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PRELIMINARY
"STEAM TABLES"
FOR NaCl SOLUTIONS

Thermodynamic Properties of the Coexisting Phases
and
Thermochemical Properties of the NaCl Component

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Abstract

Preliminary "steam tables", which give the thermodynamic data for the coexisting liquid and gas and the thermochemical data for the NaCl component in the liquid for the system $\text{H}_2\text{O} - \text{NaCl}$, are given for liquid concentrations between 0 mol NaCl/kg H_2O and halite saturation at temperatures between 80° and 325°C . The tables were calculated from parametric equations of state.

Introduction

The assembled tables present the thermochemical properties of aqueous NaCl in the vapor-saturated liquid phase and the thermodynamic properties of the coexisting liquid and gas phases for the $\text{H}_2\text{O} - \text{NaCl}$ system as follows:

- partial molal volume of NaCl in the liquid,
- partial molal entropy of NaCl in the liquid,
- partial molal enthalpy of NaCl in the liquid,
- molal volume of the liquid,
- molal entropy of the liquid,
- difference between the molal entropy of the liquid and ;the
molal entropy of the gas,
- molal entropy of the gas,
- molal enthalpy of the liquid,
- difference between the molal enthalpy of the liquid and the
molal enthalpy of the gas,
- molal enthalpy of the gas.

The data are tabulated for liquid compositions from 0 mol NaCl/kg H_2O to halite saturation at temperatures from 80° to 325°C . As an aid in using the tables, the vapor pressure and the density of the liquid are also given. These tables complement the "steam tables" prepared by Haas (1976) where the physical properties of the solutions and the thermochemical data for H_2O are tabulated.

The tables presented here are preliminary. The functions upon which they are based represent a reasonably complete analysis of the available data through 1971. Improvement can be made when measurements and analysis are completed on the volumetric properties of vapor-saturated and vapor-absent liquid at elevated temperatures and at concentrations in excess of 30 wt percent NaCl. Because there is an immediate need for the contained data, they have been made available in this preliminary form.

The tables are given as an aid in geochemical and engineering studies related to the geothermal energy program of the United States. Support for this work has come exclusively from the U. S. Geological Survey's geothermal research program.

Units, symbols and constants

Units and symbols used in tables and text

The chosen units in the tables for temperature, pressure, and density are $^{\circ}\text{C}$, bars, and g cm^{-3} , respectively. These are the same as those used in several widely referenced steam tables (Bain, 1964; Keenan and others, 1969). The partial molal and the molal entropy, enthalpy, and volume are given as $\text{J mol}^{-1} \text{K}^{-1}$, J mol^{-1} , and $\text{cm}^3 \text{mol}^{-1}$, respectively, because these are the units most used in thermodynamic calculations. Both weight percent and molal ($\text{mol NaCl/kg H}_2\text{O}$) scales for units of sodium chloride concentration are widely used in engineering and geochemical research. Both scales are employed here to achieve the maximum use of the tables.

The quantities, their symbols, and the associated units used in this text and in the tables are as follows:

<u>Quantity</u>	<u>Symbol</u>	<u>Units</u>
activity	a	
fitted parameter in the activity coefficient function (eqn 12)	B	kg H ₂ O/mol NaCl
fitted parameter in the activity coefficient function (eqn 12)	C	(kg H ₂ O/mol NaCl) ²
heat capacity at constant pressure	C _p	J mol ⁻¹ K ⁻¹
density	d	g cm ⁻³
dielectric constant for pure H ₂ O	D	
molal free energy	G	J mol ⁻¹
molal enthalpy	H	J mol ⁻¹
equilibrium constant	K	
mole fraction of NaCl	N	mol NaCl/(mol NaCl + mol H ₂ O)
pressure	p	bars
generalized thermodynamic quantity	Q	
molar gas constant	R	J mol ⁻¹ K ⁻¹
temperature	t	degrees Celsius, °C.
	T	kelvins, K
molal volume	V	cm ³ mol ⁻¹
molecular weight	W	g mol ⁻¹
concentration of NaCl in the liquid	x	mol NaCl/kg H ₂ O (molal)

Debye Huckel limiting slope	α	$(\text{kg H}_2\text{O/mol NaCl})^{1/2}$
fitted parameter in activity coefficient function (eqn 12)	β	$(\text{kg H}_2\text{O/mol NaCl})^{1/2}$
activity coefficient	γ	$\text{kg H}_2\text{O/mol NaCl}$
total number of ions per mole of solute	ν	$(\text{mol Na}^+ + \text{mol Cl}^-) / \text{mol NaCl}$

In the text and the tables the following superscripts are used:

<u>Superscript Symbol</u>	<u>Connotation</u>
G	The superscripted quantity is an attribute of the gaseous phase.
L	The superscripted quantity is an attribute of the liquid phase.
$\bar{}$ (bar)	The superscripted quantity is a partial molal quantity of the component indicated by the subscript, in the solution.
°	The superscripted quantity is an attribute of the chemical species in the standard state.
⧫	The symbol is a generalized symbol representing the superscripts G and L above.

In the text and the tables the following subscripts are used:

Subscript
Symbol

Connotation

1

The subscripted quantity is a partial quantity for the component H_2O .

2

The subscripted quantity is a partial quantity for the component $NaCl$.

o

The subscripted quantity is an attribute of the pure substance H_2O .

f

The subscripted quantity is a measure of the difference in the thermochemical property between the compound in its standard state and its component elements in their standard states.

Fundamental constants used in calculations

The Committee on Data for Science and Technology (1973b) of the International Council of Scientific Unions gives the molar gas constant R as $(8.31441 \pm 0.00026) \text{ J mol}^{-1} \text{ K}^{-1}$.

The Commission on Atomic Weights (1972) gives the following atomic weights:

H	$(1.0079 \pm 0.0001) \text{ g mol}^{-1}$
O	$(15.9994 \pm 0.0003) \text{ g mol}^{-1}$
Na	$(22.98977 \pm 0.00001) \text{ g mol}^{-1}$
Cl	$(35.453 \pm 0.001) \text{ g mol}^{-1}$

From these atomic weights the molecular weights of the components are:

H_2O	$W_1 = (18.0152 \pm 0.0005) \text{ g mol}^{-1}$
NaCl	$W_2 = (58.4428 \pm 0.0010) \text{ g mol}^{-1}$

Empirical constants used in the text and calculations

The following list gives the constants for the equations presented in the text. The equation numbers and constants are as follows:

Equation (9):

$$g_0 = 1.895555 \times 10^3$$

$$g_1 = -1.944135$$

$$g_2 = -7.343150 \times 10^7$$

$$g_3 = -9.938067 \times 10^3$$

Equation (16):

$$B_0 = 4.43570 \times 10^{-2}$$

$$B_1 = 2.14240 \times 10^{-4}$$

$$B_2 = -1.21582 \times 10^{-6}$$

Equation (17):

$$C_0 = 4.86989 \times 10^{-3}$$

$$C_1 = -6.65184 \times 10^{-5}$$

$$C_2 = 1.69534 \times 10^{-7}$$

Equation (18):

For temperatures at and below 100°C the constants are the following:

$$\beta_0 = 0.980075$$

$$\beta_1 = 0.707654 \times 10^{-2}$$

$$\beta_2 = -2.97433 \times 10^{-5}$$

For temperatures above 100°C the constants are the following:

$$\beta_0 = 1.64801$$

$$\beta_1 = -2.83246 \times 10^{-3}$$

$$\beta_2 = 4.67896 \times 10^{-6}$$

Vapor pressure and density of the vapor-saturated liquid phase

The functions for the vapor pressure and density are given in the earlier report (Haas, 1976). They are not repeated here because there has been no change.

Thermochemical data for NaCl
in the vapor-saturated liquid phase

Synopsis of the theoretical approach

An attribute of "steam tables" is that differences in the energy content between two states of matter can be calculated by simple subtraction of the data in the tables. This is possible because all values in the tables are given as the energy difference between the state of the compound at temperature and pressure and the reference temperature and reference pressure. For H_2O in the NaCl - H_2O system this was comparatively easy to derive because the thermodynamics for the pure component H_2O had been established (Bain, 1964; Keenan and others, 1969). It only remained to determine the appropriate departure that dissolved NaCl would cause relative to the pure H_2O system.

For the NaCl component, no approach has been established. First, a reference state must be chosen. In this set of tables the chosen reference state is the hypothetical ideal NaCl solution of unit molality at the ice - liquid - vapor triple point for pure H_2O .

With the reference state established, calculation of energy differences between any arbitrary temperature, pressure, and composition and the chosen reference state remains. The approach used here is as follows:

1. The partial molal volume of NaCl was obtained from a density - temperature - composition function for the

vapor-saturated NaCl liquid phase.

2. The partial molal free energy of NaCl in the hypothetical ideal 1-molal liquid as a function of temperature and pressure was obtained.
3. The dependence of the partial molal free energy of NaCl with composition at constant temperature and pressure was obtained.
4. The dependence of the partial molal free energy of NaCl with pressure at constant temperature and composition was obtained.
5. Then, using the relation

$$\bar{S}_2^L = - \frac{\partial \bar{G}_2^L}{\partial T} + \bar{V}_2^L \frac{\partial p}{\partial T} \quad (1)$$

the partial molal entropy at temperature, pressure, and composition was calculated.

6. The partial molal enthalpy of NaCl at temperature, pressure, and composition was obtained from

$$\bar{H}_2^L = \bar{G}_2^L + T \bar{S}_2^L \quad (2)$$

Each of these steps is described in further detail in the following sections.

Partial molal volume of NaCl in the liquid.

The partial molal volume of NaCl in the binary liquid system is given by equation (3).

$$\bar{V}_2^L = V^L + (1 - N^L) \frac{\partial V^L}{\partial N^L} \quad (\text{cm}^3 \text{ mol}^{-1}) \quad (3)$$

where V^L is the volume of the liquid containing a total of one mole of molecules. The term N^L is the mole fraction of NaCl in the liquid phase and is given by equation (4) in terms of x , the molality of the solution.

$$N^L = \frac{x}{1000/W_1 + x} \quad (4)$$

W_1 is the molecular weight of H_2O . The molal volume V^L of an x molal liquid of density d is given by equation (5).

$$V^L = \frac{1}{d} \frac{1000 + x W_2}{1000/W_1 + x} \quad (\text{cm}^3 \text{ mol}^{-1}) \quad (5)$$

The partial molal volume of NaCl, $\bar{V}_2^L$, was obtained by using equations (3) through (5), given here, the equations for density of the liquid phase in the preceding report (Haas, 1976, equations 7 through 10), and standard analytical techniques.

Figure 1 shows the partial molal volume of NaCl in the liquid at constant composition. The contour interval is 5 wt percent NaCl.

Figure 1 near here.

The partial molal free energy of NaCl in the liquid

Figure 2 shows graphically the route which was taken through temperature-pressure-composition space to obtain the partial molal free energy at an arbitrary temperature, pressure, and composition (point D) from the reference state at 0.01°C (point A). Steps 2, 3, and 4 in the synopsis above correspond to the segments AB, BC, and CD on the figure.

Figure 2 near here.

Step 2 of the approach given in the section, Synopsis of the theoretical approach, involved the derivation of a partial molal free energy function for aqueous NaCl, $\Delta \bar{G}_2^L(AB)$, in the hypothetical ideal liquid solution of unit molality, that is in the solute standard state, relative to the reference-state partial molal free energy at the triple point where $\bar{G}_2^L$ is defined to be 0.0 J mol^{-1} .^{1/} To accomplish

^{1/} In the usage in this report, the reference state for a chemical species is an arbitrarily chosen single point on the temperature, pressure, and composition scales which is taken as the zero point for the energy scale. That is, the thermochemical parameters of free energy, enthalpy, and entropy are defined to be zero at this point. In contrast, in the usage here (and also in many applications in aqueous chemistry), the standard state for a dissolved compound in H_2O is taken as the hypothetical ideal liquid solution of unit molality at the temperature and pressure of the vapor-saturated pure H_2O liquid. In this standard state, the partial molal free energy, enthalpy, and heat capacity of the dissolved compound is the same as that for the infinitely dilute real solution. The advantage of a standard state in aqueous chemistry is that it allows correlations of properties as a function of composition at constant temperature and pressure; whereas, a reference state is necessary when correlations or calculations in temperature-pressure-composition space are being made.

this, consider here the interrelations between free energy, temperature, pressure, entropy, enthalpy, heat capacity, and partial molal volume. By using equations (1) and (2) and the relation between enthalpy and heat capacity, equations (6) through (8) were derived.

$$\bar{S}_2 - \bar{V}_2 \frac{\partial p}{\partial T} = - \frac{\partial \bar{G}_2}{\partial T} \quad (6)$$

$$\bar{H}_2 - T \bar{V}_2 \frac{\partial p}{\partial T} = \bar{G}_2 - T \frac{\partial \bar{G}_2}{\partial T} \quad (7)$$

$$\begin{aligned} \bar{C}_{p,2} - T \bar{V}_2 \frac{\partial^2 p}{\partial T^2} - T \frac{\partial \bar{V}_2}{\partial T} \frac{\partial p}{\partial T} - \bar{V}_2 \frac{\partial p}{\partial T} \\ = - T \frac{\partial^2 \bar{G}_2}{\partial T^2} \end{aligned} \quad (8)$$

Internal consistency demands that any free energy function must satisfy the above relations and the available data for the hypothetical ideal 1-molal solution. The available data were evaluated, subject to the above constraints, using a computerized algorithm described by Haas and Fisher (1976).

The data used in the evaluation are as follows. For the partial molal volume of dissolved NaCl, the function given in the previous section was used. Data for the relations between halite and dissolved NaCl and for dissolved NaCl, all in their standard states, were taken from the following references:

Reference	Data Type	No. of Obs.	Temp. Range (°C)
Committee on Data for Science and Technology (1973a)	$\bar{S}_2^0$ (298.15K)	1	25
	$\Delta\bar{G}_{s,f}^0$ (298.15K)	1	25
Likke and Bromley (1973)	$\bar{C}_{p,s}^0$	7	80-200
Criss and Cobble (1961)	$\Delta H^0[\text{halite} = \text{NaCl(aq)}]$	13	0-95
Gardner and others (1969)	$\Delta H^0[\text{halite} = \text{NaCl(aq)}]$	3	114 - 200
Liu and Lindsay (1972)	$\log K^0[\text{halite} = \text{NaCl(aq)}]$	10	75-300
Stull and Prophet (1971)	$C_p^0, S^0, (H_T - H_{298})[\text{halite}]$	Tabulated data, 100° intervals, 25-727	

The partial molal free energy of the hypothetical ideal 1-molal solution as a function of temperature is given by equation (9); the constants are tabulated in the section, Empirical constants used in the text and the calculations.

$$\begin{aligned}
 \Delta\bar{G}_2^L(\text{AB}) = & g_0(T - T \ln T - 273.16 + 273.16 \ln 273.16) \\
 & - g_1(T^2 - 273.16^2) \\
 & - g_2(1/2T - 1/2 \times 273.16) \\
 & - g_3(T - 273.16) \quad (\text{J mol}^{-1}) \quad (9)
 \end{aligned}$$

The procedure of Haas and Fisher (1976) uses 25°C (298.15 K) as the reference temperature. Therefore, the free energy function has been corrected to reflect the shift in the reference temperature to 0.01°C (273.16 K) for use here.

Step 3 of the chosen approach for deriving the thermochemical functions requires the description of the change in the free energy with concentration, $\Delta \bar{G}_2^L(BC)$, at constant temperature and pressure. This dependence is given by equations (10) and (11).

$$\Delta \bar{G}_2^L(BC) = RT \ln a_2 \quad (10)$$

$$= RT [\ln x + \ln \gamma] \quad (11)$$

where R is the molar gas constant and a_2 and γ are the activity and activity coefficient, respectively, for the dissolved NaCl at point C relative to the standard state, the hypothetical ideal 1-molal solution, point B. Liu and Lindsay (1972) gave the following equations for the temperature and concentration dependence of $\ln \gamma$ at the vapor-saturation pressure for pure H_2O .

$$\ln \gamma = \frac{-\alpha x^{1/2}}{(1 + \beta x^{1/2})} + 2 B x + \frac{3}{2} C x^2 \quad (12)$$

B, C, and β are second-order polynomials in temperature and α is the Debye-Hückel limiting slope:

$$\alpha = 1.17202 d_0^{1/2} \left[\frac{2.33752 \cdot 10^4}{D T} \right]^{3/2} \quad (13)$$

The term d_0 is the density of pure H_2O and, for use in this calculation, d_0 is described by:

$$d_0 = 1.00157 - 1.56096 \cdot 10^{-4} t - 2.69491 \cdot 10^{-6} t^2 \quad (g \text{ cm}^{-3}) \quad (14)$$

The term D is the dielectric constant for pure H_2O as given by the Åkerlöf equation:

$$D = \frac{5321.}{T} + 233.76 - 0.9297 T + 1.417 \cdot 10^{-3} T^2 - 8.292 \cdot 10^{-7} T^3 \quad (15)$$

The functions for B, C, and β are, respectively,

$$B = B_0 + B_1 t + B_2 t^2 \quad (16)$$

$$C = C_0 + C_1 t + C_2 t^2 \quad (17)$$

$$\beta = \beta_0 + \beta_1 t + \beta_2 t^2 \quad (18)$$

The constants B_1 , C_1 , and β_1 are given in the section, Empirical constants used in the text and calculations.

Step 4 of the chosen approach for deriving the thermochemical functions requires the description of the change in the partial molal free energy with pressure, $\Delta \bar{G}_2^L(\text{CD})$, at constant temperature and composition. Basic thermodynamic principles state the pressure dependence of free energy is:

$$\partial \bar{G} = \bar{V} \partial p \quad (19)$$

Therefore,

$$\Delta \bar{G}_2^L(\text{CD}) = \int_{p_0}^p \bar{V}_2^L dp \quad (20)$$

where p_0 and p are the vapor pressures of pure H_2O and of the liquid solution, respectively. The dependence of the partial molal volume of dissolved NaCl with pressure in the vapor-absent liquid is unavailable, but the change in $\bar{V}_2^L$ with pressure is small relative to the total magnitude of this correction. Therefore, by neglecting the pressure dependence of $\bar{V}_2^L$, equation (20) can be approximated by

$$\Delta \bar{G}_2^L(\text{CD}) = \bar{V}_2^L (p_0 - p) \quad (21)$$

In summary the partial molal free energy of aqueous NaCl at an arbitrary temperature, pressure, and composition relative to the reference state at 0.01°C is given by summing equations (9), (11), and (21):

$$\bar{G}_2^L = \Delta \bar{G}_2^L(AB) + \Delta \bar{G}_2^L(BC) + \Delta \bar{G}_2^L(CD) \quad (\text{J mol}^{-1}) \quad (22)$$

Figure 3 shows the partial molal free energy of NaCl in the liquid at constant composition. The contour interval is 5 wt percent.

Figure 3 near here.

The partial molal entropy of NaCl in the liquid

The partial molal entropy at an arbitrary temperature, pressure, and composition was calculated using equation (1):

$$\bar{S}_2^L = - \frac{\partial \bar{G}_2^L}{\partial T} + \bar{V}_2^L \frac{\partial p}{\partial T} \quad (1)$$

The term $\partial \bar{G}_2^L / \partial T$ was obtained, analytically, from equation (22) above; the term $\bar{V}_2^L$ was obtained from equation (3); and the term $\partial p / \partial T$ was calculated in the manner described in the section, Enthalpy difference between the gas and the liquid at constant liquid composition, of the preceeding report (Haas, 1976).

Figure 4 shows the partial molal entropy of NaCl in the liquid phase at constant composition. The contour interval is 5 wt percent.

Figure 4 near here.

The surface depicted on figure 4 is complicated as can be seen by the cross-over of the concentration contours with decreasing temperature. For details, one is referred to the appropriate tables. The erratic behaviour of the contours near 110°C is due to the use of two sets of constants to fit the the empirical term β in the activity coefficient equation (eqn. 12). This will be discussed further in the section Recommendations for Research.

The partial molal enthalpy of NaCl in the liquid

The partial molal enthalpy of NaCl was calculated from equation (2) using the previously computed entropy and free energy:

$$\bar{H}_2^L = \bar{G}_2^L + T \bar{S}_2^L \quad (2)$$

Figure 5 shows the partial molal enthalpy of NaCl in the liquid phase at constant composition. The contour interval is 5 wt percent.

Figure 5 near here.

The erratic behaviour in the contours near 110°C are due to the use of two sets of constants to fit the empirical term β in the activity coefficient equation (eqn. 12). This will be discussed further in the section Recommendations for Research.

Partial molal thermochemical properties of NaCl in the gas

The available experimental data for the concentration of NaCl in the gas phase do not permit the estimation of the partial molal quantities of NaCl in the gas phase.

Thermodynamic data for the phases
in the H_2O - NaCl system

The molal properties of the liquid and gas phases in the H_2O - NaCl system can be calculated readily from the thermochemical data for NaCl which were developed here and for H_2O which were given in the preceeding report (Haas, 1976). The formulation is identical for all molal quantities:

$$Q = (1 - N^\phi) \bar{Q}_1^\phi + N^\phi \bar{Q}_2^\phi \quad (23)$$

where Q is the quantity of interest (volume, entropy, enthalpy) and N^ϕ is the mole fraction of NaCl in phase ϕ . In the liquid phase, the mole fraction of NaCl was calculated from the concentration by using equation (4). In the gas phase the available data do not permit the estimation of the mole fraction of NaCl with any precision. However, the mole fraction of NaCl in the gas is small, being less than or equal to 10^{-6} in most of the temperature - pressure - composition space covered in this report. Therefore, the quantity $N^G \bar{Q}_2^G$ was neglected and the thermodynamic properties of the gas were assumed to be the same as the thermochemical properties of pure H_2O at the temperature and pressure of the solution.

Figure 6 shows the molal volume of the liquid phase. The contour interval is 5 wt percent NaCl.

Figure 6 near here.

Figures 7 and 8 show the molar entropy and molar enthalpy, respectively, of both the liquid and the gas at composition of NaCl in the liquid. The contour interval is 5 wt percent NaCl contained in the liquid phase.

Figures 7 and 8 near here.

Recommendations for Research

In the preparation of these preliminary "steam tables", several areas where one can improve the precision and accuracy were noted. The most obvious place for improvement is the description of $\ln \gamma$, the activity coefficient for aqueous NaCl. Use of several equations to describe β in the activity coefficient function (equation 12) is acceptable as long as the derivative is not needed. However, this was not the situation in these steam tables where entropy is calculated from equation (1):

$$\bar{S}_2^L = - \frac{\partial \bar{G}_2^L}{\partial T} + \bar{V}_2^L \frac{\partial p}{\partial T} \quad (1)$$

The term $\partial \bar{G}_2^L / \partial T$ was obtained from equation (22) as follows:

$$\begin{aligned} \frac{\partial \bar{G}_2^L}{\partial T} = & \frac{\partial}{\partial T} \Delta \bar{G}_2^L(AB) + \frac{\partial}{\partial T} \Delta \bar{G}_2^L(BC) \\ & + \frac{\partial}{\partial T} \Delta \bar{G}_2^L(CD) \end{aligned} \quad (24)$$

The taking of the partial derivative for the first term is thermodynamically sound, because $\Delta \bar{G}_2^L(AB)$ was evaluated using equilibrium constants, entropies, heats of solution, heat capacities, and partial molal volumes. While the function is empirical, the function and its partial derivatives are consistent with thermodynamic theory.

Not so for the second term: $\partial \Delta \bar{G}_2^L(BC) / \partial T$. When Liu and Lindsay (1972) evaluated the osmotic coefficient and activity coefficient

data, no constraints were imposed except that the Debye-Huckel limiting slope be obeyed. An improved evaluation of $\ln \gamma$ using the available heats of solution of halite and the heat capacities of aqueous NaCl would eliminate the obvious discordance in the data at about 110°C as shown on figures 4 and 5.

The other problem area is the density and therefore the partial molal volumes of H_2O and NaCl. The available experimental data for the H_2O - NaCl system at temperatures above 100°C are poor. Apart from imprecise experimental methods, most experimental techniques involved the use of equipment which was corroded by the brine. The reported densities included the effects of dissolved H_2 and metal ions. Improvement in this area entails the remeasurement of densities in the H_2O - NaCl system with an experimental design that is both highly accurate and free from corrosion.

Tables

Tables 1 through 28 give the temperature, pressure and the density of the liquid at constant composition and 5-degree intervals between 80°C (or at the 5-degree interval just above which halite saturation occurs) and 325°C . The partial molal quantities of volume, entropy and enthalpy for NaCl in the liquid are given. The third part of the tables gives the molar volume of the liquid and the molar entropy and molar enthalpy of the liquid and the gas which coexists with the liquid.

Tables 3, 6, 10, 13, 17, 21, and 26 give data at 5, 10, 15, 20, 25, 30, and 35 wt percent NaCl, respectively. The other tables give the data at intervals of 0.5 mol Na/kg H_2O (molal).

Tables 29 and 30 give the same data but at the given concentration on the halite saturation equilibrium between 80° and 325°C . Table 29 is in concentration units of wt percent NaCl and Table 30 is mol NaCl/kg H_2O .

The tables were calculated by using the functions which are given in the preceeding section. Where data are contained in parentheses, they were calculated by extrapolation of the functions beyond their range.

A detailed analysis of the accuracy and precision of the tabulated data is not possible in this preliminary report. Haas (1976) discussed the accuracy of the vapor pressure, density and volume data for the liquid and the gas and of the partial molal quantities for H_2O ($\bar{H}_1$, $\bar{S}_1$, and $\bar{V}_1$) in the liquid and the gas. In preparing this report the following additional equations have been used:

<u>Equation</u>	<u>Property</u>	<u>Source</u>
(9)	$\Delta \bar{G}_2^0(AB)$	This report.
(12)	$\ln \gamma$	Liu and Lindsay (1972)

Assuming that the JANAF data for halite ($NaCl[c]$) are without error (?), the maximum error in $\Delta \bar{G}_2^0(AB)$ is 200 J mol^{-1} . For the activity coefficient equation, Liu and Lindsay (1972) gave no estimate of either the accuracy or precision. However, an analysis of the graphical data which they supplied indicates that the maximum error in the activity coefficient is less than 0.003.

Even with this information an estimate of the error in the partial molal quantities for $NaCl$ in the liquid ($\bar{V}_2^L$, $\bar{H}_2^L$, and $\bar{S}_2^L$) cannot be made because these properties were calculated in part by the partial differentiation of equations (9) and (12), above, as well as other equations cited by Haas (1976).

In the tables, data are given with as many as six digits. This is particularly true for data for entropy and enthalpy where most of the value represents the relative difference in the property between T and $0.01^\circ C$ and only a minor portion of the value is due to change in concentration. The number of digits reported in the tables is governed

by the need to have a reasonable resolution in the property when small changes in concentration or temperature are considered.

