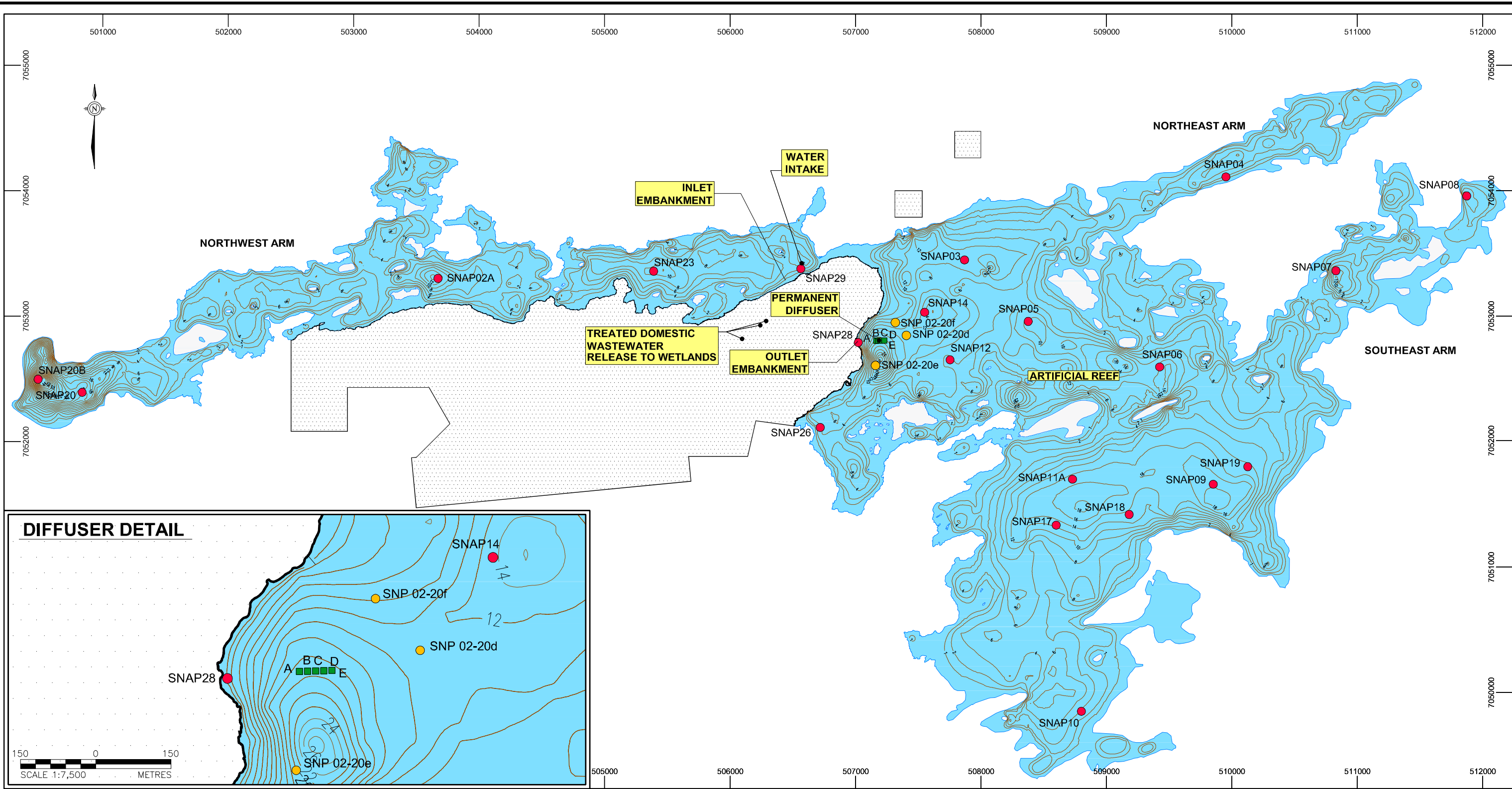
⁽¹⁾ SNAP29 replaced SNP 02-15 in July 2006.

⁽²⁾ SNAP28 replaced SNAP13 in July 2006.

The artificial reef is located close to the existing Aquatic Effects Monitoring Plan (AEMP) monitoring stations SNAP05 and SNAP12 (De Beers 2005a) (Figure 2-1). Water depths at SNAP05 and SNAP12 are 13 and 8 metres, respectively (Table 2-1), which are sufficient to encompass the depth ranges at the artificial reef. The monitoring results for these two stations are used to determine TDS concentration within the depth range of the artificial reef.

The freshwater intake compensation embankment is located in the northwest arm of Snap Lake (Figure 2-1). Since July 2006, SNAP29, which is close to the intake embankment, has been sampled to determine TDS concentration near the intake compensation works. Before July 2006, station SNP 02-15 was sampled to monitor TDS concentration near the temporary water intake.

L:\2008\1349\08-1349-0003\6100\6170\Total Dissolved Solids Report (TDS)\Drawing file: Fig 2-1 2008 Snap Lake WQ Sampling Stations.dwg Jul 29, 2008 - 2:16pm



- LEGEND**
- WATER QUALITY MONITORING STATIONS
 - DIFFUSER STATIONS
 - DIFFUSER NOZZLE LOCATIONS
 - SNAP LAKE MINE FOOTPRINT

REFERENCE

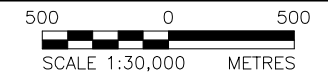
DIGITAL MAP FROM MACKAY LAKE, NORTHWEST TERRITORIES, PRODUCED BY DEPARTMENT OF ENERGY, MINES AND RESOURCES. MAP 75M, ORIGINAL SCALE 1:250,000, NAD 83 UTM ZONE 12.

SNAP LAKE OUTLINE AND ISLANDS WERE CORRECTED TO LANDSAT 7 SATELLITE IMAGE 45/15, DATED SEPTEMBER 2, 2000. PROVIDED BY GEOBASE.

BATHYMETRY WAS CREATED IN SURFER 8 USING SONAR DATA FROM THE 2002 NORTH LAKES PROGRAM (GOLDER) AND 2005 TRANSECT DATA FROM THE REFERENCE LAKE SEARCH PROGRAM (GOLDER).

NOTES

1. ALL DEPTH VALUES ARE SHOWN IN METRES.
2. MAP MOVED TO NAD83 COORDINATE SYSTEM.



PROJECT			
TITLE			
WATER QUALITY MONITORING STATIONS IN SNAP LAKE, 2008			
	PROJECT	08.1349.0003.6170	FILE No. 2008 WQ Samp Stns
	DESIGN	AH 05/12/07	SCALE AS SHOWN REV. 0
	CADD	YW 19/06/08	
	CHECK	LY 29/07/08	
	REVIEW	ZK 29/07/08	
			FIGURE: 2-1

The treated effluent outlet embankment is expected to experience the highest TDS concentrations among the fish habitat compensation works because of its proximity to the permanent diffuser (Figure 2-1). Since discharge from the permanent diffuser began near the end of May 2006, SNAP28 (Figure 2-1) has been sampled to determine TDS concentration at the outlet embankment. Before May 2006, SNAP13, which was the closest AEMP station to the outlet embankment, was sampled to monitor TDS.

2.2 FIELD METHODS

2.2.1 Field Measurements

Snap Lake was accessed by boat during the ice free season, and by snowmobile during the ice cover period. The stations were located using Universal Transverse Mercator (UTM) coordinates and a hand-held Garmin GPS (GPS 12 XL, or *etrex*).

Field measurements were collected following standard water quality procedures (Environment Canada 1983; Golder Associates Ltd. [Golder] Technical Procedures) for field measurements, recording of data and calibrating field instruments. Sampling frequency and the methods used to obtain field measurements in Snap Lake differed during ice free and ice cover conditions.

Field parameters, including specific conductivity, were measured in July, August and September during the ice free period (July to September), and monthly during the ice cover period (January to May) at SNAP05, SNAP12, SNAP28, and SNAP29 (Table 2-2). Profiles were not completed at all stations in March, due to extreme weather conditions. The April sampling program started in late March. As a result some samples from the April program were collected from March 28th to March 31st. Sampling was not completed at SNAP28 due to extreme cold conditions and time constraints in January and March 2008, and station identification issues in February 2008. Safety issues due to ice free conditions near SNAP28 prevented it from being profiled in May 2008.

Profiles of field parameters, i.e., specific conductivity, as well as dissolved oxygen, water temperature and pH were collected at SNAP05, SNAP12, SNAP28 and SNAP29. The profiles were measured with a YSI 650 MDS water quality meter, YSI 600 QS multi-parameter water quality probe and a 30 metre (m) cable. The measurements were made at one-metre intervals from near-surface to within 0.5 m to 1.0 m above the lake bottom. Station number, UTM coordinates, date, time of collection and weather were recorded at each station. Ice depth was measured using a metre stick (ice cover season), and water clarity was measured using a Secchi disk (ice free season).

Table 2-2 Sampling Dates Near the Fish Compensation Works, July 2007 to May 2008

Compensation Works	TDS Monitoring Station	Ice Free	Ice Cover
		Date	
Artificial Reef	SNAP05	23-Jul-07 ⁽³⁾ 16-Aug-07 ⁽⁴⁾ 21-Sep-07 ⁽³⁾	26-Jan-08 ⁽³⁾ 22-Feb-08 ⁽⁴⁾ 08-Apr-08 ⁽³⁾ 08-May-08 ⁽⁴⁾
	SNAP12	23-Jul-07 ⁽³⁾ 16-Aug-07 ⁽⁴⁾ 17-Sep-07 ⁽³⁾	22-Jan-08 ⁽³⁾ 22-Feb-08 ⁽⁴⁾ 27-Mar-08 ⁽³⁾ 09-May-08 ⁽⁴⁾
Fresh Water Intake Embankment	SNAP29 ⁽¹⁾	20-Jul-07 ⁽³⁾ 16-Aug-07 ⁽⁴⁾ 21-Sep-07 ⁽³⁾	21-Jan-08 ⁽³⁾ 20-Feb-08 ⁽³⁾ 29-Mar-08 ⁽³⁾ 10-May-08 ⁽⁴⁾
Treated Effluent Outlet Embankment	SNAP28 ⁽²⁾	22-Jul-07 ⁽³⁾ 15-Aug-07 ⁽⁴⁾ 15-Sep-07 ⁽³⁾	05-Apr-08 ⁽³⁾

Notes:

- (1) SNAP29 replaced SNP 02-15 in July 2006.
- (2) SNAP28 replaced SNAP13 in July 2006.
- (3) Calculated TDS determined based on laboratory analysis of water sample.
- (4) Calculated TDS estimated from field specific conductivity.

2.2.2 Sample Collection

Water sampling followed standard water quality sampling procedures (Environment Canada 1983; Golder Associates Ltd. [Golder] Technical Procedures). The quality assurance and quality control (QA/QC) protocols outlined in the De Beers Snap Lake 2007 AEMP (De Beers 2008), were followed while obtaining the samples outlined in this report.

Between July 2007 and May 2008, SNAP05 and SNAP12 were sampled twice during both ice free and ice cover conditions (Footnote 3, Table 2-2). The April SNAP29 was sampled twice during ice free and three times during ice cover conditions. SNAP28 was sampled twice during ice free and once during ice cover conditions.

At each of the stations, one depth was sampled if the specific conductivity profile indicated that TDS was well-mixed throughout the water column (i.e., there was

no vertical gradient). If a vertical gradient in conductivity was identified, three samples were collected (i.e., near the surface, at one metre above the lake bed, and at the depth of maximum conductivity). The criteria used to identify the presence of a vertical gradient in TDS concentration were as follows:

- conductivity at the station was between 0 and 60 microSiemens per centimetre ($\mu\text{S}/\text{cm}$) and the range in conductivity was greater than 15 $\mu\text{S}/\text{cm}$; or
- maximum conductivity was greater than 60 $\mu\text{S}/\text{cm}$ and the range was greater than 25 percent (%).

If the depth of maximum conductivity occurred near the surface or one metre above the bottom, then a mid-depth sample was collected in place of sampling at the depth of maximum conductivity.

During ice free conditions, a Kemmerer sampler was used to collect water at specific depths, and sample bottles were filled in the field. During the period of ice cover, sample collection methods were modified to reduce exposure to extreme weather and minimize the potential for contamination from the additional equipment utilized. An 8-inch or 19-inch gasoline-powered ice auger was used to drill through the ice, and water samples were collected by lowering a Kemmerer sampler through the hole in the ice. Water was transferred from the sampler to triple-rinsed 4 litre (L) laboratory grade plastic jugs, and sample bottles were filled at the on-site Water Handling Facility.

2.2.3 Laboratory Analysis

The ALS Laboratory Group (formerly Enviro-Test Laboratories) in Edmonton, Alberta performed all of the analyses required to determine the calculated TDS concentrations in the samples. ALS also measured the specific conductivity of each water sample submitted for TDS analysis using a lab conductivity meter.

2.3 DATA ANALYSIS

The Key Question, “*Were concentrations of TDS near the existing fish habitat compensation works from July 2007 to May 2008 below 350 mg/L, as specified in the Fisheries Authorization?*”, was answered by comparing the TDS levels at the stations selected to monitor each of the fish habitat compensation works to 350 mg/L.

The calculated TDS concentrations in water samples collected at the compensation works stations were determined as the sum of the major ion

concentrations (see Equation 1). For each sample, specific conductivity was measured using the same field instrument used to collect profile measurements. This field measurement of conductivity and the laboratory result of TDS from each sample were used to determine the relationship between field conductivity and TDS concentration, based on a linear regression (SYSTAT 2004). The regression equation was used to estimate TDS concentrations from profile measurements of conductivity collected at one-metre intervals.

The linear regression equation that was included in the 2005 Technical Memorandum (Golder 2005) was based on the TDS and specific conductivity data collected in 2004. Since then the regression equation has been updated annually using the additional TDS and conductivity data collected in Snap Lake from 2004 to date.

The analytically determined TDS concentrations and the TDS concentrations estimated from specific conductivity values, at the AEMP stations and fish compensations works between July 2007 and May 2008, were compared to the predicted maximum concentration of 350 mg/L.

2.4 QA/QC PROCEDURES

QA/QC procedures for the Snap Lake water sampling program covered field, lab and office practices. The QA/QC procedures were designed to ensure that field sampling, laboratory analysis, data analysis and report preparation produced valid results. The QA/QC procedures also covered the maintenance and operation of field equipment and the validation of data. The QA/QC procedures are described briefly below, and in more detail in the AEMP annual report (De Beers 2008).

2.4.1 Equipment

Field water quality meters were maintained regularly, and calibrated every three days using standard calibration solutions for specific conductivity and pH. Dissolved oxygen was calibrated daily. Calibration results and any required maintenance were recorded daily.

The Kemmerer sampler, which was used to collect water samples for measurement of calculated TDS concentration, was inspected daily and maintained on a regular basis.

2.4.2 Field Procedures

Specific work instructions, outlining all field tasks to be completed during each field program, were prepared and approved by the water quality component lead. Detailed field notes were recorded in waterproof field books and on waterproof field data sheets in pencil or permanent marker. At the end of each field day, data sheets and sample labels were checked for completeness and accuracy. Samples were labelled, preserved and shipped according to the standard laboratory protocols and the De Beers Environmental Management System (EMS). Each sample was given a name and a unique sample control number. Project specific chain-of-custody forms were used to track shipments, sample and blank analyses, and entry of results into the De Beers' database.

The QA/QC procedures included testing the repeatability and reliability of sample results. This was accomplished by analysis of duplicate water quality samples, and of field, equipment and travel blanks. The duplicate samples and blanks were used to detect and reduce systematic and random errors that may occur during field sampling, shipment and laboratory handling.

2.4.3 Data Analysis

Data were analyzed using Excel (Microsoft 2003) and SYSTAT 11 (SYSTAT 2004). Analysis of the data was checked on an ongoing basis for accuracy and, when appropriate, data were plotted to confirm results. Data that were inconsistent with expectations were investigated. To avoid transcription errors, data were imported whenever possible from the database to Excel or SYSTAT, and from Excel to the report, rather than manually entered.

3 RESULTS AND DISCUSSION

The results and discussion section of this report were organized into three subsections:

1. presentation of an update of the linear regression relationship between calculated total dissolved solids (TDS) and field measured specific conductivity;
2. comparison of the calculated TDS concentrations near the three fish compensation works to 350 mg/L; and
3. comparison of the calculated TDS concentrations throughout Snap Lake to 350 mg/L.

The results of the quality assurance and quality control (QA/QC) procedures for the TDS and specific conductivity data collected between July 2007 and May 2008 are presented in Appendix I.

3.1 RELATIONSHIP BETWEEN TOTAL DISSOLVED SOLIDS AND SPECIFIC CONDUCTIVITY

The calculated TDS concentration and the field specific conductivity data, collected between May 2004 and April 2008, were used to determine the linear regression equation. This regression equation was used for predicting calculated TDS concentrations from field specific conductivities (Figure 3-1 and Appendix II). The linear regression equation predicting calculated TDS concentration from field specific conductivity is provided below:

Equation 2

$$C\text{-TDS}_{\text{estimate}} = 0.47 \cdot \text{FieldSpCond}$$

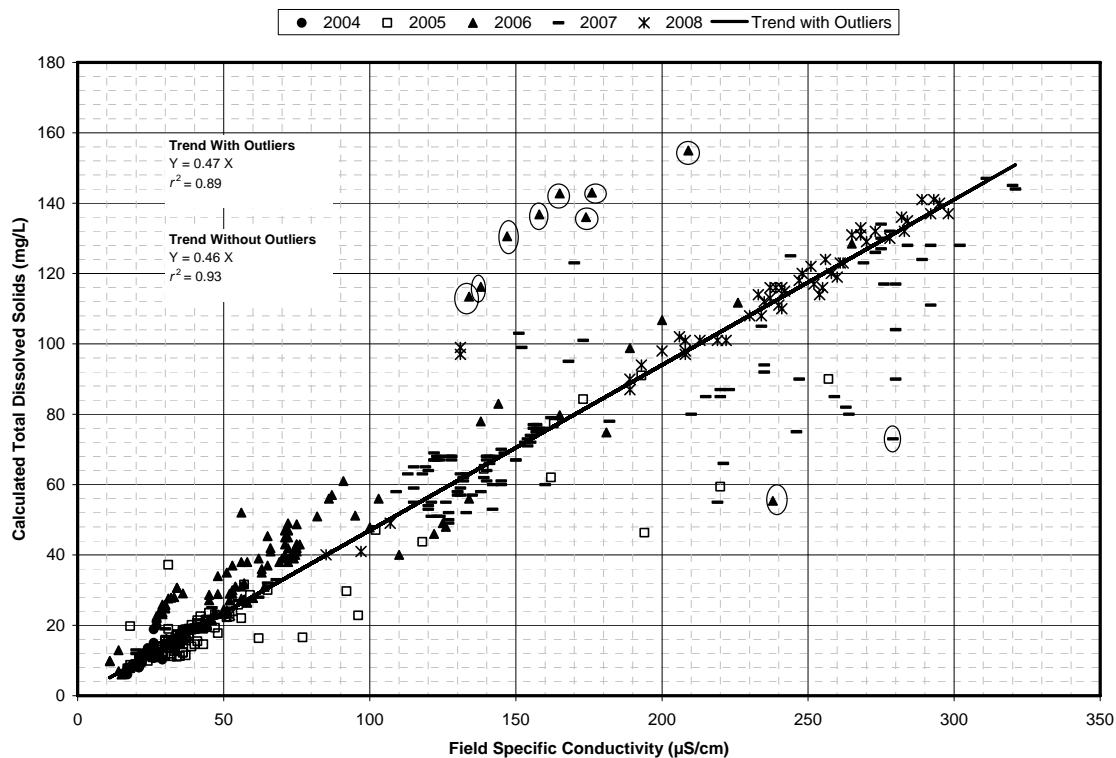
where:

$C\text{-TDS}_{\text{estimate}}$ = estimate of calculated TDS concentration (mg/L); and

FieldSpCond = field specific conductivity measurement ($\mu\text{S}/\text{cm}$).

The May 2008 laboratory data were not available for this report and were thus not included in the regression analysis. The omission of these data is expected to have a negligible effect on the equation. The May 2008 data would have only added 10 additional samples to the 477 samples used to generate the regression equation.

Figure 3-1 Relationship Between Calculated TDS Concentration and Field Specific Conductivity, May 2004 to May 2008



Notes:

Ten pairs of outliers were identified (circled in figure), but were not excluded from the regression analysis.

mg/L = milligrams per litre.

$\mu\text{S}/\text{cm}$ = microSiemens per centimetre.

r^2 = coefficient of determination; shows strength of relationship between field specific conductivity and TDS.

$n = 477$.

SYSTAT 11 (SYSTAT 2004) was used to determine the linear regression equation. The results of the initial regression analysis identified ten pairs of outliers in the data set (Table 3-1). The linear regression analysis was rerun without the outliers. The regression analysis resulted in an equation with a slope of 0.47 and an r^2 value of 0.89 with the outliers, and a slope of 0.46 and an r^2 value of 0.93 without the outliers. Because the equation that included the outliers had a very similar slope and r^2 value compared to the one without the outliers, the outliers were not removed from the analysis.

All of the outlier pairs were samples from the mid depth or bottom of the water column and were sampled during ice cover conditions (Table 3-1). The depth and season of the outliers suggest that they resulted from small differences between the depth of the field conductivity measurements and water sample

collections during ice cover conditions, when TDS concentrations may increase sharply over a narrow depth range (Appendix I).

Table 3-1 Outliers in the Laboratory Calculated TDS and Field Specific Conductivity Data Set, May 2004 to April 2008

Sample Name	Depth (m)	Date Sampled	Sample Control Number	Laboratory TDS, Calculated (mg/L)	Field Specific Conductivity (µS/cm)	Laboratory Specific Conductivity (µS/cm)
SNAP13-mid	9.0	15-Jan-06	2006-0148	55.4	238	118
SNP 02-20b-bottom	4.1	07-Apr-06	2006-0323	154.9	209	321
SNAP06-bottom	11.9	08-Apr-06	2006-0331	113.4	134	234
SNAP05-bottom	14.1	08-Apr-06	2006-0335	130.6	147	260
SNAP03-bottom	11.0	08-Apr-06	2006-0338	116.3	138	233
SNAP13-bottom	20.0	09-Apr-06	2006-0343	142.8	165	295
SNAP14-bottom	12.1	10-Apr-06	2006-0353	136.8	158	276
SNP 02-20e-bottom	27.0	20-Jul-06	2006-0444	143.0	176	297
SNP 02-20e-bottom	24.0	13-Aug-06	2006-0457	136.0	174	286
SNAP05-mid	6.0	24-Feb-07	2007-0028	73.0	279	160

Notes:

Bottom and mid refer to relative depth at a station.

mg/L = milligrams per litre.

µS/cm = microSiemens per centimetre.

3.2 TDS CONCENTRATIONS NEAR THE COMPENSATION WORKS

3.2.1 Artificial Reef

The AEMP stations SNAP12 and SNAP05 were sampled to monitor TDS concentrations near the artificial reef. During the ice free period in 2007, calculated TDS concentrations were similar at SNAP12 and SNAP05 (Table 3-2), and ranged from 67 to 75 mg/L (Table 3-2).

During the ice cover period, TDS concentrations near the artificial reef increased substantially. The higher TDS in the discharged treated effluent causes the effluent plume to have a higher specific gravity and during ice cover conditions, when wind-driven mixing is absent, the plume from the treated effluent settles to the bottom of the water column. During the ice cover period, at SNAP05 and SNAP12, the calculated TDS concentrations of near-surface waters ranged from 102 to 116 mg/L (Table 3-2). Concentrations at the bottom of the water column were higher than surface water concentrations and ranged from 112 to 149 mg/L.

Table 3-2 TDS Concentrations Near the Fish Compensation Works

Compensation Works	TDS Monitoring Stations	Ice Free		Ice Cover	
		July to October 2007		December 2007 to May 2008	
		Date	Calculated TDS	Date	Calculated TDS
Artificial Reef	SNAP05	23-Jul-07 ⁽³⁾	67(M)	26-Jan-08 ⁽³⁾	116(M)
		16-Aug-07 ⁽⁴⁾	73.3(S), 72.8(M), 73.3(B)	22-Feb-08 ⁽⁴⁾	105.8(S), 128.8 (M), 120.3(B)
		21-Sep-07 ⁽³⁾	73(M)	08-Apr-08 ⁽³⁾	137(M)
	SNAP12	08-May-08 ⁽⁴⁾	112.3(S), 144.3(M), 133.0(B)		
		23-Jul-07 ⁽³⁾	67(M)	22-Jan-08 ⁽³⁾	102(S), 101(M), 112(B)
		16-Aug-07 ⁽⁴⁾	73.3(S), 73.3(M), 73.3(B)	22-Feb-08 ⁽⁴⁾	103.4(S), 125.5(M), 134.4(B)
17-Sep-07 ⁽³⁾	75(M)	27-Mar-08 ⁽³⁾	111(S), 117(M), 124(B)		
09-May-08 ⁽⁴⁾	116.6(S), 149.0(M), 149.5(B)				
Fresh Water Intake Embankment	SNAP29 ⁽¹⁾	20-Jul-07 ⁽³⁾	22(M)	21-Jan-08 ⁽³⁾	40(M)
		16-Aug-07 ⁽⁴⁾	25.3(S), 27.3(M), 27.3(B)	20-Feb-08 ⁽³⁾	41(M)
		21-Sep-07 ⁽³⁾	27(M)	29-Mar-08 ⁽³⁾	49(M)
				10-May-08 ⁽⁴⁾	51.2(S), 47.5(M), 52.1(B)
Treated Effluent Outlet Embankment	SNAP28 ⁽²⁾	22-Jul-07 ⁽³⁾	68(M)	05-Apr-08 ⁽³⁾	114(S), 136(M), 141(B)
		15-Aug-07 ⁽⁴⁾	71.9(S), 71.9(M), 71.9(B)		
		15-Sep-07 ⁽³⁾	77(M)		

Notes:

S = surface; M = mid-depth; B = near bottom.

⁽¹⁾ SNAP29 replaced SNP 02-15 in July 2006.

⁽²⁾ SNAP28 replaced SNAP13 in July 2006.

⁽³⁾ Calculated TDS determined analytically.

⁽⁴⁾ Calculated TDS estimated from field specific conductivity.

3.2.2 Intake Embankment

The AEMP station SNAP29 was sampled to monitor the concentration of TDS near the intake embankment in the northwest arm. The concentrations of calculated TDS at SNAP29 between July 2007 and May 2008 ranged from 22 to 52 mg/L (Table 3-2). During the ice free period in 2007, calculated TDS concentrations at SNAP29 ranged from 22 to 27 mg/L (Table 3-2). During the period of ice cover, calculated TDS concentration at SNAP29 ranged from 40 to 52 mg/L, and did not vary substantially with depth (Table 3-2).

As expected, the concentration of TDS in the northwest arm of Snap Lake has been less affected by treated effluent discharge than the main body of the lake. All of the concentrations observed at SNAP29 between July 2007 and May 2008 were below the predicted maximum TDS concentration of 350 mg/L.

3.2.3 Treated Effluent Outlet Embankment

The AEMP station SNAP28 was sampled to monitor TDS concentrations near the treated effluent embankment. Sampling was only done once during ice cover conditions. Sampling was not completed at SNAP28 in January, February, and May 2008. Extreme cold, station identification issues, and ice conditions limited access to SNAP28 during the winter of 2008.

During the ice free period in 2007, calculated TDS concentrations at SNAP28 ranged from 68 to 77 mg/L (Table 3-2). During ice cover, TDS concentration at SNAP28 was only measured in April. The concentration range on April was 114 to 141 mg/L (Table 3-2).

Out of the four stations used to monitor TDS at or near fish compensation works, SNAP28, is the closest to the permanent diffuser. Despite this close proximity, TDS concentrations observed at SNAP28 were the same or below levels measured at other monitoring stations near fish compensation works, with the exception of SNAP29. This pattern of lower TDS at a station closer to the diffuser was most likely due to the shallow depth at SNAP28. The effluent from the diffuser has higher TDS concentrations and will tend to settle to the bottom and fill up deeper areas in the lake before “spilling” into the shallower areas. SNAP 29 is an exception to this trend because it is located in the northwest arm, which is more hydrologically isolated from the main basin, and therefore is not as influenced by the effluent.

All TDS concentrations at SNAP28 were below the predicted maximum concentration of 350 mg/L.

3.3 TDS CONCENTRATIONS THROUGHOUT SNAP LAKE

In addition to monitoring TDS concentrations near the fish compensation works between July 2007 and May 2008, concentrations throughout Snap Lake were also monitored. TDS concentrations were determined both analytically and estimated from the vertical profiles of conductivity measured in the field. Calculated TDS concentrations estimated from field specific conductivity measurements are provided in Tables II-1 and II-2, and the analytically determined TDS concentrations are provided in Tables II-3 and II-4, in Appendix II. Both during the ice free and ice cover conditions, the concentrations of calculated TDS observed throughout Snap Lake were below 350 mg/L.

From July 2007 to April 2008, calculated TDS concentrations based on ALS analytical data in Snap Lake ranged from 12 mg/L (23.6 μ S/cm) at SNAP20 (at the western end of northwest arm) to 141 mg/L (292 μ S/cm) at SNP 02-20d mid (Appendix II, Table II-3, Table II-4). The ice free values ranged from 12 mg/L (23.6 μ S/cm) at SNAP20, to 123 mg/L (264 μ S/cm) at SNP 02-20e bottom. The ice cover season values ranged from 16 mg/L (32.9 μ S/cm) at SNAP20B, to 141 mg/L (292 μ S/cm) at SNP 02-20d mid.

Table 3-3 Maximum TDS Concentrations Measured in Snap Lake, July 2007 to May 2008

Data Source	Type of Value	Calculated TDS (mg/L)	Specific Conductivity (μ S/cm)	Station	Depth (m)	Sample Date	Data Source
Calculated TDS from ALS data	Ice free Minimum	12	23.6	SNAP20	6	24-Jul-07	Appendix II Table II-3
	Ice free Maximum	123	264	SNP 02-20e bottom	26	14-Aug-07	Appendix II Table II-3
	Ice cover Minimum	16	32.9	SNAP20B	15	19-Feb-08	Appendix II Table II-4
	Ice cover Maximum	141	292	SNP 02-20d mid	7	06-Apr-08	Appendix II Table II-4
Calculated TDS derived from specific conductivity profile data	Ice free Minimum	7	14	SNAP20	8-12	24-Jul-07	Appendix II Table II-1
	Ice free Maximum	126	269	SNP 02-20e	24-26.5	04-Aug-07	Appendix II Table II-1
	Ice cover Minimum	15	32	SNAP20B	22-29	19-Feb-08	Appendix II Table II-2
	Ice cover Maximum	155	330	SNP 02-20f	10-14	08-May-08	Appendix II Table II-2

Notes: ALS data were available up to April 2008 at the time of report preparation.
mg/L = milligrams per litre, μ S/cm = microSiemens per centimetre, m = metre.

The overall range of calculated TDS values was greater for values estimated using specific conductivity profile data, for both ice free and ice cover conditions. Estimated TDS values ranged from 7 mg/L (14 μ S/cm) at SNAP 20, to 155 mg/L (330 μ S/cm) at SNP 02-20f. During the ice free season, estimated TDS values ranged from 7 mg/L (14 μ S/cm) at SNAP20 (western end of the northwest arm) to 126 mg/L (269 μ S/cm) at SNP 02-20e (the deepest point near the permanent diffuser) (Appendix II, Table II-1). During the period of ice cover, analytically determined calculated TDS concentrations ranged from 15 mg/L (32 μ S/cm) at SNAP20B (near the western end of the northwest arm) to 155 mg/L (330 μ S/cm) at SNP 02-20f (near the permanent diffuser) (Appendix II, Table II-2).

During both the ice free and ice cover conditions, the range of TDS concentrations estimated from field conductivity matched well with the range of analytically determined calculated TDS concentrations. A poor match between TDS values calculated using the two different methods tended to occur when high specific conductivity readings were encountered in the water column profile. Highest field specific conductivity readings occurred near the diffuser, in the deeper part of the water column, during ice cover conditions. In these cases, slight variations in grab sample depths from the depths of field specific conductivity readings likely resulted in errors in the estimation of the calculated TDS concentrations. In 2008, this source of error has been reduced by taking field conductivity readings from sample water to be used for analytical determination of calculated TDS concentration (Appendix I). As a result, the 2008 data used in the regression analysis displayed a much better fit to the regression line than the data collected in previous years (Figure 3-1).

4 CONCLUSIONS

The Key Question in this report was: “*Were concentrations of TDS near the existing fish habitat compensation works from July 2007 to May 2008 below 350 mg/L, as specified in the Fisheries Authorization?*” The results of monitoring TDS between July 2007 and May 2008 showed that concentrations were well below 350 mg/L near the fish compensation works, and throughout Snap Lake and the northwest arm, during both the ice free and ice cover seasons.

DFO considers the AEMP stations SNAP12 and SNAP05 to be in proximity of the artificial reef, but also indicated that sampling locations closer to the reef may be required in the future depending on TDS sampling results (DFO 2006). Based on the results of sampling to date, the AEMP stations SNAP05 and SNAP12 are reliable indicators of the TDS concentrations near the artificial reef. .

5 CLOSURE

We trust the above meets your present requirements. If you have any questions or require additional details, please contact the undersigned.

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APPENDIX I

**QA/QC RESULTS, CALCULATED TDS DATA,
AND
LAB AND FIELD CONDUCTIVITY DATA**

QUALITY ASSURANCE/QUALITY CONTROL RESULTS

The following sections provide an overview of the results of the quality assurance and quality control (QA/QC) procedures related to the 2007 – 2008 data presented in this report.

Field Methods

Measurement of field specific conductivity and calculation of TDS concentration at the same water depth are the basis of the linear regression used to estimate vertical profiles of calculated TDS from the conductivity profiles. The linear regression analysis of the relationship between calculated TDS concentrations and field conductivity measurements was performed using SYSTAT 11 (SYSTAT 2004). SYSTAT detected ten pairs of outliers (Table 3-1) in the May 2004 to April 2008 calculated TDS and field specific conductivity data set (Table I-1). Outliers were not removed from the regression analysis, because they had a negligible effect on the results of the analysis.

The occurrence of most of the outliers at mid and bottom depths during the ice cover season (see Section 3-1) suggests they may be the result of small differences between the depths of the field measurements and water sample collections, where TDS concentrations increase sharply over a narrow depth range. The field measurements of conductivity and the collection of water samples were made by independent deployment of a YSI probe and Kemmerer sampler, respectively. As result, the depth at which field conductivity is measured and the depth at which water is collected may be slightly different. Where TDS concentration increases over a narrow depth range, a small difference in the depth of conductivity measurement and water sampling depths could account for the outliers in the data set. In addition, the repeated deployment of the Kemmerer sampler, which is necessary to collect a sufficient volume of water to perform all of the analyses required to determine TDS by calculation, may mix waters with different concentrations of TDS and, thereby, influence the comparison with field measurements of conductivity. As a result, field conductivity readings were taken from a portion of the grab sample water, during the 2008 AEMP field program. Field methods for collecting field profile data and water samples at the same depth will continue to be reviewed on an ongoing basis.

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNAP14	5-May-04	0.0	10.9	21.0	25.80
SNAP14	5-May-04	4.5	10.8	21.0	24.50
SNAP14	5-May-04	9.0	11.2	21.0	23.70
Snap8	6-May-04	7.0	12.1	28.0	27.90
Snap8	7-May-04	5.0	13.5	24.0	29.00
Snap 13	9-May-04	0.0	12.3	28.0	27.20
Snap 13	9-May-04	6.0	10.9	23.0	24.50
SNP 02-20a bottom	9-May-04	-	9.2	22.0	23.20
SNP 02-20a surface	9-May-04	-	11.9	22.0	27.80
Snap 6	10-May-04	0.0	13.1	33.0	29.80
Snap 6	10-May-04	8.0	11.3	26.0	25.80
Snap01	30-Jul-04	0.0	6.0	17.0	19.30
Snap02	30-Jul-04	0.0	7.0	17.0	19.20
Snap10	30-Jul-04	0.0	8.0	18.0	20.30
Snap11	30-Jul-04	0.0	9.0	19.0	20.90
Snap3	30-Jul-04	0.0	8.0	21.0	23.20
Snap4	30-Jul-04	0.0	8.0	19.0	20.90
Snap5	30-Jul-04	0.0	10.0	21.0	22.60
Snap6	30-Jul-04	0.0	9.0	21.0	21.30
Snap6	30-Jul-04	0.0	8.0	21.0	21.10
Snap7	30-Jul-04	0.0	8.0	18.0	20.30
Snap8	30-Jul-04	0.0	8.0	17.0	19.70
Snap9	30-Jul-04	0.0	9.0	19.0	20.80
SNP 02-20a bottom	1-Aug-04	0.0	12.3	26.0	27.00
SNP 02-20a middle	1-Aug-04	2.0	11.7	26.0	27.20
SNP 02-20a surface	1-Aug-04	4.0	11.7	26.0	26.80
SNP 02-20a surface	1-Aug-04	4.5	11.6	26.0	26.80
SNP 02-20b bottom	1-Aug-04	6.0	11.6	27.0	26.80
SNP 02-20b middle	1-Aug-04	0.0	10.7	26.0	27.50
SNP 02-20b surface	1-Aug-04	3.0	11.7	26.0	27.00
SNP 02-20c bottom	1-Aug-04	2.0	10.3	29.0	29.50
SNP 02-20c middle	1-Aug-04	0.0	11.9	27.0	29.10
SNP 02-20c surface	1-Aug-04	0.0	12.5	27.0	28.50
SNP 02-0b	17-Aug-04	0.0	9.5	21.0	21.30
SNP 02-20a bottom	1-Sep-04	4.0	19.2	39.0	42.00
SNP 02-20a middle	1-Sep-04	2.0	18.9	36.0	41.00
SNP 02-20a surface	1-Sep-04	0.0	16.4	35.0	37.60
SNP 02-20a surface	1-Sep-04	1.0	16.8	35.0	37.90
SNP 02-20b bottom	1-Sep-04	6.0	19.8	27.0	41.90
SNP 02-20b middle	1-Sep-04	3.0	18.8	26.0	41.50

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20b surface	1-Sep-04	0.0	15.0	26.0	33.30
SNP 02-20c bottom	1-Sep-04	0.0	18.5	36.0	39.30
SNP 02-20c middle	1-Sep-04	1.0	17.9	36.0	38.80
SNP 02-20c surface	1-Sep-04	2.0	17.8	36.0	38.50
SNP 02-20a bottom	18-Jan-05	3.5	14.6	43.0	30.90
SNP 02-20a middle	18-Jan-05	2.5	15.4	35.0	34.10
SNP 02-20a surface	18-Jan-05	1.0	17.8	48.0	38.30
SNP 02-20b bottom	18-Jan-05	5.1	22.6	42.0	49.00
SNP 02-20b middle	18-Jan-05	3.0	14.7	35.0	32.60
SNP 02-20b surface	18-Jan-05	1.0	15.5	41.0	35.80
SNP 02-20c middle	18-Jan-05	1.0	19.4	47.0	41.60
SNAP01-mid	19-Jan-05	2.0	11.4	28.0	24.70
SNAP02-mid	19-Jan-05	4.0	9.9	24.0	22.10
SNAP03-bottom	19-Jan-05	12.5	22.8	96.0	50.30
SNAP03-mid	19-Jan-05	6.0	11.3	30.0	25.50
SNAP03-surface	19-Jan-05	1.1	11.5	37.0	26.70
SNAP04-mid	19-Jan-05	2.0	12.2	36.0	28.20
SNAP05-bottom	19-Jan-05	14.1	43.8	118.0	96.80
SNAP05-mid	19-Jan-05	7.0	12.3	36.0	28.60
SNAP05-surface	19-Jan-05	1.0	14.6	40.0	31.50
SNAP06-bottom	19-Jan-05	13.0	22.0	56.0	47.30
SNAP06-mid	19-Jan-05	7.0	11.2	32.0	25.70
SNAP06-surface	19-Jan-05	1.0	14.0	39.0	31.10
SNAP07-mid	20-Jan-05	4.0	12.7	33.0	28.60
SNAP08-mid	20-Jan-05	5.0	12.0	32.0	24.70
SNAP09-mid	20-Jan-05	7.1	11.5	29.0	24.40
SNAP10-mid	20-Jan-05	2.0	11.3	35.0	25.00
SNAP11-mid	20-Jan-05	8.0	14.5	30.0	29.30
SNP 02-20c surface	17-Feb-05	0.5	23.0	47.0	49.40
SNP 02-20a bottom	18-Feb-05	3.0	19.0	31.0	39.70
SNP 02-20a surface	18-Feb-05	0.1	21.4	41.0	45.40
SNP 02-20b bottom	18-Feb-05	2.5	17.5	34.0	34.00
SNP 02-20b bottom	18-Feb-05	2.5	11.1	34.0	33.70
SNP 02-20b surface	18-Feb-05	0.5	16.4	36.0	37.90
SNP 02-20a bottom	21-Mar-05	3.0	15.4	30.0	33.60
SNP 02-20a surface	21-Mar-05	1.5	20.1	39.0	40.70
SNP 02-20b surface	22-Mar-05	1.5	15.9	36.0	35.70
SNAP01-mid	16-Apr-05	2.0	13.0	25.0	27.20
SNAP02-mid	16-Apr-05	3.5	12.2	24.0	24.00
SNAP14-bottom	17-Apr-05	8.0	16.6	77.0	35.30

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS- Calculated (mg/L)	Specific Conductivity (μ S/cm)	
				Field	Laboratory
SNAP14-mid	17-Apr-05	4.0	12.5	27.0	28.00
SNAP14-surface	17-Apr-05	1.6	14.7	30.0	31.40
SNP 02-20a bottom	17-Apr-05	3.0	15.9	30.0	33.90
SNP 02-20a surface	17-Apr-05	1.5	16.7	36.0	37.60
SNAP03-bottom	18-Apr-05	12.0	62.1	162.0	130.00
SNAP03-mid	18-Apr-05	6.0	11.9	28.0	28.00
SNAP03-surface	18-Apr-05	1.5	14.5	31.0	31.00
SNAP04-mid	18-Apr-05	2.0	18.7	36.0	36.00
SNAP13-bottom	18-Apr-05	20.0	91.0	193.0	198.00
SNAP13-mid	18-Apr-05	10.0	46.3	194.0	145.00
SNAP13-surface	18-Apr-05	1.5	15.3	32.0	32.00
SNAP05-bottom	19-Apr-05	14.0	77.4	163.0	164.00
SNAP05-mid	19-Apr-05	7.0	29.7	92.0	64.00
SNAP05-surface	19-Apr-05	1.5	14.8	31.0	31.00
SNAP06-bottom	19-Apr-05	12.0	64.5	139.0	137.00
SNAP06-mid	19-Apr-05	6.0	37.2	31.0	96.00
SNAP06-surface	19-Apr-05	1.5	15.7	33.0	33.00
SNP 02-20b bottom	20-Apr-05	5.0	90.0	257.0	191.00
SNP 02-20b surface	20-Apr-05	1.6	17.0	35.0	35.00
SNP 02-20c middle	20-Apr-05	2.5	17.2	36.0	36.00
SNAP08-mid	21-Apr-05	4.0	13.3	26.0	28.00
SNAP07-mid	22-Apr-05	4.0	15.2	32.0	32.70
SNAP09-mid	22-Apr-05	7.0	12.4	26.0	26.80
SNAP10-mid	22-Apr-05	2.0	15.1	32.0	30.00
SNAP11-mid	22-Apr-05	8.0	13.1	27.0	27.80
SNP 02-20a bottom	18-May-05	3.1	16.3	62.0	62.00
SNP 02-20a surface	18-May-05	1.6	16.2	34.0	36.00
SNP 02-20b bottom	18-May-05	5.0	59.4	220.0	197.00
SNP 02-20b surface	18-May-05	1.5	15.7	31.0	31.00
SNP 02-20c middle	18-May-05	1.5	16.4	35.0	34.00
SNAP03-bottom	19-Jul-05	12.0	19.6	42.0	42.00
SNAP03-mid	19-Jul-05	6.0	18.8	38.0	37.50
SNAP03-surface	19-Jul-05	1.2	19.4	41.0	41.00
SNAP04-mid	19-Jul-05	2.1	15.4	32.0	32.00
SNAP01-mid	20-Jul-05	2.0	19.8	18.0	18.00
SNAP02-mid	21-Jul-05	3.5	8.8	18.0	18.00
SNAP05-bottom	21-Jul-05	13.0	17.2	38.0	38.00
SNAP05-mid	21-Jul-05	7.0	16.7	37.0	37.00
SNAP05-surface	21-Jul-05	1.0	15.7	37.0	37.00
SNAP06-bottom	21-Jul-05	9.0	16.1	35.0	35.00