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Figure 1. The partial molal volume of NaCl in the liquid phase for vapor-saturated NaCl solutions from 0 wt percent to halite saturation between 80° and 325°C. The contour interval is 5 wt percent. The stippled zone was calculated by the extrapolation of the functions given in the text.

Figure 2. Temperature - pressure - concentration diagram for the vapor-liquid coexistence surface of the H_2O - NaCl system, between 80° and 325°C . The surface is contoured both in temperature (50° intervals) and concentration (1 molal intervals). The concentration contours are truncated by the locus of the three phase coexistence liquid - vapor - halite at high concentrations. The blank vertical plane between 250° and 300°C represents an arbitrary isotherm on which lie the points B, C, and D and the heavy solid lines connecting them. Steps 2, 3, and 4 of the chosen approach represent the temperature - pressure - composition paths AB, BC, and CD, respectively, along which partial molal free energy functions were sought. The combination of these functions then gives the partial molal free energy of NaCl at the arbitrary point D relative to the reference state at A, the triple point of pure H_2O .

Figure 2 (Haas)

Figure 3. The partial molal free energy of NaCl in the liquid phase of vapor-saturated NaCl solutions from 0 wt percent to halite saturation between 80° and 325°C. The contour interval is 5 wt percent NaCl. All contours between 5 wt percent and halite saturation are systematic. Below the 5 wt percent contour, there is a reversal in the free energy function such that the partial molal free energy of aqueous NaCl at infinite dilution lies above the partial molal free energies of NaCl at higher concentrations. For details, one is referred to the tables. The shaded zone at concentrations greater than 30 wt percent and at temperatures greater than 300°C contains data which were calculated by the extrapolation of the functions given in the text.

Figure 4. The partial molal entropy of NaCl in the liquid for vapor-saturated NaCl solutions from 0 wt percent to halite saturation between 80° and 325° C. The contour interval is 5 wt percent. The inflection near 110° C is due to the use of two sets of constants to describe the fitted constant β in the activity coefficient equation. The surface is complex. Most of the change in the partial molal entropy with change in composition occurs between 0 and 5 wt percent. For details, the reader is referred to the tables.

Figure 5. The partial molal enthalpy of NaCl in the liquid for vapor-saturated NaCl solutions from 0 wt percent to halite saturation between 80° and 325°C. The contour interval is 5 wt percent. The inflection near 110°C is from the use of two sets of constants to describe the fitted constant β in the activity coefficient equation. The shaded area contains data which were calculated by the extrapolation of the functions given in the text.

Figure 6. The molal volume of liquid solutions in the $\text{H}_2\text{O} - \text{NaCl}$ system from 0 wt percent NaCl to halite saturation between 80° and 325°C . The contour interval is 5 wt percent NaCl. As is obvious from the crossing of contours, the surface is complex. For details, the reader is referred to the tables.

Figure 7. The molal entropy of the gas and the liquid phases in the $\text{H}_2\text{O} - \text{NaCl}$ system from 0 wt percent NaCl to halite saturation in the liquid phase between 80° and 325°C . The contour interval is 5 wt percent NaCl in the liquid. The shaded area contains data which were calculated by the extrapolation of functions given in the text. The buncning of the contours between 300° and 325°C is most probably due to an artifact in the equations which is exaggerated when the partial molal entropy of aqueous NaCl is calculated.

Figure 8. The molal enthalpy of the gas and the liquid phases in the $\text{H}_2\text{O} - \text{NaCl}$ system from 0 wt percent to halite saturation in the liquid phase between 80° and 325°C . The contour interval is 5 wt percent in the liquid phase. The shaded area contains data which were calculated by the extrapolation of functions given in the text. The bunching of the contours between 300° and 325°C is most probably due to an artifact in the equations which is exaggerated when the partial molal enthalpy of aqueous NaCl is calculated.

Table 1. α Cl concentration: 0.0000 mol/kg H ₂ O 0.00 wt percent 0.000 mol percent												
t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.474	0.972	17.91	-21.806	-16732.	18.54	19.296	117.814	137.110	6017.	41606.	47624.
85.	0.578	0.969	17.61	-22.754	-17700.	18.60	20.356	115.534	135.890	6395.	41378.	47773.
90.	0.701	0.965	17.29	-23.737	-18644.	18.66	21.405	113.307	134.712	6773.	41148.	47921.
95.	0.845	0.962	16.94	-24.762	-19689.	18.73	22.443	111.131	133.574	7153.	40913.	48066.
100.	1.013	0.958	16.58	-25.836	-20717.	18.80	23.465	109.010	132.475	7532.	40677.	48209.
105.	1.208	0.955	16.19	-26.966	-21772.	18.87	24.480	106.931	131.411	7914.	40436.	48349.
110.	1.433	0.951	15.78	-28.157	-22855.	18.94	25.479	104.901	130.381	8294.	40193.	48487.
115.	1.691	0.947	15.34	-29.416	-23970.	19.02	26.467	102.915	129.382	8676.	39947.	48622.
120.	1.985	0.943	14.87	-30.745	-25119.	19.10	27.444	100.971	128.414	9058.	39697.	48754.
125.	2.321	0.939	14.38	-32.151	-26305.	19.19	28.409	99.065	127.475	9441.	39443.	48883.
130.	2.701	0.935	13.86	-33.636	-27530.	19.27	29.365	97.196	126.561	9824.	39185.	49009.
135.	3.131	0.931	13.31	-35.204	-28796.	19.36	30.311	95.362	125.674	10209.	38922.	49131.
140.	3.614	0.926	12.72	-36.859	-30105.	19.45	31.248	93.561	124.809	10595.	38655.	49249.
145.	4.155	0.922	12.11	-38.602	-31459.	19.55	32.177	91.791	123.967	10982.	38382.	49364.
150.	4.760	0.917	11.45	-40.438	-32861.	19.65	33.097	90.049	123.146	11370.	38104.	49474.
155.	5.433	0.912	10.76	-42.367	-34312.	19.75	34.009	88.336	122.345	11759.	37821.	49580.
160.	6.180	0.907	10.03	-44.392	-35813.	19.85	34.914	86.648	121.561	12150.	37531.	49682.
165.	7.008	0.902	9.25	-46.516	-37368.	19.96	35.811	84.984	120.795	12543.	37236.	49779.
170.	7.920	0.897	8.43	-48.739	-38977.	20.08	36.703	83.343	120.045	12938.	36933.	49871.
175.	8.925	0.892	7.56	-51.064	-40642.	20.19	37.587	81.722	119.310	13334.	36624.	49958.
180.	10.027	0.887	6.64	-53.491	-42366.	20.31	38.466	80.122	118.588	13732.	36307.	50040.
185.	11.234	0.882	5.66	-56.024	-44149.	20.44	39.340	78.539	117.879	14133.	35983.	50116.
190.	12.552	0.876	4.62	-58.652	-45994.	20.56	40.208	76.974	117.182	14536.	35651.	50186.
195.	13.989	0.870	3.52	-61.408	-47903.	20.70	41.072	75.424	116.496	14941.	35310.	50250.
200.	15.551	0.865	2.35	-64.262	-49876.	20.83	41.931	73.888	115.819	15348.	34960.	50309.
205.	17.245	0.859	1.10	-67.227	-51916.	20.98	42.786	72.366	115.152	15758.	34602.	50360.
210.	19.080	0.853	-0.22	-70.304	-54025.	21.13	43.637	70.855	114.492	16171.	34233.	50405.
215.	21.063	0.847	-1.64	-73.494	-56205.	21.28	44.485	69.354	113.839	16587.	33855.	50442.
220.	23.201	0.840	-3.14	-76.799	-58457.	21.44	45.330	67.862	113.192	17006.	33466.	50473.
225.	25.504	0.834	-4.75	-80.221	-60784.	21.60	46.172	66.378	112.550	17429.	33066.	50495.
230.	27.979	0.827	-6.47	-83.762	-63189.	21.78	47.011	64.900	111.911	17854.	32655.	50509.
235.	30.635	0.821	-8.32	-87.425	-65673.	21.95	47.848	63.428	111.276	18284.	32231.	50514.
240.	33.480	0.814	-10.29	-91.212	-68240.	22.14	48.684	61.959	110.643	18717.	31794.	50511.
245.	36.524	0.807	-12.42	-95.126	-70892.	22.34	49.518	60.492	110.011	19153.	31344.	50497.
250.	39.776	0.799	-14.70	-99.172	-73633.	22.54	50.352	59.027	109.378	19595.	30880.	50474.
255.	43.245	0.792	-17.16	-103.352	-76466.	22.75	51.184	57.560	108.744	20040.	30400.	50440.
260.	46.940	0.784	-19.83	-107.672	-79396.	22.98	52.016	56.092	108.108	20490.	29905.	50395.
265.	50.872	0.776	-22.71	-112.138	-82427.	23.21	52.849	54.620	107.469	20945.	29394.	50339.
270.	55.051	0.768	-25.84	-116.756	-85564.	23.46	53.682	53.142	106.824	21405.	28864.	50269.
275.	59.487	0.759	-29.24	-121.534	-88814.	23.72	54.516	51.658	106.174	21871.	28316.	50187.
280.	64.191	0.751	-32.96	-126.483	-92184.	24.00	55.352	50.165	105.516	22342.	27749.	50091.
285.	69.175	0.742	-37.03	-131.612	-95682.	24.29	56.189	48.661	104.851	22820.	27160.	49980.
290.	74.449	0.732	-41.51	-136.938	-99318.	24.60	57.030	47.145	104.175	23304.	26550.	49854.
295.	80.025	0.723	-46.46	-142.475	-103106.	24.93	57.874	45.615	103.488	23795.	25916.	49711.
300.	85.917	0.712	-51.95	-148.247	-107058.	25.28	58.722	44.067	102.790	24294.	25257.	49551.
305.	(92.136)	0.702	-58.07	(-154.278)	(-111194.)	25.67	(59.576)	(42.501)	(102.077)	(24801.)	(24572.)	(49373.)
310.	(98.676)	0.691	-64.93	(-160.601)	(-115537.)	26.08	(60.436)	(40.914)	(101.350)	(25318.)	(23859.)	(49177.)
315.	(105.612)	0.679	-72.69	(-167.260)	(-120114.)	26.52	(61.304)	(39.303)	(100.607)	(25844.)	(23116.)	(48960.)
320.	(112.878)	0.667	-81.53	(-174.307)	(-124963.)	27.01	(62.181)	(37.664)	(99.846)	(26382.)	(22341.)	(48723.)
325.	(120.571)	0.654	-91.68	(-181.815)	(-130133.)	27.54	(63.070)	(35.995)	(99.066)	(26932.)	(21531.)	(48463.)

Table 2.		C1 concentration: 0.5000 mol/kg H ₂ O					2.84 wt percent			0.893 mol percent		
t	P	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	$\bar{S}^L$	ΔS	$\bar{S}^G$	$\bar{H}^L$	ΔH	$\bar{H}^G$
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.465	0.991	19.60	-1.021	-15935.	18.54	19.232	118.028	137.260	5813.	41813.	47626.
85.	0.568	0.988	19.41	-1.352	-16693.	18.60	20.277	115.763	136.041	6179.	41597.	47776.
90.	0.689	0.985	19.21	-1.693	-17457.	18.66	21.311	113.552	134.863	6548.	41377.	47924.
95.	0.831	0.981	18.99	-2.048	-18228.	18.72	22.335	111.392	133.726	6915.	41154.	48070.
100.	0.996	0.978	18.76	-2.423	-19009.	18.79	23.348	109.219	132.627	7285.	40928.	48213.
105.	1.187	0.974	18.51	-2.822	-19801.	18.86	24.342	107.223	131.565	7653.	40701.	48354.
110.	1.408	0.971	18.24	-3.249	-20605.	18.93	25.326	105.210	130.536	8023.	40470.	48493.
115.	1.662	0.967	17.95	-3.709	-21438.	19.00	26.320	103.219	129.539	8400.	40228.	48629.
120.	1.951	0.963	17.65	-4.202	-22311.	19.08	27.278	101.294	128.572	8770.	39992.	48762.
125.	2.241	0.959	17.32	-4.726	-23113.	19.16	28.225	99.408	127.634	9139.	39752.	48891.
130.	2.655	0.955	16.97	-5.283	-23943.	19.24	29.162	97.561	126.722	9509.	39509.	49018.
135.	3.077	0.951	16.60	-5.874	-24816.	19.33	30.088	95.748	125.836	9880.	39261.	49141.
140.	3.552	0.947	16.21	-6.498	-25731.	19.41	31.004	93.970	124.974	10251.	39009.	49260.
145.	4.084	0.942	15.79	-7.164	-26610.	19.50	31.910	92.223	124.134	10623.	38753.	49376.
150.	4.679	0.938	15.34	-7.873	-27543.	19.60	32.808	90.506	123.315	10996.	38491.	49488.
155.	5.341	0.933	14.86	-8.626	-28531.	19.69	33.697	88.818	122.515	11370.	38225.	49595.
160.	6.076	0.928	14.36	-9.426	-29576.	19.79	34.579	87.156	121.735	11746.	37953.	49698.
165.	6.889	0.924	13.81	-10.274	-30680.	19.89	35.452	85.519	120.971	12122.	37675.	49797.
170.	7.786	0.919	13.24	-11.171	-31843.	20.00	36.318	83.906	120.224	12499.	37391.	49891.
175.	8.773	0.914	12.62	-12.118	-33066.	20.11	37.177	82.315	119.492	12879.	37101.	49980.
180.	9.857	0.909	11.97	-13.116	-34350.	20.22	38.029	80.744	118.773	13259.	36804.	50064.
185.	11.044	0.904	11.27	-14.165	-35695.	20.34	38.876	79.192	118.068	13641.	36501.	50142.
190.	12.340	0.898	10.53	-15.266	-37102.	20.46	39.716	77.659	117.375	14025.	36189.	50215.
195.	13.752	0.893	9.74	-16.420	-38572.	20.58	40.551	76.141	116.693	14411.	35871.	50282.
200.	15.287	0.887	8.89	-17.728	-40105.	20.71	41.381	74.639	116.020	14799.	35544.	50343.
205.	16.953	0.882	7.98	-19.099	-41706.	20.84	42.206	73.151	115.357	15189.	35208.	50397.
210.	18.756	0.876	7.02	-20.534	-43376.	20.98	43.027	71.675	114.702	15582.	34864.	50445.
215.	20.705	0.870	5.98	-22.034	-45116.	21.12	43.844	70.211	114.055	15977.	34510.	50486.
220.	22.808	0.864	4.88	-23.600	-46926.	21.27	44.657	68.756	113.413	16374.	34146.	50520.
225.	25.071	0.858	3.69	-25.232	-48806.	21.42	45.467	67.310	112.777	16775.	33772.	50546.
230.	27.504	0.852	2.41	-26.930	-50756.	21.58	46.275	65.871	112.145	17178.	33387.	50565.
235.	30.114	0.845	1.05	-28.686	-52776.	21.74	47.080	64.438	111.517	17585.	32990.	50575.
240.	32.911	0.839	-0.43	-30.499	-54866.	21.91	47.883	63.009	110.892	17995.	32581.	50576.
245.	35.902	0.832	-2.01	-32.369	-57026.	22.09	48.685	61.583	110.268	18409.	32159.	50569.
250.	39.098	0.825	-3.72	-34.296	-59256.	22.27	49.485	60.159	109.644	18828.	31724.	50552.
255.	42.507	0.818	-5.57	-36.280	-61556.	22.47	50.286	58.734	109.020	19250.	31274.	50524.
260.	46.138	0.811	-7.57	-38.320	-63926.	22.67	51.086	57.307	108.394	19677.	30809.	50486.
265.	50.002	0.803	-9.74	-40.416	-66366.	22.88	51.888	55.877	107.765	20109.	30328.	50437.
270.	54.108	0.795	-12.10	-42.568	-68876.	23.10	52.691	54.442	107.133	20547.	29829.	50376.
275.	58.466	0.787	-14.68	-44.776	-71456.	23.34	53.497	52.999	106.496	20991.	29312.	50303.
280.	63.088	0.779	-17.49	-47.040	-74106.	23.58	54.305	51.547	105.852	21441.	28775.	50216.
285.	67.983	0.771	-20.57	-49.360	-76826.	23.84	55.118	50.083	105.202	21898.	28218.	50116.
290.	73.163	0.762	-23.96	-51.736	-79616.	24.11	55.937	48.606	104.543	22363.	27638.	50001.
295.	78.640	0.753	-27.70	-54.168	-82476.	24.41	56.762	47.111	103.874	22837.	27033.	49871.
300.	84.426	0.744	-31.85	-56.656	-85406.	24.72	57.596	45.598	103.194	23321.	26403.	49724.
305.	(90.533)	0.734	-36.47	(-59.204)	(-88416.)	25.05	(58.441)	(44.061)	(102.503)	(23817.)	(25744.)	(49561.)
310.	(96.974)	0.723	-41.65	(-61.812)	(-91506.)	25.40	(59.299)	(42.499)	(101.798)	(24325.)	(25055.)	(49380.)
315.	(103.763)	0.713	-47.47	(-64.472)	(-94676.)	25.79	(60.173)	(40.905)	(101.078)	(24848.)	(24332.)	(49180.)
320.	(110.914)	0.701	-54.08	(-67.184)	(-97926.)	26.20	(61.067)	(39.276)	(100.343)	(25388.)	(23573.)	(48961.)
325.	(118.443)	0.689	-61.64	(-69.948)	(-101256.)	26.66	(61.985)	(37.606)	(99.591)	(25949.)	(22773.)	(48722.)

Table 3. NaCl concentration: 0.9006 mol/kg H₂O 5.00 wt percent 1.597 mol percent

t	p	d ^L	V ₂ ^L	S ₂ ^L	H ₂ ^L	V	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.459	1.006	20.17	-10.305	-15920.	18.55	19.044	118.339	137.382	5655.	41973.	47628.
85.	0.560	1.003	20.02	-10.462	-16618.	18.61	20.080	116.083	136.163	6013.	41765.	47778.
90.	0.679	1.000	19.86	-10.621	-17318.	18.67	21.105	113.881	134.986	6373.	41553.	47927.
95.	0.819	0.996	19.69	-10.788	-18022.	18.73	22.120	111.730	133.850	6734.	41339.	48073.
100.	0.982	0.993	19.50	-10.967	-18731.	18.79	23.124	109.628	132.752	7096.	41120.	48217.
105.	1.171	0.989	19.30	-11.161	-19447.	18.86	24.110	107.580	131.690	7457.	40902.	48358.
110.	1.388	0.986	19.08	-11.372	-20172.	18.93	25.085	105.577	130.662	7818.	40679.	48497.
115.	1.638	0.982	18.85	-8.381	-19680.	19.00	26.100	103.566	129.666	8199.	40434.	48634.
120.	1.924	0.978	18.60	-9.004	-20568.	19.07	27.046	101.654	128.701	8559.	40208.	48767.
125.	2.249	0.974	18.33	-9.683	-21482.	19.15	27.981	99.783	127.764	8919.	39978.	48898.
130.	2.618	0.970	18.04	-10.419	-22423.	19.23	28.904	97.949	126.853	9279.	39745.	49025.
135.	3.034	0.966	17.73	-11.215	-23392.	19.31	29.817	96.152	125.969	9640.	39509.	49149.
140.	3.502	0.962	17.40	-12.072	-24390.	19.40	30.719	94.389	125.108	10001.	39268.	49269.
145.	4.027	0.958	17.05	-12.991	-25419.	19.48	31.611	92.658	124.270	10363.	39023.	49386.
150.	4.613	0.953	16.67	-13.973	-26480.	19.57	32.494	90.958	123.452	10725.	38774.	49499.
155.	5.266	0.949	16.27	-15.018	-27573.	19.66	33.368	89.287	122.655	11088.	38519.	49607.
160.	5.991	0.944	15.84	-16.125	-28699.	19.76	34.234	87.643	121.876	11452.	38260.	49712.
165.	6.792	0.940	15.38	-17.292	-29857.	19.86	35.091	86.024	121.115	11816.	37995.	49812.
170.	7.677	0.935	14.88	-18.520	-31048.	19.96	35.940	84.430	120.370	12182.	37725.	49907.
175.	8.651	0.930	14.36	-19.804	-32272.	20.06	36.782	82.859	119.641	12549.	37449.	49997.
180.	9.719	0.925	13.79	-21.144	-33527.	20.17	37.617	81.308	118.925	12917.	37166.	50083.
185.	10.889	0.920	13.19	-22.534	-34813.	20.28	38.445	79.777	118.223	13286.	36877.	50163.
190.	12.167	0.915	12.55	-23.972	-36128.	20.39	39.267	78.265	117.533	13657.	36581.	50238.
195.	13.559	0.910	11.86	-25.452	-37471.	20.51	40.084	76.770	116.854	14029.	36278.	50307.
200.	15.073	0.904	11.13	-26.969	-38840.	20.63	40.894	75.291	116.185	14403.	35967.	50370.
205.	16.715	0.899	10.34	-28.516	-40232.	20.76	41.700	73.825	115.526	14780.	35647.	50427.
210.	18.493	0.893	9.49	-30.086	-41644.	20.89	42.501	72.373	114.875	15158.	35320.	50478.
215.	20.414	0.888	8.59	-31.670	-43071.	21.02	43.298	70.933	114.231	15538.	34983.	50522.
220.	22.487	0.882	7.62	-33.259	-44510.	21.16	44.092	69.503	113.595	15922.	34637.	50558.
225.	24.718	0.876	6.58	-34.840	-45954.	21.30	44.882	68.082	112.963	16307.	34281.	50598.
230.	27.116	0.870	5.45	-36.402	-47398.	21.45	45.669	66.668	112.337	16696.	33914.	50610.
235.	29.689	0.864	4.25	-37.928	-48834.	21.61	46.455	65.260	111.715	17088.	33536.	50624.
240.	32.446	0.857	2.95	-39.403	-50252.	21.76	47.238	63.857	111.095	17484.	33146.	50629.
245.	35.394	0.851	1.55	-40.806	-51643.	21.93	48.021	62.457	110.478	17883.	32743.	50626.
250.	38.544	0.844	0.03	-42.114	-52993.	22.10	48.803	61.058	109.861	18287.	32327.	50614.
255.	41.904	0.837	-1.60	-43.302	-54288.	22.28	49.586	59.658	109.245	18695.	31897.	50592.
260.	45.482	0.830	-3.38	-44.338	-55512.	22.47	50.370	58.257	108.627	19108.	31451.	50559.
265.	49.290	0.823	-5.31	-45.187	-56643.	22.67	51.157	56.851	108.007	19527.	30989.	50516.
270.	53.336	0.816	-7.41	-45.807	-57658.	22.87	51.946	55.439	107.385	19952.	30509.	50462.
275.	57.631	0.808	-9.69	-46.148	-58527.	23.08	52.740	54.018	106.758	20384.	30011.	50395.
280.	62.184	0.801	-12.20	-46.153	-59215.	23.31	53.539	52.586	106.126	20824.	29492.	50316.
285.	67.007	0.793	-14.94	-45.751	-59683.	23.55	54.346	51.141	105.487	21273.	28951.	50224.
290.	72.110	0.784	-17.96	-44.860	-59878.	23.79	55.162	49.679	104.841	21732.	28387.	50119.
295.	77.505	0.776	-21.29	-43.378	-59740.	24.06	55.989	48.197	104.186	22202.	27747.	49998.
300.	83.203	0.767	-24.98	-41.184	-59194.	24.34	56.831	46.691	103.522	22685.	27178.	49862.
305.	(89.218)	0.757	-29.09	(-38.130)	(-58148.)	24.64	(57.690)	(45.157)	(102.847)	(23183.)	(26528.)	(49711.)
310.	(95.560)	0.748	-33.68	(-34.030)	(-56488.)	24.96	(58.570)	(43.590)	(102.159)	(23698.)	(25844.)	(49542.)
315.	(102.245)	0.738	-38.85	(-28.658)	(-54070.)	25.30	(59.476)	(41.983)	(101.459)	(24234.)	(25122.)	(49356.)
320.	(109.286)	0.727	-44.70	(-21.728)	(-50715.)	25.67	(60.414)	(40.330)	(100.744)	(24795.)	(24356.)	(49152.)
325.	(116.697)	0.716	-51.36	(-12.877)	(-46193.)	26.07	(61.392)	(38.622)	(100.014)	(25386.)	(23542.)	(48928.)