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNAP06-mid	21-Jul-05	5.0	15.4	35.0	35.00
SNAP06-surface	21-Jul-05	1.1	15.6	35.0	35.00
SNAP07-mid	22-Jul-05	5.0	14.8	32.0	32.00
SNAP08-mid	22-Jul-05	4.0	12.3	29.0	29.00
SNAP10-mid	22-Jul-05	2.0	14.7	31.0	31.00
SNAP11-mid	22-Jul-05	7.0	15.4	33.0	34.00
SNAP09-mid	23-Jul-05	6.0	17.0	35.0	35.00
SNAP13-bottom	23-Jul-05	22.0	84.3	173.0	173.00
SNAP13-mid	23-Jul-05	16.0	28.6	59.0	59.00
SNAP13-surface	23-Jul-05	1.0	18.9	40.0	40.00
SNAP14-bottom	23-Jul-05	13.0	18.7	39.0	39.00
SNAP14-mid	23-Jul-05	7.0	17.7	38.0	38.00
SNAP14-surface	23-Jul-05	1.1	18.7	38.0	38.00
SNP 02-20a bottom	24-Jul-05	4.0	25.8	55.0	54.00
SNP 02-20a surface	24-Jul-05	1.1	22.3	51.0	49.00
SNP 02-20b bottom	24-Jul-05	4.1	24.0	53.0	52.00
SNP 02-20b surface	24-Jul-05	1.0	22.5	52.0	52.00
SNP 02-20c middle	24-Jul-05	1.0	30.0	65.0	65.00
SNP 02-20a bottom	17-Aug-05	3.1	19.5	44.0	43.00
SNP 02-20a surface	17-Aug-05	1.0	19.1	43.0	42.00
SNP 02-20b bottom	17-Aug-05	4.1	47.1	102.0	100.00
SNP 02-20c middle	17-Aug-05	1.0	20.3	44.0	45.00
SNAP01-mid	13-Sep-05	2.0	7.7	17.0	19.20
SNAP02-mid	13-Sep-05	5.0	7.8	18.0	18.00
SNAP03-mid	13-Sep-05	6.0	20.4	41.0	44.00
SNAP04-mid	13-Sep-05	2.1	17.1	34.0	34.00
SNAP06-mid	13-Sep-05	6.0	19.1	38.0	38.00
SNAP07-mid	13-Sep-05	5.0	17.8	36.0	36.00
SNAP08-mid	13-Sep-05	3.0	16.7	35.0	37.20
SNAP09-mid	13-Sep-05	5.0	17.7	36.0	38.60
SNAP10-mid	13-Sep-05	3.0	16.8	35.0	35.00
SNAP11-mid	13-Sep-05	8.0	18.5	36.0	38.50
SNAP13-mid	14-Sep-05	11.0	21.1	44.0	44.00
SNAP14-mid	14-Sep-05	7.0	20.6	41.0	44.00
SNP 02-20a bottom	14-Sep-05	4.0	21.6	44.0	44.00
SNP 02-20a surface	14-Sep-05	1.0	21.2	44.0	47.20
SNP 02-20b bottom	14-Sep-05	5.0	21.1	44.0	47.80
SNP 02-20b surface	14-Sep-05	1.0	23.6	45.0	45.00
SNP 02-20c middle	14-Sep-05	1.5	31.6	57.0	63.00
SNAP03-surface	13-Jan-06	1.0	23.8	51.0	53.40

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20a bottom	13-Jan-06	3.0	23.8	47.0	53.20
SNP 02-20a surface	13-Jan-06	1.0	27.3	57.0	57.60
SNP 02-20b bottom	13-Jan-06	3.0	23.4	51.0	50.40
SNP 02-20b surface	13-Jan-06	1.0	27.1	56.0	56.30
SNP 02-20c middle	13-Jan-06	1.0	27.8	60.0	60.00
SNAP03-bottom	14-Jan-06	12.0	74.8	181.0	157.00
SNAP03-mid	14-Jan-06	6.0	19.3	41.0	43.10
SNAP05-bottom	14-Jan-06	13.0	98.8	189.0	201.00
SNAP05-mid	14-Jan-06	7.0	47.8	100.0	103.00
SNAP05-surface	14-Jan-06	1.0	23.5	51.0	52.50
SNAP 12-mid	15-Jan-06	4.0	28.7	45.0	61.20
SNAP 12-mid	15-Jan-06	4.0	27.1	45.0	57.80
SNAP06-bottom	15-Jan-06	11.0	79.8	165.0	169.00
SNAP06-mid	15-Jan-06	4.0	21.6	45.0	47.40
SNAP06-surface	15-Jan-06	1.0	24.5	50.0	54.60
SNAP13-bottom	15-Jan-06	19.0	128.5	265.0	273.00
SNAP13-mid	15-Jan-06	9.0	55.4	238.0	118.00
SNAP13-surface	15-Jan-06	1.0	27.1	52.0	56.20
SNAP14-bottom	15-Jan-06	11.0	111.7	226.0	234.00
SNAP14-mid	15-Jan-06	5.0	21.6	46.0	47.40
SNAP14-surface	15-Jan-06	1.0	23.3	50.0	51.90
SNAP07-mid	16-Jan-06	3.0	24.3	51.0	52.60
SNAP08-mid	16-Jan-06	4.0	21.0	43.0	46.10
SNAP09-mid	16-Jan-06	7.0	20.2	44.0	45.10
SNAP04-mid	17-Jan-06	2.0	23.6	50.0	51.30
SNAP04-mid	17-Jan-06	2.0	23.5	50.0	50.80
SNAP10-mid	17-Jan-06	2.0	24.1	51.0	51.00
SNAP11-mid	17-Jan-06	8.0	21.5	46.0	46.10
SNAP01-mid	18-Jan-06	4.0	11.5	22.0	22.90
SNAP01-mid	18-Jan-06	20.0	11.8	22.0	23.00
SNAP02-mid	18-Jan-06	4.0	11.4	21.0	22.00
SNP 02-20a bottom	17-Feb-06	3.0	27.6	56.0	59.90
SNP 02-20b surface	17-Feb-06	1.0	28.9	48.0	64.70
SNP 02-20c middle	17-Feb-06	1.0	31.0	64.0	65.10
SNP 02-20c middle	14-Mar-06	1.0	30.7	34.0	67.20
SNP 02-20b bottom	16-Mar-06	4.1	106.8	200.0	222.00
SNP 02-20b surface	16-Mar-06	1.1	29.1	36.0	63.30
SNP 02-20a bottom	7-Apr-06	3.0	27.6	31.0	57.20
SNP 02-20a surface	07-Apr-06	1.2	28.0	33.0	61.60
SNP 02-20b bottom	07-Apr-06	4.1	154.9	209.0	321.00

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20b surface	07-Apr-06	1.3	27.9	32.0	61.30
SNP 02-20c middle	07-Apr-06	1.0	30.7	34.0	65.50
SNAP03-bottom	08-Apr-06	11.0	116.3	138.0	233.00
SNAP03-mid	08-Apr-06	7.0	45.4	65.0	95.60
SNAP03-surface	08-Apr-06	1.3	23.8	29.0	53.70
SNAP05-bottom	08-Apr-06	14.1	130.6	147.0	260.00
SNAP05-mid	08-Apr-06	6.1	26.5	58.0	56.70
SNAP05-mid	08-Apr-06	6.1	26.4	58.0	57.60
SNAP05-surface	08-Apr-06	1.5	23.7	28.0	53.40
SNAP06-bottom	08-Apr-06	11.9	113.4	134.0	234.00
SNAP06-mid	08-Apr-06	7.0	51.2	95.0	109.00
SNAP06-surface	08-Apr-06	1.4	25.9	30.0	55.30
SNAP 12-mid	09-Apr-06	4.0	22.2	27.0	49.70
SNAP12-bottom	09-Apr-06	7.0	48.7	75.0	103.00
SNAP12-surface	09-Apr-06	1.2	25.9	29.0	55.20
SNAP13-bottom	09-Apr-06	20.0	142.8	165.0	295.00
SNAP13-mid	09-Apr-06	7.1	57.1	87.0	121.00
SNAP13-surface	09-Apr-06	1.3	25.8	30.0	56.90
SNAP07-mid	10-Apr-06	-	24.8	30.0	54.70
SNAP08	10-Apr-06	-	22.6	27.0	47.00
SNAP14-bottom	10-Apr-06	12.1	136.8	158.0	276.00
SNAP14-mid	10-Apr-06	6.0	52.1	56.0	113.00
SNAP14-surface	10-Apr-06	1.3	23.7	28.0	53.30
SNAP09-mid	11-Apr-06	7.0	22.0	27.0	48.00
SNAP10-mid	11-Apr-06	2.1	24.9	30.0	54.70
SNAP11a	12-Apr-06	7.0	23.2	29.0	50.90
SNAP04-mid	13-Apr-06	3.0	25.7	30.0	51.60
SNAP20-mid	14-Apr-06	6.0	9.9	11.0	20.70
SNAP20-mid	14-Apr-06	12.0	9.8	11.0	20.50
SNAP02a	16-Apr-06	5.0	13.0	14.0	25.50
SNP 02-20e surface	10-Jul-06	1.0	38.0	69.0	83.2
SNP 02-20e mid	11-Jul-06	13.0	56.0	103.0	84
SNP 02-20d bottom	12-Jul-06	11.0	40.0	110.0	87.5
SNP 02-20d mid	12-Jul-06	6.0	42.0	72.0	84.2
SNP 02-20d surface	12-Jul-06	1.0	38.0	72.0	84.2
SNP 02-20f bottom	12-Jul-06	7.5	40.0	74.5	86.9
SNP 02-20f bottom	12-Jul-06	13.0	46.0	122.0	100
SNP 02-20f surface	12-Jul-06	1.0	39.0	74.0	85.5
SNAP03-mid	13-Jul-06	6.5	40.0	73.0	90
SNAP05-mid	13-Jul-06	7.0	37.0	65.0	80.7

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNAP06-mid	13-Jul-06	7.0	35.0	63.0	78.1
SNAP06-mid	13-Jul-06	7.0	36.0	63.0	79
SNAP12	13-Jul-06	4.0	39.0	70.0	86.3
SNAP14-mid	13-Jul-06	7.0	40.0	71.0	86.9
SNAP28	13-Jul-06	4.0	43.0	75.0	92.1
SNAP07-mid	14-Jul-06	5.5	31.0	54.0	67.6
SNAP08-mid	14-Jul-06	4.0	29.0	52.0	64.9
SNAP09-mid	14-Jul-06	7.0	31.0	56.0	68.9
SNAP11a	14-Jul-06	7.0	32.0	57.0	70.1
SNAP20-mid	18-Jul-06	6.5	6.0	15.0	18.9
SNAP04-mid	19-Jul-06	2.5	29.0	53.0	64.1
SNAP04-mid	19-Jul-06	2.5	30.0	53.0	63.9
SNP 02-20e bottom	20-Jul-06	27.0	143.0	176.0	297
SNP 02-20d bottom	13-Aug-06	11.0	78.0	138.0	163
SNP 02-20d mid	13-Aug-06	6.5	41.0	75.0	89.4
SNP 02-20d surface	13-Aug-06	1.0	41.0	74.0	89.3
SNP 02-20d surface	13-Aug-06	1.0	41.0	74.0	85.8
SNP 02-20e bottom	13-Aug-06	24.0	136.0	174.0	286
SNP 02-20e mid	13-Aug-06	12.0	56.0	134.0	118
SNP 02-20e surface	13-Aug-06	1.0	43.0	76.0	88
SNP 02-20f bottom	13-Aug-06	12.0	83.0	144.0	179
SNP 02-20f mid	13-Aug-06	7.0	42.0	75.0	90.9
SNP 02-20f surface	13-Aug-06	1.0	43.0	75.0	90.9
SNAP03-mid	13-Sep-06	7.0	43.0	71.0	97.6
SNAP05-mid	13-Sep-06	7.0	41.0	66.0	90
SNAP05-mid	13-Sep-06	7.0	42.0	66.0	92.5
SNAP06-mid	13-Sep-06	7.0	39.0	62.0	85
SNAP12-mid	13-Sep-06	4.0	45.0	72.0	99
SNAP14-mid	13-Sep-06	7.0	45.0	71.0	96.8
SNAP04	14-Sep-06	2.5	34.0	48.0	72.5
SNAP20-mid	14-Sep-06	7.0	7.0	14.0	21.5
SNAP07	15-Sep-06	5.0	38.0	56.0	82.1
SNAP08	15-Sep-06	4.0	35.0	51.0	76.2
SNAP09	15-Sep-06	7.5	38.0	58.0	82.6
SNAP10	15-Sep-06	3.0	37.0	53.0	78.7
SNP 02-20e bottom	19-Sep-06	28.0	56.0	86.0	119
SNP 02-20e mid	19-Sep-06	15.0	51.0	82.0	110
SNP 02-20e surface	19-Sep-06	1.0	47.0	72.0	102
SNP 02-20f bottom	19-Sep-06	14.0	61.0	91.0	132
SNP 02-20f mid	19-Sep-06	7.5	49.0	72.0	103

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20f surface	19-Sep-06	1.0	47.0	71.0	101
SNP 02-20d bottom	20-Sep-06	11.0	49.0	11.0	106
SNP 02-20d mid	20-Sep-06	6.0	47.0	72.0	105
SNP 02-20d mid	20-Sep-06	6.0	48.0	72.0	105
SNP 02-20d surface	20-Sep-06	1.0	47.0	71.0	102
SNAP03-bottom	24-Feb-07	12.0	124.0	289.0	274
SNAP03-mid	24-Feb-07	6.0	125.0	244.0	276
SNAP03-surface	24-Feb-07	1.0	58.0	138.0	123
SNAP05-bottom	24-Feb-07	12.5	128.0	292.0	277
SNAP05-mid	24-Feb-07	6.0	73.0	279.0	160
SNAP05-surface	24-Feb-07	1.0	57.0	135.0	125
SNAP12-bottom	24-Feb-07	7.0	111.0	292.0	243
SNAP12-mid	24-Feb-07	5.0	55.0	219.0	114
SNAP12-surface	24-Feb-07	1.0	60.0	142.0	130
SNAP14-bottom	24-Feb-07	13.0	128.0	302.0	280
SNAP14-mid	24-Feb-07	6.0	82.0	263.0	175
SNAP14-surface	24-Feb-07	1.0	60.0	145.0	133
SNAP14-surface	24-Feb-07	1.0	61.0	145.0	132
SNAP26-mid	24-Feb-07	2.5	54.0	120.0	116
SNAP29-mid	25-Feb-07	3.5	32.0	65.0	66.9
SNAP20-bottom	26-Feb-07	12.5	12.0	26.0	26.2
SNAP20-mid	26-Feb-07	6.5	10.0	26.0	25.3
SNAP20-surface	26-Feb-07	1.0	13.0	33.0	26.5
SNAP04-mid	27-Feb-07	2.0	58.0	130.0	124
SNAP07-mid	27-Feb-07	5.0	55.0	121.0	112
SNAP07-mid	27-Feb-07	5.0	51.0	121.0	112
SNAP08-mid	27-Feb-07	4.0	55.0	115.0	112
SNAP09-bottom	27-Feb-07	14.0	80.0	210.0	172
SNAP09-mid	27-Feb-07	7.0	53.0	142.0	118
SNAP09-surface	27-Feb-07	1.0	50.0	127.0	111
SNAP10-mid	28-Feb-07	2.5	55.0	126.0	121
SNAP11a-bottom	28-Feb-07	13.0	87.0	223.0	188
SNAP11a-mid	28-Feb-07	6.5	49.0	127.0	107
SNAP11a-surface	28-Feb-07	1.0	52.0	127.0	112
SNAP02a-bottom	01-Mar-07	10.0	19.0	44.0	38.4
SNAP02a-mid	01-Mar-07	5.0	14.0	34.0	31.7
SNAP02a-surface	01-Mar-07	1.0	22.0	46.0	44.4
SNP 02-20d bottom	14-Mar-07	11.0	132.0	278.0	283
SNP 02-20d mid	14-Mar-07	5.0	85.0	215.0	183
SNP 02-20d surface	14-Mar-07	1.0	64.0	140.0	139

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20e surface	15-Mar-07	1.0	63.0	133.0	133
SNP 02-20e bottom	15-Mar-07	28.0	147.0	311.0	316
SNP 02-20e mid	15-Mar-07	5.5	92.0	235.0	196
SNP 02-20e mid	15-Mar-07	5.5	94.0	235.0	203
SNP 02-20e surface	15-Mar-07	1.0	63.0	133.0	132
SNP 02-20f bottom	17-Mar-07	13.5	134.0	275.0	285
SNP 02-20f mid	17-Mar-07	5.0	66.0	221.0	138
SNP 02-20f surface	17-Mar-07	1.0	62.0	132.0	134
SNAP14-bottom	12-Apr-07	12.0	104.0	280.0	223
SNAP14-mid	12-Apr-07	5.5	85.0	259.0	189
SNAP14-surface	12-Apr-07	1.0	62.0	139.0	132
SNAP03-bottom	13-Apr-07	13.0	127.0	275.0	275
SNAP03-bottom	13-Apr-07	-	130.0	275.0	275
SNAP03-mid	13-Apr-07	7.0	117.0	280.0	252
SNAP03-mid	13-Apr-07	-	90.0	280.0	192
SNAP03-surface	13-Apr-07	1.0	57.0	130.0	125
SNAP03-surface	13-Apr-07	1.0	58.0	130.0	128
SNP 02-20e bottom	15-Apr-07	26.0	145.0	320.0	308
SNP 02-20e mid	15-Apr-07	17.0	144.0	321.0	301
SNP 02-20e surface	15-Apr-07	1.0	59.0	131.0	129
SNP 02-20d bottom	16-Apr-07	10.0	117.0	276.0	244
SNP 02-20d mid	16-Apr-07	5.0	87.0	220.0	187
SNP 02-20d mid	16-Apr-07	5.0	85.0	220.0	181
SNP 02-20d surface	16-Apr-07	1.0	61.0	140.0	133
SNP 02-20f bottom	17-Apr-07	13.0	128.0	284.0	276
SNP 02-20f mid	17-Apr-07	5.0	90.0	247.0	194
SNP 02-20f surface	17-Apr-07	1.0	57.0	131.0	126
SNAP06-bottom	18-Apr-07	11.5	126.0	273.0	267
SNAP06-mid	18-Apr-07	6.0	80.0	264.0	175
SNAP06-surface	18-Apr-07	1.0	53.0	120.0	120
SNAP09-bottom	20-Apr-07	13.5	105.0	234.0	227
SNAP09-mid	20-Apr-07	7.0	78.0	182.0	168
SNAP09-surface	20-Apr-07	1.0	52.0	133.0	115
SNAP04-mid	23-Apr-07	2.0	61.0	132.0	133
SNAP23	24-Apr-07	-	28.0	62.0	60.7
SNAP29	24-Apr-07	-	33.0	68.0	70.8
SNAP02a	25-Apr-07	4.5	16.0	35.0	37.2
SNAP20-mid	25-Apr-07	7.5	12.0	25.0	25.8
SNAP20-mid	25-Apr-07	7.5	12.0	25.0	27.6
SNAP07-mid	27-Apr-07	5.0	51.0	123.0	112

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNAP08-mid	27-Apr-07	4.0	51.0	124.0	114
SNP 02-20d bottom	19-Jul-07	10.5	99	152	210
SNP 02-20d mid	19-Jul-07	6	60	160	135
SNP 02-20d surface	19-Jul-07	1	59	115	135
SNP 02-20f bottom	19-Jul-07	13	103	151	213
SNP 02-20f mid	19-Jul-07	7	79	162	160
SNP 02-20f surface	19-Jul-07	1	65	115	134
SNAP07	20-Jul-07	4	68	123	143
SNAP08	20-Jul-07	4	67	128	146
SNAP29	20-Jul-07	3.5	22	46	51.9
SNAP10	22-Jul-07	2.5	63	118	134
SNAP28-mid	22-Jul-07	3.5	68	127	141
SNP 02-20e bottom	22-Jul-07	27	123	170	265
SNP 02-20e mid	22-Jul-07	12	101	173	208
SNP 02-20e surface	22-Jul-07	1	68	124	139
SNAP03	23-Jul-07	5.5	67	123	142
SNAP04	23-Jul-07	2.5	58	109	121
SNAP05	23-Jul-07	6.5	67	122	141
SNAP06	23-Jul-07	6	64	120	138
SNAP09	23-Jul-07	7.5	65	119	137
SNAP11A-mid	23-Jul-07	8	63	113	138
SNAP12-mid	23-Jul-07	3.5	67	124	141
SNAP26-mid	23-Jul-07	3	68	128	145
SNAP26-mid	23-Jul-07	3	68	128	146
SNAP02A-mid	24-Jul-07	5	13	24	27.7
SNAP20	24-Jul-07	6	13	20	24
SNAP20	24-Jul-07	6	12	20	23.6
SNAP23-bottom	24-Jul-07	12	19	30	43.5
SNAP23-mid	24-Jul-07	6	20	43	43.2
SNAP23-surface	24-Jul-07	1	25	46	52.6
SNAP14-bottom	25-Jul-07	12	95	168	144
SNAP14-mid	25-Jul-07	6	69	122	144
SNAP14-surface	25-Jul-07	1	67	122	144
SNP 02-20e bottom	14-Aug-07	26	123	269	264
SNP 02-20e mid	14-Aug-07	19	75	246	167
SNP 02-20e surface	14-Aug-07	1	67	150	149
SNP 02-20e surface	14-Aug-07	1	67	150	149
SNP 02-20d mid	15-Aug-07	6	71	154	153
SNP 02-20f mid	15-Aug-07	7	72	155	154
SNP 02-20e mid	13-Sep-07	13.5	76	160	171

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNAP23	14-Sep-07	6.5	27	55	58.2
SNAP26-mid	15-Sep-07	2.5	74	155	166
SNAP28-mid	15-Sep-07	3	77	157	169
SNAP02A-mid	16-Sep-07	5	15	29	31.5
SNAP14	16-Sep-07	6.5	76	158	169
SNAP20B	16-Sep-07	15	13	24	26.2
SNAP12-mid	17-Sep-07	3.5	75	157	165
SNP 02-20d mid	17-Sep-07	6	76	156	165
SNP 02-20d mid	17-Sep-07	6	77	156	165
SNP 02-20f mid	17-Sep-07	6.5	75	157	165
SNAP08-bottom	18-Sep-07	4.5	67	140	150
SNAP08-mid	18-Sep-07	8.5	68	140	150
SNAP08-surface	18-Sep-07	1	68	140	151
SNAP10	19-Sep-07	2.5	68	141	151
SNAP10	19-Sep-07	2.5	66	141	150
SNAP11A-mid	19-Sep-07	8	70	145	155
SNAP07	20-Sep-07	5	68	143	152
SNAP05	21-Sep-07	7	73	154	162
SNAP06	21-Sep-07	7	72	153	162
SNAP09	21-Sep-07	7	69	146	153
SNAP29	21-Sep-07	3.5	27	57	60.3
SNAP03	22-Sep-07	6	77	157	162
SNAP04	22-Sep-07	2	63	131	138
SNAP29-mid	21-Jan-08	4	40	85	84.3
SNAP12-bottom	22-Jan-08	6.5	112	235	247
SNAP12-mid	22-Jan-08	4	101	222	217
SNAP12-surface	22-Jan-08	1	102	206	218
SNP 02-20e bottom	22-Jan-08	28	118	247	256
SNP 02-20e mid	22-Jan-08	14	116	239	247
SNP 02-20e surface	22-Jan-08	1	101	213	219
SNAP26-mid	23-Jan-08	3	98	200	211
SNP 02-20d bottom	23-Jan-08	11	119	260	257
SNP 02-20d mid	23-Jan-08	5.5	115	242	246
SNP 02-20d surface	23-Jan-08	1.2	97	131	212
SNP 02-20d surface	23-Jan-08	1.2	99	131	213
SNAP14-bottom	24-Jan-08	13	120	258	265
SNAP14-mid	24-Jan-08	6.5	116	255	256
SNAP14-surface	24-Jan-08	1	101	219	227
SNP 02-20f bottom	24-Jan-08	14	122	251	268
SNP 02-20f mid	24-Jan-08	7	114	254	257

Table I-1 Calculated TDS Concentrations and Field and Lab Specific Conductivities, May 2004 to April 2008 (continued)

Sample	Date Sampled	Depth	TDS-Calculated (mg/L)	Specific Conductivity (µS/cm)	
				Field	Laboratory
SNP 02-20f surface	24-Jan-08	1.2	97	208	212
SNAP07-mid	25-Jan-08	5.5	90	189	200
SNAP08-mid	25-Jan-08	4.5	87	189	185
SNAP05-mid	26-Jan-08	7	116	241	252
SNAP09-mid	26-Jan-08	7.5	94	193	209
SNAP10-mid	26-Jan-08	2.5	101	208	218
SNAP10-mid	26-Jan-08	2.5	98	208	218
SNP 02-20e bottom	17-Feb-08	27.5	129	270	271
SNP 02-20e mid	17-Feb-08	17	133	268	273
SNP 02-20e mid	17-Feb-08	17	131	268	271
SNP 02-20e surface	17-Feb-08	1.15	116	237	239
SNAP20B	19-Feb-08	15	16	32	32.9
SNP 02-20d bottom	19-Feb-08	11	132	273	270
SNP 02-20d mid	19-Feb-08	6	123	261	262
SNP 02-20d surface	19-Feb-08	1.35	108	234	231
SNAP29	20-Feb-08	4	41	97	97.2
SNP 02-20f bottom	20-Feb-08	14	130	278	269
SNP 02-20f mid	20-Feb-08	7	132	283	296
SNP 02-20f surface	20-Feb-08	1.3	110	241	231
SNP 02-20e mid	13-Mar-08	14	131	265	275
SNAP12-bottom	27-Mar-08	7	124	256	258
SNAP12-mid	27-Mar-08	4	117	252	245
SNAP12-surface	27-Mar-08	1.55	111	240	234
SNAP29-mid	29-Mar-08	4	49	107	101
SNAP09-mid	4-Apr-08	7	108	230	227
SNAP11A-mid	5-Apr-08	7	113	237	239
SNAP28-bottom	5-Apr-08	6	141	293	297
SNAP28-mid	5-Apr-08	4	136	282	287
SNAP28-surface	5-Apr-08	1.25	114	233	243
SNP 02-20d bottom	6-Apr-08	11	140	295	297
SNP 02-20d mid	6-Apr-08	7	141	289	292
SNP 02-20d surface	6-Apr-08	1.6	120	248	250
SNP 02-20e bottom	7-Apr-08	28	137	298	294
SNP 02-20e mid	7-Apr-08	14	135	284	283
SNP 02-20e surface	7-Apr-08	1.3	123	262	263
SNAP05-mid	8-Apr-08	7	137	292	277
SNAP02A-mid	16-Apr-08	5	23	52	46.8
SNAP05	-	6.0	19.0	39.0	41.70

Notes:

- = no data.

µS/cm = microSiemens per centimetre.

Comparison of Field and Lab Specific Conductivities

To assess the validity of using field specific conductivity measurements to estimate the concentrations of TDS through the water column, the field conductivity values were regressed against the lab conductivity values.

The linear regression analysis of the relationship between field and lab conductivity measurements was performed using SYSTAT 11 (SYSTAT 2004). SYSTAT detected nine pairs of outliers (Table I-2). These were not removed from the regression because they had very little effect on the slope of the regression line. Most of the outlier pairs were from bottom waters and a majority occurred during ice cover, which suggests they resulted from measuring field conductivity at slightly different depths than water sample collections, where TDS concentrations increase sharply over a narrow depth range. As a result, field specific conductivity readings were taken from a portion of the water sample during the 2008 AEMP field program.

Table I-2 Outliers in the Lab and Field Specific Conductivity Data Sets, July 2007 to May 2008

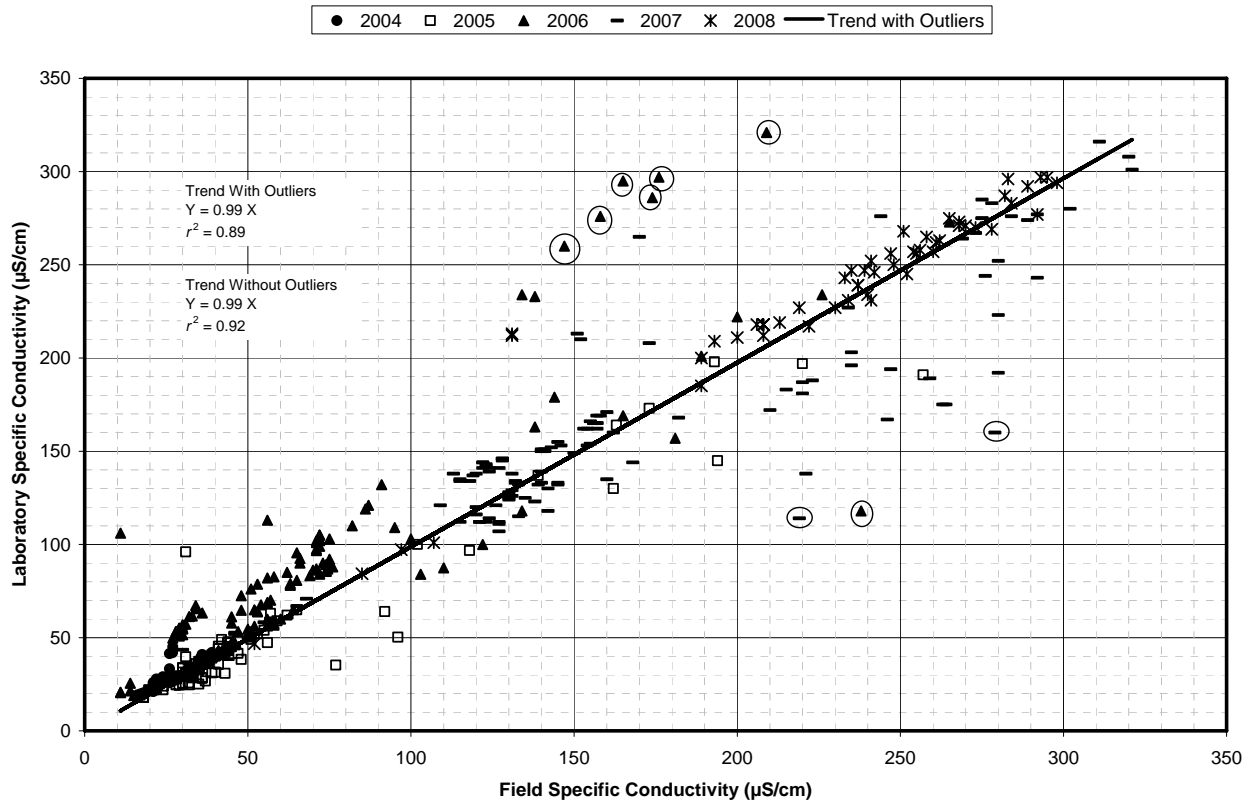
Sample	Depth	Date Sampled	Month	Year	Sample Control Number	TDS-Calculated (mg/L)	Field Specific Conductivity (µS/cm)	Laboratory Specific Conductivity (µS/cm)
SNP 02-20b bottom	4.1	07-Apr-06	April	2006	2006-0323	154.9	209	321
SNAP05-bottom	14.1	08-Apr-06	April	2006	2006-0335	130.6	147	260
SNAP03-bottom	11.0	08-Apr-06	April	2006	2006-0338	116.3	138	233
SNAP13-bottom	20.0	09-Apr-06	April	2006	2006-0343	142.8	165	295
SNAP14-bottom	12.1	10-Apr-06	April	2006	2006-0353	136.8	158	276
SNP 02-20e bottom	27.0	20-Jul-06	July	2006	2006-0444	143.0	176	297
SNP 02-20e bottom	24.0	13-Aug-06	August	2006	2006-0457	136.0	174	286
SNAP12-mid	5.0	24-Feb-07	February	2007	2007-0021	55.0	219	114
SNAP05-mid	6.0	24-Feb-07	February	2007	2007-0028	73.0	279	160

Notes:

µS/cm = microSiemens per centimetre.

The equation of the regression line in the Figure I-1 quantifies the relationship between the field and lab measurements of specific conductivity, and the r^2 (i.e., coefficient of determination) value for the regression indicates the strength of the relationship between the field and lab measurements. The slope value of 0.99 indicates a nearly one-to-one relationship between the field and lab measurements of specific conductivity, and the r^2 value of 0.89 indicates that the relationship between field and lab conductivities is strong. The nearly one-to-one relation and the high r^2 value of the field-lab conductivity relationship indicate that field conductivity measurements provide accurate estimates of the calculated TDS concentrations.

Figure I-1 Relationship Between Field and Lab Specific Conductivity, May 2004 and May 2008



Notes:
Eight pairs of outliers were identified (circled in figure).
mg/L = milligrams per litre.
 $\mu\text{S}/\text{cm}$ = microSiemens per centimetre.
 $n = 478$.

APPENDIX II

**FIELD WATER QUALITY PROFILES, AND MAJOR
ION AND TDS DATA**

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentration Made from Field Specific Conductivity, July 2007 to September 2007 (Ice Free Period)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP02a	24-Jul-07	0.0	18.3	9.1	96.3	25	12
		1.0	17.9	9.1	95.4	25	12
		2.0	17.5	9.0	94.5	24	11
		3.0	17.5	9.0	94.3	24	11
		4.0	17.3	9.0	93.9	24	11
		5.0	17.3	9.0	93.7	24	11
		6.0	17.3	9.0	93.8	24	11
		7.0	17.2	9.0	93.5	24	11
		8.0	17.2	9.0	93.6	24	11
		9.0	17.1	9.0	93.1	24	11
	10.0	13.8	9.4	91.0	23	11	
	16-Sep-07	0.0	4.7	13.3	103.3	29	14
		1.0	4.7	13.2	102.7	29	14
		2.0	4.8	13.2	102.6	29	14
		3.0	4.8	13.2	102.6	29	14
		4.0	4.7	13.2	102.6	29	14
		5.0	4.8	13.2	102.6	29	14
		6.0	4.8	13.2	102.7	29	14
		7.0	4.8	13.2	102.6	29	14
		8.0	4.8	13.2	102.5	29	14
9.0		4.8	13.2	102.6	29	14	
10.0	4.8	13.1	102.0	29	14		
SNAP03	23-Jul-07	0.0	16.5	10.0	101.9	123	58
		1.0	16.5	10.0	102.4	123	58
		2.0	16.5	10.0	102.4	123	58
		3.0	16.5	10.0	102.4	124	58
		4.0	16.5	10.0	102.3	124	58
		5.0	16.5	10.0	102.3	123	58
		6.0	16.5	10.0	102.3	123	58
		7.0	16.4	10.0	102.2	124	58
		8.1	16.3	10.0	102.4	124	58
		9.1	11.3	12.9	117.5	130	61
		10.0	8.4	14.2	120.9	135	63
	11.0	7.8	13.8	115.9	136	64	
	22-Sep-07	0.0	4.3	13.6	104.4	156	73
		1.0	4.3	13.6	104.4	156	73
		2.0	4.3	13.6	104.3	156	73
		3.0	4.2	13.6	104.3	157	74
		4.0	4.2	13.6	104.2	157	74
		5.0	4.2	13.6	104.4	157	74
		6.0	4.2	13.6	104.2	157	74
		7.0	4.2	13.6	104.0	157	74
		8.0	4.2	13.5	103.8	153	72
		9.0	4.2	13.5	103.7	157	74
10.0		4.2	13.5	103.8	157	74	
11.0	4.2	13.5	103.8	157	74		
12.0	4.2	13.5	103.7	157	74		
SNAP04	22-Jul-07	0.0	17.3	9.4	98.0	109	51
		1.0	17.3	9.5	98.8	109	51
		2.0	17.3	9.5	98.9	109	51
		3.0	17.3	9.5	98.9	109	51
		4.0	17.3	9.5	98.7	109	51

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP04 (cont)	22-Sep-07	0.0	2.9	14.3	106.2	131	62
		1.0	2.9	14.3	105.8	131	62
		2.0	2.9	14.3	105.7	131	62
		3.0	2.9	14.2	105.4	131	62
		4.0	2.9	14.2	105.4	131	62
SNAP05	23-Jul-07	0.0	16.4	10.0	101.7	123	58
		1.0	16.4	10.0	102.3	123	58
		2.0	16.4	10.0	102.3	123	58
		3.0	16.4	10.0	102.2	123	58
		4.1	16.4	10.0	102.3	122	57
		5.0	16.4	10.0	102.2	122	57
		6.0	16.4	10.0	102.1	122	57
		7.0	16.3	10.0	102.0	121	57
		8.0	16.3	10.0	102.0	122	57
		9.0	16.4	10.0	102.0	122	57
		10.0	16.3	10.0	101.9	122	57
		11.0	16.3	10.0	101.8	122	57
		12.0	16.3	10.0	101.8	121	57
	16-Aug-07	0.0	12.3	10.6	98.9	156	73
		1.0	12.3	10.6	98.8	155	73
		2.0	12.3	10.6	98.6	156	73
		3.0	12.3	10.6	98.6	155	73
		4.0	12.3	10.6	98.5	155	73
		5.0	12.3	10.6	98.4	154	72
		6.1	12.3	10.5	98.4	154	72
		7.0	12.3	10.5	98.3	155	73
		8.1	12.2	10.5	98.3	154	72
		9.1	12.2	10.5	98.3	154	72
		10.1	12.2	10.5	98.2	154	72
		11.0	12.2	10.5	98.1	154	72
	21-Sep-07	0.0	4.3	13.6	104.4	154	72
		1.0	4.3	13.5	104.3	154	72
		2.0	4.3	13.5	104.3	154	72
		3.0	4.3	13.5	104.2	154	72
		4.0	4.3	13.5	104.3	154	72
		5.0	4.3	13.5	104.3	154	72
		6.0	4.3	13.5	104.2	154	72
		7.0	4.3	13.5	104.2	154	72
		8.0	4.3	13.5	104.2	154	72
		9.0	4.3	13.5	104.2	154	72
23-Jul-07	0.0	16.4	9.8	100.4	120	56	
	1.0	16.4	9.9	100.9	120	56	
	2.0	16.4	9.9	101.2	120	56	
	3.0	16.4	9.9	101.2	120	56	

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP06 (cont)	23-Jul-07	4.1	16.4	9.9	101.2	120	56
		5.0	16.4	9.9	101.1	120	56
		6.0	16.4	9.9	101.1	120	56
		7.0	16.4	9.9	101.0	120	56
		8.1	16.3	9.9	101.1	119	56
		9.0	16.3	9.9	101.2	119	56
		10.1	16.3	9.9	101.2	119	56
		11.0	12.8	11.1	105.5	117	55
	12.1	10.8	9.6	79.1	127	60	
	21-Sep-07	0.0	4.4	13.6	105.0	153	72
		1.0	4.4	13.5	104.5	153	72
		2.0	4.4	13.5	104.4	153	72
		3.0	4.4	13.5	104.1	153	72
		4.0	4.4	13.5	104.2	153	72
		5.0	4.4	13.5	104.1	153	72
		6.0	4.4	13.5	104.1	154	72
		7.0	4.4	13.5	104.2	153	72
		8.0	4.4	13.5	104.0	153	72
		9.0	4.4	13.5	103.9	153	72
		10.0	4.4	13.5	104.1	154	72
11.1		4.4	13.5	103.8	153	72	
12.0	4.4	13.5	103.8	154	72		
13.0	4.4	13.5	103.8	154	72		
SNAP07	20-Jul-07	0.0	17.5	9.7	101.3	123	58
		1.0	17.4	9.8	102.6	123	58
		2.1	17.3	9.8	102.5	123	58
		3.0	17.3	9.9	102.6	123	58
		4.0	17.2	9.9	102.8	123	58
		5.0	16.7	11.1	112.4	117	55
		6.0	13.5	12.0	115.1	114	54
		7.0	11.5	12.6	115.8	114	54
	8.0	11.2	12.0	110.0	115	54	
	20-Sep-07	0.0	3.6	13.7	103.6	143	67
		1.0	3.6	13.7	103.6	143	67
		2.0	3.6	13.7	103.5	143	67
		3.0	3.6	13.7	103.6	143	67
		4.0	3.6	13.7	103.6	143	67
		5.0	3.6	13.7	103.5	143	67
		6.0	3.6	13.7	103.5	143	67
		7.0	3.5	13.7	103.4	143	67
		8.0	3.5	14.0	105.3	143	67
9.0		3.5	13.8	103.9	143	67	
10.0	3.5	13.8	103.7	143	67		
SNAP08	20-Jul-07	0.0	17.7	9.6	100.4	128	60
		1.0	17.8	9.6	101.4	128	60
		2.1	17.8	9.6	101.3	128	60
		3.0	17.8	9.6	101.2	128	60
		4.0	17.8	9.6	101.1	128	60
		5.0	17.8	9.6	101.1	128	60
		6.0	17.7	9.6	101.2	128	60
		7.0	13.3	11.1	105.5	124	58

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP08 (cont)	18-Sep-07	0.0	3.0	13.9	103.1	140	66
		1.0	2.9	13.9	103.1	140	66
		2.0	2.9	13.9	102.9	140	66
		3.0	2.9	13.9	103.0	140	66
		4.0	2.9	13.9	103.0	140	66
		5.0	2.9	13.9	103.0	140	66
		6.0	2.9	13.9	102.9	140	66
		7.0	2.9	13.9	103.0	140	66
		9.0	3.0	13.1	97.6	140	66
SNAP09	23-Jul-07	0.0	16.2	10.0	101.4	119	56
		1.0	16.2	9.9	100.8	119	56
		2.0	16.2	9.9	101.0	119	56
		3.0	16.2	10.0	101.3	119	56
		4.0	16.2	9.9	101.2	119	56
		5.1	16.2	10.0	101.3	119	56
		6.0	16.2	10.0	101.3	119	56
		7.0	16.2	10.0	101.3	119	56
		8.1	16.1	10.0	101.4	118	55
		9.0	14.7	10.6	104.3	117	55
		10.1	11.5	12.0	108.6	115	54
		11.0	9.1	12.5	108.6	114	54
		12.0	8.7	12.5	107.5	112	53
	13.1	8.2	11.8	100.5	112	53	
	21-Sep-07	0.0	5.1	13.2	103.6	145	68
		1.0	5.0	13.2	103.5	145	68
		2.0	5.0	13.2	103.6	146	69
		3.1	4.9	13.2	103.5	145	68
		4.0	4.9	13.2	103.4	145	68
		5.0	4.9	13.2	103.4	145	68
		6.0	4.9	13.2	103.4	146	69
		7.0	4.9	13.2	103.4	146	69
		8.0	4.9	13.2	103.4	145	68
9.0		4.9	13.2	103.4	146	69	
SNAP10	22-Jul-07	0.0	16.1	9.8	99.1	118	55
		1.0	16.1	9.8	100.0	118	55
		2.0	16.1	9.9	100.0	118	55
		3.0	16.1	9.8	99.9	118	55
		4.0	16.1	9.8	99.9	118	55
		5.0	16.1	9.8	99.7	118	55
	19-Sep-07	0.0	3.9	13.7	103.9	141	66
		1.0	3.8	13.7	104.1	141	66
		2.0	3.8	13.7	104.1	141	66
		3.0	3.8	13.8	104.5	141	66
4.0	3.8	13.8	104.8	141	66		
5.0	3.8	13.8	104.5	142	67		

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP11a	23-Jul-07	0.0	16.2	9.8	99.3	119	56
		1.0	16.2	10.0	101.4	119	56
		2.0	16.1	10.0	101.4	119	56
		3.1	16.1	10.0	101.6	118	55
		4.0	15.9	10.1	101.8	118	55
		5.0	15.8	10.1	102.3	118	55
		6.0	15.4	10.3	103.5	118	55
		7.0	12.0	11.0	107.3	117	55
		8.1	10.4	12.3	109.6	113	53
		9.0	9.6	12.6	110.7	112	53
		10.1	8.9	12.5	108.2	113	53
		11.1	8.6	12.4	106.4	113	53
		12.0	8.3	12.3	104.3	112	53
		13.1	8.2	12.3	103.9	112	53
		14.1	8.2	12.2	103.6	112	53
		15.0	8.0	11.8	99.9	112	53
	16.0	7.8	12.0	96.7	114	54	
	19-Sep-07	0.0	5.2	13.4	105.0	145	68
		1.0	5.3	13.1	103.4	145	68
		2.0	5.3	13.0	102.8	145	68
		3.0	5.3	13.0	102.5	145	68
		4.0	5.3	13.0	102.5	145	68
		5.0	5.3	13.0	102.5	145	68
		6.0	5.3	13.0	102.5	145	68
		7.0	5.2	13.0	102.5	145	68
		8.0	5.2	13.0	102.5	145	68
		9.0	5.2	13.0	102.4	145	68
		10.0	5.2	13.0	102.3	145	68
		11.0	5.2	13.0	102.4	145	68
		12.0	5.2	13.0	102.4	145	68
		13.0	5.2	13.0	102.4	145	68
		14.0	5.1	13.0	102.4	145	68
		15.0	5.1	13.0	102.3	145	68
16.0		5.1	13.0	102.3	145	68	
SNAP12	23-Jul-07	0.0	16.5	9.8	100.6	124	58
		1.0	16.5	10.0	102.4	124	58
		2.0	16.5	10.0	102.4	124	58
		3.0	16.5	10.0	102.4	124	58
		4.0	16.5	10.0	102.4	124	58
		5.0	16.5	10.0	102.4	124	58
		6.1	16.5	10.0	102.3	124	58
		16-Aug-07	0.0	12.4	10.6	98.9	156
	1.0		12.4	10.6	98.9	156	73
	2.0		12.4	10.6	98.8	156	73
	3.0		12.4	10.6	98.8	156	73
	4.1		12.4	10.5	98.7	156	73
	5.0		12.4	10.6	98.7	156	73
	6.0		12.4	10.6	98.7	156	73
	17-Sep-07	0.0	12.4	10.5	98.7	156	73
		0.0	5.5	12.8	101.8	158	74
		1.0	5.5	12.6	100.3	157	74
		2.0	5.6	12.6	100.0	157	74