Table 4. aCl concentration: 1.0000 mol/kg H_2O 5.52 wt percent 1.770 mol percent												
t	p	d^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	S^L	ΔS	S^G	H^L	ΔH	H^G
($^\circ\text{C}$)	(bars)	(g cm^{-3})	($\text{cm}^3 \text{mol}^{-1}$)	($\text{J mol}^{-1} \text{K}^{-1}$)	(J mol^{-1})	($\text{cm}^3 \text{mol}^{-1}$)	(J $\text{mol}^{-1} \text{K}^{-1}$)			(J mol^{-1})		
80.	0.457	1.010	20.29	-11.999	-15912.	18.55	18.989	118.424	137.413	5616.	42012.	47629.
85.	0.558	1.006	20.15	-12.120	-16598.	18.61	20.023	116.171	136.194	5973.	41806.	47779.
90.	0.677	1.003	20.00	-12.242	-17285.	18.67	21.046	113.971	135.017	6331.	41596.	47927.
95.	0.816	1.000	19.84	-12.371	-17975.	18.73	22.059	111.822	133.881	6690.	41383.	48073.
100.	0.979	0.997	19.66	-12.511	-18670.	18.79	23.062	109.722	132.783	7051.	41167.	48218.
105.	1.167	0.993	19.47	-12.663	-19371.	18.86	24.046	107.676	131.722	7409.	40950.	48359.
110.	1.384	0.990	19.26	-12.832	-20080.	18.93	25.019	105.675	130.694	7769.	40730.	48498.
115.	1.633	0.986	19.04	-9.648	-19515.	19.00	26.040	103.658	129.698	8151.	40484.	48635.
120.	1.917	0.982	18.80	-10.241	-20391.	19.07	26.984	101.749	128.733	8509.	40260.	48769.
125.	2.241	0.978	18.54	-10.847	-21293.	19.15	27.915	99.881	127.796	8867.	40033.	48899.
130.	2.609	0.974	18.26	-11.591	-22221.	19.23	28.836	98.051	126.887	9225.	39802.	49027.
135.	3.024	0.970	17.97	-12.353	-23176.	19.31	29.745	96.257	126.002	9583.	39568.	49151.
140.	3.490	0.966	17.65	-13.175	-24161.	19.39	30.644	94.498	125.142	9941.	39330.	49271.
145.	4.013	0.962	17.31	-14.059	-25176.	19.48	31.533	92.770	124.304	10301.	39088.	49388.
150.	4.597	0.957	16.95	-15.004	-26222.	19.57	32.413	91.074	123.487	10660.	38841.	49501.
155.	5.248	0.953	16.56	-16.011	-27299.	19.66	33.283	89.407	122.690	11021.	38590.	49610.
160.	5.969	0.948	16.15	-17.078	-28408.	19.75	34.145	87.767	121.912	11382.	38333.	49715.
165.	6.768	0.944	15.70	-18.206	-29549.	19.85	34.999	86.153	121.151	11743.	38072.	49815.
170.	7.650	0.939	15.23	-19.392	-30722.	19.95	35.844	84.563	120.407	12106.	37805.	49911.
175.	8.620	0.934	14.72	-20.633	-31927.	20.05	36.682	82.996	119.678	12470.	37532.	50002.
180.	9.685	0.929	14.18	-21.928	-33163.	20.16	37.513	81.450	118.963	12835.	37253.	50088.
185.	10.850	0.924	13.60	-23.273	-34428.	20.27	38.337	79.924	118.262	13201.	36967.	50168.
190.	12.124	0.919	12.98	-24.662	-35722.	20.38	39.155	78.417	117.572	13569.	36674.	50244.
195.	13.511	0.914	12.31	-26.093	-37043.	20.50	39.967	76.927	116.894	13938.	36375.	50313.
200.	15.019	0.909	11.60	-27.558	-38388.	20.62	40.773	75.453	116.226	14309.	36067.	50377.
205.	16.655	0.903	10.84	-29.051	-39755.	20.74	41.575	73.993	115.568	14682.	35752.	50434.
210.	18.427	0.898	10.02	-30.564	-41140.	20.87	42.372	72.547	114.918	15057.	35428.	50486.
215.	20.342	0.892	9.14	-32.089	-42539.	21.00	43.164	71.112	114.276	15435.	35096.	50530.
220.	22.406	0.886	8.20	-33.615	-43948.	21.14	43.953	69.687	113.640	15814.	34754.	50568.
225.	24.630	0.880	7.18	-35.131	-45360.	21.28	44.739	68.272	113.010	16197.	34402.	50598.
230.	27.019	0.874	6.10	-36.623	-46770.	21.42	45.522	66.864	112.385	16582.	34039.	50621.
235.	29.583	0.868	4.92	-38.076	-48169.	21.58	46.303	65.462	111.764	16971.	33665.	50636.
240.	32.329	0.862	3.66	-39.472	-49548.	21.73	47.082	64.064	111.146	17363.	33280.	50643.
245.	35.267	0.855	2.30	-40.791	-50896.	21.90	47.860	62.670	110.531	17759.	32882.	50641.
250.	38.405	0.849	0.83	-42.010	-52200.	22.07	48.639	61.277	109.916	18159.	32470.	50629.
255.	41.752	0.842	-0.77	-43.102	-53446.	22.24	49.418	59.883	109.301	18564.	32044.	50608.
260.	45.318	0.835	-2.50	-44.034	-54615.	22.43	50.199	58.487	108.686	18974.	31603.	50577.
265.	49.111	0.828	-4.37	-44.771	-55687.	22.62	50.982	57.086	108.068	19390.	31145.	50536.
270.	53.142	0.821	-6.41	-45.269	-56636.	22.82	51.768	55.679	107.448	19813.	30670.	50483.
275.	57.421	0.813	-8.64	-45.478	-57434.	23.03	52.560	54.263	106.823	20243.	30176.	50418.
280.	61.957	0.806	-11.08	-45.336	-58043.	23.25	53.358	52.836	106.194	20681.	29661.	50341.
285.	66.761	0.798	-13.75	-44.774	-58421.	23.48	54.164	51.394	105.558	21128.	29124.	50251.
290.	71.845	0.790	-16.69	-43.704	-58517.	23.72	54.981	49.935	104.916	21585.	28563.	50148.
295.	77.220	0.781	-19.94	-42.025	-58268.	23.98	55.810	48.454	104.264	22055.	27975.	50030.
300.	82.894	0.772	-23.53	-39.609	-57596.	24.25	56.655	46.949	103.604	22538.	27359.	49897.
305.	(88.887)	0.763	-27.53	(-36.304)	(-56407.)	24.54	(57.518)	(45.414)	(102.932)	(23038.)	(26710.)	(49748.)
310.	(95.205)	0.754	-32.00	(-31.922)	(-54583.)	24.85	(58.405)	(43.844)	(102.249)	(23556.)	(26026.)	(49582.)
315.	(101.854)	0.744	-37.03	(-26.220)	(-51976.)	25.19	(59.321)	(42.232)	(101.554)	(24096.)	(25303.)	(49400.)
320.	(104.877)	0.733	-42.72	(-18.924)	(-48402.)	25.55	(60.273)	(40.572)	(100.844)	(24664.)	(24535.)	(49199.)
325.	(116.259)	0.722	-49.19	(-9.641)	(-43623.)	25.93	(61.268)	(38.852)	(100.119)	(25263.)	(23716.)	(48979.)

Table 5. V_2O_5 concentration: 1.5000 mol/kg H_2O 8.06 wt percent 2.631 mol percent												
t ($^{\circ}\text{C}$)	p (bars)	d^L (g cm^{-3})	$\bar{V}_2^L$ ($\text{cm}^3 \text{mol}^{-1}$)	$\bar{S}_2^L$ ($\text{J mol}^{-1} \text{K}^{-1}$)	$\bar{H}_2^L$ (J mol^{-1})	$\bar{V}^L$ ($\text{cm}^3 \text{mol}^{-1}$)	S^L ($\text{J mol}^{-1} \text{K}^{-1}$)	ΔS ($\text{J mol}^{-1} \text{K}^{-1}$)	S^G	H^L (J mol^{-1})	ΔH (J mol^{-1})	H^G
80.	0.449	1.027	20.83	-18.660	-15838.	18.57	18.679	118.890	137.569	5427.	42204.	47631.
85.	0.548	1.024	20.73	-18.630	-16471.	18.63	19.705	116.646	136.351	5775.	42007.	47782.
90.	0.665	1.021	20.61	-18.596	-17103.	18.68	20.720	114.455	135.175	6124.	41806.	47931.
95.	0.802	1.018	20.49	-18.562	-17735.	18.74	21.724	112.316	134.040	6475.	41603.	48077.
100.	0.961	1.015	20.35	-18.533	-18368.	18.80	22.719	110.225	132.944	6827.	41395.	48222.
105.	1.146	1.011	20.20	-18.510	-19005.	18.87	23.695	108.188	131.883	7177.	41187.	48364.
110.	1.359	1.008	20.04	-18.495	-19644.	18.94	24.661	106.196	130.857	7528.	40976.	48504.
115.	1.603	1.004	19.87	-18.485	-20284.	19.00	25.719	104.144	129.863	7919.	40723.	48641.
120.	1.883	1.000	19.68	-18.472	-20929.	19.07	26.649	102.249	128.899	8266.	40510.	48776.
125.	2.201	0.996	19.47	-18.459	-21576.	19.15	27.568	100.396	127.964	8612.	40295.	48907.
130.	2.562	0.992	19.25	-18.450	-22225.	19.22	28.474	98.581	127.056	8959.	40076.	49036.
135.	2.969	0.988	19.02	-18.443	-22875.	19.30	29.370	96.803	126.173	9306.	39854.	49161.
140.	3.427	0.984	18.76	-18.438	-23527.	19.38	30.254	95.060	125.315	9653.	39629.	49282.
145.	3.941	0.980	18.48	-18.432	-24181.	19.46	31.129	93.350	124.479	10001.	39400.	49401.
150.	4.514	0.976	18.19	-18.427	-24837.	19.55	31.993	91.672	123.665	10348.	39167.	49515.
155.	5.153	0.972	17.87	-18.422	-25494.	19.64	32.847	90.023	122.870	10696.	38930.	49625.
160.	5.862	0.967	17.52	-18.417	-26153.	19.73	33.692	88.403	122.095	11044.	38688.	49732.
165.	6.646	0.963	17.15	-18.412	-26814.	19.82	34.528	86.809	121.337	11393.	38441.	49834.
170.	7.512	0.958	16.76	-18.407	-27477.	19.91	35.356	85.240	120.596	11742.	38189.	49931.
175.	8.464	0.953	16.33	-18.402	-28142.	20.01	36.176	83.694	119.870	12092.	37932.	50024.
180.	9.509	0.949	15.87	-18.397	-28809.	20.11	36.989	82.170	119.159	12443.	37669.	50112.
185.	10.654	0.944	15.38	-18.392	-29478.	20.22	37.794	80.667	118.461	12795.	37400.	50195.
190.	11.904	0.939	14.85	-18.387	-30149.	20.32	38.592	79.183	117.775	13148.	37125.	50273.
195.	13.266	0.934	14.29	-18.382	-30821.	20.43	39.384	77.717	117.101	13502.	36843.	50345.
200.	14.746	0.929	13.68	-18.377	-31494.	20.55	40.171	76.267	116.438	13856.	36553.	50411.
205.	16.353	0.923	13.02	-18.372	-32169.	20.66	40.952	74.832	115.785	14216.	36257.	50472.
210.	18.092	0.918	12.32	-18.367	-32846.	20.78	41.728	73.411	115.140	14575.	35952.	50527.
215.	19.971	0.913	11.56	-18.362	-33524.	20.91	42.500	72.002	114.503	14936.	35638.	50575.
220.	21.998	0.907	10.75	-18.357	-34204.	21.03	43.269	70.604	113.873	15300.	35316.	50616.
225.	24.180	0.901	9.87	-18.352	-34885.	21.17	44.034	69.215	113.249	15667.	34984.	50651.
230.	26.525	0.896	8.92	-18.347	-35567.	21.30	44.797	67.834	112.631	16036.	34642.	50678.
235.	29.041	0.890	7.90	-18.342	-36250.	21.44	45.559	66.459	112.017	16409.	34289.	50697.
240.	31.736	0.884	6.80	-18.337	-36934.	21.59	46.319	65.088	111.407	16785.	33924.	50709.
245.	34.620	0.878	5.61	-18.332	-37619.	21.74	47.079	63.720	110.799	17166.	33547.	50712.
250.	37.699	0.871	4.32	-18.327	-38305.	21.89	47.840	62.353	110.193	17551.	33156.	50707.
255.	40.983	0.865	2.92	-18.322	-38992.	22.06	48.604	60.985	109.588	17942.	32751.	50693.
260.	44.481	0.858	1.40	-18.317	-39680.	22.22	49.370	59.613	108.983	18338.	32330.	50668.
265.	48.203	0.852	-0.25	-18.312	-40369.	22.40	50.141	58.235	108.376	18742.	31893.	50634.
270.	52.157	0.845	-2.05	-18.307	-41059.	22.58	50.918	56.850	107.768	19153.	31437.	50590.
275.	56.354	0.838	-4.01	-18.302	-41750.	22.77	51.703	55.453	107.156	19572.	30961.	50534.
280.	60.803	0.831	-6.16	-18.297	-42442.	22.97	52.498	54.043	106.540	20002.	30464.	50466.
285.	65.515	0.823	-8.52	-18.292	-43135.	23.18	53.305	52.614	105.920	20444.	29943.	50387.
290.	70.500	0.816	-11.11	-18.287	-43829.	23.39	54.129	51.164	105.293	20899.	29395.	50294.
295.	75.770	0.808	-13.97	-18.282	-44524.	23.62	54.971	49.688	104.659	21369.	28819.	50188.
300.	81.335	0.800	-17.14	-18.277	-45220.	23.86	55.836	48.180	104.016	21858.	28210.	50068.
305.	(87.208)	0.791	-20.67	-18.272	-45917.	24.12	(56.731)	(46.634)	(103.365)	(22368.)	(27565.)	(49933.)
310.	(93.401)	0.782	-24.60	-18.267	-46615.	24.39	(57.660)	(45.044)	(102.703)	(22904.)	(26878.)	(49783.)
315.	(99.926)	0.773	-29.01	-18.262	-47314.	24.68	(58.632)	(43.399)	(102.031)	(23471.)	(26145.)	(49616.)
320.	(106.797)	0.764	-33.99	-18.257	-48014.	24.99	(59.657)	(41.689)	(101.346)	(24074.)	(25358.)	(49433.)
325.	(114.028)	0.754	-39.64	-18.252	-48715.	25.32	(60.747)	(39.900)	(100.647)	(24723.)	(24509.)	(49232.)

Table 6. NaCl concentration: 1.9012 mol/kg H ₂ O 10.00 wt percent 3.312 mol percent												
t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)		(J mol ⁻¹)		(J mol ⁻¹)	
80.	0.442	1.041	21.20	-22.599	-15732.	18.59	18.400	119.298	137.699	5279.	42354.	47633.
85.	0.540.	1.038	21.12	-22.468	-16330.	18.64	19.421	117.060	136.481	5621.	42163.	47784.
90.	0.655	1.035	21.03	-22.330	-16925.	18.70	20.430	114.876	135.306	5964.	41969.	47933.
95.	0.790	1.032	20.93	-22.189	-17518.	18.76	21.429	112.743	134.172	6308.	41772.	48080.
100.	0.947	1.029	20.82	-22.049	-18111.	18.82	22.418	110.658	133.076	6654.	41572.	48225.
105.	1.129	1.025	20.71	-21.910	-18705.	18.88	23.391	108.626	132.017	6998.	41371.	48368.
110.	1.338	1.022	20.58	-21.775	-19299.	18.94	24.352	106.640	130.992	7342.	41166.	48509.
115.	1.579	1.018	20.44	-17.340	-18259.	19.01	25.443	104.555	129.998	7742.	40905.	48646.
120.	1.855	1.014	20.28	-17.704	-19048.	19.08	26.365	102.671	129.036	8061.	40701.	48782.
125.	2.168	1.011	20.11	-18.116	-19859.	19.15	27.274	100.828	128.102	8419.	40494.	48914.
130.	2.524	1.007	19.93	-18.578	-20692.	19.23	28.171	99.024	127.195	8758.	40285.	49043.
135.	2.925	1.003	19.73	-19.093	-21550.	19.30	29.057	97.258	126.314	9097.	40072.	49169.
140.	3.376	0.999	19.52	-19.661	-22432.	19.38	29.931	95.527	125.458	9435.	39857.	49292.
145.	3.862	0.995	19.29	-20.283	-23341.	19.46	30.794	93.829	124.624	9773.	39637.	49411.
150.	4.447	0.990	19.03	-20.960	-24276.	19.54	31.647	92.164	123.811	10112.	39414.	49526.
155.	5.076	0.985	18.76	-21.690	-25238.	19.63	32.490	90.529	123.019	10450.	39188.	49638.
160.	5.774	0.982	18.47	-22.474	-26228.	19.72	33.324	88.922	122.246	10789.	38957.	49745.
165.	6.547	0.977	18.15	-23.310	-27245.	19.80	34.148	87.342	121.490	11128.	38721.	49849.
170.	7.399	0.973	17.80	-24.194	-28288.	19.90	34.963	85.788	120.751	11467.	38481.	49948.
175.	8.337	0.968	17.43	-25.125	-29357.	19.99	35.771	84.258	120.028	11807.	38235.	50042.
180.	9.367	0.963	17.04	-26.100	-30451.	20.09	36.570	82.750	119.320	12147.	37984.	50132.
185.	10.494	0.959	16.60	-27.113	-31569.	20.19	37.362	81.263	118.625	12489.	37728.	50216.
190.	11.725	0.954	16.14	-28.160	-32708.	20.29	38.146	79.796	117.942	12831.	37465.	50296.
195.	13.066	0.949	15.64	-29.235	-33866.	20.40	38.925	78.347	117.272	13174.	37196.	50370.
200.	14.524	0.944	15.10	-30.331	-35041.	20.50	39.697	76.915	116.612	13519.	36921.	50439.
205.	16.106	0.939	14.52	-31.441	-36229.	20.62	40.464	75.498	115.952	13865.	36638.	50502.
210.	17.819	0.934	13.90	-32.554	-37425.	20.73	41.226	74.095	115.322	14213.	36347.	50560.
215.	19.670	0.928	13.22	-33.662	-38625.	20.85	41.984	72.705	114.689	14563.	36048.	50610.
220.	21.665	0.923	12.49	-34.752	-39823.	20.97	42.738	71.326	114.064	14915.	35740.	50655.
225.	23.814	0.918	11.71	-35.810	-41013.	21.09	43.490	69.955	113.445	15270.	35423.	50693.
230.	26.123	0.912	10.86	-36.820	-42185.	21.22	44.239	68.593	112.832	15627.	35096.	50723.
235.	28.601	0.906	9.94	-37.765	-43331.	21.36	44.987	67.237	112.224	15989.	34758.	50747.
240.	31.254	0.901	8.95	-38.625	-44440.	21.49	45.735	65.885	111.620	16354.	34408.	50762.
245.	34.093	0.895	7.87	-39.375	-45498.	21.63	46.483	64.535	111.019	16724.	34046.	50770.
250.	37.124	0.889	6.71	-39.988	-46491.	21.78	47.234	63.186	110.419	17099.	33671.	50769.
255.	40.357	0.882	5.44	-40.432	-47400.	21.93	47.987	61.835	109.822	17479.	33281.	50760.
260.	43.801	0.876	4.07	-40.671	-48205.	22.09	48.745	60.479	109.224	17867.	32875.	50741.
265.	47.464	0.870	2.57	-40.661	-48881.	22.25	49.509	59.117	108.627	18262.	32452.	50713.
270.	51.356	0.863	0.94	-40.352	-49398.	22.42	50.282	57.745	108.027	18665.	32009.	50675.
275.	55.487	0.857	-0.84	-39.685	-49721.	22.59	51.065	56.360	107.426	19079.	31546.	50626.
280.	59.845	0.850	-2.79	-38.589	-49808.	22.78	51.862	54.959	106.821	19505.	31061.	50566.
285.	64.502	0.843	-4.93	-36.981	-49609.	22.97	52.675	53.536	106.211	19944.	30550.	50494.
290.	69.407	0.835	-7.29	-34.760	-49063.	23.17	53.508	52.089	105.597	20400.	30010.	50410.
295.	74.592	0.828	-9.89	-31.804	-48096.	23.37	54.365	50.611	104.976	20874.	29440.	50313.
300.	80.067	0.820	-12.76	-27.968	-46616.	23.59	55.253	49.095	104.348	21370.	28834.	50203.
305.	(85.844)	0.812	-15.96	(-23.071)	(-44512.)	23.82	(56.178)	(47.535)	(103.712)	(21892.)	(28187.)	(50079.)
310.	(91.935)	0.804	-19.53	(-16.891)	(-41647.)	24.06	(57.147)	(45.920)	(103.067)	(22446.)	(27495.)	(49941.)
315.	(98.352)	0.796	-23.52	(-9.151)	(-37845.)	24.32	(58.171)	(44.241)	(102.412)	(23038.)	(26749.)	(49787.)
320.	(105.108)	0.787	-28.01	(0.494)	(-32887.)	24.60	(59.263)	(42.483)	(101.746)	(23675.)	(25942.)	(49617.)
325.	(112.218)	0.778	-33.10	(12.485)	(-26494.)	24.89	(60.438)	(40.630)	(101.068)	(24369.)	(25063.)	(49431.)

Table 7. α -C1 concentration: 2.0000 mol/kg H_2O 10.47 wt percent 3.478 mol percent

t	p	d^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	V	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.441	1.045	21.28	-23.439	-15700.	18.59	18.328	119.403	137.731	5243.	42390.	47634.
85.	0.538	1.042	21.21	-23.286	-16289.	18.65	19.348	117.166	136.514	5584.	42201.	47785.
90.	0.653	1.038	21.13	-23.124	-16876.	18.70	20.356	114.983	135.339	5925.	42009.	47934.
95.	0.787	1.035	21.03	-22.959	-17461.	18.76	21.354	112.852	134.205	6268.	41813.	48081.
100.	0.943	1.032	20.93	-22.794	-18045.	18.82	22.342	110.768	133.110	6612.	41615.	48226.
105.	1.124	1.029	20.82	-22.629	-18629.	18.88	23.313	108.738	132.051	6954.	41415.	48369.
110.	1.333	1.025	20.70	-22.466	-19213.	18.95	24.273	106.752	131.025	7298.	41212.	48510.
115.	1.573	1.021	20.57	-22.299	-19833.	19.01	25.373	104.659	130.033	7699.	40949.	48648.
120.	1.848	1.018	20.42	-22.127	-20494.	19.08	26.293	102.777	129.070	8036.	40747.	48783.
125.	2.160	1.014	20.26	-21.962	-21196.	19.15	27.200	100.937	128.137	8373.	40542.	48915.
130.	2.514	1.010	20.09	-21.792	-21941.	19.23	28.095	99.135	127.230	8710.	40335.	49045.
135.	2.914	1.006	19.90	-21.619	-22729.	19.30	28.978	97.372	126.350	9046.	40125.	49171.
140.	3.363	1.002	19.69	-21.443	-23563.	19.38	29.850	95.643	125.493	9383.	39911.	49294.
145.	3.867	0.998	19.47	-21.266	-24441.	19.46	30.711	93.949	124.660	9719.	39694.	49413.
150.	4.430	0.994	19.23	-21.088	-25366.	19.54	31.562	92.286	123.848	10055.	39474.	49529.
155.	5.057	0.990	18.97	-20.909	-26338.	19.63	32.402	90.654	123.056	10391.	39249.	49641.
160.	5.752	0.985	18.68	-20.728	-27357.	19.71	33.233	89.050	122.283	10728.	39021.	49749.
165.	6.522	0.981	18.38	-20.546	-28422.	19.80	34.054	87.474	121.528	11064.	38788.	49852.
170.	7.371	0.976	18.05	-20.363	-29533.	19.89	34.867	85.923	120.790	11401.	38550.	49952.
175.	8.306	0.972	17.69	-20.179	-30691.	19.99	35.671	84.397	120.068	11739.	38308.	50046.
180.	9.331	0.967	17.30	-19.994	-31891.	20.08	36.467	82.892	119.360	12077.	38060.	50137.
185.	10.454	0.962	16.89	-19.808	-33136.	20.18	37.256	81.410	118.666	12416.	37806.	50222.
190.	11.681	0.957	16.44	-19.621	-34427.	20.28	38.038	79.946	117.984	12755.	37547.	50302.
195.	13.017	0.953	15.95	-19.434	-35764.	20.39	38.813	78.501	117.314	13096.	37281.	50377.
200.	14.469	0.948	15.43	-19.247	-37147.	20.50	39.582	77.073	116.655	13438.	37008.	50446.
205.	16.045	0.943	14.87	-19.059	-38576.	20.61	40.346	75.661	116.007	13781.	36729.	50510.
210.	17.751	0.937	14.26	-18.870	-40051.	20.72	41.105	74.262	115.367	14126.	36441.	50568.
215.	19.595	0.932	13.60	-18.680	-41572.	20.83	41.859	72.876	114.735	14474.	36146.	50619.
220.	21.583	0.927	12.89	-18.489	-43139.	20.95	42.610	71.501	114.111	14823.	35841.	50664.
225.	23.723	0.921	12.13	-18.297	-44762.	21.08	43.359	70.135	113.494	15175.	35528.	50703.
230.	26.024	0.916	11.30	-18.104	-46441.	21.21	44.105	68.777	112.882	15530.	35204.	50734.
235.	28.491	0.910	10.41	-17.910	-48176.	21.34	44.850	67.425	112.275	15889.	34870.	50759.
240.	31.135	0.905	9.44	-17.715	-49967.	21.47	45.595	66.078	111.673	16252.	34524.	50775.
245.	33.962	0.899	8.39	-17.520	-51814.	21.61	46.341	64.732	111.073	16619.	34165.	50784.
250.	36.982	0.893	7.26	-17.325	-53716.	21.75	47.089	63.387	110.476	16991.	33793.	50785.
255.	40.202	0.887	6.02	-17.130	-55673.	21.90	47.840	62.040	109.880	17370.	33407.	50777.
260.	43.633	0.880	4.68	-16.935	-57686.	22.06	48.596	60.688	109.284	17755.	33004.	50759.
265.	47.281	0.874	3.22	-16.740	-59755.	22.22	49.359	59.329	108.688	18148.	32584.	50732.
270.	51.158	0.868	1.63	-16.545	-61880.	22.38	50.132	57.960	108.091	18550.	32145.	50696.
275.	55.272	0.861	-0.11	-16.350	-64061.	22.55	50.915	56.577	107.492	18963.	31685.	50648.
280.	59.633	0.854	-2.02	-16.155	-66300.	22.73	51.712	55.178	106.890	19388.	31202.	50590.
285.	64.251	0.847	-4.11	-15.960	-68607.	22.92	52.527	53.756	106.283	19827.	30693.	50520.
290.	69.137	0.840	-6.41	-15.765	-70982.	23.11	53.363	52.309	105.672	20283.	30156.	50438.
295.	74.300	0.833	-8.95	-15.570	-73425.	23.32	54.225	50.830	105.054	20758.	29586.	50344.
300.	79.753	0.825	-11.76	-15.375	-75936.	23.53	55.118	49.311	104.430	21256.	28980.	50236.
305.	(85.506)	0.818	-14.88	(-15.180)	(-78513.)	23.75	(56.051)	(47.747)	(103.797)	(21782.)	(28333.)	(50115.)
310.	(91.572)	0.810	-18.36	(-14.985)	(-81156.)	23.99	(57.031)	(46.126)	(103.156)	(22341.)	(27639.)	(49979.)
315.	(97.963)	0.801	-22.26	(-14.790)	(-83875.)	24.24	(58.068)	(44.437)	(102.506)	(22939.)	(26890.)	(49829.)
320.	(104.691)	0.793	-26.64	(-14.595)	(-86660.)	24.51	(59.177)	(42.667)	(101.844)	(23585.)	(26077.)	(49662.)
325.	(111.771)	0.783	-31.59	(-14.400)	(-89511.)	24.79	(60.375)	(40.796)	(101.171)	(24291.)	(25189.)	(49480.)