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP12 (cont)	17-Sep-07	3.0	5.6	12.6	99.9	157	74
		4.0	5.6	12.6	99.8	157	74
		5.0	5.6	12.6	99.8	157	74
		6.0	5.6	12.6	99.8	157	74
		7.0	5.6	12.6	99.8	157	74
SNAP14	25-Jul-07	0.0	16.5	9.9	101.5	122	57
		1.0	16.5	10.0	101.9	122	57
		2.0	16.5	10.0	101.9	122	57
		3.0	16.5	10.0	101.9	122	57
		4.0	16.5	10.0	101.8	122	57
		5.0	16.5	10.0	101.8	122	57
		6.0	16.5	10.0	101.8	122	57
		7.0	16.4	10.0	101.8	123	58
		8.0	16.2	10.1	102.8	134	63
		9.0	15.5	10.5	105.7	153	72
		10.0	14.9	10.8	106.9	163	77
		11.0	14.5	11.0	108.3	166	78
		12.0	13.0	11.4	109.4	168	79
	16-Sep-07	0.0	5.8	13.1	105.0	158	74
		1.0	5.9	12.9	103.3	158	74
		2.0	5.9	12.8	102.9	157	74
		3.0	5.9	12.0	102.8	157	74
		4.0	5.9	12.8	102.7	157	74
		5.0	5.9	12.8	102.7	157	74
		6.0	5.9	12.8	102.7	157	74
		7.1	5.9	12.8	102.6	158	74
		8.0	5.9	12.8	102.6	157	74
		9.0	5.9	12.8	102.6	158	74
		10.0	5.9	12.8	102.5	157	74
		11.0	5.9	12.8	102.5	157	74
12.0	5.9	12.8	102.5	158	74		
13.1	5.9	12.8	102.6	158	74		
SNAP20	24-Jul-07	0.0	17.4	9.0	94.0	21	10
		1.0	17.3	9.1	95.0	21	10
		2.0	17.2	9.2	95.3	20	9
		3.1	17.1	9.2	95.2	20	9
		4.0	17.1	9.2	94.8	20	9
		5.1	17.1	9.2	94.8	20	9
		6.0	16.9	9.2	94.9	20	9
		7.0	12.0	10.4	100.9	18	8
		8.1	7.7	11.9	99.3	15	7
		9.0	6.7	11.9	96.9	14	7
		10.0	6.3	11.8	95.6	14	7
		11.0	6.0	11.7	94.0	14	7
		12.0	5.8	11.4	91.0	14	7
SNAP20B	16-Aug-07	0.0	12.3	10.6	98.9	25	12
		1.0	12.2	10.5	98.3	25	12
		2.0	12.2	10.5	97.8	25	12
		3.1	12.2	10.5	97.6	25	12
		4.0	12.2	10.5	97.4	25	12
		5.0	12.1	10.5	97.4	25	12
		6.0	12.1	10.4	97.1	25	12

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP20B (cont)	16-Aug-07	7.0	12.1	10.4	97.1	25	12
		8.0	12.1	10.4	96.5	25	12
		9.0	9.4	11.5	100.2	23	11
		10.1	6.3	11.6	93.8	23	11
		11.0	5.9	11.5	91.7	23	11
		12.0	5.6	11.1	88.0	23	11
		12.0	5.3	10.8	85.2	23	11
		14.0	5.0	10.6	83.0	23	11
		15.0	4.8	10.3	80.0	23	11
		16.1	4.7	10.2	79.1	23	11
		17.0	4.6	10.1	78.2	23	11
		18.0	4.5	10.2	79.1	24	11
		19.0	4.5	10.1	78.1	24	11
		20.1	4.4	10.0	77.2	24	11
		21.1	4.3	10.0	76.7	24	11
		22.0	4.3	10.0	76.7	24	11
		23.0	4.3	9.8	75.4	24	11
		24.1	4.2	9.6	74.0	24	11
		25.1	4.2	9.6	73.4	25	12
		26.0	4.2	9.5	73.1	25	12
	27.1	4.2	9.5	73.0	25	12	
	28.0	4.2	9.6	72.6	25	12	
	29.1	4.2	9.5	72.4	25	12	
	16-Sep-07	0.0	6.6	12.3	100.5	24	11
		1.0	6.5	12.3	99.9	24	11
		2.0	6.5	12.3	99.9	24	11
		3.0	6.5	12.3	99.8	24	11
		4.0	6.5	12.3	99.7	24	11
		5.0	6.5	12.3	99.6	24	11
		6.0	6.4	12.3	99.6	24	11
		7.1	6.4	12.3	99.9	24	11
		8.0	6.4	12.3	99.7	24	11
		9.0	6.4	12.3	99.9	24	11
10.0		6.4	12.3	99.6	24	11	
11.1		6.4	12.3	99.6	24	11	
12.0		6.4	12.3	99.8	24	11	
13.0		6.4	12.3	99.5	24	11	
14.1		6.3	12.2	98.8	24	11	
15.0		6.0	12.1	96.9	24	11	
16.0		5.9	12.1	97.0	24	11	
17.0		5.9	12.1	97.1	24	11	
18.0		5.8	12.1	97.0	24	11	
19.0		5.5	12.0	95.1	24	11	
20.1	5.1	10.5	82.2	22	10		
21.0	4.6	9.9	77.1	22	10		
23.1	4.4	9.9	76.5	23	11		
24.0	4.3	9.8	75.5	23	11		
25.0	4.3	9.8	74.8	23	11		
26.0	4.3	9.6	74.0	23	11		
27.0	4.2	9.3	71.5	23	11		
28.1	4.2	9.3	71.7	23	11		
29.0	4.2	9.4	72.0	23	11		

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)		
SNAP20B (cont)	16-Sep-07	30.1	4.2	9.4	72.0	23	11		
		22..02	4.4	9.9	76.7	23	11		
SNAP23	24-Jul-07	0.0	18.0	9.1	96.4	46	22		
		1.0	17.9	9.2	97.1	46	22		
		2.0	17.5	9.3	97.1	45	21		
		3.0	17.2	9.3	96.3	46	22		
		4.0	17.1	9.3	96.0	44	21		
		5.0	17.0	9.3	95.9	42	20		
		6.0	16.9	9.3	95.6	43	20		
		7.0	16.8	9.3	95.6	40	19		
		8.0	16.4	9.4	95.4	40	19		
		9.0	11.1	10.9	99.4	33	16		
		10.0	9.5	11.2	97.2	30	14		
		11.0	8.7	10.8	92.6	30	14		
	12.0	8.4	9.2	78.4	30	14			
	14-Sep-07	0.0	6.3	12.7	102.6	55	26		
		1.0	6.4	12.4	100.9	55	26		
		2.0	6.4	12.4	100.6	55	26		
		3.0	6.4	12.4	100.5	55	26		
		4.1	6.4	12.4	100.3	55	26		
		5.0	6.4	12.4	100.3	55	26		
		6.1	6.4	12.3	100.2	55	26		
		7.0	6.4	12.3	100.1	55	26		
		8.0	6.4	12.3	100.0	55	26		
		9.0	6.4	12.3	100.0	55	26		
		10.0	6.3	12.3	100.0	55	26		
		11.1	6.4	12.3	100.0	55	26		
		12.0	6.3	12.1	98.5	55	26		
		SNAP26	22-Jul-07	0.0	16.7	9.6	99.1	127	60
				1.1	16.7	9.8	100.8	128	60
2.0				16.7	9.8	100.9	128	60	
3.0	16.7			9.8	100.9	128	60		
4.0	16.7			9.8	100.7	128	60		
5.1	16.7			9.8	100.7	128	60		
15-Sep-07	0.0		5.1	13.5	105.4	155	73		
	1.0		5.1	13.1	102.9	155	73		
	2.0		5.2	13.0	102.5	155	73		
	3.0		5.2	13.0	102.4	155	73		
	4.0		5.1	13.0	102.4	155	73		
	5.0		5.2	13.0	102.4	155	73		
	SNAP28		22-Jul-07	0.0	16.8	9.6	98.8	125	59
				1.0	16.8	9.7	99.9	126	59
2.0		16.7		9.8	100.6	127	60		
3.0		16.6		9.9	101.6	127	60		
4.0		16.6		9.9	101.6	131	62		
5.0		16.4		9.7	99.8	134	63		
15-Aug-07		6.0	16.2	8.9	90.3	137	64		
		0.0	12.5	10.8	101.5	153	72		
		1.1	12.4	10.8	100.9	153	72		
		2.0	12.4	10.8	100.8	153	72		
3.1	12.4	10.7	100.5	153	72				
4.0	12.4	10.7	100.2	153	72				

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP28 (cont)	15-Aug-07	5.0	12.4	10.7	100.0	154	72
		6.0	12.4	8.5	79.7	153	72
	15-Sep-07	0.0	6.5	12.8	104.1	158	74
		1.0	6.5	12.7	103.1	158	74
		2.0	6.5	12.6	102.8	157	74
		3.0	6.5	12.6	102.8	157	74
		4.0	6.5	12.7	103.0	158	74
		5.0	6.5	12.7	103.0	158	74
6.0	6.4	12.7	103.0	158	74		
SNAP29	20-Jul-07	0.0	18.7	9.9	102.8	46	22
		1.0	18.5	9.4	100.6	46	22
		2.0	18.3	9.5	101.3	47	22
		3.0	18.3	9.5	101.3	47	22
		4.0	18.2	9.5	101.3	45	21
		5.0	16.8	10.0	101.9	44	21
		6.0	15.1	10.3	102.1	41	19
	16-Aug-07	0.0	12.1	10.8	100.0	54	25
		1.0	12.1	10.7	99.5	58	27
		2.1	12.1	10.7	99.3	58	27
		3.1	12.1	10.7	99.2	58	27
		4.1	12.1	10.7	99.2	58	27
		5.0	12.1	10.7	99.1	58	27
	21-Sep-07	0.0	12.1	10.6	98.8	58	27
		0.0	3.5	14.0	105.4	57	27
		1.0	3.5	14.0	105.0	57	27
		2.0	3.5	13.9	104.9	57	27
		3.0	3.5	13.9	104.8	57	27
		4.0	3.5	13.9	104.7	57	27
		5.0	3.5	13.9	104.7	57	27
6.0	3.5	13.9	104.6	57	27		
7.0	3.5	13.7	102.9	57	27		
SNP02-20d	19-Jul-07	0.0	17.3	9.7	101.1	115	54
		1.0	17.3	9.7	101.1	115	54
		2.0	17.3	9.7	101.1	115	54
		3.0	17.3	9.7	101.2	115	54
		4.0	17.3	9.7	101.1	115	54
		5.0	17.2	9.9	102.1	115	54
		6.0	14.7	11.0	108.7	160	75
		7.0	13.6	11.4	110.6	153	72
		8.0	13.1	11.6	110.2	164	77
		9.0	12.7	11.7	110.7	147	69
		10.0	12.1	12.0	111.6	152	71
	11.0	10.6	11.5	103.5	149	70	
	15-Aug-07	0.0	12.3	10.6	99.3	154	72
		1.0	12.3	10.6	99.2	154	72
		2.0	12.3	10.6	99.2	154	72
		3.1	12.3	10.6	99.2	154	72
		4.0	12.3	10.6	99.1	154	72
		5.1	12.3	10.6	99.1	154	72
		6.0	12.3	10.6	99.1	154	72
		7.1	12.3	10.6	99.0	154	72
8.0		12.2	10.6	98.8	155	73	

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP02-20d (cont)	15-Aug-07	9.1	12.2	10.6	98.7	154	72
		10.1	12.2	10.6	98.7	154	72
		11.0	12.2	10.6	98.7	155	73
	17-Sep-07	0.0	5.4	13.0	102.7	157	74
		1.0	5.5	12.7	100.4	156	73
		2.0	5.5	12.6	99.7	156	73
		3.0	5.5	12.5	99.6	156	73
		4.0	5.6	12.5	99.5	157	74
		5.0	5.6	12.5	99.5	157	74
		6.0	5.6	12.5	99.5	156	73
		7.0	5.6	12.5	99.4	156	73
		8.0	5.6	12.5	99.4	156	73
		9.0	5.6	12.5	99.5	157	74
		10.0	5.6	12.5	99.4	156	73
11.0	5.5	12.5	99.4	156	73		
SNP02-20e	22-Jul-07	0.0	16.9	9.6	99.1	124	58
		1.0	16.8	9.6	99.2	124	58
		2.0	16.8	9.6	99.2	124	58
		3.0	16.8	9.6	99.1	124	58
		4.0	16.8	9.6	99.3	124	58
		5.0	16.8	9.6	99.3	125	59
		6.0	16.2	10.1	102.6	131	62
		7.0	15.7	10.5	105.7	141	66
		8.0	14.9	10.9	108.1	148	70
		9.0	14.2	11.5	112.0	149	70
		10.0	13.4	11.8	113.0	156	73
		11.0	12.8	12.0	113.3	165	78
		12.0	12.5	12.0	113.0	173	81
		13.0	12.1	12.1	112.1	170	80
		14.1	11.7	12.1	111.0	161	76
		15.0	10.7	12.0	108.2	157	74
		16.0	7.1	11.8	97.3	152	71
		17.0	5.4	11.3	89.4	155	73
		18.0	4.7	10.9	84.8	162	76
		19.0	4.6	10.6	82.3	163	77
		20.0	4.4	10.5	80.5	166	78
		21.0	4.2	10.1	77.4	168	79
		22.0	4.2	9.9	75.7	169	79
		23.3	4.1	9.8	75.0	169	79
		24.0	4.1	9.7	74.1	169	79
		25.0	4.1	9.6	73.5	170	80
		26.0	4.0	9.4	72.1	170	80
		27.1	4.0	9.3	70.8	170	80
	28.0	4.0	8.8	67.0	170	80	
	14-Aug-07	0.0	12.6	10.2	96.0	149	70
		1.0	12.5	10.2	95.4	150	71
		2.0	12.5	10.1	95.1	150	71
		3.0	12.5	10.1	95.0	149	70
4.0		12.5	10.1	94.8	149	70	
5.0		12.4	10.1	94.7	149	70	
6.0		12.4	10.1	94.6	149	70	
7.0	12.4	10.1	94.7	149	70		

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNP02-20e (cont)	14-Aug-07	8.0	12.4	10.1	94.5	149	70	
		9.0	12.4	10.1	94.4	149	70	
		10.0	12.3	10.1	94.5	149	70	
		11.0	12.4	10.1	94.4	149	70	
		12.0	12.4	10.1	94.4	149	70	
		13.0	12.3	10.1	94.5	149	70	
		14.0	12.3	10.1	94.5	149	70	
		15.0	12.3	10.1	94.6	150	71	
		16.0	12.3	10.1	94.6	150	71	
		17.0	12.3	10.2	94.8	150	71	
		18.0	11.4	9.9	90.2	162	76	
		19.0	5.9	8.5	68.3	246	116	
		20.0	4.7	8.3	64.6	260	122	
		21.0	4.4	8.0	66.7	264	124	
		22.0	4.2	7.6	58.0	265	125	
		23.0	4.1	7.4	56.7	267	125	
		24.0	4.1	7.3	55.8	268	126	
		25.0	4.1	6.8	52.2	268	126	
		26.0	4.0	6.5	49.3	269	126	
		26.5	4.0	6.2	47.0	269	126	
		13-Sep-07	0.0	7.6	12.0	100.0	160	75
			1.0	7.6	11.9	99.7	160	75
			2.0	7.5	12.0	99.8	160	75
			3.1	7.5	11.9	99.7	160	75
			4.0	7.5	11.9	99.5	160	75
			5.0	7.5	11.9	99.5	160	75
	6.1		7.5	11.9	99.4	160	75	
	7.0		7.5	11.9	99.4	160	75	
	8.0		7.5	11.9	99.5	160	75	
	9.0		7.5	11.9	99.2	160	75	
	10.0		7.5	11.9	99.2	160	75	
	11.0		7.5	11.9	99.1	160	75	
	12.0		7.5	11.9	99.1	160	75	
	13.0		7.4	11.9	99.1	160	75	
	14.1		7.4	11.9	99.1	160	75	
	15.1		7.4	11.9	99.1	160	75	
	16.1		7.4	11.9	99.1	160	75	
	17.0		7.4	11.9	99.0	160	75	
	18.0		7.4	11.9	99.1	160	75	
	19.0		7.4	11.9	99.2	160	75	
	20.1		7.4	11.9	99.1	160	75	
	21.0		7.4	11.9	99.0	160	75	
	22.0		7.4	11.9	99.0	160	75	
	23.0		7.3	11.9	98.9	161	76	
	24.0		7.3	11.9	98.9	161	76	
25.0	7.3		11.9	98.8	162	76		
26.0	7.1		12.0	99.3	159	75		
19-Sep-07	0.0		4.5	13.5	104.6	156	73	
	1.0	4.5	13.4	103.6	156	73		
	2.0	4.5	13.4	103.4	156	73		
	3.0	4.5	13.4	103.5	156	73		
	4.0	4.5	13.4	103.5	156	73		

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP02-20e (cont)	19-Sep-07	5.0	4.5	13.4	103.3	156	73
		6.0	4.5	13.4	103.3	156	73
		7.0	4.5	13.3	103.2	156	73
		8.0	4.5	13.4	103.2	156	73
		9.0	4.5	13.4	103.2	156	73
		10.1	4.5	13.4	103.2	156	73
		11.0	4.4	13.4	103.2	156	73
		12.0	4.4	13.4	103.2	156	73
		13.0	4.4	13.4	103.2	156	73
		14.0	4.4	13.4	103.3	156	73
		15.0	4.4	13.4	103.2	156	73
		16.0	4.4	13.4	103.2	156	73
		17.0	4.4	13.4	103.2	156	73
		18.0	4.4	13.4	103.1	156	73
		19.0	4.4	13.4	103.1	156	73
		20.0	4.4	13.4	103.1	156	73
		21.0	4.4	13.4	103.1	156	73
		22.0	4.4	13.4	103.1	156	73
		23.0	4.4	13.4	103.2	156	73
		24.0	4.4	13.4	103.2	156	73
25.0	4.4	13.4	103.2	156	73		
26.0	4.4	13.4	103.1	156	73		
27.0	4.4	13.4	103.2	156	73		
28.0	4.4	13.4	94.7	157	74		
SNP02-20f	19-Jul-07	0.0	17.3	9.7	101.1	115	54
		1.0	17.3	9.7	101.1	115	54
		2.0	17.3	9.7	101.1	115	54
		3.0	17.3	9.7	101.1	115	54
		4.0	17.3	9.7	101.1	115	54
		5.0	17.3	9.7	101.1	115	54
		6.0	15.2	10.8	107.2	134	63
		7.0	14.0	11.6	112.9	162	76
		8.0	13.1	11.6	110.1	176	83
		9.0	12.5	11.8	110.4	170	80
		10.0	12.3	11.8	110.3	159	75
		11.0	11.9	11.8	109.6	161	76
		12.0	11.5	11.9	108.8	155	73
	13.0	10.7	12.4	110.3	151	71	
	15-Aug-07	0.0	12.3	10.6	99.3	156	73
		1.1	12.3	10.6	99.3	156	73
		2.0	12.3	10.6	99.1	156	73
		3.0	12.3	10.6	99.1	157	74
		4.0	12.3	10.6	99.0	157	74
		5.0	12.3	10.6	99.1	156	73
		6.0	12.3	10.6	98.9	156	73
		7.1	12.3	10.6	99.0	155	73
		8.0	12.3	10.6	98.9	155	73
		9.0	12.3	10.6	98.9	155	73
		10.0	12.3	10.6	98.8	155	73
11.0		12.3	10.6	98.9	155	73	
12.1	12.2	10.6	98.8	157	74		
13.0	12.2	10.6	98.6	156	73		

Table II-1 Field Profiles and the Estimates of Calculated TDS Concentrations Made from Specific Conductivity, July 2007 to September 2007 (Ice Free Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP02-20f (cont)	17-Sep-07	0.0	5.4	12.9	101.6	157	74
		1.0	5.5	12.6	100.1	157	74
		2.0	5.5	12.6	99.8	157	74
		3.0	5.5	12.6	99.8	157	74
		4.0	5.5	12.6	99.7	157	74
		5.0	5.5	12.6	99.6	157	74
		6.0	5.5	12.6	99.6	157	74
		7.0	5.5	12.6	99.6	157	74
		8.0	5.5	12.6	99.6	157	74
		9.0	5.5	12.5	99.6	157	74
		10.0	5.5	12.5	99.5	157	74
		11.0	5.5	12.5	99.5	157	74
		12.0	5.5	12.5	99.5	157	74
13.0	5.5	12.5	99.5	157	74		

Notes:

m = metre.

°C = degree Celsius.

µS/cm = microSiemens per centimetre.

mg/L = milligrams per litre.

Estimate of calculated TDS = 0.45 * field specific conductivity.

- = no data.

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP02A	16-Apr-08	1.7	0.7	18.3	127.6	53	25
		2.0	1.1	18.3	129.1	50	24
		3.0	2.0	17.2	124.2	48	23
		4.0	2.5	16.2	118.8	47	22
		5.0	2.9	11.5	84.8	45	21
		6.0	3.1	9.9	74.0	50	24
		7.0	3.2	9.6	71.4	51	24
		8.0	3.2	10.9	82.1	56	26
		9.0	3.3	11.5	86.2	57	27
	11-May-08	1.7	0.5	16.9	117.0	46	22
		2.0	2.0	16.1	116.3	45	21
		3.0	3.2	16.2	120.8	50	24
		4.0	3.5	13.9	104.3	50	24
		5.0	3.6	15.0	114.8	54	25
		6.0	3.8	16.0	121.5	56	26
		7.0	3.7	18.4	139.4	61	29
		8.0	3.7	17.1	128.9	63	30
SNAP03	11-Apr-08	1.3	0.1	16.8	115.1	246	116
		2.0	0.7	16.3	113.8	236	111
		3.0	1.1	16.1	113.6	263	124
		4.0	1.2	15.9	112.1	291	137
		5.0	1.2	15.7	110.9	295	139
		6.0	1.2	15.5	109.7	301	141
		7.0	1.2	15.3	108.5	300	141
		8.0	1.3	15.2	107.5	299	141
		9.0	1.5	14.6	103.9	289	136
		10.0	1.8	14.1	100.9	285	134
		11.0	2.0	13.6	98.3	281	132
		12.0	2.2	12.8	92.3	279	131
	9-May-08	1.5	0.6	15.7	109.1	250	118
		2.0	1.1	15.0	105.3	240	113
		3.0	1.4	14.8	105.7	302	142
		4.0	1.5	15.0	107.2	315	148
		5.0	1.5	15.0	107.1	321	151
		6.0	1.5	14.9	106.2	319	150
		7.0	1.5	14.8	105.6	319	150
		8.0	1.5	14.8	105.4	319	150
		9.0	1.8	14.4	103.5	310	146
SNAP04	20-Feb-08	1.3	0.3	17.3	119.6	252	118
		2.0	1.5	14.4	103.0	235	110
		3.0	2.3	14.5	105.4	226	106
		4.0	2.8	13.4	99.3	222	104
	3-Apr-08	1.3	0.6	14.2	98.5	261	123
		1.3	0.8	14.0	98.2	259	122
		1.5	0.4	14.3	98.7	255	120
		2.0	1.0	13.9	97.8	246	116
		2.5	1.9	13.0	93.7	239	112
		3.0	2.5	12.4	90.8	234	110
		3.5	2.9	11.6	86.1	232	109

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP04 (cont)	10-May-08	1.4	0.7	13.5	94.2	264	124
		2.0	2.9	12.5	91.8	249	117
		3.0	3.9	11.5	87.3	245	115
		4.0	3.9	10.9	82.7	246	116
SNAP05	26-Jan-08	1.2	0.2	17.8	123.0	201	94
		2.0	0.7	17.4	121.3	192	90
		3.0	0.9	17.1	119.3	189	89
		4.0	0.9	16.9	118.5	202	95
		5.0	0.9	16.6	116.3	236	111
		6.0	0.9	16.5	116.0	245	115
		7.0	1.0	16.1	113.3	244	115
		8.0	1.2	15.5	109.2	236	111
		9.0	1.5	14.6	103.8	232	109
		10.0	1.7	14.1	101.3	229	108
		11.0	1.9	13.4	96.5	226	106
		12.0	2.1	12.5	90.8	225	106
		13.0	2.3	10.9	79.0	226	106
	22-Feb-08	1.3	0.3	16.2	111.7	240	113
		2.0	0.8	15.9	111.0	225	106
		3.0	1.1	15.5	109.2	221	104
		4.0	1.1	15.1	106.7	238	112
		5.0	1.1	14.9	105.3	269	126
		6.0	1.1	14.6	103.3	279	131
		7.0	1.2	14.3	101.5	274	129
		8.0	1.4	13.5	95.6	267	125
		9.0	1.7	12.8	91.9	264	124
		10.0	2.0	12.4	89.4	260	122
		11.0	2.2	11.5	83.7	258	121
		12.0	2.4	11.1	80.8	256	120
		13.0	2.5	10.0	73.6	256	120
	8-Apr-08	1.8	1.0	15.6	109.3	235	110
		2.0	0.9	15.7	109.8	227	107
		3.0	1.2	15.0	106.5	223	105
		4.0	1.1	15.5	109.2	275	129
		5.0	1.2	15.6	110.6	278	131
		6.0	1.2	15.5	110.0	283	133
		7.0	1.3	15.2	108.2	279	131
8.0		1.5	14.5	103.6	274	129	
9.0		1.8	13.6	98.9	269	126	
10.0		2.0	13.3	95.9	266	125	
11.0		2.2	12.7	92.4	264	124	
12.0		2.4	12.0	87.9	262	123	
13.0		2.6	10.9	80.1	261	123	
14.0	2.8	9.3	98.3	260	122		
8-May-08	1.4	0.2	15.8	107.6	246	116	
	2.0	1.1	14.9	105.0	239	112	
	3.0	1.7	14.6	104.5	242	114	
	4.0	1.5	15.0	107.4	303	142	
	5.0	1.6	15.4	110.0	301	141	
	6.0	1.6	15.3	109.2	307	144	
	7.0	1.8	15.0	108.0	295	139	
	8.0	2.0	14.8	107.3	289	136	
9.0	2.1	14.1	100.7	294	138		

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNAP05 (cont)	8-May-08	10.0	2.3	12.7	92.6	290	136	
		11.0	2.5	12.2	89.3	288	135	
		12.0	2.6	12.0	88.0	288	135	
		13.0	2.8	11.4	83.6	286	134	
		14.0	3.0	8.9	65.2	283	133	
SNAP06	10-Apr-08	1.3	0.2	15.4	106.3	249	117	
		2.0	0.7	15.1	105.2	236	111	
		3.0	1.4	12.8	90.8	228	107	
		4.0	1.5	13.4	95.5	231	109	
		5.0	1.6	14.6	104.8	235	110	
		6.0	1.4	14.5	103.1	270	127	
		7.0	1.5	13.8	98.9	276	130	
		8.0	1.8	14.0	101.2	266	125	
		9.0	2.0	14.7	106.8	256	120	
		10.0	2.1	13.2	94.7	261	123	
		11.0	2.2	10.7	78.1	260	122	
		1.3	0.2	16.6	114.0	248	117	
		2.0	0.6	16.3	113.3	233	110	
		3.0	1.4	14.7	104.2	223	105	
		4.0	1.5	14.0	99.7	226	106	
		5.0	1.5	14.4	103.6	260	122	
		6.0	1.4	14.8	105.2	273	128	
		7.0	1.6	14.4	102.5	269	126	
		8.0	1.9	14.5	104.7	261	123	
		9.0	2.1	15.2	109.9	253	119	
		10.0	2.2	13.1	94.6	255	120	
	11.0	2.3	11.9	86.6	254	119		
	9-May-08	1.6	0.4	15.9	110.4	247	116	
		2.0	0.7	15.7	109.5	246	116	
		3.0	1.8	13.8	98.7	245	115	
		4.0	2.0	13.7	99.1	246	116	
		5.0	2.3	14.1	103.5	238	112	
		6.0	2.1	14.6	105.8	279	131	
		7.0	2.2	14.6	106.3	272	128	
		8.0	2.8	14.8	109.9	251	118	
		9.0	3.0	15.3	113.8	246	116	
		10.0	3.0	15.5	114.8	249	117	
		11.0	2.8	14.4	105.5	260	122	
12.0		2.7	12.2	88.7	268	126		
SNAP07	25-Jan-08	1.3	0.3	18.2	125.6	204	96	
		2.0	0.7	17.6	122.7	193	91	
		3.0	0.9	17.5	121.6	191	90	
		4.0	1.0	16.9	118.5	191	90	
		5.1	1.1	16.4	115.3	193	91	
		6.0	1.4	15.7	111.9	190	89	
		7.0	1.7	14.8	105.9	187	88	
		8.0	1.8	16.5	96.8	185	87	
		9.0	1.8	13.1	94.3	192	90	
		10.0	1.9	12.7	91.3	191	90	
		10-Apr-08	1.6	0.1	17.5	120.3	233	110
			2.0	0.7	17.1	119.2	221	104
	3.0		1.4	16.6	117.8	214	101	
	4.0		1.7	16.4	117.8	211	99	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP07 (cont)	10-Apr-08	5.0	1.9	16.2	116.9	208	98
		6.0	2.1	15.5	112.1	207	97
		7.0	2.2	14.9	108.4	210	99
	10-May-08	1.7	0.9	13.7	96.1	243	114
		2.0	1.8	13.3	95.2	233	110
		3.0	1.9	13.0	94.0	237	111
		4.0	1.9	12.7	91.9	237	111
		5.0	1.9	12.7	91.7	238	112
		6.0	1.9	12.7	91.4	235	110
		7.0	1.9	12.7	91.9	245	115
		8.0	2.0	12.8	92.3	247	116
		9.0	2.0	12.6	91.3	247	116
		10.0	2.1	12.2	88.6	248	117
		11.0	2.1	12.2	88.4	248	117
		12.0	2.1	12.0	86.9	252	118
13.0	2.3	11.7	85.2	246	116		
14.0	2.4	11.5	83.8	246	116		
SNAP08	25-Jan-08	1.3	0.9	17.7	124.4	213	100
		2.0	1.7	16.7	119.4	194	91
		3.0	3.0	14.3	106.1	184	86
		4.0	3.6	13.0	97.8	180	85
		5.0	3.6	11.8	89.4	184	86
		6.0	3.8	11.1	84.1	185	87
		7.0	3.9	9.0	67.0	188	88
		8.0	3.9	9.4	71.1	193	91
	24-Feb-08	1.5	1.1	16.2	114.0	234	110
		2.0	1.6	15.1	107.6	223	105
		3.0	2.8	13.6	100.3	206	97
		4.0	3.7	12.4	93.5	198	93
		5.0	3.8	11.5	87.3	200	94
		6.0	3.8	11.7	89.2	204	96
		7.0	3.8	11.4	85.2	206	97
		8.0	3.8	11.1	84.6	212	100
	10-Apr-08	1.8	0.2	17.4	119.6	230	108
		2.0	1.2	17.0	120.4	223	105
		3.0	3.6	15.9	120.0	210	99
		4.0	3.8	15.9	120.7	210	99
		5.0	3.9	16.0	121.9	210	99
		6.0	4.0	16.0	122.5	211	99
		7.0	4.1	15.7	120.2	212	100
		8.0	4.0	15.6	119.3	215	101
	10-May-08	1.9	3.4	16.0	120.2	230	108
		2.0	3.7	16.1	121.6	230	108
		3.0	4.0	16.0	122.1	230	108
		4.0	4.0	16.1	122.9	230	108
		5.0	4.0	16.2	123.5	230	108
		6.0	4.0	16.2	123.4	230	108
7.0		4.1	16.2	123.6	230	108	
8.0		4.1	16.2	123.5	230	108	
9.0		4.1	16.1	123.0	229	108	
SNAP09	26-Jan-08	1.2	0.1	17.9	122.5	206	97
		2.0	0.6	17.1	118.3	193	91
		3.1	0.9	16.1	112.4	187	88

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP09 (cont)	26-Jan-08	4.0	1.0	15.1	105.8	191	90
		5.0	1.1	14.8	104.6	195	92
		6.0	1.1	14.8	104.5	200	94
		7.0	1.2	14.7	103.9	200	94
		8.0	1.2	14.8	104.5	205	96
		9.0	1.3	14.5	103.0	202	95
		10.0	1.3	14.4	102.3	201	94
		11.0	1.4	14.1	100.1	202	95
		12.0	1.5	13.5	96.2	198	93
		13.0	1.6	13.1	93.6	198	93
	14.0	1.7	12.6	90.5	198	93	
	22-Feb-08	1.4	0.7	15.2	106.2	237	111
		2.0	0.9	14.7	103.0	223	105
		3.0	1.3	14.0	98.9	212	100
		4.0	1.3	13.1	92.8	215	101
		5.0	1.4	12.7	90.1	221	104
		6.0	1.4	12.5	88.8	224	105
		7.0	1.4	12.5	88.8	228	107
		8.0	1.3	12.7	90.3	244	115
		9.0	1.4	12.6	89.6	237	111
		10.0	1.6	12.3	87.4	226	106
		11.0	1.6	11.8	84.3	224	105
		12.0	1.7	11.4	81.9	222	104
		13.0	1.8	11.0	78.7	221	104
		14.0	1.9	10.5	75.4	220	103
	4-Apr-08	1.7	1.1	14.4	101.5	248	117
		2.0	1.4	13.3	94.9	232	109
		3.0	1.5	12.4	88.5	228	107
		4.1	1.5	12.5	88.9	231	109
		5.1	1.5	12.4	88.6	231	109
		6.1	1.6	12.2	87.3	230	108
		7.1	1.6	12.0	85.5	229	108
		8.1	1.6	12.1	86.9	235	110
		9.0	1.7	12.0	86.2	234	110
		10.0	1.7	11.6	83.5	232	109
		11.1	1.8	11.2	81.0	229	108
		12.0	1.9	11.1	80.2	228	107
		13.1	2.0	10.9	78.7	229	108
		14.0	2.1	10.5	76.3	228	107
	10-May-08	1.7	0.4	14.0	96.9	251	118
		2.0	1.3	13.5	95.7	243	114
		3.0	2.2	13.2	95.9	235	110
		4.0	2.4	13.7	100.6	234	110
5.0		2.8	13.7	101.5	236	111	
6.0		2.9	13.6	100.9	238	112	
7.0		3.0	13.7	101.5	238	112	
8.0		3.0	14.0	103.9	237	111	
9.0		3.1	14.1	104.8	237	111	
10.0		3.1	13.4	100.6	237	111	
SNAP10	26-Jan-08	1.2	0.2	19.3	132.8	215	101
		2.2	0.5	18.7	129.9	206	97
		3.2	0.8	18.0	125.9	200	94
		4.2	1.0	17.7	124.5	211	99

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP10 (cont)	3-Apr-08	1.6	0.5	15.1	104.8	229	108
		2.0	0.9	15.0	105.2	221	104
		2.5	1.2	14.9	105.4	218	102
		3.0	1.4	14.8	105.5	216	102
		3.5	1.5	14.8	105.4	217	102
		3.5	1.5	14.8	105.2	217	102
		3.5	1.5	14.8	105.2	217	102
		4.0	1.5	15.2	108.4	231	109
		4.0	1.5	15.2	108.2	231	109
	4.5	1.6	15.1	108.4	243	114	
	9-May-08	1.9	1.3	17.8	118.9	227	107
		2.0	1.4	16.5	117.5	226	106
		3.0	1.8	16.3	117.3	226	106
		4.0	2.1	16.9	122.5	240	113
		5.0	2.7	16.6	122.5	242	114
SNAP11A	24-Feb-08	1.4	0.5	15.3	105.8	221	104
		2.0	0.9	14.9	104.6	208	98
		3.0	1.2	14.5	102.8	204	96
		4.0	1.3	13.8	98.2	202	95
		5.0	1.3	13.5	95.5	205	96
		6.0	1.4	12.9	91.9	210	99
		7.0	1.4	12.8	90.8	210	99
		8.0	1.5	12.6	89.5	212	100
		9.0	1.5	12.5	89.0	215	101
		10.0	1.6	12.4	88.7	215	101
		11.0	1.6	12.1	86.7	215	101
		12.0	1.7	11.6	83.5	216	102
		13.0	1.8	11.4	81.7	217	102
	5-Apr-08	1.5	0.5	13.9	96.7	233	110
		2.0	1.1	13.5	95.2	216	102
		3.0	1.4	12.5	89.2	213	100
		4.0	1.5	11.9	85.1	220	103
		5.0	1.5	11.9	84.8	228	107
		6.0	1.5	12.1	86.6	240	113
		7.0	1.5	12.4	88.4	245	115
		8.0	1.5	12.5	89.2	249	117
		9.0	1.5	12.8	91.2	252	118
		10.0	1.6	12.6	90.4	246	116
		11.0	1.7	12.2	87.8	240	113
		12.0	1.8	12.2	87.6	244	115
	9-May-08	1.8	1.6	12.4	88.5	236	111
		2.0	1.6	12.4	88.7	234	110
		3.0	1.9	12.3	88.5	234	110
		4.0	1.9	12.1	87.3	245	115
		5.0	1.9	12.0	86.3	257	121
		6.0	1.9	11.9	85.8	257	121
		7.0	2.0	11.9	85.7	255	120
		8.0	2.0	11.9	85.7	254	119
9.0		2.0	11.9	86.4	260	122	
10.0		2.1	11.8	85.7	253	119	
11.0		2.3	11.6	84.3	248	117	
12.0		2.1	11.4	83.2	266	125	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNAP11A (cont)	9-May-08	13.0	2.2	11.4	83.1	269	126	
		14.0	2.3	11.4	82.9	265	125	
		15.0	2.3	10.4	75.6	266	125	
		16.0	2.4	9.6	70.2	266	125	
SNAP12	22-Jan-08	1.1	0.1	16.8	115.6	206	97	
		2.0	0.4	15.8	108.8	191	90	
		3.0	0.6	15.0	104.4	191	90	
		4.0	0.8	15.2	106.4	225	106	
		5.0	0.9	15.2	106.4	233	110	
		6.0	0.9	15.1	106.0	241	113	
		7.0	1.0	15.2	106.7	247	116	
	22-Feb-08	1.4	0.8	15.3	107.3	238	112	
		2.0	1.0	15.0	105.4	220	103	
		3.0	1.1	14.5	102.0	233	110	
		4.0	1.1	14.2	100.5	267	125	
		5.0	1.1	14.3	100.6	274	129	
		6.0	1.1	14.2	100.4	281	132	
		7.0	1.2	14.3	101.2	286	134	
	27-Mar-08	1.6	0.4	14.3	98.9	238	112	
		2.0	1.1	13.5	95.2	229	108	
		3.0	1.2	13.5	95.4	254	119	
		4.0	1.2	13.5	95.5	277	130	
		5.0	1.2	13.5	95.7	283	133	
		6.0	1.2	13.5	95.6	287	135	
		7.0	1.2	13.5	95.6	291	137	
	9-May-08	1.7	0.9	13.5	94.7	248	117	
		2.0	1.7	12.8	91.4	248	117	
		3.0	1.5	12.9	92.4	308	145	
		4.0	1.5	13.2	94.2	317	149	
		5.0	1.5	13.2	94.4	320	150	
		6.0	1.6	13.2	94.4	324	152	
		7.0	1.7	13.1	94.2	324	152	
		8.0	2.4	11.5	83.8	318	149	
	SNAP14	24-Jan-08	1.0	0.1	16.8	115.3	210	99
			2.0	0.2	16.5	113.5	198	93
			3.0	0.9	15.7	109.9	239	112
4.0			0.9	15.4	108.2	244	115	
5.0			1.0	15.2	107.0	249	117	
6.0			1.0	15.1	106.4	254	119	
7.0			1.0	15.1	106.0	257	121	
8.0			1.0	15.1	106.3	258	121	
9.0			1.0	15.1	106.3	258	121	
10.0			1.0	15.0	105.9	259	122	
11.0			1.3	14.0	99.0	249	117	
12.0			1.5	13.2	94.0	245	115	
13.0			1.8	10.6	76.0	239	112	
20-Feb-08		1.3	0.4	17.1	118.4	245	115	
		2.0	0.9	16.3	114.8	223	105	
		3.0	1.1	16.1	113.2	264	124	
		4.0	1.1	16.0	112.4	273	128	
		5.0	1.1	15.9	112.3	280	132	
		6.0	1.1	15.9	112.1	286	134	
		7.0	1.1	15.8	111.5	287	135	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP14 (cont)	20-Feb-08	8.0	1.1	15.7	110.7	287	135
		9.0	1.1	15.5	109.2	287	135
		10.0	1.1	15.5	109.1	288	135
		11.0	1.4	14.9	105.8	277	130
		12.0	1.6	13.8	99.0	272	128
		13.0	2.0	12.1	87.8	264	124
		13.0	2.0	10.8	78.1	264	124
	9-Apr-08	1.4	0.2	17.1	117.6	262	123
		2.0	0.2	16.2	113.0	240	113
		3.0	1.0	15.9	112.2	289	136
		4.0	1.1	15.9	112.0	298	140
		5.0	1.1	15.8	111.7	301	141
		6.0	1.2	15.8	111.1	308	145
		6.5	1.2	15.1	107.2	310	146
		7.0	1.1	15.7	110.7	310	146
		8.0	1.1	15.6	110.1	310	146
		9.0	1.1	15.6	110.1	310	146
		10.0	1.1	15.6	110.2	310	146
		11.0	1.4	14.5	103.2	300	141
		12.0	1.6	13.8	99.1	293	138
	9-May-08	1.7	0.8	13.3	92.8	250	118
		2.0	1.4	13.0	92.4	253	119
		3.0	1.5	13.0	92.5	317	149
		4.0	1.5	13.2	94.3	319	150
		5.0	1.5	13.3	94.9	321	151
		6.0	1.5	13.3	95.1	325	153
		7.0	1.6	13.3	95.1	326	153
		8.0	1.6	13.3	95.0	327	154
		9.0	1.6	13.3	94.9	327	154
		10.0	1.6	13.3	94.9	328	154
		11.0	1.6	13.3	94.9	328	154
		12.0	1.7	12.8	991.8	324	152
		13.0	2.2	11.9	86.3	306	144
SNAP17	5-Apr-08	1.7	0.9	13.4	94.2	226	106
		2.1	1.2	13.3	93.8	217	102
		3.0	1.5	12.2	86.7	213	100
		4.1	1.5	12.0	85.8	227	107
		5.0	1.5	12.1	86.3	235	110
		6.0	1.5	12.4	88.0	246	116
		7.1	1.5	12.4	88.7	247	116
		8.1	1.5	12.4	88.8	246	116
		9.0	1.6	12.4	88.8	244	115
SNAP18	7-Apr-08	1.9	1.2	13.6	96.2	230	108
		3.0	1.5	12.8	91.6	216	102
		4.1	1.6	11.8	84.3	224	105
		5.1	1.6	11.8	84.1	232	109
		6.0	1.6	11.9	85.4	235	110
		7.1	1.6	11.8	84.4	236	111
		8.0	1.7	11.7	83.6	235	110
		9.0	1.8	11.9	85.4	236	111
		11.1	1.9	11.7	84.2	238	112
		12.0	2.0	2.6	18.9	229	108