Table 8. NaCl concentration: 2.5000 mol/kg H_2O							12.75 wt percent			4.310 mol percent		
t	p	d^L	V^L	S^L	H^L	V	S^L	ΔS	S^G	H^L	ΔH	H^G
($^{\circ}\text{C}$)	(bars)	(g cm^{-3})	($\text{cm}^3 \text{mol}^{-1}$)	($\text{J mol}^{-1} \text{K}^{-1}$)	(J mol^{-1})	($\text{cm}^3 \text{mol}^{-1}$)	(J $\text{mol}^{-1} \text{K}^{-1}$)			(J mol^{-1})		
80.	0.432	1.061	21.68	-27.104	-15496.	18.62	17.948	119.952	137.901	5066.	42571.	47636.
85.	0.528	1.058	21.63	-26.844	-16049.	18.67	18.962	117.722	136.684	5399.	42389.	47788.
90.	0.640	1.055	21.58	-26.573	-16596.	18.72	19.965	115.545	135.510	5733.	42205.	47937.
95.	0.771	1.052	21.52	-26.296	-17140.	18.78	20.958	113.419	134.377	6068.	42017.	48085.
100.	0.925	1.049	21.45	-26.014	-17682.	18.84	21.941	111.341	133.282	6405.	41826.	48231.
105.	1.102	1.045	21.37	-25.729	-18221.	18.90	22.909	109.316	132.225	6741.	41634.	48374.
110.	1.307	1.042	21.28	-25.441	-18758.	18.97	23.865	107.336	131.201	7077.	41438.	48516.
115.	1.543	1.038	21.19	-25.144	-19304.	19.03	25.012	105.197	130.209	7491.	41163.	48654.
120.	1.812	1.035	21.08	-24.847	-19847.	19.10	25.922	103.326	129.248	7819.	40971.	48790.
125.	2.118	1.031	20.96	-24.576	-20389.	19.17	26.819	101.497	128.316	8147.	40777.	48924.
130.	2.465	1.027	20.82	-24.311	-20933.	19.24	27.704	99.707	127.411	8474.	40580.	49054.
135.	2.857	1.023	20.68	-24.046	-21478.	19.31	28.577	97.956	126.533	8801.	40381.	49181.
140.	3.298	1.019	20.52	-23.782	-22024.	19.39	29.438	96.240	125.678	9127.	40178.	49305.
145.	3.792	1.015	20.34	-23.518	-22571.	19.46	30.288	94.559	124.847	9453.	39973.	49426.
150.	4.344	1.011	20.15	-23.255	-23118.	19.54	31.126	92.911	124.037	9779.	39764.	49543.
155.	4.959	1.007	19.93	-22.993	-23665.	19.63	31.955	91.293	123.248	10104.	39552.	49656.
160.	5.641	1.002	19.70	-22.730	-24212.	19.71	32.773	89.705	122.478	10430.	39336.	49766.
165.	6.396	0.998	19.45	-22.465	-24759.	19.79	33.581	88.144	121.725	10755.	39116.	49871.
170.	7.228	0.994	19.18	-22.205	-25306.	19.88	34.380	86.610	120.990	11081.	38891.	49972.
175.	8.145	0.989	18.88	-21.945	-25853.	19.97	35.171	85.100	120.271	11407.	38662.	50069.
180.	9.151	0.985	18.56	-21.685	-26400.	20.06	35.953	83.613	119.566	11733.	38429.	50161.
185.	10.252	0.980	18.21	-21.425	-26947.	20.16	36.727	82.148	118.876	12059.	38189.	50249.
190.	11.454	0.975	17.83	-21.165	-27494.	20.26	37.494	80.704	118.198	12387.	37945.	50331.
195.	12.765	0.971	17.42	-20.905	-28041.	20.36	38.255	79.278	117.532	12715.	37694.	50409.
200.	14.189	0.966	16.97	-20.645	-28588.	20.46	39.009	77.869	116.878	13044.	37437.	50481.
205.	15.734	0.961	16.49	-20.385	-29135.	20.56	39.757	76.476	116.234	13375.	37173.	50548.
210.	17.407	0.956	15.97	-20.125	-29682.	20.67	40.501	75.098	115.599	13707.	36902.	50609.
215.	19.214	0.951	15.40	-19.865	-30229.	20.78	41.241	73.732	114.973	14041.	36623.	50664.
220.	21.164	0.946	14.79	-19.605	-30776.	20.89	41.977	72.377	114.354	14378.	36335.	50713.
225.	23.262	0.940	14.12	-19.345	-31323.	21.01	42.711	71.032	113.743	14717.	36038.	50755.
230.	25.517	0.935	13.40	-19.085	-31870.	21.13	43.443	69.694	113.137	15059.	35732.	50791.
235.	27.936	0.930	12.62	-18.825	-32417.	21.25	44.175	68.363	112.537	15406.	35414.	50820.
240.	30.528	0.924	11.77	-18.565	-32964.	21.38	44.907	67.035	111.942	15756.	35085.	50841.
245.	33.299	0.919	10.85	-18.305	-33511.	21.51	45.642	65.708	111.350	16111.	34744.	50856.
250.	36.259	0.913	9.85	-18.045	-34058.	21.64	46.379	64.382	110.761	16473.	34389.	50862.
255.	39.415	0.907	8.76	-17.785	-34605.	21.78	47.122	63.052	110.174	16841.	34019.	50860.
260.	42.777	0.901	7.58	-17.525	-35152.	21.92	47.872	61.716	109.588	17217.	33632.	50849.
265.	46.353	0.895	6.28	-17.265	-35699.	22.07	48.631	60.372	109.003	17602.	33228.	50829.
270.	50.152	0.889	4.87	-17.005	-36246.	22.22	49.402	59.015	108.417	17997.	32803.	50800.
275.	54.183	0.883	3.33	-16.745	-36793.	22.37	50.187	57.642	107.829	18405.	32356.	50761.
280.	58.456	0.877	1.64	-16.485	-37340.	22.54	50.991	56.248	107.240	18827.	31884.	50712.
285.	62.980	0.870	-0.22	-16.225	-37887.	22.70	51.817	54.829	106.647	19267.	31385.	50651.
290.	67.766	0.864	-2.27	-15.965	-38434.	22.88	52.671	53.379	106.050	19726.	30854.	50580.
295.	72.823	0.857	-4.52	-15.705	-38981.	23.06	53.558	51.891	105.448	20209.	30288.	50497.
300.	78.163	0.850	-7.02	-15.445	-39528.	23.25	54.485	50.356	104.841	20720.	29681.	50401.
305.	(83.797)	0.843	-9.78	(-15.185)	(-40075.)	23.44	(55.461)	(48.765)	(104.226)	(21264.)	(29028.)	(50293.)
310.	(89.736)	0.835	-12.86	(-14.925)	(-40622.)	23.65	(56.496)	(47.107)	(103.605)	(21849.)	(28321.)	(50171.)
315.	(95.992)	0.828	-16.30	(-14.665)	(-41169.)	23.87	(57.608)	(45.367)	(102.975)	(22483.)	(27552.)	(50035.)
320.	(102.575)	0.820	-20.16	(-14.405)	(-41716.)	24.09	(58.809)	(43.527)	(102.336)	(23177.)	(26708.)	(49885.)
325.	(109.505)	0.812	-24.50	(-14.145)	(-42263.)	24.34	(60.122)	(41.565)	(101.687)	(23944.)	(25775.)	(49719.)

Table 9.		a C1 concentration: 3.0000 mol/kg H ₂ O					14.92 wt percent			5.127 mol percent		
t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}_2^L$	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.423	1.077	22.04	-29.998	-15227.	18.65	17.544	120.534	138.078	4892.	42746.	47639.
85.	0.517	1.074	22.02	-29.644	-15747.	18.70	18.555	118.308	136.862	5219.	42572.	47791.
90.	0.627	1.071	21.99	-29.277	-16260.	18.75	19.554	116.135	135.689	5546.	42395.	47941.
95.	0.756	1.068	21.95	-28.900	-16769.	18.81	20.543	114.013	134.557	5875.	42214.	48089.
100.	0.906	1.065	21.91	-28.516	-17273.	18.87	21.523	111.940	133.463	6205.	42030.	48235.
105.	1.080	1.061	21.86	-28.125	-17773.	18.93	22.488	109.918	132.406	6535.	41845.	48380.
110.	1.281	1.058	21.81	-27.729	-18269.	18.99	23.441	107.941	131.383	6865.	41657.	48521.
115.	1.512	1.054	21.74	-27.350	-18869.	19.05	24.638	105.754	130.392	7292.	41369.	48661.
120.	1.775	1.051	21.67	-22.505	-17578.	19.12	25.540	103.893	129.433	7612.	41186.	48798.
125.	2.076	1.047	21.58	-22.704	-18305.	19.19	26.429	102.073	128.502	7931.	41001.	48932.
130.	2.416	1.043	21.49	-22.947	-19053.	19.25	27.305	100.294	127.599	8249.	40814.	49063.
135.	2.800	1.039	21.38	-23.238	-19821.	19.33	28.169	98.553	126.722	8567.	40625.	49192.
140.	3.232	1.035	21.25	-23.577	-20611.	19.40	29.020	96.849	125.869	8884.	40433.	49317.
145.	3.716	1.031	21.13	-23.965	-21423.	19.48	29.860	95.180	125.040	9201.	40238.	49439.
150.	4.257	1.027	20.98	-24.401	-22259.	19.55	30.689	93.543	124.232	9517.	40040.	49557.
155.	4.860	1.023	20.81	-24.886	-23119.	19.63	31.507	91.939	123.445	9832.	39839.	49672.
160.	5.528	1.019	20.63	-25.418	-24001.	19.71	32.314	90.364	122.677	10148.	39635.	49783.
165.	6.268	1.015	20.43	-25.994	-24907.	19.80	33.111	88.817	121.928	10463.	39427.	49890.
170.	7.084	1.010	20.21	-26.614	-25835.	19.88	33.898	87.297	121.195	10778.	39215.	49993.
175.	7.982	1.006	19.96	-27.273	-26785.	19.97	34.677	85.802	120.479	11093.	38999.	50092.
180.	8.968	1.002	19.70	-27.967	-27755.	20.06	35.446	84.331	119.778	11408.	38778.	50186.
185.	10.048	0.997	19.41	-28.692	-28743.	20.15	36.208	82.883	119.091	11723.	38553.	50276.
190.	11.226	0.992	19.09	-29.442	-29748.	20.24	36.962	81.454	118.417	12039.	38322.	50361.
195.	12.510	0.988	18.75	-30.212	-30766.	20.34	37.710	80.045	117.755	12356.	38085.	50441.
200.	13.907	0.983	18.37	-30.992	-31794.	20.43	38.451	78.654	117.105	12673.	37843.	50516.
205.	15.421	0.978	17.96	-31.775	-32828.	20.53	39.186	77.279	116.465	12992.	37593.	50585.
210.	17.061	0.973	17.51	-32.550	-33864.	20.64	39.917	75.918	115.835	13312.	37337.	50650.
215.	18.832	0.968	17.03	-33.306	-34896.	20.74	40.644	74.570	115.214	13635.	37073.	50708.
220.	20.742	0.964	16.50	-34.030	-35917.	20.85	41.367	73.233	114.600	13960.	36801.	50761.
225.	22.799	0.958	15.92	-34.708	-36920.	20.96	42.089	71.906	113.995	14287.	36520.	50807.
230.	25.009	0.953	15.30	-35.320	-37895.	21.07	42.809	70.586	113.395	14618.	36229.	50847.
235.	27.380	0.948	14.62	-35.849	-38833.	21.19	43.530	69.272	112.802	14953.	35927.	50880.
240.	29.919	0.943	13.88	-36.271	-39720.	21.30	44.252	67.961	112.213	15292.	35614.	50907.
245.	32.635	0.938	13.07	-36.560	-40543.	21.43	44.978	66.651	111.629	15638.	35288.	50926.
250.	35.535	0.932	12.19	-36.686	-41285.	21.55	45.708	65.340	111.048	15989.	34948.	50938.
255.	38.628	0.927	11.24	-36.614	-41925.	21.68	46.445	64.024	110.469	16348.	34593.	50941.
260.	41.922	0.921	10.19	-36.304	-42441.	21.81	47.191	62.702	109.893	16716.	34221.	50937.
265.	45.425	0.915	9.05	-35.707	-42805.	21.94	47.949	61.368	109.317	17095.	33829.	50924.
270.	49.147	0.910	7.80	-34.770	-42984.	22.08	48.722	60.020	108.741	17485.	33417.	50902.
275.	53.096	0.904	6.44	-33.425	-42939.	22.23	49.513	58.652	108.165	17890.	32981.	50871.
280.	57.281	0.898	4.94	-31.596	-42624.	22.37	50.326	57.261	107.587	18312.	32518.	50830.
285.	61.712	0.892	3.29	-29.190	-41984.	22.52	51.168	55.840	107.007	18754.	32026.	50779.
290.	66.399	0.886	1.48	-26.097	-40950.	22.68	52.042	54.382	106.424	19219.	31499.	50718.
295.	71.352	0.879	-0.52	-22.182	-39441.	22.84	52.958	52.880	105.837	19712.	30933.	50645.
300.	76.581	0.873	-2.73	-17.284	-37356.	23.01	53.923	51.323	105.246	20238.	30323.	50561.
305.	(82.096)	0.867	-5.18	(-11.204)	(-34571.)	23.18	(54.948)	(49.701)	(104.649)	(20804.)	(29660.)	(50464.)
310.	(87.910)	0.860	-7.89	(-3.695)	(-30934.)	23.36	(56.047)	(47.999)	(104.045)	(21419.)	(28937.)	(50356.)
315.	(94.033)	0.853	-10.92	(5.547)	(-26251.)	23.55	(57.235)	(46.200)	(103.435)	(22092.)	(28142.)	(50234.)
320.	(100.478)	0.846	-14.30	(16.910)	(-20277.)	23.74	(58.533)	(44.283)	(102.816)	(22837.)	(27262.)	(50099.)
325.	(107.258)	0.839	-18.09	(30.883)	(-12701.)	23.95	(59.968)	(42.221)	(102.189)	(23670.)	(26280.)	(49950.)

Table 1		NaCl concentration:					3.0195 mol/kg H ₂ O		15.00 wt percent		5.159 mol percent		
t	p	d ^L	$\bar{V}_a^L$	$\bar{S}_a^L$	$\bar{H}_a^L$	$\bar{C}_V^L$	S ^L	ΔS	S ^G	H ^L	Δ	H ^G	
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)			
80.	0.423	1.078	22.05	-30.098	-15216.	18.65	17.528	120.557	138.085	4886.	42753.	47639.	
85.	0.516	1.075	22.03	-29.741	-15734.	18.70	18.538	118.331	136.869	5212.	42579.	47791.	
90.	0.626	1.072	22.00	-29.370	-16246.	18.75	19.538	116.159	135.696	5539.	42402.	47941.	
95.	0.755	1.069	21.97	-28.990	-16753.	18.81	20.527	114.037	134.564	5868.	42222.	48089.	
100.	0.905	1.065	21.93	-28.602	-17256.	18.87	21.506	111.964	133.470	6198.	42038.	48236.	
105.	1.079	1.062	21.88	-28.208	-17754.	18.93	22.472	109.942	132.413	6527.	41853.	48380.	
110.	1.280	1.059	21.83	-27.807	-18249.	18.99	23.425	107.966	131.390	6857.	41665.	48522.	
115.	1.510	1.055	21.76	-22.415	-16844.	19.05	24.624	105.776	130.400	7285.	41376.	48661.	
120.	1.774	1.051	21.69	-22.567	-17552.	19.12	25.525	103.915	129.440	7604.	41194.	48798.	
125.	2.074	1.048	21.61	-22.761	-18278.	19.19	26.414	102.096	128.510	7923.	41010.	48932.	
130.	2.414	1.044	21.51	-23.002	-19024.	19.26	27.289	100.317	127.607	8241.	40823.	49064.	
135.	2.798	1.040	21.41	-23.289	-19790.	19.33	28.153	98.577	126.730	8558.	40634.	49192.	
140.	3.229	1.036	21.29	-23.624	-20579.	19.40	29.004	96.873	125.877	8875.	40442.	49317.	
145.	3.713	1.032	21.15	-24.008	-21390.	19.48	29.844	95.204	125.048	9191.	40248.	49439.	
150.	4.254	1.028	21.01	-24.441	-22224.	19.55	30.672	93.568	124.240	9507.	40051.	49558.	
155.	4.856	1.024	20.84	-24.922	-23082.	19.63	31.489	91.964	123.453	9822.	39850.	49672.	
160.	5.524	1.020	20.66	-25.450	-23963.	19.71	32.296	90.390	122.685	10137.	39647.	49783.	
165.	6.263	1.015	20.46	-26.023	-24867.	19.80	33.092	88.843	121.936	10452.	39439.	49891.	
170.	7.079	1.011	20.24	-26.638	-25794.	19.88	33.879	87.324	121.204	10766.	39228.	49994.	
175.	7.976	1.007	20.00	-27.293	-26742.	19.97	34.657	85.830	120.487	11081.	39012.	50092.	
180.	8.961	1.002	19.74	-27.983	-27710.	20.06	35.427	84.359	119.786	11395.	38792.	50187.	
185.	10.040	0.998	19.45	-28.704	-28696.	20.15	36.188	82.911	119.099	11710.	38566.	50277.	
190.	11.217	0.993	19.14	-29.450	-29698.	20.24	36.942	81.484	118.425	12026.	38336.	50362.	
195.	12.500	0.988	18.80	-30.214	-30714.	20.34	37.689	80.075	117.764	12342.	38100.	50442.	
200.	13.895	0.984	18.42	-30.990	-31740.	20.43	38.429	78.684	117.114	12659.	37858.	50517.	
205.	15.409	0.979	18.01	-31.768	-32772.	20.53	39.164	77.310	116.474	12978.	37609.	50587.	
210.	17.047	0.974	17.57	-32.538	-33806.	20.64	39.894	75.950	115.844	13297.	37354.	50651.	
215.	18.817	0.969	17.09	-33.289	-34835.	20.74	40.621	74.602	115.223	13619.	37090.	50710.	
220.	20.726	0.964	16.56	-34.008	-35854.	20.85	41.344	73.266	114.610	13944.	36819.	50762.	
225.	22.781	0.959	15.99	-34.679	-36854.	20.96	42.065	71.940	114.005	14271.	36538.	50809.	
230.	24.989	0.954	15.37	-35.286	-37826.	21.07	42.785	70.621	113.406	14601.	36248.	50849.	
235.	27.358	0.949	14.69	-35.809	-38761.	21.18	43.505	69.307	112.812	14936.	35947.	50883.	
240.	29.895	0.944	13.96	-36.224	-39645.	21.30	44.227	67.997	112.224	15275.	35634.	50909.	
245.	32.609	0.938	13.15	-36.506	-40465.	21.42	44.952	66.687	111.640	15620.	35309.	50929.	
250.	35.507	0.933	12.28	-36.625	-41202.	21.55	45.682	65.377	111.059	15971.	34970.	50940.	
255.	38.597	0.927	11.33	-36.546	-41839.	21.67	46.419	64.062	110.481	16330.	34615.	50944.	
260.	41.889	0.922	10.29	-36.227	-42350.	21.81	47.165	62.739	109.904	16697.	34243.	50940.	
265.	45.389	0.916	9.15	-35.623	-42710.	21.94	47.923	61.406	109.329	17076.	33852.	50928.	
270.	49.108	0.910	7.91	-34.676	-42884.	22.08	48.696	60.058	108.754	17466.	33440.	50906.	
275.	53.053	0.905	6.55	-33.321	-42834.	22.22	49.487	58.691	108.178	17871.	33004.	50875.	
280.	57.235	0.900	5.06	-31.482	-42513.	22.37	50.301	57.300	107.601	18293.	32542.	50835.	
285.	61.663	0.893	3.42	-29.064	-41866.	22.52	51.143	55.878	107.021	18734.	32050.	50784.	
290.	66.346	0.887	1.62	-25.958	-40825.	22.67	52.019	54.420	106.439	19200.	31523.	50723.	
295.	71.295	0.880	-0.37	-22.030	-39308.	22.83	52.936	52.917	105.853	19693.	30957.	50651.	
300.	76.519	0.874	-2.57	-17.117	-37214.	23.00	53.902	51.359	105.261	20220.	30347.	50567.	
305.	(82.030)	0.868	-5.00	(-11.019)	(-34420.)	23.17	(54.929)	(49.736)	(104.665)	(20787.)	(29684.)	(50471.)	
310.	(87.839)	0.861	-7.71	(-3.492)	(-30772.)	23.35	(56.030)	(48.032)	(104.062)	(21403.)	(28960.)	(50363.)	
315.	(93.957)	0.854	-10.72	(5.772)	(-26076.)	23.53	(57.222)	(46.231)	(103.452)	(22078.)	(28164.)	(50242.)	
320.	(100.397)	0.847	-14.08	(17.159)	(-20088.)	23.73	(58.524)	(44.311)	(102.835)	(22824.)	(27283.)	(50107.)	
325.	(107.171)	0.840	-17.85	(31.161)	(-12495.)	23.93	(59.964)	(42.245)	(102.209)	(23660.)	(26298.)	(49959.)	

Table 11.

NaCl concentration:

3.5000 mol/kg H₂O

16.98 wt percent

5.931 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	s^L	ΔS	s^G	h^L	ΔH	h^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)		(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)	
80.	0.414	1.093	22.37	-32.307	-14894.	18.68	17.122	121.144	138.265	4724.	42918.	47642.
85.	0.506	1.090	22.37	-31.868	-15384.	18.73	18.129	118.920	137.049	5044.	42750.	47794.
90.	0.613	1.087	22.36	-31.414	-15866.	18.78	19.126	116.751	135.877	5365.	42580.	47945.
95.	0.740	1.084	22.35	-30.948	-16343.	18.84	20.113	114.632	134.745	5688.	42406.	48093.
100.	0.887	1.080	22.34	-30.473	-16813.	18.89	21.090	112.561	133.651	6012.	42228.	48240.
105.	1.057	1.077	22.32	-29.989	-17278.	18.95	22.054	110.541	132.595	6336.	42049.	48385.
110.	1.254	1.074	22.29	-29.495	-17738.	19.01	23.006	108.567	131.573	6660.	41867.	48527.
115.	1.480	1.070	22.26	-23.792	-18215.	19.08	24.255	106.328	130.583	7102.	41566.	48668.
120.	1.738	1.066	22.21	-23.868	-18893.	19.14	25.150	104.475	129.625	7414.	41392.	48805.
125.	2.032	1.063	22.16	-23.986	-19589.	19.21	26.031	102.664	128.695	7724.	41216.	48940.
130.	2.365	1.059	22.10	-24.147	-20304.	19.28	26.900	100.893	127.793	8034.	41038.	49073.
135.	2.742	1.055	22.03	-24.354	-21039.	19.35	27.756	99.162	126.918	8344.	40858.	49202.
140.	3.165	1.051	21.94	-24.607	-21794.	19.42	28.599	97.468	126.067	8652.	40676.	49328.
145.	3.639	1.047	21.85	-24.908	-22571.	19.49	29.430	95.808	125.239	8960.	40492.	49451.
150.	4.169	1.043	21.74	-25.256	-23370.	19.57	30.250	94.183	124.433	9267.	40304.	49571.
155.	4.759	1.039	21.62	-25.649	-24191.	19.65	31.058	92.590	123.648	9573.	40114.	49687.
160.	5.414	1.035	21.48	-26.088	-25034.	19.72	31.856	91.027	122.883	9879.	39921.	49800.
165.	6.139	1.031	21.32	-26.570	-25899.	19.80	32.643	89.492	122.135	10184.	39724.	49909.
170.	6.939	1.026	21.15	-27.093	-26785.	19.89	33.420	87.985	121.406	10490.	39524.	50014.
175.	7.819	1.022	20.96	-27.653	-27692.	19.97	34.188	86.504	120.692	10794.	39320.	50114.
180.	8.785	1.018	20.74	-28.245	-28616.	20.06	34.947	85.047	119.994	11099.	39111.	50211.
185.	9.842	1.013	20.51	-28.866	-29558.	20.15	35.697	83.612	119.310	11404.	38898.	50303.
190.	10.997	1.009	20.25	-29.510	-30514.	20.24	36.440	82.199	118.639	11709.	38681.	50390.
195.	12.256	1.004	19.97	-30.169	-31481.	20.33	37.176	80.805	117.981	12015.	38457.	50473.
200.	13.623	1.000	19.65	-30.836	-32457.	20.42	37.906	79.429	117.334	12322.	38228.	50550.
205.	15.107	0.995	19.31	-31.502	-33436.	20.52	38.630	78.069	116.699	12630.	37993.	50623.
210.	16.714	0.990	18.93	-32.157	-34415.	20.62	39.349	76.724	116.073	12939.	37751.	50690.
215.	18.450	0.985	18.52	-32.789	-35387.	20.72	40.065	75.392	115.457	13251.	37501.	50752.
220.	20.322	0.981	18.07	-33.384	-36345.	20.82	40.777	74.071	114.849	13565.	37243.	50808.
225.	22.337	0.976	17.58	-33.926	-37282.	20.92	41.489	72.760	114.248	13882.	36976.	50858.
230.	24.502	0.971	17.04	-34.399	-38188.	21.03	42.199	71.455	113.655	14202.	36700.	50902.
235.	26.825	0.966	16.46	-34.782	-39053.	21.14	42.911	70.156	113.067	14527.	36413.	50940.
240.	29.314	0.961	15.81	-35.051	-39863.	21.25	43.625	68.860	112.485	14857.	36114.	50971.
245.	31.975	0.955	15.11	-35.179	-40604.	21.36	44.344	67.564	111.908	15193.	35802.	50995.
250.	34.816	0.950	14.35	-35.136	-41258.	21.48	45.069	66.265	111.334	15536.	35476.	51012.
255.	37.846	0.945	13.51	-34.885	-41805.	21.60	45.802	64.961	110.763	15887.	35134.	51021.
260.	41.073	0.940	12.60	-34.385	-42220.	21.72	46.547	63.648	110.195	16249.	34774.	51023.
265.	44.505	0.934	11.60	-33.586	-42476.	21.85	47.306	62.322	109.629	16622.	34394.	51016.
270.	48.151	0.929	10.50	-32.432	-42539.	21.97	48.083	60.980	109.063	17009.	33992.	51001.
275.	52.019	0.924	9.29	-30.854	-42368.	22.10	48.882	59.615	108.497	17413.	33565.	50978.
280.	56.119	0.918	7.97	-28.774	-41915.	22.24	49.709	58.222	107.930	17836.	33109.	50945.
285.	60.459	0.912	6.52	-26.095	-41223.	22.37	50.568	56.794	107.362	18281.	32621.	50903.
290.	65.049	0.907	4.92	-22.704	-41222.	22.51	51.467	55.325	106.792	18754.	32096.	50850.
295.	69.900	0.901	3.16	-18.463	-41228.	22.66	52.415	53.804	106.219	19259.	31528.	50767.
300.	75.020	0.895	1.22	-13.203	-43937.	22.81	53.421	52.221	105.642	19803.	30911.	50714.
305.	(80.420)	0.889	-0.94	(-6.720)	(-43920.)	22.96	(54.499)	(50.562)	(105.060)	(20393.)	(30236.)	(50629.)
310.	(85.112)	0.883	-3.32	(1.241)	(-47020.)	23.11	(55.663)	(48.811)	(104.474)	(21039.)	(29493.)	(50532.)
315.	(92.106)	0.877	-5.97	(10.996)	(-42036.)	23.28	(56.933)	(46.948)	(103.881)	(21754.)	(28670.)	(50424.)
320.	(98.414)	0.871	-8.92	(22.944)	(-415716.)	23.44	(58.334)	(44.947)	(103.282)	(22553.)	(27750.)	(50303.)
325.	(105.049)	0.864	-12.19	(37.594)	(-47735.)	23.61	(59.896)	(42.779)	(102.675)	(23455.)	(26714.)	(50169.)

Table 12.

C1 concentration:

4.0000 mol/kg H₂O

18.95 wt percent

6.722 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.405	1.108	22.68	-34.140	-14498.	18.71	16.682	121.780	138.462	4558.	43087.	47645.
85.	0.494	1.105	22.70	-33.624	-14960.	18.76	17.687	119.559	137.246	4872.	42925.	47797.
90.	0.600	1.102	22.71	-33.092	-15414.	18.81	18.683	117.391	136.074	5188.	42760.	47948.
95.	0.723	1.099	22.73	-32.546	-15861.	18.87	19.668	115.274	134.942	5505.	42592.	48098.
100.	0.867	1.096	22.74	-31.988	-16302.	18.92	20.644	113.204	133.849	5824.	42421.	48245.
105.	1.034	1.092	22.74	-31.420	-16736.	18.98	21.608	111.184	132.793	6142.	42248.	48390.
110.	1.226	1.089	22.74	-30.840	-17163.	19.04	22.559	109.211	131.771	6461.	42072.	48534.
115.	1.448	1.085	22.73	-24.856	-15533.	19.11	23.862	106.919	130.782	6919.	41756.	48675.
120.	1.700	1.082	22.72	-24.060	-16184.	19.17	24.751	105.072	129.824	7223.	41590.	48813.
125.	1.988	1.078	22.70	-24.905	-16851.	19.23	25.627	103.268	128.895	7526.	41423.	48949.
130.	2.314	1.074	22.67	-24.993	-17537.	19.30	26.489	101.506	127.994	7828.	41254.	49082.
135.	2.682	1.070	22.63	-25.125	-18241.	19.37	27.338	99.782	127.120	8129.	41083.	49213.
140.	3.097	1.066	22.58	-25.303	-18966.	19.44	28.174	98.096	126.270	8430.	40910.	49340.
145.	3.561	1.062	22.52	-25.526	-19711.	19.51	28.998	96.446	125.444	8729.	40735.	49464.
150.	4.080	1.058	22.45	-25.796	-20478.	19.59	29.810	94.830	124.639	9028.	40558.	49585.
155.	4.658	1.054	22.37	-26.110	-21265.	19.66	30.610	93.246	123.856	9325.	40378.	49703.
160.	5.300	1.050	22.27	-26.467	-22074.	19.74	31.399	91.694	123.092	9622.	40195.	49817.
165.	6.009	1.046	22.16	-26.866	-22903.	19.82	32.177	90.170	122.347	9919.	40009.	49928.
170.	6.793	1.042	22.03	-27.304	-23753.	19.90	32.945	88.675	121.620	10214.	39820.	50034.
175.	7.655	1.037	21.88	-27.777	-24621.	19.98	33.704	87.205	120.909	10510.	39627.	50137.
180.	8.601	1.033	21.72	-28.282	-25506.	20.07	34.453	85.760	120.213	10805.	39430.	50235.
185.	9.637	1.029	21.54	-28.812	-26407.	20.15	35.194	84.338	119.532	11100.	39229.	50329.
190.	10.768	1.024	21.33	-29.363	-27321.	20.24	35.927	82.938	118.864	11395.	39023.	50419.
195.	12.001	1.020	21.10	-29.927	-28245.	20.33	36.652	81.557	118.210	11691.	38813.	50504.
200.	13.341	1.015	20.85	-30.497	-29175.	20.42	37.372	80.195	117.567	11988.	38596.	50584.
205.	14.795	1.011	20.57	-31.062	-30107.	20.51	38.086	78.849	116.935	12286.	38374.	50660.
210.	16.369	1.006	20.26	-31.614	-31036.	20.61	38.795	77.518	116.313	12585.	38145.	50730.
215.	18.070	1.001	19.91	-32.138	-31957.	20.70	39.501	76.200	115.701	12886.	37908.	50795.
220.	19.904	0.997	19.54	-32.622	-32862.	20.80	40.204	74.893	115.097	13190.	37664.	50854.
225.	21.879	0.992	19.12	-33.050	-33742.	20.90	40.906	73.595	114.502	13497.	37411.	50908.
230.	24.001	0.987	18.67	-33.403	-34589.	21.00	41.609	72.305	113.913	13808.	37148.	50956.
235.	26.277	0.982	18.17	-33.661	-35391.	21.11	42.313	71.019	113.332	14123.	36874.	50997.
240.	28.715	0.977	17.62	-33.799	-36135.	21.21	43.021	69.735	112.755	14444.	36588.	51033.
245.	31.323	0.972	17.02	-33.791	-36806.	21.32	43.734	68.450	112.184	14772.	36289.	51062.
250.	34.107	0.967	16.35	-33.603	-37385.	21.43	44.456	67.162	111.618	15108.	35976.	51084.
255.	37.076	0.962	15.63	-33.200	-37852.	21.54	45.187	65.867	111.054	15453.	35645.	51098.
260.	40.238	0.957	14.84	-32.538	-38183.	21.65	45.933	64.561	110.494	15809.	35297.	51106.
265.	43.601	0.952	13.96	-31.567	-38347.	21.77	46.695	63.240	109.936	16178.	34927.	51105.
270.	47.173	0.947	13.01	-30.228	-39310.	21.89	47.479	61.900	109.379	16563.	34534.	51097.
275.	50.963	0.942	11.96	-28.452	-38031.	22.01	48.288	60.534	108.822	16967.	34114.	51080.
280.	54.980	0.937	10.80	-26.158	-37460.	22.13	49.130	59.136	108.266	17392.	33663.	51055.
285.	59.232	0.932	9.53	-23.246	-36539.	22.25	50.009	57.700	107.709	17843.	33178.	51021.
290.	63.729	0.926	8.13	-19.600	-35196.	22.38	50.935	56.215	107.150	18325.	32652.	50977.
295.	68.480	0.921	6.59	-15.079	-33344.	22.51	51.918	54.672	106.590	18844.	32080.	50923.
300.	73.495	0.916	4.89	-9.509	-30875.	22.64	52.968	53.058	106.026	19406.	31453.	50860.
305.	(78.785)	0.910	3.01	(-2.681)	(-27660.)	22.77	(54.101)	(51.358)	(105.459)	(20022.)	(30763.)	(50785.)
310.	(84.359)	0.905	0.93	(5.669)	(-23533.)	22.91	(55.334)	(49.553)	(104.887)	(20703.)	(29997.)	(50700.)
315.	(90.229)	0.900	-1.37	(15.865)	(-18290.)	23.05	(56.691)	(47.620)	(104.311)	(21462.)	(29142.)	(50604.)
320.	(96.406)	0.894	-3.90	(28.319)	(-11670.)	23.19	(58.198)	(45.531)	(103.729)	(22317.)	(28179.)	(50495.)
325.	(102.901)	0.888	-6.70	(43.556)	(-3338.)	23.34	(59.892)	(43.249)	(103.140)	(23291.)	(27084.)	(50375.)

Table 13. NaCl concentration: 4.2777 mol/kg H ₂ O							20.00 wt percent			7.155 mol percent		
t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.400	1.116	22.84	-34.981	-14250.	18.73	16.431	122.146	138.576	4467.	43179.	47646.
85.	0.488	1.113	22.87	-34.425	-14698.	18.78	17.436	119.924	137.360	4779.	43020.	47799.
90.	0.592	1.110	22.90	-33.852	-15138.	18.83	18.431	117.757	136.187	5091.	42859.	47950.
95.	0.714	1.107	22.93	-33.265	-15570.	18.89	19.416	115.640	135.055	5405.	42695.	48100.
100.	0.856	1.104	22.95	-32.665	-15995.	18.94	20.391	113.571	133.962	5721.	42527.	48248.
105.	1.021	1.100	22.97	-32.053	-16413.	19.00	21.356	111.550	132.906	6037.	42356.	48393.
110.	1.211	1.097	22.98	-31.429	-16823.	19.06	22.307	109.577	131.884	6353.	42184.	48537.
115.	1.429	1.093	22.99	-25.304	-15139.	19.12	23.641	107.255	130.895	6819.	41859.	48678.
120.	1.679	1.090	22.99	-25.272	-15776.	19.19	24.527	105.411	129.938	7119.	41698.	48817.
125.	1.963	1.086	22.98	-25.280	-16429.	19.25	25.399	103.610	129.009	7419.	41535.	48954.
130.	2.285	1.082	22.97	-25.331	-17100.	19.32	26.258	101.851	128.109	7717.	41371.	49088.
135.	2.649	1.078	22.95	-25.425	-17790.	19.39	27.104	100.131	127.235	8014.	41205.	49219.
140.	3.059	1.075	22.92	-25.565	-18499.	19.46	27.936	98.449	126.386	8310.	41037.	49347.
145.	3.518	1.071	22.88	-25.749	-19228.	19.53	28.756	96.803	125.560	8605.	40867.	49472.
150.	4.031	1.067	22.82	-25.979	-19978.	19.60	29.564	95.192	124.756	8899.	40695.	49593.
155.	4.602	1.062	22.76	-26.253	-20749.	19.68	30.360	93.613	123.974	9192.	40520.	49712.
160.	5.236	1.058	22.69	-26.570	-21540.	19.75	31.145	92.066	123.211	9484.	40343.	49827.
165.	5.937	1.054	22.60	-26.927	-22352.	19.83	31.919	90.548	122.467	9776.	40163.	49938.
170.	6.712	1.050	22.49	-27.323	-23183.	19.91	32.682	89.058	121.740	10066.	39979.	50046.
175.	7.564	1.046	22.37	-27.753	-24032.	19.99	33.436	87.595	121.031	10357.	39792.	50149.
180.	8.499	1.041	22.23	-28.214	-24898.	20.08	34.180	86.156	120.336	10647.	39602.	50249.
185.	9.523	1.037	22.08	-28.700	-25779.	20.16	34.916	84.740	119.656	10937.	39407.	50344.
190.	10.642	1.033	21.90	-29.205	-26672.	20.25	35.644	83.347	118.990	11227.	39208.	50435.
195.	11.860	1.028	21.70	-29.722	-27574.	20.34	36.364	81.973	118.337	11517.	39004.	50521.
200.	13.186	1.024	21.48	-30.244	-28482.	20.42	37.079	80.617	117.696	11809.	38794.	50603.
205.	14.623	1.019	21.23	-30.760	-29391.	20.52	37.788	79.279	117.066	12101.	38579.	50680.
210.	16.179	1.015	20.96	-31.261	-30296.	20.61	38.492	77.955	116.446	12395.	38357.	50752.
215.	17.861	1.010	20.65	-31.733	-31192.	20.70	39.193	76.644	115.836	12691.	38127.	50818.
220.	19.675	1.005	20.31	-32.163	-32070.	20.80	39.891	75.344	115.235	12989.	37890.	50879.
225.	21.627	1.001	19.94	-32.534	-32923.	20.90	40.589	74.053	114.642	13291.	37644.	50935.
230.	23.725	0.996	19.53	-32.829	-33741.	20.99	41.288	72.769	114.057	13597.	37388.	50985.
235.	25.976	0.991	19.07	-33.026	-34512.	21.10	41.988	71.489	113.478	13908.	37121.	51029.
240.	28.387	0.986	18.57	-33.100	-35224.	21.20	42.693	70.211	112.904	14224.	36842.	51067.
245.	30.966	0.981	18.02	-33.025	-35860.	21.30	43.404	68.932	112.337	14548.	36550.	51098.
250.	33.719	0.977	17.41	-32.765	-36403.	21.41	44.124	67.649	111.773	14880.	36243.	51122.
255.	36.655	0.972	16.75	-32.289	-36832.	21.52	44.856	66.358	111.214	15222.	35918.	51140.
260.	39.782	0.967	16.02	-31.547	-37120.	21.63	45.602	65.055	110.657	15575.	35575.	51150.
265.	43.108	0.962	15.22	-30.492	-37239.	21.74	46.367	63.736	110.103	15943.	35211.	51153.
270.	46.640	0.957	14.33	-29.063	-37154.	21.85	47.155	62.396	109.551	16327.	34821.	51148.
275.	50.368	0.952	13.36	-27.190	-36822.	21.96	47.971	61.028	109.000	16731.	34405.	51135.
280.	54.360	0.947	12.29	-24.790	-36194.	22.08	48.822	59.627	108.449	17158.	33956.	51114.
285.	58.565	0.942	11.12	-21.764	-35209.	22.20	49.713	58.184	107.897	17612.	33471.	51084.
290.	63.011	0.937	9.82	-17.993	-33796.	22.32	50.655	56.689	107.344	18100.	32945.	51044.
295.	67.710	0.932	8.40	-13.334	-31865.	22.44	51.658	55.132	106.790	18627.	32369.	50996.
300.	72.669	0.927	6.83	-7.611	-29309.	22.56	52.734	53.500	106.233	19201.	31736.	50937.
305.	(77.899)	0.922	5.09	(-0.611)	(-25995.)	22.69	(53.898)	(51.775)	(105.673)	(19832.)	(31037.)	(50868.)
310.	(83.410)	0.916	3.18	(7.931)	(-21756.)	22.81	(55.171)	(49.938)	(105.109)	(20532.)	(30257.)	(50789.)
315.	(89.214)	0.911	1.07	(18.346)	(-16384.)	22.94	(56.577)	(47.965)	(104.541)	(21316.)	(29383.)	(50699.)
320.	(95.320)	0.906	-1.25	(31.053)	(-9614.)	23.07	(58.144)	(45.824)	(103.968)	(22203.)	(28394.)	(50597.)
325.	(101.742)	0.901	-3.80	(46.585)	(-1106.)	23.20	(59.913)	(43.476)	(103.389)	(23218.)	(27265.)	(50484.)

Table 14. a Cl concentration: 4.5000 mol/kg H ₂ O 20.82 wt percent 7.499 mol percent												
t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}_2^D$	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.395	1.123	22.96	-35.571	-14037.	18.14	16.227	122.444	138.670	4395.	43252.	47647.
85.	0.463	1.120	23.01	-34.984	-14475.	18.19	17.231	120.223	137.454	4704.	43096.	47801.
90.	0.546	1.117	23.04	-34.380	-14903.	18.25	18.226	118.055	136.281	5015.	42938.	47952.
95.	0.706	1.114	23.08	-33.761	-15324.	18.30	19.211	115.938	135.148	5326.	42776.	48102.
100.	0.847	1.110	23.11	-33.129	-15737.	18.36	20.187	113.868	134.055	5640.	42610.	48250.
105.	1.010	1.107	23.14	-32.485	-16143.	19.02	21.154	111.844	132.998	5955.	42441.	48396.
110.	1.195	1.103	23.16	-31.827	-16541.	19.08	22.103	109.874	131.977	6268.	42272.	48540.
115.	1.414	1.100	23.18	-25.596	-14816.	19.14	23.461	107.527	130.988	6741.	41941.	48681.
120.	1.662	1.096	23.20	-25.536	-15442.	19.20	24.345	105.685	130.031	7038.	41783.	48821.
125.	1.943	1.092	23.20	-25.517	-16085.	19.27	25.215	103.887	129.102	7334.	41624.	48958.
130.	2.262	1.089	23.20	-25.539	-16744.	19.33	26.072	102.130	128.202	7629.	41463.	49092.
135.	2.623	1.085	23.19	-25.605	-17423.	19.40	26.915	100.413	127.328	7923.	41301.	49223.
140.	3.028	1.081	23.18	-25.715	-18120.	19.47	27.745	98.734	126.479	8215.	41136.	49352.
145.	3.483	1.077	23.15	-25.871	-18837.	19.54	28.562	97.092	125.654	8507.	40970.	49477.
150.	3.991	1.073	23.12	-26.071	-19575.	19.62	29.367	95.484	124.851	8797.	40802.	49600.
155.	4.556	1.069	23.07	-26.315	-20333.	19.69	30.160	93.909	124.069	9087.	40632.	49719.
160.	5.184	1.065	23.01	-26.602	-21112.	19.77	30.942	92.365	123.307	9375.	40459.	49834.
165.	5.880	1.061	22.94	-26.928	-21910.	19.84	31.712	90.852	122.564	9663.	40283.	49946.
170.	6.647	1.056	22.85	-27.293	-22727.	19.92	32.472	89.366	121.838	9950.	40105.	50055.
175.	7.491	1.052	22.75	-27.691	-23563.	20.00	33.222	87.907	121.129	10237.	39922.	50159.
180.	8.418	1.048	22.63	-28.119	-24414.	20.09	33.963	86.473	120.435	10523.	39737.	50259.
185.	9.432	1.044	22.50	-28.572	-25280.	20.17	34.694	85.062	119.757	10809.	39547.	50356.
190.	10.541	1.039	22.34	-29.044	-26158.	20.25	35.418	83.673	119.092	11095.	39353.	50447.
195.	11.748	1.035	22.17	-29.526	-27044.	20.34	36.135	82.305	118.440	11381.	39154.	50535.
200.	13.061	1.030	21.97	-30.013	-27935.	20.43	36.845	80.954	117.800	11668.	38950.	50618.
205.	14.486	1.026	21.75	-30.493	-28828.	20.52	37.550	79.621	117.171	11956.	38739.	50696.
210.	16.028	1.021	21.50	-30.956	-29715.	20.61	38.251	78.302	116.553	12246.	38523.	50769.
215.	17.685	1.017	21.22	-31.389	-30592.	20.70	38.948	76.997	115.945	12538.	38299.	50837.
220.	19.492	1.012	20.91	-31.779	-31451.	20.80	39.643	75.702	115.345	12832.	38067.	50899.
225.	21.427	1.007	20.57	-32.109	-32284.	20.89	40.338	74.416	114.754	13130.	37826.	50956.
230.	23.507	1.003	20.19	-32.361	-33080.	20.99	41.033	73.137	114.171	13432.	37576.	51008.
235.	25.738	0.998	19.77	-32.513	-33829.	21.09	41.731	71.862	113.594	13739.	37315.	51054.
240.	28.124	0.993	19.31	-32.541	-34517.	21.19	42.434	70.589	113.023	14052.	37041.	51093.
245.	30.663	0.989	18.80	-32.416	-35128.	21.29	43.144	69.314	112.458	14372.	36754.	51126.
250.	33.412	0.984	18.24	-32.106	-35645.	21.39	43.863	68.034	111.897	14701.	36452.	51153.
255.	36.323	0.979	17.62	-31.573	-36044.	21.50	44.594	66.746	111.340	15041.	36132.	51173.
260.	39.422	0.974	16.94	-30.774	-36302.	21.61	45.342	65.445	110.787	15393.	35793.	51185.
265.	42.718	0.969	16.19	-29.657	-36388.	21.71	46.109	64.127	110.236	15759.	35432.	51191.
270.	46.220	0.964	15.36	-28.161	-36267.	21.82	46.901	62.786	109.687	16143.	35046.	51189.
275.	49.935	0.960	14.45	-26.216	-35896.	21.93	47.723	61.417	109.139	16547.	34631.	51178.
280.	53.872	0.955	13.45	-23.739	-35225.	22.05	48.580	60.012	108.592	16976.	34184.	51160.
285.	58.040	0.950	12.35	-20.628	-34194.	22.16	49.482	58.563	108.045	17433.	33700.	51133.
290.	62.447	0.945	11.14	-16.765	-32728.	22.27	50.437	57.060	107.497	17925.	33172.	51097.
295.	67.104	0.940	9.81	-12.003	-30740.	22.39	51.456	55.491	106.947	18459.	32593.	51052.
300.	72.019	0.935	8.33	-6.166	-28119.	22.51	52.553	53.842	106.396	19042.	31955.	50997.
305.	(77.203)	0.930	6.71	(0.961)	(-24731.)	22.62	(53.744)	(52.097)	(105.841)	(19686.)	(31247.)	(50933.)
310.	(82.666)	0.925	4.93	(9.647)	(-20408.)	22.74	(55.049)	(50.234)	(105.283)	(20402.)	(30456.)	(50858.)
315.	(88.418)	0.921	2.96	(20.227)	(-14939.)	22.86	(56.494)	(48.227)	(104.721)	(21206.)	(29566.)	(50772.)
320.	(94.470)	0.916	0.81	(33.124)	(-8057.)	22.99	(58.111)	(46.044)	(104.154)	(22120.)	(28556.)	(50676.)
325.	(100.834)	0.911	-1.55	(48.877)	(-584.)	23.11	(59.940)	(43.643)	(103.583)	(23168.)	(27399.)	(50568.)

Table 15		C1 concentration: 5.0000 mol/kg H ₂ O					22.61 wt percent			8.263 mol percent		
t		d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v_2^L	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.385	1.137	23.24	-36.649	-13514.	18.78	15.757	123.133	138.891	4234.	43416.	47651.
85.	0.470	1.134	23.30	-35.997	-13928.	18.83	16.762	120.911	137.673	4538.	43266.	47804.
90.	0.571	1.131	23.36	-35.326	-14333.	18.88	17.757	118.742	136.499	4844.	43112.	47956.
95.	0.689	1.128	23.41	-34.641	-14730.	18.94	18.742	116.624	135.366	5151.	42956.	48106.
100.	0.926	1.124	23.47	-33.941	-15118.	18.99	19.718	114.553	134.271	5459.	42796.	48255.
105.	0.986	1.121	23.52	-33.228	-15498.	19.05	20.686	112.528	133.214	5770.	42632.	48402.
110.	1.169	1.117	23.56	-32.500	-15870.	19.11	21.637	110.555	132.192	6078.	42468.	48546.
115.	1.381	1.114	23.61	-26.050	-14062.	19.17	23.052	108.152	131.203	6568.	42121.	48689.
120.	1.622	1.110	23.65	-25.934	-14666.	19.24	23.931	106.314	130.245	6858.	41970.	48829.
125.	1.898	1.106	23.68	-25.857	-15286.	19.30	24.797	104.520	129.317	7148.	41819.	48966.
130.	2.210	1.103	23.71	-25.821	-15923.	19.37	25.649	102.768	128.417	7436.	41666.	49102.
135.	2.562	1.099	23.73	-25.828	-16577.	19.43	26.487	101.057	127.543	7722.	41512.	49234.
140.	2.959	1.095	23.74	-25.880	-17251.	19.50	27.311	99.384	126.695	8008.	41356.	49364.
145.	3.404	1.091	23.75	-25.976	-17944.	19.57	28.123	97.748	125.870	8292.	41199.	49490.
150.	3.901	1.087	23.75	-26.116	-18657.	19.65	28.921	96.146	125.068	8575.	41039.	49614.
155.	4.454	1.083	23.73	-26.299	-19389.	19.72	29.708	94.579	124.287	8856.	40878.	49734.
160.	5.069	1.079	23.71	-26.524	-20142.	19.80	30.483	93.043	123.526	9137.	40715.	49851.
165.	5.750	1.075	23.68	-26.789	-20914.	19.87	31.246	91.538	122.784	9416.	40549.	49965.
170.	6.501	1.070	23.63	-27.091	-21704.	19.95	31.998	90.061	122.059	9695.	40380.	50075.
175.	7.328	1.066	23.57	-27.425	-22511.	20.03	32.741	88.611	121.352	9973.	40208.	50181.
180.	8.235	1.062	23.50	-27.789	-23333.	20.11	33.473	87.187	120.660	10250.	40033.	50283.
185.	9.229	1.058	23.41	-28.176	-24170.	20.19	34.197	85.786	119.983	10527.	39854.	50382.
190.	10.315	1.053	23.30	-28.580	-25017.	20.28	34.913	84.408	119.321	10804.	39671.	50476.
195.	11.498	1.049	23.18	-28.994	-25872.	20.36	35.622	83.049	118.671	11082.	39483.	50565.
200.	12.785	1.044	23.03	-29.410	-26730.	20.45	36.324	81.710	118.034	11360.	39291.	50650.
205.	14.181	1.040	22.86	-29.818	-27589.	20.53	37.020	80.387	117.408	11639.	39092.	50731.
210.	15.692	1.036	22.67	-30.207	-28441.	20.62	37.713	79.080	116.793	11920.	38887.	50807.
215.	17.326	1.031	22.46	-30.565	-29281.	20.71	38.402	77.785	116.188	12202.	38675.	50878.
220.	19.088	1.027	22.21	-30.876	-30102.	20.80	39.090	76.501	115.592	12488.	38455.	50943.
225.	20.985	1.022	21.94	-31.125	-30895.	20.90	39.778	75.226	115.004	12777.	38226.	51004.
230.	23.023	1.017	21.63	-31.292	-31650.	20.99	40.467	73.957	114.425	13071.	37988.	51059.
235.	25.211	1.013	21.29	-31.356	-32354.	21.08	41.160	72.692	113.852	13370.	37738.	51108.
240.	27.554	1.008	20.91	-31.291	-32996.	21.18	41.859	71.427	113.286	13675.	37476.	51151.
245.	30.060	1.004	20.49	-31.070	-33557.	21.28	42.566	70.160	112.726	13989.	37199.	51188.
250.	32.736	0.999	20.02	-30.657	-34021.	21.38	43.284	68.887	112.171	14312.	36907.	51219.
255.	35.590	0.994	19.50	-30.016	-34364.	21.48	44.016	67.603	111.620	14647.	36597.	51244.
260.	38.630	0.990	18.93	-29.102	-34561.	21.58	44.767	66.305	111.072	14995.	36267.	51261.
265.	41.863	0.985	18.29	-27.861	-34581.	21.68	45.540	64.988	110.528	15359.	35913.	51272.
270.	45.297	0.981	17.59	-26.233	-34389.	21.78	46.341	63.645	109.986	15742.	35534.	51275.
275.	48.941	0.976	16.82	-24.146	-33940.	21.88	47.176	62.270	109.446	16148.	35123.	51271.
280.	52.803	0.971	15.97	-21.513	-33184.	21.99	48.052	60.855	108.907	16581.	34678.	51259.
285.	56.891	0.967	15.03	-18.233	-32058.	22.09	48.978	59.390	108.368	17046.	34193.	51239.
290.	61.214	0.962	13.99	-14.183	-30489.	22.19	49.963	57.866	107.830	17550.	33661.	51210.
295.	65.782	0.958	12.85	-9.215	-28383.	22.30	51.021	56.269	107.290	18099.	33074.	51173.
300.	70.603	0.953	11.59	-3.149	-25631.	22.40	52.165	54.583	106.749	18704.	32422.	51126.
305.	(75.688)	0.949	10.22	(4.237)	(-22094.)	22.51	(53.416)	(52.789)	(106.205)	(19376.)	(31695.)	(51070.)
310.	(81.046)	0.944	8.70	(13.217)	(-17600.)	22.61	(54.795)	(50.865)	(105.659)	(20128.)	(30876.)	(51005.)
315.	(86.687)	0.940	7.05	(24.133)	(-11934.)	22.72	(56.330)	(48.780)	(105.110)	(20980.)	(29949.)	(50929.)
320.	(92.622)	0.936	5.26	(37.419)	(-4820.)	22.82	(58.059)	(46.498)	(104.557)	(21954.)	(28889.)	(50843.)
325.	(98.863)	0.932	3.33	(53.629)	(4094.)	22.93	(60.026)	(43.973)	(103.999)	(23078.)	(27668.)	(50746.)