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNAP19	7-Apr-08	1.9	1.2	13.1	93.0	236	111	
		2.1	1.3	13.0	91.9	225	106	
		3.0	1.5	12.2	86.7	223	105	
		4.1	1.5	12.1	86.0	228	107	
		5.0	1.5	11.9	85.2	227	107	
		6.0	1.6	11.7	83.6	227	107	
		8.1	1.7	12.2	87.6	231	109	
		9.0	1.7	11.5	82.5	232	109	
		10.1	1.8	11.2	80.9	232	109	
SNAP20	15-Apr-08	1.7	0.1	17.1	117.3	39	18	
		2.0	0.7	16.2	113.2	37	17	
		3.0	1.2	14.9	105.4	33	16	
		4.0	1.3	13.8	98.1	34	16	
		5.0	1.4	13.6	96.4	34	16	
		6.0	1.4	13.4	95.6	34	16	
		7.0	1.4	13.5	95.9	34	16	
		8.0	1.4	13.5	96.0	34	16	
		9.0	1.4	13.5	95.7	34	16	
		10.0	1.4	13.6	96.5	34	16	
		11.0	1.5	13.7	97.4	34	16	
		12.0	1.5	13.6	97.0	34	16	
		13.0	1.5	13.6	97.1	34	16	
SNAP20B	19-Feb-08	1.0	1.0	18.0	126.2	44	21	
		2.0	0.8	15.8	110.6	35	16	
		3.0	1.1	14.7	103.6	32	15	
		4.0	1.2	13.6	96.3	32	15	
		5.0	1.2	13.3	94.1	32	15	
		6.0	1.2	13.1	92.9	32	15	
		8.0	1.3	13.0	92.3	32	15	
		9.0	1.3	13.0	92.3	32	15	
		11.0	1.3	13.0	92.1	33	16	
		12.0	1.3	13.1	92.7	33	16	
		14.0	1.3	13.0	92.1	33	16	
		15.0	1.3	12.9	91.5	33	16	
		16.0	1.3	12.9	91.3	33	16	
		16.0	1.3	12.8	90.9	33	16	
		17.0	1.3	12.8	90.8	33	16	
		18.0	1.4	12.8	90.7	33	16	
		19.0	1.4	12.6	89.6	33	16	
		20.0	1.4	12.5	88.9	33	16	
		21.0	1.4	12.5	88.6	33	16	
		22.0	1.4	12.4	88.1	32	15	
		23.0	1.4	12.1	86.2	32	15	
		24.0	1.4	12.0	85.0	32	15	
		25.0	1.4	11.9	84.5	33	16	
		26.0	1.4	12.1	85.9	33	16	
		27.0	1.4	11.9	84.9	32	15	
		28.0	1.4	11.7	83.4	32	15	
		29.0	1.4	11.5	82.1	32	15	
		12-Apr-08	1.3	0.5	18.7	130.0	43	20
			2.0	0.8	18.3	127.9	38	18
			3.0	1.3	15.3	107.5	33	16
	4.0		1.4	14.4	101.9	34	16	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNAP20B (cont)	12-Apr-08	5.0	1.4	14.0	99.2	34	16	
		6.0	1.4	13.9	98.9	34	16	
		7.0	1.4	13.9	98.8	34	16	
		8.0	1.4	13.8	98.1	34	16	
		9.0	1.4	13.9	99.0	34	16	
		10.0	1.4	14.1	100.2	34	16	
		11.0	1.4	14.0	99.3	35	16	
		12.0	1.5	14.0	99.4	34	16	
		13.0	1.5	14.0	99.9	35	16	
		14.0	1.5	13.9	99.2	35	16	
		15.0	1.5	13.8	97.8	34	16	
		16.0	1.5	13.6	96.6	34	16	
		17.0	1.5	13.5	96.1	35	16	
		18.0	1.5	13.7	97.7	35	16	
		19.0	1.5	13.8	98.0	35	16	
		20.0	1.5	13.9	99.1	35	16	
		21.0	1.5	13.7	97.8	35	16	
		10-May-08	1.3	0.6	16.6	115.3	39	18
			2.0	1.4	14.6	103.4	35	16
			3.0	1.6	13.9	99.4	34	16
			4.0	1.6	13.7	97.8	35	16
	5.0		1.7	13.7	97.9	35	16	
	6.0		1.7	13.7	97.8	35	16	
	7.0		1.7	13.6	97.7	35	16	
	8.0		1.7	13.4	95.6	35	16	
	9.0		1.7	13.4	96.2	35	16	
	10.0		1.7	13.5	96.7	35	16	
	11.0		1.7	13.4	96.3	35	16	
	12.0		1.7	13.5	96.6	35	16	
	13.0		1.7	13.5	96.4	35	16	
	14.0		1.7	13.5	96.6	35	16	
	15.0		1.7	213.6	97.6	35	16	
	16.0		1.7	13.5	96.8	35	16	
17.0	1.7		13.5	97.0	35	16		
18.0	1.8		13.6	97.4	35	16		
19.0	1.8		13.5	96.6	35	16		
20.0	1.8		13.5	96.6	35	16		
21.0	1.8		13.5	96.9	35	16		
22.0	1.8		13.5	97.3	35	16		
23.0	1.8	13.5	97.1	35	16			
24.0	1.8	13.5	97.0	35	16			
25.0	1.8	13.5	96.9	35	16			
26.0	1.8	13.5	96.8	34	16			
27.0	1.8	13.5	97.0	34	16			
28.0	1.8	13.5	96.7	34	16			
29.0	1.8	13.5	96.8	35	16			
30.0	1.8	13.4	96.5	34	16			
31.0	1.8	13.4	96.1	34	16			
SNAP23	12-Apr-08	1.8	0.3	18.9	130.5	100	47	
		2.0	0.8	18.6	130.4	98	46	
		3.0	2.1	18.1	124.8	92	43	
		4.0	2.4	17.0	124.1	90	42	
		5.0	2.6	14.3	105.5	89	42	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP23 (cont)	12-Apr-08	6.0	2.9	12.2	88.9	90	42
		7.0	3.0	6.5	47.0	95	45
		8.0	3.1	5.6	42.9	97	46
		9.0	3.2	6.3	47.6	101	47
		10.0	3.3	7.9	55.2	105	49
		11.0	3.3	8.8	66.8	109	51
	10-May-08	1.9	2.0	15.2	110.2	82	39
		2.0	2.7	14.7	107.7	89	42
		3.0	3.7	14.4	108.5	94	44
		4.0	6.8	14.3	108.1	96	45
		5.0	4.0	14.2	108.5	95	45
		6.0	3.9	12.9	97.4	102	48
		7.0	3.7	11.7	88.8	107	50
		8.0	3.8	11.1	83.2	110	52
		9.0	3.7	10.3	77.9	112	53
		10.0	3.8	10.3	78.1	113	53
		11.0	3.8	10.1	76.1	113	53
12.0	3.8	8.3	62.2	112	53		
13.0	3.9	11.2	84.0	215	101		
SNAP26	23-Jan-08	1.0	0.7	17.0	118.2	216	102
		2.0	0.9	16.7	117.1	207	97
		3.0	1.1	15.6	109.8	205	96
		4.0	1.5	14.6	103.7	212	100
		5.0	2.4	5.7	41.4	217	102
	16-Apr-08	1.5	0.4	16.9	117.1	272	128
		2.0	0.8	16.7	116.6	264	124
		3.0	1.2	15.7	110.8	260	122
		4.0	1.6	15.1	108.6	263	124
		5.0	2.5	10.9	76.9	254	119
	9-May-08	1.0	0.5	13.8	96.1	271	127
		2.0	1.5	13.4	95.7	275	129
		3.0	1.9	13.2	95.0	285	134
		4.0	2.8	12.8	94.9	275	129
5.0		3.5	12.6	95.0	283	133	
SNAP28	5-Apr-08	1.3	0.9	15.1	105.9	241	113
		2.1	1.0	15.2	107.1	244	115
		3.0	1.3	15.0	106.3	276	130
		4.0	1.3	15.2	107.9	299	141
		5.1	1.3	15.3	108.7	301	141
		6.1	1.3	15.6	110.4	302	142
SNAP29	21-Jan-08	1.1	0.8	18.1	126.6	96	45
		2.1	1.1	18.0	127.2	85	40
		3.1	1.4	16.1	125.4	82	39
		4.1	1.5	14.2	119.5	84	39
		5.1	1.8	14.2	116.7	87	41
		6.1	2.2	14.5	82.4	94	44
		6.5	2.4	6.8	50.1	94	44
	20-Feb-08	1.3	0.2	19.6	134.3	119	56
		2.0	0.7	18.7	130.4	103	48
		3.0	1.2	17.8	125.9	97	46
		4.0	1.6	15.1	108.1	100	47
		5.0	1.9	14.5	104.8	96	45
		6.0	2.3	8.9	65.0	100	47
		6.0	2.3	8.8	64.4	100	47

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNAP29 (cont)	29-Mar-08	1.5	0.4	17.5	120.8	120	56
		2.0	0.9	16.8	118.0	108	51
		3.0	1.6	15.8	112.7	108	51
		4.0	1.9	14.4	104.1	104	49
		5.0	2.2	14.1	102.7	101	47
		6.0	2.7	7.2	52.7	100	47
	10-May-08	1.8	1.2	15.9	112.3	116	55
		2.0	2.1	15.5	112.7	109	51
		3.0	3.1	15.2	115.9	103	48
		4.0	3.5	15.9	119.9	101	47
		5.0	3.8	16.2	122.8	100	47
		6.0	3.7	14.1	106.9	103	48
		7.0	3.6	9.8	74.2	111	52
		SNP 02-20d	23-Jan-08	1.4	0.6	15.7	109.1
2.0	0.9			15.4	107.7	190	89
3.0	0.9			15.4	108.2	235	110
4.0	0.9			15.5	108.8	239	112
5.1	1.0			15.5	108.8	241	113
6.0	1.0			15.5	108.9	247	116
7.0	1.0			15.4	108.2	248	117
8.0	1.0			15.1	106.0	248	117
9.0	1.0			15.0	105.5	249	117
10.0	1.0			15.0	105.6	249	117
11.0	1.1			14.9	105.0	249	117
19-Feb-08	1.4		1.4	18.1	128.6	223	105
	1.3		0.7	16.2	113.1	227	107
	1.4		0.9	15.5	108.5	226	106
	2.0		1.0	15.3	107.9	207	97
	3.0		1.0	14.8	104.5	255	120
	3.0		1.0	14.9	104.8	255	120
	4.0		1.0	14.9	105.2	260	122
	5.0		1.0	14.9	105.2	264	124
	6.0		1.1	14.9	104.9	268	126
	7.0		1.1	14.8	104.6	271	127
	8.0		1.1	14.8	104.5	272	128
13-Mar-08	0.2		0.1	14.9	101.8	125	59
	1.0		0.1	14.9	102.4	124	58
	2.0		1.0	14.0	98.3	116	55
	3.0		1.1	14.2	100.5	146	69
	4.0		1.1	14.3	100.7	147	69
	5.0		1.1	14.3	100.9	148	70
	6.0		1.1	14.3	100.6	149	70
	7.0		1.1	14.2	100.5	152	71
	8.0		1.2	13.9	98.1	153	72
	9.0		1.2	13.9	98.1	154	72
	10.0		1.2	13.9	97.9	154	72
6-Apr-08	1.6		0.6	14.8	103.1	248	117
	2.0		1.0	14.4	101.0	230	108
	3.0		1.2	14.6	103.1	288	135
	4.0		1.2	14.7	104.0	291	137

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNP 02-20d (cont)	6-Apr-08	5.0	1.2	14.7	103.9	291	137	
		6.0	1.2	14.6	103.4	293	138	
		7.0	1.2	14.5	102.7	297	140	
		8.0	1.2	14.4	102.3	298	140	
		9.0	1.2	14.4	101.9	299	141	
		10.0	1.2	14.4	102.0	299	141	
		11.0	1.2	14.4	101.8	300	141	
	8-May-08	1.6	0.5	15.0	110.8	-	-	
		2.0	1.0	15.4	107.4	-	-	
		3.0	1.4	15.0	106.8	-	-	
		4.0	1.4	15.1	107.7	-	-	
		5.0	1.4	15.1	107.7	-	-	
		6.0	1.4	15.1	107.5	-	-	
		7.0	1.5	15.1	107.1	-	-	
		8.0	1.5	15.0	107.1	-	-	
		9.0	1.5	14.9	106.5	-	-	
		10.0	1.5	14.9	106.5	-	-	
		11.0	1.5	20.0	107.0	-	-	
	9-May-08	1.6	1.0	15.5	109.3	252	118	
		2.0	1.7	14.6	104.4	248	117	
		3.0	1.6	14.7	106.0	315	148	
		4.0	1.5	15.1	107.7	314	148	
		5.0	1.5	15.1	107.5	318	149	
		6.0	1.5	15.1	107.4	319	150	
		7.0	1.5	15.0	107.2	322	151	
		8.0	1.5	15.0	107.1	322	151	
		9.0	1.5	15.0	107.0	323	152	
		10.0	1.5	14.9	106.7	323	152	
		11.0	1.5	14.9	106.5	322	151	
		12.0	1.6	5.6	37.1	294	138	
	SNP 02-20e	22-Jan-08	1.0	1.4	16.8	119.4	208	98
			2.0	1.3	16.4	117.0	194	91
			3.0	1.2	16.1	113.8	213	100
4.0			1.1	16.0	113.4	229	108	
5.0			1.2	16.0	113.3	241	113	
6.0			1.1	16.0	113.1	246	116	
7.0			1.1	15.9	111.8	247	116	
8.0			1.1	15.7	110.9	246	116	
9.0			1.1	15.6	109.7	245	115	
10.0			1.1	15.5	109.5	247	116	
11.0			1.1	15.4	108.3	245	115	
12.0			1.1	15.1	106.3	240	113	
13.0			1.2	14.7	104.5	237	111	
14.0			1.3	14.1	100.2	236	111	
15.0			1.3	13.9	98.2	237	111	
16.0			1.3	13.8	97.8	242	114	
17.0			1.3	13.7	97.5	244	115	
18.0			1.3	13.5	95.8	244	115	
19.0			1.3	13.4	94.8	244	115	
20.0			1.4	13.2	93.8	244	115	
21.0			1.4	13.1	93.4	245	115	
22.0	1.4	12.9	91.3	245	115			
23.0	1.4	12.8	90.7	245	115			
24.0	1.4	12.5	88.7	246	116			

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP 02-20e (cont)	22-Jan-08	25.0	1.4	12.1	86.2	247	116
		26.0	1.5	11.4	81.0	247	116
		27.0	1.5	10.2	72.7	247	116
		28.0	1.5	8.7	69.0	249	117
		29.0	1.6	6.7	46.1	240	113
	17-Feb-08	11.7	1.1	15.2	107.0	269	126
		1.1	0.5	15.6	108.0	234	110
		2.0	0.9	15.5	108.8	222	104
		3.0	1.0	14.9	105.0	245	115
		4.0	1.0	14.7	103.7	254	119
		5.0	1.0	14.7	103.3	266	125
		6.0	1.1	14.6	103.0	267	125
		7.0	1.1	14.6	102.8	268	126
		8.0	1.1	14.5	102.3	267	125
		9.0	1.1	14.5	102.0	268	126
		10.0	1.1	14.4	101.8	269	126
		11.0	1.1	14.4	101.9	269	126
		12.0	1.1	14.4	101.7	269	126
		13.0	1.2	14.2	100.8	259	122
		14.0	1.3	13.9	98.7	262	123
		15.0	1.3	13.7	97.2	266	125
		16.0	1.3	13.5	95.8	272	128
		17.0	1.3	13.4	95.4	273	128
		18.0	1.3	13.4	95.2	273	128
		19.0	1.3	13.3	94.3	271	127
		20.0	1.4	13.1	92.9	271	127
		21.0	1.4	12.8	91.0	270	127
		22.0	1.4	12.6	89.6	270	127
	23.0	1.4	12.3	87.8	269	126	
	24.0	1.5	12.1	86.1	268	126	
	25.0	1.5	11.7	83.4	268	126	
	26.0	1.5	11.2	79.9	268	126	
	27.0	1.6	10.6	75.7	269	126	
28.0	1.6	10.2	73.0	271	127		
13-Mar-08	0.2	0.5	13.8	95.6	130	61	
	1.0	0.2	14.5	100.0	132	62	
	2.0	0.8	14.9	104.4	123	58	
	3.0	1.1	14.9	105.1	141	66	
	4.0	1.1	14.9	105.4	145	68	
	5.0	1.1	15.0	106.3	150	71	
	6.0	1.1	15.1	106.4	151	71	
	7.0	1.2	14.9	105.5	151	71	
	8.0	1.2	14.8	104.6	152	71	
	9.0	1.2	14.7	103.6	152	71	
	10.0	1.2	14.4	102.1	152	71	
	11.0	1.2	14.3	101.2	153	72	
	12.0	1.2	14.1	99.8	152	71	
	13.0	1.3	13.8	97.2	149	70	
	14.0	1.4	13.3	94.5	147	69	
15.0	1.3	13.1	92.7	154	72		
16.0	1.3	13.0	92.3	154	72		
17.0	1.4	12.8	91.2	154	72		
18.0	1.3	13.0	92.1	156	73		
19.0	1.4	12.9	91.9	155	73		

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP 02-20e (cont)	13-Mar-08	20.0	1.4	12.9	91.3	155	73
		21.0	1.4	12.6	89.8	154	72
		22.0	1.4	12.3	87.5	153	72
		23.0	1.5	11.9	84.6	153	72
		24.0	1.5	11.3	80.8	152	71
		25.0	1.5	11.0	78.1	153	72
		26.0	1.5	10.8	77.1	153	72
		27.0	1.6	10.1	72.2	153	72
	28.0	1.6	9.8	70.4	154	72	
	7-Apr-08	1.3	2.1	14.3	103.7	266	125
		2.0	1.4	14.5	103.6	250	118
		3.0	1.4	14.4	102.3	262	123
		4.0	1.4	14.6	103.6	284	133
		5.0	1.3	14.5	102.7	287	135
		6.0	1.3	14.4	102.1	297	140
		7.0	1.3	14.2	100.8	297	140
		8.0	1.3	14.0	99.2	297	140
		9.0	1.3	13.9	98.9	298	140
		10.0	1.3	13.9	98.8	299	141
		11.0	1.3	13.9	98.6	300	141
		12.0	1.3	13.8	97.6	295	139
		13.0	1.4	13.3	94.9	287	135
		14.0	1.4	13.2	94.2	294	138
		15.0	1.4	13.4	95.1	301	141
		16.0	1.4	13.3	94.8	300	141
		17.0	1.4	13.3	94.5	301	141
		18.0	1.4	13.4	95.0	303	142
		19.0	1.4	13.2	93.7	302	142
		20.0	1.4	13.1	93.3	301	141
		21.0	1.4	13.1	92.9	301	141
		22.0	1.4	13.1	93.1	303	142
		23.0	1.4	13.0	92.7	302	142
		24.0	1.5	12.7	90.6	301	141
		25.0	1.5	12.6	89.9	300	141
		26.0	1.5	11.7	83.3	298	140
		27.0	1.5	11.3	80.5	297	140
	28.0	1.6	9.8	70.0	297	140	
	11-May-08	1.4	1.1	15.2	107.3	248	117
		2.0	1.3	15.1	107.2	261	123
		3.0	1.7	14.5	104.1	284	133
		4.0	1.5	14.6	104.3	316	149
		5.0	1.6	14.8	106.0	318	149
		6.0	1.5	14.9	106.6	318	149
		7.0	1.6	15.0	107.0	317	149
		8.0	1.6	15.0	107.0	317	149
9.0		1.6	14.9	107.0	315	148	
10.0		1.7	14.9	107.0	310	146	
11.0		1.8	14.9	107.1	308	145	
12.0		1.8	14.9	107.3	304	143	
13.0		1.9	14.8	106.9	303	142	
14.0		1.8	14.9	107.2	316	149	
15.0		1.8	14.8	106.7	314	148	
16.0	1.9	14.7	106.1	312	147		
17.0	1.9	14.7	105.8	312	147		

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)	
SNP 02-20e (cont)	11-May-08	18.0	1.9	14.7	105.7	313	147	
		19.0	1.9	14.7	105.8	312	147	
		20.0	1.9	14.6	105.2	313	147	
		21.0	1.9	14.5	104.6	315	148	
		22.0	1.9	14.5	104.4	315	148	
		23.0	1.9	14.5	104.3	314	148	
		24.0	1.9	14.5	104.4	313	147	
		25.0	1.9	14.5	104.8	314	148	
		26.0	1.9	14.5	104.4	316	149	
		27.0	1.9	14.4	103.8	317	149	
		28.0	1.9	1.1	8.2	318	149	
SNP 02-20f	24-Jan-08	1.1	0.3	16.8	115.8	208	98	
		2.0	0.7	16.5	114.9	196	92	
		3.0	0.9	16.5	115.9	227	107	
		4.0	0.9	16.8	118.2	243	114	
		5.0	0.9	16.8	118.1	248	117	
		6.0	1.0	16.8	118.1	254	119	
		7.0	1.0	16.4	115.2	255	120	
		8.0	1.0	15.9	111.9	256	120	
		9.0	1.0	15.7	110.4	258	121	
		10.0	1.0	15.9	112.2	260	122	
		11.0	1.0	15.5	109.4	261	123	
		12.0	1.1	15.0	105.8	259	122	
		13.0	1.2	14.7	103.7	256	120	
		14.0	1.4	13.5	96.2	248	117	
		20-Feb-08	1.3	0.5	17.5	121.3	238	112
			1.3	0.5	17.4	121.0	243	114
			2.0	1.0	16.6	116.7	221	104
			3.0	1.0	15.9	112.0	234	110
			4.0	1.1	15.8	111.1	274	129
			5.0	1.1	15.7	110.6	279	131
			6.0	1.1	15.6	110.3	284	133
			7.0	1.1	15.5	109.6	287	135
			8.0	1.1	15.5	109.4	287	135
			9.0	1.1	15.5	109.2	287	135
		16-Mar-08	0.0	0.1	15.0	102.6	127	60
			1.0	0.1	15.6	106.8	125	59
			2.0	0.3	15.5	106.8	115	54
			3.0	0.5	15.4	107.1	140	66
			4.0	1.1	15.0	105.8	148	70
			5.0	1.1	15.1	106.9	151	71
			6.0	1.1	15.2	107.4	152	71
			7.0	1.1	15.1	106.7	153	72
			8.0	1.2	14.7	103.8	153	72
			9.0	1.2	14.3	101.0	153	72
		10.0	1.2	14.1	99.5	154	72	
		11.0	1.2	14.0	99.3	154	72	
		12.0	1.2	14.0	99.0	155	73	
		13.0	1.3	13.7	97.0	153	72	
		14.0	1.5	12.9	91.6	150	71	

Table II-2 Field Profiles and the Estimates of Calculated TDS Concentrations from Field Specific Conductivity, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Date (d-m-y)	Depth (m)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Conductivity (µS/cm)	Estimate of Calculated TDS (mg/L)
SNP 02-20f (cont)	13-Apr-08	1.5	0.7	15.4	107.5	241	113
		2.0	0.9	15.3	107.4	236	111
		3.0	1.2	15.3	107.9	282	133
		4.0	1.2	15.4	108.6	295	139
		5.0	1.2	15.3	108.4	302	142
		6.0	1.2	15.3	108.2	303	142
		7.0	1.3	15.2	108.0	305	143
		7.5	1.3	15.2	107.5	307	144
		8.0	1.3	15.2	107.8	307	144
		9.0	1.3	15.2	107.7	309	145
		10.0	1.3	15.2	107.4	311	146
		11.0	1.3	15.1	107.2	312	147
		12.0	1.3	15.0	106.3	309	145
		13.0	1.3	14.9	105.8	309	145
	14.0	1.4	14.3	102.2	307	144	
	8-May-08	1.6	1.6	14.8	105.0	-	-
		2.0	1.5	14.2	101.5	-	-
		3.0	1.5	14.7	104.7	-	-
		4.0	1.5	14.8	105.9	-	-
		5.0	1.4	15.0	107.0	-	-
		6.0	1.4	15.0	107.0	-	-
		7.0	1.5	15.0	107.0	-	-
		8.0	1.5	14.9	106.7	-	-
		9.0	1.5	15.0	106.8	-	-
		10.0	1.5	14.9	106.8	-	-
		11.0	1.5	15.0	107.1	-	-
		12.0	1.5	15.0	106.8	-	-
		13.0	1.5	14.9	106.6	-	-
		14.0	1.5	14.9	106.5	-	-
		1.6	0.8	13.5	94.6	259	122
2.0		1.0	13.4	94.1	256	120	
3.0		1.4	13.3	94.7	317	149	
4.0		1.5	13.4	95.4	322	151	
5.0		1.5	13.4	95.7	327	154	
6.0		1.5	13.4	95.6	328	154	
7.0		1.6	13.4	95.5	328	154	
8.0		1.6	13.3	95.4	328	154	
9.0		1.6	13.3	95.4	328	154	
10.0		1.6	13.3	95.2	329	155	
11.0	1.5	13.3	95.1	329	155		
12.0	1.5	13.3	95.1	330	155		
13.0	1.5	13.3	95.3	330	155		
14.0	1.6	13.3	95.0	330	155		

Notes:

m = metres.