Table 16. CaCl_2 concentration: 5.5000 mol/kg H_2O 24.32 wt percent 9.015 mol percent												
t	p	d^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	S^L	ΔS	S^G	H^L	ΔH	H^G
($^{\circ}\text{C}$)	(bars)	(g cm^{-3})	($\text{cm}^3 \text{mol}^{-1}$)	($\text{J mol}^{-1} \text{K}^{-1}$)	(J mol^{-1})	($\text{cm}^3 \text{mol}^{-1}$)	(J $\text{mol}^{-1} \text{K}^{-1}$)			(J mol^{-1})		
80.	0.375	1.151	23.50	-37.408	-12920.	18.82	15.274	123.850	139.125	4075.	43579.	47654.
85.	0.458	1.144	23.57	-36.696	-13321.	18.87	16.280	121.625	137.905	4374.	43433.	47808.
90.	0.556	1.145	23.65	-35.965	-13704.	18.92	17.276	119.454	136.729	4675.	43285.	47960.
95.	0.671	1.142	23.73	-35.219	-14079.	18.97	18.262	117.333	135.595	4977.	43133.	48111.
100.	0.805	1.138	23.80	-34.458	-14445.	19.03	19.239	115.260	134.499	5282.	42978.	48260.
105.	0.961	1.135	23.87	-33.683	-14802.	19.09	20.208	113.232	133.441	5587.	42820.	48407.
110.	1.140	1.131	23.94	-32.892	-15150.	19.15	21.162	111.255	132.418	5892.	42660.	48553.
115.	1.346	1.128	24.01	-26.246	-13267.	19.21	22.634	108.794	131.428	6399.	42297.	48696.
120.	1.583	1.124	24.07	-26.079	-13852.	19.27	23.510	106.959	130.469	6683.	42154.	48837.
125.	1.851	1.120	24.13	-25.951	-14452.	19.34	24.371	105.169	129.540	6965.	42010.	48975.
130.	2.156	1.116	24.19	-25.864	-15068.	19.40	25.219	103.421	128.640	7247.	41865.	49111.
135.	2.501	1.112	24.24	-25.821	-15702.	19.47	26.052	101.714	127.766	7527.	41718.	49245.
140.	2.889	1.108	24.28	-25.821	-16355.	19.54	26.872	100.045	126.917	7805.	41571.	49376.
145.	3.324	1.104	24.32	-25.866	-17027.	19.61	27.678	98.414	126.092	8082.	41421.	49503.
150.	3.810	1.100	24.35	-25.955	-17719.	19.68	28.471	96.819	125.290	8357.	41271.	49628.
155.	4.352	1.095	24.37	-26.086	-18430.	19.76	29.252	95.258	124.509	8632.	41118.	49750.
160.	4.954	1.092	24.38	-26.259	-19160.	19.83	30.020	93.729	123.749	8904.	40964.	49868.
165.	5.620	1.088	24.38	-26.472	-19909.	19.91	30.777	92.231	123.008	9176.	40807.	49984.
170.	6.355	1.084	24.37	-26.721	-20676.	19.98	31.523	90.761	122.284	9447.	40648.	50095.
175.	7.165	1.080	24.35	-27.002	-21460.	20.06	32.258	89.320	121.578	9717.	40486.	50203.
180.	8.054	1.075	24.32	-27.311	-22259.	20.14	32.983	87.904	120.887	9986.	40321.	50307.
185.	9.027	1.071	24.28	-27.644	-23070.	20.22	33.700	86.512	120.212	10254.	40153.	50407.
190.	10.091	1.067	24.21	-27.992	-23892.	20.30	34.408	85.143	119.551	10523.	39980.	50503.
195.	11.251	1.062	24.14	-28.350	-24721.	20.39	35.109	83.794	118.903	10792.	39803.	50595.
200.	12.512	1.058	24.04	-28.709	-25553.	20.47	35.803	82.465	118.268	11061.	39622.	50682.
205.	13.880	1.054	23.93	-29.058	-26384.	20.56	36.492	81.152	117.644	11331.	39434.	50765.
210.	15.362	1.049	23.79	-29.387	-27208.	20.64	37.177	79.854	117.031	11603.	39240.	50844.
215.	16.963	1.045	23.63	-29.682	-28018.	20.73	37.860	78.569	116.429	11878.	39040.	50917.
220.	18.691	1.040	23.45	-29.930	-28808.	20.82	38.541	77.295	115.836	12155.	38831.	50986.
225.	20.552	1.036	23.24	-30.112	-29569.	20.91	39.223	76.029	115.252	12436.	38614.	51049.
230.	22.551	1.031	23.01	-30.210	-30289.	21.00	39.907	74.769	114.675	12721.	38386.	51107.
235.	24.697	1.027	22.74	-30.202	-30958.	21.09	40.595	73.512	114.107	13013.	38147.	51160.
240.	26.996	1.022	22.44	-30.063	-31561.	21.18	41.290	72.254	113.544	13311.	37895.	51207.
245.	29.455	1.018	22.10	-29.762	-32082.	21.28	41.995	70.993	112.988	13619.	37629.	51248.
250.	32.081	1.013	21.71	-29.266	-32503.	21.37	42.713	69.725	112.437	13936.	37347.	51283.
255.	34.882	1.009	21.29	-28.536	-32800.	21.47	43.447	68.445	111.891	14266.	37046.	51312.
260.	37.865	1.005	20.82	-27.527	-32947.	21.56	44.201	67.148	111.349	14611.	36723.	51334.
265.	41.038	1.000	20.29	-26.185	-32913.	21.66	44.981	65.829	110.811	14973.	36376.	51349.
270.	44.409	0.996	19.71	-24.447	-32661.	21.75	45.793	64.482	110.275	15357.	36001.	51358.
275.	47.986	0.991	19.07	-22.241	-32148.	21.85	46.642	63.100	109.741	15765.	35594.	51359.
280.	51.777	0.987	18.35	-19.478	-31320.	21.95	47.537	61.673	109.209	16203.	35150.	51353.
285.	55.791	0.983	17.57	-16.055	-30115.	22.04	48.487	60.191	108.678	16676.	34652.	51338.
290.	60.035	0.978	16.70	-11.847	-28457.	22.14	49.504	58.643	108.147	17192.	34125.	51346.
295.	64.520	0.974	15.74	-6.703	-26252.	22.23	50.601	57.015	107.616	17758.	33528.	51286.
300.	69.254	0.970	14.70	-0.439	-23387.	22.33	51.794	55.289	107.084	18385.	32862.	51247.
305.	(74.246)	0.966	13.55	(7.170)	(-19720.)	22.42	(53.105)	(53.444)	(106.550)	(19086.)	(32113.)	(51198.)
310.	(79.507)	0.962	12.30	(16.405)	(-15078.)	22.51	(54.559)	(51.455)	(106.014)	(19876.)	(31265.)	(51141.)
315.	(85.046)	0.958	10.95	(27.616)	(-9239.)	22.60	(56.187)	(49.289)	(105.476)	(20776.)	(30298.)	(51074.)
320.	(90.874)	0.954	9.50	(41.245)	(-1921.)	22.69	(58.029)	(46.905)	(104.934)	(21811.)	(29187.)	(50997.)
325.	(97.001)	0.951	7.97	(57.862)	(7236.)	22.78	(60.136)	(44.253)	(104.389)	(23012.)	(27898.)	(50911.)

Table 17

NaCl concentration:

5.7036 mol/kg H₂O

25.00 wt percent

9.318 mol percent

t	P	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	$\bar{S}^L$	ΔS	$\bar{S}^G$	$\bar{H}^L$	ΔH	$\bar{H}^G$
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
80.	0.370	1.157	23.60	-37.633	-12671.	18.83	15.074	124.150	139.224	4010.	43645.	47655.
85.	0.453	1.154	23.68	-36.897	-13056.	18.88	16.080	121.924	138.004	4308.	43502.	47809.
90.	0.550	1.150	23.77	-36.143	-13431.	18.94	17.076	119.751	136.827	4607.	43355.	47962.
95.	0.663	1.147	23.85	-35.374	-13797.	18.99	18.063	117.628	135.692	4907.	43205.	48113.
100.	0.796	1.144	23.93	-34.589	-14155.	19.05	19.041	115.554	134.595	5210.	43052.	48262.
105.	0.950	1.140	24.01	-33.791	-14503.	19.11	20.011	113.525	133.536	5514.	42896.	48410.
110.	1.128	1.137	24.09	-32.977	-14842.	19.17	20.966	111.546	132.513	5817.	42738.	48555.
115.	1.332	1.133	24.17	-26.257	-12931.	19.23	22.461	109.061	131.522	6330.	42368.	48699.
120.	1.566	1.129	24.24	-26.071	-13509.	19.29	23.336	107.227	130.563	6612.	42228.	48840.
125.	1.832	1.125	24.31	-25.924	-14101.	19.35	24.196	105.438	129.633	6892.	42087.	48979.
130.	2.134	1.122	24.38	-25.819	-14710.	19.42	25.042	103.691	128.733	7171.	41944.	49115.
135.	2.476	1.118	24.44	-25.756	-15337.	19.49	25.873	101.985	127.858	7448.	41801.	49249.
140.	2.860	1.114	24.49	-25.738	-15982.	19.56	26.691	100.318	127.009	7724.	41657.	49380.
145.	3.291	1.110	24.54	-25.764	-16647.	19.63	27.495	98.689	126.185	7998.	41511.	49509.
150.	3.773	1.106	24.58	-25.834	-17330.	19.70	28.286	97.096	125.382	8270.	41364.	49634.
155.	4.310	1.102	24.62	-25.947	-18034.	19.77	29.065	95.537	124.602	8542.	41215.	49756.
160.	4.906	1.098	24.64	-26.102	-18756.	19.85	29.831	94.011	123.841	8811.	41064.	49875.
165.	5.567	1.093	24.66	-26.296	-19497.	19.92	30.585	92.515	123.100	9080.	40911.	49991.
170.	6.296	1.089	24.67	-26.526	-20256.	20.00	31.328	91.049	122.377	9347.	40756.	50103.
175.	7.099	1.085	24.66	-26.788	-21032.	20.08	32.060	89.610	121.671	9614.	40598.	50212.
180.	7.980	1.081	24.65	-27.079	-21822.	20.16	32.783	88.198	120.980	9880.	40437.	50316.
185.	8.946	1.076	24.62	-27.392	-22625.	20.24	33.496	86.809	120.306	10145.	40272.	50417.
190.	10.001	1.072	24.57	-27.721	-23438.	20.32	34.202	85.443	119.645	10410.	40104.	50514.
195.	11.151	1.068	24.51	-28.060	-24258.	20.40	34.899	84.098	118.998	10675.	39932.	50607.
200.	12.401	1.063	24.44	-28.398	-25081.	20.48	35.591	82.772	118.363	10941.	39754.	50695.
205.	13.759	1.059	24.35	-28.727	-25902.	20.57	36.277	81.463	117.740	11208.	39571.	50779.
210.	15.229	1.055	24.23	-29.035	-26716.	20.66	36.959	80.169	117.128	11477.	39382.	50858.
215.	16.818	1.050	24.10	-29.309	-27517.	20.74	37.639	78.888	116.527	11747.	39186.	50933.
220.	18.532	1.046	23.94	-29.534	-28296.	20.83	38.317	77.617	115.935	12021.	38981.	51003.
225.	20.378	1.041	23.76	-29.694	-29045.	20.92	38.997	76.355	115.351	12299.	38768.	51067.
230.	22.363	1.037	23.55	-29.769	-29754.	21.01	39.678	75.098	114.776	12581.	38545.	51127.
235.	24.492	1.032	23.31	-29.736	-30410.	21.10	40.365	73.844	114.209	12870.	38311.	51181.
240.	26.773	1.028	23.04	-29.570	-31000.	21.19	41.059	72.589	113.648	13166.	38063.	51229.
245.	29.214	1.024	22.73	-29.242	-31508.	21.28	41.763	71.330	113.093	13471.	37801.	51271.
250.	31.820	1.019	22.38	-28.718	-31913.	21.37	42.481	70.063	112.544	13786.	37522.	51308.
255.	34.601	1.015	22.00	-27.957	-32194.	21.47	43.216	68.784	112.000	14114.	37224.	51338.
260.	37.562	1.010	21.56	-26.915	-32323.	21.56	43.972	67.488	111.460	14458.	36905.	51362.
265.	40.712	1.006	21.08	-25.537	-32270.	21.65	44.755	66.168	110.923	14819.	36560.	51380.
270.	44.058	1.002	20.55	-23.761	-31998.	21.75	45.570	64.819	110.389	15203.	36187.	51390.
275.	47.609	0.997	19.95	-21.512	-31462.	21.84	46.426	63.433	109.858	15612.	35781.	51393.
280.	51.373	0.993	19.29	-18.704	-30609.	21.94	47.328	62.000	109.328	16052.	35337.	51389.
285.	55.357	0.989	18.57	-15.230	-29376.	22.03	48.289	60.511	108.800	16529.	34848.	51377.
290.	59.572	0.985	17.77	-10.965	-27685.	22.12	49.318	58.954	108.272	17049.	34308.	51357.
295.	64.024	0.981	16.88	-5.757	-25444.	22.21	50.432	57.312	107.744	17623.	33707.	51329.
300.	68.725	0.977	15.92	0.578	-22538.	22.30	51.646	55.569	107.215	18259.	33034.	51293.
305.	(73.682)	0.973	14.86	(8.270)	(-18825.)	22.39	(52.982)	(53.703)	(106.684)	(18972.)	(32276.)	(51248.)
310.	(78.905)	0.969	13.72	(17.599)	(-14128.)	22.48	(54.466)	(51.686)	(106.152)	(19778.)	(31416.)	(51194.)
315.	(84.405)	0.965	12.48	(28.918)	(-8224.)	22.57	(56.132)	(49.486)	(105.618)	(20698.)	(30432.)	(51130.)
320.	(90.192)	0.962	11.16	(42.676)	(-830.)	22.65	(58.020)	(47.060)	(105.080)	(21757.)	(29299.)	(51057.)
325.	(96.276)	0.958	9.79	(59.445)	(8418.)	22.74	(60.185)	(44.355)	(104.539)	(22991.)	(27983.)	(50973.)

Table 18. α C1 concentration: 6.0000 mol/kg H₂O 25.96 wt percent 9.755 mol percent

t (°C)	p (bars)	d^L (g cm ⁻³)	$\bar{V}_2^L$ (cm ³ mol ⁻¹)	$\bar{S}_2^L$ (J mol ⁻¹ K ⁻¹)	$\bar{H}_2^L$ (J mol ⁻¹)	v (cm ³ mol ⁻¹)	S^L (J mol ⁻¹ K ⁻¹)	ΔS (J mol ⁻¹ K ⁻¹)	S^G	H^L (J mol ⁻¹)	ΔH (J mol ⁻¹)	H^G
80.	0.364	1.165	23.75	-37.876	-12279.	18.85	14.779	124.595	139.374	3916.	43741.	47657.
85.	0.445	1.161	23.84	-37.107	-12652.	18.91	15.786	122.366	138.152	4211.	43601.	47811.
90.	0.540	1.158	23.93	-36.321	-13016.	18.96	16.783	120.191	136.974	4507.	43457.	47964.
95.	0.652	1.155	24.03	-35.520	-13371.	19.01	17.771	118.066	135.837	4806.	43310.	48116.
100.	0.783	1.151	24.12	-34.703	-13716.	19.07	18.750	115.989	134.739	5105.	43160.	48265.
105.	0.935	1.148	24.22	-33.872	-14052.	19.13	19.721	113.958	133.679	5407.	43006.	48413.
110.	1.110	1.144	24.31	-33.026	-14379.	19.19	20.678	111.976	132.654	5708.	42851.	48559.
115.	1.311	1.141	24.40	-26.205	-12430.	19.25	22.207	109.456	131.662	6232.	42471.	48703.
120.	1.542	1.137	24.48	-25.992	-12997.	19.31	23.080	107.623	130.702	6510.	42335.	48845.
125.	1.804	1.133	24.57	-25.820	-13580.	19.38	23.938	105.834	129.772	6786.	42198.	48984.
130.	2.102	1.129	24.65	-25.689	-14179.	19.45	24.781	104.089	128.871	7061.	42060.	49121.
135.	2.439	1.125	24.72	-25.602	-14795.	19.51	25.611	102.385	127.996	7335.	41921.	49256.
140.	2.818	1.121	24.80	-25.559	-15431.	19.58	26.426	100.721	127.146	7606.	41781.	49387.
145.	3.243	1.117	24.86	-25.560	-16085.	19.65	27.227	99.094	126.321	7876.	41640.	49516.
150.	3.719	1.113	24.92	-25.605	-16758.	19.72	28.015	97.503	125.519	8145.	41498.	49643.
155.	4.249	1.109	24.97	-25.694	-17451.	19.80	28.790	95.947	124.738	8412.	41354.	49766.
160.	4.838	1.105	25.02	-25.824	-18163.	19.87	29.553	94.424	123.977	8677.	41208.	49885.
165.	5.490	1.101	25.06	-25.993	-18894.	19.95	30.304	92.932	123.236	8941.	41061.	50002.
170.	6.210	1.097	25.08	-26.199	-19642.	20.02	31.043	91.470	122.513	9204.	40911.	50115.
175.	7.003	1.092	25.10	-26.437	-20407.	20.10	31.771	90.036	121.807	9466.	40759.	50224.
180.	7.873	1.088	25.11	-26.703	-21187.	20.18	32.490	88.627	121.117	9727.	40604.	50330.
185.	8.827	1.084	25.10	-26.992	-21979.	20.26	33.199	87.243	120.442	9987.	40445.	50432.
190.	9.870	1.080	25.08	-27.296	-22780.	20.34	33.900	85.882	119.782	10247.	40283.	50530.
195.	11.006	1.075	25.05	-27.609	-23589.	20.42	34.593	84.542	119.136	10508.	40116.	50624.
200.	12.242	1.071	25.01	-27.922	-24400.	20.50	35.281	83.221	118.502	10769.	39945.	50714.
205.	13.584	1.067	24.94	-28.225	-25209.	20.59	35.962	81.917	117.880	11030.	39768.	50799.
210.	15.037	1.062	24.86	-28.507	-26010.	20.67	36.641	80.628	117.269	11294.	39586.	50880.
215.	16.608	1.058	24.76	-28.754	-26798.	20.76	37.316	79.352	116.668	11560.	39396.	50956.
220.	18.303	1.053	24.63	-28.951	-27563.	20.85	37.991	78.087	116.078	11829.	39198.	51027.
225.	20.129	1.049	24.49	-29.082	-28298.	20.93	38.667	76.829	115.496	12102.	38991.	51093.
230.	22.091	1.045	24.32	-29.127	-28992.	21.02	39.345	75.577	114.922	12380.	38774.	51154.
235.	24.198	1.040	24.12	-29.062	-29633.	21.11	40.030	74.326	114.356	12664.	38546.	51210.
240.	26.454	1.036	23.89	-28.864	-30207.	21.20	40.722	73.075	113.797	12956.	38304.	51260.
245.	28.869	1.031	23.63	-28.501	-30696.	21.29	41.425	71.819	113.244	13257.	38048.	51305.
250.	31.448	1.027	23.33	-27.939	-31082.	21.38	42.143	70.555	112.697	13569.	37774.	51344.
255.	34.198	1.023	23.00	-27.139	-31343.	21.47	42.879	69.277	112.155	13895.	37481.	51376.
260.	37.129	1.018	22.63	-26.054	-31450.	21.56	43.638	67.980	111.618	14237.	37166.	51403.
265.	40.246	1.014	22.21	-24.630	-31372.	21.65	44.425	66.659	111.084	14598.	36824.	51422.
270.	43.558	1.010	21.74	-22.804	-31073.	21.75	45.247	65.306	110.553	14982.	36454.	51435.
275.	47.073	1.006	21.21	-20.501	-30507.	21.84	46.110	63.914	110.025	15392.	36049.	51441.
280.	50.798	1.001	20.63	-17.631	-29621.	21.93	47.025	62.473	109.498	15836.	35605.	51440.
285.	54.742	0.997	19.99	-14.090	-28350.	22.02	48.000	60.973	108.973	16317.	35114.	51432.
290.	58.914	0.993	19.29	-9.751	-26618.	22.10	49.049	59.400	108.449	16845.	34570.	51415.
295.	63.322	0.989	18.51	-4.458	-24329.	22.19	50.186	57.739	107.925	17429.	33962.	51391.
300.	67.976	0.986	17.66	1.974	-21367.	22.28	51.429	55.971	107.400	18079.	33280.	51358.
305.	(72.883)	0.982	16.73	(9.775)	(-17590.)	22.36	(52.802)	(54.073)	(106.874)	(18809.)	(32508.)	(51317.)
310.	(78.055)	0.978	15.73	(19.231)	(-12819.)	22.44	(54.331)	(52.016)	(106.347)	(19638.)	(31629.)	(51267.)
315.	(83.501)	0.975	14.66	(30.699)	(-6828.)	22.52	(56.052)	(49.766)	(105.818)	(20587.)	(30621.)	(51208.)
320.	(89.231)	0.971	13.54	(44.632)	(669.)	22.60	(58.009)	(47.277)	(105.286)	(21683.)	(29456.)	(51139.)
325.	(95.256)	0.968	12.40	(61.611)	(10044.)	22.68	(60.257)	(44.494)	(104.751)	(22963.)	(28098.)	(51061.)

Table 19.

NaCl concentration:

6.5000 mol/kg H₂O

27.53 wt percent

10.482 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
85.	0.432	1.174	24.09	-37.251	-11923.	18.95	15.281	123.135	138.416	4047.	43768.	47815.
90.	0.524	1.171	24.21	-36.415	-12269.	19.00	16.280	120.954	137.234	4340.	43629.	47968.
95.	0.633	1.168	24.32	-35.563	-12605.	19.06	17.270	118.824	136.094	4634.	43486.	48120.
100.	0.761	1.164	24.43	-34.696	-12932.	19.11	18.251	116.743	134.994	4930.	43341.	48271.
105.	0.908	1.161	24.54	-33.815	-13250.	19.17	19.224	114.706	133.930	5228.	43191.	48419.
110.	1.079	1.157	24.66	-32.919	-13557.	19.23	20.185	112.718	132.903	5526.	43040.	48566.
115.	1.275	1.153	24.77	-25.940	-11548.	19.29	21.771	110.138	131.909	6066.	42644.	48710.
120.	1.500	1.150	24.88	-25.689	-12100.	19.36	22.641	108.306	130.947	6338.	42515.	48853.
125.	1.756	1.146	24.98	-25.478	-12668.	19.42	23.496	106.519	130.015	6609.	42384.	48993.
130.	2.047	1.142	25.09	-25.310	-13252.	19.49	24.337	104.775	129.112	6878.	42254.	49131.
135.	2.376	1.138	25.19	-25.186	-13854.	19.56	25.162	103.073	128.235	7145.	42122.	49267.
140.	2.746	1.134	25.29	-25.106	-14475.	19.63	25.973	101.412	127.384	7410.	41990.	49399.
145.	3.162	1.130	25.38	-25.072	-15114.	19.70	26.770	99.788	126.558	7673.	41856.	49530.
150.	3.627	1.126	25.47	-25.082	-15773.	19.77	27.553	98.202	125.754	7935.	41722.	49657.
155.	4.145	1.122	25.55	-25.135	-16452.	19.84	28.322	96.650	124.973	8195.	41587.	49781.
160.	4.721	1.117	25.63	-25.231	-17149.	19.91	29.079	95.132	124.211	8453.	41450.	49902.
165.	5.359	1.113	25.70	-25.367	-17865.	19.99	29.824	93.645	123.469	8709.	41311.	50020.
170.	6.064	1.109	25.76	-25.539	-18599.	20.07	30.557	92.189	122.746	8964.	41170.	50135.
175.	6.840	1.105	25.82	-25.743	-19349.	20.14	31.279	90.761	122.040	9218.	41027.	50246.
180.	7.693	1.100	25.86	-25.976	-20114.	20.22	31.991	89.360	121.350	9472.	40882.	50353.
185.	8.628	1.096	25.90	-26.231	-20891.	20.30	32.693	87.983	120.676	9724.	40733.	50457.
190.	9.649	1.092	25.92	-26.503	-21678.	20.38	33.386	86.630	120.016	9976.	40581.	50557.
195.	10.764	1.087	25.93	-26.782	-22471.	20.46	34.073	85.297	119.370	10228.	40425.	50653.
200.	11.976	1.083	25.93	-27.062	-23267.	20.54	34.753	83.984	118.737	10480.	40264.	50744.
205.	13.292	1.079	25.91	-27.331	-24060.	20.63	35.427	82.688	118.116	10734.	40098.	50832.
210.	14.718	1.074	25.88	-27.577	-24845.	20.71	36.098	81.407	117.506	10989.	39926.	50915.
215.	16.259	1.070	25.84	-27.789	-25615.	20.80	36.767	80.139	116.907	11247.	39746.	50993.
220.	17.923	1.066	25.77	-27.950	-26364.	20.88	37.436	78.882	116.317	11508.	39559.	51067.
225.	19.716	1.061	25.68	-28.043	-27080.	20.97	38.106	77.631	115.737	11773.	39363.	51136.
230.	21.543	1.057	25.57	-28.049	-27755.	21.05	38.779	76.386	115.165	12043.	39156.	51200.
235.	23.711	1.053	25.44	-27.944	-28375.	21.14	39.459	75.142	114.601	12320.	38938.	51258.
240.	25.929	1.048	25.29	-27.702	-28927.	21.23	40.148	73.896	114.045	12605.	38706.	51312.
245.	28.301	1.044	25.10	-27.293	-29393.	21.32	40.850	72.645	113.495	12901.	38459.	51359.
250.	30.835	1.040	24.89	-26.682	-29754.	21.40	41.568	71.383	112.950	13208.	38194.	51401.
255.	33.539	1.035	24.64	-25.829	-29987.	21.49	42.306	70.106	112.411	13529.	37908.	51438.
260.	36.420	1.031	24.36	-24.687	-30064.	21.58	43.069	68.808	111.877	13868.	37599.	51468.
265.	39.486	1.027	24.04	-23.200	-29953.	21.67	43.863	67.483	111.347	14228.	37264.	51491.
270.	42.743	1.023	23.68	-21.305	-29616.	21.75	44.696	66.124	110.820	14612.	36897.	51509.
275.	46.200	1.019	23.27	-18.926	-29009.	21.84	45.574	64.722	110.296	15026.	36493.	51519.
280.	49.865	1.015	22.82	-15.972	-28076.	21.92	46.508	63.266	109.774	15474.	36048.	51523.
285.	53.745	1.011	22.32	-12.336	-26752.	22.01	47.508	61.746	109.254	15965.	35554.	51519.
290.	57.851	1.007	21.77	-7.888	-24960.	22.09	48.589	60.146	108.735	16505.	35002.	51508.
295.	62.189	1.004	21.16	-2.473	-22601.	22.17	49.766	58.451	108.217	17106.	34383.	51489.
300.	66.769	1.000	20.50	4.099	-19559.	22.25	51.060	56.639	107.698	17779.	33683.	51462.
305.	(71.600)	0.997	19.79	(12.063)	(-15688.)	22.33	(52.494)	(54.685)	(107.179)	(18539.)	(32887.)	(51426.)
310.	(76.692)	0.993	19.03	(21.709)	(-10806.)	22.40	(54.099)	(52.560)	(106.659)	(19406.)	(31976.)	(51383.)
315.	(82.053)	0.990	18.23	(33.401)	(-4684.)	22.48	(55.914)	(50.224)	(106.137)	(20404.)	(30926.)	(51330.)
320.	(87.595)	0.987	17.42	(47.600)	(2972.)	22.55	(57.985)	(47.628)	(105.613)	(21563.)	(29706.)	(51269.)
325.	(93.628)	0.984	16.65	(64.901)	(12540.)	22.62	(60.375)	(44.711)	(105.086)	(22921.)	(28277.)	(51198.)

Table 20.

NaCl concentration:

7.0000 mol/kg H₂O

29.03 wt percent

11.198 mol percent

t (°C)	p (bars)	d ^L (g cm ⁻³)	$\bar{V}_2^L$ (cm ³ mol ⁻¹)	$\bar{S}_2^L$ (J mol ⁻¹ K ⁻¹)	$\bar{H}_2^L$ (J mol ⁻¹)	$\bar{V}^L$ (cm ³ mol ⁻¹)	S ^L	ΔS (J mol ⁻¹ K ⁻¹)	S ^G	H ^L	ΔH (J mol ⁻¹)	H ^G
135.	2.311	1.150	25.64	-24.584	-12878.	19.60	24.705	103.781	128.486	6956.	42322.	49278.
140.	2.673	1.146	25.75	-24.475	-13447.	19.67	25.512	102.121	127.633	7214.	42197.	49412.
145.	3.079	1.142	25.88	-24.412	-14114.	19.74	26.305	100.500	126.804	7471.	42072.	49543.
150.	3.533	1.138	26.00	-24.395	-14762.	19.82	27.083	98.916	125.999	7726.	41945.	49671.
155.	4.040	1.133	26.11	-24.422	-15424.	19.89	27.847	97.369	125.216	7979.	41818.	49797.
160.	4.603	1.129	26.22	-24.492	-16116.	19.96	28.598	95.855	124.453	8230.	41690.	49919.
165.	5.227	1.125	26.32	-24.602	-16821.	20.04	29.337	94.373	123.710	8479.	41560.	50039.
170.	5.917	1.121	26.42	-24.749	-17545.	20.11	30.064	92.922	122.986	8726.	41428.	50155.
175.	6.677	1.116	26.51	-24.930	-18284.	20.19	30.779	91.500	122.279	8973.	41295.	50267.
180.	7.513	1.112	26.59	-25.140	-19039.	20.27	31.483	90.105	121.588	9218.	41159.	50376.
185.	8.428	1.108	26.66	-25.372	-19806.	20.35	32.179	88.735	120.913	9462.	41020.	50482.
190.	9.430	1.103	26.72	-25.621	-20583.	20.43	32.865	87.388	120.253	9706.	40877.	50583.
195.	10.522	1.099	26.78	-25.878	-21366.	20.51	33.544	86.063	119.607	9950.	40731.	50681.
200.	11.711	1.095	26.82	-26.136	-22151.	20.59	34.216	84.757	118.974	10194.	40581.	50775.
205.	13.002	1.090	26.85	-26.382	-22934.	20.67	34.884	83.469	118.353	10439.	40425.	50864.
210.	14.402	1.086	26.87	-26.607	-23709.	20.76	35.547	82.196	117.743	10686.	40263.	50949.
215.	15.915	1.082	26.87	-26.796	-24469.	20.84	36.209	80.935	117.145	10935.	40095.	51030.
220.	17.549	1.077	26.86	-26.934	-25205.	20.93	36.871	79.685	116.556	11188.	39918.	51106.
225.	19.310	1.073	26.83	-27.003	-25911.	21.01	37.535	78.442	115.977	11445.	39732.	51177.
230.	21.203	1.069	26.78	-26.983	-26573.	21.09	38.204	77.203	115.406	11708.	39536.	51243.
235.	23.237	1.064	26.72	-26.852	-27180.	21.18	38.879	75.964	114.843	11978.	39327.	51305.
240.	25.416	1.060	26.63	-26.582	-27718.	21.27	39.565	74.723	114.288	12256.	39105.	51361.
245.	27.749	1.056	26.52	-26.143	-28169.	21.35	40.264	73.476	113.740	12545.	38866.	51412.
250.	30.242	1.052	26.38	-25.499	-28513.	21.44	40.981	72.216	113.198	12847.	38610.	51467.
255.	32.902	1.047	26.22	-24.610	-28727.	21.52	41.721	70.940	112.661	13165.	38332.	51496.
260.	35.737	1.043	26.03	-23.428	-28783.	21.61	42.488	69.640	112.129	13501.	38029.	51530.
265.	38.754	1.039	25.80	-21.897	-28648.	21.69	43.290	68.311	111.601	13859.	37698.	51557.
270.	41.961	1.035	25.55	-19.953	-28285.	21.78	44.133	66.945	111.077	14243.	37335.	51578.
275.	45.365	1.031	25.26	-17.517	-27647.	21.86	45.025	65.531	110.557	14659.	36933.	51592.
280.	48.974	1.027	24.93	-14.499	-26679.	21.94	45.978	64.060	110.038	15113.	36487.	51600.
285.	52.797	1.024	24.56	-10.790	-25315.	22.02	47.003	62.519	109.522	15612.	35988.	51600.
290.	56.841	1.020	24.16	-6.257	-23474.	22.10	48.115	60.892	109.007	16165.	35429.	51594.
295.	61.116	1.017	23.72	-0.744	-21060.	22.18	49.332	59.161	108.493	16783.	34797.	51580.
300.	65.630	1.013	23.24	5.943	-17952.	22.25	50.675	57.304	107.979	17479.	34079.	51558.
305.	(70.392)	1.010	22.73	(14.043)	(-14003.)	22.32	(52.171)	(55.295)	(107.465)	(18269.)	(33259.)	(51528.)
310.	(75.412)	1.007	22.20	(23.850)	(-9027.)	22.39	(53.852)	(53.099)	(106.951)	(19175.)	(32315.)	(51490.)
315.	(80.698)	1.004	21.66	(35.734)	(-2791.)	22.46	(55.759)	(50.675)	(106.435)	(20221.)	(31221.)	(51443.)
320.	(86.262)	1.001	21.16	(50.166)	(5003.)	22.52	(57.945)	(47.971)	(105.917)	(21442.)	(29945.)	(51387.)
325.	(92.112)	0.998	20.74	(67.753)	(14742.)	22.58	(60.478)	(44.919)	(105.397)	(22880.)	(28443.)	(51323.)

Table 21. C1 concentration: 7.3332 mol/kg H₂O 30.00 wt percent 11.670 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)		(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)	
160.	4.523	1.137	26.60	-23.921	-15416.	20.00	28.273	96.346	124.620	8081.	41850.	49931.
165.	5.138	1.133	26.72	-24.020	-16117.	20.07	29.008	94.868	123.875	8325.	41726.	50051.
170.	5.818	1.128	26.84	-24.156	-16835.	20.15	29.730	93.420	123.150	8568.	41600.	50168.
175.	6.568	1.124	26.95	-24.323	-17570.	20.23	30.440	92.001	122.442	8809.	41473.	50282.
180.	7.391	1.120	27.06	-24.526	-18320.	20.30	31.140	90.610	121.750	9049.	41343.	50392.
185.	8.295	1.115	27.15	-24.748	-19083.	20.38	31.831	89.244	121.075	9287.	41211.	50498.
190.	9.283	1.111	27.24	-24.988	-19856.	20.46	32.512	87.902	120.414	9526.	41075.	50601.
195.	10.361	1.107	27.33	-25.237	-20635.	20.54	33.186	86.582	119.767	9764.	40936.	50700.
200.	11.535	1.102	27.40	-25.485	-21417.	20.63	33.853	85.281	119.134	10002.	40792.	50795.
205.	12.810	1.098	27.46	-25.724	-22196.	20.71	34.515	83.997	118.512	10242.	40643.	50885.
210.	14.192	1.093	27.51	-25.940	-22967.	20.79	35.174	82.729	117.903	10483.	40489.	50972.
215.	15.687	1.089	27.54	-26.121	-23723.	20.87	35.831	81.473	117.304	10727.	40327.	51054.
220.	17.302	1.085	27.57	-26.251	-24456.	20.96	36.488	80.228	116.715	10974.	40157.	51131.
225.	19.042	1.080	27.57	-26.311	-25157.	21.04	37.148	78.989	116.136	11226.	39978.	51204.
230.	20.914	1.076	27.57	-26.283	-25815.	21.13	37.812	77.754	115.566	11483.	39789.	51272.
235.	22.925	1.072	27.54	-26.142	-26417.	21.21	38.484	76.520	115.004	11748.	39587.	51335.
240.	25.080	1.067	27.50	-25.861	-26950.	21.30	39.168	75.282	114.449	12022.	39371.	51393.
245.	27.388	1.063	27.43	-25.410	-27395.	21.38	39.865	74.036	113.902	12307.	39139.	51446.
250.	29.855	1.059	27.35	-24.754	-27732.	21.47	40.582	72.778	113.360	12605.	38887.	51493.
255.	32.487	1.055	27.24	-23.850	-27938.	21.55	41.322	71.502	112.824	12920.	38614.	51534.
260.	35.293	1.051	27.11	-22.651	-27985.	21.63	42.092	70.201	112.293	13254.	38316.	51570.
265.	38.280	1.047	26.94	-21.101	-27841.	21.72	42.898	68.869	111.767	13611.	37958.	51599.
270.	41.455	1.043	26.76	-19.133	-27465.	21.80	43.747	67.498	111.244	13995.	37627.	51622.
275.	44.826	1.039	26.54	-16.671	-26813.	21.88	44.648	66.077	110.725	14413.	37226.	51639.
280.	48.401	1.035	26.29	-13.621	-25827.	21.96	45.614	64.595	110.209	14870.	36779.	51649.
285.	52.188	1.032	26.01	-9.874	-24442.	22.04	46.655	63.039	109.694	15375.	36277.	51652.
290.	56.195	1.028	25.70	-5.298	-22577.	22.11	47.788	61.394	109.182	15936.	35712.	51648.
295.	60.431	1.025	25.37	0.268	-20133.	22.19	49.030	59.639	108.670	16565.	35072.	51637.
300.	64.905	1.021	25.00	7.019	-16989.	22.26	50.406	57.753	108.158	17276.	34342.	51618.
305.	(69.625)	1.018	24.63	(15.194)	(-12996.)	22.33	(51.942)	(55.705)	(107.647)	(18086.)	(33505.)	(51591.)
310.	(74.601)	1.015	24.25	(25.092)	(-7966.)	22.39	(53.673)	(53.462)	(107.135)	(19017.)	(32539.)	(51556.)
315.	(79.842)	1.012	23.88	(37.089)	(-1664.)	22.46	(55.642)	(50.980)	(106.622)	(20096.)	(31417.)	(51513.)
320.	(85.358)	1.009	23.58	(51.658)	(6212.)	22.52	(57.904)	(48.203)	(106.108)	(21358.)	(30103.)	(51461.)
325.	(91.160)	1.007	23.38	(69.416)	(16054.)	22.58	(60.531)	(45.060)	(105.591)	(22848.)	(28553.)	(51400.)

Table 22.

CaCl concentration:

7.5000 mol/kg H₂O

30.47 wt percent

11.903 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	s^L	ΔS	s^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
170.	5.768	(1.132)	(27.05)	(-23.839)	(-16477.)	(20.17)	(29.561)	(93.672)	123.234	(8488.)	(41687.)	50175.
175.	6.512	(1.128)	(27.17)	(-24.006)	(-17211.)	(20.24)	(30.269)	(92.256)	122.525	(8726.)	(41562.)	50289.
180.	7.330	(1.123)	(27.29)	(-24.202)	(-17950.)	(20.32)	(30.967)	(90.866)	121.833	(8963.)	(41436.)	50399.
185.	8.227	(1.119)	(27.40)	(-24.421)	(-18721.)	(20.40)	(31.654)	(89.503)	121.157	(9200.)	(41307.)	50506.
190.	9.209	(1.115)	(27.50)	(-24.658)	(-19493.)	(20.48)	(32.333)	(88.163)	120.496	(9435.)	(41175.)	50610.
195.	10.280	(1.110)	(27.59)	(-24.904)	(-20271.)	(20.56)	(33.004)	(86.844)	119.849	(9670.)	(41039.)	50709.
200.	11.446	(1.106)	(27.68)	(-25.151)	(-21051.)	(20.64)	(33.669)	(85.546)	119.215	(9906.)	(40899.)	50805.
205.	12.713	(1.101)	(27.76)	(-25.387)	(-21829.)	(20.73)	(34.328)	(84.265)	118.593	(10143.)	(40753.)	50896.
210.	14.087	(1.097)	(27.82)	(-25.601)	(-22599.)	(20.81)	(34.984)	(82.999)	117.983	(10381.)	(40602.)	50983.
215.	15.573	(1.093)	(27.87)	(-25.780)	(-23354.)	(20.89)	(35.639)	(81.746)	117.384	(10622.)	(40444.)	51066.
220.	17.178	(1.088)	(27.91)	(-25.908)	(-24087.)	(20.98)	(36.294)	(80.502)	116.796	(10866.)	(40278.)	51144.
225.	18.908	(1.084)	(27.94)	(-25.966)	(-24787.)	(21.06)	(36.951)	(79.266)	116.217	(11115.)	(40102.)	51218.
230.	20.770	(1.080)	(27.95)	(-25.935)	(-25444.)	(21.14)	(37.613)	(78.033)	115.646	(11370.)	(39916.)	51286.
235.	22.769	(1.075)	(27.95)	(-25.792)	(-26045.)	(21.23)	(38.284)	(76.800)	115.084	(11633.)	(39718.)	51350.
240.	24.913	(1.071)	(27.93)	(-25.508)	(-26576.)	(21.31)	(38.966)	(75.564)	114.530	(11904.)	(39505.)	51409.
245.	27.209	(1.067)	(27.88)	(-25.054)	(-27019.)	(21.40)	(39.662)	(74.320)	113.982	(12187.)	(39275.)	51462.
250.	29.662	(1.063)	(27.82)	(-24.394)	(-27355.)	(21.48)	(40.379)	(73.062)	113.441	(12483.)	(39027.)	51510.
255.	32.282	(1.058)	(27.74)	(-23.485)	(-27559.)	(21.57)	(41.119)	(71.786)	112.905	(12796.)	(38756.)	51553.
260.	35.073	(1.054)	(27.64)	(-22.281)	(-27603.)	(21.65)	(41.890)	(70.485)	112.375	(13129.)	(38460.)	51589.
265.	38.046	(1.050)	(27.51)	(-20.723)	(-27455.)	(21.73)	(42.697)	(69.152)	111.849	(13485.)	(38134.)	51620.
270.	41.205	(1.046)	(27.35)	(-18.747)	(-27075.)	(21.81)	(43.549)	(67.778)	111.327	(13870.)	(37774.)	51644.
275.	44.560	(1.043)	(27.17)	(-16.275)	(-26416.)	(21.89)	(44.456)	(66.353)	110.809	(14289.)	(37373.)	51662.
280.	48.119	(1.039)	(26.96)	(-13.213)	(-25424.)	(21.97)	(45.427)	(64.865)	110.293	(14747.)	(36926.)	51673.
285.	51.889	(1.035)	(26.72)	(-9.451)	(-24030.)	(22.05)	(46.476)	(63.303)	109.779	(15254.)	(36423.)	51677.
290.	55.878	(1.032)	(26.46)	(-4.856)	(-22155.)	(22.12)	(47.619)	(61.648)	109.267	(15819.)	(35855.)	51675.
295.	60.096	(1.028)	(26.18)	(0.733)	(-19698.)	(22.20)	(48.874)	(59.882)	108.756	(16454.)	(35211.)	51665.
300.	64.550	(1.025)	(25.88)	(7.511)	(-16538.)	(22.27)	(50.266)	(57.980)	108.246	(17172.)	(34475.)	51647.
305.	(69.250)	(1.022)	(25.56)	(15.720)	(-12525.)	(22.33)	(51.822)	(55.914)	(107.736)	(17992.)	(33630.)	(51622.)
310.	(74.206)	(1.019)	(25.25)	(25.660)	(-7471.)	(22.40)	(53.578)	(53.647)	(107.225)	(18936.)	(32653.)	(51588.)
315.	(79.426)	(1.016)	(24.98)	(37.708)	(-1139.)	(22.46)	(55.578)	(51.136)	(106.713)	(20031.)	(31516.)	(51547.)
320.	(84.920)	(1.013)	(24.76)	(52.342)	(6775.)	(22.52)	(57.878)	(48.322)	(106.200)	(21314.)	(30183.)	(51496.)
325.	(90.699)	(1.011)	(24.68)	(70.180)	(16665.)	(22.59)	(60.551)	(45.134)	(105.685)	(22830.)	(28608.)	(51438.)

Table 23.

a Cl concentration:

8.0000 mol/kg H₂O

31.86 wt percent

12.597 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	v^L	S^L	ΔS	S^G	H^L	ΔH	H^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
200.	11.178	(1.116)	(28.51)	(-24.112)	(-19965.)	(20.70)	(33.108)	(86.355)	119.463	(9615.)	(41220.)	50835.
205.	12.421	(1.112)	(28.63)	(-24.350)	(-20744.)	(20.79)	(33.759)	(85.081)	118.840	(9842.)	(41085.)	50928.
210.	13.769	(1.107)	(28.74)	(-24.566)	(-21515.)	(20.87)	(34.406)	(83.823)	118.229	(10072.)	(40945.)	51017.
215.	15.229	(1.103)	(28.84)	(-24.746)	(-22271.)	(20.95)	(35.052)	(82.577)	117.629	(10304.)	(40798.)	51102.
220.	16.406	(1.099)	(28.93)	(-24.876)	(-23005.)	(21.04)	(35.699)	(81.340)	117.040	(10540.)	(40642.)	51182.
225.	18.506	(1.094)	(29.01)	(-24.937)	(-23706.)	(21.12)	(36.349)	(80.111)	116.460	(10780.)	(40477.)	51258.
230.	20.337	(1.090)	(29.08)	(-24.909)	(-24365.)	(21.20)	(37.005)	(78.884)	115.889	(11027.)	(40302.)	51329.
235.	22.304	(1.086)	(29.14)	(-24.767)	(-24967.)	(21.29)	(37.669)	(77.658)	115.327	(11282.)	(40113.)	51395.
240.	24.413	(1.081)	(29.18)	(-24.485)	(-25499.)	(21.37)	(38.346)	(76.426)	114.772	(11546.)	(39910.)	51456.
245.	26.673	(1.077)	(29.21)	(-24.031)	(-25943.)	(21.45)	(39.039)	(75.185)	114.225	(11822.)	(39690.)	51512.
250.	29.090	(1.073)	(29.22)	(-23.369)	(-26278.)	(21.54)	(39.753)	(73.930)	113.684	(12112.)	(39450.)	51563.
255.	31.670	(1.069)	(29.21)	(-22.457)	(-26480.)	(21.62)	(40.494)	(72.655)	113.148	(12420.)	(39187.)	51608.
260.	34.421	(1.065)	(29.19)	(-21.246)	(-26521.)	(21.70)	(41.267)	(71.352)	112.619	(12749.)	(38898.)	51647.
265.	37.351	(1.061)	(29.15)	(-19.680)	(-26368.)	(21.78)	(42.079)	(70.014)	112.093	(13103.)	(38577.)	51680.
270.	40.467	(1.057)	(29.10)	(-17.690)	(-25980.)	(21.86)	(42.940)	(68.633)	111.572	(13488.)	(38220.)	51708.
275.	43.777	(1.053)	(29.02)	(-15.199)	(-25312.)	(21.94)	(43.858)	(67.197)	111.055	(13908.)	(37821.)	51729.
280.	47.289	(1.049)	(28.93)	(-12.112)	(-24306.)	(22.02)	(44.846)	(65.694)	110.541	(14371.)	(37372.)	51743.
285.	51.010	(1.046)	(28.82)	(-8.318)	(-22895.)	(22.09)	(45.918)	(64.110)	110.029	(14886.)	(36865.)	51751.
290.	54.949	(1.042)	(28.69)	(-3.681)	(-20995.)	(22.17)	(47.090)	(62.428)	109.518	(15462.)	(36290.)	51752.
295.	59.114	(1.039)	(28.56)	(1.960)	(-18508.)	(22.24)	(48.384)	(60.626)	109.010	(16112.)	(35633.)	51745.
300.	63.515	(1.036)	(28.43)	(8.806)	(-15310.)	(22.31)	(49.822)	(58.679)	108.501	(16853.)	(34879.)	51732.
305.	(68.160)	(1.033)	(28.31)	(17.101)	(-11247.)	(22.37)	(51.438)	(56.556)	(107.994)	(17701.)	(34009.)	(51710.)
310.	(73.058)	(1.030)	(28.21)	(27.148)	(-6130.)	(22.43)	(53.267)	(54.219)	(107.486)	(18682.)	(32999.)	(51681.)
315.	(78.219)	(1.027)	(28.18)	(39.331)	(282.)	(22.49)	(55.357)	(51.619)	(106.977)	(19825.)	(31818.)	(51644.)
320.	(83.653)	(1.025)	(28.25)	(54.136)	(8298.)	(22.56)	(57.770)	(48.696)	(106.467)	(21169.)	(30428.)	(51598.)
325.	(89.369)	(1.022)	(28.50)	(72.194)	(18319.)	(22.62)	(60.584)	(45.371)	(105.955)	(22763.)	(28780.)	(51543.)

Table 24.

a Cl concentration:

8.5000 mol/kg H₂O

33.19 wt percent

13.279 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
225.	18.098	(1.104)	(30.05)	(-23.921)	(-22668.)	(21.18)	(35.726)	(80.984)	116.710	(10437.)	(40862.)	51298.
230.	19.898	(1.099)	(30.18)	(-23.908)	(-23335.)	(21.27)	(36.374)	(79.765)	116.138	(10674.)	(40697.)	51371.
235.	21.833	(1.095)	(30.29)	(-23.782)	(-23945.)	(21.35)	(37.031)	(78.544)	115.575	(10921.)	(40519.)	51440.
240.	23.909	(1.091)	(30.39)	(-23.515)	(-24485.)	(21.44)	(37.701)	(77.318)	115.019	(11177.)	(40326.)	51503.
245.	26.134	(1.087)	(30.49)	(-23.076)	(-24936.)	(21.52)	(38.390)	(76.082)	114.471	(11446.)	(40116.)	51561.
250.	28.514	(1.082)	(30.57)	(-22.427)	(-25279.)	(21.60)	(39.100)	(74.829)	113.929	(11729.)	(39885.)	51614.
255.	31.057	(1.078)	(30.64)	(-21.527)	(-25487.)	(21.69)	(39.839)	(73.555)	113.394	(12032.)	(39630.)	51662.
260.	33.770	(1.074)	(30.70)	(-20.327)	(-25534.)	(21.77)	(40.613)	(72.251)	112.864	(12356.)	(39348.)	51704.
265.	36.560	(1.070)	(30.75)	(-18.768)	(-25385.)	(21.85)	(41.429)	(70.910)	112.339	(12707.)	(39033.)	51740.
270.	39.734	(1.066)	(30.79)	(-16.782)	(-25000.)	(21.93)	(42.296)	(69.522)	111.818	(13090.)	(38580.)	51770.
275.	43.001	(1.063)	(30.81)	(-14.291)	(-24331.)	(22.00)	(43.225)	(68.075)	111.300	(13511.)	(38282.)	51794.
280.	46.463	(1.059)	(30.83)	(-11.198)	(-23322.)	(22.08)	(44.229)	(66.558)	110.786	(13978.)	(37833.)	51811.
285.	50.144	(1.055)	(30.84)	(-7.391)	(-21903.)	(22.16)	(45.322)	(64.953)	110.275	(14500.)	(37323.)	51822.
290.	54.036	(1.052)	(30.85)	(-2.733)	(-19992.)	(22.23)	(46.522)	(63.244)	109.766	(15086.)	(36740.)	51826.
295.	58.154	(1.049)	(30.87)	(2.941)	(-17487.)	(22.30)	(47.851)	(61.407)	109.258	(15752.)	(36071.)	51823.
300.	62.506	(1.046)	(30.90)	(9.832)	(-14262.)	(22.36)	(49.335)	(59.416)	108.751	(16513.)	(35300.)	51813.
305.	(67.100)	(1.043)	(30.96)	(18.188)	(-10164.)	(22.43)	(51.007)	(57.237)	(108.244)	(17390.)	(34405.)	(51795.)
310.	(71.946)	(1.040)	(31.08)	(28.318)	(-4948.)	(22.49)	(52.908)	(54.830)	(107.738)	(18407.)	(33362.)	(51769.)
315.	(77.055)	(1.037)	(31.28)	(40.610)	(1479.)	(22.55)	(55.088)	(52.143)	(107.231)	(19597.)	(32138.)	(51736.)
320.	(82.434)	(1.034)	(31.63)	(55.554)	(9531.)	(22.61)	(57.612)	(49.111)	(106.722)	(21001.)	(30692.)	(51694.)
325.	(89.096)	(1.031)	(32.20)	(73.805)	(19715.)	(22.68)	(60.563)	(45.650)	(106.213)	(22672.)	(28971.)	(51643.)

Table 25.