°C = degrees Celsius.

mS/cm = microSiemens per centimetre.

mg/L = milligrams per litre.

Estimate of Calculated TDS = 0.45 * field specific conductivity.

Shading indicates questionable values.

Table II-3 Major Ion and Calculated TDS Concentrations, July to September 2007 (Ice Free Period)

Station	Sample Control Number	Date	QA/QC Type	Related Sample Control Number	Depth (m)	Field Specific Conductivity (µS/cm)	Lab Specific Conductivity (µS/cm)	Calcium (mg/L)	Chloride (mg/L)	Hardness, as CaCO ₃ (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Reactive Silica, as SiO ₂ (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Nitrate, as N (mg/L)	TDS (mg/L)	TDS, Calculated (mg/L)
SNP 02-20d surface	2007-1259	19-Jul-07	Sample		1	115	135	13.4	31	40	1.7	0.8	0.3	7	4.82	0.079	112	59
SNP 02-20d mid	2007-1260	19-Jul-07	Sample		6	160	135	13.5	31	41	1.7	0.9	0.5	7	0.025	0.084	114	60
SNP 02-20d bottom	2007-1261	19-Jul-07	Sample		10.5	152	210	21.4	50	62	2.2	1	0.7	11	7.74	0.24	172	99
SNP 02-20f surface	2007-1262	19-Jul-07	Sample		1	115	134	13.2	31	40	1.6	0.8	0.3	7	4.81	0.079	111	65
SNP 02-20f mid	2007-1263	19-Jul-07	Sample		7	162	160	16.2	37	48	1.8	0.9	0.4	9	5.75	0.134	126	79
SNP 02-20f bottom	2007-1264	19-Jul-07	Sample		13	151	213	21.7	50	64	2.3	1	0.7	12	7.8	0.248	168	103
SNAP08	2007-1267	20-Jul-07	Sample		4	128	146	14.5	33	44	1.8	0.9	0.4	8	5.08	0.059	110	67
SNAP07	2007-1268	20-Jul-07	Sample		4	123	143	14	32	42	1.7	0.8	0.3	8	4.98	0.071	95	68
SNAP29	2007-1270	20-Jul-07	Sample		3.5	46	51.9	5	9	17	1.1	0.8	0.05	3	2.72	0.003	33	22
SNP 02-20e surface	2007-1273	22-Jul-07	Sample		1	124	139	14.7	31	44	1.8	0.8	0.3	8	4.82	0.081	108	68
SNP 02-20e mid	2007-1274	22-Jul-07	Sample		12	173	208	23.2	49	68	2.4	1	0.7	12	7.1	0.238	158	101
SNP 02-20e bottom	2007-1275	22-Jul-07	Sample		27	170	265	26.2	65	76	2.5	1	1.7	14	8.92	0.328	210	123
SNAP28-mid	2007-1276	22-Jul-07	Sample		3.5	127	141	14.1	32	42	1.7	0.8	0.3	8	4.87	0.091	91	68
SNAP10	2007-1277	22-Jul-07	Sample		2.5	118	134	13.3	30	40	1.6	0.7	0.3	7	4.61	0.069	92	63
SNAP04	2007-1278	23-Jul-07	Sample		2.5	109	121	11.9	27	36	1.6	0.7	0.3	6	4.24	0.031	89	58
SNAP26-mid	2007-1279	23-Jul-07	Sample		3	128	145	14.4	33	43	1.7	0.8	0.3	8	4.21	0.097	104	68
SNAP26-mid	2007-1280	23-Jul-07	Duplicate	2007-1279	3	128	146	13.9	33	42	1.7	0.8	0.4	7	4.96	0.098	119	68
SNAP11A-mid	2007-1283	23-Jul-07	Sample		8	113	138	13.3	30	40	1.6	0.7	0.3	7	5.01	0.08	120	63
SNAP09	2007-1284	23-Jul-07	Sample		7.5	119	137	13.3	31	40	1.6	0.7	0.3	7	4.98	0.078	115	65
SNAP06	2007-1286	23-Jul-07	Sample		6	120	138	13.4	30	40	1.6	0.7	0.3	7	5.01	0.078	119	64
SNAP05	2007-1287	23-Jul-07	Sample		6.5	122	141	13.6	31	41	1.7	0.8	0.3	8	5.11	0.082	125	67
SNAP03	2007-1288	23-Jul-07	Sample		5.5	123	142	13.8	31	41	1.7	0.8	0.3	8	5.23	0.089	123	67
SNAP12-mid	2007-1289	23-Jul-07	Sample		3.5	124	141	13.7	32	41	1.7	0.7	0.3	7	5.19	0.086	126	67
SNAP20	2007-1294	24-Jul-07	Sample		6	20	24	1.9	2	7	0.6	0.8	0.2	1	1.89	0.003	25	13
SNAP20	2007-1296	24-Jul-07	Duplicate	2007-1294	6	20	23.6	2	2	8	0.7	0.8	0.2	1	1.73	0.003	26	12
SNAP02A-mid	2007-1297	24-Jul-07	Sample		5	24	27.7	2.4	2	9	0.8	0.7	0.1	1	1.72	0.003	30	13
SNAP23-surface	2007-1298	24-Jul-07	Sample		1	46	52.6	4.9	8	17	1.1	0.9	0.05	3	1.89	0.003	44	25
SNAP23-mid	2007-1299	24-Jul-07	Sample		6	43	43.2	3.7	6	13	1	0.8	0.05	2	2.58	0.003	37	20
SNAP23-bottom	2007-1300	24-Jul-07	Sample		12	30	43.5	3.8	6	14	1	0.8	0.05	2	2.6	0.003	40	19
SNAP14-surface	2007-1305	25-Jul-07	Sample		1	122	144	13.9	33	42	1.7	0.8	0.3	7	5.08	0.097	117	67
SNAP14-mid	2007-1306	25-Jul-07	Sample		6	122	144	13.9	33	42	1.7	0.8	0.3	7	5.01	0.095	115	69
SNAP14-bottom	2007-1307	25-Jul-07	Sample		12	168	144	19.9	47	58	2.1	1	0.7	11	6.98	0.221	163	95
SNP 02-20e surface	2007-1315	14-Aug-07	Sample		1	150	149	14.2	34	42	1.5	0.6	0.3	7	5.3	0.071	96	67
SNP 02-20e surface	2007-1316	14-Aug-07	Duplicate	2007-1315	1	150	149	14.3	34	42	1.5	0.6	0.3	7	5.28	0.072	108	67
SNP 02-20e mid	2007-1318	14-Aug-07	Sample		19	246	167	16.2	38	47	1.7	0.7	0.5	8	5.86	0.111	127	75
SNP 02-20e bottom	2007-1319	14-Aug-07	Sample		26	269	264	26.3	63	76	2.4	0.9	1.7	14	8.95	0.32	210	123

Table II-3 Major Ion and Calculated TDS Concentrations, July to October 2006 (Ice Free Period) (continued)

Station	Sample Control Number	Date	QA/QC Type	Related Sample Control Number	Depth (m)	Field Specific Conductivity (µS/cm)	Lab Specific Conductivity (µS/cm)	Calcium (mg/L)	Chloride (mg/L)	Hardness, as CaCO ₃ (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Reactive Silica, as SiO ₂ (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Nitrate, as N (mg/L)	TDS (mg/L)	TDS, Calculated (mg/L)
SNP 02-20d mid	2007-1324	15-Aug-07	Sample		6	154	153	15	35	44	1.6	0.8	0.3	9	5.39	0.071	127	71
SNP 02-20f mid	2007-1325	15-Aug-07	Sample		7	155	154	15.3	36	45	1.6	0.8	0.3	8	5.43	0.076	120	72
SNP 02-20e mid	2007-1351	13-Sep-07	Sample		13.5	160	171	16.3	37	49	1.9	1	0.3	9	5.51	0.09	91	76
SNAP23	2007-1354	14-Sep-07	Sample		6.5	55	58.2	5.3	10	18	1.1	0.8	0.05	3	2.7	0.007	37	27
SNAP28-mid	2007-1358	15-Sep-07	Sample		3	157	169	16	38	48	1.9	0.9	0.05	9	5.61	0.102	119	77
SNAP26-mid	2007-1359	15-Sep-07	Sample		2.5	155	166	15.7	37	47	1.9	0.9	0.2	8	5.49	0.079	118	74
SNAP20B	2007-1362	16-Sep-07	Sample		15	24	26.2	2.2	3	8	0.7	0.7	0.1	1	1.75	0.003	9	13
SNAP02A-mid	2007-1363	16-Sep-07	Sample		5	29	31.5	2.7	4	10	0.8	0.8	0.05	2	1.96	0.003	20	15
SNAP14	2007-1364	16-Sep-07	Sample		6.5	158	169	15.8	38	47	1.9	0.9	0.3	9	5.51	0.096	117	76
SNP 02-20d mid	2007-1367	17-Sep-07	Sample		6	156	165	15.8	38	47	1.9	1	0.4	9	5.54	0.091	122	76
SNP 02-20d mid	2007-1368	17-Sep-07	Duplicate	2007-1367	6	156	165	15.8	38	47	1.9	1.2	0.4	9	5.51	0.092	117	77
SNP 02-20f mid	2007-1370	17-Sep-07	Sample		6.5	157	165	15.7	37	47	1.9	1	0.4	9	5.5	0.097	120	75
SNAP12-mid	2007-1371	17-Sep-07	Sample		3.5	157	165	15.7	37	47	1.9	1	0.4	9	5.52	0.089	122	75
SNAP08-surface	2007-1376	18-Sep-07	Sample		1	140	151	14.5	33	44	1.8	1	0.3	8	4.96	0.018	114	68
SNAP08-bottom	2007-1377	18-Sep-07	Sample		4.5	140	150	14.3	33	43	1.8	0.9	0.3	8	4.97	0.019	115	67
SNAP08-mid	2007-1378	18-Sep-07	Sample		8.5	140	150	14	33	42	1.8	1	0.3	8	5.1	0.018	114	68
SNAP10	2007-1381	19-Sep-07	Sample		2.5	141	151	14.3	33	43	1.8	0.8	0.3	8	5.06	0.024	99	68
SNAP10	2007-1382	19-Sep-07	Duplicate	2007-1381	2.5	141	150	14.1	33	43	1.8	0.8	0.2	7	5.04	0.025	92	66
SNAP11A-mid	2007-1383	19-Sep-07	Sample		8	145	155	15.1	35	45	1.8	0.8	0.2	8	5.2	0.043	94	70
SNAP07	2007-1387	20-Sep-07	Sample		5	143	152	14.6	33	44	1.8	0.9	0.2	8	5.05	0.024	114	68
SNAP09	2007-1393	21-Sep-07	Sample		7	146	153	14.7	34	44	1.8	0.8	0.2	8	5.12	0.038	115	69
SNAP06	2007-1394	21-Sep-07	Sample		7	153	162	15.4	36	46	1.9	0.9	0.3	8	5.44	0.071	125	72
SNAP05	2007-1395	21-Sep-07	Sample		7	154	162	15.5	36	47	1.9	0.8	0.3	8	5.46	0.075	122	73
SNAP29	2007-1396	21-Sep-07	Sample		3.5	57	60.3	5.3	10	18	1.1	0.8	0.1	3	2.81	0.013	38	27
SNAP03	2007-1399	22-Sep-07	Sample		6	157	162	16.1	38	48	1.9	0.9	0.3	9	5.67	0.106	111	77
SNAP04	2007-1400	22-Sep-07	Sample		2	131	138	13	31	39	1.7	0.9	0.3	7	4.67	0.017	95	63

Notes:

< = less than the limit of detection.

- = no data.

m = metre.

µS/cm = microSiemens per centimetre.

mg/L = milligrams per litre.

N = nitrogen.

Dissolved iron was excluded from the table (but not the calculations of TDS concentration) because concentrations were <0.001 mg/L.

Table II-4 Major Ion and Calculated TDS Concentrations, January 2008 to May 2008 (Ice Cover Period)

Station	Sample Control Number	Date	QA/QC Type	Related Sample Control Number	Depth (m)	Field Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Calcium (mg/L)	Chloride (mg/L)	Hardness, as CaCO ₃ (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Reactive Silica, as SiO ₂ (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Nitrate, as N (mg/L)	TDS (mg/L)	TDS, Calculated (mg/L)
SNAP29-mid	2008-0003	21-Jan-08	Sample		4	85	84.3	7.5	17	24	1.4	0.8	0.2	4	3.72	0.051	45	40
SNP 02-20e surface	2008-0005	22-Jan-08	Sample		1	213	219	19.7	52	59	2.3	1	0.3	11	7.29	0.135	130	101
SNP 02-20e mid	2008-0006	22-Jan-08	Sample		14	239	247	24	59	71	2.6	1.1	0.7	13	8.4	0.302	152	116
SNP 02-20e bottom	2008-0007	22-Jan-08	Sample		28	247	256	23.7	61	69	2.4	1	1	13	8.83	0.354	159	118
SNAP12-surface	2008-0008	22-Jan-08	Sample		1	206	218	20.7	52	62	2.4	1	0.4	11	7.28	0.142	156	102
SNAP12-mid	2008-0009	22-Jan-08	Sample		4	222	217	21.5	51	64	2.5	1.1	0.5	11	7.25	0.208	139	101
SNAP12-bottom	2008-0010	22-Jan-08	Sample		6.5	235	247	22.6	58	66	2.3	0.9	0.7	12	8.45	0.314	155	112
SNP 02-20d surface	2008-0013	23-Jan-08	Sample		1.2	131	212	19.4	49	58	2.3	1	0.4	11	7.11	0.138	133	97
SNP 02-20d surface	2008-0015	23-Jan-08	Duplicate	2008-0013	1.2	131	213	19.3	52	58	2.3	0.9	0.4	11	7.04	0.134	139	99
SNP 02-20d mid	2008-0016	23-Jan-08	Sample		5.5	242	246	22.8	59	67	2.4	1	0.8	13	8.4	0.306	163	115
SNP 02-20d bottom	2008-0017	23-Jan-08	Sample		11	260	257	23.8	62	69	2.4	1	1	13	8.84	0.331	171	119
SNAP26-mid	2008-0022	23-Jan-08	Sample		3	200	211	19	51	57	2.2	1	0.4	11	7.05	0.137	145	98
SNP 02-20f surface	2008-0023	24-Jan-08	Sample		1.2	208	212	20.4	47	62	2.6	1.1	0.3	11	7.3	0.127	114	97
SNP 02-20f mid	2008-0024	24-Jan-08	Sample		7	254	257	24.2	57	71	2.6	1.1	0.9	12	8.85	0.309	143	114
SNP 02-20f bottom	2008-0025	24-Jan-08	Sample		14	251	268	26.7	60	78	2.8	1.1	1	14	9.36	0.346	150	122
SNAP14-surface	2008-0026	24-Jan-08	Sample		1	219	227	21.6	51	65	2.6	1.1	0.3	11	7.45	0.134	129	101
SNAP14-mid	2008-0027	24-Jan-08	Sample		6.5	255	256	24.8	58	73	2.7	1.1	0.8	13	8.75	0.313	153	116
SNAP14-bottom	2008-0028	24-Jan-08	Sample		13	258	265	25.4	60	75	2.7	1.1	0.9	13	8.97	0.328	139	120
SNAP08-mid	2008-0031	25-Jan-08	Sample		4.5	189	185	18.6	42	56	2.3	1	0.3	10	6.14	0.089	110	87
SNAP07-mid	2008-0032	25-Jan-08	Sample		5.5	189	200	19.3	44	58	2.4	1	0.3	10	6.55	0.102	106	90
SNAP10-mid	2008-0035	26-Jan-08	Sample		2.5	208	218	21	51	63	2.6	1.1	0.3	11	7.24	0.116	117	101
SNAP10-mid	2008-0036	26-Jan-08	Duplicate	2008-0035	2.5	208	218	20.9	48	63	2.6	1.1	0.3	11	7.19	0.117	117	98
SNAP09-mid	2008-0037	26-Jan-08	Sample		7.5	193	209	19.9	47	59	2.3	1	0.5	10	6.88	0.187	121	94
SNAP05-mid	2008-0038	26-Jan-08	Sample		7	241	252	25.2	57	74	2.7	1.1	0.8	13	8.65	0.3	145	116
SNP 02-20e surface	2008-0047	17-Feb-08	Sample		1.15	237	239	24.1	59	72	2.9	1.2	0.5	13	7.72	0.164	143	116
SNP 02-20e mid	2008-0048	17-Feb-08	Sample		17	268	273	28.4	68	83	3	1.1	1.1	15	9.34	0.414	162	133
SNP 02-20e mid	2008-0049	17-Feb-08	Duplicate	2008-0048	17	268	271	27.9	67	82	2.9	1	1.1	14	9.43	0.423	161	131
SNP 02-20e bottom	2008-0050	17-Feb-08	Sample		27.5	270	271	26.7	67	78	2.8	1.1	1.3	14	9.25	0.419	170	129
SNP 02-20d surface	2008-0053	19-Feb-08	Sample		1.35	234	231	22.4	55	67	2.6	1	0.5	12	7.61	0.167	147	108
SNP 02-20d mid	2008-0054	19-Feb-08	Sample		6	261	262	26.7	63	78	2.8	1	1	14	9.04	0.362	169	123
SNP 02-20d bottom	2008-0055	19-Feb-08	Sample		11	273	270	26.7	67	78	2.8	1	1	14	9.4	0.408	167	132
SNAP20B	2008-0056	19-Feb-08	Sample		15	32	32.9	2.6	4	10	0.8	0.6	0.3	1	2.04	0.013	22	16
SNP 02-20f surface	2008-0059	20-Feb-08	Sample		1.3	241	231	21.9	57	66	2.7	1.2	0.5	12	7.78	0.159	140	110
SNP 02-20f mid	2008-0061	20-Feb-08	Sample		7	283	296	26.3	68	77	2.8	1.3	1	14	9.11	0.391	156	132
SNP 02-20f bottom	2008-0062	20-Feb-08	Sample		14	278	269	26.4	68	77	2.7	1.1	1.1	14	9.23	0.388	168	130
SNAP29	2008-0063	20-Feb-08	Sample		4	97	97.2	8.3	17	27	1.5	0.9	0.3	4	3.91	0.048	67	41

Table II-4 Major Ion and Calculated TDS Concentrations, January 2008 to May 2008 (Ice Cover Period) (continued)

Station	Sample Control Number	Date	QA/QC Type	Related Sample Control Number	Depth (m)	Field Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Calcium (mg/L)	Chloride (mg/L)	Hardness, as CaCO ₃ (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Reactive Silica, as SiO ₂ (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Nitrate, as N (mg/L)	TDS (mg/L)	TDS, Calculated (mg/L)
SNAP11A-mid	2008-0081	24-Feb-08	Sample		7	210	216	20.7	48	61	2.2	0.9	0.6	10	6.92	0.195	139	97
SNP 02-20e mid	2008-0091	13-Mar-08	Sample		14	265	275	27.8	66	82	3	1.3	1	14	10.2	0.43	182	131
SNP 02-20f surface	2008-0096	14-Mar-08	Sample		1	127	222	21.6	53	65	2.6	1.1	0.6	11	7.78	0.185	184	104
SNP 02-20f mid	2008-0097	14-Mar-08	Sample		7	166	273	27.8	66	81	2.9	1.2	1.1	14	10.3	0.484	216	131
SNP 02-20f bottom	2008-0098	14-Mar-08	Sample		14	153	272	27.5	67	81	2.9	1.2	1.2	14	10.3	0.49	208	132
SNAP12-surface	2008-0106	27-Mar-08	Sample		1.55	240	234	22.8	57	68	2.7	1.1	0.6	12	8.14	0.202	163	111
SNAP12-mid	2008-0107	27-Mar-08	Sample		4	252	245	24	60	71	2.7	1.2	0.7	12	8.74	0.288	166	117
SNAP12-bottom	2008-0108	27-Mar-08	Sample		7	256	258	25.4	63	75	2.8	1.3	0.9	13	9.3	0.354	171	124
SNAP29-mid	2008-0118	29-Mar-08	Sample		4	107	101	9.3	21	30	1.7	1	0.3	5	4.4	0.059	74	49
SNAP09-mid	2008-0141	4-Apr-08	Sample		7	230	227	22.1	56	65	2.5	1.1	0.7	11	7.67	0.243	151	108
SNAP28-surface	2008-0145	5-Apr-08	Sample		1.25	233	243	23.3	59	70	2.8	1.2	0.6	12	8.1	0.227	170	114
SNAP28-mid	2008-0146	5-Apr-08	Sample		4	282	287	27.9	70	82	3	1.2	1.1	14	10.1	0.484	201	136
SNAP28-bottom	2008-0147	5-Apr-08	Sample		6	293	297	28.7	72	84	3.1	1.3	1.2	15	10.6	0.56	205	141
SNAP11A-mid	2008-0148	5-Apr-08	Sample		7	237	239	23.1	59	68	2.6	1.1	0.8	12	8.19	0.275	178	113
SNP 02-20d surface	2008-0155	6-Apr-08	Sample		1.6	248	250	24.2	63	72	2.9	1.2	0.7	12	8.45	0.205	174	120
SNP 02-20d mid	2008-0156	6-Apr-08	Sample		7	289	292	28.7	73	84	3.1	1.2	1.2	15	10.6	0.544	207	141
SNP 02-20d bottom	2008-0157	6-Apr-08	Sample		11	295	297	29	71	85	3.1	1.2	1.2	14	10.7	0.59	214	140
SNP 02-20e surface	2008-0164	7-Apr-08	Sample		1.3	262	263	25.4	63	76	3.1	1.2	0.7	13	8.87	0.226	170	123
SNP 02-20e mid	2008-0165	7-Apr-08	Sample		14	284	283	27.7	69	82	3	1.2	1.1	14	10.3	0.483	185	135
SNP 02-20e bottom	2008-0166	7-Apr-08	Sample		28	298	294	28.2	71	83	3	1.1	1.4	14	10.8	0.556	190	137
SNAP05-mid	2008-0173	8-Apr-08	Sample		7	292	277	67	89	89	3.3	1.3	1.1	16	10.2	0.455	175	137
SNAP02A-mid	2008-0216	16-Apr-08	Sample		5	52	46.8	7	14	14	1.2	0.9	0.3	2	2.72	0.016	14	23

Notes:

< = less than the limit of detection.

- = no data.

m = metre.

µS/cm = microSiemens per centimetre.

mg/L = milligrams per litre.

N = nitrogen.

Dissolved iron was excluded from the table (but not the calculations of TDS concentration) because concentrations were <0.001 mg/L.