Na Cl. concentration:

9.0000 mol/kg H₂O

34.47 wt percent

13.952 mol percent

t	p	d ^L	$\bar{V}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{V}^L$	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)		
250.	27.925	(1.091)	(31.88)	(-21.570)	(-24356.)	(21.68)	(38.415)	(75.769)	114.184	(11330.)	(40337.)	51667.
255.	30.430	(1.087)	(32.03)	(-20.698)	(-24579.)	(21.76)	(39.150)	(74.497)	113.647	(11626.)	(40091.)	51717.
260.	33.105	(1.083)	(32.17)	(-19.524)	(-24640.)	(21.84)	(39.923)	(73.193)	113.116	(11945.)	(39816.)	51761.
265.	35.955	(1.079)	(32.30)	(-17.989)	(-24504.)	(21.92)	(40.740)	(71.850)	112.590	(12293.)	(39508.)	51800.
270.	38.989	(1.075)	(32.43)	(-16.024)	(-24130.)	(22.00)	(41.612)	(70.456)	112.068	(12673.)	(39160.)	51833.
275.	42.215	(1.071)	(32.55)	(-13.550)	(-23471.)	(22.08)	(42.550)	(69.000)	111.551	(13094.)	(38765.)	51859.
280.	45.639	(1.068)	(32.68)	(-10.470)	(-22469.)	(22.16)	(43.567)	(67.469)	111.036	(13563.)	(38316.)	51880.
285.	49.271	(1.064)	(32.81)	(-6.669)	(-21053.)	(22.23)	(44.679)	(65.845)	110.524	(14090.)	(37803.)	51893.
290.	53.119	(1.061)	(32.95)	(-2.009)	(-19141.)	(22.30)	(45.905)	(64.110)	110.015	(14687.)	(37214.)	51900.
295.	57.191	(1.057)	(33.11)	(3.676)	(-16629.)	(22.37)	(47.267)	(62.240)	109.507	(15366.)	(36534.)	51900.
300.	61.496	(1.054)	(33.30)	(10.590)	(-13391.)	(22.44)	(48.795)	(60.206)	109.000	(16147.)	(35746.)	51893.
305.	(66.044)	(1.051)	(33.54)	(18.985)	(-9270.)	(22.50)	(50.522)	(57.972)	(108.494)	(17050.)	(34828.)	(51878.)
310.	(70.842)	(1.048)	(33.86)	(29.174)	(-4070.)	(22.57)	(52.492)	(55.497)	(107.988)	(18103.)	(33753.)	(51856.)
315.	(75.902)	(1.045)	(34.30)	(41.550)	(2457.)	(22.63)	(54.758)	(52.724)	(107.482)	(19338.)	(32487.)	(51825.)
320.	(81.233)	(1.042)	(34.91)	(56.615)	(10629.)	(22.70)	(57.390)	(49.584)	(106.974)	(20801.)	(30986.)	(51787.)
325.	(86.844)	(1.039)	(35.79)	(75.021)	(20859.)	(22.77)	(60.477)	(45.988)	(106.465)	(22548.)	(29192.)	(51740.)

t (°C)	p (bars)	d ^L (g cm ⁻³)	$\bar{V}_2^L$ (cm ³ mol ⁻¹)	$\bar{S}_2^L$ (J mol ⁻¹ K ⁻¹)	$\bar{H}_2^L$ (J mol ⁻¹)	$\bar{V}^L$ (cm ³ mol ⁻¹)	$\bar{S}^L$ (J mol ⁻¹ K ⁻¹)	ΔS (J mol ⁻¹ K ⁻¹)	$\bar{S}^G$	$\bar{H}^L$ (J mol ⁻¹)	ΔH (J mol ⁻¹)	$\bar{H}^G$
260.	32.813*	(1.087)	(32.78)	(-19.217)	(-24286.)	(21.88)	(39.616)	(73.612)	113.227	(11763.)	(40023.)	51786.
265.	35.646	(1.083)	(32.95)	(-17.697)	(-24158.)	(21.96)	(40.433)	(72.267)	112.701	(12108.)	(39718.)	51826.
270.	38.663	(1.079)	(33.11)	(-15.746)	(-23792.)	(22.04)	(41.307)	(70.872)	112.179	(12488.)	(39372.)	51860.
275.	41.870	(1.075)	(33.28)	(-13.285)	(-23140.)	(22.12)	(42.248)	(69.413)	111.660	(12908.)	(38979.)	51888.
280.	45.277	(1.071)	(33.45)	(-10.215)	(-22143.)	(22.19)	(43.270)	(67.876)	111.146	(13378.)	(38531.)	51909.
285.	48.890	(1.068)	(33.63)	(-6.422)	(-20733.)	(22.27)	(44.389)	(66.245)	110.634	(13907.)	(38017.)	51924.
290.	52.719	(1.064)	(33.83)	(-1.768)	(-18823.)	(22.34)	(45.624)	(64.499)	110.124	(14507.)	(37425.)	51932.
295.	56.772	(1.061)	(34.05)	(3.915)	(-16312.)	(22.41)	(47.000)	(62.615)	109.616	(15192.)	(36741.)	51933.
300.	61.058	(1.058)	(34.31)	(10.833)	(-13071.)	(22.48)	(48.546)	(60.563)	109.109	(15981.)	(35946.)	51927.
305.	(65.586)	(1.054)	(34.62)	(19.238)	(-8944.)	(22.54)	(50.295)	(58.307)	(108.603)	(16895.)	(35019.)	(51914.)
310.	(70.365)	(1.051)	(35.03)	(29.445)	(-3734.)	(22.61)	(52.294)	(55.803)	(108.097)	(17962.)	(33931.)	(51893.)
315.	(75.404)	(1.048)	(35.56)	(41.849)	(2810.)	(22.67)	(54.596)	(52.994)	(107.590)	(19217.)	(32647.)	(51864.)
320.	(80.714)	(1.045)	(36.28)	(56.957)	(11007.)	(22.74)	(57.274)	(49.809)	(107.083)	(20704.)	(31122.)	(51826.)
325.	(86.306)	(1.042)	(37.29)	(75.422)	(21273.)	(22.81)	(60.418)	(46.156)	(106.574)	(22482.)	(29299.)	(51781.)

t (°C)	p (bars)	d ^L (g cm ⁻³)	$\bar{V}_2^L$ (cm ³ mol ⁻¹)	$\bar{S}_2^L$ (J mol ⁻¹ K ⁻¹)	$\bar{H}_2^L$ (J mol ⁻¹)	$\bar{V}^L$ (cm ³ mol ⁻¹)	$\bar{S}^L$ (J mol ⁻¹ K ⁻¹)	ΔS (J mol ⁻¹ K ⁻¹)	$\bar{S}^G$	$\bar{H}^L$ (J mol ⁻¹)	ΔH (J mol ⁻¹)	$\bar{H}^G$
270.	38.213	(1.083)	(34.02)	(-15.416)	(-23369.)	(22.09)	(40.883)	(71.449)	112.331	(12231.)	(39667.)	51897.
275.	41.396	(1.079)	(34.25)	(-12.977)	(-22729.)	(22.17)	(41.827)	(69.986)	111.812	(12650.)	(39276.)	51927.
280.	44.778	(1.075)	(34.48)	(-9.927)	(-21743.)	(22.24)	(42.859)	(68.442)	111.297	(13121.)	(38829.)	51950.
285.	48.366	(1.072)	(34.72)	(-6.150)	(-20341.)	(22.32)	(43.983)	(66.802)	110.784	(13652.)	(38314.)	51966.
290.	52.170	(1.068)	(34.99)	(-1.509)	(-18439.)	(22.39)	(45.231)	(65.043)	110.274	(14256.)	(37720.)	51976.
295.	56.197	(1.065)	(35.29)	(4.167)	(-15932.)	(22.46)	(46.625)	(63.141)	109.765	(14949.)	(37030.)	51979.
300.	60.456	(1.062)	(35.64)	(11.084)	(-12692.)	(22.53)	(48.193)	(61.066)	109.258	(15747.)	(36227.)	51974.
305.	(64.957)	(1.059)	(36.05)	(19.496)	(-8560.)	(22.60)	(49.972)	(58.780)	(108.752)	(16675.)	(35287.)	(51962.)
310.	(69.709)	(1.056)	(36.57)	(29.721)	(-3339.)	(22.67)	(52.008)	(56.237)	(108.245)	(17761.)	(34182.)	(51943.)
315.	(74.722)	(1.052)	(37.23)	(42.156)	(3223.)	(22.73)	(54.358)	(53.381)	(107.738)	(19041.)	(32875.)	(51916.)
320.	(80.006)	(1.049)	(38.10)	(57.313)	(11449.)	(22.80)	(57.095)	(50.136)	(107.231)	(20561.)	(31319.)	(51880.)
325.	(85.570)	(1.046)	(39.28)	(75.851)	(21760.)	(22.88)	(60.315)	(46.407)	(106.722)	(22381.)	(29455.)	(51836.)

t (°C)	p (bars)	d ^L (g cm ⁻³)	$\bar{V}_2^L$ (cm ³ mol ⁻¹)	$\bar{S}_2^L$ (J mol ⁻¹ K ⁻¹)	$\bar{H}_2^L$ (J mol ⁻¹)	$\bar{V}^L$ (cm ³ mol ⁻¹)	$\bar{S}^L$ (J mol ⁻¹ K ⁻¹)	ΔS (J mol ⁻¹ K ⁻¹)	$\bar{S}^G$	$\bar{H}^L$ (J mol ⁻¹)	ΔH (J mol ⁻¹)	$\bar{H}^G$
290.	51.156	(1.075)	(36.98)	(-1.230)	(-17883.)	(22.50)	(44.494)	(66.058)	110.552	(13788.)	(38267.)	52055.
295.	55.136	(1.072)	(37.42)	(4.417)	(-15392.)	(22.57)	(45.915)	(64.127)	110.042	(14491.)	(37570.)	52061.
300.	59.348	(1.068)	(37.91)	(11.317)	(-12162.)	(22.64)	(47.520)	(62.013)	109.533	(15306.)	(36753.)	52060.
305.	(63.801)	(1.065)	(38.50)	(19.725)	(-8032.)	(22.71)	(49.348)	(59.678)	(109.026)	(16258.)	(35793.)	(52051.)
310.	(68.504)	(1.062)	(39.21)	(29.963)	(-2803.)	(22.78)	(51.447)	(57.072)	(108.519)	(17375.)	(34659.)	(52035.)
315.	(73.469)	(1.058)	(40.09)	(42.435)	(3782.)	(22.85)	(53.877)	(54.134)	(108.011)	(18697.)	(33313.)	(52010.)
320.	(78.704)	(1.055)	(41.21)	(57.658)	(12048.)	(22.93)	(56.717)	(50.786)	(107.503)	(20272.)	(31706.)	(51978.)
325.	(84.220)	(1.051)	(42.69)	(76.304)	(22424.)	(23.02)	(60.066)	(46.928)	(106.993)	(22165.)	(29773.)	(51937.)

Table 29. Halite saturated NaCl solutions, concentrations in wt percent

w	t	p	d ^L	V ₂ ^L	S ₂ ^L	H ₂ ^L	V ^L	S ^L	ΔS	S ^G	H ^L	ΔH	H ^G
wt percent	(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)		(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)	
27.472	80.	0.353	1.177	23.98	-38.068	-11595.	18.89	14.291	125.339	139.631	3762.	43898.	47660.
27.596	85.	0.431	1.175	24.10	-37.252	-11890.	18.95	15.259	123.169	138.428	4040.	43775.	47815.
27.725	90.	0.522	1.173	24.24	-36.408	-12169.	19.01	16.215	121.053	137.269	4319.	43650.	47959.
27.859	95.	0.629	1.171	24.38	-35.540	-12433.	19.06	17.161	118.991	136.152	4597.	43524.	48121.
27.998	100.	0.754	1.168	24.52	-34.646	-12680.	19.13	18.096	116.979	135.075	4876.	43396.	48272.
28.143	105.	0.897	1.166	24.67	-33.726	-12911.	19.19	19.022	115.015	134.036	5156.	43266.	48422.
28.293	110.	1.063	1.163	24.83	-32.779	-13125.	19.25	19.934	113.100	133.034	5434.	43135.	48569.
28.448	115.	1.253	1.161	24.98	-25.676	-10992.	19.32	21.503	110.562	132.066	5966.	42749.	48715.
28.608	120.	1.470	1.158	25.15	-25.346	-11434.	19.39	22.324	108.806	131.130	6217.	42642.	48859.
28.774	125.	1.710	1.156	25.31	-25.046	-11885.	19.46	23.126	107.099	130.225	6463.	42538.	49001.
28.945	130.	1.994	1.153	25.49	-24.777	-12346.	19.53	23.911	105.439	129.349	6706.	42435.	49141.
29.122	135.	2.308	1.151	25.67	-24.541	-12817.	19.61	24.677	103.824	128.501	6944.	42334.	49278.
29.304	140.	2.659	1.148	25.85	-24.339	-13300.	19.68	25.426	102.254	127.680	7178.	42236.	49414.
29.491	145.	3.053	1.145	26.04	-24.172	-13795.	19.76	26.157	100.727	126.884	7408.	42139.	49547.
29.683	150.	3.491	1.143	26.23	-24.038	-14302.	19.84	26.870	99.241	126.112	7633.	42045.	49678.
29.881	155.	3.978	1.140	26.43	-23.937	-14822.	19.92	27.566	97.796	125.362	7853.	41953.	49806.
30.084	160.	4.516	1.137	26.63	-23.859	-15354.	20.00	28.244	96.390	124.634	8068.	41864.	49932.
30.292	165.	5.111	(1.135)	(26.84)	(-23.830)	(-15898.)	(20.08)	(28.906)	(95.021)	123.927	(8278.)	(41777.)	50055.
30.505	170.	5.765	(1.132)	(27.06)	(-23.818)	(-16454.)	(20.17)	(29.550)	(93.689)	123.239	(8483.)	(41692.)	50175.
30.724	175.	6.483	(1.130)	(27.29)	(-23.831)	(-17019.)	(20.25)	(30.178)	(92.392)	122.570	(8682.)	(41610.)	50293.
30.946	180.	7.268	(1.127)	(27.52)	(-23.863)	(-17594.)	(20.34)	(30.790)	(91.128)	121.918	(8877.)	(41530.)	50407.
31.178	185.	8.125	(1.124)	(27.76)	(-23.910)	(-18175.)	(20.43)	(31.387)	(89.896)	121.283	(9066.)	(41452.)	50519.
31.413	190.	9.055	(1.122)	(28.01)	(-23.967)	(-18761.)	(20.52)	(31.968)	(88.695)	120.664	(9251.)	(41376.)	50628.
31.653	195.	10.072	(1.119)	(28.27)	(-24.027)	(-19348.)	(20.61)	(32.536)	(87.523)	120.060	(9431.)	(41302.)	50733.
31.898	200.	11.170	(1.116)	(28.53)	(-24.082)	(-19934.)	(20.70)	(33.091)	(86.379)	119.470	(9606.)	(41229.)	50836.
32.149	205.	12.357	(1.114)	(28.81)	(-24.122)	(-20514.)	(20.80)	(33.634)	(85.260)	118.894	(9777.)	(41158.)	50935.
32.405	210.	13.634	(1.111)	(29.10)	(-24.138)	(-21082.)	(20.89)	(34.167)	(84.164)	118.331	(9945.)	(41086.)	51031.
32.666	215.	15.019	(1.109)	(29.41)	(-24.118)	(-21634.)	(20.99)	(34.690)	(83.090)	117.780	(10109.)	(41014.)	51124.
32.932	220.	16.502	(1.106)	(29.73)	(-24.047)	(-22161.)	(21.09)	(35.207)	(82.034)	117.241	(10271.)	(40941.)	51213.
33.204	225.	18.093	(1.104)	(30.06)	(-23.909)	(-22656.)	(21.19)	(35.719)	(80.995)	116.713	(10432.)	(40866.)	51299.
33.481	230.	19.797	(1.102)	(30.42)	(-23.686)	(-23109.)	(21.28)	(36.228)	(79.968)	116.196	(10593.)	(40788.)	51381.
33.764	235.	21.619	(1.099)	(30.79)	(-23.357)	(-23508.)	(21.38)	(36.738)	(78.950)	115.688	(10756.)	(40704.)	51460.
34.052	240.	23.564	(1.097)	(31.19)	(-22.896)	(-23840.)	(21.49)	(37.254)	(77.937)	115.190	(10922.)	(40613.)	51535.
34.345	245.	25.636	(1.095)	(31.61)	(-22.274)	(-24088.)	(21.59)	(37.778)	(76.923)	114.701	(11093.)	(40513.)	51607.
34.643	250.	27.841	(1.092)	(32.06)	(-21.458)	(-24233.)	(21.69)	(38.316)	(75.904)	114.220	(11273.)	(40401.)	51674.
34.947	255.	30.183	(1.090)	(32.55)	(-20.407)	(-24253.)	(21.79)	(38.876)	(74.872)	113.748	(11465.)	(40274.)	51739.
35.256	260.	32.668	(1.088)	(33.07)	(-19.075)	(-24120.)	(21.89)	(39.463)	(73.819)	113.283	(11673.)	(40126.)	51799.
35.570	265.	35.301	(1.086)	(33.65)	(-17.406)	(-23801.)	(22.00)	(40.089)	(72.736)	112.825	(11902.)	(39953.)	51855.
35.889	270.	38.086	(1.084)	(34.27)	(-15.334)	(-23259.)	(22.10)	(40.763)	(71.611)	112.374	(12158.)	(39749.)	51908.
36.214	275.	41.029	(1.082)	(34.96)	(-12.782)	(-22446.)	(22.21)	(41.500)	(70.431)	111.930	(12450.)	(39506.)	51956.
36.544	280.	44.133	(1.081)	(35.72)	(-9.654)	(-21305.)	(22.31)	(42.315)	(69.178)	111.493	(12787.)	(39215.)	52001.
36.880	285.	47.404	(1.079)	(36.58)	(-5.836)	(-19768.)	(22.42)	(43.230)	(67.832)	111.062	(13180.)	(38862.)	52042.
37.221	290.	50.845	(1.077)	(37.54)	(-1.191)	(-17749.)	(22.53)	(44.268)	(66.369)	110.637	(13645.)	(38435.)	52079.
37.567	295.	54.461	(1.075)	(38.65)	(4.453)	(-15145.)	(22.64)	(45.461)	(64.757)	110.218	(14199.)	(37913.)	52113.
37.918	300.	58.253	(1.073)	(39.92)	(11.304)	(-11826.)	(22.75)	(46.847)	(62.959)	109.806	(14868.)	(37275.)	52143.
38.275	305.	(62.226)	(1.071)	(41.40)	(19.625)	(-7628.)	(22.87)	(48.475)	(60.925)	(109.401)	(15679.)	(36491.)	(52169.)
38.637	310.	(66.379)	(1.069)	(43.16)	(29.747)	(-2345.)	(23.00)	(50.407)	(58.595)	(109.002)	(16671.)	(35522.)	(52193.)
39.004	315.	(70.713)	(1.066)	(45.27)	(42.090)	(4237.)	(23.13)	(52.722)	(55.889)	(108.611)	(17893.)	(34320.)	(52213.)
39.376	320.	(75.227)	(1.063)	(47.86)	(57.200)	(12614.)	(23.29)	(55.524)	(52.705)	(108.229)	(19410.)	(32822.)	(52232.)
39.754	325.	(79.918)	(1.058)	(51.10)	(75.796)	(23092.)	(23.48)	(58.950)	(48.907)	(107.857)	(21308.)	(30940.)	(52249.)

Table 30. H₂O - saturated NaCl solutions, concentrations in mol NaCl/kg (molal)

x	t	p	d ^L	$\bar{v}_2^L$	$\bar{S}_2^L$	$\bar{H}_2^L$	$\bar{v}_2^L$	$\bar{S}^L$	ΔS	$\bar{S}^G$	$\bar{H}^L$	ΔH	$\bar{H}^G$
(molal)	(°C)	(bars)	(g cm ⁻³)	(cm ³ mol ⁻¹)	(J mol ⁻¹ K ⁻¹)	(J mol ⁻¹)	(cm ³ mol ⁻¹)		(J mol ⁻¹ K ⁻¹)			(J mol ⁻¹)	
6.481	80.	0.353	1.177	23.98	-38.068	-11595.	18.89	14.291	125.339	139.631	3762.	43898.	47660.
6.522	85.	0.431	1.175	24.10	-37.252	-11890.	18.95	15.259	123.169	138.428	4048.	43775.	47815.
6.554	90.	0.522	1.173	24.24	-36.408	-12169.	19.01	16.215	121.053	137.269	4319.	43650.	47969.
6.608	95.	0.629	1.171	24.38	-35.540	-12433.	19.06	17.161	118.991	136.152	4597.	43524.	48121.
6.654	100.	0.754	1.168	24.52	-34.646	-12680.	19.13	18.096	116.979	135.075	4876.	43396.	48272.
6.701	105.	0.897	1.166	24.67	-33.726	-12911.	19.19	19.022	115.015	134.036	5156.	43266.	48422.
6.751	110.	1.063	1.163	24.83	-32.779	-13125.	19.25	19.934	113.100	133.034	5434.	43135.	48569.
6.803	115.	1.253	1.161	24.98	-31.776	-13325.	19.32	21.503	110.562	132.066	5766.	42749.	48715.
6.857	120.	1.470	1.158	25.15	-29.346	-13434.	19.39	22.324	108.806	131.130	6217.	42642.	48859.
6.913	125.	1.716	1.156	25.31	-25.046	-13885.	19.46	23.126	107.099	130.225	6463.	42538.	49001.
6.970	130.	1.994	1.153	25.49	-24.777	-12346.	19.53	23.911	105.439	129.349	6706.	42435.	49141.
7.030	135.	2.308	1.151	25.67	-24.541	-12817.	19.61	24.677	103.824	128.501	6944.	42334.	49278.
7.092	140.	2.659	1.148	25.85	-24.339	-13300.	19.68	25.426	102.254	127.680	7178.	42236.	49414.
7.157	145.	3.053	1.145	26.04	-24.172	-13795.	19.76	26.157	100.727	126.884	7408.	42139.	49547.
7.223	150.	3.491	1.143	26.23	-24.038	-14302.	19.84	26.870	99.241	126.112	7633.	42045.	49678.
7.292	155.	3.978	1.140	26.43	-23.937	-14822.	19.92	27.566	97.796	125.362	7853.	41953.	49806.
7.362	160.	4.516	1.137	26.63	-23.869	-15354.	20.00	28.244	96.390	124.634	8068.	41864.	49932.
7.436	165.	5.111	(1.135)	26.84	(-23.830)	(-15898.)	(20.08)	(28.906)	(95.021)	123.927	(8278.)	(41777.)	50055.
7.511	170.	5.765	(1.132)	27.06	(-23.818)	(-16454.)	(20.17)	(29.550)	(93.689)	123.239	(8483.)	(41692.)	50175.
7.589	175.	6.483	(1.130)	27.29	(-23.831)	(-17019.)	(20.25)	(30.178)	(92.392)	122.570	(8682.)	(41610.)	50293.
7.669	180.	7.268	(1.127)	27.52	(-23.863)	(-17594.)	(20.34)	(30.790)	(91.128)	121.918	(8877.)	(41530.)	50407.
7.752	185.	8.125	(1.124)	27.76	(-23.910)	(-18175.)	(20.43)	(31.387)	(89.896)	121.283	(9066.)	(41452.)	50519.
7.837	190.	9.058	(1.122)	28.01	(-23.967)	(-18761.)	(20.52)	(31.968)	(88.695)	120.664	(9251.)	(41376.)	50628.
7.924	195.	10.072	(1.119)	28.27	(-24.027)	(-19348.)	(20.61)	(32.536)	(87.523)	120.060	(9431.)	(41302.)	50733.
8.014	200.	11.170	(1.116)	28.53	(-24.082)	(-19934.)	(20.70)	(33.091)	(86.379)	119.470	(9606.)	(41229.)	50836.
8.107	205.	12.357	(1.114)	28.81	(-24.122)	(-20514.)	(20.80)	(33.634)	(85.260)	118.894	(9777.)	(41159.)	50935.
8.203	210.	13.639	(1.111)	29.10	(-24.138)	(-21082.)	(20.89)	(34.167)	(84.164)	118.331	(9945.)	(41086.)	51031.
8.301	215.	15.019	(1.109)	29.41	(-24.118)	(-21634.)	(20.99)	(34.690)	(83.090)	117.780	(10109.)	(41014.)	51124.
8.402	220.	16.502	(1.106)	29.73	(-24.047)	(-22161.)	(21.09)	(35.207)	(82.034)	117.241	(10271.)	(40941.)	51213.
8.506	225.	18.093	(1.104)	30.06	(-23.909)	(-22656.)	(21.19)	(35.719)	(80.995)	116.713	(10432.)	(40866.)	51299.
8.613	230.	19.797	(1.102)	30.42	(-23.686)	(-23109.)	(21.28)	(36.228)	(79.968)	116.196	(10593.)	(40788.)	51381.
8.722	235.	21.619	(1.099)	30.79	(-23.357)	(-23508.)	(21.38)	(36.738)	(78.950)	115.688	(10756.)	(40704.)	51460.
8.835	240.	23.564	(1.097)	31.19	(-22.890)	(-23840.)	(21.49)	(37.254)	(77.937)	115.190	(10922.)	(40613.)	51535.
8.951	245.	25.636	(1.095)	31.61	(-22.274)	(-24088.)	(21.59)	(37.778)	(76.923)	114.701	(11093.)	(40513.)	51607.
9.070	250.	27.841	(1.092)	32.06	(-21.458)	(-24233.)	(21.69)	(38.316)	(75.904)	114.220	(11273.)	(40401.)	51674.
9.192	255.	30.183	(1.090)	32.55	(-20.407)	(-24253.)	(21.79)	(38.876)	(74.872)	113.748	(11465.)	(40274.)	51739.
9.317	260.	32.668	(1.088)	33.07	(-19.075)	(-24120.)	(21.89)	(39.463)	(73.819)	113.283	(11673.)	(40126.)	51799.
9.446	265.	35.301	(1.086)	33.65	(-17.406)	(-23801.)	(22.00)	(40.089)	(72.736)	112.825	(11902.)	(39953.)	51855.
9.579	270.	38.086	(1.084)	34.27	(-15.334)	(-23259.)	(22.10)	(40.763)	(71.611)	112.374	(12158.)	(39749.)	51908.
9.715	275.	41.029	(1.082)	34.96	(-12.782)	(-22446.)	(22.21)	(41.500)	(70.431)	111.930	(12450.)	(39506.)	51956.
9.854	280.	44.133	(1.081)	35.72	(-9.654)	(-21305.)	(22.31)	(42.315)	(69.178)	111.493	(12787.)	(39215.)	52001.
9.997	285.	47.404	(1.079)	36.58	(-5.836)	(-19768.)	(22.42)	(43.230)	(67.832)	111.062	(13180.)	(38862.)	52042.
10.145	290.	50.845	(1.077)	37.54	(-1.191)	(-17749.)	(22.53)	(44.268)	(66.369)	110.637	(13645.)	(38435.)	52079.
10.296	295.	54.461	(1.075)	38.65	(4.453)	(-15145.)	(22.64)	(45.461)	(64.757)	110.218	(14199.)	(37913.)	52113.
10.451	300.	58.253	(1.073)	39.92	(11.304)	(-11826.)	(22.75)	(46.847)	(62.959)	109.806	(14868.)	(37275.)	52143.
10.610	305.	(62.226)	(1.071)	41.40	(19.625)	(-7628.)	(22.87)	(48.475)	(60.925)	(109.401)	(15679.)	(36491.)	(52169.)
10.774	310.	(66.374)	(1.069)	43.16	(29.747)	(-2345.)	(23.00)	(50.407)	(58.595)	(109.002)	(16671.)	(35522.)	(52193.)
10.941	315.	(70.713)	(1.066)	45.27	(42.090)	(4287.)	(23.13)	(52.722)	(55.889)	(108.611)	(17893.)	(34320.)	(52213.)
11.114	320.	(75.227)	(1.063)	47.86	(57.200)	(12614.)	(23.29)	(55.524)	(52.705)	(108.229)	(19410.)	(32822.)	(52232.)
11.291	325.	(79.918)	(1.058)	51.10	(75.796)	(23092.)	(23.48)	(58.950)	(48.907)	(107.857)	(21308.)	(30940.)	(52249.)